TRANSPORTATION SYSTEMS MANAGEMENT

TRANSIT ELEMENT

SECOND ANNUAL STATUS REPORT

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

PLANNING DEPARTMENT

JULY 1979

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Chapter I. Intra-Modal TSM Actions

A. Regular Ongoing Efficiency Measures

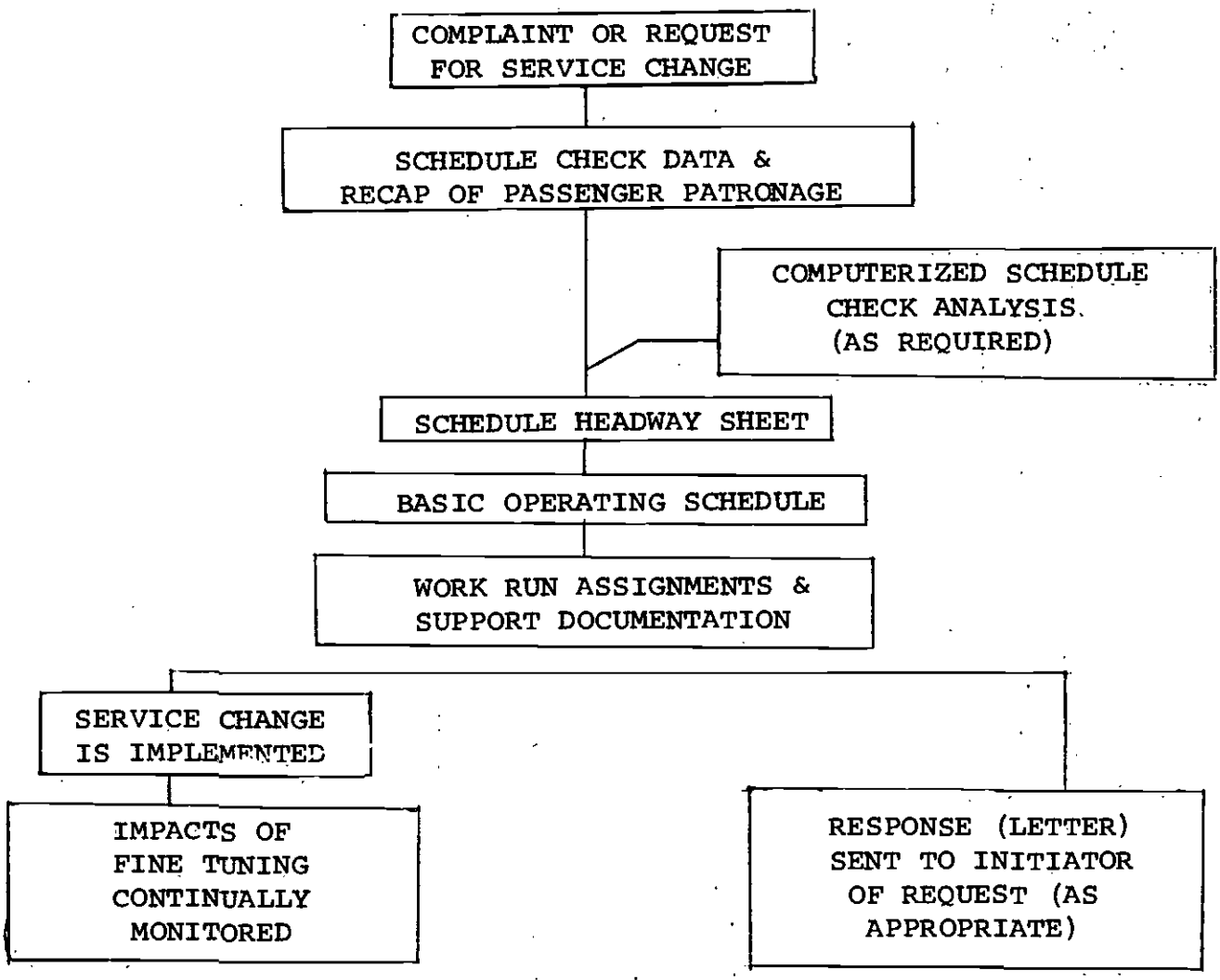
The functions and responsibilities of the District's Planning Department range from planning public transportation facilities for entire sub-regions downward to simple route modifications and/or service changes on a single route of line. Ongoing functions the Department is responsible for are categorized within three broad areas. They are: (a) Service Requests, (b) Service Economies, and (c) Fine Tuning (jointly with the Service Analysis and Schedules Department).

Although responsible for these broadly defined categories, Planning must work closely with all other departments within the District in order to implement new services, make service economies or fine tune the system for added efficiencies or cost savings.

In order to present a clear picture of the Planning Department's role in the overall structure of the District, the three flow charts in Exhibits 1, 2 and 3 indicate the processes involved prior to implementation:

EXHIBIT 1

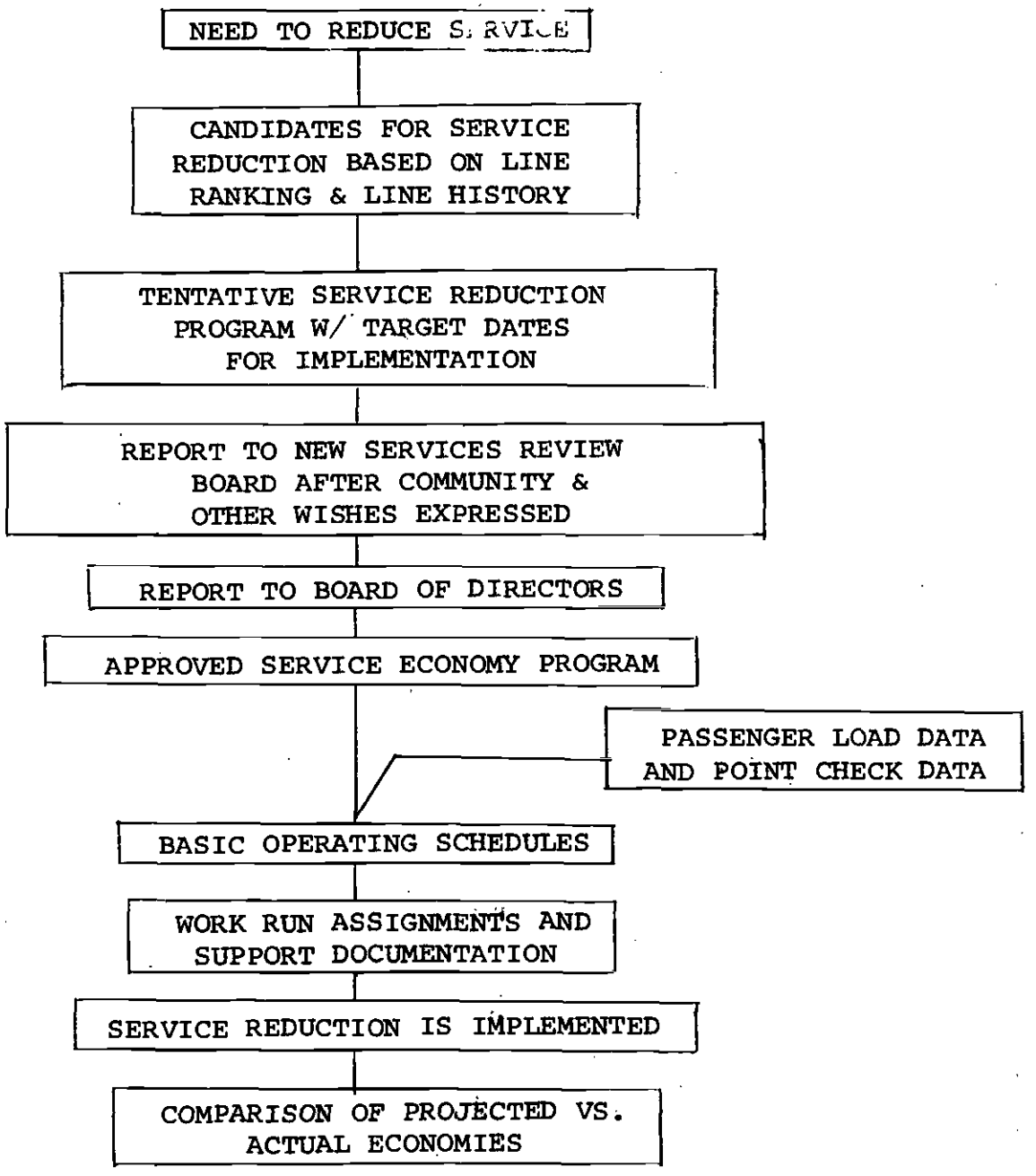
SERVICE FINE TUNING



Planning Department

EXHIBIT 2

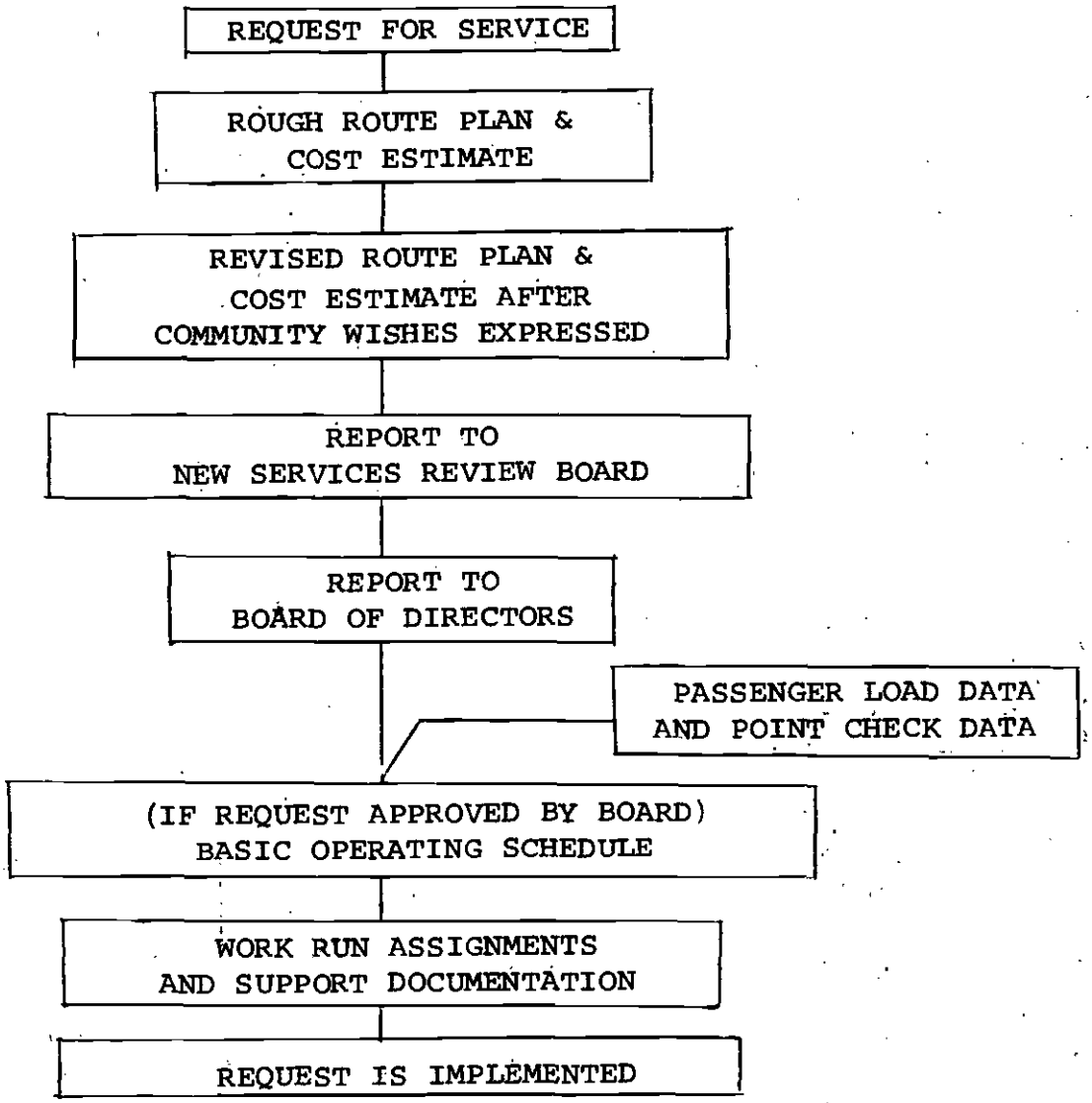
SERVICE REDUCTION (ECONOMY) PROCESSING



Planning Department

EXHIBIT 3

SERVICE REQUEST PROCESSING



Planning Department

A list of some of the ongoing efficiency measures that have occurred within the District this past year are presented in Exhibit 4. It should be noted that the District generally has sole control over these intra-modal actions. However, implementing many of these types of actions involves the interface and cooperation of various local agencies.

EXHIBIT 4

TSM Actions
Presented to the New Services Review Board (NSRB)
from May 1978 to April 1979

NSRB Meeting Date	Line	Item
4/25/79	92	Minor route modification - move from Firestone to 92nd for safety reasons
4/11/79	New	Amtran shuttle
3/14/79	832	- Minor route modification - extension of route into Marymount University
	42	- Extension of route - on Fountain from Edgemont to Western.
2/14/79	17	Extension of route - on Eastern from Telegraph to Firestone
1/31/79	9	- Minor route modification - operations within Rancho Los Amigos Hospital grounds
	36,423 841,860 & 873	- Minor route modifications - alter routes of line to pass new Long Beach Ticket Agency.
1/9/79		Weekday service restoration and improvements analysis
12/13/78	434	- Minor route modification - establishment of short line turnaround loop
	493	- Minor route modification - move line from Myrtle to Primrose.
11/15/78	92	- Minor route modification - move line from 14th to 15th to provide easier turn
	828	- Minor route modification - move line from Marina Fwy. to Allan to expand service area
	83	- Addition of a limited stop at Wilton to provide additional transfer possibilities
	762	- Rerouting of 482X to Puente Hills Mall and redesignation of line to Park-N-Ride.

N.'RB 'eeting Date	Line	Item
10 11/78	451-453	- Minor route modification - extend route to serve El Roble Jr. High School
	Airport Express	- Service improvement analysis
9/27/78		- 25¢ second-stage smog alert fare analysis
		- Sunday pass analysis
		- Deployment analysis of accessible buses
9/13/78		Service Improvement and Restoration analysis
8/9/78		Maple Avenue lot modifications to accommodate articulated buses
7/26/78	452-454	- Minor route modification to serve El Roble Jr. Hi
		- Marketing program proposed for ARCO Plaza commuter bus service
7/12/78		- Labor Day reduced fare project
	157	- Route extension to El Cariso Regional Park
	24	- Route extension to County Juvenile Hall Complex
6/28/78	484	- Extension of in-service route to include pull-in/out on Brea Cyn.
	10	- Minor route modification - reverse turnaround loop
	91S	- Minor route modification - reverse turnaround loop
5/30/78	872	- Minor route modification - reroute to serve O'Farrell Street
	432	- Minor route modification - extend service on Huntington Drive & Second Ave.
	4	- Establishment of an additional limited stop at Arlington Ave.

B. Line-by-Line Operational Review

In addition to regular ongoing efficiency measures that are a normal part of District operations, a Line-by-Line Operational Review process has been initiated. This process includes a total systematic review of an individual bus line's performance and that line's impact on the overall SCRTD system.

The first line tested under this program was Line 25. This line has remained virtually intact for many years serving the Highland Park, Downtown and West Ninth Street areas. Close analysis resulted in recommending of (1) relocation of the L.A. CBD Shortline Terminal; (2) extending the line using existing equipment with no deterioration in service levels to a major shopping center; (3) rerouting the line from a very congested area thereby improving through trip time with very little impact on local patrons; and (4) reducing the level of service on a lightly patronized leg of the line and deploying the equipment to serve the productive trunk portion of the route.

Exhibit 5 is the report presented to the District's Board of Directors regarding Line 25. It indicates the level of effort expended for the Line 25 evaluation. This service was implemented in March 1979, and will result in a $50,000 (1978 dollars) annual savings coupled with an overall improved service.

This evaluation is an ongoing process that will result in other service modification and improvements as staff time permits.

Reports with improvement recommendations are due to be completed early in Fiscal Year 1979 that will result in improved El Monte Busway operation involving several lines and on regional Line 36.

EXHIBIT 5

South California Rapid Transit District • 425 So. Main St. • Los Angeles, Calif. 90013 • Telephone: (213) 972-6000

Jack R. Gilstrap
General Manager

December 13, 1978

To: Board of Directors

From: Jack R. Gilstrap

Subject: Proposed Route Modifications and Service Changes to Line 25 - North Figueroa St. - West Ninth St. in Central and Northeast Los Angeles.

SUMMARY

Planning Department staff is presently working on a Line-by-Line Evaluation Program, which is part of our overall Transportation Systems Management (TSM) effort. The purpose of this program is to review on a systematic basis all aspects of the operation of each line in the system and make recommendations for improvements where justified. The first of these reviews has now been completed for District Line 25 - North Figueroa Street-West Ninth Street. As a result of this evaluation, staff is proposing the implementation of four modifications at this time: (1) relocation of the LA CBD shortline terminal; (2) extension of service to Eagle Rock Plaza; (3) rerouting of Griffin Ave. service; and (4) adjustment of Avenue 66 - Meridian Street branch service. (See Figure 1.)

REASONS FOR CHANGE

The Line 25 Evaluation Report reveals there is a 25% decline in patronage between 1975 and 1978. The proposed changes are designed to provide operational efficiencies and to reverse the present negative trend. Reasons for the individual changes are listed below:

(1) Relocation of the LA CBD Shortline Terminal

Present night and alternate weekday daytime service now terminates at Ninth and Hope Streets in downtown Los Angeles. Buses using this terminal do not serve all of the LA CBD and they do not directly connect with Figueroa Street bus service.

In addition, the Hope Street area is frequently congested, and the layover zone is often occupied by other vehicles. To alleviate these conditions, it is proposed to extend the shortline three blocks further west to Francisco Street, to establish the layover zone southbound on Francisco Street between Eighth and Ninth Streets, and to discontinue use of the Ninth and Hope Streets location. (See Figure 2.)

(2) Eagle Rock Plaza

The present terminal for Eagle Rock service is at Colorado and Eagle Rock Boulevards. Much difficulty has been encountered in obtaining and retaining satisfactory layover facilities on adjacent residential or commercial streets. In addition, the Eagle Rock Plaza Shopping Center is an attraction for many Line 25 riders and is located about one-half mile west of the present Eagle Rock terminal. A review of Line 25 revealed that there is sufficient time within the framework of the existing schedule to extend all Eagle Rock trips to the Eagle Rock Plaza. The proposed route would be from Colorado Boulevard and Caspar Avenue, via Colorado Boulevard, R-Broadway, L-Eagledale Avenue and L-Colorado Boulevard to a proposed layover zone under the Glendale Freeway viaduct; the return route would be via Colorado Boulevard to Eagle Rock Boulevard, where it would join the existing route. (See Figure 3.)

(3) Griffin Avenue Route

In the Lincoln Heights-Montecito Heights area, Line 25 is operated over two alternate routes, (i.e., Pasadena Avenue and Griffin Avenue), which are located from one to four blocks apart over their mile and a half lengths. These routes diverge at Avenue 26-Daly Street-Pasadena Avenue with the Pasadena Avenue route operating along Pasadena Avenue to North Figueroa Street, then regular route of line. Griffin Avenue buses operate along Avenue 26, Griffin Avenue, and Avenue 43 to North Figueroa Street, then regular route. It is proposed to diverge the route at North Broadway and Daly Street instead of Avenue 26-Daly Street-Pasadena Avenue. Griffin Avenue route buses would continue on North Broadway, and turn directly into Griffin Avenue. This change would (1) eliminate two turns in each direction, including an unsafe right turn northbound at Avenue 26 and Daly

Street, (2) eliminate the unprotected left turn northbound at Avenue 26 and Griffin Avenue, (3) discontinue operation on narrowly constructed Avenue 26, where parking is permitted in both directions, (4) reduce travel through the congested five point Avenue 26-Daly Street-Pasadena Avenue intersection with its three phase traffic signal, and (5) save around two minutes per trip, which will probably be perceived to be much greater by existing passengers. The route of Pasadena Avenue buses will be unchanged. (See Figure 4.)

(4) Avenue 66 - Meridian Street Service

The present level of ridership along the Avenue 66-Meridian Street branch is extremely low. Most of the route of this branch is duplicated by Line 425. In fact, there is only one stop that is not also served by that line. Approximately 70 riders board or alight at this one stop on a typical weekday, but because this stop serves an area (San Pascual Avenue) without access to other service, it is not recommended that all service on the Avenue 66-Meridian Street branch be discontinued at this time. It is proposed, however, that weekday peak hour service be modified to base level frequencies (approximately 20 to 30 minutes) with service ceasing at about 6:00 PM. On Saturday, it is proposed that all service on this branch be discontinued and those trips that now operate to Avenue 66-Meridian Street be operated instead to Eagle Rock Plaza. Adoption of this operation will provide a uniform service on Saturday as well as Sunday, with all daytime trips operating between Eighth Street-Vermont Avenue and Eagle Rock Plaza.

IMPACT ON PATRONAGE

The extensions of service to Eagle Rock Plaza and to Francisco Street are expected to have an overall positive impact on ridership because more new service is provided to additional attractions.

Additionally, the rerouting of Griffin Avenue trips via North Broadway and Griffin Avenue is expected to have a positive effect on the more than 14,000 through riders per week, due to the overall faster trip time. Because service will be eliminated at two stops at night and on weekends, approximately 1400 riders per week, including 800 who now board at the Avenue 26-Daly Street-Pasadena Avenue stop, and 600 who now

board at the Avenue 26-Workman Avenue stop will have to walk 1,000 feet or less to other nearby stops. Although 1400 passengers per week is a substantial amount, it is only one-tenth of the number of through passengers that will be benefited. This comparison does not count the people who may find the new stop at North Broadway and Griffin Avenue (where there is a substantial amount of commercial activity) more convenient, nor does it include those people who may be attracted to Line 25 service due to the elimination of delays.

There is expected to be very little effect on patronage on the Avenue 66-Meridian Street branch that will be caused by the reduction of service to that area during peak hours on weekdays, because most riding occurs during midday hours. Elimination of service on the Avenue 66 branch on Saturday is also expected to have very little negative effect because of the substitute service that is available on Line 425. Even the 25 people who now board at the Avenue 66-Meridian Street stop on Saturday need only walk 1,000 feet or less to Line 425. On the other hand, the doubling of service on the better utilized Eagle Rock branch on which there are approximately 700 Saturday riders, and extension of all trips to the Eagle Rock Plaza Shopping Center is expected to have a very positive effect on Saturday patronage, perhaps even doubling the existing number.

IMPACT ON COST

An analysis of current schedules has indicated that the proposed modifications may be made within the present manpower and equipment requirements. This can be accomplished by more efficiently utilizing layover time and making minor adjustments to level of service, which staff estimates will result in an annual savings of approximately $50,000.

This proposal has been discussed with and has the concurrence of the New Services Review Board.

RECOMMENDATION

In order to implement the changes described above, your Board is requested to concur in staff's proposal by approving Third Revised

Page 25 of the Official Route Descriptions, a copy of which has been filed with the Secretary. Upon approval this change will become effective on March 15, 1979.

Respectfully,

Jack R. Gilstrap

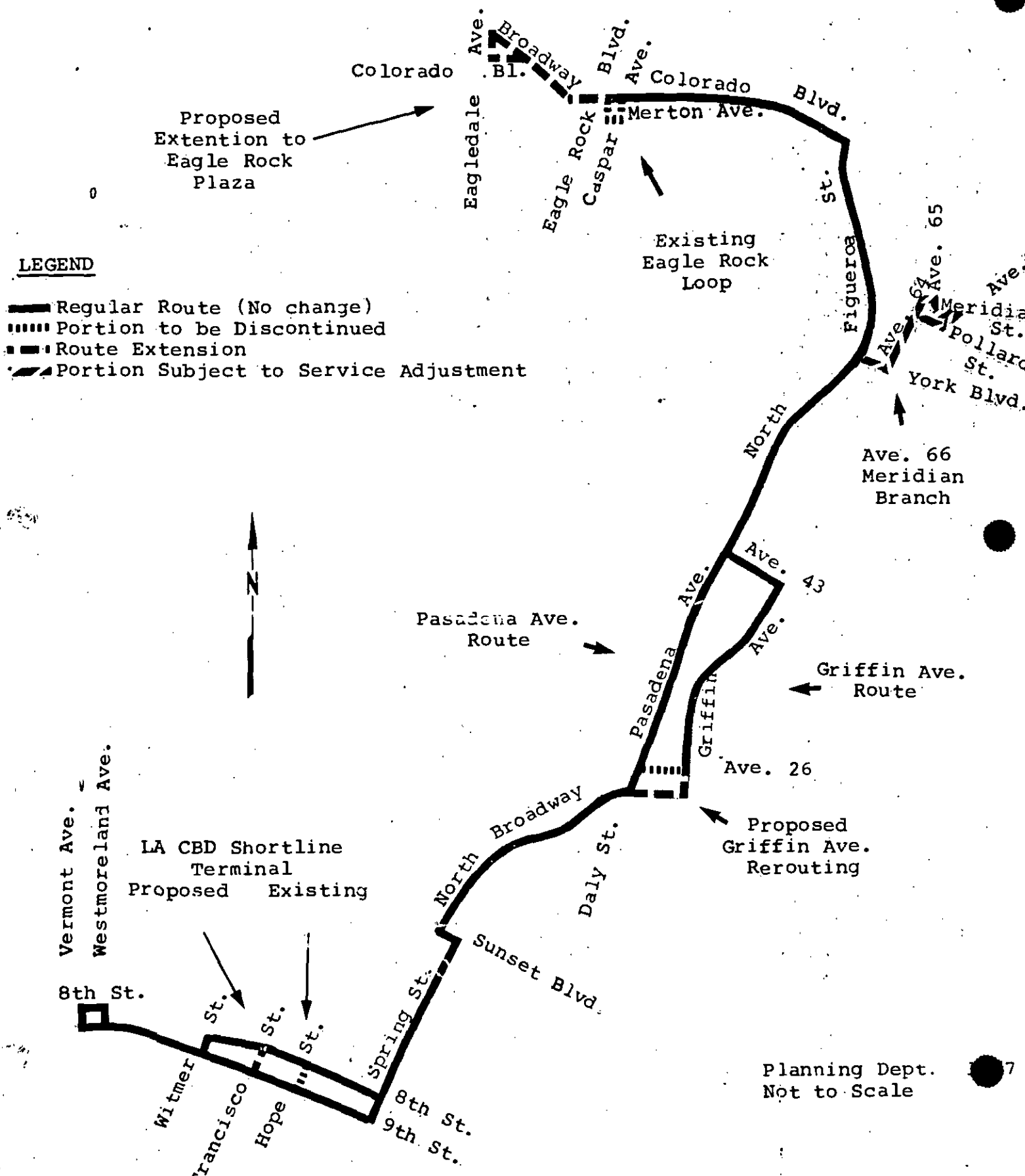
By: George L. McDonald
Manager of Planning & Marketing

By: Paul C. Taylor
Director of Bus Planning

Attachments

Line 25-North Figueroa St.-West Ninth St.
Location of Proposed Route Changes

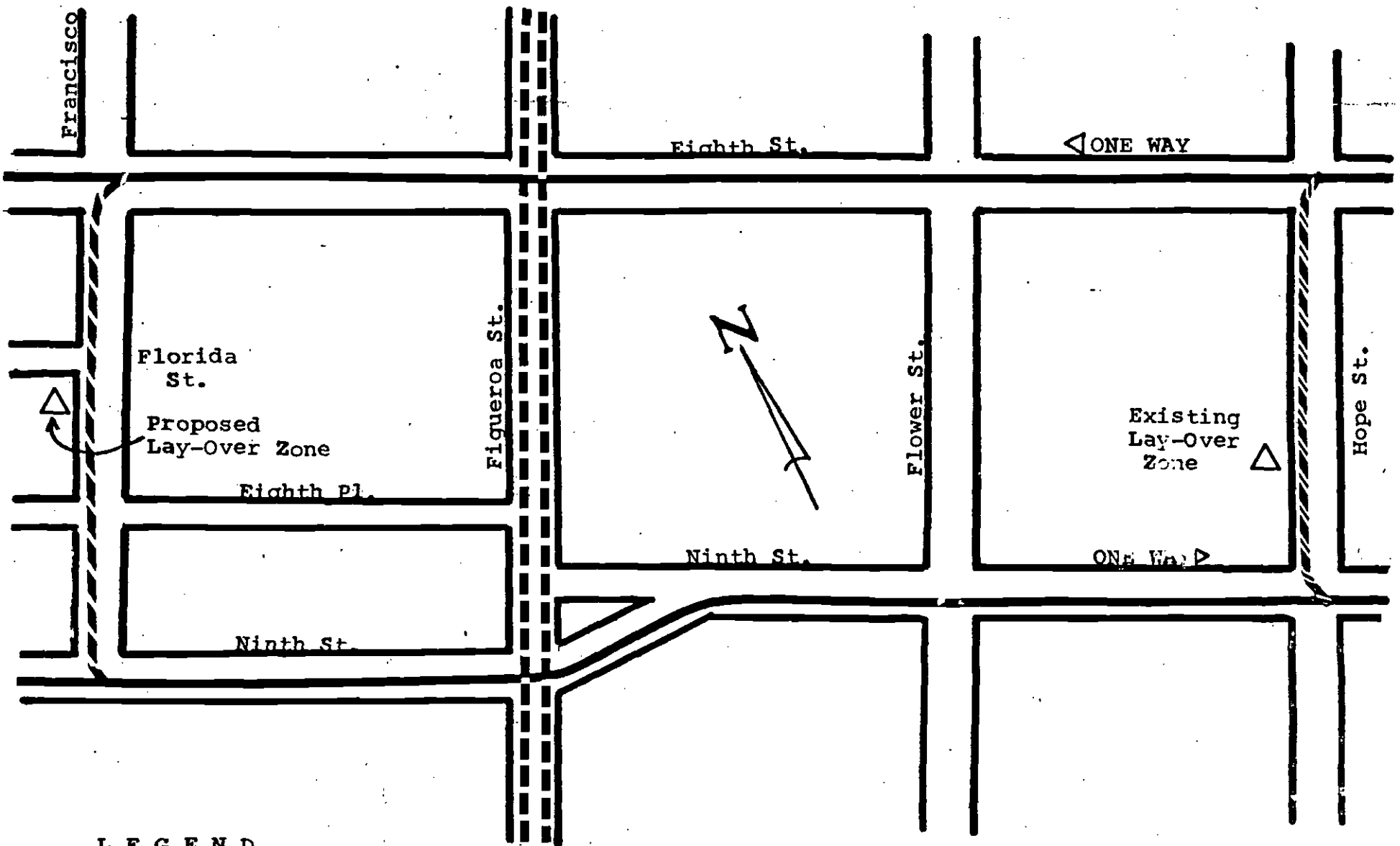
Figure 1



Line 25 -- NORTH FIGUEROA ST. - WEST NINTH ST.

Proposed Relocation of LA CBD Short Line Terminal

Figure 2



LEGEND

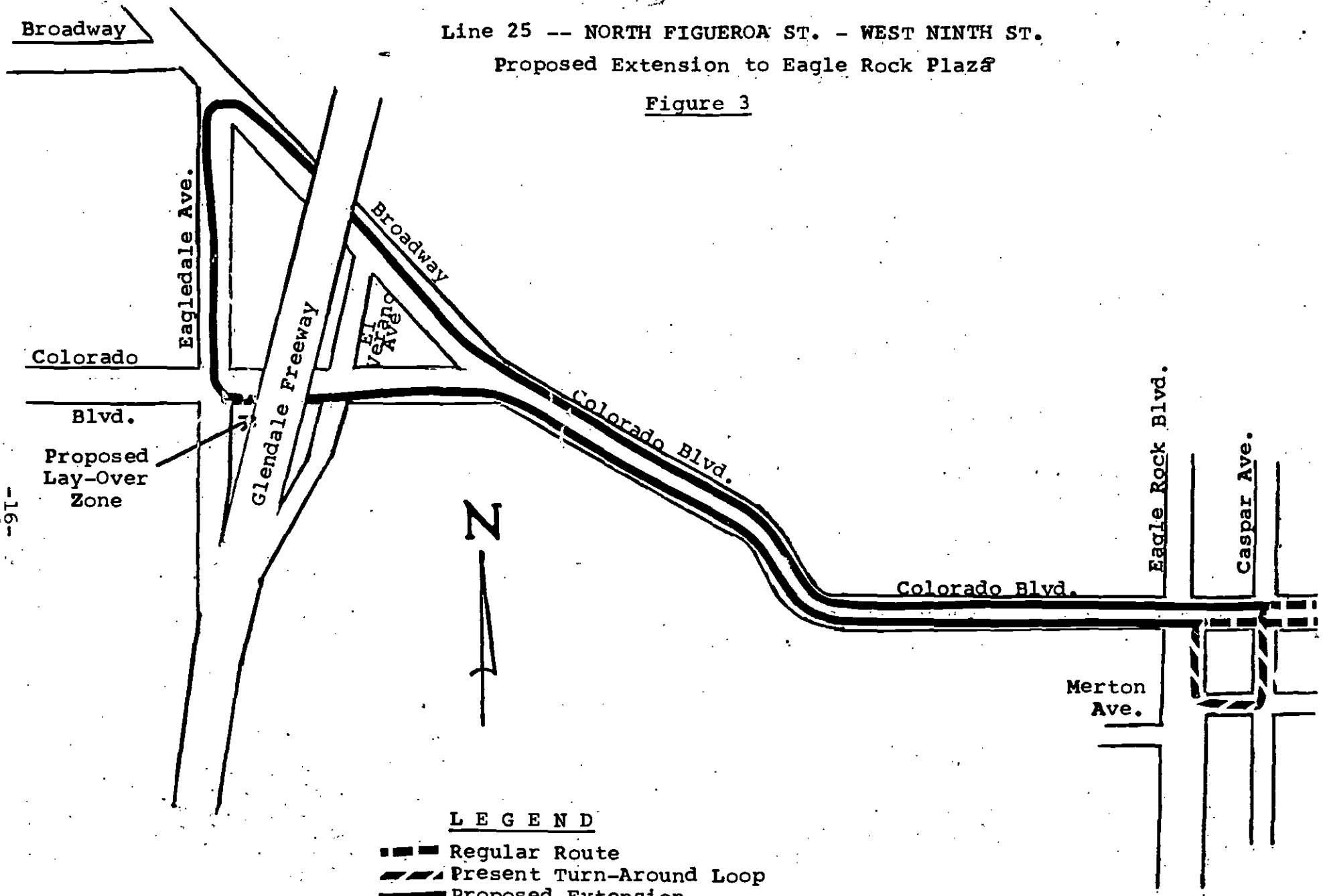
- Regular Route
- Present Short Line Route
- Proposed Short Line Route
- Line 49 - FIGUEROA ST.

Planning Dept
No Scale

Line 25 -- NORTH FIGUEROA ST. - WEST NINTH ST.

Proposed Extension to Eagle Rock Plaza

Figure 3

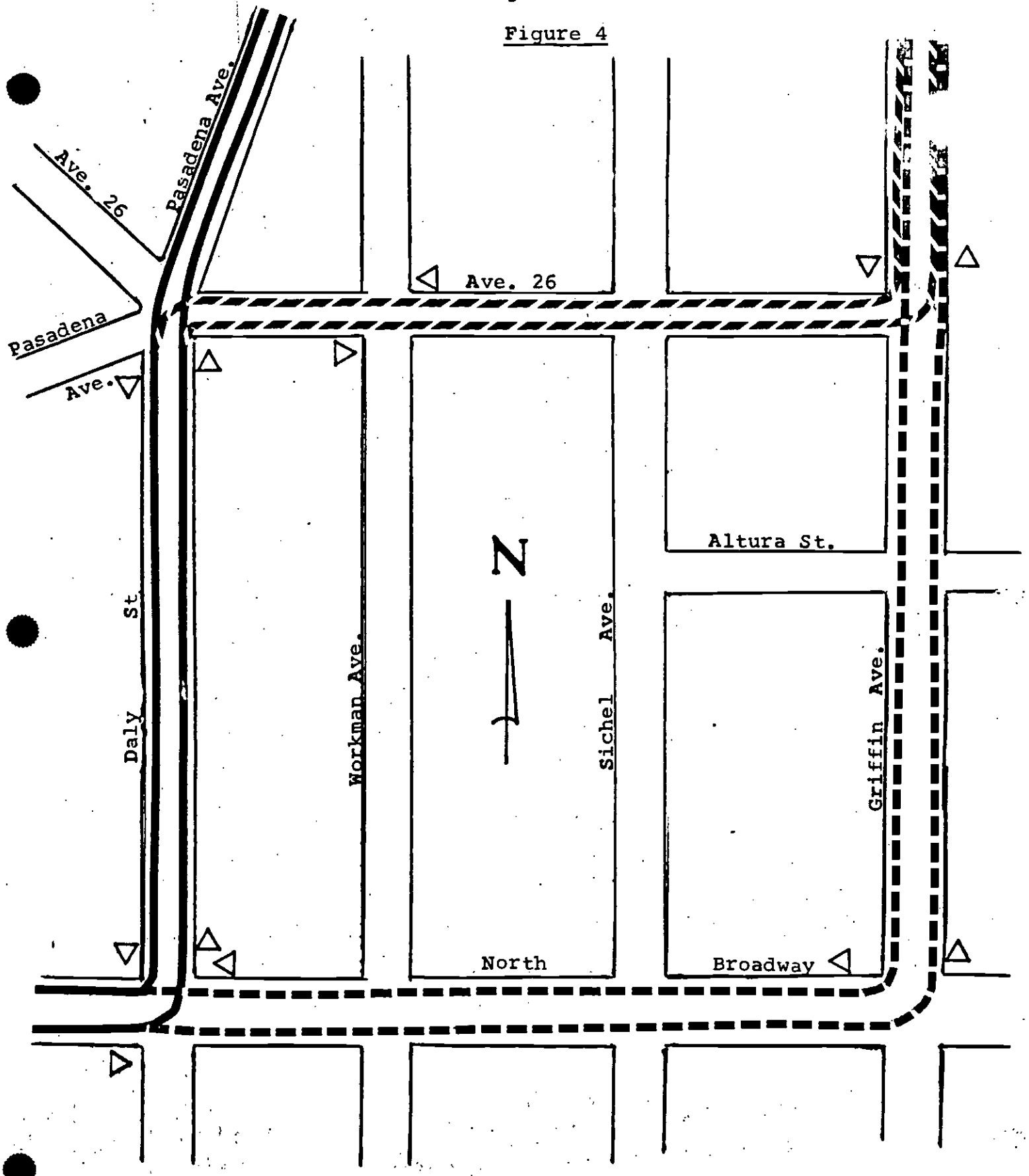


Planning Dept. 10/78
No Scale

Line 25 -- NORTH FIGUEROA ST. - WEST NINTH ST.

Proposed Rerouting of Griffin Ave. Service

Figure 4



LEGEND

Regular Route

Present Griffin Ave. Route

Proposed Griffin Ave. Route

Bus Stops

Planning Dept.
10/78 - No Scale

C. Sector Improvement Process

The District has established ten geographic planning sectors. These sectors were established because of the extent of the District's service area. The areas have topographic, socio-economic and demographic characteristics which may result in travel patterns and needs that are distinct for that particular area.

The ten sectors are:

(1) South Central Los Angeles

(2) San Fernando Valley

(3) East Los Angeles

(4) Mid-Cities

(5) San Gabriel Valley

(6) South Bay Region

(7) West Los Angeles

(8) North Los Angeles

(9) East Central Cities, and

(10) Los Angeles Central Business District

Since 1975, the first six sectors have been analyzed and have had subsequent major improvements implemented. The remaining four sectors are currently undergoing an intensive review process with a projected implementation date of June 1980.

With essentially the same bus fleet we have today this 1980 sector improvement program will:

- Expand the ability of the District to attract additional riders in many areas through increased passenger capacity;

- Expand the public's access to transit services, especially on "crosstown" corridors;

- Expand travel opportunities for present riders through extensions and inter-sector linkages;
- Reduce the need to transfer on several major streets;
- Reduce overcrowding on our heaviest lines;
- Improve on-time performance of many of our lines;
- Reduce travel time by providing more direct routings for many riders and expanding limited-stop and express service;
- Make the system easier to understand; and
- Conserve energy by making the District system more efficient and effective.

Our studies have also shown that due to the interwoven nature of our bus lines, services in adjacent sectors will also be impacted. Exhibit 6 is the report to the Board of Directors which presented the Initial Proposal for these improvements. If all the proposed recommendations are implemented, this 1980 Sector Improvement Program may affect as many as 890,000 bus riders in Greater Los Angeles area. Ninety-eight local, 5 limited and 24 express routes have been identified for changes. The revised system will include 115 local, 16 limited and 29 express lines.

In addition to establishing a new system that is thoroughly integrated with other sectors on a system basis, the 1980 proposal also uses the concept of transit centers. These are key locations where certain lines converge for the convenience of passengers simplifying transferring and making it possible to board any one of several routes at one location. Some of these transport centers are already part of our operation and additional centers will be created under the proposal.

All of these sector improvement projects are done in the spirit of TSM --- making the best use of existing available facilities to provide the most efficient transportation system for a region. It is the District's intent to review all sectors on an approximate 4 to 5-year cyclical basis to assure that the system is working efficiently and meaningfully, consistent with land-use and socio-economic changes that may have occurred in the interim.

EXHIBIT 6

Southern California Rapid Transit District • 425 So. Main St. • Los Angeles, Calif. 90013 • Telephone: (213) 972-6000

Jack R. Gilstrap
General Manager

February 23, 1979

TO: Board of Directors

FROM: Jack R. Gilstrap

SUBJECT: Initial Proposal for 1980 Sector Improvements

SUMMARY

With the continued direction of your Board, staff has been working to complete the cycle of sector improvement projects begun in 1975. We now present for your consideration an Initial Proposal for 1980 Sector Improvements.

This proposal implements the Board's Short-Range Plan adopted on January 9, 1979, and supports all four elements of the Regional Transit Development Program. The objectives and associated criteria for planning of Sector Improvements were adopted by your Board on January 9, 1979, and are attached along with constraints that staff has observed in developing the Initial Proposal.

The Initial Proposal was prepared using the levels of equipment availability and funding the District can expect for Fiscal Year 1980. With essentially the same bus fleet we have today, the 1980 Sector Improvements will:

- Expand the ability of the District to attract additional riders in many areas through increased passenger capacity;
- Expand the public's access to transit services, especially on "crosstown" corridors;
- Expand travel opportunities for present riders through extensions and inter-sector linkages;
- Reduce the need to transfer on several major streets;

- Reduce overcrowding on our heaviest lines;
- Improve on-time performance of many of our lines;
- Reduce travel times by providing more direct routings for many riders and expanding limited-stop and express service;
- Make the system easier to understand; and
- Conserve energy by making the District system more efficient and effective.

This Initial Proposal affects 100 present lines of which 30 will be essentially unchanged, 37 will have minor modifications and 33 will be substantially changed. Of the 31 heaviest District lines (those with over 10,000 riders daily), 13 will be unchanged, 11 will have minor changes and only 7 will be completely restructured.

As in the previous sector improvement projects, the next step for the 1980 Sector Improvements will be to present the Initial Proposal to the public for review and comment. Because staff anticipates considerable public input, we propose the following guidelines for public review be adopted by your Board to insure an orderly process:

1. Comments and suggested modifications will be accepted through June 1, 1979;
2. Suggested modifications will be evaluated by staff in terms of the attached constraints on operability, impact on riders and communities and the other system objectives to insure at least as high service levels as under the Initial Proposal;
3. Modifications must be limited in scope to the involved sectors or must improve linkage with adjacent sectors;
4. Modifications to the Initial Proposal must be shown to be possible within the projected availability of buses; and
5. Modifications will be coordinated with municipal transit operators as appropriate.

The proposed improvements involve the North Los Angeles, West Los Angeles, South Central and Central cities sectors. The interwoven nature of our bus lines means that the improvements will affect limited portions of adjacent sectors as well. Due to the scope of the final sector improvement projects, staff is working toward an implementation date in June 1980.

This proposal has been reviewed by and has the concurrence of the New Services Review Board.

RECOMMENDATIONS

In order to keep these sector improvements on course toward implementation in June 1980, we recommend that your Board:

a) Receive the attached Initial Proposal for 1980 Sector Improvements;

b) Adopt the proposed guidelines for public review; and

c) Authorize staff to submit the Initial Proposal to those review activities required to lead to a revised proposal for presentation to your Board in the Fall of 1979.

Respectfully,

Jack R. Gilstrap

By: George L. McDonald
Manager of Planning
and Marketing

Attachments

D. Upgrade Existing Fleet and Ensure Adequate Future Fleet-Mix

The Southern California Rapid Transit District has the oldest active bus fleet among major systems in America. The average fleet age is in excess of 12 years. This results in higher operating costs, increased possibility of not being able to put buses into scheduled service and in some cases a poorer quality of ride. Additionally, it is harder to attract the discretionary rider to use public transportation because of "old-look" equipment and the negative psychological effect this type of equipment has for potential first-time riders.

One of the goals of TSM is to modernize the bus fleet through bus acquisitions. This will increase the operating efficiency and productivity of the existing systems. An appropriate fleet mix of newer buses will:

1. Reduce operating costs;

2. Ensure available equipment will be ready for service;

3. Promote transit usage;

4. Improve the quality of local service;

5. Improve the quality and comfort through new inter-urban coaches for premium paying express riders;

6. Improve productivity on heavily travelled lines through the acquisition of high occupancy vehicles, i.e., double-deck and articulated buses.

The District has been aggressively planning for upgrading the existing fleet with an appropriate mix of equipment. Past problems included obtaining UMTA approval and funding for significant numbers of buses that would have an impact on our operation. Due to commendable efforts by our Board of Directors, Local and State Officials and the California Congressional Delegation, UMTA was finally persuaded to provide the necessary grant for what will be one of the biggest bus acquisitions by any property in the nation.

Through this grant, 1,200 buses will be purchased and other needed capital improvements will be financed. These buses will complement the 230 advanced design buses already on order that are scheduled for delivery early in 1980. The existing and projected fleet mix is then projected to be as follows:

Model	Number of Buses in Present Fleet	Total Number Programmed for Acquisition	Retire	Number of Buses in 1982 Fleet
Minibus	59	--	--	59
Inter-mediate	224	170	147	247
Standard	2,240	1,170	1,023	2,387
Interurban	58	50	43	65
Articulated	30	50	--	80
Double-Deck	2	60	--	62
	2,613	1,500	1,213	2,900

Three-hundred of the 2900 fleet size projected for 1982 will be a reserve fleet that will be used as back-up in the event of a future energy crisis. This crisis strategy was adopted by our Board of Directors as part of the District energy contingency planning efforts.

Chapter II. Inter-Modal TSM Actions

A. Transportation Center Developmer

The key objective of TSM is to make the best possible use of existing facilities for transportation purposes. In this spirit, the District has identified and is proceeding with the development of two sites that will greatly improve public transportation opportunities in this region.

One site is the West Los Angeles Transportation Center that proposes a joint use of an existing Caltrans maintenance site under the Santa Monica Freeway. Development of this site to a full multi-modal facility will provide for the convenient and strategic interface of local buses of the District and Culver City Municipal Bus Lines with regional line-haul Freeway Transit services operating in (1) the Hollywood-Wilshire regional core, and (2) the West Los Angeles sub-region. The site is bounded by Washington Boulevard, Venice Boulevard and Apple Street under the Santa Monica Freeway. The entire site is owned by Caltrans and the Los Angeles Department of Water and Power.

This proposed West Los Angeles Transportation Center location is critical to the first increment of developing a region-wide bus rapid transit system and will provide shelter for waiting passengers, bus parking and turnaround areas, bus route and schedule information and amenities for bus drivers. The passenger accommodations will include benches and may include drinking fountains and telephones. The Center could serve as an interface between the local bus lines of the SCRTD, the Santa Monica and Culver City Municipal Bus Lines, Freeway Transit service and Los Angeles International Airport Express Service. The facility will also accommodate a "Kiss/Ride" interface and a Bike/Bus interface.

The District has received full and complete cooperation from Caltrans and the City of Los Angeles in the development of this site. Actions that are being taken or in the process of negotiations are:

1. A lease agreement with Caltrans and the City of Los Angeles Department of Water and Power for use of this property. A portion of the property will be solely used as a Caltrans maintenance facility while the remainder will be used as the Transportation Center. The Department of Water and Power owns a portion of the property traversed by their power transmission lines; this necessitates lease negotiation with that agency also.

2. Provision of a bus bypass lane at the metered eastbound Washington Boulevard on-ramp to the freeway.

3. Caltrans design and construction of an additional on-ramp bypass lane if required because of surface street traffic conditions.

4. Caltrans design and construction of a bus stop and shelter adjacent to the westbound Fairfax on-ramp.

5. City of Los Angeles approval for modifying existing curb returns for safe transit operations around the facility.

6. City of Los Angeles approval for constructing new driveways for entry/exit of buses on the property.

7. City of Los Angeles approval for an eastbound bus stop on Apple Street that will be the companion stop for the westbound stop to be constructed by Caltrans.

The Universal City Transportation Center proposes to upgrade an existing Park/Ride lot to full multi-modal facility which will provide for the convenient interface of local transit services with regional line-haul Freeway Transit services between (1) the San Fernando Valley and the Los Angeles Central Business District, and (2) the San Fernando Valley and the Hollywood-Wilshire corridors, as well as other sub-regions of the District's service area. The proposed location of the Universal City Transportation Center will be on the north side of Ventura Boulevard between Riverton Avenue and Lankershim Boulevard in Studio City. The entire property is owned by the County of Los Angeles and abuts the Hollywood Freeway. The land is now being used as a paved Park/Ride lot with no other physical improvements.

The proposed Universal City Transportation Center location is critical to the first increment of developing a region-wide bus rapid transit system and will have a covered shelter for waiting passengers, bus parking and turnaround areas, lighted parking area, bus route and schedule information and provision of driver restroom facilities. The passenger accommodations at the Universal City Center will include benches and may include drinking fountains and telephones.

The Center will serve as an interface between the local bus lines of the SCRTD and Freeway Transit service. Other travel modes which will be accommodated by the facility will be Park/Ride and Kiss/Ride interfaces.

Actions by local agencies necessary to completion of this Transportation Center include:

(1) County of Los Angeles - Negotiation and sale of the property to the District is the primary action required of the County of Los Angeles. The County of Los Angeles is the present owner of the property, therefore, the transfer of land title from the County to the District is imperative relative to the fruition of this project.

(2) City of Los Angeles - It will be necessary to have new and/or modified signalization on Ventura

Boulevard which will assure safe and expeditious bus operations for ingress/egress of the facility property. Permission must be obtained for the inclusion of this signalization and the City must be willing to maintain the equipment after installation.

(3) Caltrans - This agency will be responsible for the design and construction of a slip ramp from the property onto the southbound Hollywood Freeway for the expeditious movement of Freeway Transit buses through the freeway corridor.

Excellent inter-agency cooperation has been received in the development of these sites. The many diversified inter-agency actions indicate the degree of complexity that goes into the overall development of these types of facilities. However, many benefits will accrue to the transportation system as a result and these are examples of making excellent use of available facilities for transportation purposes.

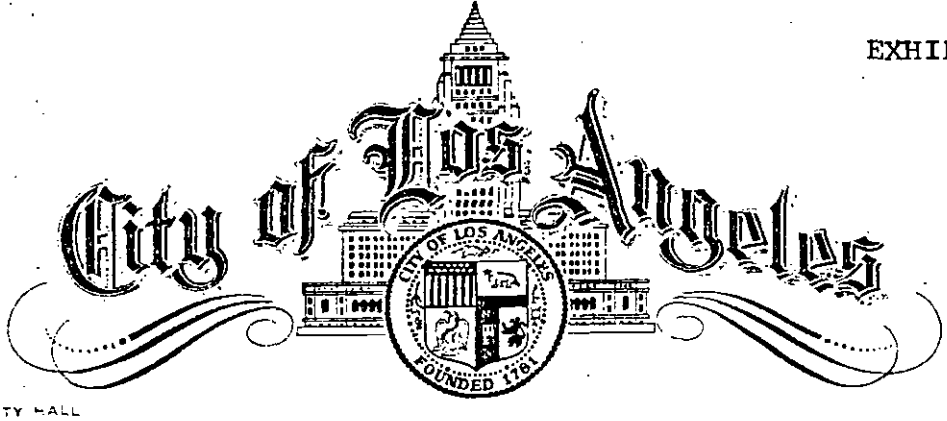
B. Signal Pre-Emption on Ventura Boulevard

District staff has worked with the City of Los Angeles, Department of Transportation on a proposed demonstration project that would give preferential treatment to District buses on Ventura Boulevard by causing traffic signals to either change to green or hold on green for an approaching bus, thereby eliminating many unnecessary stops and delays. This technology has proven successful in other cities throughout the country, but has not been demonstrated in an environment with high traffic volumes, traffic signal density and bus patronage as high as on Ventura Boulevard. The limits for this proposed project are on Ventura Boulevard between Reseda Boulevard and Lankershim Boulevard, and involves 43 signalized intersections.

Any project of this nature requires the total and absolute cooperation of the City. This is due to possible traffic impacts on surface streets, traffic signal modification and maintenance. For this reason, the City must be the lead agency in the development of the project. Buses on two District regional lines would have hardware installed; evaluation of service benefits will be conducted by the District as part of this project.

Exhibit 7 is the notice of intent to file a grant application which was sent to UMTA on May 21, 1979. This could lead to an eventual 100% funded demonstration project. Letters of support from both the District and the Los Angeles County Transportation Commission accompanied the City's request to UMTA.

EXHIBIT 7



CITY HALL
LOS ANGELES, CALIFORNIA 90012
(213) 485-3311

OFFICE OF THE MAYOR

TOM BRADLEY
MAYOR

May 18, 1979

Mr. Marvin Futrell
Urban Mass Transportation Administration
Room 6419
2100 Second Street
Washington, D.C. 20590

Dear Mr. Futrell:

Demonstration Project Proposal for Ventura Boulevard
Bus Priority Traffic Signal Preemption Project

As part of the 1978-79 Southern California Association of Governments (SCAG) Overall Work Program, the City Department of Transportation (DOT) has examined potential locations which could benefit from the installation of a bus priority traffic signal preemption system. As a result of the study, we are requesting grant funding for a joint City DOT - Southern California Rapid Transit District (SCRTD) demonstration project to give preferential treatment to bus transit vehicles on Ventura Boulevard by increasing the amount of green signal time for buses approaching a signalized intersection. This technology has proven successful in other cities throughout the country, but has not been demonstrated in an urban environment with traffic volumes, traffic signal density and bus patronage as high as on Ventura Boulevard.

The attached Demonstration Project Proposal contains the essential facts concerning the project, along with estimates of expected benefits and costs. The cost estimate for the project includes participation by the SCRTD in all necessary phases, such as system design, project evaluation and a marketing effort to attract ridership. The SCRTD has participated in the study effort leading to the recommended project and has indicated interest in participating in the implementation of this TSM measure.

Through discussions with staff of the Los Angeles County Transportation Commission (LACTC), we have learned that UMTA is interested in funding a demonstration of a bus priority preemption system on a major urban

arterial. We request that consideration be given to the attached preliminary proposal, and that you notify us at your earliest convenience of the possibility of UMTA funding for this worthwhile project.

Also attached are letters from the General Manager of SCRTD and the Executive Director of LACTC supporting this proposal.

If you need any additional information, please contact Mr. S.E. Rowe, Deputy City Traffic Engineer, phone (213) 485-4281.

Very truly yours,

Tom Bradley

TOM BRADLEY
Mayor

TB:bm

Attachments

LACTC
LOS ANGELES COUNTY TRANSPORTATION COMMISSION • 311 SOUTH SPRING STREET – SUITE 1206, LOS ANGELES, CALIFORNIA 90013 • (213) 626-0370

JEROME C. PREMO
EXECUTIVE DIRECTOR

May 17, 1979

Mr. Don Howery
Director
Department of Transportation
City of Los Angeles
Room 1200, City Hall
200 N. Spring Street
Los Angeles, CA 90012

Dear Mr. Howery:

Proposed Ventura Boulevard Bus Priority Traffic Signal Preemption Demonstration Project Between Reseda Boulevard and Vineland Avenue

This letter is to reaffirm the Commission's support of the bus priority demonstration project on Ventura Boulevard.

After stating my support before your Transportation and Traffic Committee on May 9, 1979, I made a presentation at the Commission meeting that afternoon. I am happy to report that there is unanimous support by the Commission for this project.

This project is timely not only for the improvements expected to transit operations, but implications to our County's air quality improvement efforts and our current gasoline shortage situation.

The current modal split, wherein transit accommodates 35% of the person-trips while making up only 3% of the total vehicle trips along Ventura Boulevard, establishes a high probability of success. This project could further increase the people-moving capability of Ventura Boulevard by attracting additional transit patrons. In turn, auto drivers could benefit through reduced congestion.

This cooperative effort between your Department of Transportation and the Southern California Rapid Transit District is commendable. As Commission staff, we are pleased to have had a part in bringing about this project through our

County's overall work program. If it appears necessary, we are prepared to make additional contacts with UMTA to seek approval of your project.

I look forward toward the development of other similar transportation systems management actions and offer our assistance toward implementation.

Sincerely,

Jerry Premo

JEROME C. PREMO
Executive Director

RKM:kyt

Copies to: Jack R. Gilstrap, SCRTD
Mark Pisano, SCAG

Southern California Rapid Transit District • 425 So. Main St. • Los Angeles, Calif. 90013 • Telephone: (213) 972-6000

Jack R. Gilstrap
General Manager

April 27, 1979

Mr. Donald R. Howery
General Manager, Department
of Transportation
Room 1200, City Hall
200 North Spring Street
Los Angeles, California 90012

Dear Mr. Howery:

Our respective staffs have been closely working together for some time in developing a signal preemption within the City of Los Angeles. The proposed project would be on Ventura Boulevard between Reseda Boulevard and Vineland Avenue. Ventura Boulevard is a heavily travelled commuter corridor that is utilized by two major regional SCRTD lines.

The District is very supportive and will cooperate to the fullest extent possible with the City in the development, implementation and evaluation of this project. We feel Transportation Systems Management actions of this nature will help public transportation in this region at a time of impending energy shortages. In fact, this project is among those TSM improvements called for in the Energy Shortage Contingency Plan recently adopted by our Board of Directors.

I am pleased with the joint agency cooperation exhibited on this project and wish to work cooperatively with you on this and other projects that will improve public transportation in this region.

Respectfully,

[Original Signed By] J. R. Gilstrap

Jack R. Gilstrap

cc: J. Premo, LACTC
bc: S. Black
G. McDonald
B. Urban
PCT/BEU/cor

C. Deficient Street Segments within City of Los Angeles

The Southern California Rapid Transit District and the City of Los Angeles Department of Transportation have been working together in the identification and ranking of critical sections on the surface street bus system within the City of Los Angeles. There are around 2,100 one-way route-miles operated by the SCRTD within the city. This extensive review identified those surface street bus route sections on which general traffic has average route speeds of less than 15 M.P.H. or between 15 and 20 M.P.H. for the weekday 7:00 - 9:00 AM, 11:00 AM - 1:00 PM and 4:00 - 6:00 PM time periods.

More than 1,500 surface street bus route sections, varying in length from several hundred feet up to a half mile in length, were identified as having average route speeds of less than 20 M.P.H. for one or more time periods and in one or both directions. To establish a more manageable list of candidate locations for future study, a second set of more restrictive criteria was established. Surface street bus route sections would satisfy the new criteria if general traffic had average route speeds of less than 15 M.P.H. for any of the three time periods under study, or if the average route speed was between 15 and 20 M.P.H. for both the AM and PM peak periods. Street sections satisfying the new criteria would warrant further consideration and be classified as a deficient street section. Under the new criteria, approximately 600 street sections were classified as being deficient. Those deficient street sections that were found to be adjacent were grouped into segments. Information on bus line, bus volume, bus patronage, and traffic volumes (where available) for each deficient street section was inventoried and tabulated. Also inventoried and tabulated for each deficient street section was information on average route speed, traffic signal density and bus stopping characteristics.

From this initial inventory, 30 surface street sections were selected for further field investigation. Included were eight sections in the morning peak-hour period, eight street sections in the midday off peak-hour period and 14 street sections in the evening peak-hour period.

These 30 sections were selected on the basis of: (a) benefits that could be accrued with improvements; (b) the fact that they were isolated and had no corridor implication; (c) the fact that the segments were relatively short, thereby having the possibility for low-cost TSM type improvements.

Long segments involving significant lengths in the west side of Los Angeles were not considered for immediate study. The reason for this is that a study on a corridor basis would have to be accomplished that would more likely result in recommendations involving large capital expenditures and take long lead times to implement.

Exhibit 8 includes a list of these deficient street sections, a vicinity map and a matrix showing possible TSM actions for consideration. This list has now been forwarded to the appropriate City of Los Angeles District Traffic sections for action. When implemented, these improvements will help reduce corridor person-delay that our patrons are subjected to on a recurring basis.

EXHIBIT 8

STREET SECTIONS SELECTED FOR FIELD INVESTIGATION

STREET SECTION & NUMBER	RANKING	TRAVEL DIRECTION	TIME PERIOD	PASSENGER DELAY (MIN)	SECTION LENGTH (FT)	SCRTD BUS LINES
(1) Santa Fe Av.-25th St. to Washington Bl.	36	N/B	AM	1393	1350	9
(2) Macy St.-Mission Rd. to Pleasant Av.	43	W/B	AM	1267	1000	2,240
(3) Whittier Bl.-Boyle Av. to Soto St.	68	W/B	AM	1019	1100	28,800,801 802,820
(4) Western Av.-92nd St. to Manchester Av.	128	N/B	AM	660	2600	84
(5) Crenshaw Bl.-Florence Av. to Hyde Park Bl.	154	N/B	AM	580	2200	5,85
(6) Vermont Av.-59th St. to Slauson Av.	156	N/B	AM	577	1000	6,353
(7) Monte Vista St.-Av. 54 to Av. 50	197	S/B	AM	492	1900	6
(8) Figueroa St.-Av. 22 to Av. 26	217	S/B	AM	441	600	6,7,24,56

STREET SECTIONS SELECTED FOR FIELD INVESTIGATION

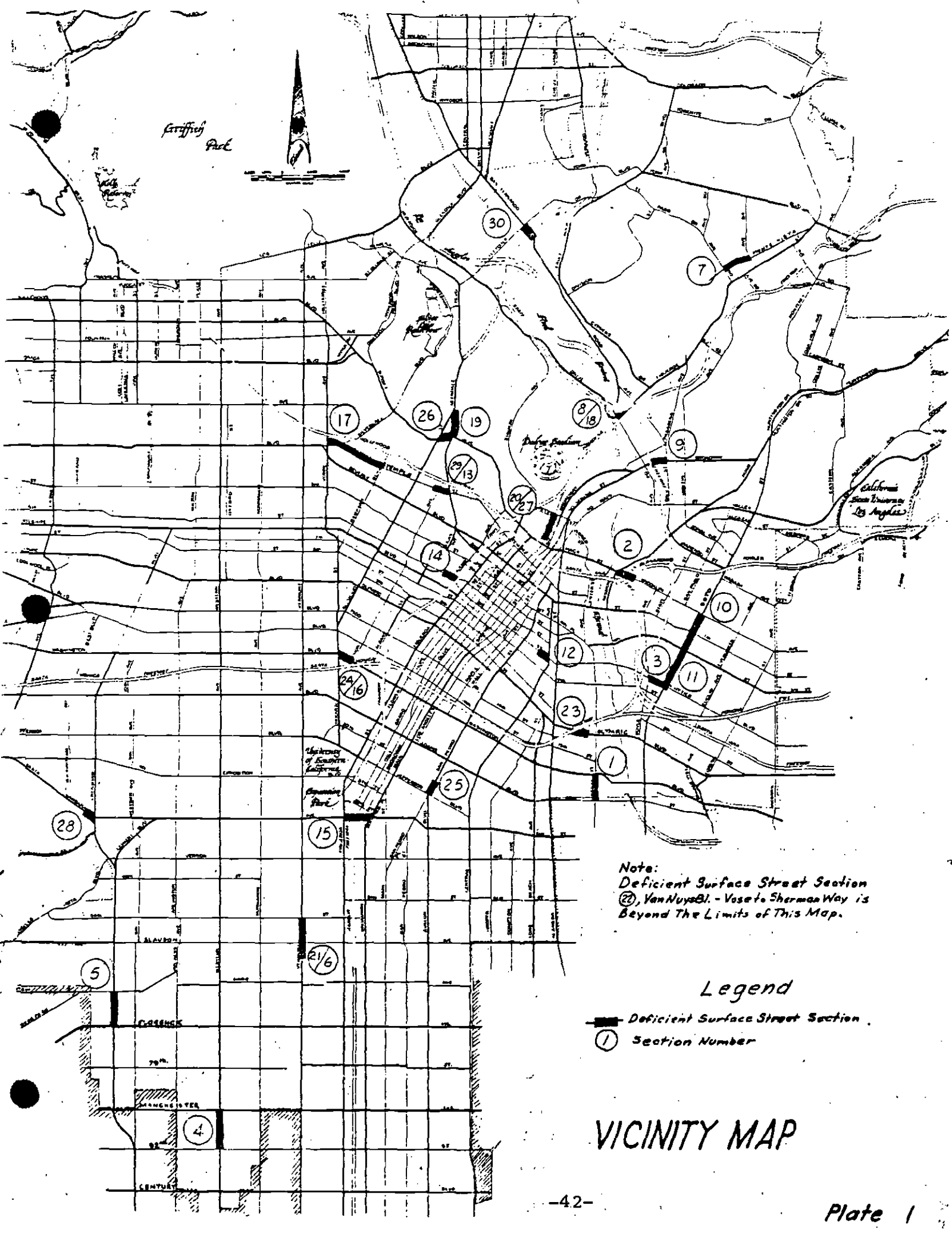
STREET SECTION & NUMBER	RANKING	TRAVEL DIRECTION	TIME PERIOD	PASSENGER DELAY (MIN)	SECTION LENGTH (FT)	SCRTD BUS LINES
(9) N.Broadway-Golden State Fwy. to Daly St.	105	E/S	MD	744	1400	12,25,50
(10) Soto St.-Brooklyn Av. to 4th St.	124	N/B	MD	666	2600	50
(11) Soto St.-4th St. to Whittier Bl.	125	N/B	MD	664	2600	50
(12) 6th St.-Stanford St. to Central Av.	134	E/B	MD	646	1100	3,800,801, 802,820
(13) Temple St.-Bonnie Brae St. Glendale Bl.	141	E/B	MD	624	1500	42
(14) 6th St.-Boyel St. to Harbor Fwy.	147	E/B	MD	607	900	3,4
(15) Santa Barbara Av.-Figueroa St. to Broadway	163	W/B	MD	555	1350	5,6,27,871
(16) Washington Bl.-Hoover St. to Union Av.	209	W/B	MD	458	1000	12

STREET SECTIONS SELECTED FOR FIELD INVESTIGATION

STREET SECTION & NUMBER	RANKING	TRAVEL DIRECTION	TIME PERIOD	PASSENGER DELAY (MIN)	SECTION LENGTH (FT)	SCRTD BUS LINES
(17) Temple St.-Virgil Av. to Rampart Bl.	2	W/B	PM	3226	4000	42
(18) Figueroa St.-San Fernando Rd. to Av. 22	17	N/B	PM	1867	600	6,7,24,56
(19) Glendale Bl.-Sunset Bl. to Delta St.	46	N/B	PM	1230	2200	39
(20) Hill St.-Alpine St. to College St.	64	N/B	PM	1064	650	121,122,721 770,24,56
(21) Vermont Av.-Slauson Av. to 54th St.	103	S/B	PM	754	1500	6,353
(22) Van Nuys Bl.-Vose St. to Sherman Way	118	N/B	PM	684	1000	86,88,93,144
(23) Olympic Bl.-Wilson St. to Mateo St.	119	E/B	PM	677	800	47
(24) Washington Bl.-Hoover St. to Union Av.	123	W/B	PM	666	1000	12

STREET SECTIONS SELECTED FOR FIELD INVESTIGATION

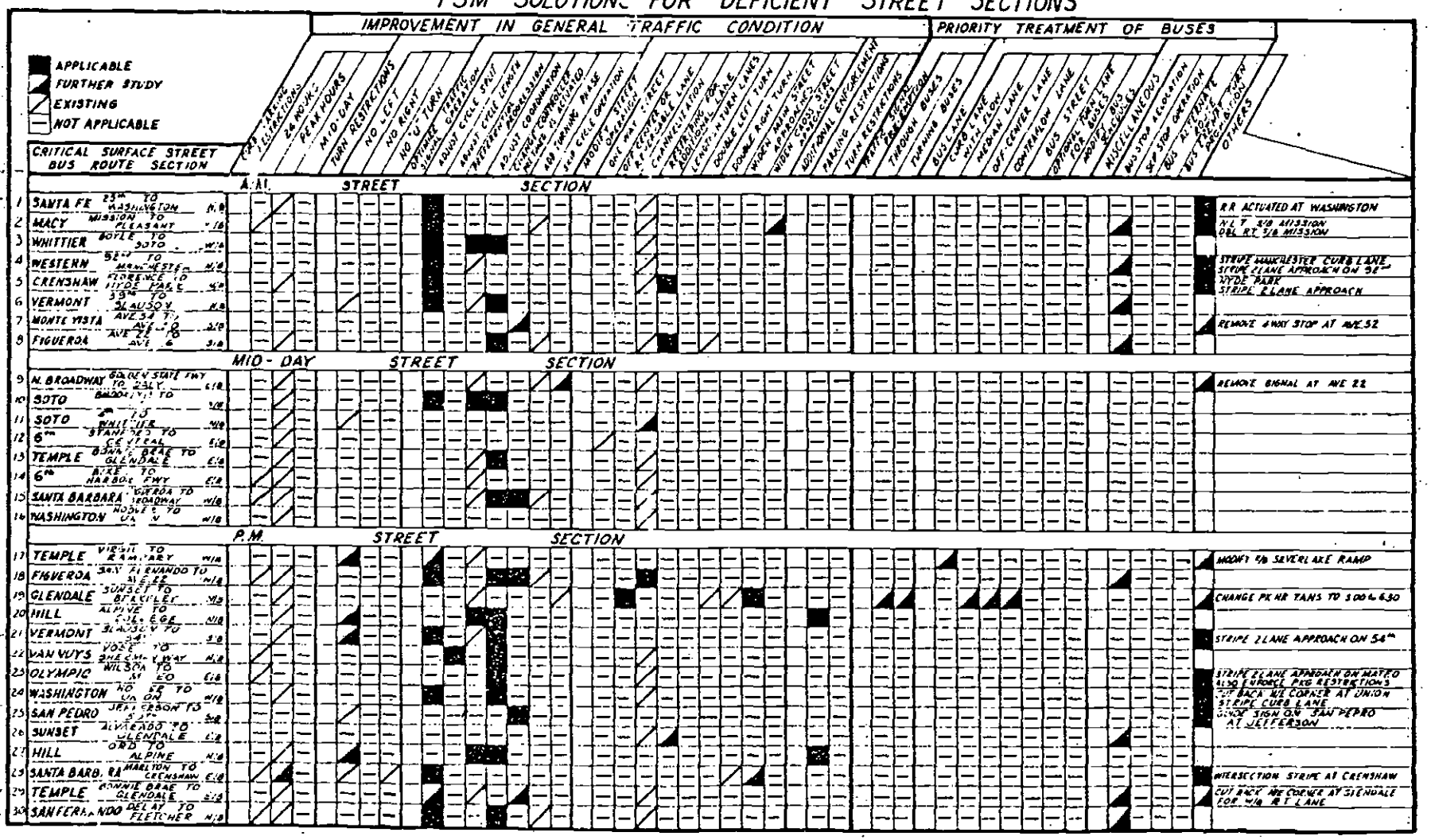
STREET SECTION & NUMBER	RANKING	TRAVEL DIRECTION	TIME PERIOD	PASSENGER DELAY (MIN)	SECTION LENGTH (FT)	SCRTD BUS LINES
(25) San Pedro St.-Jefferson Bl. to 30th St.	126	S/B	PM	664	1300	29,33
(26) Sunset Bl.-Alvarado St. to Glendale Bl. O/C	153	E/B	PM	581	850	91,94
(27) Hill St.-Ord St. to Alpine St.	157	N/B	PM	572	750	121,122,721 770,24,56
(28) Santa Barbara Av.-Marlton Av. to Crenshaw Bl.	168	E/B	PM	543	1800	27
(29) Temple St.-Bonnie Brae St to Glendale Bl.	170	E/B	PM	541	1500	42
(30) San Fernando Rd.-Delay Dr to Fletcher Dr.	182	N/B	PM	520	1100	24,56



VICINITY MAP

Plate 1

TSM SOLUTIONS FOR DEFICIENT STREET SECTIONS



D. Energy Shortage Contingency Plan/TSM Action List of Possible Projects

The District Board of Directors has adopted an Energy Contingency Plan on April 19, 1979. This Plan has served the District well during the gasoline shortages that existed in Los Angeles County in May 1979. An important element of the Plan's content was a list of TSM actions that would enhance public transportation in the Los Angeles area. These actions require the cooperation of other agencies plus in some cases, a strong political commitment. Many of these actions will:

- Improve efficiency of existing roadway facilities;
- Reduce transit travel times for system users;
- Improve energy efficiency through better utilization of transit vehicles and facilities;
- Improve coordination of SCRTD service with other carriers in region;
- Improve local circulation and feeder/distribution service in communities throughout Los Angeles County;
- Improve access and be complementary to other elements of Regional Transit Development Programs;
- Increase operating efficiency and productivity of the existing transit system.

Exhibit 9 includes letters that have been forwarded to Caltrans, the City of Los Angeles, Los Angeles County and the Los Angeles County Transportation Commission with a list of suggested TSM actions that were included in the Energy Shortage Contingency Plan. It is recognized that some of the proposals will require additional sources of funding. Moreover, it is the District's intent to continue to work toward these needed TSM-type proposals to enhance and make the best use of transportation facilities in this region.

It appears that the most difficult actions to achieve will be the provision of priority for movement of transit vehicles on existing traffic lanes. Proposals for funding and implementation have been made by the City of Los Angeles for the Broadway Mall and Glendale Boulevard preferential projects. For various reasons such as insufficient funding, impacts on surface streets and/or businesses, etc., these projects have never reached implementation stage. Actions like these are necessary if the District is to provide even more reliable and effective service for Los Angeles County.

EXHIBIT 9

Southern California Rapid Transit District
425 South Main St., Los Angeles, California 90013
Telephone: (213) 972-6000

JACK R. GILSTRAP
General Manager

April 25, 1979

Mr. Jerry Premo
Los Angeles County Transportation
Commission
311 S. Spring St., Room 1206
Los Angeles, California 90011

Dear Mr. Premo:

Our Board of Directors recently approved an Energy Shortage Contingency Plan that considered a wide variety of actions that would be required for an overall crisis preparation. Some of these actions include Transportation System Management (TSM) measures that, if implemented, would improve public transportation in this region and help the SCRTD cope with a crisis situation.

Attached is a list of actions that were included in the plan for your consideration. It is the District's intent to work cooperatively with you in the development of these and other actions your agency deems appropriate.

I am hoping to hear from you on the possibility of expediting these and any other TSM plans that could enhance public transportation in this region.

Respectfully,

ORIGINAL SIGNED FOR
JACK R. GILSTRAP BY JACK STUBBS

Jack R. Gilstrap

Attachments

Southern California Rapid Transit District
425 South Main St., Los Angeles, California 90013
Telephone (213) 972-6000

JACK R GILSTRAP
General Manager

April 25, 1979

Mr. D. Howery
General Manager,
Department of Transportation
Room 1200 City Hall
200 No. Spring St.
Los Angeles, California 90012

Dear Mr. Howery:

Our Board of Directors recently approved an Energy Shortage Contingency Plan that considered a wide variety of actions that would be required for an overall crisis preparation. Some of these actions include Transportation System Management (TSM) measures that, if implemented, would improve public transportation in this region and help the SCRTD cope with a crisis situation.

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Respectfully,

ORIGINAL SIGNED FOR
JACK R. GILSTRAP BY JACK STUBBS

Jack R. Gilstrap

Attachments

Southern California Rapid Transit District
425 South Main St., Los Angeles, California 90013
Telephone: (213) 972-6000

JACK R. GILSTRAP
General Manager

April 25, 1979

Mr. Donald G. Dreher
Los Angeles County Road
Department
1540 Alcazar Street
Los Angeles, California 90033

Dear Mr. Dreher:

Our Board of Directors recently approved an Energy Shortage Contingency Plan that considered a wide variety of actions that would be required for an overall crisis preparation. Some of these actions include Transportation System Management (TSM) measures that, if implemented, would improve public transportation in this region and help the SCRTD cope with a crisis situation.

Attached is a list of actions that were included in the plan for your consideration. It is the District's intent to work cooperatively with you in the development of these and other actions your agency deems appropriate.

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Respectfully,

ORIGINAL SIGNED FOR
JACK R. GILSTRAP BY JACK STUBBS

Jack R. Gilstrap

Attachments

Southern California Rapid Transit District
425 South Main St., Los Angeles, California 90013
Telephone: (213) 972-6000

JACK R. GILSTRAP
General Manager

April 25, 1979

Mr. R. J. Datel
District Directors
Caltrans, District 07
120 South Spring Street
Los Angeles, California 90012

Dear Mr. Datel:

Our Board of Directors recently approved an Energy Shortage Contingency Plan that considered a wide variety of actions that would be required for an overall crisis preparation. Some of these actions include Transportation System Management (TSM) measures that, if implemented, would improve public transportation in this region and help the SCRTD cope with a crisis situation.

Attached is a list of actions that were included in the plan for your consideration. It is the District's intent to work cooperatively with you in the development of these and other actions your agency deems appropriate.

I am hoping to hear from you on the possibility of expediting these and any other TSM plans that could enhance public transportation in this region.

Respectfully,

ORIGINAL SIGNED FOR
JACK R. GILSTRAP BY JACK STUBBS

Jack R. Gilstrap

Attachments

TRANSIT TSM IMPROVEMENTS

The public transportation system in Los Angeles has been developed over a period of more than 100 years, transitioning through various technological developments to the all-bus system of today. Some of the problems involved with operation of the existing bus system basically concern conflicts over the best use of space for transportation purposes.

There are several types of treatments that can on a low capital cost basis, provide significant improvement to our operation. Some suggested TSM improvements that would help transit and require interagency cooperation are:

* Establishment of a Bus Turnaround in the Vicinity of Sunset Boulevard and Pacific Coast Highway

  There is no turnaround presently available at this location, hampering schedule assignments plus future route layout in this area. An analysis of this intersection is needed to determine the type of geometric improvements that could be rendered for a bus turnaround so that efficient equipment assignments and improved service could be made possible.

* Establishment of Layover and Bus Staging Areas in the North-West Vicinity of the CBD

  Additional layover and staging areas will be required for future route layout. Possible examples are Fremont Avenue between First and Temple Street. A thorough investigation complete with recommendations of what could reasonably be available is needed.

* Broadway Transit Mall

  The conversion of Broadway into an exclusive transit facility between Second and Ninth Streets. This project will significantly improve north/south local transit operations within the CBD, as well as impact CBD line layout.

* Glendale Boulevard

  This project would establish a preferential bus lane on Glendale Boulevard between the Glendale Freeway

and First Street. The section of Glendale Boulevard between the Glendale Freeway and Sunset Boulevard might operate as a peak direction, peak period contra-flow lane and the remainder might operate as a combination of peak direction, median, and off-center lanes. Initially, existing lines in this corridor would benefit from this project; as the short and medium-range actions in Freeway Transit are developed, line haul services could be routed through this corridor.

* Seventh Street Transit Facility

The conversion of Seventh Street into an exclusive transit facility between Figueroa Street and Los Angeles Street. This project would improve heavily traveled east/west local transit operations within the CBD ---

OR

Fifth/Sixth Street Contra-Flow Lanes

This project would establish a permanent contra-flow lane operation on Fifth and Sixth Streets, which will significantly improve CBD east/west transit operation between Beaudry Avenue and Central Avenue.

* Wilshire Boulevard Signal Pre-emption

This project would establish the pre-emption of traffic signals on minor distribution streets intersecting Wilshire Boulevard between the CBD and Beverly Hills. Initially, the existing lines on Wilshire Boulevard which operate on a "limited" basis would utilize the pre-emption mode. Ultimately, short and medium-range Freeway Transit Lines which will serve the regional core would operate in the same mode.

* Ventura Boulevard Signal Pre-emption

This project would establish the pre-emption of traffic signals on minor distributor streets intersecting Ventura Boulevard between Reseda Boulevard and Vineland Avenue. Initially, a selected local line on Ventura Boulevard would utilize pre-emption. Ultimately, short and medium-range Freeway Transit Lines which will operate through this corridor would operate in the same mode.

* Extend Existing Spring Street Contra-Flow Lane on New High Street to Ord Street

  This extension would eliminate severe delays encountered by buses who use the Pasadena Freeway that must now travel through the heavily congested Broadway/Sunset and Broadway/Ord intersections because of the Spring Street contra-flow lane termination at Spring/Sunset.

* Utilization of Caltrans Airspace under Santa Monica Freeway

  Elimination of much of the on-street layover that occurs on the south portion of the L.A. CBD could be effected if suitable available existing airspace could be utilized. This would help District operation, plus improve overall surface street circulation.

* Exclusive Bus-Only Center Street Operation on First Street Between Hope and Los Angeles Streets

  The SCRTD presently has, and also plans in the future to have, significant bus movements on First Street within the L.A. CBD. It appears that an exclusive center street operation with center loading platform could be justified and prove technically feasible. An analysis should be conducted regarding the overall feasibility of this type of operation.

* Establishment of Transportation Centers

  Transportation Centers provide a sheltered location at which to transfer or interface with other modes. Without strategically located terminals, planning concepts that can be implemented to serve local and regional needs will be impaired. Timed transfer/pulse scheduling techniques can be effectively implemented from these transportation centers. These Centers can also provide space and facilities for the layover and staging of buses between runs; such space may not be available in sufficient quantity, or at all, on surface streets. Two examples of this type of development are the proposed Universal City Transportation Center and the West Los Angeles Transit Center.

E. Caltrans "Park-and-Pool" Developments

Obtaining land for transportation related purposes in appropriate locations throughout the District service area has proven difficult. Further complicating matters is the long lead time required to develop such facilities. In this regard, the District is cooperatively working with Caltrans in the development of these critical facilities. These types of facilities will be very important as the public becomes more energy-conscious in the near and medium range time frames.

Caltrans has conducted a review of available rights-of-way utilizing existing freeway air space in the Los Angeles region and has identified three locations suitable for development of "Park-and-Pool" facilities. These locations are in:

1) Glendora at Lone Pine and the Foothill Freeway (Rte. 210)

2) Pomona at Garey and the San Bernardino Freeway (Rte. 10)

3) Long Beach at Artesia Boulevard in the vicinity of the Long Beach (Rte. 7) and Artesia Freeways (Rte. 91).

Design of these facilities is virtually complete; they are scheduled to go to construction in 1979. The combined facilities will have a parking capacity for around 250 automobiles. District's Planning staff is currently investigating the feasibility of serving these lots and will be making a recommendation to our Board of Directors. Estimated cost for the construction of these facilities is $209,000. Federal financing will pay for $183,000 of the cost while the local match of $25,000 will come from SB 283 funds. An action by our Board of Directors allowed for the legal transfer of these SB 283 funds so that these facilities could be built. It is the District's intent to work cooperatively in projects of this nature so that the best use of available land can be put to beneficial transportation related purposes.

F. SCRTD-Caltrans San Bernardino Freeway Express Busway Coordination

The San Bernardino Freeway Express Busway is an 11-mile exclusive roadway for use of High-Occupancy Vehicles (HOV's). The two unidirectional Busway lanes are built in the median strip or alongside the freeway, and are separated from the automobile traffic lanes by either concrete barriers or a buffer lane with flexible pylons.

Carpools of three or more are permitted on this facility from 6-10 A.M. and 3-7 P.M. Recent data indicated that the people now carried on this Busway by both buses and carpools during the peak hour is the equivalent of three freeway lanes.

One stipulation in the operation of this facility is that the number of carpools that would be permitted to use the Busway would only approach the point in which speeds of District buses would not be significantly reduced. Exhibit 10 includes a chart prepared by the District indicating a car-bus mix for speeds of 55 MPH. To date, speeds of District buses have not been significantly impacted because the bus-carpool mix has not reached a saturation point during the peak hour. However, when and if this occurs other strategies for carpool usage will have to be worked out. Possible measures include metering carpools into the facility or changing the legal carpool occupancy to four or more. This type of arrangement will be negotiated with Caltrans if needed at some future date.

In the interim, staff is working closely with Caltrans to ensure TSM actions are implemented so that the facility works as efficiently and safely as possible. These actions are documented in Exhibit 11. One problem area that was resolved was the realignment and installation of new pylons in the buffer area from El Monte to the Long Beach Freeway. Other TSM actions involved restriping for better and safer operation. Further, the signal timing at Mission Road was changed in early November 1978 by Caltrans after SCRTD had verbally informed the Caltrans Traffic Branch of delays and a major safety problem at the end of the queue of vehicles formed from Mission Road during the morning peak period. This action significantly reduced person-delay to Busway users and eliminated a potential serious accident situation.

EXHIBIT 10

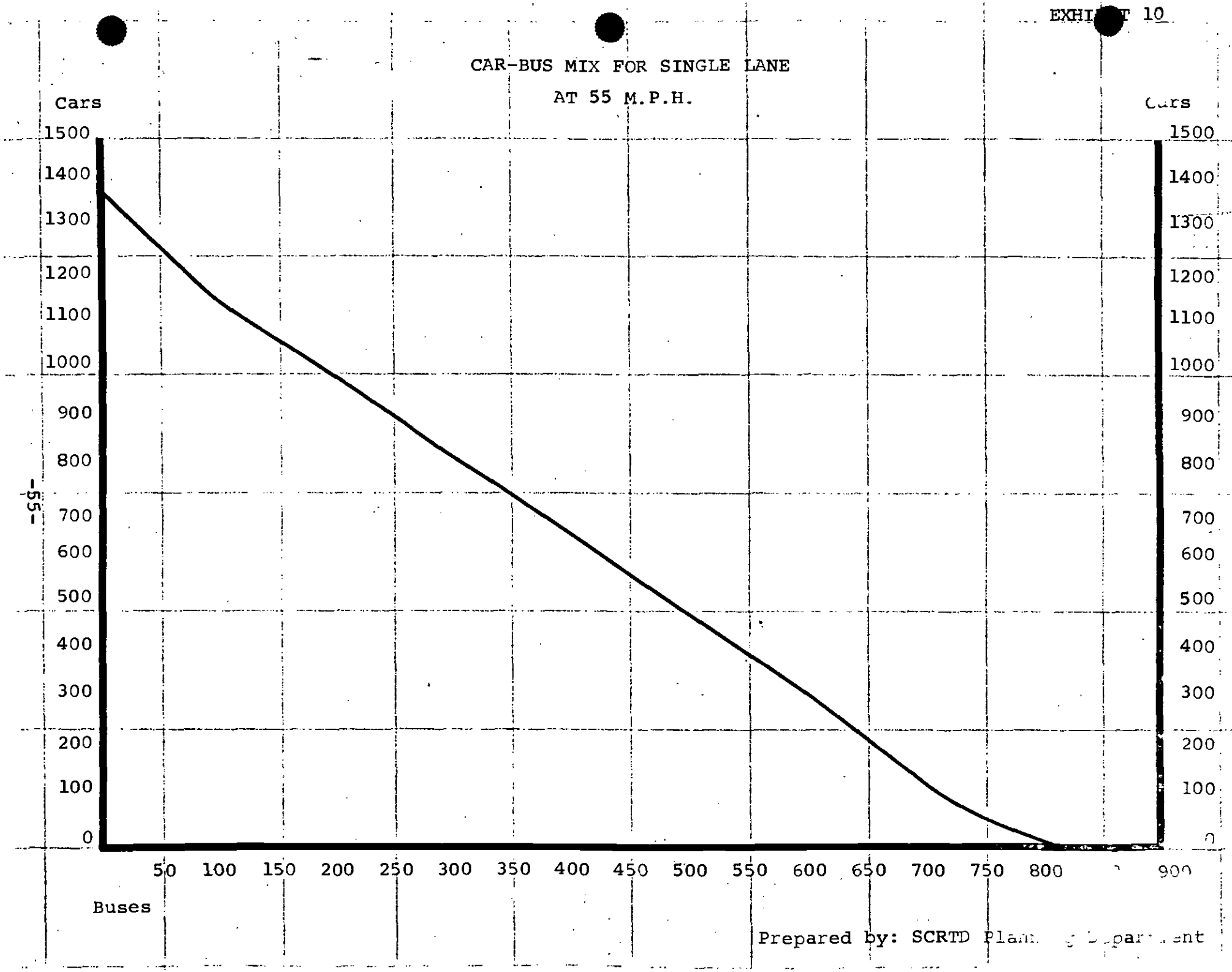

CAR-BUS MIX FOR SINGLE LANE
AT 55 M.P.H.
Cars
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
900
Buses
Prepared by: SCRTD Planning Department

EXHIBIT 11

Southern California Rapid Transit District • 425 So. Main St. • Los Angeles, Calif. 90013 • Telephone: (213) 972-6000

Jack R. Gilstrap
General Manager

December 5, 1978

Mr. R. J. Datel
District Director
Caltrans
120 South Spring Street
Los Angeles, California 90012

Dear Mr. Datel:

Our respective agencies have been cooperatively working together in an effort to make mixed-mode use of the San Bernardino Busway a successful operation. Results of this experiment have been documented in a report prepared by Crain & Associates that has now been finalized. Generally, many of the goals of this project are being realized.

One facet of the operation that is of serious concern to the SCRTD is the violation and safety problem on the easterly segment of the facility (Long Beach Freeway to El Monte). Field observations and reports from our drivers indicate there are a number of vehicles that illegally weave into and out of the Busway on a regular basis. A few of these vehicles are carpools, however, it appears a majority are single-occupant vehicles who weave in and out of the Busway over relatively short distances. This type of operation creates a potentially dangerous situation for Busway and freeway users alike. Our drivers have had to make emergency maneuvers or stops to avoid accident situations numerous times. The Crain Report states that a physical barrier between the Busway lane and freeway lane would be desirable from the safety standpoint.

I would like to request that Caltrans investigate the possibility of constructing a positive type barrier on this facility to help alleviate this safety problem. Additionally, I would like to point out that it appears many of the pylons, which act as a deterrent to illegal weaving, have been knocked out and are not being replaced. You will recall that with the inception of mixed-mode operation, the District

agreed to a 100-foot pylon spacing in lieu of the previous 50-foot spacing. We feel that a 100-foot well-maintained pylon spacing that is realigned closer to the #1 freeway lane would at least help (but not eliminate) the overall weaving violation problem and request Caltrans look into this possibility in the interim. It should be noted that weaving into and out of the Busway was virtually non-existent prior to mixed-mode operation.

I am sure that many of the things we have learned from the El Monte experience can be incorporated on future Bus-on-Freeway designs that are now being planned for this region. Let me assure you that the District intends to fully cooperate with Caltrans in the development of the El Monte and future planned facilities so that the best possible planned transportation system can be realized in this region.

Sincerely,

Jack R. Gilstrap

cc: Deputy Chief M. O'Leary, CHP
Ms. A. Gianturco, Caltrans

RTD 37 '1
REV. 3 '5

DEPARTMENTAL

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

425 SOUTH MAIN STREET
LOS ANGELES

DO NOT INCLUDE MORE THAN ONE SUBJECT IN THIS COMMUNICATION

DATE: January 25, 1979

TO: Paul Taylor

FROM: Ben Urban BEU

SUBJECT: Busway Pylon Installation

I was informed on January 24th by Mr. H. C. Harada of Caltrans that formal headquarters approval has now been obtained to install pylons on the San Bernardino Busway at a 50 foot spacing throughout the entire busway reach (i.e., El Monte to Long Beach Freeway). These pylons will be installed 2 feet from the edge of the pavement.

The earliest the pylons can be made available is around March 5, 1979. It will take at least four days to install the pylons over the entire section.

cc: C. J. Holzer
A. Styffe
W. Packard

BEU:mlc

RTD 37-11
REV. 3/65

DEPARTMENTAL

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

425 SOUTH MAIN STREET
LOS ANGELES

DO NOT INCLUDE MORE THAN ONE SUBJECT IN THIS COMMUNICATION

DATE: January 19, 1979

TO: J. H. Walsh

FROM: A. W. Styffe

SUBJECT: Meeting with Caltrans re Busway Restriping

At 8:30 a.m. this date Messrs. W. L. Packard, [illegible]n Urban and I met with Mr. H. Harada of Caltrans for the purpose of reviewing a proposal for striping revisions on the El Monte Busway.

The specific changes proposed for the Busway are to occur on the westbound lane between the Hospital Station and Mission Road. In this area, which includes a blind curve, the Busway is presently striped in such a manner that the roadway is established immediately adjacent to the southside wall. The proposed change will move the roadway to the right along the northside wall which, at the same time, will cause the emergency lane to be on the left side rather than the right as presently is the case.

Messrs. Packard, Urban and I are unanimously of the opinion that this proposed change will greatly enhance operating safety along this section of the Busway as the relocation of the lane of travel will improve visibility for our operators and motorists, while negotiating the curves and thereby minimize the possibilities of rear end collisions in that area.

It should be noted that this very striping configuration had been recommended by us to Caltrans during the initial negotiations prior to the installation of car pool operations on the Busway. We were therefore pleased to concur in this proposal.

Allan W. Styffe
Operations Staff Analyst

AWS:em

cc: W. L. Foster
W. L. Packard
J. Reyes
B. Urban ✓

G. Ramp Metering - Freeway Express Coordination

Caltrans has an approved ongoing program to "Upgrade and Control the Los Angeles Area Freeway Network." As a part of this program, Caltrans provides bypasses for car-pools and buses on metered ramps so that trip time for HOV's can be improved. These High-Occupancy Vehicles bypass single occupant vehicles waiting at the metering signal prior to entering a free running freeway facility. The objective of the ramp meter bypass is to increase vehicle occupancy by providing time savings for bus users, carpools and vanpools.

The District and Caltrans work closely together to insure that bypass lanes are installed at ramps that are utilized by buses where feasible. This type of action makes efficient use of existing resources in the movement of people.

Exhibit 12 documents the types of ongoing coordination and cooperation related to ramp metering.

EXHIBIT 12

Southern California Rapid Transit District • 425 So. Main St. • Los Angeles, Calif. 90013 • Telephone: (213) 972-6000

April 11, 1979

Mr. C. G. Bork
Senior Transportation Engineer
Caltrans Traffic Operations - East
120 So. Spring Street
Los Angeles, California 90012

Dear Gary:

I would like to inform you of a problem the SCRTD is experiencing at Bus-Only bypass ramps at three locations, and perhaps others should be investigated regarding signing at the metering signal.

The three ramps in question are the Seventh and Eighth Street on-ramps to the southbound Santa Ana Freeway, and the Long Beach Blvd. on-ramp to the northbound Long Beach Freeway.

These on-ramps are striped and signed "STRIPED AREA - BUS USE ONLY". However, there is no signing at the metering signal indicating that buses do not have to stop. This has caused a great deal of confusion among our drivers, many of whom operate runs on lines that use these ramps on only an intermittent basis. Further, it has come to our attention that many of our drivers feel they will be ticketed if they do not stop, because there is no sign indicating they do not have to stop; therefore, they will not even use the bypass lane.

The District would like to request that Caltrans install signs at the metering signal of these ramps, indicating that buses do not have to stop at the signal. Your cooperation in this matter will be appreciated.

Sincerely,

Benedict E. Urban

Benedict E. Urban
Principal Planner

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY EDMUND G. BROWN JR. Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, P.O. BOX 2304, LOS ANGELES 90051

(213) 620-2408

June 11, 1979

Mr. Benedict E. Urban
Principal Planner
Southern California Rapid
Transit District
425 So. Main Street
Los Angeles, CA 90013

Dear Ben:

Thank you for bringing to our attention a situation that may be a problem for R.T.D. drivers using Bus-Only bypass ramps. I would like to assure you and your drivers that the intention of the Bus-Bypass lanes is to allow buses to enter the freeway without having to wait in the metered line or stop at the metered signal. Also, it is not the intention of the California Highway Patrol to issue citations to bus drivers legally and safely taking advantage of this time saving installation.

Our recently approved signing standards for Bus-Only bypass lanes calls for a sign opposite the meter signal indicating that traffic in the preferential lane (either left or right lane) should not stop.

While these signs will be installed as a part of the normal sign upgrading program, I will expedite the installation of the signs at the three locations you mentioned in your letter.

Thank you for bringing this matter to my attention.

Sincerely,

C. G. BORK
Senior Transportation Engineer
Traffic Operations East

Chapter III. Extra-Modal TSM Actions

A. Staggered Work Hours

The staggering of work hours can greatly enhance the District's ability to carry additional passengers by spreading the peak period. This strategy can be particularly effective in very densely populated areas such as the Los Angeles Central Business District or the Wilshire Corridor. Our heavily traveled lines in these areas virtually do not have any available capacity to carry additional passengers. It is felt staggering of work hours in these areas will not be counter-productive to carpooling, as may be the case in less dense, suburban areas. The District's system has available capacity to absorb additional riding in these less dense areas thereby not requiring additional trips to carry demand.

Staggering of work hours will require the cooperation of private and public organizations in these highly dense regions. Exhibit 13 shows how the District is informing the various concerns of the benefit of staggering work hours. This TSM action would enable the District to carry additional people with the same pieces of equipment.

EXHIBIT 13

Southe.. California Rapid Transit District • 425 So. Main St. • Los Angeles, Calif. 90013 • Telephone: (213) 972-6000

May 25, 1979

Mr. J. Richard Hannan
General Manager
Central City Association of Los Angeles
523 West Sixth Street, Suite 200
Los Angeles, California 90014

Dear Mr. Hannan:

As promised, I am pleased to transmit to you 135 copies of our monograph on staggered work hours requested by you at our breakfast meeting of May 8.

It is my understanding that you intend to mail this to your membership, and for this we at SCRTD are grateful.

Please note that the monograph includes mention of a telephone survey rendered by this organization regarding staggered work hours. I am attaching one copy of a further report on this matter for your scrutiny and possible use.

If we may be of further service to you, please let me know.

Sincerely,

George L. McDonald

George L. McDonald
Manager of Planning & Marketing

Attachment

cc: Mr. Marvin L. Holen, President,
SCRTD Board of Directors

Mr. Jack R. Gilstrap
General Manager, SCRTD

STAGGERED WORK HOURS AND THE RTD

The Energy Shortage Contingency Plan recently adopted by the Board of Directors of the Southern California Rapid Transit District includes a number of strategies that will enable the District to absorb extra passengers in the energy crisis. The most important and beneficial of these strategies - staggered work hours or "flextime" - is one that must also involve a high level of understanding and cooperation from agencies, organizations and individuals outside the SCRTD - particularly those private and public employers between downtown Los Angeles and Century City, where most of our bus overcrowding is taking place.

Transportation Advantages of Flexible Work Hours

Most large transportation facilities, including both the Los Angeles freeways and the SCRTD, experience severe "peaking" problems. This means that most people want to use highways or ride buses during a few hours in the early morning and a few hours in the late afternoon. Outside of these hours, the freeways and buses have considerable capacity. SCRTD buses carry at least 50% of their passengers during the 3-hour morning peak and the 3-hour afternoon peak.

When the 1979 SCRTD Energy Plan analysis was done three months ago, 25 of the 61 SCRTD lines going downtown had crush loads during the peak period. The remaining 36 lines only had room for about 10% more passengers. In recent weeks, the overcrowding of lines has become much more serious; the SCRTD system has had to absorb up to 24% more passengers each day as total daily boardings have increased from 1.12 million to over 1.4 million. Many of these passengers are riding in already-overcrowded lines in the west and central areas.

Looking at the peaking problem of buses, it is apparent that a moderate change in work hours could allow SCRTD to carry many more passengers. Adding 1 1/2 hours to each of the peak periods would allow each of our peak-period-only buses to travel 43 additional miles. Right now, each of our buses picks up approximately 3.3 passengers for each mile it operates. A total of 3 hours of extended service per day would allow each of the peak-period-only buses to carry 141 extra passengers. With the extended service, these buses would be able to pick up over 86,000 people per day. Allowing for transfers, this would result in a total of over 62,000 one-way trips per day.

As we found in our Energy Plan, staggered work hours and 300 additional buses would allow us to immediately carry 9.1% of work trips instead of the 5.6% we carried before the crisis. In a severe crisis, widely staggered working hours would allow us to

accommodate more than 10.5% of work trips in Los Angeles County.

In addition, flexible working hours make it easier for employees to use transit--especially employees who use the less-frequent services coming from outlying areas. Employees on flextime can choose their working hours based on bus schedules.

It has been found that staggering work hours in dense employment areas (such as the central core and the Wilshire corridor) has very little effect on carpool formation. This is because even with flextime, the large number of employees arriving or leaving at any one time ensure that carpool matches can be made.

Experiences with Flextime and Modified Flextime

RTD recently conducted a telephone survey of 25 Southland employers. This survey revealed that 13 of these companies are on flextime of one sort or another, while 3 are on a short work week. In general, the employers use a wide variety of flextime schedules. While one firm allows only a one-hour leeway (starting time between 7:30 and 8:30 a.m.), some companies allowed two hours of leeway, and still others have set a period between 6:30 a.m. and 6:00 p.m. during which employees may work any eight hours. As a direct result of the energy crisis, two companies presently on flextime are considering a 4-day work week.

Companies implementing flextime have noted certain advantages--including reduced tardiness, increased productivity and reduced sick leave. In addition, the flexible hours have allowed employees to adjust their work hours to fit bus or carpool schedules, thus resulting in more ridesharing.

Because of the benefits of flextime, especially in reducing congestion on downtown streets and freeways and allowing more passengers to use buses in a crisis, the SCRTD is asking employers in the Los Angeles regional core and the Wilshire District to consider implementing some form of staggered work hours if the energy crisis continues.

The District emphasizes that we are not asking employers in the outlying areas to stagger work hours. Buses in outlying and suburban areas that are not headed downtown currently have adequate capacity even in the peak periods.

It is our purpose to provide a service that is complementary to carpools, vanpools, and buspools, so that the most people may be accommodated by ridesharing during a crisis. In addition, the District's present level of service may not accommodate staggered work hours implemented by employers in outlying industrial parks. For these reasons, the District's Contingency Plan only asks for staggered work hours in high-density areas.

SCRTD Planning Department
Patricia Van Matre

B. Coordination of Accessible Fixed-Route and Accessible Demand-Response Bus Stops

A vast array of paratransit services in Los Angeles County was identified by the District's Paratransit Advisory Committee in 1978. As a result of this work, there is now a potential for stop coordination between District line-haul service and these various small operations. This coordination will make the use of public transportation more effective and efficient. Exhibit 14 documents the District's efforts in this regard in the past year.

EXHIBIT 14

RTD 37-11
REV. 3/65

DEPARTMENTAL

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

425 SOUTH MAIN STREET
LOS ANGELES

DO NOT INCLUDE MORE THAN ONE SUBJECT IN THIS COMMUNICATION

DATE: June 12, 1979

TO: Ben Urban

FROM: Patricia Van Matre

SUBJECT: Coordination of Accessible Fixed-Route and Accessible Demand-Response Bus Stops.

In March, 1978, our Board of Directors adopted the final report of the District's Paratransit Advisory Committee. A number of the report's recommendations addressed the need to establish coordinated transfer points between accessible fixed-route and accessible demand-response systems.

One of the criteria for choosing the original 23 accessible routes was their proximity to existing demand-response services. In the time between planning and implementation, many of the demand-responsive services were discontinued and others were established.

District staff has used the Paratransit Advisory Committee's Inventory of Paratransit Services to identify potential systems for stop coordination. This inventory is currently being updated through the joint efforts of Southern California Association of Governments and District staff.

So far, District staff has met with or established contact with representatives of demand-response systems in Glendale, Pasadena, Montebello, West Los Angeles, East Los Angeles and the Pomona Valley (Pomona/San Dimas/Claremont/La Verne). Specific transfer locations meeting the criteria suggested by the Paratransit Advisory Committee have been established in Montebello, Glendale, Claremont and Pomona. An example of the procedure followed in establishing such coordinated stops is attached.

Additional work is being done with individual cities, the County of Los Angeles and Caltrans to eliminate barriers at bus stops along accessible routes. The District has completed an investigation of all bus stops located along the initial 23 routes which identified all barriers at these bus stops. The District sent letters to all concerned cities regarding specific improvements needed at stops within their jurisdictions. Subsequently, District staff has been working with a number of these cities on specific stop improvements. In the next year, the District will be preparing a joint report with Los Angeles City identifying further stop improvements within the City.

Attachment

RTD 37-11
REV. 3/65

DEPARTMENTAL

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

425 SOUTH MAIN STREET
LOS ANGELES

DO NOT INCLUDE MORE THAN ONE SUBJECT IN THIS COMMUNICATION

DATE: March 22, 1979

TO: Pat Van Matre

FROM: Fred E. Ybarra FEY

SUBJECT: Bus Stop Coordination

On Wednesday, March 21, I met with Mary Sandoe and her staff, from the Get About Transportation Service, to discuss the possibilities of coordinated bus stop locations. RTD Accessible Routes 440 and 480 operate in the Get About Service area.

Get About serves the cities of Pomona, La Verne, San Dimas, and Claremont, therefore, because of the size of their service area, two (2) transfer locations were mutually agreed upon. They are:

1) Foothill Blvd-Towne Ave.- Line 440

   Both of these stops have public telephone access and are on the border between Claremont and Pomona. However, the telephones are not as yet accessible to wheelchair passengers. The stop locations are well lit in an active business area.

2) Keystone Ave. between Indian Hill Blvd. and Mills Ave. Line 480 layover zone.

   Since Line 480 lays over at this location for approximately 20 minutes and operates on a 20-minute schedule, there will always be a bus in the layover zone. This eliminates the possibility of a passenger missing a bus, also it allows passengers to board the bus during its layover and wait until it begins service.

In addition, Get about is currently working with its service area cities and Caltrans to obtain curb ramps and sidewalks that now make certain areas inoperable by RTD's fixed accessible routes.

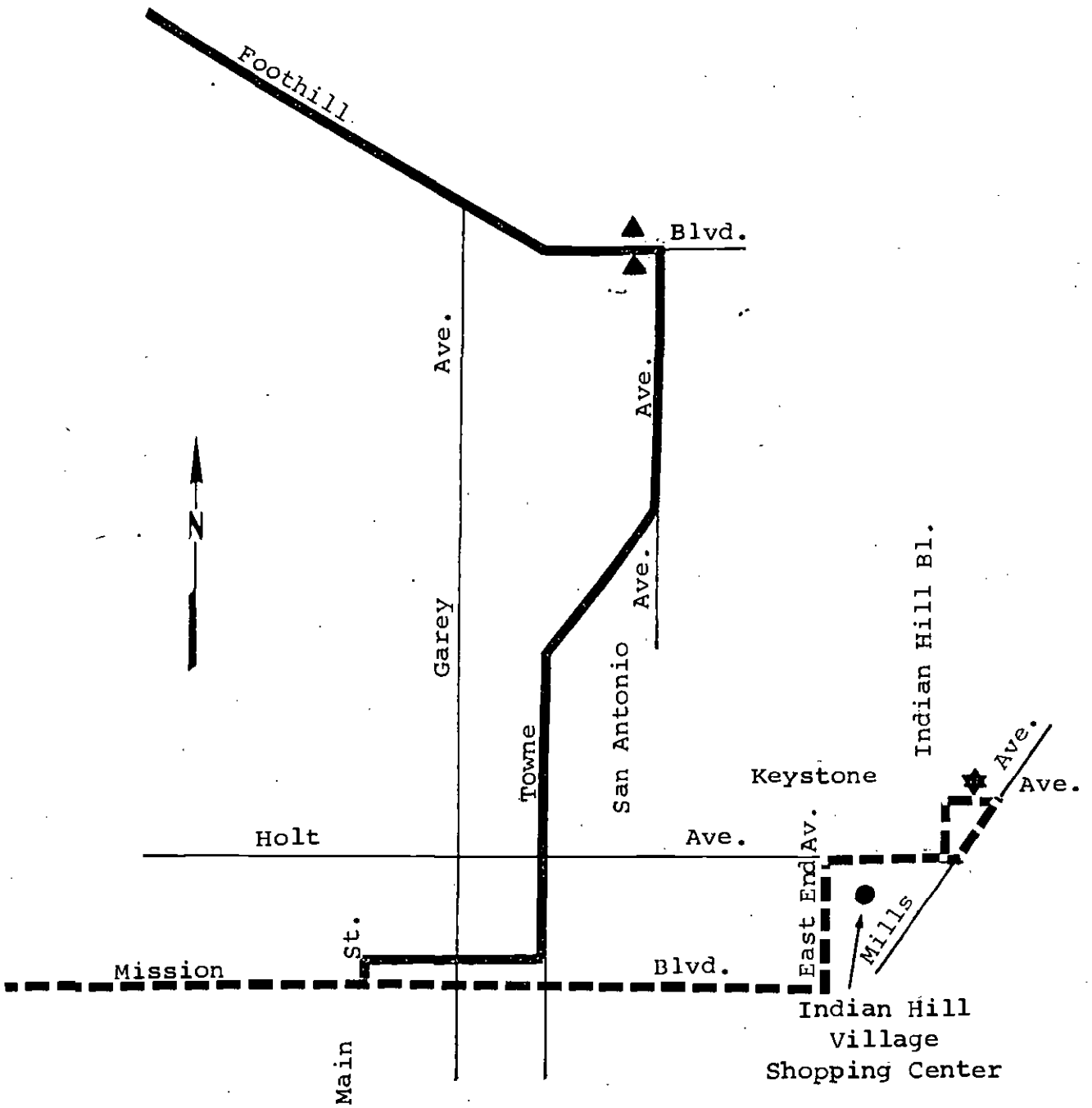
Incidentally, it would be of benefit to handicapped passengers who utilize these stops to have additional accessible related information provided for at each coordinated bus stop. This holds true for the already established coordinated stops with other agencies and any to be established in the future.

cc: Mary Sandoe
Get About Transportation

FY:mez

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

Proposed Coordinated Bus Stops
With Get About Transportation



LEGEND

Coordinated Bus Stops

▲ Line 440

✡ Line 480

Bus Planning
Not to Scale
FEY· 3/26/79

Acknowledgements

Report Prepared by:

Benedict E. Urban
Principal Planner
SCRTD Planning Department

Under the Direction of:

Paul C. Taylor
Director of Bus Planning
Southern California Rapid
Transit District