7. Recommendations

Prioritization Process

The CTIP employed the following four steps to prioritize the transportation improvement concepts within the study area.

Step 1: Assign Each Improvement Concept to a Particular Goal

Potential improvement concepts were grouped by the CTIP goals, according to each project and program's primary objective, to ensure that similar projects would be evaluated against the same criteria.

- Move people safely and efficiently
- Reduce drive alone travel
- Protect the residential neighborhoods
- Support new housing and economic development

Step 2: Score Improvements using Evaluation Criteria

Chapter 6 describes the evaluation criteria in detail and shows the scores for each improvement project and program. Projects that were not scored included improvements already programmed for implementation or part of SDOT ongoing operations; transit service improvements that require further SDOT/Metro planning and decisions; and Transportation Management Association–related recommendations. In addition, the I-5 crossing (I-3) was addressed separately due to high cost and the need to involve multiple partners.

Step 3: Establish Implementation Priority

The following prioritization categories were established:

- High-Priority recommendations are those that should be implemented first. They provide significant transportation benefits related to costs and are needed to address critical needs.
- Mid-Level recommendations are those that should be implemented after the High-Priority improvements have been completed. They provide important benefits in relation to costs, responding to less immediate needs.

- Long-Range recommendations provide desirable benefits and should be implemented after higher-priority recommendations are implemented.
- Improvement concepts that were evaluated but found infeasible were not recommended for implementation.

Step 4: Apply Final Screening Criteria

The following issues were considered to assign each concept to a prioritization category:

Policy Direction—Improvements that would achieve CTIP goals and are consistent with the policy objectives found in the Seattle Comprehensive Plan, the Transportation Strategic Plan, the Mayor's Northgate Strategy (*Get Northgate Moving*) and Council Ordinances No. 30641 and No. 30642, which established a broad framework for future steps for Northgate and establishment of the CTIP.

Scores—Evaluation of benefits and possible drawbacks.

Time Sensitivity—Improvements that would address high-priority emerging demand such as "failing" intersections, ongoing safety problems, new public/private development.

Opportunity—such as potential partners and funding availability.

Recommendations

The CTIP recommendations were developed in consultation with outside transportation agencies and the Northgate Stakeholder Group, particularly the Stakeholders CTIP Subcommittee.

Recommendation: Implement transportation projects and programs to *Move People Safely and Efficiently.*

The locations of the recommended improvement concepts for this goal are shown in **Figure 7-1**.

High-Priority Improvements

F-6. Provide sidewalks on the north side of NE 100th Street from 1st Avenue NE to 5th Avenue NE. Note: This project is fully funded. Over time, the City, King County and private development (ERA Care) will construct a continuous sidewalk from 1st Avenue NE to 5th Avenue NE. (Cost estimate: not prepared)

A-6. Provide curbs, gutters, and sidewalks on both sides of NE 125th Street from 5th Avenue NE to Roosevelt Way NE. (Cost estimate: $859,000)

A-5. Upgrade the intersection of NE 125th Street/Roosevelt Way NE/10th Avenue NE and include the existing stop-controlled 125th Street intersection as part of one new signal-controlled intersection. (Cost estimate: $2,557,000)

D-1. Provide curbs, gutters, and sidewalks on both sides of NE 92nd Street from 1st Avenue NE to 5th Avenue NE. Provide curb bulbs as appropriate to assist pedestrian crossings. (Cost estimate: $550,000)

H-1. Analyze pedestrian crossing conditions, including pedestrian demand and adjacent land uses, on Roosevelt Avenue NE between NE 90th Street and NE 94th Street through the neighborhood business district. If consistent with SDOT guidelines and practices, install pedestrian crossing improvements, such as curb bulbs and crosswalk signs and markings. (Cost estimate: $99,000)

G-4. Install a pedestrian signal, consistent with SDOT signal warrant criteria, at the 15th Avenue NE/NE 120th Street intersection. SDOT is currently evaluating the pedestrian need at this location and considering a pedestrian-actuated signal. (Cost estimate: $297,000)

C-8. Work with businesses along N Northgate Way to develop an access management plan that includes construction of a median and restriction of mid-block left turns from Meridian Avenue N to the Corliss Ave N/I-5 off-ramp. Consider where a break in the median may be allowed for access. Investigate the feasibility of providing a business access street south of N Northgate Way. (Cost estimate: $218,000, which does *not* include cost of the business access street)

E-7. Work with the businesses along NE Northgate Way from 5th Avenue NE to Roosevelt Way NE to develop an access management plan that includes construction of medians and restriction of mid-block left turns. Consider where breaks in the medians may be allowed for access, or U-turns at intersections. (Cost estimate: $81,000; cost of developing U-turn capacity is not included.)

C-12. Apply the DPD Open Space/Pedestrian Connections Plan for design treatments that enhance the pedestrian connection on N Northgate Way between Corliss Avenue N and 1st Avenue NE particularly under I-5. A key CTIP recommendation is to place the sidewalks behind the I-5 bridge columns. This project should be implemented together with C-7, C-9, and C-10 as a package. (Cost estimate: $253,000)

I-3. Improve the streetscape and pedestrian street crossings at major intersections on 5th Avenue NE from NE 100th Street to NE 112th Street consistent with the 5th Avenue NE Streetscape Design Plan (2003) (Preliminary cost estimate: $2.5 million. Not included in CTIP costs, as $2.5 million for Phase 1 has already been programmed in the City's Capital Improvement Program, and Phase 2 costs are subject to further project definition.)

Mid-Level Priority Improvements

A-1. Add left turn pockets on all approaches at the N 130th Street/Meridian Avenue N intersection. (Cost estimate: $1,980,000)

G-1. Add curbs, gutters, and sidewalks on both sides of 15th Avenue NE from NE 92nd Street to NE 117th Street. This project may require phasing due to its high cost. Neighborhood-based funds have been allocated for a raised walkway for approximately four blocks (NE 92nd to NE 96th Street). In 2006 and prior to the execution of this project, SDOT should work with the community to decide upon the permanent design and construction technology to be utilized for the entire 15th Avenue NE pedestrian facility, and phasing and funding options identified to achieve maximum leverage. (Cost estimate: $3,539,000)

C-13. Upgrade N Northgate Way from Meridian Avenue N to Aurora Avenue N to meet the City's principal arterial roadway design standards. Key improvements needed within this corridor are adding sidewalks along the north edge of North Seattle Park, improving substandard sidewalks, adding urban design treatments and expanding vehicular capacity at the N Northgate Way/Aurora Avenue N intersection. (Cost estimate: $1.4 million for sidewalks on both sides from Meridian Avenue N to Ashworth Avenue N; no other improvements have been estimated)

A-4. Signalize the I-5 northbound off-ramp and 5th Avenue NE intersection and coordinate this signal with the 5th Avenue NE/NE 130th Street intersection signal and connect/coordinate all signals along NE 130th Street/NE 125th Street corridor. (Cost estimate: $669,000)

G-3. Install a traffic signal after adopted warrants have been met and modify the intersection geometry at the 15th Avenue NE/NE 117th Street/Pinehurst Way NE intersection. (Cost estimate: $1,980,000)

Long-Range Priority Improvements

G-2. Construct a roundabout at the Pinehurst Way NE/NE 115th Street/12th Avenue NE intersection. (Cost estimate: $3,107,000)

G-5. Reconstruct the NE Northgate Way/15th Avenue NE intersection to provide north-south left turn pockets. (Cost estimate: $825,000)

C-3. Install a traffic signal after adopted warrants have been met at the N 115th Street/Meridian Avenue N intersection. (Cost estimate: $413,000)

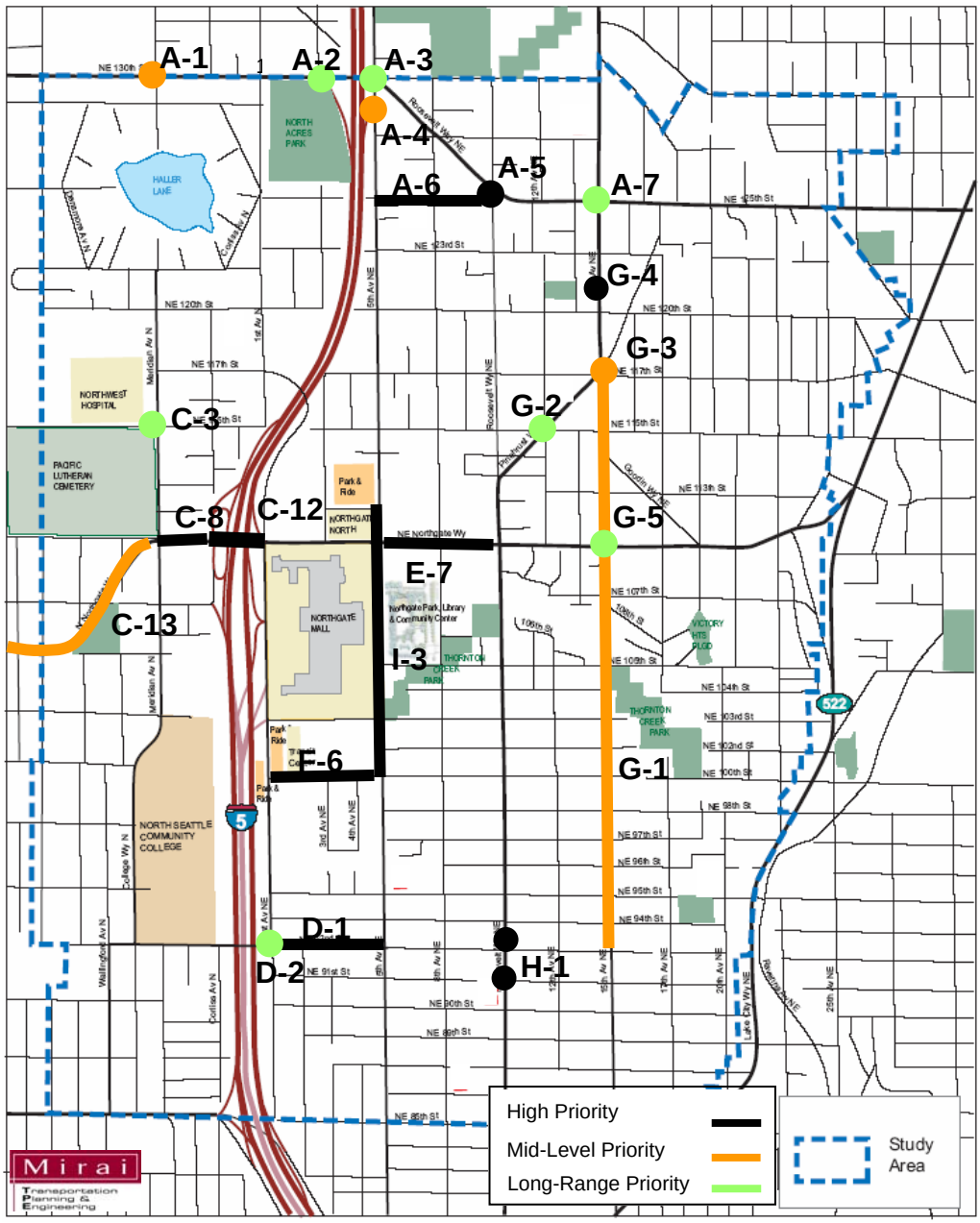
A-3. Add an eastbound left turn pocket at the 5th Avenue NE and NE 130th Street intersection. (Cost estimate: $3,416,000)

A-2. Add a westbound left turn pocket at the I-5 southbound on-ramp and NE 130th Street intersection. (Cost estimate: $89,000)

A-7. Upgrade the traffic existing signal at the NE 125th Street/15th Avenue NE intersection to include poles/mast arms and vehicle detection. (Cost estimate: $231,000)

D-2. Install a traffic signal after adopted warrants have been met at the NE 92nd Street and 1st Avenue NE intersection. When the traffic signal is installed, replace existing speed humps with humps that are consistent with the most current SDOT design and construction standards. (Cost estimate: $495,000)

Figure 7-1. Priority Ranking of Recommended Improvements under the CTIP Goal: Move People Safely and Efficiently



Recommendation: Implement transportation projects and programs to *Reduce Drive-Alone Travel*

The locations of the recommended improvement concepts for this goal are shown in **Figure 7-2**.

High-Priority Improvements

C-2. Add bicycle lanes and sidewalks on both sides of Meridian Avenue N from N 115th Street to N 122nd Street. (Cost estimate: $1,276,000)

F-7. Reconstruct the existing sidewalk on the east side of 1st Avenue NE from NE 92nd Street to NE 97th Street and provide a bicycle lane on the west side of 1st Avenue (by extending the shoulder by 4 feet) between NE 103rd Street and NE 92nd Street. (Cost estimate: $485,000)

I-2. Stripe bicycle lanes on 5th Avenue NE from NE 115th Street to NE 125th Street. (Cost estimate: $129,000)

C-4. Provide bicycle lanes on both sides of Meridian Avenue N from N 100th Street to N Northgate Way. (Cost estimate: $141,000)

C-5. Provide bicycle lanes on both sides of College Way from N 92nd Street to N 100th Street by converting the curb lanes to bicycle lanes. Work with Metro to ensure that transit service standards for speed and reliability of service are maintained. (Cost estimate: $97,000)

J-4. Facilitate development of a "parking brokerage" function to efficiently allocate parking needs through shared use of parking spaces. This function could be managed by a new or existing association of employers and property owners, a Chamber of Commerce, or a Transportation Management Association (TMA). These organizations may also be able to provide other services related to improving public transportation and promoting alternatives to drive-alone commutes. (Cost estimate: not prepared) See **Appendix 5-2** for information about TMA models.

J-6. Amend SMC 23.71.016 to allow shared parking between retail stores and other uses. The Northgate Overlay District is the only zone in the city where retail is prohibited from sharing parking with other uses. Shared parking between uses increases the efficiency with which parking supply is used. Parking impacts of a project can be addressed through SEPA mitigation.

J-7. Amend SMC 23.71.016(C) to allow for reductions to minimum parking requirements for commercial uses, and consider expanding 23.71.016 to allow for these reductions to apply to residential uses as well as commercial uses. 23.54.020 (F) applies in other commercial zones in the City, and allows for parking reductions for proximity to transit and provision of alternative transportation strategies such as vanpools and bicycle racks. This reduction should apply in the Northgate Overlay District as well.

J-8. Amend SMC 23.71.018 to make the Northgate Overlay District mode split goals consistent with the goals for Northgate in the Seattle Comprehensive Plan. The Seattle Comprehensive Plan has mode split goals for each Urban Center. Mode split goals are an indicator of how many people are driving alone as opposed to using alternative means of transportation.

J-9. Allow residential uses to meet their parking requirements off-site. Under current Code, commercial uses may meet their parking requirements off-site. Allowing off-site residential parking can encourage adjacent property owners to more efficiently meet their respective parking needs.

J-10. Continue researching appropriate parking requirements to achieve Seattle Comprehensive Plan goals LU50 (parking maximums) and NGP12 (discourage SOV use, improve short-term parking accessibility). Through the process, acknowledge stakeholder concerns, including the following comments:

- Retail parking maximums may be appropriate to review with respect to current lending practices.
- Reduced parking requirements should be considered by the City contingent on increased transit service.
- Benefits to developers from reduced parking requirements should be matched by their commitment to alternative travel as demonstrated by provision of transit passes, bicycle facilities, and car-share vehicles.

Mid-Level Priority Improvements

C-1. Add bike lanes or widen shoulders to accommodate bike traffic on 1st Avenue N from N 117th Street to N 130th Street. (Cost estimate: $999,000)

J-2. Provide improved transit service with average of 15-minute frequencies during off-peak hours from Northgate to the University District. This service improvement recommendation should be consistent with the Seattle Transit Plan. (Cost estimate: not prepared)

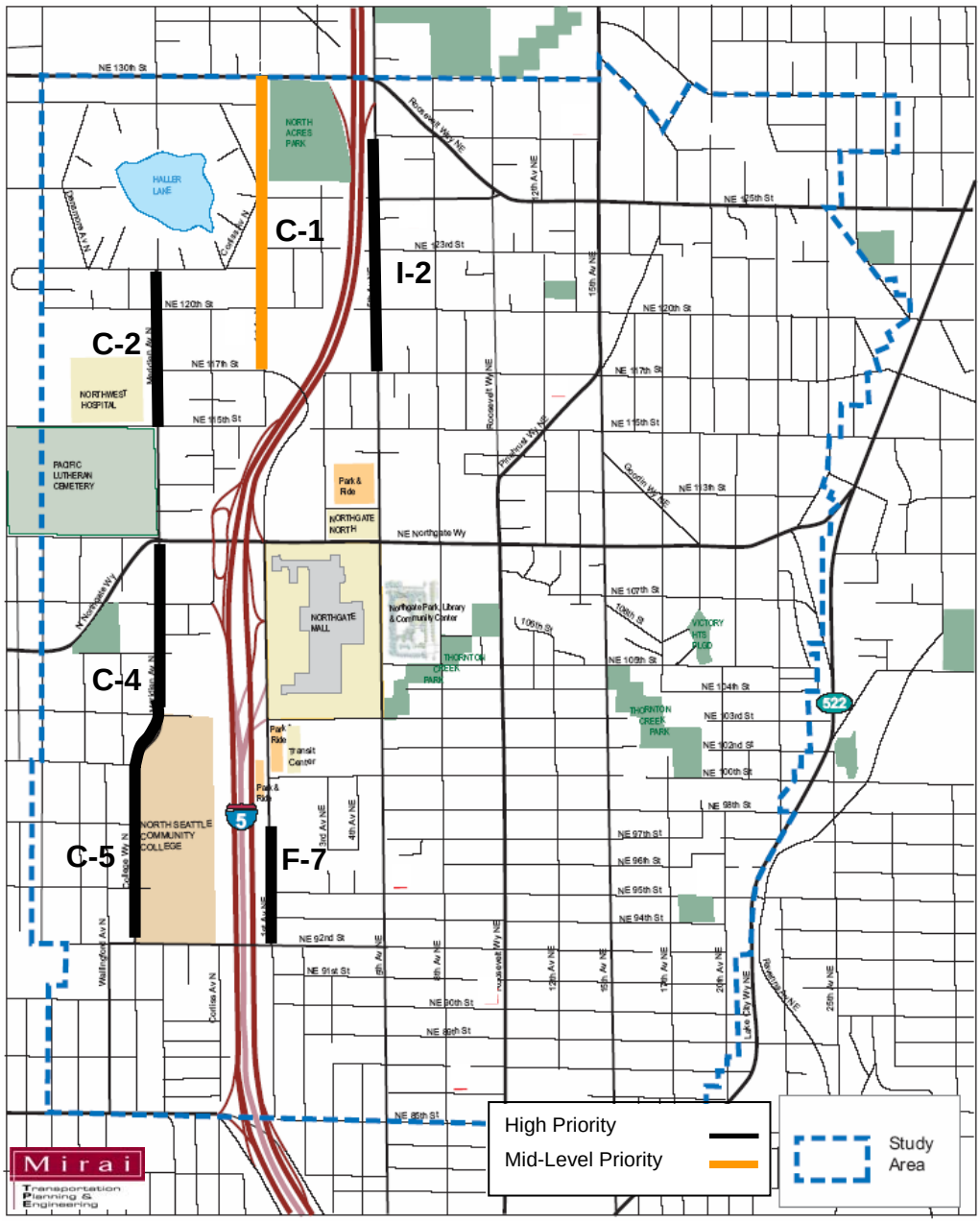
J-3. Improve transit service with average of 15-minute frequencies during peak periods and 30-minute frequencies during off peak periods to other Urban Villages such as Bitter Lake and Aurora Licton Springs. This service improvement recommendation is consistent with the SDOT Urban Village Transit Network plan, prepared in collaboration with Metro. (Cost estimate: not prepared)

J-14. Add ten bus shelters within the study area at locations with 40 or more daily boardings. King County Metro should provide seven of the shelters in keeping with their standard of providing shelters at locations with 50 or more daily boardings; the City of Seattle should provide funds for the additional three shelters through the Northgate Mitigation Program. (Cost estimate: $78,000 for three shelters)

Long-Range Priority Improvements

J-1. Following the extension of light rail to Northgate, provide transit feeder services from nearby neighborhoods to the transit center. (Cost estimate: not prepared)

Figure 7-2. Priority Ranking of Recommended Improvements under the CTIP Goal: Reduce Drive-Alone Travel



Note: Transit service improvement concepts J-1, J-2, J-3; parking improvement concepts J-4, J-6, J-7, J-8, J-9, and J-10; and transit shelter improvements J-14 are not shown.

Recommendation: Implement transportation projects and programs to *Support New Housing and Economic Development*

The locations of the recommended improvement concepts for this goal are shown in **Figure 7-3.**

High-Priority Improvements

F-4. Construct a three-lane roadway on 3rd Avenue NE from NE 100th Street to NE 103rd Street. (Cost estimate: not prepared, as project has already been programmed by SDOT and Metro for design and construction)

F-2. Install a traffic signal at the NE 103rd Street /3rd Avenue NE intersection. Provide urban design treatments for accommodating pedestrians. (Cost estimate: not prepared, as this project has already been programmed by SDOT)

F-5. When warranted, add four-way stop control and, ultimately, install a traffic signal at the NE 100th Street /3rd Avenue NE intersection. Provide marked crosswalks and urban design treatments to accommodate pedestrians. Note: upon opening, the 3rd Avenue NE extension will have two-way stop controls on the 3rd Avenue NE approaches. (Cost estimate: $495,000 for traffic signal)

E-6. Add a second westbound left turn lane on NE Northgate Way at 5th Avenue NE by widening the south side of NE Northgate Way from approximately 8th Avenue NE to 3rd Avenue NE. Assign southbound curb lane to right turns only. Re-align the southbound through lane to eliminate the existing “offset” condition. Provide urban design treatment to enhance the pedestrian crossings at the NE Northgate Way/5th Avenue NE intersection. (Cost estimate: $660,000 not including right of way costs)

E-4, E-5. Working with the Northgate Mall owner, add a new access driveway to the 3rd Avenue NE alignment at the NE Northgate Way/3rd Avenue NE intersection and eliminate the existing semicircular, two-intersection Northgate Mall driveway. It may require widening of 3rd Avenue north of NE Northgate Way to align the approach lane with the Northgate Mall side. Provide crosswalks on all legs at the NE Northgate Way/3rd Avenue NE intersection. Place barriers at the edge of the north sidewalk or in the median (possibly landscaping) between 3rd Avenue NE and 5th Avenue NE to discourage mid-block street crossings by pedestrians. (Cost estimate: public costs $1,980,000)

C-7. Allow left turns from westbound N Northgate Way to southbound Corliss Avenue at the southbound I-5 off-ramp/Corliss Ave/N Northgate Way intersection. Extend the westbound left turn lane on N Northgate Way under the I-5 overpass by placing the new sidewalks behind the support columns. (Cost estimate for lane extension only: $132,000)

C-9. Provide a roundabout at the southbound I-5 on-ramp/Corliss Avenue N/N 107th Street intersection. C-9, C-10, C-11 and J-5 work together to form an alternative westbound route to Meridian Avenue. (Cost estimate: $2,333,000) *Note: Roundabout design would accommodate vehicles that typically use the intersection, including large trucks and fire trucks.*

C-10. Provide a roundabout at the Meridian Ave N/N 107th Street intersection. (Cost estimate: $2,345,000) *Note: Roundabout design would accommodate vehicles that typically use the intersection, including buses and fire trucks.*

C-11. Provide curbs, gutters, and sidewalks on N 107th Street from Meridian Avenue N to Corliss Avenue N/southbound I-5 on-ramp. (Cost estimate: $221,000)

J-5. Re-classify Corliss Avenue from NE Northgate Way to N 107th Street and N 107th Street from Corliss Avenue N to Meridian Avenue N from local streets to collector arterials. (Cost estimate: staff time)

E-1. Coordinate all signals and optimize signal operation for peak/non-peak weekdays and weekend days based on vehicle volumes on N/NE Northgate Way. (Cost estimate: $1,040,000)

E-8. Replace the existing pedestrian signal with a full traffic signal and allow left turns on all approaches at the NE Northgate Way/8th Avenue NE intersection. Utilize urban design treatments consistent with the theme established at other key intersections within the Urban Center (e.g. NE Northgate Way/5th Avenue NE). The full traffic signal should not be installed until the second turn lane and pedestrian improvements are added to the Northgate Way and 5th Avenue NE intersection (E-6). By relieving traffic congestion at Northgate Way/5th Avenue, traffic will be more likely to use 5th Avenue NE rather than seek an alternative by using 8th Avenue NE, which is a local street. In addition, traffic from the proposed developments at the southeast corner of the 5th Avenue NE/Northgate Way intersection exiting onto 8th Avenue NE would be able to reach 5th Avenue via the new signal, also avoiding 8th Avenue NE. (Cost estimate: $495,000) *Note: See also CTIP Goal of "Protect Neighborhoods" (project B-3).*

E-3. Monitor safety performance of westbound traffic on NE Northgate Way approaching 1st Avenue intersection to determine the future channelization improvements. (Cost estimate: not prepared, as this is an ongoing SDOT function)

J-11. Manage on-street parking supply within the commercial core of the Northgate Urban Center to give priority to short-term customer use.

Mid-Level Priority Improvements

F-1. Add a westbound right turn lane and implement the intersection improvement concept prepared by King County Metro and SDOT at the NE 103rd Street/1st Avenue NE intersection. (Cost estimate: $1,980,000)

F-3. Allow eastbound left turns from the existing curb lane at the NE 103rd Street /5th Avenue NE intersection. (Cost estimate: $83,000)

I-1. Extend northbound right turn lane on 5th Avenue NE south of NE Northgate Way to NE 106th Street. (Cost estimate: $173,000)

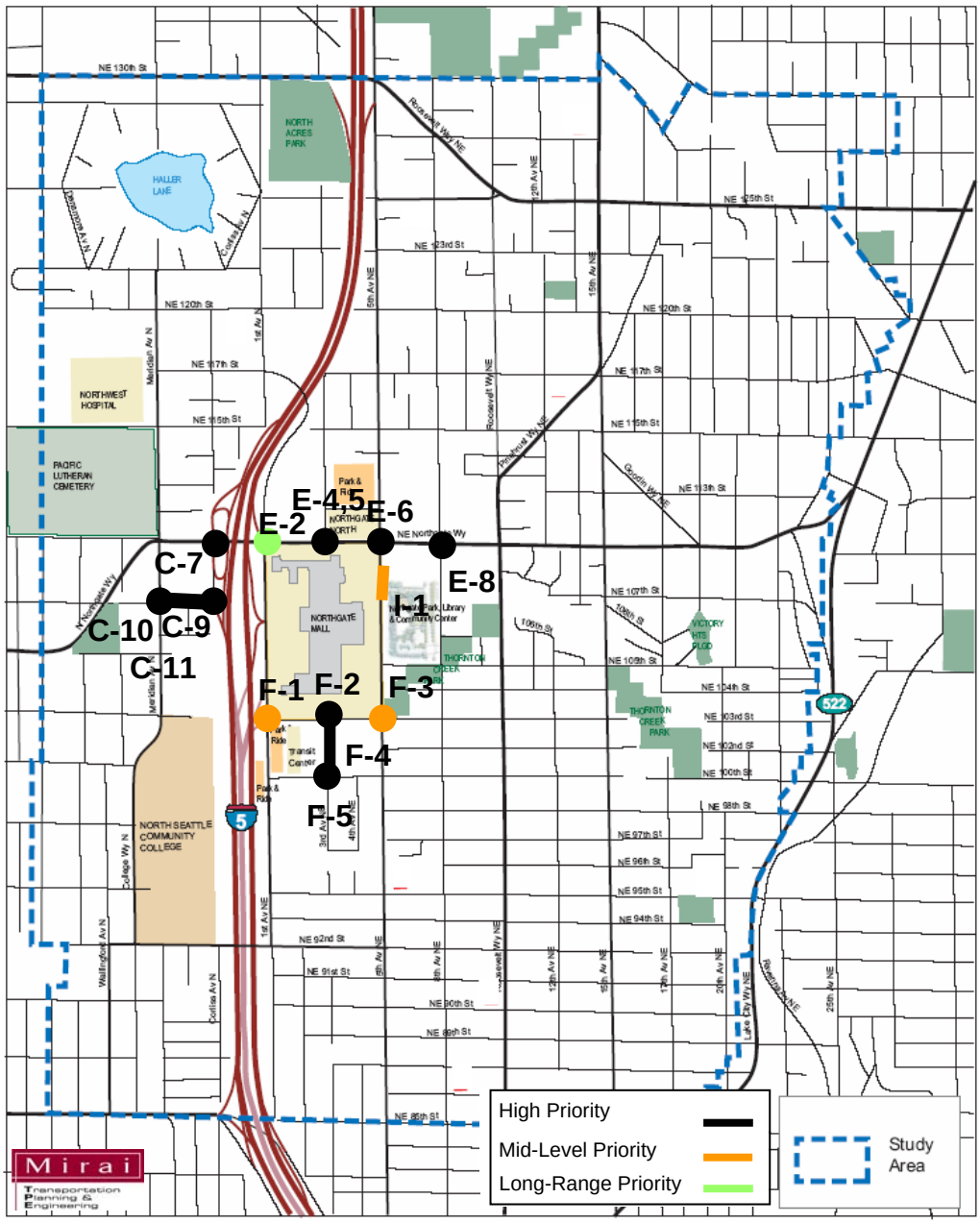
Long-Range Priority Improvements

E-2. Modify westbound approach—curb lane: right and I-5 on-ramp, 2nd lane: I-5 on-ramp and through, and 3rd lane: through only at the N Northgate Way/1st Avenue NE/I-5 on-ramp intersection. Widen the on-ramp to have two lanes on Northbound I-5 on-ramp from N Northgate Way. (Cost estimate: to be determined in conjunction with WSDOT)

Evaluated But Not Recommended

C-6. Add double left turn lanes on westbound N Northgate Way at the intersection with Meridian Avenue N. (Note: This improvement conflicts with the location of an existing four-story building at the southeast corner of the intersection. To implement this project would require purchase of this building. This project received a low evaluation score due to high cost, particularly in relation to the greater safety benefit and the lower cost of the alternative approach {i.e. the Corliss Avenue N “bypass” concept described in C-9, C-10 and C-11}). (Cost estimate: $8,571,000)

Figure 7-3. Priority Ranking of Recommended Improvements under the CTIP Goal: Support New Housing and Economic Development



Note: Transportation improvement concepts E-1, E-3, J-5, and parking concept J-11 are not shown.

Recommendation: Implement transportation projects and programs to *Protect Neighborhoods*

The locations of the recommended improvement concepts for this goal are shown in **Figure 7-4.** [1]

High-Priority Improvements

B-1. Provide a raised walkway on one side of NE 115th Street from 5th Avenue NE to Lake City Way NE. Restrict on-street parking to one side. Consider phased implementation of this project. (Cost estimate: $1,149,000)

B-2. Analyze pedestrian crossing conditions on 8th Avenue NE between NE Northgate Way and NE 115th Street. If consistent with SDOT guidelines and practices, install pedestrian crossing improvements such as curb bulbs and related signs and markings. Crossing improvements at this location would enhance the connection between the senior housing developments on the west side of 8th Avenue NE with a post office on the east side. (Cost estimate: $83,000)

B-3. Provide a raised walkway on one side of 8th Avenue NE from NE Northgate Way to NE 92nd Street. Install appropriate traffic calming devices to discourage excessive traffic speeds. Consider phased implementation of this project. (Cost estimate: $388,000)

B-4. Provide a raised walkway on one side of NE 98th Street from 15th Avenue NE to Lake City Way NE. Allow on-street parking. Integrate traffic control devices with the sidewalk improvements. Consider phased implementation. (Cost estimate: $338,000)

B-5. Add a raised walkway on the north side of N 117th Street from 1st Avenue N to Meridian Ave N and install speed "cushion" for traffic calming. Consider phased implementation of this project. (Cost estimate: $124,000)

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[1] **Note:** While all of the improvement concepts in the CTIP goal of "Protect Neighborhoods" are prioritized as high priority projects, it is anticipated that project phasing will be required. It should also be noted that there are additional pedestrian improvements recommended for arterial (residential) streets that meet the CTIP goal of "Move People Safely and Efficiently." CTIP has evaluated transportation conditions on 22 local streets using special criteria designed especially for the purpose of helping to determine which, if any, of these streets may warrant future traffic calming measures and/or other improvements. For streets not identified at this time for improvements, SDOT should utilize the CTIP baseline analysis to work with affected residents to monitor conditions and determine if future improvements become necessary. Any required traffic volume and speed studies on these streets should use SDOT program funding. (See **Appendix 7-1** for list of streets and evaluation results).

Mid-Level Priority Improvements

B-6. Provide a raised walkway on one side of NE 95th Street from 12th Avenue NE to 17th Avenue NE; on 17th Avenue NE from NE 95th Street to NE 96th Street, and on NE 96th Street from 17th Avenue NE to 19th Avenue NE.

B-7. Add a raised walkway on one side of 20th Avenue NE from NE 86th Street to NE 98th Street.

B-8. Fill in missing sections of sidewalk on 25th Avenue NE from NE 125th Street to NE 127th Street.

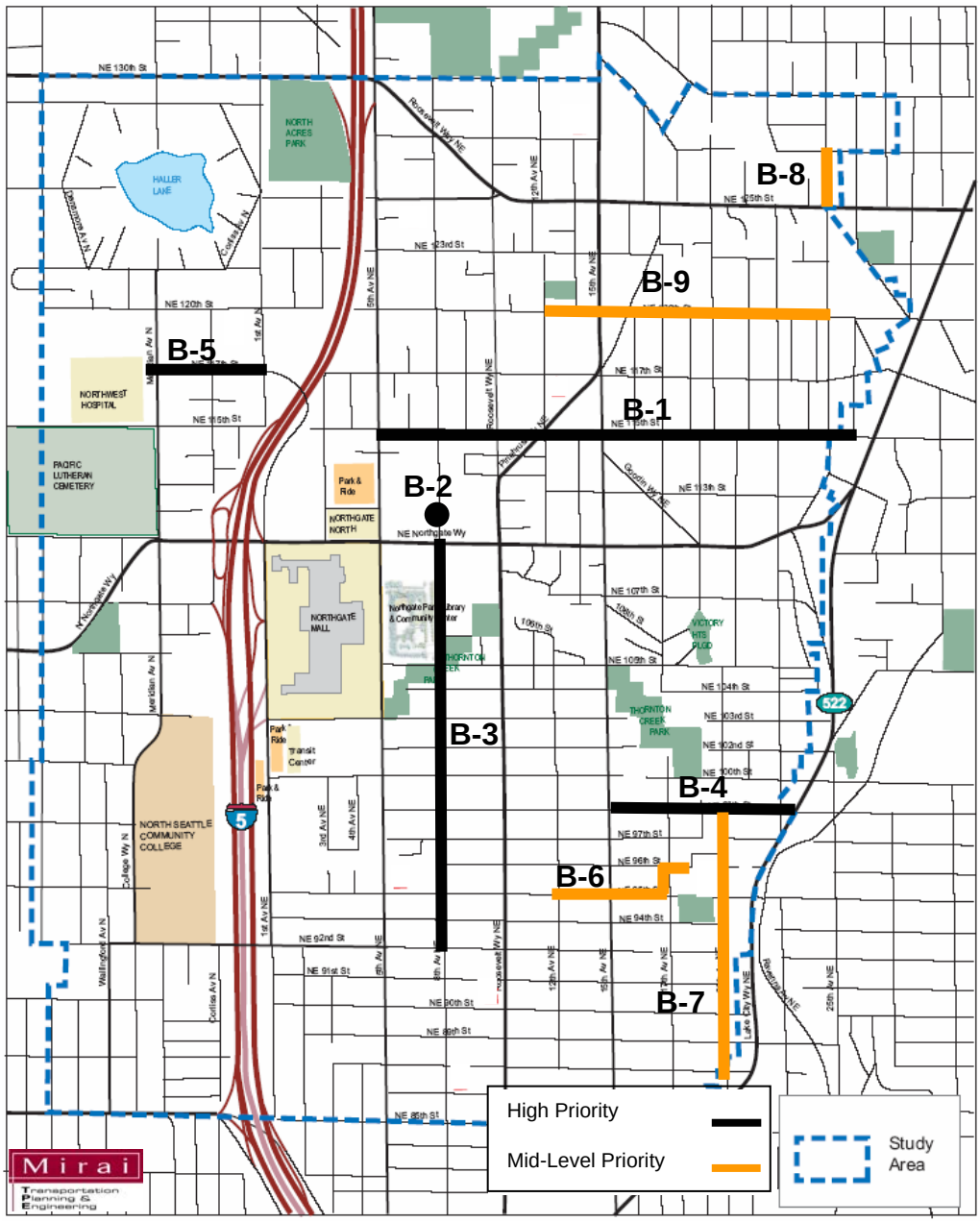
B-9. Monitor traffic volumes and speeds on NE 120th Street between 17th Avenue NE and 25th Avenue NE. Work with residents, as the need occurs, to implement traffic calming measures, including community education.

J-12. Conduct a neighborhood parking management assessment for Northgate to ensure that the neighborhood's limited supply of on-street parking adequately serves surrounding land uses, in the mid-term (2008–2010).

Long-Range Priority Improvements

J-13. Work with Sound Transit and stakeholders to study and implement proactive parking management techniques around the station to prevent use of neighborhood streets for park-and-ride purposes, prior to the opening of the light rail station.

Figure 7-4. Priority Ranking of Recommended Improvements under the CTIP Goal: Protect Neighborhoods



Note: Parking concepts J-12 and J-13 are not shown.

Recommendation: To help fund CTIP improvement projects, establish a Transportation Mitigation Payment Program. The payments would be based on the cost of transportation improvements identified in the CTIP and the development's impact. The payments would be applied to the comprehensive set of transportation improvements identified in the CTIP, which include all travel modes. For developers choosing to participate, this program would serve as an alternative to directly providing mitigation required by project permit conditions.

CTIP recommends a Northgate Transportation Mitigation Payment Program as an alternative way for developers to make direct payments to mitigate the transportation impacts of new development. This option has several benefits over the status quo mitigation method: it is more efficient and will produce better mitigation outcomes.

Under the State Environmental Policy Act (SEPA), the City assesses the environmental impacts of development proposals to determine what mitigation is required to prevent adverse environmental impacts. Depending on the type and size of a given development project, impacts on the transportation system may typically include increased traffic, causing transportation facilities to become less efficient, decreasing safety, or increasing air pollution.

To mitigate such impacts, the developer is usually required to provide capital or programmatic improvements to the street system, or to pay the City for the cost of facilities or programs that are needed to serve new development.

As a result, this status quo SEPA mitigation approach addresses transportation impacts and mitigation on a case-by-case basis. Improvements are limited to roadway capacity and do not include other transportation modes.

A promising alternative is the proposed Northgate Transportation Mitigation Payment Program, which allows developers to make a direct payment in proportion to the estimated level of impacts to the transportation system by new Northgate development projects. This Transportation Mitigation Payment Program would be an alternative way for developers to meet their transportation mitigation obligations.

The payments would be based on a formula using the estimated cost of CTIP projects and the development's proportional transportation impact. The payments would be applied to the CTIP projects, which include all travel modes, not just roadway capacity improvements.

The recommended Transportation Mitigation Payment Program would contain a number of significant improvements to the current system to determine impacts and identify mitigation. They include the following:

- Use of neighborhood-wide rather than piecemeal project-by-project transportation improvements
- Funding for transportation project improvements rather than additional traffic studies
- Funding for transportation projects that improve conditions for all travel modes, including pedestrian, bicycle, and transit capital improvements
- Faster permit review process and increased predictability for development

Under either the traditional SEPA-based impact fee approach or the alternative Transportation Mitigation Payment Program, the City will review each development proposal to make sure the mitigation is appropriately related to the anticipated impacts.

Cross-Freeway Connection

The Northgate Stakeholders Group expressed its strong support for a pedestrian and bicycle overpass crossing the freeway from North Seattle Community College to the Northgate Transit Center and future Sound Transit North Link Light Rail Station.

The crossing would make it easier for College faculty and students to use bus transit and the future light rail, reducing single-occupant vehicle trips. It would connect neighborhoods west of I-5 to the commercial area and neighborhoods east of I-5, particularly the new Northgate Civic Center and South Lot developments envisioned for Northgate.

The project could cost $7–10 million and might come about through collaboration between the City of Seattle, King County, WSDOT, Sound Transit, North Seattle Community College, private property owners, neighborhoods, and others.

Total Cost of Recommended Improvements

Table 7-1 summarizes planning-level costs for the recommended transportation improvements.[2] Cost estimates are based upon typical unit costs in 2005 from previous SDOT and WSDOT projects. Right-of-way costs are based upon King County's property assessment database as of 2005. Construction and engineering costs are assumed to be 15% of the project's subtotal cost. Pre-construction and design costs are assumed to be 20%. Contingency costs are assumed to be 30%.

Table 7-1. Summary of Recommended Transportation Improvement Costs by Priority

CTIP Costs by Priority	
Priority	**Cost**
High	**$18,826,000**
Mid-Level	**$13,719,000**
Long-Range	**$8,576,000**
Sub-Total	**$41,121,000**
Cross-Freeway Connection	**$7,000,000–$10,000,000**
Total	**$48,000,000–$51,000,000**

[2] These totals are lower than those in Table 6-3 because project C-6 (improvements to the intersection of N Northgate Way and Meridian Avenue N for $8.5 million) is not recommended due to high right of way acquisition costs.

Performance with Recommended Transportation Improvements

The recommended projects in the CTIP will make a positive difference for Northgate residents, businesses, and developers. When implemented, these improvements will move Northgate's transportation system closer to achieving the performance benchmarks defined early in the CTIP's planning process. This section summarizes how the transportation system would perform if all of the recommendations were implemented. It follows the order of the performance measures described in Chapter 2.

Pedestrian Crossings at Intersections and Mid-Block Locations

Several recommended projects address difficult crossing locations:

- NE Northgate Way: more direct pedestrian crossing at 3rd Avenue NE; reduced pedestrian and vehicle conflicts at 5th Avenue NE and 8th Avenue NE
- 3rd Avenue NE: improved and more visible pedestrian access between offices on NE 100th Street and Northgate Mall
- 5th Avenue NE: safer and more direct crossing between the new Civic Center and Northgate Mall, consistent with the 5th Avenue Streetscape Design Plan
- 8th Avenue NE: improved pedestrian access between the Northgate commercial area and the residential neighborhood to the south
- Meridian Avenue N: safer pedestrian crossing at NE 115th Street

Pedestrian Connections from Neighborhoods to the Urban Center

With the CTIP's recommended improvements, 87% of the arterials connecting neighborhoods to the Urban Center will have sidewalks on both sides, as shown in **Table 7-2.** The recommended improvements include reconstruction and/or installation of sidewalks at the following locations:

- NE 125th Street between 5th Avenue NE and Roosevelt Way NE
- NE 100th Street between 1st Avenue NE and 5th Avenue NE
- NE 92nd Street between 1st Avenue NE and 5th Avenue NE
- Meridian Avenue N between N 115th Street and N 122nd Street
- 1st Avenue NE between NE 92nd Street and NE 97th Street
- 15th Avenue NE between NE 92nd Street and NE 117th Street

Table 7-2. Neighborhood to Urban Center Pedestrian Connections: Performance with CTIP Improvements

Sector	Total Sidewalk Miles	Benchmark Miles (90% of sidewalk)	Existing Conditions	Total with Recommended Improvements
West	11.00	9.90	7.89 mi (72%)	**8.22 mi (75%)**
North	9.48	8.53	8.54 mi (90%)	**9.23 mi (97%)**
South	13.52	12.17	11.20 mi (83%)	**12.46 mi (92%)**
Total	34.02	30.62	27.63 mi (81%)	**29.76 mi (87%)**

Pedestrian Connections within the Urban Center

Several of the recommended improvements would enhance major connections between destinations within the Northgate Urban Center. With the CTIP improvements, 88% of the arterials within the Urban Center will have sidewalks on both sides, as shown in **Table 7-3.** The recommended improvements include better pedestrian facilities at the following locations:

- Northgate Transit Center/Northgate Commons to Northgate Mall/Northgate Civic Center: Safer pedestrian crossings and new sidewalks on 3rd and 5th Avenues NE and NE 100th and NE 103rd Streets
- Northgate Mall to Northgate North Center: more direct and visible crossing at 3rd Avenue NE, and greater visibility of the pedestrian crossings at the intersection of 5th Avenue NE and NE Northgate Way
- Northwest Hospital to Northgate Mall: more protected walkway under I-5, with better lighting
- Northgate Mall to the Office Center south of NE 100th Street: direct pedestrian linkage with safer pedestrian crossings by way of the 3rd Avenue NE extension
- 8th Avenue NE between NE Northgate Way and NE 92nd Street: new sidewalk and traffic calming devices, providing a safer place to walk on 8th Avenue NE

Table 7-3. Urban Center Pedestrian Connections: Performance with CTIP Improvements

Sector	Total Sidewalk Miles	Benchmark Miles (90% of sidewalk)	Existing Conditions	Total with Recommended Improvements
Total	9.56	8.60	8.15 (85%)	**8.40 mi (88%)**

Pedestrian Connections within Neighborhoods to Parks, Schools, Local Businesses, and the Transit Center

The CTIP study area includes an extensive network of school district-designated school walk routes for five elementary schools. Many of these routes lack sidewalks or walkways. These routes cover arterials and many non-arterials that link neighborhoods to local parks and businesses and to the transit center, as well as to the schools. Improvements to the school walk routes will therefore enhance all pedestrian circulation within neighborhoods. With the CTIP improvements, 55% of the school walk routes within the Urban Center will have sidewalks on one side, as shown on **Table 7-4**. The recommended improvements include new sidewalks at the following locations:

- 15th Avenue NE from NE 92nd Street to NE 117th Street
- N 117th Street from 1st Avenue N to Meridian Avenue N
- NE 115th Street between 5th Avenue NE and Lake City Way NE
- 8th Avenue NE between NE 92nd Street and NE Northgate Way
- NE 98th Street between 15th Avenue NE and Lake City Way NE

Bicycle System Performance

The CTIP's recommended bicycle facility improvements would improve bicycle levels of service and bicycle safety by adding separate bike lanes and separating bicycle and pedestrian traffic along several roadways:

- 1st Avenue NE, NE 92nd Street to NE 100th Street NE: safer bicycling conditions on new bike lanes
- College Way N/Meridian Avenue N, N 92nd Way to N Northgate Way and N 115th Street to N 122nd Street: safer bicycling conditions on new bike lanes
- NE 115th Street, 5th Avenue NE to Lake City Way NE: safer bicycling conditions by moving pedestrians onto a new raised walkway
- 8th Avenue NE, NE Northgate Way to NE 92nd Street: safer bicycling conditions by moving pedestrians onto a new raised walkway

- NE 98th Street, 15th Avenue NE to Lake City Way NE: safer bicycling conditions by moving pedestrians onto a new raised walkway

Table 7-4. School Walk Route Pedestrian Connections: Performance with CTIP Improvements

School Walk Route	Total Sidewalk Miles	Benchmark Miles (90% of sidewalk)	Existing Conditions	Total with Recommended Improvements
Alternative School #1	12.29	11.06	5.90 mi (48%)	**6.50 mi (53%)**
Northgate Elementary	11.10	9.99	4.50 mi (41%)	**6.28 mi (56%)**
Olympic Hills Elementary	5.89	5.30	2.85 mi (48%)	**3.32 mi (56%)**
Olympic View Elementary	10.84	9.76	6.50 mi (57%)	**7.56 mi (70%)**
Sacajawea Elementary	8.28	7.45	4.42 (53%)	**6.02 mi (73%)**
Total	48.45	43.61	24.17 mi (49%)	**29.68 mi (61%)**

Note: Since the school district has identified most local streets as school walking routes, the CTIP pedestrian projects would provide a relatively modest improvement, in terms of the performance measures, to the overall school walk route network.

Transit System Performance

Recommended improvements in transit service in the Urban Village Transit Network (UVTN) between the University District and Northgate would have the following results:

- service frequency of 15 minutes or less
- span of service at least 16 hours a day

Along the secondary transit network, service to the Urban Villages of Bitter Lake, Aurora–Licton Springs, and Green Lake would improve as follows:

- 15-minute average headways during peak periods
- 30-minute average headways during off-peak periods

With the anticipated light rail service to Northgate, existing bus service hours could be shifted to community feeder services. As a result, local service to local destinations and coverage of senior households could be increased.

Traffic Safety (Vehicle-Only and Vehicle/Pedestrian or Bicycle Crashes)

The CTIP's recommendations would improve safety at intersections and mid-block locations that exceed the SDOT crash benchmarks and/or are within the highest 25% crash rate for the five-year period of 1999–2003.[3]

Sites of the recommended improvements that are not currently meeting the SDOT benchmark:

- N/NE Way: Meridian Avenue N to 15th Avenue NE (seven locations)
- 15th Avenue NE: NE 123rd to 125th streets
- N Northgate Way: Corliss Avenue N to 1st Avenue NE
- Meridian Avenue N: N 107th Street to N Northgate Way
- N 130th/Meridian Avenue N

Sites of the recommended improvements where the cash rates are within the highest 25 percent:

- NE Northgate Way between 3rd Avenue NE and 5th Avenue NE
- NE 125th between 8th Avenue NE and Roosevelt Way NE
- 8th Avenue NE between NE Northgate Way and NE 107th
- N Northgate Way between Meridian Avenue N and Corliss Avenue N
- Meridian Avenue N between N Northgate Way and N 107th
- NE 130th Street/Meridian Avenue N
- Meridian Avenue N/N 107th
- NE Northgate Way/15th Avenue NE
- NE 115th/Pinehurst Way NE
- NE 115th Street/5th Avenue NE

Non-Arterial/Residential Streets

The CTIP's recommendations will provide increased pedestrian safety through major investments along the following three

[3] Two sites were not specifically addressed: modifications at one of the sites, at N 130th and 1st Avenue North, were recently completed, such that the five years of data do not represent existing conditions. Crashes noted at the other site, on Wallingford Avenue N between NE 85th and NE 88th streets are related to the intersection operation at Wallingford Avenue N and NE 85th, which is just outside the study area boundaries.

corridors that demonstrated the poorest performance against the CTIP's benchmarks:

- NE 98th Street: 15th Avenue NE to Lake City Way NE
- NE 115th Street: 12th Avenue NE to 15th Avenue NE
- N 117th Street: Meridian Avenue N to 1st Avenue N

Arterial Levels of Service

Implementation of all CTIP improvements would enable the transportation system to successfully manage the traffic impacts of the considerable new growth forecast for Northgate. By 2030, all arterial corridors and all intersections but two will be maintained or improved to operate at LOS E, the CTIP performance measure for roadway operations. The CTIP considers LOS E the appropriate performance measure for an Urban Center where non-motorized and transit trips are emphasized.

Implementation of the CTIP improvements would achieve the following levels of service in the years 2010 and 2030, as noted:

- All arterial corridors but one will operate at LOS E or above by 2010
- All arterial intersections but four will operate at LOS E or above by 2010
- All arterial corridors will operate at level of service E or above by 2030
- All arterial intersections but two will operate at LOS E or above by 2030

The two intersections forecast to operate at LOS F in 2030 are Meridian Avenue N/N Northgate Way and College Way N/N 92nd Street. Significant right-of-way costs are part of any major improvements to the intersection at Meridian Avenue N and N Northgate Way. As an alternative, the CTIP's recommended westbound left turn lane at the Corliss Avenue N and N Northgate Way intersection and roundabouts at N Northgate Way/Corliss Avenue N and Meridian Avenue N/N 107th Street would improve the level of service at the Meridian Avenue N and N Northgate Way intersection.

The second intersection projected to operate at LOS F in 2030 was College Way N and N 92nd Street. However, the modeling analysis of this unsignalized intersection appears to have overemphasized future congestion. More detailed operational analysis through the North Seattle Community College's Master Plan process should consider current and future traffic demand before deciding upon the most suitable improvements.

Figure 7-5. 2010 PM Peak Hour Arterial Level of Service and Average Speed with the CTIP Recommended High-Priority Improvements

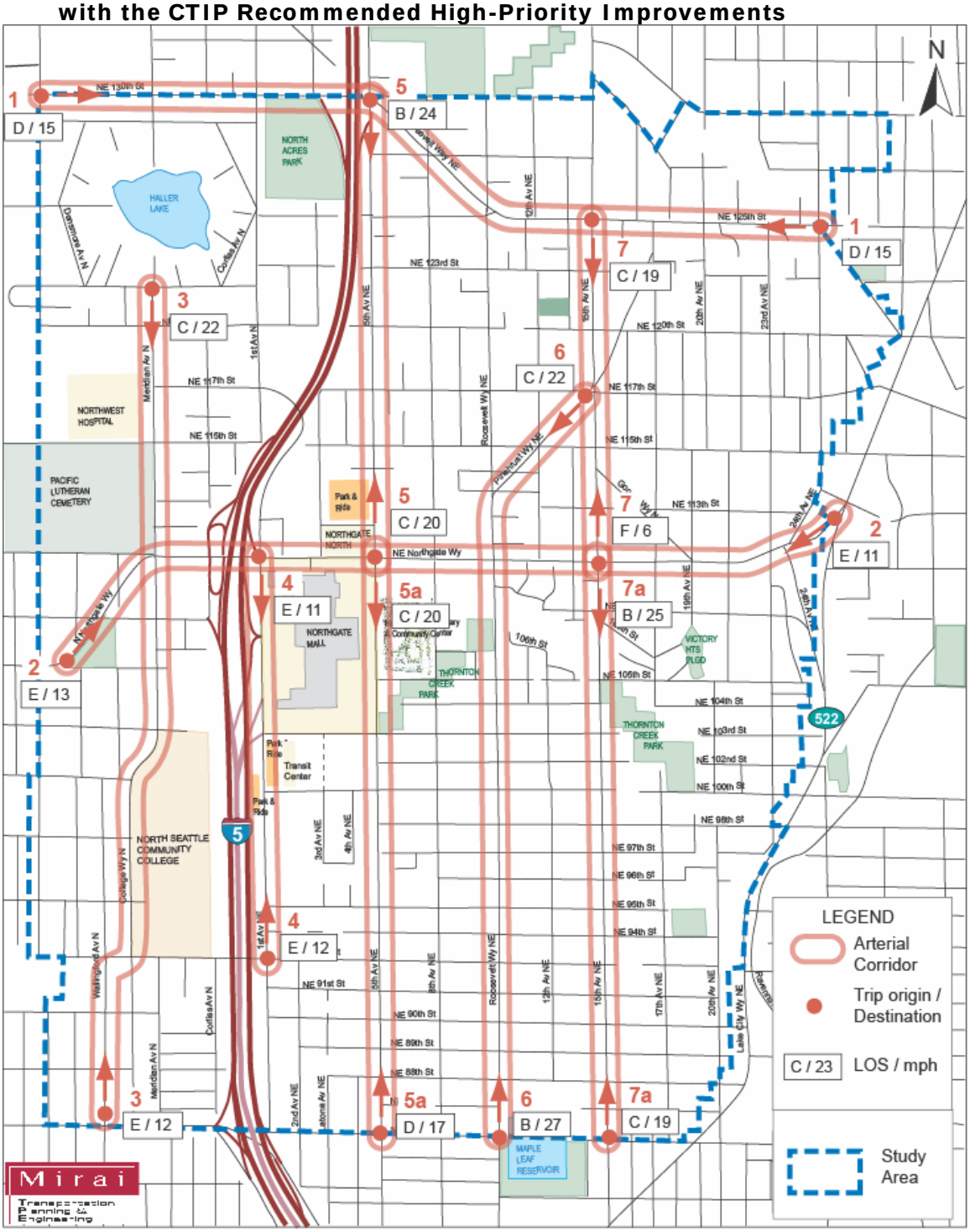


Figure 7-6. 2030 PM Peak Hour Arterial Level of Service and Average Speed with the CTIP Recommended Improvements

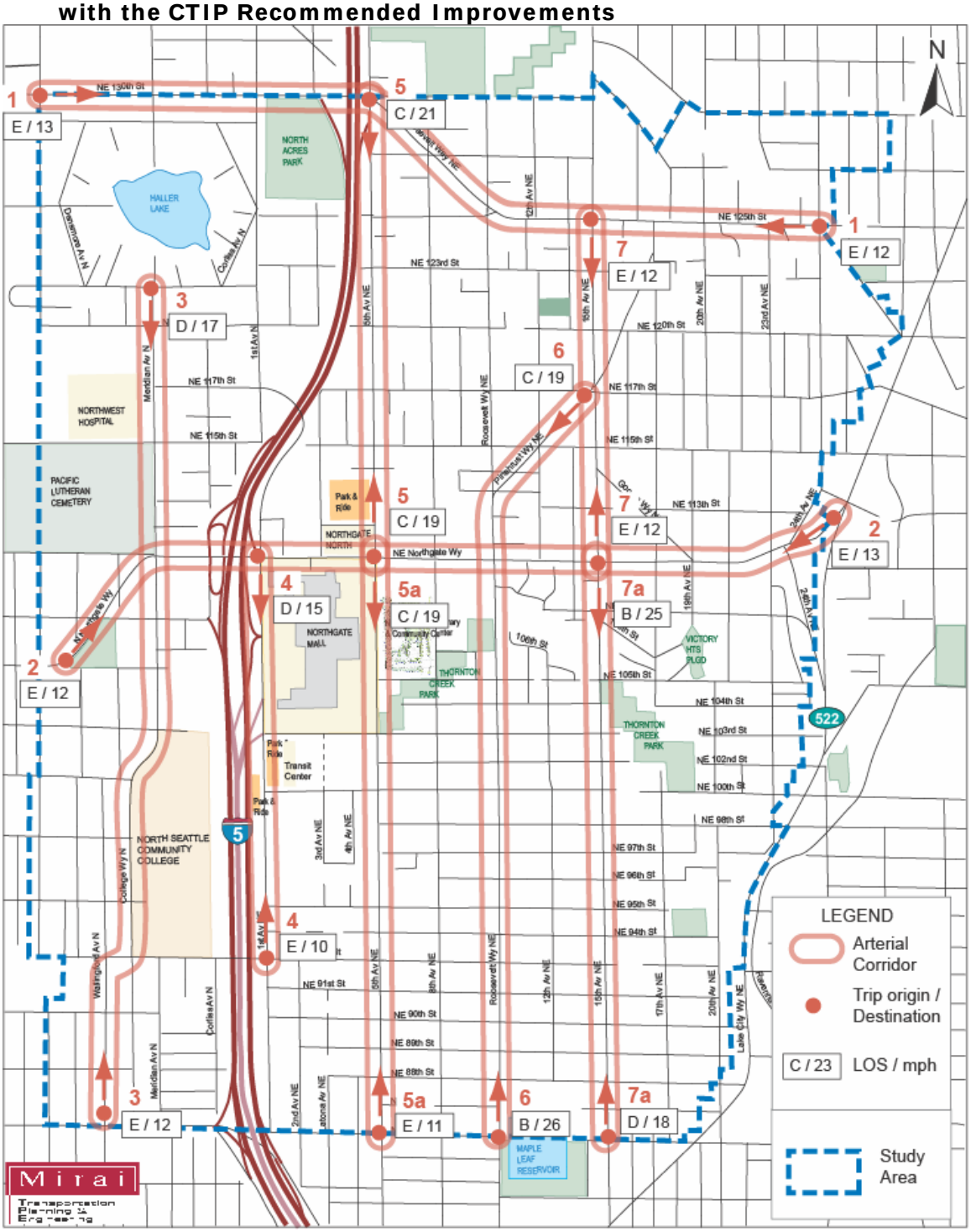


Figure 7-7. 2010 PM Peak Hour Intersection Level of Service with the CTIP Recommended High-Priority Improvements

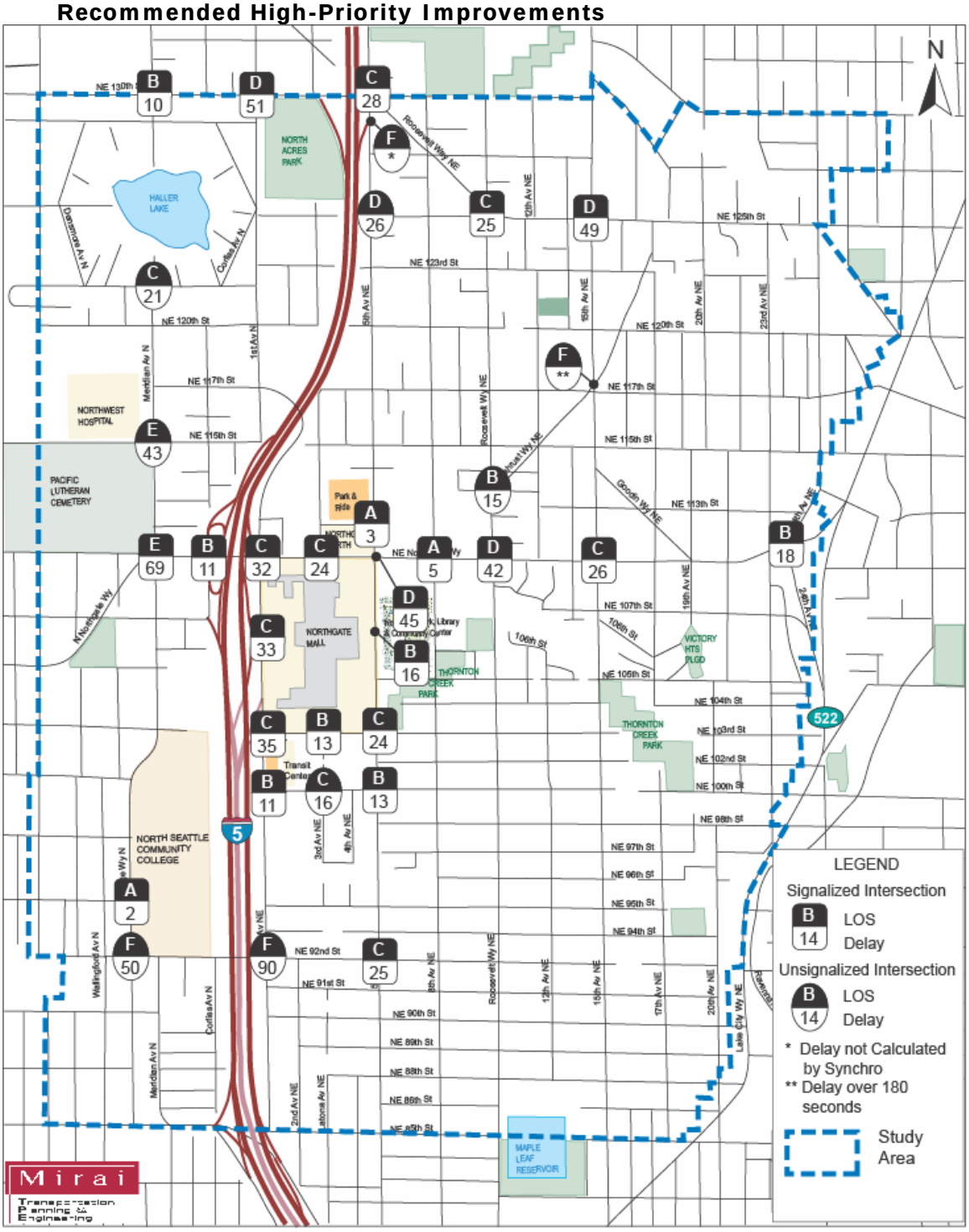


Figure 7-8. 2030 PM Peak Hour Intersection Level of Service with the CTIP Recommended Improvements