

Active Transportation... **4**



Active Transportation

In this report, the term Active Transportation refers to all non-motorized transportation and transit. In the project area this includes pedestrians, bicyclists, and buses. Creating an active transportation network is essential for promoting community cohesion, social justice, and economic vitality of the project area.

This chapter is composed of three sections: 1) Pedestrian Network, 2) Bicycle Network, and 3) Transit Network.

Pedestrian Network

Sidewalks

Of primary concern to the Mitigation and Enhancement Subcommittee was the maintenance and enhancement of the existing network of pedestrian sidewalks. For urban neighborhoods, it is the public sidewalk that creates social cohesion, fostering the ability of neighbors to casually meet and get to know and respect each other. The city's grid of sidewalks forms an excellent pedestrian network. Maintaining the pedestrian grid is as essential as maintaining the vehicular grid. Maintaining and enhancing its dimensions, particularly the width of the sidewalk, its relationship to the road, especially the dimensions of the boulevard that buffers it from the road, the setback from adjacent structures, and the amenities it affords a walker, are all important to creating a pedestrian network that contributes

to the health and welfare of the community it serves.

Sidewalks on commercial streets should be 12 to 14 feet wide, typically paved from building face to curb. This allows many pedestrians to congregate at commercial destinations and it allows the merchant the opportunity to engage prospective customers. The edge between private and public should be purposefully blurred, giving the neighbor, typically merchants, not only the ability to use the sidewalk as a marketplace but the right and duty to police the space in front of their stores.

Paving between the storefront and the curb also allows the pedestrian the ability to park their car and immediately join the pedestrian world. Parked cars serve as a buffer, essentially a group of moveable bollards that protect pedestrians. In the event that parked cars are not available, a wider sidewalk should be used.

Regardless of parked cars, space for a 6 foot amenity zone adjacent to the curb should be allowed. The amenity

zone provides an additional buffer between the curb and the walker. Typically, the amenity zone is populated with items that enhance the pedestrian environment, such as lighting, trees, benches, bus shelters, newspaper racks, drinking fountains, kiosks, and public art.

Sidewalks in residential areas are less demonstrative but also must be "owned" by the residential neighbor who can police the department of pedestrians. A residential sidewalk is part playground and fosters a child's first independent encounters with the big wide world. It must be safely buffered, preferably with a boulevard and parked cars from traffic. Typically the dimensions of the walk and the boulevard are both six feet. On community streets – residential streets with commercial nodes at major intersections – the six foot boulevard typically is paved from storefront to curb.

The original construction of I-35W disrupted the pedestrian grid. It is essential that new bridges over and under the freeway encourage pedestrian movement. Fifteen-foot sidewalks with bollards (or other safety barrier), lights, and even vegetation are modest mitigation for the loss of the vibrant pedestrian environment that was present before the freeway was constructed.

It is not enough to replace the physical width of the sidewalk. It is necessary to approximate the psychological space that has been lost. In a residential setting, the pedestrian typically

has a boulevard and parked cars protecting them from speeding vehicles. Snow storage occurs on the boulevard, not on the walk. The pedestrian environment includes the green of a residential yard or on a commercial street, an inviting building. Replacing this psychological space requires a wider sidewalk. The Mitigation and Enhancement Subcommittee recommends that the walks on bridges be 15 feet wide.

Crosswalks

Crosswalks on commercial streets should be at least 10 feet wide and defined by unique pavement. The City of Minneapolis uses double curb ramps at commercial intersections only. On residential streets, the crosswalk is typically 8 feet wide and the curb ramps are placed between the two crosswalks or on road with the least vehicular traffic. Typically the City of Minneapolis only stripes crosswalks at intersections with semaphores. The Mitigation and Enhancement Subcommittee recommends that PAC review the design of crosswalk and signals during the final design phase of this project.

Medians

Based on observation and research, the Mitigation and Enhancement Subcommittee, strongly recommends that 18-foot wide medians be provided as a pedestrian refuge wherever the pedestrian is expected to cross more than 60 feet of pavement.

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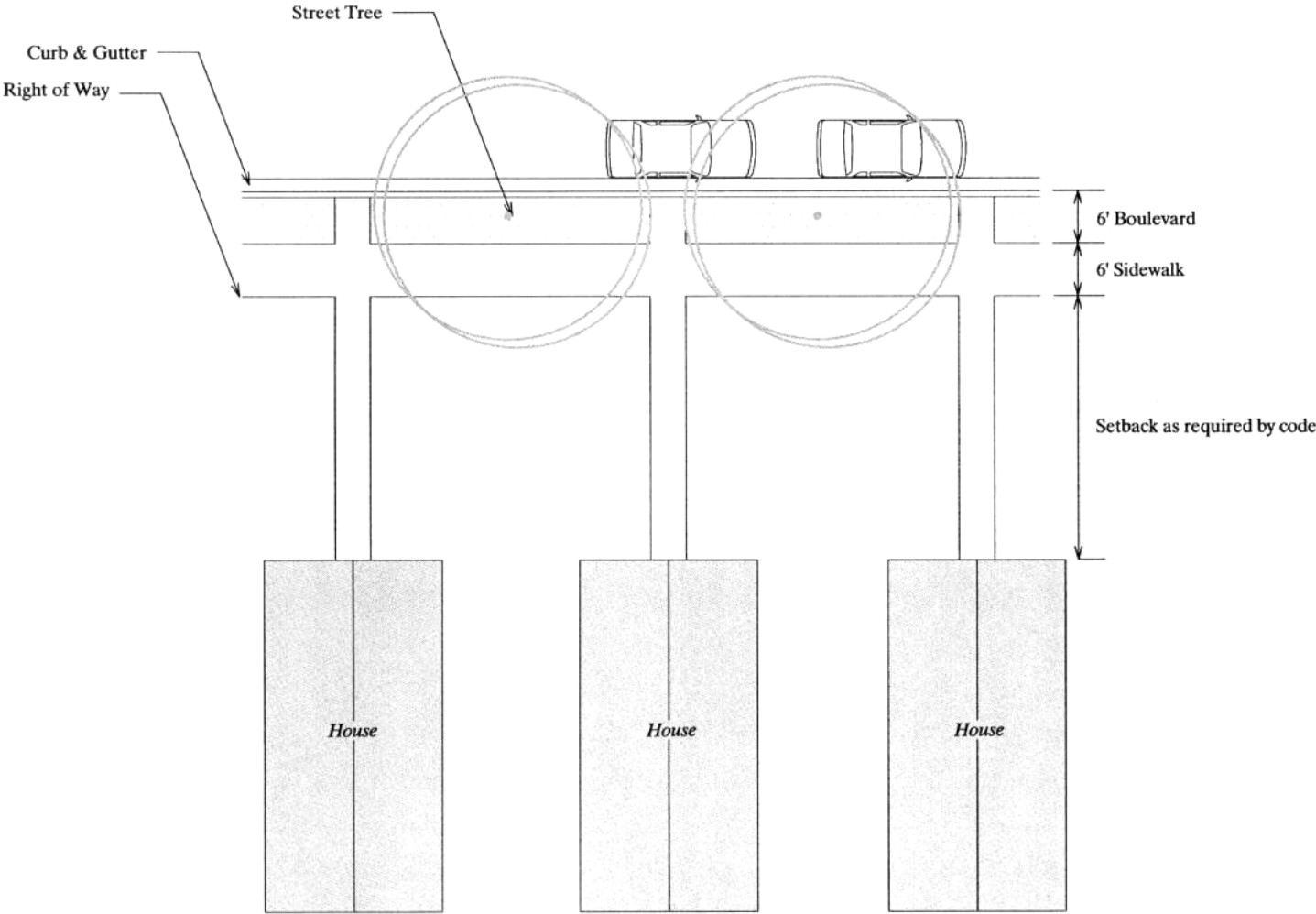
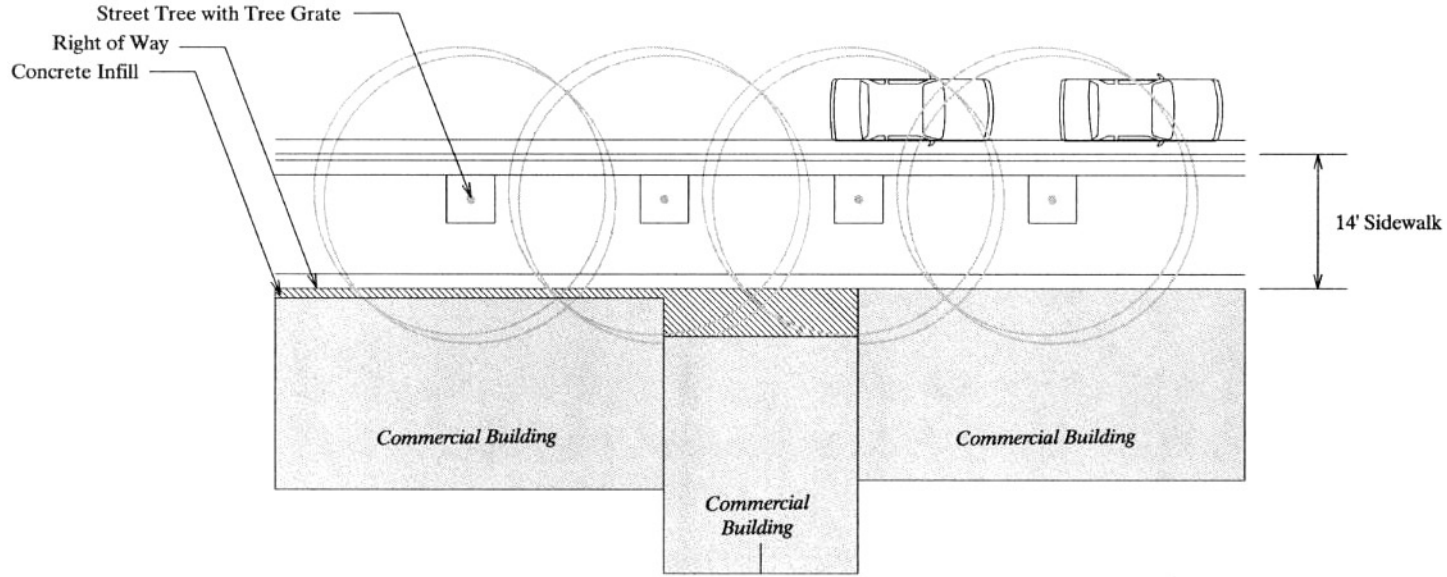
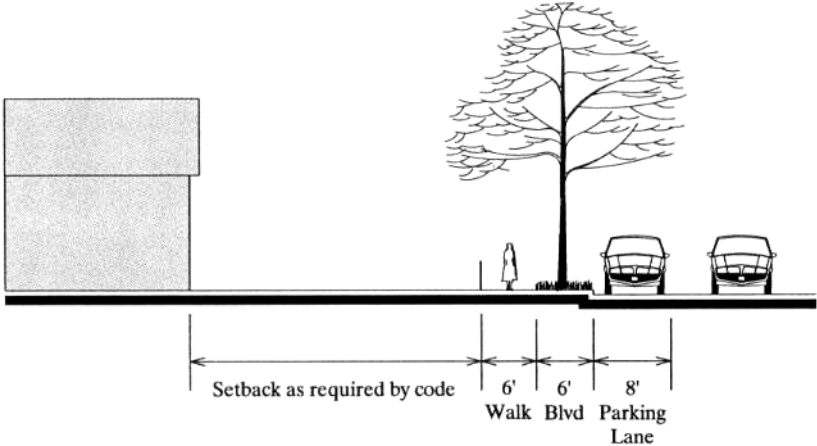
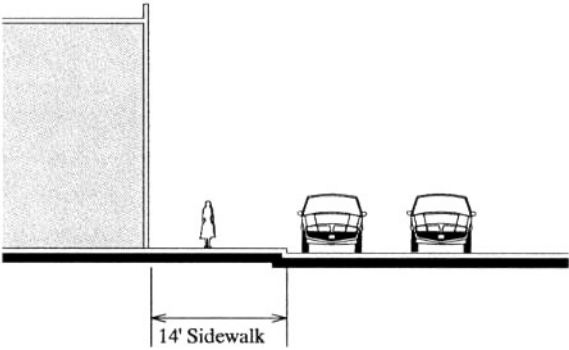


Figure 14A (above): Sidewalks on Commercial Streets. A cross section and plan of a sidewalk on a commercial street. Commercial sidewalks are typically 14 feet wide to accommodate pedestrian and commercial use, such as sidewalk cafes. Typically an amenity zone filled with trees, lights, mailboxes, and other street furniture, buffers the pedestrian from the street. This same plan and section also apply to the commercial nodes of community streets.

Figure 14B (right) : Sidewalks on Residential Streets. A cross section and plan of a sidewalk on a residential street. Residential sidewalks are typically six feet wide with a six foot boulevard planted with regularly spaced trees that buffers the pedestrian from the street. This same plan and section also apply to the residential sections of community streets.

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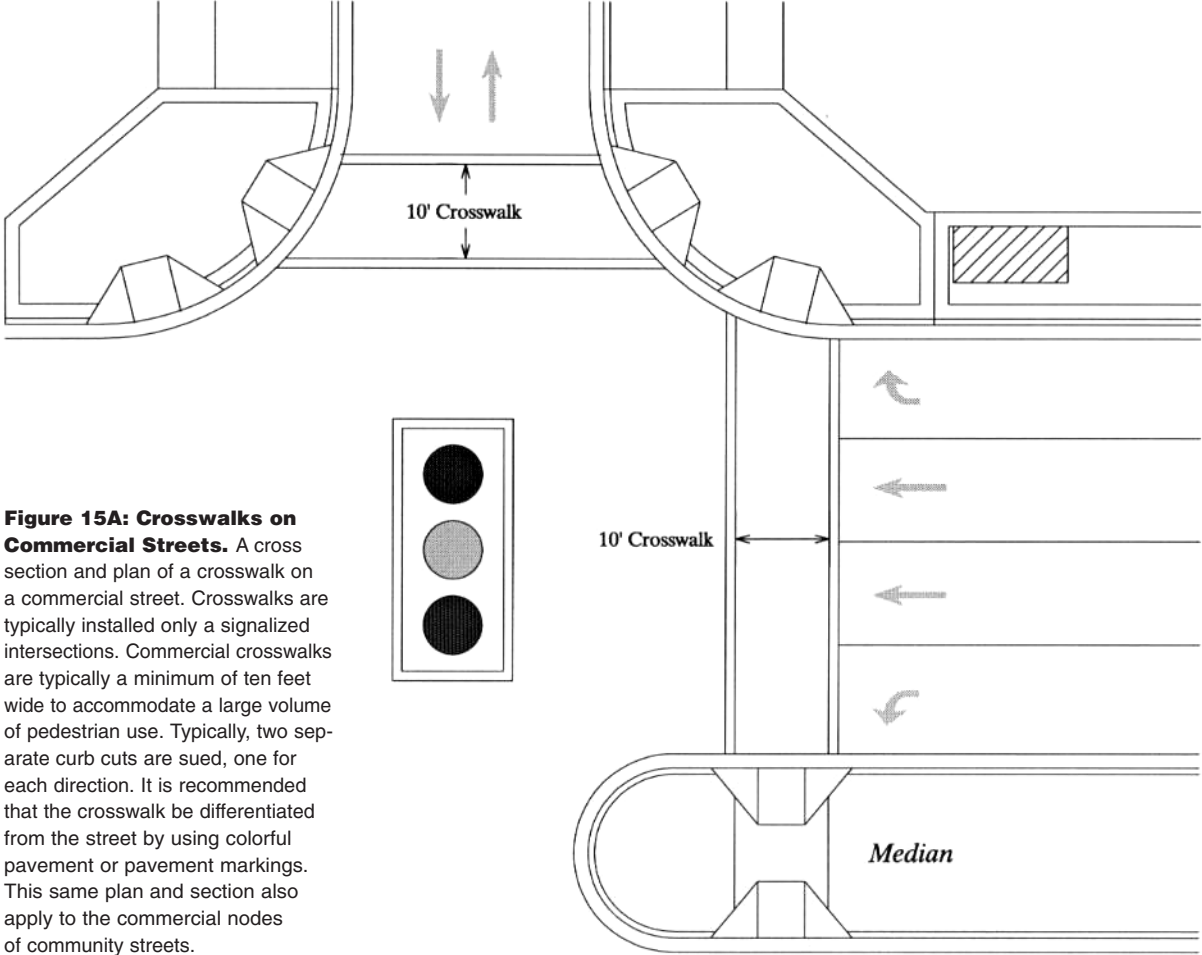
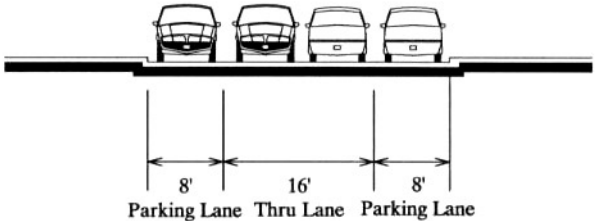
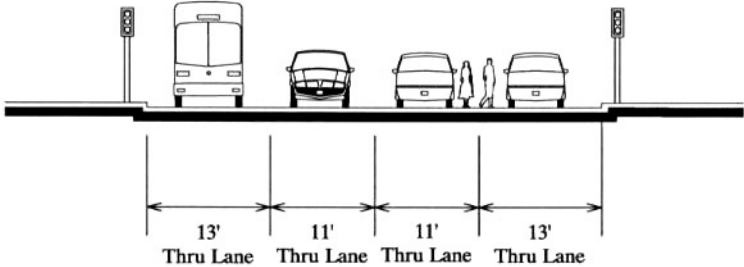


Figure 15A: Crosswalks on Commercial Streets. A cross section and plan of a crosswalk on a commercial street. Crosswalks are typically installed only at a signalized intersections. Commercial crosswalks are typically a minimum of ten feet wide to accommodate a large volume of pedestrian use. Typically, two separate curb cuts are used, one for each direction. It is recommended that the crosswalk be differentiated from the street by using colorful pavement or pavement markings. This same plan and section also apply to the commercial nodes of community streets.

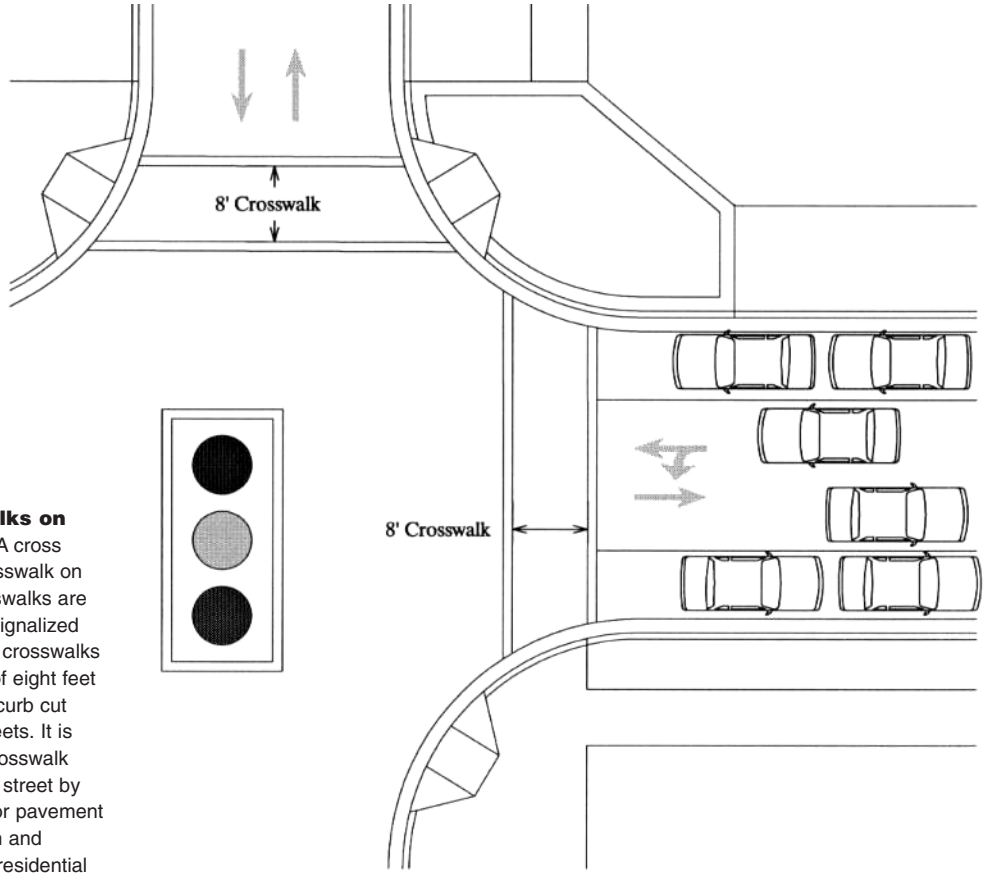
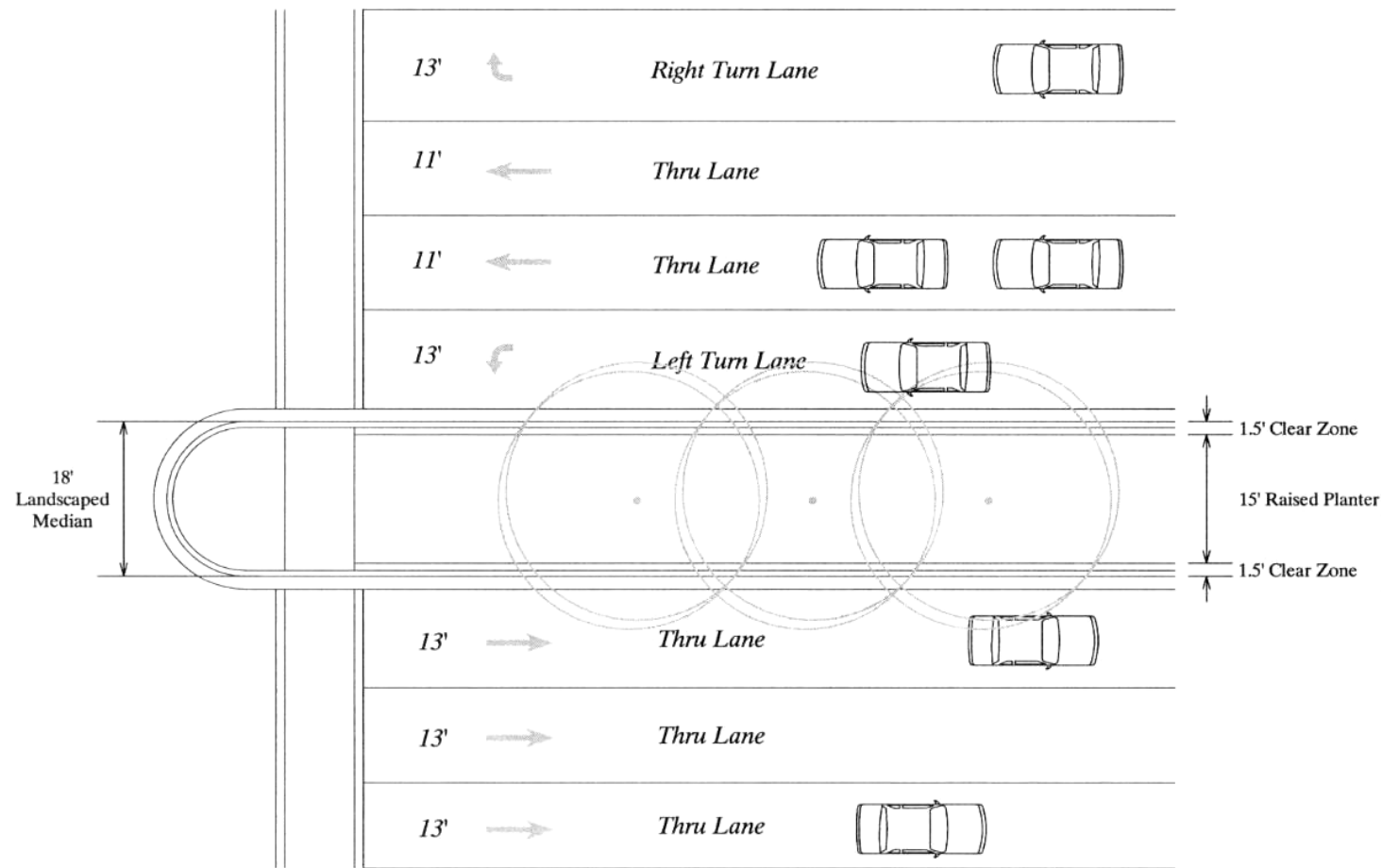
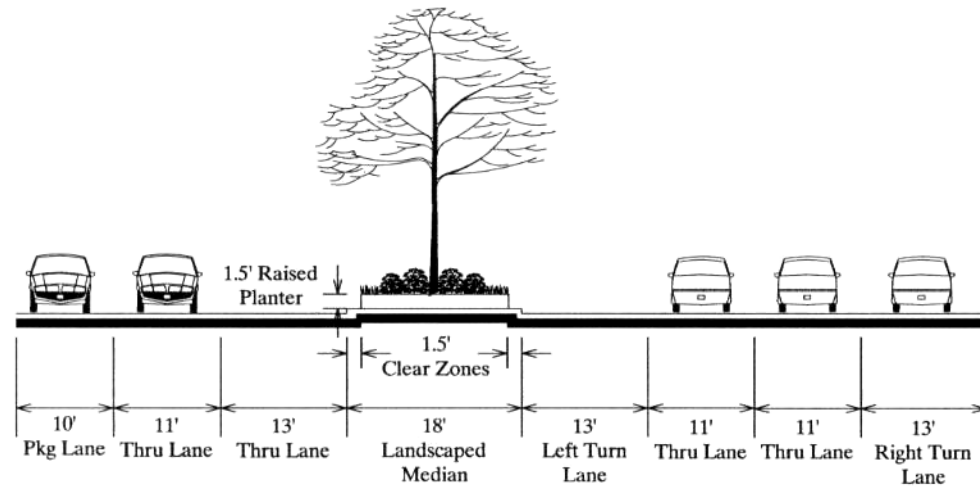


Figure 15B: Crosswalks on Residential Streets. A cross section and plan of a crosswalk on a residential street. Crosswalks are typically installed only at a signalized intersections. Residential crosswalks are typically a minimum of eight feet wide. Typically, only one curb cut is used on residential streets. It is recommended that the crosswalk be differentiated from the street by using colorful pavement or pavement markings. This same plan and section also apply to the residential sections of community streets.

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Bicycle Network

The City of Minneapolis enjoys a comprehensive network of bicycle trails and routes. It's network is well used, particularly by commuters. Providing on-street and off-street bicycle routes is essential for creating a complete transportation system. Although all roads should accommodate bicycles, designated on-street bicycle routes should incorporate exclusive lanes that have been signed and striped. The width of an on-street route varies from five feet to eight feet.

In the project area, the Mitigation and Enhancement Subcommittee recommends that designated routes occur on the 29th Street Greenway, 34th Street, Blaisdell Avenue, and 1st Avenue. Except for 34th Street, these routes are currently designated. The

designated route on 34th Street would replace the one-way routes on 35th and 36th Streets. To complete this route, the Subcommittee and the PAC are also recommending that a new pedestrian bridge be installed over the freeway at 34th Street.

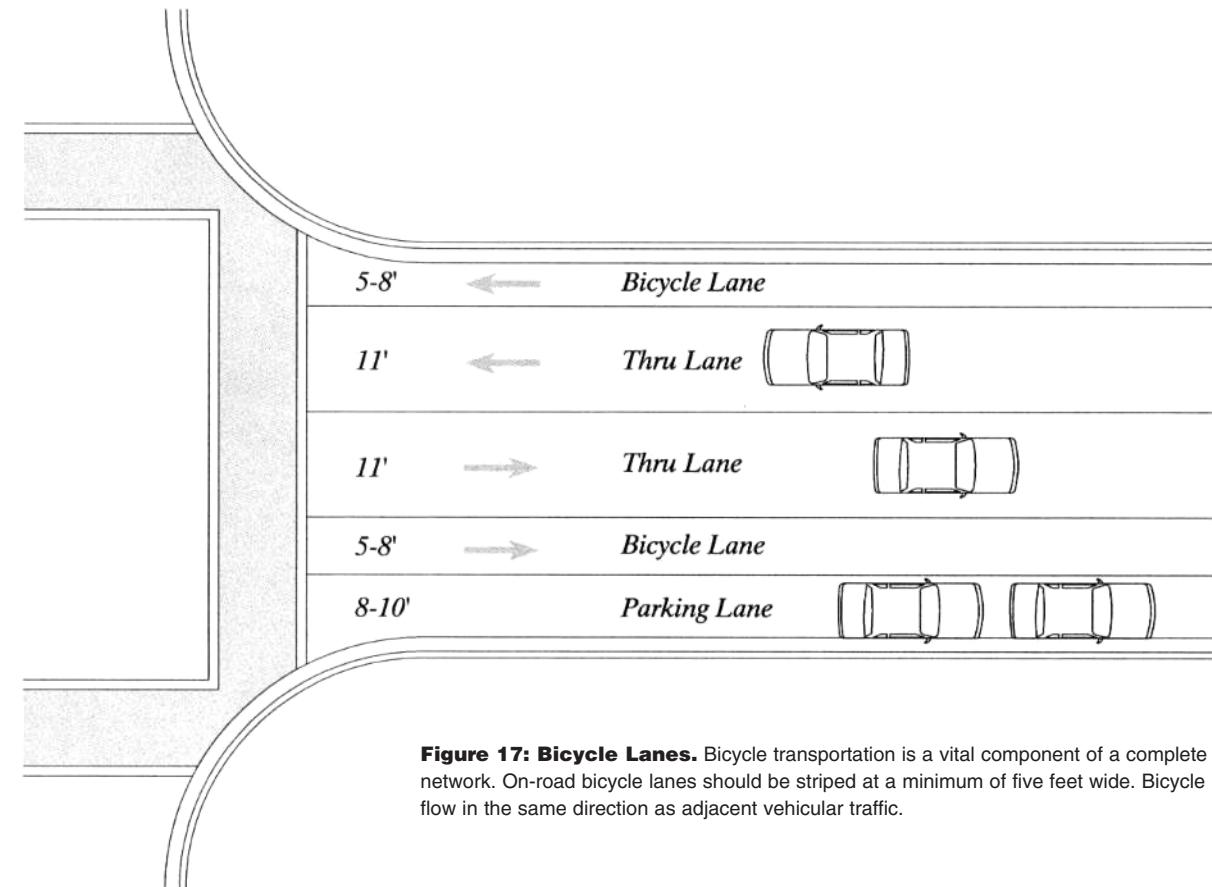
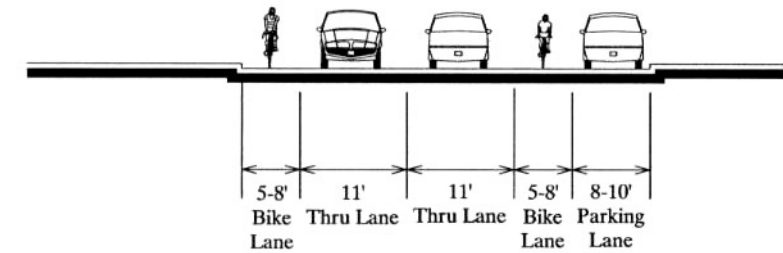


Figure 17: Bicycle Lanes. Bicycle transportation is a vital component of a complete transportation network. On-road bicycle lanes should be striped at a minimum of five feet wide. Bicycle lanes should flow in the same direction as adjacent vehicular traffic.

Figure 16: Medians. Medians would typically be located only on commercial streets that are wider than 60 feet, providing a pedestrian refuge and space for plantings and other community amenities. It is recommended that the minimum width of a median be 18 feet.

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Transit Network

Some of the highest ridership of transit occurs in the neighborhoods adjacent to I-35W in South Minneapolis. It is important that the transit network respond to the needs of this constituency.

Transit Stations

The efficient and convenient transfer of people between buses on Lake Street from and to buses on I-35W is key to the continued success of the network. Therefore the Mitigation and Enhancement Subcommittee suggests that a transit station be placed in the middle of the I-35W bridge, with access to both eastbound and westbound Lake Street. It is recommended that this transit station be linked to the 29th Street Greenway and the bicycle transportation network by a trail through a new park constructed on the remnant parcel east of I-35W.

Similarly, a transit station in the middle of I-35W should be explored at 38th Street. However, a transit hub should not be constructed on 38th Street to provide service to such a station.

Transit Shelters

On sidewalks wider than 12 feet, transit shelters can be placed 2 feet off of the curb adjacent to a bus stop. However, in many locations, a sidewalk narrower than 12 feet would leave only 4 feet between private property and the bus shelter. In order to maximize the cross-sectional space available for pedestrians,

the Mitigation and Enhancement Subcommittee recommends that the bus shelter be placed either next to the adjacent private property or in an adjacent building.

Transit Stops

In plan, most transit stops will be constructed of a 12 foot by 100 foot concrete pad to lessen wear to the street. Such a pad adequately accommodates a bus maneuvering into and out of a transit stop.

Most transit stops simply occur on the near side of any traffic control device in a right turn lane where parking is restricted. In an effort to discourage commuting traffic from cutting through residential areas, the Mitigation and Enhancement Subcommittee recommends that far side stops be used where it would facilitate right turning movements from one commuting street to another, such as at Nicollet Avenue and Lake Street and Nicollet Avenue and 38th Street.

Demand Reduction

Although it is unlikely that increasing transit ridership will reduce the number of thru lanes at peak periods being suggested for streets in the project area, the PAC recommends several additional improvements to the transit system to reduce demand for automobile travel including:

- A neighborhood circulator be initiated to increase convenience
- The number of bus stops be limited to increase responsiveness

- Shelters be heated to increase attractiveness
- More shelters be constructed to increase accessibility and comfort
- Sidewalks be improved to encourage walking to transit stops
- A marketing campaign be instigated to increase ridership

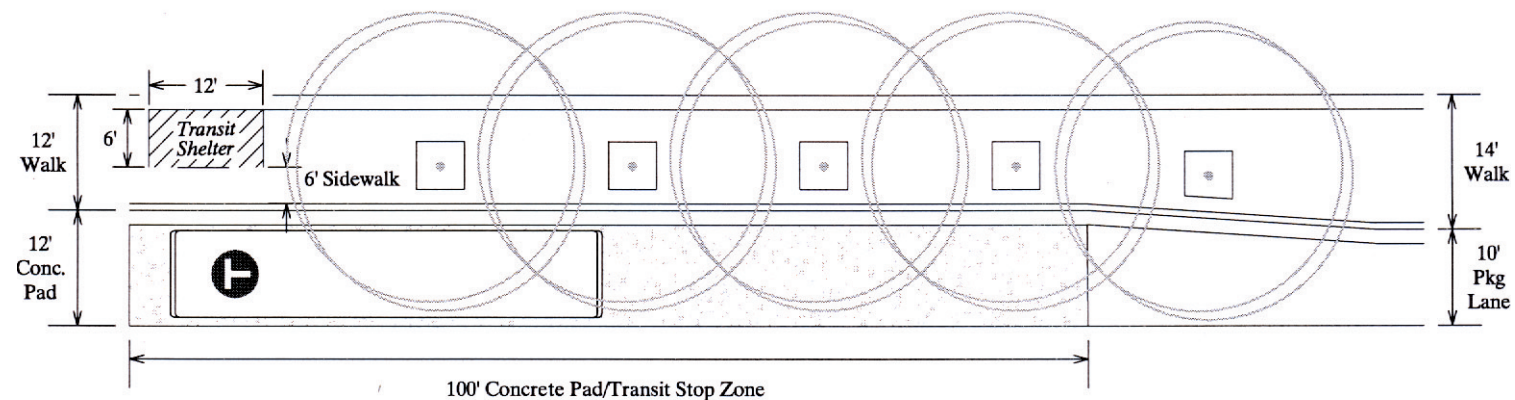
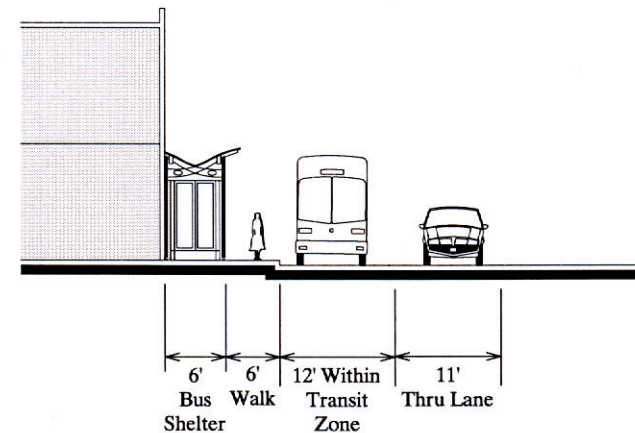


Figure 18A: Transit Stops. A cross section and plan of a transit stops on a typical commercial street or commercial node on a community street. To improve pedestrian flow around transit shelters, it is recommended that the shelters be located next to or inside of buildings. A large concrete pad is used to inhibit pavement rutting caused by heavy bus use.

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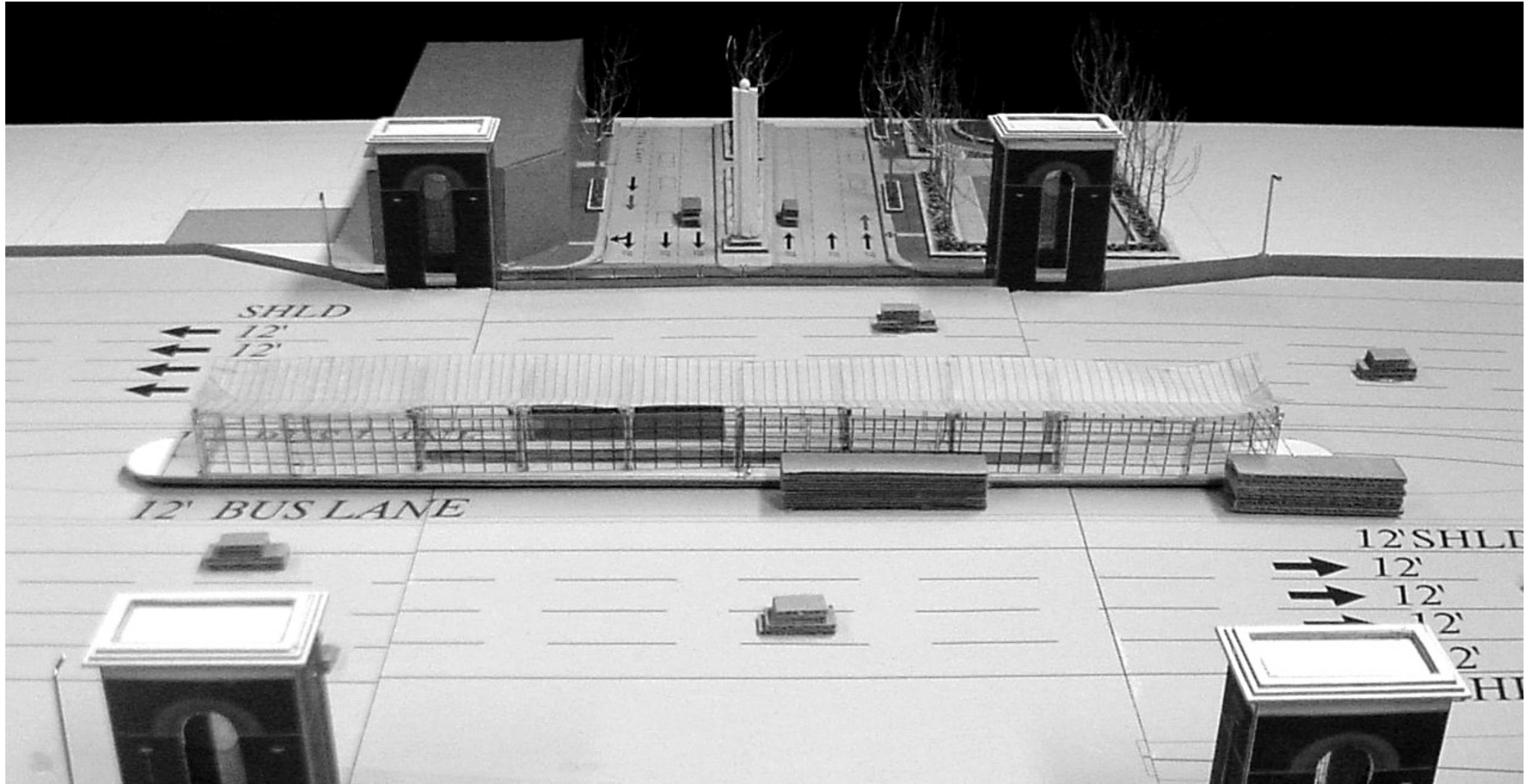


Figure 18B: I-35W and Lake Street Transit Station Model. A photograph of a study model of the proposed transit station on I-35W at Lake Street. Access to the transit station would be by elevator or stair from either side of Lake Street.