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I. SUMMARY OF REPORT

The Southern California Rapid Transit District was requested by the Central City Association, working through its Los Angeles Transportation Task Force, to develop alternatives for an expanded circulation bus system within downtown Los Angeles.

The District responded by developing six alternative plans. Each plan consists of between two and three separate circulation bus routes. Three of the six plans retain the present shuttle bus route (Line 202) operated by the District. The remaining three plans consist of completely new route configurations. Excellent route coverage of major activity centers is obtained in the plans as shown in the route maps which include an overlay of the major centers of activity.

The plans require between 21 and 38 buses. The present line 202 shuttle bus service requires 12 buses to operate during the noon peak period. The estimated operating costs assume the same frequency of service and hours of operation as the present Line 202. The estimated net cost (total operating cost less estimated fare revenues) ranges between \$1,507,800 and \$2,741,700. This compares with the net cost of the present Line 202 shuttle bus service (\$1,000,000 for FY 82-83) which is funded 60% by the City of Los Angeles, 20% by the Los Angeles Community Redevelopment Agency (CRA) and 20% by the District.

As a result of discussions between the District and CRA staff, an additional plan developed by CRA staff is submitted for consideration. This plan was costed by the District staff using the same costing method.

This report is forwarded to all interested parties for review and comment, including the Central City Association, the City of Los Angeles and the CRA. Additional funding would be required to operate the expanded circulation bus service included in the alternatives plans. Possible sources include private sector beneficiaries from this service, a benefit assessment district within the central business district and Proposition A (transit sales tax referendum) funds from the City of Los Angeles.

Appendices to this report document the present and projected employment levels for downtown Los Angeles and show the percent of the employment population directly served by the studied routes. The Downtown People Mover (DPM) route and master plan is also included for reference.

II. DESCRIPTION OF ALTERNATIVES

A. OVERVIEW

The District staff has developed six alternative routing plans, A through D-1, for review and comment by other public agencies and by interested representatives within the private sector. These six plans are the culmination of the development and review of more than two dozen separate routing plans intended to meet circulation and distribution travel needs within the Los Angeles Business District. These plans are shown in Exhibits A thru I.

Staff recommends these six plans for further study as a means of improving circulation bus service and travel within the rapidly growing Los Angeles Central Business District (CBD). In particular there is a need to improve circulation service for the growing West Side Financial District and for the upper Bunker Hill area which will be fully developed in less than a decade. These needs are especially addressed in Plans A, B and B-1.

Major activity centers are shown on Exhibits O thru Q. The locations of the centers are shown on a map together with a table listing the names of these activity centers. A second table lists the activity centers along with numerical values that indicate a subjective evaluation of the amount of potential ridership that can be obtained for selected activity centers from each plan.

The individual routes included in each plan are listed below:

<u>ROUTE NO.</u>	<u>DESCRIPTION</u>
<u>PLAN A</u>	
1	Present 202 route (Transamerica Center/Westside Financial District/Civic Center/Chinatown)
2	Convention Center/via Grand & Olive St./Little Tokyo
<u>PLAN B</u>	
1	Modified 202 route (Transamerica/Garment District/Westside Financial District/Civic Center/Union Station)
2	Convention Center/via Grand & Olive Sts./Little Tokyo
3	Convention Center/via Spring St./Chinatown

PLAN B-1

Same as Plan B except as follows:

- 3 Via Broadway instead of via Spring St.

PLAN C

- 1 5th & 6th Sts./Little Tokyo/Chinatown
2 1st & 7th Sts. (Two-way Loop)
3 7th/11th/12th Sts. (Two-way Loop)

PLAN D

- 1 Financial District/Civic Center/Chinatown
2 Garment District/Westside Financial District/Bunker Hill (Two-way Loop)
3 Olympic Blvd./7th St./Spring St./Little Tokyo

PLAN D-1

Same as Plan D except as follows:

- 3 Via Broadway instead of via Spring St.

B. PLANS A, B AND B-1

In addition to retention of the present 202 route configuration, top priority has been given to providing service to the upper Bunker Hill area. Two of the three plans include routes which directly serve the area and also provide through bus service between the Convention Center to the south, and the Civic Center and Little Tokyo areas to the north and east.

Other factors that were considered in the development of these plans include the following:

- o Serve maximum number of riders;
- o Connect maximum number of activity centers;
- o Develop routes in an easily understandable alignment;
- o Establish routes for locations not well served by present bus network in the CBD; and

- o Develop routes which are operational, taking into consideration workable layover locations, bus turning movements and traffic congestion levels.

The plan alternatives address the considerations discussed. In varying degrees, the plans provide area coverage for the following areas not well served by the present bus network:

- o Grand Ave. between 5th and 1st Streets;
- o Los Angeles St. between 7th and Olympic Blvd.; and
- o Figueroa St. between 7th and 12th Streets.

The following area is also covered, even though it is well served by existing RTD service:

- o Spring Street between Civic Center and Olympic Blvd.

C. PLANS C AND D AND D-1

The fourth, fifth and sixth plans focus on the following criteria:

- o Strive for high service visibility within the center of the CBD and continue to provide one route to Union Station, Olvera Street and Chinatown.
- o Consider opportunities for short loops focused on activity centers, preferably within a maximum off-route walking distance of 400 feet.
- o Consider "figure 8" type route configuration.
- o Focus on transfers at major focal points within the center of the CBD.

These plans concentrate more service on Seventh Street. A number of riders now using the present Line 202 Shuttle Bus Route would have to transfer with these new circulation route configurations.

With respect to operational feasibility, Plan D requires a bus turning movement from eastbound on 7th Street to northbound on Spring St. This would require a special set back at the stop line for southbound Spring Street vehicles stopping at the 7th Street intersection. The feasibility of this bus turning movement from a traffic flow safety standpoint remains to be determined.

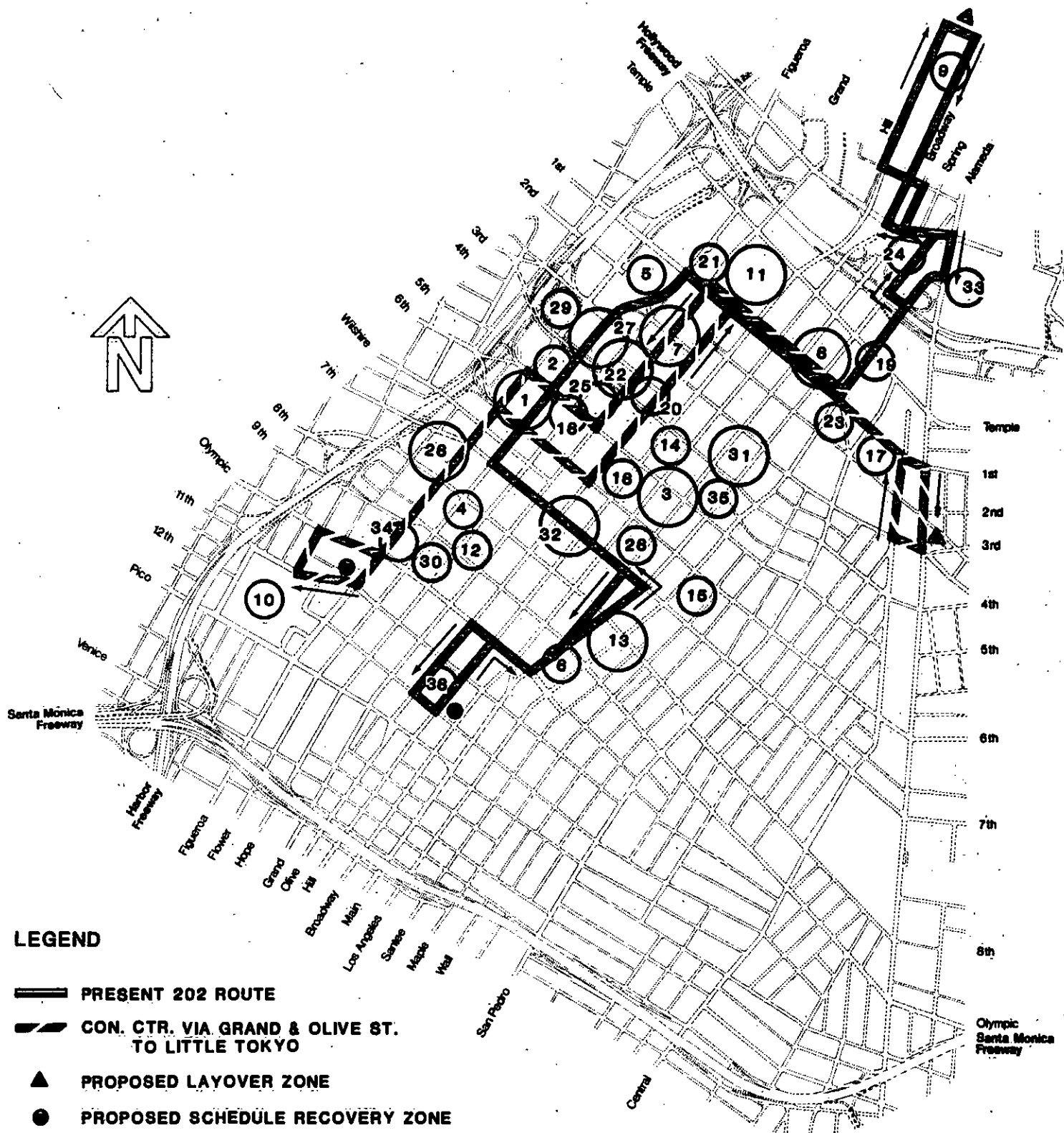
CRA staff has tentatively suggested that a parcel of land, about 60,000 square feet in size, may be available for an off-street bus layover site, within one year. This parcel is located at the northwest corner of General Thaddeus Kosciuszko Way and lower Grand Avenue and would be available for only a four to

five year period. District's staff estimates that 20,000 square feet would be necessary for bus turnaround and bus layover purposes for the studied route. If the CRA is able to obtain the land, a substantially improved route can be operated for several of the plans at reduced operating costs.






Variations of Plans C, D, and D-1, shown on pages 10, 12 and 14, respectively, show the improved routes resulting from the use of the CRA Bunker Hill layover site. For example, Plan C, Route No. 2, (7th/11th/12th Street two-way loop) can be improved upon by abandoning the Wall Street layover zone in favor of the Bunker Hill layover site. This revision would reduce the required number of buses from 12 to 8 which equates to more than a \$300,000 annual cost savings. Plans D and D-1 Route No. 2 (Garment District/Bunker Hill/two-way loop) also could be improved by relocating the southern layover zone at Main Street and 11th Street to the Bunker Hill layover site. There would be some cost savings, but the main benefit would be a simplified route.

CRA staff believes that it may be possible to obtain the necessary paving for the off-street bus turnaround and layover area as a result of the construction contractor's temporary use of this site.

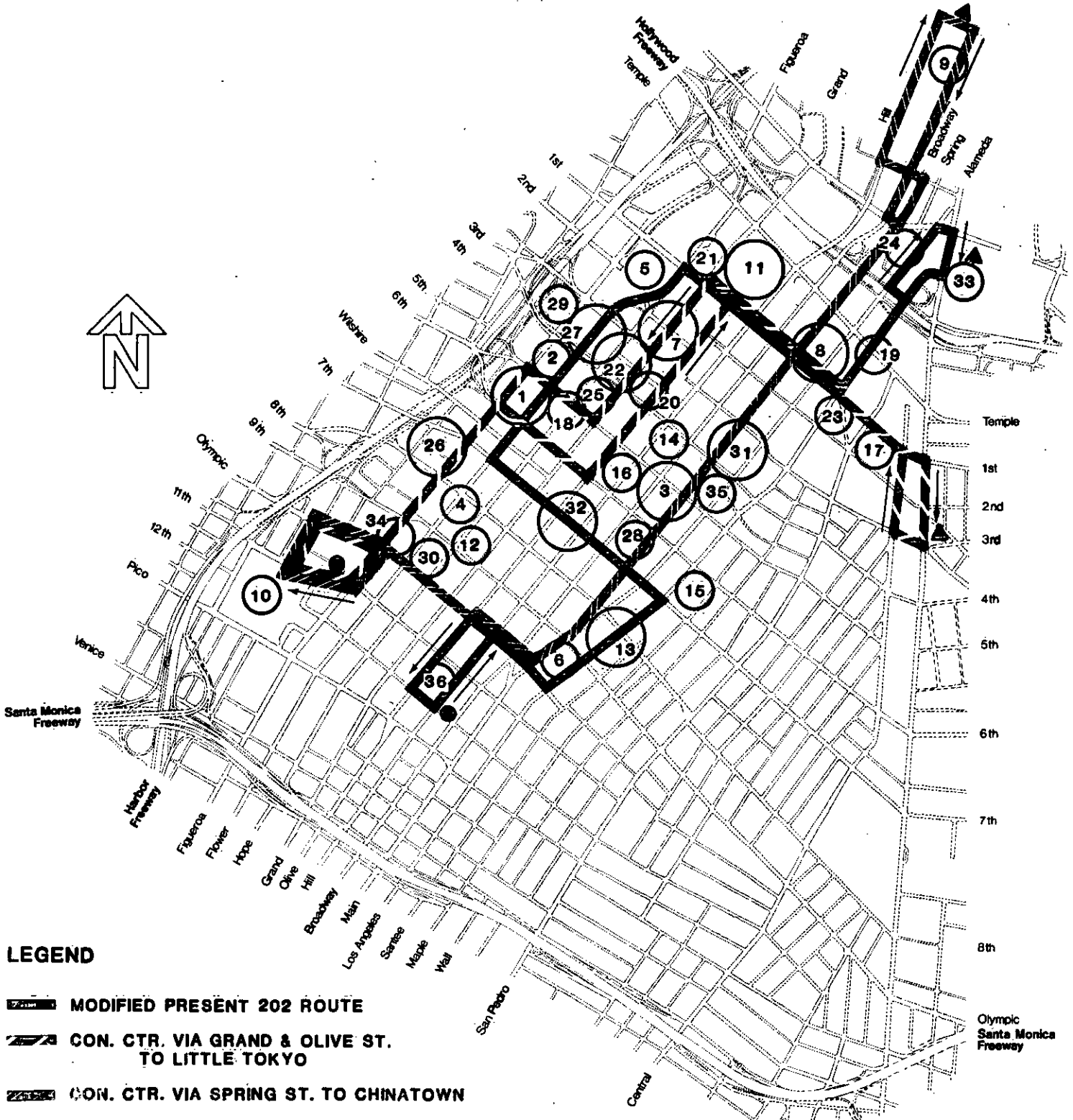
STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES PLAN A



LEGEND

-  PRESENT 202 ROUTE
-  CON. CTR. VIA GRAND & OLIVE ST. TO LITTLE TOKYO
-  PROPOSED LAYOVER ZONE
-  PROPOSED SCHEDULE RECOVERY ZONE
-  SELECTED ACTIVITY CENTERS

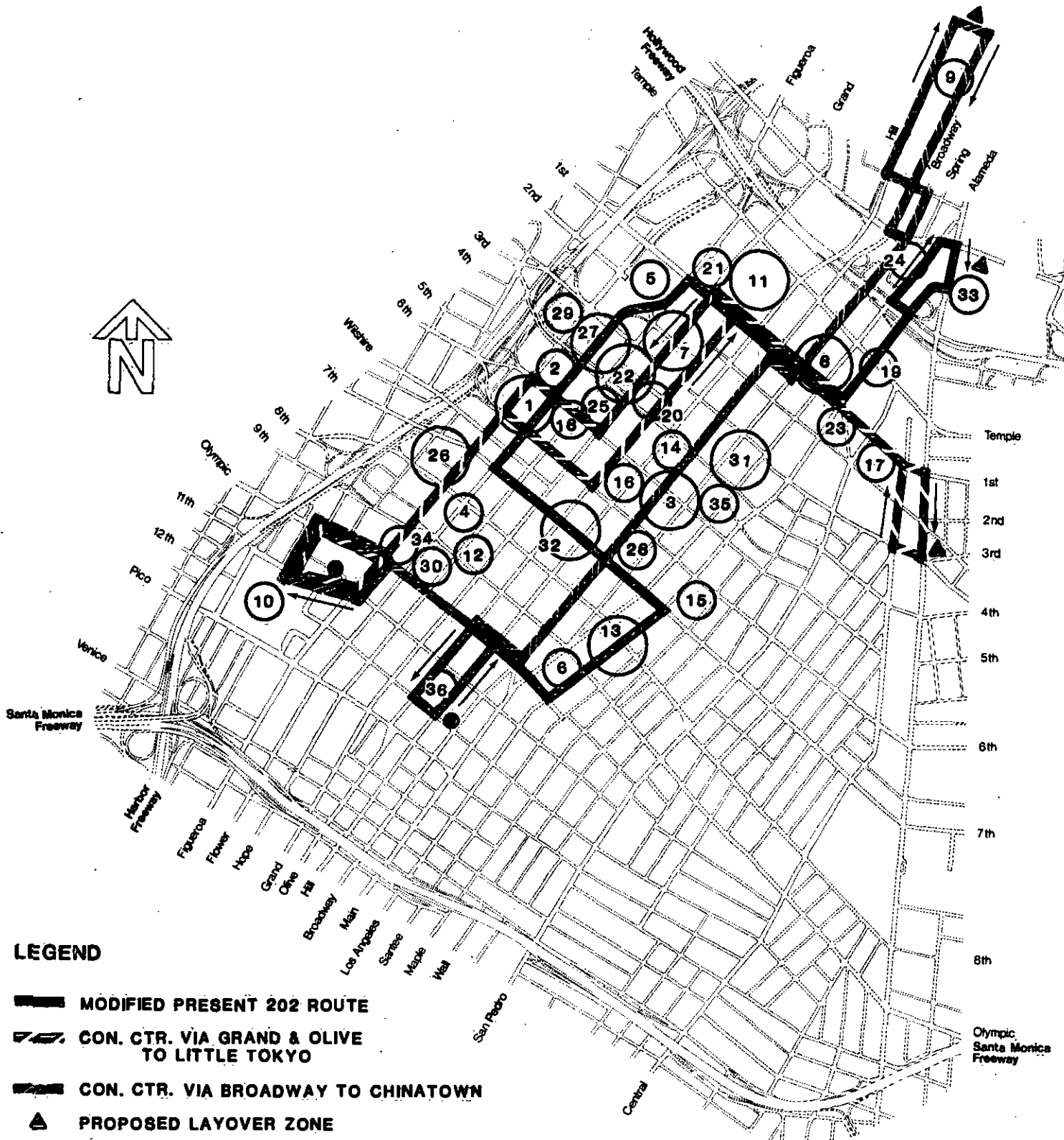
STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES PLAN B









LEGEND

-  MODIFIED PRESENT 202 ROUTE
-  CON. CTR. VIA GRAND & OLIVE ST. TO LITTLE TOKYO
-  CON. CTR. VIA SPRING ST. TO CHINATOWN
-  PROPOSED LAYOVER ZONE
-  PROPOSED SCHEDULE RECOVERY ZONE
-  SELECTED ACTIVITY CENTERS

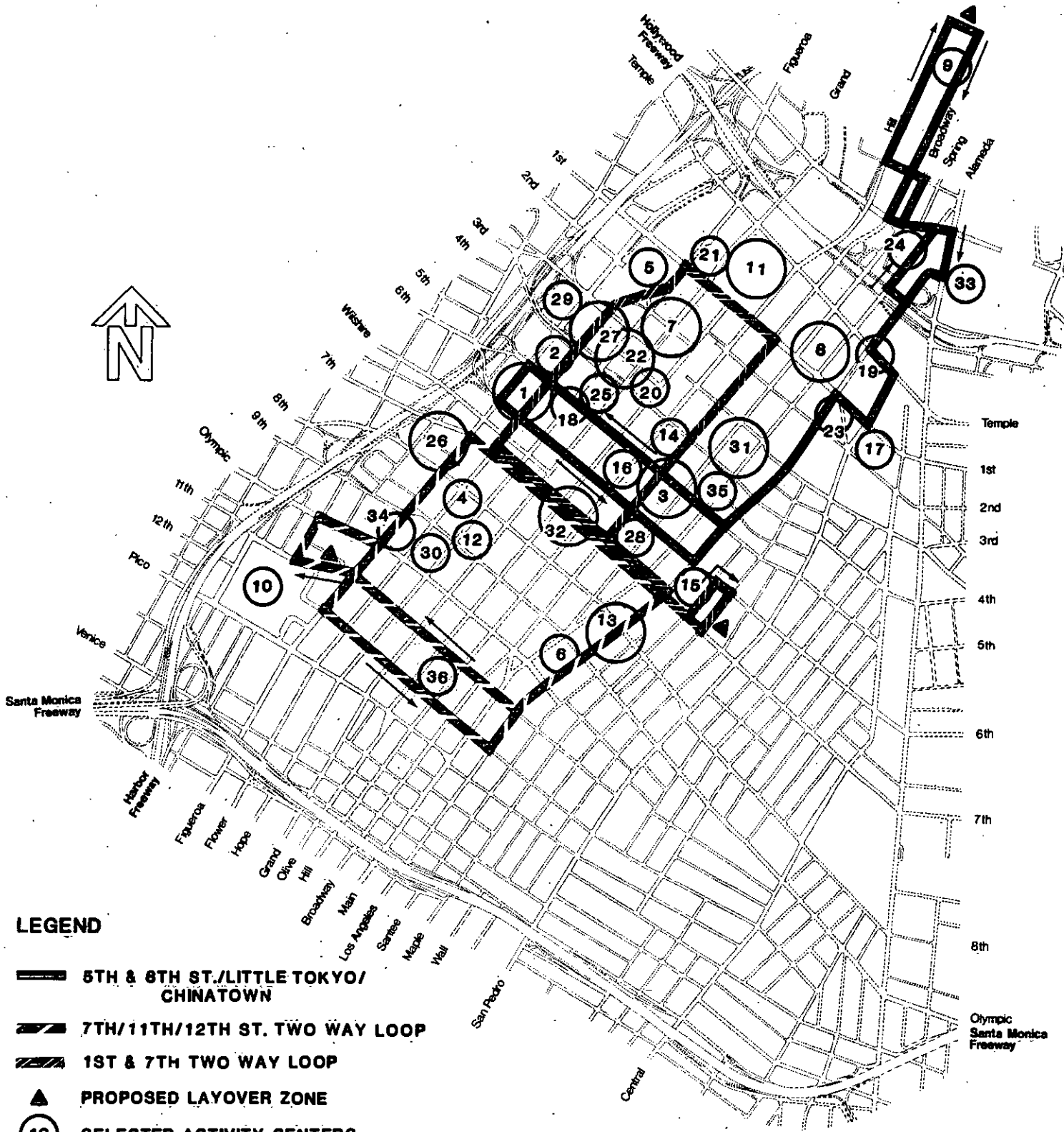
STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES PLAN B1








LEGEND

-  MODIFIED PRESENT 202 ROUTE
-  CON. CTR. VIA GRAND & OLIVE TO LITTLE TOKYO
-  CON. CTR. VIA BROADWAY TO CHINATOWN
-  PROPOSED LAYOVER ZONE
-  PROPOSED SCHEDULE RECOVERY ZONE
-  SELECTED ACTIVITY CENTERS

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES PLAN C



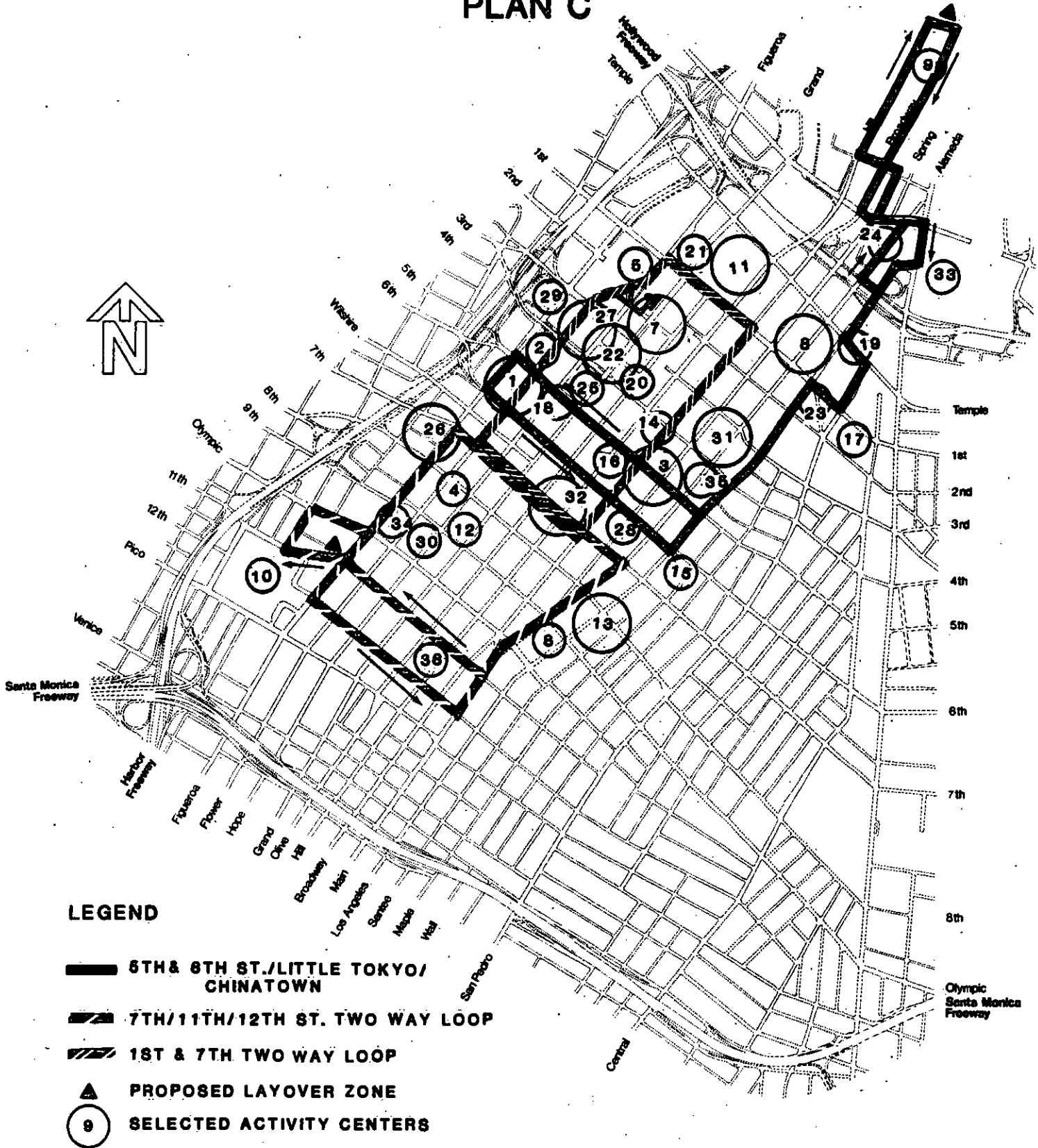
LEGEND

-  5TH & 6TH ST./LITTLE TOKYO/
CHINATOWN
-  7TH/11TH/12TH ST. TWO WAY LOOP
-  1ST & 7TH TWO WAY LOOP
-  PROPOSED LAYOVER ZONE
-  SELECTED ACTIVITY CENTERS






STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

USING CRA'S BUNKER HILL LAYOVER SITE

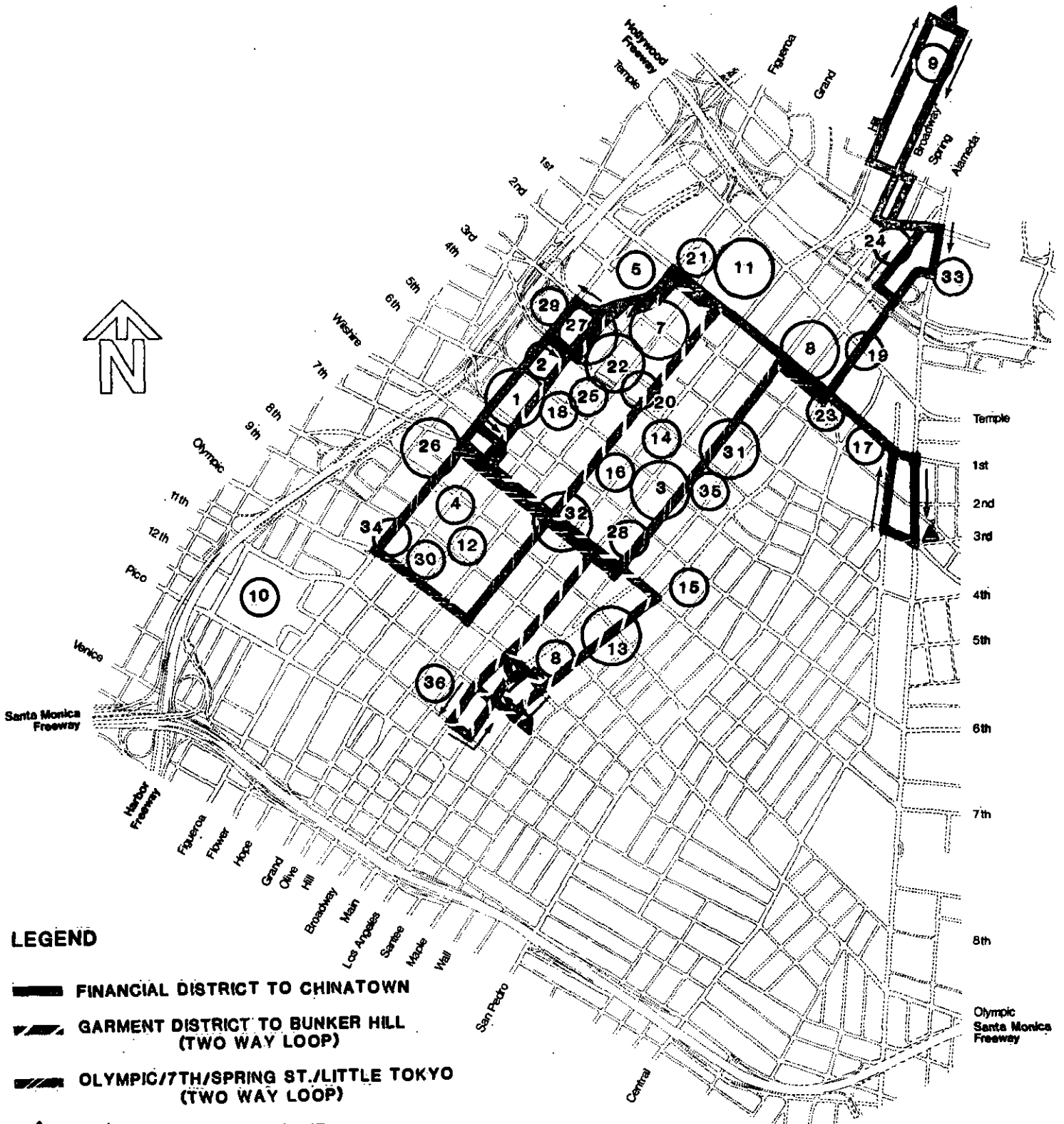
PLAN C



LEGEND

-  5TH & 6TH ST./LITTLE TOKYO/ CHINATOWN
-  7TH/11TH/12TH ST. TWO WAY LOOP
-  1ST & 7TH TWO WAY LOOP
-  PROPOSED LAYOVER ZONE
-  SELECTED ACTIVITY CENTERS

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES PLAN D



LEGEND






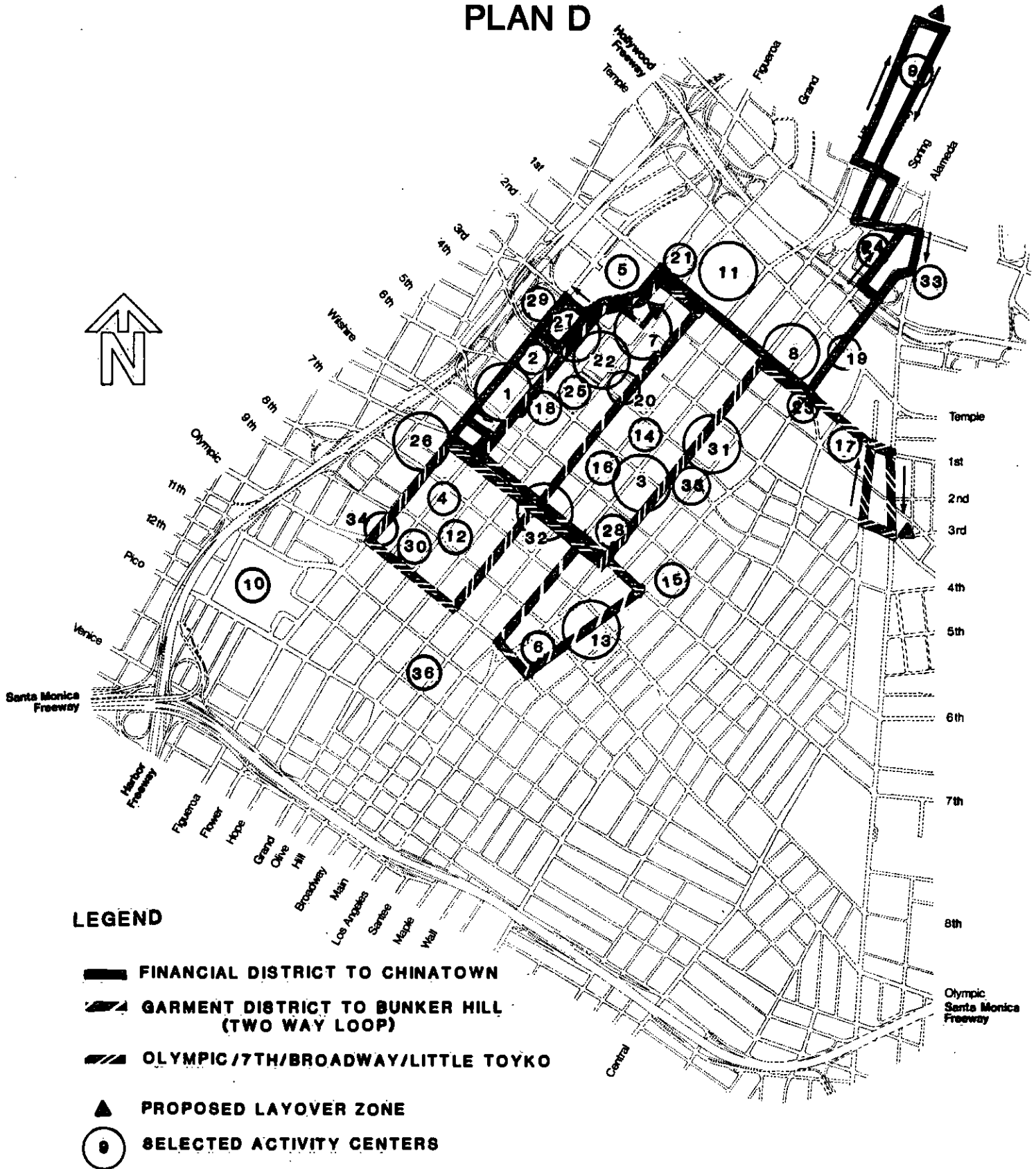
-  FINANCIAL DISTRICT TO CHINATOWN
-  GARMENT DISTRICT TO BUNKER HILL (TWO WAY LOOP)
-  OLYMPIC/7TH/SPRING ST./LITTLE TOKYO (TWO WAY LOOP)
-  PROPOSED LAYOVER ZONE
-  SELECTED ACTIVITY CENTERS








EXHIBIT G
STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

USING CRA'S BUNKER HILL LAYOVER SITE

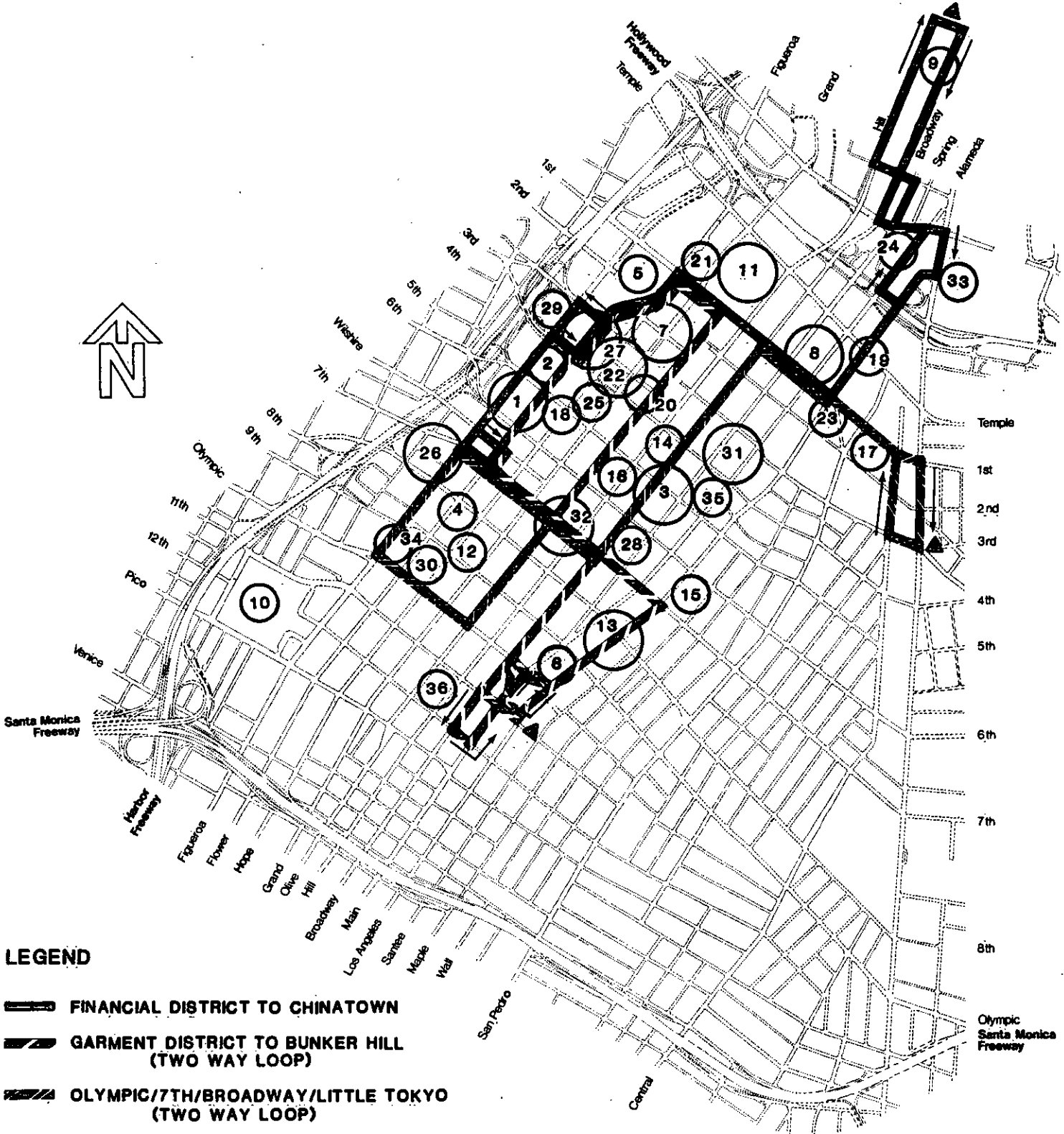
PLAN D








LEGEND

-  FINANCIAL DISTRICT TO CHINATOWN
-  GARMENT DISTRICT TO BUNKER HILL
(TWO WAY LOOP)
-  OLYMPIC/7TH/BROADWAY/LITTLE TOYKO
-  PROPOSED LAYOVER ZONE
-  SELECTED ACTIVITY CENTERS

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES PLAN D1



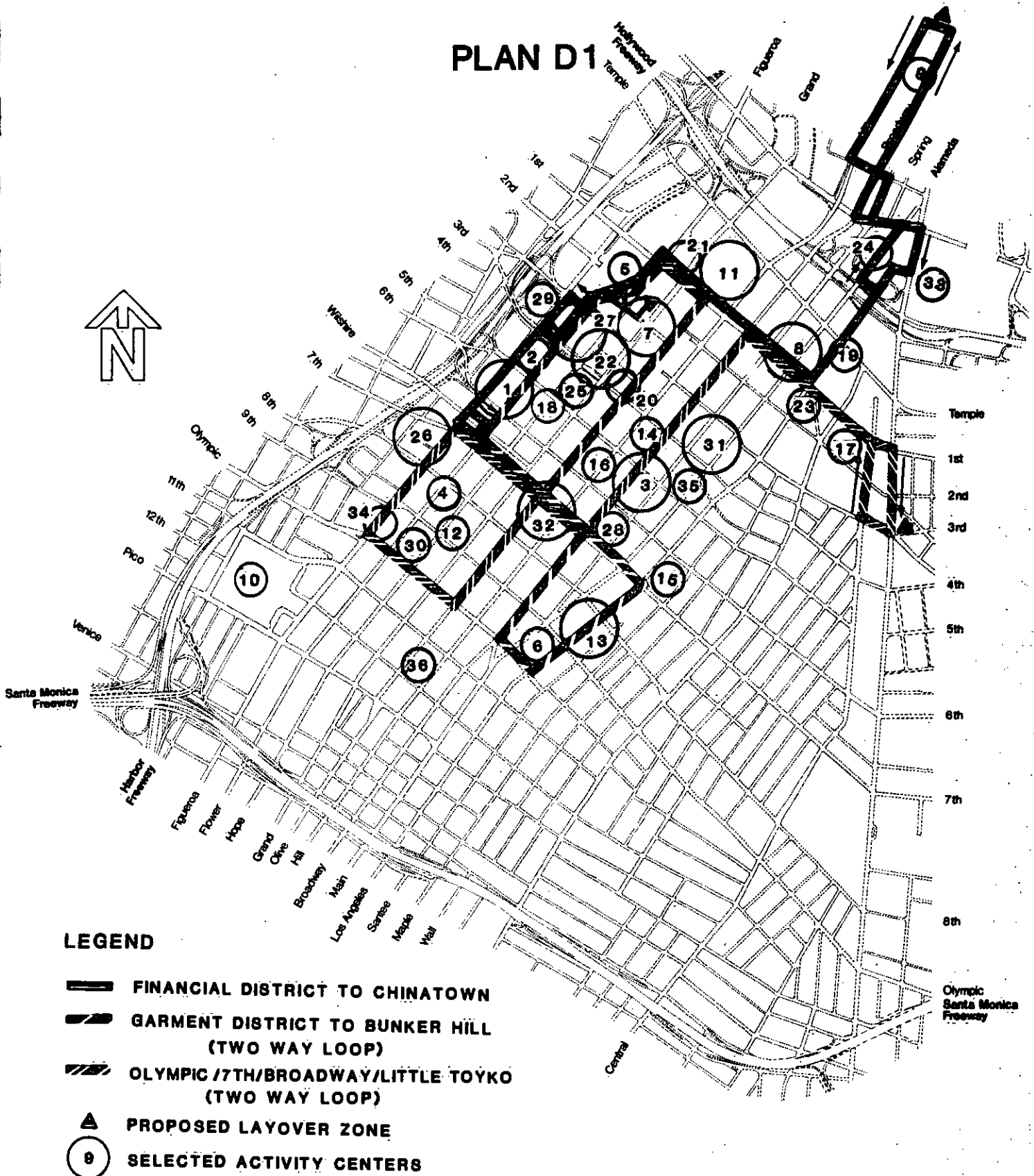
LEGEND

-  FINANCIAL DISTRICT TO CHINATOWN
-  GARMENT DISTRICT TO BUNKER HILL (TWO WAY LOOP)
-  OLYMPIC/7TH/BROADWAY/LITTLE TOKYO (TWO WAY LOOP)
-  PROPOSED LAYOVER ZONE
-  SELECTED ACTIVITY CENTERS

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

USING CRA'S BUNKER HILL LAYOVER SITE

PLAN D1



D. SERVICE AND COST STATISTICS

The costs of the six alternative plans are presented in Exhibits J thru N. As shown in Exhibit J, total operating costs range from a low of \$1,937,700 for Plan A to a high of \$3,473,700 for Plan D. Deducting for estimated farebox revenues of about 23%, net operating costs were calculated and are also shown on the same attachments.

The operating costs for the lines were based upon the District's projected cost levels for FY 1982-83. The same cost levels were used to forecast the operating costs for Line 202, the present downtown shuttle bus route, which is contained in the proposed service contract with the City of Los Angeles and the Los Angeles Community Redevelopment Agency (CRA) for FY 1982-83. The same level of service, expressed as headways (time interval between buses), existing for Line 202 was assumed in estimating costs for the new routes.

The farebox revenue estimates also were based on the present ridership level of the existing downtown shuttle bus route. Initially these ridership estimations may be somewhat optimistic. Depending on the actual ridership demand between different areas within the CBD, portions of the proposed alternative routes may produce considerably lower ridership than the assumed five boardings per bus mile. On the other hand, portions of some of the proposed routes may produce ridership considerably greater than this level of ridership. Good adherence to the bus schedule and effective District and business community promotions could result in significantly higher ridership for segments of the proposed routes.

If ridership is assumed to be proportional to increases in bus miles operated, the number of passengers carried would increase between 33 percent and 125 percent compared to the 1.3 million annual boardings carried on Line 202 currently.

E. FUNDING AND BUSES REQUIRED

It is assumed that the studied plans would be funded from new funding sources. Funding alternatives include using a portion of the transit funding sales tax revenues (Proposition A funds) flowing to the City of Los Angeles. Private sector funding has also been mentioned as a possibility; however, procedures and mechanisms to accomplish this have not been specified.

It is possible that funding for an expanded shuttle bus system could be obtained from the same benefit assessment districts that were to be utilized by the Downtown People Mover (DPM). The purpose of these benefit assessment districts (that were to be located around each DPM station) was to provide a portion of the required operating funds for the DPM.

The studied plans would require an increase in buses ranging from a minimum of 21 buses for Plan A, to a maximum of 38 buses for Plans D and D-1. This compares with the present requirement of 12 buses in service during the noon peak period on the existing Line 202.

If it is assumed that buses smaller than the standard 40 foot bus would be operated on the studied routes, it may be necessary to purchase additional buses. Thirty new intermediate buses will soon be purchased which may be available for the studied routes. If the District were to purchase additional buses specifically for this service, a multi-year commitment from the funding agencies may be appropriate.

Exhibit J

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

SUMMARY

ESTIMATED ANNUAL OPERATION REQUIREMENTS

Assume 25¢ Fare

	<u>Budgeted FY 1982-83 Line 202 Service</u>	<u>Plan A</u>	<u>Plan B*</u>	<u>Plan C</u>	<u>Plan D**</u>
Passengers	1,293,000	1,719,600	2,357,200	2,405,600	2,928,000
Revenue	\$ 323,250	\$ 429,900	\$ 589,300	\$ 601,400	\$ 732,000
Total Cost	\$ 1,328,000	\$ 1,937,700	\$ 2,677,100	\$ 2,915,100	\$ 3,473,700
Net Cost	\$ 1,004,750	\$ 1,507,800	\$ 2,087,800	\$ 2,313,700	\$ 2,741,700
Max Daily Buses	12	21	29	32	38
Max Saturday Buses	8	16	22	23	29

* Plan B has the same operational requirements as Plan B-1

** Plan D has the same operational requirements as Plan D-1

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Exhibit K

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

PLAN A

Assume 25¢ Fare

Scheduled Headway (Time Intervals Between Buses)

<u>Period</u>	<u>1. Present 202 Route</u>		<u>2. Con.Ctr/via Grand/Little Olive/Tokyo</u>	
	<u>Weekday</u>	<u>Saturday</u>	<u>Weekday</u>	<u>Saturday</u>
7:00am - 9:00am	10"	-	10"	-
9:00am - 10:00am	10"	8"	10"	8"
10:00am - 11:00am	8"	8"	8"	8"
11:00am - 2:00pm	6"	8"	6"	8"
2:00pm - 4:00pm	8"	8"	8"	8"
4:00pm - 5:00pm	8"	-	8"	-
5:00pm - 6:00pm	10"	-	10"	-
Trips Operated (Daily)	87	53	87	53

Estimated Cost*

Route Length	8.27	5.38
Required Buses (at noon peak period)	12	9
One Day Hours	107	80
One Day Miles	770	530
Annual Total Miles	198,700	136,700
Annual Cost	\$ 1,117,000	820,700

Estimated Annual Results of Operation and Subsidy Requirements

			<u>Combined Total</u>
Total Cost	\$ 1,117,000	\$ 820,700	\$ 1,937,700
Revenue	\$ 254,600	\$ 175,300	\$ 429,900
Net Cost	\$ 862,400	\$ 645,400	\$ 1,507,800
Passengers	1,018,400	701,200	1,719,600

* - Costs Based on FY1982-83 Projected Cost Levels
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Exhibit L

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

PLAN B**

Assume 25¢ Fare

Scheduled Headway (Time Intervals Between Buses)

P e r i o d	1. Modified Present 202 Route		2. Con.Ctr/via ^{Grand} Olive/ Little Tokyo		3. Con.Ctr/via Spring St./ Chinatown	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
	7:00am - 9:00am	10"	-	10"	-	10"
9:00am - 10:00am	10"	8"	10"	8"	10"	8"
10:00am - 11:00am	8"	8"	8"	8"	8"	8"
11:00am - 2:00pm	6"	8"	6"	8"	6"	8"
2:00pm - 4:00pm	8"	8"	8"	8"	8"	8"
4:00pm - 5:00pm	8"	-	8"	-	8"	-
5:00pm - 6:00pm	10"	-	10"	-	10"	-
Trips Operated (Daily)	87	53	87	53	87	53

Estimated Cost*

Route Length	6.88	5.38	6.31
Required Buses (at noon peak period)	10	9	10
One Day Hours	91	80	90
One Day Miles	658	530	589
Annual Total Miles	169,800	136,700	152,000
Annual Cost	\$ 954,400	\$ 820,700	\$ 902,000

Estimated Annual Results of Operation and Subsidy Requirements

				<u>Combined Total</u>
Total Cost	\$ 954,400	\$ 820,700	\$ 902,000	\$ 2,677,100
Revenue	\$ 218,600	\$ 175,300	\$ 195,400	\$ 589,300
Net Cost	\$ 735,800	\$ 645,400	\$ 706,600	\$ 2,087,800
Passengers	874,400	701,200	781,600	2,357,200

* Costs based on FY1982-83 projected cost levels ** Plan B has the same operational requirements as of Plan B-1

Exhibit M

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

PLAN C

Assume 25¢ Fare

Scheduled Headways (Time Intervals Between Buses)

P e r i o d	1. 5th & 6th Sts./Little Tokyo/Chinatown		2. 1st & 7th Sts. (Two Way Loop)		3. 7th/11th/12th Sts. (Two Way Loop)	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
7:00am - 9:00am	10"	-	10"	-	10"	-
9:00am - 10:00am	10"	8"	10"	8"	10"	8"
10:00am - 11:00am	8"	8"	8"	8"	8"	8"
11:00am - 2:00pm	6"	8"	6"	8"	6"	8"
2:00pm - 4:00pm	8"	8"	8"	8"	8"	8"
4:00pm - 5:00pm	8"	-	8"	-	8"	-
5:00pm - 6:00pm	<u>10"</u>	<u>-</u>	<u>10"</u>	<u>-</u>	<u>10"</u>	<u>-</u>
Trips Operated (Daily)	87	53	87	53	87	53

Estimated Cost*

Route Length	5.88	5	5.87
Required Equipment	9	8	11
One Day Hours	81	73	102
One Day Miles	548	488	605
Annual Total Miles	141,400	125,646	156,100
Annual Cost	\$ 826,600	742,700	\$ 998,400

Estimated Annual Results of Operation and Subsidy Requirements

				<u>Combined Total</u>
Total Cost	\$ 826,600	\$1,090,100	\$ 998,400	\$ 2,915,100
Revenue	\$ 181,700	\$ 218,800	\$ 200,900	\$ 601,400
Net Cost	\$ 644,900	\$ 871,300	\$ 797,500	\$ 2,313,700
Passengers	726,800	875,200	803,600	2,405,600

* Costs based on FY 1982-83 projected cost levels.

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Exhibit N

STUDIED DOWNTOWN SHUTTLE BUS ALTERNATIVES

PLAN D**

Assume 25¢ Fare

Scheduled Headways (Time Intervals Between Buses)

P e r i o d	1. Financial District/ Civic Center/ Chinatown		2. Garment Dist/West Side Financial Dist/Bunker Hill (Fig. 8 Loop)		3. Olympic Blvd/Spring St./Little Tokyo	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
	7:00am - 9:00am	10"	-	10"	-	10"
9:00am - 10:00am	10"	8"	10"	8"	10"	8"
10:00am - 11:00am	8"	8"	8"	8"	8"	8"
11:00am - 2:00pm	6"	8"	6"	8"	6"	8"
2:00pm - 4:00pm	8"	8"	8"	8"	8"	8"
4:00pm - 5:00pm	8"	-	8"	-	8"	-
5:00pm - 6:00pm	10"	-	10"	-	10"	-
Trips Operated (Daily)	87	53	87	53	87	53

Estimate Cost*

Route Length	6.20	7.42	9.24
Required Equipment	10	12	16
One Day Hours	90	110	146
One Day Miles	580	730	898
Annual Total Miles	149,600	188,300	231,700
Annual Cost	\$ 899,300	\$ 1,127,000	\$ 1,447,400

Estimated Annual Results of Operation and Subsidy Requirements

				<u>Combined Total</u>
Total Cost	\$ 899,300	\$ 1,127,000	\$ 1,447,400	\$ 3,473,700
Revenue	\$ 192,400	\$ 242,400	\$ 297,200	\$ 732,000
Net Cost	\$ 706,900	\$ 884,600	\$ 1,150,200	\$ 2,741,700
Passengers	769,600	969,600	1,188,800	2,928,000

* Costs based on FY 1982-83 projected cost levels. ** Plan D has the same operational requirements as Plan D-1.
Planning Dept.

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F. ACTIVITY CENTERS IN RELATION TO PLANS

Major activity centers within the downtown Los Angeles have been superimposed over each plan to illustrate how well each route serves these centers.

Exhibit O shows the location of each activity center on a map of the downtown area. Exhibit P and Q list the activity centers and show the ranking that each plan received for directly serving the identified centers. The potential for each center to generate boardings for the shuttle bus routes was subjectively evaluated. Major traffic generators received 3 points. Other activity centers received 1 point when the route directly served the activity center. Centers not served by a bus route received a 0 rating.

All of the plans provide good overall coverage although some of the plans do not serve a few important activity centers. In addition, the linking of the activity centers varies considerably between the plans. Knowledge of trip making desires or desire lines are needed to fully evaluate the effectiveness of the alternative route configurations contained in the plans.

LOCATION OF SELECTED ACTIVITY CENTERS WITHIN THE LOS ANGELES CENTRAL BUSINESS DISTRICT



EXHIBIT P

SELECTED ACTIVITY CENTERS WITHIN THE
LOS ANGELES CENTRAL BUSINESS DISTRICT

<u>Key Areas of the CBD</u>	<u>Location</u>
1. *ARCO Towers	Figueroa between 5th and 6th Sts.
2. Bonaventure Hotel	Figueroa between 4th & 5th Sts.
3. *Broadway Retail Stores	Broadway between 9th & 1st Sts.
4. Bullock's Hqt.	Flower & 8th Sts.
5. Bunker Hill Towers	Hope between 1st & 3rd Sts.
6. California Mart	Los Angeles between 9th & Olympic Blvd.
7. *California Plaza	Grand Ave. between 4th & 2nd Sts.
8. *City Hall	Main St. & 1st St.
9. Chinatown	North Broadway & Bernard St.
10. Convention Center	Figueroa St. between Pico Blvd. & 11th St.
11. *County Administrative Offices & Courthouse	Grand Ave. & Hill St. between 1st & Temple Sts.
12. Embassy Auditorium	9th St. & Grand Ave.
13. *Garment District	Los Angeles between 7th & 11th Sts.
14. Grand Central Market	3rd St. & Broadway St.
15. Greyhound Terminal	6th St. & Los Angeles St.
16. Jewelry Mart	Hill St. between 5th & 6th St.
17. Little Tokyo	1st St. & San Pedro St.
18. Los Angeles City Library	Grand Ave. & 5th St.
19. Los Angeles City Mall	Main St. & Temple St.
20. Museum of Contemporary Art	3rd St. & Grand Ave.
21. Music Center	1st St. & Grand Ave.
22. *New Crocker Center	4th St. & Grand Ave.
23. New Otani Hotel	1st St. & Los Angeles St.
24. Olvera Street	Main St. & Sunset Blvd.
25. O'Melveny & Meyers Bldg.	4th St. & Grand Ave.
26. Pacific Plaza	Figueroa St. & 7th St.
27. *Security Pacific Bank Plaza	Hope St. between 3rd & 4th St.
28. Senior Citizen Housing	Spring St. & 7th St.
29. Sheraton Grande Hotel	Figueroa St. & 3rd St.
30. South Park Residential Development	Flower St. between 9th & Olympic Blvd.
31. *State Building	Spring St. between 3rd & 4th Sts.
32. *7th Street Shopping Area	7th St. between Figueroa St. & Spring St.
33. Union Station	Alameda St. & Macy St.
34. Variety Arts Theater	9th St. & Figueroa St.
35. SCRTD Headquarters	Main St. & 4th St.
36. Transamerica Building	12th St. between Hill St. & Olive St.

* Indicates a major traffic generator - Three point were given for major generators - all others received a one point rating.

Exhibit Q

SELECTED ACTIVITY CENTERS
WITHIN THE LOS ANGELES CENTRAL
BUSINESS DISTRICT

<u>KEY AREAS OF THE CBD</u>		<u>ROUTES</u>					
		<u>A</u>	<u>B</u>	<u>B1</u>	<u>C</u>	<u>D</u>	<u>D1</u>
1.	* ARCO Towers	3	3	3	3	3	3
2.	Bonaventure Hotel	1	1	3	1	1	1
3.	* Broadway Retail Area	0	0	3	3	3	3
4.	Bullock's Headquarters	0	0	0	0	0	0
5.	Bunker Hill Towers	1	1	1	1	1	1
6.	California Mart	1	1	1	1	1	1
7.	* California Plaza	3	3	3	3	3	3
8.	* City Hall	3	3	3	3	3	3
9.	Chinatown	1	1	1	1	1	1
10.	Convention Center	1	1	1	1	0	0
11.	* County Administrative Offices & Courthouse	3	3	3	3	3	3
12.	Embassy Auditorium	0	0	0	0	0	0
13.	* Garment District	0	3	3	3	3	3
14.	Grand Central Market	0	0	1	0	0	1
15.	Greyhound Terminal	0	0	0	1	0	0
16.	Jewelry Mart	0	0	0	1	0	0
17.	Little Tokyo	1	1	1	1	1	1
18.	Los Angeles City Library	1	1	1	1	1	1
19.	Los Angeles City Mall	1	1	1	1	1	1
20.	Museum of Contemporary Art	1	1	1	0	1	1
21.	Music Center	1	1	1	1	1	1
22.	* New Crocker Center	3	3	3	0	3	3
23.	New Otani Hotel	1	1	1	1	1	1
24.	Olvera Street	1	1	1	1	1	1
25.	O'Melveny & Meyers Building	1	1	1	0	0	1
26.	Pacific Plaza	1	1	1	1	1	1
27.	* Security Bank Plaza	3	3	3	3	3	3
28.	Senior Citizen Housing	1	1	1	1	1	1
29.	Sheraton Grande Hotel	0	0	0	0	1	1
30.	South Park Residential Development	0	1	1	0	1	1
31.	* State Building	0	3	0	3	3	0
32.	* Seventh Street Shopping Area	3	3	3	3	3	3
33.	Union Station	1	1	1	1	1	1
34.	Variety Arts Theater	1	1	1	1	1	1
35.	SCRTD Headquarters	0	0	0	1	0	1
36.	Transamerica Center	1	1	1	1	0	0
TOTAL POINTS		39	46	49	46	48	47

* Indicates a major traffic generator--three points were given for major generators-- all others received a one point rating.

III. NEXT STEPS

It is understood that District operation of the studied alternatives would be contingent upon the availability of a suitable financial sponsor and/or additional funding sources.

At its June 3rd, 1982 meeting, the District Board of Directors instructed the staff to transmit the studied alternatives with several modifications, included herein, to interested public and private organizations including the City of Los Angeles, the Los Angeles Community Redevelopment Agency (CRA) and the Los Angeles Central City Association. Following discussions with all the interested parties, toward the objective of developing consensus on a specific proposal, the staff will report back to the District Board of Directors for their further consideration.

IV. LOS ANGELES CRA STUDIED ROUTE ALTERNATIVES

The Los Angeles Community Redevelopment Agency (CRA) CBD Planning staff has reviewed the District's six alternative routes. In the process of this review, the CRA staff has developed two additional routing alternatives which are included in this report for review by all concerned. The CRA's statements in support of their shuttle bus plan are as follows in the next three pages:

- o General CBD Wide Objectives
- o Core Area Loop Objectives & Characteristics
- o Chinatown/South Park Shuttle Objectives & Characteristics

At this point, the CRA staff is continuing to review both the District's and its own routing alternatives from the standpoint of whether the CRA could justify an increase in expenditures for additional circulation bus service within the Los Angeles CBD.

The estimated cost for the CRA plan using the same methodology and level of service assumptions as was used for the other alternative plan are also shown in Exhibit P.

With respect to the operational feasibility of the Core area loop via 6th and 8th Street, the route requires a bus turning movement from eastbound on 6th Street to northbound on the Spring Street contra-flow lane. This would require a special set back of the stop line for southbound Spring Street vehicles stopping at the 6th Street intersection. The feasibility of this bus turning movement from a traffic flow safety standpoint remains to be determined.

PROPOSED CRA MINI-BUS ROUTE ALIGNMENTS DESCRIPTION

GENERAL CBD WIDE OBJECTIVES

- o Maximize Convenience and Effectiveness of Service
Since current Mini-Bus peak hour patronage occurs during the time-limited lunch hour, both the Loop and Shuttle Route Alignments suggest that by providing service to (within 1 block of) rather than along congested 7th Street (in case of the Loop) and Flower Street (in the case of the Shuttle) the effective service area and the average speed of both route alignments is increased, thereby increasing ridership potential.
- o Increase Level of Service to West Side
Both the Loop and Shuttle Alignments serve the high density West Side with parallel lines on 1st Street, through Bunker Hill and Flower and Figueroa Streets. Since the current headways of 6 minutes during noon peak are nearly at maximum operating efficiency, the only remaining option for increased service to the West Side is a parallel route with a staggered schedule.
- o Provide Service to East Side
A long standing east side revitalization objective is the re-occupancy of vacant buildings along Spring Street and Broadway. Marketability of this mostly upper level space is directly linked to the degree of Civic Center and West Side accessibility potential tenants can rely on.
- o Develop Clear, Distinguishable Route Alignments
The proposed Loop and Shuttle route alignments providing service within and to the CBD are graphically envisioned as a large circle (Core Area Loop) engaged by a line with two small circles at either end (Chinatown/South Park Shuttle). Graphic clarity will be essential, as the proportion of CBD visitors to employees, residents and local shoppers increases daily.

CORE AREA LOOP OBJECTIVES & CHARACTERISTICS

Objective

- o Serve maximum number of passengers by linking maximum number of activity generators via shortest and fastest route possible.

Trip Characteristics

Primary individual trip purpose is business or shopping related during off peak hours; noontime patronage combines locals users with tourists.

User Group & Activity Centers Served (Predominantly employee & shopper oriented)

Employees: Financial and Commercial Core Area; Civic Center Spring Street; Broadway; and Hill Street Jewelry District

Shoppers: Westside & 7th Street Retail District; Hill Street; (Local & Jewelry District; Los Angeles Street Discounts; visitors) B'way/Grand Central Market and May Company.

Tourists: Music Center; Sheraton Grande, Bonaventure, L.A. Hilton, Hyatt Regency, Biltmore and Mayflower Hotels; Hill Street Jewelry District; Grand Central Market; Bradbury Bldg.

Residents: Bunker Hill; PT&T and Van Nuys Buildings (Elderly Housing); Spring Street and Broadway Artist Lofts and Premier Towers Condominiums.

CHINATOWN/SOUTH PARK SHUTTLE OBJECTIVES & CHARACTERISTICS

Objectives

- o Serve outlying employment & shopping districts (Chinatown, Little Tokyo, South Park) by providing link to Core Area Activity Centers
- o Link majority of Core Area's tourist related facilities (Hotels, Convention Center, specialty shopping and cultural attractions)
- o Increase level of service to high density West Side

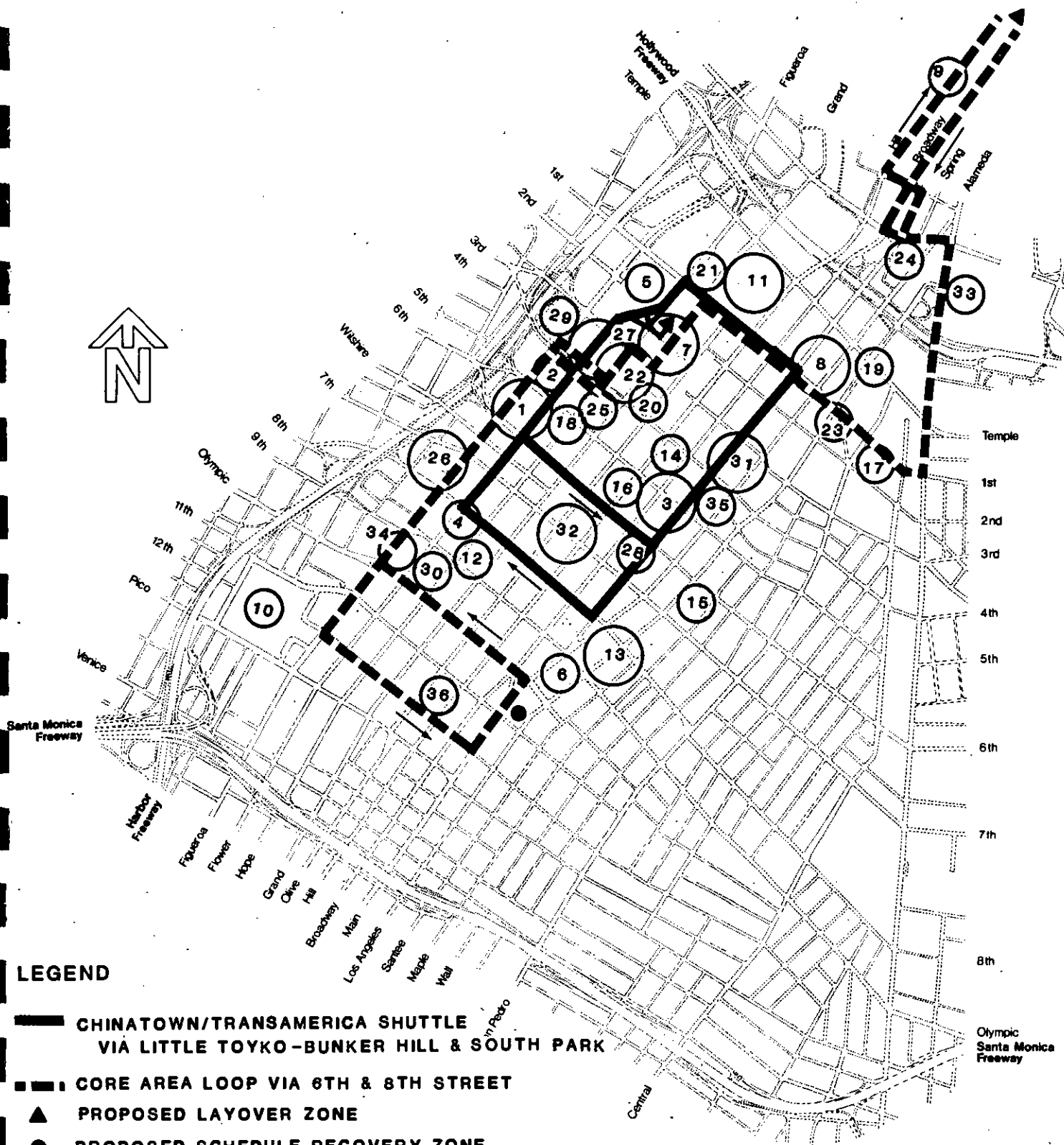
Trip Characteristics

Primary individual trip purpose is tourist related during off peak hours; noontime patronage incorporates business lunch trips to Chinatown from the Core Area or to the Core Area from South Park.

User Groups & Activity Centers Served (predominantly tourist oriented)

- Employees: Chinatown; Little Tokyo; Civic Center; Bunker Hill; West Side Financial District; Olympic Boulevard; California Mart; Transamerica Center
- Shoppers: Chinatown; Olvera Street; Little Tokyo, West Side and 7th Street Retail District; Los Angeles Street/Apparel District
(Local & visitors)
- Tourists: Chinatown; Olvera Street; Museum of Neon Art and Traction Street Galleries; Little Tokyo; New Otani Hotel and Temporary Contemporary (MOCA); Childrens' Museum; Music Center; Crocker Center; Bonaventure, Sheraton Grande; Hilton and Hyatt Regency Hotels and Hotel Figueroa and Olympic Boulevard motels; Convention Center.
- Residents: Chinatown; Little Tokyo; Traction Street Artists Lofts; Angelus Plaza (Elderly Housing) South Park Skyline Condominiums and Diverse apartment structures.

PROPOSED DOWNTOWN CRA SHUTTLE BUS ALTERNATIVE



LEGEND






-  CHINATOWN/TRANSAMERICA SHUTTLE VIA LITTLE TOYKO - BUNKER HILL & SOUTH PARK
-  CORE AREA LOOP VIA 6TH & 8TH STREET
-  PROPOSED LAYOVER ZONE
-  PROPOSED SCHEDULE RECOVERY ZONE
-  SELECTED ACTIVITY CENTERS

Exhibit S

STUDIED DOWNTOWN CRA SHUTTLE BUS ALTERNATIVES

Assume 25¢ Fare

Scheduled Headway (Time Intervals Between Buses)

P e r i o d	1. Chinatown/Trans- America		2. Core Area Loop via 6th & 8th Street	
	<u>Weekday</u>	<u>Saturday</u>	<u>Weekday</u>	<u>Saturday</u>
7:00am - 9:00am	10"	-	10"	-
9:00am - 10:00am	10"	8"	10"	8"
10:00am - 11:00am	8"	8"	8"	8"
11:00am - 2:00pm	6"	8"	6"	8"
2:00pm - 4:00pm	8"	8"	8"	8"
4:00pm - 5:00pm	8"	-	8"	-
5:00pm - 6:00pm	<u>10"</u>	<u>-</u>	<u>10"</u>	<u>-</u>
Trips Operated (Daily)	87	53	87	53

Estimated Cost*

Route Length	8.88	5.20
Required Buses (at noon peak period)	13	9
One Day Hours	116	82
One Day Miles	823	511
Annual Total Miles	212,401	131,812
Annual Cost	\$1,207,800	\$ 820,100

Estimated Annual Results of Operation and Subsidy Requirements

			<u>Combined Total</u>
Total Cost	\$ 1,207,800	\$ 820,100	\$ 2,027,100
Revenue	\$ 273,100	\$ 169,600	\$ 442,700
Net Cost	\$ 934,700	\$ 650,500	\$ 1,585,200
Passengers	1,092,400	678,400	1,770,800

* Costs based on FY1982-83 projected cost levels.
 Planning Dept.
 I.2.10:MJB:ea

EXHIBIT S

SELECTED ACTIVITY CENTERS
WITHIN THE LOS ANGELES CENTRAL
BUSINESS DISTRICT

	<u>KEY AREAS OF THE CBD</u>	<u>CRA ROUTE</u>
1.	* ARCO Towers	3
2.	Bonaventure Hotel	1
3.	* Broadway Retail Area	3
4.	Bullock's Headquarters	1
5.	Bunker Hill Towers	1
6.	California Mart	1
7.	* California Plaza	3
8.	* City Hall	3
9.	Chinatown	1
10.	Convention Center	1
11.	* County Administrative Offices & Courthouse	1
12.	Embassy Auditorium	0
13.	* Garment District	0
14.	Grand Central Market	0
15.	Greyhound Terminal	0
16.	Jewelry Mart	1
17.	Little Tokyo	1
18.	Los Angeles City Library	0
19.	Los Angeles City Mall	0
20.	Museum of Contemporary Art	0
21.	Music Center	1
22.	* New Crocker Center	3
23.	New Otani Hotel	1
24.	Olvera Street	1
25.	O'Melveny & Meyers Building	1
26.	Pacific Plaza	1
27.	* Security Bank Plaza	3
28.	Senior Citizen Housing	1
29.	Sheraton Grande Hotel	1
30.	South Park Residential Development	1
31.	* State Building	3
32.	* Seventh Street Shopping Area	0
33.	Union Station	1
34.	Variety Arts Theater	1
35.	SCRTD Headquarters	0
36.	Transamerica Center	1

TOTAL POINTS 41

* Indicates a major traffic generator - three points were given for major generators - all others received a one point rating.

APPENDICES

APPENDIX A

LOS ANGELES CENTRAL BUSINESS DISTRICT (CBD) GROWTH

With respect to present travel volumes into the Central Business District (CBD), there are 1,370,000 total person trips (transit and auto) entering and leaving the CBD each weekday. On an all-day basis, approximately 27% of these trips are on RTD buses. The transit market share is higher when through trips (transit and auto) are omitted. The transit market share is also higher when only peak period travel is considered. For example, including through transit and auto trips during the peak hours, one-third or 33% of all trips entering and leaving the CBD are currently made by public transportation.

The growth of trips made into the CBD is closely tied to the projected increase in CBD employment. The rate of growth for the Los Angeles CBD has increased notably during the last four years. For the CBD as a whole, between 1980 and the year 2000 employment has been projected to increase between 15% and 55% depending on the particular agency making the forecast. Given the strong surge in construction in the downtown area, the earlier 15% growth projection is now considered too low.

Using the high range growth projections, by 1990 employment is projected to increase 31% from approximately 192,000 in 1980 to 251,000 in 1990. The most recent amended projection based on latest growth trends shows a total of 263,000 employees in 1990. This equates to a 29 percent increase in CBD employment between 1980 and 1990. The accompanying map shows the boundaries used in these statistics.

CBD BOUNDARIES FOR EMPLOYMENT PROJECTIONS

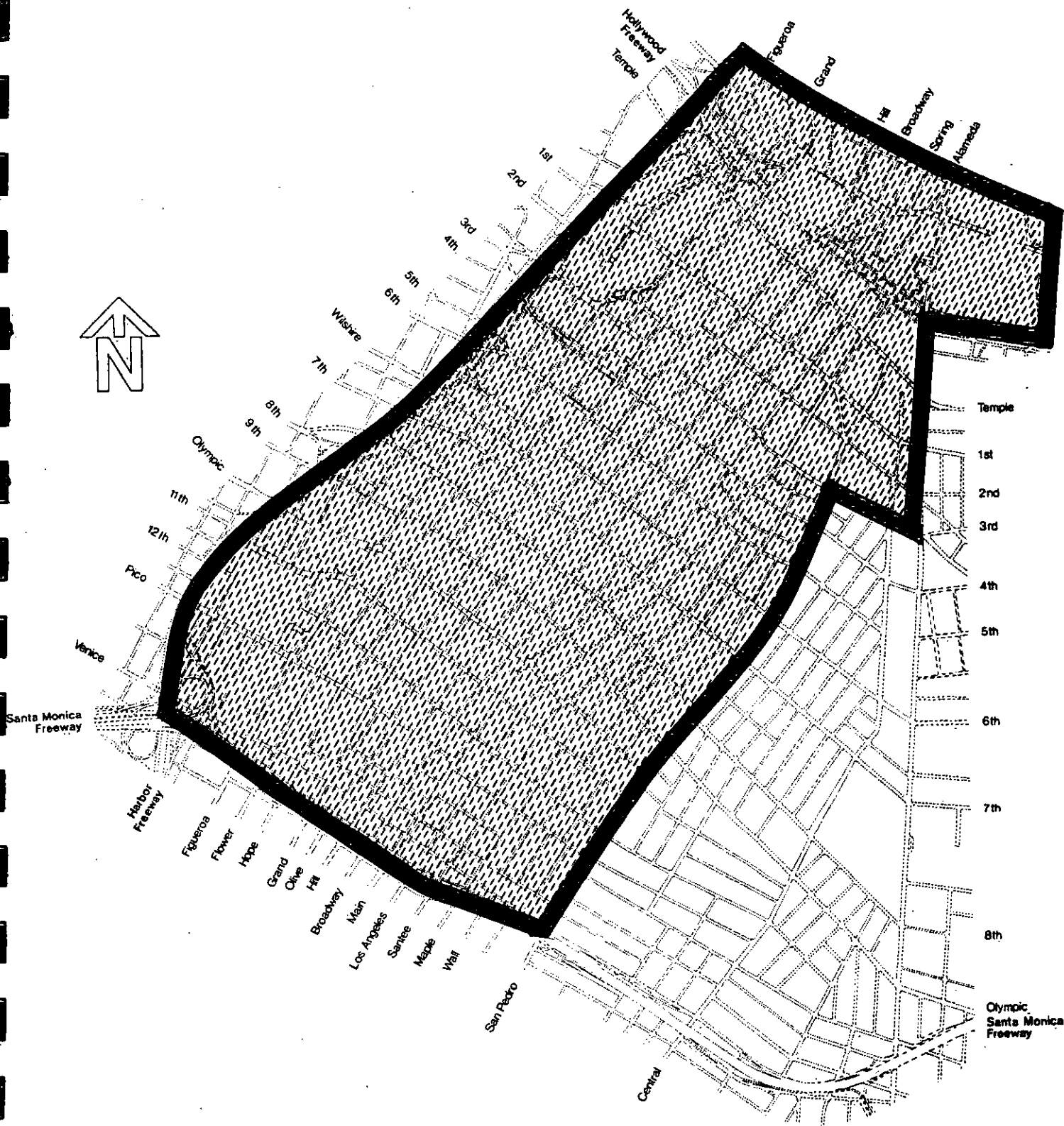


Exhibit 2a

CBD EMPLOYEES SERVED BY STUDIED ALTERNATIVES

	<u>Number of Employees Served</u>		<u>% of Total CBD Employees</u>	
	<u>1980</u>	<u>1990</u>	<u>1980</u>	<u>1990</u>
<u>PLAN A</u>				
<u>Routes</u>				
1	104,950	110,929	51%	42%
	Additional Employees not served by Route 1.			
2	<u>29,600</u>	<u>91,252</u>	<u>15%</u>	<u>35%</u>
TOTAL:	134,500	202,181	66%	77%
<u>PLAN B</u>				
<u>Routes</u>				
1	105,873	109,427	52%	42%
	Additional employees not served by Route 1.			
2	27,021	33,411	13%	13%
	Additional employees not served by Routes 1 & 2.			
3	<u>25,565</u>	<u>85,180</u>	<u>13%</u>	<u>32%</u>
TOTAL:	158,459	228,180	78%	87%

Exhibit 2b

	<u>Number of Employees Served</u>		<u>% of Total CBD Employees</u>	
	<u>1980</u>	<u>1990</u>	<u>1980</u>	<u>1990</u>
<u>PLAN B1</u>				
<u>Routes</u>				
1	105,873	109,427	52%	42%
	Additional employees not served by Route 1			
2	33,456	40,517	16%	15%
	Additional Employees not served by Routes 1 & 2			
3	<u>24,430</u>	<u>84,045</u>	<u>12%</u>	<u>32%</u>
TOTAL:	163,759	233,629	80%	89%
 <u>PLAN C</u>				
<u>Routes</u>				
1	61,865	80,038	30%	30%
	Additional employees not served by Route 1			
2	58,439	63,584	29%	24%
	Additional employees not served by Routes 1 & 2			
3	<u>34,223</u>	<u>51,491</u>	<u>17%</u>	<u>20%</u>
TOTAL:	154,527	195,113	76%	74%







Exhibit 2c

	<u>Number of Employees Served</u>		<u>% of Total CBD Employees</u>	
	<u>1980</u>	<u>1990</u>	<u>1980</u>	<u>1990</u>
<u>PLAN D</u>				
<u>Route</u>				
1	93,835	110,700	46%	42%
	Additional employees not served by Route 1			
2	24,682	46,519	12%	18%
	Additional employees not served by Routes 1 & 2			
3	<u>23,616</u>	<u>27,656</u>	<u>12%</u>	<u>10%</u>
TOTAL:	142,133	184,875	70%	70%
 <u>PLAN D1</u>				
<u>Routes</u>				
1	93,835	110,700	46%	42%
	Additional employees not served by Route 1			
2	29,737	52,144	15%	20%
	Additional employees not served by Routes 1 & 2			
3	<u>20,036</u>	<u>24,076</u>	<u>10%</u>	<u>9%</u>
TOTAL:	143,608	186,920	71%	71%

1980 EMPLOYMENT DENSITIES



EMPLOYEES/ACRE

-  0-99
-  100-499
-  500-999
-  1000-1499
-  1500 & Above
-  Zone #

1990 EMPLOYMENT DENSITIES

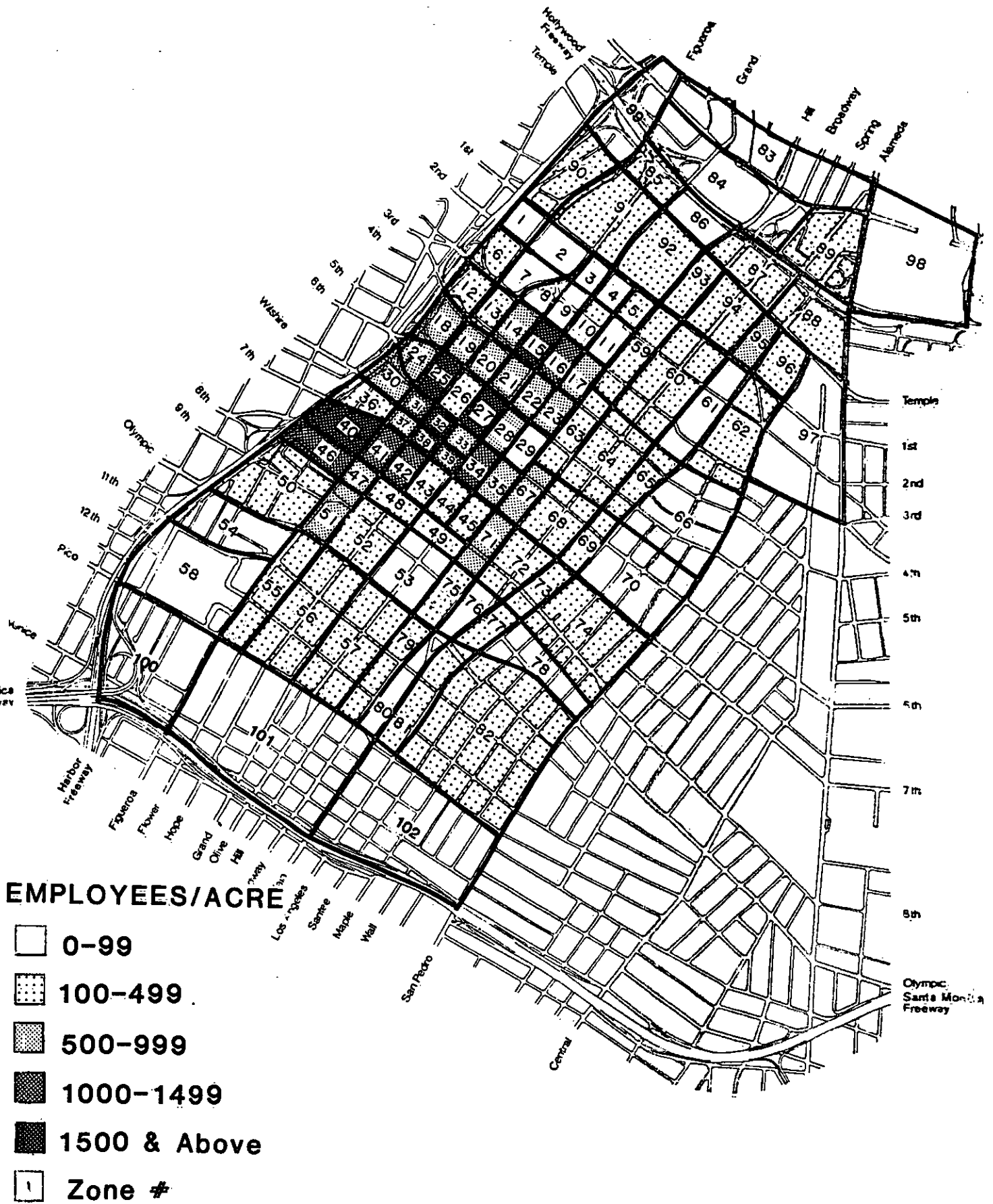


Exhibit 3c

(1980/1990)

EMPLOYMENT PROJECTION TABLE
FOR LOS ANGELES CBD*

<u>ZONE NUMBER</u>	<u>ACRES</u>	<u>EMPLOYEES</u>	<u>EMPLOYEES/ACRE</u> <u>DENSITY</u>
1	4.0	0/0	0/0
2	8.0	0/0	0/0
3	3.33	0/0	0/0
4	3.33	0/0	0/0
5	6.0	0/1,685	0/280.83
6	4.4	840/840	190.9/190.9
7	5.55	0/0	0/0
8	2.5	60/60	24/24
9	4.07	0/0	0/0
10	5.40	0/735	0/136.1
11	2.86	0/15	0/5.24
12	3.42	0/755	0/220.76
13	3.6	1,190/1,190	330.5/330.5
14	4.1	4,050/4,050	987.8/987.8
15	4.3	0/6,780	0/1,576.7
16	5.6	0/7,320	0/1,307.14
17	3.48	0/3,130	0/899.43
18	4.4	2,270/2,270	515.9/515.9
19	3.4	2,060/2,060	605.88/605.88
20	3.4	0/3,250	0/955.88
21	4.17	1,030/3,280	247/786.57
22	4.09	1,170/2,285	286.06/558.68
23	4.10	2,270/2,270	553.65/553.65
24	2.5	580/2,035	232/814
25	3.4	10,600/10,600	3,117.64/3,117.64
26	4.8	830/830	172.91/172.91
27	4.8	3,780/11,615	787.5/2,419.79
28	3.9	2,930/2,930	751.28/751.28
29	3.85	0/0	0/0

Exhibit 3d

<u>ZONE NUMBER</u>	<u>ACRES</u>	<u>EMPLOYEES</u>	<u>EMPLOYEES/ACRE</u> <u>DENSITY</u>
30	3.12	1,280/3,095	410.26/991.9
31	2	2,390/2,390	1,195/1,195
32	1.9	5,910/5,910	3,110.5/3,110.5
33	1.9	1,360/1,360	715.8/715.8
34	4.5	5,000/5,000	1,111.1/1,111.1
35	4.1	2,630/2,715	641.5/662.2
36	4.6	2,180/2,180	473.9/473.9
37	1.5	1,200/1,200	800/800
38	1.6	1,720/1,720	1,075/1,075
39	1.6	1,350/2,330	843.8/1,456.3
40	2.27	0/16,075	0/7,081.5
41	3.9	1,070/4,180	274.4/1,071.8
42	3.9	3,990/3,990	1,023/1,023
43	3.9	690/895	176.9/229.5
44	3.9	590/590	151.3/151.3
45	3.9	1,370/1,370	351.3/351.3
46	5	470/7,595	95/1,519
47	1.9	620/955	326.3/502.6
48	3.68	960/1,675	260.9/455.1
49	3.8	740/740	194.7/194.7
50	2.27	1,020/1,020	449.3/499.3
51	5.92	170/3,165	28.72/534.6
52	11.73	1,310/1,235	111.7/105.3
53	11.71	1,140/1,140	97.4/97.4*
54	18.18	390/390	21.5/21.5
55	12.81	1,600/1,600	125/125
56	25	2,950/2,950	118/118
57	23.8	4,760/4,760	200/200
58	36.6	580/940	15.9/25.68
59	10.3	3,580/3,580	347.6/347.6
60	21.5	4,350/4,350	202.3/202.3

Exhibit 3e

<u>ZONE NUMBER</u>	<u>ACRES</u>	<u>EMPLOYEES</u>	<u>EMPLOYEES/ACRE DENSITY</u>
61	12.9	750/750	58.14/58.14
62	18.9	2,800/3,090	148.2/163.4
63	9.12	3,650/4,220	400.2/462.7
64	18.3	5,590/8,845	305.6/486.3
65	7.9	1,220/1,220	154.4/154.4
66	31.94	2,300/2,300	72.01/72.01
67	6.5	6,790/6,430	1,044.6/989.2
68	13.1	5,680/5,680	433.6/433.6
69	6.0	1,450/1,515	241.7/252.5
70	30.0	1,990/1,990	66.3/66.3
71	6.4	5,150/3,820	804.7/596.9
72	11.7	3,550/3,550	303.4/303.4
73	8.82	3,990/3,990	452.4/452.4
74	35.34	3,720/3,720	105.3/105.3
75	6.5	990/960	152.3/147.69
76	8.15	800/800	98.2/98.2
77	27	6,050/6,050	224.07/224.07
78	24.23	1,680/1,680	69.3/69.3
79	9.8	2,440/2,440	248.9/248.9
80	9.5	850/850	89.5/89.5
81	11.68	1,530/1,530	131.00/131
82	78.08	8,240/8,240	105.5/105.5
83	25	920/920	36.8/36.8
84	39.7	1,550/1,550	39.04/39.04
85	1.19	170/170	142.9/142.9
86	5	0/0	0/0
87	10.2	4,540/4,540	445.1/445.1
88	13.5	4,535/4,535	335.93/335.93
89	21.25	120/120	5.65/5.65
90	9.46	520/1,495	54.97/158.03

Exhibit 3f

<u>Zone Number</u>	<u>Acres</u>	<u>Employees</u>	<u>Employees/Acre Density</u>
91	22.13	3,460/3,460	156.35/156.35
92	18.4	1,940/1,940	105.43/105.43
93	7.10	1,130/1,130	159.15/159.15
94	14.08	3,090/3,090	219.46/219.46
95	4.5	2,720/2,720	604.44/604.44
96	8.28	960/960	115.94/115.94
97	39.3	2,095/2,615	53.3/66.54
98	35.3	2,220/2,235	62.89/63.31
99	21.2	90/90	4.25/4.25
100	45.1	1,270/1,270	28.15/28.15
101	81.0	6,340/6,640	78.27/81.98
102	67.3	4,160/4,160	61.81/61.81
TOTALS	1,256.6	204,070/263,440	162.4/209.65

* These projections include office, government retail, hotel/
service/institutions, Average Number of Employee/Acre, manufacture
and wholesale areas of employment within the CBD. Based on Peat,
Marwick, Mitchell & Co., Inventory and Projections of land use and
employment in the Los Angeles Central Business District, Task #2
Final Report, Downtown People Mover Evaluation Program, January
1981.

Planning Dept.
TA:ea: CBD.11

Exhibit 4

COMPARISON
OF
EMPLOYMENT PROJECTIONS

<u>Source</u>	<u>Employee Projections</u>		<u>Remarks</u>
	<u>1980</u>	<u>1990</u>	
Task II - Final DPM Report Peat, Marwick, & Co., January 1981	204,070	263,440	1990 estimates were adjusted to include additional develop- ments 25 of March 1981.
Central City Parking Study, Wilbur Smith & Associates, October 1981	185,020	233,225	These estimates do not include any recent developments within the CBD area.

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TA:ea: CBD.12

CBD EMPLOYMENT GROWTH PROJECTIONS

BY TYPE OF EMPLOYMENT

<u>Types of Employment</u>	<u>1980</u>		<u>1990</u>		<u>Percentage Change</u> <u>1980-1990</u>	
	<u>Wilbur Smith & Assoc. (1)</u>	<u>Peat, Marwick, Mitchell & Co(2)</u>	<u>Wilbur Smith & Assoc.</u>	<u>Peat, Marwick, Mitchell & Co.</u>	<u>Wilbur Smith & Assoc.</u>	<u>Peat, Marwick, Mitchell & Co.</u>
Private Office	83,640	98,590	120,735	155,075	+44%	+57%
Government	43,330	33,640	47,660	34,420	+10%	+ 2%
Retail	10,920	17,205	12,570	17,055	+15%	-.8%
Hotel Service	12,410	19,155	14,370	21,340	+16%	+11%
Manufacture-Wholesale	<u>34,720</u>	<u>35,480</u>	<u>37,890</u>	<u>35,550</u>	<u>+9%</u>	<u>+.2%</u>
TOTAL	185,020	204,070	233,225	263,440	+26%	+29%

1) Figures based on Wilbur Smith & Associates, Central City Parking Study, October 1981.

2) Figures based on Peat, Marwick, Mitchell & Co. - Task II Final DPM Report, January 1981.

Exhibit 6

CBD FLOOR AREA GROWTH PROJECTIONS
(Square Footage in 000's)

<u>Type of Floor Area</u>	<u>1980</u>		<u>1990</u>		<u>Percentage Change</u>	
	<u>Wilbur Smith & Assoc.</u>	<u>Peat, Marwick, Mitchell & Co.</u>	<u>Wilbur Smith & Assoc.</u>	<u>Peat, Marwick Mitchell & Co.</u>	<u>1980-1990</u>	<u>1980-1990</u>
					<u>Wilbur Smith & Asso.</u>	<u>Peat, Marwick, Mitchell & Co.</u>
Private Office	27,145	33,550	36,190	51,526	+33%	+54%
Government	10,540	9,000	10,650	9,210	+ 1%	+2%
Retail	5,605	9,805	6,730	10,980	+20%	+12%
Hotel Service	8,165	12,905	9,850	14,390	+20%	+12%
Manufacture-Wholesale	<u>17,615</u>	<u>16,065</u>	<u>18,590</u>	<u>16,100</u>	<u>+6%</u>	<u>+2%</u>
TOTAL	69,070	81,325	82,010	102,305	+19%	+25%

1) Figures based on Wilbur Smith & Associates, Central City Parking Study, October 1981.

2) Figures based on Peat, Marwick, Mitchell & Co. - Task II Final DPM Report, January 1981.

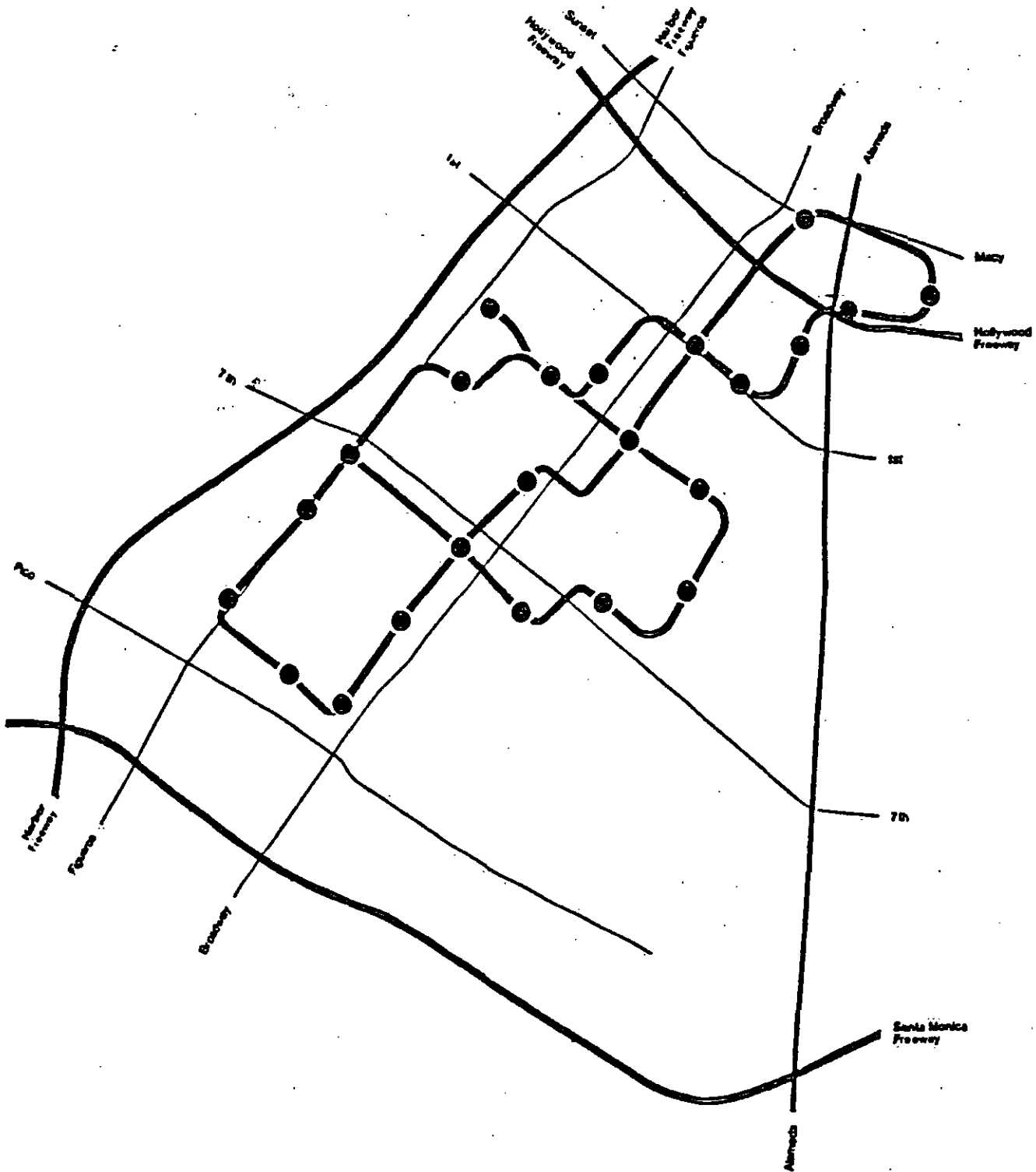
APPENDIX C

PREVIOUS DOWNTOWN PEOPLE MOVER (DPM) ANALYSIS AND PROPOSED ROUTES

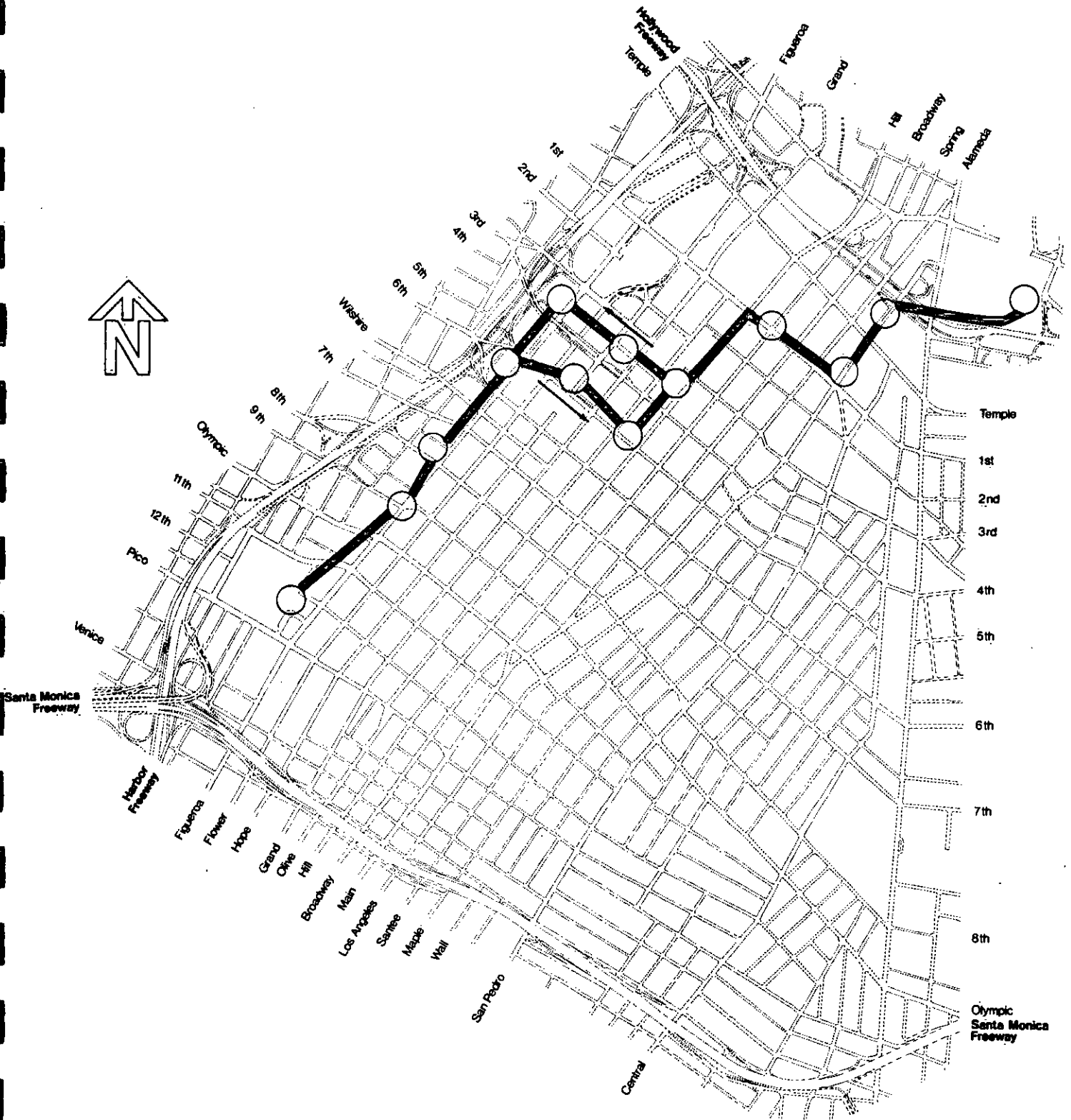
The transportation concept of the Los Angeles Downtown People Mover (DPM) involves a small to medium car aerial guideway system serving internal circulation trips and regional auto and transit trips transferring (intercepted by) to the DPM.

This concept was first proposed by the Los Angeles Community Redevelopment Agency (CRA) in 1970 primarily as a means of alleviating projected traffic congestion in the rapidly developing CRA Bunker Hill Redevelopment Project located on the west side of the Los Angeles CBD. Restudy of the entire concept started in 1975. All corridors or portions of the CBD were reviewed with respect to the suitability of DPM technology to meet transportation needs in these areas of the CBD. Alternatives analysis resulted in narrowing route alternatives to three routes considered viable: 1) a horseshoe shaped route serving the mid-CBD area, with the two route terminals on the west side; 2) Union Station to Convention Center via the east side; 3) Union Station to Convention Center via the west side. This third alternative route configuration became the final recommended DPM alignment, with the exception that a one-way configuration modification was made in order to obtain additional route coverage in the heart of the Bunker Hill Project. Exhibit 7 shows the proposed three route DPM master plan for the L.A. CBD. Exhibit 8 shows the final DPM route at the time the system was undergoing final design in the fall of 1980. (The system was indefinitely deferred in the Spring of 1981 due to the withdrawal of the Federal funding commitment to fund the construction of the 2.9 mile system.)

Exhibit 7
STUDIED DPM COMPLETE NETWORK



FINAL PEOPLE-MOVER ROUTE



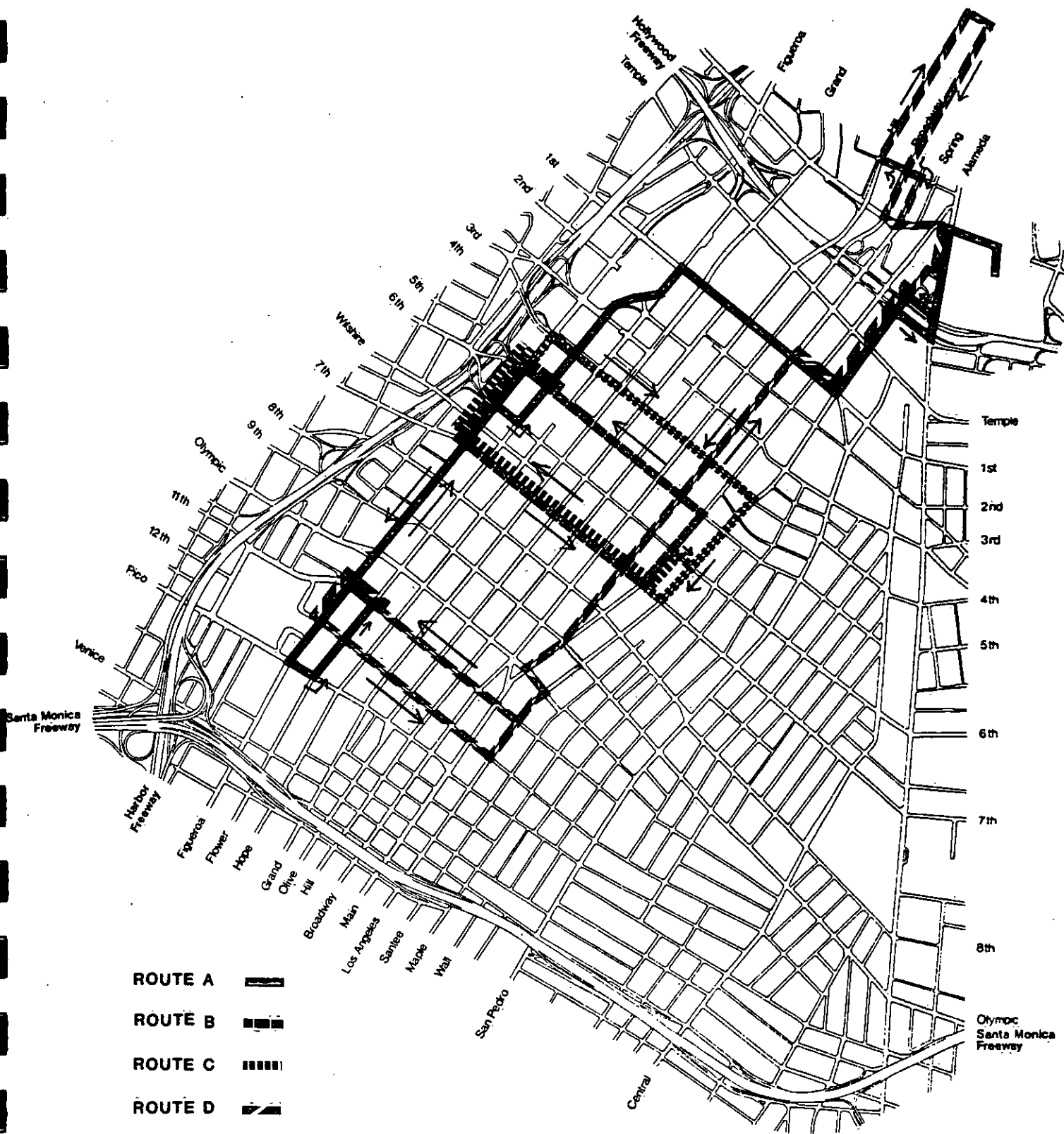
APPENDIX D

STUDIED BUS CIRCULATION ROUTES AS A SUBSTITUTE FOR THE DPM

In development of the plan alternatives included in this report the staff has benefited from a previous review of studied expanded circulation/distribution bus system alternatives completed in June 1981. That report reviewed the proposed Downtown People Mover (DPM) alignments as a basis for considering an expanded bus circulation system which would provide a route configuration similar to the DPM master plan consisting of three DPM routes within the CBD. Exhibit 9 shows the studied bus route system which emulates the configuration of the proposed three route DPM system.

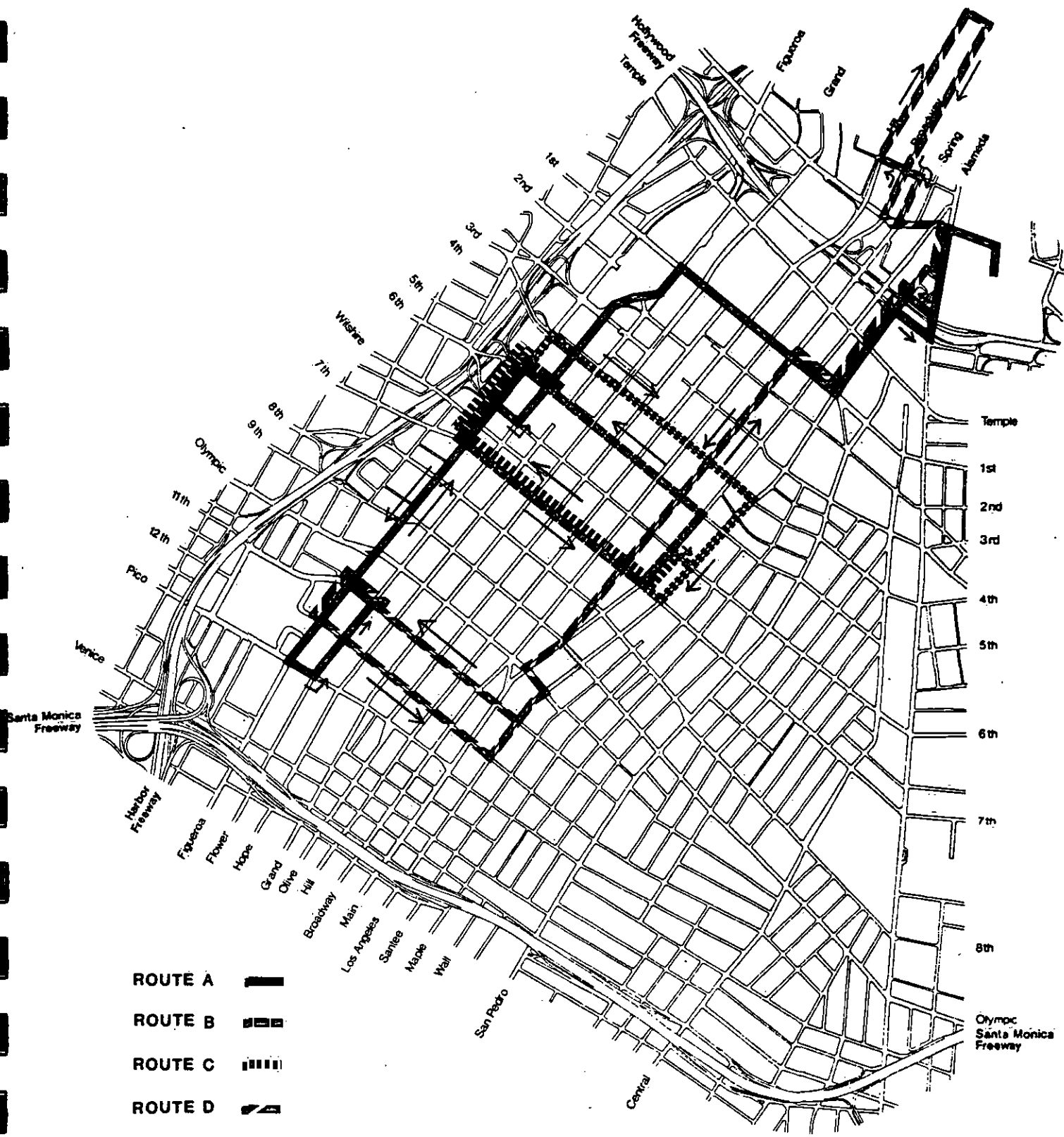
The estimated annual results of operation and subsidy requirements for this plan are shown in Exhibit 10 based on FY 81-82 instead of FY 82-83 cost levels.

STUDIED EXPANDED CIRCULATION/DISTRIBUTION BUS SYSTEM



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STUDIED EXPANDED CIRCULATION/DISTRIBUTION BUS SYSTEM



PLANNING DEPT.
M.J.B. 6/81

STUDIED EXPANDED CIRCULATION/DISTRIBUTION - BUS SYSTEM FOR DOWNTOWN LOS ANGELES

PERIOD	SCHEDULE FREQUENCY				SATURDAY & SUNDAY
	Route A West Side	Route B 7th/5th	Route C 7th/4th	Route D East Side	Route D
7:00 a.m.- 9:00 a.m.	10	10	10	10	-
9:00 a.m.-10:00 a.m.	10	10	10	10	6
10:00 a.m.-11:00 a.m.	8	8	8	8	6
11:00 a.m.- 2:00 p.m.	6	6	6	6	6
2:00 p.m.- 4:00 p.m.	8	8	8	8	6
4:00 p.m.- 5:00 p.m.	8	8	8	8	-
5:00 p.m.- 6:00 p.m.	10	10	10	10	-
Trips Operated (Daily)	87	87	87	87	70

	ESTIMATED COST *				Combined Total	EXHIBIT 10
	Route A	Route B	Route C	Route D		
<u>ROUTE MILES</u>	7.5 Miles	1.75 Miles	2.25 Miles	7.12 Miles	18.6 Miles	
<u>REQUIRED EQUIPMENT</u>	12 Buses	4 Buses	4 Buses	11 Buses	31 Buses	
<u>ONE DAY HOURS</u>	124 Hours	45 Hours	45 Hours	124 Hours 80 Hours (Sat. & Sun.)	498 Hours	
<u>ONE DAY MILES</u>	849 Miles	203 Miles	258 Miles	839 Miles 541 " (Sat. & Sun.)	2,149 Miles (1,032) " Sat. & Sun.	
<u>ANNUAL TOTAL MILES</u>	216,495 Miles	51,638 Miles	65,663	213,996 Miles (56,285)(Sat. & Sun.)	547,792 Miles	
<u>ANNUAL COST</u>	\$1,119,248	\$361,208	\$383,240	\$1,400,637	\$3,264,333	

<u>ESTIMATED ANNUAL RESULTS OF OPERATION AND SUBSIDY REQUIREMENTS</u>					
	Route A	Route B	Route C	Route D	Combined Total
<u>TOTAL COST</u>	\$1,119,248	\$361,208	\$383,240	\$1,400,637	\$3,264,333
<u>REVENUE</u>	\$ 241,000	\$ 80,000	\$ 80,000	\$ 277,000	\$ 678,000
<u>NET COST</u>	\$ 878,248	\$281,208	\$303,240	\$1,123,637	\$2,586,333
<u>PASSENGERS</u>	963,000	319,000	319,000	1,101,000	2,702,000

* Costs based on FY 1981-82 Projected Cost Levels

APPENDIX E

A. Present Downtown Los Angeles Shuttle Bus Service

Downtown Los Angeles is served by a special separate circulation bus route. The 8.4 mile round trip route links the West Side Financial District with various points of interest throughout the Los Angeles Central Business District (CBD): To the south, the 7th Street commercial area, the Garment District and the Transamerica Center are served; To the north, the Civic Center, Little Tokyo, Olvera Street, Union Station and Chinatown areas are served. The route of the present shuttle bus system is shown in Exhibit 11.

On weekdays the buses operate every 6 minutes with the time interval between buses (headways) extending to 10 minutes during the morning and late afternoon periods. On Saturdays the buses operate every 8 minutes throughout the day. Service operates 7:00 am to 5:30 PM on weekdays and 9AM to 4PM on Saturdays.

The fare is 25¢. Because this is a specially funded supplemental service with a special fare, RTD system passes or regular transfers are not honored.

Ridership on the RTD downtown shuttle bus line averages 5000 passengers (boardings) each weekday and 1200 passengers on Saturdays. Over the last several years this ridership level has been fairly constant. Peak riding on the line occurs during the noon period in contrast to the usual morning and evening peaking found on regular RTD routes.

B. Funding for the Present Shuttle Bus Service

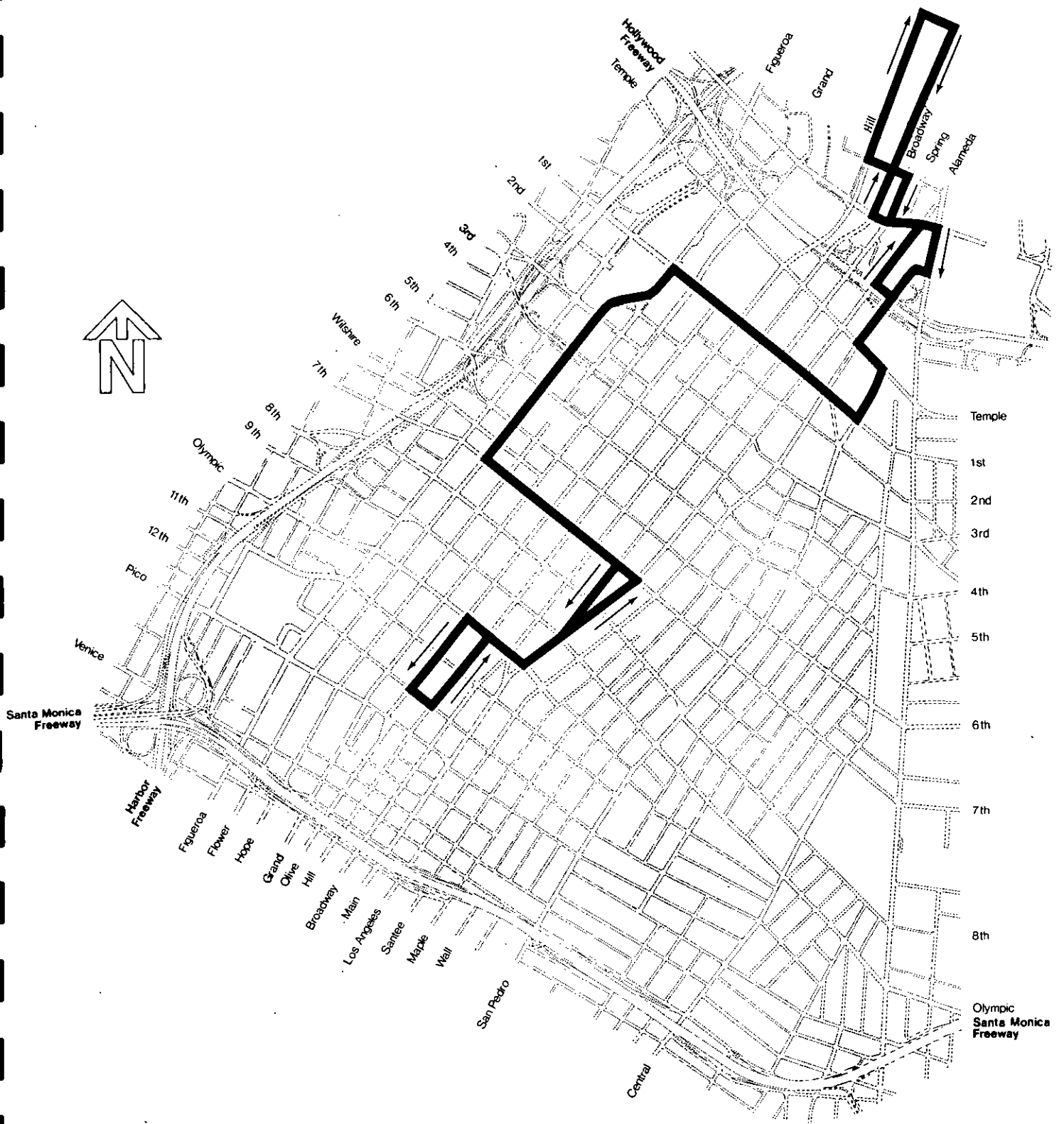
Cost projections to operate the downtown shuttle bus for FY 82-83 are as follows:

<u>Estimated Expense</u>	<u>Estimated Revenue</u>	<u>Estimated Net Cost (Subsidy Required)</u>
\$1,328,000	\$328,000	\$1,000,000

As a special local service which supplements regular RTD service, the downtown shuttle bus service is funded as follows, by special service contract:

City of Los Angeles	60%
Los Angeles Community Redevelopment Agency (CRA)	20%
RTD	20%

PRESENT SHUTTLE BUS ROUTE



C. Background Information on the Shuttle Bus Service

This special circulation service started in October 1971. The route configuration has undergone several changes over the decade. For three years in the mid seventies two separate routes were in service. At five minute headways, (later increased to six minutes) a total of 32 buses were in service during the noon peak period. Currently, the single route in operation requires 12 buses in service at the noon peak period, operating with a 6 minute headway.

The present type of vehicle in service on the Line 202 Shuttle Bus route consists of a 30 foot heavy duty transit bus with diesel engine manufactured by the Flxible Company in 1966. A distinctive paint scheme is used to make the vehicles easy to identify for passengers. This year, the District expects to purchase 30 small buses with an option to purchase 30 more. These buses may be used on the downtown shuttle bus line in addition to other circulation type routes within RTD's service area.

The cost of operating the downtown shuttle bus service is similar to average District operating costs. Driver wages, fuel maintenance, overhead costs are about the same. Exposure to public liability and property damage claims is higher due to the heavy traffic congestion of downtown Los Angeles. Also due to this congestion, this service has a lower average speed of 8 mph compared to the District average of 14 mph. For this reason, the cost per mile of operation is higher compared to the RTD system average.

ACKNOWLEDGEMENTS

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July 1982