

Options Considered

The N. 38th Street improvements encompass N. 38th Street, SR 99 North as well as Bridge Way N. and Fremont Way N. Two improvements are proposed for this area: intersection improvements and access improvements to SR 99 North. Other options that were considered included a new interchange at N. 38th Street, and access improvements at N. 39th and N. 40th streets. All of the options considered would maintain pedestrian access and existing transit priority. The new interchange was not recommended because it was prohibitively expensive. The access improvements at N. 39th and N. 40th streets were not recommended because of their potential for increasing traffic through residential neighborhoods with narrow lanes.

Recommendation

Signalization and/or channelization improvements are recommended to the SR 99 North on- and off-ramps on Bridge Way and Fremont Way and their intersections with N. 38th Street, as well as one block of N. 38th Street east of SR 99 North (see Figure 6-7) to improve access and reduce congestion. The City of Seattle has committed to the long-term signalization and channelization improvements at this location and will determine the specifics at a future date. The future improvements will maintain safe pedestrian crossings of Bridge Way, N. 38th Street, and Fremont Way, as well as transit priority and freight access.

In order to improve freight access to northbound SR 99 North from the N. 38th Street area (Figure 6-8), the RDP recommends converting the block of the N. 38th Street immediately to the east of SR 99 North to one-way westbound with a no parking restriction. By restricting parking and converting the street to one-way, enough width would be provided to accommodate the turning movement requirements of large trucks and other large vehicles that would like to travel northbound onto SR 99 North from N. 38th Street area. This set of improvements is recommended for implementation in the near term.

In conjunction with private redevelopment, additional freight access can be provided by adding a new acceleration and deceleration lane northbound between N. 38th and 39th streets (See Figure 6-8).

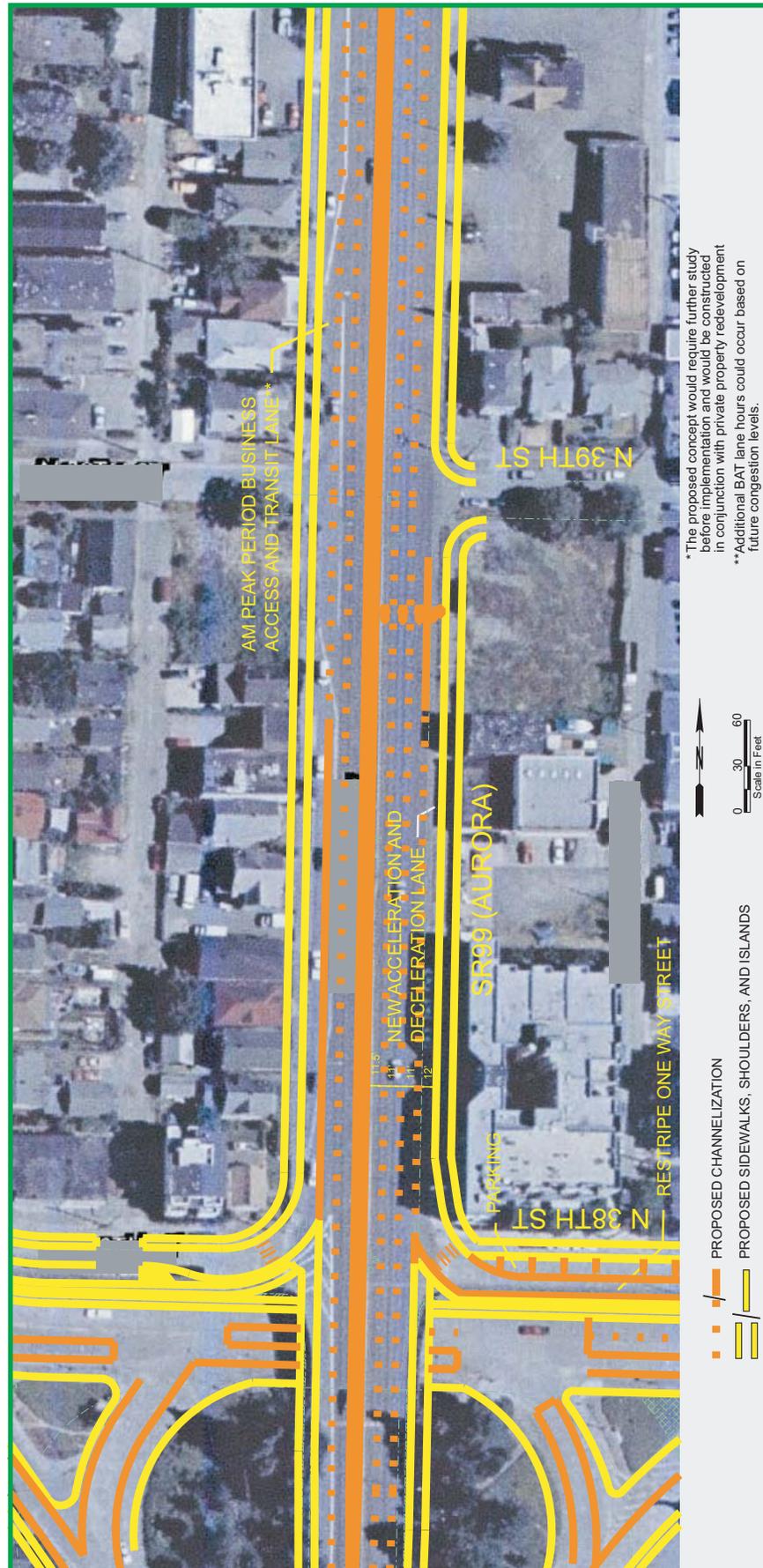
The estimated cost for all of these improvements is \$1.8 million. The cost estimate is in 2002 dollars.

Figure 6-7
N. 38th Street Intersections



SR 99 North: North End of Battery Street Tunnel to N. 145th Street
Route Development Plan

Figure 6-8
N. 38th Steet Access



*The proposed concept would require further study before implementation and would be constructed in conjunction with private property redevelopment
 **Additional BAT lane hours could occur based on future congestion levels.

N. 39th Street to N. 50th Street Roadway Improvements

This segment of SR 99 North has a 17-foot outside lane northbound with parking allowed except for the p.m. peak. When parked cars are present, the through traffic must merge over to avoid them.

From the N. 39th Street improvements to N. 50th Street, the total roadway width would remain unchanged, but lane widths would be adjusted to utilize the removed parking width (see Figure 6-9). The median width would increase from 5 feet to 6 feet, providing a slightly wider inside shoulder. The inside lanes would increase 2 feet, from 10 feet to 12 feet. The middle traveled lane would increase 1.5 feet in width, from 9.5 feet to 11 feet. The curb lane would decrease from 17 feet (including parking) to 13 feet.

The existing sidewalk width of 6 feet would be widened to 10.5 feet along the entire focus area in conjunction with private redevelopment. The proposed 10.5 feet would include both a planter strip and sidewalk.

The estimated cost for these improvements is \$1.7 million. The cost estimate is in 2002 dollars.

Central Focus Area – N. 50th Street to N. 110th Street

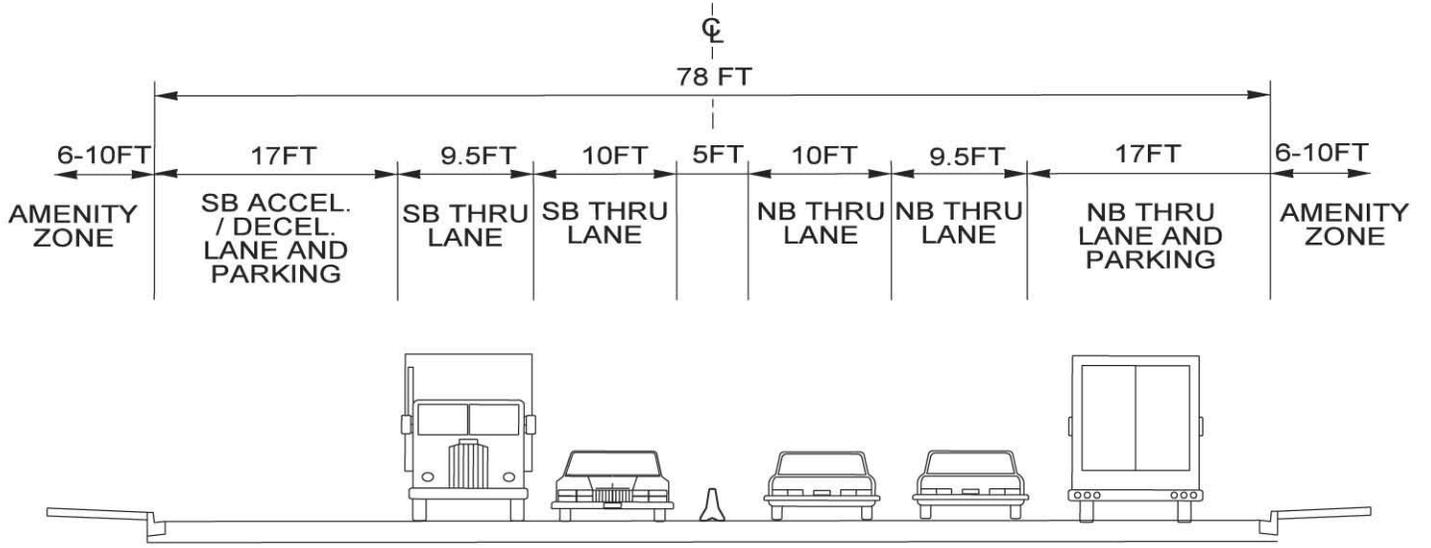
The Central Focus Area of the SR 99 North study corridor has existing operational and accident issues. The central area also has a high number of closely spaced driveways on SR 99 North. These access points, along with roadway sections with an unrestricted center median/two-way center-turn lane, result in a high percentage of turning related accidents. Of all accidents, 32 percent between 1999 and 2001 were turning or angle related.

Roadway Improvements

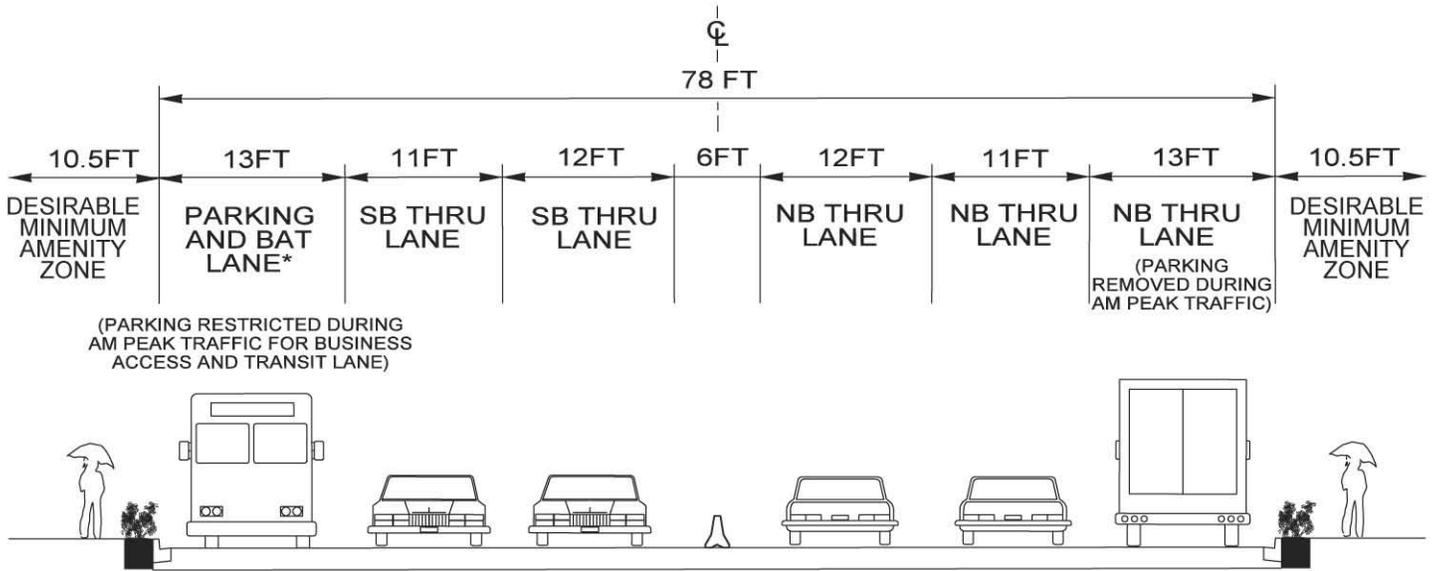
The Central Focus Area is broken into three segments, from N. 50th Street to N. 59th Street, N. 59th Street to N. 72nd Street, and N. 72nd Street to N. 110th Street (see Figures 6-10, 6-11, and 6-12). The roadway width between N. 50th and N. 59th streets would increase from 62 feet to 74 feet. The extra width would provide for increased lane widths and a center median with barrier. The existing lane widths of 10 to 10.5 feet would increase to 11 feet for interior lanes and 12 feet for the curb lane. The new center median would be 6 feet wide (a 2 foot barrier with 2 feet on shy distance on each side).

A new 6-foot-wide center median would be added between N. 59th and N. 63rd streets and match into the existing 6-foot-wide median at N. 63rd Street.

Figure 6-9
N. 39th Street to N. 50th Street Proposed Future Cross Section



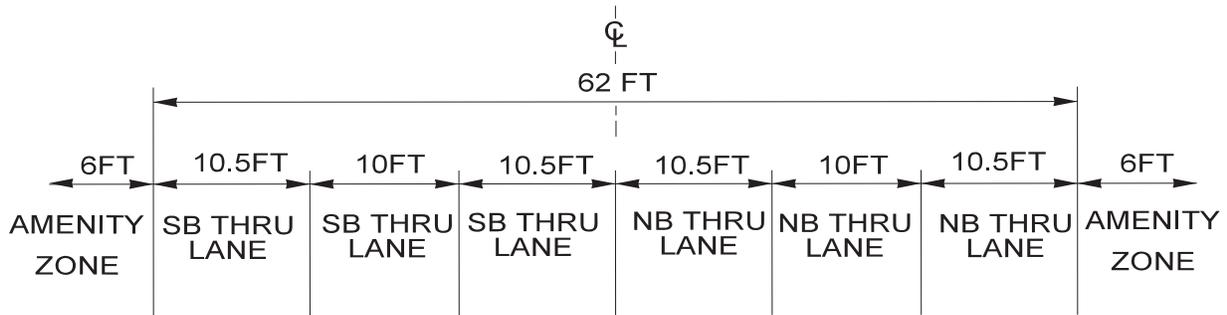
EXISTING CROSS SECTION



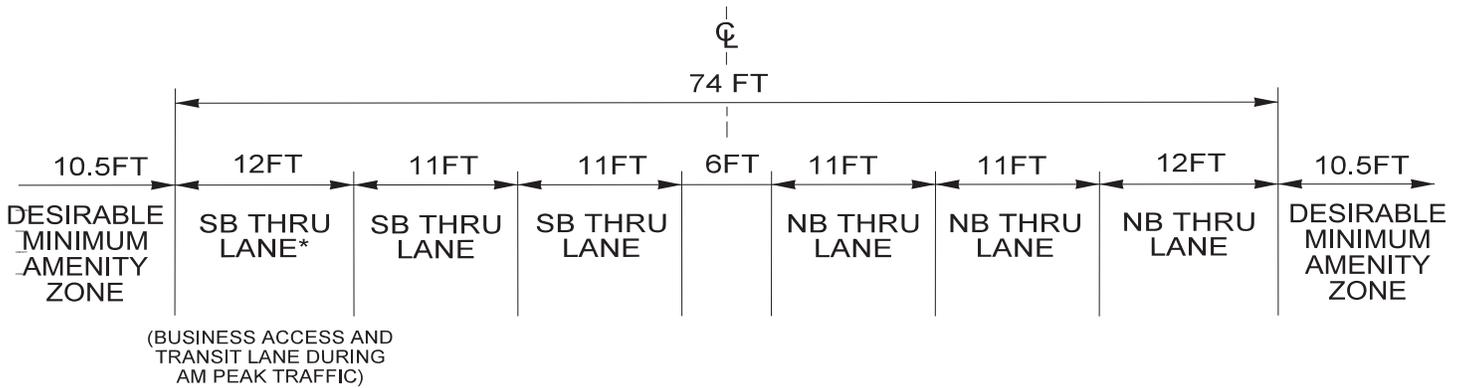
PROPOSED FUTURE CROSS SECTION

*ADDITIONAL BAT LANE HOURS COULD OCCUR
 BASED ON FUTURE CONGESTION LEVELS

Figure 6-10
N. 50th Street to N. 59th Street Proposed Future Cross Section



EXISTING CROSS SECTION

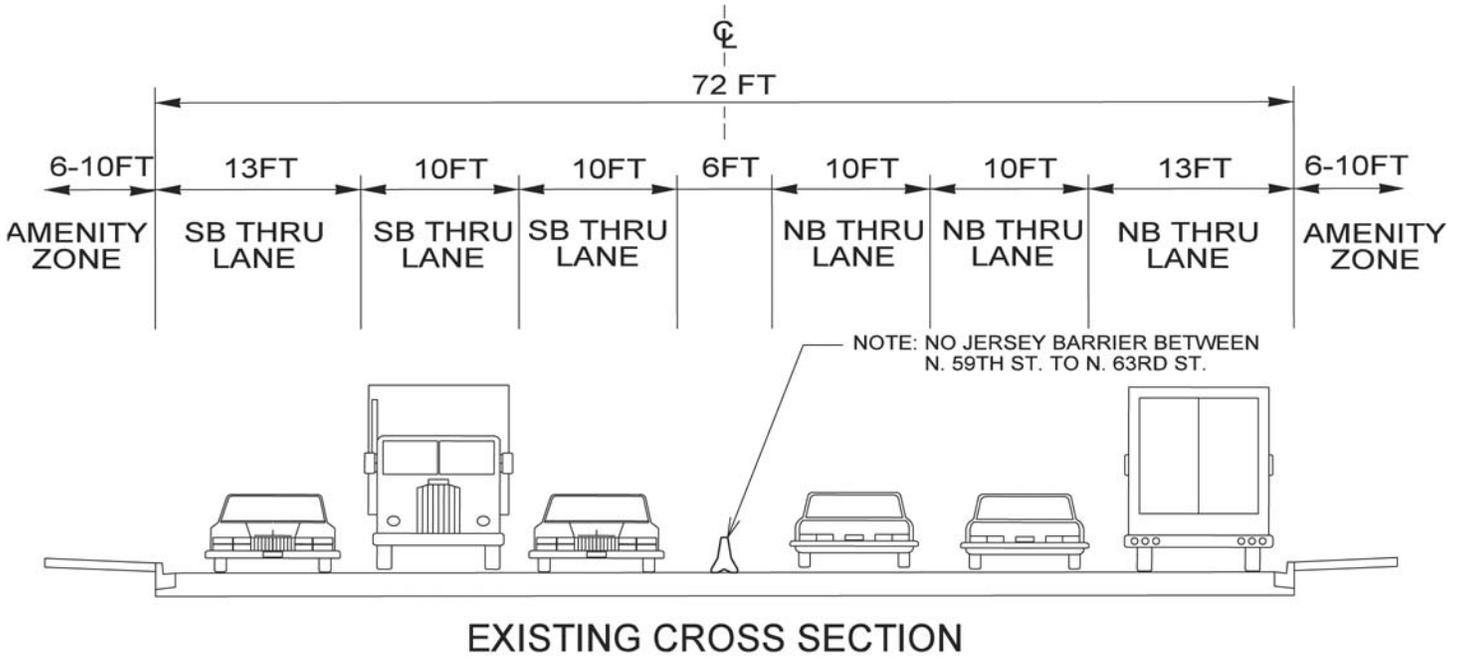


PROPOSED FUTURE CROSS SECTION

*ADDITIONAL BAT LANE HOURS COULD OCCUR
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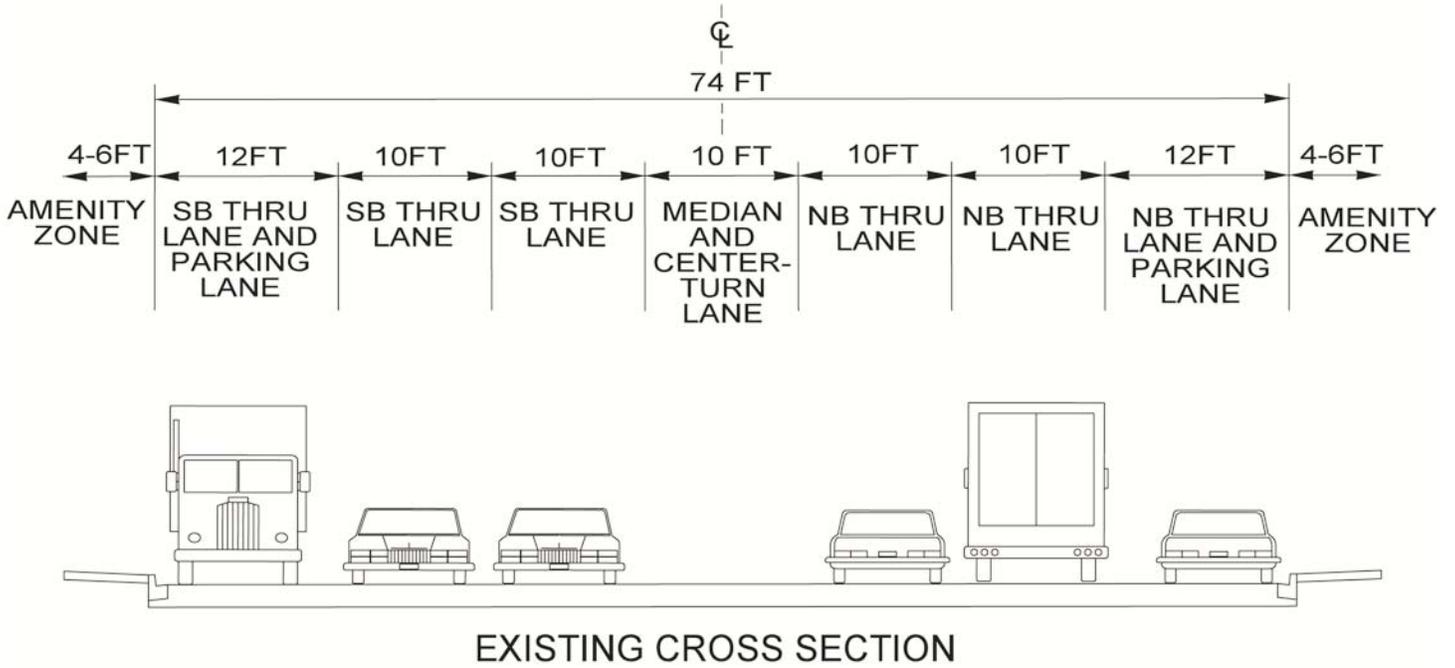
Note: Several pedestrian overpasses are located in this corridor segment. Additional study will be required to maintain overpass access and widen existing lanes and sidewalks.

Figure 6-11
N. 59th Street to N. 72nd Street Proposed Future Cross Section



Note: Please see text for description of future cross-section

Figure 6-12
N. 72nd Street to N. 110th Street Proposed Future Cross Section



Note: Please see text for description of future cross-section

The N. 59th Street to N. 72nd Street and the N. 72nd Street to N. 110th Street segments are not expected to have any large-scale land use redevelopment. As a result, no modifications (except for median from N. 59th Street to N. 63rd Street) to this area are anticipated.

Table 6-3 summarizes the long-term improvements proposed for the Central Focus Area.

| Table 6-3 Central Focus Area Proposed Long-Term Improvements | |
|---|--|
| Location | Long-Term Improvements |
| N. 50th St. – N. 59th St. | Widen existing lanes and add center median with barrier. |
| N. 59th St. – N. 63rd St. | Add center median with barrier. |
| N. 63rd St. – N. 72nd St. | No modifications are anticipated except in conjunction with large-scale private development. |
| N. 72nd St. – N. 110th St. | No modifications are anticipated except in conjunction with large-scale private redevelopment. |

N. 50th Street N. 59th Street

This segment of the study corridor is adjacent to Woodland Park. A raised median barrier, wider lanes, and a wider amenity zone are proposed for this segment. It is conceivable that the public right-of-way can be redeveloped to the proposed cross-section within a 20-year period. This will likely occur through publicly sponsored redevelopment projects. The proposed widening of travel lanes and the amenity zone

Future high-accident locations along this segment of the corridor may be upgraded if it is determined that roadway improvements would address accidents. These improvement upgrades could have right-of-way implications for adjacent properties.

The existing travel lanes are narrow and contribute to sideswipe accidents and reduced capacity. Although 12-foot travel lanes are preferred, 11-foot travel lanes are recommended.

The curb lanes need to be wider than other travel lanes to provide for a “shy” distance between moving vehicles and the sidewalk, and to account for the need to accommodate buses and trucks. Buses and trucks, mirror to mirror, are wider than cars, and generally operate in the curb lane. Although 13-foot curb lanes are preferred, 12-foot curb lanes are recommended due to right-of-way constraints.

A raised median is recommended to minimize the number and severity of accidents involving vehicles crossing over the centerline.

The existing sidewalks in this segment are six feet wide. The proposed amenity zone (pedestrian sidewalk and planter strip) would be a desired minimum of 10.5 feet wide and would provide ample room for multiple users. Several pedestrian overpasses are located in this corridor segment. Additional study will be required to maintain overpass access and widen existing lanes and sidewalks.

Improvements are recommended to be made in consultation with the City of Seattle Parks Department with the goal of maintaining pedestrian access through this section and a parallel bicycle facility in the vicinity.

The estimated cost for these improvements is \$7.2 million. The cost estimate is in 2002 dollars.

N. 59th Street to N. 72nd Street

This segment of the study corridor is adjacent to Green Lake Park and single-family residences. Large-scale redevelopment along this section of SR 99 North is not anticipated. Since the environment along this section of SR 99 North is not expected to redevelop in the next 30 years, a preferred cross-section to be constructed in conjunction with private redevelopment is not proposed for this section. The only substantive change recommended for this corridor segment is adding a center raised median from N. 59th Street to N. 63rd Street.

If redevelopment does occur within the next 30 years, roadway cross-section improvements will be done in conjunction with private property redevelopment. The specific size and characteristics of the cross-section improvements will be determined based on the location and size of the redevelopment.

The estimated cost for these improvements is \$3.4 million. The cost estimate is in 2002 dollars.

N. 72nd Street to N. 110th Street

This segment of SR 99 North is adjacent to businesses. The built environment along this section of SR 99 North is fully developed. Because significant private property redevelopment along this section of SR 99 North is not expected in the next 30 years, most likely opportunities to modify the existing sidewalk and roadway widths to improve mobility and safety would be limited.

Installation of a center-raised median is recommended (with a goal of providing an 11-foot wide center raised median where possible) along segments that experience a high

number of left-turn related accidents and/or at driveway and street locations that experience significant traffic volume increases.

If spot redevelopment does occur along this segment, changes to the abutting roadway and adjacent streetscape amenity zone will be determined based on the location and size of the property, and on-site specific characteristics (with a goal of providing 11-foot travel lanes where possible, in addition to the existing 12-foot curb lanes). At such spot locations, redevelopment would include the required building setback and sidewalk width, a streetscape amenity zone, and is desired to include curb relocation (where applicable), driveway consolidation, and additional roadway widening improvements where possible to accommodate u-turn access to businesses (taking into consideration proximity to transit stops.)

North Focus Area: N. 110th Street to N. 145th Street

The North Focus Area of SR 99 North is unique from the other areas. Northbound, there is a Business Access and Transit (BAT) lane between N. 115th and N. 145th streets. This lane serves transit vehicles and is used for access to and from adjacent businesses. It is also used for vehicles turning right at intersections.

The majority of this area does not have continuous curb, gutter, and sidewalk. The sidewalk locations are intermittent and vary in width and setback location.



**Picture 6-5:
Pedestrians
walking
along
shoulder
near N. 137th
Street and
SR 99 North**

It is conceivable that the public right-of-way can be redeveloped to the proposed cross-section within a 10- to 15-year period. This will likely occur through publicly sponsored redevelopment projects. Right-of-way is generally less constrained, and it should be possible to implement the preferred cross-section in the majority of areas with minimal right-of-way impacts.

The existing travel lanes are narrow, contributing to sideswipe accidents and reduced capacity. The roadway width in this focus area would be increased from 64.5 feet to 81 feet (see Figure 6-13). Although 12-foot travel lanes are preferred, 11-foot travel lanes are recommended due to right-of-way constraints. Widening lanes to 11 feet can improve the performance of the roadway and will minimize right-of-way impacts.

The curb lanes need to be wider than other travel lanes to provide for a shy distance between moving vehicles and the sidewalk, and accommodate buses and trucks. Buses and trucks are wider than cars, and generally operate in the curb lane. Therefore 13-foot curb lanes are recommended.

The proposed long-term typical cross-section for this segment includes a raised median to control left turns with left-turn pockets between intersections, storage for vehicles waiting to turn left, and pedestrian refuges. The current center-turn lane area is typically 10 feet in width and is considered relatively narrow - with little or no shy distance between adjacent travel lanes in either direction. When the roadway is redeveloped, the raised median and the center lane need to be widened to 11 feet in width.

Currently, intermittent curb and sidewalks exist southbound and northbound. The proposed cross-section includes an amenity zone (pedestrian sidewalk and planter strip) with a desired minimum of 10.5 feet wide (consistent with the City of Seattle Street Improvement Manual, Section 2-20) that would provide ample room for multiple users. Amenity zone width will vary due to existing structures and right-of-way constraints.

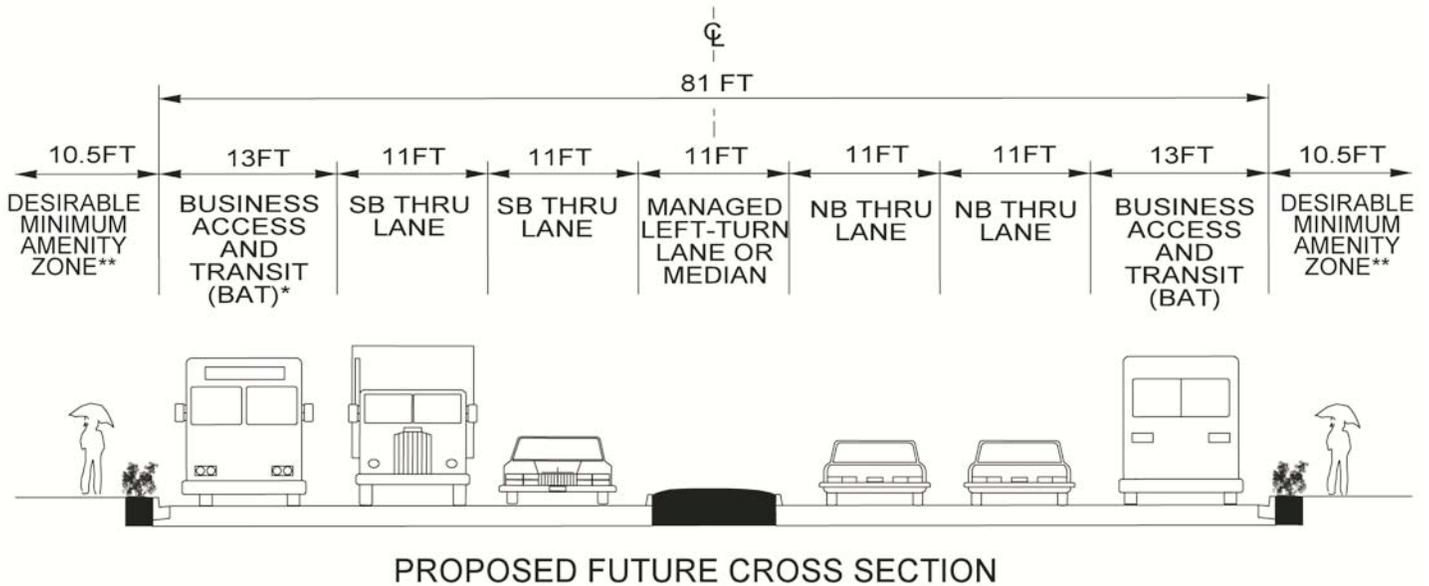
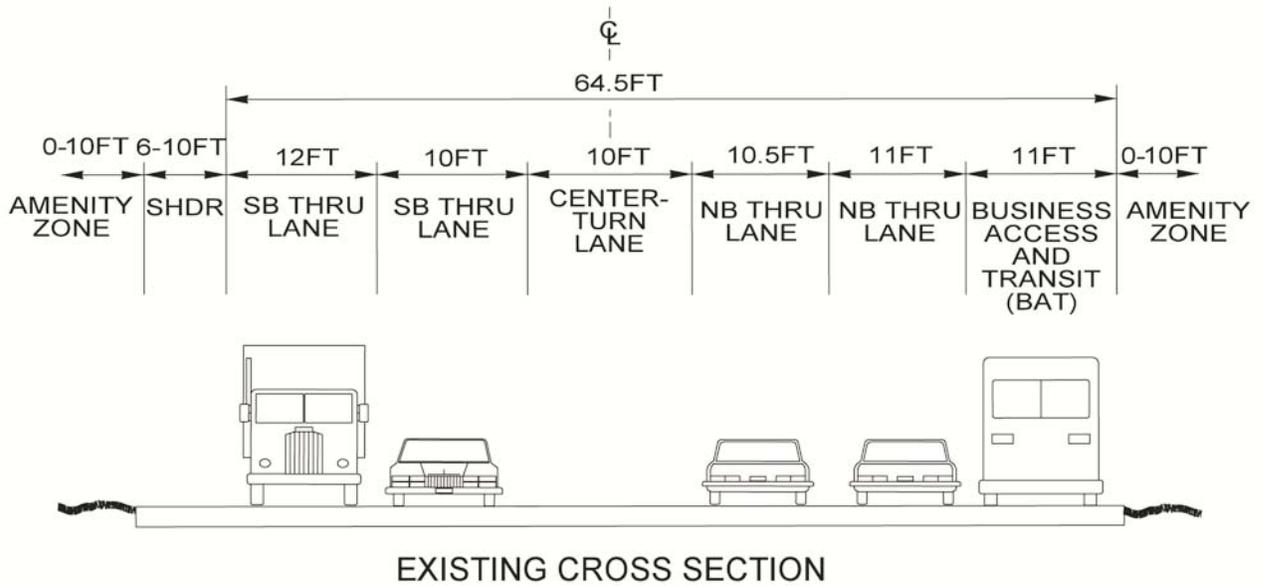
A large portion of this segment of the corridor has multiple or undefined driveways/ access points. As noted in Chapter 3: Accident and Safety Issues, sections of roadway with a high number of access points can be a contributing factor for accidents. Therefore, driveway consolidation is recommended where logical, in conjunction with private redevelopment, to minimize accident potential.

The estimated cost for these improvements is \$37 million, and is in 2002 dollars.

The long-term improvements proposed for the North Focus Area, N. 110th street to N. 145th Street, are presented in Table 6-4.

| Table 6-4 |
|---|
| North Focus Area Proposed Long-Term Improvement Recommendation |
| Widen existing lanes |
| Add a southbound BAT lane |
| Add a raised median with controlled access points |
| Construct a continuous amenity zone on both sides of SR 99 North |
| Improve pedestrian crossings |
| Driveway consolidation at logical locations |

Figure 6-13
N. 110th Street to N. 145th Street Proposed Future Cross Section



*SOUTHBOUND BAT LANE AND AMENITY ZONE TO BE CONSTRUCTED AS ROADWAY REDEVELOPMENT PROJECT

**AMENITY ZONE WIDTH MAY VARY DUE TO EXISTING STRUCTURES AND RIGHT-OF-WAY CONSTRAINTS

