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GENERAL PLANNING CONSULTANT:

BOUNDARY OPTIONS WHITE PAPER

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## SUMMARY

The primary purpose of this report is to discuss the issues and options concerning the definition of boundaries for the SCRTD Metro Rail Phase II Benefit Assessment Districts. The constraints of the legislation, the measurement methodology (i.e., walk distance versus radius), alternate methods for determining whether a block is included, the use of internal zones and the MOS-1 boundary rules are explored. In evaluating alternative boundaries, several criteria should be considered: the ability to demonstrate that special benefits accrue to property within the boundary; the degree to which the boundary will generate administrative problems; the equitable treatment of benefiting and non-benefiting properties; and revenue generating requirements.

The boundary evaluation task involves determination of the:

- o maximum boundary distance,
- o distance measurement methodology (walk distance vs. radius),
- o method for areas of inclusion (use of parcels, block faces or full blocks),
- o block inclusion rules (when to include a block within the boundary),
- o barriers which override distance boundaries, and
- o internal zones or tiers, if appropriate.

It is recommended that the following criteria be considered for adoption for the Phase II Benefit Assessment Districts:

- o The district boundary be determined by a 1/2 mile walk distance (2640 feet) from the center of the station.
- o The walk distance be measured along the centerline of the street.
- o Full blocks rather than parcels or block faces be included as whole units (e.g., blocks will not be split by the boundary).
- o Manmade and natural barriers to movement be used as boundaries.
- o A full block be included if more than 50% of any one block face (measured as a linear distance along the street frontage) is within the defined walking distance.
- o A block be excluded if any portion of the block is outside of the 1/2 mile radius.
- o Internal zones or tiers be considered.

The one-half mile distance is the maximum allowed by the enabling legislation. The area encompassed by this distance spreads the benefit assessments more equitably among those who will benefit from the location of a Metro Rail station. Using walking distance rather than radius relates the boundary more directly to benefit, since there is a direct relationship between walking distance and benefit. The inclusion of a full block when more than 50% of the block face is within walking distance provides a smoother more equitable boundary which is also less costly to administer.

If a manmade or natural feature is considered a barrier to movement, then the feature should override the walking distance criterion since the extent of benefit assessment districts must be matched with the ability to demonstrate that special benefits are received. If the feature inhibits walking, then special benefits may be diminished. If a portion of a block is outside of the one-half mile radius, the entire block should be excluded from the district in order to avoid the creation of inequities between adjacent lots. Furthermore, split blocks would be costly to administer. The aim of boundary setting is to include all properties which receive special benefits and to exclude those that receive little or no benefits.

## BOUNDARY OPTIONS WHITE PAPER

### Introduction

The setting of the boundaries is a critical task in determining Benefit Assessment Districts for Phase II of Metro Rail. In determining how to define the boundaries and structure of benefit-assessment districts, four primary issues must be considered:

- o Determination of benefit
- o Equity of the assessment
- o Ease and cost of administration
- o Ability to raise the funds needed

Legislative and case law distinguishes between general and special benefits and permits assessments to be based on special benefits only, as opposed to taxes, which may be based on general benefits. Thus, the primary aim of benefit assessment must be that those who receive a special benefit share that benefit with the agency building the project. The aim of the boundary setting process, therefore, is to include all those who receive special benefit and exclude those that receive only general benefit.

The SCRTD's benefit assessment enabling legislation defines a maximum boundary but allows discretion in determining district boundaries within that maximum limit. The legislation also allows tiers or zones within the Districts. A uniform boundary criteria for all districts would be the easiest and least costly to administer; however, the setting of boundaries must consider all factors including the ability to raise the needed funds. Benefit and equity are matters that must enter into all considerations of the boundaries and structure of benefit assessment districts.

This paper examines the enabling legislation and its constraints, the geographic limitations, the rationale for walking distances, the use of internal zones and tiers, the criteria used in determining MOS-1 Boundaries, and preliminary assessable square footage figures for all stations for Phase II. This paper also identifies viable options for determining boundaries which appear to be equitable and which would raise the necessary private sector share of funds for construction and operation of Metro Rail.

## Fundamental Aims of Boundary Setting

Boundaries for a benefit assessment district for a transit project are difficult to define. Anyone may use the transit system. Therefore the system confers general benefit on both urban-area residents and visitors. Identifiable special benefits are those that arise from proximity to a station. As detailed in the "Summary of Issues and Analysis of Benefits Attributable to Rail Transit" paper, primary special benefits accrue to property owners and proprietors of hotels, motels, retail establishments, offices and other commercial businesses in the vicinity of the stations. In addition, tenants, visitors and employees located in the vicinity of Metro Rail stations should enjoy a wider variety of retail shopping and entertainment opportunities as well as the improved accessibility and convenience offered by the transit system. Employers may experience greater visibility and subsequent improvements in employee recruitment and retention. Principally these benefits arise only by virtue of people being able to walk to and from the station. Increased retail business occurs because of concentration of pedestrian flows around retail establishments, as people walk to and from the station.

## Legislative Constraints

Section 33000 et seq. of the Public Utilities Code authorizes the Southern California Rapid Transit District to levy special benefit assessments for rail rapid transit facilities and services. The legislation restricts the area which can be assessed to a maximum of one mile from the center point of any rail transit station within the Central Business District of the City of Los Angeles and to a maximum of one-half mile from the center point of a rail transit station at any other location. The Phase II benefit assessment districts are all subject to the one-half mile restriction. By placing different restrictions on the maximum boundaries, the legislature recognized that there may be differences in the CBD and non-CBD areas which would affect the criteria used to set boundaries. The CBD is developed with intensive high rise commercial use with minimal residential use. The non-CBD area is not developed to the intensity of the CBD, and the land use patterns are more varied. In the Phase II area, low rise commercial structures front along the major thoroughfares and are generally surrounded by residential or mixed uses.

The legislation allows for separate zones within the benefit assessment districts. The internal zones may be either contiguous or noncontiguous areas of land within the district. The only restrictions in the legislation on zones are:

- o each zone must be an area adjacent to or in the vicinity of one or more rail transit stations, and
- o the boundaries of the benefit district and each zone must be drawn so as to reflect, as accurately as possible, the areas in which special benefits are conferred by reason of the proximity and operation of one or more rail transit stations.

In the enabling legislation, there is provision for future changes in boundaries after the original benefit district is implemented. Specifically, the SCRTD Board can reduce the extent of a district unilaterally, and without requirements for consultation, hearings, or any other procedure. However, if the SCRTD Board decides to expand the Assessment District, the entire approval/adoption process involving local governing bodies and property owners must be repeated.

### **Natural and Man-Made Boundaries**

Natural and man-made barriers such as a freeway or steep topography should be considered when determining the benefit assessment boundary, particularly when they impose either a real or perceived barrier to access to the transit station. If there is a barrier to access to the station, then benefit is likely to be less. Not all natural or man-made features are barriers. Therefore criteria need to be developed to determine when such a feature could be a barrier to access which would affect benefit to property. The following criteria could be used in such a determination:

1. 75 percent or more of the streets along the feature terminate on one or both sides of the feature

This criteria implies that if three out of four streets are terminated, the feature represents a significant barrier to movement. Generally, if one out of every two streets is terminated, significant diversions are not required to cross the feature, and the perception of a barrier to movement is not obvious. When three out of four are terminated, then substantial deviations may be required to cross the feature, sufficient that designation as a barrier seems appropriate.

2. The feature represents a psychological barrier, as would be the case for an open, wide river, a range of mountains or hills, and an above-grade freeway

This issue has to do with the visual intrusion of the barrier. For example, a range of mountains or hills is obviously perceived as a barrier, no matter what other considerations enter into barrier determination. Generally, a freeway or rail line that is above grade will provide a visual indication of its presence and will therefore be a fairly obvious psychological (and occasionally physical) boundary. A freeway that is below grade is not intrusive in the same way, and generally would not be considered to form a psychological barrier. In Phase II, the Hollywood Hills could be considered a psychological barrier. The Hollywood Freeway is also above grade as it passes through parts of the Phase II area, and might be perceived as a psychological boundary.

3. There is a marked change in development pattern from one side of the feature to the other.

A change in the development pattern across the feature is an indicator that receipt of benefits may be markedly different across the feature, or may not continue across it. Lack of change of development pattern on the other hand, would tend to indicate that the feature is not perceived to be a barrier, irrespective of other criteria. The area north of the Hollywood Freeway between Bronson Avenue and Vine Street is significantly different from the area south of the Freeway both in terms of density and type of development. The area south of the freeway is developed with mixed use and commercial use on the frontage streets. The area north of the freeway is developed primarily with residential use.

4. There is no direct street connection that crosses the feature to the station.

A direct connection from a station across the feature such as a direct street connection or pedestrian bridge, is advantageous for benefits to be maintained across the feature. Research into benefit from rapid transit stations indicates that direct physical connections or visible identity with a station heightens the level of perceived and actual benefit.

The MOS-1 Task Force determined that if any three of these conditions are found to exist, the feature should be considered a barrier. If it is determined that the feature is a barrier, then it should act as the boundary provided it is within the maximum legal limit.

Topography of an area could be considered in addition to the above criteria. If topography inhibits pedestrian access, then it could be considered a barrier. A preliminary literature search did not reveal any slope criteria above which pedestrians will not walk. According to Pedestrian Planning and Design by Dr. John J. Fruin, if a walkway exceeds 10 percent slope, walking speed is reduced by 11.5 percent. Slopes greater than 10 percent would certainly begin to approach an actual barrier to convenient pedestrian access. If there are publicly accessible people movers, trams, elevators or escalators to move people up the slope, then the topography may not be considered a barrier.

Whenever a natural or artificial feature (such as a river, mountain range, lake, railroad, or freeway) is determined to represent a barrier to movement and the feature would fall within a potential benefit assessment district, it is recommended that the alignment of the feature should be used to define the boundary of the benefit assessment district. Determination of when such a feature is a barrier should be based on previously described criteria.

## Radius Boundary

The use of a radius measured from the centerpoint of the station as a boundary would be the easiest to measure. A one-half mile radius boundary would include the maximum parcel area allowable by the legislation. However, such a boundary would be the most difficult to administer and may create inequities. The radius would cross parcel lines and intersect blocks. The location of buildings would have to be precisely identified as would the uses within the buildings. It would be possible that a boundary could split a building and the assessment paid on a portion of the building. This could create an inequity even within the building if the assessment is passed on to tenants.

## Walking Distance

A critical factor identified in benefit evaluation resulting from rail rapid transit systems is walking distance, especially to activity centers. A comprehensive literature search, as well as personal interviews in Washington, D.C. and Atlanta, Georgia, were completed to determine the locus, magnitude and level of sustained real estate gains generated by rapid transit systems. The most germane findings that relate to defining boundaries for Metro Rail districts involve the incidence and duration of benefits. This evaluation determined that the highest incidence of real estate gains occurs within walking distance of activity centers with a more dispersed pattern of gains in suburban stations. An average person walks at about 3 mph, and can cover a quarter mile in 5 minutes, and a half mile in 10 minutes. There is considerable evidence to suggest that average walking distances to and from transit facilities do not generally exceed one-half mile, and have a mean of approximately one-quarter mile. This range (one-quarter to one-half mile) should generally be the maximum range within which boundaries are set. Real estate projects located within close proximity to a rapid transit station often promote their transit access by identifying the distance in city blocks to the nearest station entrance.

It is recommended that boundaries be based on walking distances since benefits are more directly related to walking distance as opposed to a radius. If walking distance is used to define the boundary, the distance should be defined as closely as possible to represent an actual walking distance, that is the distance measured along the centerline of the streets.



## Boundary Determination -- Alternative Methods

A city block may be defined as a rectangular space bounded by streets and comprised of one or more parcels of land. A block face is the distance along one side of a block, with a depth of one row of parcels. Using either a walking distance or a radius for measurement, a determination must be made as to when a block, block face or parcel should be included in the assessment district. Using either method of measurement, the boundary could split parcels and blocks which could create program administration and equity problems. This problem would be alleviated if full city blocks were used in determining the boundary. Blocks are generally well defined geographic areas, subject to little arbitrary interpretation. Moreover, in other cities with rapid-transit systems, developers have, at times, responded to transit stations by acquiring, developing or redeveloping an entire city block. The use of full blocks, however, may cause some parcels to be included which are outside the designated distance as measured by either walk distance or radius.

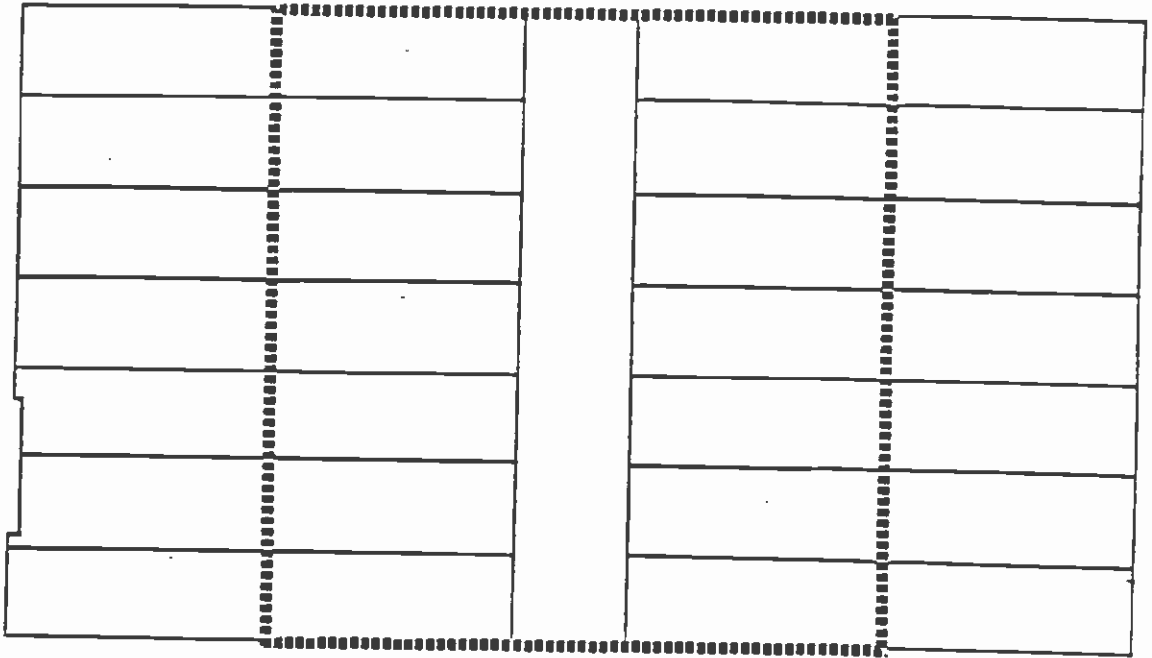
Block faces could be considered as an alternative to full city blocks. A block face is a subset of a block which fronts along a street. It may be a more precise measure of distance from a transit station than is a full city block. Specifically, a benefit assessment district may include one, two, or three block faces rather than a full city block, potentially better representing the actual extent of special benefits than full city blocks.

Use of block faces, however, introduces several possible disadvantages. First, existing parcel boundaries could present a large range of unusual parcel configurations for a given block face (e.g. differing parcel depths, L-shaped parcels, parcels with double frontage etc.) Such a configuration could introduce both equity and program administration issues. Second, buildings are not confined to single parcels which might result in a benefit assessment district that covers only part of a building. To avoid the administrative problems of assessing only a portion of a building, the SCRTD would have to monitor continually the developments on the periphery of all benefit assessment districts and would need to change boundaries every time a new development took place that would cross both a parcel boundary and the benefit assessment district boundary. Use of block faces would entail highly unusual boundary configurations and would introduce program administration problems. Figure 1 gives examples of blocks which contain regular block faces and irregular block faces. Block face B illustrates the difficulty of drawing a boundary using block faces.

For these reasons, benefit assessment district boundaries should be established in terms of full city blocks. It is recommended that full blocks be used for benefit assessment district boundaries, i.e. the district boundaries should follow the centerline of street rights-of-ways or natural barriers.

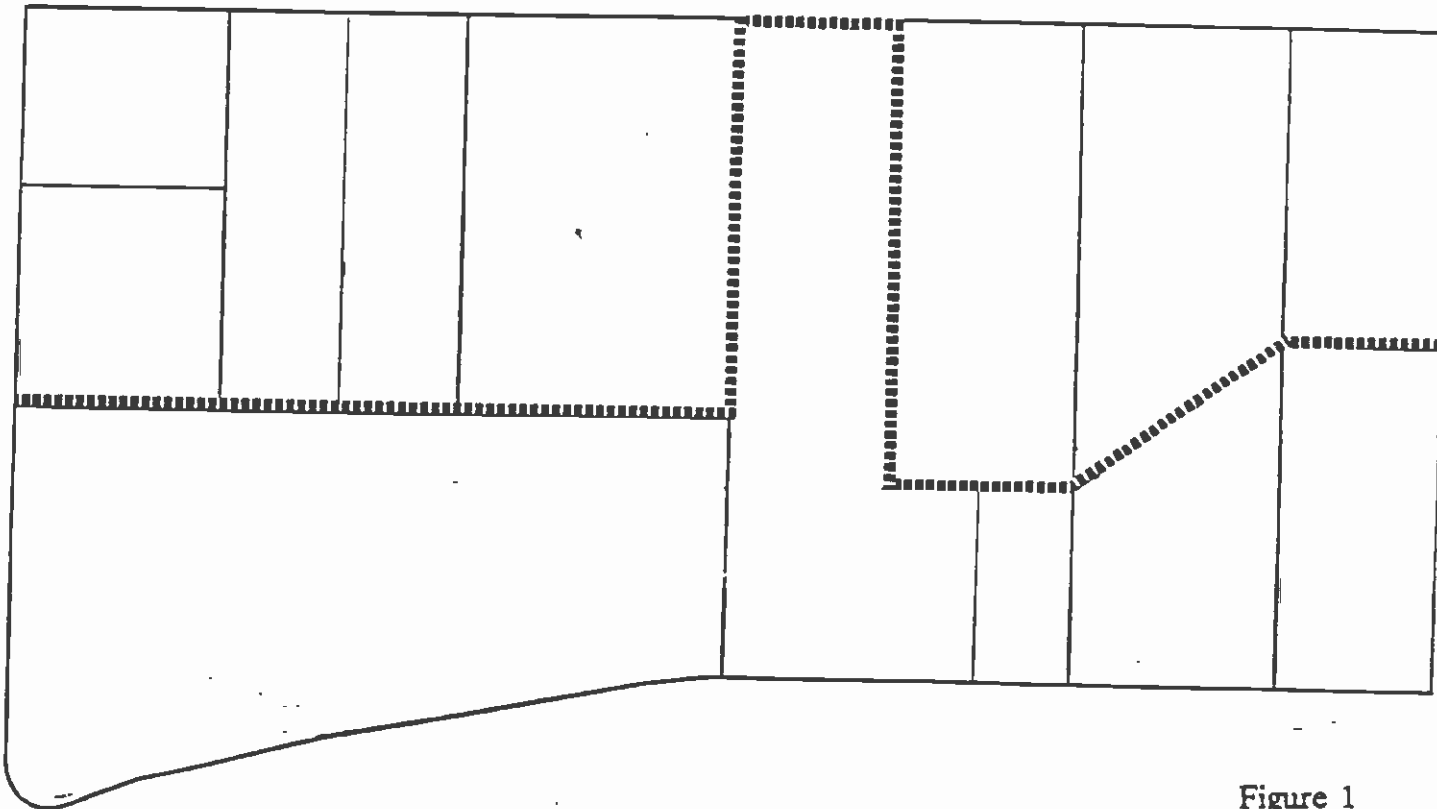
BLOCK WITH CONSISTENT BLOCKFACE

A.



BLOCK WITH INCONSISTENT BLOCKFACE DUE TO IRREGULAR SHAPED LOTS

B.



----- Potential Boundary

Figure 1

## Block Inclusion - Alternate Methods

Different methods may be used to determine if a full block should be included in a benefit assessment district. Two methods are:

- A) If any part of a block face<sup>1</sup> is included within a designated walking distance (i.e. the distance recommended by the Benefit Assessment Task Force) from the geometric center of a station, the entire block would be included in the benefit-assessment district.
- B) If more than one-half of a block face is included within the designated walking distance from the geometric center of a station, the entire city block would be included in the benefit assessment district. (Figure 2)

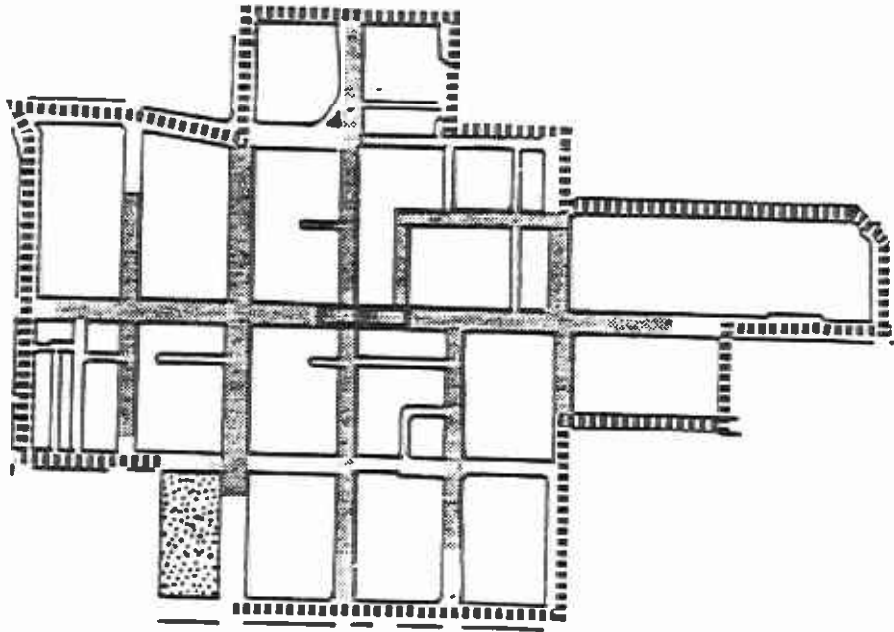
Each of these two methods for determining inclusion or exclusion of a block presents advantages and disadvantages. Alternative A (if any part of a block face is included, the entire block is included) would likely create a larger benefit assessment district than would Alternative B for the same distance measurements. Alternative A would also be likely to introduce a more jagged boundary than the second, leading to some potential question about its fairness at the periphery of the district. In either case, if the one-half mile distance is used, there will be blocks which exceed the maximum distance allowed by law. Alternative A, however, would create more instances that this would happen than the second alternative since a block is included if only a small portion of the block face is within the one-half mile walking distance.

Alternative B would only include a block if one-half or more of the block face is within the walking distance. It would be easier to demonstrate that benefit accrues to the block if the majority of the block is within the walking distance. It would produce a more equitable boundary particularly if there are large blocks at the perimeter of the walk distance. This method would create a smaller benefit assessment district than alternative one.

It is recommended that the Alternative B, i.e. more than 50 percent of the block face be within walking distance before the block is included, be used to determine boundaries because it would be easier to demonstrate special benefits in that district boundaries would be more closely tied to average walking distance and the district boundaries would be less jagged and potentially more equitable and acceptable to property owners in the district. Also, any block that goes beyond the one-half mile boundary would have to be excluded by definition.

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<sup>1</sup> In this instance, block face is used for measuring distance along the block face rather than the inclusion of the block face in the benefit assessment district.



ALTERNATIVE METHODS FOR DETERMINING  
INCLUSION OR EXCLUSION OF A BLOCK

- Station Center
- ▭ Station
- ▨ Walk Distance
- Boundary
- Block Included Using Rule A
- ▩ Block Not Included Using Rule B

- A. If any part of a block face is included within a designated walking distance from the geometric center of a station, the entire block would be included in the benefit assessment district.
- B. If more than one-half of a block face is included within the designated walking distance from the geometric center of a station, the entire city block would be included in the benefit assessment district.

## One-Half Mile Radius - Block Inclusion versus Legal Limit

If the one-half mile walk distance is used for the boundary, there will be blocks which could be included under the walk distance rule but portions of those blocks would exceed the one-half mile radius. (Figure 3) Any property located outside the one-half mile radius can not be legally assessed. In this instance, there are the following four options:

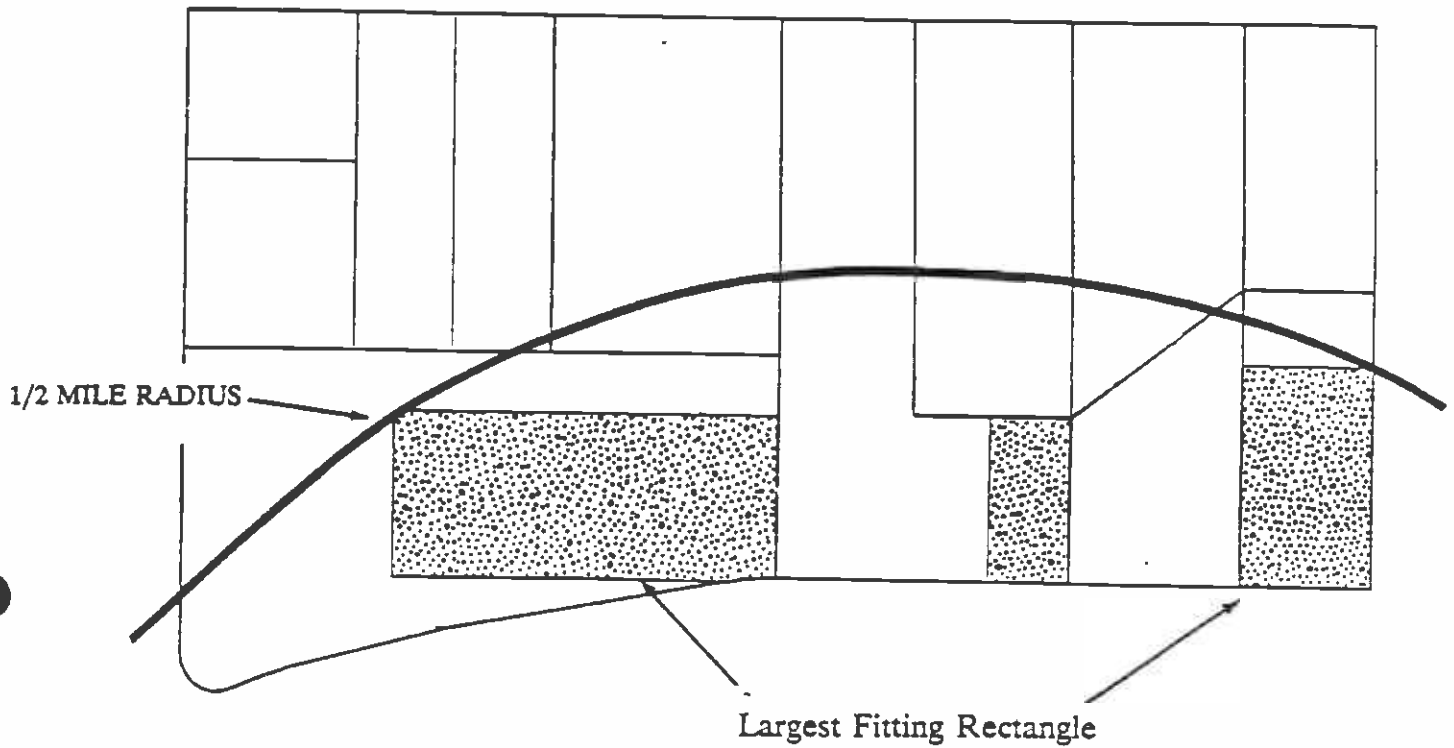
1. exclude entire block
2. include the portion of the block under the curve
3. include largest fitting rectangle (if greater than 50 percent of parcel)  
(see figure 3)
4. include the individual parcel if within the 1/2 mile radius.

Option 1 would produce a consistent boundary throughout the benefit assessment district, if the previously discussed full block rule were used. It also eliminates the possibility of parcels being split and/or portions of buildings being assessed. If this method is used, some properties which could be assessed under the 1/2 mile radius limit would not be included in the assessment district. The cost of administering such a boundary, however, may exceed the additional revenue. Options 2, 3, and 4 would produce a jagged boundary which could run between adjacent lots and could cause inequities to occur between identical buildings on adjacent lots if one is assessed and one is not. These options would also be difficult to administer because it would have to be determined where buildings are sited on parcels and the portion of the parcel subject to assessment prorated. A building may even straddle the boundary line if built on more than one parcel. This would require an inordinate amount of staff time to determine what portion of a building is subject to assessment and what uses are located within that portion of the building. Options 2, 3 and 4 would allow the a larger area to be assessed than Option 1, but they create a boundary which may be perceived as inequitable and costly to administer.

## Zones

There are special benefits (increased accessibility, mobility, higher land values, etc.) in the proximity of a station which could support the argument for a premium zone. If tiers or zones are used within benefit assessment districts, the benefit assessment rate within the premium tier would be higher than that in the rest of the district due to the special benefits received. The premium tier could be designated as one full block surrounding a station, the block face on property fronting major streets, or located within a specified premium distance from the station portal. The rate differential between the premium and secondary zones should be set to reflect the anticipated gradient of decreasing potential benefits with increasing distance from the station portals. Figure 4 illustrates how far people will walk to a rapid transit station. For the first 1000', walking is clearly preferred. After 2500', the

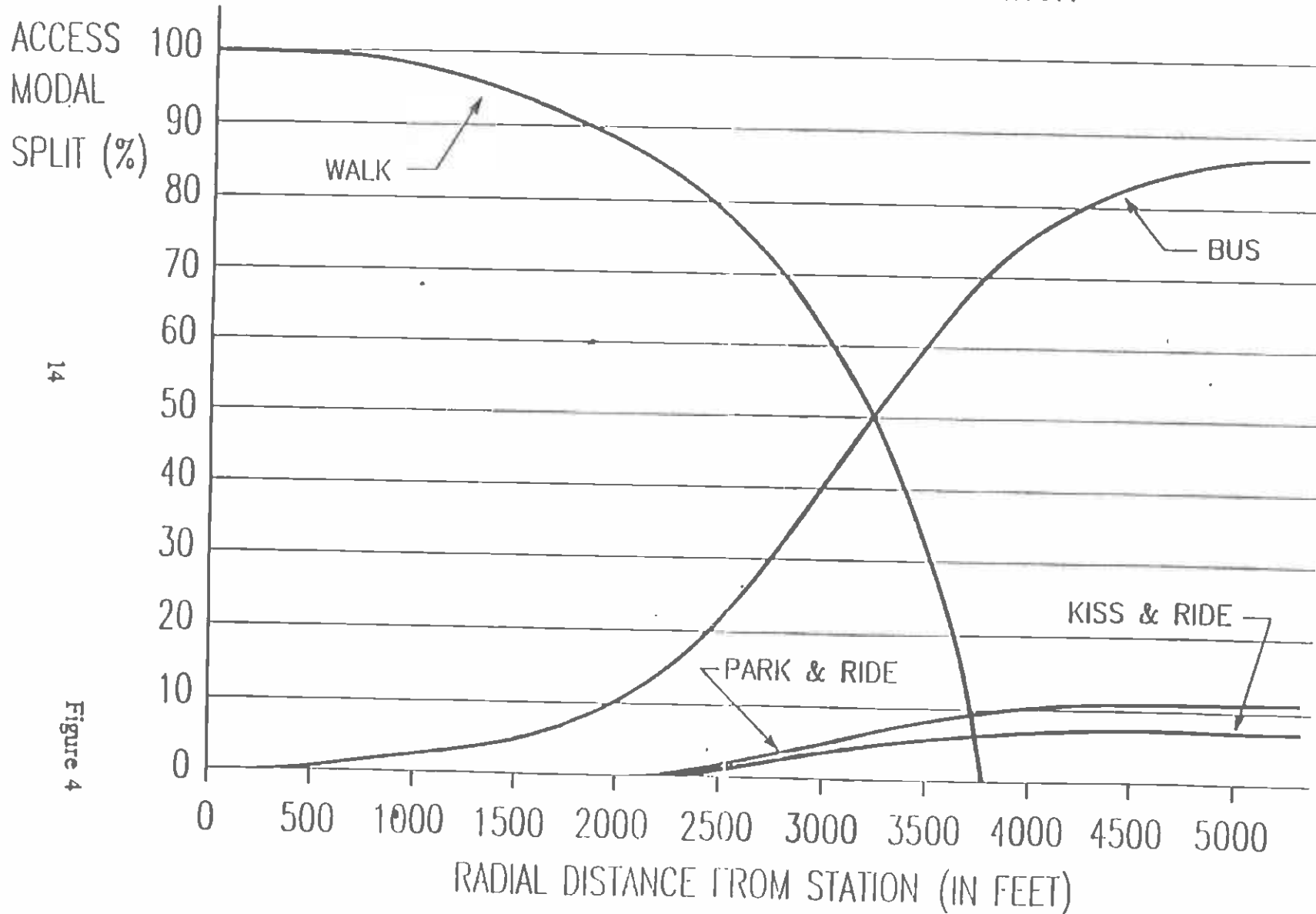
1/2 MILE BOUNDARY  
BLOCK INCLUSION VS. LEGISLATIVE LIMIT\*



\* THE ENABLING LEGISLATION DOES NOT ALLOW PROPERTIES WHICH ARE OUTSIDE THE 1/2 MILE RADIUS TO BE INCLUDED.

Figure 3

# ACCESS TO RAPID TRANSIT STATION RELATIVE TO DISTANCE FROM STATION



14

Figure 4

proportion of people who will walk to a transit station drops dramatically. The enabling legislation allows the use of tiers or premium zones.

It is recommended that zones be considered, however, a full determination of the advantages and disadvantages of zones can not be made without a more detailed analysis of the revenue projections. These projections will be included in the White Paper on Assessment Methodology which will be presented at a future meeting.

### **Accommodation of Change**

The possibility of establishing the initial boundary beyond where it would be placed today if the decision were to reflect only current development activity, behavior patterns, and technology should be considered. The boundary, however, can not exceed the one-half mile limit. First, redevelopment is likely to occur on parcels around stations, including those currently zoned for low density use and non-commercial use. The extent to which such redevelopment occurs is determined by the willingness of the governing body to change zoning, and the support of local residents for zoning changes.

Second, evidence indicates that special benefits occur within walking distance, which is a function of current behavior patterns and technology. If behavior patterns were to change (e.g. lengthened average walking distances resulting from large or sudden increases in gasoline costs) or technology changes were introduced (e.g. replacement of standard sidewalks by moving sidewalks), average walking distance may change and the extent of special benefit incidence may change with it. Because the benefit assessment process envisaged in the enabling legislation is on-going and because there is an intent to levy an equitable assessment on the majority of benefiting property owners, there is valid reason to build in a capability to respond to changes in development activity, behavior patterns and technology.

### **Accommodations for Future Land Use Changes**

Inequities would potentially arise as future development occurs on previously exempted parcels, if annual adjustments to accommodate land use do not occur. For example, if an office tower is built on land that was formerly residential and initially excluded from the benefit assessment district, the developer of the new structure would not be subject to assessment. Yet an identical office tower existing today would be assessed. This clearly would be inequitable. Owners of existing commercial properties would be paying assessments, but new development—which may even occur in response to Metro Rail—would not pay the assessment. SCRTD would not benefit from any future development that occurs. The assessment base would be frozen at the initial level.

To overcome this concern, the benefit assessment program should incorporate the ability to assess parcels in the future as the land use changes, while exempting certain land use



categories from assessment. All parcels, regardless of land use, would then be included within the designated benefit assessment district boundary, and parcels containing exempt land uses would not be assessed. If the land use on that parcel were subsequently to change from an exempt to a non-exempt use, a corresponding change in assessment for that property would be made.

It is recommended that parcels containing exempt land uses not be excluded from the districts, in order to ensure that any land use changes from exempt status result in an appropriate levy on the changed land use. This will also make it reasonable and prudent for the SCRTD to define boundaries to benefit assessment districts that encompass parcels that are currently designated exempt, thus recognizing the potential that these parcels have for future redevelopment to non-exempt uses.

### **Phase II Data Collection**

In order to determine the amount of revenue which will be generated from the assessment districts, data on the type of land use and the amount of square footage by category must be collected. A massive data collection effort was undertaken in order to determine the amount of square footage within the potential boundaries. Data on the amount of square feet by land use type was collected from the L.A. County Tax Assessor's information and from the L.A. County Flood Control Data Tape. This information was augmented by data collected from a field survey, and from a survey of existing records from the City of Los Angeles Department of Building and Safety for all properties located within 1/3 mile radius of the station. For the area between 1/3 mile and 1/2 mile, data was collected from the L.A. County Tax Assessor's Information and from the L.A. County Flood Control Data. This data was augmented with information from the Building Owners and Managers Association (BOMA) on the large office buildings located along the route.

The amount of assessable square footage, using the same rules as used for MOS-1, is shown in Table 1. For purposes of this table, the amount of square footage which lies within the overlap area of the Wilshire/Vermont and Wilshire/Normandie stations is included in the Wilshire/Vermont station figures, the overlap between the Vermont/Santa Monica and Vermont/Sunset stations is included in the Vermont/Santa Monica station, the overlap between the Hollywood/Vine and Hollywood/Highland stations is included in the figures for the Hollywood/Vine station and the overlap between the Wilshire/Normandie and Wilshire/Western stations is included in the figures for the Wilshire/Normandie station. The assignment of common area to a single station was done to avoid double counting of square footage for stations. The total for all eleven stations for 1/3 mile is approximately 52 million square feet and for 1/2 mile is approximately 57 million square feet.

TABLE 1  
PRELIMINARY  
ASSESSABLE SQUARE FOOTAGE  
BY STATION

STATION	DISTANCE	SQUARE FEET
WILSHIRE/ VERMONT	1/3 MILE	5,977,826
	1/2 MILE	6,726,600
WILSHIRE/ NORMANDIE	1/3 MILE	10,862,282
	1/2 MILE	10,967,071
WILSHIRE/ WESTERN	1/3 MILE	4,191,990
	1/2 MILE	4,306,713
VERMONT/ BEVERLY	1/3 MILE	2,146,873
	1/2 MILE	2,546,229
VERMONT/ S. MONICA	1/3 MILE	1,899,243
	1/2 MILE	2,266,737
VERMONT/ SUNSET	1/3 MILE	2,044,425
	1/2 MILE	2,431,404
HOLLYWOOD/ WESTERN	1/3 MILE	2,655,878
	1/2 MILE	2,877,011
HOLLYWOOD/ HIGHLAND	1/3 MILE	6,429,170
	1/2 MILE	6,491,329
HOLLYWOOD/ VINE	1/3 MILE	8,527,095
	1/2 MILE	8,816,892
NORTH HOLLYWOOD	1/3 MILE	4,294,812
	1/2 MILE	6,192,836
UNIVERSAL CITY	1/3 MILE	2,707,966
	1/2 MILE	3,154,904
TOTAL	1/3 MILE	51,737,562
	1/2 MILE	56,777,726

## MOS-1 Boundary Rules

The MOS-1 boundaries were established based on walking distances with a distance of 1/2 mile for the four CBD stations and 1/3 mile for the Wilshire/Alvarado station. The distances were measured using the block inclusion rule which includes a full city block in the district if more than one-half of the block face is included within the designated walk distance from the center of the station. There are also two smoothing rules which were developed to eliminate some of the irregularities of the boundary in order to accomplish the goal of being fair and equitable. These rules are:

1. When the boundary is to run along major features such as a freeway, river or railroad right-of-way, the boundary runs along the centerline of the feature.
2. When the boundary runs along three sides of one or two adjacent blocks then those blocks are included.

Tiers or premium zones were not instituted in MOS-1.

## Boundary Conclusions

This discussion leads to three important conclusions regarding boundary definitions:

- a) Boundaries for a rapid transit benefit assessment district must be established through a careful determination of the distance to which special benefits extend from a station.
- b) Boundaries cannot be set at more than some reasonable distance from a station. One-quarter to one-half mile should generally be the maximum range within which boundaries are set.
- c) Boundaries should be set to include as many properties receiving special benefits as possible, to spread the assessment as widely and equitably as possible.

## Recommendations

In evaluating alternate boundaries, several criteria should be used, including the ability to demonstrate that special benefits (as opposed to general, regionwide benefits) occur for property within the boundary, that the boundary will not generate undue problems in administration, that the boundary would represent an equitable treatment of benefiting and non-benefiting property and that revenue-generating requirements are met.

While similar criteria and guidelines should be utilized to determine the boundaries for both CBD and non-CBD stations, variances in existing development patterns, local development planning objectives, and future station area growth potentials in the non-CBD area may require the use of different criteria, i.e. the maximum distance of the boundary, to define non-CBD Metro Rail benefit assessment boundaries.

It is recommended that the following criteria be considered for adoption for the Phase II benefit assessment districts:

- o The district boundary be determined by a 1/2 mile walk distance (2640 feet) from the center of the station.
- o The walk distance be measured along the centerline of the street.
- o Full blocks rather than parcels or block faces be included as whole units (e.g., blocks will not be split by the boundary).
- o Manmade and natural barriers to movement be used as boundaries.
- o A full block be included if more than 50% of any one block face (measured as a linear distance along the street frontage) is within the defined walking distance.
- o A block be excluded if any portion of the block is outside of the 1/2 mile radius.
- o Internal zones or tiers be considered.

The 1/2 mile distance is one which is allowed by the enabling legislation and one which permits the benefit assessments to be shared by all those who will benefit from the location of a Metro Rail station. Using walking distance rather than radius relates the boundary more directly to benefit since there is a proven correlation between walking distance and benefit. The inclusion of a full block when more than 50 percent of the block is within walk distance provides a smoother more equitable boundary which is also less costly to administer. If a manmade or natural feature is considered a barrier to movement, then the feature should override the maximum distance criterion since the extent of benefit assessment districts must be matched with the ability to demonstrate that special benefits are received. If the feature inhibits walking, then special benefits may be diminished. If a block is split by the one-half mile radius, it should be excluded from the district because it would produce a jagged boundary which could produce inequities between adjacent lots, and would be costly to administer. The aim of boundary setting is to include all properties which receive special benefits and to exclude those that receive no benefits.