LACMTA STOPS AND ZONES DEPARTMENT POLICIES AND PROCEDURES MANUAL



I. PURPOSE

This module describes best practice on how to establish a new bus stop or bus zone.

II. POLICY SUMMARY

It is the policy of the Stops and Zones department to provide M.T.A. customers safe, accessible bus stops and bus zones with which to board and alight.

III. REFERENCES

1998 California Vehicle Code, Sections 21458 subdivision (a) paragraph (1), 22500 subdivision (c), 22502 subdivisions (b) and (d), and 22512.

Public Utilities Code, Part 3, Chapter 5, Section 30631.

"Establishment of Bus Stops and Zones Policy and Criteria" dated April 1976. Approved by the So. Calif. Rapid Transit District Board of Directors.

Refer to the following Stops and Zones department policy module:

Policy 5.0 Identification of Bus Stop Locations

IV. RESPONSIBILITIES

Stops and Zones employee classifications directly charged with the authority of establishing a new bus stop or bus zone are:

- Stops and Zones Facilities Maintenance Manager
- Stops and Zones Supervisors

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LOCATING / SELECTING A BUS ZONE

Safety of our passengers and equipment shall be the number one concern in locating /selecting all new bus stops. Study the intersection and determine where the bus can stop safely and with the least objections from the residents or businesses adjacent thereto. Establish the zone where the least amount of parking will be affected. Experience will teach you what types of businesses will resist your efforts.

Always ascertain the number of Lines operating at the intersection and bus turning moves. If there is more than one Line operating in the intersection and one of the Lines turns there, it will create a common stop situation. After you familiarize yourself with the conditions at the intersection selected, then review it with the local authority in charge of bus stop locations. In dealing with the local engineer, police department, city manager, etc., remember that you will probably have to make many requests of them in the future, and you need their cooperation. Present your choices to them with engineering logic. Good, clear sketches should accompany any requests for proposed bus stop locations. In most cases, thorough fieldwork prior to meeting with the City or County representative will help present your proposal better.

There are pros and cons regarding the establishing of bus stops nearside versus farside. Each location should be governed by the conditions at each intersection.

The following factors must be considered in determining the best stop locations: The street's traffic capacity, a change in bus route direction; the origin and destination of patrons boarding or leaving the bus; operation of traffic signals controlling the intersection. Layover zone and fare break zones where the coaches are required to layover while making their fare checks must be considered on a more selective basis than that of a regular coach zone. The terminal zone cannot be established across driveways or in such a manner as to block traffic. Desirable locations where a restroom facility can be provided for our operators and also afford them the greatest amount of protection by keeping them in a well-lighted street to lessen the hazards of being a victim of armed robbery or assault must be considered.

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LOCATING / SELECTING A BUS ZONE (Continued)

6.1 NEARSIDE BUS STOPS: ADVANTAGES:

Buses accelerating from a nearside stop are under better control in the intersection than vehicles decelerating at a farside stop. Operators attention is not diverted by cross traffic and turning vehicles when pulling into a nearside stop. Compared to a farside stop, nearside stops eliminate the practice of loading and of unloading at non-established loading points, and eliminate the tendency for persons to run out into the street, trying to board a bus at a non-established loading point while it waits for a signal change. Operators have a direct view of three directions from which passengers may come at a nearside stop. Farside stops provide direct view only in front with unsatisfactory view of sides. A bus stopped at an intersection waiting for a signal change at approach to farside stop may encounter difficulty pulling into curb lane due to vehicles attempting to pass on the right side.

Farside stops encourage greater approach speed near the intersection and more frequent signal violation in effort to beat the signal in order to reach farside stop. Nearside stops encourage the stopping and slowing at intersections and become much easier for the bus to leave the curb from a nearside stop.

Many riders automatically wait for their bus at a nearside stop out of habit. Refusal of a bus driver to load or unload at a non-established point while waiting for a signal change, at the approach to a farside stop irritates some riders. At a nearside bus stop, buses continue to load while waiting for traffic signals to change, thus making productive use of time. In suburban areas, nearside stops eliminate curb parking near intersections by location of nearside bus stops, thereby increasing street capacity.

6.2 FARSIDE STOPS: ADVANTAGES:

6.2.1 <u>Safety.</u> At nearside stops, passengers leaving a bus have the tendency to try to cross in front of the bus. This situation is not present at a farside stop, which also eliminates hazardous condition of vehicles making right turns in front of a stopped bus that could start up suddenly. More access space is available for pulling to the curb, which reduces the potential of sideswiping parked vehicles. Rear exit doors are spotted closer to the curb at farside stops. Farside stops eliminate blocking the view

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LOCATING / SELECTING A BUS ZONE (Continued)

6.2 FARSIDE BUS STOPS: ADVANTAGES (Continued)

6.2.1 Safety. (Continued)

of traffic signals by a bus, which is common at a nearside stop. Accidents are reduced by avoiding the rear end of the bus protruding into another traffic lane at nearside stops.

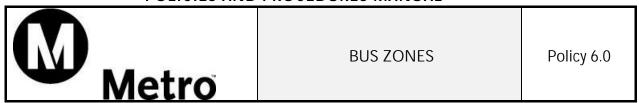
- 6.2.2 <u>Convenience.</u> It is easier for a bus to enter a farside stop in urban areas. Also, farside stops encourage the use of the back door for exiting since it is closer to crosswalk than the front door.
- 6.2.3 <u>Traffic.</u> Farside stops eliminate congestion of right turning vehicles waiting behind loading buses at nearside stop. Right turning vehicles stalled at crosswalks due to heavy pedestrian movement do not hold up buses as they can use the inner lane to approach a farside bus stop. Farside stops also expedite right turns permitted on red signal that would ordinarily be blocked at nearside stop.

6.3 OTHER FACTORS TO BE CONSIDERED:

6.3.1 <u>Special Conditions</u>. Pedestrian generator locations: Bus stops should be located where the greatest amount of pedestrian traffic is generated. Bus patrons should not be required to cross major streets when this can be avoided. This factor will quite often determine the proper location for the bus stop, whether it be located nearside or farside.

- 6.3.2 <u>Interchange and Transfer Points</u>. It is desirable to provide bus zones in such locations that interchange between lines may be affected conveniently without crossing major streets.
- 6.3.3 <u>Similarity.</u> At the junction of two lines proceeding in the same direction, the lines should have a common stop at their junction to avoid the confusion of two loading points for the same direction of travel. The bus routes will generally indicate the most suitable loading points to satisfy these conditions. At intersections where the street width changes abruptly, it is usually advisable to locate the stops at the wide section; whether near or farside, as a means to minimize interference with other traffic.

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LOCATING / SELECTING A BUS ZONE (Continued)

- 6.3.4 <u>Physical characteristics of desirable locations</u>: There are physical features that sometimes determine the proper location for a bus stop. These include pedestrian tunnels, irregular and offset streets, intersections, boulevard stops, existing sidewalks, crosswalks, etc. It is frequently desirable to concentrate all pedestrian movements into one crosswalk to reduce pedestrian conflict areas. This may call for a combination nearside stop on one side, with a farside stop on the other.
- 6.3.5 <u>Undesirable Locations</u>. Similarly, there are numerous locations where physical barriers and objectionable adjustment develops. Rule out those locations as bus stops. These include high curbs, drainage structures, hazardous driveways, alleyways, poles, trees, shrubs, steep grades and proximity to bars and nightclubs.

The above clearly indicates that each stop location must be evaluated individually.