

Appendix 5-1.

CTIP Planning, Financing and Technical Assumptions

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Northgate Coordinated Transportation Plan

Planning, Financing and Technical Assumptions

Prepared for

Northgate Stakeholder Group

Prepared by

**Seattle Department of Transportation
and Mirai Associates**

February 24, 2005



Appendix 5-1. CTIP Planning, Financing and Technical Assumptions

Northgate Coordinated Transportation Investment Plan (CTIP) Planning, Financing and Technical Assumptions

This report establishes planning, financing and technical assumptions for the Northgate Coordinated Transportation Investment Plan (CTIP).

The assumptions are grouped into the following categories:

- Planning assumptions
- Financing sources
- System performance measures and benchmarks

1. Planning Assumptions

To proceed with the development of a transportation plan for the Northgate area, several assumptions should be clarified at an early stage of the planning process. The consultant and City staff team has identified several key assumptions as follows:

A. Existing Plans

The CTIP will be developed based partially on previous plans and studies. It is particularly important to review and evaluate the policies and recommendations in the following plans:

- Northgate Area Comprehensive Plan (1993)
- Open Space and Pedestrian Connections Plan (2004)
- 5th Avenue NE Streetscape Final Design Report

In addition, known or anticipated new developments will be evaluated as “pipeline projects”.

Assumption:

- 1) Develop CTIP recommendations that will be consistent with previously prepared plans for the Northgate area.
- 2) Include known or anticipated new development as part of CTIP traffic forecasts.

B. Study area

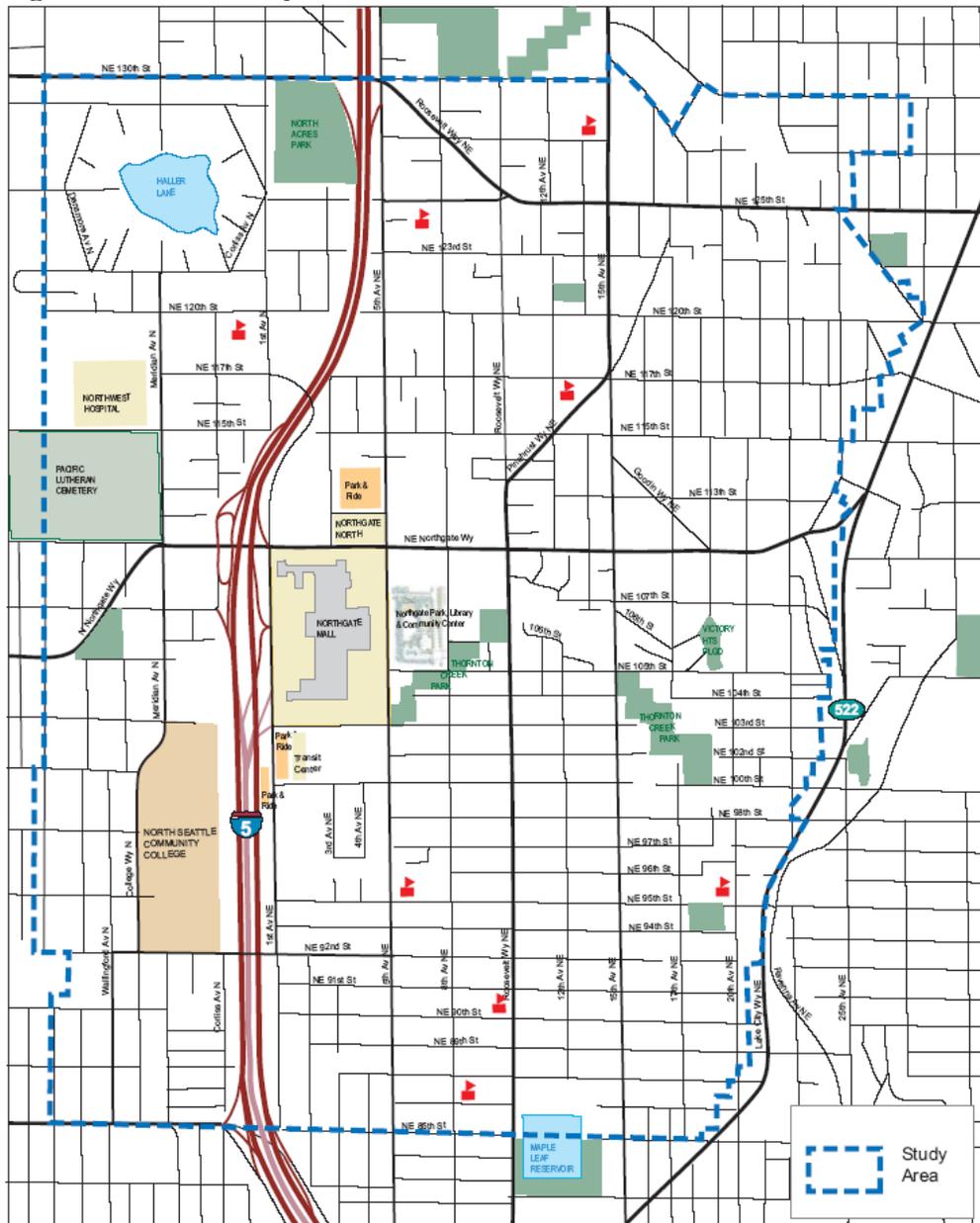
The study area adopted in the 1993 Northgate Area Comprehensive Plan (NACP) study is shown in Figure 1. The boundaries of the Core Overlay Area within the NACP and the Northgate Urban Center were also considered as the potential CTIP study area.

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Assumption:

- 1) The study area of the CTIP should be consistent with the Northgate Comprehensive Plan. The study area boundaries, as designated in the Comprehensive Plan EIS, are defined by Ashworth Avenue N on the west, N 130th Street/125th Street on the north, NE 85th Street on the south, and the west side of Lake City Way on the east, excluding Lake City Way. However, we would analyze traffic that may travel through the study area from access points on Lake City Way.

Figure 1. CTIP Study Area



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C. Study Area Growth Assumptions

The CTIP will be developed to support the planned future (2010 and 2030) land use growth in the study area. It is therefore important to clarify the growth assumptions to be used for this study. These assumptions involve use of the Seattle Transportation Demand Forecasting Model (“Seattle Model”) for the following three areas: 1) Northgate CTIP study area, 2) the entire City of Seattle area, and 3) the region outside the City.

Assumptions:

- 1) Review the Seattle Model’s assumptions for existing land use, and 2010 and 2030 growth projections.
- 2) Refine land use projections that the CTIP will use for 2010 and 2030 based on the existing development proposals.

D. Interstate 5

While the City does not have land use or transportation planning responsibility within the State right-of-way, State facilities significantly affect the operation of the City’s transportation system. In particular, the current planning activities for I-5 may provide a vehicle by which to implement CTIP recommendations. At the same time, an analysis of I-5’s function and operations would be resource-intensive, may duplicate Washington State Department of Transportation (WSDOT) efforts and may distract from higher priority interests in the Northgate area. Therefore, it is important to clarify the City’s direction with respect to the consultant’s work related to I-5.

Assumptions:

- 1) Develop and evaluate concepts that would improve east-west pedestrian circulation across I-5
- 2) Evaluate intersection operations on City arterials at existing I-5 ramps.
- 3) Coordinate with WSDOT I-5 study.

E. Sound Transit

The Sound Transit Board affirmed its plan to build a light rail system from Downtown Seattle to Northgate, but full funding and project timing remain uncertain.

Sound Transit has initiated planning for Sound Move Phase II, and it is possible that an extension of light rail from Northgate into Snohomish County may be discussed in the near future. Given these uncertain conditions about the future of the North Link light rail extensions, CTIP should assume light rail implementation consistent with City of Seattle policy. The implications of the light rail assumption for the Northgate are mostly related to park and ride demand and parking supply, potential parking spillover, traffic impacts, and pedestrian/bicycle facilities connecting the neighborhoods to the station.

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While Sound Transit has identified Northgate as a temporary terminus of the light rail line, it is too speculative to precisely define whether and when the light rail line would be extended to the north from Northgate. The CTIP will not make any statement about how long the Northgate station would remain the temporary terminus. When a decision is made to extend North Link Light Rail, Sound Transit will prepare environmental documents and analyze impacts of such action to the Northgate communities. Therefore, the following is the assumptions that will be used for the CTIP.

Assumptions:

- 1) Link Light Rail would be extended to the University District by 2020.
- 2) Link Light Rail would serve Northgate by 2030

F. Seattle Monorail

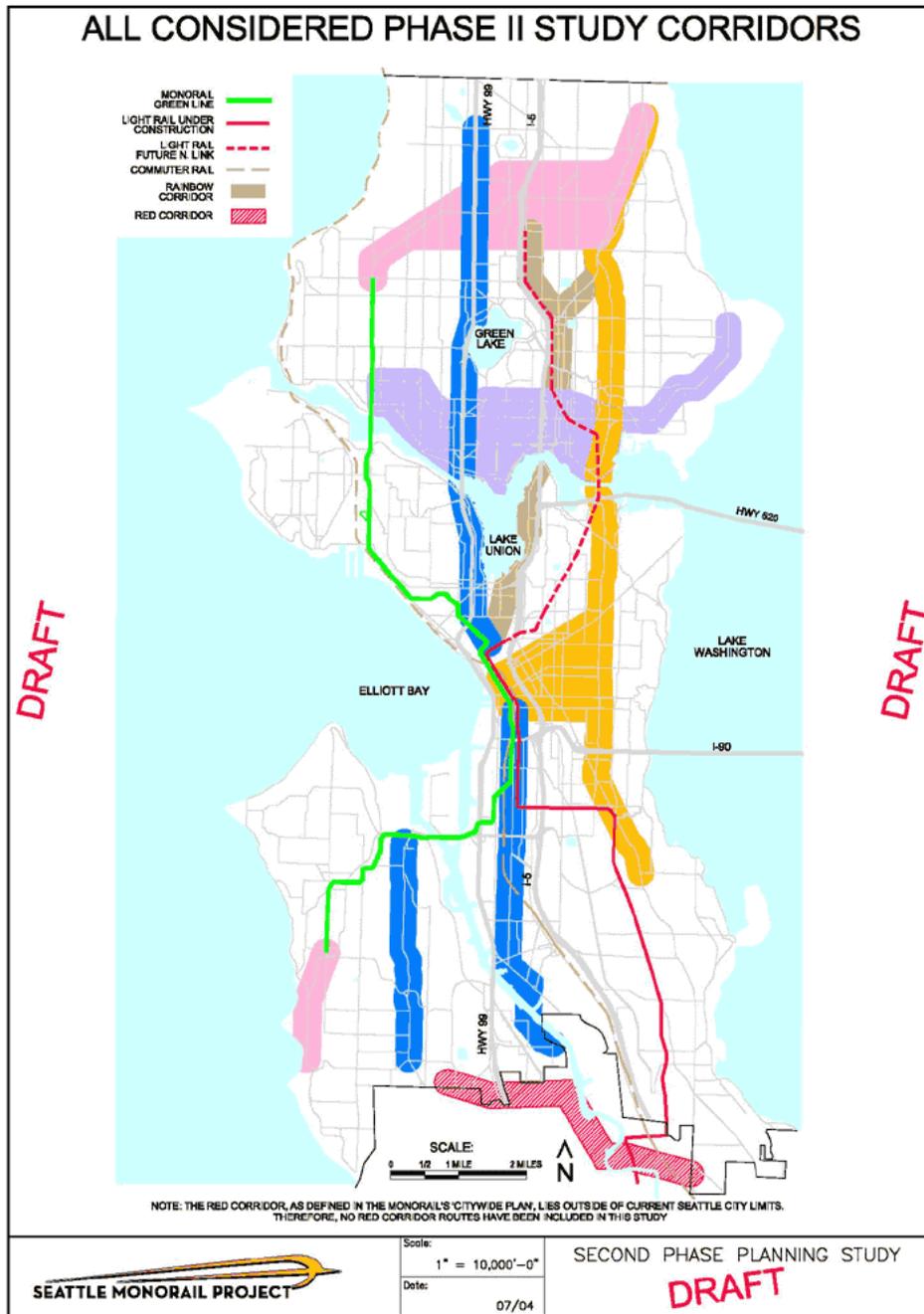
The Seattle Monorail Project has initiated planning for Phase II of the Monorail system. Several possible extensions from the current Green Line or new lines have been identified. One of the Phase II options is to extend the Green Line from Crown Hill to Northgate. At this time, it is uncertain which Phase II corridor will be selected. While many uncertainties exist for this project, CTIP needs to make some planning assumptions. A map (Figure 2) showing the corridors for possible extensions in Phase II of the Monorail Project is attached.

Assumptions:

- 1) Identify the range of issues that would be related to a potential Green Line extension to Northgate.
- 2) Develop policy recommendations in CTIP regarding a Green Line extension. However, we would not expend major effort to evaluate and formulate recommendations on a Green Line Northgate alignment or supporting infrastructure.

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Figure 2: Map of the Seattle Monorail Project Extension Corridors



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2. Financing Sources

One of the important issues that will influence the direction of the Northgate CTIP is if, and at what point in the planning process, the CTIP should be financially constrained within current funding levels.

If the CTIP is financially constrained at the outset, new, bold or innovative ideas, which may be funded through regional grants or other financing possibilities, might not be considered and evaluated in this study. On the other hand, if financial reality is not introduced early in the plan development process, we may waste resources defining unlikely investments and unduly raising expectations.

The issues of potential transportation financing resources may impact more than just the CTIP and the Northgate area. City leadership may wish to consider some or all of these possible revenue sources in light of city-wide impacts:

- Development impact fees;
- Local Improvement District financing;
- Transportation Benefit District financing;
- Employee tax for transportation improvements;
- Additional general fund allocation to transportation;
- Partnership opportunities involving the use of street rights-of-way, including street vacations;
- Partnership opportunities via neighborhood grant allocations.

The study team would look for City guidance in determining how much the communities and agencies may be willing to pay, who should pay, and through what mechanisms.

Assumptions:

- 1) Clarify the potential investment level that the City may make under the City's current financial capability early in the CTIP planning process.
- 2) Develop CTIP recommendations that can be funded within the City's current financial capability as a starting point.
- 3) Identify other potential funding sources and identify steps needed to implement each funding source.

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3. System Performance Measures

One of the key tasks in the CTIP process is to identify deficiencies in the transportation system. At issue is how the system deficiencies should be defined, particularly related to 1) pedestrian facilities, 2) bike facilities, 3) transit facilities, 4) residential streets and 5) arterial roadways and intersections. While the level of service standards in the City's Comprehensive Plan Transportation Element are important for the City's concurrency management system, they may not be a sufficient performance indicator for subarea transportation planning such as CTIP. A more detailed set of performance measures and benchmarks may better illustrate the potential benefits of recommended improvements.

Performance measures are defined as:

“Measurement or evaluation of how a system is performing to meet its goals and objectives”.

Indicators are defined as:

“components and/or characteristics of a system. Generally, a performance measure consists of several indicators.”

Benchmarks are defined as:

“Acceptable conditions for each transportation system”.

Recommended Performance Measures and Benchmarks

The performance measures, consisting of indicators and benchmarks should be regarded as an initial set to prepare for the development of CTIP. As more information is assembled throughout the duration of the study, the benchmarks may potentially be adjusted.

The following key components of Northgate's transportation system will be evaluated using the recommended measures and benchmarks.

- Mode share
- Transportation system for pedestrians
- Transportation system for bicyclists
- Transit system
- Transportation system for vehicles

Mode Share

Travel mode share by transit, carpool, pedestrian and bicycle (non-single occupant vehicles) modes indicates how efficiently the transportation system is used. The Transportation Element of the Comprehensive Plan recommends mode choice goals for 2010 and 2020 as does the Northgate Area Comprehensive Plan.

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The Northgate Area Comprehensive Plan and Northgate Overlay District in the Land Use Code (SMC 23.71) includes the maximum PM peak hour SOV mode use for commercial and residential trips generated by projects above a certain trip generation threshold. After year 2000, the maximum SOV use goal is set at 55 percent for both commercial and residential trips. However, the mode share goals recommended in the Transportation Element (shown below) appear to be more useful, considering the 2000 Census survey data.

Mode Share Performance Measures:

Indicator	Benchmark
Work Trips by workers within the Urban Center	2010: 70% or less drive alone 2020: 60% or less drive alone
All Trips by Residents within the Urban Center	2010: 45% or less drive alone 2020: 40% or less drive alone

Transportation System for Pedestrians

Key indicators for a safe and effective pedestrian system for the Northgate area will include arterial crossings, connections between major destinations, connections between neighborhoods and the Northgate Urban Center, and connections within neighborhoods to local schools, parks, the transit center, and neighborhood commercial districts. The performance of these indicators will be measured through field observations and comments the consultant team receives at public meetings and those made by the Northgate Stakeholders.

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Pedestrian System Performance Measure:

Indicator	Benchmark
Intersections and Mid-Block Crossings (including those defined in Open Space/Pedestrian Plan)	
<u>Northgate Way Corridor</u>	
I-5 Southbound ramps, 1 st Avenue NE, 3 rd Avenue NE, 5 th Avenue NE, 8 th Avenue NE, Roosevelt Way, and a section between 5 th Avenue and 7 th Avenue	
<u>5th Avenue NE Corridor</u>	
Northgate Way, NE 106 th Street (Community Center), NE 103 rd Street, NE 100 th Street, NE 92 nd Street, NE 105 th Street, NE 112 th Street, NE 85 th Street	
<u>8th Avenue NE Corridor</u>	
North of Northgate Way NE to Post Office	
<u>Roosevelt Way Corridor</u>	
Street sections between NE 112 th Street and Northgate Way, and between NE 88 th Street and NE 92 nd Street	
<u>15th Ave NE Corridor</u>	
North of NE 94 th Street, access to Sacajawea Elementary School, NW Puppet Center, NE 117 th Street – NE 125 th Street	
<u>3rd Avenue Corridor between NE 100th Street and NE 103rd Street (New Street)</u>	
NE 100 th Street, NE 103 rd Street	
<u>College Way/Meridian Avenue N Corridor</u>	
From N 92 nd Street to N 122 nd Street	
Pedestrian Accidents Crossing Width Conflicting Turning Volumes Average Daily Volumes Refuge Space Average Speed Pedestrian Signals Activated Pedestrian Signals ADA-Compliant Ramps Streetlights	Quantitative and qualitative analysis to determine adequacy
Indicator	Benchmark
Neighborhoods to urban center (arterials including trail segments through public open space)	
Connectivity (Sidewalks) Characteristics of pedestrian facilities such as street lights, sidewalk space, pavement conditions (such as tree grate displacement, lack of maintenance, etc)	Acceptable when equals 90% of total arterial linear arterial distance times two(2)*, and qualitative assessment of pedestrian facilities to determine adequacy
* Sidewalks on both sides of a street will be evaluated.	

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Indicator	Benchmark
Within Urban Center (connectivity targets defined in open space and pedestrian plan)	
<u>Between North Seattle Community College and Northgate Transit Center</u>	
<u>Between new Civic Center and Transit Center</u>	
<u>Between Northgate Mall and Northgate Transit Center</u>	
<u>Between Northgate Mall and future Link Light Rail station</u>	
<u>Between Northgate Mall and Northgate Community Center/Library</u>	
<u>Between Northgate Mall and Northgate North Center</u>	
<u>Between Northwest Hospital and Northgate Mall</u>	
<u>Between Office center south of NE 100th Street and Northgate Mall</u>	
<u>Pedestrian Access to QFC at Roosevelt Way and NE 112th Street</u>	
<u>8th Avenue NE between Northgate Way to NE 92nd Street</u>	
Connectivity (Pedestrian facilities that may include sidewalks, trails, etc.)	Acceptable when equals 90% of total linear street distance of all connections combined times two(2)* and
Quality of pedestrian connection	qualitative assessment of pedestrian facilities to determine adequacy
* Sidewalks on both sides of a street will be evaluated.	

Indicator	Benchmark
Neighborhoods to Parks, Library, Schools, Local Businesses and Transit Center (arterials and local streets)	
Obstacles (minimum space necessary for two persons to walk continuously)	None within 1/2 mile radius of parks, library and neighborhood commercial districts
Connectivity (sidewalks) and quality of sidewalks	90% of total arterial linear distance times two(2)* and qualitative assessment of pedestrian facilities to determine adequacy
School Walk Routes	90% have sidewalks on one side within each school walk zone
* Sidewalks on both sides of a street will be evaluated.	

Transportation System for Bicyclists

The measure for bicycle facilities on designated bicycle routes (Figure 3) will assess whether adequate bicycle facilities are provided on the City's designated bicycle routes in the CTIP study area. The bicycle facilities for this purpose are bicycle lanes, shared use lanes (wider curb lanes), and multi-purpose trails. The City's designated bike routes and all arterials will be evaluated using the indicators shown below, from which an level of service score, which is called the Bicycle Performance Index (BPI), will be derived. BPI benchmarks will vary according to roadway type and area as follows.

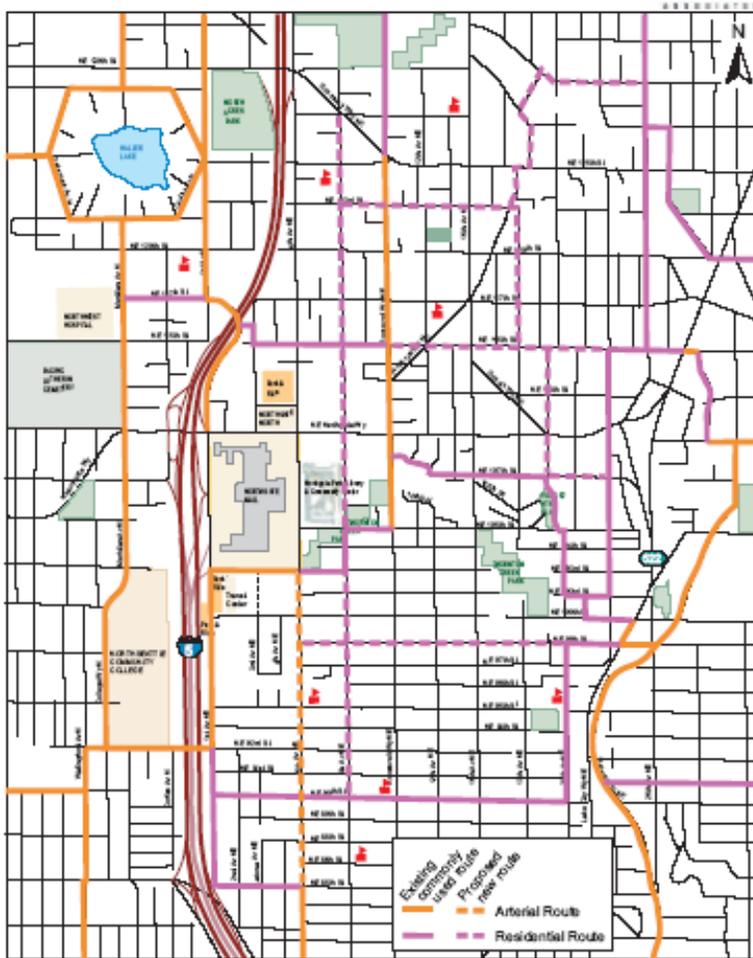
The proposed bicycle level of service attempts to indicate bicyclist comfort level for specific roadway geometries and traffic conditions. Each of the indicators listed in the recommended benchmark table are weighted according to a mathematical equation.

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From this computation, the scores can be obtained. Bicycle Performance Index is defined with ranges of the score. For example, BPI **B** is defined with the score between 1.51 and 2.50, and BPI **C** is a range of the score between 2.51 and 3.5.

Bicycle System Performance Measure:

Indicator	Benchmark
Traffic Conditions (Average Daily Trips, Percent of Heavy Vehicles)	Bike routes within 1/2 mile of a recreational facility or schools: BPI B Bike routes along non-arterials: BPI B
Roadway Design (Number of Lanes, Speed Limit, Width of Outside Lane)	Bike routes along arterials: BPI C (FHWA's Bicycle Compatibility Index and Updates)
Roadway Surface Conditions	



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Transit System

Key indicators for convenient and effective transit service for Northgate residents and employers will include transit services provided in the Seattle’s Urban Village Transit Network, and transit services in the Secondary Network for Northgate households, with specific measures for senior households. The bus routes will be grouped based on Northgate residents’ travel destinations. For example, one set of the routes will serve local/neighborhood facilities such as the Northgate mall, community center, Northgate Community College, etc. and others will serve major destinations such as downtown Seattle and University of Washington.

Transit System Performance Measure:

Indicator	Benchmark
Urban Village Transit Network	
Frequency (per UVTN Report)	7-15 minutes
Span of Service (per UVTN Report)	16 – 18 hours
Loading	<100% capacity
Reliability (per UVTN Report)	> 60% services running < 1 minute late
Transit Vehicle Speed	> 30% of the speed limits
Senior Households (Residents in multi family senior facilities)	
Transit Service for 90% of Senior Households within 1/8 mile of Routes Serving the Destinations Below:	
Downtown Seattle and University District	<15 minute peak and midday
Other Urban Centers	<30 minute peak and midday
Local Destinations	<30 minute peak and midday
Households (Secondary Transit Network)	
Transit Service for 60% of All Other Households within 1/4 mile of Routes Serving the Destinations Below:	
Downtown Seattle and University District	<15 minute peak and midday
Other Urban Centers and Nearby Urban Villages	<15 minute peak and 30 minute midday
Transit Service for 70% of All Other Households within 1/4 mile of Routes Serving the Destinations Below:	
Local Destinations	<30 minute peak and midday

Transportation System for Vehicles

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Performance of the transportation system for vehicles will be evaluated according to Traffic Safety, Non-Arterial/Residential Street, Arterial Corridor Level of Service, and Arterial Signalized Intersection Level of Service.

Traffic Safety

Traffic safety will be measured with the number of accidents and traffic accident rates. The rates will be defined by average annual accidents per million vehicles at intersections and mid-block locations will be derived from the last 5-years of traffic collision records maintained by the City.

Traffic Safety Performance Measure:

Indicator	Benchmark
Averaged number of Crashes for Signalized Intersections	10 per year
Averaged number of Crashes for Unsignalized Intersections and Mid-block Locations	5 per year
Accident Rates for Signalized Intersections	Intersections within the top one-quarter (ranked highest to lowest rates)
Accident Rates for Unsignalized Intersections	Intersections within the top one-quarter (ranked highest to lowest rates)
Accident Rates for Mid-block Locations	Mid-block locations within the top one-quarter (ranked highest to lowest rates)

Non-Arterial/Residential Street

The performance of non-arterial/ residential streets will be evaluated using the following indicators: traffic volumes, vehicle speeds, collision history, school walkway designations, pedestrian routes, which are identified in the Open Space and Pedestrian Connections Report (2004) and elsewhere, bicycle routes, presence of sidewalks/walkways and street characteristics such as street width, sight distance and on street parking.

CTIP recognizes that the residential/non-arterial streets should be comprehensively evaluated using not only traffic volumes and speeds but also other important street features such as curbs, sidewalks, street width, street trees and parking. Conditions will be inventoried for the residential street system, but benchmarks will not be established initially. For each performance indicator, we will assign points based on the maximum points described below, and key residential streets will be ranked by the total points given to each street. A benchmark may be established after the range of scores has been identified.

Indicator	Maximum Points
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Vehicle Volume (1 point per 100 vpd)	20
Vehicle Speed (1 point per each mph above an 85 th % speed of 20 mph)	20
Pedestrian Facilities	20
Collision History	10
School Walk Route	10
Primary Pedestrian Route	10
Bicycle Route	5
Street Characteristics	5

The Northgate Area Comprehensive Plan includes a policy stating that traffic circulation will be directed onto arterials to protect the neighborhood from avoidable intrusion of through traffic. It specifically lists the following streets for aiming at reducing traffic, speeds, and pedestrian vehicular conflicts with operational and design controls, including sidewalks:

- Ashworth Avenue N
- NE 115th Street between Lake City Way and 5th Avenue NE
- NE 107th Street between 15th Avenue NE and 23rd Avenue NE
- 23rd Avenue NE
- Pinehurst Way between NE 120th Street and NE 125th Street
- Maple Leaf local access streets
- NE 98th Street between Lake City Way and 15th Avenue NE

Additional streets have been suggested for analysis by SDOT staff, Stakeholders and other community members.

Non-arterial/Residential Street Performance Measure:

Indicator	Benchmark
Traffic Volume, Traffic Speed, Collision History, School Walkway, Pedestrian Facilities, Bicycle Routes, and Street Characteristics	Points will be assigned to each indicator. Individual residential streets will be ranked total score. This ranking of streets will be used at the initial stage of action identification.

Arterial Corridor Level of Service

Arterial corridor level of service (LOS) will be measured in terms of average speeds during the PM peak period. The Highway Capacity Manual (HCM) 2000 method will be applied. The HCM 2000 recommends that the length of the streets selected for the arterial corridor LOS should be at least one mile. The following arterials will be selected for this analysis based on the one-mile minimum criteria:

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NE 130th Street/ NE 125th Street between Ashworth Ave and 25th Ave NE

Northgate Way between Meridian Avenue and Lake City Way

Meridian Avenue N/College Way/Wallingford Avenue N between NE 122th Street and NE 85th Street

1st Avenue NE between Northgate Way and NE 92nd Street, and between Northgate Way and NE 130th Street

5th Avenue NE between NE 130th Street and Northgate Way, and between Northgate Way and NE 85th Street

Roosevelt Way NE/Pinehurst Way NW between NE 117th Street (15th Avenue) and NE 85th Street

15th Avenue NE between NE 125th Street and Northgate Way and between Northgate way and NE 85th Street

LOS E is defined with average speeds in a range of 7 to 13 miles per hour, depending on the Street Class. Arterials will be classified for the purpose of the roadway corridor LOS analysis based on free-flow speeds.

Arterial Corridor Level of Service Performance Measure:

Indicator	Benchmark*
Travel Speed	Level of Service E
* The benchmarks for the arterial corridors will be reviewed when the future baseline forecasts become available. <i>It is possible that changes to the benchmarks may be needed.</i>	

Arterial Signalized Intersection Level of Service

Arterial signalized intersection level of service will be using the HCM 2000 intersection delay method. Average vehicle delay at each arterial intersection will be calculated with Synchro 6 for the PM peak hour. Instead of focusing on the individual intersections, the performance of the intersections may be evaluated based on averaged intersection delay within key arterial corridors, including those intersections identified in the Northgate Area Comprehensive Plan.

Arterial Signalized Intersection Level of Service Performance Measure:

Indicator	Benchmark*
Intersection Delay at	Level of service at each arterial intersection will be

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Each Intersection	reported. (Specific benchmark will not be established because it would be more meaningful to evaluate the performance of the aggregated intersections than the performance of individual intersections for an Urban Center area.)
Averaged Delay Among Intersections	LOS E within a key arterial corridor
* The benchmarks for the arterial intersections will be reviewed when the future baseline forecasts become available. <i>It is possible that changes to the benchmarks may be needed.</i>	

Appendix 5-2.

**CTIP Geographic and Programmatic
Improvement Categories**

Appendix 5-2. CTIP Geographic and Programmatic Improvement Categories

- A: NE 130th/125th Street Corridor
- B: Residential/Non-Arterial Streets
- C: West of I-5
- D: NE 92nd Street Corridor
- E: NE Northgate Way Corridor
- F: Transit Service at the Northgate Transit Center and proposed Link Light Rail Station on 1st Avenue NE
- G: 15th Avenue NE Corridor
- H: Roosevelt Way Corridor
- I: 5th Avenue NE Corridor
- J: Transit Services and Programs

Appendix 5-3.

Transportation Management Associations

Appendix 5-3. Transportation Management Associations

MEMORANDUM



Date: January 17, 2006
To: Northgate Stakeholders Group CTIP Subcommittee
From: Lise Northey, Mirai Transportation Planning & Engineering
Re: Transportation Management Associations

In response to the Subcommittee's interest in Transportation Management Associations, below please find a brief discussion of Transportation Management Associations (TMAs), potential TMA services, TMAs relative to parking management, and examples of existing TMAs.

What is a TMA?

A Transportation Management Association (TMA) is a private, non-profit organization providing various transportation services to a specific area. More than 140 TMAs exist nationwide, serving many different constituencies. TMAs cover regional, suburban, corridor-wide, city-wide, and central business district service areas.

Initiative to form a TMA often comes from local or regional governments, chambers of commerce, or major facilities in the area; any of which can provide seed funding. Developers or facility managers may be required to form a TMA as mitigation for local congestion and parking impacts. Additional stakeholders may include transit providers, businesses and other business organizations, employees, nearby residents and customers. TMAs receive funding primarily from membership fees and grants. Grant sources typically include federal and state transportation or clean-air programs; transit agencies and local governments also contribute to some TMAs.

Successful TMAs demonstrate a clear mission and goals, diversified funding, a professional image, collaboration and facilitation of diverse stakeholders, strong leadership, and an active board. TMAs can help develop and maintain cooperation between stakeholders affected by their programs. Many TMAs publish an annual report describing travel demand management programs and resources, travel trends and comparisons with other communities.

TMA Services

TMAs offer a diversity of transportation planning services, travel options and incentives. Services sometimes include efforts to create additional pedestrian and transit oriented land uses and/or parking brokerage services to help businesses share and trade parking resources. TMAs can promote both incentives and disincentives, with many TMAs providing financial incentives (such as subsidized transit passes) for trip reduction. One way that TMAs attract participation from small employers is to promote access to public policy decision-makers through networking events, such as Seattle's Duwamish TMA web-page declaration that

"members of the Duwamish TMA take the initiative by interacting with key government decision makers on transportation at various events."

Appendix 5-3. Transportation Management Associations

Alternatively, the TMA of Delaware advertises that

“TMA members qualify for intensive and customized assistance with their transportation needs. Employee Expos, workshops, surveys, advocacy, and GIS maps of employee locations are only a few of the TMA’s special services.”

TMA’s often focus on educating employees about commute options, providing discounted transit passes, and carpool/vanpool services. Many act as consultants to assist businesses in developing commute trip reduction programs based on available regional resources. A few TMA’s provide parking management and brokerage services, but these services are less frequent due to divergent membership interests and funding constraints. TMA’s do not typically raise funds for infrastructure improvements, although TMA parent organizations, such as business or economic improvement districts may do so through annual assessments.

TMA’s and Parking Management

The role of a TMA in parking management can range from political advocacy and educational materials to providing management and brokerage services. For example, the Lloyd District TMA in Portland, Oregon advocated in the early 1990s for installation of parking meters. TMA’s may seek to reduce parking demand by advocating for transit and pedestrian-supportive land use policies, shared parking, parking taxes, and improved pedestrians and bike facilities.

Some TMA’s provide printed and on-line user guides that provide the public information about parking facilities and pricing, as well as how to reach destinations by alternative modes.

TMA’s also address parking issues by promoting commuter financial incentives, such as subsidized transit passes, to reduce parking demand where spaces are limited. TransManage in Bellevue, Washington has helped supplement transit benefits by managing a “free park day” program. The program allows regular transit user free parking in a garage one day a month. TransManage also sells parking permits to off-site workers for local parking facilities and receives a percentage of the revenue.

It also monitors the parking facilities by marking tires and issuing tickets.

Some TMA’s serve as parking brokers. Parking brokerage services help businesses sell, lease, share, or trade available parking. A TMA can match businesses with parking shortages with others in the vicinity that have extra parking. The Gresham Regional Center TMA in Gresham, Oregon has developed a voluntary “Customer First Policy” that includes shared parking and mandatory off-site employee parking.

Other Parking Management Options

Washington State allows cities and counties to form Parking and Business Improvement Areas under RCW 35.87A. This legislation permits several activities, including provision of parking and maintenance of parking structures and lots. The Seattle City Council adopted Resolution 30389 in 2001 to encourage and support the establishment of BIAs, six of which currently exist in the City, as noted below.

- o Broadway BIA (created 1986)
- o Chinatown/International District BIA (created 1995)
- o Metropolitan Improvement District (created 1999)
- o Pioneer Square BIA (created 1983)
- o University District BIA (created 1996)
- o West Seattle Junction BIA (created 1987)

Appendix 5-3. Transportation Management Associations

Existing TMAs

The greater Puget Sound Region has four organizations that function as Transportation Management Associations: the **Duwamish Transportation Management Association** (South Seattle), the **Greater Redmond Transportation Management Association**, the **Urban Mobility Group** (downtown Seattle), and **TransManage** (downtown Bellevue). Additional TMAs described below demonstrate a range of potential parking services: the Missoula Ravalli Transportation Management Association (Montana), the Lloyd District Transportation Management Association (Oregon), the Gresham Regional Center Transportation Management Association (Oregon), and Smart Commute - North Toronto, Vaughan (Toronto, Canada).

Duwamish Transportation Management Association

http://www.seattleindustry.org/duamish_tma/duamish_tma.html

The Duwamish TMA is a non-profit group working to improve transportation services in, to, and through the Duwamish business community. Its service area extends from the professional sports stadiums in the north to the King County International Airport in the south. It deals with the movement of employees in and out of the area, as well as freight movement, and stadium event impacts. The Duwamish TMA assists business owners and managers access financial incentives to help encourage employees to carpool and vanpool through a partnership between the TMA and Metro.

The Duwamish TMA is affiliated with Seattle's Manufacturing and Industrial Council. The TMA and the Manufacturing and Industrial Council share employees, with one full-time employee solely dedicated to the TMA. The Duwamish TMA and the Manufacturing and Industrial Council cosponsor the Seattle Freight Mobility Advisory Committee, which is the first committee of its type in the City's history. The Duwamish TMA has its own board, comprised of members from local industries and the Port of Seattle. Funding comes primarily from board members and grants from the South Downtown Foundation and the Washington State Department of Transportation.

Greater Redmond Transportation Management Association

<http://www.grtma.org/>

The Greater Redmond Transportation Management Association (GRTMA) provides members with tools to ensure compliance with state and local regulations while keeping their commuters aware of commute options throughout the Puget Sound. The GRTMA represents 283 organizations and 58,000 commuters. Its board of directors includes employers, property owners and managers, and City of Redmond staff. Funding of the GRTMA comes from membership dues (57%), contract services (28%), grants (6%), and other sources (8%). GRTMA services include marketing and printed products to sustain awareness and educate employees, commuter motivation promotions, transportation fairs at member sites, and member network meetings. It also provides member consultations, plan development, survey assistance, commuter self-serve internet tools, and grant assistance.

Appendix 5-3. Transportation Management Associations

The Urban Mobility Group

<http://www.urbanmobilitygroup.com/>

The Urban Mobility Group is an alliance of the Downtown Seattle Association, King County Metro and the City of Seattle. It was formed partially in anticipation of downtown Seattle's projected growth in jobs and housing. The Urban Mobility Group provides products, services and resources to businesses and commuters located in or commuting to Seattle's Central Business District. It customizes member programs and identifies opportunities for building managers to support all commute options. Programs offered by the Urban Mobility Group include FlexPass broker, S.T.A.R. (Simply Take Along a Rider) Carpool, consultations, and updates about key infrastructure changes.

TransManage

<http://www.bellevuedowntown.org/maps/transmanage.html>

As part of the Bellevue Downtown Association, TransManage provides commuting information to over 12,000 downtown Bellevue employees by conducting on-site transportation promotions at client locations, planning transportation fairs, and offering individual commuting assistance to employees. TransManage also helps manage a "free park day" program. This program provides two to four days a month of free garage parking for carpool/vanpool riders, bus riders, and those who bike or walk to work. In addition, TransManage contracts with a number of property managers to monitor their parking lots, marking tires after three to four hours and issuing tickets to vehicles without permits. TransManage also coordinates the sale of parking permits for various lots to off-site workers based on availability. Revenues are split between TransManage and the property owner.

Missoula Ravalli Transportation Management Association

<http://www.mrtma.org/>

The Cities of Missoula and Ravalli, Montana formed the non-profit Missoula Ravalli Transportation Management Association (MRTMA). The MRTMA, in collaboration with the Montana Department of Transportation, provides transportation options for the citizens of Lake County, as well as the Cities of Missoula and Ravalli. Funding comes from grants from the member cities and county and the Montana State Department of Transportation. The MRTMA provides services and vehicles for carpools and vanpools. It also establishes Park & Ride sites and works with businesses to manage priority parking for carpools and vanpools.

Lloyd District Transportation Management Association

<http://www.ldtma.com>

The Lloyd District Transportation Management Association (LDTMA) is a voluntary partnership involving the City of Portland, Tri-Met, the regional transit authority, and 35 businesses in the Lloyd District, one of Portland's most concentrated business districts. The LDTMA promotes transit, carpooling/vanpooling, bicycling, telecommuting, and compressed work weeks, guaranteed rides home, and reserved parking spaces for carpool and vanpool vehicles at a reduced fee. It also advocates for transportation

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improvements. Members of the LDTMA include representatives of over 50 public and private organizations, including the Bonneville Power Administration, US Department of the Interior Bureau of Indian Affairs, Kaiser Permanente, hotels, the Oregon Convention Center and the Lloyd Center Mall. Funding for the LDTMA comes from parking meters (41%), the Lloyd Business Improvements District (28%), grants (14%), and commissions from PASSport sales (17%).

Memberhip in the TMA includes businesses seeking to comply with the Oregon Department of Environmental Quality's Employee Commute Option (ECO) Rule. The ECO Rule requires employers in the Lloyd District which have a total of 50 or more people at any one work site to implement programs which will encourage their employees to use alternatives to driving alone in order to reduce the number of auto trips taken to the work site. Stage agencies also have an interest in joining the TMA as a result of a 1998 Executive Order for state agencies, requiring each agency to reduce the number of vehicle miles travelled by state employees. Many state agencies decided to participate in the PASSPort program, which provides an annual transit pass at a discounted rate (and an Energy Tax Credit for private sector participants).

The LDTMA in not directly involved in parking management, but it played a significant role in working towards the installation of parking meters in 1994 to increase parking space turnover for merchants, thereby reducing the need to create more parking. Initially the parking meters were publicly funded. Today parking meters are completely funded by sources that include parking meter fees and commissions from transit pass sales. Thirty percent of the fees collected from the parking meters provide funding for the LDTMA.

Gresham Regional Center Transportation Management Association

<http://www.gdda.org/transit.htm>

The Gresham Regional Center Transportation Management Association (GRCTMA) in Oregon is managed by the Gresham Downtown Development Association (GDDA). It is funded by the GDDA, the City of Gresham and local transit agencies and serves *"to bring together a coalition of local businesses, public agencies and citizens dedicated to improving access options for employees and customers of the Gresham Regional Center and enhancing the Gresham Regional Center as the economic engine of East Multnomah County."*

The GRCTMA helped establish the "Customer First" policy for the Gresham Regional Center. The GRCTMA identified under-utilized parking supply outside of the downtown core area that could be used for shared parking.

Employees in the downtown area are encouraged to use the shared parking areas and leave prime parking for customers. Shared parking is currently operated on a voluntary basis. The GRCTMA is also working with property owners to require off-site employee parking in leases. The GRCTMA also provides businesses educational



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materials on the benefits of off-site parking and alternative commute modes.

Smart Commute - North Toronto, Vaughan (formerly Smart Commute Association of Black Creek)

www.bcrmta.org/

Smart Commute - North Toronto, Vaughan is a private, non-profit membership organization in Canada supported by the Cities of Toronto and Vaughan, York Region, EcoAction, Toronto Atmospheric Fund, York University and other partners. Together they work to alleviate smog and congestion in the Black Creek region and reduce the impacts to local businesses, communities, and the environment. It is the first independent TMA in Ontario and one of the first in Canada.

The Smart Commute Association advocates improved transit service and other transportation management enhancements and infrastructure programs that will benefit the Black Creek Region, including improved transit service, improving the network of cycling paths, and the promotion of alternative transportation modes. Services offered include a carpool program, guaranteed ride home, a shuttle service, vanpooling, and consulting on parking management and commute reduction, as well as support services for member business.