

TECHNICAL REPORT
CRIME IMPACT ANALYSIS
OF
SCRTD METRO RAIL PROJECT

Prepared for:

Sedway/Cooke

304 S. Broadway

Los Angeles California 90013

Prepared by:

GEORGE RAND ASSOCIATES

1312 North Beverly Glen Blvd.

Los Angeles, CA 90077

June 1983

S.C.R.T.D. LIBRARY

EXECUTIVE SUMMARY

This report summarizes the analysis of crime-impacts of the proposed Metro Rail system. Protection from criminal victimization is one of the most important criteria for transit use from a passenger point-of-view. It can determine the success or failure of achieving the Metro Rail objectives for Los Angeles. When the system is introduced into a community it will have both immediate and deferred crime-impacts. As soon as the system is operational it will generate new businesses, establish new expectations and alter daily behavior patterns of local residents and residents of the entire region. Metro Rail passengers will begin to park cars in neighborhoods currently isolated from outside incursions. Increasing numbers of pedestrians will take to the streets and walk to stations or take buses to stations as new patterns of transit dependency are adopted. Five years after Metro Rail begins operation, major changes in the urban areas surrounding some of the key station sites are to be expected. High-rise offices, mixed-use facilities (offices and residences) may occur in Hollywood, along parts of the Wilshire Corridor and in the Central Business District (CBD). Taken as a whole, these changes in urban behavior patterns have important implications for the future of urban crime in Los Angeles.

This report documents existing high crime rates in the Central Business District and in Hollywood, areas through which the proposed alignment will run. It calls attention to increases in serious crimes (Part I offenses such as homicide, rape, robbery, assault, burglary, larceny, vehicle theft) in the Wilshire Corridor in the past four years. While much of the proposed alignment passes through areas without crime problems, there is cause for concern, especially in light of the rapid population shifts that are occurring in Los Angeles. There is need for a careful analysis and monitoring of these population shifts and a search for ways to mitigate against future crime problems through a broad palette of environmental design techniques.

Direct (short-term) and indirect (long-term) crime-impacts were considered in this report. Direct impacts include the potential increased numbers of robberies and assaults on pedestrians who use Metro Rail as a primary daily mode of transportation; of bus users waiting for buses to connect with Metro Rail; of Metro Rail users parking on nearby residential streets or in off-street parking near stations; and potential increases in burglaries due to the presence of commuter autos in private residential neighborhoods. Indirect impacts include potential increases in crime that will occur as a result of major new patterns of urbanization generated in response to Metro Rail.

Finally, the proposed station complexes were analyzed to determine if they create high crime risks. These crime-impacts are mitigatable, to one or another degree, by (a) modifications to the physical design of station entrances, (b) additions to urban areas in the immediate vicinity of the station (intersections, bus-lanes, parking structures), or (c) application of urban design guidelines to the larger station environs (1/4-1/2 mile radius). Each of the proposed stations was analyzed in detail to identify crime related issues that might result from its specific location; site-planning, i.e., its relationship with its immediate surrounding (parking,

bus-lanes, traffic arteries, open-spaces), and detailed design, i.e., entrances, exits, passages, and platforms. Eleven types of mitigation were identified for incorporation in design development of station architecture, and as guidelines for future buildings in the vicinity of Metro Rail stations. These mitigation measures emphasize Crime Prevention through Environmental Design and include modifying station designs, e.g., reducing number of station levels and/or modifying circulation pattern to provide greater visibility of patrons on lower levels, eliminating cul-de-sacs or adding activities in blind areas of station entrance, improving ability of station agent to see entrance concourse and outside areas, using station entrances to link existing safe activity nodes such as public buildings and commercial buildings, and siting and planning of parking areas and parking structures to insure visibility of parking spaces from street.

Brief highlighting of crime-impacts for each station¹

Union Station--potential crime problems created by the interface of Metro Rail and bus drop-off areas as well as new parking structure (mitigations C, D, E).

Civic Center--no major negative crime-impacts.

Fifth/Hill--potential crime problems due to conflict with Central City East population, and danger of lingering at Pershing Square entrance. High crime risk for Bunker Hill residents using the station after dark (mitigations E, H, J).

Seventh/Flower--potential problem in long underground passage; entrances are not linked to existing activity nodes in area (mitigations D, E, H).

Wilshire/Alvarado--danger of increased victimization of pedestrians. There is an established trend toward increased crime in this neighborhood (mitigations E, H).

Wilshire/Vermont--no major crime-impacts. Some concern about off-street location of station entrance and orientation away from traffic as well as long underground passage. Passage is within paid area.

Wilshire/Normandie--no major short term direct crime-impacts--may be long term indirect impacts from land use changes.

Wilshire/Western--no major crime-impacts in either short or long term are anticipated.

Wilshire/Crenshaw--danger of victimization of patrons at station site waiting for boarding and alighting from buses (mitigations F, H, J).

Wilshire/La Brea--no crime-impacts identified.

Wilshire/Fairfax--station design and community site-planning are exemplary and a model of crime-prevention through environmental design. Will serve to reduce risk of criminal victimization in area (mitigations J, K).

¹See mitigation text (Section V) for a description of these measures.

Fairfax/Beverly--no major crime-impacts identified. Some risk of increased burglary due to juxtaposition of residential areas and high-density commercial activities.

Fairfax/Santa Monica--some risk of criminal victimization due to station design. Can be mitigated by creating a public zone around entire intersection (mitigations H, J).

La Brea/Sunset--danger of crime for pedestrians and bus-passengers. Very low volume expected (mitigations E, H, J).

Hollywood/Cahuenga--danger of crime for pedestrians and bus-passengers. Very high volume expected. Will be mitigated by major redevelopment of the area (mitigations H, J).

Universal City--no crime-impacts identified.

North Hollywood--no major crime-impacts identified. Need careful planning of large parking structure to prevent crime.

The analysis relied on field studies of station sites, detailed analysis of existing market projections, patronage data, parking and traffic estimates. Crime data were gathered by interpreting readily available statistics. While no special statistical runs or analyses were prepared, the insights of area Police Captains and their deputies proved invaluable--their conjectures were supported by crime statistics and represent a reliable though general assessment of crime-trends for the police areas in which they work. No data sources were identified on the geography of crime in Los Angeles that were sufficiently broad-based to be used for comprehensive crime-impact analyses.

In general, the current station options do not suggest any unmitigatable crime problems; there are some individual problem areas that should be addressed. Preliminary architectural design and site-planning work is sensitive to crime-environment issues. In some station areas, crime concerns need to be made more of a focus of the proposed design.

Station plans employed in this analysis are those which were available in November, 1983.

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
Crime and Security Issues for Metro Rail	1
Spatial Patterns of Crime	1
Crime in Mass Transit Systems	2
II. EXISTING CONDITIONS	4
The Spatial Location of Crime	4
Station Design and Urban Context.	10
III. IMPACT ASSESSMENT METHODOLOGY	17
Fear of Crime and Risk of Criminal Victimization	17
Study Procedure	17
Types of Crime Impacts.	20
IV. IMPACT ASSESSMENT	23
System vs. No Project Alternative	23
Central Business District (CBD) Cluster	24
Union Station	26
Civic Center.	29
Fifth/Hill.	32
Seventh/Flower.	35
East Wilshire Cluster	37
Wilshire/Alvarado	39
Wilshire/Vermont.	42
Wilshire/Normandie	45
West Wilshire Corridor Cluster.	47
Wilshire/Western.	49
Wilshire/Crenshaw	51
Wilshire/La Brea.	53
Wilshire/Fairfax.	55
West Hollywood/Hollywood Cluster.	57
Fairfax/Beverly	59
Fairfax/Santa Monica.	62
LaBrea/Sunset	64
Hollywood/Cahuenga	66
San Fernando Valley Cluster	68
University City	70
North Hollywood	72
V. MITIGATIONS	74
VI. Bibliography	76
Persons and Agencies contacted	78
List of Tables	vi

List of Tables

- Table 1: Part I Offenses per 1000 population
- Table 2: Major Crimes in Regional Core 1979, 1980, 1981
- Table 3: Crime in Police Reporting Districts Adjacent to Station Location
- Table 4: Factors Contributing to Crime Risks by Impact Area
- Table 5: Crime Increases in Station Environs
- Table 6: Serious Crimes in Central Business District Cluster, 1981
- Table 7: Serious Crimes in Wilshire East Cluster, 1981
- Table 8: Serious Crimes in Wilshire West Cluster, 1981
- Table 9: Serious Crimes in West Hollywood/Hollywood Cluster, 1981
- Table 10: Serious Crimes in San Fernando Valley Cluster, 1981

Appreciation is expressed to Scott Senauke for assisting with data collection for this study.

I. INTRODUCTION

CRIME AND SECURITY ISSUES FOR METRO RAIL

This report summarizes the analysis of crime impacts of the proposed Metro Rail system. Protection from criminal victimization is one of the most important criteria for transit use from a passenger's point of view. Beliefs about security will influence how, where and when people will use transit (Siegel et al., 1977). There is no way to precisely predict the direct impacts of crime on passenger volume, or the indirect impacts crime may have on the outlook for value-capture proposals. It is possible, however, to study and describe current spatial patterns of crime in the proposed station environs as well as overall patterns in the Regional Core. This study will then attempt to estimate crime impacts--significant increments in the amount of crime anticipated due to increases in pedestrian activity around station sites, increases in residential density, and other effects of introducing the Metro Rail system into the community fabric of Los Angeles.

There are three classes of questions that need to be asked about crime and the Metro Rail system: first, will introduction of the system result in an increase in crime along the Metro Rail corridor? Will the system create new opportunities for crimes that do not currently exist (e.g., crimes against residents of the neighboring communities whose homes and businesses are not currently crime targets; second, will the transit system itself become a focus of new crimes and will these crimes have an impact on ridership and the overall success of the system?; third, will the specific station sites create unsurveilled public areas such as parking lots and passages, with new risks of criminal victimization? Stations are unique public spaces in use by a large number of patrons for a very short period of time. It is a changing population of users, under enclosed conditions in which they remain confined, out of public view. This is a unique urban setting for Los Angeles. Residents of the Regional Core are accustomed to driving individually to and from destinations. The Metro Rail system may create a range of unknown crime opportunities as citizens adjust to rapid transit as a way of urban life. When Metro Rail is introduced into communities in the Regional Core, it will have both immediate and deferred impacts. As soon as it is operational, patrons will begin to park cars in station neighborhoods and walk to stations for the Metro Rail ride downtown. This may increase the risk of criminal victimization of riders and of businesses and residents in neighborhoods. Over time, value capture efforts will take advantage of available mass-transit and result in new patterns of urbanization around stations. Unless properly designed, these new high-density, mixed-use urban environments may bring with them potential crime problems. This study will assess these direct and indirect crime impacts for each of the proposed station sites.

SPATIAL PATTERNS OF CRIME

Crime impacts will be considered separately for each of five areas in the Regional Core (Central Business District, East Wilshire, West Wilshire, West Hollywood/Hollywood and the San Fernando Valley). Each area has a unique pattern of criminal activities and a definitive spatial organiza-

tion of land uses. Each will have a unique relationship to the mass transit system. The impact of Metro Rail can either be positive or negative. If a community is lacking a strong public focus and is already suffering high crime rates, introducing the system into the community might result in a net reduction in crime because of the new presence of a public conveyance. On the other hand, if an area is already buffered from high crime areas by large avenues or other geographic boundaries, a new Metro Rail station could alter spatial crime patterns and result in a displacement of crime into the community.

The more territorially defined the residential base of a community the more it will be able to resist negative impacts of the Metro Rail system. "Porous" communities (with many vacant lots) are more subject to severe impacts than those in which there are clear corridors and collector streets. Resistance against crime impacts is stronger in residential areas that are internalized, separated from the perimeter of a neighborhood (cf. Brantingham and Brantingham, 1980).

CRIME IN MASS TRANSIT SYSTEMS

Crime in transit systems is highly variable. As a public system, Metro Rail is potentially subject to vandalism directed at public space in general. Such acts may include breaking a vehicle window, damaging seats, damaging station facilities, and graffiti. The costs of repair of vandalized facilities are a major potential crime impact inasmuch as they can run into millions of dollars per year. Repairs have to be performed at once (Van Fliet, 1982) to prevent further acts against the system. Vandalism itself, incidentally, can increase the risk of crime to patrons. The system which has been left without repair is perceived to be less concerned about the well-being of patrons and criminals feel more prone to attempt criminal acts under such conditions.

The risks of transit crime to the individual vary from city to city and depend very much on the design of the system. On the average (Thrasher and Schell, 1974) the chances of being a victim of crime are greater on an urban transit system than in a non-transit situation in the city. But each system has its own qualities; e.g., Chicago transit is safer than the rest of the city with respect to robbery (Shellow, et al., 1974). In Los Angeles, the best guess about crime risks in the Metro Rail system is that it will parallel the ambient rate of crime in the communities through which it runs. Stations in high crime areas generally experience high levels of transit crime (Richards and Hoel, 1980).

Most transit crimes in urban rapid rail systems are generated in response to the unique opportunities provided by the system. They are committed in the stations, not in the vehicles; usually by two or more perpetrators; most likely during evening rush hours or Friday and Saturday nights, often associated with drugs and/or alcohol (Richards and Hoel, 1980). With the proper investment in environmental design countermeasures to reduce crime--good station lighting, closed circuit television (CCTV) monitoring, easy surveillance, platform access and egress control, emergency alarm devices--many of these sources of crime in the system itself can be controlled and defended against.

Mass Transit and Community Interface

Each characteristic of the functional interface between the Metro Rail system and the communities along its route will contribute to the impacts of the system. Will criminal perpetrators feel they can use the system for access to new neighborhoods? For escape following commission of a crime? Will they feel free to roam far from the public space surrounding the station site itself? Will residents of existing neighborhoods feel sufficiently encouraged by the security characteristics of the system to trust it for habitual use or will they restrict themselves to using it for optional travel only? Richard and Jacobson (1979) performed a study of a station in a large metropolitan area in which security had recently been radically enhanced using CCTV and other improvements. Through surveys, they measured results of the changes. Elderly citizens and women of all ages are generally most affected by fear of crime. The consequences of crime for women and elderly are far more devastating than crimes perpetrated on young males--therefore, perceived risks are greater. In their study, personal security was considered to be a major factor in deciding whether to use the system for one third of the men and half of the women responding to the surveys. Eighty percent of the men and ninety percent of the women said there were times they were reluctant to use the system for reasons of personal security.

From the passengers' perspective the Metro Rail system will work more effectively if the interface of the system and a community is handled in a fashion that responds to the unique circumstances of each community, notably its demographic patterns, number of elderly and disabled, ambient crime rates, and land uses in the community.

Security management needs to be extended to all elements of patron use of the system including: a) travel to the station (by foot, auto, park-and-ride or kiss-and-ride, bus); b) arrival at the station site; c) entering the station; d) paying fare.

Studies by V.W. Rouse and Associates (1980) have investigated the most problematic interfaces between a station and a community. From studies of crime-environment relationships in a large number of U.S. cities they have determined that crime risks are greater when:

- There is high density land uses surrounding the station site;
- Parking is provided adjacent to the station (This increases the risk of assault and burglary from automobiles, as well as other crimes);
- There is more than one point of access and egress from the station;
- The immediately surrounding land uses are commercial/mixed or alternatively vacant or underdeveloped;
- There is high passenger volume at the station location creating more crime opportunities outside the system (high volume use within the system is associated with increased security); and,
- The system is below grade with two or more levels creating un surveilled platform areas away from public access.

The ideal station design from a crime-control point of view only point is one which has one level below grade, a single entrance, is part of a network of smaller stations with relatively low patronage in each, operates in lower density residential neighborhoods with little available parking. Rouse suggests that transfer stations (bus to train or train to train) are less ideal than "through" or terminal stations. No patterns have been observed with respect to the crime problems caused by transfers from bus to train.

Defensible Space Design

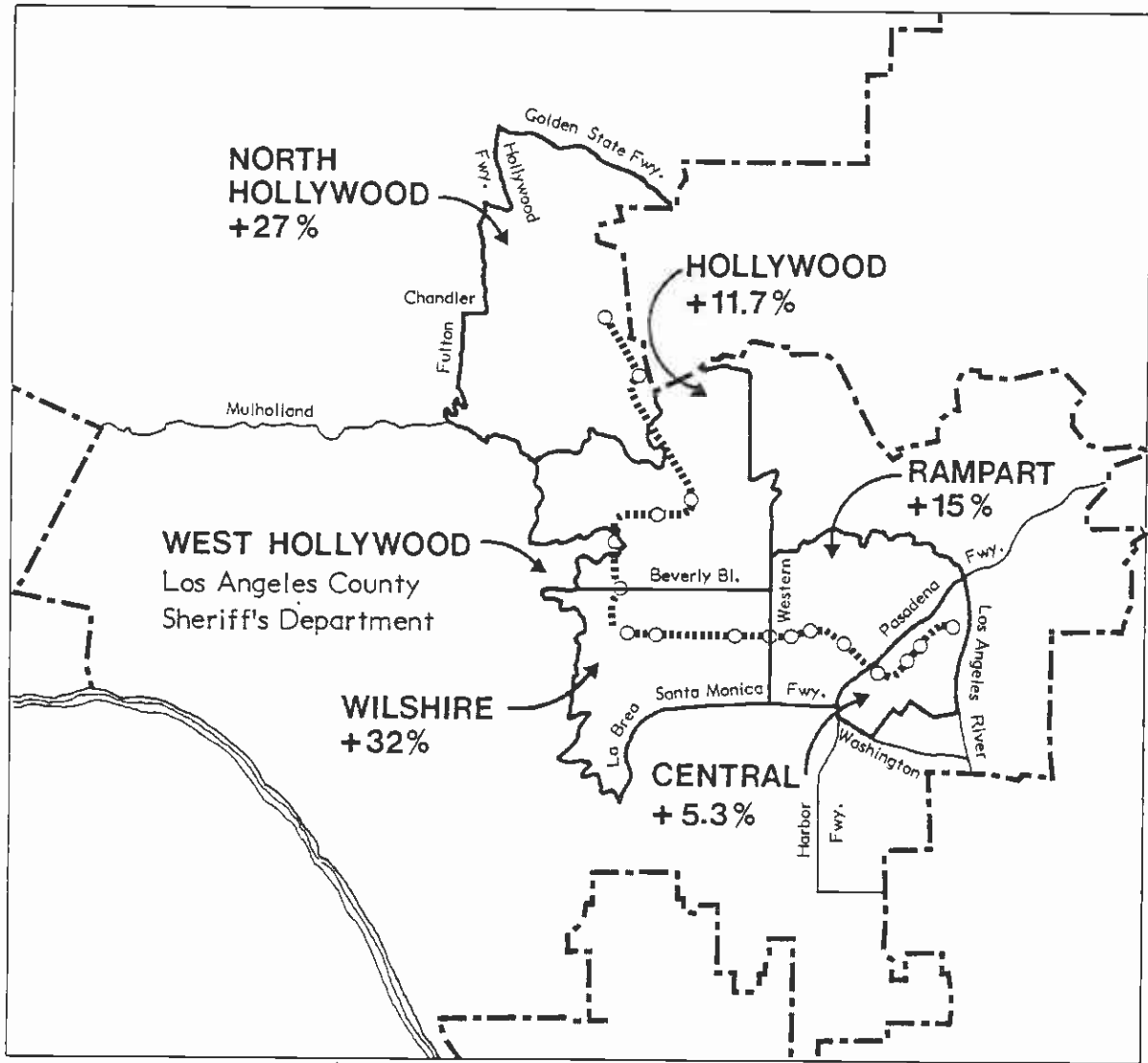
One of the most critical, and yet difficult to analyze, features of the interface between station and area has to do with urban design and architectural considerations (cf. Newman, 1971; Rand, 1980). Metro Rail is being designed to operate with a small staff at station locations. It is critical to tie stations, literally or figuratively, to the private business and other community interests that exist in the station vicinity. For example, in pedestrian oriented stations in the Central Business District crime risks can be minimized through architectural means; e.g., creating a public plaza around the entrance. In a low density site in a Wilshire community, the same benefits might be achieved by tying the station to some small retail activity. Finally, architectural strategies can increase natural surveillance (e.g., views of pay areas from passing autos) to provide safe, enclosed passage to parking areas and to eliminate cul-de-sacs and blind areas at bus stops and drop-off lanes that are not visible from public streets. Finally, architectural forms can be designed so that the station is perceived as being related to its surroundings.

II. EXISTING CONDITIONS

THE SPATIAL LOCATION OF CRIME

This section will review the general patterns of crime along the Metro Rail corridor. We reviewed data on the rates of Part I crimes for years 1978, 1979, 1980, and 1981 for each of the Police Areas along the proposed alignment. In order, the stations go through Los Angeles Police Departments' Central Area (Police Area 1), the Rampart Area (Police Area 2), the Wilshire Area (Police Area 7), the Hollywood Area (Police Area 6), and the North Hollywood Area (Police Area 15). In Figure 1 these areas are indicated, along with their respective crime rates for 1981. Crime rates are expressed on a per population basis. The high rate of Part I crimes for downtown Los Angeles results partially because of the small residential population. The highest rates on the regional map are in Southwest (3) and Southeast (13) areas. Very close behind them in rate of crime are Wilshire, Hollywood and West Hollywood (Los Angeles County).

Tables 1, 2 and 3 show the progressive increase in Part I crimes in each of these areas and the net percentage increase for each. The areas with the greatest increase in Part I crimes in the past four years are Wilshire Area (+32 percent) and North Hollywood Area (+27 percent). The increase in Rampart Area is relatively high (+15 percent). The smallest increase is in the Central Area. In the Central Area there has been and remains an extraordinarily high rate of assault, robbery, and burglary, equal in absolute numbers to those which occur in Rampart Area even



○ Proposed Metro Rail Project Station

..... Proposed Metro Rail Project Alignment

— Police Statistical Area Boundary

- - - Los Angeles City Limits

Figure 1
 Percentage Increases in Reports of Serious Crimes
 1978-1981

Source: Los Angeles Police Department
 Statistical Digest

TABLE 1
PART I* OFFENSES PER 1000 POPULATION

	1978	1979	1980	1981	Net Increase (percent)
Central	467.7	462.5	463.7	497.2	5.3%
Rampart	90.2	91.7	95.0	103.7	15.0%
Hollywood	121.0	116.4	130.3	135.2	11.7%
Wilshire	93.3	97.7	117.1	123.3	32.0%
N. Hollywood	71.2	72.0	86.8	90.6	27.0%

Source: Los Angeles Police Department Statistical Digest, 1978-1981.

*Homicide, Rape, Robbery, Aggravated Assault, Burglary, Larceny, Vehicle Theft.

TABLE 2

MAJOR CRIMES IN REGIONAL CORE 1979, 1980, 1981

	HOMICIDE		FORCIBLE RAPE		AGGRAVATED Number	ASSAULT Percent Total		
	Number	Percent Total	Number	Percent Total				
1979								
Central	51	5.3	103	4.1	1202	6.1		
Rampart	81	9.9	186	7.3	1117	7.9		
Hollywood	43	5.2	226	8.9	1560	5.6		
Wilshire	48	5.9	207	8.2	1101	5.6		
N. Hollywood	24	3.0	111	4.5	652	3.3		
1980								
Central	54	5.3	117	4.1	1261	5.7		
Rampart	91	8.9	227	8.0	1801	8.1		
Hollywood	40	3.9	239	8.5	892	4.0		
Wilshire	56	5.4	234	8.2	1223	5.6		
N. Hollywood	23	2.2	104	3.7	782	3.6		
1981								
	HOMICIDE		FORCIBLE RAPE		AGGRAVATED ASSAULT		ROBBERY	BURGLARY
	#	%T	#	%T	#	%T	#	#
Central	52	5.9	128	4.7	1192	5.6	2382	2619
Rampart	87	9.9	218	8.1	1842	8.7	2384	7500
Hollywood	73	8.2	214	8.0	1144	5.4	2059	5283
Wilshire	51	5.8	206	7.7	1272	6.0	2758	6119
N. Hollywood	16	1.8	121	4.5	761	3.6	778	5178

Source: Los Angeles Police Department Statistical Digest 1979, 1980, 1981

TABLE 3

CRIME IN POLICE REPORTING DISTRICTS ADJACENT TO STATION LOCATION

LOCATION	Reporting District	Part I crime rate (1980, 1981)
1. Union Station	107	Low
	114	Medium
	106	High
2. Civic Center	118	Low
	124	Low
	125	Low
3. Fifth/Hill	132	Medium
	135	Low
	143	Low
4. Seventh/Flower	152	High
	171	High
5. Wilshire/ Alvarado	255	High
	256	High
6. Wilshire/ Vermont	253	High
	262	High
	252	Medium
	261	High
7. Wilshire/ Normandie	252	Medium
	261	High
	729	High
	739	Medium
8. Wilshire/ Western	729	High
	738	Medium
	728	High
	737	Medium
9. Wilshire/ Crenshaw	728	High
	737	Medium
	735	Low

Table 3 (continued)

LOCATION	Reporting District	Part I crime rate (1980, 1981)
10. Wilshire/ La Brea	724 725 (733)	Low Low Medium
11. Wilshire/ Fairfax	723 732	Low Medium
12. Fairfax/ Beverly	703 (732) 692 693	Medium Low Low Low
13. Santa Monica/ Fairfax (county)	not available	
14. La Brea/ Sunset	645 643	High High
15. Hollywood/ Cahuenga	636 646	High High
16. Universal City	1586	Low
17. North Hollywood	1549 1547	Medium Low

Source: Los Angeles Police Department - Part I Crimes and Attempts by Reporting District, Quarterly reports.

though the latter has more than six times the population. The Central Area will remain a problem area from a crime perspective with or without the Metro Rail system.

A large number of stations will be located in the Wilshire and West Hollywood areas. These areas are already in transition and undergoing a rapid increase in crime due to social instability. The fact that they border on other high crime areas adds further to their instability. Studies have shown (cf. George-Abeye and Harries, 1980) that criminals will select areas as close as possible to their home territory to commit crimes but far enough away to allow them to elude recognition and apprehension. There are many areas in the CBD and Wilshire Corridor clusters that suggest an optimal spatial arrangement between criminal and victim for commission of crimes. Criminals in Hollywood, South-Central, Southeast, Hollenbeck areas, can find prospective targets in Wilshire, West Hollywood and other nearby zones.

More detailed analysis of crime reports within each Police Area (see Figures 2-6) suggest that many stations are sited in police "reporting districts" (R.D.s) that are considered to be high in Part I crimes, according to the 1981 statistics. In the Central Area (Figure 2) Union Station is adjacent to the R.D. 106, Fifth/Hill and 7th/Flower are also within another high crime zone (R.D. 152; R.D. 153). In the Rampart Area, all three proposed stations (see Figure 3) are in close proximity to "high-crime" R.D.s. In the Wilshire Area, Wilshire/Western and Wilshire/Crenshaw border on "high-crime" R.D.s. Finally, in Hollywood Area almost all the stations are located in relatively high crime areas (see Figure 4).

These data are only suggestive of the problems that may be faced by users of Metro Rail. They do show the need for caution, however, in operating an unmanned system in neighborhoods which are in the process of social change. All areas with high crime-rate have changed markedly in the past several years. They are absorbing a great deal of the massive ethnic and minority populations of Los Angeles, living at high densities in close proximity to one another. Crime and social development of these communities are linked together as issues for the future.

STATION DESIGN AND URBAN CONTEXT

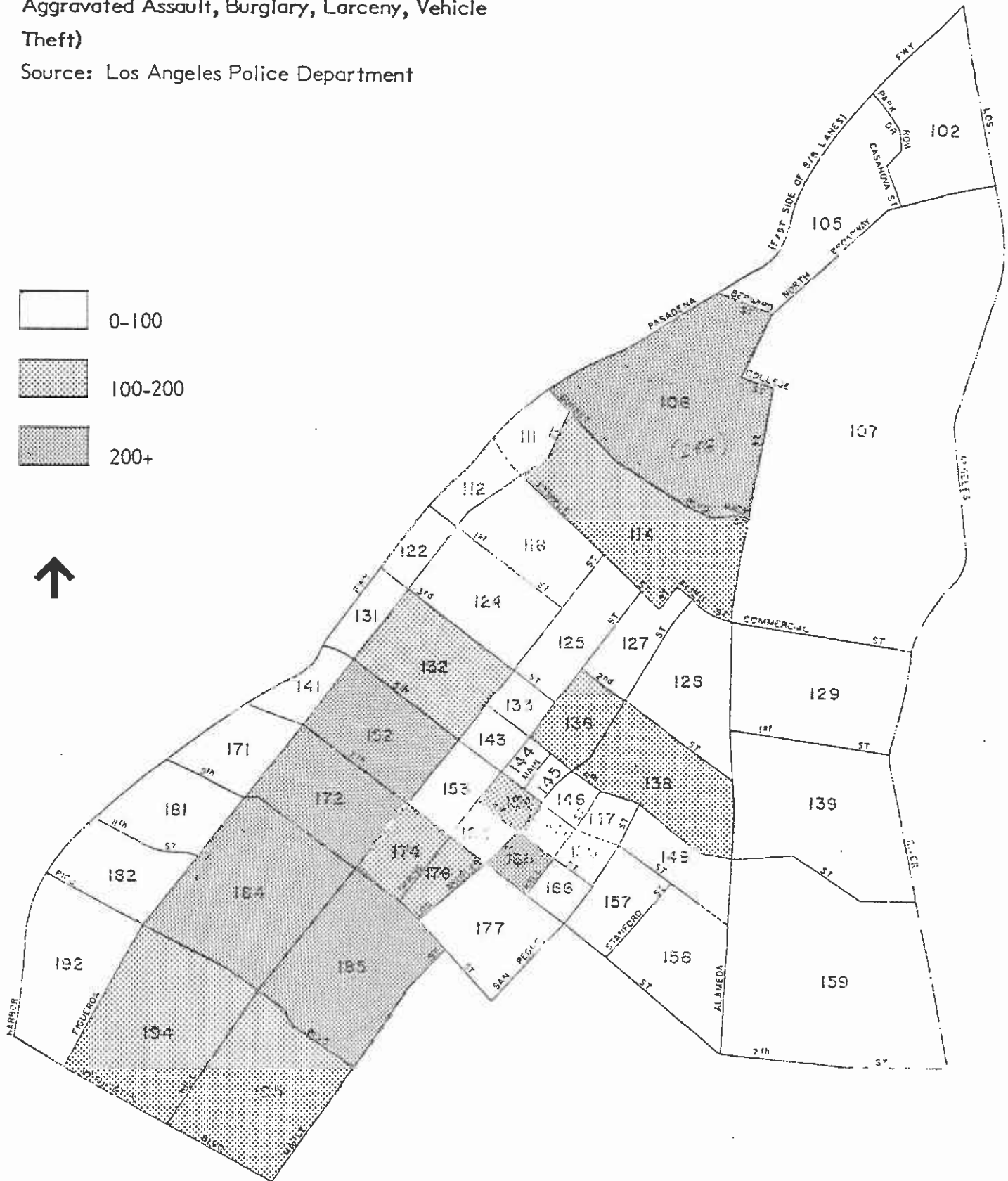
Three stations are envisioned as "high density downtown development" locations (Civic Center, Fifth/Hill, Seventh/Flower). The main issues concern providing reliably controlled environments during off-peak hours, especially to support evening use of the Music Center complex, and Bunker Hill cultural and entertainment facilities. A range of residential communities planned for the Central Business District may create new crime opportunities. Secure use of Metro Rail by new residents of the Central Business District needs to be considered as a major concern. Crime concerns in an extremely urban context are best handled by careful control of patterns of access and egress, monitoring by electronic means (CCTV), and where possible, integrating station sites into multi-use institutional settings. For example, in downtown Atlanta, the Mass Transit System (MARTA) integrates a terminal station into the downtown campus of a university. In these urban locations, high density use is the best counter-measure.

Figure 2

CENTRAL AREA

Average Number of Crime Reports Per Quarter
1980-1981, for Police Reporting Districts
(Part I Offenses - Homicide, Rape, Robbery,
Aggravated Assault, Burglary, Larceny, Vehicle
Theft)

Source: Los Angeles Police Department



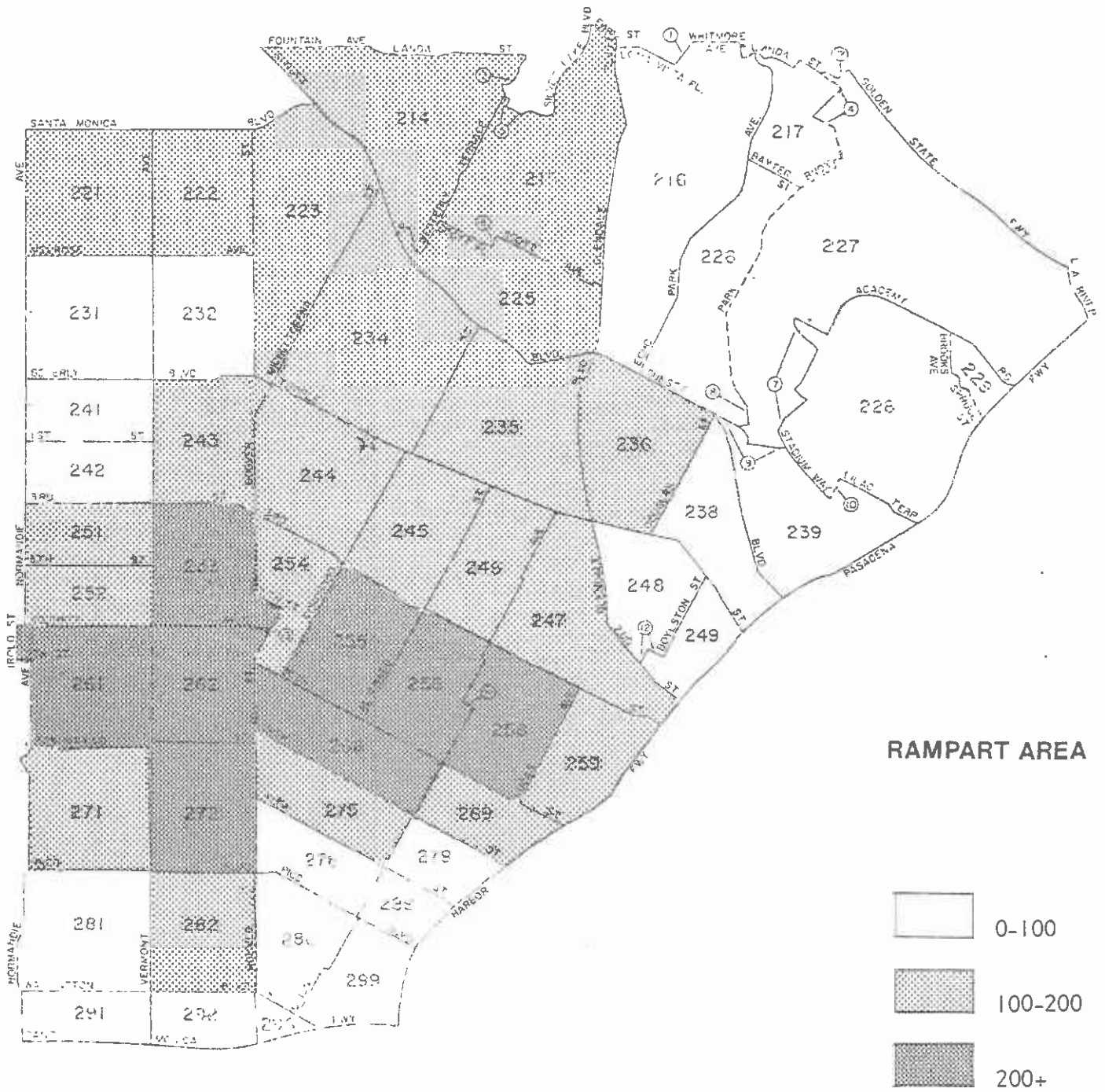


Figure 3
 Average Number of Crime Reports Per Quarter
 1980-1981, for Police Reporting Districts
 (Part I Offenses - Homocide, Rape, Robbery,
 Aggravated Assault, Burglary, Larceny, Vehicle
 Theft)

Source: Los Angeles Police Department



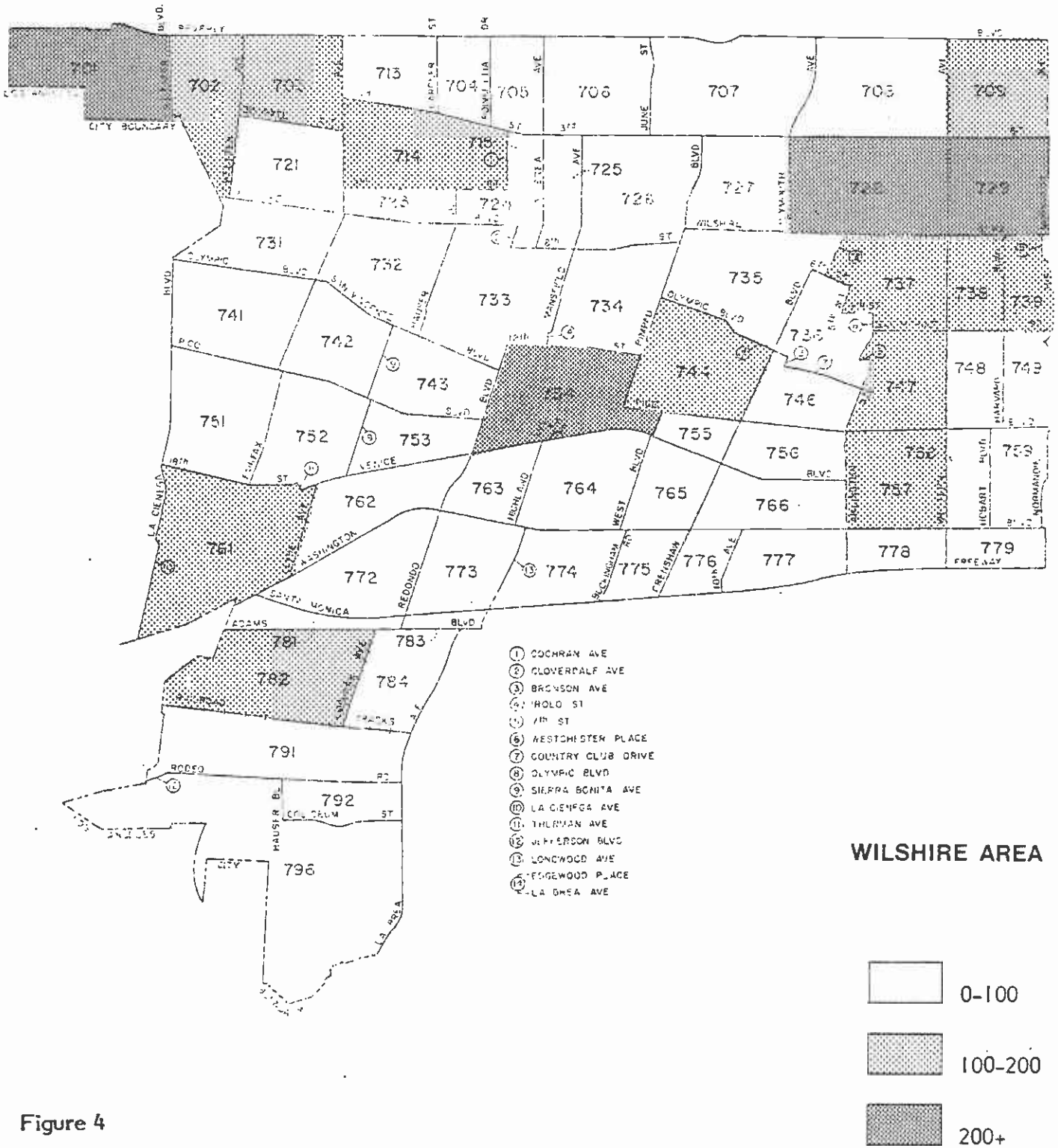


Figure 4
 Average Number of Crime Reports Per Quarter
 1980-1981, for Police Reporting Districts
 (Part I Offenses - Homicide, Rape, Robbery,
 Aggravated Assault, Burglary, Larceny, Vehicle
 Theft)

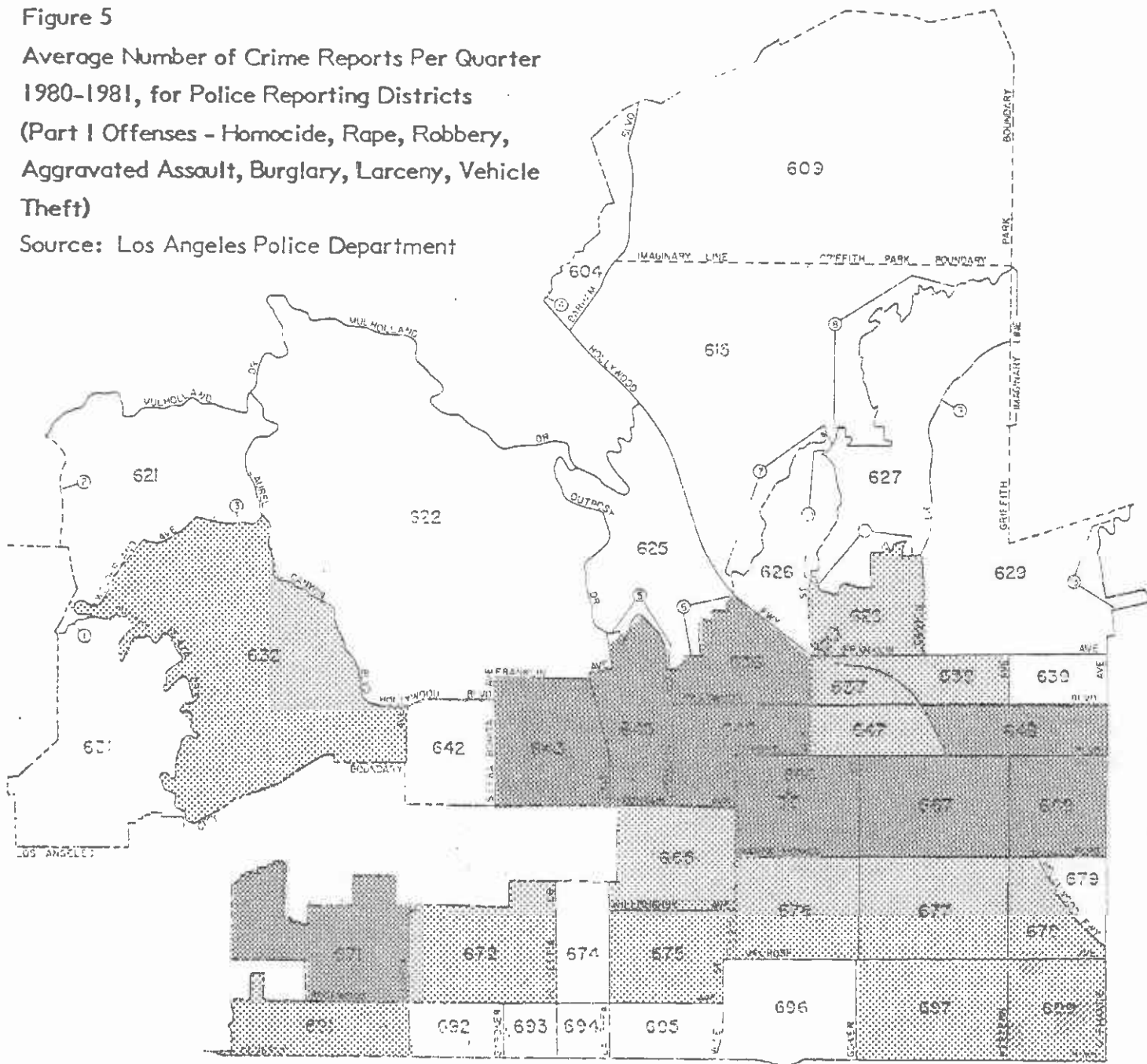
Source: Los Angeles Police Department



Figure 5

Average Number of Crime Reports Per Quarter
1980-1981, for Police Reporting Districts
(Part I Offenses - Homicide, Rape, Robbery,
Aggravated Assault, Burglary, Larceny, Vehicle
Theft)

Source: Los Angeles Police Department



- ① CRESCENT DR
- ② CHEST OF ROSE
- ③ LOOKMUI V. WZ
- ④ IMAGINARY LINE
- ⑤ OUTPOST DR
- ⑥ HILLSIDE AVE
- ⑦ HICH DR
- ⑧ SYCAMORE AVE
- ⑨ H. CREST RD
- ⑩ FRANKLIN AVE
- ⑪ FRANKLIN AVE
- ⑫ LAS PALMAS AVE
- ⑬ WILNER RD
- ⑭ WHITLEY TERR
- ⑮ IMAGINARY LINE
- ⑯ WHITLEY TERR
- ⑰ LANUENGA BLVD
- ⑱ ODIN ST
- ⑲ LA GRANADA DR
- ⑳ HOLLY DR
- ㉑ IMAGINARY LINE
- ㉒ WOLFLEAKE DR
- ㉓ MULHOLLAND HWY
- ㉔ WETONIA DR
- ㉕ DURAND DR
- ㉖ FLACMOOR PL
- ㉗ BELDEN DR
- ㉘ WESTSHIRE DR
- ㉙ BEACHWOOD DR
- ㉚ LEGGWOOD DR
- ㉛ MULHOLLAND HWY
- ㉜ BRUSH CANYON FIRE RD
- ㉝ WARENE AVE
- ㉞ ALCYONA DR
- ㉟ FL CONTENTO DR
- ㊱ QUEBEC DR
- ㊲ CRESTON DR
- ㊳ DURAND DR
- ㊴ ALCYONA DR
- ㊵ PIMMOSE AVE
- ㊶ SCENIC AVE
- ㊷ BEACHWOOD DR
- ㊸ GRACIOSA DR
- ㊹ MANOLA WY
- ㊺ CANYON COVE
- ㊻ ARGYLE AVE
- ㊼ DIX ST
- ㊽ AMBROSE AVE
- ㊾ EDGEWORT ST
- ㊿ LOS FELIZ BLVD
- 1 NOTTINGHAM AVE
- 2 GLENDOWER AVE

HOLLYWOOD AREA

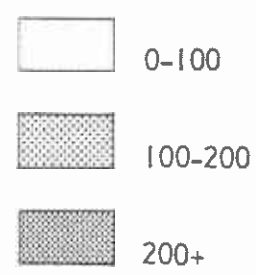
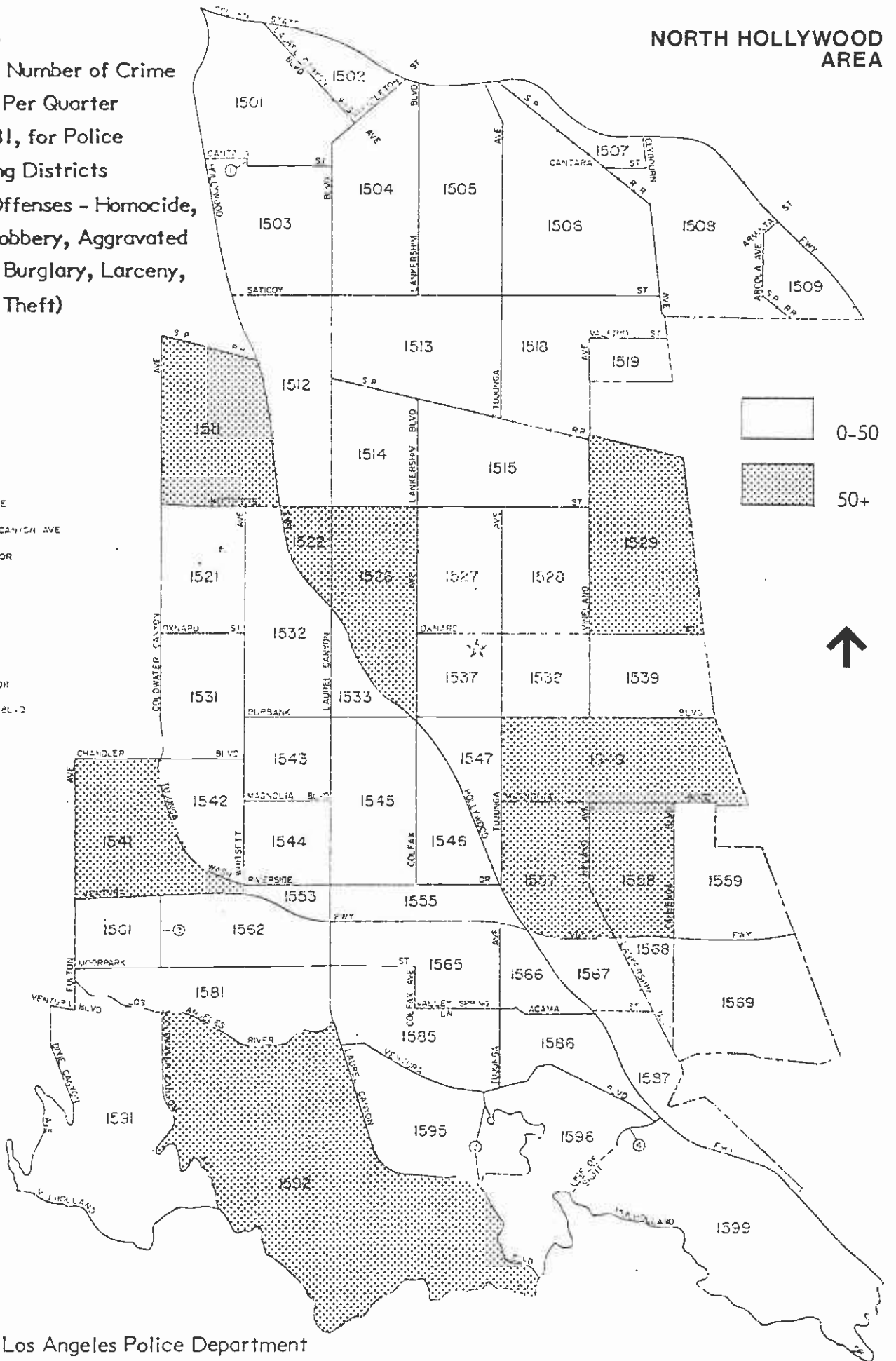


Figure 6
 Average Number of Crime
 Reports Per Quarter
 1980-1981, for Police
 Reporting Districts
 (Part I Offenses - Homicide,
 Rape, Robbery, Aggravated
 Assault, Burglary, Larceny,
 Vehicle Theft)

NORTH HOLLYWOOD
 AREA

- ① AMITSETT AVE
- ② GOLDWATER CANYON AVE
- ③ RIDGEMOORE DR
 BERRY DR
 LAURIE DR
 LAURIE PL
 BLARY DR
 DONA LOLA DR
- ④ LANKEESHAM BLVD



Source: Los Angeles Police Department

Four of the proposed stations are "corridor developments" along the Wilshire Corridor (Wilshire/Vermont; Wilshire/Normandie; Wilshire/Western; Wilshire/Fairfax). These are envisioned as potential sources of commercial development activity that may fill gaps in the high-rise spine. There is a real opportunity to integrate these station sites into new high-rise commercial buildings and to create significant opportunities for transit exchanges (e.g., extended bus-waiting areas, kiss-and-ride facilities, park-and-ride facilities). However, these are difficult station sites to control in terms of crime. They will be subject to high densities of use but only during very specific hours, and off peak volumes are on the average lower than downtown station sites. In other words, for these "corridor" locations, crowds are not large enough to provide security in numbers, and yet are large enough to offer good prospective targets to criminals. Crime rates in this area have increased 32% in the past four years. The communities provide optimal crime targets, but command one of the lowest police manpower resources in the Regional Core (\$73.00 per capita cost).

Three station sites are identified as sources of major "independent development" (Hollywood/Cahuenga, North Hollywood, Universal City). These stations offer the opportunity for creation of controlled environments connected systematically to new multi-use facilities. Because new development will dominate the areas around these stations, crime-environment problems can be managed as part of effective urban design analysis. The context of these stations can be controlled, if these crime concerns are raised early enough in the design process.

Three stations are seen as accommodating themselves to strong existing community contexts (Fairfax/Beverly; Fairfax/Santa Monica; Wilshire/Alvarado). Each of these areas already has a serious crime problem. Increasing crime in these communities could accelerate their rate of decline. The goal is to utilize the transit system as part of larger redevelopment efforts to turn these neighborhoods around or to insure the success of efforts already initiated. A comprehensive strategy was undertaken in Decatur, Georgia to prevent failure of small specialty businesses near a station location that support street life and have a significant positive effect on crime and public security.

Two stations represent unique situations. Union Station is different because it is a downtown terminal station with transfer functions to bus and a variety of surface rail systems. Crime problems faced by the Union Station site are unique to its complex functions in the heart of the CBD. Ironically, they are caused by the lack of urban activity near the station, which is almost an island nestled between large freeways and expanses of public buildings.

The Wilshire/Crenshaw Station also presents a unique set of crime concerns because it is a low density station located in an extremely low-density residential community. The community, however, is mixed in income, served by bus lines from low-income communities to the south. Like most low-density, low patronage stations it can not justify high expenditure for manpower or security; on the other hand, the complex socio-economic combinations of patrons may provide a particularly unstable situation that requires additional supervision.

In order to prevent crime impacts of the Metro Rail in each of these types of community settings, careful consideration is needed to match available crime-countermeasures with current and potential crime problems.

III. IMPACT ASSESSMENT METHODOLOGY

FEAR OF CRIME AND RISK OF CRIMINAL VICTIMIZATION

This report considers the potential impact of the Metro Rail on crime rates: absolute numbers of crimes, as well as crime rates in the vicinity of each station. Absolute number of crimes has an important relationship to "fear of crime" in a geographic area. Studies of victimization have shown that fear increases with absolute number of crimes, independent of population base or density. Fear is related primarily to number of crimes people "hear about" rather than the probability of actually being victimized.

The primary determinant of a station site's impact on crime in its environs will be whether the site creates new public areas that are perceived to be good locations for commission of crimes. According to Angel (1969) crime locations are selected by criminals based on an optimization formula. Crimes will be carried out in places which offer availability of suitable "targets" with low risks of detection and apprehension. The likelihood of detection and apprehension is based on the physical layout of the community, watchfulness of residents and businesses, criminal's familiarity with area, and alternative modes of escape. All other variables held constant, transitional commercial/residential zones are optimal locations for crime. Patrons leaving entertainment areas to retrieve cars parked in residential streets are good targets. They also increase the risk of burglary of residences adjacent to commercial areas.

STUDY PROCEDURE

The data collection for this impact analysis involved extensive studies of the communities surrounding each of the proposed station sites. First, demographic data was assembled using 1980 census tapes, on areas adjacent to proposed stations. Second, field studies were performed including creating a photo-journal of the half-mile radius near each station, and compiling a checklist of commercial facilities, residential blocks, "porous" zones, special nodes (parks, commercial centers) in each area that have been associated with crime in the past.

Meetings were held with Police Captains in each area in which station sites are located. They reviewed crime trends, statistics, and identified environmental patterns of crime. Finally, a detailed architectural/urban design study of the station/neighborhood interface was performed to identify present and future impacts of the station on crime patterns. The result of these detailed studies is a "defensible space" profile for each station. This profile lists the assets and liabilities of each station from a crime-control perspective, and suggest mitigations which can be introduced to reduce the threat of crime.

Crime Impact Assessment Measures

A series of crime-impacts were identified as a basis for station-by-station analysis. Each impact measure has been associated in with an increase in crime-rate. These relationships are complex. Increases in residential density that result from the Metro Rail system can produce increases in residential burglary and crimes against pedestrians. These increases in crime however will be greatest in communities that already have high crime rates and the effect may even be reversed in communities in which new residential buildings remove a vacant lot or fill gaps in the street scope that have been an environmental source of crime. Proposed community crime impacts and measures are summarized in Table 4. In all instances, the new availability of rapid transit will increase residential densities to some degree and result in a complex pattern of changes in land use in the station cluster areas.

Land Use Changes and Crime Impacts. The effect of the new stations will vary depending on whether they are located in the CBD, in "corridor developments", or in "independent development" areas. In all but a few instances, there will be a tendency to increase mixed-use (residential and commercial uses; public and private uses). These will eventually become higher density urban areas with increasing numbers of high-rise offices and multiple-occupancy residential buildings, served by a broad range of commercial and retail centers. From a crime point-of-view, these urbanized developments along the transportation spine in the Regional Core can become sources for crime. Most directly, more residences at higher density may increase the risk of residential burglary and offenses against pedestrians (assault and robbery).

Station Environs and Crime. In the station environs, the use and importance of street intersections will be altered. What now is a landmark intersection (such as Western and Wilshire) will become a major public zone. New pressures will be placed on traffic and parking as system users compete for curbside pickup and drop-off space, and to absorb excess curbside parking and offstreet parking supply. This means the entry of more non-residents into residential neighborhoods. Past studies indicate such events can increase risks of burglary, robbery and assault.

Station Complex and Crime. The station itself is a complex new urban element. It is an interface between an urban setting and a new urban system. The entrance lobby and fare area will be minimally manned. In some instances there will not be an existing network of pedestrian or commercial activity to provide informal supervision of public areas. For these reasons, it is important that the station entrances, exits, bus-lanes, curbside drop-off areas, parking lots and structures, and passages be reviewed to determine whether they are introducing new public zones that can become a location for muggings, assaults, robberies in the immediate station vicinity.

TABLE 4

FACTORS CONTRIBUTING TO CRIME RISKS BY IMPACT AREA

I. Station Cluster Areas

- A. Increases in residential density in community.
- B. Increased mixed (residential/commercial/entertainment) uses in community.
- C. Increases in mixed (public/private) uses in station areas.
- D. Increases in mixes of high-rise and low-rise building configurations.
- E. Increased density of buildings in community.

II. Station Areas

- A. Increased pedestrian uses around station.
- B. Increased number of bus boardings and exitings, auto drop-offs, curbside waiting, etc. at station
- C. Increased use of existing excess supply of curb parking (in residential and commercial areas in station vicinity).
- D. Increased use of existing supply of off-street parking near station.

III. Station Complex

- A. New station parking spaces that are not secure, and/or not under surveillance.
- B. New areas of public space (multiple paid exits, mezzanine areas, lower platforms) not secure and/or not under surveillance.

Specific crime issues at each of the impact areas are identified below.

Impact Area

Crime-Environment Issues

Station complex

the station site itself--station design, entry-exits, security personnel, lighting, access distances and sequences, entrances, exits, relationships to streets, peak and off-peak ridership patterns, immediate street level surroundings, visual character, visibility.

Station Environs

patterns of transit and pedestrian activity, land-use patterns, ambient crime levels, population trends and dynamics, centrality and access, perception of crime by police, transit patrons, and local residents.

Station Cluster

groups of stations occupying the same relation to their surrounding community--identifying factors, perception by visitors, modes of intra-area access, crime patterns, boundaries between land-uses, patterns of mixed use...

TYPES OF CRIME IMPACTS

Direct Impacts

The pattern and distribution of this population growth will be very different with and without the Metro Rail. Value-capture efforts associated with the Metro Rail Project will affect the market outlook in particular ways. For example, incentives will be provided for dense development of parcels continuing the process of urbanization of the Regional Core. If no mitigation measures are taken, dense urban developments in station areas suggest the following specific crime concerns summarized in Table 5,

- Pedestrians using the transit system in new urbanized areas will be subject to victimization, especially after daylight hours (increases in robbery, assault);
- Bus-transfer, bus-waiting patrons will be subject to victimization (increases in rates of robbery, assault, larceny);
- Curbside parking in existing communities will be demanded by park and ride commuters. This will bring large numbers of strangers into existing, spatially protected residential areas, thus increasing the risk of crimes against persons and property (increases in rates of burglary, robbery) in residential zones;

TABLE 5
CRIME INCREASES IN STATION ENVIRONS

	ROBBERY ASSAULT RAPE	BURGLARY RESID. COMM.	AUTO (TFV)	PETTY CRIMES (LARCENY, PICK- POCKET, ETC.)
Increased pedestrian use of area	X	X		
Increased bus/auto boardings, exits, drop-offs, waiting	X			X
Increased curb-side parking	X	X	X	
Increased off-street parking	X		X	

- New off-street parking structures built for Metro Rail, and expanded use of existing off-street parking will increase auto related crimes (increases in auto theft, as well as potential increases in personal crimes such as robbery, and rape).

Indirect Impacts

On a larger, regional scale new urban patterns will develop in response to Metro Rail. The city will become more centralized, and urban areas around key stations will be highly developed, especially Wilshire/Normandie, Fairfax/Beverly and Hollywood/Cahuenga. In these new dense developments there will be new building-types and new zoning mixes; e.g., residential, commercial-office, entertainment uses combined in a single structure. These new forms of urbanization could result in new patterns of crime. Criminals may take advantage of juxtapositions of high-income and low-income communities to secure targets for crime. Currently, buffer areas separate these high and low income zones. Existing community boundaries, (for example, in West Hollywood or in South Park in the CBD) will weaken as a result of this urbanization process.

Urban design analysis is required for each station site to insure that value-capture efforts do not contribute to crime impacts. New buildings created by Metro Rail joint development of stations should provide ground-level activities to offer safe, surveilled passage along their edges to pedestrians; they should create suitable buffers between high active commercial uses and more sedentary residential areas. Special incentives should be offered for projects which mix residential and office uses in positive ways (as in New York's Fifth Avenue Incentive zone) to provide twenty-four hour activities around station; e.g., residential hotels mixed with office buildings to provide informal surveillance by hotel clerks and employees over parking and station complex. For example, Metro Rail parking requirements could be defined simultaneously with parking for new office buildings so that they can provide mutual security and surveillance through joint planning.

There is a potential conflict between existing urban design goals of current public agencies and the new goals which may emerge once Metro Rail is a reality. Crime control is not now a major consideration in formulating urban design policy. It could become a major concern in future urban design activities. It is important that crime-countermeasures be considered early in the formulation of design guidelines for achieving urban design objectives. If crime control can be introduced early in the process, great savings can be achieved over more expensive manpower alternatives. The cost of crime-control efforts through police manpower is far greater than that which can be achieved through effective environmental management of the opportunities to commit crimes.

Metro Rail itself is part of a larger urban system. Its long-term effects can be profound for reduction of crime in the city as a whole if it establishes areas around stations subject to new standards of urban design that include crime-control as a major consideration. These station areas can become especially safe zones and a source of positive environmental influence.

IV. IMPACT ASSESSMENT

SYSTEM VS. NO PROJECT ALTERNATIVE

If there were "no project", buses would continue to be the only form of transit or there might eventually be increases in options such as van-pools or carpools. Perlstein and Wachs (1981) using Los Angeles data on bus ridership, show remarkable similarity in spatial patterns between transit and non-transit crimes. Los Angeles Police Department areas which have the highest numbers of Part I offenses (Homicide, Rape, Robbery, Aggravated Assault, Burglary, Larceny, Vehicle Theft) per 1,000 population (Central Area; Southwest Area; Southwest Area) also have the largest numbers of serious incidents aboard RTD buses. Only 88 of the 223 SCRTD bus lines, according to their study, experienced any serious incidents at all in 1980-81. Most of these lines served Central and South-Central Los Angeles. Correspondingly, these routes have the greatest ridership, and the areas they serve have the most transit dependent populations in the city. According to these studies more than half of the SCRTD boardings are made on a mere ten percent of the lines with the highest incidents of crime. As a result, the No Project Alternative would not result in a noticeable change in crime rates.

The Metro Rail system can be expected to be a focus of some new criminal behavior. In most recent urban rail systems, data has been kept on the frequency and location of crimes within the system (in Atlanta, Washington, and San Francisco). There is general agreement that careful attention to the security design of stations--channeling patrons through a small number of portals, preventing easy escape via unsurveilled exits, providing two-way communication with patrons--has reduced the number of serious crime incidents. In Washington, the subways provided 374 million passenger miles of service in 1980 (cf. Perlstein and Wachs, 1981); in 1979, the last year for which data were available, there were 851 criminal incidents reported, and only 15 were considered violent crimes, principally assaults. In older systems, like New York, Chicago, Philadelphia, crimes against persons are far higher. Patrons are far more vulnerable in the maze-like passages and dark recesses of these less adequately designed systems. Crimes against property and fare evasion have reached epidemic proportions. By incorporating appropriate preventive measures and being aware of the crime environment Metro Rail designers can avoid increasing crime risks. Accordingly, Metro Rail is unlikely to result in crime rates significantly different than the No Project Alternative.

CENTRAL BUSINESS DISTRICT (CBD) CLUSTER: Union Station, Civic Center, Fifth/Hill, Seventh/Flower

The proposed CBD Metro Rail stations are located at strategic points in order to serve dense concentrations of potential transit riders employed within the central city. The high daytime population and typical CBD pattern of intensive daytime pedestrian activity integrates the area as a cluster of stations, an identifiable regional destination and activity center. The key crime and security issues for downtown stations are: the temporally restricted use pattern of the CBD--activity almost exclusively during daylight working hours; the presence of territorially based youth gangs in the area; the anonymity of pedestrian areas generating an environment for street crimes; rapid transitions from high rise, high density commercial office buildings to low and medium density commercial, industrial and residential uses over short distances; the negative patterns of use of "public" spaces and zones; and the real and perceived dangers of crime related to the Skid Row population (especially at Fifth/Hill Station).

While the CBD station areas are quite distinct, socially and physically, each presents a very different environment for crime. Table 6 presents 1981 crime statistics for the station areas.

TABLE 6

SERIOUS CRIMES IN CENTRAL BUSINESS DISTRICT CLUSTER, 1981

Metro Rail Station Environs	Resident Population	Part I Crime Reported	Robbery Reported	Burglary Reported	Assault Reported	Part I Rates/1000 population
Union	5200	864	50	57	15	166
Civic Center	2533	817	58	44	27	322
Fifth/Hill	8549	3214	331	349	191	376
Seventh/Hill	1916	2381	242	236	68	1243
TOTAL	18,198	7276	681	686	301	399.8
Total LAPD Central Area	39,496	19,635	2382	2619	1192	497.1

Source: Los Angeles Police Department Statistics; RTD population data (SCAG Census Data Center)

Union Station

This proposed terminal station is located adjacent to the Union Station rail passenger terminal. The immediate station area borders on the industrial periphery of the Central Business District and is proximate to several ethnic communities located on the east side of the downtown area: Chinatown, Little Tokyo, and expanding Hispanic areas. The social fabric of the area is characterized by an overall resident population that is approximately 45 percent Asian, primarily Chinese, and 39 percent Hispanic, mostly Mexican in origin. These residential areas are transitional low-income areas strongly divided by ethnic background and very territorial in behavior.

The station context is primarily industrial. The Union Station architecture, important public places nearby, and ethnic contrasts create a strong image and draw significant tourist and pedestrian trade to the area. Olvera Street, the Pueblo and Chinatown are regional attractions, generating activity both day and night.

The physical pattern of the area is dominated by relatively large scale public and quasi-public elements. The imposing superstructure of the Santa Ana Freeway creates a great gap for pedestrian access from downtown. The immediate area has very limited residential, retail commercial, or office space. The primary traffic artery is Alameda Street, although pedestrian movement is concentrated in the areas around Olvera Street and on parking areas to the west and north.

Crime rates tend to increase with proximity to the low-income resident neighborhoods. The rate of Part I crimes for the immediate area in 1981 (166.3 Part I crimes/1000 population) compares favorably with the larger Central Business District average of 497.1 crimes/1000. This includes rates and actual reports of street crimes, thefts from vehicles, and residential burglaries. At present, Los Angeles Police officials perceive no special threat or crime problems concerning locations in the area of Union Station; it is believed that the ethnic homogeneity and territoriality of the ethnic communities tend to control criminal activity, even in the heavily tourist visited areas. Furthermore, low density street patterns of the area enhance patrollability.

As a hub of a potential integrated transportation complex serving Southern California, the proposed Metro Rail station at Union Station is well suited for making connections to other parts of the city. While the location is convenient for access to the immediate public spaces across Alameda Street, it presents potential crime risks to patrons going to and from streets in Chinatown, Little Tokyo, and Hispanic neighborhoods to the east. These patrons must traverse industrial areas and large open spaces that can be dangerous both during the day and night.

Crime risks may also be greater because of increases in public and tourist activities. Heavier volumes of use will make possible concomitant increases in petty thefts and crimes against pedestrians and tourists. Residential areas peripheral to the immediate station area are sufficiently removed from the impact area of the stations, so that no direct impact is anticipated.

Potential crime issues are the connections between station entries/exits and Union Station entrances and parking areas; and the paths to and from

public buildings in the immediate vicinity. The scale of streets in the area is very large. A walk from a station exit to Union Terminal without adequate lighting or security could be a major crime risk by night.

The station itself can be evaluated for its crime potential (cf. Rouse Associates (1980) based on elements which have been associated in past studies with deterring crime. The preliminary designs for Union Station suggest a positive overall crime-impact: the high projected passenger volume intrinsically acts as a deterrent; limiting to two the number of paid exits/entrances reduces the crime potential of the station. The fact that it is a terminal station (rather than a through or transfer station) suggests a positive impact. Past studies have shown that terminal stations are likely to be a location of petty crimes (larceny) but not usually more serious crimes such as robbery and assault.

Long term impacts of the Union Station on crime depend on future urban developments that are initiated as a result of the station. In general, the market outlook for this area is positive like other CBD stations. The trend toward outflow of population from the Central City that took place between 1950 and 1970 is being reversed. All areas of the Regional Core are expected to expand and to increase their density by the year 2000. Projections suggest that the presence of the Metro Rail station and associated joint development activities will produce a low-to-moderate increase in commercial and residential uses in the Union Station environs. The Union Station area has some potential as a multi-modal transit center with hotel, office and retail uses due to existing air rights. Even when the available areas are fully "built out" they will occupy only 25 percent of the available square feet (including underutilized land areas). The major crime problems that may result from this station will be in its immediate area. There is need to relate station entrances to Olvera Street, and to establish effective internal circulation patterns across the long expanses of undeveloped land in which the station lies. Central City North will continue to grow, in part as a response to the Union Station Metro Rail activity. Condominium residential projects and retail projects oriented toward the Chinese population are expected. These trends taken by themselves do not suggest any long-term crime impacts of Metro Rail. Recommended mitigations for the Union Station site are therefore minimal considering the limited nature of the crime impacts.

Entrances in the preliminary station design are appropriately linked to existing or proposed rail terminal functions. Connections to SCRTD parking lots and bus drop-off areas need to be developed to offer passengers continual protection as they enter and exit from non-station areas. Mitigation of potential crime impacts can be achieved by including standards for crime prevention through environmental design in the architectural program used to guide design development. This would insure that pedestrian movements would be channeled into areas that can be kept under surveillance and that informal surveillance methods will be maximized where possible; e.g., by placing windows in waiting rooms to allow visibility of pedestrians, orienting exits from parking structures so they emerge into active public zones, etc.

CRIME IMPACTS OF METRO RAIL SYSTEM: UNION STATION

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick- pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	*				C, D, E, H
IV. Increased bus/auto boardings, at station	***			*	G
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured (1000 spaces)	***		**		I
VIII. New public spaces--unsecured	*				K

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected

Civic Center

The proposed Civic Center station is located between Hill and First Streets within a zone of public and governmental buildings extending from Flower Street to Los Angeles Street between Hill Street and Temple Street on a north/south axis. The Civic Center Plaza and pedestrian mall are the focus of the area and the location of the primary station entrances.

Like the other Central Business District station locations (other than Union Station), the area is primarily a 12-hour use zone and active primarily during daylight working hours. In spite of the public nature of the buildings, pedestrian spaces, and plazas in the vicinity of First and Hill Streets, there is less tourist and visitor activity than might be expected.

Land use in the quarter-mile area is dominated by public and quasi-public uses: government buildings, Civic Center Plaza, the Mall, and the Music Center Complex to the north. Along Hill Street, just to the west of the proposed station entrances, lies a portion of the high density Bunker Hill housing development. Other commercial and residential uses do not presently exist in the immediate area although important vacant areas, currently used for parking, are reserved as potential development sites.

First Street is the primary traffic artery for auto, bus, minibus and pedestrian traffic moving in a north/south direction. Hill Street is a key connector to other Central Business District areas to the west. Music Center traffic before and after evening performances typically use Grand, Hope, First and Temple Streets. Pedestrians employed or visiting any of the governmental facilities in the station area must cross Hill Street to get to parking areas.

Los Angeles Police Department officials report that the Civic Center has no serious crime problems and do not identify any particular areas in the immediate surroundings which are generators of crime. The most serious, frequently reported crime is burglary/theft from auto, occurring in the extensive parking structures adjacent to the Civic Center. The high crime rate in the station vicinity (346 Part I crimes/1000 population) is attributable to the high number of auto related crimes and a correspondingly small residential population. If the daytime population were considered as a base of crime, the quoted rates would be far lower.

Potential crime impacts for the Civic Center Station stem from limited use of the public zone surrounding the station entrances by day and night, and the relative isolation of the Plaza and Mall during off-peak hours. While bus transfers are significant, no park and ride or kiss and ride facilities are anticipated. Because the station area is so close to "high-crime" zones in nearby downtown areas, there is a danger of crime-displacement from Pershing Square or Central City East.

Long term crime impacts in this Metro Rail station site are fewer than many other stations since it is not expected to induce a great deal of development activity either of commercial or residential facilities. New parking structures and extensive bus-transfers facilities are not considered. From a crime point of view, the primary issue is rerouting of pedestrian traffic from nearby cultural, entertainment, and residential

facilities into this station during evening hours. There are a large number of separate entrances proposed to accommodate peak volumes of government workers; these become a major liability during off-peak evening hours.

Mitigation of these potential impacts can be achieved by reducing the number of entrances on the Civic Center end of the station and/or limiting use of these entrances to business hours only. Alternatively, the public zone around the station in the Civic Center area can be more clearly articulated to provide an "oasis" of activity, especially at night. At a minimum this can be achieved by integrating the proposed bus stop into the design of the entrance; this would then form a kind of "front porch" for the station.

CRIME IMPACTS OF METRO RAIL SYSTEM: CIVIC CENTER

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.) *					H
STATION AREA IMPACTS					
III. Increased pedestrian use around station *					H
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured *					A, G, H

31

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Fifth/Hill

The proposed station at Fifth and Hill Streets is the heart of the Central Business District (CBD). The Pershing Square area offers pedestrian access to a number of important activity centers--retail commercial shopping on Broadway, the Jewelry Mart, Grand Central Market, Spring Street, the Biltmore Hotel, and the Main Library. Land uses in the immediate area are high density, high-rise offices with street level retail. Housing and hotel uses are limited.

The focus of the area for residents, employees, and tourists is Pershing Square--a primary organizer of the downtown pedestrian patterns as well as auto traffic. The plaza attracts strollers, tourists, vagrants and winos, youth gangs, and downtown employees during lunch. Pershing Square is heavily used during daylight hours, especially between 10 a.m. and 2 p.m. After 6 p.m. the area becomes an unsafe area, deserted except for youth gangs. Crime rates are significantly higher than the citywide averages: 376.0 crimes/1000 population compared to 102.8 crimes/1000. The rate reflects very high pedestrian volumes, extensive parking, and the influence of the youth gangs.

Informants from the Los Angeles Police Department Central Division said Pershing Square area is patrolled by patrol car and foot patrol. An average of five patrol cars are located in the Central Business District core at any time of the day. The heavy patrol reflects the reality of crime. Mexican and black youth gangs use the square as their territorial base. Although their presence is not overtly obvious, they are a threat to tourists traversing Pershing Square during the evening, nighttime, and early morning hours. Police informants consider Pershing Square and Broadway dangerous areas. Although gang activities are not targeted at "outsiders" or visitors, the risk of assault or robbery remains very high.

The proposed Fifth/Hill Station area is within high density downtown development. The location of entrances present the potential patron with the greatest immediate risk of any station in the Metro Rail system. High peak-hour pedestrian volumes will mitigate somewhat against crime. Low levels of evening and nighttime use will have the opposite effect. Projected patronage levels are very high and include large numbers of pedestrians and bus riders from residential areas within the CBD and surrounding parts of the Regional Core. Entry/exit points for the Metro Rail station have the potential of developing into congregation points for "street people," especially in areas where "street people" are prevalent. This might interfere with pedestrian uses, inhibit transit ridership, and generally alter uses of parks-- Pershing Square and Library Lawns--leading to a circumstance in which public fear of crime is heightened. This station is located in a transitional area between Central City East and the business area of downtown. It will be the primary station stop for the new Bunker Hill complex. Since fear of crime is a major issue in the minds of visitors to the CBD, the "marketing" of evening uses of the CBD to the general public will depend to a great extent on the control of crime in the vicinity of this station location.

The character of the Fifth/Hill Station area is at present underdeveloped. It is projected for office, commercial, and residential development. These will increase daily use in the station area. This may provide

mitigation against crime, depending on the sensitivity with which urban design is used to channel pedestrian access to and from station entrances. For some time there will continue to be conflicts between these new uses and existing community uses in Central City East, Pershing Square and along Hill Street. For the immediate future mitigation of dangerous entrances can be achieved by eliminating dog-legs, blind alleys and cul-de-sacs in station entrances. Consideration should be given to integrating station entrances into retail stores in order to provide informal control.

CRIME IMPACTS OF METRO RAIL SYSTEM: FIFTH/HILL

Metro Rail Impact	Types of Crime			MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)	
DEVELOPMENT IMPACTS				
I. Residential density increases in community	***			K
II. Increased mixed uses (residential/commercial, etc.)	**			K
STATION AREA IMPACTS				
III. Increased pedestrian use around station	***			E, H, J
IV. Increased bus/auto boardings, at station				
V. Increased use of curbside parking near station				
VI. Increased use of off-street parking near station				
STATION COMPLEX IMPACTS				
VII. New station parking--unsecured				
VIII. New public spaces--unsecured	*		*	C

34

¹ See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Seventh/Flower

The proposed station location at Seventh and Flower Streets serves the important office, retail shopping, and financial buildings of the Central Business District, including 7th Street retail stores, Broadway Plaza, Arco Center, and many major office buildings. Land use in the area is devoted to high-rise office towers, street level retail and commercial uses, major department stores, shopping centers, and restaurants. As a result, 7th Street is a major auto and pedestrian artery through the Central Business District. Local, express, and minibus connections offer access to South Park and other parts of the Central Business District.

Pedestrian volume is heavy during the day. Housing is located on the periphery of the station environs in the South Park and the Convention Center areas. The residential population associated with the Seventh/Flower Station will be less significant than daytime employment and visitor population. While functioning rather independently of its peripheral uses, the station is on the edge of a low-income, "high-crime" community.

Officials from the Los Angeles Police Departments' Central Division indicated that the immediate station area is relatively safe and free of serious crime problems. There has been little encroachment on the area by unstable or transient populations and youth gangs. Crime statistics for 1981, however, indicate Part I crimes for this station area are one of the highest of all Metro Rail station areas in the Regional Core: 1248 crimes/1000 population compared to the Central Area rate of 497 crimes/1000 and the citywide rate of 102.8 crimes/1000 population. This statistic may be misleading because of problems with the population base in estimating crime rate. In absolute numbers, there were 2381 Part I crimes reported in R.D.s 152 and 171 for 1981. These are the two police reporting districts adjacent to the station site and included more than 200 robbery reports, more than 200 burglary reports and a relatively high number of reported assaults. The growth of urban residential areas to the south will result in increased use of this station location by day and night, by pedestrians and as a place for bus-transfer. These patterns suggest the importance of a careful urban design approach to station design including bus stops and small scale streetscape designs to discourage crime and provide for public safety after business hours and on weekends.

The long term impacts on crime in this station area hinge on the fact that the station is likely to induce a large amount of commercial development to the south. Once achieved, this area is likely to become quite stable. During the course of development some crime increases can be expected. Occasional crimes in this area can be expected to continue as new offices and associated entertainment areas are extended to the south of downtown, drawing tourists and visitors away from more concentrated zones in the center of CBD. The large "free" zone in current station plans may become a source of problems, especially during late evening hours if stations are not manned. Entrances do not appear to be coordinated with significant urban features. As long as volume is high, crime problems will be minimal. As activity in the station environs and complex declines in evening hours, crime concerns may become more prominent.

CRIME IMPACTS OF METRO RAIL SYSTEM: SEVENTH/FLOWER

Metro Rail Impact	Types of Crime			MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV) Petty Crimes (Larceny, pick- pocket, etc.)	
DEVELOPMENT IMPACTS				
I. Residential density increases in community				
II. Increased mixed uses (residential/commercial, etc.)		*		J
STATION AREA IMPACTS				
III. Increased pedestrian use around station	*		*	J
IV. Increased bus/auto boardings, at station	*		*	J
V. Increased use of curbside parking near station				
VI. Increased use of off-street parking near station				
STATION COMPLEX IMPACTS				
VII. New station parking--unsecured				
VIII. New public spaces--unsecured		***		D, E, G, H

¹ See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

WILSHIRE EAST CLUSTER: Wilshire/Alvarado, Wilshire/Vermont, Wilshire/
Normandie

The Wilshire Corridor cluster of Metro Rail stations actually comprise a variety of social and physical environments along the region's most important office/commercial linear strip. Spaced along Wilshire Boulevard at approximate intervals of one-half mile, these proposed stations serve large numbers of Wilshire Boulevard office employees as well as a large Wilshire Center population traveling east, west, and north to other major regional activity centers. The Wilshire and Westlake "communities" together have an employment population of approximately 200,000 compared with the CBD's 280,000, and a resident population which is highest in the Regional Core. Ethnic diversity and segregation is strong. The west side of the cluster is predominantly white, with Asian and Hispanic neighborhoods clustered to the south and west in older neighborhoods. The street-scape and spatial pattern of the Wilshire Corridor office core is typified by high and medium rise office/commercial along Wilshire, low and medium commercial/retail/mixed use on 6th Street and residential uses of varying density north and south of 6th and 7th Streets.

The primary crime and security issues for Metro Rail stations in the area include transition from the public areas of Wilshire Boulevard to residential uses and commercial uses over relatively short distances. Los Angeles is no longer comprised of a series of sprawling suburbs. Areas such as the Wilshire Corridor now are comprised of complex income, ethnic and age mixes for which the environment was not designed. The locations of commercial centers are relatively random and not coordinated with residential density. Commercial office developments are unrelated to nearby residential neighborhoods and serve to diminish security rather than provide safe, lighted ways through otherwise isolated areas. These problems of coordination of residential uses and commercial development affect each of the Wilshire station sites in a different way, but serves as the key issue in assessing crime impacts for the cluster of stations.

TABLE 7

SERIOUS CRIMES IN WILSHIRE EAST CLUSTER, 1981

Metro Rail Station Environs	Resident Population	Part I Crime Reported	Robbery Reported	Burglary Reported	Assault Reported	Part I Rates/1000 population
Wilshire/Alvarado	12,288	2086	317	590		170
Wilshire/Vermont	25,641	3405	302	836		133
Wilshire/Normandie	11,762	1560	160	406		133
TOTAL	49,691	7051	779	1832		141.9
Total LAPD Rampart Area	237,690	24,649	2384	7500		103.7

Source: Los Angeles Police Department Statistics; RTD population data (SCAG Census Data Center)

Wilshire/Alvarado

Wilshire and Alvarado in the Westlake area is in transition. It is high density, predominantly low-income, and contains a majority Hispanic population (65 percent Mexican or Cuban). MacArthur Park is the major land use element in this area. The perception of most visitors is that MacArthur Park is unsafe. MacArthur Park and a number of nearby streets were casually referred to as "drug havens" by the Los Angeles Police Department officers who patrol the area. Grandview Street was until recently considered the City's "secondary skid row". Special patrolling efforts by the LAPD has largely removed some of the visible signs of vagrancy from the area.

Land use patterns in the area suggest heavy commercial activity on primary streets--Alvarado, 6th and 7th--mixed use along Wilshire, east of the park, and dense infill of medium and high density residential housing. The park serves as a dynamic public space in the daytime, a vacant spatial "void" at night. Pedestrian and auto movement is concentrated on Alvarado, with major intersections at 6th Street, Wilshire, and 7th Street.

The LAPD patrols the area with a single patrol car and foot patrol (1-2 officers) simultaneously, 24 hours per day. Foot patrolmen focus on the park and Alvarado between 6th and 8th Streets, where the majority of police calls are reported. The primary perception of these police officers about crime and security is that their constant surveillance and presence have reduced the drug dealing problem. Generally they believe there is an "acceptable" level of crime in the area. However, perception of crime to the potential transit rider or visitor remains high. Crime statistics for Alvarado show Part I crimes to be highest among the Wilshire Corridor station areas, especially for burglary, robbery, and aggravated assault. Police account for these statistics by citing the heightened opportunity for crime afforded by the park and the high percentage of elderly low-income population. The 1981 Part I crime index of 172.0 crimes/1000 population reflects the relatively high level of crime.

The patronage and mode of access projections for the Wilshire/Alvarado Station indicate that a large number of transit patrons from outside the Westlake area will transfer to Metro Rail from buses and there will be a great deal of pedestrian access. This suggests an opportunity to design a community that enhances the interface between the park, commercial activity on Alvarado Street and Wilshire Boulevard, and the station entrance itself.

Long term commercial and residential development in the area as a result of the Metro Rail station is expected to be moderate to high. This will produce still more mixed uses in the area. The urban area has no solid core (other than the park) around which to create an urban focus. Crime problems can be expected to increase due to larger numbers of pedestrians, many of whom are likely to be transit dependent.

The proposed station design is likely to act as a deterrent to crime in station platforms or concourses. It has only two levels. Previous studies have shown that three level stations induce more crimes than two level stations. Also, it has only one entrance. The greater the number of entrances and exits the greater the likelihood of crime in station areas.

In order to mitigate negative impacts of this station location, the station entrance concourse could be designed as an intensely public place. Paths of access from feeder streets in the surrounding environs should be analyzed to provide safe passage to and from the entrance. Guidelines for crime prevention through environmental design can be included in the program used by architects for the station entrance and concourse. Urban design guidelines for the larger area could include a crime-control component so that as new office building projects are defined they can each contribute in some measure to environmental security in the larger area.

CRIME IMPACTS OF METRO RAIL SYSTEM: WILSHIRE/ALVARADO

Metro Rail Impact	Robbery Assault	Types of Crime		Petty Crimes (Larceny, pick- pocket, etc.)	MITIGATIONS ¹
		Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community	**	*	*	*	K
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	***				E, H
IV. Increased bus/auto boardings, at station	**				E, H
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured	*				E, H

41

¹ See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Wilshire/Vermont

The proposed station near the intersection of Wilshire Boulevard and Vermont Avenue is an important Wilshire Corridor location, with a very high daytime employment population, resident population, and heavy volume of pedestrian and auto traffic. The resident population in the area of approximately 25,000 persons reflects a diversity of ethnic groups and income groups in the low-income range. The population is 55 percent Hispanic, 30 percent white, and 15 percent Asian. It is a relatively young population--the median age is 30 years old, residing almost exclusively in renter occupied units (97 percent).

The land use pattern of the area is well defined. Wilshire Boulevard is devoted to high rise, high density offices, with ground floor retail. Parallel streets to the north and south (6th and 7th Streets) are low rise commercial and mixed uses. Sixth Street is especially commercially active in the five blocks east and west of the Wilshire/Vermont Station. Further north and south are blocks of medium and high density housing. Thus, there is a shift from high rise commercial and office to housing in a mere two blocks; with neighborhood commercial strips offering a buffer to this "shift" in land uses.

The hierarchy of primary auto and pedestrian traffic arteries supports the definition of the land use pattern. Wilshire Boulevard and Vermont Avenue are clearly primary, 7th and 6th Streets secondary, and there are "tertiary" residential streets. The intersection of Wilshire and Vermont is a main bus transfer point.

Rampart police officers characterize this area as relatively quiet, night and day, despite high pedestrian activity and with no specific "hot-spots" for crime identified. There are a great number of burglaries from vehicles parked in the many parking lots throughout the area. Residential neighborhoods in the station area are low-income but generally stable and ethnically divided, usually by nation of origin. Crime statistics reveal a moderately high Part I crime rate in the station area (132.8 crimes/1000 population) compared with a citywide rate of 102.8 crimes/1000. Crimes against persons and street crimes are not significant here in spite of heavy pedestrian activity. Reports of burglaries are relatively high due to the high density of housing without adequate security.

The proposed Metro Rail station will increase the accessibility of mid-Wilshire residents and employees to the CBD and will be a key transfer point for South-Central Los Angeles. The station will become part of an integrated system of bus and rail transit and will be used as a vital transit node, day and night. The hierarchy of streets in the vicinity of the station (from major cross-streets to neighborhood mixed use streets to residential streets) suggests a good pattern for pedestrian use. High density housing both north and south of the station are within pedestrian access, and this housing zone can be expanded by new development efforts.

Long term impacts of the Metro Rail system for this area include inducing major increases in the residential population in the station environs. This in turn will increase the number of pedestrians vulnerable to assault and robbery.

The preliminary design of the station proposes to create a public zone adjacent to the entrances for bus-transfer passengers. This is very desirable as long as provisions are made in the design for high visibility as passengers walk across the width of Vermont Avenue in the underground tunnel component. Since this station is on a mid-block location, it is also important that the entrances be located to be highly visible from passing cars.

CRIME IMPACTS OF METRO RAIL SYSTEM: WILSHIRE/VERMONT

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community	*	*			K
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	*				J
IV. Increased bus/auto boardings, at station				*	J
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station			*		K
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured	**				E

44

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Wilshire/Normandie

The proposed station located along Wilshire at Normandie will primarily serve the high volume of daytime office employees in the Wilshire Boulevard high rise office buildings located between Harvard Avenue and the Ambassador Hotel. It will also serve tourists and businessmen staying at the Hyatt Wilshire or Ambassador Hotels. Residential areas north and south of Wilshire (north of Sixth, south of Seventh) support a large resident population that is ethnically diverse: 30 percent Hispanic, 32 percent white, 10 percent Black, and 25 percent Asian. There is little overlap in the spatial and movement patterns between the area's employment and resident populations.

The land use pattern again reflects a shift from high density high-rise office and commercial uses along Wilshire Boulevard to medium and high density residential uses north and south. Wilshire is the main traffic artery. There is no "major" north/south interaction as the Wilshire street-scape presents a nearly unbroken "unified" high-rise frontage. The Ambassador Hotel's quasi-public garden and open space is the only effective break in the streetscape along this segment of Wilshire.

Again, as with adjacent station sites, the LAPD Wilshire Division patrol officers identify no specific crime and security problems in the area. Crimes against office employees and tourists are minimal. Statistics reveal no significant patterns other than high incidence of parking lot and auto related crimes.

Long term crime impacts on the Metro Rail station are a function of the types of development induced by value-capture efforts and the patterns of urban use that result. It is projected that the station environs around Wilshire/Normandie will be very heavily developed, both in commercial office space and residential units. Projected development will utilize up to 99 percent of available capacity within areas suitable for reinvestment. This will produce a highly dense urban community which includes rapid contrasts between high-rise offices and low density residential zones. It is important that the large numbers of new multiple-dwelling buildings be carefully located from a crime perspective. They can be sited to take advantage of the presence of Metro Rail by zoning and planning measures that induce development on feeder streets. This might be done, for example, by reducing parking requirements selectively for buildings which contribute to pedestrian safety.

CRIME IMPACTS OF METRO RAIL SYSTEM: WILSHIRE/NORMANDIE

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick- pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community	*	*			K
II. Increased mixed uses (residential/commercial, etc.)	*				J
STATION AREA IMPACTS					
III. Increased pedestrian use around station	*				F, H
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured	**				E, F, J

¹ See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

WEST WILSHIRE CORRIDOR CLUSTER: Wilshire/Western, Wilshire/Crenshaw, Wilshire/La Brea, Wilshire/Fairfax.

The West Wilshire Corridor is differentiated from areas along Wilshire to the east by the general change in land use. Unlike eastern parts of Wilshire, Wilshire Boulevard in this cluster becomes a connector between relatively socio-economically diverse and contrasting residential communities. Crime in these station areas are somewhat less significant than in the commercial and residential areas in the East Wilshire Corridor cluster but rates remain quite high in the areas around both the Wilshire/Western Station and the Wilshire/Crenshaw Station.

TABLE 8

SERIOUS CRIMES IN WILSHIRE WEST CLUSTER, 1981

Metro Rail Station Environs	Resident Population	Part I Crime Reported	Robbery Reported	Burglary Reported	Assault Reported	Part I Rates/1000 population
Wilshire/Western	24,773	3608	530	864	90	146
Wilshire/Crenshaw	9,253	1348	171	336	30	146
Wilshire/La Brea	4,455	574	59	120	11	129
Wilshire/Fairfax	8,432	956	176	311	34	113
TOTAL	46,913	6486	936	1641	165	138.2
Total LAPD Wilshire Area	189,926	23,370	2750	6114	1272	123.0

Source: Los Angeles Police Department Statistics; RTD population data (SCAG Census Data Center)

Wilshire/Western

The proposed station at Wilshire Boulevard and Western Avenue lies on the western periphery of the high density, high-rise segment of the Wilshire Corridor office core. A relatively dense population of approximately 30,000 persons is housed north and south of the office, commercial, and retail uses along Wilshire Boulevard. This population is ethnically diverse--22 percent Hispanic, 35 percent white, 25 percent Asian, and 14 percent Black--and predominantly low and low-middle income.

The land use pattern surrounding the station area is typical of the Wilshire Corridor: high-rise office towers with street level retail or commercial on Wilshire Boulevard, shifting to mid-rise mixed use or commercial uses on Sixth Street, then medium and high density housing north of Sixth Street and south of Seventh Street.

The area is a blend of regional and local influences: major office buildings exist proximate to neighborhood churches, retail stores, and housing. The resident and employment population are relatively independent of each other. Although the residential areas north and south of Wilshire have a reputation for being "tough", the LAPD reports no unusual sources of street crime or "hot-spots" in the immediate area. They perceive, and the crime statistics corroborate, that the majority of crimes (burglary and robbery) occur in residential areas. The Part I crime rate for 1981 (145.7 crimes/1000 population) is highest among the station sites in this cluster (average of 123.3 and far greater than the citywide mean of 102.8).

Long term projections for this area call for moderate development as a result of the Metro Rail system. There will be an increased urban focus with the Wiltern Theater and office tower on the corner.

The station entrance is designed optimally. Though there is no reason to expect crime rates to increase as a result of Metro Rail, some thought might be given to the crime impacts of a substantial number of bus transfer patrons which will use Metro Rail for travel to the east and west from this central location.

CRIME IMPACTS OF METRO RAIL SYSTEM: WILSHIRE/WESTERN

Types of Crime

Metro Rail Impact	Robbery Assault	Burglary		Petty Crimes (Larceny, pick- pocket, etc.)	MITIGATIONS ¹
		Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	*				J
IV. Increased bus/auto boardings, at station	*			*	J
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured	*			*	J

50

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Wilshire/Crenshaw

This proposed station, located at the intersection of Crenshaw Boulevard and Wilshire Boulevard is not typical of the Wilshire Corridor pattern of land use and spatial organization. The station is located in an underdeveloped, underutilized segment of Wilshire Boulevard which divides two residential neighborhoods that are ethnically and economically a picture of marked contrast. Wilshire Boulevard is very porous at this point with a variety of vacant lots--sites for potential criminal activities--on both the north and south. There is no neighborhood level retail sector on Sixth and Seventh Streets, and there are no appreciable office and commercial buildings on Wilshire.

The residential population is approximately 15,000 persons. The overall ethnic distribution is somewhat misleading: 45 percent white, 23 percent Asian, 17 percent Hispanic, and 12 percent Black. It is ethnically diverse south of Wilshire and relatively homogeneous north of Wilshire. The income distribution ranges from predominantly low-middle income south of Wilshire to upper income levels north of Wilshire.

Spatially, the Wilshire/Crenshaw intersection is most important as a bus transfer and connection point for access to Hollywood, Wilshire Corridor and the Central Business District from the Crenshaw area and South-Central Los Angeles. Fear of criminal elements moving north on Crenshaw Boulevard, committing crimes against the residential neighborhoods in the station area, pervades the resident population.

The long term crime impacts of this station are not different from relatively short term effects. There is low likelihood of major development in the station environs. Some mitigation might be achieved by providing a public zone around the station entrance for bus-transfers and orienting the station entrance more definitively toward Wilshire Boulevard. The proposed station design is likely to act as a deterrant to crime. This is because it is expected to be a low patronage station, has only one entrance and is in a low density residential area. Each of these elements is associated with low crime-potential of the station and environs in past studies (Rouse Associates, 1980).

CRIME IMPACTS OF METRO RAIL SYSTEM: WILSHIRE/CRENSHAW

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	**				F, H, J
IV. Increased bus/auto boardings, at station	***			*	F, H, J
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured					

52

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Wilshire/La Brea

The proposed Metro Rail station at La Brea Avenue and Wilshire Boulevard is sited at a commercial intersection of a predominantly residential zone in the Wilshire Corridor. Land use at this point on Wilshire Boulevard is mostly low-rise commercial and retail with an exception in the landmark, small high-rise "Mutual of Omaha" building. The land use shifts to residential housing, both low and high density, immediately north and south of Wilshire Boulevard. The middle income resident population in the station area is 68 percent white, 18 percent Black, 8 percent Asian, and 6 percent Hispanic.

The area is currently characterized by very light pedestrian traffic and mostly "thru" auto traffic. The area has no major destinations or public spaces and attractions.

Crimes occur predominantly in residential areas of the station environs, according to police officials. Street crime, burglary and robbery from the commercial sector are a relatively minor concern. Part I crime rate for the station area is 128.8 crimes/1000 population for 1981. This is similar to the rate for other Wilshire stations and typical of the LAPD's statistics for Wilshire Area as a whole (123.3).

No major long term changes in the area are anticipated as part of value-capture projections. Passenger volume at this station is expected to remain relatively light. The low volume of use and the presence of only one station entrance will act as a deterrent to crime in the station complex. This station should have very little impact on crime in the area both over the short and long term: relatively little off-street parking in the community is anticipated; the vast majority of riders will be bus-transfer passengers; and the area is already a major transfer point so that a Metro Rail station will be readily assimilated into the community.

CRIME IMPACTS OF METRO RAIL SYSTEM: WILSHIRE/LA BREA

Metro Rail Impact	Types of Crime			MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)	
DEVELOPMENT IMPACTS				
I. Residential density increases in community				
II. Increased mixed uses (residential/commercial, etc.)				
STATION AREA IMPACTS				
III. Increased pedestrian use around station	*			H, J
IV. Increased bus/auto boardings, at station	*			H, J
V. Increased use of curbside parking near station				
VI. Increased use of off-street parking near station				
STATION COMPLEX IMPACTS				
VII. New station parking--unsecured				
VIII. New public spaces--unsecured				

54

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Wilshire/Fairfax

The proposed station, located between Spaulding Avenue and Curson Avenue along Wilshire Boulevard, is in the center of an area that is a residential area and a major regional, public activity center. It includes the following attractions: The Los Angeles County Art Museum, the Rancho La Brea Tar Pits, and the Page Museum of Natural History. The area draws visitors and tourists seven days a week and is especially busy on weekend afternoons, when auto traffic and pedestrian activity around Hancock Park is high. The resident population in the station area is homogeneous--80 percent White and predominantly middle income. Residents here have excellent access and efficient bus connections to the Wilshire Corridor, Beverly Hills, and Hollywood areas.

Land uses around the station area include public park areas, and a range of housing from low to high density, including the Park La Brea Towers and retail shopping. Wilshire Boulevard is the primary movement generator and feeder for these uses. Major retail shopping in the vicinity includes May Company and Ohrbachs, both at Wilshire and Fairfax. These add importance to the area as a local and regional destination.

Because of the public nature of the land uses around the station area, crime has not been a significant problem, according to the LAPD. Although the park-like space around the Tar Pits has been used for some drug traffic and as a congregation point, there are few signs of criminal activity as in MacArthur Park. The Part I crime rate for 1981 for the area is the lowest of any Metro Rail station area in the Regional Core (113.4 crime reports/1000 population) compared with the Wilshire Area rate of 123.3 and the citywide rate of 102.8. The majority of crime reports are residence-related burglary and robbery with a relatively high incidence of burglary and theft from vehicles parked near the Hancock Park public attractions.

Long term projections for this area suggest moderate levels of commercial development and minimal residential development as a result of Metro Rail. Major crime-impacts will result from the high volume of use of the proposed station and the large (1000 space) parking structure that is planned to accompany it. The vast majority of business and recreational trips generated by Metro Rail will be during the day. The volume of bus-transfer passengers from Fairfax Avenue is expected to be very high. These volumes of use provide a high degree of informal control as a deterrent against crime. The transition from parking to station may become a source of concern and can be mitigated by carefully designing parking structures to insure visibility from the avenue and from bus-transfer areas.

Station design is excellently integrated into available land in preliminary plans. Entrances are related to auto traffic lanes; and/or are integrated into the Museum complex and future sites for commercial development. Parking is integrated into the Museum complex and bus drop-off areas to provide paths of access and mutual security.

CRIME IMPACTS OF METRO RAIL SYSTEM: WILSHIRE/FAIRFAX

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station					
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured (1000 spaces)	*	*	**		J, K
VIII. New public spaces--unsecured	*				J, K

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

WEST HOLLYWOOD/HOLLYWOOD CLUSTER: Fairfax/Beverly, Fairfax/Santa Monica, La Brea/Sunset, Hollywood/Cahuenga.

The West Hollywood and Hollywood Cluster of Metro Rail stations exhibit differences in context, community composition, streetscape and general crime characteristics from most other station areas and clusters. Although each of the individual stations in this cluster are quite different from each other, the West Hollywood and Hollywood areas represent identifiable residential, commercial, and entertainment foci. Crime in these areas is generally very high compared to the rest of the city. The Asian, Hispanic and Black population have increased significantly in recent years and the white population has been reduced to less than 60 percent. Social and economic shifts in a short time frame can result in neighborhood instability, which in turn makes areas quite vulnerable to crime. The danger is that Metro Rail stations in this area might have a "tipping" effect and result in a still more aggravated decline in community safety. Metro Rail can also be catalyst to begin redevelopment efforts in these areas.

TABLE 9

SERIOUS CRIMES IN WEST HOLLYWOOD/HOLLYWOOD CLUSTER, 1981

Metro Rail Station Environs	Resident Population	Part I Crime Reported	Robbery Reported	Burglary Reported	Assault Reported	Part I Rates/1000 population
Fairfax/Beverly	5,884	776	96	197	23	132
Fairfax/Santa Monica (County)	9,100	1610	---	407	---	177
La Brea/Sunset	12,084	2908	342	556	146	241
Hollywood/Cahuenga	10,292	2672	325	549	202	260
TOTAL	37,360	7966	---	---	---	213.2
Total LAPD Hollywood Area (excluding county)	---	---	2059	5288	1144	

Source: Los Angeles Police Department Statistics; Los Angeles County Sheriff's Department Statistics; RTD population data (SCAG Census Data Center)

Fairfax/Beverly

The proposed station located at Beverly Boulevard and Fairfax Avenue is sited in the heart of the Fairfax "district" of West Hollywood. The resident population is of predominantly eastern European, Jewish descent, and quite elderly. The area has the highest median age (50.2 years) and the highest percentage of population over 65 years old (34 percent) of any Metro Rail station area in the Regional Core. The percentage of the white population is highest (91 percent) in the Regional Core. The population is sedentary, socially stable, and homogeneous. The cultural and religious homogeneity is readily apparent in the physical structure of the neighborhood and in activity patterns of residents. Generally, residents are low and middle income. More than seventy percent are renters. The territorial definition of the area is further enhanced by the proximity of neighborhood shopping, banking, cultural, religious, and entertainment facilities. In addition, two regional scale retail, tourist, and employment centers are in this immediate vicinity: Farmers Market and CBS Television City. Both are important regional destinations located within one block of the station site.

Land use in the area is characterized by retail, commercial, and mixed uses along Fairfax and Beverly, with an immediate shift to residential housing on other streets: low density, single family housing to the west, and medium and high density apartments to the east of Fairfax. The entire southeast quadrant of the area is composed of the CBS/Farmers Market complex.

Auto and pedestrian movement are concentrated on the primary arteries, Fairfax Avenue and Beverly Boulevard, where most of the local destinations can be found. The very heavy pedestrian activity reflects social patterns that date back to the Eastern European origins of residents. The pedestrian activity on Fairfax, between Beverly Boulevard and Melrose Avenue is very heavy during the daytime, especially near major local foci such as Canter's Delicatessen and the S&L produce market.

Unlike many of the other Metro Rail station areas, perceived threat of crime and assault critically affects the activity patterns of the resident population in Fairfax. The age, cultural homogeneity, and territorial homogeneity tend to increase perceptions of danger. The elderly perceive all vacant lots, and areas devoid of pedestrians as being dangerous especially during evening hours. Fear of crime at times is more significant in this area than actual incidence of crime. Actual crime rates reveal a pattern similar to the Hancock Park and Wilshire areas--a predominance of residence related crimes, mostly burglary. The Part I crime rate for 1981 is 131.9 crimes/1000 population which is slightly above average for the Wilshire area (123.3 is crimes per/1000 population) and well below the average for the West Hollywood/Hollywood Areas.

Long term development potential for this area is very high, especially with regard to new commercial buildings. This will further heighten the urban density of the area and expose citizens to greater risks of criminal victimization. The presence of a strong community can reverse this process through crime-control efforts. The direct impact of Metro Rail will be to increase pedestrian use of streets and to expand use of curbside parking in nearby neighborhoods in the station environs. Careful use of

urban design mechanisms can mitigate these impacts by creating safe pedestrian areas that are supervised informally by retail stores, by concentrating on-street parking in suitable locations, by street lighting efforts, etc.

The entrances to the station is located with high visibility from Fairfax Avenue. This station has the potential to act as a community catalyst increasing transit service to its major, transit-dependent population. By increasing the public character of the station, crimes that occur as a part of transportation activities such as those while waiting for a bus or walking home following a bus ride can be reduced. The location of the station entrance in the immediate proximity of the proposed parking area offers the opportunity for connecting the two in order to enhance parking security. This parking area is an extension of existing land uses. Although there may be conflicts over parking use, crime-impacts will be minimized if all-day park-and-ride autos can be integrated with business-related parking in the area.

CRIME IMPACTS OF METRO RAIL SYSTEM: FAIRFAX/BEVERLY

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	*				E, G, H
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station	*	**			K
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured (1000 spaces)			*		I
VIII. New public spaces--unsecured					

61

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Fairfax/Santa Monica

The proposed station is located at the intersection of Fairfax Avenue and Santa Monica Boulevard at the juncture of two very distinct communities. Each of these communities exhibits a high degree of territoriality--the ethnically homogeneous Fairfax "district" and the West Hollywood "gay" strip with its population of young single men. Santa Monica Boulevard near Fairfax Avenue is an increasingly prosperous commercial strip catering to the gay population and serving the general needs of a larger residential population. The area is high density and ethnically homogeneous (90 percent white). It is also 40 percent single. The resident population spans the full range of income groups.

Land use in the station area includes low-rise, mixed use commercial buildings (storefront retail and small neighborhood shopping centers) and a variety of housing types ranging from low to high density. Housing is located both north and south of Santa Monica Boulevard. Although the scale is generally low-rise, the streetscape is not filled with buildings along major avenues. There are alleys, vacant lots, and parking lots interspersed with these widely diverse land uses.

The crime and security issues for this area are gradually changing as major areas of the community are redeveloped. The County Sheriff's Department reports crimes against the elderly are decreasing in frequency and the prominence and visibility of male prostitution is increasing along Santa Monica Boulevard. Perhaps the single most important improvement affecting crime in the area has been the closing of the Starwood Club on Santa Monica Boulevard, west of the station site. Since that time, street crime and drug traffic have decreased significantly. The club was the most important generator of crime in the whole of West Hollywood according to County Sheriff's Department informants. They believe that the criminal activities focusing on this club have dispersed, primarily to the north (Hollywood and Sunset Boulevards, Sunset Strip).

Long term predictions for this area call for moderate development, mostly increases in multiple-occupancy residential buildings. This will foster neighborhood retail developments and pedestrian activities. In order to mitigate negative crime impacts, urban design strategies can be explored to prevent crime by enhancing neighborhood boundaries and by providing buffers between incompatible land uses such as commercial, entertainment and residential zones.

CRIME IMPACTS OF METRO RAIL SYSTEM: FAIRFAX/SANTA MONICA

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	***			*	H, J
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station		*			K
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured		*			H

63

¹See mitigation text (Section V) for a description of these measures.
 *Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)
 **Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)
 ***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

La Brea/Sunset

The proposed Metro Rail station located at Sunset Boulevard and La Brea Avenue is within a local environment where both fear of crime and actual incidence of crime are high. Prostitution is common, as is drug traffic. There is continuous pedestrian activity including criminal lingering through most of the day. The resident population is seventy-five percent white with a Hispanic population of fifteen percent. Approximately 55 percent of this population is comprised of single person households.

The station area is characterized by a pattern of mixed uses. Sunset and La Brea have low-rise commercial uses, including the Safeway center, retail stores, motels, an adult theater, and entertainment industry headquarters for KRLA TV Studios and A & M Record Co. Sunset and La Brea are the location for both the primary neighborhood commercial facilities and more regional employment and activity centers. The residential infill is mostly low density, single family housing. Hollywood High School is another major land use that contrasts with nearby commercial uses.

Heavy auto and pedestrian activity add to the reasons the area is noted as a high crime area. The LAPD vice squad for Hollywood Division indicates that the motels, vacant lots, and adult theaters, and any number of parking lots in the area are locations for drug trafficking and prostitution. They patrol the area continuously by patrol car--each unit responsible for a very small geographic area. In spite of the overall residential character of the area, Hollywood Area LAPD personnel perceive La Brea/Sunset to be the most potentially dangerous station area in the Regional Core. Crime statistics substantiate these concerns with a very high rate of Part I crimes for 1981 (241 crime reports/1000 population) compared with the Hollywood area rate of 135.2.

The long term projections for this area foresee no major commercial or residential developments due to Metro Rail. Also, the station is slated to operate at very low passenger volume. Potential negative impacts will be minimized by this low-volume of use because low-volume reduces the availability of suitable crime targets. The station is well designed for crime control with a single entrance and a single platform level. Currently, there are many incompatible land uses competing for space in a small urban area. Locating the station in this area could be part of a more comprehensive urban strategy to stimulate the redevelopment of the area and ultimately to contribute to crime-reduction through environmental design.

CRIME IMPACTS OF METRO RAIL SYSTEM: LA BREA/SUNSET

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station	***			***	E, H, J
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured					

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

Hollywood/Cahuenga

The station located off-street at Cahuenga and Hollywood Boulevards, is statistically the second most dangerous station area in the Regional Core, after Fifth/Hill in the CBD. In the heart of Hollywood, the area has a resident population, a transient population, and a significant tourist/visitor/patron population. The resident population of 14,500 includes 59 percent white and 24 percent Hispanic.

Land use is characterized by mixed-use and low-medium rise commercial with a number of entertainment uses. While Hollywood Boulevard is entirely commercial, some industrial uses are located along Cahuenga. High-density residential uses are found north of Hollywood Boulevard and west of Cahuenga.

Both auto and pedestrian activities are significant during most of the day. Pedestrian movement is particularly heavy at nighttime. There is a high perception of risk and danger to visitors. Actual crime statistics, although somewhat skewed by the lack of an effective population base, reveal a very high ambient crime level. The Part I crime rate of 260 crimes/1000 population is the highest in the Hollywood/West Hollywood Cluster, average of 135.2 crimes/1000 population. The rate and number of assaults, burglary/theft from auto, and robbery are among the highest in the Regional Core, and the city as a whole.

Long term value-capture projections for this station anticipate a very large increase in both commercial and residential properties. It is expected to be one of the most intensively developed areas in the entire Regional Core. Without some intervention, current high-crime rates in the area will continue to rise. Crime can be mitigated if value-capture efforts include a comprehensive approach to crime prevention through environmental design. Large areas in the 1/4 mile radius of the station are available for a major independent development project. The design of the station can be a focus of this redevelopment effort.

CRIME IMPACTS OF METRO RAIL SYSTEM: HOLLYWOOD/CAHUENGA

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick- pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community	*				K
II. Increased mixed uses (residential/commercial, etc.)	*				K
STATION AREA IMPACTS					
III. Increased pedestrian use around station	***			***	H, J
IV. Increased bus/auto boardings, at station	**			**	J
V. Increased use of curbside parking near station	*	**		*	K
VI. Increased use of off-street parking near station	**			*	H
STATION COMPLEX IMPACTS					
VII. New station parking--unsecured					
VIII. New public spaces--unsecured					

67

¹See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use).

SAN FERNANDO VALLEY CLUSTER: Universal City, North Hollywood

After Metro Rail "emerges" from the Santa Monica Mountains north of the basin, the contexts for crime and community take on a somewhat different urban/suburban character. The Metro Rail stations in the San Fernando Valley are related to major commercial mixed use office streets but with excellent accessibility for Universal City and North Hollywood resident commuters. Generally, crime in the valley is much less significant than for the rest of the Regional Core. Crime rates and reports are typically much lower than residential areas in Hollywood and along the Wilshire Corridor.

TABLE 10

SERIOUS CRIMES IN SAN FERNANDO VALLEY CLUSTER, 1981

Metro Rail Station Environs	Resident Population	Part I Crime Reported	Robbery Reported	Burglary Reported	Assault Reported	Part I Rates/1000 population
Universal City	3440	361	12	30	7	105
North Hollywood	4614	613	20	181	43	133
TOTAL	8054	974	32	211	50	120.9
Total LAPD Hollywood Area (excluding county)	---	15,118	660	5200	735	90.6

Source: Los Angeles Police Department Statistics; RTD population data (SCAG Census Data Center)

Universal City

The proposed Universal City Metro Rail station is located within a zone of commercial and mixed uses--park land, office, nearby tourist attractions and major movement generators. At the intersection of Lankershim Boulevard and the Hollywood Freeway, there is direct access to major corporate facilities, planned and existing; a historical landmark, Campo de Cahuenga; Weddington Park; and the residential areas south of Ventura Boulevard. The small, predominantly white, middle-upper income resident population of approximately 5,000 live in mostly single family dwellings in the hills south of the proposed station site, south of Ventura Boulevard. Although the spatial character of the station area is decidedly suburban, the immediate station area is a high density urban concentration of office uses and major public uses, particularly the Universal City/Studio complex of office/tourist/hotel/restaurant. Crime in the area is very light compared to the city as a whole and the Regional Core: The Part I Crime Index of 104.9 crimes/1000 population in 1981. Most reported crime is residence-oriented burglary of the houses south of Ventura Boulevard. Street crime is very rare. Spatial patterns, limited pedestrian movement, and well integrated parking structures presently mitigate against crimes against persons and vehicles in the immediate station area.

The main crime related issue for this station concerns the massive parking structure proposed for 2500 cars. This structure may be too large to operate without direct supervision. Potential crime problems might be mitigated if other activities were located in some parts of the parking structure (e.g., RTD offices) to offer informal controls.

CRIME IMPACTS OF METRO RAIL SYSTEM: UNIVERSAL CITY

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick-pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station					
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking-- unsecured (2500 spaces)	*		*		I
VIII. New public spaces-- unsecured					

71

¹See mitigation text (Section V) for a description of these measures.
 *Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)
 **Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)
 ***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

North Hollywood

The proposed North Hollywood Station is located at Chandler Boulevard and Lankershim Boulevard. The site is a juncture of light industrial, retail, public and residential uses. The resident population of about 1,000 persons include 66 percent white and 27.2 percent Hispanic, and are predominantly lower-middle income. The area is spatially disjointed although the land use pattern shows that retail use-types are concentrated along Lankershim Boulevard, light industrial along Chandler Boulevard, and residential predominantly northeast of the station site. Auto dealerships are also concentrated along this segment of Lankershim Boulevard. Also present in the area is the Lankershim Elementary School and a portion of North Hollywood Park.

Crime in the area is relatively light, although the 1981 Part I Crime Index of 133 crimes/1000 population is significantly higher than the North Hollywood rate of 90.6 and the citywide rate of 102.8. Crime in this station area is split between residential and commercial burglaries, and a significant number of car thefts reported each year. The disjointed physical and spatial patterns contribute to a general lack of cohesiveness in the area. LAPD officers patrolling the area cite the area's anonymity and the ease of escape as major factors facilitating the commission of burglaries.

CRIME IMPACTS OF METRO RAIL SYSTEM: NORTH HOLLYWOOD

Metro Rail Impact	Types of Crime			Petty Crimes (Larceny, pick- pocket, etc.)	MITIGATIONS ¹
	Robbery Assault	Burglary Residential Commercial	Auto (TFV)		
DEVELOPMENT IMPACTS					
I. Residential density increases in community					
II. Increased mixed uses (residential/commercial, etc.)					
STATION AREA IMPACTS					
III. Increased pedestrian use around station					
IV. Increased bus/auto boardings, at station					
V. Increased use of curbside parking near station					
VI. Increased use of off-street parking near station					
STATION COMPLEX IMPACTS					
VII. New station parking-- unsecured (2500 spaces)	*		*		I
VIII. New public spaces-- unsecured	.				

¹ See mitigation text (Section V) for a description of these measures.

*Low potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

**Medium potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

***High potential for crime impact (based on physical analysis of station and environs and projected patterns of use)

V. MITIGATIONS

Environmental design techniques to reduce crime can be introduced early in the design development process, at no additional cost, and serve as a major supplement to formal law-enforcement efforts provided by the SCRTD Transit Police. These techniques (see Rand, 1983 for review) have been demonstrated to have broad usefulness in a wide variety of contexts, from public and private housing, to commercial facilities, schools, and a range of types of transportation facilities; these results have been repeated across many regions in the U.S. and other parts of the world. They depend for the most part on the use of natural surveillance by citizens as a supplement to formal crime control efforts of police and other authorities. European mass transit systems tend to be more labor intensive. With our automated operation and lean personnel budgets, these techniques are all the more important. Mitigations all involve small adjustments in the design of elements of the station-community interface to decrease crime risks faced by patrons and by residents and businesses in the station environs.

These mitigations can be divided into roughly three classes: station entrance and concourse designs to reduce crime; designs to reduce crime in immediate station areas, (including parking structures and parking supply in the community); and, urban design strategies to reduce crime in the extended station area.

STATION COMPLEX

A. Reduce number of paid entrances in order to focus patrons into a single area;

B. Reduce number of station levels. Providing direct access from street to platform is preferable over mezzanine and split platform designs.

C. Eliminate tunnels, cul-de-sacs and dog-leg routes from street to entrance lobby. If needed, provide signs of activity en route so patrons know they are approaching the entrance area and how far it is.

D. Improve visibility for station agent to see portions of entrances and waiting platforms. Provide glimpses of station agent for patrons when they are outside the station complex. All paths in and out of the station should provide some indication of the imminent presence of the station agent area so patrons feel they are always within communication distance.

E. Integrate entrances into other facilities which offer informal sources of control such as retail shops and office building lobbies.

F. Orient station entrances so they face traffic on major nearby thoroughfares. If necessary create new attractions near station entrances, e.g., news-stands, small retail businesses, and convenience stores, to create traffic where none exists.

STATION AREA

G. Use stations to link existing activity nodes. If multiple entrances are necessary link sources of social surveillance and informal supervision, e.g., a hotel lobby and a government building.

H. Expand station entrance to include major public zones; e.g., areas for bus waiting and car drop-offs. Accentuate the public zone through architectural design, lighting, etc. The extended station entrance area should have a clear and unambiguous border, expressed architecturally, in order to prevent lingering, and where necessary to enforce this regulation by police action:

I. Design parking structures to insure visibility of spaces from street where possible; eliminate parking zones that can not be seen from more than one perspective; provide safe access from station to parking areas by defining a clear path with adequate lighting and surveillance.

J. Plan entire intersection of subway stops, not merely entrances and exits. In some instances this might entail an entire urban intersection which has special paving, paths of access, lighting etc. This is an important public node and should be treated as such in order to prevent lingering near station entrances.

STATION ENVIRONS

K. Employ special urban design guidelines to reduce crime. These guidelines suggest defining smaller spatial areas within the larger station environs: preventing the station from destroying existing community boundaries; creating a hierarchy of spaces from office commercial (high-rise building zones) to low-rise residential areas; including adequate buffers between these areas; strategically locating new public facilities in the community to create a network of public zones; using spot-zoning and overlay-zoning techniques to encourage commercial and retail developments that provide informal surveillance for pedestrians; and concentrating neighborhood street-parking in areas adjacent to retail shops rather than allowing use of curbsides for park-and-ride parking in a diffuse manner throughout a residential community.

VI. BIBLIOGRAPHY

- Angel, S. Discouraging Crime Through City Planning. Berkeley, University of California, 1969.
- Brantingham, P.J. and Brantingham, P.L. Crime, Occupation, and Economic Specialization: A consideration of inter-metropolitan patterns. In Harries, K.D. and George-Abeye, Crime: A Spatial Perspective, 1980.
- Frankel, M. (1981) Policing the Rails: Washington Proves It Can Be Done, Mass Transit. 8 (August), pp. 8-9, 54-60.
- Gardiner, R.A. The Environmental Security Planning Process. Unpublished manuscript, Gardiner and Associates, 1977.
- Gilian, J. and Wachs, M. Lifestyles and Transportation Needs of the Elderly in Los Angeles. Transportation, March 1976, 5(1), 45-61.
- Harries, K.D. and George-Abeye (eds.). Crime: A Spatial Perspective, Columbia University Press, 1980.
- Newman, O. Defensible Space: Crime Prevention Through Environmental Design. MacMillan, 1972.
- Perlstein, A. and Wachs, M. Crime in Public Transit Systems: An Environmental Design Perspective, School of Architecture and Urban Planning, UCLA, November, 1981.
- Rand, G. Multiple Housing. In Hopf, P. (ed.), Handbook of Security Design, McGraw Hill, 1980.
- Rand, G. Crime and Environment: An Approach for Los Angeles. Policy Research in Environmental Design, Number 1. Urban Innovations Group, Los Angeles. George Rand, Editor, 1983.
- Richards, L.G. and Hoel, L.A. Planning Procedures for Improving Transit Station Security. U.S. Department of Transportation, DOT-OS-50233, 1980. Traffic Quarterly (34) July, 1980, pp. 355-376.
- Rouse, V.W. Predicting Automated Guided System Station Security Requirements, UMTA. Transportation Systems Center, Cambridge, Mass., 1980.
- Shellow, R., Romvaldi, J., Bartel, E. Crime in Rapid Transit Systems: An Analysis and Recommended Security and Surveillance System. Crime and Vandalism in Public Transportation. Transportation Research Record #487, 1974.
- Siegel, L., Molof, M., Moy, W., Strack, J. and Jordon, F., Jr. An Assessment of Crime and Policing Responses in Urban Mass Transit Systems. The Mitre Corporation, April 1977. NILECJ/LEAA No. 76-NI-99-011, 1977.
- Thrasher, E.J. and Schell, J.B. Studies of Public Attitudes Toward Transit Crime and Vandalism. Crime and Vandalism in Public Transportation, Transportation Research Record #487, 1974.

Van Fliet, W. Vandalism: A Review of the Literature. Presentation to International Colloquim on Vandalism. Paris, 1981.

Zimbardo, P.G. The Human Choice: Individuation, Reason and Order versus Deindividuation, Impulse and Chaos, in Arnold, W.J. and Levine, D., (eds.), Nebraska Symposium on Motivation, 1969. Lincoln-University of Nebraska Press, 1969, 237-307.

List of Persons Consulted

William Rhine, RTD Safety and Security Advisor
Commander Morrison, LAPD Liaison to RTD project
Sgt. Mallony, Deputy to Commander Morrison
Sgt. William Deladuhanty, LAPD Headquarters
Captain Robert Smitson, Hollywood Area
Captain Frank Piersall, Rampart Area
Captain Richard Wedgeworth, Central Area
Captain Smith, Wilshire Area
Captain William Gartland, North Hollywood Area
Captain Baker, Los Angeles County Sheriff's Department,
West Hollywood
Patrol officers in Wilshire and Central Area
Vice officers in Hollywood Area