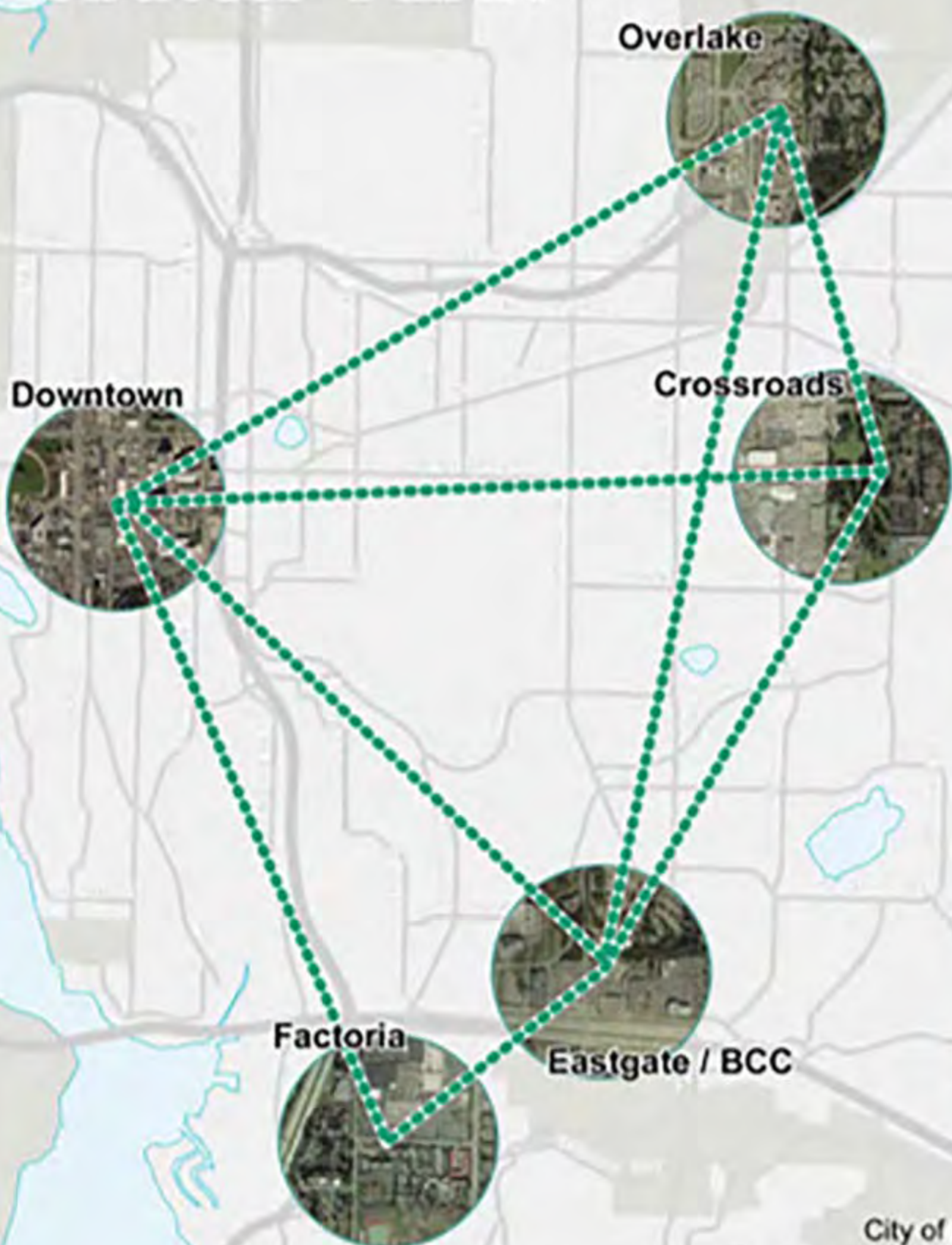


BELLEVUE TRANSIT PLAN



BELLEVUE TRANSIT PLAN

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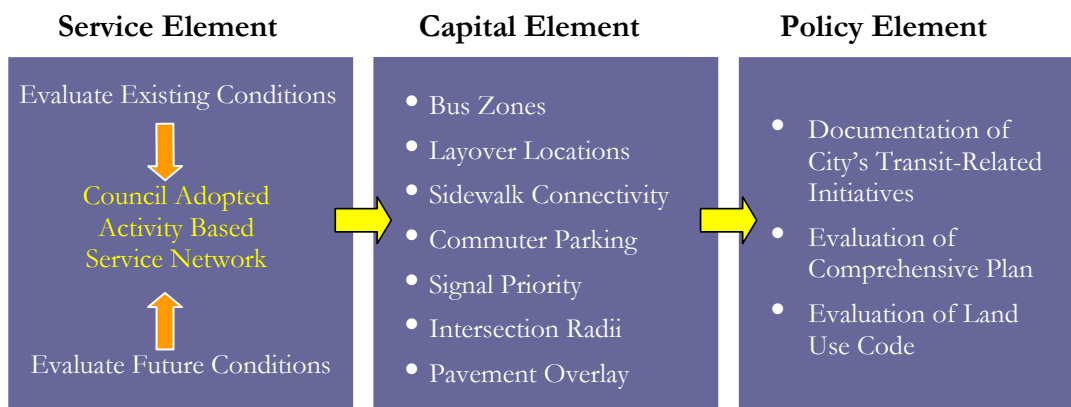
BELLEVUE TRANSIT PLAN

Executive Summary

The Bellevue City Council considers transportation a top priority. The City recognizes that responding to the travel demand needs of its residents and businesses cannot be fully supported through increases in and improvement to the City's roadway network. The Council views transit solutions as an increasingly important part of a local and regional transportation system that supports land use and level-of-service standards in the Bellevue Comprehensive Plan.

The Bellevue Transit Plan recommends improved public transit service to and within Bellevue, the capital improvements to support the recommended transit services, and a review of and recommendations concerning the transit-supportive policies in the City's Comprehensive Plan. The Transit Plan is comprised of the following three elements ...

Figure 1
Project Approach



- **Service Element** - - Recommends bus service improvements within Bellevue, and better connections to major Eastside and regional destinations. Key destinations within Bellevue (downtown Bellevue, Eastgate/BCC, Factoria, Crossroads, and Overlake) serve as "anchors" for the recommended system. Emphasis is placed on connecting these transit hubs to neighborhoods and to each other with frequent and direct service.
- **Capital Element** - Recommends transit-supportive capital improvements. Efforts to improve sidewalk connections from neighborhoods to transit service, investments that support enhanced speed and reliability of transit, and the location of shelters all influence the decision to ride.
- **Policy Element** - Explores different strategies the City might undertake in support of transit. The City Council views transit solutions as an increasingly important part of the local and regional transportation system and key to the City's future development.

BELLEVUE TRANSIT PLAN

Service Element

Current market conditions necessitate transit service improvements to improve intra-Bellevue service connections. The figure below reflects areas (in red) that lack 30 minute service (based on Sept 2000 data) broken out by time of day (peak, midday, evening) and by weekday, Saturday, and Sunday. Areas lacking 30 minute service are considered inconvenient for potential users of the bus system.

Figure 2
Areas in Bellevue Lacking 30 Minute Bus Service

Hours of Operation

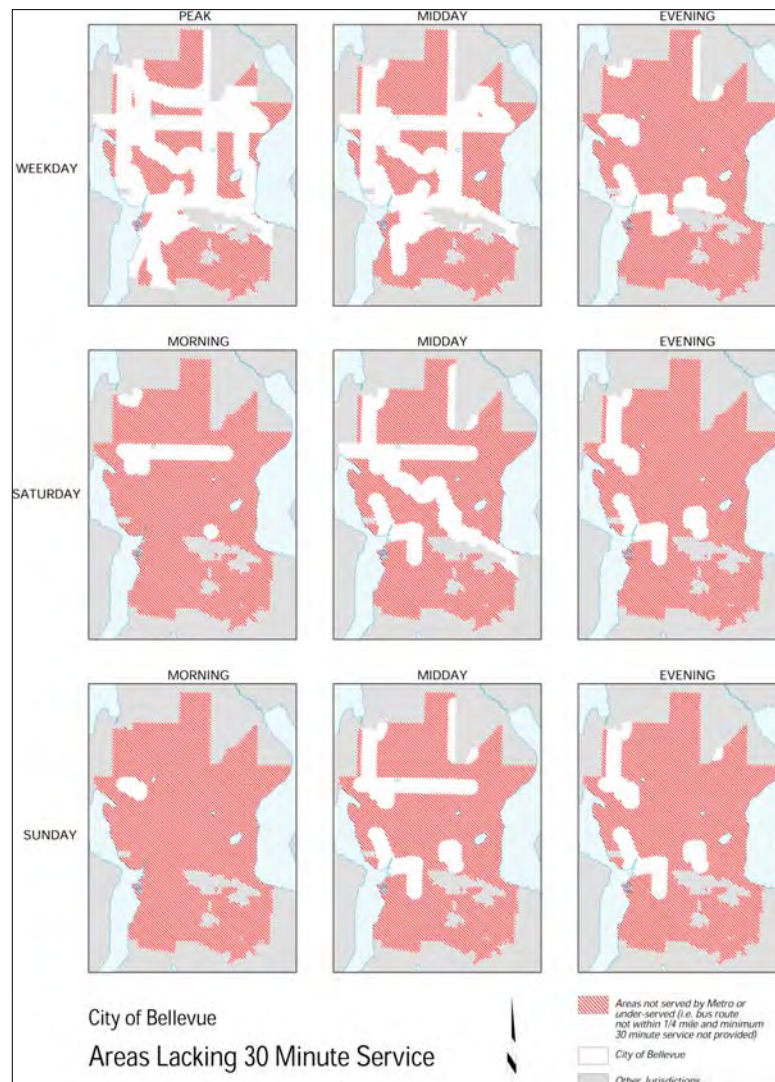
- Weekday services tend to be limited to peak hours.
- Mid-day & evening service is poor.
- Weekend service negligible all times.

Service Frequency

- Largely 60+ minute - resulting in lengthy waits.

Service Area

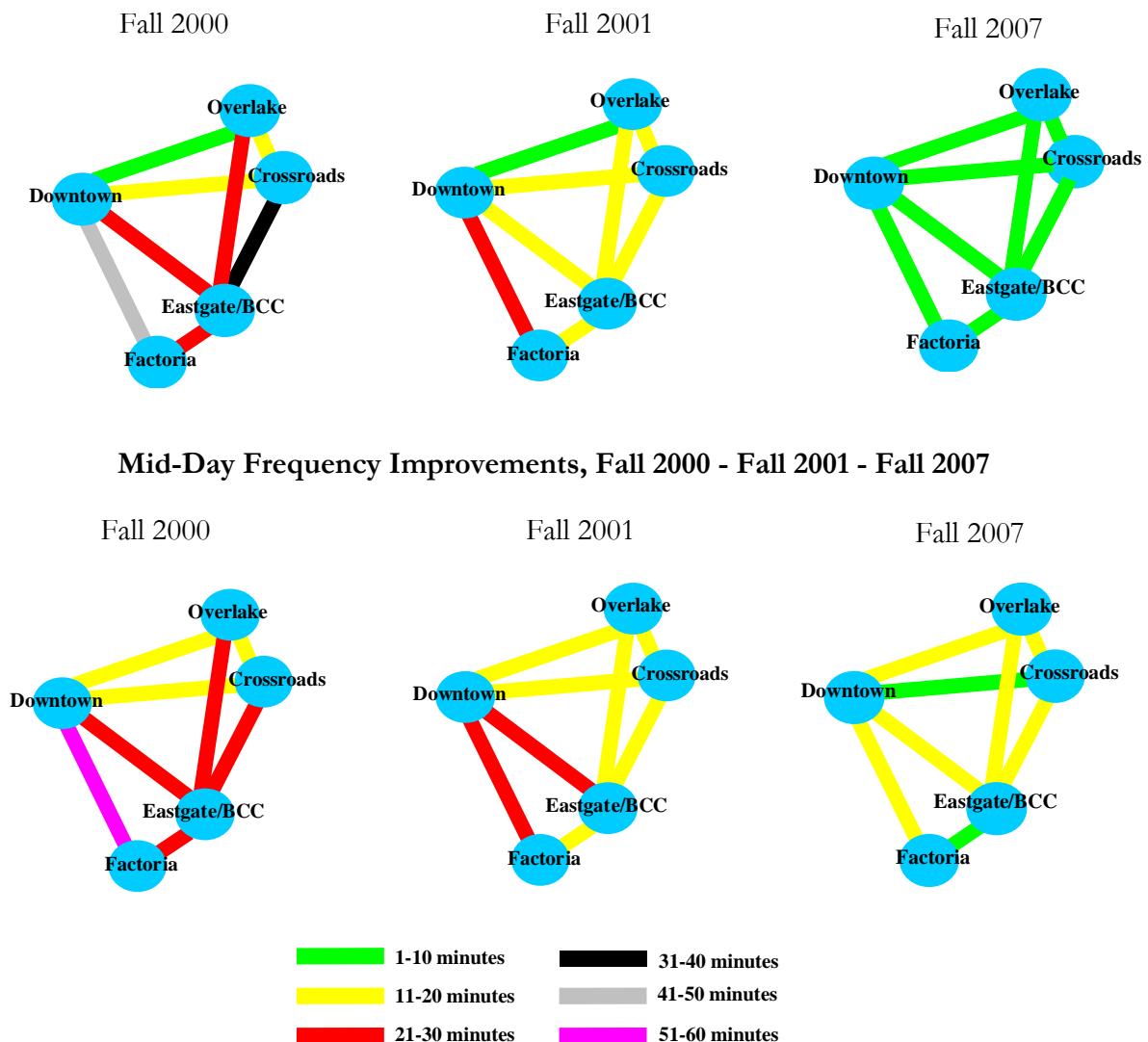
- Access limited or absent in many parts of the City.



BELLEVUE TRANSIT PLAN

The recommended transit service improvements in this Plan include enhancements to local transit service within Bellevue, as well as improved transit service to major Eastside and regional destinations. Key destinations within Bellevue (downtown Bellevue, Eastgate/BCC, Factoria, Crossroads, and Overlake) would be served better with the recommended plan. These transit hubs provide "anchors" for the system of improvements recommended in the Plan. Emphasis is placed on connecting transit hubs to each other with frequent and direct service, which is consistent with King County Metro's Six-Year Transit Plan. This service concept represents a departure from Metro's prior service concept, which emphasized a commuter-based focus on getting Bellevue residents to employment locations outside the City, primarily to downtown Seattle and the University District. As reflected in Figure 3, the target service frequency improvements within Bellevue for Fall 2001 and Fall 2007.

Figure 3
Peak Hour Frequency Improvements, Fall 2000 - Fall 2001 - Fall 2007

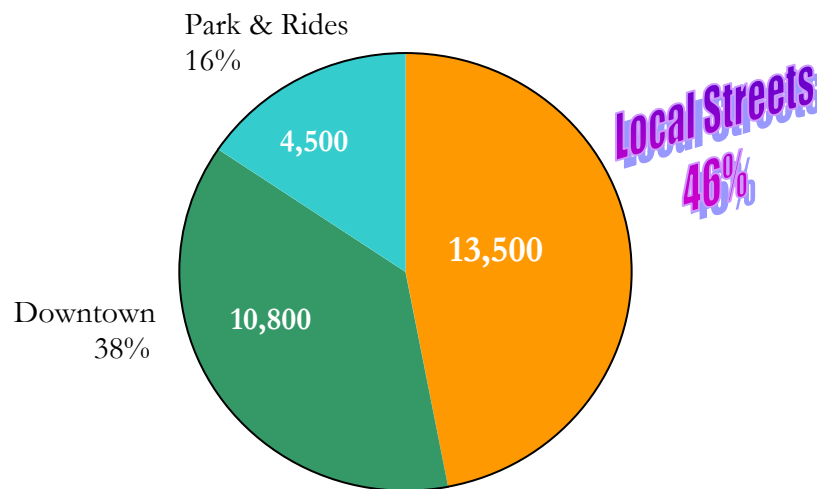


BELLEVUE TRANSIT PLAN

Capital Element

There is need for more localized transit-supportive infrastructure investments that are supportive of the intra-Bellevue transit network. The figure below shows that almost 50 percent of the 30,000 average weekday transit riders (ons/off) in Bellevue occur on the city's street system outside of downtown Bellevue and outside of the City's park and ride lots.

Figure 4
Daily Transit Facility Utilization in Bellevue



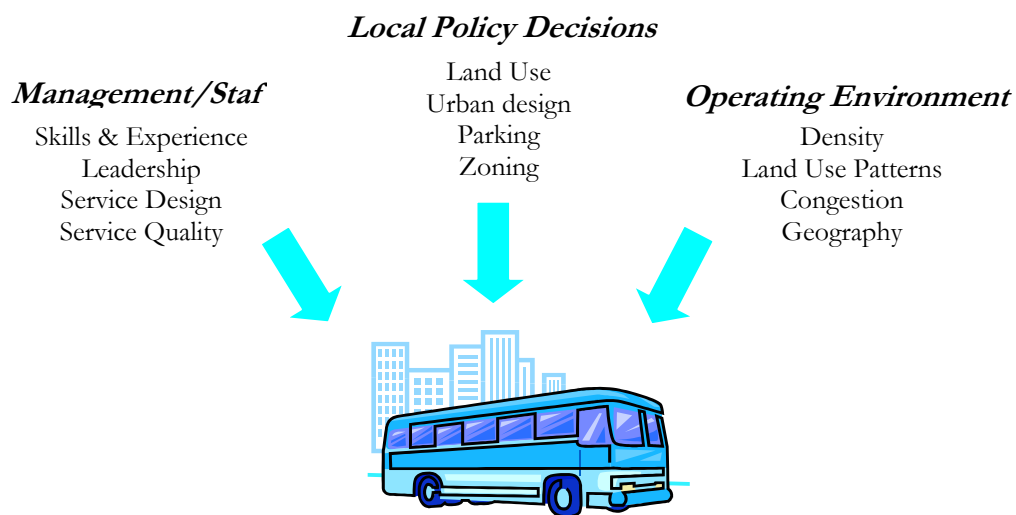
The localized focus of the Capital Element aims to address the needs of the majority of the City's transit customers by improving access to and the operating environment of the City's local street network. The orientation of this plan is therefore centered around recommended improvements to the following program areas:

- **Bus stop amenities:** Transit passenger amenities throughout Bellevue, including provision of shelters at locations with high concentrations of transit and pedestrian activity.
- **Pedestrian accessibility:** Improving/installing sidewalks along streets with key transit routes.
- **Transit signal priority:** Signal improvements to enable buses to maintain a predictable schedule and perform at an overall operating speed that compares favorably with general traffic.
- **Pavement overlay:** A broader pavement depth along streets that are subject to higher transit traffic volumes.
- **Arterial improvements:** On-street improvements to arterials to improve transit operations that are negatively impacted by traffic congestion.
- **Transit centers:** Upgrading transit center facilities based on existing and projected ridership patterns in the Factoria area, Bellevue Community College, and Crossroads.

Policy Element

The recently adopted King County Metro (Metro) Six-Year Transit Development Plan for 2002-2007 includes service allocation policies that are predicated on the commitments made by local jurisdictions to aggressively implement local land use plans, growth management strategies, and regulations to facilitate development that is supportive of transit services. The figure below reflects the City of Bellevue's understanding that it's local policy decisions on land use, urban design, parking, and zoning are critical factors affecting transit performance.

Figure 5
Factors Affecting Transit Performance



The Policy Element articulates the City's position that it takes its partnership with Metro seriously and has already undertaken a number of strategic transit initiatives to improve the environment within which transit operates in the City of Bellevue. Policy support for this partnership is reflected in the City's Comprehensive Plan and in numerous interest statements the City Council has adopted. The Policy Element explores the different strategies the City is undertaking in support of these transit directives. The orientation of this plan is therefore centered around supporting the following types of transit policy considerations:

- Pedestrian and bicycle access improvements to transit.
- Commute trip reduction coordination with employers.
- HOV/HCT improvements to address mobility demand on state highways.
- Marketing and outreach to increase citizen awareness of transit alternatives.
- Parking management efforts to limit supply for single-occupant vehicles.
- ROW preservation in support of future regional transit facility development.
- Leased lot park and ride development to address commuter parking demand.
- Development review efforts to incorporate transit/pedestrian friendly design.

SERVICE ELEMENT

CHAPTER I - PROJECT CONTEXT AND APPROACH

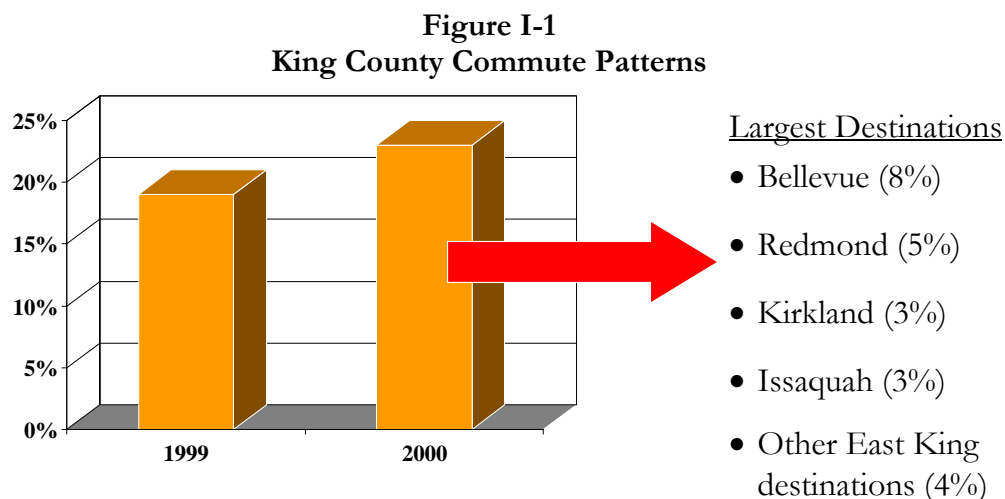
In its May 8, 2000 adoption of the *Comprehensive King County Transit Policies* (see Appendix A) the Bellevue City Council directed city staff to undertake the following service-related activities with the region's transit providers:

- I. Identify transit needs to support continued growth & development.
- II. Strengthen transit services to/from & within Eastside communities.
- III. Emphasize transit service to Urban Centers and Suburban clusters.
- IV. Coordinate with Metro in improving downtown circulation.
- V. Support coordination of services provided by Sound Transit & Metro.

Such policy guidance has become the basis for the City's Service Element of the *Bellevue Transit Plan Update (2001-2007)*. The overarching message from this policy directive is that the City of Bellevue has achieved population and employment densities that warrant dramatic transit service improvements. Further, it appears that local transit will play an increasing role in supporting the City's future growth in population and employment.

Growing Attractiveness of Transit on Eastside

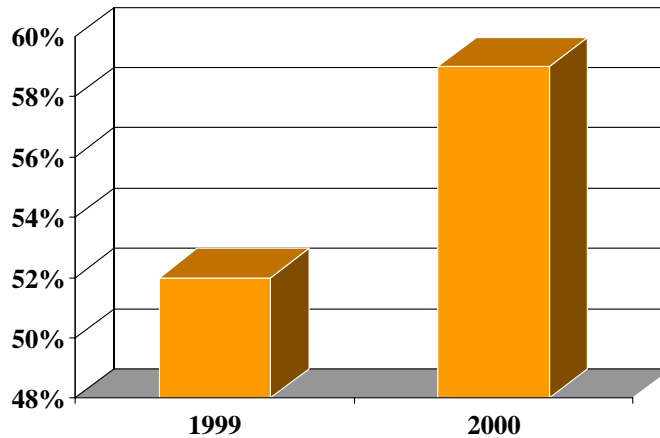
King County Metro's 2000 *Rider/Nonrider Survey* shows that an ever increasing number of King County workers are commuting to East King County jobs. From 1999 to 2000, the number of King County commuters traveling to East King County jobs increased from 19% in 1999 to 23% in 2000 – with 70 percent of these commuters travelling to the East King urban centers of Bellevue, Redmond, and Kirkland.



SERVICE ELEMENT

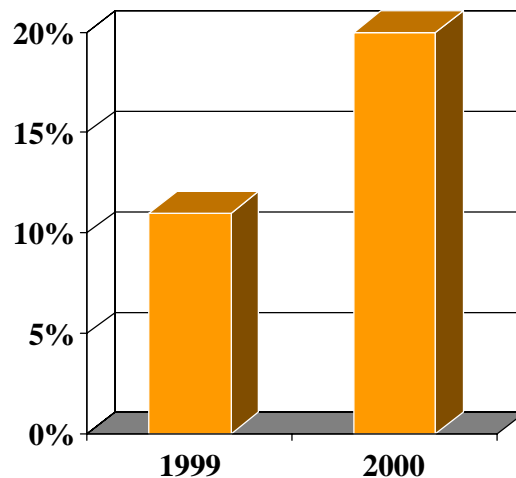
As reflected in Figure I-2 the “traditional commute” - the Bellevue resident commuting to downtown Seattle - is now one of many travel markets; including Bellevue residents commuting to Bellevue and other eastside jurisdictions as well as the Seattle resident commuting to downtown Bellevue. King County Metro’s 2000 *Rider/Nonrider Survey* goes on to show that nearly six out of ten (59%) commuters living in East King County also work on the Eastside – up from 52% in 1999.

Figure I-2
East King County Commute Patterns



Noteworthy is the fact that the proportion of commuters going to East King County who find the idea of commuting by bus to be “very appealing” has nearly doubled since 1999 (from 11% to 20% in 2000). A growing interest among Bellevue residents in using transit was also witnessed in the public focus group discussions that were held as part of the Bellevue Transit Plan Update.

Figure I-3
Appeal of Using the Bus for East King County Commute



SERVICE ELEMENT

Public Focus Group Discussions

Public focus group discussions provided a valuable assessment of local transit needs and opportunities in Bellevue. Three brief focus group discussions were held with Bellevue residents: Group 1 included elderly residents; Group 2 included youth/student residents; and, Group 3 included residents who use existing transit services.¹ These brief focus groups helped to identify the commuting patterns, satisfaction with current transit operations, suggestions for service improvements in the study area, and perception of transit's image on the Eastside. The following represent the major themes from these discussions:

**Figure I-4
Focus Group Discussion Summary**

Scheduling Improvements desired:

- More service, in general, throughout Bellevue
- More frequent service - buses every 10 to 15 minutes
- Eastside routes have over-loaded buses/sometimes people are returned away (272, 253, 230, 923)
- Improvements to make transfer connections – more/better timed
- Extend late night service (after 10 PM) from Seattle to Bellevue
- Extend evening and late night service on the Eastside
- Some seniors would like a way of scheduling Access service less than a week ahead (not always possible to do so)
- Bus schedules in vicinity of schools do not match school schedules (Bellevue schools are now out by 12:30 on Wednesdays/other times are also not coordinated with school schedules)
- Buses often do not run on time - some are late and, even more irritating to riders, some are early (222/230)

Route improvements desired:

- More direct routes that do not require transfers
- Bellevue would benefit from a “cobweb” of routes, rather than the current hub system
- All-day service needed on 116th to serve people going to medical offices
- Better service needed to office campuses off 156th and 148th north of 520

Other improvements desired:

- Increase capacity at Park and Rides/add more Park and Rides (the Bellevue Park and Rides are full by 8 AM)
- Bus stops in Bellevue are too far away in many areas, especially some of the residential areas
- Keep buses cleaner/remove graffiti
- Improve web site to provide more individual route and schedule information
- Have more Eastside outlets for purchasing bus passes and obtaining transit information
- Have a full-service customer service operation at the Bellevue Transit Center

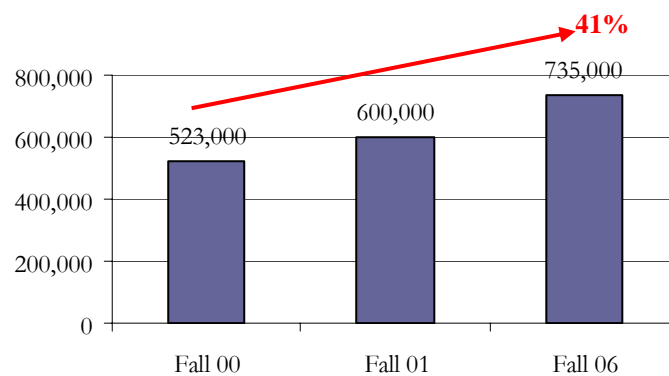
¹ The focus groups are described in detail in Appendix B.

SERVICE ELEMENT

Resource Availability, 2001-2006

The passage of the 0.2% sales tax increase for transit in the November 2000 election means that Metro can begin to implement a number of needed service and facility improvements in East King County. As reflected in Figure I-5, under current allocation methods, East King County can expect to have an estimated 41% increase in service hours through Fall 2006. It should be noted that this significant increase in service is, in part, available because of the implementation of Sound Transit regional express services which freed-up an estimated 70,000 hours of Metro service.

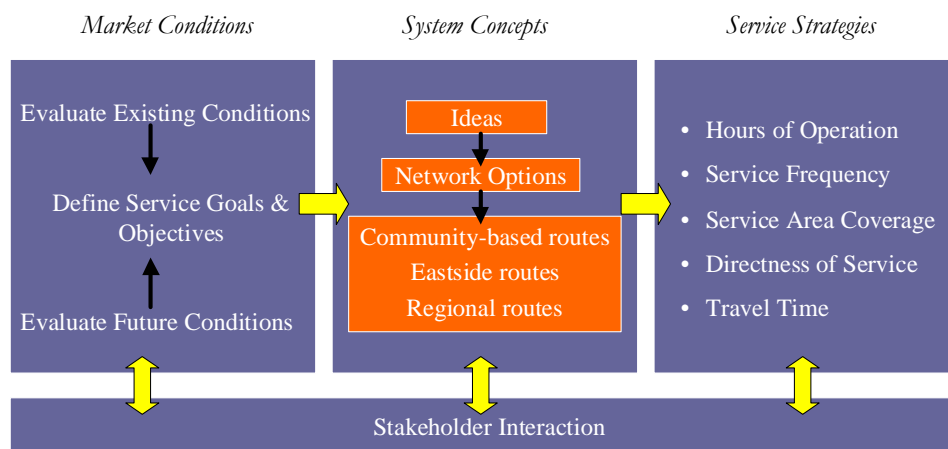
Figure I-5
Planned Metro Service Hour Increases in East King County



Project Approach

The goal of the Service Element of the *Bellevue Transit Plan (2001-2007)* is to determine the optimal transit investments within the City of Bellevue. As reflected in Figure I-6, the Service Element was approached in a three-phased planning process.

Figure 1-6
Service Element Planning Process



SERVICE ELEMENT

1. *Market Conditions* – The market conditions phase of the Service Element provides answers to the following questions: (i) what is the existing market; (ii) how are existing services meeting this market; and (iii) what will the future market look like? The assessment of market conditions provided the City with the information it needed to conceptualize various network options that would better serve Bellevue residents and businesses.
2. *System Concepts* – The system concepts phase of the Service Element identified what can be changed in the existing transit service network to best meet the existing and future travel markets within Bellevue and between Bellevue and other eastside and regional destinations. This phase identified and prioritized investments in neighborhood, Eastside, and regional transit connections. Ensuring a transit network for Bellevue, within the context of the greater Eastside, is critical in improving the travel options for Bellevue area residents and employers.
3. *Service Strategies* – The service strategies phase of the Service Element identifies the specific service attributes of the concepts reviewed in the prior phase. Service connections specified in this task will detail the anticipated markets-served and the operating requirements associated with service implementation; including, hours of operation, service frequency, travel time, etc.

This approach was further informed through targeted public involvement, interaction with elected officials, and the resources available through King County Metro.

CHAPTER II - 1995-2001 Transit Plans

Previous Bellevue transit planning efforts have sought to move the Metro transit system toward a multi-centered system, away from a Seattle-centric system to reflect the changing urban form of the Eastside. Other Cities in East King County have sought similar changes.

City of Bellevue 1997 Transit Targets

During 1997, the City developed transit targets that were adopted into the Bellevue *Comprehensive Plan* in early 1998. While the targets were not applicable during the 1996-1998 reporting period, they provide a way to monitor how well transit service and related capital facility goals were being met. Specific transit targets for each of the 14 Mobility Management Areas (MMA) were set, based on the *1995 Bellevue Transit Study* recommendations and existing transit service. These targets are defined as a set of transit services and facility improvements to be completed before 2005. Transit services are listed by type and destination served. Associated with each transit service is a target level of frequency for morning and evening peak hours, midday, evening, and weekend service.

The Downtown Bellevue MMA, for example, has targets for local neighborhood services, local urban services, Eastside inter-community services, regional services, a target has been established to provide shuttle service for local circulation.

Bellevue Transit Services

- **Local urban services:** Service along arterials and other major streets within the city.
- **Neighborhood services:** Local access within neighborhoods and links to other transit services.
- **Inter-community services:** Transit links between Bellevue and other Eastside communities, focused on major hubs.
- **Regional services:** Connections between major hubs in Bellevue and locations outside the Eastside.
- **Hubs:** Transfer points, usually located where there is a mix of transit services and other activities.

The local urban service targets have been established to provide two-way service to Overlake, Eastgate, and Crossroads. Downtown Bellevue has the highest number of regional transit services recognizing the district designation as an urban center that attracts riders from throughout the region.

Targets have been tailored to fit mixed commercial and residential areas. For example, in the Eastgate MMA, targets have been established for service to Issaquah, Renton, Overlake and the Sammamish Plateau. A target to address the over-capacity parking at the Eastgate Hub also was included.

SERVICE ELEMENT

Transit targets for the residential MMAs focus on providing services to nearby transit hubs. These targets are consistent with the Bellevue Transit Vision which calls for local neighborhood services that connect transit riders to transit hubs. At the transit hubs, riders can connect to regional services. Each of the residential MMAs includes a target for local shuttle service or local urban service.

Figure II-1 outlines the transit service targets developed during 1997 for each MMA. The targets were based on qualitative descriptions for a.m. peak, midday, p.m. peak, evening, and weekend services. The following is a synopsis of the service improvements through 2000 that have enabled the City to begin to meet some its established transit targets.

Downtown Bellevue – The Downtown Bellevue MMA reached twelve of seventeen targets. Targets met include providing two-way service to Overlake, Crossroads, and Eastgate. In addition, planning for an expanded Bellevue Transit Center started in 1996.

Bel-Red/Northup, Crossroads and Eastgate – Ten of the sixteen transit targets in these mixed commercial/residential areas were met. Transit service in Eastgate has improved greatly in the past two years with implementation of Metro's Six-Year Plan service. However, many of the targeted services exist today but not at the targeted frequency levels.

Residential Group 1 (comprised of N. Bellevue, S. Bellevue, Richards Valley, E. Bellevue) – Four of the eight targets have been met in the establishment of community services in East Bellevue. Transit service does exist for the target destinations, but not at the targeted level of frequency. In several instances, Sound Transit has provided the requisite amount of service to achieve the targets set for these areas.

Residential Group 2 (comprised of Bridle Trails, NE. Bellevue, Newcastle, and Newport) – Two of the six transit targets have been met. Transit service in these MMAs continues to be limited and infrequent. Currently, there are no plans to add service in these areas.

Analysis of 1997 transit services and capital facilities shows that approximately 60% of the transit targets have been met. Most of the unmet targets occur in the residential MMAs where local transit service remains limited. Also, several of the targeted capital facilities have not yet been completed. Reasons for the shortfalls include:

- The first phase of the *Metro Six-Year Transit Development Plan* focused on providing regional transit services and services between regional activity centers.
- Targets established for services during the peak hour are more likely to be met than for services provided during the midday and evening hours. This reflects Metro's emphasis on providing services for commuters versus non-work trips. This policy was revised in the *Metro Transit Plan* and additional services are gradually being added for midday and evening hours.
- Capital facility improvements targeted for Eastgate and Downtown Bellevue are currently in the design phase.

SERVICE ELEMENT

**Figure II-1
Bellevue 1997 Transit Targets**

Mobility Management Area (MMA)	Description of Service	Route Numbers	2005 Target Frequency (minutes)*	2000 Frequency (minutes)	Target Met
3-Downtown	Local Neighborhood Services				
	Establish shuttle service to meet local circulation needs			no service avail	
	Local Urban Services				
	Two-way service to Overlake	253/230	15/30/15/60/60	15/15/15/30/30	yes
	Two-way service to Crossroads	230/253	15/15/15/60/60	15/15/15/30/30	yes
	Two-way service to Eastgate	222/271/921	15/15/15/60/60	15/30/15/30/60	no
	Eastside Inter-Community Services				
	Two-way service to Totem Lake	230	30/60/30/-/-	30/30/30/60/60	yes
	Two-way service to Downtown Kirkland	230/234	30/60/30/-/-	30/30/30/60/60	yes
	Two-way service to Bothell	ST 565	30/60/30/-/-	15/30/15/60/60	yes
	Two-way service to Issaquah	271	30/60/30/-/-	30/30/30/60/30	yes
	Two-way service to Renton/Boeing	ST 565	30/60/30/-/-	15/30/15/60/60	yes
	Two-way service to Downtown Redmond	230/253	30/60/30/60/60	15/15/15/30/30	yes
	Two-way service to Sammamish Plateau		60/-/60/-/-	no service avail	no
	Regional Services				
	Express service to Downtown Seattle	ST 550	15/30/15/-/-	7.5/15/7.5/30/30	yes
	Express service to North Seattle	243	30/-/30/-/-	-/-/30/-/-	no
	Express service to Snohomish County	ST 530/31/32/35	30/-/30/-/-	15/30/10/60/60	yes
	Express service to Pierce County		30/-/30/-/-	no service avail	no
	All-day service to Downtown Seattle	ST 550	7.5/15/7.5/30/60	7.5/15/7.5/30/30	yes
	Capital Facilities				
	Expand Bellevue Transit Center		construction, 2001	hub in planning	yes
Mixed Commercial / Residential Areas					
4. Bel-Red/Northup	Local Urban Services				
	Two-way service to Crossroads	230/253/261	15/30/15/60/60	15/20/15/30/30	yes
	Two-way service to Downtown	230/253/261	15/30/15/60/60	15/20/15/30/30	yes
5. Crossroads	Local Neighborhood Services				
	New flexible service to serve Crossroads Hub to allow convenient transfers.	923			yes
	Local Urban Services				
	Two-way service to Eastgate	923	30/30/30/60/60	30/30/30/30/30	yes
	Two-way service to Overlake	230	30/30/30/60/60	30/30/30/60/60	yes
	Two-way service to Downtown	230/253/261	15/30/15/60/60	15/20/15/30/30	yes
	Capital Facilities				
	Address over-capacity at Crossroads Hub			hub in planning	no
10. Eastgate	Local Neighborhood Services				
	Shuttle service to meet local circulation needs	921/923/222			yes
	Local Urban Services				
	Two-way service to Crossroads	923	15/30/15/60/60	30/30/30/30/30	no
	Two-way service to Downtown	271/921	15/30/15/60/60	30/30/30/60/30	no
	Eastside Inter-Community Services				
	Two-way service to Issaquah	271	30/60/30/-/-	30/30/30/60/30	yes
	Two-way service to Renton/Boeing	no	30/60/30/-/-	no service avail	no
	Two-way service to Overlake	222/225/229	30/60/30/-/-	30/30/30/30/30	yes
	Two-way service to Sammamish Plateau	no	30/60/30/-/60	no service avail	no
	Regional Services				
	Express service to Downtown Seattle	212/215/225/229	15/30/15/-/-	15/30/15/-/-	yes
	Capital Facilities				
	Address over-capacity parking at Eastgate Hub	design phase			no
Residential					

SERVICE ELEMENT

Group 1					
1. N. Bellevue	Local Urban Services				
	Two-way service to Downtown along Bellevue Way	230/261/271/272	15/30/15/-/60	15/30/15/30/30	yes
7. S. Bellevue	Local Urban Services				
	Two-way service to Downtown along Bellevue Way	ST 550	15/30/15/-/60	7.5/15/7.5/30/30	yes
	Regional Services				
	Express service to Downtown Seattle	ST 550	15/30/15/-/-	7.5/15/7.5/30/30	yes
	Capital Facilities				
	Address over-capacity parking at the S. Bellevue Park and Ride	n/a		hub in planning	n.a.
8 Richards Vly	Local Neighborhood Services				
	Establish shuttle service to provide access to the Eastgate transit hub	271/921			yes
	Two-way service between Downtown Bellevue and the Eastgate hub	921	15/30/15/30/60	30/30/30/60/30	no
9. E. Bellevue	Local Neighborhood Services				
	Establish shuttle service to meet local circulation needs	222	30/30/30/30/30	30/30/30/60/30	no
	Local Urban Services				
	Two-way service between Eastgate and Crossroads	923	15/30/15/-/60	30/30/30/30/30	no
	Eastgate Inter-Community Services				
	Two-way service between Overlake and Eastgate	225/229	15/30/15/-/60	30/30/30/60/30	no
Residential Group 2					
2. Bridle Trails	Local Neighborhood Services				
	Establish shuttle service to provide access to the Overlake transit hub			no service avail.	no
6. NE Bellevue	Local Neighborhood Services				
	Establish shuttle service to access Overlake and/or Crossroads hubs			no service avail.	no
11. Newcastle	Local Neighborhood Services				
	Establish shuttle service to provide access to the Factoria transit hub.	222		30/30/30/60/30	yes
	Re-evaluate demand for 2-way service & other service options along Lakemont Blvd. from I-90 to Forest Dr. before Lakemont Blvd. complete			no service avail	no
14. Newport	Local Neighborhood Services				
	Establish shuttle service to provide access to transit hub	219/925			yes
	Local Urban Services				
	Two-way service to Factoria	219	30/30/30/-/60	60/-/60/-/-	no
	Regional Services				
	Peak period service to Downtown Seattle	114	15/-/15/-/-	30/30/30/60/30	no
	Capital Facilities				
	Build new transfer facility in Coal Creek Area	WSDOT		work not begun	no
*Frequencies in minutes are set for a.m. peak/midday/p.m. peak/evening/weekend services.					

Analysis of transit target completion suggests that the City has achieved success in meeting some of its targets. Because the City is not the transit provider, achieving the established transit targets has occurred through a close working partnership with King County Metro and Sound Transit. Close coordination with the transit providers must continue if the City is to be successful in meeting its transit targets.

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Kirkland and Redmond Transit Plans

A review of transit plans undertaken elsewhere in East King County reflect a great many common themes with those identified in the *Bellevue Transit Plan* – rapid growth in both population and employment and the need to improve intra-Eastside transit travel options. Figure II-2 and Figure II-3 summarize those sections of the transit plans of both Kirkland (adopted in September 2000) and Redmond (adopted in August 1994) that identify service connections to Bellevue:

**Figure II-2
Kirkland Transit Plan**

Routes Operating between Kirkland and Bellevue	Service Span		Headways	
	Existing	Recommended	Existing	Recommended
230 – Kingsgate/Kirkland transit center/BTC	Peak, Midday, late evening Monday-Sunday	Meets recommendation for service span	Peaks: 15 minutes and less 30 minutes midday and evenings	Meets recommendations for headways
234 – Juanita/Kirkland transit center/BTC	Peak and Midday (to 7:00 PM) Monday-Saturday	Extend weekday service to 9:00 PM	Peaks: 30 minutes Midday: 60 minutes	Peaks: 15 minutes Midday: 30 minutes
237 – Woodinville/Kingsgate/BTC (via I-405)	Peak only	No change	Peaks; 30 minutes	Peaks: 15 minutes
239 – Kingsgate/Totem Lake/Overlake	Peak only	No change	15-30 minutes	15 minutes
Sound Transit 540 – Redmond/Kirkland transit center/S. Kirkland park-and-ride/U-District	Peak, Midday, late evening Monday-Sunday	No change	Peaks: 30 minutes Midday: 30 minutes	Peaks: 15 minutes
Recommendations Affecting Bellevue		Key Features		
More Direct Connection between Downtown Kirkland and Overlake		<ul style="list-style-type: none"> Also called out in Redmond transit planning study. Reinforced by planned upgrades to downtown Kirkland transit center Was given substantial support by community focus groups that reviewed potential transit improvements for Kirkland. 		
Improved Connections between Kirkland and Bellevue Transit Centers		<ul style="list-style-type: none"> Stagger schedules for Routes 230 and 234 to provide more even distribution of service. 		
Improved Connections between South Kirkland and Totem Lake/Evergreen Hospital		<ul style="list-style-type: none"> Affects North Bellevue area Directly connects residential/employment 		

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	<p>areas at south and north ends of Kirkland.</p> <ul style="list-style-type: none">▪ Recommendation calls for local route operating between South Kirkland park-and-ride lot (located in north Bellevue) and Totem Lake/Evergreen Hospital via the downtown Kirkland transit center.▪ The route would also connect with the planned transit hub along I-405 in Totem lake area.
Eastside Circle Route	<ul style="list-style-type: none">▪ Connects current and future transit hubs located on Eastside including the downtown Kirkland transit center, Bellevue Transportation Center, Overlake transit center, downtown Redmond park-and-ride lot, and Kingsgate park-and-ride lot.▪ Reinforces major public investment in transit centers/park-and-ride lots by Metro, Sound Transit, and local jurisdictions.▪ Will result in direct and frequent transit connections between transit focal points, local bus service at the focal points, and nearby major travel generators.▪ Long-term strategy.

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**Figure II-3
Redmond Transit Plan**

Recommendations Affecting Bellevue	Level of Implementation	Status (effective Jan/2001)
Improved access between Overlake and Eastgate	Implemented	New Route 222 provides 7-day/week service between Overlake and Eastgate
Direct (non-transfer) access between Overlake and South Bellevue	Implemented	New Route 222 provides 7-day/week service between Overlake and Factoria
Improved all-day access between English Hill & downtown Bellevue	Partially Implemented	English Hill/dwtn Bellevue provided via Rt 233 (peaks only)
Improved all-day access between Avondale Road and downtown Bellevue.	Partially Implemented	Avondale Road/downtown Bellevue provided by Route 232 (peaks only)
Direct peak/midday connections between Overlake and Kingsgate/Totem Lake area	Partially Implemented	New Route 239 – peak periods only
Kirkland/North Bellevue to Overlake – more direct connections (see also Kirkland Transit Plan)	Not Implemented	<ul style="list-style-type: none"> ▪ New Sound Transit Route 540 connecting Redmond and Kirkland via 85th Street; ▪ Does not directly connect with Overlake. ▪ In 1999, Metro proposed new east-west link between Kirkland – Overlake - Eastgate. Deferred due to I-695.
Sammamish-Bellevue – extend service from Redmond to Overlake and downtown Bellevue. Provide peak and midday service	Partially Implemented	<ul style="list-style-type: none"> ▪ Route 269 operates in peaks only ▪ Route 269 extended from Redmond to Overlake (peaks only) ▪ Potential extension of Route 269 to downtown Bellevue proposed for Sept/99 changes (deferred due to I-695) ▪ Frequency on 269 decreased in Feb/2000 due to I-695 cuts.
Provide local circulator in Overlake; connecting with new transit center at SR 520/NE 40th Street.	Not Implemented	New transit center completion: Sept/01. Microsoft will operate shuttle service to its campus.
Provide peak/midday bi-directional express service between Overlake and downtown Seattle	Implemented	Sound Transit 545/546 connects Redmond-Overlake-Seattle; peak and midday service.
Provide express connections between dwtn Redmond, Overlake, & dwtn Bellevue.	Not Implemented	Initially in Sound Move plan; not yet implemented.

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CHAPTER III - EXISTING BELLEVUE TRANSIT SYSTEM

Currently, 40 transit routes operate through the city of Bellevue - provided by both King County Metro and Sound Transit. The routes serve diverse destinations throughout the region and within the city itself. These services can be aggregated into three service categories:

- **Community services** – Exclusively serve the City of Bellevue - connecting Bellevue neighborhoods with each other and with downtown Bellevue.
- **Eastside services** – Provide connectivity between the City of Bellevue and other eastside jurisdictions. Eastside routes connect the City of Bellevue with the following destinations: Kingsgate, Redmond, Kirkland, Northshore P&R, Woodinville, Totem Lake, Bear Creek P&R, Issaquah, and East Lake Sammamish.
- **Regional services** – Cross subarea and county lines - connecting the City of Bellevue with other regional destinations within King, Snohomish, and Pierce Counties (note: routes to Seattle are considered regional routes).

In addition to these regular fixed route services, King County Metro also operates a number of specialized transportation services in the City of Bellevue; including: one custom bus route to Everett Boeing, one Dial-A-Ride route, and sixteen school related routes. The operating expense of the custom bus and school related routes are shared with public and private institutions.

Figure III-1 groups Bellevue's routes into each of the three fixed-route service categories referenced above [note: specialized transportation services are not reflected]. Figure III-1 shows that most Bellevue routes are oriented to regional destinations, primarily Seattle.

Figure III-1
Service Categories

Regional Routes	Eastside Routes	Local Routes
<i>111, 114, 167, 210, 212, 215, 225, 229, 232, 237, 242, 243, 250, 255, 256, 258, 262, 261, 266, 271, 272, 530, 531, 532, 535, 550, 560, 565</i>	222, 230, 233, 234, 239, 240, 249, 253, 269, 920	219, 921
Note: All italicized regional routes have origins or destinations in downtown Seattle.		

As reflected in the following system network evaluation, Metro transit operations in Bellevue are oriented to serving regional employment destinations, primarily Seattle. Local transit services, when provided on weekdays, operate on a reduced span of service with limited service frequencies of approximately one trip per hour (i.e., 60 minute headways). Weekend transit services are negligible at all times.

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Because Metro's transit network in Bellevue is primarily oriented to serving Seattle the radial service pattern is designed so most routes converge at the Bellevue Transit Center – like the spoke of a wheel. The primary problem with the present radial system in Bellevue is that it is poorly suited to the land development patterns taking place in the City.

While the Bellevue CBD is growing rapidly, the CBD is not the only focus of travel in Bellevue – a number of major non-CBD activity centers are developing which are not well served by transit. As a result, people must transfer frequently to get to various Bellevue origins and destinations. This situation would not be a significant deterrent to using transit were transfer wait times 15 minutes or less. Unfortunately, residents in a number of communities in Bellevue need to transfer between two bus routes (each with limited service frequencies) and experience lengthy transfer wait times (60+ minutes) before they can access various travel destinations throughout the City.

Span of Service

For good availability of service, users must have both an adequate span and frequency of service options. Figures III-2 through III-4 provide an overview of King County Metro's Bellevue – Bellevue, Bellevue – Eastside, and Bellevue – Regional services by time period for weekdays, Saturdays, and Sundays.²

King County Metro's *1999 Rider/Nonrider Survey* showed that one-third (32%) of bus riders living in East King County rely on King County Metro for all or most of their transportation needs. Clearly, for these individuals, an adequate span of service on King County Metro operations is critical. However, many riders might use transit more often if the span of service on the existing route network were broadened.

Because most routes operating in Bellevue tend to have a strong peak orientation with limited service in non-peak periods transit is not regarded as a viable option for many types of trips; for example, many major destinations, notably Bellevue Square, Factoria, Crossroads, maintain operations until 9:00 PM or later. In the interest of encouraging transit usage among both employees and customers of these facilities, public transit services would need to operate late enough to serve these later hours of operation.

² For a detailed listing of the route profiles of King County Metro services in Bellevue (based on September 2000 Service Change data) reference Appendix D.

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**Figure III-2
Weekday Headways on King County Routes Serving Bellevue**

Community Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
219	Factoria - Newcastle	60	45			
222	Bellevue - Overlake	30	30	36		180
233	Bellevue - Overlake	45				

Inter-Community Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
230	Bellevue - Kingsgate P&R	26	30	60	180	60
230	Bellevue - Redmond P&R	30	30	60	180	90
232	Bellevue - Redmond P&R	60				180
234	Bellevue - Kirkland	45	60	180		90
234	Bellevue - Northshore P&R	36	60	180		
237	Bellevue - Woodinville	45				
239	Overlake - Totem Lake	60				
249	Bellevue - Redmond P&R	45	60			
253	Bellevue - Bear Creek P&R	30	30	180		90
269	Issaquah - E Lake Sammamish	90		180		180
920	Bellevue - Kingsgate P&R	60	60			180
921	Bellevue - Eastgate P&R	60	60	180		180

Regional Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
111	Renton - Seattle CBD	36				60
114	Renton - Seattle CBD	45				180
167	Auburn P&R - U. District	36				90
210	Issaquah - Seattle CBD	36				
212	Eastgate P&R - Seattle CBD	23				
215	Issaquah - Seattle CBD	90	30	60	90	
225	Overlake - Seattle CBD	26		90		45
229	Overlake - Seattle CBD	45		180		90
240	Bellevue - Renton	45	60	60		90
242	Overlake - North Seattle	26				180
243	Bellevue - Jackson Park	60				
250	Redmond P&R - Seattle CBD	36				90
255	Kingsgate - Seattle CBD	30	60	60	90	90
256	Overlake P&R - Seattle CBD	90				
258	Kirkland - Seattle CBD	60				180
261	Overlake P&R - Seattle CBD	36				90
262	Kingsgate P&R - Seattle CBD	45				
266	Bear Creek P&R - Seattle CBD	23				180
271	Issaquah P&R - U. District	30	30	60	180	90
272	Eastgate P&R - U. District	36	180			180
280	Bellevue TC - Seattle CBD					180
942	Eastgate P&R - First Hill	36				

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**Figure III-3
Saturday Headways on King County Routes Serving Bellevue**

Community Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
219	Factoria - Newcastle					
222	Bellevue - Overlake	180	36	60	90	
233	Bellevue - Overlake					

Inter-Community Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
230	Bellevue - Kingsgate P&R	36	30	30	45	180
230	Bellevue - Redmond P&R	60	60	90	90	
232	Bellevue - Redmond P&R					
234	Bellevue - Kirkland	60	60	180		
234	Bellevue - Northshore P&R	60	60	180		
237	Bellevue - Woodinville					
239	Overlake - Totem Lake					
249	Bellevue - Redmond P&R	180	90			
253	Bellevue - Bear Creek P&R	60	60	180		
269	Issaquah - E Lake Sammamish					
920	Bellevue - Kingsgate P&R					
921	Bellevue - Eastgate P&R					

Regional Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
111	Renton - Seattle CBD					
114	Renton - Seattle CBD					
167	Auburn P&R - U. District					
210	Issaquah - Seattle CBD					
212	Eastgate P&R - Seattle CBD					
215	Issaquah - Seattle CBD					
225	Overlake - Seattle CBD					
229	Overlake - Seattle CBD					
240	Bellevue - Renton	90	60	60		
242	Overlake - North Seattle					
243	Bellevue - Jackson Park					
250	Redmond P&R - Seattle CBD					
255	Kingsgate - Seattle CBD	90	60	60	90	
256	Overlake P&R - Seattle CBD					
258	Kirkland - Seattle CBD					
261	Overlake P&R - Seattle CBD					
262	Kingsgate P&R - Seattle CBD					
266	Bear Creek P&R - Seattle CBD					
271	Issaquah P&R - U. District	60	30	60	180	
272	Eastgate P&R - U. District					
280	Bellevue TC - Seattle CBD					
942	Eastgate P&R - First Hill					

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**Figure III-4
Sunday Headways on King County Routes Serving Bellevue**

Community Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
219	Factoria - Newcastle					
222	Bellevue - Overlake	180	60	60	180	
233	Bellevue - Overlake					

Inter-Community Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
230	Bellevue - Kingsgate P&R	45	30	30	45	
230	Bellevue - Redmond P&R	90	60	60	90	
232	Bellevue - Redmond P&R					
234	Bellevue - Kirkland					
234	Bellevue - Northshore P&R					
237	Bellevue - Woodinville					
239	Overlake - Totem Lake					
249	Bellevue - Redmond P&R					
253	Bellevue - Bear Creek P&R	90	60	180		
269	Issaquah - E Lake Sammamish					
920	Bellevue - Kingsgate P&R					
921	Bellevue - Eastgate P&R					

Regional Routes						
Route	Destination	Peak	Mid	Early Eve	Late Eve	Early Morn
111	Renton - Seattle CBD					
114	Renton - Seattle CBD					
167	Auburn P&R - U. District					
210	Issaquah - Seattle CBD					
212	Eastgate P&R - Seattle CBD					
215	Issaquah - Seattle CBD					
225	Overlake - Seattle CBD					
229	Overlake - Seattle CBD					
240	Bellevue - Renton	180	60	60		
242	Overlake - North Seattle					
243	Bellevue - Jackson Park					
250	Redmond P&R - Seattle CBD					
255	Kingsgate - Seattle CBD	180	60	60	90	
256	Overlake P&R - Seattle CBD					
258	Kirkland - Seattle CBD					
261	Overlake P&R - Seattle CBD					
262	Kingsgate P&R - Seattle CBD					
266	Bear Creek P&R - Seattle CBD					
271	Issaquah P&R - U. District	90	60	60	180	
272	Eastgate P&R - U. District					
280	Bellevue TC - Seattle CBD					
942	Eastgate P&R - First Hill					

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- *Bellevue – Bellevue routes* primarily operate weekdays during the peak and mid-day time-periods. Only one of the three routes in this service category is operated on Saturdays and Sundays.
- *Bellevue – Eastside routes* primarily operate weekdays during the peak and mid-day time-periods. Only 8 of the 12 regional routes offer mid-day service on weekdays. And, on weekends, only 6 of the 12 routes in this service category is operated on Saturdays; and, on Sundays only 3 of these routes remains in service.
- *Bellevue - Regional routes* primarily operate weekdays during the peak, early evening, and early morning time-periods. Only 5 of the 22 regional routes offer mid-day service on weekdays. And, on weekends, only 3 routes remain in operation.

Route Coverage

Considering transit service in a generic sense, that is, ignoring specific destinations served by individual routes, peak hour service area coverage in the City of Bellevue is fairly comprehensive. Service gaps are generally in mid- to upper-income areas along 92nd Avenue NE between NE 8th and Yarrow Point, between 116th Avenue NE and 130th Avenue NE north of SR-520, along 124th-128th Avenue SE south of NE 8th Street and in the Cougar Mountain area south of I-90. Most of the remainder of the City enjoys convenient access to local and/or regional fixed route transit services.

During midday hours, several additional gaps in service coverage appear, including a large portion of southeast Bellevue south of Lake Hills Boulevard and east of 148th Avenue SE and between 156th Avenue and 164th Avenue between NE 8th Street and Lake Hills Boulevard.

Early evening hours (6-9 PM) exhibit a significant reduction in the transit coverage within the City of Bellevue. Large areas of the City are virtually without transit service during this period, including the area between I-405 and 140th Avenue NE north of NE 8th Street, the northeastern portion of the city east of 164th Street NE and north of Bel-Red Road, nearly the entire area between NE 8th Street and I-90 between I-405 and 140th Avenue SE (except for Woodridge and the area adjacent to BCC and most of the area to the south and east of Somerset).

Weekend service coverage tends to resemble that of evening service coverage, with many routes not providing any weekend service. Those that do provide service tend to exhibit rather lengthy headways (more than 30 minutes), making transfers at any location other than the Bellevue Transit Center unreliable and time-consuming.

When specific route destination areas are taken into account, the coverage becomes somewhat less uniform. The following examples illustrate the lack of a coordinated intra-Bellevue route network, even during the peak commuter period.

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Downtown Bellevue

Even though downtown Bellevue represents a major employment center for the Eastside, there are a number of areas within the City which do not have direct (non-transfer) access to this important urban center.³ Included in the peak hour service gaps are the area between 116th Avenue NE and 140th Avenue NE north of SR-520, the area to the north of NE 24th Street and east of 156th Avenue NE, the area between 116th Avenue NE and 140th Avenue NE between NE 8th Street and the Lake Hills Connector and nearly the entire southeast quadrant of the City east of 148th Avenue NE/SE and NE 8th Street.

Midday service coverage for Bellevue CBD-bound service is nearly identical to that of the peaks with the exception of an area on the western slope of Newport Hills, which loses its access to the CBD.

The Evening service coverage of Bellevue CBD-bound service exhibits expanded gaps in the area north of Bel-Red Road between Bellevue Way and 140th Avenue NE, in the Woodridge community and in the Somerset/Hilltop area; in addition to the gaps exhibited in the Peak and midday periods.

Of particular concern is the absence of any direct service to the Bellevue CBD from the southeastern quadrant of the City (Lake Hills and Phantom Lake) and from the area south of Bridal Trails Park during all time periods.

Crossroads

The Crossroads area is a focus of retail and entertainment activity as well as the site of a major theater complex serving the eastern half of the City. In spite of this, direct (non-transfer) transit access to this area does not exist for significant portions of the City. During the peak periods, transit access is confined to the Lake Hills, Eastgate and Crossroads neighborhoods and to service operating across the NE 8th Street corridor.

Midday service is even more restricted, with a large area of the Lake Hills and Phantom Lake neighborhoods also cut off from direct transit access to the Crossroads area.

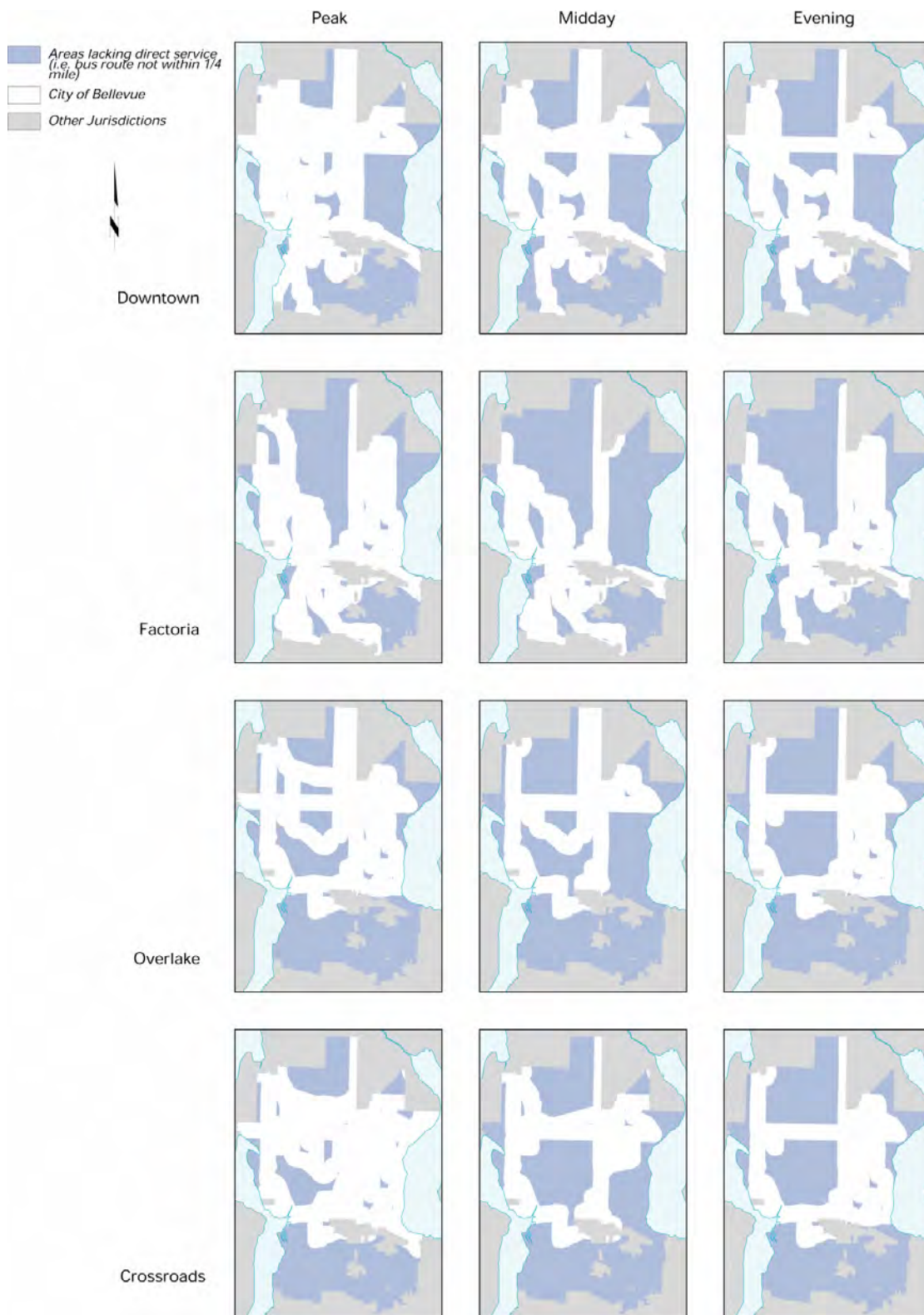
Evening service is restricted to a small area of the Crossroads neighborhood and the NE 8th Street corridor. With such limited access, the Crossroads entertainment areas, including the movie theaters, are effectively not served by transit at all from most areas of the City.

Overlake

The Overlake area is a focus of several major retail businesses (Fred Meyer and Sears) as well as a number of restaurants and other smaller retail businesses. Transit access through this area is impacted by heavy traffic congestion on NE 24th Street just east of 148th Avenue NE and along 148th Avenue NE between Bel-Red Road and SR-520.

³ Figure III-5 identifies areas in Bellevue that lack direct service to downtown Bellevue, Factoria, Overlake, and Crossroads at various times of day (peak/midday/evening).

Figure III-5
Directness of Service to Bellevue Activity Centers



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This congestion is compounded by heavy access and egress volumes to/from SR-520 and by the large volumes of left-turning traffic movements in this area.

Much of the peak hour transit service in this area is focused on the Overlake Park and Ride facility just off 152nd Avenue NE and by regional transit services bound for multiple regional destinations, including Seattle and Snohomish County. Service is provided in this area by King County Metro, Sound Transit and by Community Transit.

Major areas without direct (non-transfer) transit service to the Overlake area during peak commuter hours include the area between I-405 and 148th Avenue NE and north of SR-520, The area between Bellevue Way and 148th Avenue between NE 8th Street and I-90 and the entire area south of I-90 except for a small area around Factoria and Newport Way and the area west of Bellevue Way between NE 8th Street and SR-520.

During the midday, the entire area between Bellevue Way and 148th Ave NE north of Bellevue Road is without direct service into the Overlake area as is the region bounded by Bellevue Way, NE 8th Street, 148th Avenue SE and I-90 and the entire southeastern quadrant of the City south of NE 8th Street and east of 148th Avenue SE. South of I-90, coverage is identical to that available during peak hours.

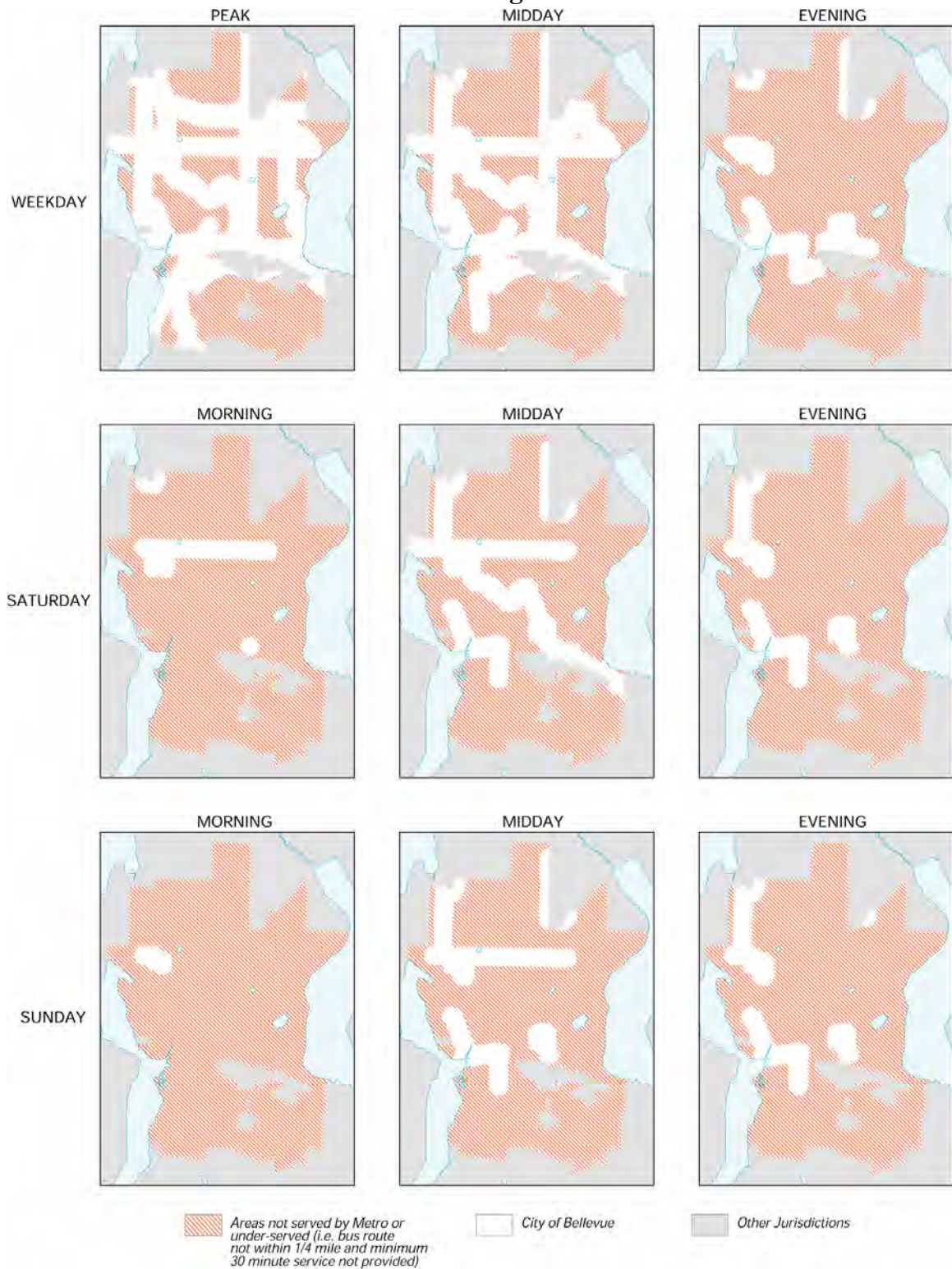
In the evening, coverage is nearly identical to that of the midday period. Some slight improvement in the Crossroads area is evident in the very early evening due to the operation of route 261 through this area. However, this service terminates at 7:00 PM.

Service Frequency

Access to the transit network must also take account of the frequency of service being provided. As reflected in Figure III-6, much of the service in the Bellevue area, particularly during non-peak periods, operates at average headways in excess of 30 minutes. This figure depicts September 2000 Service Change data where peak hour service is defined as 6 am - 9 am; midday service is from 9 am – 12 pm; and, evening service is from 6 pm – 9 pm.

In general, service is most frequent during peak commuter hours. However, even during this period, significant gaps exist in the service network. As Figure III-6 indicates, the areas around Bridle Hills, northeast Bellevue, Lake Hills, Wilburton and Eastgate/Cougar Mountain areas are without access to routes having service at least every 30 minutes during peak commuter hours. On Saturday mornings, only the area along NE 8th Street between downtown Bellevue and Crossroads enjoys such service while on Sunday Mornings, only a small area of downtown Bellevue enjoys this frequent transit access.

Figure III-6
Areas in Bellevue Lacking 30 Minute Service



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During weekday midday periods, service access to frequent transit services diminishes somewhat from peak levels, with most of the area north of SR520 between Bellevue Way and 140th Avenue NE without such access, as well as a significant portion of East Bellevue. On Saturday afternoons, most of the City northeast, east and southeast of Crossroads lose access to this frequent level of service as well as South Bellevue north of the South Bellevue P/R and the Factoria area. During Sunday middays, access to frequent transit service is restricted to a few corridors surrounding Bellevue Way north of the CBD and south of the South Bellevue P/R, NE 8th Street as far east as Crossroads, and a small area in the Eastgate area

Transit frequencies significantly decline during evening hours (after 6 PM.) On weekdays, 30-minute service is available only in downtown Bellevue, between Factoria and the South Bellevue P/R and in the Eastgate/BCC area. On Saturday and Sunday evenings, such service levels are available only along Bellevue Way between downtown Bellevue and the South Kirkland P/R, between Factoria and the South Bellevue P/R and in the immediate Eastgate area.

With the exception of these few areas, the City of Bellevue is without 30-minute service during evening hours, even across the heavily-traveled NE 8th Street corridor.

In addition to the examination of general service frequencies, a closer examination of service frequencies also points out certain deficiencies in the transit service levels being provided within neighborhoods in the City of Bellevue. To carry out this analysis, five major trip generators/destinations were chosen from within the City of Bellevue: Bellevue CBD, Crossroads, Overlake, Eastgate and Factoria. For each of these locations, the number of transit trips operated during each of five time periods were also recorded: Weekday Peak (6-9 AM), Weekday Midday (9AM-12PM), Weekday Evening (6-9 PM), Saturday Midday (6-9 AM) and Sunday Midday (6-9 AM.)

From this information, the average headway for routes serving each of these five areas during each of the five time periods was calculated. The results are summarized in the following table.

Figure III-7
Average Headways to Bellevue Activity Centers

Time Period	Average Headway					
	Total	Bell. CBD	Crossroads	Overlake	Eastgate	Factoria
6-9 AM	40	33	33	36	35	41
9AM-12 PM	42	41	36	34	39	42
6-9 PM	74	77	34	72	60	80
Sat	50	48	40	45	32	36
Sun	53	51	48	45	60	60

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As Figure III-6 shows, average headway for the entire city during the peak for all routes providing significant service within the City was 40 minutes. During the midday, that average increases only slightly to 42 minutes. However, in other time periods, the average varies from 50 minutes on Saturday to 74 minutes on weekday evenings. Since these are averages, a significant proportion of all service operates with headways greater than those shown in the table.

When one concentrates on services to specific locations, the headways follow a pattern similar to that discussed. Even though the Bellevue CBD is served by many routes, the average headway on any single route serving the CBD is still more than one hour on weekday evenings and only slightly less than one hour on weekends. Of all the areas studied, only Crossroads was served at intervals of less than one hour on weekday evenings. Saturday service is operated in the 40-60 minute headway range with Sunday headways slightly longer, generally about 60 minutes.

In serving the transit dependent, the existing level of service is useable, but not convenient. The average level of existing service within the City is inadequate, however, to make transit a competitive mode.

Even though the existing service network is designed for commuters, many of the commuter routes exhibit only marginal levels of service too few to attract significant ridership. While some routes are designed to serve specific shift times at certain work locations, many others offer only two or three AM and PM trips, providing minimal access to many job sites and providing little in the way of a safety net for employees working late or having non-traditional work schedules. During off-peak hours, many routes offer significantly lower levels of service or suspend operations entirely.

There is no truly generic measure of transit accessibility. While route coverage and frequencies can be compared from route to route, the destinations served by those routes differ significantly. The combination of gaps in service coverage to specific destinations with the generally low frequency of service on most routes during off-peak periods (and often during peak periods, as well) does little to encourage transit ridership within the City for any but the transit dependent.

Auto vs. Transit Travel Times

The disparity between auto and transit travel times depends greatly upon the beginning and end points chosen for evaluated trips. Where direct transit alignments between areas exist along major arterials, transit travel times compare favorably with those exhibited by private vehicles. In fact, when parking availability and location are added into the mix, transit can be the faster mode for some trips.

However, where alignments are circuitous and service frequencies are low, transit travel times can be significantly longer than private vehicle trips. According to this analysis, trips between several origin/destination pairs can be made by transit as fast via transit as by private vehicle. Among these origin/destination pairs are: Downtown to North Bellevue;

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Downtown to Richards Valley; and Downtown to Crossroads. All of these pairs have a transit/auto travel time ratio of less than 1.25, reflecting very competitive trip times between modes. All of these origin/destination pairs are served by multiple routes operating over direct transit alignments (NE 8th and Bellevue Way.)

However, many other origin/destination pairs exhibit very different characteristics. As reflected in Figure III-7, four pairs to/from Eastgate exhibit transit/auto travel time ratios in excess of 3.0, reflecting a significant travel time penalty associated with transit travel.⁴ Many of these origin/destination pairs are fairly close together, reflecting circuitous transit routing and infrequent levels of service.

Figure III-8
MMA Auto vs. Bus Travel Time Ratios in Excess of 2.0

Origin	Destination	Transit Travel Time	Auto Travel Time	Transit/Auto Ratio
Eastgate	Newcastle	8.00	1.00	8.00
Eastgate	East Bellevue	10.00	2.00	5.00
Eastgate	Bell-Red	30.00	7.00	4.29
Eastgate	South Bellevue	15.00	4.00	3.75
Eastgate	Downtown	27.00	9.00	3.00
Overlake	Downtown	19.00	8.00	2.38
Overlake	East Bellevue	7.00	3.00	2.33
South Bellevue	Downtown	14.00	6.00	2.33
East Bellevue	Downtown	12.00	6.00	2.00

Of the 28 origination pairs evaluated by the City of Bellevue, 12 had transit/auto travel time ratios of 1.5 or less, reflecting competitive transit travel times vis-à-vis those of the private auto, while 9 pairs exhibited ratios of 2.0 or more, reflecting transit travel times more than twice those of auto travel times. Many of these long transit travel times were noted between downtown and East Bellevue and Eastgate, where direct service is unavailable or infrequent.

The travel time analysis corroborates the findings of the service coverage analysis which identified a number of significant service coverage deficiencies. Estimated transit travel times to and from these regions tend to reflect the scarce nature of transit connections available between: Downtown to East Bellevue; Downtown to Eastgate; Crossroads to South Bellevue; and, Crossroads to Eastgate.

⁴ Transit travel times were estimated between these destinations using Metro's route schedules. Auto travel times were estimated using the Mapquest internet site (www.mapquest.com) which estimates travel times between identified origins and destinations.

SERVICE ELEMENT

Key Findings

- *Transit is Focused Toward the Commuter Market*

Service within the City of Bellevue has often developed from a commuter-based focus on getting Bellevue residents to employment locations outside the City, primarily to downtown Seattle, the University District, Snohomish County, Renton and the Kent Valley. Service in many Bellevue neighborhoods, primarily in East Bellevue, is more directly oriented to external destinations than to those within the City.

- *Access to Community-Oriented Transit Services is Poor*

Even though Bellevue residents tend to work on the Eastside, much of the existing transit network is designed to transport them more efficiently to other locations. Service during off-peak hours, while more focused on local destinations, has serious coverage and focus gaps. The most noticeable of these is the disconnection between East Bellevue and the downtown core, where transit connections are poor to non-existent and the lack of direct access, particularly during evening and night hours to the Crossroads area from a significant portion of the City.

The City would benefit from a focus on trips within the City and not on direct service to external destinations from local neighborhoods. Areas such as East Bellevue would be much better served by focusing local service on other City destinations and providing connections to external destinations via transfers at the Eastgate and Overlake park and ride lots during peak hours or by overlays of commuter routes on the local route network.

- *Access to Other Eastside Destinations via Transit is Poor*

Currently, the fixed route service network is designed primarily for commuters and frequently does not function well for other trip purposes during off-peak periods. A transit focused on local and sub-regional destinations, with commuter services overlaid on that network during commute periods would improve Eastside to Eastside access.

- *Service Frequencies are Poor*

The City of Bellevue appears to be outgrowing the ability to provide timed-transfers at the Bellevue Transit Center. Transit volumes are increasing, necessitating the expansion of that facility, and the focusing of service at the BTC sacrifices transfer priorities in other areas, notably those with lesser levels of service where transfer waits can approach an hour or more.

Improving service frequencies from the typical 60 minute interval would reduce the reliance on timed transfers and allow for more flexibility in providing connections in other Bellevue neighborhoods. This, in turn, will help reduce the travel time penalty imposed on transit riders destined to many destinations within the City of Bellevue.

CHAPTER IV - MARKET CONDITIONS

Consistent with national trends, the origins and destinations of commuting trips in the Puget Sound Region have become increasingly suburban, generating what Alan Pisarski of the Eno Foundation for Transportation calls "the suburban commuting boom."⁵ As reflected in the following quotations, the "traditional commute" - the Bellevue resident commuting to downtown Seattle - is now one of many travel markets; including Bellevue residents commuting to Bellevue and other eastside jurisdictions as well as the Seattle resident commuting to downtown Bellevue.

- The PSRC, in its *1999 Central Puget Sound Regional Economic Report*, notes that "Between 1995 and 1998, the number of high tech jobs on the Eastside grew from 36,500 to 50,100, an increase of 37 percent. Over half of the region's high tech jobs are located on the Eastside... The Eastside cities of Redmond, Bellevue, Issaquah and Bothell are home to over 51,000 high tech jobs, more than twice the number in Seattle."
- King County Metro, in its *Six Year Transit Development Plan (1996-2001)*, acknowledged that: "Continuing decentralization of population and employment in King County has decreased travel to Seattle in general and downtown Seattle in particular and has resulted in the rapid growth of suburb-to-suburb and intra-community trips."
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King County Metro *Six-Year Transit Development Plan (1995-2001)* recognized this trend and was formulated on a significant reorientation of service to a broader range of travel destinations. While a number of improvements have been made to the existing route network, the latent demand for transit in East King County is significant.

Operating statistics from King County Metro show that transit ridership on the Eastside is increasing rapidly. By way of example, 31% of East County households used transit in 1999 (1994 = 19%) – the most significant growth in Metro's service area. Additionally, King County Metro's *1999 Rider/Nonrider Survey* showed that one-third (32%) of bus riders living

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SERVICE ELEMENT

in East King County rely on King County Metro for all or most of their transportation needs.

There are a number of promising trends that suggest the continued improvement of transit as a viable mobility option for Bellevue residents – higher land use densities in the suburbs, more funding for transit service, more infrastructure improvements supportive of transit, and a public committed to alternative modes of travel.

As reflected in Figures IV-1 and IV-2, residential and employment development in the City of Bellevue is occurring at a rapid pace. As evidenced in the following summary, based on Puget Sound Regional Council 2010 growth estimates, residential development in Bellevue is strong throughout the city:

Southeast Area

- Southeast area of Bellevue has higher densities than other areas and a 1998 population of about 4,000. Projections indicate a 50% growth by 2010.
- Transit service only covers north edge of area.

Northeast Area

- Includes portions of Redmond
- Denser development with about 9,200 population; 11,700 by 2010
- Area served by one route
- Near new transit center/park-and-ride lot at SR 520/NE 40th Street

Central Bellevue (140th Avenue Corridor)

- Significant current population along corridor – Lake Hills to Kirkland (23,000)
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Similarly, employment development in Bellevue is occurring at an accelerated pace in the following areas:

North of SR 520

- Already dense employment area. Doubling of employment level by 2010 – 5,300 to 10,600. Served by two Metro routes: 230 via Lake Washington Blv'd (30 minute peak and midday service); 234 via 108th Avenue (30 minute peak; 69 minute midday service)
- Overlake: 20,000 additional employment by 2010. Sound Transit 545/546 provide quick links between Overlake transit center and Seattle
- Several Eastside locations without convenient transit access to Overlake: From Kirkland (Route 230) via downtown Bellevue; From Sammamish (Route 269) – peak only every 60 minutes; North Bellevue – peak only service; and Renton – no service.

Figure IV-1
Forecasted Population Change, 1998-2010

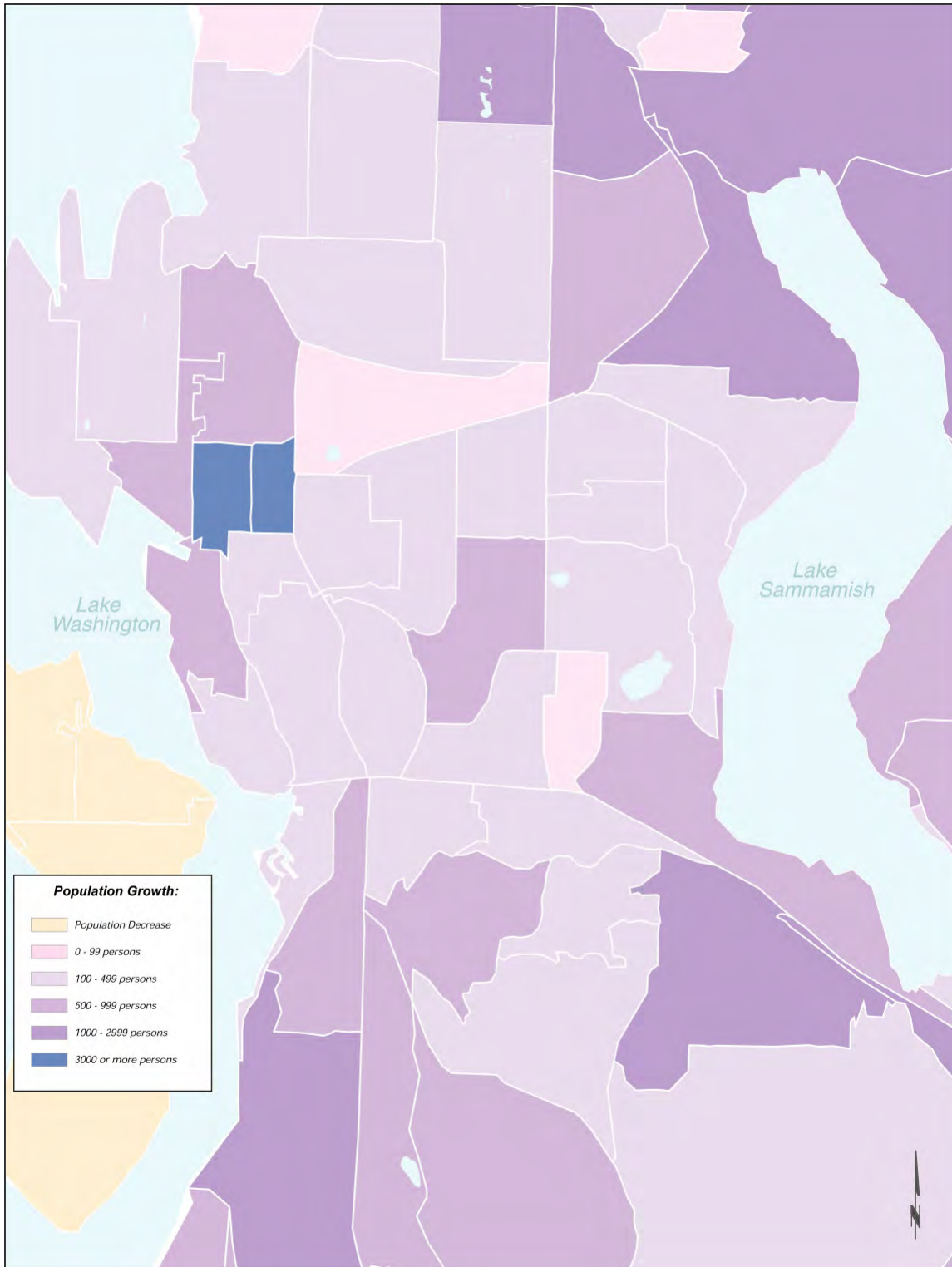
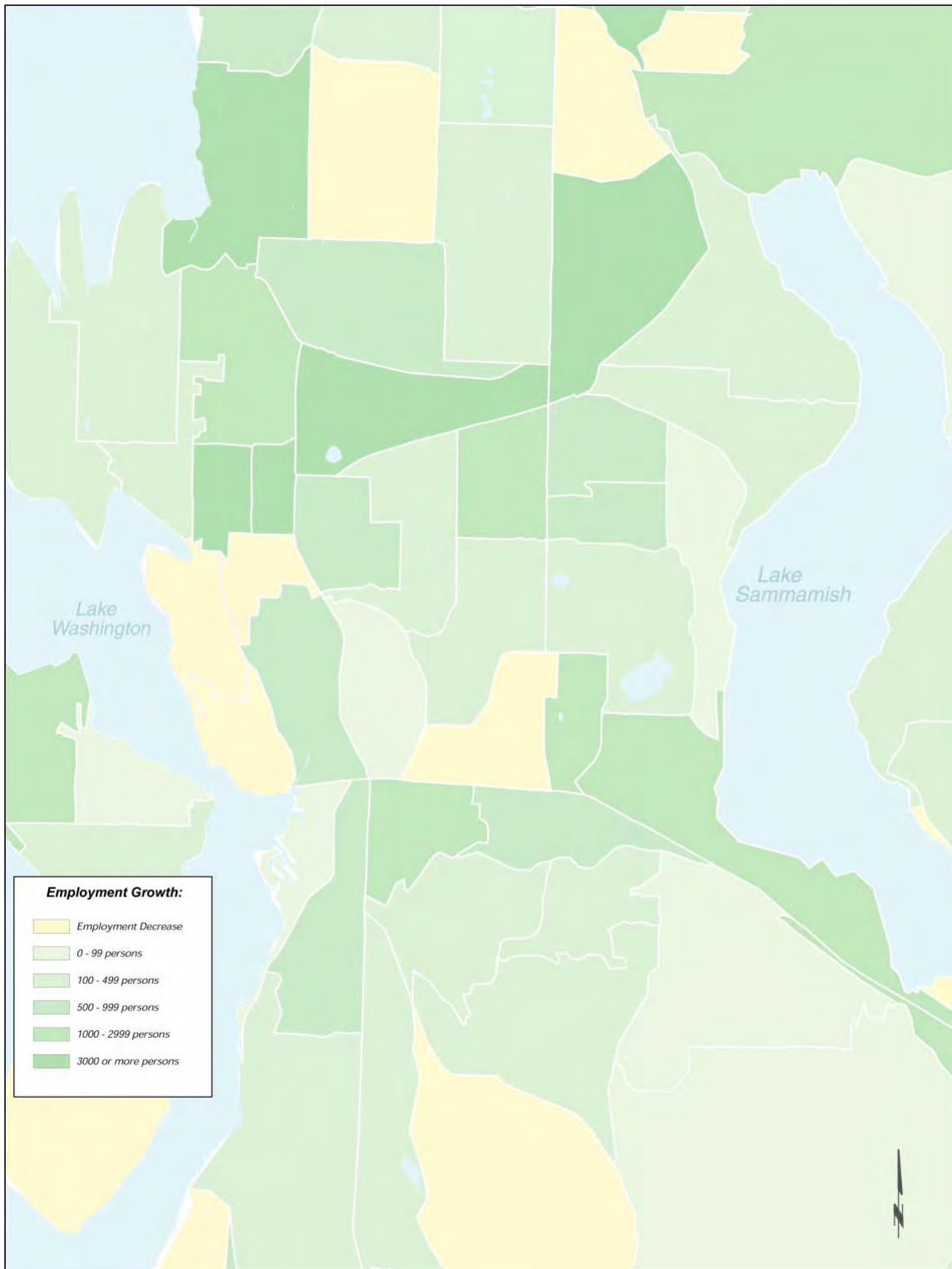


Figure IV-2
Forecasted Employment Change, 1999-2010



SERVICE ELEMENT

Travel Demand Analysis

A major factor in assessing possible transit service improvements in Bellevue is the pattern and volumes of total travel demand. It is recognized that future total travel does not necessarily translate into transit travel demand. However, many trips will be candidates for transit. The examination of total travel serves as a starting point for examining what may be potentially feasible transit markets.

This travel demand analysis of 2010 person trips to the City of Bellevue was based on information from the Bellevue-Kirkland-Redmond (BKR) model. A total of 28 districts were identified for the travel demand analysis – 13 in Bellevue; 8 for the eastside, and 7 for the region (non Bellevue and non-eastside areas). The 13 districts in Bellevue correspond to the city's Mobility Management Areas. The Bellevue, Eastside, and Regional areas are aggregations of the traffic analysis zones (TAZ's) that make up the area covered by the BKR model.

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Bellevue – Bellevue Markets (10,000 + Person Trips)

- East Bellevue - Overlake = 18,800
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SERVICE ELEMENT

Bellevue-Eastside Markets (10,000 + Person Trips)

- Redmond non-CBD - Overlake = 65,600
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- Kirkland - Overlake = 39,300
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Bellevue-Regional Markets (10,000 + Person Trips)

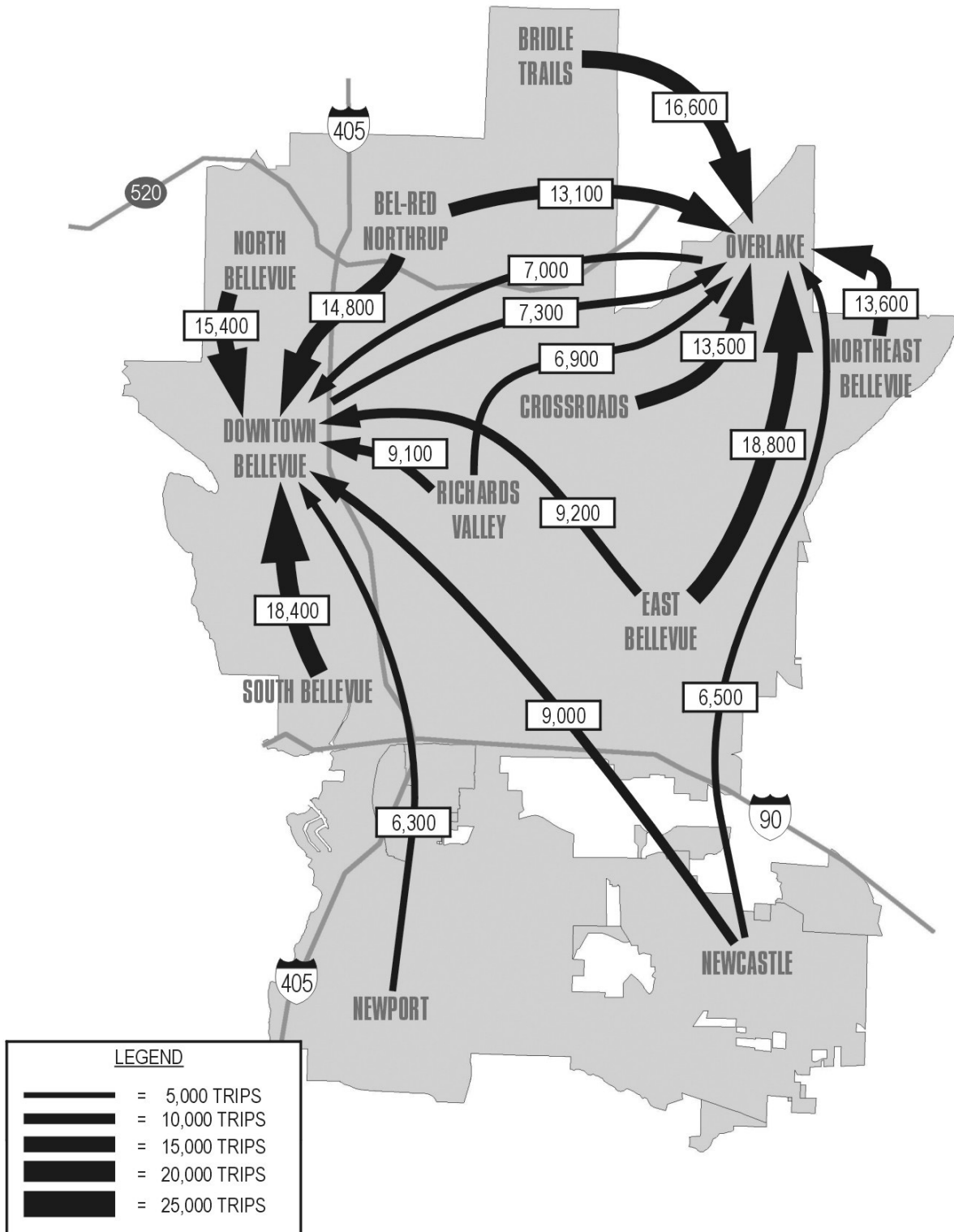
- Pierce County - Overlake = 21,300
- Pierce County - downtown Bellevue = 21,000
- Snohomish County - downtown Bellevue = 16,900
- Snohomish County - Overlake = 15,200
- South King County - downtown Bellevue = 14,900
- Medina, Clyde Hill - downtown Bellevue = 11,700
- North Seattle - downtown Bellevue = 11,500
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The travel demand assessment indicates several key conclusions:

- *Bellevue-Bellevue Markets* - The volume of South Bellevue-downtown Bellevue demand indicates the importance of quality transit access between areas such as Factoria and downtown Bellevue. Also good transit connections involving Crossroads-Overlake and East Bellevue-Overlake will be necessary to meet expected trip volumes.
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- *Bellevue-Regional Markets* - Regional travel patterns indicate that future major Bellevue markets involve corridors that are currently not well served by public transit. These include Snohomish-Overlake, South King County-Overlake, South King County-downtown Bellevue, and Pierce County to Overlake and downtown Bellevue.

SERVICE ELEMENT

Figure IV-3
2010 Total Bellevue Trips to Downtown Bellevue and Overlake



SERVICE ELEMENT

Figure IV-4
2010 Total Eastside Trips to Downtown Bellevue and Overlake

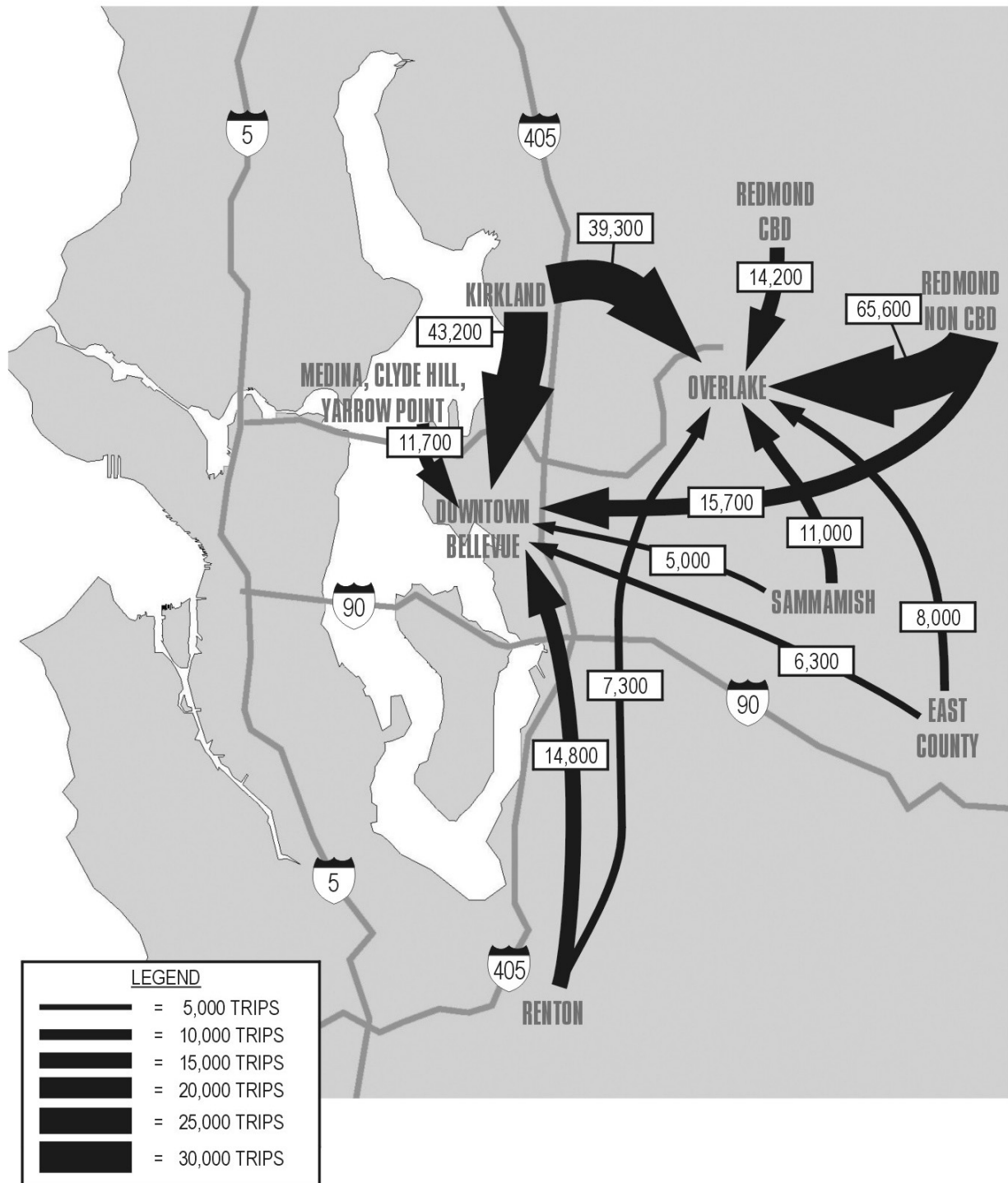
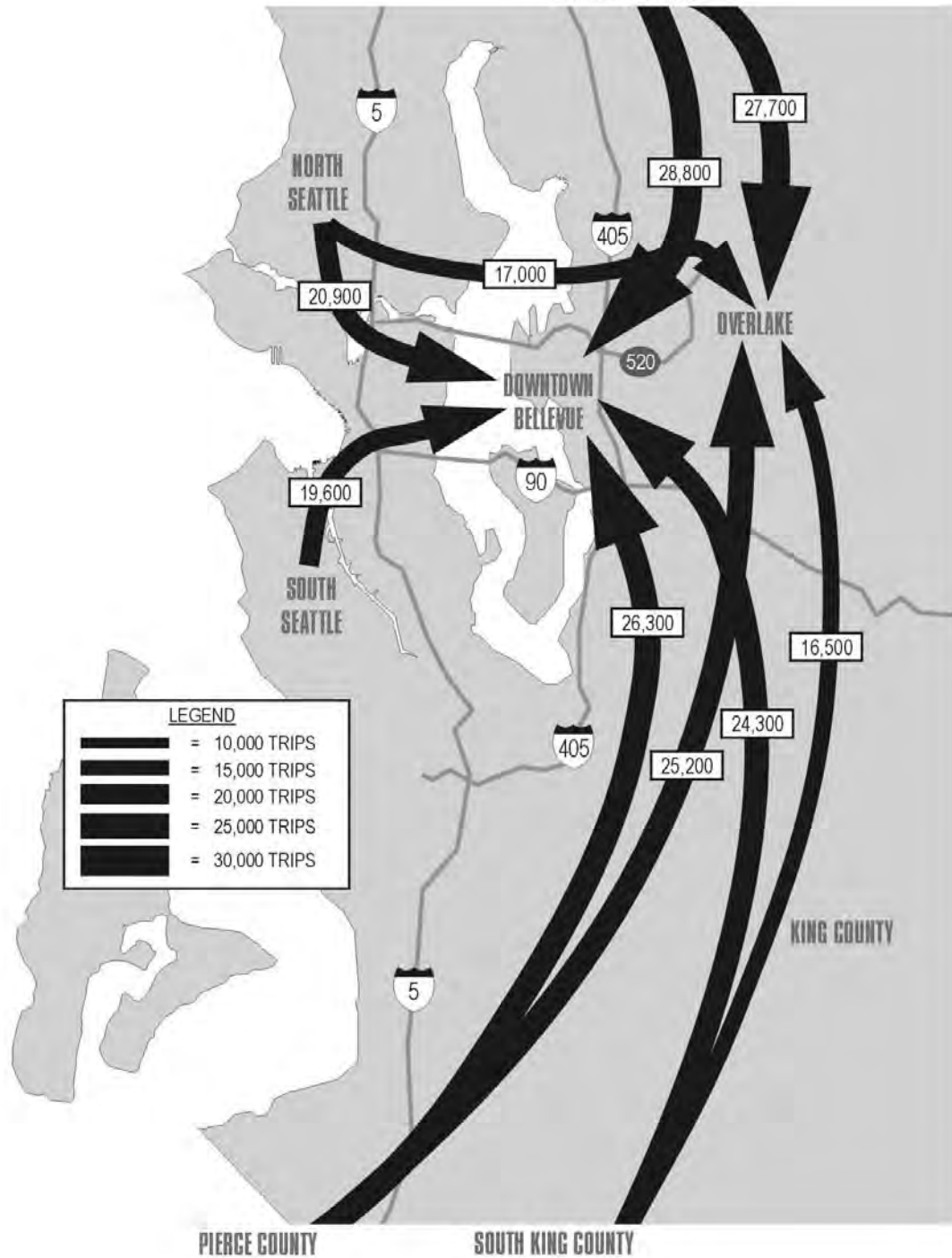


Figure IV-5
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SNOHOMISH COUNTY



CHAPTER IV - MARKET CONDITIONS

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SERVICE ELEMENT

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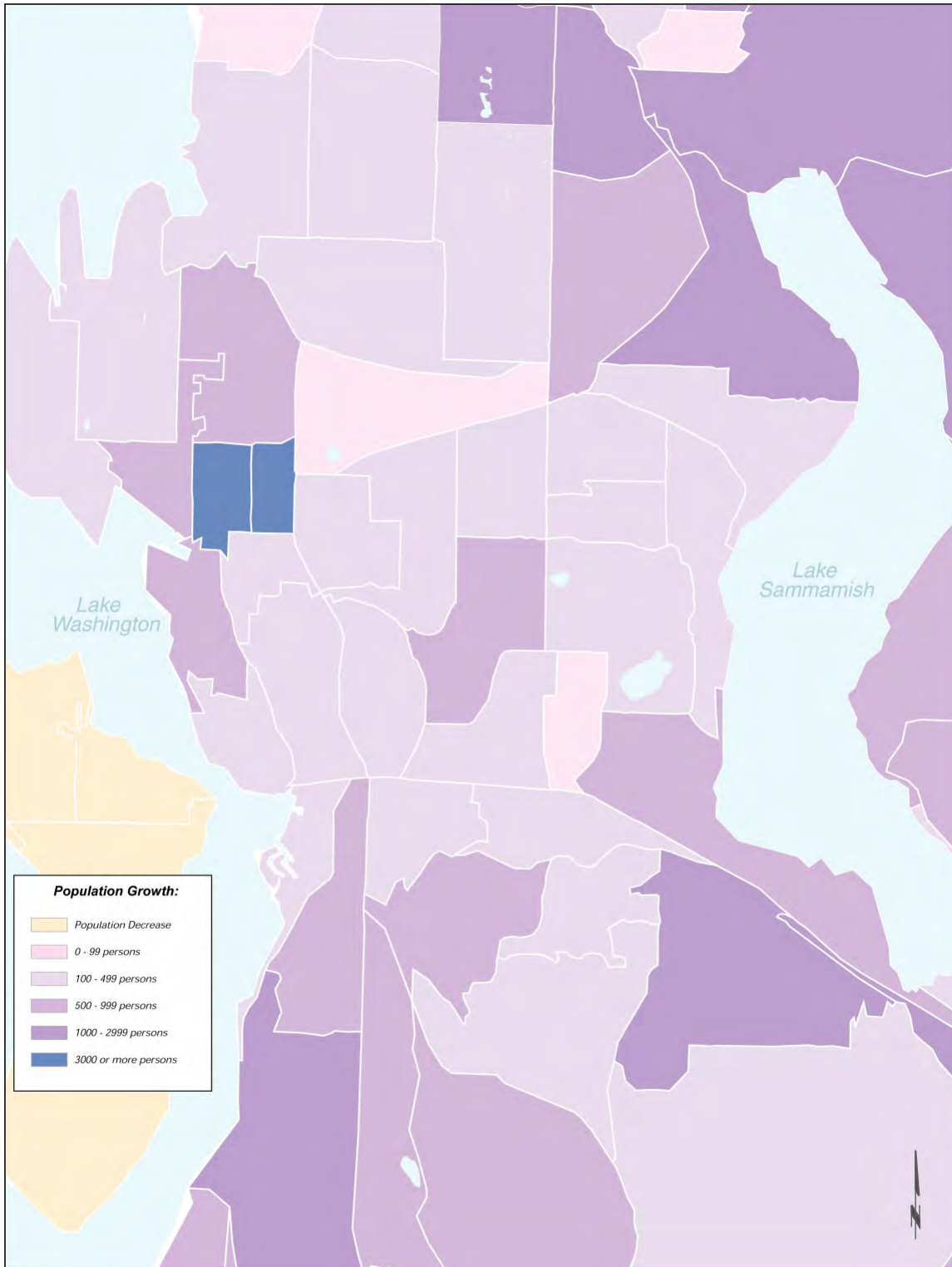
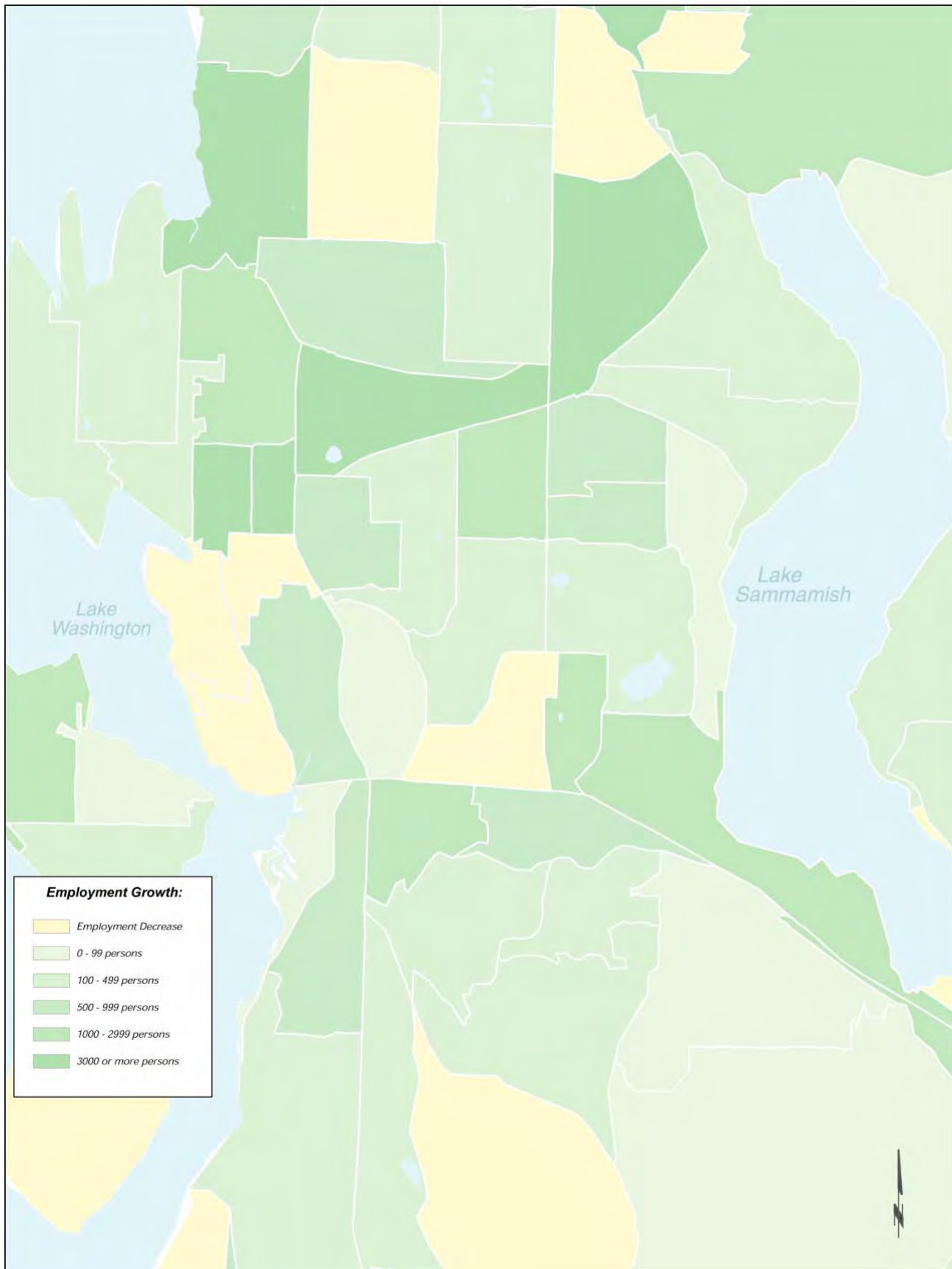


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SERVICE ELEMENT

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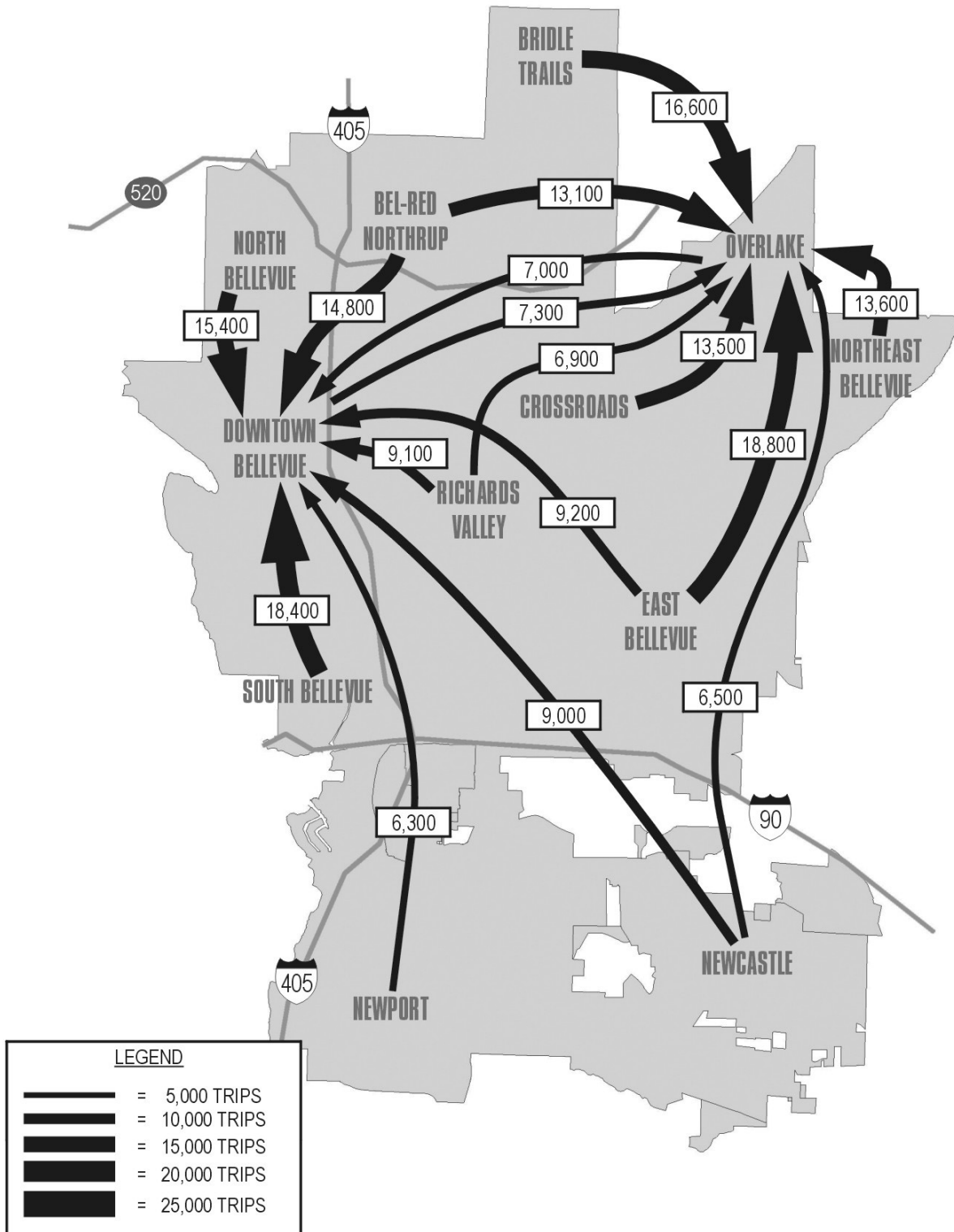
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SERVICE ELEMENT

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SERVICE ELEMENT

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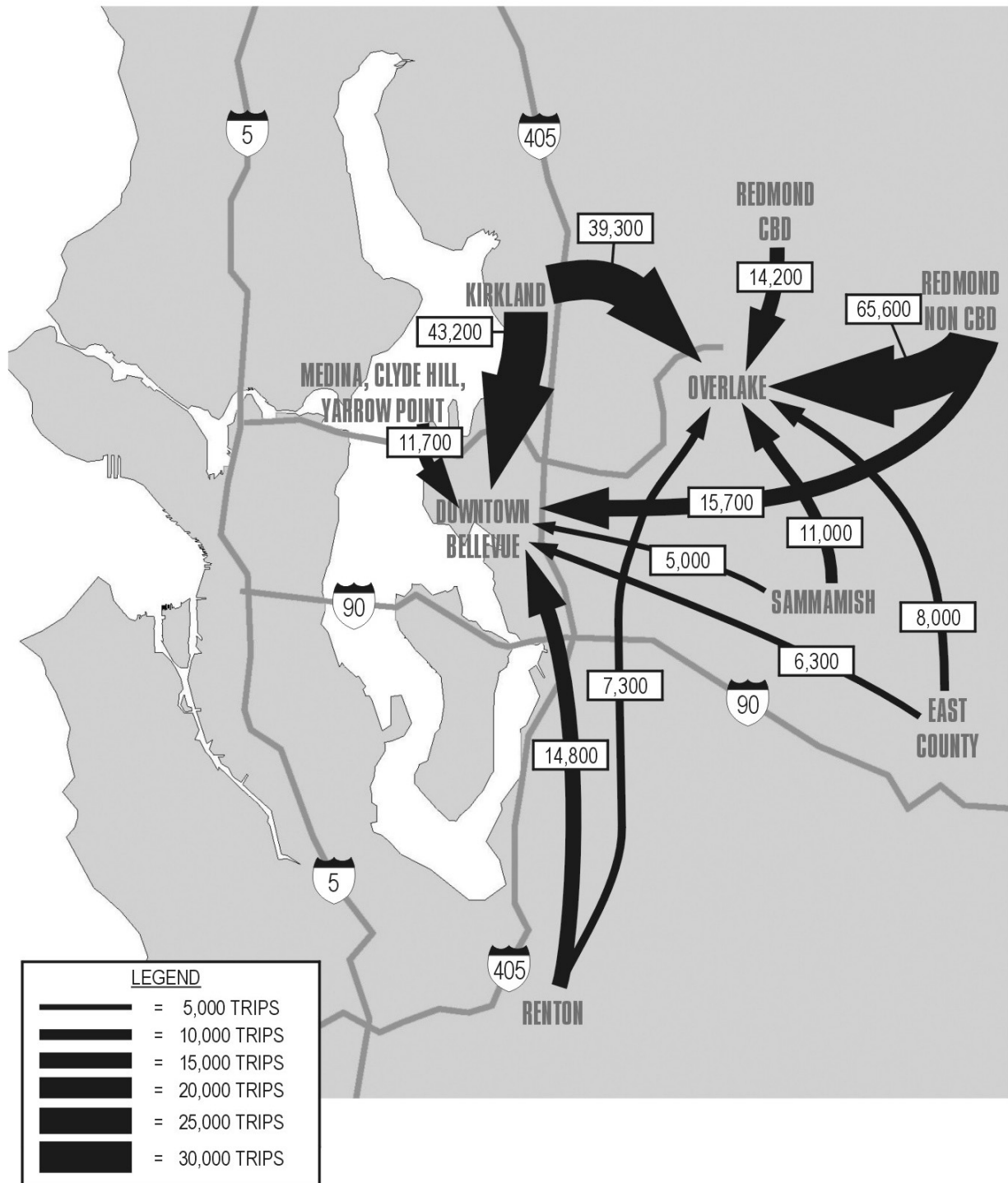
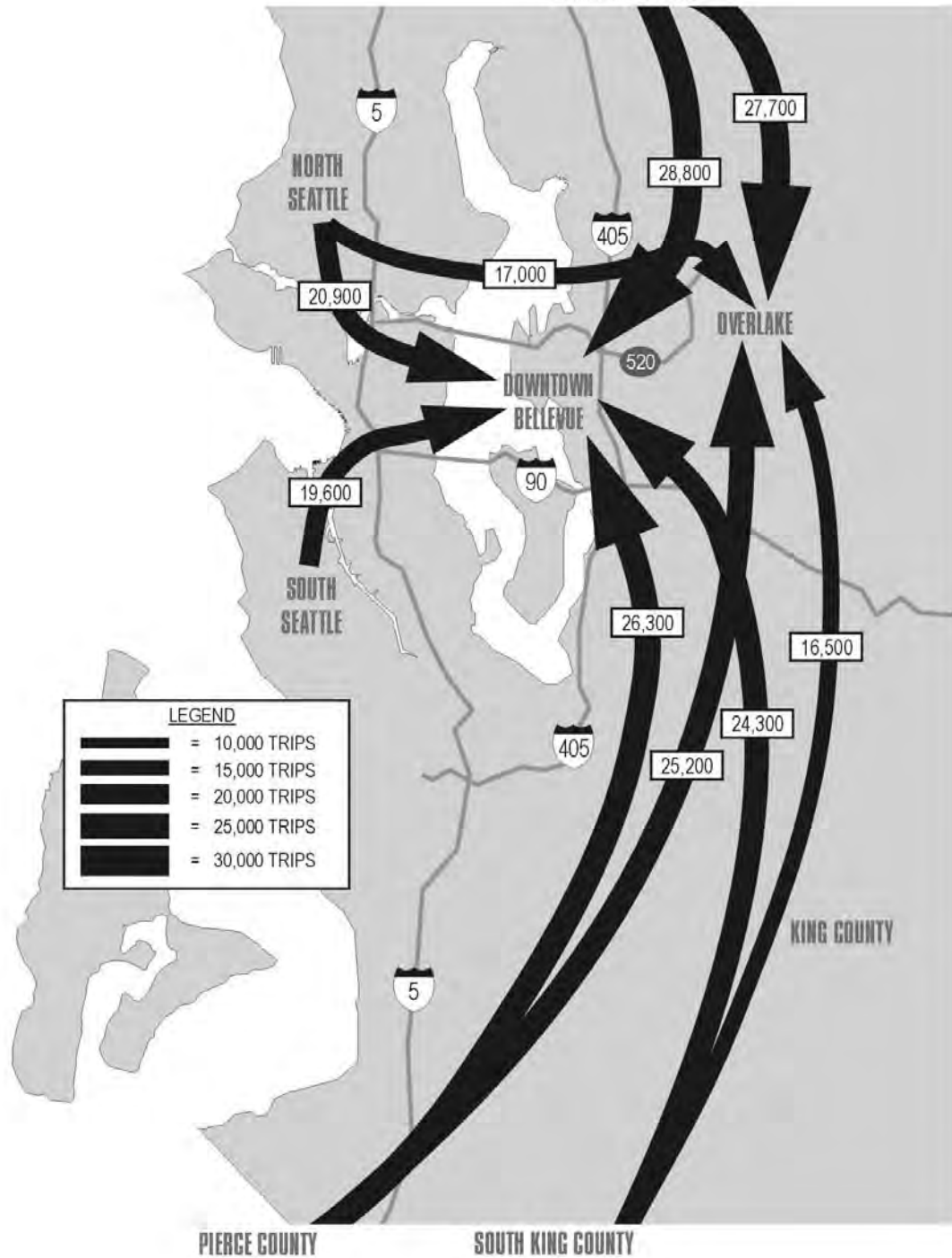


Figure IV-5
2010 Total Regional Trips to Downtown Bellevue and Overlake
SNOHOMISH COUNTY



SERVICE ELEMENT

CHAPTER V - SERVICE RECOMMENDATIONS

In its May 8, 2000 adoption of the *Comprehensive King County Transit Policies* (see Appendix L) the Bellevue City Council directed city staff to undertake the following service-related activities with the region's transit providers:

- I. Identify transit needs to support continued growth & development.
- II. Strengthen transit services to/from & within Eastside communities.
- III. Emphasize transit service to Urban Centers and Suburban clusters.
- IV. Coordinate with Metro in improving downtown circulation.
- V. Support coordination of services provided by Sound Transit & Metro.

Such policy guidance has become the basis for the City's Service Element of the *Bellevue Transit Plan Update (2001-2007)*. The overarching message from this policy directive is that the City of Bellevue has achieved population and employment densities that warrant dramatic transit service improvements. Further, because the City is expected to realize continued growth in population and employment in the future, it appears that local transit will play an ever greater role in the longer term (2010-2030). What follows is a detailed explanation of how each objective is being achieved:

I. Identify transit needs to support continued growth & development.

To address this policy guidance, the *Bellevue Transit Plan (2001-2007)* recommends improving transit access for Bellevue residents to *urban-quality* transit service levels commensurate with the growth and development occurring in the City. The following are representative examples of *urban quality* transit service levels:

- ***Span of Service*** - Routes operating in Bellevue have a strong peak orientation with limited service in non-peak periods, rendering transit ineffective for many trips. Regular transit service should be matched to activities in the City's centers to make transit a viable mode.

Recommendation: A Fall 2007 minimum target of service through 10:00 PM is recommended to capture the transit market from each of these centers.

- ***Service Frequency*** - Short and regular headways (that is, high frequency) are an essential element of attracting passenger trips to a system. From the point of view of the rider, service headways operating in excess of every 30 minutes are considered inconvenient for potential users of the system.

Recommendation: A Fall 2007 minimum off-peak service frequency target of two or more trips per hour (i.e., 30 minute headways) on most routes.

SERVICE ELEMENT

- ***Improved Transit Travel Speeds*** – If Metro is to support Bellevue’s continued growth and development it will need to promote transit as an alternative to the private automobile for a wide variety of trip purposes. To accomplish this objective, Metro will need to improve transit travel speeds relative to the private auto. As presently configured, a number of disparities exist between auto and transit travel times. In a number of these instances, bus route alignments are circuitous and service frequencies are low.

Recommendation: Metro should strive to operate at a transit/auto travel time ratio of no greater than 1.5 on mid-day route connections between key origin/destination pairs by Fall 2007.

II. Strengthen transit services to/from & within Eastside communities.

Recommendation: Improve transit connectivity between Bellevue and other major Eastside destinations. The following represent the highest priority transit nodes in East King County:

- Redmond
- Kirkland
- Issaquah
- Mercer Island
- Renton

Links between Bellevue and these eastside transit nodes should be enhanced through more frequent⁶ and more direct service that is operated for longer periods of time.

III. Emphasize transit service to Urban Centers and Suburban clusters.

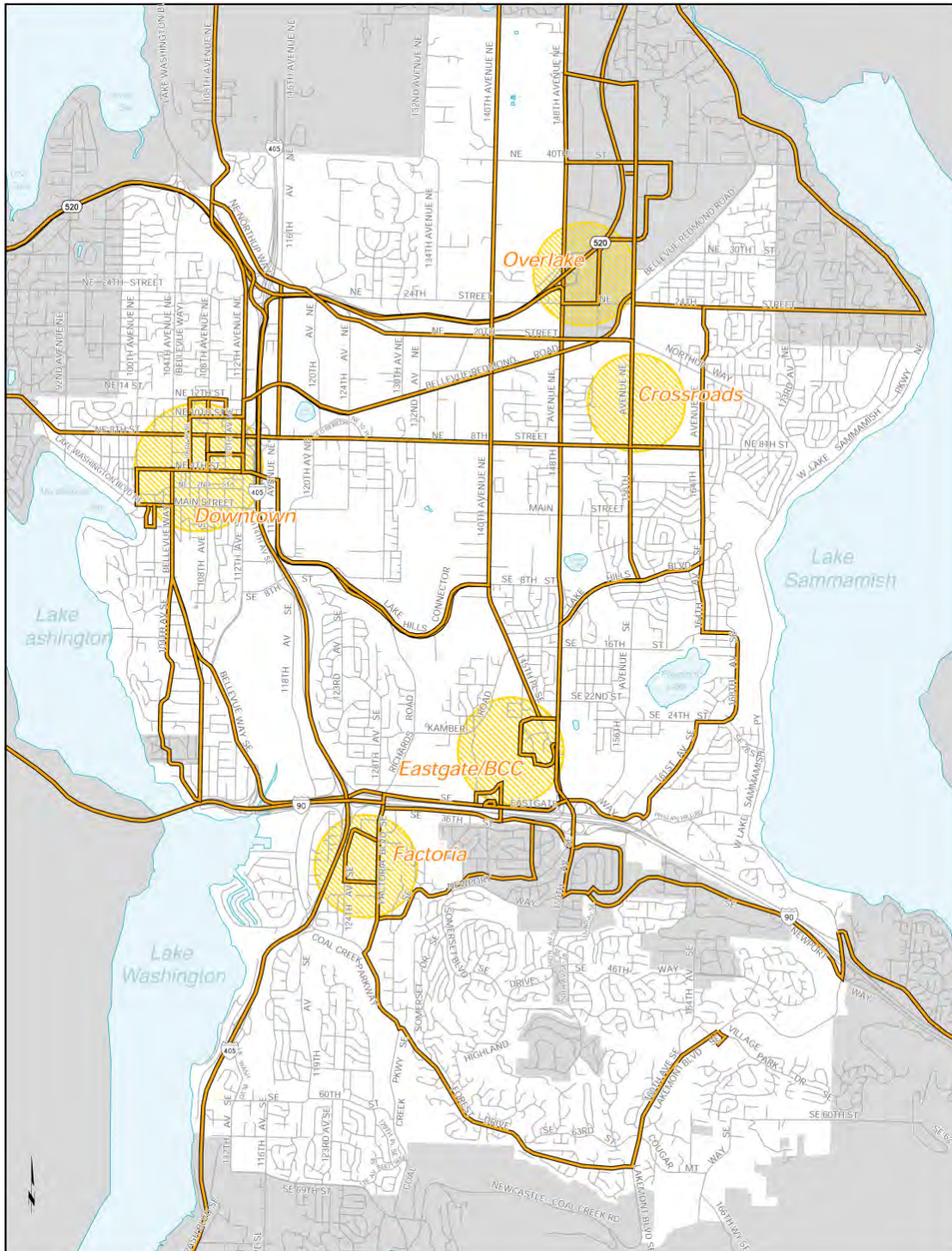
Recommendation: Improve one-seat access to major Bellevue destinations from all areas of the City. The following represent the highest priority transit nodes in the City:

- Downtown Bellevue
- Overlake Area
- Factoria Mall
- Eastgate/BCC
- Crossroads Mall

Figure V-1 aggregates route-level recommendations in this report and reflects the activity center-based approach to service planning the City arrived at following a determination that the existing network is often circuitous and travel times for even relatively short-distance trips are often extended. Based upon the importance given to travel time among the general public, it is recommended that these transit nodes be developed as hubs that are connected together by a network of direct transit links.

⁶ Weekday peak frequencies of 15 minutes with 30 minutes at all other times.

Figure V-1
Activity Center-Based Service Improvements, Fall 2007



IV. Coordinate with Metro in improving downtown circulation.

Recommendation: By Fall 2007, Metro's service network should offer all-day service connections throughout the downtown urban core at a minimum of 30 minute frequencies on most routes. A number of important service connections are missing in the existing downtown transit network (e.g., service to medical facilities on 116th). This recommendation is consistent with establishing the Distributed Facilities Network in downtown in September 2001. Further, Metro's cooperation is requested on the continued consideration of a downtown transit circulator to supplement service there.

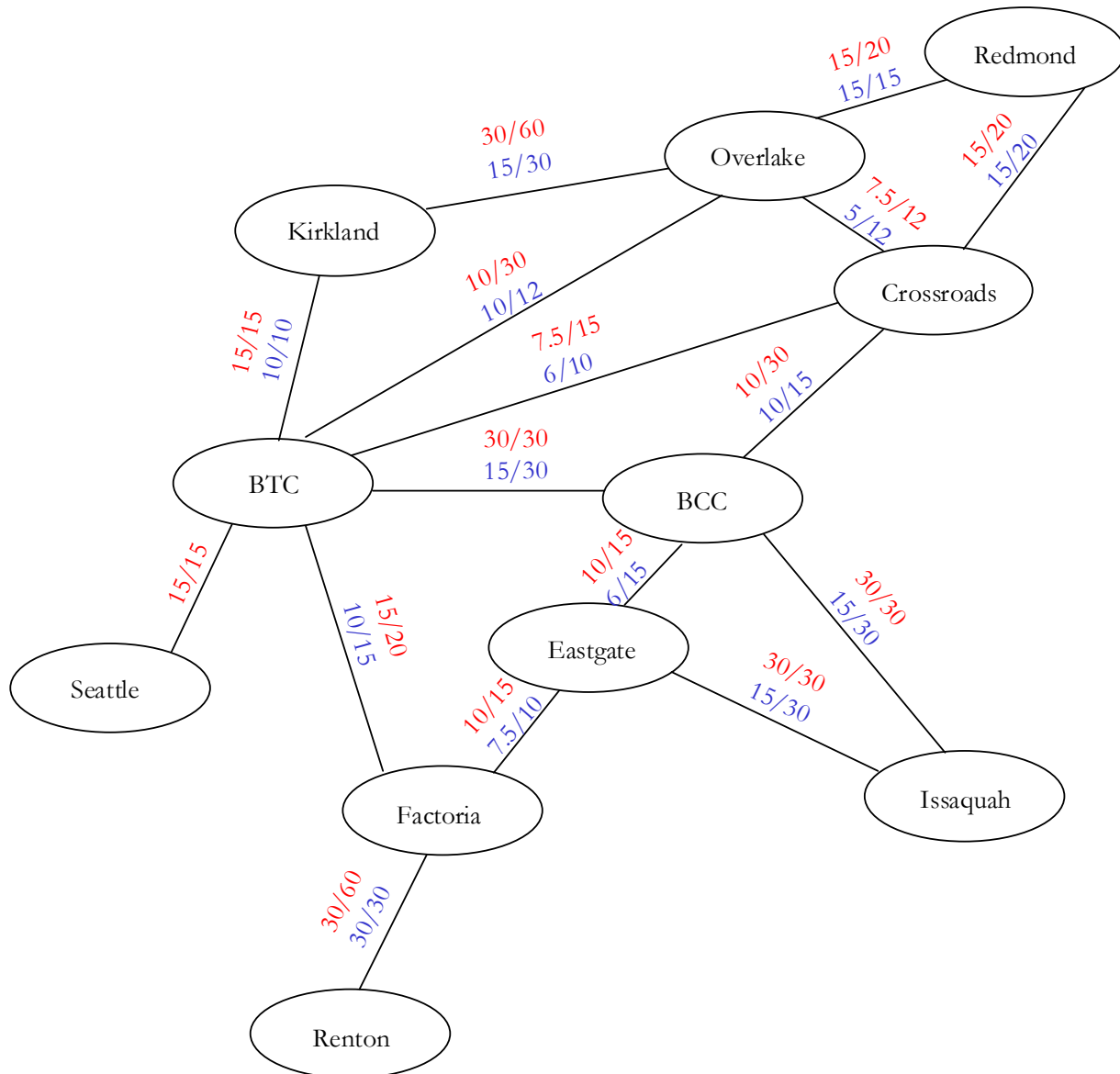
V. Support coordination of services provided by Sound Transit & Metro.

The Sound Transit Regional Express bus network connects urban centers with frequent all day every day two-way service. In addition to offering service connections unlike those that were operated previously, these corridor enhancements have enabled King County Metro to eliminate a number of routes that paralleled the Regional Express services. As a result, an estimated 70,000 hours of Metro service have been "freed-up" in East King County to enhance local service connections. Eastside jurisdictions are intent on ensuring that these and future "freed-up" service hours are expeditiously reinvested in East King County.

Figure V-2 reflects the service objectives for frequency improvements within Bellevue and between Bellevue and other eastside and regional destinations by Fall 2007. This schematic representation will be arrived at through a series of service enhancements implemented over the next six years. The recommended network strives to ensure residents and businesses realize a measurable improvement to Bellevue's transit network within the context of the greater Eastside through the following types of enhancements:

- (i) improved local service frequencies (both peak and off-peak);
- (ii) improved connections to downtown Bellevue; Crossroads; Overlake; Factoria; Eastgate/BCC
- (iii) improved travel time between major sub-regional destinations;
- (iv) enhanced peak hour express service to major eastside employers;
- (v) improved access to medical facilities (i.e., Overlake Hospital);
- (vi) improved frequencies along priority corridors (e.g., 156th, 148th, Bell-Red Road, Richards Road)
- (vii) improved all-day connections to other Eastside jurisdictions;
- (viii) elimination of duplicative services;
- (ix) creation of route structure less dependent on Seattle & more focused on Eastside;
- (x) improved connections between Bellevue neighborhoods.

Figure V-2
Recommended Service Frequency Connections



Short-Term (Fall 01) Service Frequency Recommendations (Peak/Mid-day)

Long-Term (Fall 07) Service Frequency Recommendations (Peak/Mid-day)

SERVICE ELEMENT

The September 2001 service change includes the most significant near-term service improvements that moves the City toward achieving the service network reflected in Figure V-2. The City of Bellevue's service recommendations are segmented into the following time-frames:

1. **Near-Term (for implementation in September 2001)** – These recommendations are within Metro's East King County budget of 80,000 hours for the September 2001 service change and result in an East King County service hour investment of approximately 600,000 annual hours. *It should be noted that the City of Bellevue takes issue with the current method of transit service allocation and feels strongly that this needs to be revisited.*
2. **Long-Term (for implementation by Fall 2007)** – These recommendations result in Metro's investment of an additional 135,000 hours in East King County through Fall 2007 and result in an East King County service hour investment of approximately 735,000 annual hours.

For a detailed listing of the recommended frequency improvements please reference Appendix C. For a detailed listing of the route-level hour requirements of the recommended frequency improvements please reference Appendix E.

CHAPTER VI- PURPOSE AND APPROACH

Implementing transit service enhancements in the City of Bellevue and creating a service network that supports existing and emerging travel patterns is a key stratagem for attracting and maintaining transit riders. However, other factors beside service availability influence “the decision to ride”. These factors include the speed and reliability of transit service, the convenience of facility and service access, and the overall attractiveness of transit services and facilities.

Collaborating with the region’s transit providers in investments in infrastructure that can improve transit travel time, reliability, and productivity as well as developing support facilities and amenities for passenger safety, comfort, and convenience is an objective of the City of Bellevue. This is reflected in City policies embodied in its Comprehensive Plan:

Policy TR-68f

Support multi-modal transportation solutions including general-purpose lanes, High Capacity Transit, HOV lanes, transit, and non-motorized improvements that use the best available technologies.

Policy TR-53

Work with the transit providers to create, maintain, and enhance a system of supportive facilities and systems such as transit centers, passenger shelters, park-and-ride lots, bus queue by-pass lanes, bus signal priorities, pedestrian and bicycle facilities, pricing, and incentive programs. [Amended Ord. 5058]

Also, the Bellevue City Council has provided additional policy direction in this regard when considering plans and policies of both King County Metro (Metro) and Sound Transit:

KCM-18¹

Support capital investments that increase the speed and reliability of transit service where appropriate and feasible (i.e., transit priority treatments).

REX-1²

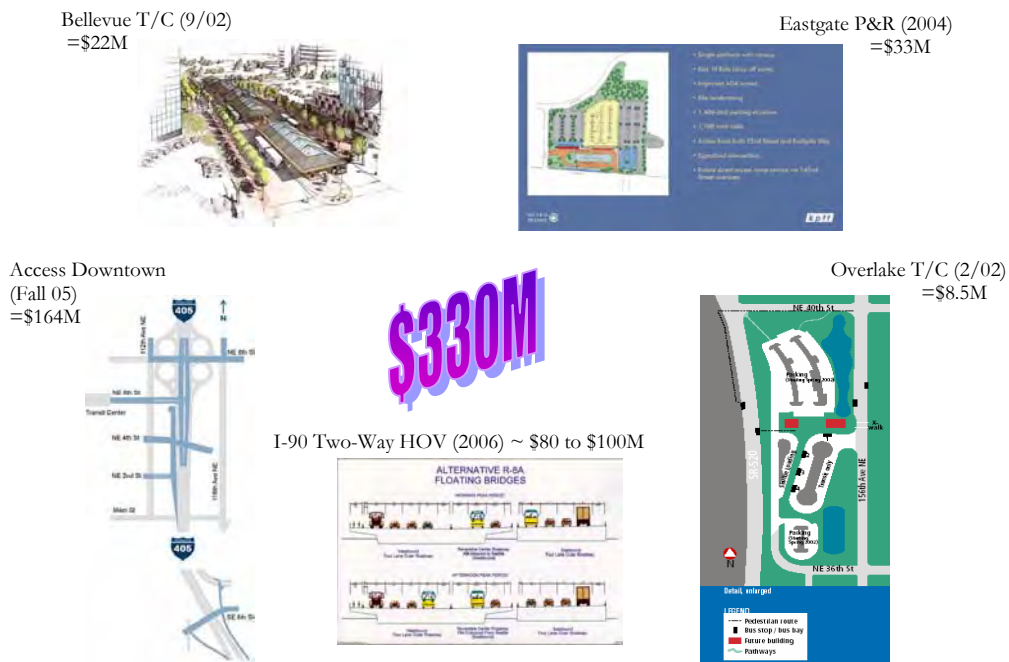
Implement an integrated regional and local transit system successfully resulting in capital investments that are community assets by virtue of their attractive design, efficient operations, and their ability to serve as catalysts for future development

As reflected in Figure VI-1, an estimated \$330 million in HOV access ramps, transit centers, park-and-ride lots, and transit signal priority projects are underway in the Bellevue area at this time to support transit operations. These large-scale transit investments tend to focus on the regional transit network.

¹ See Table K-2 in Appendix K- Transit Policies and Directives.

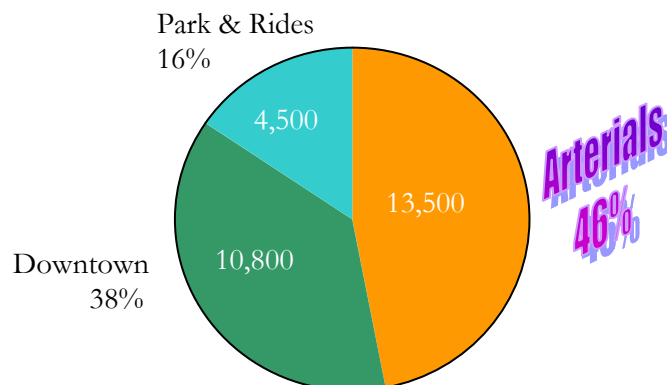
² Ibid.

Figure VI-1
Current Transit Capital Investments in Bellevue



Although the large-scale transit investments that are presently in play in Bellevue are essential for addressing regional mobility needs, there is need for more localized transit-supportive infrastructure investments that are supportive of the intra-Bellevue transit network outlined in the Service Element of the Bellevue Transit Plan. As reflected in Figure VI-2, almost 50 percent of the 30,000 average weekday transit riders (ons/off) in Bellevue occur on the city's arterial street system outside of downtown Bellevue and outside of the City's park-and-ride lots. The localized focus of the Capital Element aims to address the needs of the majority of the City's transit customers by improving access to and the operating environment of the City's arterial street network.

Figure VI-2
Daily Transit Facility Utilization in Bellevue



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Need for Capital Improvements

Enhancing transit speed and reliability, passenger amenities, and access to transit service maximizes the effectiveness of transit and contains operating costs. Increasing traffic congestion and the associated increases in transit travel time and reduced reliability have detrimental effects on transit ridership. In addition, additional congestion has an effect on operating costs. The more that buses are delayed, the greater the cost to the region's transit providers.

Metro spends tens of thousands of annual service hours (equating to millions of dollars) on maintaining existing service levels on routes that operate on highly congested roadways. For example, a route may need four buses to operate in the morning, midday, and evening, but congestion-related delays may require the addition of a fifth bus to maintain the same level of service in the afternoon peak. The capital cost of the fifth bus and the operating hours necessary to operate it are directly caused by congestion, and travel time delays that can potentially be addressed by capital projects. Speed and reliability-enhancing capital projects could allow more hours to be used for service expansion, and allow areas with transit needs to be served.

In addition to saving scarce operating dollars, capital speed and reliability projects will help attract additional ridership. As shown in Table III-8 in the Service Element, transit travel times are generally longer than auto travel times. Capital speed and reliability projects can help close this travel time gap, particularly on routes that operate through congested areas.

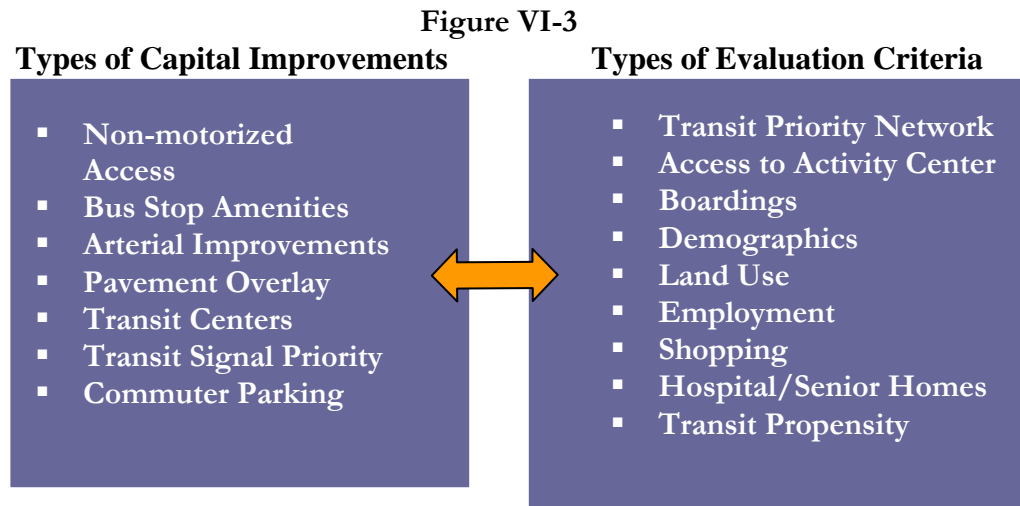
In addition to bus travel time, the ease of accessing transit service is a prime determinant of ridership. Throughout Bellevue, there are streets with high levels of bus service, yet the supporting infrastructure of sidewalks, curb cuts, or shelters make bus access difficult. Moreover, if you can access the bus stops, the waiting environment is unfriendly, and not conducive to extended waiting. For example, Northup Way has all-day and limited commuter bus service operating on it between 108th Avenue NE and 116th Avenue NE. Northup Way in this area has no sidewalks; bus patrons must walk on a grassy shoulder. There are no shelters, leaving passengers exposed to the elements. Finally, traffic levels on Northup Way are high. The overall experience of a person accessing transit is poor on this segment of Northup Way. Correspondingly, no matter how much service levels are improved on Northup Way, ridership response will likely be limited. Capital investments are necessary to improve ridership in this corridor. The characteristics of Northup Way are repeated on arterial streets elsewhere in Bellevue, and illustrates the need for a comprehensive look at both service *and* capital improvements to improve the attractiveness and reliability of transit throughout the City.

Figure VI-4 outlines the recommended service frequency connections for buses. The capital element in the following chapters will outline the recommended capital improvements that supplement and support the necessary service frequency improvements. The goal of the resulting mix of both service and capital improvements is to maximize the overall return on transit investment and improve system wide transit ridership.

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Capital Element – Project Approach

The goal of the Capital Element is to examine a variety of improvement options and determine the optimal transit infrastructure investments for the City of Bellevue. Seven areas of potential investment are evaluated in this section, based on selected assessment criteria (Figure VI-3):



Each individual assessment of improvement types describes the envisioned development, presents its role in supporting Bellevue's transit service plan, and makes an evaluation and recommendation regarding individual project options.

Methodology

As with the Service Element, the Capital Element was developed with staff from Bellevue, Metro, and Sound Transit. As envisioned, the Capital Element will not only help to inform the Bellevue CIP decision making process but will also be input for the King County and Sound Transit's capital investment strategies.

This section describes the data sources for the Capital Element, the analytical approach used, and the tools developed specifically to help evaluate project priority.

Data Sources

Several concurrent planning efforts are underway or have been completed throughout the City of Bellevue. One goal of the Capital Element was to take the transit-related elements from each planning effort and summarize the relevant findings in one comprehensive document. The Capital Element sought not to duplicate existing or past efforts, but to draw upon them for their transit-related improvements. The data sources used in the Capital Element included:

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- *Eastgate/I-90 Corridor Study* – This study was conducted concurrently to the Capital Element. A design charrette and a list of transit-related improvements was produced as a result of the study. Pertinent recommendations were adopted for use in the Capital Element.
- *148th Avenue Mobility Improvement Package/Executive Summary* – This planning effort is ongoing. The Executive Summary outlined the recommended improvements. The transit-related recommendations were incorporated for use in the Capital Element.
- *Sound Transit Customer Comments* – Sound Transit customer comments for Bellevue stops were examined as a part of the Capital Element effort. None of the comments were incorporated into the Capital Element.
- *Metro Customer Comments* – Metro customer comments for Bellevue bus stops and service were examined as part of the Capital Element effort. Several requests, such as shelter requests and pedestrian access on Northup Way, were addressed in the Capital Element.
- *Downtown Implementation Plan (DIP) / Early Draft Copy* – This planning effort is ongoing. The DEIS was released in October 2002. A draft working copy of the DIP was examined, and several applicable projects were incorporated into for use in the Capital Element effort.
- *1999 Pedestrian and Bicycle Transportation Plan* – This Plan is an update of the 1993 Bicycle and Pedestrian Plan. The projects found in the Plan formed the backbone of the Non-Motorized Access recommendations.
- *Master List ETP Projects/ Revision 3* – The Eastside Transportation Partnership created a list of transit projects that could potentially be funded by Sound Transit Unanticipated Revenues. This list of projects was examined to determine applicable capital projects in Bellevue were listed. Several of the specific capital projects from the list are carried forward in the Capital Element.
- *Metro Operators Meeting* – On April 10, 2002, a meeting was held with Metro staff at Bellevue Base to discuss ideas on capital improvements that would improve bus service within the City of Bellevue. The majority of projects identified by the Metro operators are carried forward in the Capital Element.

Analysis

As evidenced by the large number of sources, an extensive list of projects was examined for inclusion in the Capital Element. The next step in the process was to determine the transit applicability of each project. Which projects are more important for transit purposes than others? And why? Rather than depend on subjective judgments that could change depending on the evaluator, analytical tools were developed for each type of potential transit improvement.

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Geographic Information System (GIS) software was crucial for the analysis, as it automated the evaluation process. Several different efforts culminated in a series of tools that were used to evaluate the prioritization of capital projects. The GIS system allowed each individual project to be evaluated according to unique prioritization criteria. For each project, a proximity analysis was done to determine which of the criteria features were within ¼ mile of an examined project, and this information was used to provide a relative ranking for each project by criterion, as determined appropriate for that type of project. For instance, the evaluation criteria for bus stop amenities differed from those evaluating a pavement overlay priority. Each evaluation criterion is discussed below:

Transit Priority Corridors

For most cities, street classification systems tend to be limited to arterial designations governed by overall vehicular use. These general designations provide limited guidance to decision-makers and the public regarding the comprehensive functional and operational differences between street types. Further, these standard designations are ineffective as tools for prioritizing future improvements and informing overall street design and treatments.

In response to these limitations, some cities have developed a menu of street classification categories for individual mode use or function. Under this type of classification plan, individual streets can receive a combination of designations: one for each mode. Ultimately, the use of this comprehensive classification system better facilitates understanding of the functional and operational differences between street types. Additionally, this approach can better depict the “street network” for individual modes and clarify issues of compatibility between modes as well as land uses.

Bellevue Policy Guidance

The City of Bellevue recognizes the importance of a comprehensive street classification system for transportation network planning. Support for this process is maintained by policy within the City’s Comprehensive Plan:

Policy TR-39

Classify City streets according to their function, so that needed traffic capacity may be preserved, and planned street improvements will be consistent with those functions.

Moreover, in its policy guidance in reference to Metro (adopted May 8, 2000), the Bellevue City Council specifically calls out the role of transit corridor designation in optimizing transit usage of city streets and highways:

Policy KCM-25 Designation Of Key Transit Corridors

As part of the City’s Arterial Classification Review and Arterial System development, seek opportunities to:

- Optimize transit speeds and reliability on key local and state corridors that present the best chance for increased transit service and preservation of neighborhood quality; and
- Optimize transit services and treatments on key arterials in the City.

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Ultimately, transit classification categories for Bellevue streets can serve as an additional evaluative tool for assessing and prioritizing transit capital improvement options as well as aid in shaping policies designed to support the City's transit system goals.

Transit Street Classification Systems

In response to council policy guidance, city staff has developed a Transit Priority Corridor Classification System for Bellevue. To guide the development of this classification system, staff reviewed street classifications in other cities, including Portland, OR, and Seattle, WA.

It was found that there are no set rules on designation of transit street classifications. However, of the classification strategies employed, it was determined that the use of "functional purpose" based classifications would best serve the City's objectives. Unlike other classification options, such as those based only on transit trip levels, functional purpose based classification can fully articulate the City's goals for individual streets and corridors as well as its street network as a whole. Both Portland and Seattle employ a functional purpose based classification strategy.

Under a functional purpose based classification system, a street is given a designation based on the nature of the existing or envisioned transit service on the street. For instance, both Seattle and Portland use a classification of "regional transitway" within their menu of street designations. Ultimately, streets with the classification of "regional transitway" provide or are intended to support "interregional" transit trips that are frequent, high speed, and high capacity.

Clearly, this purpose-driven classification strategy provides guidance on street design and operating needs. For example, a street classified as a "regional transitway" needs to support high-speed regional service; therefore, this type of street should have high speed limits and direct access to other jurisdictions. Classification of a street by its functional purpose also provides clarity to planning and development issues such as the role transit may play in modifying predicted vehicle trips, related development conditions, and parking requirements.

Bellevue's Transit Priority Corridor Classification System

In the actual development of a Transit Priority Corridor Classification System for Bellevue, staff used Seattle and Portland's classification systems as models. However, the final designations and their definitions for the Bellevue classification system were built upon (1) consideration of existing transit service and frequencies in the City, and (2) consideration of improved connections that Bellevue would like implemented based on the Bellevue Transit Plan - Service Element.

Applying Transit Volume-Based Classifications

The first step in this process was to create definitions and apply designations to Bellevue streets based on existing volumes of transit trips. This use of volume-based transit classification definitions was a natural extension of the arterial definitions already employed by the City.

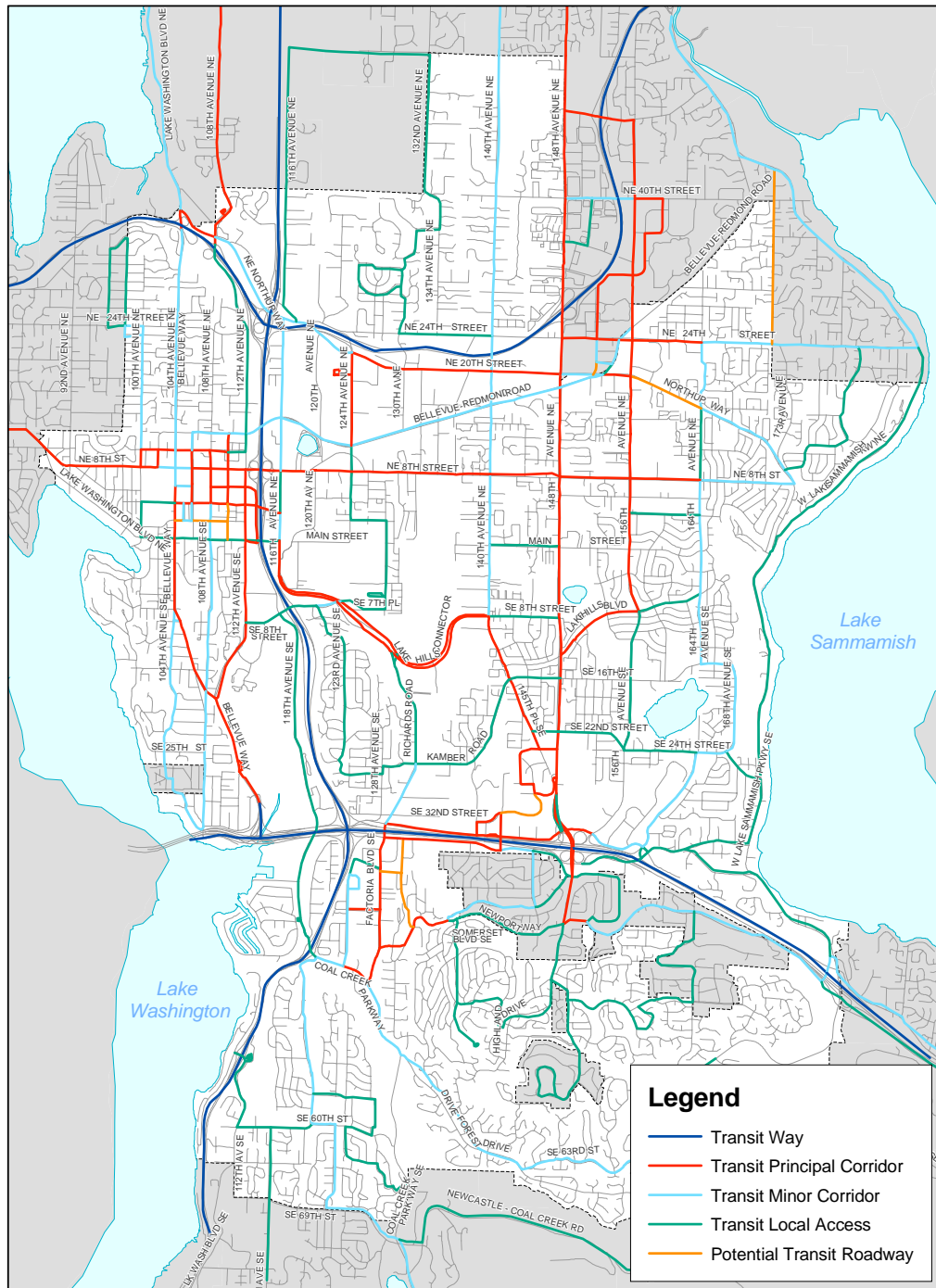
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The following is the menu of Transit Priority Corridor Classifications and their level of service definitions that evolved from this first step:

- **Transit Way:** State or Federal Highways with 51+ daily one-way trips and/or Sound Transit Routes
- **Transit Principal Corridor:** Non-highway facilities with 51+ transit trips a day and/or a Sound Transit route
- **Transit Minor Corridor:** 21 – 50 transit trips a day
- **Transit Local Access:** 1 – 20 transit trips a day
- **Potential Transit Roadway:** Roadways without existing transit service or service envisioned in the existing Bellevue Transit Plan but potentially useful in providing transit service to certain locations.

Figure VI-4 maps these classifications according to current service levels.

Figure VI-4
Bellevue Transit Priority Corridor Designations



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It is of note that the definition of a transit trip in this application is all revenue trips and non-revenue trips (a.k.a. deadhead bus trips) in areas immediately adjacent to the Metro bus bases located on 124th Avenue NE. In those cases, deadhead bus trips are given the same weight as regular service in assessing priority corridors. This non-revenue traffic from the bases to the origin and terminus of Metro bus routes occurs primarily on:

- 124th Avenue NE between SR 520 and NE 12th St. (Bell-Red Road)
- NE 20th Street between 124th Avenue NE and 148th Avenue NE
- NE 12th Street (Bell-Red Road) between 124th Avenue NE and 112th Avenue NE

The decision to include non-revenue trips in the transit volume definitions in these cases was based on two principles:

- 1) The cost to operate a bus is constant and does not depend on whether the bus is in revenue service or not; and
- 2) Even though non-revenue buses do not carry passengers, trip times and the reliability of these trip times, have a direct effect on the ability to begin passenger service on time and on the total cost of passenger service.

Any incremental improvements to improve speed and reliability will benefit both revenue and non-revenue bus trips and improvements. On-time performance improvements for either type of trip aids in reducing overall operating costs.

Development of Purpose Driven Definitions

After this initial classification and mapping of Bellevue's "transit network"—both existing and proposed in service plans—staff then considered a number of planning and development questions related to transit service in the City:

- What type of land use should be adjacent to or supported by transit services in any given corridor? For instance, high-use non-highway corridors would probably best serve high-density residential land-use. In addition, major destinations may be best suited for development on existing high-use corridors rather than being placed in areas not well served.
- What type of design treatments and street improvements best support transit service in a given corridor? High volumes on corridors without dedicated transit lanes may be the best place to create transit priority measures, also non-highway transit corridors with poor LOS ratings may be ideal locations for signal priority treatments.
- What type of operating characteristics do the services in any given corridor have? Is the service frequent all-day service? Peak hour only? What service characteristics will best serve the land use in the corridor? Are those characteristics present?

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- What type of rider amenities should be present for the type of service on a given corridor?

The consideration of planning and development issues as they relate to Bellevue's transit network provided additional dimensions to the transit priority corridor classifications that are beyond transit volume. As these issues were better defined, staff expanded the definition of the classifications to include additional characteristics for the corridors:

- **Functional Purpose** – Primary purpose of the transit service being provided.
- **Typical Adjacent Land Use** – Land use that should be located adjacent to the street, types that should be discouraged due to impact by transit on land-use or vice versa.
- **Physical Design Features** – Design elements of the street itself that support the transit functional purpose including station and stop access and street connections.
- **Operational Characteristics** – More detail on type of operation (number of daily transit trips, speed, distance between stations or stops) that is envisioned to serve the functional purpose.

The full descriptions of each of these characteristics for Bellevue's transit priority corridor classifications are contained in Table VI-1.

Final Considerations

Although the classifications have defined characteristics, the classification system is not designed to create strict limits on location or volume of bus service in the city. Instead, ***the intent of the classification system is to be a flexible evaluation tool for decision making.***

In this vein, the use of transit priority corridor classifications enables the city to better articulate its goals for individual streets and corridors as well as its street network as a whole. Further, transit classification of Bellevue streets provides an additional evaluation tool to assess and prioritize transit capital improvement options as well as to aid in shaping policies designed to support the City's transit system goals. Finally, the use of classifications can better ensure continuity and compatibility between land use and street use.

**Table VI-1
City of Bellevue Transit Corridor Classifications**

Classification	Functional Purpose	Typical Adjacent Land Use	Physical Design Features	Operational Characteristics
TRANSIT WAY	<p>Provides frequent, high speed, high capacity service</p> <p>Provides for interregional transit trips.</p>	<p>Major private and public developments of regional significance.</p> <p>Transit Ways should not be adjacent to residential areas; such land uses need to be buffered from impacts when adjacent locations cannot be avoided.</p> <p>Should not be sited in a manner that will bisect a community, neighborhood, shopping center or other homogenous area.</p>	<p>Pedestrian crossings should be grade separated.</p> <p>HOV facilities should be provided.</p> <p>Direct access ramps should be encouraged.</p> <p>Stops on Transit ways should be Flyer Stops.</p> <p>Park-and-ride facilities at or near stations and stop should be encouraged.</p> <p>Connections to other transit facilities are typically grade separated.</p>	<p>High transit volume. 51+ daily one-way trips and/or Sound Transit Route.</p> <p>Limited stop all day service. Usually includes multiple commute period only transit services.</p> <p>Transit speeds up to 55 mph.</p> <p>Extended distance between stations and stops.</p> <p>Stations should be located to provide service to regional and neighborhood commercial centers and major trip generators along the Transit Way.</p>
TRANSIT PRINCIPAL CORRIDOR	<p>Provides frequent, moderate speed, high capacity service</p> <p>Provides for connections between major activity centers and other locations, including some interregional trips.</p>	<p>Major private and public developments of regional or local significance.</p> <p>Transit Principal Corridors generally are located adjacent to commercial, industrial, and high-density residential land uses.</p>	<p>Streets should have sufficient capacity and adequate through and turning lane widths to allow separate express transit service and buses mixed with general traffic.</p> <p>Transit Signal Priority (TSP) and arterial HOV improvements should be provided.</p> <p>Pedestrian crossings should be at regular intervals with continuous sidewalks, and sidestreets should have connecting sidewalk facilities.</p> <p>Bicycle access and amenities at stations and stops should be encouraged.</p> <p>Shelters should be provided at all stops.</p> <p>Connections to other transit facilities are typically at grade.</p>	<p>High transit volume. 51+ daily one-way trips and/or Sound Transit Route.</p> <p>Limited and frequent stop all-day service. Often includes commute period only transit service.</p> <p>Speed limit 30 mph or higher.</p> <p>Stations or bus stops should be located to provide service to regional and neighborhood commercial centers and to major trip generators along the route.</p> <p>Stations or stops should be located for a walking distance of less than ¼ mile from high or medium density residential or commercial land uses and from major recreational or civic facilities, and overall average about ¼ mile apart.</p>

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Table VI-1 (continued)
City of Bellevue Transit Corridor Classifications

Classification	Functional Purpose	Typical Adjacent Land Use	Physical Design Features	Operational Characteristics
TRANSIT MINOR CORRIDOR	<p>Provides connections between local transit destinations and adequate levels of service.</p> <p>Provides concentrated transit service to connect and reinforce major activity centers and residential areas.</p>	<p>Major private and public developments.</p> <p>Transit Minor Corridors generally are located adjacent to high and medium-density residential areas as well as commercial areas.</p>	<p>Streets should have adequate lane width of through and turn lanes to allow for mixed transit and general-purpose traffic.</p> <p>Transit improvements should be supportive of general traffic access; however, there may be some access management and priority flow for transit at most intersections if compatible with adjacent land use.</p> <p>Full-time transit priority improvements may be provided if compatible with adjacent land uses.</p> <p>Pedestrian crossings should be at regular intervals with continuous sidewalks.</p> <p>Shelters should be provided at high usage stops.</p> <p>Connections to other transit facilities typically at grade.</p>	<p>Medium transit volume. 21-50 daily one-way trips per day.</p> <p>Frequent stop service. Usually all day service but may only have peak period service.</p> <p>Speed limit of 25 mph or higher.</p> <p>Stations or stops should be located for a walking distance of less than ¼ mile from high or medium density residential or commercial land uses and from major recreational or civic facilities, and overall average about ¼ mile apart.</p>
TRANSIT LOCAL ACCESS STREET	<p>Provides connections between neighborhoods and area attractions.</p> <p>Provides transit service coverage by connecting local streets and minor transit corridors.</p>	<p>Neighborhood activity centers such as schools, neighborhood businesses, and recreational facilities.</p> <p>Transit Local Access Streets are primarily adjacent to single-family neighborhood uses and any land use compatible with the street's traffic classification.</p>	<p>Streets should have adequate lane width for through and turn lanes to allow for mixed transit and general-purpose traffic.</p> <p>Transit improvements should be supportive of general traffic access and on-street parking needs, and TSP improvements should be limited to specific locations where needed to provide for transit stops and safety.</p> <p>Continuous sidewalks should be available along those streets with transit stops.</p> <p>Shelters should be provided at any high-usage stops.</p> <p>Connections to other transit facilities at grade.</p>	<p>Low transit volume. Bus volumes of 1 to 20 one-way transit trips per day.</p> <p>Frequent stop service. All day service may not be provided or only provided on certain days. Weekday commute period service is primary service provided.</p> <p>Speed limit of 25 mph or higher.</p> <p>Distance between stations and stops should reflect walking distance of less than ¼ mile from any major residential, commercial, recreational or civic land use. Stops may be provided for low-density residential or other uses where desired, but typically should be no closer than ¼ to ½ mile to each other.</p>
POTENTIAL TRANSIT ROADWAY	<p>Roadways without existing transit service or service envisioned in the existing Bellevue Transit Plan, but are potential future transit roadway.</p>	<p>Depends on location.</p>	<p>Depends on location.</p>	<p>Depends on location.</p>

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Transit Propensity

Demographic patterns have traditionally been used in transit planning to determine where populations that use transit reside, as well as identifying those areas where ridership potential is higher than others. A transit propensity analysis was completed for the City of Bellevue using 2000 census data. GIS was used to determine the auto ownership, the income levels, the elderly population density, and the overall population density. Each of these four factors has been shown to correlate to transit ridership. Transit usage tends to be better in high-density areas rather than low-density areas. Likewise, the elderly are much more likely to use transit than any other age group. Persons not owning automobiles are more likely to use transit than those owning an automobile. Low-income residents are more likely to use transit than high-income residents. The GIS system rated the four demographic factors and produced a map (Figure VI-5) showing the overall transit propensity in Bellevue. The map shows areas where transit usage should be expected to be higher. Transit propensity maps also show areas of latent demand, where areas are potentially underserved by existing service levels.

Transit Attractors

Nationwide experience has shown that certain destinations attract transit riders more than others. For instance, high pedestrian generators are generally considered a good potential transit market. In Bellevue, the transit attractors include commute trip reduction employment sites, shopping and governmental facilities, libraries, and hospitals (Figure VI-6). The GIS system determined the number of transit attractors within $\frac{1}{4}$ or $\frac{1}{2}$ mile of any identified project (the distance riders are typically willing to walk to transit). For passenger amenities, this is particularly important, because it helps measure latent passenger demand.

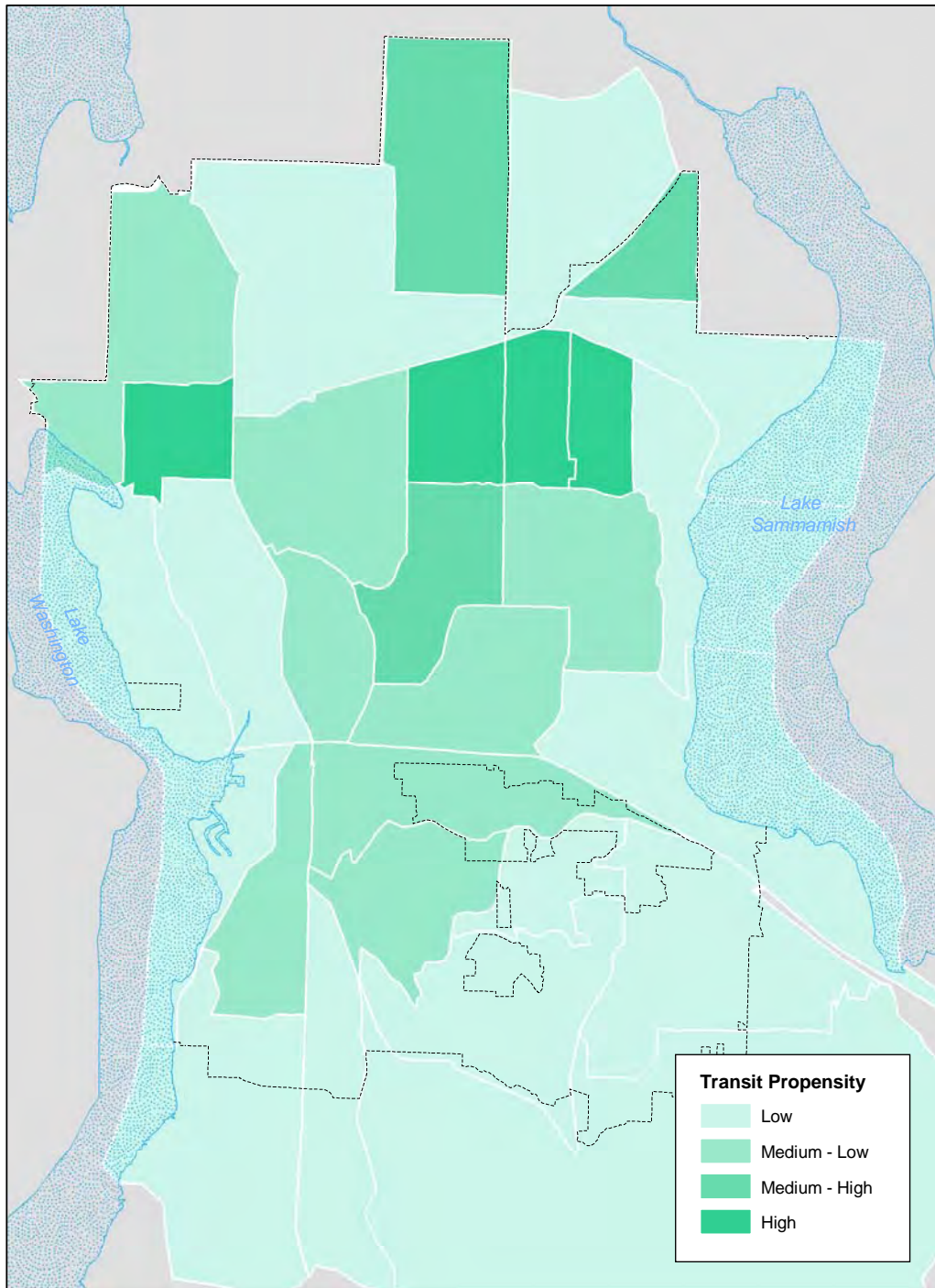
Proximity to Transit Services

The data sources used to create the initial Capital Element project list included many projects that were unrelated to transit. One of the tools used to screen whether a project was indeed beneficial to transit was the proximity to transit services (using GIS). If a proposed project was not within $\frac{1}{4}$ mile of an existing bus route, it was screened out (Figure VI-7).

Bus Stop Ridership/Passenger Loads

Capital investments for transit are most beneficial when use of the existing transit system is high. The GIS system assigned Fall 2001 ridership figures on a bus-stop level to every bus stop in Bellevue (Figure VI-8). Likewise, the GIS system summarized Fall 2000 passenger loads on every street segment that currently has bus service. The ridership analysis allows an exact accounting for the number of persons benefited by any proposed capital project.

Figure VI-5
Bellevue Transit Propensity



**Figure VI-6
Bellevue Transit Attractors**

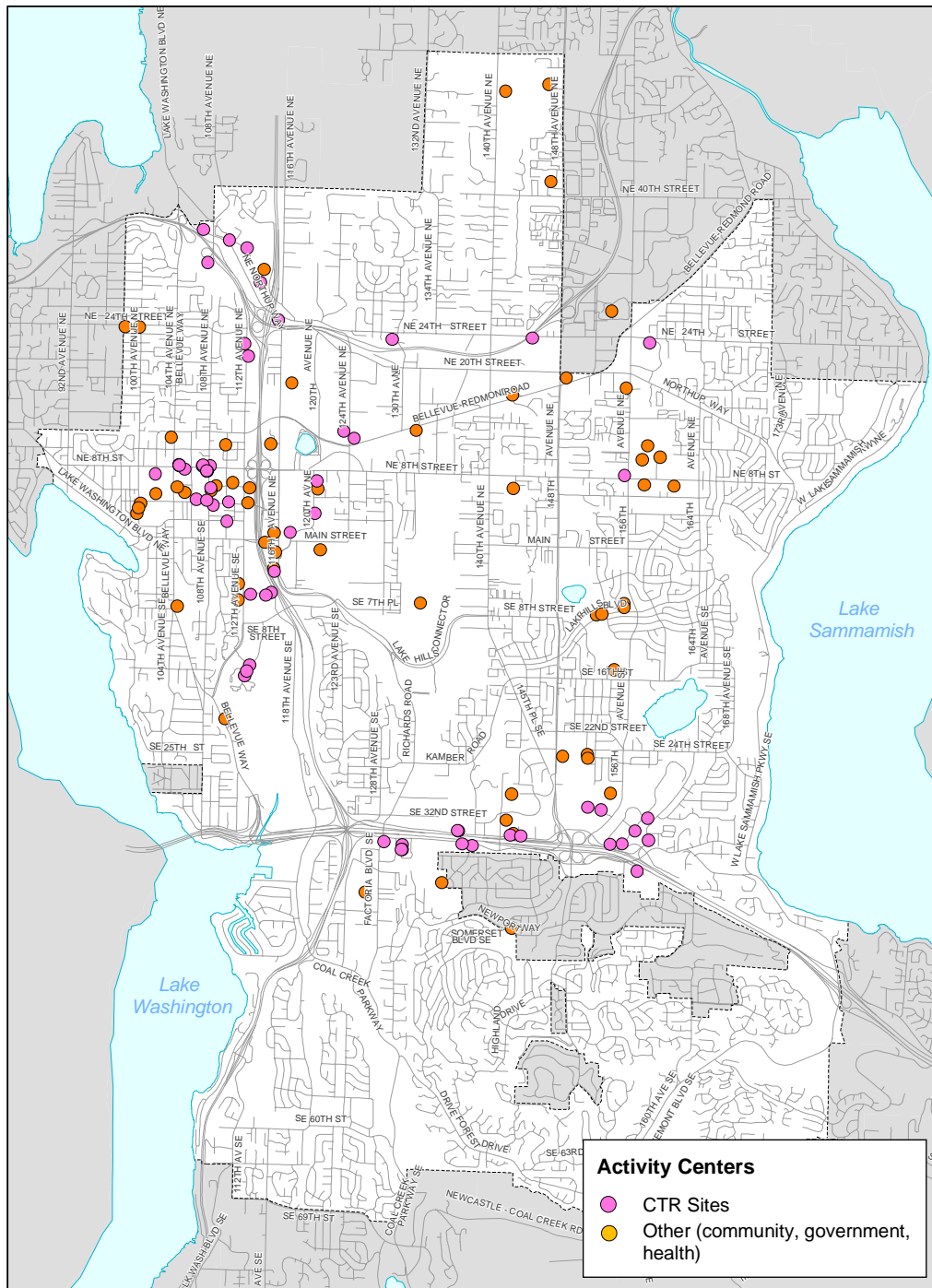
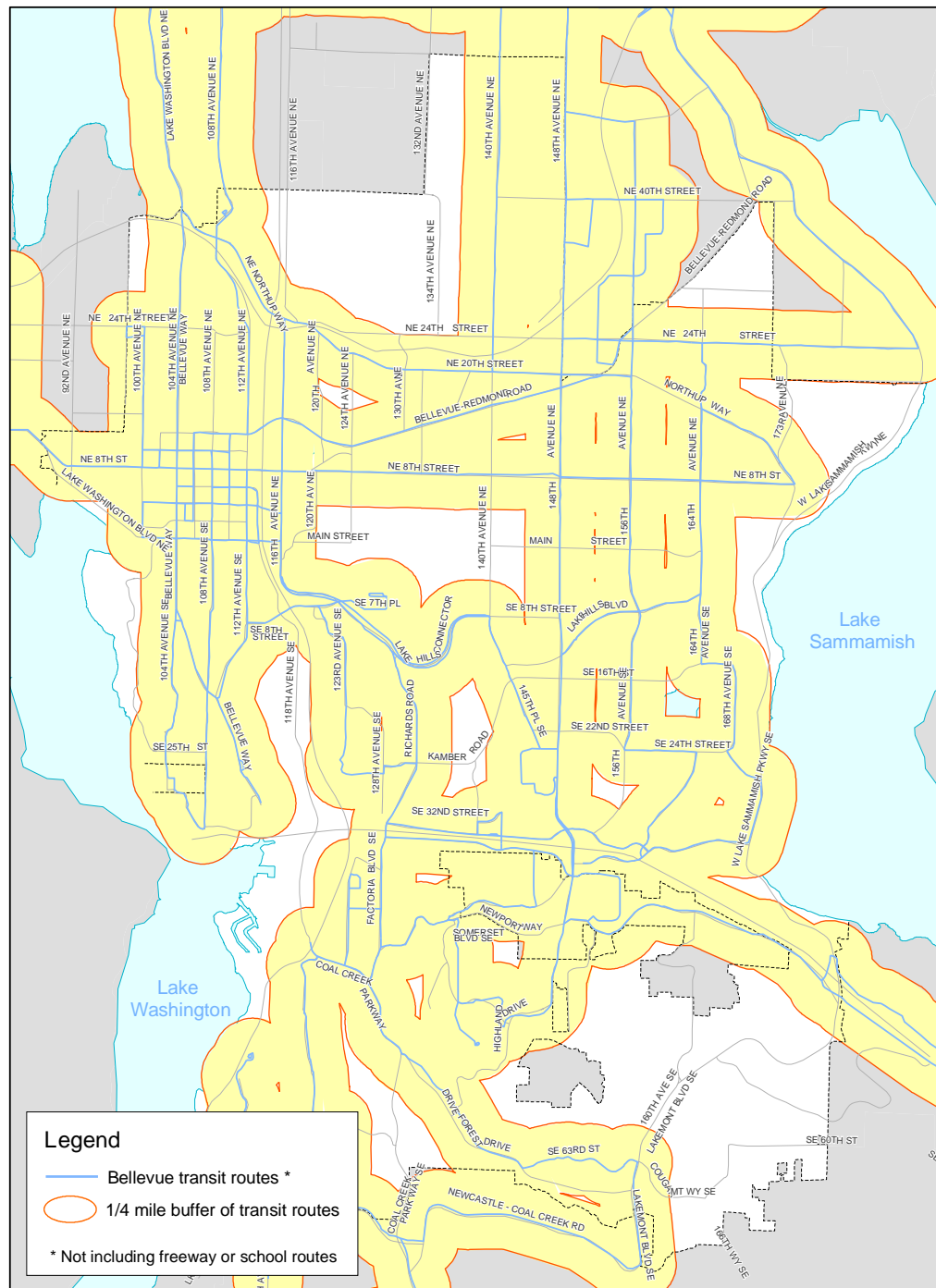


Figure VI-7
Proximity to Bellevue Transit Services



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Shelter Availability

Shelter availability can influence ridership by making the trip more attractive. The GIS analysis geocoded the location of every shelter in Bellevue. Combined with passenger activity data, the GIS data provides a powerful tool to show where shelter needs are.

Number of Routes

To determine the potential utilization of any given project, the number of bus routes is important to ascertain. The number of routes also provides a proxy to determine the number of potential transfers. GIS analysis created a count of the routes accessed by every project.

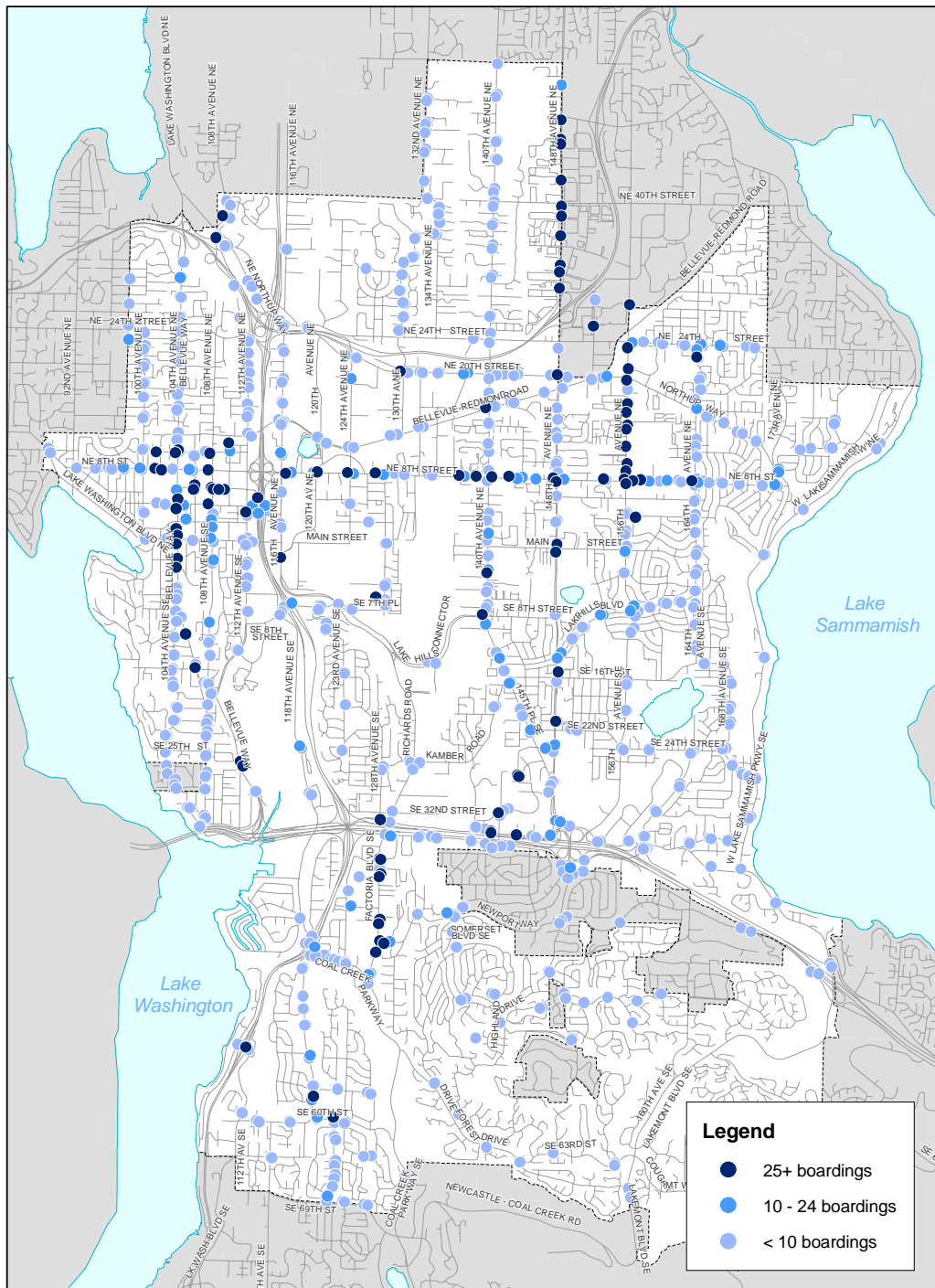
Bus Stop Accessibility

Documenting where non-accessible bus stops are is an important first step in addressing this need. According to the Americans with Disabilities Act (ADA), bus stop sites shall be chosen such that, to the maximum extent practicable, lifts or ramps may be deployed. In addition, where new bus stop pads are constructed at bus stops, bays, or other areas where a lift or ramp is to be deployed, bus stops shall have a firm, stable surface; a minimum clear length of 96 inches (measured from the curb or vehicle roadway edge) and a minimum clear width of 60 inches (measured parallel to the vehicle roadway) to the maximum extent allowed by legal or site constraints; and shall be connected to streets, sidewalks, or pedestrian paths by an accessible route. The GIS showed the location of each non-accessible bus stop and identified the highest use non-accessible locations to provide a prioritization method.

Intersection Level of Service (LOS)

Congestion is an excellent indicator of transit speed and reliability. The City of Bellevue maintains and regularly updates a computerized database that shows the delay levels and associated LOS at each signalized intersection. These data were imported into the GIS, which then assigned each signalized intersection its overall LOS and individual approach LOS. These data could then be used to determine the overall existing delays at potential Capital Element projects.

Figure VI-8
Bellevue Bus Stop Level Ridership



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Recommendations

Investments in the following arterial street characteristics are examined in this report: pedestrian accessibility, bus stop amenities, arterial improvements, pavement overlay, transit centers, transit signal priority, and commuter parking. The capital investment projects reviewed in this report are evaluated and prioritized within these seven individual project areas. In combination, the recommended projects have the potential to improve the circulation of transit services, provide enhanced access to transit services, and augment the attractiveness of transit as a travel option in Bellevue.

The report then groups each of the recommended projects into the priority transit corridors identified in Table VI-2 that link the City's key activity centers.

Table VI-2
Transit Corridor Categories and Definitions

Corridor Category	Location/Definition
Bellevue Transit Center to Crossroads	NE 8th Street between Downtown Bellevue and Crossroads Shopping Center
Bellevue Transit Center to Overlake	Bel-Red Road and Northup Way between Downtown Bellevue and Overlake
Bellevue Transit Center to Bellevue Community College	Lake Hills Connector/145th Place between Downtown Bellevue and Bellevue Community College
Bellevue Transit Center to Factoria	112th Avenue SE, Bellevue Way, 108th Avenue SE, and Beaux Arts between Downtown Bellevue and Factoria
Factoria to Renton	Factoria Boulevard, Coal Creek Parkway, and 119 th Avenue SE between Factoria and Renton
Factoria to Eastgate	Factoria Boulevard, SE 36th Street, Eastgate Way, and Newport Way between Factoria and Eastgate
Eastgate/Bellevue Community College to Issaquah	Eastgate Way and West Lake Sammamish between Eastgate/Bellevue Community College and Issaquah
Eastgate to Bellevue Community College	148th Avenue SE, Landerholm Circle, and Perimeter Road between Eastgate and Bellevue Community College
Bellevue Community College to Crossroads	148th Avenue, 156th Avenue, and 164th Avenue between BCC and Crossroads Shopping Center
Crossroads to Overlake	156th Avenue NE and 148th Avenue between Crossroads Shopping Center and Overlake
Crossroads/Overlake to Redmond	West Lake Sammamish and NE 24th Street between Crossroads/Overlake and Redmond
Bellevue Transit Center to Kirkland	Bellevue Way and 112th Avenue NE between Downtown Bellevue and Kirkland
Downtown Bellevue Improvements	Improvements in Downtown Bellevue
All Other Corridor Improvements	All Other Corridor Improvements

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Focusing on only one or two project areas is not as effective as a comprehensive approach. As the City continues to prioritize its service and capital projects, it is beneficial to consider projects in terms of service corridors within Bellevue. This view provides some insight on how individual projects relate to each other and may work together to systemically improve transit within the City.

The Plan's emphasis on corridors coincides with a greater initiative across King County to optimize transportation investments through coordinated efforts. Across the region and the state, agencies and jurisdictions are re-thinking ways to make effective decisions regarding transportation investments and the corridor approach has been met with increasing support.

Conclusions

As the City pursues a multi-modal transportation strategy to address the transportation needs of Bellevue, it recognizes the need to prioritize transit capital investments to ensure that funds are programmed for the most compelling needs. Further, the City needs to be able to communicate to its transit partners in the region what investments are desired by the City and how to best serve the travel demand needs of Bellevue. As such, the Capital Element of the *Bellevue Transit Plan* details guidance for capital transit investments in the City and outlines the methodologies employed to determine and prioritize needs.

The City recognizes that the amount of service provided is critical in the phasing, sizing and costing of the capital improvements outlined in this report. The service investment represented by the service recommendations in Chapter V requires substantially more funds than are presently available to the King County Department of Transportation Transit Division (King County Metro) for service improvements through 2007.³ Many of the capital components recommended in the Bellevue Transit Plan may be deferred for quite some time until needed to support the City's aggressive service plan.

Implementing transportation improvements in the face of declining revenues and rapid growth has become an issue unifying King County. The Bellevue City Council and other decision-makers in King County are faced with the challenge of optimizing results from investments made with existing funding while developing methods for creating new funding. Strategies to focus limited funding and to determine where available dollars should be spent are essential.

The City of Bellevue's work to identify priority transit corridors is an important piece of a larger countywide initiative. Continued efforts by the City of Bellevue and other agencies and local jurisdictions to coordinate efforts and identify strategic investments will be critical to the region's success in optimizing available transportation dollars and securing more funds for transportation improvements within King County.

³ When it was originally adopted, in April 2001, the Service Element of the Bellevue Transit Plan, was based off a 400,000 service hour increase estimate through 2007. The Puget Sound Region is in the midst of an economic recession, with lowered sales tax revenue forecasts, that significantly reduces the amount of resources available to implement the transit service investments outlined in Chapter V of the Bellevue Transit Plan. Current King County Metro estimates reflect a 110,000 service hour increase through 2007 (however, these estimates are likely to continue to change).

CHAPTER VII- PEDESTRIAN ACCESS IMPROVEMENTS TO TRANSIT

Transit-supportive communities are synonymous with pedestrian-friendly communities. Transit users begin their trips by walking from their homes to the nearest transit stop. They will then walk to their destination at the end of their trip. They may also become pedestrians if they switch modes of travel en route. As a result, the success of a transit system will depend in part on the quality of supporting pedestrian systems in the bus stop service area.

Transit planners generally regard the bus stop service area as approximately a 1/4 mile walking-distance radius from a bus stop, a 5-min walk. The bus stop service area is the acceptable walking distance to transit stops, beyond which another connecting mode is required or public transportation will not be used for the trip. Ensuring that the bus stop service area is convenient, safe, and attractive for pedestrians can provide a major impetus for transit travel.

All bus stop service areas should include curbs, gutters, and sidewalks to be fully accessible for the region's aging population, and should include Americans with Disabilities Act (ADA) accessible curb cuts, which provide the greatest flexibility in accommodating mobility aids such as wheelchairs, walkers, canes, etc. The transit industry is increasingly moving towards low floor, kneeling buses with ramps that are quickly deployable. Transit providers and Bellevue will cooperate in evaluating transit corridors to improve accessibility particularly as these new fleets of low floor buses with ramps replace the existing lifts.

Non-Motorized Access to Transit in Bellevue

The City of Bellevue recognizes the importance of non-motorized accessibility to transit. Within the Comprehensive Plan, walking and biking are called-out as important linkages to transit that should be supported:

Policy TR-58 Linkages to Transit Systems

Encourage transit use by improving pedestrian and bicycle linkages to the existing and future transit and school bus systems, and by improving the security and utility of park-and-ride lots and bus stops.

The role of pedestrian access to transit is further affirmed in specific policies within the Pedestrian and Bicycle Transportation Facility Plan that was adopted by the Bellevue City Council in 1993 (Resolution 5653):

Policy PB-12 Pedestrian Transit Access

Increase the accessibility to transit by pedestrians.

The 1993 Pedestrian and Bicycle Plan was updated in 1999 (adopted through Resolution 6364) to highlight the significant progress the City had made in developing its non-motorized transportation system since adopting the 1993 plan. Further, the 1999 revision provided an opportunity to modify policies, projects, and develop system maps that reflected changes in the transportation system and its needs.

Completed and Planned Non-Motorized Access Projects in Bellevue

The 1999 update of the Pedestrian and Bicycle Transportation Plan contained a number of critical elements related to consideration of non-motorized access to transit. First, the 1999 update provided comprehensive system maps of Bellevue's envisioned pedestrian and bicycle systems—these maps noted completed and pending projects. Also, the 1999 update outlined the numerous pedestrian and bicycle projects that had been completed since developing the 1993 version of the plan (*see Appendix E of the 1999 Plan Update*). In all, more than a hundred projects had been or were nearing completion. Finally, the 1999 update provided an extensive list of pedestrian and bicycle projects envisioned for completion during the 30-year planning cycle of the Pedestrian and Bicycle Plan.

With regard to existing prioritization of these projects, the 1999 Plan denotes each project as either Priority A or Priority B. Priority A projects are higher priority because they address pressing safety issues or provide key connections within the pedestrian and bicycle systems. With regard to creating linkages to transit services, Priority A projects are considered to be fulfilling the guidance of **Policy TR-58 Linkages to Transit Systems** by providing critical linkages to transit or school bus systems.

Considerations for Prioritizing Planned Improvements

As noted, Bellevue has plans for an extensive pedestrian system network and a considerable amount of development of this network has already occurred. In assessing the remaining projects on the list, one key consideration is whether the project supports access to transit services via non-motorized modes. The following criteria are designed to facilitate review of the project lists and provide a basis for priority in this regard.

Proximity to Transit Services

An initial screening of projects was based on proximity to transit services, (bus stops, transit hubs, and park-and-ride facilities etc). Ultimately, with regard to building linkages to transit, the connections should be ideally built from the transit service outward. Completion of linkages and facilities closer to transit services is of higher priority than completion of more distant improvements.

GIS was used in this initial screening to identify and map projects within ¼ mile or less of transit services. Of the 305 pedestrian projects identified in the 1999 update of the Pedestrian and Bicycle Transportation Plan, 216 projects are within ¼ mile or less of transit services. Projects that were not within ¼ mile or less of transit services were not considered for further analysis.

Level of Service at Transit Connections

A second-level criterion is the average weekday transit trips operated within ¼ mile of the project as depicted by the Transit Priority Network. Projects supporting connections to

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higher levels of transit services are more critical than those supporting low levels of service (e.g., connections to bus stops served by local routes are not as critical as connections to transit hubs).

As with the initial screening of proximity, this determination was facilitated by using GIS mapping to depict the levels of service at different transit facilities. With this depiction of levels of transit service, the City of Bellevue's Transit Priority Network is used to define the three "service tiers" that show the value of the connection being provided by the improvement. The Transit Priority Network definitions are based upon the number of buses projected to operate on each roadway.

Transit Propensity

Transit propensity measures the probability of transit ridership. Pedestrian projects in an area with higher transit propensity should be prioritized over those with lower transit propensity.

Transit propensity may be determined by population density, elderly population density, vehicle accessibility (auto ownership), and income. All four measures are readily available from the 2000 Census. For the purposes of measuring transit propensity, elderly is defined as those 65 years of age or older. The four measures were chosen because:

- High population densities tend to foster greater transit use.
- Elderly are much more likely to use transit; therefore, elderly population is measured.
- People not owning automobiles are more likely to use transit than those who do.
- Low-income residents are more likely to use transit than high-income residents.

The City completed a GIS analysis on 2000 Census data that summarized the demographics of each census tract. The data in each census tract was grouped into four categories: low, medium-low, medium-high, and high. These categories were then assigned a corresponding point value of 1 to 4. The point values for each census tract were summed to produce an average propensity score between 4 and 16 points. For pedestrian projects in several census tracts, the average score of the affected tracts was calculated. The next step was to reduce the scores to high, medium, and low propensity. Census tracts that had propensity one standard deviation above the mean were assigned a high propensity, census tracts that had propensity one standard deviation below the mean were assigned a low propensity, and all other tracts were assigned a medium propensity.

Transit Attractors

Transit attractors are defined as commute trip reduction employment sites, shopping and governmental facilities, libraries, hospitals, and other high pedestrian generators. Pedestrian

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projects in the vicinity of multiple transit attractors should be prioritized over areas with few or no transit attractors.

Pedestrian Amenities at Transit Facilities

A final criterion is the quality of pedestrian amenities at the facility being served. Given two projects that are similar in the above three criteria, the project connecting to a transit facility(s) with bus shelters is of higher priority than one that does not.

Table VII-1 outlines the scoring system for pedestrian projects.

Table VII-1
Point System for Pedestrian Projects

Level of Transit Service	Transit Principal Corridor	Transit Minor Corridor	Transit Local Access
	4	3	1
Transit Propensity	High	Medium	Low
	3	2	1
Transit Attractors	More than One	One	Zero
	2	1	0
Amenities at Transit Facilities	Shelters Available	No Amenities	
	1	0	

Recommendations

Based on the GIS analysis and the point assignments from Table VII-1, each of the 216 pedestrian projects adjacent to transit routes included in the 1999 update of the Pedestrian and Bicycle Transportation Plan were evaluated and ranked. The total cost of implementing all pedestrian projects is estimated at \$119,385,600 (2001 dollars¹)

Table VII-2
Pedestrian Project Prioritization Summary

	Prioritization Score	Number of Pedestrian Projects	Cost
Highest Priority Projects	10	16	\$6,475,600
Second Highest Priority Projects	9	33	\$21,735,700
Remaining Projects	2-8	167	\$91,174,300
Total	-	216	\$119,385,600

As shown in Table VII-2, sixteen projects received the highest possible ranking and represent the most important pedestrian projects from a transit perspective. Thirty-three projects received the second highest possible ranking. The descriptions of the top 49 priority pedestrian projects are listed in Table VII-3 and shown in Figure VII-1. The

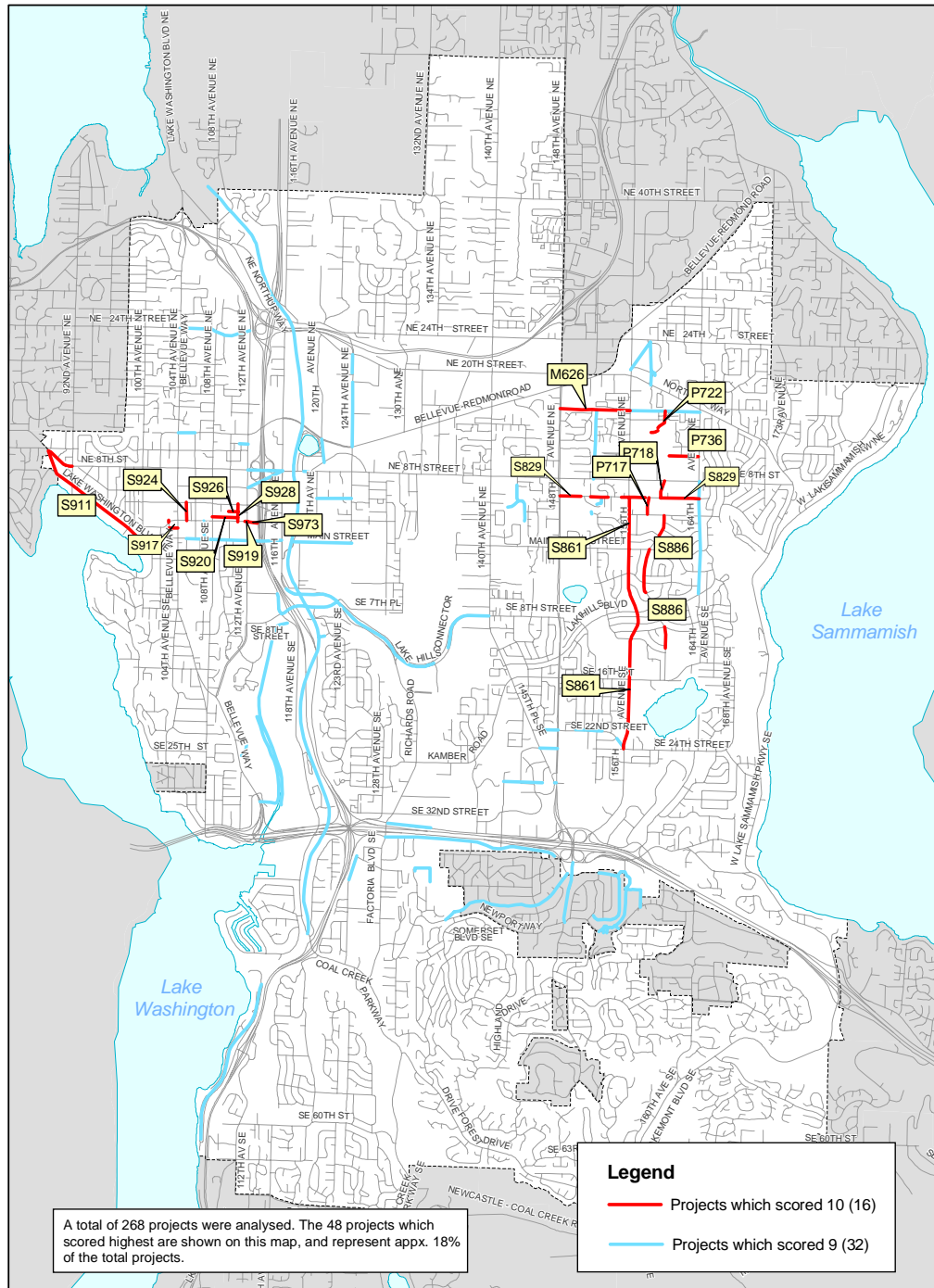
¹ Cost estimate by City of Bellevue: Cost Estimate Worksheet Ped/Bike Plan Update (Autumn 1999)

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remaining 167 pedestrian projects are listed in Appendix J. The cost figures shown are estimates, based on costs incurred for similar projects in recent years. Not included in the estimates is the cost of any additional right-of-way or easement that may be necessary. For projects that extend beyond the Bellevue city limits, the estimates are for the Bellevue portion only.

In Chapter XV - Funding Alternatives, only the \$6,475,6000 needed to address the "highest priority" projects is called out as being most beneficial to the service network requested in the Bellevue Transit Service Plan.

**Figure VII-1
Highest Priority Pedestrian Projects**



**Table VII-3
Highest Priority Pedestrian Projects**

Bellevue Project No.	Link	Limits	Description	Justification/Benefits	LOS	Prioritization Criteria			
						Transit Propensity	Transit Attractors	Amenities	Total COST
P718	Hillaire to Crossroads	NE 6th St to NE 8th St	Acquire easement and construct paved connection; Location of easement yet to be determined	Crossroads Subarea Plan; Neighborhood connection to shopping and parks	4	3	2	1	10 \$62,900
S886	160th/158th /159th Pl SE /NE	NE 4th St to SE 16th St	Construct sidewalk on one side	North-South ped connection on non-arterial street; Access to schools & parks	4	3	2	1	10 \$951,800
P717	Hillaire Access Trail	NE 4th St to Hillaire Park	Acquire easement and construct paved trail if possible	Cross block neighborhood connection to Hillaire Park	4	3	2	1	10 \$56,800
S924	105th Ave NE	NE 2nd St to NE 4th St	Construct sidewalk along entire length of west side	Downtown Plan; Safety; Access to Downtown services; Access to transit	4	3	2	1	10 \$359,100
S928	111th Ave NE	NE 2nd St to NE 4th St	Construct sidewalk on both sides; developers should build	Downtown Plan; Access to transit; Access to housing, services & offices; Safety	4	3	2	1	10 \$590,700
S861	156th Ave	NE 20th St to SE 24th St	Construct sidewalk on both sides where missing; Construct boardwalk or WW on one side on SE 16th-11th St; Section immediately S of SE 16th should be environmentally sensitive (asphalt path & swale); upgrade sidewalk in Crossroads area to improve pedestrian safety	Major north-south ped on system corridor; Access to schools, parks & shopping; Safety; Bus route; EBTS rec.	4	3	2	1	10 \$1,529,800
S926	110th Ave NE	NE 12th St to Main St	Construct sidewalk on both sides where missing & new 110th section (NE 2nd-4th)	Downtown Study; Safety; Access to transit	4	3	2	1	10 \$370,800
S911	Lake Washington Blvd	NE 10th St to 100th Ave NE	Improve driveway aprons so that sidewalk is wheelchair safe (reconstruct driveways that cross sidewalk)	Access to park; Safety	4	3	2	1	10 \$161,700
P736	Crossroads Park East Access	Crossroads Park to 164th Ave NE	Paved path; Sign; Acquire easement	Crossroads Subarea Plan; Existing connection	4	3	2	1	10 \$40,100

Table VII-3 (continued)
Highest Priority Pedestrian Projects

Prioritization Criteria										
Bellevue Project No.	Link	Limits	Description	Justification/Benefits	LOS	Transit Propensity	Transit Attractors	Amenities	Total	COST
S829	NE 6th St	148th Ave NE to 164th Ave NE	Construct sidewalks on one side where missing; Sign trailhead to NE 8th St and Lake Hills Greenbelt	Neighborhood to schools, shopping, parks	4	3	2	1	10	\$1,392,700
M626	Highland Middle School	148th Ave NE to 156th Ave NE @ NE 16th	Acquire easements; Construct path/sidewalk; SSS	Access to schools and shopping	4	3	2	1	10	\$94,200
S973	NE 2nd	112th Ave NE to 114th Ave NE	Sidewalks on both sides	Build in conjunction with Downtown Access project mitigation; Improves access to transit, businesses, parks	4	3	2	1	10	\$358,000
S919	NE 2nd St	108th Ave NE to 112th Ave NE	Construct sidewalk on both sides where missing; CIP Downtown Sidewalk Program; Implement ULI Green St improvements as funding permits	Access to Downtown services; Downtown Plan; Safety	4	3	2	1	10	\$0
S920	NE 2nd Pl	108th Ave NE to 111th Ave NE	Construct sidewalk on both sides; developers should build	Low-volume pedestrian/residential street in Downtown; Downtown Plan; Access to transit; Safety	4	3	2	1	10	\$463,300
S917	Old Bellevue Sidewalks	100th Ave to Bellevue Way	Construct sidewalk on NE 1, 102 & 103 Ave where missing; Consider design of 1st/2nd connector; CIP Downtown s/w Program; Install ped crossings, especially to park	Access to shopping, parks, housing & transit; Safety (no curbs or sidewalks currently exist); Old Bellevue Study	4	3	2	1	10	\$43,700
S983	SE Allen Rd	SE Newport Way to SE 36th St	Sidewalk on both sides	Access to schools, shopping, transit, library; EBTS rec.	4	2	2	1	9	\$413,100
S975	114th Ave SE	SE 6th to SE 8th St	Sidewalk on both sides where missing; developers should build west side	North-south connection to Wilburton P & R lot, connection to businesses; Safety	4	2	2	1	9	\$287,200

Table VII-3 (continued)
Highest Priority Pedestrian Projects

Bellevue Project No.	Link	Limits	Description	Justification/Benefits	Prioritization Criteria					COST
					LOS	Transit Propensity	Transit Attractors	Amenities	Total	
S885	Eastgate Way	Richards Rd to 148th/150th Ave SE	Construct sidewalk on north side where missing; Install bus passenger waiting areas on south side at bus stops	East-west connection; Access to Park & Ride, offices, commercial & BCC; Bus route; EBTS rec.	4	2	2	1	9	\$887,100
S860	164th Ave	Northup Way to Lake Hills Blvd	Construct sidewalk on east side where missing	Access to schools and parks; Major north-south ped system link; EBTS rec.; Safety; Bus route	4	3	1	1	9	\$805,300
L437	Unigard Trail System	Northup to NE 24th St East of 156th Ave NE	Maintain north-south and east-west trail system from Northup to NE 24th St and neighborhood linkages to 156th Ave NE	Maintain important shopping	4	2	2	1	9	\$0
P738	BNSF Railroad Path	North City Limits to South City Limits	Acquire easements; construct hard surface trail within or parallel to railroad ROW. Consider phased development of segments: N. City Limit to I-405, I-405 to SE 5th St, SE 5th St to Coal Crk Pkwy, Coal Crk Pkwy to S. City Limit. Connect 118th at SE 5th to Lake Hills Connector; connections to Mercer Slough, Woodridge, 116th near Northup, 120th Ave at SE 40th	Major north-south linkage through City and beyond; already grade-separated; Richards Valley Subarea rec.; part of regional trail network plan	4	2	2	1	9	\$9,093,500
L423	Vasa Creek System	Newport Way to I-90	Construct soft surface trail system; Acquire easements	Eastgate neighborhood connections to Vasa Park/Lake Sammamish	4	2	2	1	9	\$78,700
S871	124th Ave NE	NE 8th St to Northup Way	Construct sidewalk on both sides from NE 8th to Bel-Red and on one side between Bel-Red & Northup	North-south ped corridor; Connects Midlakes/Wilburton to Northup area; Bel-Red Subarea rec.	4	2	2	1	9	\$1,092,600

Table VII-3 (continued)
Highest Priority Pedestrian Projects

Bellevue Project No.	Link	Limits	Description	Justification/Benefits	Prioritization Criteria					COST
					LOS	Transit Propensity	Transit Attractors	Amenities	Total	
M625	NE 8th St to Highland	NE 8th St to Bel-Red Rd	Acquire connection through/between multi-family complex; SSS	Access to schools, shopping, Crossroads Subarea	4	3	1	1	9	\$104,700
L438	Lake Hills Greenbelt N.	NE 4th Pl/School to NE 6th St	Maintain developer constructed soft surface trail through wetlands	Neighborhood to school and shopping connections	4	3	1	1	9	\$0
M612	Odle / Sammamish Trail	Main St to NE 8th St	Establish linkage through school to NE 8th St; SSS	Neighborhood to school connection	4	3	1	1	9	\$55,700
S927	107th Ave NE	Main St to NE 2nd St	Construct sidewalk on both sides; developers should build	Downtown Plan; Access to transit; Access to offices, residential & services; Safety	4	2	2	1	9	\$260,600
M646	Mercer Slough Park Trail	I-90 to SE 8th St	Construct boardwalks and soft surface trails throughout park; Construct bridge over main slough channel	Major recreational and wildlife interpretive trail system	4	2	2	1	9	\$1,224,700
S941	NE 24th St	Bellevue Way to 112th Ave NE	Construct sidewalks on south side where missing	East-west connection; Access to schools, parks; Bus route	4	2	2	1	9	\$517,300
M634	Crossroads E-W Connection	156th Ave NE to 164th Ave NE	Construct trail and acquire easements (where necessary); SSS	Crossroads Subarea Plan; Breaks up superblock; Access to parks and shopping	4	3	1	1	9	\$98,400
S946	SE 38th St	150th to 156th/156th to SE 42/SE 42 to 153rd	Construct sidewalk on one side	Project primarily in King County; provides neighborhood connection to shopping, transit, businesses	4	2	2	1	9	\$347,800
S833	SE 24/ Phantom Lk-Richards Valley	148th Ave SE to 145th Pl SE	Construct sidewalk on north side	BCC access; Neighborhood to park connection, Transit access; Section of East-West route from Phantom Lake to Richards Valley	4	2	2	1	9	\$145,600
S881	SE 22nd St	145th Pl SE to 156th Ave SE	Construct sidewalk on one side where missing	EBTS rec.; Access to parks and schools; Safety	4	2	2	1	9	\$841,800

Table VII-3 (continued)
Highest Priority Pedestrian Projects

Bellevue Project No.	Link	Limits	Description	Justification/Benefits	Prioritization Criteria					COST
					LOS	Transit Propensity	Transit Attractors	Amenities	Total	
M604	Sunset Ravine Trail	132nd Ave SE to Sunset Ravine Park Trail	Maintain existing soft surface loop trail around school; Sign	Neighborhood to school connection; Access to park and services; Per Subarea Plan	4	2	2	1	9	\$1,600
S987	SE 36th St	128th to 150th Ave SE	Bus passenger waiting areas on north side at bus stops	Access to transit, offices, shopping, Bellevue Community College	4	2	2	1	9	\$17,000
S933	SE 38th St/124th Ave SE	128th Ave SE to Coal Creek Pkwy	Construct sidewalks on both sides where missing	Access to Factoria Square, Newport High School, Lake Washington Blvd rec. corridor, transit; EBTS rec; Factoria rec; Safety;	4	2	2	1	9	\$0
S857	NE 5th St	120th Ave NE to 124th Ave NE	Construct sidewalk where missing	Neighborhood to shopping connections; Safety	4	2	2	1	9	\$453,900
S900	Main St	116th Ave to 112th Ave	Construct widened sidewalk on I-405 overpass; Construct trail link through City Hall campus; Improve ped environment on City Hall frontage including lighting	Part of Lake to Lake trail; Major pedestrian corridor	4	2	2	1	9	\$463,500
S868	Lake Hills Connector	116th Ave SE to 140th Ave SE	Construct sidewalk on south side where missing; Install signing; P729 Paved Path between SE 8th & Richards Rd	Access to parks & schools; Bus route; Safety; Major East-west ped linkage; EBTS rec.	4	2	2	1	9	\$2,505,800
S943	I-405 Downtown Crossing	116th Ave NE to 112th Ave NE	Construct sidewalk on one side of new facility in conjunction with I-405 Downtown Access Project. Provide ped facilities in conjunction with any future overpasses	Provides another ped crossing over I-405; Access to transit, shopping, businesses. Downtown Access Ped/Bike Crossing Study recommendation	4	2	2	1	9	\$0
S902	Main St	112th Ave to Bellevue Way	Construct sidewalk where necessary on both sides; Developers to construct sidewalk to Downtown standards	Major ped trail link; Part of Lake to Lake Trail	4	2	2	1	9	\$213,100

Table VII-3 (continued)
Highest Priority Pedestrian Projects

Bellevue Project No.	Link	Limits	Description	Justification/Benefits	LOS	Prioritization Criteria			
						Transit Propensity	Transit Attractors	Amenities	Total COST
S891	SE 8th St	112th Ave SE to Lake Hills Connector	Construct sidewalk or separated paved path on both sides where missing; Acquire easements as necessary	Key missing link; Park & Ride; Bus route; Safety; EBTS rec.; Lake to Lake Trail	4	2	2	1	9 \$0
S866	NE 8th St	112th Ave NE to 120th Ave NE	Construct sidewalk on both sides where missing; Improve safety on I-405 interchange for E-W peds	Safety; System continuity; Wilburton Subarea rec.; Access to shopping, hospital, downtown & bus route; EBTS rec.; Downtown rec.	4	2	2	1	9 \$117,200
S922	NE 11th St	110th Ave NE to 112th Ave NE	Construct sidewalk on both sides; developers should build	Access to library, park, offices & residential areas; Safety; Access to transit	4	3	2	0	9 \$115,800
S915	NE 12th St	106th Ave NE to Bellevue Way	Construct sidewalk on north side; Developer should build	Downtown Study; Access to transit; Access to Downtown; Safety	4	2	2	1	9 \$264,200
S/W = Sidewalk WW = Walkway rec = recommendation									
P&R = park-and-ride				BCC = Bellevue Community College	ROW = right-of-way			Xings = crossings	

CHAPTER VIII- BUS STOP AMENITIES

Introduction

Transit patrons access service within the City of Bellevue at any of the 828 stops located throughout the city. The bus stop conveys not only the sense of importance and security for bus patrons, it also projects an image of transit service to non-bus riders. Ultimately, bus stops are one of the primary marketing mechanisms for transit systems.

Passenger amenities, both at transit stops and on vehicles, play an integral role in building transit ridership. To attract a bus-riding clientele, the bus stop environment must be accessible and attractive. Further, the locations of bus stops should balance operational requirements as well as passenger access needs. Passenger comfort and convenience is essential to the success of a transit stop.

National research has demonstrated that amenities are crucial to improving ridership. *TCRP Report 46 The Role of Transit Amenities and Vehicle Characteristics in Building Transit Ridership: Amenities for Transit Handbook and The Transit Design Game Workbook* research shows:

- **People react positively to amenities designed to improve their transit experience, both at the stop and on board vehicles.** Passengers appreciate these amenities when they are well placed and well designed, particularly when such basic service characteristics as frequency, efficiency, safety, and reliability are perceived by passengers to be attractive. Amenities can help to instill rider confidence in a transit agency, as well as raise passenger optimism regarding the quality of future transit improvements and service.
- **Amenities impact a broad range of passenger experience and the ridership decisions of passengers.** Infrequent or “transit choice” riders, a major target audience for increasing ridership, showed significant interest in amenities in the case study cities surveyed. Amenities do not just help make transit more comfortable, but safer (with lighting and security cameras, for example) and more efficient (with features such as low-floor buses that are shown to reduce dwell time). Amenities may also impact new riders' perception of transit as a mobility option for themselves.

As reflected in Bellevue's Comprehensive Plan, the City of Bellevue is committed to providing a safe and secure environment at bus stops and recognizes that such enhancement increases transit ridership:

Policy TR-58

Encourage transit use by improving pedestrian and bicycle linkages to the existing and future transit and school bus systems, and by improving the security and utility of park-and-ride lots and bus stops.

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The Bellevue City Council supports enhancements that improve security and safety at park-and-rides as stated in its adopted policy guidance regarding King County Metro (Metro) Transit (adopted May 8, 2000):

KCM-13

Support initiatives that seek to improve personal and property security at all lots.

One strategy for developing and enhancing bus stops is to incorporate transit amenities in new development. This enables immediate transit support for new development, encourages ridership, and adds value to new and existing development in the city. Support for this approach to bus stop development and improvement is found in adopted Comprehensive Plan policies:

Policy TR-13

Require new development to incorporate physical features designed to promote use of alternatives to single-occupant vehicles, such as:

- Preferential parking for carpools and vanpools;
- Special loading and unloading facilities for carpools and vanpools;
- Transit facilities, including comfortable bus stops and waiting areas, adequate turning room, and where appropriate, signal preemption and queue-jump lanes; and
- Bicycle parking and related facilities.

Policy TR-7

Incorporate transit-supportive and pedestrian-friendly design features in new development through the development review process. Examples include:

- Orient the major building entries to the street and closer to transit stops;
- Avoid large surface parking areas between the building frontage and the street;
- Provide pedestrian pathways that minimize distances to activities and to transit stops;
- Where feasible, cluster major buildings within developments to improve pedestrian and transit access;
- Provide weather protection in key areas, such as covered walkways or arcades connecting buildings in major developments, and covered waiting areas for transit and ridesharing;
- Design for pedestrian safety, including adequate lighting and paved, hazard-free surfaces;
- Provide bicycle connections and secure storage convenient to major transit facilities;
- Use design features to create an attractive, interesting pedestrian environment that will stimulate pedestrian use;

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- Design transit access into large developments, considering bus lanes, stops, and shelters as part of project design; and
- Encourage the availability of restrooms for public use.

With regard to developing and enhancing bus stops, the City of Bellevue recognizes its partnership role with transit agencies serving the city (as reflected in the Comprehensive Plan).

Policy TR-53

Work with the transit providers to create, maintain, and enhance a system of supportive facilities and systems such as transit centers, passenger shelters, park-and-ride lots, bus queue by-pass lanes, bus signal priorities, pedestrian and bicycle facilities, pricing, and incentive programs. [Amended Ord. 5058]

Further, the City's role as a transit partner is not limited solely to design and planning. The City also realizes its potential funding role for such improvements:

KCM-27

Evaluate the need for City financial contributions to transit services and amenities as part of the biennial update of the Capital Investment Plan (Final Comprehensive King County Transit Policy Statements, adopted by Bellevue City Council on May 8, 2000).

This chapter examines several improvements that can enhance the public image of transit and address passenger needs when accessing buses within the City of Bellevue. Initially, this chapter discusses considerations for bus stop placement. Placement can influence the overall attractiveness of a bus stop as well as govern amenity development. Second, accessibility concerns for bus stops in Bellevue are outlined. Third, types of bus stop amenities as well as whether to develop these amenities at Bellevue bus stops are profiled. Finally, an evaluative framework to prioritize amenity development was determined and applied to Bellevue's existing bus stop inventory. The discussion of bus stop improvement options also outlines suggested improvements for Bellevue's bus stops. These recommendations are fully summarized in the final section of this chapter.

Approval Process

The current approval process for bus stops and other amenities like shelters is as follows:

- The transit agency sends a request for a new or modified stop location to Bellevue Traffic Engineering.
- Bellevue reviews the proposed location to evaluate if it will work considering existing traffic operations.
- Bellevue requires modifications to the proposal as needed.
- After final revisions, the stop request is approved and the transit agency installs the bus stop.

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Many bus stop requests are approved as submitted without revisions, and occasionally requested bus stops are not approved due to traffic operation concerns.

The current approval process for amenities such as shelters, benches, street lighting, is as follows:

- The transit agency is required to apply for a Right-of-Way Use Permit for the installation of shelters, benches, and other bus stop amenities.
- The permit is review by Traffic Engineering staff for traffic issues such as sight distance and clear zone.
- The applications are either approved, or comments are forwarded back the transit provider for revision.
- Once the permit is approved, the transit provider installs the improvement.

Bus Stop Placement

Although not directly related to developing bus stop amenities, where stops are placed influences the level and type of transit ridership and can shape amenity development; i.e., does the stop take advantage of existing lighting and sidewalk improvements. For this reason, each new bus stop location should consider a number of factors including:

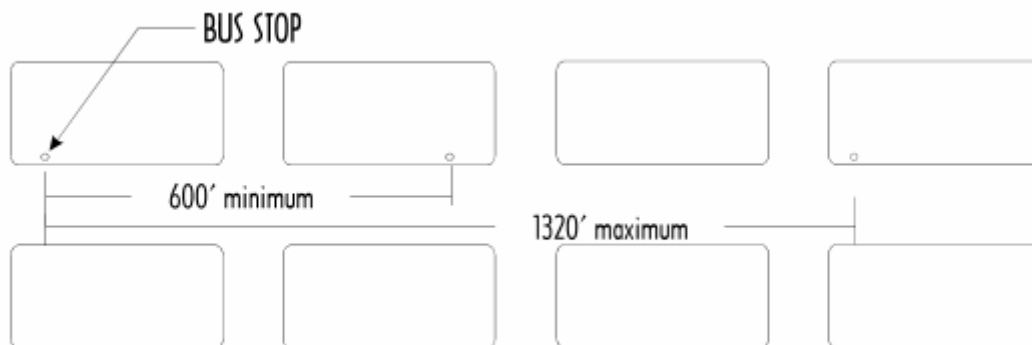
- Spacing along the route;
- Placement in relation to intersections;
- Pedestrian safety and access;
- Availability of adequate right-of-way to ensure that the bus stop meets the Americans with Disabilities Act (ADA) accessibility standards;
- Curb clearance; and,
- Operational effectiveness issues (including relation to the nearest intersection, bus turning requirements, and re-entering the travel lane).

Because of the number of factors involved, each new or relocated stop must be examined on a case-by-case basis. However, some general guidelines for stop spacing and placement are outlined below.

Stop Spacing

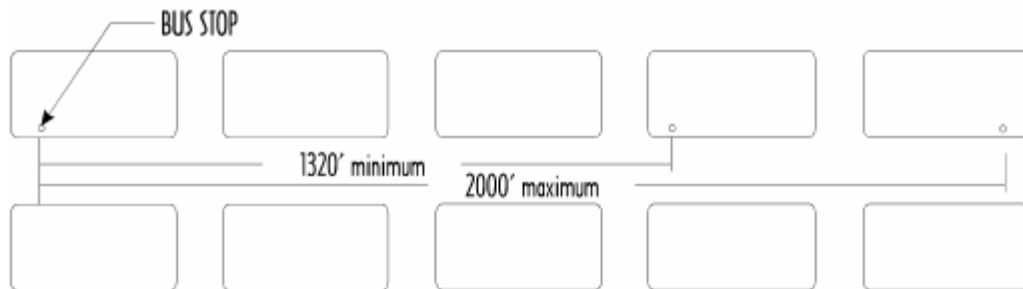
In high-density urban areas (major employment centers and/or with population densities greater than or equal to 4,000 persons per square mile), bus stops should ideally be spaced at intervals of no more than 1,320 feet (1/4 mile) and no less than 600 feet along each route (Figure VIII-1).

Figure VIII-1
High-Density Area Bus Stop Spacing¹



In less dense suburban areas (with population densities below 4,000 persons per square mile), bus stops should ideally be spaced at intervals of no more than 2,000 feet and no less than 1,320 feet (Figure VIII-2).

Figure VIII-2
Low-Density/Suburban Area Bus Stop Spacing²



While these spacing standards are the general rule, exceptions may be made in special circumstances (for example, to accommodate disabled customers who might otherwise need to use Metro Access because they would be unable to use the existing nearest bus stops).

Stop spacing in Bellevue generally reflects the high-density bus stop spacing, with relatively close-spaced stops. Close bus stop spacing increases access to potential customers by reducing walk times to the bus stop. The tradeoff of that increased access is slower bus travel times.

Throughout King County, Metro is examining corridors for bus stop consolidation. The rationale is to improve transit speed and reliability by reducing the amount of close bus stops. Transit patrons have not deserted transit as a result of increased walk distances. For example, Sound Transit Route 550 skips four stops on Bellevue Way SE that was previously

¹ Draft Arlington County Bus Stop Design Standards, April 2, 2001.

² Draft Arlington County Bus Stop Design Standards, April 2, 2001.

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served by the Metro route it replaced. Ridership along Bellevue Way SE did not drop; passengers walked to the stops that remained.

Metro's current zone consolidation efforts are focusing on three corridors: 156th Avenue NE, 148th Avenue NE between NE 51st Street and SR 520, and NE 24th Street to Redmond.

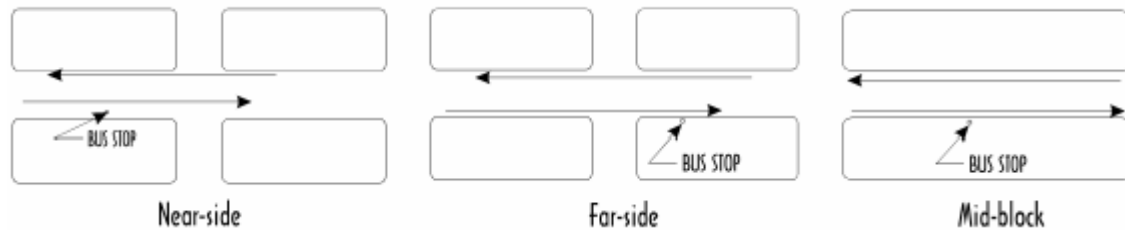
Placement in Relation to Intersections

It is especially important to consider the unique circumstances at each intersection when selecting bus stop locations, including the:

- Intersection angles,
- Traffic patterns,
- Restricted turning lanes,
- Traffic controls,
- Turning movements of the bus,
- Curb clearance needs,
- Location of crosswalks, and
- Location of nearby driveways.

Table VIII-1 summarizes the major advantages and disadvantages related to locating bus stops before crossing the intersection (near-side), after crossing the intersection (far-side), and mid-block (not close to any intersection), as well as conditions under which each of these locations is recommended. Figure VIII-3 illustrates these relative placements.

Figure VIII-3
Bus Stop Placement in Relation to Intersections



Additional Factors To Be Considered in Selecting a Bus Stop Location

- **Sidewalk Conditions** – Stops should be located and constructed to make use of existing sidewalk facilities, or new sidewalk facilities should be constructed to provide pedestrian access to the bus stop. Bus shelters, benches, and sign poles should be installed off of (but connected to) the main sidewalk path. At stops with heavy ridership, additional passenger waiting/standing areas should be constructed off of the main sidewalk so that waiting passengers do not block passage of other pedestrians.
- **Crosswalks** – Bus stops should ideally be located close to existing crosswalks to encourage safe pedestrian crossings, but also located so that a stopped bus will neither block a crosswalk nor obstruct pedestrian visibility of oncoming traffic and vice-versa. In general, it is safer to locate the bus stop on the far side of a crosswalk.
- **Driveways** – Driveways should only be blocked at stops with very brief dwell times. It is preferable to fully rather than partially block a driveway in these cases, to prevent other vehicles from attempting to squeeze by the bus in a situation with reduced sight distances.

Table VIII-1
Advantages and Disadvantages of Stop Placement Relative to the Nearest Intersection

Bus Stop Location	Advantages	Disadvantages	When Recommended
Near-side (located immediately before an intersection)	<ul style="list-style-type: none"> -Less potential conflict with traffic turning onto the bus route street from a side street. -Passengers usually deboard closer to a crosswalk 	<ul style="list-style-type: none"> -Potential conflicts with right-turning traffic as cars may cut in front of the bus while it is stopped. -The stopped bus obscures the sight distance of drivers entering from the right as well as crossing pedestrians. -At intersections controlled by a stop sign, the stopped bus may block visibility of the sign. -At signalized intersections, may result in schedule delays. 	<ul style="list-style-type: none"> -Traffic is heavier on the far-side than on the approaching side of the intersection. -Pedestrian access and existing landing area conditions on the near-side are better than on the far-side. -Street crossings and other pedestrian movements are safer when the bus stops on the near-side than the far-side. -Bus route continues straight or turns right at the intersection.
Far-Side (located immediately after an intersection)	<ul style="list-style-type: none"> -Does not conflict with vehicles turning right off of the direction of the bus route. -Appropriate after the route has made a left-hand turn. -The stopped bus does not obscure sight distance to the left for vehicles entering or crossing from the side street. -At signalized intersections, buses can more easily re-enter traffic. -The stopped bus does not obscure traffic control devices or pedestrian movements at the intersection. 	<ul style="list-style-type: none"> -The stopped bus obscures the sight distance to the right of drivers entering the from the cross street to the right of the bus. -If the bus stopping area is of inadequate length, the rear of the stopped bus will block the cross street (especially an issue for stops where more than one bus may be stopped at a time). -If the bus stops in the travel lane, it may result in queued traffic behind it blocking the intersection. 	<ul style="list-style-type: none"> -Traffic is heavier on the near-side than on the far-side of the intersection. -Intersections where heavy left or right turns occur. -Pedestrian access and existing landing area conditions on the far-side are better than on the near-side. -Intersections where traffic conditions and signal patterns may cause delays. -Intersections with transit signal priority treatments.
Mid-Block (located 300 feet or more beyond or before an intersection)	<ul style="list-style-type: none"> -The stopped bus does not obstruct sight distances at an intersection. -May be closer to major activity centers than the nearest intersection. 	<ul style="list-style-type: none"> -Requires most curb clearance of the three options (unless a mid-block sidewalk extension is built). -Encourages mid-block jaywalking. -May increase customer walking distances if the trip generator is close to an intersection. 	<ul style="list-style-type: none"> -Traffic or street/sidewalk conditions at the intersection are not conducive to a near-side or far-side stop. -Passenger traffic generator is located in the middle of the block. -The interval between surrounding cross streets exceeds stop spacing standards for the area. -A mid-block stop is compatible with a corridor or district plan.

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- **Potential Landscaping Issues** – The presence of trees and bushes at a bus stop may necessitate periodic maintenance at the stop to prevent buses from hitting tree branches and bushes from encroaching on sidewalks. Tall bushes are also a potential security problem, and additional lighting should be considered at stops with this issue.
- **Lighting** – Adequate lighting is important for passenger comfort and security as well as for visibility of waiting passengers to the bus and other oncoming traffic. Bus stops, which are served after dark, should be located where they will be illuminated at night, preferably from an overhead street light. If this is not possible, installation of lighting at the bus stop should be considered.
- **Limited Visibility Over Hills and Around Curves** – Bus stops should not be located over the crest of a hill, immediately after a right-hand curve in the road, or at other locations that limit the visibility of the stopped bus to oncoming traffic. If the bus stops in the travel lane at such locations, it is in danger of being struck from the rear. Even if the bus pulls off the road at such stops, pulling back into the travel lane presents accident potential.
- **On-Street Parking** – Locating a bus stop in an area with existing curbside parking requires either removal of enough parking to permit the bus to pull off, service the stop, and re-enter the travel lane, or installation of a sidewalk extension or curb bulb to provide passenger access to the bus.
- **Proximity to Major Trip Generator** – When feasible, a bus stop should be located to minimize walking distances to the activity center that is expected to generate the most ridership.
- **Right-of-Way Considerations** – If a bus stop may be a future candidate for transit shelter or bench installation, a site should be selected that includes adequate right-of-way for constructing improvements.
- **Transfer Locations** – Bus stops, where transfer activity between routes is heavy, should be located, as much as possible, so that passengers do not need to cross streets to transfer to other routes.
- **Compatibility with Adjacent Properties** – Care should be taken to avoid locating a bus stop immediately adjacent to land uses that are highly sensitive to the effects of bus fumes and noise, such as nursing care facilities, day care centers, and outdoor eating areas.
- **Drainage** – Areas that tend to accumulate standing water should be avoided or improved. However, bus stops should not be located so that passengers are required to step over catch basins when disembarking the bus, as this creates a potential tripping hazard.
- **Bicycle Facilities** – To the extent feasible, bus stops should be located so they do not block bicycle travel lanes.

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Bus Stop Accessibility

Both Metro and the City of Bellevue have committed to making pedestrian improvements and the resulting accessibility improvements a top improvement priority.

Of the 828 bus stops maintained by Metro within the City of Bellevue, 512 are fully accessible. Metro has classified 113 bus stops as inaccessible. The remaining 203 bus stops have some accessibility issues, but are not classified as inaccessible. Figure VIII-4 shows the location of inaccessible bus stops in Bellevue. Table VIII-2 lists these stops. Based on King County Metro data, only three of these stops have more than 5 boardings a day.

Bus stop accessibility is directly influenced by bus stop location, as accessibility is largely a function of stop design, street configuration, Right-of-Way, and the availability (or lack thereof) of sidewalks. According to the Americans with Disabilities Act (ADA), bus stop sites shall be chosen such that, to the maximum extent practicable, lifts or ramps may be deployed. In addition, where new bus stop pads are constructed at bus stops, bays, or other areas where a lift or ramp is to be deployed, bus stops shall have a firm, stable surface; a minimum clear length of 96 inches (measured from the curb or vehicle roadway edge) and a minimum clear width of 60 inches (measured parallel to the vehicle roadway) to the maximum extent allowed by legal or site constraints; and shall be connected to streets, sidewalks, or pedestrian paths by an accessible route.

One of the primary reasons for the relatively large number of inaccessible bus stops is the lack of sidewalks on some Bellevue streets. For instance, no sidewalks are present on Northup Way between 116th Avenue NE and 108th Avenue NE; therefore the stops along this corridor are inaccessible to persons with disabilities. To address these types of deficiencies, the City of Bellevue is working closely with Metro during reconstruction and sidewalk addition projects to ensure that deficient bus stops are upgraded to fully accessible status.

The ADA stipulates that bus service must be accessible to those with disabilities. According to the ADA, bus stop sites shall be chosen such that, to the maximum extent practicable, lifts or ramps may be deployed. In addition, where new bus stop pads are constructed at bus stops, bays, or other areas where a lift or ramp is to be deployed, bus stops shall have a firm, stable surface; a minimum clear length of 96 inches (measured from the curb or vehicle roadway edge) and a minimum clear width of 60 inches (measured parallel to the vehicle roadway) to the maximum extent allowed by legal or site constraints; and shall be connected to streets, sidewalks, or pedestrian paths by an accessible route.

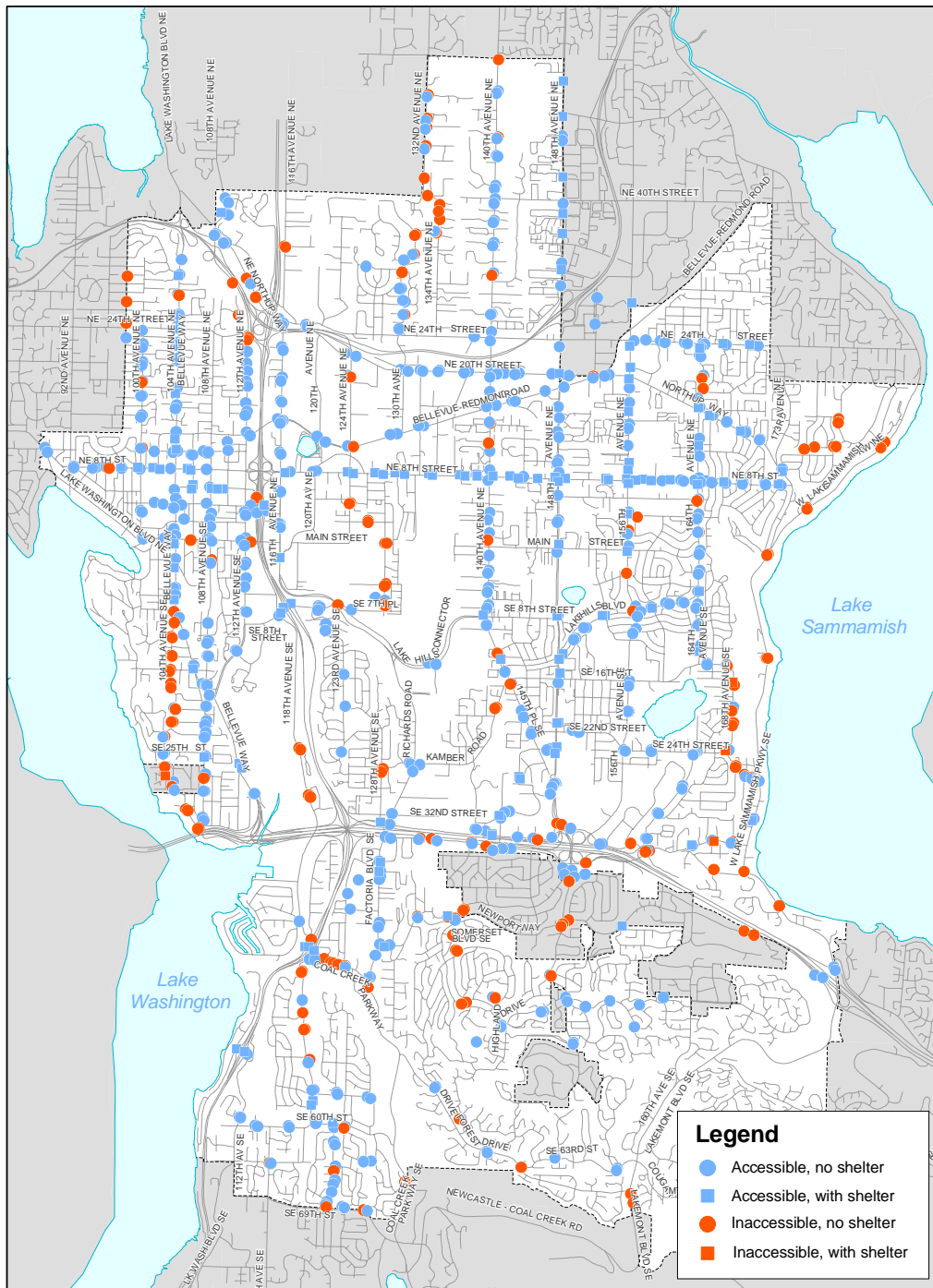
The City and King County Metro have a \$156,000 “Bellevue ADA Bus Zone Accessibility Improvements” project that is funded with a combination of local and federal funds. The project will construct accessibility improvements to remove barriers to access to public transportation for people with disabilities by upgrading existing bus zones and pedestrian connections in Bellevue to meet ADA requirements. The project emphasizes improvements at pedestrian loading areas—at bus zones, curb ramps, and sidewalks—connected to transit facilities in areas where current and future public transportation service is provided, with the

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focus on key activity centers, and locations where transfers between public transit routes are required. Eighteen projects are being funded by this grant.

Creating an accessible stop out of an inaccessible stop can be difficult, or even impossible, due to the geometric constraints. Often, the lack of sidewalk is the major factor why a stop is not accessible. Based on the Bellevue costs for making 18 bus stops accessible, at least \$1,000,000 would be necessary to upgrade all 113 inaccessible stops. Because each stop must be evaluated on an individual basis and cannot easily be examined on an “average cost basis” the \$1,000,000 probably understates amount of resources necessary to upgrade these stops. The majority of the non-accessible stops have fewer than 5 daily riders. Of the 128 non-accessible stops, 108 have fewer than 5 daily boardings, and the cost of improvements at certain locations may outweigh the benefits gained.

Figure VIII-4
Bellevue Bus Stop Accessibility



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**Table VIII-2
Current Inaccessible Stops Recommended for Accessibility Improvements**

Zone #	Street	Cross-Street	Zone #	Street	Cross-Street
64610	SE Newport	17025 (MAILBOX)	69120	104 AV SE	SE 27 ST
64800	COAL CREEK PKWY	124 AV SE	69128	104 AV SE	SE 28 ST
64810	COAL CREEK PKWY	119 AV SE	69150	106 AV SE	SE 32 ST
64821	COAL CREEK PKWY	119 AV SE	69170	106 AV SE	SE 34 ST
64866	125 AV SE	SE 60 ST	69180	106 AV SE	SE 32 ST
64870	SE ALLEN RD	SE NEWPORT WY	69230	104 AV SE	104 PL SE
65250	COAL CREEK PKWY	FACTORIA BLVD SE	69250	104 AV SE	SE 20 ST
65267	116 AV SE	SE 64 ST	69260	104 AV SE	1644 (ADDRESS)
65268	Lakemont Blvd SE	FOREST DR SE	69270	104 AV SE	SE 16 ST
65269	Lakemont Blvd SE	FOREST DR SE	69290	104 AV SE	CEDAR CREST LN
65295	SE 63 ST	FOREST DR SE	69300	104 AV SE	SE 10 ST
65298	FOREST DR SE	HIGHLAND DR	70029	NE 2 ST	126 AV NE
65335	SE Eastgate	SE 35 PL	70031	124 AV NE	NE 4 ST
66730	164 AV NE	NE 20 ST	70032	124 AV NE	NE 5 ST
66910	168 AV SE	SE 19 ST	70033	NE 2 ST	126 AV NE
66920	168 AV SE	SE 21 PL	70034	128 AV NE	MAIN ST
66966	W Lk SAMM PKW SE	SE 12 PL	70035	128 AV NE	MAIN ST
66967	W Lk SAMM PKW SE	SE 12 PL	70036	128 AV SE	SE 4 PL
66990	SE 34 ST	168 PL SE	70037	128 AV SE	SE 4 PL
67024	SE 36 ST	142 PL SE	70038	128 AV SE	SE 7 PL
67030	SE 34 ST	166 AV SE	70039	128 AV SE	SE 7 PL
67032	SE 36 ST	132 AV SE	70183	98 AV NE	NE 24 ST
67080	SE 26 ST	170 AV SE	70185	98 AV NE	NE 27 ST
67110	168 AV SE	SE 21 PL	70187	98 AV NE	NE 30 ST
67130	168 AV SE	SE 17 ST	70560	100 AV NE	NE 18 ST
67290	164 AV NE	NE 18 ST	70778	140 AV NE	NE 30 PL
67935	108 AV SE	SE 2 ST	70792	140 AV NE	NE 12 ST
68301	180 AV NE	NE 19 PL	70801	140 AV NE	NE 1 ST
68302	180 AV NE	NE 19 PL	70844	140 AV NE	NE 14 ST
68303	180 AV NE	NE 16 ST	70868	140 AV NE	NE 48 PL
68304	180 AV NE	NE 16 ST	71132	W LK SAMM PKWY SE	SE 40 PL
68305	NE 13 ST	179 PL NE	71134	SE 38 ST	166 AV SE
68306	NE 13 ST	179 PL NE	71135	SE 38 ST	WLSP SE
68307	176 AV NE	NE 13 ST	71137	Kamber Rd (140 PL SE)	SE 20 ST
68308	NE 13 ST	177 AV NE	71138	Kamber Rd (140 PL SE)	SE 20 ST
68490	156 AV SE	SE 4 ST	71151	W LK SAMM PKWY NE	NE 2 PL
68591	145 PL SE	SE 13 PL	72886	Somerset Blv	SE 43 ST
68671	118 AV SE	2500 DRWY	72888	Somerset Blv	SE 44 ST
68672	118 AV SE	2500 DRWY	74457	EAST BASE RD	124 AV NE
68673	118 AV SE	3010 DRWY	74466	112 AV NE	NE 26 PL
68674	118 AV SE	3010 DRWY	79877	SE 37 ST	15220 (DRWY)
68710	156 AV NE	NE 1 ST	81488	130 AV NE	NE 32 ST
68802	I-405 (SB OFF RAMP)	COAL CREEK PKY	81492	131 AV NE	NE 33 ST
68804	ADDR 15727 DRWY	NE 4 ST	81496	NE 36 ST	134 AV NE
68807	SE 66 ST	COAL CK PKWY SE	81498	134 AV NE	NE 37 PL
69050	104 AV SE	SE 14 ST	81500	134 AV NE	NE 37 PL
69060	104 AV SE	SE 16 ST	81502	NE 40 ST	132 AV NE
69070	104 AV SE	1659 (ADDRESS)	81504	132 AV NE	4206 (DRWY)

Table VIII-2 (continued)
Current Inaccessible Stops Recommended for Accessibility Improvements

Zone #	Street	Cross-Street	Zone #	Street	Cross-Street
81506	132 AV NE	NE 47 ST	82720	MAIN ST	106 AV SE
81508	132 AV NE	NE 50 ST	84829	NE BEL-RED RD	NE 20 ST
81614	134 AV NE	3806 (MAILBOX)	98730	114 AV NE	NE 6 ST
81618	131 AV NE	NE 36 ST	99052	COAL CREEK PKWY	124 AV SE

Bus Stop Amenities

Passenger comfort and convenience is essential to the success of a transit stop. Passenger amenities are installed at selected bus stops to improve passenger comfort and the relative attractiveness of transit as a transportation alternative. Factors that influence the selection of amenities at any given bus stop include:

- Average daily boardings,
- Proximity to major trip generators,
- Passenger transfer activity,
- Planned neighborhood improvements,
- Transit corridor marketing efforts,
- Equity among communities in the County,
- Proximity of other nearby sheltered areas, and
- Customer and community requests.

While not all stops require the same amenities, it is important that each stop be easily identifiable. Passengers should be able to recognize a stop immediately, through legible signage or an identifiable logo. Every stop should contain at a minimum, an accessible landing pad, bus sign, and schedule.

The description of desirable amenities for different types of stops is intended to illustrate what can be done to promote transit use by other public agencies (such as the City of Bellevue or Bellevue Community College) or private property owners (such as Crossroads Mall or Overlake Hospital) and is not intended to imply that Metro will solely be responsible for providing these amenities. The placement of bus stops and bus stop spacing is primarily determined by Metro, although the access to the right-of-way or private property within the City of Bellevue is controlled by the City or other property owner.

Metro has developed a set of standards to guide the implementation of certain kinds of bus stop amenities to assist in prioritizing their investments. Metro implements these standards to the extent that funding allows, and maintains the shelters and bus stop amenities that they have installed

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The following sections discuss different types of bus stop amenities. In addition, existing amenity needs, current Metro bus stop amenity standards, and locations of unidentified Metro needs are profiled. Finally, a proposed prioritization process based on a hierarchy of stops is outlined.

Shelters

Transit shelters are installed at selected bus stops to provide weather protection as well as seating for waiting passengers. Shelter protection is crucial in attracting transit customers in the Puget Sound's rainy environment. In Bellevue, 16 percent of bus stops (128 locations out of 828 stops) have bus shelters.

Metro Shelter Installation Standards

In most cases - an exception being the shelters on NE 8th Street - new shelter purchase and installation is the responsibility of Metro. According to Metro standards, additional shelters are warranted in Bellevue. The East King County standard prioritizes shelter installation at bus stops with ridership exceeding 25 boardings per day. The demand for shelters exceeds the available resources; Metro has a backlog of shelter installation needs.

Within Bellevue, 42 identified locations exceed 25 boardings per day of these, two already have shelters. Table VIII-3 shows the 40 identified locations that do not currently have shelters; of these, 19 are potential shelter sites that are not already planned for shelter installation. The other zones on the list are not eligible for shelters due to lack of room for a shelter because of limited ROW or pre-existing awnings, safety concerns with existing driveways (those locations having been denied by City), or are deactivated stops that are not in current use or layover stops where boarding counts indicate driver ons and offs.

Occasionally physical restrictions inhibit the construction of bus stop shelters. For instance, some stops have physical barriers (such as being adjacent to a rockery), which preclude installing a shelter without significant retaining wall modifications. The consequent high cost of installation has precluded a shelter being installed, despite the high number of boardings. The placement of new shelters also needs to consider sight distance from adjacent streets and driveways, as well as clear zone setbacks for adjacent vehicular traffic. These and other traffic engineering elements are addressed during the shelter design and approval process.

In addition to the high-ridership locations with shelters, some bus stops in Bellevue have shelters, yet ridership does not warrant these shelters. Currently, 68 shelters in Bellevue have fewer than 25 daily boardings, and of these, 25 serve 5 or fewer boardings per day. The maintenance costs at each of these shelters, including trash accumulation and vandalism repair, are important financial considerations for transit agencies. While shelters may be moved from an existing location to one where they are warranted, the implications to existing patrons also need to be considered.

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**Table VIII-3
Bus Stops Meeting Shelter Warrants using Metro Standards**

Stop No.	On Street	Cross Street	Ons	Feasible
65327	SE EASTGATE WY	14360 DRWY	48	F
66720	164 AV NE	NE 24 ST	40	N
67430	NE 8 ST	164 AV NE	27	N
67580	NE 8 ST	120 AV NE	29	F
67610	NE 8 ST	108 AV NE	29	DW
67620	BELLEVUE WY NE	NE 4 ST	163	P
67630	BELLEVUE WY NE	NE 1 ST	35	A
67636	110 AV NE	NE 12 ST	49	F
68020	BELLEVUE WY SE	SE 3 ST	75	F
68035	BELLEVUE WY NE	MAIN ST	26	F
68081	NE 8 ST	118 AV NE	32	F
68167	NE 8 ST	143 AV NE	27	F
68435	156 AV NE	NE 13 ST	31	N
68770	156 AV NE	NE 15 ST	62	F
68804	ADDR 15727 DRWY	NE 4 ST	42	L
69022	NE 10 ST	102 AV NE	98	L
69024	NE 10 ST	BELLEVUE WY NE	46	F
69025	NE 10 ST	108 AVE NE	47	F
70836	140 AV NE	NE 3 ST	41	F
71331	152 AV NE	NE 24 ST	59	F
73244	148 AV NE	4685 (ADDRESS) DRWY	29	F
73248	148 AV NE	NE 40 ST	42	F
73270	148 AV NE	NE 34 ST	30	F
73290	148 AV NE	NE 29 PL	44	F
74155	INT'L SCHOOL	128 AVE SE	98	L
74525	NE 20 ST	NE BEL-RED RD	49	N
79868	FACTORIA BLVD SE	SE 38 ST (OPP 7-11)	32	F
79880	FACTORIA BLVD SE	SE 40 LN	128	F
79890	FACTORIA BLVD SE	SE 42 ST	45	F
79900	FACTORIA BLVD SE	SE NEWPORT WY	48	P
80380	FACTORIA BLVD SE	SE NEWPORT WY	42	F
80390	FACTORIA BLVD SE	SE 42 ST	25	F
80400	FACTORIA BLVD SE	SE 40 LN	73	L
80492	112 AV NE	NE 4 ST	51	A
81633	NORTHUP WY	130 AV NE	26	P
84824	NE BEL-RED RD	140 AV NE	26	F
84890	148 AV SE	MAIN ST	34	DW
85640	NE 4 ST	108 AV NE	94	P
85750	BELLEVUE WY NE	NE 4 ST	30	P
86750	BELLEVUE WAY NE	NE 6 ST	57	F
F=feasible, N=not feasible, due to lack of right-of-way, school problems, only ph hr boarding, safety. DW=driveway, A=awning, P=planning underway, L=low Note: Bus stops 67700 and 68420 were deleted because these stops already have a bus shelter.				

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Benches

Benches are generally installed inside all standard shelters. Benches may also be installed independently at bus stops where average daily boardings do not warrant shelter installation, but where some level of amenity is justified. Benches may also be installed as one element of an improved streetscape; in this case, efforts should be made to locate benches near bus stops (so long as they do not create barriers to accessible bus boarding, debarking, or sidewalk usage).

Metro Bench Installation Standards

King County Transit considers benches for bus stops with 15 or more daily boardings, plus special requests from schools, hospitals, or elderly persons for benches. King County Metro is interested in working with in developing a program to establish benches along major transit corridors. Metro is also considering implementing a program to place stand alone benches at stops with higher ridership levels. The full details of this potential new program have yet to be developed. Metro currently does not track individual bus bench locations.

Where the use of the stop and overall funding allows the transit agency to install standardized benches, the transit agency will maintain them. In other locations, Metro encourages benches to be provided by the City in the public right-of-way or by local organizations or property owners. Metro must approve the design to ensure accessibility and security, and ongoing maintenance is guaranteed by the private or public entity furnishing the amenities.

Trash Cans

Trash cans are an important element of maintaining a clean and trash-free environment around bus stops. Transit patrons generate trash while waiting for their bus, whether it is a drink, food, or newspaper. To maintain the transit system's image and to reduce neighborhood complaints about bus stop cleanliness, trash cans are essential.

The installation of trash receptacles is typically a systemwide decision and the size, shape, and color reflect transit agency policy. Not all bus stops have trash receptacles. Low patron volumes may not justify this amenity at a bus stop; however, litter at a site may warrant the inclusion of a trash receptacle at an otherwise low-volume location. Non-riders frequently overload Metro trash cans near fast food vendors. For bus stops in locations with large commercial trash producers, the City should use part of the business tax to supplement the number of and frequency of collection from trash cans.

Metro Trash Can Installation Standards

Metro installs and maintains trash cans at most stops where it has installed shelters. According to Metro, trash cans are sometimes removed from shelters and stops if vandalism occurs regularly.

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Trash cans are placed at individual stops only through the Adopt-a-Stop program, where their maintenance is guaranteed by local property owners, organizations, or cities.

Telephones

Telephones at bus stops offer many potential benefits for bus patrons (see Figure VIII-5). Patrons can make personal and emergency calls while waiting for the bus. Telephones also can provide real-time bus arrival information. Some transit agencies have explicit policies regarding the telephone installation at bus stops. National experience has been mixed. For example, installing telephones at bus stops can create opportunities for illegal or unintended activities, such as drug dealing and loitering, in and around bus stops. Loitering by non-bus patrons at bus stops appears to increase when telephones are installed; this increased loitering may discourage bus patrons from using the facility.

Figure VIII-5
Example of Shelter/Telephone Installation at Bellevue Transit Center



A national trend has been to remove pay telephones from the streetscape. This trend has been driven by the explosive growth of cellular telephones, which render pay telephones less economically effective.

Metro Telephone Standards

Metro does not have an explicit policy regarding installation of telephones at bus stop locations. Telephones have been installed at the Bellevue Transit Center and park-and-ride locations. Whenever possible, stops should be located near local businesses that can provide secure locations for pay telephones to keep them in working order.

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Lighting

Lighting significantly influences riders' and non-riders' perception of safety and security. Conversely, the lack of lighting may encourage unintended use of the facility during hours, and especially after hours. Lighting is especially important considering the amount of daylight during the winter-time, as patrons may arrive and return to the stop in darkness. Lighting is also a major issue with regard to shelter maintenance. In general, a well-lit stop is less likely to have vandalism problems.

According to a recently completed survey "Safety Questions and Responses for Eastside Regular and Infrequent Bus Riders," there is concern for passenger safety after dark. Ninety-two percent of respondents were either somewhat or very satisfied with personal safety waiting for the bus in the daytime; only 64 percent were either somewhat or very satisfied during nighttime. Improved lighting and security features should be a long-term goal to address this perception.

Metro Lighting Installation Standards

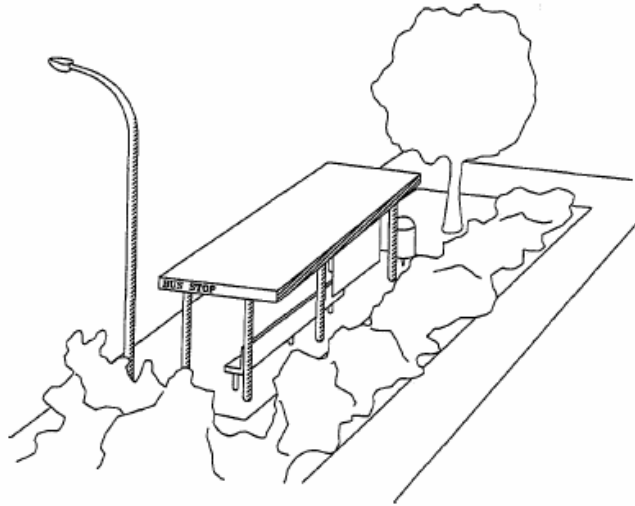
In 1995, Metro adopted a Bus Zone Lighting Improvement Program, which identifies bus zone areas with high crime levels or perceived crime areas, and develops lighting improvements. Lighting improvement requests can be from the general public, neighborhood groups, operators, or local law enforcement agencies. Requests are prioritized based on number of passengers, the light-levels at the existing stops, and the number of comments/complaints by residents, operators, passengers, and law enforcement agencies.

Bus stop locations where lighting improvements are most suitable are:

- Locations served by a high-frequency bus route with all-day and evening service.
- Locations where street lighting already exists in the area.
- Locations serving a high number of transit riders.
- Locations that have been identified as a site of security complaints and illegal activity.

Lighting improvements should be developed to limit impacts to adjacent residents. The City, Metro, and Puget Sound Energy should partner to provide low cost power and lighting to bus shelter sites along major transit corridors. Figure VIII-6 provides an example of shelter lighting.

Figure VIII-6
Example of Coordinating Shelter Locations with an Existing Street Light³



Lighting improvement costs vary from a few hundred dollars to a few thousand, depending on whether an existing pole can be used or if a new one must be installed. Funding from Metro is available to jurisdictions that have entered an agreement to work together as part of its Bus Zone Lighting Improvement Program.

The City of Bellevue and Metro currently do not have an agreement to implement the Bus Zone Lighting Improvement Program within city limits. The standard lighting agreement between Metro and local jurisdictions calls for, among other things, installation of lighting improvements by Metro but ongoing operation and maintenance costs are assumed by the local jurisdiction.

Bicycle Storage Facilities

Bicycle storage facilities, such as bike racks, may be provided at bus stops for the convenience of bicyclists using transit. Designated storage facilities discourage bicycle riders from locking bikes onto the bus facilities or on an adjacent property. Proper storage of bicycles can reduce the amount of visual clutter at a stop by confining bikes to one area. Recommendations regarding bicycle storage facilities are:

- Provide paved access to the bus stop and construct the waiting area with non-slip concrete or asphalt that is properly drained.
- Locate the storage area away from other pedestrian or patron activities to improve safety and reduce congestion.
- Coordinate the location of the storage area with existing on-site lighting.

³ TCRP Report 19, Guidelines for Location and Design of Bus Stops

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- Do not locate the storage area where views into the area are restricted by the shelter, landscaping, or existing site elements, such as walls.

Many prefabricated storage methods are available, however, as bicycle prices have escalated in recent years, interest has grown in storing bikes in completely enclosed containers called bike lockers or taking bikes on the bus. Although the transit agency can obtain revenue from renting bicycle lockers to patrons, bike lockers are large and awkward to place next to bus stop shelters on sidewalks and present additional surfaces at a bus stop for graffiti (see Figure III-7). For these reasons, they can be expensive to maintain.

It appears bicycle storage is associated with the commuter market and should be installed when demand warrants, which is primarily at major suburban stops. Where substantial bike activity exists, such as in university towns, on-vehicle bike programs are a major asset. Regional demographics should be carefully reviewed prior to implementing such a program.

Figure VIII-7
Example of Bicycle Locker⁴



Metro/Sound Transit Bicycle Storage Facility Standards

Metro has installed bicycle facilities at the major park-and-ride and transit centers within the City of Bellevue. Four bicycle lockers are available at both the Eastgate and South Kirkland park-and-ride lots. In addition, bicycle racks (uncovered storage) are available at the South Bellevue, South Kirkland, Overlake, and Eastgate park-and-ride lots, as well as the Bellevue Transit Center.

Metro and Sound Transit are working concurrently to develop a bicycle demand estimation model to assist with developing appropriate capital facilities.

For Sound Transit-funded projects, Sound Transit works with local jurisdictions and communities to determine appropriate bicycle improvements such as creating or enhancing bicycle connections and posting signs on established bicycle routes within a half-mile radius

⁴ TCRP Report 19, Guidelines for Location and Design of Bus Stops

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of stations and transit centers. All Regional Express transit centers will supply racks and/or lockers for bicycles. The goal is for every cyclist to have access to storage. Sound Transit will continue to design facilities with adequate space for maneuvering bicycles through stations. The Bellevue Transit Center is currently in the process of developing a Rider Services Facility that will include bike lockers and an enclosed bike station.

Bus Stop/Schedule Information

All Metro bus stops within Bellevue are marked with the routes that serve that location. However, providing additional information to customers is an often neglected but crucial aspect of providing high-quality transit service that will attract additional ridership. Information for riders about service characteristics, such as routes, hours of service, and frequency, is critical.

At present, the lack of information on bus stop signs continues to be a lost marketing opportunity for local transit operators. A non-transit user gains little from driving by a bus stop sign with a route number on it. Transit visibility can be improved when a sign includes destinations for each route in text sized to be legible to drivers and includes the King County Metro telephone number for rider information. Figure VIII-8 reflects the types of information that might be displayed on King County Metro bus schedules to enhance passenger information at bus stops.

Figure VIII-8
Examples of Bus/Stop Schedule Information



Passengers arriving at a stop should be able to find how to get where they are going and know how long a wait to expect. Therefore stops should provide:

- Route names and destinations for all routes serving the stop.
- Span of service and frequency of service.
- Service schedule for low-frequency routes.
- A system map.

Metro Schedule Information Standards

Most Metro bus stops have a schedule holder attached to the bus stop sign post. The schedule information includes the Metro phone number, the direction the bus is going, and the times of service. The schedule holder does not include a small route map.

Vandals often remove the schedule information holders, leaving transit patrons with no way to know where a bus goes, which direction it is traveling, or when it is coming.

Landscape Features

Landscaping can enhance the level of passenger comfort and the attractiveness of using transit, but it should be positioned and maintained so that safety and accessibility are not compromised by encroaching bushes, uneven grass surfaces, etc. Tree branches that extend into the roadway below 11 feet should be trimmed back at least two feet from the curb; otherwise, they become an obstacle that the bus driver may or may not be able to avoid hitting. Grass should not be planted between the sidewalk and the curb at bus boarding and debarking areas; at least 5 feet parallel to the street and eight feet perpendicular to the street must be solid to meet ADA requirements. Although a wheelchair lift may be able to span a well-trimmed planter strip and rest levelly on the sidewalk, the grass presents an uneven or unstable surface for ambulatory customers, which could be hazardous.

Metro Landscaping Standards

Property owners in the vicinity, including city street landscaping programs, are encouraged to place landscaping in the vicinity of stops as long as accessibility or visibility for security purposes is not compromised. Landscaping and landscaping maintenance is provided by the transit agency where the stop is placed on property owned by the agency.

Intelligent Transportation Systems (ITS) Features

One of the constant challenges of bus service is informing patrons about when the bus is to arrive. While existing schedule information on each bus stop is an important step, real-time information is extremely valuable to transit riders. Such information requires the deployment of an automatic vehicle location (AVL) system to track bus locations. The AVL data can be converted into bus arrival times, which can then be displayed at bus stops, on kiosks, or transmitted over information networks. Passengers benefit because (1) if there is sufficient time, they may decide to leave the bus stop and return closer to the arrival time of their bus and (2) even if they decide to wait, knowing when the bus will arrive, reduces the anxiety associated with waiting.

Studies have shown that perceived waiting time for transit is twice as long as actual waiting time. Real-time arrival time information has the ability to reduce this factor significantly. Examples of worldwide implementation of stop level real-time arrival data include Orlando, Los Angeles, and Dublin are shown in Figure VIII-9.

Figure VIII-9
Examples of Real-Time Schedule Information



**Lymmo Station with
Next Bus LED Display**



LACMTA Next Bus Display



**Dublin Bus Real Time
Traveler Information**

Real-time “next bus” displays are appropriate for high-ridership and high-transfer locations, transit centers, and park-and-ride lots. In preparation for such technologies, whenever feasible, new bus stop locations and improvements to existing stops should provide for electrical hardwiring for ITS functions. Installation of ITS features would provide the following benefits:

- Improved marketing of transit.
- Improved access to information for existing and potential customers.
- Increased relative attractiveness of transit to choice riders.
- Potential for more up-to-date, accurate, and complete information. Information could be updated using advanced vehicle location technology as well as through centralized distribution of information

Metro ITS Efforts

Metro is considering future installation of such ITS features as real-time next-bus bus arrival information and electronic posting of schedules. A prototype was operating at the Bellevue Transit Center prior to its reconstruction and two real-time monitors (Figure VIII-10) are incorporated into the reconstructed Bellevue Transit Center design.

Figure VIII-10
Bellevue Transit Center Real-Time Monitor
(above information booth)



Bus Stop Amenities Summary

Each of the capital improvements listed above have real benefits for passengers and yet may also have some drawbacks, such as ongoing costs. Table VIII-4 summarizes each type of amenity and the advantages and disadvantages of their implementation.

Bus Stop Amenity Prioritization

As described in the individual bus stop amenities section, Metro has explicit standards for some bus stop amenities. Metro is also beginning to target specific corridors for amenity improvements, which include shelter placement, lighting, and bus stop consolidation.

The City of Bellevue, through this plan, intends to build upon the success of the Metro process, and create a comprehensive, multi-step process that guides the level of investment required at each bus stop. This process accounts for the fact that higher passenger volume stops necessitate structures such as shelters and benches, or other amenities such as telephones, lighting, route map with schedules, and even bicycle storage areas.

To direct amenity developments, three different bus stop amenity levels are proposed: local stop, primary local stop, and transit hub. Transit centers and park-and-ride lots are discussed in separate chapters and are not included in the amenity hierarchy discussed here. The hierarchy of amenity level is based on the number of daily passengers and the number of routes served. Land uses also play a role in determining the amenity level of the stop. The recommended amenities for each bus stop level are outlined in Table VIII-5 and further explained below.

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Local Transit Stop

The local transit stop is an access point serving primarily residential areas and smaller retail areas, and generates the lowest boarding volume. At a minimum, the local transit stop should have a bus stop sign mounted on a post, route schedule, and ADA required landing pad. The sign should be easily recognizable and legible, with the route number and customer service telephone number located on it. A "keywalk" or an accessible pathway should be provided from the bus stop landing pad to an accessible route (sidewalk or pedestrian pathway).

Primary Local Stop

Primary local stops are those that receive regular use several times a day. Areas where bus routes cross and transfers are possible should be considered, at a minimum, a primary local stop. These stops are usually located near major intersections, and can include all land use types. The higher frequency of use dictates additional passenger amenities. The primary local stop should include, at a minimum, a sign mounted on a post, ADA required landing pad, a passenger shelter with a bench, a route schedule, route map, and a trash receptacle. Other beneficial amenities may include security lighting, telephone, and landscaping.

**Table VIII-4
Summary of Bus Stop Amenities**

Amenity	Advantages	Disadvantages
Bus Shelters	<ul style="list-style-type: none">• Provide a place of comfort for waiting passengers• Provide protection from elements (sun, glare, wind, rain, snow)• Help identify the transit system• Can provide a venue for establishing lighting at a site• Can provide a space to install route and schedule information	<ul style="list-style-type: none">• Require maintenance, trash collection• May be used by graffiti artists• Must be located outside of sight lines from adjacent street/driveways.• Can create vehicular clear zone concerns.
Benches	<ul style="list-style-type: none">• Provide comfort for patrons• Help identify the stop• Are a low-cost amenity when compared to installing a shelter.	<ul style="list-style-type: none">• Require maintenance• May be used by graffiti artists
Trash Cans	<ul style="list-style-type: none">• Provide place to discard trash• Keep bus stop clean	<ul style="list-style-type: none">• May be costly to maintain• May be used by customers of nearby land use• May smell
Telephones	<ul style="list-style-type: none">• Are convenient for bus patrons• Provide access to transit information	<ul style="list-style-type: none">• May encourage loitering at or near bus stop by non-bus patrons• May encourage illegal activities at bus stop
Lighting	<ul style="list-style-type: none">• Increases visibility• Increases perceptions of comfort and security by patrons• Discourages “after hours” use of bus stop facilities by indigents	<ul style="list-style-type: none">• Requires maintenance of lighting elements• Can be costly
Bicycle Storage Facilities	<ul style="list-style-type: none">• Increases transit draw area• Discourages locking bicycles to bus facilities or on adjacent property	<ul style="list-style-type: none">• Require additional sidewalk space• May attract graffiti
Bus Stop/Schedule Information	<ul style="list-style-type: none">• Is useful to first-time riders• Helps identify the bus stop• Can communicate general system information	<ul style="list-style-type: none">• Must be maintained to provide current route or schedule information• May be popular surface for graffiti
Landscape Features	<ul style="list-style-type: none">• Improves overall passenger waiting experience• May improve passenger safety	<ul style="list-style-type: none">• Can be costly• Can negatively affect sight distance.
ITS Technology	<ul style="list-style-type: none">• Real-time arrival data dramatically improve passenger experience	<ul style="list-style-type: none">• Expensive, up-front cost

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Table VIII-5
Bus Stop Levels and Amenities

Components	Local	Primary Local	Transit Hub	Transit Center	Park-and-Ride Lot
Bus stop sign	●	●	●	●	●
Schedule	●	●	●	●	●
Disabled Access	●	●	●	●	●
Passenger Shelter		●	●	●	●
Route Map/Schedule		●	●	●	●
Benches		●	●	●	●
Trash Receptacle		●	●	●	●
System Map/Fare Info.		●	●	●	●
Lighting		●	●	●	●
Landscaping		●	●	●	●
Public Telephone		●	●	●	●
Bicycle Storage		●	●	●	●
Information Kiosk		○	●	●	●
Auto Parking			●	●	●
Real-Time Schedule Information (ITS)			●	●	●
Cash Machine			●	●	●
Post Office Vending			●	●	●
Retail Kiosk			●	●	●
Turnarounds			○	●	●
Concierge Services				●	●
Day Care Center				●	●
Joint Development				●	●
On-Site Management				●	●
Taxi Stand				●	●
Bathrooms			○	○	○
<p>● Essential</p> <p>Legend: ● Beneficial in Most Situations</p> <p>○ Beneficial in some Situations</p>					
<p>Notes:</p> <p>1) Essential amenities may not be possible in some locations due to physical attributes of the site, or cost disproportionate to the use of the bus stop.</p> <p>2) King County Metro does not provide most of the amenities on this list, so City or private participation is assumed to implement and maintain both essential and beneficial amenities for bus stops within Bellevue.</p>					

Transit Hubs

The transit hub concept serves as a hybrid between the primary local stop and the transit center. The transit hub provides many of the same amenities found at a primary local stop, while also adding to the usefulness of neighborhood centers. They are located near activity centers such as college campuses, parks, government centers, and shopping areas. They have facilities that focus on conveniences in residential and mixed-use land types. The transit hub would include all of the items that are both essential and beneficial at a primary local stop. Additional amenities include items such as bicycle storage and an information kiosk. Some beneficial, but not necessary items would be public telephones, real-time bus arrival time information (ITS), bathrooms, a cash machine, and a retail kiosk. Transit hubs can be targeted for neighborhood commercial centers already containing many development pads for cash machines, photo drops, food concessions, postal outlets, and drop boxes.

Proposed Bus Amenity Prioritization Methodology

Each of the 828 transit stops within the City of Bellevue was analyzed to determine its potential position in the hierarchy presented as described in the previous section. The analysis was based on five categories:

- Number of Routes (1-3 points)
- On Transit Priority Network (1-3 points)
- Boardings (1-5 points)
- Transit Propensity (1-3 points)
- Proximity to Transit Attractors (0-2 points)

A scoring methodology was applied to each stop based on the above criteria. Each passenger stop was given a total score based on this evaluation. The stop was then assigned a position in the hierarchy (i.e., local transit stop, primary local stop, transit hub, etc.) based on the score it received. However, transit center classification was given to existing transit centers. As noted, transit centers are discussed in Chapter XI and are not included in the amenity hierarchy discussed here. The criteria and scoring system are explained in the following sections.

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Number of Routes

The number of routes determines the amount of transfer activity that is likely to occur. Stops with high transfer activity are usually classified as at least a primary local stop, and usually require additional amenities such as shelters and benches. The scoring methodology is shown below:

One Route	1 point
Two Routes	2 points
3 or more Routes	3 points

On Transit Priority Network Status

The frequency of routes determines the likelihood of future boarding activity. Corridors with high service frequencies are likely to attract greater numbers of riders, and therefore should be targeted for improved amenities such as shelters and benches. The scoring methodology is shown below:

Local Transit Access	1 point
Minor Transit Corridor	2 points
Principal Transit Corridor	3 points
Transitway	3 points

Boardings

The number of boardings determines the amount of pedestrian activity located at the stop (except at park-and-ride locations). A large number of boardings at a stop is usually due to greater transfer activity or nearby activity centers. The number of average daily weekday boardings was used to determine each stop's classification. Stops with high boardings are usually classified as at least a primary local stop that requires additional amenities, such as shelters and benches. Because this characteristic has the greatest impact on amenity needs, this criterion's scoring is weighted higher than other criterion:

0-10 boardings	1 point
10-25 boardings	3 points
25+ boardings	5 points

Transit Propensity

Transit propensity measures the probability of transit ridership. Pedestrian projects in an area with higher transit propensity should be prioritized over those with lower transit propensity.

Transit propensity may be determined by population density, elderly population density, vehicle accessibility (auto ownership), and income. All four measures are readily

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available from the 2000 Census. For the purposes of measuring transit propensity, elderly is defined as those 65 years of age or older. The four measures were chosen because:

- High population densities tend to foster greater transit use.
- Elderly are much more likely to use transit, therefore, elderly population is measured.
- People not owning automobiles are more likely to use transit than those who do.
- Low-income residents are more likely to use transit than high-income residents.

The City completed a GIS analysis on 2000 Census data that summarized the demographics of each census tract. The data in each census tract were grouped by statistical analysis into four different categories: low, medium-low, medium-high, and high. These categories were then assigned a corresponding point value of 1 to 4. The point values for each census tract were summed to produce an average propensity score between 4 and 16 points. For pedestrian projects in several census tracts, the average score of the affected tracts was calculated. The next step was to reduce the scores to high, medium, and low propensity. Census tracts that had propensity one standard deviation above the mean were assigned a high propensity, census tracts that had propensity one standard deviation below the mean were assigned a low propensity, and all other tracts were assigned a medium propensity.

The scoring methodology is shown below:

Low Transit Propensity	1 points
Medium Transit Propensity	2 point
High Transit Propensity	3 points

Proximity to Transit Attractors

Transit attractors are defined as commute trip reduction employment sites, shopping and governmental facilities, libraries, hospitals, medical facilities, and other high pedestrian generators. Stops near several transit attractors are likely to generate more use, and thereby should be given additional weighting for stop amenities. The scoring methodology is shown below:

Within ¼ mile of Zero Transit Attractors—	0 points
Within ¼ mile of One Transit Attractors—	1 point
Within ¼ mile of Two or more Transit Attractors	2 points

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Hierarchy Application

Based on the total score, each stop was then categorized into a stop hierarchy. The scoring methodology is shown below:

Local Transit Stop	0-8 points
Primary Local Stop	9-12 points
Transit hub	13 or more points
Transit Center	Already designated

Based on the hierarchy application, the majority of bus stops within Bellevue are categorized as local transit stops, 430. An additional 354 stops are categorized as primary local stops, and 42 are categorized as transit hubs. The results of the hierarchy application are found in Table VIII-6.

Table VIII-6
Bus Stop Improvement Needs Summary⁵

	Bellevue System	Upgrade Desired	Percent Complete	Cost to Complete
Transit Center Stops	11	0	100%	0
Transit hubs	36	36	0%	\$1,746,000
Primary Local Stops	241	171	29%	\$3,560,000
Local Transit Stops	535	535	0%	\$267,500
Total	823	742	10%	\$5,573,500

Implementation Strategies

Several strategies have been identified to enhance the bus-riding experiences of transit patrons and provide community enhancement:

- *Work with Metro* – As the primary service provider and the agency currently responsible for the vast majority of bus stop amenities operations and maintenance, Metro will be responsible for implementing the recommended improvements. The City of Bellevue could continue and expand its involvement with Metro by remaining involved in corridor improvement programs (156th Avenue NE) and developing a Bus Zone Lighting Program. The City of Bellevue and Metro should also continue their successful efforts at obtaining ADA accessibility grants, which is currently being used to make bus stops accessible.

⁵ The cost estimates reflected in the table above are subject to further field evaluations. For example, the designation of "Primary Local Stops" presumes an aggressive shelter enhancement program throughout the City; this would include shelter installs at bus zones with less than 25 boardings per day (to encourage ridership at locations with market conditions suggesting untapped latent demand). At present, the above estimate reflects the high-end of the type of investments required. Were the sites reflected to receive a basic upgrade the cost could be as little as \$500 per location as compared to the \$20,000 per location reflected (which presumes a shelter install).

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- *Work with Sound Transit* – Sound Transit provides high levels of service on several Bellevue corridors; the primary ones being 112th Avenue SE and Bellevue Way SE. Sound Transit, through its capital program, has developed a higher standard of bus stop amenities. The City of Bellevue should begin working with Sound Transit to provide these higher levels of bus stop amenities at stops served by Sound Transit on arterials. Bellevue Way SE should be the initial focus of this effort.
- *Implement Community Bus Stop Adoption* – The Lynx system in Orlando, Florida has been a front-runner in involving the community to assist in the design and maintenance of community bus stop facilities. The City of Bellevue should consider implementing a more involved bus stop adoption process with the ultimate goal of improving neighborhood amenities by having the neighborhoods themselves supporting this aim.
- *Create City of Bellevue Process to Fund Bus Stop Amenity Investments* – Due to funding constraints of the local transit service providers, cases will arise where bus stop amenity priorities for the City of Bellevue or one of its neighborhoods are not funded. To address this, the City should consider creating a process in its own CIP process to fund and construct bus stop facilities.

Recommendations

The bus stop may be the first image passengers have of transit service within the City of Bellevue, and one of the only lasting images for non-riders. Bus stop facilities are also an important piece of the urban, commercial, and neighborhood environments. Consistent, visible, and user-friendly bus stop design will provide the riders, and potential future riders, the confidence and security of a well-defined, identifiable system.

The description of desirable amenities for different types of stops is intended to illustrate what can be done to promote transit use and is not intended to imply that Metro will solely be responsible for providing these amenities. The placement of bus stops and bus stop spacing is primarily determined by Metro, although the access to the right-of-way or private property within the City of Bellevue is controlled by the City or other property owner.

Two different categories of recommendations are suggested for bus stop amenities within the City of Bellevue. The first category consists of global recommendations, which are applicable at every stop within the City. The other category of recommendations is site specific, and based on the bus stop amenity prioritization process outlined earlier.

Global Bus Stop Amenity Recommendations

The following recommendations are applicable to every bus stop within the City of Bellevue.

- *Add Additional Passenger Information at Bus Stop* – The lack of information on bus stop signs continues to be a lost marketing opportunity for local transit operators. A non-transit user gains little from driving by a bus stop sign with a route number on it. The size of legible sign typeface and the number of routes that may serve a stop has led to information on King County Metro bus signs being limited to route numbers. To improve transit visibility, we recommend a sign template be developed for each set of stops served by common routes. Each sign template should have destinations for each route in text sized to be legible to drivers and include the King County Metro telephone number for rider information. In addition, small maps should be developed showing the routes serving a particular stop to allow pedestrians to see the intermediate destinations that are available. These signs would provide a sense of civic connection to transit service, and would improve transit patron way-finding, improve transit visibility, and give passers-by an opportunity to see where bus service actually goes. Ultimately, this recommendation will improve system marketing and potentially lead to higher ridership city-wide.
- *Refine Schedule Data in Bus Stop Schedule Holders* – Metro should be lauded for having schedule information at the majority of its stops. The information within the schedule holder, however, could be improved. We recommend replacing existing timepoint-based schedule information with a bus-stop specific schedule at every bus stop. The existing schedule information reflects timepoints, not the actual time buses arrive at that stop. Most people do not understand timepoints; they want to know “when will the bus be at my stop?” In addition, a small route map should also be included in the schedule information.
- *Make All Bus Stops ADA Accessible* – One of the City’s goals is to improve accessibility and meet ADA standards. The existing ADA grant efforts confirm this commitment. We recommend that the City continue to support Metro’s efforts to upgrade all bus stops within Bellevue to an accessible standard. Figure VIII-4 and Table VIII-2 show the inaccessible bus stops in Bellevue. These stops should be prioritized for improvements as funding becomes available. In this regard, higher ridership stops should be prioritized for accessibility improvements over lower ridership stops. Upgrading the 113 inaccessible Bellevue stops to current accessible standards will require at a minimum \$1,000,000⁶. The costs presented here do not include the cost to the City to install a continuous sidewalk for the block where the stop exists, and for the distance necessary to form a connected ADA pathway.

⁶ Based on an average cost of \$8,666 per improvement (derived from \$156,000 ADA grant fixing 18 stops in Bellevue). For many of the inaccessible bus stops, the average cost of \$8,666 significantly understates the level of effort necessary. Each stop must be examined separately for a more detailed cost estimate.

Individual Bus Stop Amenity Recommendations

Based on the quantitative analysis done using six different evaluation criteria outlined earlier, every bus stop in Bellevue has been assigned one of three different amenity level categories.⁷ Of the 823 stops, it is recommended that new shelters be installed at 186 locations, primarily at transit hubs and primary local stops. The total capital cost estimate for transit-related improvements is \$5,573,500 not including contingency costs (Table VIII-6). Capital improvement recommendations are shown in Table VIII-7.

There are 36 stops shown in Table VIII-7 that are categorized as transit hubs, estimated to cost approximately \$58,000 per location. As outlined in Table VIII-5, each transit hub should include bus stop signage, schedule information, ADA accessibility, shelters, system maps, schedules and fare information, benches, trash cans, landscaping, public telephone lighting, and an information kiosk. Some beneficial, but not necessary items may include public and courtesy telephones, computer bulletin, bathrooms, a cash machine and a retail kiosk. The total estimated cost for these amenities is \$1,746,000, with King County Metro provided amenities comprising only a portion of this total. Some of the amenities reflected would be privately owned and maintained. The City and Metro would need to develop an aggressive program to recruit private provision of these amenities. The City would also need to consider whether or not zoning regulations would have to be altered to allow these activities to take place adjacent to these transit hubs.

The 241 stops shown in Table VIII-7 are categorized as primary local stops. As outlined in Table VIII-5, each primary local stop should have the following amenities: bus stop signage, schedule information, ADA accessibility, shelters, system maps, schedules and fare information, benches, trash cans. Some beneficial, but not necessary items for primary local stops are landscaping, public telephones, lighting, and bicycle storage. Each primary local stop is estimated to cost approximately \$20,000, including labor for installation. The total estimated cost for primary local stops improvements is \$3,560,000.

The remaining 535 Bellevue transit stops are classified as local transit stops. As mentioned in the “Global Bus Stop Amenity Recommendation” section, each of these stops should receive upgraded signage, schedule information, and ADA accessibility; in addition to the local stop amenities outlined in Table VIII-5. Each local transit stop is estimated to cost at minimum approximately \$500, including labor for installation. The total estimated cost for improvements to local transit stops is \$267,500.

⁷ The quantitative analysis conducted as part of the Bellevue Transit Plan does not account for site specific issues that would preclude the implementation of recommendations identified in this section. It is not clear, that zones on the list are eligible for shelters due to lack of room for a shelter because of limited ROW or pre-existing awnings, safety concerns with existing driveways, or are deactivated stops that are not in current use or layover stops where boarding counts indicate driver ons and offs. Occasionally physical restrictions inhibit the construction of bus stop shelters. For instance, some stops have physical barriers (such as being adjacent to a rockery), which preclude installing a shelter without significant retaining wall modifications. The consequent high cost of installation would preclude a shelter being installed, despite the high number of boardings. The placement of new shelters also needs to consider sight distance from adjacent streets and driveways, as well as clear zone setbacks for adjacent vehicular traffic. These and other traffic engineering elements would need to be addressed during the shelter design and approval process.

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Table VIII-7
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
67013	EASTGATE P&R BAY	SE EASTGATE WY	0	3	1	2	2	T	N/A
67014	EASTGATE P & R	BAY 2	3	3	5	2	2	T	N/A
67015	EASTGATE P & R	BAY 1	3	3	5	2	2	T	N/A
67653	NE 6 ST BAY B	108 AV NE	3	3	5	3	2	T	N/A
67654	NE 6 ST BAY C	110 AV NE	3	3	5	3	2	T	N/A
68007	108 AV NE BAY A	NE 6 ST (BTC ENTR)	3	3	5	3	2	T	N/A
68047	106 AV NE	NE 6 ST	3	3	5	3	2	T	N/A
68048	106 AV NE	NE 6 ST	3	3	5	3	2	T	N/A
84268	S BELLEVUE P & R	BAY 2	3	3	5	2	0	T	N/A
84292	BELLEVUE WY SE	S.BELV. P&R (BAY 1)	3	3	5	2	0	T	N/A
85630	108 AV NE BAY D	NE 6 ST	3	3	5	3	2	T	N/A
65327	SE EASTGATE WY	14360 DRWY	3	3	5	2	2	TH	\$58,000
67022	142 PL SE	SE 32 ST	3	3	5	2	2	TH	\$40,000
67430	NE 8 ST	164 AV NE	3	3	5	3	1	TH	\$58,000
67460	NE 8 ST	156 AV NE	3	3	5	3	2	TH	\$40,000
67470	NE 8 ST	156 AV NE	3	3	5	3	2	TH	\$40,000
67480	NE 8 ST	153 AV NE	3	3	5	3	1	TH	\$40,000
67510	NE 8 ST	143 AV NE	3	3	5	3	1	TH	\$40,000
67570	NE 8 ST	124 AV NE	3	3	5	2	2	TH	\$40,000
67580	NE 8 ST	120 AV NE	3	3	5	2	2	TH	\$58,000
67610	NE 8 ST	108 AV NE	3	3	5	3	2	TH	\$58,000
67620	BELLEVUE WY NE	NE 4 ST	3	3	5	3	2	TH	\$58,000
67636	110 AV NE	NE 12 ST	3	3	5	3	2	TH	\$58,000
68085	NE 8 ST	116 AV NE	3	3	5	2	2	TH	\$40,000
68150	NE 8 ST	140 AV NE	3	3	5	3	1	TH	\$40,000
68200	NE 8 ST	156 AV NE	2	3	5	3	2	TH	\$40,000
68360	156 AV NE	NE NORTHUP WY	3	3	5	2	2	TH	\$40,000
68410	156 AV NE	NE 16 PL	3	3	5	3	1	TH	\$40,000
68420	156 AV NE	NE 15 PL	3	3	5	3	1	TH	\$58,000
68435	156 AV NE	NE 13 ST	3	3	5	3	2	TH	\$58,000
68438	156 AV NE	NE 10 ST	3	3	5	3	2	TH	\$40,000
68440	156 AV NE	NE 8 ST	3	3	5	3	2	TH	\$40,000
68750	156 AV NE	NE 10 ST	3	3	5	3	2	TH	\$40,000
68770	156 AV NE	NE 15 ST	3	3	5	3	2	TH	\$58,000
68780	156 AV NE	1616 (ADDRESS)	3	3	5	3	1	TH	\$58,000
69022	NE 10 ST	102 AV NE	2	3	5	3	2	TH	\$58,000
69024	NE 10 ST	BELLEVUE WY NE	2	3	5	3	2	TH	\$58,000
69025	NE 10 ST	108 AVE NE	2	3	5	3	2	TH	\$58,000
70608	NE 8 ST	102 AV NE	3	3	5	3	2	TH	\$40,000
74460	108 AV NE	NE NORTHUP WY	3	3	5	2	2	TH	\$58,000
79868	FACTORIA BLVD SE	SE 38 ST (OPP 7-11)	3	3	5	2	2	TH	\$58,000
80412	FACTORIA BLVD SE	SE 38 ST (OPP BANK)	3	3	5	2	2	TH	\$40,000
80492	112 AV NE	NE 4 ST	3	3	5	3	2	TH	\$58,000
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
80570	116 AV SE	SE 1 ST	3	3	5	2	2	TH	\$40,000
85410	I-90 (WB ON RAMP)	RICHARDS ROAD	3	3	5	2	2	TH	\$40,000
85640	NE 4 ST	108 AV NE	3	3	5	3	2	TH	\$58,000
85770	BELLEVUE WY NE	NE 10 ST	2	3	5	3	2	TH	\$40,000
64750	SE ALLEN RD	138 AV SE	3	3	1	2	1	P	\$20,000
64760	SE ALLEN RD	SE NEWPORT WY	3	3	3	2	1	P	\$2,000
64780	SE NEWPORT WY	129 PL SE	3	3	3	2	0	P	\$20,000
64790	FACTORIA BLVD SE	COAL CREEK PKWY	3	3	3	2	0	P	\$2,000
64835	SE 41 PL	124 AV SE	3	3	3	2	1	P	\$20,000
64845	SE NEWPORT WY	FACTORIA BLVD SE	3	3	5	2	0	P	\$2,000
65300	SE EASTGATE WY	RICHARDS RD	3	3	1	2	2	P	\$20,000
65305	SE EASTGATE WY	146 PL SE	3	3	1	2	2	P	\$20,000
65310	SE EASTGATE WY	148 AV SE	3	3	3	2	1	P	\$20,000
65320	SE EASTGATE WY	150 AV SE	3	3	1	2	1	P	\$20,000
65323	SE EASTGATE WY	160 AV SE	3	3	1	1	2	P	\$20,000
65325	SE EASTGATE WY	146 PL SE	3	3	1	2	2	P	\$20,000
65328	SE EASTGATE WY	158 AV SE	3	3	1	2	2	P	\$20,000
65329	SE EASTGATE WY	158 AV SE	3	3	1	1	2	P	\$20,000
65335	SE EASTGATE WY	SE 35 PL	3	3	1	1	2	P	\$20,000
65480	SE 60 ST	123 AV SE	2	2	5	2	0	P	\$2,000
65500	119 AV SE	SE 58 ST	3	2	5	2	0	P	\$2,000
65520	119 AV SE	SE 52 ST	3	2	3	2	0	P	\$20,000
65630	119 AV SE	SE 58 ST	3	2	3	2	0	P	\$2,000
66710	164 AV NE	NE 24 ST	3	3	3	2	0	P	\$2,000
66720	164 AV NE	NE 24 ST	3	3	5	2	0	P	\$20,000
66780	164 AV NE	NE 8 ST	2	3	1	3	1	P	\$2,000
66790	164 AV NE	NE 6 ST	2	3	1	3	1	P	\$20,000
67012	SE 35 PL	SE EASTGATE WY	3	3	1	1	2	P	\$20,000
67019	139 AV SE	SE EASTGATE WY	3	3	1	2	2	P	\$20,000
67024	SE 36 ST	142 PL SE	3	3	1	2	2	P	\$20,000
67026	SE 36 ST	136 PL SE	3	3	1	2	2	P	\$20,000
67028	SE 36 ST	13451 DRWY	3	3	1	2	2	P	\$20,000
67032	SE 36 ST	132 AV SE	3	3	1	2	2	P	\$20,000
67034	SE 36 ST	FACTORIA BLD SE	3	3	1	2	2	P	\$20,000
67230	164 AV NE	NE 4 ST	3	3	1	3	0	P	\$20,000
67240	164 AV NE	NE 6 ST	3	3	1	2	1	P	\$20,000
67280	164 AV NE	NE 16 PL	3	2	3	2	0	P	\$20,000
67440	NE 8 ST	164 AV NE	3	3	1	3	2	P	\$20,000
67450	NE 8 ST	164 AV NE	3	3	3	3	2	P	\$2,000
67500	NE 8 ST	148 AV NE	3	3	5	3	0	P	\$2,000
67520	NE 8 ST	140 AV NE	3	3	5	3	0	P	\$2,000
67530	NE 8 ST	136 AV NE	3	3	5	3	0	P	\$2,000
67560	NE 8 ST	126 AV NE	3	3	3	2	0	P	\$2,000
67612	NE 8 ST	106 AV NE	2	3	3	3	2	P	\$2,000

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CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
67625	105 AV NE	NE 2 ST	1	3	3	3	2	P	\$20,000
67630	BELLEVUE WY NE	NE 1 ST	3	3	5	3	0	P	\$20,000
67637	110 AV NE	NE 10 ST	2	3	3	3	2	P	\$20,000
67640	BELLEVUE WY SE	MAIN ST	3	3	5	3	0	P	\$2,000
67650	BELLEVUE WY SE	SE 3 ST	3	3	5	2	0	P	\$2,000
67660	BELLEVUE WY SE	SE 6 ST	3	3	1	2	1	P	\$20,000
67670	BELLEVUE WY SE	SE 6 ST	3	3	1	2	1	P	\$2,000
67700	BELLEVUE WY SE	SE 11 ST	3	3	5	2	1	P	\$20,000
67720	BELLEVUE WY SE	SE 16 ST	3	3	5	2	0	P	\$2,000
67943	108 AV SE	SE 10 ST	1	3	3	2	1	P	\$20,000
67990	BELLEVUE WY SE	SE 10 ST	3	3	1	2	1	P	\$20,000
68000	BELLEVUE WY SE	SE 6 ST	3	3	1	2	1	P	\$20,000
68010	BELLEVUE WY SE	SE 6 ST	3	3	1	2	1	P	\$20,000
68020	BELLEVUE WY SE	SE 3 ST	3	3	5	3	0	P	\$20,000
68023	106 AVE NE	NE 10 ST	3	3	1	3	2	P	\$20,000
68026	106 AVE NE	NE 10 ST	3	3	1	3	2	P	\$20,000
68035	BELLEVUE WY NE	MAIN ST	3	3	5	3	0	P	\$20,000
68042	NE 4 ST	105 AV NE	3	3	3	3	2	P	\$20,000
68058	NE 12 ST	112 AV NE	1	3	1	3	2	P	\$20,000
68063	NE BEL-RED RD	148 AV NE	2	3	1	3	1	P	\$20,000
68066	NE BEL-RED RD	124 AV NE	2	3	1	2	2	P	\$20,000
68069	NE BEL-RED RD	143 AV NE	2	3	1	3	1	P	\$20,000
68081	NE 8 ST	118 AV NE	3	3	3	2	2	P	\$20,000
68090	NE 8 ST	120 AV NE	3	3	3	2	2	P	\$20,000
68100	NE 8 ST	124 AV NE	3	3	3	2	1	P	\$2,000
68110	NE 8 ST	126 PL NE	3	3	3	2	0	P	\$2,000
68135	NE 8 ST	136 AV NE	3	3	3	3	0	P	\$2,000
68140	NE 8 ST	140 AV NE	3	3	5	3	0	P	\$2,000
68160	NE 8 ST	143 AV NE	3	3	3	3	1	P	\$2,000
68165	NE 8 ST	143 AV NE	3	3	3	3	1	P	\$2,000
68167	NE 8 ST	143 AV NE	3	3	3	3	1	P	\$20,000
68180	NE 8 ST	148 AV NE	3	3	3	3	0	P	\$2,000
68190	NE 8 ST	153 AV NE	3	3	1	3	1	P	\$2,000
68210	NE 8 ST	156 AV NE	2	3	3	3	2	P	\$2,000
68220	NE 8 ST	164 AV NE	2	3	1	3	2	P	\$20,000
68230	NE 8 ST	164 AV NE	2	3	1	3	2	P	\$20,000
68240	NE 8 ST	164 AV NE	1	3	3	2	1	P	\$20,000
68370	NE 24 ST	156 AV NE	3	3	3	2	1	P	\$20,000
68372	NE 24 ST	160 AV NE	3	3	1	2	1	P	\$20,000
68390	156 AV NE	NE 24 ST	3	3	5	2	1	P	\$2,000
68400	156 AV NE	NE NORTHUP WY	3	3	3	3	1	P	\$2,000
68460	156 AV NE	NE 4 ST	3	3	1	3	1	P	\$2,000
68470	156 AV NE	NE 1 ST	3	3	1	3	0	P	\$20,000
68490	156 AV SE	SE 4 ST	3	3	1	2	1	P	\$20,000

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CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
68500	LK HILLS BLVD	156 AV SE	3	3	3	2	2	P	\$20,000
68510	LK HILLS BLVD	154 AV SE	3	3	3	2	2	P	\$2,000
68520	LK HILLS BLVD	150 PL SE	3	3	1	2	2	P	\$20,000
68530	LK HILLS BLVD	SE 12 PL	3	3	1	2	1	P	\$20,000
68540	148 AV SE	LK HILLS BLVD	3	3	3	2	0	P	\$2,000
68560	148 AV SE	SE 22 ST	3	3	5	2	1	P	\$2,000
68570	148 AV SE	SE 24 ST	3	3	1	2	2	P	\$2,000
68582	LANDERHOLM CIR	148 AV SE	3	3	1	2	1	P	\$20,000
68584	148 AV SE	SE 28 ST	3	3	1	2	1	P	\$20,000
68590	148 AV SE	SE 28 ST	3	3	1	2	1	P	\$20,000
68596	145 PL SE	LK HILLS BLVD	1	3	3	3	0	P	\$2,000
68597	140 AV SE	LK HILLS CONN	1	3	3	3	0	P	\$20,000
68598	LK HILLS CONN	140 AV SE	2	3	5	3	0	P	\$2,000
68610	148 AV SE	SE 24 ST	3	3	3	2	2	P	\$2,000
68612	SE 24 ST	148 AV SE	3	3	1	2	1	P	\$20,000
68613	SE 24 ST	145 PL SE	3	3	3	2	1	P	\$20,000
68620	148 AV SE	SE 22 ST	3	3	5	2	1	P	\$2,000
68630	148 AV SE	SE 16 ST	3	3	5	2	0	P	\$2,000
68640	LK HILLS BLVD	148 AV SE	3	3	3	2	0	P	\$2,000
68650	LK HILLS BLVD	SE 12 PL	3	3	1	2	2	P	\$20,000
68660	LK HILLS BLVD	150 PL SE	3	3	1	2	2	P	\$20,000
68670	LK HILLS BLVD	154 AV SE	3	3	3	2	2	P	\$2,000
68680	156 AV SE	SE LK HILLS BLVD	3	3	3	2	2	P	\$20,000
68700	156 AV NE	MAIN ST	3	3	1	3	0	P	\$20,000
68710	156 AV NE	NE 1 ST	3	3	1	3	0	P	\$20,000
68720	156 AV NE	NE 4 ST	3	3	1	3	1	P	\$20,000
68740	156 AV NE	NE 8 ST	3	3	1	3	2	P	\$20,000
68782	156 AV NE	NE NORTHUP WY	3	3	1	3	1	P	\$20,000
68784	156 AV NE	NE 28 ST	3	3	5	1	1	P	\$2,000
68804	ADDR 15727 DRWY	NE 4 ST	2	3	5	3	1	P	\$20,000
68930	BELLEVUE WY NE	NE 30 PL	3	2	3	2	1	P	\$2,000
69010	BELLEVUE WY NE	NE 12 ST	3	3	1	3	2	P	\$2,000
69027	NE 10 ST	108 AV NE	3	3	1	3	2	P	\$20,000
69029	NE 10 ST	BELLEVUE WY NE	3	3	1	3	2	P	\$20,000
70520	NE 23 ST	98 AV NE	2	2	3	2	2	P	\$20,000
70596	NE 8 ST	100 AV NE	2	3	1	2	2	P	\$20,000
70600	BELLEVUE WY SE	108 AV SE	3	3	1	2	1	P	\$20,000
70607	NE 8 ST	BELLEVUE WY NE	2	3	1	3	2	P	\$20,000
70610	100 AV NE	NE 10 ST	1	3	1	3	2	P	\$20,000
70619	NE 8 ST	100 AV NE	2	3	3	2	1	P	\$2,000
70682	116 AV NE	NE 8 ST	3	3	1	2	2	P	\$20,000
70796	140 AV NE	NE 8 ST	2	3	1	3	1	P	\$20,000
70804	140 AV SE	SE 3 PL	2	2	3	3	0	P	\$20,000
70812	SE 8 ST (WILBUR PR)	I-405 (SB OFF RAMP)	2	3	1	2	2	P	\$2,000
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
70822	SE 8 ST	118 AV SE	2	3	1	2	2	P	\$20,000
70830	140 AV SE	SE 3 PL	2	2	3	3	0	P	\$20,000
70865	116 AVE NE	NE 2 PL	3	3	1	2	2	P	\$20,000
71280	NE 24 ST	167 AV NE	2	3	3	2	0	P	\$2,000
71290	NE 24 ST	164 AV NE	2	3	3	2	0	P	\$20,000
71310	NE 24 ST	160 AV NE	3	3	1	2	1	P	\$20,000
71320	NE 24 ST	156 AV NE	3	3	1	2	1	P	\$20,000
71331	152 AV NE	NE 24 ST	3	3	5	1	1	P	\$20,000
71686	156 AV SE	SE 10 ST	2	3	1	2	2	P	\$20,000
71866	NE 20 ST	NE BEL-RED RD	3	3	1	3	1	P	\$20,000
72870	150 AV SE	SE 38 ST	3	3	3	2	0	P	\$20,000
72880	150 AV SE	SE EASTGATE WY	3	3	3	2	1	P	\$20,000
72932	NE 8 ST	98 AV NE	2	3	3	2	0	P	\$2,000
72983	KELSEY CK RD	TYE RIVER RD	3	3	5	2	1	P	\$2,000
72985	KELSEY CK RD	TYE RIVER RD	3	3	5	2	1	P	\$2,000
73049	NE 8 ST	106 AV NE	3	3	1	3	2	P	\$2,000
73053	116 AV NE	1041 ADD. OP-1040	2	3	3	1	1	P	\$20,000
73080	150 AV SE	SE EASTGATE WY	3	3	3	2	1	P	\$20,000
73240	148 AV NE	NE 51 ST	3	3	5	2	1	P	\$2,000
73242	148 AV NE	VFW POST (2995)	3	3	5	2	0	P	\$20,000
73244	148 AV NE	4685 DRWY	3	3	5	2	0	P	\$20,000
73246	148 AV NE	4207 PP #4309	3	3	5	2	1	P	\$2,000
73248	148 AV NE	NE 40 ST	3	3	5	2	1	P	\$20,000
73250	148 AV NE	NE 37 PL	3	3	5	2	1	P	\$2,000
73260	148 AV NE	NE 36 ST	3	3	5	2	0	P	\$2,000
73270	148 AV NE	NE 34 ST	3	3	5	2	0	P	\$20,000
73282	148 AV NE	NE 32 ST	3	3	5	2	0	P	\$2,000
73290	148 AV NE	NE 29 PL	3	3	5	2	0	P	\$20,000
73351	148 AV NE	NE 55 ST	3	3	3	2	1	P	\$2,000
74155	INTL SCHOOL PARK	128 AVE SE	3	3	5	2	0	P	\$20,000
74158	112 AV NE	ADDR 2229 DRWY	2	3	1	2	2	P	\$20,000
74442	108 AV NE	NE 38 PL	3	3	1	1	2	P	\$20,000
74446	NORTHUP WY	3000 NORTHUP	3	3	1	1	2	P	\$20,000
74447	NORTHUP WY	3000 NORTHUP	3	3	1	2	2	P	\$20,000
74448	NORTHUP WY	NE 33 PL	3	3	1	2	2	P	\$20,000
74450	S KIRKLAND P & R	SHELTER LOAD ZN	3	3	5	1	2	P	\$2,000
74451	NORTHUP WY	NE 33 PL	3	3	1	2	2	P	\$20,000
74453	NORTHUP WY	NE 28 ST	3	3	1	1	2	P	\$20,000
74455	NORTHUP WY	NE 28 ST	3	3	1	2	2	P	\$20,000
74461	112 AV NE	NE 24 ST	2	3	1	2	2	P	\$20,000
74462	112 AV NE	BELLWOOD OFF PK	2	3	1	2	2	P	\$20,000
74512	112 AV NE	NE 12 ST	2	3	1	2	2	P	\$20,000
74517	112 AV NE	UNISYS (DRWY)	2	3	1	2	2	P	\$20,000
74518	112 AV NE	EVERWOOD PARK	2	3	1	2	2	P	\$20,000
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CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
74519	112 AV NE	NE 24 ST	2	3	1	2	2	P	\$20,000
74520	108 AV NE	NE NORTHUP WY	3	3	1	1	2	P	\$20,000
74525	NE 20 ST	NE BEL-RED RD	3	3	1	2	1	P	\$20,000
74537	NE 20 ST	136 PL NE	3	3	3	1	0	P	\$20,000
74538	NE 20 ST	136 PL NE	3	3	3	1	0	P	\$20,000
79862	SE 36 ST	FACTORIA BLVD SE	3	3	3	2	2	P	\$20,000
79864	SE 36 ST	132 AV SE	3	3	1	2	2	P	\$20,000
79870	FACTORIA BLVD SE	SE 38 ST	3	3	1	2	2	P	\$2,000
79872	SE 36 ST	13451 DRWY	3	3	1	2	2	P	\$20,000
79874	SE 36 ST	136 PL SE	3	3	1	2	2	P	\$20,000
79876	SE 36 ST	142 PL SE	3	3	1	2	2	P	\$20,000
79878	142 PL SE	SE 32 ST	3	3	1	2	2	P	\$20,000
79879	139 AV SE	SE EASTGATE WY	3	3	1	2	2	P	\$20,000
79880	FACTORIA BLVD SE	SE 40 LN	3	3	5	2	1	P	\$20,000
79890	FACTORIA BLVD SE	SE 42 ST	3	3	5	2	0	P	\$20,000
79892	RICHARDS RD	SE 32 ST	3	3	1	2	2	P	\$20,000
79900	FACTORIA BLVD SE	SE NEWPORT WY	3	3	5	2	0	P	\$20,000
80380	FACTORIA BLVD SE	SE NEWPORT WY	3	3	5	2	0	P	\$20,000
80390	FACTORIA BLVD SE	SE 42 ST	3	3	5	2	1	P	\$20,000
80400	FACTORIA BLVD SE	SE 40 LN	3	3	5	2	1	P	\$20,000
80409	124 AV SE	SE 41 PL	3	3	1	2	1	P	\$20,000
80410	FACTORIA BLVD SE	SE 38 ST	3	3	1	2	2	P	\$20,000
80489	112 AV NE	NE 4 ST	2	3	1	3	2	P	\$20,000
80491	I-405 (NB ON RAMP)	NE 4 ST	3	3	1	2	2	P	\$2,000
80493	I-405 (SB ON RAMP)	NE 4 ST	3	3	3	3	2	P	\$20,000
80495	NE 4 ST	I-405 (ES)	3	3	1	2	2	P	\$20,000
80497	NE 4 ST	I-405 (WS)	3	3	3	3	2	P	\$20,000
80565	116 AV SE	SE 1 ST	3	3	3	2	2	P	\$2,000
80571	116 AV NE	NE 2 PL	2	3	1	2	2	P	\$20,000
80572	116 AV NE	NE 2 PL	3	3	1	2	2	P	\$20,000
81633	NORTHUP WY	130 AV NE	3	3	5	1	1	P	\$20,000
82718	I-405 (SB OFF RAMP)	SE 8 ST	3	3	1	2	2	P	\$2,000
82740	112 AV SE	MAIN ST	2	3	1	2	2	P	\$20,000
82741	112 AV SE	MAIN ST	2	3	1	3	2	P	\$20,000
82750	112 AV SE	SE 1 PL	2	3	1	2	2	P	\$20,000
82760	112 AV SE	SE 4 ST	2	3	1	2	2	P	\$20,000
82780	I-405 (NB ON RAMP)	112 AV SE (EXIT 9)	3	3	5	2	0	P	\$2,000
82785	I-405 (NB ON RAMP)	COAL CREEK PKWY	3	3	3	2	0	P	\$2,000
82787	I-405 (NB ON RAMP)	SE 8 ST	2	3	3	2	2	P	\$2,000
82790	112 AV SE	SE 4 ST	2	3	1	2	2	P	\$20,000
82800	112 AV SE	SE 4 ST	2	3	1	2	2	P	\$20,000
82810	MAIN ST	112 AV NE	1	3	1	3	2	P	\$20,000
82834	MAIN ST	100 AV NE	1	3	1	3	2	P	\$20,000
82836	100 AV NE	NE 4 ST	1	3	1	3	2	P	\$20,000

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CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
84250	112 AV SE	SE 8 ST	2	3	1	2	2	P	\$20,000
84260	112 AV SE	SE 15 ST	2	3	1	2	2	P	\$20,000
84300	112 AV SE	SE 15 ST	2	3	1	2	2	P	\$20,000
84310	112 AV SE	SE 8 ST	2	3	1	2	2	P	\$20,000
84810	148 AV NE	NE 24 ST	3	3	1	1	2	P	\$20,000
84820	148 AV NE	NE 20 ST	3	3	5	1	1	P	\$2,000
84821	NE BEL-RED RD	152 AV NE	2	3	1	3	1	P	\$20,000
84824	NE BEL-RED RD	140 AV NE	2	3	5	1	1	P	\$20,000
84830	148 AV NE	NE 15 ST	2	3	1	3	1	P	\$20,000
84860	148 AV NE	NE 8 ST	2	3	5	3	0	P	\$2,000
84890	148 AV SE	MAIN ST	3	3	5	3	0	P	\$20,000
84900	148 AV SE	SE 8 ST	3	3	1	3	0	P	\$2,000
84920	148 AV NE	MAIN ST	2	3	5	3	0	P	\$2,000
85040	108 AV NE	NE 38 PL	3	3	1	1	2	P	\$20,000
85487	108 AV NE	NE 2 PL	2	3	1	3	2	P	\$20,000
85489	108 AV NE	NE 2 ST	2	3	3	3	2	P	\$20,000
85646	NE 4 ST	I-405 (NB ON RAMP)	3	3	1	2	2	P	\$20,000
85650	NE 4 ST	BELLEVUE WY NE	1	3	1	3	2	P	\$20,000
85669	NE 8 ST	102 AV NE	2	3	3	3	2	P	\$2,000
85670	NE 4 ST	102 AV NE	1	3	1	3	2	P	\$20,000
85685	MAIN ST	100 AV NE	1	3	1	3	2	P	\$20,000
85730	108 AV NE	NE 2 ST	2	3	3	3	2	P	\$20,000
85737	108 AV NE	MAIN ST	2	3	3	3	2	P	\$20,000
85750	BELLEVUE WY NE	NE 4 ST	1	3	5	3	2	P	\$20,000
86750	BELLEVUE WAY NE	NE 6 ST	2	3	1	3	2	P	\$20,000
98730	114 AV NE	NE 6 ST	3	3	5	3	2	Layover	
74456	EAST BASE RD	124 AV NE	0	3	1	1	0	Bus Base	
74457	EAST BASE RD	124 AV NE	2	3	3	1	0	Bus Base	
64045	COAL CREEK PKWY	I-405 (SB ON RAMP)	3	3	1	2	0	L	\$500
64056	SE 63 ST	155 AV SE	1	2	1	2	0	L	\$500
64057	SE 63 ST	155 AV SE	1	2	1	2	0	L	\$500
64605	W LK SAMM PKWY	SR 901	1	3	1	1	0	L	\$500
64610	SE NEWPORT WY	17025 (MAILBOX)	2	3	1	1	0	L	\$500
64770	SE NEWPORT WY	133 AV SE	3	3	1	2	0	L	\$500
64800	COAL CREEK PKWY	124 AV SE	3	3	1	2	0	L	\$500
64810	COAL CREEK PKWY	119 AV SE	3	3	1	2	0	L	\$500
64820	COAL CREEK PKWY	119 AV SE	3	3	1	2	0	L	\$500
64821	COAL CREEK PKWY	119 AV SE	3	3	1	2	0	L	\$500
64830	COAL CREEK PKWY	124 AV SE	3	3	1	2	0	L	\$500
64840	FACTORIA BLVD SE	COAL CREEK PKWY	3	3	1	2	0	L	\$500
64860	SE NEWPORT WY	133 AV SE	3	3	1	2	0	L	\$500
64862	SE 56 ST	123 AV SE	1	2	1	2	0	L	\$500
64864	SE 56 ST	128 AV SE	1	1	1	1	0	L	\$500
64866	125 AV SE	SE 60 ST	1	2	1	1	0	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
64868	SE 63 PL	127 PL SE	1	2	1	1	0	L	\$500
64870	SE ALLEN RD	SE NEWPORT WY	3	3	1	2	0	L	\$500
64871	SE 63 PL	127 PL SE	1	1	1	1	0	L	\$500
64873	125 AV SE	SE 60 ST	1	2	1	1	0	L	\$500
64875	SE 56 ST	128 AV SE	1	1	1	1	0	L	\$500
64877	SE 56 ST	123 AV SE	1	2	1	2	0	L	\$500
64880	SE ALLEN RD	138 AV SE	3	3	1	2	0	L	\$500
64951	SE 36 ST	150 AV SE	1	3	1	2	0	L	\$500
64952	SE 36 ST	150 AV SE	1	3	1	2	0	L	\$500
64953	SE 36 ST	142 PL SE	1	3	1	2	2	L	\$500
64960	SE NEWPORT WY	151 AV SE	2	3	1	2	0	L	\$500
64980	SE NEWPORT WY	156 AV SE	2	2	1	2	0	L	\$500
65014	SE NEWPORT WY	SR-901 (W LK SAM)	2	3	1	1	0	L	\$500
65015	W LAKE SAMM. P.	SE NEWPORT WY	2	3	1	1	0	L	\$500
65020	SE NEWPORT WY	SE 42 PL	2	3	1	1	0	L	\$500
65023	W LK SAMM PKWY	SR-901	1	3	1	1	0	L	\$500
65157	SE NEWPORT WY	SOMERSET BLVD SE	3	3	1	2	0	L	\$500
65159	SE NEWPORT WY	SOMERSET BLVD SE	3	3	1	2	0	L	\$500
65250	COAL CREEK PKWY	FACTORIA BLVD SE	1	3	1	2	0	L	\$500
65264	116 AV SE	SE 64 ST	1	1	1	1	0	L	\$500
65265	SE 60 ST	118 AV SE	2	2	1	2	0	L	\$500
65266	SE 60 ST	118 AV SE	2	2	1	2	0	L	\$500
65267	116 AV SE	SE 64 ST	1	1	1	1	0	L	\$500
65268	LAKEMONT BLVD	FOREST DR SE	1	1	1	1	0	L	\$500
65269	LAKEMONT BLVD	FOREST DR SE	1	2	1	1	0	L	\$500
65292	SE 63 ST	149 AV SE	1	2	1	2	0	L	\$500
65294	SE 63 ST	149 AV SE	1	2	1	2	0	L	\$500
65295	SE 63 ST	FOREST DR SE	1	2	1	2	0	L	\$500
65296	FOREST DR SE	142 AV SE	1	2	1	2	0	L	\$500
65297	FOREST DR SE	142 AV SE	1	2	1	2	0	L	\$500
65298	FOREST DR SE	HIGHLAND DR	1	2	1	2	0	L	\$500
65299	FOREST DR SE	HIGHLAND DR	1	2	1	2	0	L	\$500
65301	FOREST DR SE	SOMERSET DR SE	1	2	1	2	0	L	\$500
65302	FOREST DR SE	SOMERSET DR SE	1	2	1	2	0	L	\$500
65410	SE 69 WY	128 AV SE	2	2	1	1	0	L	\$500
65420	SE 69 WY	125 AV SE	2	2	1	1	0	L	\$500
65432	123 AV SE	SE 68 PL	2	2	3	1	0	L	\$500
65450	123 AV SE	SE 65 PL	2	2	1	1	0	L	\$500
65460	123 AV SE	SE 64 PL	2	2	1	1	0	L	\$500
65470	123 AV SE	SE 62 ST	2	2	1	1	0	L	\$500
65490	SE 60 ST	119 AV SE	2	2	3	2	0	L	\$500
65510	119 AV SE	SE 56 ST	3	2	1	2	0	L	\$500
65530	119 AV SE	SE 49 PL	3	2	1	2	0	L	\$500
65540	119 AV SE	SE 48 ST	3	2	1	2	0	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
65550	119 AV SE	LK HEIGHTS ST	3	3	1	2	0	L	\$500
65560	119 AV SE	COAL CREEK PKWY	3	3	1	2	0	L	\$500
65570	119 AV SE	COAL CREEK PKWY	3	3	1	2	0	L	\$500
65580	119 AV SE	LK HEIGHTS ST	3	3	1	2	0	L	\$500
65590	119 AV SE	SE 47 ST	3	2	1	2	0	L	\$500
65600	119 AV SE	SE 49 PL	3	2	1	2	0	L	\$500
65610	119 AV SE	SE 52 ST	3	2	1	2	0	L	\$500
65620	119 AV SE	SE 54 PL	3	2	1	2	0	L	\$500
65640	SE 60 ST	119 AV SE	2	2	1	2	0	L	\$500
65652	123 AV SE	SE 60 ST	2	2	1	1	0	L	\$500
65660	123 AV SE	SE 61 ST	2	2	1	1	0	L	\$500
65670	123 AV SE	SE 64 PL	2	2	1	1	0	L	\$500
65680	123 AV SE	SE 65 PL	2	2	1	1	0	L	\$500
65690	123 AV SE	123 PL SE	2	2	1	1	0	L	\$500
65700	123 AV SE	SE 69 WY	2	2	1	1	0	L	\$500
65710	SE 69 WY	123 AV SE	2	2	1	1	0	L	\$500
65720	SE 69 WY	125 AV SE	2	2	1	1	0	L	\$500
65730	SE 69 WY	128 AV SE	2	2	1	1	0	L	\$500
66700	NE 24 ST	162 AV NE	3	3	1	2	0	L	\$500
66730	164 AV NE	NE 20 ST	3	3	1	2	0	L	\$500
66740	164 AV NE	NE 18 ST	3	2	1	2	0	L	\$500
66750	164 AV NE	NE NORTHUP WY	3	2	1	3	0	L	\$500
66760	164 AV NE	NE 12 ST	1	2	1	3	0	L	\$500
66770	164 AV NE	NE 11 ST	1	3	1	3	0	L	\$500
66800	164 AV NE	NE 4 ST	2	2	1	3	0	L	\$500
66810	164 AV NE	NE 2 ST	2	2	1	3	0	L	\$500
66820	164 AV SE	MAIN ST	2	2	1	3	0	L	\$500
66830	164 AV SE	SE 2 ST	2	2	1	2	0	L	\$500
66840	164 AV SE	LK HILLS BLVD	2	2	1	2	0	L	\$500
66850	164 AV SE	SE 7 ST	1	2	1	2	0	L	\$500
66860	164 AV SE	SE 9 ST	1	2	1	2	0	L	\$500
66870	164 AV SE	SE 12 ST	1	2	1	2	0	L	\$500
66880	SE 14 ST	165 AV SE	1	2	1	2	0	L	\$500
66890	SE 14 ST	167 AV SE	1	2	1	2	0	L	\$500
66900	168 AV SE	SE 16 ST	1	2	1	2	0	L	\$500
66910	168 AV SE	SE 19 ST	1	2	1	2	0	L	\$500
66920	168 AV SE	SE 21 PL	1	2	1	2	0	L	\$500
66930	168 AV SE	SE 26 ST	1	2	1	2	0	L	\$500
66940	SE 26 ST	169 AV SE	1	2	1	1	0	L	\$500
66950	SE 26 ST	170 AV SE	1	2	1	1	0	L	\$500
66960	SE 26 ST	171 AV SE	1	1	1	2	0	L	\$500
66966	W LK SAMM PKWY	SE 12 PL	1	1	1	2	0	L	\$500
66967	W LK SAMM PKWY	SE 12 PL	1	1	1	2	0	L	\$500
66980	W LK SAMM PKWY	SE 31 PL	2	1	1	1	0	L	\$500

† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
66990	SE 34 ST	168 PL SE	2	1	1	1	0	L	\$500
67000	SE 34 ST	166 AV SE	2	1	1	1	0	L	\$500
67010	SE 34 ST	163 PL SE	2	1	1	1	0	L	\$500
67018	SE 35 PL	EASTGATE WY	2	3	1	1	2	L	\$500
67020	SE 34 ST	163 PL SE	3	1	1	1	0	L	\$500
67025	SE 36 ST	142 PL SE	1	3	1	2	2	L	\$500
67030	SE 34 ST	166 AV SE	3	1	1	1	0	L	\$500
67035	SE 26 ST	RICHARDS RD	1	2	1	2	0	L	\$500
67036	128 AV SE	SE 27 ST	1	2	1	2	0	L	\$500
67038	123 AV SE	SE 17 PL	1	1	1	2	0	L	\$500
67040	SE 34 ST	168 PL SE	3	1	1	1	0	L	\$500
67045	121 AV SE	SE 10 ST	1	3	1	2	0	L	\$500
67050	W LK SAMM PKWY	SE 31 PL	3	1	1	1	0	L	\$500
67060	W LK SAMM PKWY	SE 26 ST	3	1	1	2	0	L	\$500
67070	SE 26 ST	171 AV SE	2	1	1	2	0	L	\$500
67080	SE 26 ST	170 AV SE	2	2	1	1	0	L	\$500
67090	SE 26 ST	169 AV SE	2	2	1	2	0	L	\$500
67100	168 AV SE	SE 26 ST	1	2	1	2	0	L	\$500
67110	168 AV SE	SE 21 PL	1	2	1	2	0	L	\$500
67120	168 AV SE	SE 19 ST	1	2	1	2	0	L	\$500
67130	168 AV SE	SE 17 ST	1	2	1	2	0	L	\$500
67140	SE 14 ST	167 AV SE	1	2	1	2	0	L	\$500
67150	SE 14 ST	165 AV SE	1	2	1	2	0	L	\$500
67160	164 AV SE	SE 12 ST	1	2	1	2	0	L	\$500
67170	164 AV SE	SE 9 ST	1	2	1	2	0	L	\$500
67180	164 AV SE	SE 7 ST	1	2	1	2	0	L	\$500
67190	164 AV SE	LK HILLS BLVD	2	2	1	2	0	L	\$500
67200	164 AV SE	SE 2 ST	2	2	1	2	0	L	\$500
67210	164 AV NE	MAIN ST	2	2	1	2	0	L	\$500
67220	164 AV NE	NE 2 ST	2	2	1	2	0	L	\$500
67250	164 AV NE	NE 8 ST	1	3	1	2	1	L	\$500
67260	164 AV NE	NE 11 ST	1	3	1	2	0	L	\$500
67270	164 AV NE	NE 13 PL	1	2	1	2	0	L	\$500
67290	164 AV NE	NE 18 ST	3	2	1	2	0	L	\$500
67300	164 AV NE	NE 20 ST	3	3	1	2	0	L	\$500
67310	164 AV NE	NE 24 ST	3	3	1	2	0	L	\$500
67320	164 AV NE	NE 24 ST	3	3	1	2	0	L	\$500
67330	NE NORTHUP WY	165 AV NE	2	2	1	2	0	L	\$500
67340	NE NORTHUP WY	168 AV NE	2	2	1	2	0	L	\$500
67350	NE NORTHUP WY	169 PL NE	2	2	1	2	0	L	\$500
67360	NE NORTHUP WY	170 AV NE	2	2	1	2	0	L	\$500
67370	NE NORTHUP WY	NE 10 ST	2	2	3	2	0	L	\$500
67380	NE 8 ST	172 PL NE	1	2	3	2	0	L	\$500
67390	NE 8 ST	172 AV NE	1	2	1	2	0	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
67400	NE 8 ST	170 PL NE	1	2	1	2	0	L	\$500
67410	NE 8 ST	167 AV NE	1	3	1	2	0	L	\$500
67420	NE 8 ST	165 AV NE	1	3	1	2	1	L	\$500
67540	NE 8 ST	134 AV NE	3	3	1	2	0	L	\$500
67550	NE 8 ST	130 AV NE	3	3	1	2	0	L	\$500
67596	NE 12 ST	116 AV NE	1	3	1	1	1	L	\$500
67740	108 AV SE	SE 22 ST	1	3	1	2	1	L	\$500
67750	108 AV SE	SE 23 ST	1	3	1	2	1	L	\$500
67760	108 AV SE	SE 25 PL	1	3	1	2	0	L	\$500
67770	108 AV SE	SE 28 ST	1	2	1	2	0	L	\$500
67780	108 AV SE	SE 30 ST	1	2	1	2	0	L	\$500
67790	108 AV SE	SE 34 ST	1	3	1	2	0	L	\$500
67880	108 AV SE	SE 34 ST	1	3	1	2	0	L	\$500
67890	108 AV SE	SE 29 ST	1	2	1	2	0	L	\$500
67900	108 AV SE	SE 28 ST	1	3	1	2	0	L	\$500
67910	108 AV SE	SE 25 PL	1	3	1	2	0	L	\$500
67920	108 AV SE	SE 23 ST	1	3	1	2	1	L	\$500
67922	108 AV SE	BELLEVUE WY SE	1	3	1	2	0	L	\$500
67925	108 AV SE	BELLEVUE WY SE	1	3	1	2	0	L	\$500
67930	108 AV SE	SE 22 ST	1	3	1	2	1	L	\$500
67932	108 AV SE	SE 3 ST	1	3	1	2	0	L	\$500
67935	108 AV SE	SE 2 ST	1	3	3	2	0	L	\$500
67938	108 AV SE	SE 12 ST	1	3	1	2	0	L	\$500
67939	108 AV SE	SE 14 ST	1	3	1	2	0	L	\$500
67940	108 AV SE	SE 20 ST	1	3	1	2	1	L	\$500
67944	108 AV SE	SE 12 ST	1	3	1	2	0	L	\$500
67947	108 AV SE	SE 14 ST	1	3	1	2	0	L	\$500
67950	BELLEVUE WY SE	108 AV SE	0	3	1	2	0	L	\$500
67960	BELLEVUE WY SE	SE 16 ST	3	3	1	2	0	L	\$500
68062	NE 12 ST	116 AV NE	1	3	1	1	1	L	\$500
68064	NE 12 ST	120 AV NE	1	3	1	1	2	L	\$500
68065	NE BEL-RED RD	130 AV NE	2	2	1	2	1	L	\$500
68067	NE BEL-RED RD	132 AV NE	2	2	1	2	1	L	\$500
68068	NE BEL-RED RD	140 AV NE	2	3	1	1	1	L	\$500
68120	NE 8 ST	130 AV NE	3	3	1	2	0	L	\$500
68130	NE 8 ST	131 AV NE	3	3	1	2	0	L	\$500
68250	NE 8 ST	165 AV NE	1	3	1	2	0	L	\$500
68260	NE 8 ST	167 AV NE	1	3	1	2	0	L	\$500
68270	NE 8 ST	170 PL NE	1	2	1	2	0	L	\$500
68280	NE 8 ST	172 AV NE	1	2	1	2	0	L	\$500
68290	NE 8 ST	172 PL NE	1	2	1	2	0	L	\$500
68300	NE NORTHUP WY	NE 10 ST	2	2	3	2	0	L	\$500
68303	180 AV NE	NE 16 ST	1	1	1	2	0	L	\$500
68304	180 AV NE	NE 16 ST	1	1	1	2	0	L	\$500

† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
68305	NE 13 ST	179 PL NE	1	1	1	2	0	L	\$500
68306	NE 13 ST	179 PL NE	1	1	1	2	0	L	\$500
68307	176 AV NE	NE 13 ST	1	2	1	2	0	L	\$500
68308	NE 13 ST	177 AV NE	1	1	1	2	0	L	\$500
68310	NE NORTHUP WY	170 AV NE	2	2	1	2	0	L	\$500
68320	NE NORTHUP WY	169 PL NE	2	2	1	2	0	L	\$500
68330	NE NORTHUP WY	168 AV NE	2	2	1	2	0	L	\$500
68340	NE NORTHUP WY	165 AV NE	2	2	1	2	0	L	\$500
68351	116 AV NE	NE 19 ST	2	3	1	1	1	L	\$500
68352	116 AV NE	NE 19 ST	2	3	1	1	1	L	\$500
68353	116 AV NE	NE 12 ST	2	3	1	1	1	L	\$500
68354	116 AV NE	NORTHUP WY	2	3	1	1	1	L	\$500
68355	116 AV NE	NORTHUP WY	2	3	1	1	1	L	\$500
68480	156 AV SE	MAIN ST	3	3	1	2	0	L	\$500
68550	148 AV SE	SE 16 ST	3	3	1	2	0	L	\$500
68555	NEWPORT KEY	118 AV SE	1	3	1	2	0	L	\$500
68583	LANDERHOLM CIR	148 AV SE	3	3	1	2	0	L	\$500
68585	COAL CREEK RD	142 PL SE	0	3	1	2	2	L	\$500
68586	COAL CREEK RD	142 PL SE	0	3	1	2	2	L	\$500
68591	145 PL SE	SE 13 PL	1	3	1	3	0	L	\$500
68592	145 PL SE	SE 22 ST	1	3	3	2	0	L	\$500
68593	145 PL SE	SE 16 ST	1	3	3	2	0	L	\$500
68594	145 PL SE	SE 16 ST	1	3	3	2	0	L	\$500
68595	145 PL SE	SE 22 ST	1	3	1	2	0	L	\$500
68599	145 PL SE	144 AV SE	1	3	1	2	0	L	\$500
68611	145 PL SE	LAKE HILLS BLVD	1	3	1	3	0	L	\$500
68614	145 PL SE	144 AV SE	1	3	1	2	0	L	\$500
68671	118 AV SE	2500 DRWY	1	3	3	2	0	L	\$500
68672	118 AV SE	2500 DRWY	1	3	1	2	0	L	\$500
68673	118 AV SE	3010 DRWY	1	3	1	2	0	L	\$500
68674	118 AV SE	3010 DRWY	1	3	1	2	0	L	\$500
68802	I-405 (SB OFF RAMP)	COAL CREEK PKWY	3	3	1	2	0	L	\$500
68807	SE 66 ST	COAL CK PKWY SE	1	1	1	1	0	L	\$500
68888	SE 22 ST	150 AV SE	0	3	1	2	2	L	\$500
68889	SE 22 ST	150 AVE SE	0	3	1	2	2	L	\$500
68940	BELLEVUE WY NE	NE 28 PL	3	2	1	2	0	L	\$500
68950	BELLEVUE WY NE	NE 26 ST	3	2	1	2	0	L	\$500
68960	BELLEVUE WY NE	NE 24 ST	3	2	1	2	1	L	\$500
68970	BELLEVUE WY NE	NE 22 PL	3	2	1	2	0	L	\$500
68980	BELLEVUE WY NE	NE 20 ST	3	2	1	2	0	L	\$500
68990	BELLEVUE WY NE	NE 17 ST	3	2	1	2	0	L	\$500
69000	BELLEVUE WY NE	NE 15 ST	3	2	1	2	1	L	\$500
69030	104 AV SE	SE 8 ST	1	3	1	2	1	L	\$500
69040	104 AV SE	CEDAR CREST LN	1	3	1	2	1	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
69050	104 AV SE	SE 14 ST	1	3	1	2	0	L	\$500
69060	104 AV SE	SE 16 ST	1	3	1	2	0	L	\$500
69070	104 AV SE	1659 (ADDRESS)	1	3	1	2	0	L	\$500
69080	104 AV SE	SE 20 ST	1	2	1	2	0	L	\$500
69090	104 AV SE	SE 22 ST	1	2	1	2	0	L	\$500
69100	104 AV SE	104 PL SE	1	2	1	2	0	L	\$500
69110	104 AV SE	SE 25 ST	1	2	1	2	0	L	\$500
69120	104 AV SE	SE 27 ST	1	2	1	2	0	L	\$500
69128	104 AV SE	SE 28 ST	1	2	1	2	0	L	\$500
69140	105 AV SE	SE 29 ST	1	2	1	2	0	L	\$500
69150	106 AV SE	SE 32 ST	1	3	1	2	0	L	\$500
69160	106 AV SE	SE 34 ST	1	3	1	2	0	L	\$500
69170	106 AV SE	SE 34 ST	1	3	1	2	0	L	\$500
69180	106 AV SE	SE 32 ST	1	3	1	2	0	L	\$500
69190	SE 30 ST	105 AV SE	1	2	1	2	0	L	\$500
69200	105 AV SE	SE 28 ST	1	2	1	2	0	L	\$500
69210	104 AV SE	SE 27 ST	1	2	1	2	0	L	\$500
69220	104 AV SE	SE 25 ST	1	2	1	2	0	L	\$500
69230	104 AV SE	104 PL SE	1	2	1	2	0	L	\$500
69240	104 AV SE	SE 22 ST	1	2	1	2	0	L	\$500
69250	104 AV SE	SE 20 ST	1	2	1	2	0	L	\$500
69260	104 AV SE	1644 (ADDRESS)	1	3	1	2	0	L	\$500
69270	104 AV SE	SE 16 ST	1	3	1	2	0	L	\$500
69280	104 AV SE	SE 14 ST	1	3	1	2	0	L	\$500
69290	104 AV SE	CEDAR CREST LN	1	3	1	2	1	L	\$500
69300	104 AV SE	SE 10 ST	1	3	1	2	1	L	\$500
69320	BELLEVUE WY NE	NE 12 ST	2	3	1	2	1	L	\$500
69330	BELLEVUE WY NE	NE 15 ST	2	2	1	2	1	L	\$500
69340	BELLEVUE WY NE	NE 17 ST	2	2	1	2	0	L	\$500
69350	BELLEVUE WY NE	NE 20 PL	2	2	1	2	0	L	\$500
69360	BELLEVUE WY NE	NE 22 PL	2	2	1	2	0	L	\$500
69370	BELLEVUE WY NE	NE 24 ST	2	2	1	2	0	L	\$500
69380	BELLEVUE WY NE	NE 26 ST	2	2	1	2	0	L	\$500
69390	BELLEVUE WY NE	NE 28 PL	2	2	1	2	0	L	\$500
69400	BELLEVUE WY NE	NE 30 PL	2	2	1	2	1	L	\$500
69402	BELLEVUE WY NE	103 AV NE	2	3	1	2	1	L	\$500
70029	NE 2 ST	126 AV NE	2	1	1	2	0	L	\$500
70031	124 AV NE	NE 4 ST	2	3	1	2	1	L	\$500
70032	124 AV NE	NE 5 ST	2	3	1	2	1	L	\$500
70033	NE 2 ST	126 AV NE	2	1	1	2	0	L	\$500
70034	128 AV NE	MAIN ST	2	1	1	2	0	L	\$500
70035	128 AV NE	MAIN ST	2	1	1	2	0	L	\$500
70036	128 AV SE	SE 4 PL	2	1	1	2	0	L	\$500
70037	128 AV SE	SE 4 PL	2	1	1	2	0	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
70038	128 AV SE	SE 7 PL	3	3	1	2	0	L	\$500
70039	128 AV SE	SE 7 PL	3	3	1	2	0	L	\$500
70183	98 AV NE	NE 24 ST	1	2	1	2	2	L	\$500
70185	98 AV NE	NE 27 ST	1	2	1	2	2	L	\$500
70187	98 AV NE	NE 30 ST	1	1	1	2	0	L	\$500
70530	100 AV NE	NE 24 ST	2	2	1	2	2	L	\$500
70540	100 AV NE	NE 22 ST	1	2	1	2	2	L	\$500
70550	100 AV NE	NE 20 ST	1	2	1	2	0	L	\$500
70560	100 AV NE	NE 18 ST	1	2	1	2	0	L	\$500
70570	100 AV NE	NE 16 ST	1	2	1	2	0	L	\$500
70580	100 AV NE	NE 14 ST	1	3	1	2	0	L	\$500
70590	100 AV NE	BELFAIR LANE 2*2	1	3	1	2	2	L	\$500
70620	100 AV NE	NE 14 ST	1	2	1	2	0	L	\$500
70630	100 AV NE	NE 16 PL	1	2	1	2	0	L	\$500
70640	100 AV NE	NE 18 ST	1	2	1	2	0	L	\$500
70650	100 AV NE	NE 20 ST	1	2	1	2	1	L	\$500
70660	100 AV NE	NE 22 ST	1	2	1	2	2	L	\$500
70686	116 AV NE	NE 8 ST	1	3	1	2	2	L	\$500
70764	140 AV NE	NE 55 ST	1	2	1	2	1	L	\$500
70766	140 AV NE	NE 48 PL	1	2	1	2	0	L	\$500
70768	140 AV NE	NE 44 PL	1	2	1	2	0	L	\$500
70770	140 AV NE	NE 42 ST	1	2	1	2	0	L	\$500
70772	140 AV NE	NE 40 ST	1	2	1	2	0	L	\$500
70774	140 AV NE	NE 37 PL	1	2	1	2	0	L	\$500
70776	140 AV NE	NE 34 PL	1	2	1	2	0	L	\$500
70778	140 AV NE	NE 30 PL	1	2	1	2	0	L	\$500
70780	140 AV NE	NE 26 PL	1	2	1	2	0	L	\$500
70782	140 AV NE	NE 24 ST	2	3	1	1	0	L	\$500
70784	140 AV NE	NE 20 ST	1	3	1	1	1	L	\$500
70786	140 AV NE	NE 20 ST	1	3	1	1	1	L	\$500
70790	140 AV NE	NE 14 ST	1	2	1	3	1	L	\$500
70792	140 AV NE	NE 12 ST	1	3	1	3	0	L	\$500
70798	140 AV NE	NE 3 ST	2	2	1	3	0	L	\$500
70801	140 AV NE	NE 1 ST	2	2	1	3	0	L	\$500
70803	LK HILLS CONN	134 AV SE	2	3	1	3	0	L	\$500
70805	LK HILLS CONN	134 AV SE	2	3	1	3	0	L	\$500
70806	140 AV SE	SE 5 ST	1	3	1	3	0	L	\$500
70807	LK HILLS CONN	SE 8 ST	3	3	1	2	0	L	\$500
70808	140 AV SE	SE 7 ST	1	3	1	3	0	L	\$500
70811	SE 8 ST	121 AV SE	3	3	1	2	0	L	\$500
70813	LK HILLS CONN	SE 8 ST	3	3	1	2	0	L	\$500
70815	121 AV SE	SE 8 ST	1	3	1	2	0	L	\$500
70817	121 AV SE	SE 10 ST	1	3	1	2	0	L	\$500
70825	SE 8 ST	121 AV SE	3	3	1	2	0	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
70826	140 AV SE	SE 7 ST	2	3	1	3	0	L	\$500
70828	140 AV SE	SE 5 ST	2	3	1	3	0	L	\$500
70832	140 AV SE	SE 1 ST	2	2	1	3	0	L	\$500
70834	140 AV NE	NE 1 ST	0	2	3	3	0	L	\$500
70836	140 AV NE	NE 3 ST	0	2	1	3	1	L	\$500
70838	140 AV NE	NE 8 ST	0	3	1	3	1	L	\$500
70842	140 AV NE	NE 12 ST	0	3	1	3	0	L	\$500
70844	140 AV NE	NE 14 ST	0	2	1	3	1	L	\$500
70846	140 AV NE	NE BEL-RED RD	0	3	1	1	1	L	\$500
70850	140 AV NE	NE 20 ST	2	3	1	1	0	L	\$500
70852	140 AV NE	NE 24 ST	1	3	1	2	0	L	\$500
70854	140 AV NE	NE 26 PL	1	2	1	2	0	L	\$500
70856	140 AV NE	NE 30 PL	1	2	1	2	0	L	\$500
70858	140 AV NE	NE 34 PL	1	2	1	2	0	L	\$500
70860	140 AV NE	NE 37 PL	1	2	1	2	0	L	\$500
70862	140 AV NE	NE 40 ST	1	2	1	2	0	L	\$500
70864	140 AV NE	NE 42 ST	1	2	1	2	0	L	\$500
70866	140 AV NE	NE 44 PL	1	2	1	2	0	L	\$500
70868	140 AV NE	NE 48 PL	1	2	1	2	0	L	\$500
70870	140 AV NE	NE 55 PL	1	2	1	2	1	L	\$500
70872	140 AV NE	NE 62 ST	1	2	1	2	0	L	\$500
71132	W LK SAMM PKWY	SE 40 PL	1	3	1	1	0	L	\$500
71134	SE 38 ST	166 AV SE	1	3	1	1	0	L	\$500
71135	SE 38 ST	W LK SAMM PKWY	1	1	1	1	0	L	\$500
71137	KAMBER RD(140 PL)	SE 20 ST	1	3	1	2	0	L	\$500
71138	KAMBER RD(140 PL)	SE 20 ST	1	3	1	3	0	L	\$500
71139	SE 26 ST	RICHARDS RD	1	2	1	3	0	L	\$500
71151	W LK SAMM PKWY	NE 2 PL	1	1	1	2	0	L	\$500
71152	W LK SAMM PKWY	NE 2 PL	1	1	1	2	0	L	\$500
71153	W LK SAMM PKWY	177 LN NE	1	2	1	2	0	L	\$500
71154	W LK SAMM PKWY	177 LN NE	1	2	1	2	0	L	\$500
71155	W LK SAMM PKWY	NE 15 PL	1	1	1	2	0	L	\$500
71156	W LK SAMM PKWY	NE 15 PL	1	1	1	2	0	L	\$500
71208	NE 24 ST	136 PL NE	0	3	1	2	0	L	\$500
71270	NE 24 ST	169 AV NE	2	2	1	2	0	L	\$500
71300	NE 24 ST	162 AV NE	3	3	1	2	0	L	\$500
71380	NE 24 ST	164 AV NE	2	3	1	2	0	L	\$500
71390	NE 24 ST	167 AV NE	2	3	1	2	0	L	\$500
71400	NE 24 ST	171 AV NE	2	2	1	2	0	L	\$500
71650	156 AV SE	SE 8 ST	1	3	1	2	2	L	\$500
71652	156 AV SE	SE 10 ST	1	3	1	2	2	L	\$500
71654	156 AV SE	SE 16 ST	1	1	1	2	1	L	\$500
71656	156 AV SE	SE 20 PL	1	1	1	2	0	L	\$500
71658	SE 24 ST	156 AV SE	1	1	1	1	0	L	\$500

† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
71660	SE 24 ST	158 AV SE	1	1	1	2	0	L	\$500
71661	SE 24 ST	161 AV SE	0	2	1	1	0	L	\$500
71662	161 AV SE	SE 24 ST	1	2	1	1	0	L	\$500
71664	161 AV SE	SE 28 PL	1	2	1	1	0	L	\$500
71666	161 AV SE	SE 31 ST	1	2	1	1	2	L	\$500
71668	161 AV SE	SE 33 PL	1	3	1	1	2	L	\$500
71670	161 AV SE	SE 33 PL	1	3	1	1	2	L	\$500
71672	161 AV SE	SE 31 ST	1	2	1	1	2	L	\$500
71674	161 AV SE	SE 28 PL	1	2	1	1	0	L	\$500
71675	SE 24 ST	161 AV SE	1	2	1	2	0	L	\$500
71676	161 AV SE	SE 24 ST	1	2	1	1	0	L	\$500
71678	SE 24 ST	158 AV SE	2	1	1	2	0	L	\$500
71680	SE 24 ST	156 AV SE	2	1	1	1	0	L	\$500
71682	156 AV SE	SE 20 PL	2	1	1	2	0	L	\$500
71684	156 AV SE	SE 16 ST	2	1	1	2	1	L	\$500
71865	NE 20 ST	148 AV NE	3	3	1	1	1	L	\$500
72810	SE 38 ST	150 AV SE (TM)	1	3	1	2	0	L	\$500
72811	SE 38 ST	150 AV SE	1	3	1	2	0	L	\$500
72861	116 AV NE	NE 34 ST	1	3	1	1	1	L	\$500
72862	116 AV NE	NE 34 ST	0	3	1	1	1	L	\$500
72871	150 AV SE	SE 38 ST	3	3	1	2	0	L	\$500
72872	150 AV SE	SE NEWPORT WY	3	3	1	2	0	L	\$500
72873	150 AV SE	SE NEWPORT WY	1	3	1	2	0	L	\$500
72874	148 AV SE	SE 45 PL	3	1	1	2	0	L	\$500
72875	148 AV SE	SE 46 ST	1	1	1	2	0	L	\$500
72876	HIGHLAND DR	147 PL SE	2	1	1	2	0	L	\$500
72877	HIGHLAND DR	147 PL SE	1	1	1	2	0	L	\$500
72878	HIGHLAND DR	SOMERSET BLVD SE	2	1	1	2	0	L	\$500
72879	SOMERSET BLVD SE	HIGHLAND DR	1	1	1	2	0	L	\$500
72881	SOMERSET BLVD SE	143 AV SE	2	1	1	2	0	L	\$500
72882	SOMERSET BLVD SE	143 AV SE	1	1	1	2	0	L	\$500
72884	SOMERSET BLVD SE	SOMERSET LN	2	1	1	2	0	L	\$500
72885	SOMERSET BLVD SE	SE 44 ST	2	3	1	2	0	L	\$500
72886	SOMERSET BLVD SE	SE 43 ST	2	3	1	2	0	L	\$500
72887	SOMERSET BLVD SE	SE 43 ST	1	3	1	2	0	L	\$500
72888	SOMERSET BLVD SE	SE 44 ST	1	3	1	2	0	L	\$500
72889	SOMERSET BLVD SE	SOMERSET LN	1	1	1	2	0	L	\$500
72891	FOREST RIDGE SCH	ACADEMIC BLDG	1	1	1	2	0	L	\$500
72892	151 AV SE	SE 49 ST	1	1	1	2	0	L	\$500
72893	150 AV SE	SE 46 WAY	2	1	1	2	0	L	\$500
72897	151 AV SE	SE 49 ST	1	1	1	2	0	L	\$500
72898	150 AV SE	SE 46 WAY	1	1	1	2	0	L	\$500
72900	LK HILLS BLVD	156 AV SE	1	3	1	2	2	L	\$500
72910	LK HILLS BLVD	159 PL SE	1	3	1	2	2	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
72920	LK HILLS BLVD	160 AV SE	1	3	1	2	0	L	\$500
72930	LK HILLS BLVD	163 AV SE	1	2	1	2	0	L	\$500
72934	NE 8 ST	96 AV NE	2	3	1	2	0	L	\$500
72936	NE 8 ST	95 AV NE	2	3	1	2	0	L	\$500
72940	NE 8 ST	92 AV NE	2	3	1	2	0	L	\$500
72950	NE 1 ST	NE 10 ST	2	3	1	2	0	L	\$500
73040	NE 1 ST	NE LK WASH BLVD	2	3	1	2	0	L	\$500
73042	NE 8 ST	92 AV NE	2	3	1	2	0	L	\$500
73044	NE 8 ST	94 AV NE	2	3	1	2	0	L	\$500
73046	NE 8 ST	96 AV NE	2	3	1	2	0	L	\$500
73047	116 AV NE	2385 (ADDRESS)	2	3	1	1	2	L	\$500
73048	NE 8 ST	98 AV NE	2	3	1	2	0	L	\$500
73050	LK HILLS BLVD	163 AV SE	1	2	1	2	0	L	\$500
73051	116 AV NE	1601 (ADDRESS)	2	3	1	1	1	L	\$500
73052	116 AV NE	1040 (ABODIO)	2	3	1	1	1	L	\$500
73054	116 AV NE	1600 OP-1601	2	3	1	1	1	L	\$500
73055	116 AV NE	NE 12 ST	2	3	1	1	1	L	\$500
73056	116 AV NE	2112 (ADDRESS)	2	3	1	1	2	L	\$500
73060	LK HILLS BLVD	160 AV SE	1	3	1	2	0	L	\$500
73070	LK HILLS BLVD	159 PL SE	1	3	1	2	2	L	\$500
73082	SE 46 WY	151 PL SE	1	1	1	2	0	L	\$500
73084	SE 46 WY	154 PL SE	1	1	1	2	0	L	\$500
73085	158 AV SE	SE 47 PL	1	1	1	2	0	L	\$500
73086	SE 46 WY	159 AV SE	1	1	1	2	0	L	\$500
73088	SE 46 WY	161 AV SE	1	1	1	2	0	L	\$500
74154	128 AV SE	ADDRESS 522	3	3	1	2	0	L	\$500
74441	108 AV NE	NE 39 ST	3	3	1	1	0	L	\$500
74445	NORTHUP WY	116 AV NE	3	3	1	1	1	L	\$500
74452	NORTHUP WY	NE 24 ST	3	3	1	1	1	L	\$500
74454	NORTHUP WY	124 AV NE	3	3	1	1	0	L	\$500
74463	112 AV NE	HIDDEN VALLEY	2	3	1	2	1	L	\$500
74464	112 AV NE	NE 15 ST	2	3	1	2	0	L	\$500
74465	112 AV NE	NE 14 ST	2	3	1	2	0	L	\$500
74466	112 AV NE	NE 26 PL	2	3	1	2	1	L	\$500
74472	NORTHUP WY	130 AV NE	3	3	1	1	1	L	\$500
74474	NE 20 ST	132 AV NE	3	3	1	1	0	L	\$500
74476	NE 20 ST	13433 (AT SHIRLEY'S)	3	3	1	1	0	L	\$500
74478	NE 20 ST	140 AV NE	2	3	1	1	1	L	\$500
74480	NE 20 ST	14309 AT CAMERA W	2	3	1	1	1	L	\$500
74514	112 AV NE	NE 14 ST	2	3	1	2	0	L	\$500
74516	112 AV NE	NE 15 ST (BLDGS BC)	2	3	1	2	1	L	\$500
74524	NE 20 ST	148 AV NE	2	3	1	1	1	L	\$500
74526	NE 20 ST	14408 (AT Melco DR)	2	3	1	1	2	L	\$500
74528	NE 20 ST	14230 OP CAMERA W	2	3	1	1	1	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
74533	108 AV NE	NE 39 ST	3	3	1	1	0	L	\$500
74535	NE 20 ST	140 AV NE	2	3	1	1	1	L	\$500
74542	NE 20 ST	13424(At MR Plywood)	3	3	1	1	0	L	\$500
74544	NE 20 ST	132 AV NE	3	3	1	1	0	L	\$500
74761	FACTORIA MALL	GOTTSCHALKS W E	2	3	1	2	1	L	\$500
79856	128 AV SE	SE 26 PL	1	2	1	2	0	L	\$500
79858	SE 26 ST	RICHARDS RD	1	2	1	2	0	L	\$500
79877	SE 37 ST	15220 (DRWY)	2	3	1	2	1	L	\$500
79906	RICHARDS RD	SE 26 ST	3	2	1	2	0	L	\$500
80325	NEWPORT HILLS PR	113 PL SE	1	3	1	2	0	L	\$500
80331	LK WASH BLVD SE	SE 59 ST	2	3	1	1	0	L	\$500
80332	LK WASH BLVD SE	SE 59 ST	2	3	1	1	0	L	\$500
80334	SE 60 ST	114 PL SE	2	1	1	2	0	L	\$500
80335	SE 60 ST	114 PL SE	2	1	1	2	0	L	\$500
80566	123 AV SE	SE 17 PL	1	3	1	2	0	L	\$500
81480	130 AV NE	NE 24 PL	0	3	1	1	1	L	\$500
81482	130 AV NE	NE 26 PL	0	1	1	1	1	L	\$500
81484	130 AV NE	NE 28 PL	0	1	1	1	0	L	\$500
81485	NE 32 ST	125 AV NE	1	1	1	1	0	L	\$500
81486	130 AV NE	NE 30 ST	0	1	1	1	0	L	\$500
81488	130 AV NE	NE 32 ST	0	1	1	1	0	L	\$500
81490	130 AV NE	NE 32 PL	0	1	1	1	0	L	\$500
81492	131 AV NE	NE 33 ST	0	1	1	1	0	L	\$500
81494	131 AV NE	NE 36 ST	0	1	1	1	0	L	\$500
81496	NE 36 ST	134 AV NE	0	1	1	1	0	L	\$500
81498	134 AV NE	NE 37 PL	0	1	1	2	0	L	\$500
81500	134 AV NE	NE 37 PL	0	1	1	2	0	L	\$500
81502	NE 40 ST	132 AV NE	0	1	1	1	0	L	\$500
81504	132 AV NE	4206 (DRWY)	0	1	1	1	0	L	\$500
81506	132 AV NE	NE 47 ST	0	1	1	1	0	L	\$500
81508	132 AV NE	NE 50 ST	0	1	1	1	0	L	\$500
81510	132 AV NE	NE 51 PL	0	1	1	1	0	L	\$500
81512	132 AV NE	NE 54 PL	0	1	1	2	0	L	\$500
81602	132 AV NE	NE 54 PL	1	1	1	1	0	L	\$500
81604	132 AV NE	NE 51 PL	1	1	1	1	0	L	\$500
81606	132 AV NE	NE 50 ST	1	1	1	1	0	L	\$500
81608	132 AV NE	NE 47 ST	1	1	1	1	0	L	\$500
81614	134 AV NE	3806 (MAILBOX)	1	1	1	2	0	L	\$500
81616	NE 36 ST	134 AV NE	1	1	1	1	0	L	\$500
81618	131 AV NE	NE 36 ST	1	1	1	1	0	L	\$500
81620	131 AV NE	NE 33 ST	1	1	1	1	0	L	\$500
81622	131 AV NE	130 AV NE	1	1	1	1	0	L	\$500
81626	130 AV NE	NE 30 ST	1	1	1	1	0	L	\$500
81628	130 AV NE	NE 28 PL	1	1	1	1	0	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CAPITAL ELEMENT

Table VIII-7 (continued)
Evaluation of Existing Bus Stops

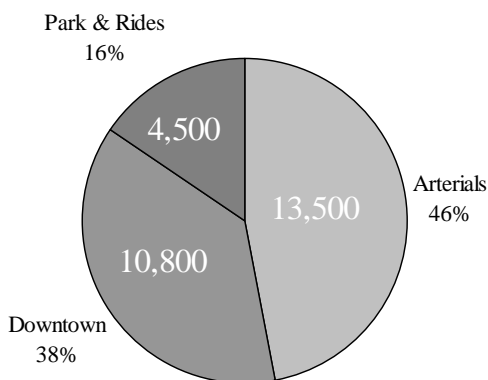
Stop No.	On Street	Cross Street	No. of Routes	Transit Priority Network	Boardings	Transit Propensity	Transit Attractors	Assigned Hierarchy†	Cost
81630	130 AV NE	NE 26 PL	1	1	1	1	1	L	\$500
81632	130 AV NE	NE 24 PL	1	3	1	1	1	L	\$500
81635	NORTHUP WY	124 AV NE	3	3	1	1	0	L	\$500
81637	NORTHUP WY	NE 24 ST	3	3	1	1	1	L	\$500
82720	MAIN ST	106 AV SE	1	3	1	2	0	L	\$500
82730	MAIN ST	108 AV SE	1	3	1	2	2	L	\$500
82821	MAIN ST	108 AV NE	1	3	1	2	2	L	\$500
82832	MAIN ST	103 AV NE	1	3	1	3	0	L	\$500
84270	BELLEVUE WY SE	113 AV SE	3	3	1	2	0	L	\$500
84275	I-405 (SB ON RAMP)	COALCREEK PKWY	3	3	1	2	0	L	\$500
84280	I-405 (SB OFF RAMP)	112 AV SE (EXIT 9)	3	3	1	2	0	L	\$500
84822	NE BEL-RED RD	143 AV NE	2	3	1	1	1	L	\$500
84825	NE BEL-RED RD	148 AV NE	2	3	1	1	2	L	\$500
84826	NE BEL-RED RD	132 AV NE	2	2	1	1	1	L	\$500
84827	NE BEL-RED RD	130 AV NE	2	2	1	2	1	L	\$500
84828	NE 12 ST	124 AV NE	1	3	1	1	2	L	\$500
84829	NE BEL-RED RD	NE 20 ST	2	3	1	1	1	L	\$500
84832	NE 12 ST	120 AV NE	1	3	1	1	1	L	\$500
84840	148 AV NE	NE 13 PL	2	3	1	3	0	L	\$500
84850	148 AV NE	NE 10 ST	2	3	1	3	0	L	\$500
84870	148 AV NE	NE 6 ST	2	3	1	3	0	L	\$500
84880	148 AV NE	NE 3 ST	2	3	1	3	0	L	\$500
84910	148 AV SE	SE 8 ST	2	3	1	2	0	L	\$500
84930	148 AV NE	NE 3 ST	2	3	1	3	0	L	\$500
84940	148 AV NE	NE 8 ST	2	3	1	3	0	L	\$500
84950	148 AV NE	NE 10 ST	2	3	1	3	0	L	\$500
84960	148 AV NE	NE 12 ST	2	3	1	3	0	L	\$500
84970	148 AV NE	NE 15 ST	2	3	1	3	0	L	\$500
85683	100 AV NE	NE 4 ST	1	3	1	2	2	L	\$500
85720	MAIN ST	BELLEVUE WY SE	1	3	1	3	0	L	\$500
85728	MAIN ST	112 AV NE	1	3	1	2	2	L	\$500
99049	152 AV NE	2956 (ADDRESS)	3	3	1	1	1	L	\$500
99052	COAL CREEK PKWY	124 AV SE	3	3	1	2	0	L	\$500
99751	123 AV SE	SE 20 PL	1	1	1	2	0	L	\$500
99752	123 AV SE	SE 25 ST	1	3	1	2	0	L	\$500
† T = Transit Center, TH = Transit Hub, P = Primary Local Stop, L = Local Transit Stop									

CHAPTER IX-ARTERIAL IMPROVEMENTS***Introduction***

The vast majority of bus service within the City of Bellevue operates on local city streets in mixed traffic. As such, most bus service is affected by the same traffic conditions that impact general traffic, including congestion. The impact of congestion on transit operations can be significant. Extended travel times and schedule delays resulting from congestion result in increased operating costs and reduce the attractiveness of transit to potential patrons.

The need to support transit with arterial improvements is considered essential given that almost 50% of the City's 30,000 average weekday transit riders (ons and offs) occur on the city's arterial street system outside of downtown Bellevue and outside of the City's park-and-ride lots (see Figure IX-1). Given the significant transit ridership activity along arterials, it is essential that the City collaborate with the region's transit providers to improve and expand the route structure and the transit-supportive infrastructure of treatments that improve bus speed and reliability as well as amenity improvements such as sidewalks and shelters.

Figure IX-1
Location of Average Weekday Ridership Activity in Bellevue, 2001
(28,800 Total)



The continued support for arterial improvements is consistent with the policy guidance within regional policy and Bellevue's Comprehensive Plan:

Regional Policy**Puget Sound Regional Council *Destination 2030***

Destination 2030 supports priority treatment for high occupancy vehicles (HOV). Higher vehicle occupancies mean that personal mobility is achieved at a greater level of system efficiency. Higher occupancies, in the form of transit, carpools, and vanpools, result in lower traffic volumes, lower vehicle emissions, less costly

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investment in capacity over time, and less private resources dedicated to the maintenance of the region's private vehicle fleet. *Destination 2030* includes the policies recommended by the Regional HOV Policy Advisory Committee in 1999. The regional policies endorse and recommend inclusion of the Washington State Department of Transportation's (WSDOT) HOV system policies and operational definitions, including speed and reliability, capacity, and carpools definition. The regional HOV system will, in part, be achieved through investment in the following HOV facilities:

- Core HOV network on regional freeways, including HOV bottlenecks
- Direct access for more efficient use of HOV facilities
- Arterial HOV investments that directly link to the core HOV facilities
- HOV by-pass lanes and priority systems on arterials, corridors, and within centers

Destination 2030 clearly supports arterial HOV improvements to provide enhanced speed and reliability for HOVs.

Bellevue Comprehensive Plan

Policy TR-53

Work with transit providers to create, maintain, and enhance a system of supportive facilities and systems such as transit centers, passenger shelters, park-and-ride lots, bus queue by-pass lanes, bus signal priorities, pedestrian and bicycle facilities, pricing, and incentive programs.

A major goal for these arterial improvements is to optimize transit usage of city streets, as reflected in the Bellevue City Council's policy interest statement in reference to King County Metro (Metro) (adopted May 8, 2000):

Policy TR-68f

Support multi-modal transportation solutions including general purpose lanes, High Capacity Transit, HOV lanes, transit and non-motorized improvements that use the best available technologies.

Policy KCM-25

As part of the City's Arterial Classification Review and Arterial System development, seek opportunities to:

- Optimize transit speeds and reliability on key local and state corridors that present the best chance for increased transit service and preservation of neighborhood quality; and
- Optimize transit services and treatments on key arterials in the City.

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This chapter examines several improvements that can facilitate the movement of buses in an arterial setting. Initially, bus stop design and improvements are examined. In addition, transit-oriented arterial improvements are examined, including queue jump lanes, HOV options, as well as design considerations for buses. Within the discussion of arterial improvement options, suggested improvements for Bellevue's arterial system are outlined. These recommendations are fully summarized in the final section of this chapter.

Many of the treatments developed and described in this chapter can be developed for both transit and HOV users. Transit only improvements are referred to as "transit" whereas improvements for both transit and HOV users are referred to as "HOV".

Please note that transit signal priority (TSP), which is another capital improvement option designed to support speed and reliability goals, is discussed in Chapter XII.

Bus Stop Improvements

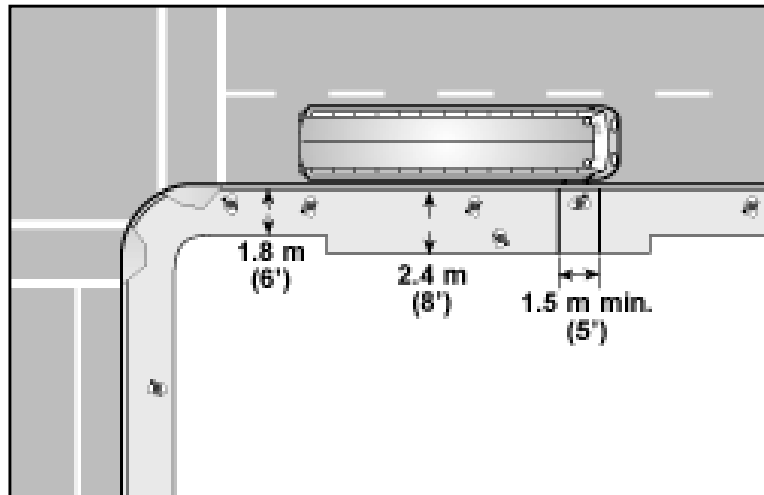
Three different bus stop configurations are found in the City of Bellevue: bus bulbs, in-lane stops, and pullouts. This section describes the amenities found for each stop type and typical applications. Bus pullouts are reviewed in this section, even though they are not regarded as improving the operating environment for transit. However, bus pullouts are a capital improvement option that is sometimes necessary to manage overall traffic flow in a travel corridor.

An additional option for improving transit speed and reliability is consolidating bus stops. However, this option is facilitated through operation and planning choices; as such, it is not examined within this chapter.

In-Lane Stops

In-lane stops are defined as those where buses stop in the actual travel lane. The travel lane is blocked while the bus is dropping off or boarding passengers. The majority of Metro's transit stops in Bellevue are in-lane stops. Metro's practice of stopping in-lane, even in high traffic settings like downtown Bellevue, is consistent with national and international practice in the transit industry. The reason for the standardization of this approach is to avoid delay associated with reentering the traffic stream any time the bus leaves the travel lane. Buses reentering the travel lane from bus pullouts reduce schedule reliability, add to operating costs, and reduce the quality of service for bus riders. This also is the source of motorist complaints and near miss accidents as other vehicles often ignore the state law requiring them to yield to emerging buses. Figure IX-2 depicts a typical in-lane stop.

Figure IX-2
Typical In-Lane Stop¹



Consideration for In-Lane Stops

Metro's use of in-lane stops in Bellevue is consistent with how it operates in most areas of the county. There are some situations, like downtown Seattle, where designated bus stops are signed within a lane typically used for parking or turning traffic (also called a bus bay stop). In those cases the bus can pull out of the traffic lane while loading and unloading passengers. This design is generally not applicable in Bellevue because there is very little designated on-street parking.

A variation on bus stop use of the parking lane also occurs in downtown Seattle on 2nd and 4th avenues. The variation allows on-street parking during non-peak hours and designates the entire lane for transit only use during peak hours. This option is usually limited to streets where bus and passenger volumes are high. This approach requires aggressive parking code enforcement to clear the lane prior to the start of the peak-hour period to provide for unobstructed bus operations. Again, this has no parallel in Bellevue due to the lack of on-street parking; however, it might be considered in the future, especially in downtown.

Potential In-Lane Development in Bellevue

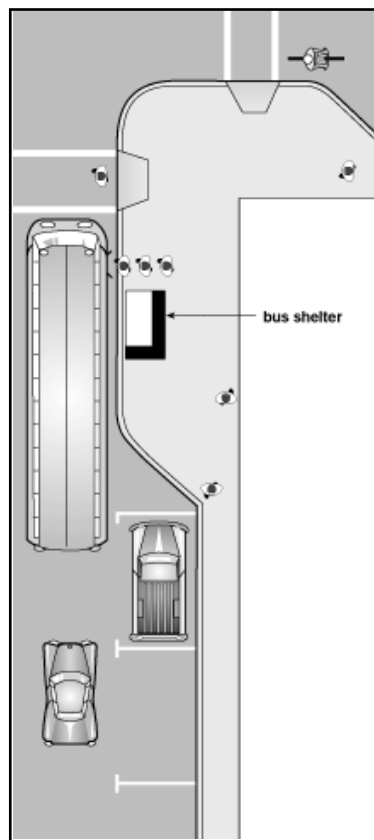
The in-lane bus stops are typically used throughout Bellevue. No recommendations for further applications are made.

¹ Source: Oregon Department of Transportation.

Bus Bulbs

Bus bulbs operate similar to curbside bus stops. A bus bulb is a section of sidewalk that extends from the curb of a parking lane to the edge of a through lane (see Figure IX-3). Buses stop in the traffic lane instead of weaving into a parking-lane curbside stop.² Bus bulbs should not be installed at the end of a travel lane, where traffic must merge into the adjacent lane, so they are typically located in parking lanes. Bus bulbs placed on the far side of intersections must be long enough that an articulated coach can stop at the bulb without encroaching on travel lanes or crosswalks. The cities of Seattle, WA; San Francisco, CA; and Portland, OR have a number of bus bulbs in use. Bellevue has one operational bus-bulb at present. It is located on westbound Main Street between 102nd Avenue NE and 103rd Avenue NE (Figure IX-4).

Figure IX-3
Typical Bus-Bulb Stop³



² Transportation Research Board. TCRP Report 65: Evaluation of Bus Bulbs. 2001.

³ Source: Oregon Department of Transportation.

Figure IX-4
Bus Bulb at Main Street and 102nd Avenue NE

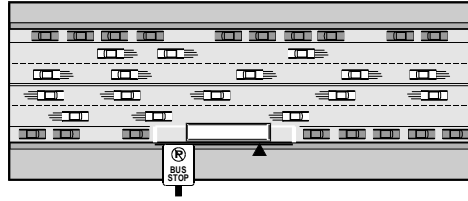


A major advantage of using bus bulbs is the creation of additional space at bus stops. This increased space allows development of bus patron amenities such as shelters and benches (Figure IX-3), and for additional landscaping to improve the visual environment. Additionally, bus bulbs reduce pedestrian crossing distances and provide pedestrians with a more comfortable place to determine the location of oncoming traffic at the start of a crossing. This significantly improves pedestrian safety, especially for older or physically disabled pedestrians. Finally, bus bulbs require less street space than other bus stop options. The bulb can be the length of the bus or the minimum length required for boarding and alighting activities. In cases where a bus bulb is replacing a bus bay in a parking lane, this minimal amount of space requirement can result in the creation of additional parking spaces because the bulb does not require the inclusion of weaving space for a bus to enter the bay (Figure IX-5).

Figure IX-5
Example Operation of Bus Bulbs⁴

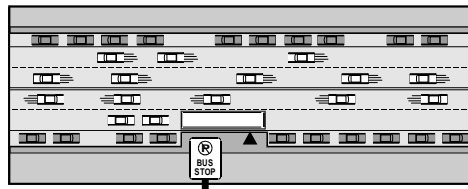
Before

Bus pulls to curb at bus stop: must wait for gap in traffic to proceed.



After

Curb extended into parking lane, bus stops in travel lane; more curbside parking available.



There are some potential disadvantages of bus bulbs that should be considered when identifying locations for siting these types of stops. Bus bulbs may create potential sight distance problems for automobile drivers. Also, right-turn-on-reds may be more challenging in cases where a bus bulb is present.

Potential Bus Bulb Development in Bellevue

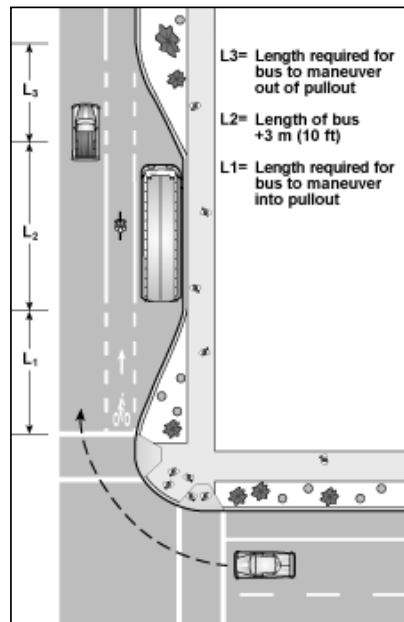
Although bus bulbs present some advantages for bus operations, potential use in Bellevue is limited. As noted, bus bulbs are typically sited on streets with on-street parking. Further, bus bulbs should not be considered on streets where existing on-street parking space is projected to be converted to regular traffic carrying lanes. With regard to Bellevue's arterials, very few locations fit these primary criteria. However, if the present on-street parking located on NE 2nd Street and 106th Avenue NE is maintained, then the feasibility of bus bulbs on that corridor should be examined. According to the Downtown Implementation Plan, on-street parking on both NE 2nd Street and 106th Avenue NE are likely interim; in the long-run, the parking lanes will be required to accommodate projected traffic volumes.

Bus Pullouts

A pullout is a specifically constructed area outside the travel lanes of a roadway that provides for the pickup and discharge of passengers (Figure IX-6). In general, pullouts help automobile traffic flow at the detriment of buses. Buses can experience significant delays exiting the pull-out, particularly in saturated traffic conditions. Barring a unique operating environment, pullouts should be avoided if transit speed and reliability is a priority.

⁴ Source: Kittleson & Associates Transit Preferential Treatments Presentation to TRB

Figure IX-6
Typical Bus Pullout Stop⁵



Considerations for Bus Pullouts

In some instances it is appropriate to consider bus pullouts as a means of diminishing the impact of stopped or slower transit vehicles on faster-moving general-purpose traffic. However, Metro's *Administrative Guidelines*, as related to bus pullouts, asserts:

“Bus pullouts should be provided only where buses, when stopping on the roadway, present a serious traffic and safety problem. This is because of the delay bus drivers encounter when trying to get back into the stream of traffic. The following is a list of conditions under which pullouts should be considered:

- *Speed limit of 35 mph or more on a two-lane road; 40 mph on a four-lane road*
- *Poor sight distance (on curve or crest of hill)*
- *Long dwell time at bus zone (more than 30 seconds)*
- *High accident rate (rear-end collisions, sideswipes)*
- *Regular disabled stop*
- *No area to unload passengers safely*

In order to improve system on-time performance and minimize merging conflicts, a traffic study should be conducted to determine if a pullout is warranted.”

⁵ Source: Oregon Department of Transportation.

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Potential Bus Pullout Development in Bellevue

Given the above criteria, only 148th Avenue has bus stops in pullouts and no additional efforts are being made to implement pullouts elsewhere in the City. In 1976, the City undertook the 148th NE/SE Project between Bel-Red Road and SE 28th Street along 148th Avenue. This roadway improvement project created a free-flow environment for traffic along 148th Avenue by minimizing access to/from adjacent side-streets. As a result, access to adjacent neighborhoods is provided vis-à-vis u-turn routes in left-hand turn pockets. Although not the intent of this project, the need for traffic turning radius modifications at these points resulted in tapers that function as pullout locations for transit at the following locations along 148th Avenue: NE 15th, NE 8th, NE 6th, NE 3rd, Lake Hills Blvd, SE 22nd, SE 24th. Metro has not expressed any reservations about the use of these sites, because a number of these pullouts are significantly longer (up to 500 feet) than those required by Metro (between 70 feet and 110 feet in length); as such, they do not pose a significant travel time and schedule reliability problem to coaches re-entering the travel lane.

While it would be possible to locate additional bus pullouts along city streets, this option of serving the City would have the following consequences:

- The construction of pullouts in some areas of Bellevue (e.g., downtown) would require either: a) a modification of the City's Land Use Code to allow for narrower walkways, or b) the purchase of additional right-of-way to add the equivalent of another travel lane. Within downtown Bellevue, the street rights-of-way vary from 60 to 90 feet and typically, the street occupies all or most of the available public right-of-way, with the sidewalk and buffer strip located on private property through easements. Most of the bus stops in downtown Bellevue are located on streets with 16-foot-wide sidewalks.
- Construction of pullouts is costly. The optimal measurements for a pullout are 70 feet to 110 feet in length and 10 to 12 feet in width. Pullouts often include such improvements as landing pads, walkways, curb ramps, and corner radius work. Pavement design must be sufficient to handle 40-foot and 60-foot buses that are classed as "heavy weight vehicles." Metro's general concern is to meet or exceed a minimum standard of a compacted subgrade and 10 inches of ATB (Asphalt Treated Base) and 3 inches of Class B Asphalt overlay. Based on recent bus pullout construction experience along 156th Avenue, a pullout could be assumed to cost (ROW and construction) approximately \$200,000.
- Delays to transit vehicles could be substantial, which could increase costs to Metro and reduce ridership because of slower running times. Moreover, increased transit travel time can lead to reduced transit resources for Bellevue. In Anchorage, AK, bus pullouts on an arterial street similar to 148th Avenue in Bellevue added up to 5 minutes of travel time during congested periods to a route that normally took approximately 50 minutes. Buses were regularly trapped in the pullouts by heavy

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traffic for over a minute.⁶ Often buses would stop in-lane prior to or after the pullout to avoid being trapped.

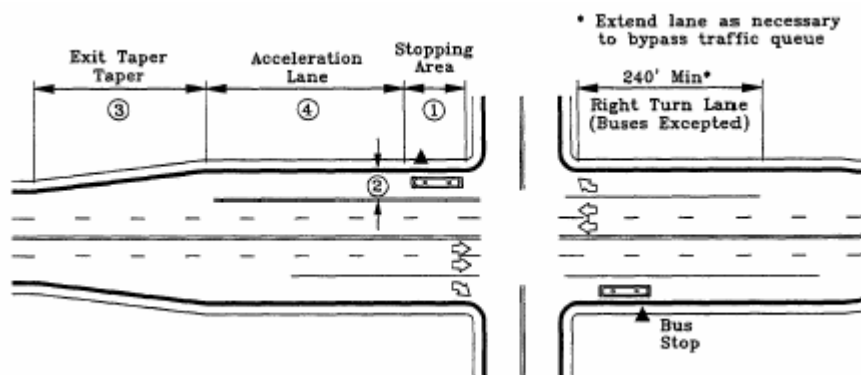
While some negative impacts to general-purpose traffic may be caused by transit coaches stopping in-lane, these impacts are considered negligible relative to other safety and congestion issues.

Signal Queue Jump Lanes

A signal queue jump lane provides short lanes at the approach to an intersection reserved for buses or HOVs. These lanes may be used in combination with a bus stop or a bus pull-in or as stand-alone projects. These lanes allow buses and HOVs to move around the line of general traffic at a signal and travel through the intersection. A way to merge back into the general traffic lane after the intersection must be provided with this approach. One technique is to provide a separate traffic signal head for the HOV queue jump lane and to give the lane an advance green light, while holding the general traffic lanes on red. This approach allows HOVs to move through the intersection and re-enter the general traffic lanes in advance of other traffic (Figures IX-7 and IX-8)

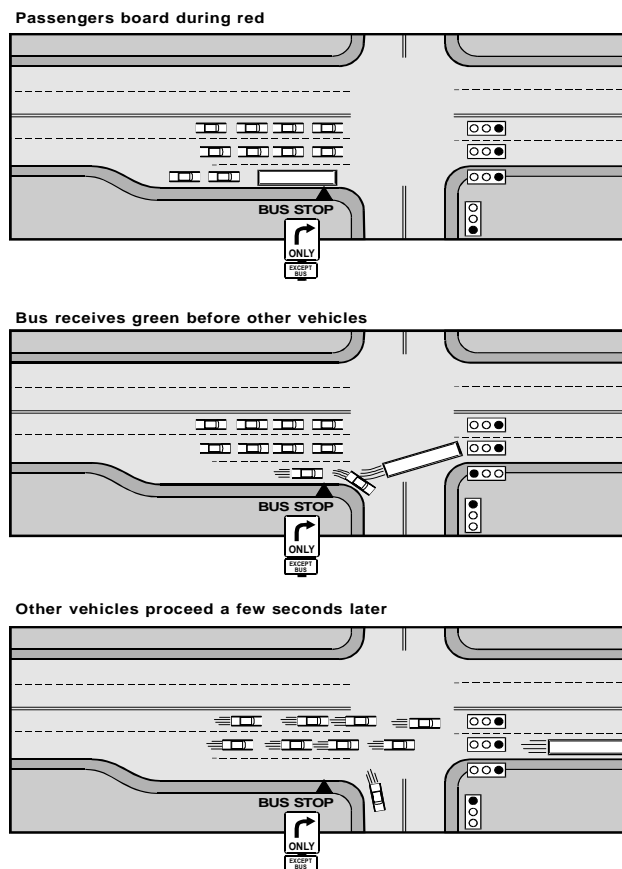
The concept of signal queue jump lanes in Bellevue has been discussed for almost two decades. The May 1985 *Central Business District Transit/Carpool Facility Study* conducted by Entranco included a discussion of HOV queue jump lanes at 108th Avenue NE.

Figure IX-7
Typical Signal Queue Jump Lane⁶



⁶ Source: Thomas Wittmann Observations of People Mover Route 75, September 2001

Figure IX-8
Typical Operation of Queue Jump Lane⁷



Considerations for Bus Queue Jump Lanes

According to the transit agencies that use queue jump bus lanes, these lanes should be considered at arterial street intersections when the following factors are present⁸:

- High-frequency bus routes have an average headway of 15 minutes or less;
- Traffic volumes exceed 250 vehicles per hour in the curb lane during the peak hour;
- The intersection operates at a level of service “D” or worse (see the Transportation Research Board's *Highway Capacity Manual* for techniques on evaluating the operations at an intersection); and
- Land acquisitions are feasible and costs are affordable.

⁷ Source: Kittleson & Associates Transit Preferential Treatments Presentation to TRB

⁸ Source: TCRP Report 19 – Guidelines for the Location and Design of Bus Stops

An exclusive bus lane, in addition to the right-turn lane, should be considered when right-turn volumes exceed 400 vehicles per hour during the peak hour.

One caveat for implementing queue jump lanes is that the City of Bellevue signal system does not have the ability to provide more than eight phases to an intersection. If left-turns are unprotected at an intersection, then a queue jump phase may be possible. However, if left-turns are protected, the Bellevue central signal software would need modification. Based on the locations identified above for potential queue jump improvements, every candidate intersection for queue jump lanes on NE 8th Street appears to operate currently with 8-phase signal timing; software improvements would be necessary to implement queue jump lanes.

Potential Queue Jump Development in Bellevue

Currently, several corridors have service and traffic characteristics consistent with the recommended guidelines for queue jump considerations. These corridors include Bellevue Way SE and NE 8th Street. Both NE 8th Street and Bellevue Way SE are being considered for Bus Rapid Transit (BRT) service by Metro and Sound Transit respectively. Transit queue jump lanes are appropriate capital improvements for this future occurrence. Downtown Bellevue locations do not have the right-of-way available to accommodate queue jump lanes.

Bellevue Way SE has very frequent bus service and experiences severe congestion during the peak hours. Throughout the Bellevue Way SE corridor, right-turn lanes do not exist. Therefore, any queue jump lanes would require widening on the near and far side of the intersection. The Downtown Implementation Plan Update, which is currently in progress, considered several options to widen Bellevue Way SE to accommodate future traffic volumes. In August 2002, the Bellevue City Council put further examination of these options on hold due to lowered downtown Bellevue growth forecasts, neighborhood opposition, and ongoing discussions concerning I-405 improvements.

An HOV lane on Bellevue Way SE should be considered in the future as a complement to transit/HOV improvements in the I-90 corridor, and as a mechanism to address congestion in the longer term. The HOV improvements on Bellevue Way SE would need to be considered from a system perspective that would weigh freeway-oriented improvements against local access issues. Bellevue Way HOV/transit improvements would address an immediate and acute need. However, an investment of this magnitude should be considered within a broader context that encompasses freeway improvements, the future of the South Bellevue Park-and-Ride lot, and the potential of a high capacity transit system.

NE 8th Street has very frequent bus service and experiences congestion throughout the day. Several locations along the corridor have existing right-turn lanes that could be used as queue jump lanes, including the eastbound leg at 148th Avenue NE, and the eastbound leg at 120th Avenue NE.

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148th Avenue is heavily congested during the p.m. peak in particular. In addition, several segments of 148th Avenue have high levels of bus service. The 148th Avenue Mobility Improvement Package outlines several different transportation improvements that optimize north-south travel. The project Technical Advisory Committee and the Bellevue Transportation Commission recommended a southbound HOV queue jump lane between SE 22nd Street to SE 24th Street to improve the speed and reliability of approximately 25 daily buses. The Bellevue City Council, on October 22, 2002, did not agree to carry this recommendation forward. The Council desires resolution on the I-405 widening process prior to addressing improvements to corridors parallel to I-405. A similar recommendation applies north of SE 22nd Street. The Mobility Improvement Package recommends that an approximately 2,100-foot-long HOV lane be constructed between Lake Hills Boulevard and SE 22nd Street that connects to the queue jump lane.

Arterial HOV Lanes

Arterial street HOV projects facilitate the movement of buses, carpools, and vanpools through congested areas, providing travel time savings and improved trip time reliability. Arterial street HOV facilities may also provide time savings to transit operators, improve fuel efficiency, reduce energy use, and enhance air quality.

An arterial HOV lane is a traffic lane on a surface street reserved for the exclusive use of buses, carpools, and vanpools. With curbside bus lanes, bicyclists and right-turning vehicles are usually permitted. In King County, Business Access Transit (BAT) lanes are the preferred option for arterial bus lanes. Buses and right-turns are allowed uses; carpool users are not. Examples of arterial HOV lanes in King County are found in Tukwila on Pacific Highway, and an example of a BAT lane is found on SR 522 in Kenmore.

The benefits of arterial HOV lanes include:

- Reserved lanes help buses pass congested traffic.
- HOV lanes can carry more people than general-purpose lanes by definition. On both Airport Road in Snohomish County, WA and on Hastings Street in Vancouver, B.C., arterial HOV lanes carry more people than in both adjacent lanes.
- Travel time advantage for transit/HOVs because they can bypass delays. For example, adding arterial HOV lanes to a 4.3-mile-long segment of Hastings Street in Vancouver B.C. resulted in a 3-minute savings for carpools and buses. On Airport Road, carpool users averaged savings of one-minute over a 3-mile segment of roadway.⁹
- Delays on arterials happen predominately at signals. HOV lanes help bypass queues at signals and reduce the overall signal delay to buses.
- HOV lanes improve transit speed and reliability, which translates into more controllable operating costs (costs don't steadily increase with increased congestion)

⁹ Sketch Planning Tools for Arterial HOV Evaluation, Chris Wellander, P.E., Kathy Leotta, Susan Serres, P.E., Michael Horn., Paper to ITE, Appendix I.

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and more efficient use of transit dollars. In addition, transit reliability is critical for the general public to choose transit over driving.

- Arterial HOV lanes result in increased numbers of carpools, a condition which is sought-after as a congestion mitigation result. After one year, the number of carpools on Hastings Street in Vancouver, B.C. increased by 12 percent from 31 percent to 43 percent (Table IX-1). The number of carpools on Airport Road in Snohomish County, WA increased by 1 percent as a result of opening arterial HOV lanes (Table IX-2)¹⁰.

Table IX-1
Airport Road HOV Lane Carpool Creation Results

	Before Volumes			Actual Results		
Vehicle Classification	HOV Lanes	Mixed Lanes	Total	3 mos.	6 mos.	12 mos.
SOVs	0	1,267	1,267	1,282	1,187	1,102
HOVs	0	239	239	288	318	272
Buses	0	0	0	0	0	0
Total	0	1,506	1,506	1,570	1,505	1,374

Table IX-2
Hastings Street HOV Lane A.M. Peak Carpool Creation Results

	Before Volumes			Actual Results (7 Months Later)	
Vehicle Classification	HOV Lanes	Mixed Lanes	Total	HOV Lanes	Mixed Lanes
SOVs	0	1,545	1,545	74	1,476
HOV 2	0	430	430	426	175
HOV 3+		50	50	45	19
Buses	0	33	33	33	0
Trucks	0	37	37	0	37
Motorcycles	0	4	4	4	0
Total	0	2,099	2,099	583	1,706

Arterial HOV lanes should be considered when the number of persons per hour carried by buses in a given corridor approaches the people-carrying capacity of a general-purpose lane. They do have operational issues that may hinder implementation. Arterials generally have severe right-of-way (ROW) constraints due to driveways, turns, signals, multiple users, and

¹⁰ May 11, 2000 presentation to Bellevue Transportation Commission by Susan K. Serres, P.E.

adjacent land uses. In addition, depending on the location, multiple agencies are involved such as the City, Metro, WSDOT, Sound Transit, etc. Arterial HOV lanes are subject to the same perception problem as expressway HOV lanes; even when an arterial HOV lane has a higher throughput (persons per hour) than other traffic lanes, it may appear under-used. Due to the “empty lane syndrome”, sufficient demand for arterial HOV lanes should be documented prior to construction.

A number of different approaches can be used to provide priority to buses, vanpools, and carpools on arterial streets. Most of these techniques use existing travel or curb lanes rather than adding new lanes. These approaches include using bus malls, right-side lanes, center lanes, contraflow lanes on one-way streets, and providing priority to buses at signalized intersections.

Bus Malls

Bus malls are streets reserved exclusively for public transit vehicles. Most also include improved sidewalks and other pedestrian amenities. Access to emergency vehicles is usually provided and some projects allow taxis. Bus or transit malls are primarily found in downtown areas. Existing transit malls range in length from a few blocks to facilities covering 10 to 15 blocks. Transit and pedestrian malls were developed in a number of cities in the 1970s. Some of these facilities have been removed or modified, but a number are still in operation.

Three of the best examples of successful bus malls are found in downtown Portland, downtown Denver (Figure IX-9), and downtown Minneapolis (Figure IX-10). Bus malls provide a number of benefits to transit operators and transit riders. These facilities provide a high level of service for bus operations by enhancing the flow of transit vehicles through a congested area and providing a focal point for transit within an area. Additional benefits may be realized through coordinated traffic signal phasing or providing priority for buses at signalized intersections.

Bus Mall Considerations

Bus malls are usually considered only in major activity centers with high bus volumes and congested streets. It is important that capacity exists on the remaining street system so that general-purpose traffic is not negatively affected. Some existing bus malls were one part of larger downtown redevelopment programs. The capital costs associated with bus malls frequently limit the application of this technique. Variables that may influence capital costs include the length of the facility, modifications in street or sidewalk design, passenger waiting areas or bus stations, links to buildings or skywalk connections, passenger amenities, trees, and other street furniture or enhancements.

Figure IX-9
Denver 16th Street Transit Mall¹¹



Figure IX-10
Nicollet Mall in Minneapolis.



11 Arterial Street High-Occupancy Vehicle (HOV) Lanes in Texas, Katherine F. Turnbull, Texas Transportation Institute

Bus Mall Potential Opportunities

The only area where a bus mall may be appropriate within the City of Bellevue's city limits is along the NE 6th Street pedestrian corridor between 112th Avenue NE and Bellevue Way. A bus mall would focus bus service on the entire core of downtown Bellevue, provide east-west mobility, and remove buses from congested thoroughfares such as NE 8th Street and NE 4th Street. The May 1985 *Central Business District Transit/ Carpool Facility Study* included a discussion of an East-West CBD Core Area Transit-Way on NE 6th Street. Due to the existing development patterns and right-of-way limitations, creating a bus mall on NE 6th Street does not appear to be feasible at this time. Bus malls do not appear to be a reasonable strategy elsewhere in Bellevue, at this time, though improved transit access would be desirable in several locations, such as Crossroads Mall, Overlake, and Factoria Mall. Limited street capacity, a lack of parallel routes, and generally limited transit service preclude consideration of dedicating substantial right of way to exclusive transit use at this time.

Right-Side HOV Lanes

This type of HOV facility uses the right-side lane, usually the curb lane or the second lane, on an arterial street for an HOV lane. This approach represents the most common application of HOV lanes on arterial streets. Right-side HOV lanes may be open only to buses, although vanpools, and carpools may be allowed. Bus-only lanes are found in many downtown areas. These facilities may operate only during the morning and afternoon peak hours or throughout most of the day and help move buses through congested downtown areas.

Right-Side HOV Lane Considerations

Curbside lanes are difficult to keep uncongested. The major threats to smooth curbside bus lane operation are (1) illegal parking and standing and (2) right-turning vehicles waiting for pedestrians. One solution to the first problem is to designate the next lane away from the curb as the bus lane, thereby providing a legal place for curbside parking. Some spots can be reserved for deliveries. One solution to the second problem is to prohibit right turns at locations where serious delays would otherwise be encountered. Another solution is also using the lane *adjacent* to the curb lane as a bus lane and mark a right-turn-only lane next to the curb at intersections with heavy right-turn volumes.

Right-side arterial street bus lanes are currently in operation in downtown Seattle. The City of Bellevue operated a curb-side HOV lane on NE 4th Street between 108th Avenue NE to 112th Avenue NE for almost 16 years. The lanes are being removed as part of the Downtown Access Project that is constructing a direct access ramp from the I-405 HOV lanes to NE 6th Street.

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The May 1985 *Central Business District Transit/Carpool Facility Study* identified the NE 4th Street arterial as an HOV lane. The 1985 study also called for other improvements, including an HOV only left-turn lane on NE 8th street at the 116th Ave NE intersection, HOV turn lanes on 108th Ave NE at NE 4th street, and a northbound HOV only left-turn lane on 112th Ave NE at NE 6th Street. Of these projects, only the NE 4th Street arterial HOV lane was in operation for an extended period of time. A lack of right-of-way currently constrains any future development of HOV turn lanes at downtown Bellevue intersections.

Potential Right-Side HOV Lane Opportunities

Curbside HOV lanes should be considered in future 148th Avenue NE studies and downtown Bellevue long-range planning efforts. Right-side bus-only lanes may be appropriate for downtown Bellevue streets if one-way pairs are adopted in the future. For example, if either street providing access to the Bellevue Transit Center, 108th Avenue NE or 110th Avenue NE, becomes one-way between Main Street and NE 10th Street, right-side bus lanes should be strongly considered to maintain bi-directional access to the Bellevue Transit Center. The Downtown Implementation Plan currently is considering making both 108th Avenue NE and 106th Avenue NE one-way streets. Currently, 110th Avenue NE is not under consideration for one-way operation.

In the future, peak-hour bus lanes should be considered for downtown Bellevue streets with on-street parking and a concurrent high volume of bus traffic. Currently, this does not exist, however, as bus volumes continue to grow in the next ten years, removing on-street parking for bus only facilities should be considered. Creating off-peak on-street parking/peak-hour bus lanes assumes that the streets with on-street parking have not been modified to accommodate bus bulbs. Bus bulbs and off-peak on-street parking/peak-hour bus lanes are incompatible.

Left-Side HOV Lane Considerations

Nationwide, few examples exist of left-side HOV lanes. Operating an HOV facility in the left lane of an arterial street eliminates potential traffic conflicts related to curb lanes, such as on-street parking, delivery vehicles, and right-turn movements at driveways and intersections. This approach may be appropriate for longer-distance HOV facilities or one-way streets. Potential issues with this technique include accommodating left-turns for general traffic and significant problems to transit operations if buses must pull over to the curb to pick up and drop off passengers. An alternative is to provide passenger waiting platforms adjacent to the left lane, which requires additional right-of-way and capital expenditures.

Left-Side HOV Lane Opportunities

One location in Bellevue may be appropriate for a left-side bus-only/HOV lane, depending on the ultimate decision on whether the proposed Bellevue Way direct access ramp has a left- or right-lane HOV access onto I-90. Bellevue Way SE between 112th Avenue SE and I-90 experiences severe congestion related delays. In the southbound direction, buses are often delayed for minutes at a time as they crawl through traffic on Bellevue Way. One hundred seventy buses a day travel in the southbound direction on this segment (16 buses per a.m. peak hour and eleven buses per p.m. peak hour). A southbound left-side bus-

only/HOV lane between I-90 and 112th Avenue SE would allow buses to travel past any congestion related queues and onto the proposed I-90 bidirectional HOV lanes. There are no southbound bus stops in this segment, so a left-side HOV lane is feasible.

Median HOV Lane Considerations

Bus lanes can also be located in the median, usually of a wide boulevard. Many similar reservations were created for trolleys, a few of which still exist in the United States. Some of these rights-of-way were converted to bus use, for example, Canal Street in New Orleans (Figure IX-11) and Market Street in San Francisco (both of which now have shared trolley and bus use). Median lanes are usually separated from general traffic lanes by a raised curb. Passenger platforms are usually on the right, and can be staggered to reduce the overall width needed. Center platforms can also be used, but this requires left-side doors on all vehicles using the median lanes. If there is sufficient room, median lanes can be designed to permit buses to pass each other, but this is not always feasible.

Median lanes are much less likely to be congested by other traffic than curbside lanes. On the other hand, they do present a few disadvantages relative to curbside lanes:

- Left-turning traffic conflicts with straight-through buses. Either left turns must be banned or they must be permitted only in a separate phase.
- Passengers must cross traffic lanes to reach stops. Where there are several lanes of fast traffic, this can create safety problems, especially since passengers often are anxious to cross to catch an approaching bus.
- Because of the need for passenger loading areas in the center of the street, the overall street width needed is larger than in the case of curbside lanes.

Despite these drawbacks, median HOV lanes are sometimes appropriate for high volume routes, particularly when they connect to freeway HOV direct access ramps.

Median Lane HOV Lane Opportunities

Bellevue has no locations where median lanes are under consideration in the near-term. In the long term, opportunities for median transit lanes should be explored, particularly in areas where higher capacity transit will become necessary. Bellevue Way SE is the most viable long-term candidate for median transit lanes, whether for light rail, bus rapid transit, or even expanded bus service. Other corridors such as NE 8th Street, 156th Avenue NE, and 148th Avenue NE should also be considered as part of long-term planning processes.

Figure IX-11
Median Bus Lanes in New Orleans¹²



¹² Arterial Street High-Occupancy Vehicle (HOV) Lanes in Texas, Katherine F. Turnbull, Texas Transportation Institute

Contraflow Lane Considerations

Another option is to provide a *contraflow lane* to carry buses in the opposite direction on what would otherwise be a one-way street (Figure IX-12). Contraflow lanes can provide more direct routing for buses when one-way street patterns create detours. Contraflow lanes do not have the same enforcement problems as curbside lanes, since violators are easy to spot and catch.

This option is under consideration for 108th Avenue NE in downtown Bellevue as part of the Downtown Implementation Plan. It would permit two-way bus access to the new Bellevue Transit Center, with buses operating in the outside lanes on both sides of the street. This arrangement allows for the ongoing use of existing heavily used bus stops.

Figure IX-12
Contraflow Bus-only Lane on Spring Street in Downtown Los Angeles¹³



Most contraflow lanes in the past were installed adjacent to the curb. This design prevents the use of the curb for deliveries, which may be a serious problem for businesses without rear loading access, such as via side streets or alleys. One solution to this problem was devised in San Francisco in 1997. The next lane from the curb on Sansone Street was designated as a contraflow bus-only lane. The curb lane was reserved for commercial deliveries, and commercial vehicles were authorized to use the lane. Essentially the project

¹³ Arterial Street High-Occupancy Vehicle (HOV) Lanes in Texas, Katherine F. Turnbull, Texas Transportation Institute

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involved converting a northbound one-way street with three travel lanes and curb parking into a two-way street with a southbound lane and curb parking restricted to buses and commercial vehicles.

The Lymmo downtown circulator in Orlando, FL provides another option in bus lane design. For most of the route, the Lymmo travels on streets that were formerly three lanes in the same direction (one-way streets). After conversion to bus lanes, the right-most lane remains for general traffic use and provides access to on-street parking. The center lane was converted to a bus-only lane, with a raised curb separating it from the general traffic lane and providing space for loading.

The left-most lane becomes a bus-only lane for opposite-direction bus traffic; loading is on the opposite sidewalk and there is no on-street parking on that side. These configurations can produce complications at intersections. Orlando's solution was to provide separate bus phases at every intersection, controlled by special bus-only signals, to permit buses to make all movements free of conflicting traffic moves. These signals are only activated when an approaching bus is detected.

A contraflow bus lane is in operation in downtown Seattle on 5th Avenue between Terrace Street and the Cherry Street Express Lane reversible off/on-ramp. The lane is three blocks long and has bus-only signals. The segment also includes one bus stop.

Contraflow Lane Opportunities

Contraflow bus lanes may be appropriate for downtown Bellevue streets if one-way pairs are adopted in the future. For example, if either street providing access to the Bellevue Transit Center, 108th Avenue NE or 110th Avenue NE, becomes one-way, contraflow lanes should be strongly considered to maintain access. The Downtown Implementation Plan is examining making both 108th Avenue NE and 106th Avenue NE one-way streets. Currently, 110th Avenue NE is not being considered for one-way operation. Otherwise, contraflow lanes are not applicable to the Bellevue streetscape, and should not be considered.

Arterial Design for Buses

Transit route design often encounters roadways where buses cannot safely operate. Often in these cases, bus routes are designed not for the passenger market on a particular street, but simply on how to most effectively get from point A to point B.

Turn Radii

In a meeting with Metro supervisors and planning staff, seven different locations were identified where turn radii make bus turns difficult, if not impossible. These eight locations all either have existing bus traffic on them, or the desired movement is currently not possible:

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- Eastbound right turn 148th Avenue at Landerholm Circle – Routes 271, 245, and 222 make this turn out of the Bellevue Community College. Drivers report that often the turn radius causes them to swing into adjacent lanes (splitting lanes), and during congested times, splitting lanes is often impossible. This turn radii issue will be addressed by a project in Bellevue’s 2003 CIP.
- 156th Avenue at Bel-Red Road – The Overlake region has limited turn movements and large blocks. Metro has difficulty efficiently turning buses around and creating routing through the area that meets customer needs. Adding left-turn movements between 156th Avenue and Bel-Red Road would address these concerns and allow routes to be routed more efficiently through Overlake.
- Southbound right turn 156th Avenue at Northup Way – The Overlake region has limited turn-movements and large blocks. Metro has difficulty efficiently turning buses around and creating routing through the area that meets customer needs. Buses currently cannot make a southbound right-turn movement from 156th Avenue onto Northup Way, which limits the area routing possibilities and creates inefficient routing patterns.
- Eastbound right turn 156th Avenue at NE 24th - Routes 253 and 229 currently make this movement. Bus operators report the turn radii causes them to swing into the adjacent lane, which is difficult during peak hours.
- Southbound right turn 164th Avenue at Northup Way - Route 230 in east Bellevue is routed to avoid a right-turn, which is too tight for buses, from Northup Way onto 164th Avenue NE. In the process of avoiding the right-turn, a potentially higher ridership area remains unserved by route 230.
- Northbound right turn 164th Avenue at Northup Way – Currently, Route 230 travels through this intersection. Metro planning staff indicated that routing in the area could change and become more efficient if the northbound right-turn from 164th Avenue onto Northup Way were possible for buses.
- Westbound right turn 139th Avenue SE at SE 32nd Street – Currently, it is difficult for a bus to make this movement. Currently there is no service on 139th Avenue SE, but it is a City of Bellevue service goal to begin providing transit to this area. To facilitate service patterns between 139th Avenue SE and the Eastgate Park-and-Ride bus loop, the westbound right turn from SE 32nd Street to 139th Avenue SE must be possible.

Roadway Standards

Transit routing is also affected by arterial design standards. Three locations in Bellevue were identified where roadways are currently not ideally designed for bus traffic. The roadway issues involve permission to use private roadways and inadequate pavement depths (pavement standards are discussed in Chapter X). The three locations are:

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- SE Perimeter Road from Bellevue Community College (BCC) to Eastgate – Currently, only vans are able to drive on SE Perimeter Road between Landerholm Circle and 142nd Place SE. This roadway has an inadequate pavement depth for full-size buses, which is the most direct connection between the BCC and the Eastgate Park-and-Ride. A more direct routing between the north end and south end of the BCC campus is desired to improve transit speed and reliability for several bus routes that currently travel between BCC and the Eastgate Park-and-Ride. For this to occur, SE Perimeter Road must be upgraded to accommodate full-size buses.

An alternative to upgrading SE Perimeter Road and providing a more direct routing through the BCC campus, is to improve the campus roadway that connects 142nd Place with 145th Place at SE 24th Street. This roadway, once upgraded to accommodate buses, does not provide any significant parking access, yet provides close pedestrian proximity to buildings.

- SE 32nd Street between 139th Avenue and 140th Place - According to Metro planning staff, reconstructing the Eastgate bus turnaround will likely create bus traffic on SE 32nd Street. According to operators, the existing roadway is not constructed for buses. The Eastgate Park-and-Ride expansion project will improve this roadway to accommodate buses.
- Westbound left turn NE 8th Street to 108th Avenue NE – According to Metro operators, the existing left-turn lane is very narrow considering the high bus traffic (over 100 daily buses). The left-turn lane is 11 feet wide, and the adjacent through lanes are all 11 feet wide as well. The only cost-effective method to widen the left-turn lane is to restripe the eastbound and westbound through lanes to slightly less than 11 feet wide. The increased width for the left-turn lane would result in narrower through lanes. The estimated cost of restriping NE 8th Street between 108th Avenue NE and 110th Avenue NE is \$15,000.

Transit Facilities Access

The majority of transit facilities in Bellevue were constructed prior to today's congested traffic levels. Upon year of opening, transit facility access was not problematic, because the street traffic volumes were not substantial. Today, however, traffic on arterials throughout the city is reaching new highs, and it is affecting the ability of buses to access transit facilities.

According to Metro operators, two different Bellevue facilities have existing access issues that are substantially delaying buses:

South Bellevue Park-and-Ride – The southbound access for buses into the park-and-ride is currently unsignalized. During peak hours, Metro operators indicated that the southbound left turn from Bellevue Way into the park-and-ride can be delayed by up to two minutes. Over 170 daily buses make this movement and are subject to these delays. The operators recommended installing a bus-actuated left-turn signal to minimize this delay. This recommendation would need to be examined for signal warrants and impacts to northbound traffic flow on Bellevue Way.

South Kirkland Park-and-Ride – Access for buses from 108th Avenue NE to the park-and-ride is currently unsignalized. Metro operators report that limited sight distances and heavy traffic on 108th Avenue NE create delays whenever buses access the park-and-ride lot. Six routes are affected by delays at this access. The operators recommended installing a signal at the park-and-ride entrance that is synchronized with the 108th/Northup Way signal. In addition, the intersection of NE 38th Place/108th Avenue NE would need to be accommodated by this signal as well. This recommendation would need to be examined for signal warrants and impacts to traffic flow on 108th Avenue NE. This recommendation is currently being evaluated by Sound Transit as part of their Kirkland transit improvement project.

Identified Arterial Trouble Spots that Affect Transit Speed and Reliability

As part of the planning effort, several congestion hot-spots were identified by Metro operators. These congestion areas regularly delay routes through the area, but they are also indicative of general-purpose vehicle congestion rather than a transit-specific issue. Table IX-3 shows the identified congestion hot spots as well as a proposed solution by the operators, if a solution was possible. Improvements to these locations for general-purpose traffic would also assist in reducing transit delays, and would enhance overall transit speed and reliability.

The January 24, 2002 Downtown Implementation Plan Transportation Analysis Summary identifies 35 projects groupings that were analyzed on a planning-level basis. Eighteen project groupings were recommended for further analysis. The groupings contained projects that would help address future traffic congestion and access to downtown Bellevue. While most of the groupings were not transit specific, improvements in traffic flow in downtown Bellevue would benefit transit. Table IX-4 lists the improvements from the plan that would improve general-purpose traffic and also assist in reducing transit delays, resulting in enhanced overall transit speed and reliability.

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Table IX-3
KCM Identified Arterial Trouble Spots that Affect Transit Speed and Reliability

Location	Identified Issue	Identified Potential Solution
148th Ave. south to Landerholm Circle.	Landerholm Circle light causes a backup on 148th in the southbound direction	Have BCC reroute internal traffic better using the 142nd access to the west
164th Ave. at NE 24th	Congestion at this intersection.	
156th Ave. between NE 24th and NE 8th	Congestion and many driveways	
156th Ave. at Lake Hills Blvd.	Congestion at Lake Hills Shopping Center	
Northup Way at Lake Washington Blvd.	Southbound and westbound left-turning buses are often severely delayed by this signal.	Install left turn TSP
Northup Way at 108th Ave - Eastbound LT	Eastbound buses trying to access the 108th Ave NE on the way to the South Kirkland Park-and-Ride are delayed by the congestion at this left turn.	Retime signal or install eastbound left turn TSP
NE 8th St between 102nd and 100th	Buses often have trouble pulling out of the bus stop in the curb-lane and shifting into the inside through-lane.	
148th Ave. between SR 520 and NE 8th St.	Corridor congestion.	
NE 20th between 148th and 116th	Congestion increasing	
Bellevue Way SE between 112th Ave and I-90	Southbound p.m. peak congestion backs up traffic between 112th Ave SE and I-90	Add southbound HOV lane between 112th Avenue SE and I-90

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Table IX-4
Downtown Implementation Plan Identified Arterial Trouble Spots
that Affect Transit Speed and Reliability

Location	Identified Issue	Identified Potential Solution
Bellevue Way @ NE 4th Street	Intersection operates at poor LOS	Add dual northbound left-turn lanes, an eastbound right-turn lane, and a westbound right-turn lane.
Bellevue Way @ Main Street	Intersection operates at poor LOS	Add dual westbound left-turn lanes
Bellevue Way between NE 8th Street and NE 12th Street	Intersections operate at poor LOS	Add southbound lane from NE 8th Street to NE 12th Street
Bellevue Way between Main Street and NE 4th Street	Intersections operate at poor LOS	Add southbound lane from Main Street to NE 4th Street
Bellevue Way between I-90 and 112th Avenue SE	Intersections operate at poor LOS	Widen by one lane in each direction
Bellevue Way between 112th Avenue SE and Main Street	Intersections operate at poor LOS	Widen by one lane in each direction
Bellevue Way @ SR 520	Lack of freeway access	Add eastbound on-ramp to SR 520 from Bellevue Way
Bellevue Way between SR 520 and NE 12th Street	Intersections operate at poor LOS	Widen by one lane in each direction
112th Avenue NE between Main and SE 8th through vehicles	Left-turning vehicles delay	Add center turn-lane
112th Avenue SE @ SE 8th Street	Intersection operates at poor LOS	Add southbound through lane
112th Avenue NE between SR 520 and NE 12th Street	Intersections operate at poor LOS	Add one through lane in each direction
NE 12th Street @ 116th Avenue NE	Intersection operates at poor LOS	Add dual eastbound left-turn lane

Recommendations

The goal of all improvements listed in this chapter is to improve overall transit speed and reliability, which will in turn improve service for Bellevue residents and other users. The City of Bellevue, in conjunction with Metro and Sound Transit, should continue to monitor roadways and transit operations for problems with speed and reliability. Routes change,

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transit service expands, new needs and travel markets emerge, and new congestion patterns may appear. All these factors speak to creating an ongoing monitoring process.

Based on an examination of the technology and techniques used nationwide to improve arterial-based transit convenience, speed, and reliability, a list was developed of recommended arterial improvements for consideration. The listed recommendations are consistent with the adopted plans and policies of the City of Bellevue, including the 2001 Service Plan (Chapters I-V) service vision approved by the City Council. Each recommendation must be developed further to ensure that signal timing, turn movement, property, or local environmental issues are properly addressed. The identified needs also point to the need for partnerships with neighboring cities, King County, and other institutions (e.g., Bellevue Community College) to develop transit corridors that comprehensively address the multitude of arterial projects. The total cost of all recommendations is approximately \$15,000,000¹⁴. Each recommendations is discussed below, displayed in Figure IX-13, and summarized in Table IX-5:

- Implement Transit Queue Jump Lanes and Transit Signal Priority on Eastbound NE 8th Street

Queue jump lanes are recommended on eastbound NE 8th Street at 120th Avenue and at 148th Avenue. They are an appropriate method to improve speed and reliability in the NE 8th Street corridor. The rationale includes:

- NE 8th Street is congested at both locations.
- Both locations have a high number of daily buses (75 daily eastbound buses, with nine buses per p.m. peak hour) that would benefit from being able to bypass long queues at these congested intersections.
- Both locations have existing right-turn lanes, which facilitate implementation.
- NE 8th Street has been chosen by Metro as a potential BRT corridor. Transit queue jumps are a cost-effective way to prioritize buses in this corridor.

Implementing queue jump lanes would require constructing a receiving lane on the far side of the intersection, modifying signal timing and protocol, and modifying the central Bellevue signal control software. The estimated cost of the NE 8th Street/120th Avenue NE improvement is \$570,000 and the NE 8th Street/148th Avenue NE improvement is estimated to cost \$1,000,000.

- Implement HOV Lane and Transit Queue Jump Lanes and Transit Signal Priority on 148th Avenue

The 148th Avenue Mobility Improvement Package recommends two different projects, including a southbound queue jump lane between SE 22nd Street to SE 24th Street (\$1,178,000) and constructing an approximately 2,100-foot-long HOV lane between Lake Hills Boulevard and SE 22nd Street (\$2,636,000) that connects to the queue jump lane. The Bellevue City Council has not endorsed either the HOV lane

¹⁴ These cost estimates should be considered as planning-level only. Unless otherwise specified, the cost estimates do not include right-of-way costs, utilities, or water treatment.

or the transit queue jump lane on 148th Avenue. While HOV lanes on 148th Avenue may not fit into the existing vision for 148th Avenue, the long-term vision for 148th Avenue should consider HOV lanes and queue jump lanes. The rationale includes:

- 148th Avenue is severely congested in this segment, especially during the p.m. peak.
- The improvement enhances speed and reliability of approximately 25 daily buses.
- Capacity of the southbound general-purpose lanes will be improved.

Implementing the extended 148th Avenue queue jump lanes would require constructing an entirely new southbound lane between Lake Hills Boulevard and SE 24th Street, modifying signal timing and protocol, and modifying the central Bellevue signal control software. The estimated cost for this project, based on the 148th Avenue Mobility Improvement Package, is \$3,814,000.

- **Construct a Southbound HOV Lane on Bellevue Way SE**

Congestion on the I-90 ramps often backs up traffic on Bellevue Way SE for over a mile to the intersection with 112th Avenue SE. During the p.m. peak hour in particular, this congestion severely reduces bus speed and reliability on Bellevue Way SE. One hundred seventy buses a day travel in the southbound direction on this segment (16 buses per a.m. peak hour and eleven buses per p.m. peak hour).

As considered by the Downtown Implementation Plan, construction of a southbound bus-only/HOV lane between I-90 and 112th Avenue SE is recommended. The HOV lane should be placed on Bellevue Way so that it ties seamlessly into the proposed bidirectional I-90 HOV lanes.

To maintain easy bus access for 170 daily buses from the southbound HOV lane to the South Bellevue Park-and-Ride, a left-side HOV lane is preferred. There are no bus stops along Bellevue Way between the intersection with 112th Avenue SE and I-90 other than at the South Bellevue Park-and-Ride. According to the September 2002 *Bellevue Way Concept Definition and Technical Feasibility Study* completed by CH2M Hill, the estimated cost for an HOV lane between the South Bellevue Park-and-Ride and I-90 is \$980,000.

- **Construct a Contraflow Lane on Southbound 108th Avenue NE**

One of the preliminary recommendations for Bellevue's Downtown Implementation Plan is to make 108th Avenue NE and 106th Avenue NE a one-way pair. In this plan, 108th Avenue NE is one-way in the northbound direction and 106th Avenue NE is one-way in the southbound direction. If 108th Avenue NE becomes a northbound one-way street, then a transit-only contraflow southbound lane is recommended. This would provide bidirectional transit access to the Bellevue Transit Center, which is crucial for that facility to operate effectively and efficiently. Without it, bus riders would be subjected to more out-of-direction travel, and operating costs would be increased due to circuitous routing. Most importantly, ridership would suffer as certain connections could no longer be made. Between NE 8th Street and Bellevue Transit Center, 128 daily buses currently use southbound 108th Avenue NE

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to access the Bellevue Transit Center. Between the Bellevue Transit Center and NE 4th Street, 143 daily buses use southbound 108th Avenue NE. The estimated cost for this improvement, along with the northbound right-side bus-only lane described below, is \$5,630,000.

- Construct a Northbound Right-Side Bus-Only Lane on Northbound 108th Avenue NE

One of the preliminary recommendations for Bellevue's Downtown Implementation Plan is to make 108th Avenue NE and 106th Avenue NE a one-way pair. In this plan, 108th Avenue NE is one-way in the northbound direction and 106th Avenue NE is one-way in the southbound direction. If 108th Avenue NE becomes a northbound one-way street, then it is recommended that one of the lanes be striped for transit only. Every bus accessing the Bellevue Transit Center travels on 108th Avenue NE. A bus-only lane will minimize delays and associated operating costs for buses traveling to and from the Bellevue Transit Center. The estimated cost for this improvement, along with the southbound contra-flow lane described above, is \$5,630,000.

- Improve Turn Radii for Buses

The turn radii at six intersections in Bellevue should be improved to accommodate buses. Metro staff/operations supervisors and Bellevue staff identified these locations as spot improvements where minor changes in turn-radii would improve automobile, bus, and pedestrian safety. The following locations are recommended for improvements:

- Eastbound right-turn 148th Avenue at Landerholm Circle. The estimated cost for this improvement is \$230,000, which is included in an upcoming CIP project.
- Southbound right-turn 156th Avenue NE at Northup Way. The estimated cost for this improvement is \$390,000.
- Eastbound right-turn 156th Avenue NE at NE 24th Street. The estimated cost for this improvement is \$320,000.
- Southbound right-turn 164th Avenue NE at Northup Way. The estimated cost for this improvement is \$325,000.
- Northbound right-turn 164th Avenue NE at Northup Way. The estimated cost for this improvement is \$440,000.
- Westbound right-turn at SE 32nd Street at 139th Ave SE. The estimated cost for this improvement is \$100,000.

Implementing these projects would improve turning movements for buses and allow routes to be more efficiently routed. This would lower operating costs, improve service timing and reliability, improve safety, and be more attractive to transit users, potentially increasing ridership.

- **Improve Roadways that Cannot Accommodate Buses**

Several existing roadways are recommended for improvements to facilitate/enable bus movements:

- SE Perimeter Road from Landerholm Circle to 142nd Place (BCC to Eastgate) – Currently, only vans are permitted to drive on SE Perimeter Road between Landerholm Circle and 142nd Place SE. Full-size buses are not permitted to use this roadway, which is the most direct connection between the BCC and the Eastgate Park-and-Ride. A more direct routing between the north end and south end of the BCC campus is desired to improve transit speed and reliability for several bus routes that currently travel between BCC and the Eastgate Park-and-Ride. One of the primary issues preventing the more direct routing is pavement loadings on SE Perimeter Road. Therefore, we recommend upgrading SE Perimeter Road to accommodate full-size buses. The estimated cost for this improvement is \$960,000.

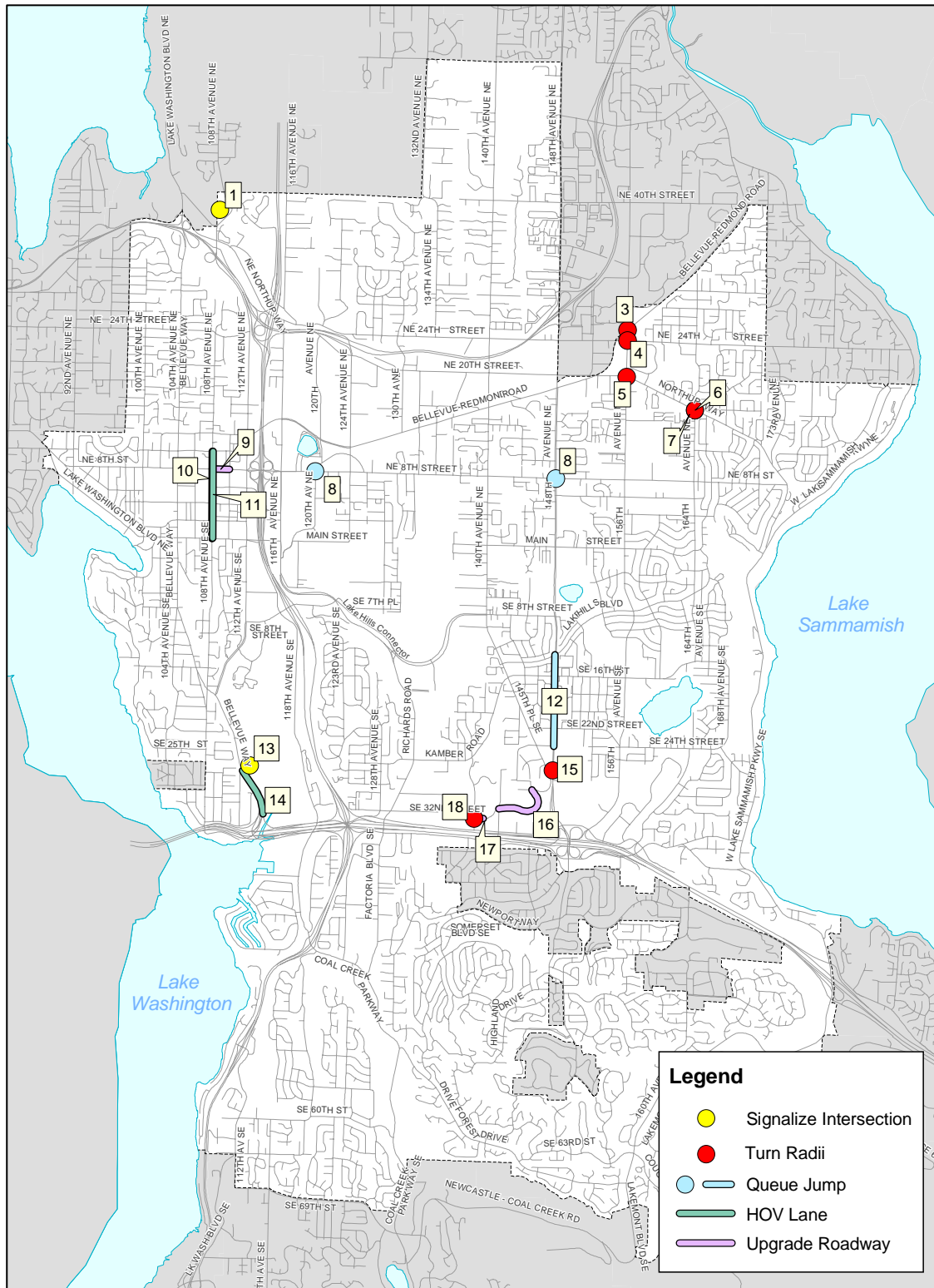
An alternative to upgrading SE Perimeter Road and providing a more direct routing through the BCC campus is to improve the campus roadway that connects 142nd Place with 145th Place at SE 24th Street. This roadway, once upgraded to accommodate buses, does not provide any significant parking access, yet provides close pedestrian proximity to buildings.

- SE 32nd Street between 139th Avenue and 140th Place - The existing roadway is not constructed for buses, but it is scheduled to be upgraded to accommodate buses as part of the Eastgate Park-and-Ride project. This improvement will be accomplished within the scope of the existing Eastgate Park-and-Ride expansion project.
- Westbound left turn NE 8th Street to 108th Avenue NE – According to Metro operators, the existing left-turn lane is very narrow considering the high bus traffic (over 100 daily buses). We recommend examining opportunities to widen the left-turn lane by up to one foot to better accommodate the bus traffic. The estimated cost for this improvement is \$15,000 (assuming restriping only).

- **Improve Transit Facility Access**

Poor access to the Overlake Park-and-Ride, the South Bellevue Park-and-Ride, and the South Kirkland Park-and-Ride regularly causes delays to buses using the facilities. To improve transit speed and reliability at each facility, we recommend examining the Overlake Park-and-Ride entrance, South Bellevue Park-and-Ride southbound bus entrance, and South Kirkland Park-and-Ride entrance for signalization. The estimated cost for both signals is \$215,000 (South Bellevue Park-and-Ride estimate is \$85,000 and the South Kirkland Park-and-Ride estimate is \$130,000). We recommend completing a signal warrant analysis and determining the overall impacts of the new signal on the surrounding streets.

Figure IX-13
Recommended Arterial Projects



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Table IX-5
Recommendation Summary and Projected Utilization

No.	Recommendation	Existing Daily Buses	Projected Daily Buses	Estimated Cost
1	Signalize South Kirkland Park-and-Ride entrance	327	~350	\$130,000
3	Improve turn radii for eastbound right-turn 156th Avenue at NE 24th Street	35	~60	\$320,000
4	Improve turn radii for southbound right-turn 156th Avenue at Northup Way	0	~25	\$390,000
5	Improve turn radii for southbound right-turn 164th Avenue at Northup Way	0	~30	\$325,000
6	Improve turn radii for northbound right-turn 164th Avenue at Northup Way	0	~30	\$440,000
7	Implement Transit Queue Jump Lanes and Transit Signal Priority on Eastbound NE 8th Street at 120th Avenue NE	75	~110	\$570,000
8	Implement Transit Queue Jump Lanes and Transit Signal Priority on Eastbound NE 8th Street at 148th Avenue NE	75	~110	\$1,000,000
9	Widen westbound left-turn lane from NE 8th Street to 108th Avenue NE	100	~80	\$15,000
10	Construct a Northbound Right-Side Bus-Only Lane on Northbound 108th Avenue NE	85	~50 ^a	inc. in \$5,630,000
11	Construct a Contraflow Lane on Southbound 108th Avenue NE	143	~175	\$5,630,000
12	Implement HOV Lane and Transit Queue Jump Lanes and Transit Signal Priority on 148th Avenue between Lake Hills and SE 24th Street	25	~50	\$3,814,000
13	Signalize South Bellevue Park-and-Ride north access	170	~200	\$85,000
14	Construct a southbound HOV Lane on Bellevue Way SE between South Bellevue Park-and-Ride and I-90	170	~200	\$980,000
15	Improve turn radii for eastbound right-turn 148th Avenue at Landerholm Circle	110	~70 ^b	\$230,000
16	Upgrade SE Perimeter Road between Landerholm Circle and 142nd Place to accommodate full-sized buses.	39	~100	\$960,000
17	Upgrade SE 32nd Street between 139th Avenue and 140th Place to accommodate full-sized buses.	0	~25	inc. in Eastgate PR
18	Improve turn radii for westbound right-turn 139th Ave SE at SE 32nd Street	0	~25	\$100,000

^a The future number of buses decreases at this location because bus routes using the movement to access I-405 northbound at NE 8th Street will use the new NE 6th Street direct access ramps instead.

^b The future number of buses decreases at this location because the proposed improvements to SE Perimeter Road will cause several bus routes currently making this right turn to be routed on SE Perimeter Road instead.

CHAPTER X- PAVEMENT OVERLAY

Pavement design is traditionally based on traffic volume and load estimates. Streets that are subject to higher traffic volumes and loads require a broader pavement depth than those experiencing light loads on average. Maintaining city streets in good condition is a city responsibility that, among other things, allows King County Metro to provide transit service to residents, employees, and visitors.

A critical factor in assessing pavement needs and design is the assumed level of truck and bus traffic. Due to their weight, relative to general traffic, truck and bus traffic have a significant impact on pavement. As such, pavement design has to factor in the potential of these high load vehicles to ensure that the depth of overlay can compensate for the increased weight. In pavement design schemes, buses have been included in counts of truck traffic. However, in recent years, the level of bus traffic on Bellevue's arterial system has significantly increased. As such, an analysis of the pavement needs on transit routes in Bellevue was recently conducted to determine where pavement rehabilitation or reconstruction is required.

Transit Route Pavement Analysis Methodology

For road segments in Bellevue served by transit, bus loading was determined by considering the heaviest coach used on the street segment as well as the number of bus trips on that segment. On routes where multiple bus types are evenly divided, each size and type was considered in the evaluation. Also, the road base being overlayed with pavement was assessed by considering the resilient modulus of the subgrade materials. This combination of factors was used to determine the full depth of asphalt concrete thickness required for any given road segment.

The final step in the analysis was comparing the existing pavement depth of each roadway segment with the depth suggested by assumed load factors and subgrade qualities. Based on these findings, recommendations were developed for pavement rehabilitation or reconstruction needs as well as potential project costs.

"Pavement Rehabilitation" was considered necessary for any segment requiring an additional overlay of 2.5 inches or less. Such projects can be addressed within the City's pavement management program. Additional overlay requirements in excess of 2.5 inches were considered to be "Pavement Reconstruction" projects. These projects should be considered within the City's CIP program.

Prioritization Methodology

In addition to determining the amount of overlay required, each segment was assigned a priority ranking based on the level of bus traffic.¹ Corridors with more frequent service and associated higher pavement loading should be prioritized over those with limited bus traffic. Existing pavement conditions and automobile volumes are specifically excluded from this ranking

¹ With regard to a primary ranking criterion for prioritizing pavement improvements from a transit perspective, frequency is a more readily measured factor than bus type. Different bus types do have different axle loadings, but the type of bus on a particular street may change on a daily basis and the extremely heavy Breda dual-powered buses will be retired in several years.

CAPITAL ELEMENT

methodology. These factors are already incorporated in the Bellevue Pavement Management Program.

The Transit Priority Network designation for any given segment serves as a proxy for transit volume. Based on those designations, the related priority ranking for pavement overlay is shown below:

Local Transit Access	Low Priority
Minor Transit Corridor	Medium Priority
Principal Transit Corridor	Highest Priority
Transitway	Highest Priority

Once each transit segment has received its priority ranking, it should be compared to its standing and ranking in the Bellevue Pavement Management Program. The results of the Transit Route Pavement Analysis should be used to assist choosing between projects that score closely in the Bellevue Pavement Management Program (i.e., it is a “tie-breaker” criterion). The result is that projects with higher bus pavement impacts will be prioritized for resurfacing or reconstruction over those with lower bus traffic, all other factors being equal.

Analysis Findings and Recommendations

Fifty-two arterial street segments in Bellevue were evaluated as part of the Transit Route Pavement Analysis. Of these, it was found that 10 segments require pavement rehabilitation and 33 segments are in need of pavement reconstruction.

All the segments requiring rehabilitation or reconstruction, as well as the level of overlay required, are outlined in Table X-1 and shown in Figure X-1. The priority designation is included in the final column of the table.

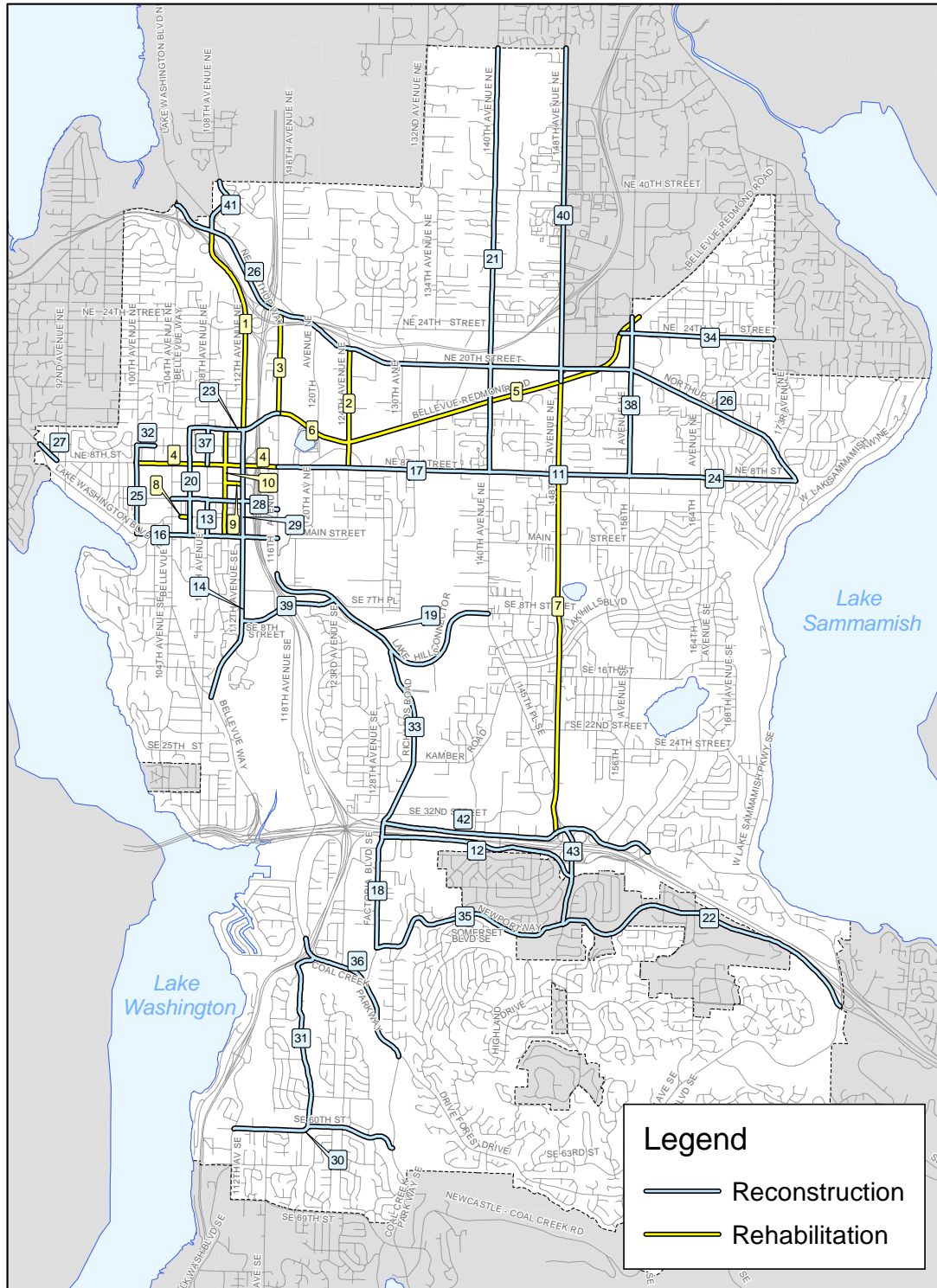
The total cost for the combined rehabilitation and reconstruction needs is estimated at \$27.4 million. The combined rehabilitation and reconstruction costs exceed available funding sources. Therefore, from a transit perspective, the priority designation was used to assist in determining which projects are the most important.

The rehabilitation and reconstruction needs for the highest-priority projects, as defined by the Transit Priority Network, total approximately \$18.5 million. In Chapter XV - Funding Alternatives, only the \$18.5 million needed to address the "highest priority" projects is called out as being most beneficial to the service network requested in the Bellevue Transit Service Plan.

Table X-1
Transit Route Pavement Analysis Results and Recommendations

Map ID	Roadway	From	To	Pavement Required (inches)	Existing Pavement (inches)	Required Overlay (inches)	Action	Cost	Priority
29	112 TH AVE NE	MAIN ST	12 TH ST (NE)	12.5	7.5	5.0	Recon	\$788,000	High
2	124 TH AVE NE	8 TH ST (NE)	NORTHUP WAY	8.5	7.5	1.0	Rehab	\$224,840	High
4	8TH ST (NE)	100 TH AVE NE	116 TH AVE NE	15.5	13.5	2.0	Rehab	\$381,465	High
10	110 TH AVE NE	MAIN ST	12 TH ST (NE)	9.5	7.0	2.5	Rehab	\$167,055	High
9	6 TH ST (NE)	110 TH AVE NE	112 TH AVE NE	14.5	12.0	2.5	Rehab	\$49,490	High
7	148 TH AVE NE (NB)	EASTGATE WAY	BELL, RED, ROAD	12.5	10.0	2.5	Rehab	\$834,680	High
11	8TH ST (NE)	140 TH AVE NE	156 TH AVE NE	11.0	8.0	3.0	Recon	\$856,667	High
12	36 TH ST (SE)	128 TH AVE SE	150 TH AVE SE	10.5	7.5	3.0	Recon	\$578,667	High
14	112 TH AVE SE	MAIN ST	BELLEVUE WAY SE	11.0	7.5	3.5	Recon	\$702,694	High
18	128TH AVE SE	EASTGATE WAY	NEWPORT WAY SE	12.0	8.0	4.0	Recon	\$808,333	High
17	8TH ST (NE)	116 TH AVE NE	140 TH AVE NE	12.0	8.0	4.0	Recon	\$1,679,167	High
19	LAKE HILLS CONNECTO	116 TH AVE SE	140 TH AVE SE	12.0	8.0	4.0	Recon	\$1,349,333	High
20	106 TH AVE NE	MAIN ST	12 TH ST (NE)	11.0	7.0	4.0	Recon	\$470,611	High
28	4 TH ST (NE)	104 TH AVE NE	116TH AVE NE	15.0	10.0	5.0	Recon	\$700,444	High
27	1 ST ST (NE)	LAKE WA, BLVD	8 TH ST (NE)	10.0	5.0	5.0	Recon	\$46,111	High
26	NORTHUP WAY	LAKE WA, BLVD	8 TH ST (NE)	12.0	7.5	4.5	Recon	\$2,531,111	High
24	8 TH ST (NE)	156 TH AVE NE	NORTHUP WAY	10.5	6.0	4.5	Recon	\$728,611	High
34	24 TH ST (NE)	BELL, RED, ROAD	172 ND AVE NE	12.0	6.0	6.0	Recon	\$558,389	High
40	148 TH AVE NE	BELL, RED, ROAD	60 TH ST NE	13.0	5.5	7.5	Recon	\$1,021,667	High
35	NEWPORT WAY (SE)	128TH AVE SE	150 TH AVE SE	11.0	5.0	6.0	Recon	\$537,733	High
37	108 TH AVE NE	8 TH ST (NE)	12 TH ST (NE)	12.5	5.5	7.0	Recon	\$167,500	High
43	150 TH AVE SE	EASTGATE WAY	SE NEWPORT WAY	12.5	3.5	9.0	Recon	\$742,500	High
41	108 TH AVE NE	840' S/O NORTHUP WAY	CITY LIMITS	13.5	5.5	8.0	Recon	\$398,667	High
38	156 TH AVE NE	8 TH ST (NE)	26 TH ST (NE)	12.5	5.5	7.0	Recon	\$1,011,111	High
32	10 TH ST (NE)	100 TH AVE NE	102 ND AVE NE	11.5	6.0	5.5	Recon	\$79,444	High
42	EASTGATE WAY (SE)	RICHARDS RD	35 TH PL (SE)	13.5	5.5	8.0	Recon	\$1,086,167	High
3	116 TH AVE NE	12 TH ST (NE)	NORTHUP WAY	9.0	7.5	1.5	Rehab	\$192,500	Medium
5	BELL, RED, ROAD	124 TH AVE NE	26TH ST (NE)	11.0	9.0	2.0	Rehab	\$888,463	Medium
8	2 ND ST (NE)	105 TH AVE NE	106 TH AVE NE	8.0	5.5	2.5	Rehab	\$16,940	Medium
6	12 TH ST (NE)	116 TH AVE NE	124 TH AVE NE	10.5	8.0	2.5	Rehab	\$198,800	Medium
13	108 TH AVE NE	MAIN ST	4TH ST (NE)	9.0	6.0	3.0	Recon	\$162,556	Medium
22	NEWPORT WAY (SE)	150 TH AVE SE	LAKEMONT BLVD	10.0	6.0	4.0	Recon	\$812,667	Medium
23	12 TH ST (NE)	106 TH AVE NE	116 TH AVE NE	10.0	5.5	4.5	Recon	\$628,583	Medium
33	RICHARDS ROAD	LAKE HILLS CONNECTOR	EASTGATE WAY	10.0	4.5	5.5	Recon	\$451,333	Medium
31	119 TH AVE SE	COAL CREEK PARKWAY	60 TH ST (SE)	10.0	5.0	5.0	Recon	\$687,500	Medium
36	COAL CREEK PARKWAY	LAKE WASH BLVD SE	FOREST DRIVE SE	12.5	6.0	6.5	Recon	\$920,111	Medium
21	140 TH AVE NE	24 TH ST (NE)	60 TH ST (NE)	9.0	5.0	4.0	Recon	\$955,167	Medium
15	140 TH AVE NE	8 TH ST (NE)	24 TH ST (NE)	10.5	7.0	3.5	Recon	\$473,917	Medium
16	MAIN ST	100 TH AVE NE	116 TH AVE NE	9.5	6.0	3.5	Recon	\$757,986	Low
25	100 TH AVE NE	MAIN ST	10 TH ST (NE)	10.0	5.5	4.5	Recon	\$415,278	Low
1	112 TH AVE NE	12 TH ST (NE)	NORTHUP WAY	8.5	7.5	1.0	Rehab	\$350,607	Low
39	8 TH ST (SE)	112 TH AVE SE	LAKE HILLS CONNECTOR	11.5	4.0	7.5	Recon	\$474,667	Low
30	60 TH ST (SE)	112 TH AVE SE	COAL CREEK PKWY SE	10.5	5.5	5.0	Recon	\$486,578	Low

Figure X-1
Map of Pavement Improvement Locations



CHAPTER XI- TRANSIT CENTERS AND LAYOVER LOCATIONS

The transit center serves as a base for the regional network of local and express routes. These centers operate specifically as easy transfer points between transit modes and routes. Transit centers focus on service in major activity centers, which are themselves the focus of extensive local services. Transit centers primarily occur in commercial or mixed-use land use areas. Parks or colleges may also be associated with or integral to the transit center. Currently, two major transit centers are within or in the vicinity of the city of Bellevue: Bellevue Transit Center and Overlake Transit Center.

Central to this discussion of transit centers is consideration of layover locations which are defined as areas where buses can safely park between trips. The link between layover locations and transit centers is reflected in the “distributed services” plan for the Bellevue Transit Center which relies on layover zones located as close as possible to the core of the downtown, in order to minimize impacts to the transit operating time. If layovers are located too far away from the Transit Center's service area, additional time is needed for the bus to get back to its route, which then impacts the operating time and cost. This can require additional buses (capital costs) and service (operating costs) in order for the route frequency to be maintained. The tradeoff would be less frequent transit service to downtown Bellevue on certain routes if the capital or operating costs are not available.

This chapter discusses the existing transit centers (downtown Bellevue and Overlake) and park-and-rides (South Bellevue, South Kirkland, and Eastgate) that are focal points for local and regional service and serve as secondary transit centers (see Figure XI-1). The chapter includes a preliminary needs assessment for additional transit centers and concludes with recommendations regarding transit centers and layover locations..

The following City of Bellevue Comprehensive Plan policies demonstrate local support for transit centers, secondary transit centers, and other transit supportive facilities (i.e., layover locations):

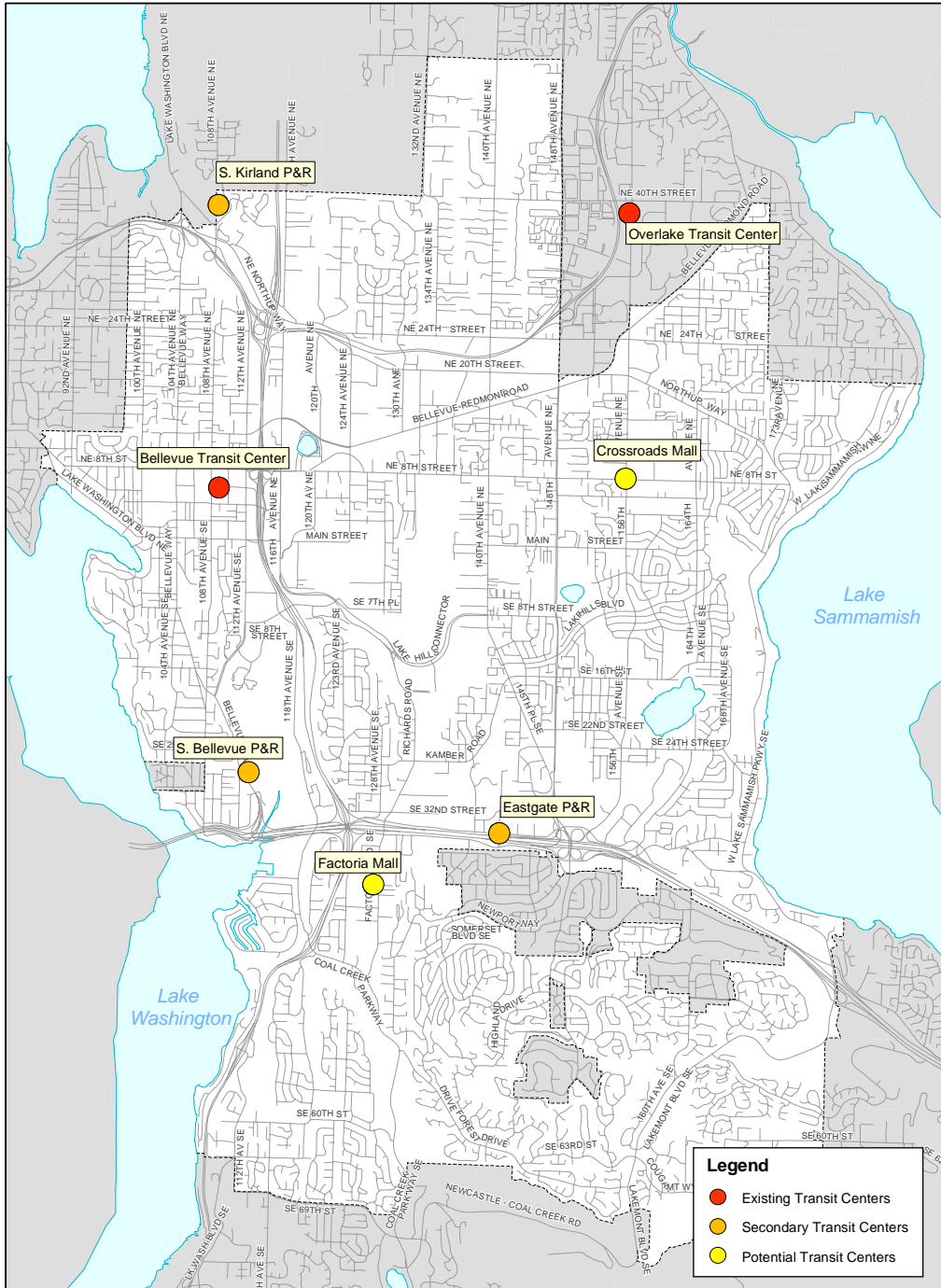
Policy TR-49

Work with the transit providers to establish transit hubs at activity areas in the City. Strategic locations for transit hubs include Downtown Bellevue, Crossroads, Eastgate, and Factoria. Direct the most intensive levels of transit service to the designated transit hubs that have been strategically located in the designated Urban Center and Activity Centers of Bellevue. Work with the City of Redmond to establish a transit hub at Overlake. [Amended Ord. 5058]

Policy TR-53

Work with the transit providers to create, maintain, and enhance a system of supportive facilities and systems such as transit centers, passenger shelters, park-and-ride lots, bus queue by-pass lanes, bus signal priorities, pedestrian and bicycle facilities, pricing, and incentive programs. [Amended Ord. 5058]

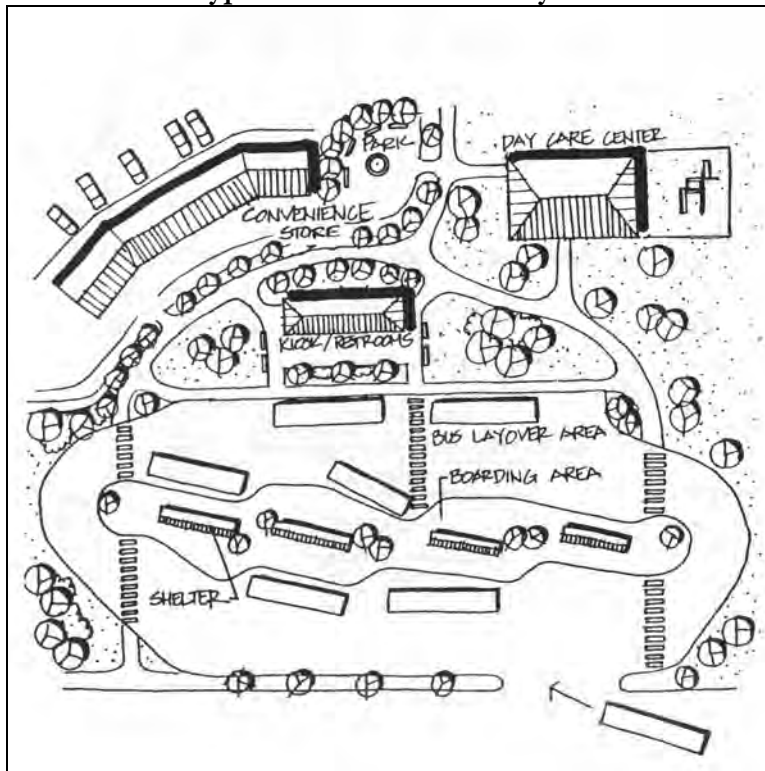
**Figure XI-1
Transit Centers**



Transit Center Amenities

Transit Centers should incorporate features that enhance the experience of transit riders either accessing or transferring between buses. Typical amenities include shelters, route schedules and maps, restrooms, trash receptacles, newspaper stands, telephones, landscaping, bicycle storage, and an information kiosk. Other amenities sometimes found at transit centers include real-time arrival/departure information, cash machines, and retail kiosks. Transit centers should also be designed to facilitate “natural” surveillance to add security. This includes “open” design, high levels of lighting, security cameras, and transit personnel at stations during operating hours. Figure XI-2 shows a typical transit center layout.

Figure XI-2
Typical Transit Center Layout



Existing Conditions

Each transit center and the associated secondary transit centers at park-and-ride lots are discussed in detail in the following sections.

Bellevue Transit Center

Downtown Bellevue continues to grow as a major destination for regional and local transit services in East King County. The Bellevue Transit Center is located in the heart of downtown Bellevue, on NE 6th Street between 108th Avenue NE and 110th Avenue NE. This location is within a quarter-mile of about 70 percent of downtown employment, shopping, and entertainment centers.

The facility is the cornerstone of King County Metro's (Metro) East King County timed transfer system; a timed transfer pulse operated every 15 minutes throughout the day. Also, the Bellevue Transit Center is served by a number of Sound Transit Regional Express routes. In all, 29 different routes serve the Bellevue Transit Center and more than 7,000 people board or depart from buses at the Bellevue Transit Center each weekday.

Redevelopment of the Bellevue Transit Center was recently completed to accommodate the continuing growth in transit ridership coupled with new services provided by Sound Transit. The City worked with Sound Transit and King County to develop needed improvements to the Bellevue Transportation Center. The new Bellevue Transit Center opened in September 2002.

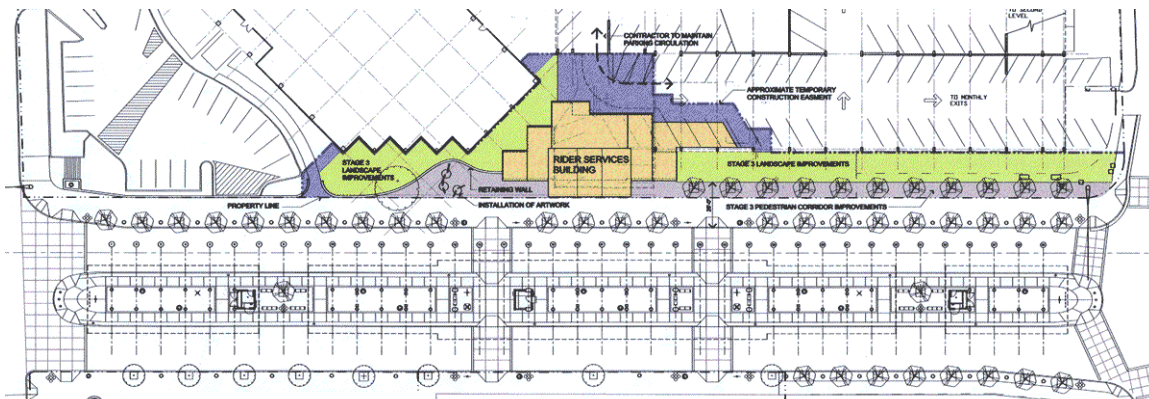
The former facility consisted of seven bus bays. Amenities included shelters, a manned supervisor's booth, public restrooms, lighting, newspaper kiosks, a coffee shop, telephones, and a real-time bus information display.

The new Bellevue Transit Center (Figures XI-3 and XI-4) has a wider platform than the old facility: 29 feet versus 24 feet. In addition, the platform was extended to the intersection of NE 6th Street and 110th Avenue NE to accommodate two additional bus bays with the understanding that more than eight buses are likely to use the eight bays during peak periods. The shelters on the existing platform were removed and replaced with a larger canopy that extends over the entire platform to provide better weather protection.

Figure XI-3
Bellevue Transit Center



Figure XI-4
Bellevue Transit Center Layout



In addition, a soon-to-be-constructed rider services facility will be located adjacent to the platform, and will include customer information, a bike station, restrooms, and a neighborhood police station. The rider services facility is slated for completion by late 2003.

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The decision to redevelop the Bellevue Transit Center emerged after months of preliminary screening, community meetings, and discussions with the City Council and Transportation Commission, the Sound Transit Board, and the King County Council. During those discussions, a “distributed facilities” alternative was selected as the best option for *near-term* improvements (near term means up to 15 years) for the transportation needs in Downtown Bellevue. It is understood that a longer-term solution is still needed to accommodate future transportation needs; such as high capacity transit and other modes including shuttles and taxis. A longer-term facility to accommodate these needs will be planned after Sound Transit begins its Phase 2 planning.

In addition to the redeveloped Bellevue Transit Center, the “distributed facilities” alternative also includes other improvements in Downtown Bellevue:

- Additional bus stalls and shelters were built on 108th Avenue NE, both northbound and southbound, adjacent to the NE 6th Street Transportation Center.
- Roadway improvements on 106th Avenue NE, 108th Avenue NE, 110th Avenue NE, and on NE 6th Street east of 110th Avenue NE have already been completed to improve transit and traffic flow through the downtown area and around the transit center.
- New bus stops, shelters, signage, and other amenities were built on 106th Avenue NE (northbound and southbound), near Downtown Bellevue’s Pedestrian Corridor, which extends along the NE 6th Street alignment to the west of the Transit Center. Bus routes that use these stops will not stop at the Transit Center; they will be routes that require the least amount of transfers.
- Bus layover sites have been established throughout the downtown area as part of the Distributed Services alternative. These are necessary to provide recovery time in bus routes to compensate for potential traffic delays. The City of Bellevue worked with Metro and Sound Transit to establish 15 bays for layovers distributed throughout the downtown area. All of the bays were provided on existing curb of street lanes. The City is currently working with Sound Transit and Metro to locate 5 layover spaces to replace the 5 existing layover spaces on NE 6th that will be eliminated when the 6th direct access ramp is opened up. In addition to all current layover zones within downtown Bellevue, Metro is projecting an additional six layover spaces for 60-foot coaches, as required in their Six-Year Transit Plan. These spaces would be needed in the long term, by the year 2008. In addition, Metro projects the need for four additional layovers by the year 2020.
- Street improvements were constructed, including new turn lanes and increased curb radii at corners.
- Direct access improvements at NE 6th Street will connect the transit center to I-405 in 2005.

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Overlake Transit Center

The new Overlake Transit Center (figures XI-5 and XI-6) opened February 2002 and is located adjacent to the new SR 520 interchange at NE 40th Street and next door to the Microsoft Campus. It is a short distance from more than 20,000 workers in the middle of one of the Eastside's largest employment centers. In addition to Microsoft, the Overlake Transit Center serves such businesses as Eddie Bauer, Nintendo, and Safeco Insurance.

Sound Transit, King County, the City of Redmond, the Federal Transit Administration and Microsoft collaborated on the construction of the NE 40th/Overlake Transit Center. The Overlake Transit Center is a key component in connecting the Overlake employment areas with the express bus service provided on SR 520. With the facility, express buses can stay on SR 520 and avoid the congested local routing through the Overlake arterial system. Eleven routes currently serve the Overlake Transit Center.

Figure XI-5
Overlake Transit Center View



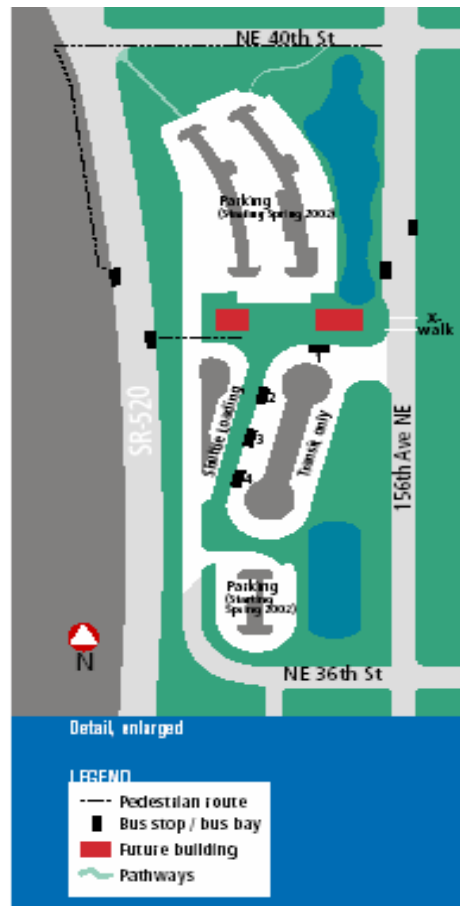
The \$8.5 million, nine-acre transit center is a local and regional hub, providing approximately 230 park-and-ride spaces as well as a transfer site for riders using buses operated by Sound Transit, Metro, and Community Transit. Private shuttle services operated by nearby employers also use the facility. Bicycle riders will be served with a convenient station offering a changing room, lockers for daytime storage and three options for securing their bikes. There are several other features that make this facility a unique and valuable addition to the Overlake community:

- City of Redmond police will operate a field station at the site for officers patrolling the Overlake area.

CAPITAL ELEMENT

- The Greater Redmond Transportation Management Association will lease space so they can assist commuters and help employers market public transit services to their workers.
- Space will also be available for potential food and/or beverage concessionaires as well as for bike repairs.

Figure XI-6
Overlake Transit Center Site Plan



Transit-Oriented Development

Transit-oriented development (TOD) is a way to locate people near transit services and to decrease their dependence on driving. From a transportation perspective, TOD is the land-use and economic development version of transportation demand management. The purposes of TOD are to reduce the use of single-occupant vehicles by increasing the number of times people walk, bicycle, carpool, vanpool, or take a bus, streetcar, or rail.

TOD development brings potential riders closer to transit facilities rather than building away from population centers and making people more dependent on roads and automobiles.

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TOD makes transit investments work more efficiently by putting more riders on existing buses.

The following City of Bellevue policies demonstrate local support for TOD:

KCM-26

The City of Bellevue recognizes the importance of transit-friendly design and where appropriate, TOD. Evaluate opportunities for advancing TOD principles in all long-range transportation and land use plans where appropriate. Consistency with local/neighborhood land uses is critical. This policy is from the Council interest statement “Final Comprehensive King County Transit Policy Statements (As revised and adopted by Bellevue City Council on May 8, 2000)”.

TR-76

To promote transit use and achieve land use objectives, transit system planning shall include:

- Provision of supportive land uses, including mixed use and night-time activities;
- A safe, pedestrian-friendly environment, with restrictions on auto access;
- Integration of multiple access modes, including buses, carpools and vanpools, bicycles and pedestrians;
- Urban design and community character;
- Protection of nearby neighborhoods from undesirable impacts; and
- Potential transit-oriented development opportunities with the private and public sectors. [Amended Ord. 5058, 5247]

TOD Considerations

To reduce external trips, TOD projects should be located in higher-density, mixed-use, urban pedestrian districts with high-quality transit service. External SOV trips can be reduced as much or more by people walking within a mixed-use urban district as they can by using transit within and between urban centers. To be most effective, TOD should be “urban” even in a suburban setting. Pedestrian-scale design draws people to return repeatedly.

Once that idea takes hold in a community, it becomes a powerful motivator for changing the built environment. The concept includes mixed-use, higher-density buildings at the sidewalk; less private and more public open space; smaller blocks; narrow streets with wider sidewalks, street trees, and lights; lower parking-to-occupant ratios; shared parking; parking behind buildings; and on-street parallel parking.

TOD Opportunities

Within Bellevue city limits, only one TOD opportunity is currently being examined, the South Kirkland Park-and-Ride. In addition, the Overlake Park-and-Ride TOD has opened recently in Redmond.

South Kirkland Park-and-Ride – This county-owned site is 6.95 acres with 603 parking stalls. Transit service runs through the lot, and increased parking capacity is needed at the site. The site straddles the border between Kirkland and Bellevue; the Kirkland portion is zoned Professional Office, and the Bellevue portion is Residential, 15 units/acre. The City of Kirkland expressed interest in TOD in 2001; Sound Transit road improvements are proposed near the park-and-ride. In 2001, Metro evaluated the South Kirkland Park-and-Ride to determine the feasibility of placing a TOD on the site. At this time, no improvements to the South Kirkland Park-and-Ride have been completed as a result of this effort.

Overlake Park-and-Ride - The Overlake Park-and-Ride TOD project in Redmond was one of the first pilot projects for King County's TOD Section. It combines moderate-income rental housing, a day-care facility, and a park-and-ride/transit center into a single integrated use. The first apartments opened to the public in December 2001, with the final project completed in June 2002. The park-and-ride facility reopened to the public in March 2002.

The Village at Overlake Station includes two levels of covered parking with 536 parking stalls and 308 rental housing units affordable to households earning 60 percent of the area's median income (\$35,000-\$40,000 per year). The garage provides shared parking for use by both residents and park-and-ride users. The site continues to operate as a park-and-ride lot and a major transit facility in the Metro Transit system. There is a 2,400-square-foot child-care facility for use by residents and park-and-ride users.

This project is a joint development of King County, the King County Housing Authority, and a private developer using tax-exempt financing and federal housing tax credits. A bus pass is provided to every apartment unit as an incentive to take the bus and help reduce automobile congestion in the region. Figures XI-7a and XI-7b are photos of the current Village at Overlake station.

Figure XI-7a
The Village at Overlake Station



Figure XI-7b
The Village at Overlake Station



Layover Zones

Layover spaces are defined as areas where buses can safely park between trips. Layover space is necessary to give buses adequate recovery time between runs so that the driver has a break, and can start the return trip on-time. Ideally, layover zones should have driver facilities.

Currently, there are a total of 19 available layover spaces in Bellevue (Table XI-1 and Figure XI-9). Of these, thirteen are located in downtown Bellevue. Five of these spaces, at NE 6th Street between 110th Avenue NE and 112th Avenue NE, will be unavailable by 2005, when the NE 6th Street direct access ramp is completed. King County Metro and the City of Bellevue are currently developing permanent alternative locations for these spaces.

The “Distributed Services” plan for the Bellevue Transit Center relies on layover zones located as close as possible to the core of the downtown, in order to minimize impacts to the transit operating time. If layovers are located too far away from the service area, additional time is needed for the bus to get back to its route, which then impacts the operating time and cost. This can require additional buses (capital costs) and service (operating costs) in order for the route frequency to be maintained. The tradeoff would be less frequent transit service to downtown Bellevue on certain routes if the capital or operating costs are not available.

As service levels improve to the levels outlined in Chapters I-V and routing patterns change, additional layover space throughout the City of Bellevue will be required. According to King County Metro, two (2) immediate layover space are needed in downtown Bellevue by April 2003 (currently on NE 6th Street which will be displaced due to Access Downtown construction staging). By mid 2005, the remaining three (3) layover spaces currently on NE 6th Street will need to be relocated. In addition, there is a possibility that one (1) additional layover space may be needed if new service is added. By 2007, based on current planning, Sound Transit/King County Metro will need six (6) additional layover spaces (to accommodate 60' coaches). However, given the current funding situation, these additional layover spaces may not be needed until year 2010. For the long term (2020), and based on current planning, Sound Transit/King County Metro will need seven (7) more additional spaces (above the mid-term need). King County Metro, Sound Transit, and the City of Bellevue are currently devising a plan to address these longer-term layover needs (Table XI-2).

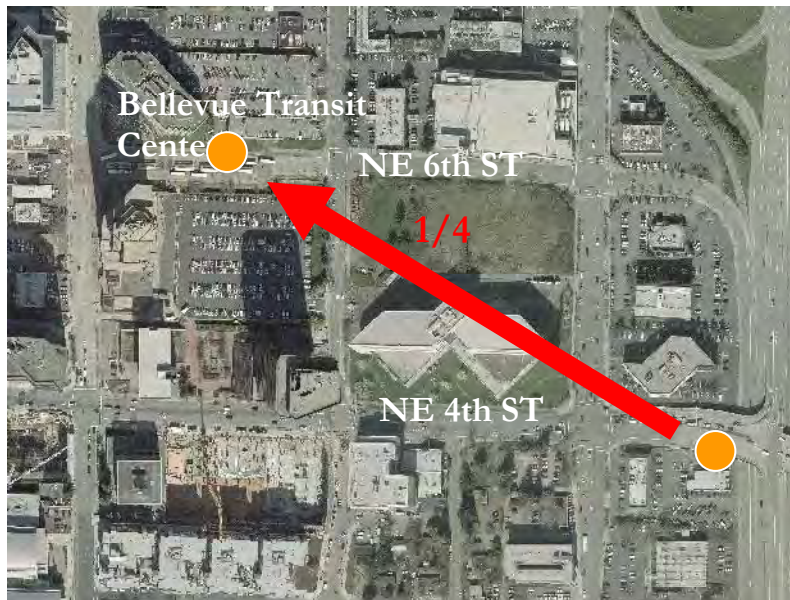
In addition to the downtown Bellevue layover spaces, the service vision outlined in Chapters I-V point to the need for additional layover spaces at activity centers such as Crossroads and Factoria. If service frequencies improve, then a corresponding improvement in layover spaces at these locations must be made *Needs Analysis for Transit Centers in Bellevue* section that follows.

The importance of convenient layover zones cannot be overemphasized. King County Metro “spends” 1.5 hours of bus driver’s time for every hour of bus service in Bellevue. This ratio is high, and is a direct result of congestion and the associated scheduling. A

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contributing factor to the large amount of unproductive time is the distance to/from the end of the route to the layover area. The cost impacts to operators are significant. As reflected in Figure XI-8 Sound Transit Route 560 reduced its operating costs by \$250,000 annually just because a layover space was available in the Bellevue Transit Center. The annual savings for Route 560 and one bus (worth \$350,000) were then used to improve existing service. Additional savings opportunities like this are possible if convenient layover spaces are available.

Figure XI-8
Example Cost Savings Through Layover Location Change



Layovers: ST Route 560 reduced its operating costs by \$250K annually because a layover space was available in the BTC. The annual savings for Route 560 and one bus (worth \$350,000) were then used to improve service.

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Table XI-1
Existing Designated City of Bellevue Layover Spaces

Zone#	Layover location	Dir	Onstreet	Inter.	Cross street	Layover Stalls
67625	105th Ave	N	105 AV NE	FS	NE 2 ST	1
69022	10th St	E	NE 10 ST	NS	102 AV NE	3
70865	116TH Ave.	N	116 AV NE	NS	NE 2 PL	1
67651	6th St	E	NE 6 ST	FS	110 AV NE	5 (until 2005)
70520	Clyde Hill	W	NE 23 ST	NS	98 AV NE	1
72810	Eastgate Area	E	SE 38 ST	FM	150 AV SE (TM)	1
67014	EASTGATE P&R	W	EASTGATE P & R	AT	BAY 2 (INSIDE ZONE)	1
67015	EASTGATE P&R	W	EASTGATE P & R	AT	BAY 1 (OUTSIDE ZONE)	
67021	EASTGATE INTERIM PR	E	EASTGATE INTM P&R	AT	SE EASTGATE WAY	1
64836	Factoria Mall	W	SE 41ST PL	FS	FACTORIA BLVD SE	1
66220	Old Bellevue	N	100 AV NE	FS	MAIN ST	1
67636	Bellevue Regional Library	S	110 AV NE	FS	NE 12 ST	2
74555	S KIRKLAND P & R	S	S KIRKLAND P & R	AT	EAST SIDE OF LOOP	1
None	S. BELLEVUE P&R	S	S BELLEVUE P & R	NS	EAST SIDE, MAIN ENTR RD	1
70812	WILBURTON P&R	W	SE 8 ST (WILBUR P&R)	FS	I-405 (SB OFF RAMP)	1
None	Wildwood Park*	N	101 Av SE	FS	SE 3 ST	2 (van only)
* The Wildwood Park location has been adopted by the Bellevue City Council, but as it is only usable by van service so far it has not been used. Use is expected by 2005.						
Note: Due to the frequency of service through the BTC, none of the existing BTC bays can be considered a pure "layover zone" and therefore have not been documented as such. Similarly, most "active" zones have too much service traveling through to be used for layover, whether on a street or in a park and ride facility.						

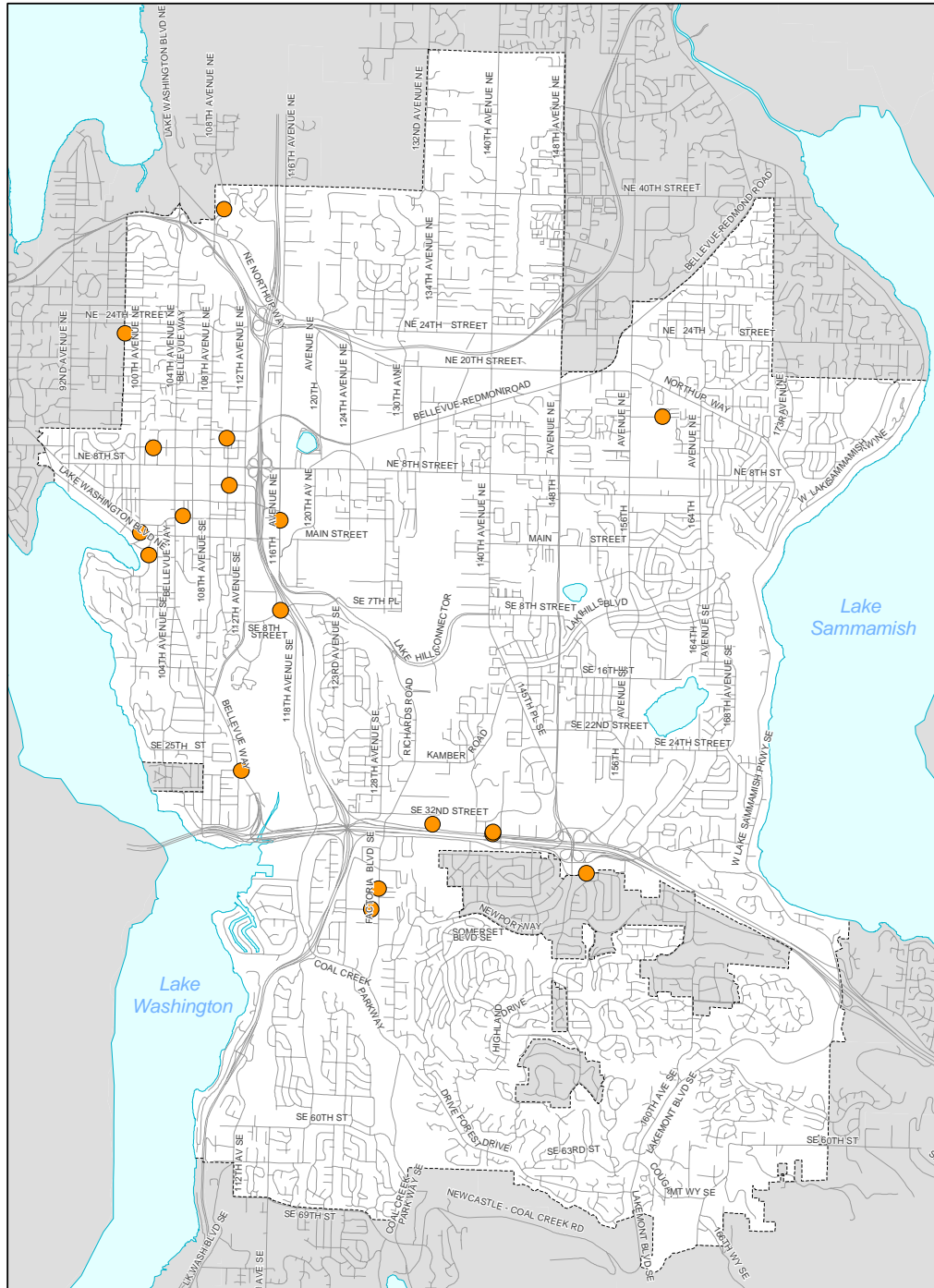
Table XI-2
Locations in Bellevue that are used for layover when space is available

Zone#	Layover location	Dir	Onstreet	Inter.	Cross street	Layover Stalls
None	Factoria Mall	-	FACTORIA MALL	-	GOTTSCALKS W ENT.	none - contiguous parking stalls when available used by vans
None	North Crossroads Community Park	-	parking lot on north end of park	-	15th place (or whatever road to park is called!)	none - contiguous parking stalls when available used by vans

Table XI-3
Projected Downtown Bellevue Layover Requirements

Time Period	Additional Layovers	Reason for Need
Immediate: Spring 2003	2	Replace NE 6th layovers needed by Bellevue Access project
Near Term: Summer 2005	4	Replace 3 NE 6th layovers and 1 additional for Sound Transit bus service
Medium Term: 2006 - 2010	6	Accommodate increased Metro and Sound Transit bus service
Long Term: 2010 - 2020	7	Accommodate increased Metro and Sound Transit bus service
Total for downtown Bellevue	19	19 in addition to those already approved (the two van layovers approved but not currently used will start being used; therefore, 21 additional)

Figure XI-9
Existing Bellevue Layover Locations



Secondary Transit Centers

The South Bellevue, South Kirkland, and Eastgate park-and-ride facilities all have minimal amenities for passengers, considering the level of waiting passengers. Each park-and-ride has shelters, newspaper racks, and bus schedule maps and information available. However, the features—lighting and passenger amenities—at these facilities are not to the level of either the Overlake or Bellevue Transit Centers, even though each facility accommodates large numbers of transfers. This is unsurprising, considering the primary mission of the facilities is for park-and-ride purposes. The available amenities at all three facilities reflect this primary purpose.

The Eastgate Park-and-Ride will be reconstructed and expanded in the future. The details are summarized in the Needs Analysis section below.

Needs Analysis For Additional Transit Centers In Bellevue

Transit systems can seldom serve every trip pattern with direct service. Transferring between buses will continue to be a feature of bus service in Bellevue for the foreseeable future. Currently, service in Bellevue tends to focus on the timed transfer that occurs every 15 minutes at the Bellevue Transit Center. As bus frequencies increase to urban levels (a bus every 15 minutes or better), the need for timed transfers at the Bellevue Transit Center will decrease. However, the need for timed transfers and connections at activity centers outside of downtown Bellevue will remain.

Designation of a location as a transit center recognizes the presence of multiple bus routes operating frequently with many riders, and is generally also within walking distance of popular destinations such as shopping areas, colleges, or a central business district like downtown Bellevue. A transit center allows riders to transfer between routes to reach more destinations, and it may provide a “pulse” where buses wait while people move between routes. A pulse also allows trips delayed by traffic conditions to begin their next segment on time. However, the minutes to “pulse” also provide a disadvantage to some riders who are continuing their trip on the same vehicle, so the usefulness of imposing this delay must be carefully considered. In addition to these functions, transit centers also should allow space for buses to park between trips. These ‘layover’ spaces are needed so that time can be allowed for those trips that are delayed by congestion to catch up to the printed schedule, and also are needed to allow drivers to take periodic breaks.

Most routes can only reliably meet other routes in one location, since the result of varying travel times required by different routes means that two routes leaving one transit center at the same time will not arrive at another transit center together. Providing timed transfers at multiple locations is practically possible only when the routes serving the two locations are different. Although it would be possible to delay the earlier bus until a later one arrived, this is often an unacceptable time delay for riders.

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The Service Element of the of the Bellevue Transit Plan shows four different focal points in Bellevue outside of the downtown area: Factoria, Eastgate, Bellevue Community College, and Crossroads. Each would be an appropriate location for further study. A brief description of some of the issues for each location follows.

- *Factoria* – consists of a concentration of retail, office, and higher density housing along Factoria Boulevard. The area is served by 10 routes, and currently generates high transit ridership. Future housing and retail growth plans will likely enhance Factoria as a transit destination. The current planning efforts for the Factoria Mall call for a TOD.

Existing Transit Center Needs: Factoria does not have a transit focal point although several routes travel along Factoria Boulevard. A transit focal point would allow infrequent and first-time transit patrons to easily find access points to bus service. The Bellevue Service Element and the Metro Six-Year Plan show several routes terminating in Factoria. Route 245 currently terminates in Factoria; the layover space, however, is less than ideal. There is no space for expansion and the site does not have permanent operator facilities.

Recommendations: A permanent dedicated layover area with driver amenities is currently necessary to address the existing layover deficiency. In the long run, additional facilities are likely necessary to accommodate future development in Factoria, and the associated growth in person-trips. A more detailed analysis on the transit amenities of the Factoria area is currently being undertaken.

- *Eastgate Park-and-Ride* – is located adjacent to I-90, just south of the Bellevue Community College. The park-and-ride is located close to major employment destinations and the Bellevue Community College, although most destinations are at the edge of comfortable walking distance. The Park-and-Ride is served by 17 routes. Metro is proposing to build a five-story park-and-ride garage at the Eastgate park-and-ride lot. The 1,400-stall garage is scheduled to open in late 2003 (see Figure XI-10). Parking capacity for the entire facility would increase from 700 stalls to 1,700. The new facility is planned for completion by early 2004.

Existing Transit Center Needs: The Eastgate Park-and-Ride is currently the focal point of local and regional service and some timed transfers are currently scheduled at this location (Figure XI-11). Timed transfers will likely continue in the future. The proposed redesign has incorporated more features of a transit center, including one platform with covered shelter, and a turnaround loop for buses, and layover spaces. All represent an improvement over existing conditions, and improve the transit amenities.

Recommendations: No recommendations are made for the Eastgate Park-and-Ride.

**Figure XI-10
Eastgate Park-and-Ride Layout**



**Figure XI-11
Existing Eastgate Park-and-Ride**



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- *Bellevue Community College (BCC)* – is a major transit destination in Bellevue that is located just north of I-90 and the Eastgate Park-and-Ride (see Figure XI-12). Four routes serve the BCC campus (Routes 222, 245, 271 and 926). Locally, community colleges have become more of a focus for transit improvements, as they cater to a market that is traditionally more receptive to transit. In Pierce, Snohomish, and King counties, transit facilities and transit centers have been constructed at community colleges to tap this potential market.

Figure XI-12
Bellevue Community College Access Shelter



Existing Transit Center Needs: While creating a transit center at the BCC responds to the transit market, it has its challenges. The BCC is located within walking distance of the Eastgate Park-and-Ride, which currently functions as a transfer point and transit hub for the Eastgate area. Two transit centers in such close proximity would be counter-productive. Also, access into the BCC is poor; speed bumps slow bus traffic on any approach, SE Perimeter Road, which could connect Eastgate Park-and-Ride with the BCC is not suitable for full-sized coaches, and the intersection of Landerholm Circle at 148th Avenue SE is congested and poorly configured for buses.

As the number of bus trips serving the BCC campus increases, it is anticipated that a number of transfers currently taking place at the Eastgate Park and Ride, perhaps as many as 100 per weekday, could be shifted to the main BCC campus stop. The BCC location, a much more pedestrian-friendly location than the Eastgate Park and Ride facility adjacent to Eastgate Way, can be expected to attain a much higher significance as a sub-regional transfer point in the future.

Currently, an average of 680 weekday riders get on and off the four KCM transit routes serving the main BCC campus stop adjacent to Building L along Kelsey Creek Road. As the college is currently anticipating significant expansion of operations and of capital facilities, the demand for transit services to this area is anticipated to grow. Within the study area, the BCC campus is currently the number two transit destination, exceeded only by the Eastgate Park and Ride, and currently exceeds the number of transit trips generated by the Factoria area.

Currently, Bellevue Community College has about 22,000 students representing approximately 9,500 full-time equivalents. Forecasts anticipate approximately 15,000 full-time equivalent students, representing 30,000 individuals by the year 2012.

Metro rider counts taken in the Spring of 2002 recorded 349 boardings and 331 alightings from Metro buses at the stops on both sides of Kelsey Creek Road at Tye River Road, the main bus stop on the BCC campus. With an anticipated increase of 8,000 individual students coming to campus by 2012, and the recommended improvements to BCC campus transit access and circulation, the passenger utilization at the existing main campus bus stop is expected to increase to approximately 550 to 600 boardings per day by 2012.

Recommendations: The expansion of ridership into and out of the BCC campus, coupled with the diversion of as many as 100 daily transfers from the Eastgate Park and Ride, may achieve a level of total transit activity of more than 1,300 passenger trips per weekday compared to the approximately 680 weekday passenger trips at present. The growing attractiveness of the community college as a major regional transit destination has suggested a number of transit enhancements designed to improve access to the community college for existing riders, to accommodate larger numbers of riders and to enhance the main college transit zone as a sub-regional transfer point.

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- The anticipated expansion of service suggests the need for a significant upgrade to the passenger loading area and facilities on both sides of Kelsey Creek Road, particularly along the eastern side of Kelsey Creek Road. Investments to improve the transit and pedestrian environment at this location can pay off significantly in terms of inducing more students to commute to BCC via public transit.
- Bus shelters, waste receptacles, low-level lighting, schedule information & maps for all BCC & Eastgate Transit Center routes and prominent signs identifying the area as a transit transfer facility are minimum facilities needs that should be provided on both sides of Kelsey Creek Road adjacent to, and across from L Building.
- This anticipated level of transit activity, nearly double the current level, justifies a more significant capital investment in the transit facilities at the Kelsey Creek Road location in conjunction with the planned parking garage and other planned capital improvements at this location. While the Eastgate Park and Ride will continue to be a major transfer point in the Bellevue/Factoria area, the BCC campus is expected to represent an increasingly-important transfer location in the region, justifying a significant enhancement of rider amenities.
- With the increased likelihood of multiple transit vehicles stopped along both sides of the roadway and moving in and out of traffic lanes, there is a potential for increased pedestrian-vehicle conflicts at the existing crosswalks in this vicinity due to the decreased visibility and the propensity of some auto and bicycle drivers to travel too fast through congested pedestrian areas. The safety of crossing pedestrians must be a high priority in designing any improvements in this area.

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- *Crossroads* – is also a major transit destination in east Bellevue located adjacent to the intersection of NE 8th Street and 156th Avenue NE (see Figure XI-13). Commercial and high-density land uses dominate, and ridership is correspondingly high. Six routes currently serve the Crossroads area.

Figure XI-13
Existing Crossroads Bus Shelter



Existing Transit Center Needs: Currently, there is no transit focal point in Crossroads, and Metro has been hampered from improving Crossroads specific service due to the lack of layover in the area and the superblocks that make turning buses around a time-consuming proposition. Routes that could end in the Crossroads area are extended to either the Overlake Park-and-Ride or the Overlake Transit Center, which adds significant running time and operating costs that could pay for additional service. Currently, only one route terminates in Crossroads. Route 926 operates with a van, and not a full-sized coach, and can therefore travel into the parking areas of the Crossroads Mall.

Recommendations: Two recommendations should be considered. Based on existing needs, a turnaround and layover area for full-sized buses should be found or constructed in the Crossroads area. A turnaround/layover area would improve Metro flexibility, allow full-sized coaches on Route 926, and potentially attract additional services to Crossroads. On a long-term basis, the Crossroads area should be considered for a transit center; however, locating a transit center in this area would be difficult because of the problems with obtaining ROW, or obtaining an off-street space that would not delay routes too greatly. The high levels of ridership and the transfer potential between routes at NE 8th Street/156th Avenue NE should be incentive for this step.

Recommendations

Upgrading existing bus stops to a Transit Center level is most often a political decision. Therefore, the following projects are not evaluated on a qualitative basis. Based on the existing and projected ridership patterns, four areas should be considered for bus stop improvements on the level of transit centers. In all four areas, an upgrade of the existing facilities is warranted, and in all four, further improvements should be examined. The full cost of implementing both long- and short-term transit center recommendations is approximately \$6,874,200 (which does not include the downtown Bellevue layover recommendations). The recommendations are discussed below and summarized in Table XI-3:

Downtown Bellevue Recommendations

Short-Term Recommendation: Identify and permanently create ten layover locations in downtown Bellevue by 2010. These layovers need to be close to the Transit Center, as they are linked to the selection of the Distributed Services concept. These layover spaces are necessary to accommodate future service expansion. King County Metro, Sound Transit, and the City of Bellevue are currently working on this issue. The cost of this improvement is currently not known, as this effort is on-going.

Long-Term Recommendation: Create an additional four permanent layover spaces in downtown Bellevue to accommodate long-range service improvements. The cost of this improvement is currently not known, as this effort is on-going.

Factoria Recommendations

Short-Term Recommendation: Construct a permanent dedicated layover area with driver amenities to address the existing layover deficiencies in the Factoria area. A pullout layover space construction costs is approximately \$120,000, not including right-of-way.

Long-Term Recommendation: Additional transit passenger facilities are likely necessary to accommodate future development in Factoria, and the associated growth in person-trips. A more detailed analysis on the transit amenities of the Factoria area is currently being undertaken. The cost of a full-sized transit center is estimated at approximately \$3,000,000.

Bellevue Community College Recommendations

Short-Term Recommendation: Improve amenities at the existing BCC stops. At a minimum, additional shelters and improved passenger information should be considered. These passenger amenities for the existing BCC stops are recommended in Chapter VIII Bus Stop Amenities. The estimated cost for these improvements is \$4,200.

Long-Term Recommendation: Improve access between Eastgate Park-and-Ride and the existing transit shelters and facilities in the BCC. The current routing between the Eastgate Park-and-Ride and the BCC via 148th Avenue SE is circuitous and the

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resulting travel time rivals that of an able-bodied pedestrian. As part of this effort, determine additional ways that full-sized transit coaches can travel between the BCC and Eastgate park-and-rides without accessing 148th Avenue SE. Improving access between the Eastgate Park-and-Ride and BCC is discussed and recommended in Chapter IX - Arterial Improvements.

Crossroads Recommendations

Short-Term Recommendations: Based on existing needs, a turnaround and layover area for full-sized buses should be found in the Crossroads area. A turnaround/ layover area would improve Metro flexibility, allow full-sized coaches on Route 926, and potentially attract additional services to Crossroads. It could also decrease route lengths, which could lead to additional service hours for Bellevue. An estimate for a bus turnaround and layover area is \$750,000, which excludes ROW costs.

Long-Term Recommendations: The Crossroads area should be considered for a transit center. The high levels of ridership and the transfer potential between routes at NE 8th Street/156th Avenue NE should be incentive for this step. The transit center should accommodate layovers, require minimal time to access from either NE 8th Street or 148th Avenue NE, and be within walking distance of the major destination in the area, the Crossroads Mall. The cost of a full-sized transit center is estimated approximately \$3,000,000, excluding right-of-way costs.

Table XI-4
Recommendation Summary and Projected Utilization

Recommendation	Existing Daily Buses	Projected Daily Buses	Estimated Cost ^a
Construct twelve permanent layover spaces in downtown Bellevue by 2010	none	~250	n/a
Construct seven permanent layover spaces in downtown Bellevue by 2020	none	~150	n/a
Construct a permanent dedicated layover area behind Factoria Mall	30	~50	\$120,000
Construct a transit center in Factoria	199	~300	\$3,000,000
Improve amenities at the existing BCC stops	218	~350	\$4,200
Construct a turnaround and layover area for full-sized buses in the Crossroads area	20	~50	\$750,000
Construct a transit center in Crossroads	218	~350	\$3,000,000
a. Does not include any costs associated with right-of-way.			

CHAPTER XII- TRANSIT SIGNAL PRIORITY

To effectively compete with SOV options, transit services need to maintain a predictable schedule and perform at an overall operating speed that compares reasonably with general traffic. Extended travel times and schedule delays can become a deterrent for attracting new riders to transit as well as influence some existing riders away from transit.

With regard to supporting speed and reliability goals for transit service, Transit Signal Priority (TSP) can provide a relatively low-cost capital improvement option in some service corridors. The goal of TSP is to provide transit vehicles with an advantage when crossing traffic signal controlled intersections. It achieves this by providing a system that detects transit vehicles in traffic (by receiving a “call” from the vehicle) and communicates with traffic signals to conditionally provide more “green light time” for these vehicles.

The City of Bellevue recognizes the potential role of TSP in supporting transit. Within the Comprehensive Plan, TSP is identified as an important additional element in the City’s transit environment. Partnerships with transit providers and, where appropriate, developers are the City’s key strategies for TSP development:

Policy TR-13

Require new development to incorporate physical features designed to promote use of alternatives to single-occupant vehicles, such as:

- Preferential parking for carpools and vanpools;
- Special loading and unloading facilities for carpools and vanpools;
- Transit facilities, including comfortable bus stops and waiting areas, adequate turning room, and where appropriate, signal preemption and queue-jump lanes; and
- Bicycle parking and related facilities.

Policy TR-53

Work with the transit providers to create, maintain, and enhance a system of supportive facilities and systems such as transit centers, passenger shelters, park-and-ride lots, bus queue by-pass lanes, bus signal priorities, pedestrian and bicycle facilities, pricing, and incentive programs. [Amended Ord. 5058]

TSP System Applications

The concept of TSP has been in existence since the 1960s. In the late seventies, extensive experiments were conducted in the U.S. to test various methods of minimizing bus delays at intersections. Because of advances in technology and increases in traffic congestion, a number of TSP demonstration programs and projects have been launched in the U.S. in recent years.

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Although it is similar in concept to emergency vehicle preemption treatments, it is important to recognize that, unlike emergency vehicle preemption, TSP tends not to be designed to favor transit vehicles at all times. Emergency vehicle preemption is an abrupt response that alters the normal operating cycle of a traffic signal. Ultimately, priority is given to the emergency vehicle unconditionally once a priority call is received by the signal. As such, emergency vehicle preemption may result in omitting signal phases.

With TSP, the priority for transit is generally designed to be conditional (e.g., is this particular bus entitled to priority?). Depending on the technology employed, any variety of conditions may be applied for granting priority. Some of the potential conditions include:

- **Schedule adherence:** Only buses that are “late enough” are granted priority.
- **Time interval since last activation:** Minimum intervals between priority activations may be used to limit the impact on other traffic.
- **Bus occupancy:** Higher occupancy buses may be given higher priority.

Also, the actual priority response tends to be managed within the normal signal operation cycle. Typical signal responses to a priority call include:

- **Green Extension:** green time is increased to allow predictable travel times, if timing can accommodate the additional time.
- **Red Truncation:** red time is shortened when the prioritized vehicle is predicted to arrive at the intersection during a red phase.
- **Phase suppression:** a low demand non-priority phase may be omitted from the normal phase sequence to hasten return to green for the priority vehicle. Phase suppression is not possible with the existing City of Bellevue signal system.

In most cases, TSP may “borrow” some green time from other non-coordinated signal phases, but it does not have to preclude any signal change. Further, signal response can be designed to provide compensation of green time to phases that were truncated, if desired. The impact on general traffic by TSP is not as disruptive, or as noticeable, as emergency vehicle priority.

Overview of Selected TSP Projects

The use of TSP in the U.S. continues to grow. As evidenced by the discussion of some projects below in Table XII-1, a variety of benefits can be derived from TSP for transit operations.

Table XII-1
Select Transit Signal Priority Applications

Location	<i>Year Documented</i>	Application	Reported Benefits
Los Angeles, CA	2001	Two corridors	7 percent reduction in travel time associated with lower signal delay
Cermak Road, IL	1994	Corridor wide (22)	Travel time reduction of 12 to 23 percent
Bremerton, WA	1994	Corridor wide application	Travel time reduction averaged 10 percent
Portland, OR	1993	4 signals on corridor of 8 signals	Travel time reduction of 5 to 8 percent
MD 2 Anne Arundel County, MD	1993	Corridor wide (14)	Travel time reduction of 13 to 18 percent

- **Los Angeles, CA:** TSP consisted of extending green time or truncating change time, as necessary, at signals where priority was activated. This TSP program was coupled with limited bus stops to achieve an overall reduction of 28 to 33 percent in traffic signal delay and a 7 percent reduction in overall travel time.
- **Cermak Road, IL:** This application consisted of passive priority (i.e., no special queue jump or other phases were used for the bus). This system reduced transit travel times by 12 to 23 percent. By not utilizing preemption, the impact on automotive traffic was minimal.
- **Bremerton, WA:** TSP was implemented on all major transit routes within the city. Studies of the system identified bus travel time reductions of up to 10 percent. However, because the Bremerton system used active priority that was similar to controller preemption logic, i.e., the traffic controller loses coordination and cycle lengths are adjusted to extend the bus phase, a measurable increase in cross street vehicle delay occurred. Recent enhancements to the controller logic have made the operation less disruptive to general traffic while retaining its effectiveness for bus travel time.
- **Portland, Oregon:** Conducted operational studies on four different corridors where TSP was implemented. The TSP system increased green time or truncated red time as needed. The result was a reduced travel time of 5 to 8 percent and an insignificant impact on general traffic. TSP continues to be expanded in Portland.

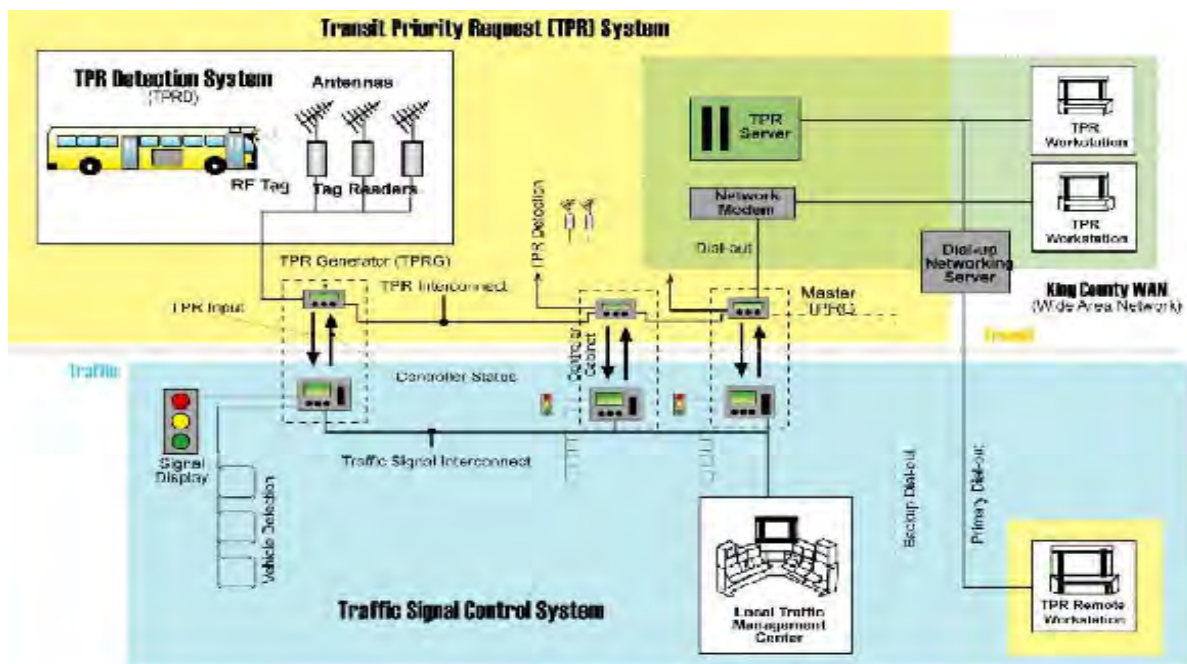
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- **Anne Arundel County, MD:** TSP was implemented on Maryland State Highway Route 2. Bus preemption was the strategy employed. This included green-time extension as well as queue jumps at certain intersections. Although travel time improvements were significant for both transit, 13 to 18 percent reduction in travel time, and general traffic traveling in the same direction, 4 to 5 percent travel time reduction, other traffic traveling in the corridor experienced an increase in travel times.

Local TSP Experience

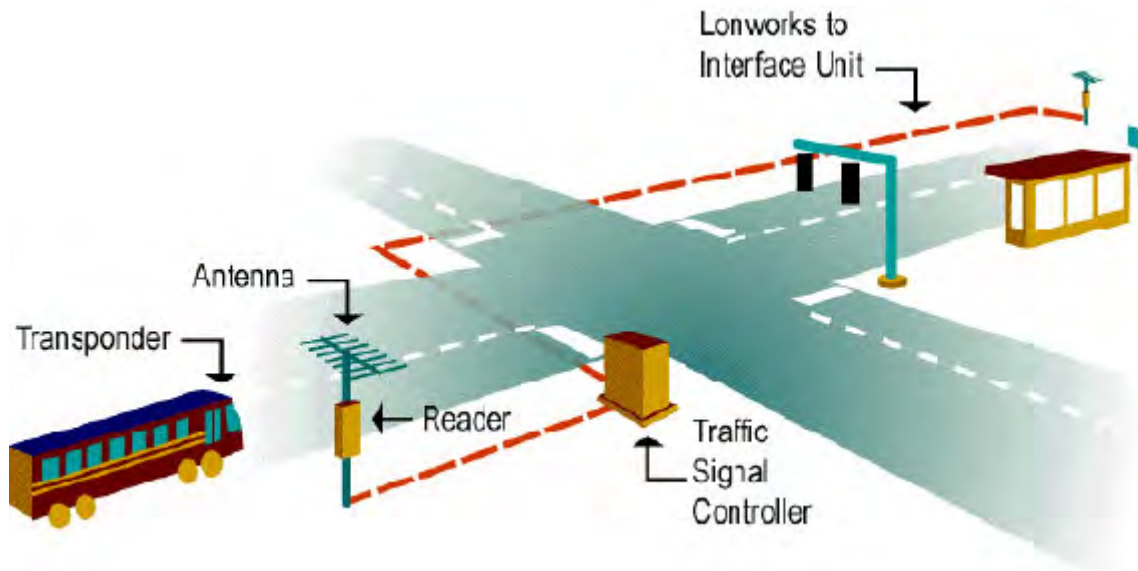
With regard to local applications of TSP, in the spring of 2000, King County implemented TSP at five intersections along Rainier Avenue in Seattle. The King County Metro (Metro) TSP on-street equipment includes an antenna, call-reader, and the existing traffic signal controller. Figures XII-1 and XII-2 show how the TSP system operates as implemented along Rainier Avenue in Seattle.

Figure XII-1¹
King County Transit Signal Priority System



¹ King County Metro web site (<http://transit.metrokc.gov/prog/tsp/tsp-strategy.html>) October 7, 2002

Figure XII-2
Schematic of King County Metro System Transit Signal Priority Study²



It is important to note that the Rainier Avenue system was designed with non-transit vehicles in mind. In addition to improving schedule adherence and travel time, a primary goal of the project was to avoid any delay to other traffic or disrupt the flow of traffic. To achieve this, transit vehicle calls for priority did result in extended green-time for priority buses and shortened red displays for such buses; but signals were not able to skip phases or break coordination to respond to priority calls. The City of Seattle, in conjunction with Metro, developed the implementation requirements for the system, summarized as follows:

- Traffic signals shall extend their green interval for approaching priority vehicles.
- Traffic signals shall shorten red displays for approaching priority vehicles.
- Traffic signals shall not shorten any minimum or clearance intervals.
- Traffic signals shall not skip any phases.
- Traffic signals shall not break coordination.

TSP reduced the number of times buses had to stop at intersections by 43% and decreased the average delay experienced by buses at intersections by 34%. Further, no side street cycle failures occurred. Thus, the reduction in green time for side streets had a minimal impact on travel time for those vehicles, less than 4 seconds per vehicle.

² King County Metro Website (<http://transit.metrokc.gov/prog/tsp/tp-schematic.html>), October 7, 2002

Considerations and Criteria for TSP in Bellevue

A variety of lessons and critical information have been learned from TSP applications to date. Ultimately, TSP can extract benefits from the signal system to provide transit operations with better reliability and travel times by reducing signal-related stops and average transit signal delay. In turn, this could also result in less transit-related congestion and increased attractiveness of transit as a mode option.

As evidenced by the experience of the Rainier Avenue program, local transit officials recognize “green time” as a resource. Further, newer technology has provided better tools to support the needs of both transit and general traffic. However, TSP use still needs to be balanced with local policy direction and the needs of other users—general traffic, pedestrians, cyclists, commercial traffic, emergency vehicles, etc. TSP needs to be able to assist transit vehicles without excess delay to non-transit vehicles. As such, TSP may not be appropriate in every transit corridor or at every intersection.

The City of Bellevue is well positioned to implement TSP treatments on its street network. Bellevue has recently updated its central traffic signal computer system and controllers, and Bellevue has developed TSP software for its signal computer system. Further, most Bellevue intersections are interconnected and can be controlled by the central signal system. The centralized traffic signal control software can facilitate the implementation of TSP anywhere in the system—individual controller software does not need to be revised. Upon identifying a TSP location, TSP would require installation of detectors and request generators as well as development of an appropriate timing plan.

At present, King County and the City are working concurrently to install a pilot TSP project at two locations: NE 8th Street/148th Avenue NE and NE 8th Street/156th Avenue NE. These TSP locations should be operational in December 2002. This initial application will provide an opportunity to document the impacts of TSP on transit speed and reliability as well as its impact on non-transit traffic. Further, this application should help the City develop decision and design criteria that can be applied to evaluating future TSP projects in Bellevue.

In the interim, some basic criteria for considering TSP can be outlined based on a review of TSP literature and case studies:

Intersection Considerations

- **How heavy is the volume of traffic at the intersection being considered? At other intersections in the corridor?** TSP is not effective at saturated intersections. Further, a single heavily saturated intersection in a TSP corridor may reduce the overall effectiveness of the treatment.
- **How congested are the cross streets?** In general, TSP implementation in areas with heavily congested cross streets can be problematic. In these situations, traffic disruptions caused by the priority response may not be able to resolve before the next priority call response.

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- **Is the intersection in a coordinated corridor?** The Bellevue traffic control system coordinates green-time in several arterial corridors throughout the city. Minor streets on coordinated corridors and left-turn movements have a greater ability to successfully accommodate TSP.

The benefits of TSP in areas of high congestion are limited and the impact on non-transit traffic is more pronounced. Conversely, if traffic is very light or free flowing, the benefit of TSP may be limited. Ultimately, **TSP has the most potential for providing benefits in areas with medium congestion and, in such situations, impacts on non-transit traffic can be minimized.**

Transit Service Considerations

Given a set of potential TSP intersections that have been screened based on overall traffic volumes, the second step in prioritizing projects can be based on the number of buses through the intersection.

- **What is the level of bus traffic?** Clearly, TSP will provide the most benefit in areas with a significant amount of bus traffic. Lightly traveled bus corridors may still benefit from TSP, if the corridor has some level of congestion that is creating delays. However, given a set of potential TSP intersections, those supporting more bus traffic should be prioritized over less transit traffic.

Suggested TSP Evaluation Process

Given the combined role of intersection and transit service characteristics in determining the potential for TSP at any given intersections, a suggested evaluation process has been designed that examines traffic delay, the amount of bus traffic, and signal coordination patterns. The evaluation process should be completed at each intersection approach at Bellevue's 160 intersections with bus volumes. The process, outlined below, assigns points based on these characteristics. The final ranking of intersections will correlate with the total points scored: high scoring intersections are a higher priority than low scoring intersections.

Step 1: assign points based on p.m. peak intersection level of service

Level of service (LOS) refers to the degree of congestion on a road or intersection. It is a measure of vehicle operating speed, travel time, travel delay, and driving comfort. Level of service is generally described by a letter scale ranging from A to F. For signalized intersections, LOS A represents free-flow conditions (motorists experience little or not delay) and LOS F represents forced-flow conditions (motorists experience delays in excess of 80 seconds per vehicle). LOS can be summarized for an intersection as well as for each intersection approach.

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The combined impact of approach and intersection level of service will influence the effectiveness of a TSP treatment. Table XII-2 outlines a suggested scoring matrix for intersections based on the combined traffic volume characteristics.

Table XII-2
Point Scale for Intersection Characteristics

Intersection LOS		Approach LOS					
		A	B	C	D	E	F
	A	0	3	6	5	4	4
	B	3	4	5	4	3	3
	C	6	5	4	3	2	2
	D	5	4	3	2	1	1
	E	4	3	2	1	0	0
	F	4	3	2	1	0	0

For any given intersection, both the intersection and approach LOS need to be determined. Based on the relationship of intersection and approach LOS, a score is assigned. The assigned score relates to the potential for TSP at the intersection. For instance, intersections with high delays for both the intersection and approach (LOS E or F) receive a score of zero, as these types of intersections are not ideal for TSP applications. Conversely, an intersection with medium approach delays (LOS C) and low intersection delays (LOS A) receives six points.

Step 2: assign points based on coordination characteristics during peak hours

The next step is to assign points to the intersection based on its existing signal coordination characteristics. TSP on through movements is more effective in non-coordinated corridors than coordinated corridors. In coordinated corridors, the through movement already receives the majority of excess green-time, so green time extensions are less likely to be as effective. A suggested scoring matrix based on coordination type is found in Table XII-3.

Table XII-3
Point Scale for Coordination Characteristics

Transit Network	Points
Non-Coordinated Arterial	2
Coordinated Arterial	0

To complete this step, the intersection should be referenced on the signal coordination map produced by the City of Bellevue Traffic Operations Group.

Upon completing the first two steps, transit service considerations (level of bus service) should be examined to determine a final score for peak hour characteristics.

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Step 3: assign points based on the level of bus service

Clearly, TSP will provide the most benefit in areas with a significant amount of bus traffic. Lightly traveled bus corridors may still benefit from TSP, if the corridor has some level of congestion that is creating delays. However, given a set of potential TSP intersections, those supporting more bus traffic should be prioritized over those with less transit traffic. The determination and scoring for this criterion reflect the City of Bellevue's Arterial Transit Priority Network definitions. Those definitions are based upon the number of buses that are projected to operate on each roadway.

Table XII-4 shows the suggested scoring for each intersection, which depends on whether the intersection is located on a transit principal corridor, transit minor corridor, or transit local access. Corridors with higher bus traffic receive a higher score.

Table XII-4
Point Scale for Level of Bus Service

	Definition	Points
Transit Principal Corridor	51+ daily one-way trips and/or Sound Transit	4
Transit Minor Corridor	21-50 daily one-way trips	2
Transit Local Access	1-20 daily one-way trips	1

Step 4: combine list of intersection scores and prioritize intersections for potential TSP treatment

The final step is to sum the scores for the intersection LOS characteristics, coordination characteristics, and bus service levels into one list. Using the combined list, determine the highest-ranking intersections. Again, the score received should correlate with the TSP potential for the intersection (high scoring intersections are a higher priority than low scoring intersections).

Exceptions to this analysis are to be expected. This scoring process is designed to provide a model for consideration and prioritization of TSP implementation; it is not designed to subjugate all case specific issues.

Recommendations

The suggested evaluation criteria were applied to each one of Bellevue's 160 signalized intersections and the associated 461 approach movements at these intersections with bus volumes. Each intersection was assigned a final score and ranked based on the final score. Intersections that scored more than seven or more points out of a possible twelve points should be considered for TSP improvements. Table XII-5 lists every analyzed intersection, its individual score for each criterion, as well as the assigned ranking.

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Based on the analysis, 169 individual approach movements at 82 intersections within the City of Bellevue have scores of 8 points or above and are appropriate for TSP purposes (Figure XII-3).

The cost of implementing TSP at an intersection increases with the number of individual approaches undertaken at the intersection in question. King County Metro presently uses the following cost estimates for a given intersection with between 1 and 4 approaches: 1 approach = \$25,000 per intersection; 2 approaches = \$35,000 per intersection; 3 approaches = \$50,000 per intersection; and, 4 approaches = \$75,000 per intersection. Given these numbers, the following cost estimates would apply to the intersections identified in this study:

25 intersections with 1 approach @ \$25,000/intersection	=	\$625,000
32 intersections with 2 approaches @ 35,000/intersection	=	\$1,120,000
23 intersections with 3 approaches @ \$50,000/intersection	=	\$1,150,000
2 intersections with 4 approaches @ \$75,000/intersection	=	\$150,000

Based on this analysis, installing TSP at all 82 locations and 169 approaches would require approximately \$3,045,000.

Conclusions

The intersections recommended for TSP treatment are an initial list of likely TSP candidates. The specific approaches determined to be TSP candidates may or may not prove to be feasible once a more refined analysis is conducted. During the planning and pre-design phases, various implementation issues could result in not pursuing these TSP installations, including:

- Measured actual delay associated with the recommended transit movement are not high enough to warrant investment
- Agreement between the City and Transit Agency(ies) cannot be reached as related to operations and maintenance
- Ability to affect timing changes as seen as necessary to warrant investment, may be an issue at closely spaced or tightly coordinated intersections
- Ability to move bus zones to far side will impact TSP effectiveness
- Changes in transit routing that change the underlying assumptions

Other intersections not listed in Figure XII-3 may prove to be TSP candidates due to:

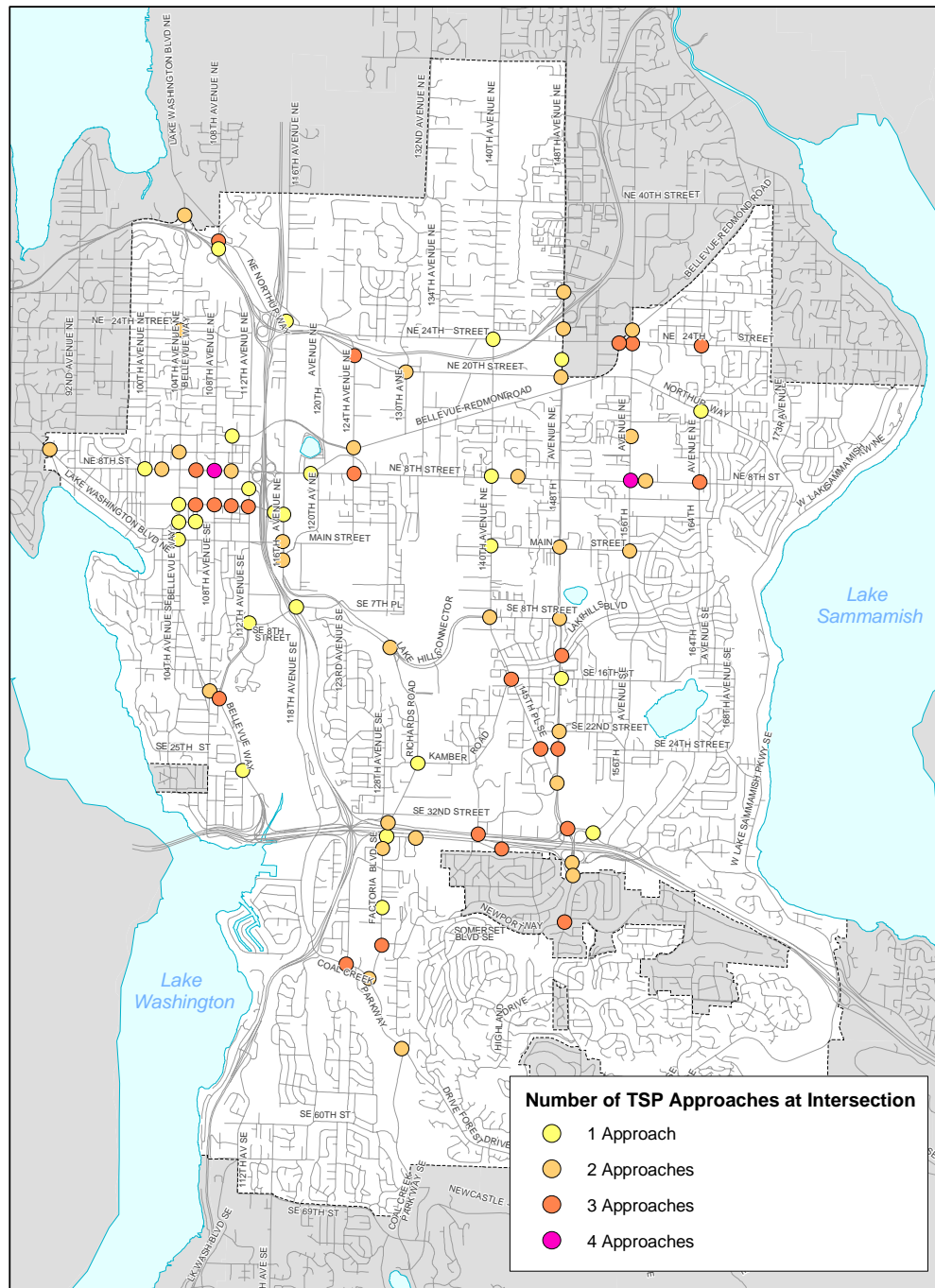
- Opportunities to incorporate TSP in new signal improvement projects
- Changes in transit routing that change the underlying assumptions
- TSP supports a Bus Rapid Transit or route based priority corridor

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Although TSP has existed on a conceptual level for decades, implementation is still not widespread and local experience is just beginning to develop. Outcomes to date suggest that TSP is an effective method for decreasing transit travel times and reducing schedule delays at a relatively modest cost: under \$80,000 cost per intersection. However, a primary concern is ensuring that TSP provides transit vehicles with an advantage without significant negative impact on the travel of non-transit vehicles.

The pending TSP implementation in Bellevue as well as continued experience at other King County TSP projects will provide more information that can be used to develop assessment criteria for future projects. In the interim, the decision criteria outlined above best reflect available data from TSP applications across the country and the existing literature on the subject. Regardless, for any TSP application, city and transit agency staff need work in concert to develop control strategies that are appropriate for the given conditions.

Figure XII-3
Intersections Recommended for TSP Treatment



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Table XII-5 TSP Intersection Prioritization Results						
Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
Bel Way & Northup	41	74NB	5	4	2	11
NE 24th & 156th	71	61WB	5	4	2	11
Northup & 124th	73	88WB	5	4	2	11
NE 10th St & Bel Way	156	6WB	5	4	2	11
NE 10th St & Bel Way	281	6EB	5	4	2	11
SR 520 WB On & 108th	315	302SB	5	4	2	11
SE 36th & 142nd Place SE	396	171SB	5	4	2	11
NE 8th & 102nd	418	4SB	5	4	2	11
520 Ramp & 148th	451	279NB	5	4	2	11
Kamber Rd & 145th Pl	510	45NB	5	4	2	11
Newport wy & Allen Rd	596	104EB	5	4	2	11
108th & Bel Way		13NWB	6	4	0	10
156th & Bel red	42	60NB	6	4	0	10
NE 8th & Old Bel-Red	99	33WB	6	4	0	10
NE 24th & 156th	198	61EB	6	4	0	10
NE 8th & 124th	227	35EB	6	4	0	10
3600 Block & Factoria	523	285NB	6	4	0	10
NE 10th & Lk Washington	15	93SEB	4	4	2	10
Bel Way & Northup		74NWB	4	4	2	10
NE 10th & Lk Washington	47	93NWB	4	4	2	10
City Hall & SE 1st	48	131NB	4	4	2	10
Richard Rd & Lk Hills Conn		134NWB	4	4	2	10
Bel Way & 112th	53	14NB	4	4	2	10
SE 38th & 148th	57	174NB	4	4	2	10
NE 8th & 124th	100	35WB	4	4	2	10
NE 8th & Mall	106	299WB	4	4	2	10
BCC & 145th Pl	129	54WB	4	4	2	10
Eastgate Way & 139th Ave SE	136	272WB	4	4	2	10
Newport Way & 148th	145	133WB	4	4	2	10
Newport Way & Factoria	148	202WB	4	4	2	10
124th &	149	284WB	4	4	2	10
NE 24th & 164th	199	75EB	4	4	2	10
Northup & 130th	202	68EB	4	4	2	10
NE 8th & Mall	233	299EB	4	4	2	10
NE 8th & 164th	234	87EB	4	4	2	10
BCC & 145th Pl	254	54EB	4	4	2	10
SE 24th St & 148th	255	55EB	4	4	2	10
SE 36th & 132nd	263	291EB	4	4	2	10
SE 36th & 142nd Place SE	266	171EB	4	4	2	10
520 Ramp & 148th	320	279SB	4	4	2	10

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Table XII-5 (continued) TSP Intersection Prioritization Results						
Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
NE 8th & 156th	359	63SB	4	4	2	10
Eastgate Way & 139th Ave SE	390	272SB	4	4	2	10
Newport Way & 148th	400	133SB	4	4	2	10
NE 4th St & 106th	431	17SB	4	4	2	10
NE 8th & 156th	490	63NB	4	4	2	10
Newport Way & Factoria	531	202NB	4	4	2	10
NE 8th & 106th	549	16NB	4	4	2	10
NE 8th & 110th	551	27NB	4	4	2	10
Coal Creek & Factoria	581	203SB	4	4	2	10
Coal Creek & Factoria	583	203EB	4	4	2	10
Lk Hills Conn & 140th	592	43NB	4	4	2	10
Lk Hills Conn & 140th	593	43EB	4	4	2	10
City Hall & SE 1st	29	131SB	5	4	0	9
108th & Bel Way		13SEB	5	4	0	9
Bel Way & 112th		14SEB	5	4	0	9
Lk Hill Blvd & 148th	51	51NB	5	4	0	9
I-90 WB On & Richard Rd	55	105NB	5	4	0	9
NE 4th St & NB Ramp	109	225WB	5	4	0	9
NE 8th & 108th	166	21WB	5	4	0	9
NE 4th St & 106th	176	17WB	5	4	0	9
NE 4th St & 110th	177	159WB	5	4	0	9
NE 4th St & 108th	300	22EB	5	4	0	9
Main St & 148th	367	50SB	5	4	0	9
3600 Block & Factoria	395	285SB	5	4	0	9
Main St. & 116th	496	73NB	5	4	0	9
SE 8th & 148th	504	65NB	5	4	0	9
NE 4th St & Bel Way	558	8NB	5	4	0	9
I-90 WB On & Richard Rd	8	105WB	3	4	2	9
112th & Bel Way	21	108NWB	3	4	2	9
156th & Bel_red	27	60SB	3	4	2	9
Bel Way & 112th	34	14SB	3	4	2	9
SE 38th & 148th	38	174SB	3	4	2	9
Richard Rd & Lk Hills Conn		134SEB	3	4	2	9
Coal Creek & Forest Drive	59	98SEB	5	2	2	9
Coal Creek & Forest Drive		98NWB	5	2	2	9
NE 24th & 164th	72	75WB	5	2	2	9
NE 8th & 156th	105	63WB	3	4	2	9
SE 8th & I-405 NB On	118	219WB	6	1	2	9
SE 36th & 132nd	138	291WB	3	4	2	9
Northup & 108th Ave NE	188	78EB	3	4	2	9
Northup & 116th	192	114EB	5	2	2	9

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Table XII-5 (continued) TSP Intersection Prioritization Results						
Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
Eastgate Way & 139th Ave SE	261	272EB	3	4	2	9
SE 41st & Factoria	269	282EB	3	4	2	9
124th &	274	284EB	5	2	2	9
NE 6th & 112th	296	107EB	3	4	2	9
NE 29th & 148th	317	188SB	3	4	2	9
Bel-Red Rd & 124th	348	34SB	3	4	2	9
Main St & 156th	368	83SB	3	4	2	9
Kamber Rd & 145th Pl	381	45SB	3	4	2	9
BCC & 145th Pl	383	54SB	3	4	2	9
Eastgate Way & 148th	389	101SB	3	4	2	9
124th &	404	284SB	5	2	2	9
NE 8th & 106th	420	16SB	3	4	2	9
NE 8th & 108th	421	21SB	3	4	2	9
NE 8th & 110th	422	27SB	3	4	2	9
NE 4th St & 108th	430	22SB	3	4	2	9
NE 4th St & 110th	432	159SB	3	4	2	9
Northup & 108th Ave NE	445	78NB	3	4	2	9
NE 29th & 148th	448	188NB	3	4	2	9
Northup & 124th	457	88NB	3	4	2	9
Main St & 156th	499	83NB	3	4	2	9
SE 8th & 112th	506	89NB	3	4	2	9
SE 28th & 148th	516	57NB	3	4	2	9
NE 12th St & 110th	537	162NB	3	4	2	9
NE 8th & 108th	550	21NB	3	4	2	9
NE 24th & Bel_red		59WB	4	4	0	8
NE 24th & Bel_red		59NB	4	4	0	8
Lk Hill Blvd & 148th	32	51SB	4	4	0	8
Northup & 130th	75	68WB	4	4	0	8
NE 8th & 143rd	103	46WB	4	4	0	8
NE 8th & 106th	165	16WB	4	4	0	8
NE 4th St & 112th	178	72WB	4	4	0	8
NE 8th & 143rd	230	46EB	4	4	0	8
NE 8th & 156th	232	63EB	4	4	0	8
NE 4th St & 116th	237	139EB	4	4	0	8
NE 8th & 102nd	288	4EB	4	4	0	8
NE 8th & 108th	291	21EB	4	4	0	8
NE 4th St & 106th	301	17EB	4	4	0	8
NE 4th St & 110th	302	159EB	4	4	0	8
NE 4th St & 112th	303	72EB	4	4	0	8
NE 13th & 156th	346	70SB	4	4	0	8
SE 24th St & 148th	384	55SB	4	4	0	8

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Table XII-5 (continued)
TSP Intersection Prioritization Results

Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
SE 28th & 148th	387	57SB	4	4	0	8
Newport Way & Factoria	403	202SB	4	4	0	8
NE 24th & 156th	455	61NB	4	4	0	8
NE 22nd & 148th	458	268NB	4	4	0	8
NE 13th & 156th	477	70NB	4	4	0	8
Main St & 148th	498	50NB	4	4	0	8
SE 16th & 148th	509	52NB	4	4	0	8
SE 24th St & 148th	513	55NB	4	4	0	8
I-90 Off & Richard Rd	520	204NB	4	4	0	8
NE 4th St & 112th	562	72NB	4	4	0	8
NE 24th & Bel red	13	59EB	4	2	2	8
Lk Hill Blvd & 148th	19	51SWB	2	4	2	8
Eastgate Way & 156th	23	86EB	2	4	2	8
NE 8th & 164th	107	87WB	4	2	2	8
Main St & 140th	112	42WB	5	1	2	8
Kamber Rd & 145th Pl	127	45WB	5	1	2	8
SE 22nd & 148th	128	53WB	5	1	2	8
SE 36th & 142nd Place SE	141	171WB	4	2	2	8
NE 2nd & Bel Way	179	31WB	6	0	2	8
Northup & 124th	200	88EB	4	2	2	8
Northup & 148th	206	47EB	2	4	2	8
NE 8th & 140th	229	41EB	2	4	2	8
Main St. & 116th	238	73EB	5	1	2	8
SE 8th & 148th	246	65EB	5	1	2	8
SE 22nd & 148th	253	53EB	5	1	2	8
Eastgate Way & 148th	260	101EB	2	4	2	8
Newport Way & 148th	270	133EB	5	1	2	8
NE 8th & 100th Ave	286	3EB	2	4	2	8
Northup & 108th Ave NE	314	78SB	2	4	2	8
NE 24th & Bel Way	321	69SB	4	2	2	8
NE 24th & 140th	322	64SB	4	2	2	8
Northup & 148th	332	47SB	2	4	2	8
Northup & 164th	340	76SB	4	2	2	8
I-90 Ramp & 148th	397	227SB	2	4	2	8
NE 2nd & 106th	434	18SB	4	2	2	8
NE 24th & Bel Way	452	69NB	4	2	2	8
NE 24th & 164th	456	75NB	4	2	2	8
Bel-Red Rd & 124th	479	34NB	5	1	2	8
NE 8th & 124th	485	35NB	5	1	2	8
NE 8th & 164th	492	87NB	4	2	2	8
SE 26th & Richard Rd	514	82NB	4	2	2	8

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Table XII-5 (continued)
TSP Intersection Prioritization Results

Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
Eastgate Way & 148th	518	101NB	2	4	2	8
I-90 Ramp & 148th	525	227NB	2	4	2	8
NE 4th St & 108th	559	22NB	4	2	2	8
Main St. & Bel Way	568	9NB	2	4	2	8
Newport wy & Allen Rd	594	104SW	4	2	2	8
Newport Wy & Somerset	598	99WB	5	1	2	8
Northup & NE 24th	1	118NWB	5	2	0	7
Northup & Bel-Red	3	58WB	3	4	0	7
Northup & Bel-Red	14	58EB	5	2	0	7
NE 24th & Bel_red	44	59SWB	5	2	0	7
NE 8th & 100th Ave	161	3WB	3	4	0	7
NE 8th & 110th	167	27WB	3	4	0	7
NE 4th St & Bel Way	174	8WB	3	4	0	7
NE 4th St & 108th	175	22WB	3	4	0	7
Bel-Red Rd & 124th	221	34EB	5	2	0	7
NE 8th & 120th		233WB	3	4	0	7
NE 8th & Old Bel-Red	226	33EB	3	4	0	7
NE 4th St & NB Ramp	236	225EB	3	4	0	7
NE 8th & 110th	292	27EB	3	4	0	7
NE 24th & 156th	324	61SB	3	4	0	7
NE 22nd & 148th	327	268SB	3	4	0	7
SE 8th & 148th	375	65SB	3	4	0	7
SE 16th & 148th	380	52SB	3	4	0	7
I-90 Off & Richard Rd	391	204SB	3	4	0	7
SE 38th & Factoria	398	222SB	3	4	0	7
SE 41st & Factoria	399	282SB	3	4	0	7
NE 4th St & Bel Way	429	8SB	3	4	0	7
NE 4th St & 112th	433	72SB	3	4	0	7
Main St. & Bel Way	440	9SB	3	4	0	7
NE 24th & 140th	453	64NB	5	2	0	7
Bel-Red Rd & 148th	468	48NB	3	4	0	7
NE 15th & 156th	473	66NB	3	4	0	7
NE 4th St & 116th	495	139NB	5	2	0	7
SE 27th & 148th	515	56NB	3	4	0	7
SE 38th & Factoria	526	222NB	3	4	0	7
Bel Way & Northup	26	74SB	3	2	2	7
Eastgate Way & 161st Ave SE		92SWB	3	2	2	7
Northup & 120th	43	117NWB	3	2	2	7
SE 26th & Richard Rd	131	82WB	4	1	2	7
Eastgate Way & 148th	135	101WB	1	4	2	7
I-90 Off & Richard Rd	137	204WB	1	4	2	7

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Table XII-5 (continued) TSP Intersection Prioritization Results						
Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
Lk Washington Blvd & 100th A	182	1WB	4	1	2	7
NE 8th & 116th	225	30EB	1	4	2	7
SE 10th & Bel Way	247	12EB	3	2	2	7
SE 26th & Richard Rd	256	82EB	4	1	2	7
NE 4th St & Bel Way	299	8EB	4	1	2	7
Northup & 116th E	319	116SB	4	1	2	7
NE 8th & 164th	361	87SB	4	1	2	7
NE 4th St & 116th	364	139SB	4	1	2	7
NE 8th & 100th Ave	416	3SB	1	4	2	7
Lk Washington Blvd & 100th A	438	1SB	4	1	2	7
Main St. & 108th	442	24SB	3	2	2	7
SR 520 WB On & 108th	446	302NB	4	1	2	7
Northup & 116th	449	114NB	3	2	2	7
Northup & 148th	463	47NB	1	4	2	7
Northup & 164th	471	76NB	4	1	2	7
Coal Creek & Factoria	533	203NB	3	2	2	7
NE 4th St & 106th	560	17NB	3	2	2	7
Main St. & 112th	572	36NB	1	4	2	7
NE 2nd & 106th	575	18EB	3	2	2	7
Northup & 164th	584	76WB	3	2	2	7
SE 8th & I-405 SB Off	587	226WB	4	1	2	7
SE 8th & Lk Hills Conn	589	71NB	1	4	2	7
Newport Wy & Somerset	599	99NB	4	1	2	7
Northup & 120th	12	117EB	4	2	0	6
SE 32nd & Richard Rd	22	85NEB	4	2	0	6
156th & Bel_red		60NEB	4	2	0	6
Northup & 116th	65	114WB	4	2	0	6
Bel-Red Rd & 130th	91	37WB	4	2	0	6
Bel-Red Rd & 124th	94	34WB	4	2	0	6
NE 8th & 140th	102	41WB	2	4	0	6
NE 8th & 102nd	163	4WB	4	2	0	6
Bel-Red Rd & 130th	218	37EB	4	2	0	6
NE 8th & 120th	224	233EB	2	4	0	6
NE 8th & 106th	290	16EB	4	2	0	6
Main St. & 116th	365	73SB	4	2	0	6
Main St & 140th	366	42SB	4	2	0	6
Lk Hills Conn & 140th	374	43SB	4	2	0	6
NE 8th & 148th	489	49NB	2	4	0	6
Main St & 140th	497	42NB	4	2	0	6
112th & Bel Way	6	108WB	0	4	2	6
NE 8th & 405 OFF	10	26WB	0	4	2	6

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Table XII-5 (continued)
TSP Intersection Prioritization Results

Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
Eastgate Way & 161st Ave SE		92NEB	3	1	2	6
108th & Bel Way	33	13SB	2	2	2	6
112th & Bel Way	36	108SB	0	4	2	6
SE 32nd & Richard Rd	37	85SB	2	2	2	6
108th & Bel Way	52	13NB	2	2	2	6
Kamber Rd & 139th Ave SE	54	280SWB	3	1	2	6
Eastgate Way & 156th	56	86NWB	2	2	2	6
NE 24th & 148th	70	81WB	0	4	2	6
NE 8th & 92nd Ave	96	94WB	0	4	2	6
NE 8th & 133rd Ped Crossing	101	288WB	0	4	2	6
Lk Hills Conn & 140th	120	43WB	3	1	2	6
NE 10th St & 102nd	155	129WB	0	4	2	6
NE 10th St & 106th	157	154WB	0	4	2	6
NE 10th St & 108th	158	190WB	0	4	2	6
NE 6th & 108th	170	126WB	0	4	2	6
NE 6th & 112th	171	107WB	0	4	2	6
Metro Base & 124th	208	95EB	0	4	2	6
NE 8th & 92nd Ave	223	94EB	0	4	2	6
NE 8th & 133rd Ped Crossing	228	288EB	0	4	2	6
SE 8th & 121st	243	106EB	3	1	2	6
SE 8th & I-405 NB On	244	219EB	3	1	2	6
SE 16th & 148th	251	52EB	3	1	2	6
Kamber Rd & 145th Pl	252	45EB	3	1	2	6
NE 10th St & 102nd	280	129EB	0	4	2	6
NE 10th St & 106th	282	154EB	0	4	2	6
NE 10th St & 108th	283	190EB	0	4	2	6
NE 10th St & 110th	285	235EB	0	4	2	6
NE 24th & 148th	323	81SB	0	4	2	6
Metro Base & 124th	334	95SB	0	4	2	6
NE 8th & 124th	354	35SB	3	1	2	6
SE 8th & 112th	377	89SB	0	4	2	6
Lk Hill Blvd & 145th Pl SE	378	44SB	0	4	2	6
SE 26th & Richard Rd	385	82SB	3	1	2	6
NE 12th St & Bel Way	405	5SB	2	2	2	6
NE 10th St & 110th	415	235SB	0	4	2	6
NE 6th & 106th	424	179SB	0	4	2	6
NE 6th & 108th	425	126SB	0	4	2	6
Metro Base & 124th	465	95NB	0	4	2	6
Lk Hill Blvd & 145th Pl SE	507	44NB	0	4	2	6
Newport Way & 148th	528	133NB	3	1	2	6
NE 10th St & 102nd	539	129NB	0	4	2	6

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Table XII-5 (continued)
TSP Intersection Prioritization Results

Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
NE 10th St & 106th	541	154NB	0	4	2	6
NE 10th St & 108th	542	190NB	0	4	2	6
NE 10th St & 110th	544	235NB	0	4	2	6
NE 6th & 106th	553	179NB	0	4	2	6
NE 6th & 108th	554	126NB	0	4	2	6
NE 4th St & 110th	561	159NB	4	0	2	6
SE 8th & I-405 SB Off	586	226EB	3	1	2	6
SE 8th & 121st	588	106NB	3	1	2	6
SE 8th & Lk Hills Conn	590	71SB	0	4	2	6
Newport wy & Allen Rd	595	104WB	3	1	2	6
Newport Wy & Somerset	597	99EB	3	1	2	6
I-90 WB On & Richard Rd		105SWB	3	2	0	5
Northup & NE 24th	11	118EB	3	2	0	5
Northup & Bel-Red		58NB	3	2	0	5
Bel-Red Rd & 120th	28	32SEB	3	2	0	5
Northup & Bel-Red	45	58SWB	4	1	0	5
NE 8th & 405 OFF	60	26NB	1	4	0	5
Northup & 116th E	66	116WB	3	2	0	5
Northup & 140th	78	39WB	1	4	0	5
NE 8th & 148th	104	49WB	1	4	0	5
NE 12th St & 108th	152	20WB	3	2	0	5
NE 8th & Bel Way	164	7WB	3	2	0	5
Northup & 116th E	193	116EB	3	2	0	5
NE 8th & 148th	231	49EB	1	4	0	5
NE 12th St & 108th	277	20EB	3	2	0	5
NE 12th St & Bel Way		5WB	3	2	0	5
NE 10th St & Bel Way	411	6SB	3	2	0	5
Northup & 156th	464	62NB	1	4	0	5
NE 12th St & Bel Way	534	5NB	3	2	0	5
NE 10th St & Bel Way	540	6NB	3	2	0	5
NE 8th & Bel Way	548	7NB	3	2	0	5
SE 38th & 148th	9	174WB	2	1	2	5
Northup & 108th Ave NE	61	78WB	1	2	2	5
NE 24th & 140th	196	64EB	2	1	2	5
Main St & 148th	240	50EB	2	1	2	5
Main St. & Bel Way	309	9EB	2	1	2	5
Bel-Red Rd & 116th	341	29SB	1	2	2	5
NE 12th St & 112th	409	25SB	2	1	2	5
Main St. & 110th	443	157SB	3	0	2	5
Bel-Red Rd & 116th	472	29NB	1	2	2	5
NE 2nd & 106th	574	18WB	3	0	2	5

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Table XII-5 (continued) TSP Intersection Prioritization Results						
Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
Northup & 164th	585	76EB	3	0	2	5
SE 8th & Lk Hills Conn	591	71EB	1	2	2	5
NE 8th & 405 OFF	25	26EB	0	4	0	4
Wolverine Way & Bel Way	30	10SB	0	4	0	4
Wolverine Way & Bel Way	49	10NB	0	4	0	4
Northup & 132nd	76	252WB	0	4	0	4
Northup & 136th Pl	77	185WB	0	4	0	4
Bel-Red Rd & 140th	86	40WB	2	2	0	4
NE 8th & 116th	98	30WB	0	4	0	4
NE 4th St & SB Ramp	108	224WB	0	4	0	4
NE 8th & 101st	162	303WB	0	4	0	4
Northup & 132nd	203	252EB	0	4	0	4
Northup & 136th Pl	204	185EB	0	4	0	4
Northup & 140th	205	39EB	0	4	0	4
Northup & 156th	207	62EB	0	4	0	4
Bel-Red Rd & 140th	213	40EB	2	2	0	4
NE 4th St & SB Ramp	235	224EB	0	4	0	4
NE 12th St & 112th	279	25EB	2	2	0	4
NE 8th & 101st	287	303EB	0	4	0	4
NE 8th & Bel Way	289	7EB	2	2	0	4
Northup & 156th	333	62SB	0	4	0	4
Bel-Red Rd & 148th	337	48SB	0	4	0	4
Bel-Red Rd & 140th	339	40SB	2	2	0	4
NE 15th & 156th	342	66SB	0	4	0	4
NE 10th & 156th	349	67SB	0	4	0	4
NE 8th & 140th	356	41SB	2	2	0	4
NE 8th & 148th	358	49SB	0	4	0	4
LK Trail & 148th	369	304SB	0	4	0	4
SE 8th & Bel Way	372	11SB	0	4	0	4
SE 10th & Bel Way	376	12SB	0	4	0	4
SE 16th & Bel Way	379	135SB	0	4	0	4
SE 22nd & 148th	382	53SB	0	4	0	4
SE 27th & 148th	386	56SB	0	4	0	4
NH School & Factoria	401	301SB	0	4	0	4
NE 6th & 112th	426	107SB	0	4	0	4
NE 2nd & Bel Way	435	31SB	0	4	0	4
Main St. & 112th	444	36SB	0	4	0	4
NE 24th & 148th	454	81NB	0	4	0	4
NE 10th & 156th	480	67NB	0	4	0	4
LK Trail & 148th	500	304NB	0	4	0	4
SE 10th & Bel Way	505	12NB	0	4	0	4

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Table XII-5 (continued)
TSP Intersection Prioritization Results

Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
SE 16th & Bel Way	508	135NB	0	4	0	4
SE 22nd & 148th	511	53NB	0	4	0	4
SE 41st & Factoria	527	282NB	0	4	0	4
NH School & Factoria	529	301NB	0	4	0	4
NE 6th & Bel Way	552	28NB	0	4	0	4
NE 6th & 112th	555	107NB	0	4	0	4
NE 2nd & Bel Way	563	31NB	0	4	0	4
SE 38th & 148th		174SEB	1	1	2	4
Eastgate Way & 161st Ave SE	24	92EB	0	2	2	4
Lake Washington & I405 off	39	221SB	1	1	2	4
Lake Washington & I405 off	58	221NB	1	1	2	4
SE 8th & Lk Hills Conn	116	71WB	0	2	2	4
SE 8th & 121st	117	106WB	0	2	2	4
Eastgate Way & 158th	139	90WB	0	2	2	4
Eastgate Way & 158th	264	90EB	0	2	2	4
SE 38th & Factoria	268	222EB	1	1	2	4
NE 6th & 106th	294	179EB	0	2	2	4
NE 30th & Bel Way	316	136SB	0	2	2	4
NE 17th & Bel Way	335	137SB	0	2	2	4
NE 10th & 116th	347	180SB	0	2	2	4
NE 8th & 116th	352	30SB	0	2	2	4
SE 30th & Richard Rd	388	132SB	0	2	2	4
NE 10th St & 106th	412	154SB	0	2	2	4
NE 2nd & 108th	436	23SB	0	2	2	4
NE 30th & Bel Way	447	136NB	0	2	2	4
NE 17th & Bel Way	466	137NB	0	2	2	4
NE 10th & 116th	478	180NB	0	2	2	4
NE 8th & 116th	483	30NB	1	1	2	4
SE 30th & Richard Rd	517	132NB	0	2	2	4
NE 12th St & 106th	535	15NB	0	2	2	4
NE 2nd & 108th	564	23NB	0	2	2	4
Main St. & 108th	570	24NB	0	2	2	4
Eastgate Way & 160th	578	91EB	0	2	2	4
Eastgate Way & 160th	579	91WB	0	2	2	4
Northup & 148th	79	47WB	1	2	0	3
NE 12th St & 112th	154	25WB	1	2	0	3
Main St. & Bel Way	184	9WB	2	1	0	3
Bel-Red Rd & 116th	214	29EB	1	2	0	3
NE 8th & Bel Way	419	7SB	1	2	0	3
Bel-Red Rd & 140th	470	40NB	1	2	0	3
NE 8th & 140th	487	41NB	1	2	0	3

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Table XII-5 (continued) TSP Intersection Prioritization Results						
Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
NE 12th St & 112th	538	25NB	2	1	0	3
Bel-Red Rd & 120th	580	32WB	1	2	0	3
SE 8th &	5	102WB	0	1	2	3
SE 8th &	18	102EB	0	1	2	3
Kamber Rd & 139th Ave SE	20	280EB	0	1	2	3
Eastgate Way & 161st Ave SE		92NWB	0	1	2	3
Northup & 156th	80	62WB	1	0	2	3
SE 8th & 112th	123	89WB	0	1	2	3
SE 38th & Factoria	143	222WB	1	0	2	3
NE 10th St & 110th	160	235WB	0	1	2	3
NE 4th St & 100th Ave	172	96WB	0	1	2	3
NE 4th St & 102nd	173	145WB	0	1	2	3
Main St. & 102nd	183	2WB	0	1	2	3
NE 10th St & 112th	284	234EB	0	1	2	3
NE 4th St & 102nd	298	145EB	0	1	2	3
Main St. & 102nd	308	2EB	0	1	2	3
Sunset Elementary & W. Lake	402	311SB	0	1	2	3
Sunset Elementary & W. Lake	530	311NB	0	1	2	3
NE 4th St & 100th Ave	556	96NB	0	1	2	3
Main St. & 112th	576	36WB	0	1	2	3
Bel-Red Rd & 148th	84	48WB	0	2	0	2
Bel-Red Rd &	85	308WB	0	2	0	2
Bel-Red Rd & 116th	87	29WB	0	2	0	2
Bel-Red Rd & 134TH	89	175WB	0	2	0	2
Bel-Red Rd & 132nd	90	38WB	0	2	0	2
NE 12th St & 106th	151	15WB	0	2	0	2
NE 12th St & 110th	153	162WB	0	2	0	2
Bel-Red Rd & 148th	211	48EB	0	2	0	2
Bel-Red Rd &	212	308EB	0	2	0	2
Bel-Red Rd & 134TH	216	175EB	0	2	0	2
Bel-Red Rd & 132nd	217	38EB	0	2	0	2
NE 12th St & 110th	278	162EB	0	2	0	2
Main St. & 112th	313	36EB	1	1	0	2
Northup & 140th	331	39SB	0	2	0	2
Evergreen & 140th	336	270SB	0	2	0	2
NE 6th & Bel Way	423	28SB	0	2	0	2
Northup & 140th	462	39NB	0	2	0	2
Evergreen & 140th	467	270NB	0	2	0	2
SE 8th & Bel Way	502	11NB	0	2	0	2
NE 12th St & 106th		15EB	0	2	0	2
NE 2nd & 108th	180	23WB	0	0	2	2

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Table XII-5 (continued)						
TSP Intersection Prioritization Results						
Intersection	TSPID	ID2	LOS	TPN	Cord art	Final score
NE 2nd & 108th	305	23EB	0	0	2	2
NE 2nd & 110th	306	158EB	0	0	2	2
NE 2nd & 110th	437	158SB	0	0	2	2
NE 2nd & 110th	565	158NB	0	0	2	2
Main St. & 106th	185	19WB	0	1	0	1
Main St. & 108th	186	24WB	0	1	0	1
Main St. & 110th	187	157WB	0	1	0	1
Main St. & 106th	310	19EB	0	1	0	1
Main St. & 108th	311	24EB	0	1	0	1
Main St. & 110th	312	157EB	0	1	0	1
NE 10th St & 112th	414	234SB	0	1	0	1

CHAPTER XIII- COMMUTER PARKING FACILITIES

Commuter parking facilities play an important role in lower-density suburban settings. They provide convenient access to transit via auto or bicycle for those persons who do not live within convenient walking distance of a bus line. By concentrating boardings at a single point, a more frequent level of service can be supported. The City of Bellevue recognizes the importance of commuter parking facilities. The City is dedicated to providing comprehensive commuter parking options and to working in partnership with transit providers and the State to develop additional facilities as needed. This dedication is reflected in a number of Bellevue's Comprehensive Plan policies:

Policy TR-70b

Provide a safe system of park-and-ride and park-and-pool lots to serve activity centers in the region and on the Eastside to:

- intercept trips by single occupant vehicles closer to the trip origins,
- reduce traffic congestion, and
- reduce total vehicle miles traveled [Previously Policy TR-68 Ord. 5247].

Policy TR-70d

Encourage transit providers and the State to provide new and expanded park-and-ride lots to adequately serve City residents and to develop additional capacity outside Bellevue at other strategic Eastside locations to serve outlying residents [New Ord. 5247].

Policy TR-50

Work with the transit providers to maintain and improve public transportation services to meet employer and employee needs. Develop and implement attractive transit commuter options, such as park-and-ride facilities and local shuttle systems with sufficient frequencies to increase use of transit for commuting and reduce reliance on private automobiles [Amended Ord. 5058].

To meet demand for commuter parking, Bellevue not only intends to maintain and enhance existing permanent facilities (also known as park-and-ride lots) but to use leased parking options, or park-and-pool lots, to maximize parking opportunities for Bellevue residents and commuters. This particular strategy is also reflected in the following adopted policies:

KCM-7

Leased lots are also an important part of the park-and-ride system and should be encouraged.

Policy TR-70e

Work with transit providers and local property owners to develop new leased park-and-ride lots [New Ord. 5247].

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This section documents the existing commuter parking facilities in the Bellevue area based on recent survey efforts (see Appendices G and H). In addition, this chapter reviews commuter parking demand assessments for the greater Bellevue area and considers this demand in light of existing parking facilities. Finally, recommendations have been developed for meeting the near-term and projected commuter parking needs.

Park-and-Ride Lots

Seven permanent park-and-ride lots with 2,416 stalls are within Bellevue at the following locations: Eastgate, Newport Hills, South Bellevue, South Kirkland (a portion in Bellevue), Wilburton, Evergreen Point, and Northrup Way. Most lots were at, near, or over capacity during 2001.¹ Table XIII-1 shows the fourth quarter 2001 utilization rates for these lots.

Table XIII-1
Park-and-Ride Lot Use, 4th Quarter, 2001

Park and Ride	Location	Number of Spaces Available	Number of Spaces Used	Percent Used
Eastgate	14200 SE Eastgate Way	724	691	95%
Newport Hills	5115 113th Place SE	292	200	68%
South Bellevue	270 Bellevue Way SE	524	534	102%
South Kirkland*	3801 108th Ave NE	603	583	97%
Wilburton	720 114th Ave SE	190	122	64%
Evergreen Point P&R	SR 520 & 76th Ave NE	51	47	92%
Northrup Way P&R	N. Way & Lk W Blvd	32	21	65%

*Stalls for the entire lot, not just the Bellevue portion

Utilization rates in excess of 100 percent indicate use of parking spaces by more than one vehicle over the course of a day or illegal parking in fire lanes and along driveways. Excess demand in the form of illegally parked vehicles within individual facilities, vehicles parked along adjacent streets, and vehicles parked in adjacent properties can be readily identified through field observations. However, when demand for individual facilities exceeds available capacity, latent demand is generated in the form of unmet parking demand. This suggests that demand observations at individual park-and-ride facilities may substantially undercount existing demand because of the capacity constraint generated by the full facility.

¹ Source: King County Dept. of Transportation. *Park and Ride Lot Utilization Report*, 4th Quarter. 2001.

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Park-and-Pool Lots

At the end of 2001, approximately 520 parking stalls were available in 11 leased park-and-pool lots within the City. These leased facilities are primarily located in church parking lots. Each lot was at, near, or over capacity during 2001.² Table XIII-2 shows the fourth quarter 2001 utilization rates for these eleven lots.

Table XIII-2
Park-and-Pool Lot Use, 4th Quarter, 2001

Leased Lot	Location	Number of Spaces Available	Number of Spaces Used	Percent Used
Bellevue Christian Reform Church	1221 148th Ave NE	20	10	48%
Bellevue Church of Christ	1212 104th Ave SE	28	14	51%
Bellevue Foursquare Church	2015 Richards Road	50	32	64%
Bellevue Way P&R (St. Luke's Lutheran Church)	Bellevue Way & NE 30th Place	30	14	47%
Factoria P&R (Newport Covenant Church)	Newport Way & Coal Creek Pkwy	75	48	64%
Grace Lutheran Church	NE 8th St & 96th Ave NE	50	53	105%
Newport Hills Community Church	SE 58th St & 119th Ave SE	50	30	60%
Medina P&R (St. Thomas)	84th Ave NE & NE 12th St	52	38	73%
Overlake Park Presbyterian Church	1836 156th Ave NE	80	41	51%
St. Margaret's Episcopal	4228 128th Ave SE	64	41	64%
St. Andrew's Lutheran Church	2650 148th Ave SE	20	10	48%

Commuter Parking Demand

The demand for park-and-ride lot spaces is expected to increase steadily as transit services and rideshare opportunities grow. According to the Washington State Department of Transportation, the total I-90 corridor park-and-ride demand forecast for 2010 exceeds current capacity by approximately 2,500 stalls. For 2020, excess demand is forecast to total approximately 3,400 as compared to current corridor capacity. Responding to the growth in I-90 park-and-ride demand will be expensive. Preliminary cost estimates for additional stalls along the I-90 corridor are as follows: 1,500 stalls between 2000-2006 will cost an estimated \$37,328,000; 650 stalls between 2007-2015 will cost an estimated \$16,600,000; and 1,300 stalls between 2016-2020 will cost an estimated \$36,140,000.³

Responding to the growth in Bellevue park-and-ride demand will be expensive; preliminary cost estimates for additional stalls are as follows: there are no Bellevue improvements

² Source: King County Dept. of Transportation. *Park and Ride Lot Utilization Report*, 4th Quarter. 2001.

³ Washington State Department of Transportation. *Puget Sound Park & Ride System Update*. Prepared by Parsons Brinckerhoff. February 2001.

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forecasted between 2000-2006; 500 stalls between 2007-2015 will cost an estimated \$13,900,000; and 1,300 stalls between 2016-2020 will cost an estimated \$36,140,000.⁴ The cost estimates for 2007-2020 are not site specific, and may not end up on I-90 in Bellevue.

Clearly, expanding existing park-and-ride facilities and constructing new lots are expected to play a significant role in responding to this growth in demand for commuter parking spaces. The City of Bellevue is presently working with King County Metro (Metro) and Sound Transit in constructing a parking garage at the Eastgate Park & Ride lot – thus expanding the existing lot by approximately 1,000 new spaces (completion is scheduled for 2003). Also, the I-90 corridor is expected to benefit from the construction of a new park-and-ride lot at Issaquah Highlands—approximately 500 spaces are included in the first project phase (completion is scheduled for 2004).

However, the ability to meet the growth in demand in the I-90 corridor will be challenging given the magnitude of the demand along the other major corridors in King County (I-5, I-405, and SR-167). According to the Washington State Department of Transportation, the total countywide corridor park-and-ride demand forecast for 2010 exceeds current capacity by approximately 5,535 stalls. For 2020, excess demand is forecast to total approximately 11,185 as compared to current corridor capacity. The demand forecasts are corridor-level estimates, and do not represent site-specific demand estimates.

Park-and-Pool Lots: A Near-Term Capacity Option

Park-and-ride lots will continue to play an important role in meeting commuter needs, although budget constraints and long project lead times will limit the amount of new park-and-ride capacity that can be added over the next six-years. Meanwhile, park-and-ride lots located in Bellevue are not meeting the demand of commuters today; as such there is an immediate need for additional commuter parking spaces.

One potential near-term strategy is to use existing parking lots that are not used during regular business hours. The use of park-and-pool lots as a near-term commuter parking capacity relief strategy is consistent with the City of Bellevue's Transportation Policy Element directive: TR 70E – “Work with transit providers and local property owners to develop new leased park-and-ride lots.”⁵

Responding to Council's directive, Bellevue staff worked with Metro in developing a series of criteria for assessing additional park-and-pool lots that might be undertaken with various church facilities throughout the City. Bellevue staff used site visits and the evaluation criteria in assessing 20 different churches in the City that might be candidates for park-and-pool lot development. All the surveyed sites were within three blocks of a transit route. Table XIII-3 provides a synopsis of the results of this evaluation, identifying which lots have the greatest potential for further examination.⁶ Figure XIII-1 shows the locations of existing park-and-ride lots, park-and-pool lots, and the 20 potential park-and-pool lots.

⁴ Washington State Department of Transportation. *Puget Sound Park & Ride System Update*. Prepared by Parsons Brinckerhoff. February 2001.

⁵ New Ordinance 5247.

⁶ See *Appendix G: City of Bellevue Potential Park-and-Pool Site Evaluation*.

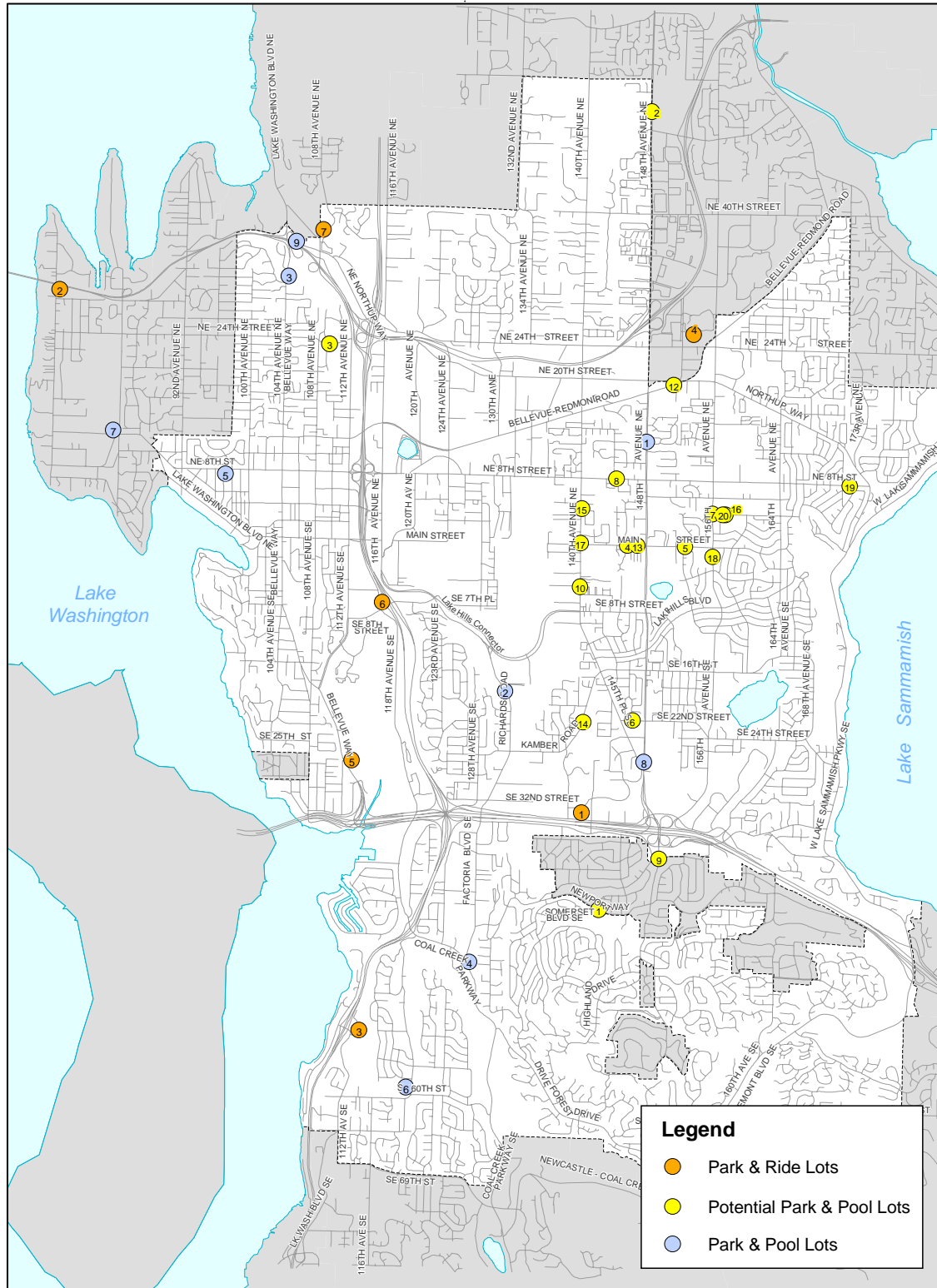
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**Table XIII-3
Comparison Table of Potential Park-and-Pool Lots**

ID	Church Name	Lighting	Visibility from street	Street Activity	Pedestrian Activity	Proximity to bus stop	Sheltered bus stop	Paved
1	Aldersgate United Methodist Church	●	●	○	○	N/A	?	Y
2	All Saints Lutheran Church	●	○	●	○	< One block	Y	Y
3	Bellewood Presbyterian Church	●	●	●	○	N/A	?	Y
4	Church of Jesus Christ of LDS	●	●	●	●	< One block	N	Y
5	Church of Resurrection	●	●	●	●	.5 block	N	Y
6	Coal Creek Church	●	●	○	○	< One block	Y and N	Y
7	Cross of Christ Lutheran Church	●	○	●	○	< One block	Y	Y
8	Crossroads Bible Church	●	●	●	○	1 block	Y	Y
9	First Baptist Church	●	●	●	●	< One block	N	Y
10	First Baptist Church of Lake Hills	○	●	●	○	< One block	N	Y
12	Highland Covenant Church	●	●	●	●	< One block	N	Y
13	Islamic Center of Eastside	●	●	●	●	.5 block	N	Y and N
14	Kingdom Hall of Jehovah's Witnesses	●	○	●	○	N/A	?	Y
15	Neighborhood Church, The	●	●	○	●	2 blocks	N	Y
16	New Hope Ministries	●	●	●	○	1 block	Y	Y
17	Seventh Day Adventist Church	●	○	●	○	< One block	N	Y
18	Saint Louise Catholic Church	●	●	○	○	N/A	Y	Y
19	Saint Peter's United Methodist	●	●	●	○	< One block	N	N
20	Temple B'Nai Torah	●	●	●	○	1 block	Y	Y

● High
 ● Average
 ○ Low

Figure XIII-1
Park-and-Ride, Park-and-Pool, and Potential Park-and-Pool Sites



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If the City of Bellevue is to make a commitment to responding to the immediate demand for commuter parking stalls vis-à-vis the development of near-term park-and-pool lots it will be important for the City to examine the permit approval process it has for such activities to occur. According to Metro, the City of Bellevue is the only jurisdiction in King County that Metro works with that requires it to undergo an administrative use permit approval process for park-and-pool lots.

In all other King County jurisdictions, Metro park-and-pool lots are considered a permitted use in all zones; as such, Metro is allowed to work directly with the church in developing lease agreements for parking areas. As reflected below, in the Bellevue *Land Use Code* 20.20.200 - *Commuter Parking Facility* a park-and-pool lot of 50 spaces or less requires an administrative conditional use process.

- A. The applicant may propose a commuter parking facility providing no more than 50 parking spaces and utilizing the parking area of an existing use through the administrative conditional use process, Part 20.30E LUC. Appeals of decisions made pursuant to this subsection will be decided using the Process II appeal procedures, LUC 20.35.250.
- B. The Director of Planning and Community Development may approve a commuter parking facility described in subsection A of this section only if he/she finds that:
 - 1. The commuter parking facility is proposed as part of a transportation program.
 - 2. The number of parking spaces proposed for the commuter parking facility is in excess of the actual parking demand for the primary use during overlapping hours of operation.
 - 3. The subject property abuts and gains access from a major, secondary, or collector arterial as defined by the Public Works Department.
 - 4. Signage proposed in conjunction with the commuter parking facility is adequate to identify the facility and in keeping with the general character of the immediate vicinity.
 - 5. The location of the commuter parking facility on the subject property will have no significant adverse impact on uses in the immediate vicinity.

An administrative use permit requires the following: application, application fees (minimum of \$1,102), mailed notice to property owners within 200 feet, public comment period of 14 days, and permit application and fees for all signs posted. Typically, processing an administrative use permit for this type of use will take up to 120 days.

The current permit process also affects Metro's ability to implement the shop-and-ride program it intends to initiate later this year. This program involves developing lease agreements between Metro and commercial property owners for use as commuter parking facilities. Implementing such a program at the Factoria Mall, Crossroads Mall, or other shopping centers has the potential to change the character of these parking lots to that of a transit center/community focal point thus increasing transit usage and pedestrian activity at the shopping center. Shop-and-rides also have the opportunity to diminish person trips in

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Bellevue by enabling people who use the bus to commute to work an opportunity to complete their shopping trips at one location before returning home in the evening.

It is also worth noting that park-and-ride lots, which tend to be located on the interstate system, on the periphery of the city, are frequently oriented toward serving regional trips passing through Bellevue rather than to linking Bellevue neighborhoods to Bellevue activity centers. Park-and-pool lots, when located at church facilities or retail developments close to neighborhoods, bring additional transit service closer to Bellevue residents. By integrating these facilities into the surrounding neighborhoods, park-and-pool lots reorient transit's focus making it easier for Bellevue residents to use transit while remaining sensitive to community character.

Recommendations

The desire to provide sufficient commuter parking for Bellevue residents has long- and short-term components that must be met. From a long-term policy perspective, the City must decide whether it is willing to consider additional permanent commuter parking facility expansion possibilities (beyond the current construction effort at the Eastgate park-and-ride lot) in Bellevue. The South Bellevue Park-and-Ride and South Kirkland Park-and-Ride are both potential candidates for future expansion, based on existing and projected demand.

Based on the park-and-pool analysis detailed in Appendix G, 19 locations have been identified that have potential to immediately relieve at-capacity existing park-and-ride lots. It is recommended that the City of Bellevue examine the steps necessary to access this capacity. First, the City must decide whether it is willing to consider additional leased lot development in Bellevue. Second, the City will examine its permit process, including submittal requirements, cap on the number of leased parking spaces, and fees for leased lot development in Bellevue. Only if both of these issues are resolved will it again become cost-effective for Metro to negotiate park-and-pool locations within Bellevue.

The 19 park-and-pool locations were prioritized based on their proximity to the transit priority network and the number of routes serving the location. If the park-and-pool was located adjacent to a transit principal corridor and had existing bus service, then it scored a "High" priority. If the park-and-pool was located on a transit minor corridor and had existing bus service, it scored a "Medium" priority. If the park-and-pool was located on a transit local access or it had no existing bus service, it scored a "Low" priority. Table XIII-4 shows the prioritization and cost of each of the potential park-and-pool lots. Fourteen potential park-and-pool lots should be considered high priority for implementation. The cost of implementing park-and-pool lots is estimated at approximately \$20,000 (assuming a total of \$1,000 in permitting costs) of up-front costs and \$43,470 in annual maintenance costs (currently \$2.50 per month per stall, according to Metro).

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Table XIII-4
Potential Park-and-Pool Lots Costs and Prioritization

ID	ADDRESS	Stalls ⁷	Routes	Permit Cost ⁸	Annual Cost ⁹	Priority
2	5501 148th Ave NE	60	239, 253, 266, 441	\$1,000	\$1,800	High
4	14536 Main St	50	222	\$1,000	\$1,500	High
5	15220 Main St	25	229, 926	\$1,000	\$750	High
6	14615 SE 22nd St	96	271, 272, 222, 926	\$1,000	\$2,880	High
7	411 156th Ave NE	213	253, 230, 272, 229, 926	\$1,000	\$6,390	High
8	14434 NE 8th St	200	230, 253, 272	\$1,000	\$6,000	High
9	15005 SE 38th St	80	271, 272, 222	\$1,000	\$2,400	High
10	506 140th Ave SE	25	271	\$1,000	\$750	High
11	15022 Bel Red Rd	76	249	\$1,000	\$2,280	High
12	14700 Main St	25	222	\$1,000	\$750	High
15	15760 NE 4th St	57	926	\$1,000	\$1,710	High
17	141 156th Ave SE	75	245, 926, 229	\$1,000	\$2,250	High
19	15727 NE 4th St	117	225, 926	\$1,000	\$3,510	High
1	14230 SE Newport Wy	100	210, 222	\$1,000	\$3,000	Medium
18	17222 NE 8th St	65	230	\$1,000	\$1,950	Medium
3	10936 NE 24th St	45	234, 230, 243, 280	\$1,000	\$1,350	Low
13	2211 140th Pl SE	50	0	\$1,000	\$1,500	Low
14	625 140th Ave NE	50	0	\$1,000	\$1,500	Low
16	15 140th Ave NE	20	0	\$1,000	\$600	Low

⁷ This is the total amount of stalls in the parking lot. If an agreement is reached with each respective church, it is unlikely that the full amount of parking stalls will be available for park-and-pool purposes.

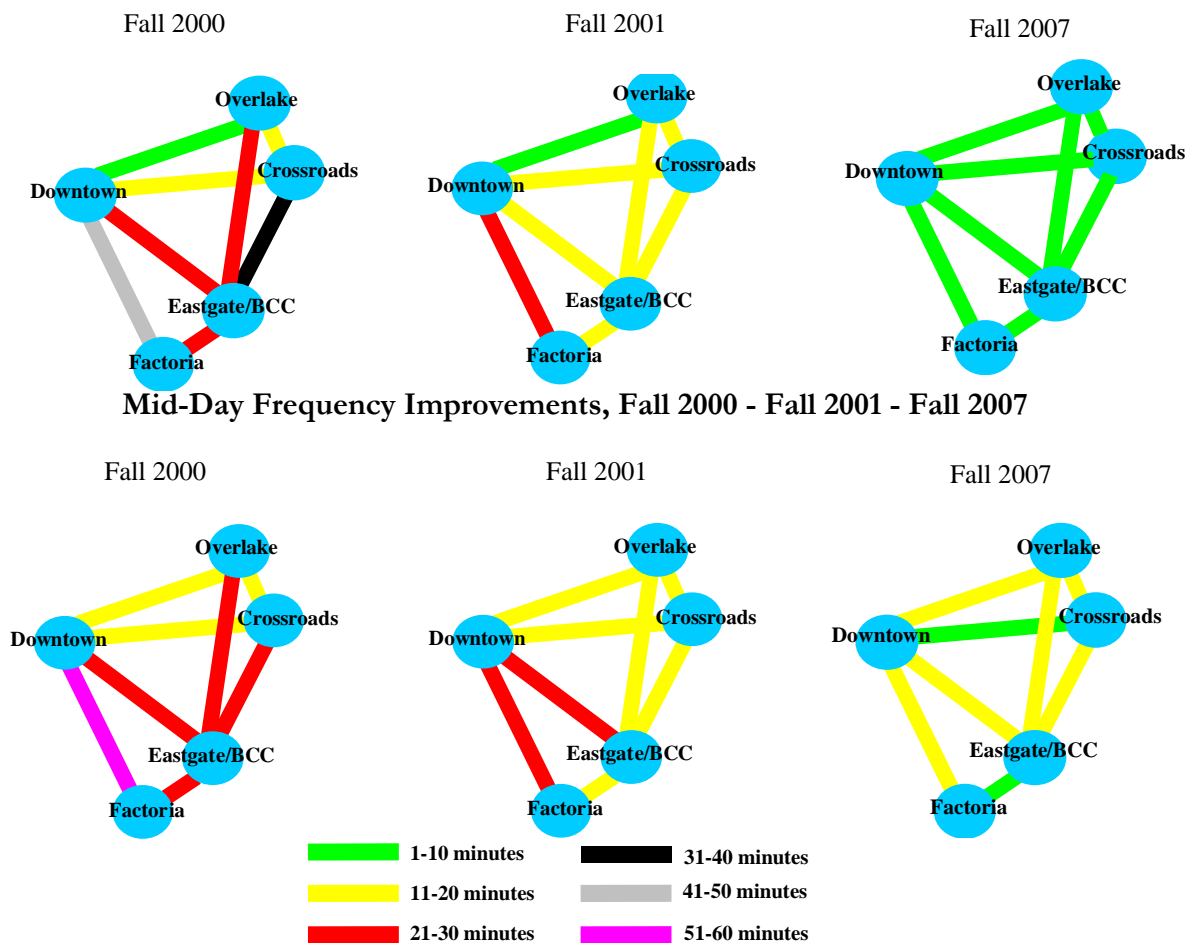
⁸ Estimated.

⁹ Based on existing King County Metro costs of \$2.50 per month per stall. This is a conservative estimate, as it assumes that 100 percent of all stalls will be available for park-and-pool purposes. The amount of available parking will depend on the actual needs of the church, and the number of vacant stalls.

Chapter XIV – Corridor Projects Recommendations

Within the preceding chapters of the Service Element and Capital Element, a variety of transit system needs have been identified. Specific corridor service needs have been identified that will create the framework for high frequency service that choice riders will readily access. In addition, supporting specific capital investment projects to address these needs have been evaluated and prioritized within seven individual project areas. In combination, the recommended projects have the potential to improve the circulation of transit services, provide enhanced access to transit services, and augment the attractiveness of transit as a travel option in Bellevue. Figure XIV-1 illustrates the planned frequency improvements.

Figure XIV-1
Peak Hour Frequency Improvements, Fall 2000 - Fall 2001 - Fall 2007



The City recognizes that addressing the transit needs of city residents and businesses requires a multidimensional plan. Focusing on only one or two project areas is not as effective as a comprehensive approach. As the City continues to prioritize its service and capital projects,

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it is beneficial to consider projects in terms of service corridors within Bellevue. This view provides some insight on how individual projects relate to each other and may work together to systemically improve transit within the City.

Within this chapter, service corridors identified in Table XIV-1 are summarized and all Capital Element projects have been assigned to an appropriate corridor. The corridors and their definitions are outlined in Table XIV-1.

Table XIV-1
Transit Corridor Categories and Definitions

Corridor Category	Location/Definition
Bellevue Transit Center to Crossroads	NE 8th Street between Downtown Bellevue and Crossroads Shopping Center
Bellevue Transit Center to Overlake	Bel-Red Road and Northup Way between Downtown Bellevue and Overlake
Bellevue Transit Center to Bellevue Community College	Lake Hills Connector/145th Place between Downtown Bellevue and Bellevue Community College
Bellevue Transit Center to Factoria	112th Avenue SE, Bellevue Way, 108th Avenue SE, and Beaux Arts between Downtown Bellevue and Factoria
Factoria to Renton	Factoria Boulevard, Coal Creek Parkway, and 119th Avenue SE between Factoria and Renton
Factoria to Eastgate	Factoria Boulevard, SE 36th Street, Eastgate Way, and Newport Way between Factoria and Eastgate
Eastgate/Bellevue Community College to Issaquah	Eastgate Way and West Lake Sammamish between Eastgate/Bellevue Community College and Issaquah
Eastgate to Bellevue Community College	148th Avenue SE, Landerholm Circle, and Perimeter Road Between Eastgate and Bellevue Community College
Bellevue Community College to Crossroads	148th Avenue, 156th Avenue, and 164th Avenue between BCC and Crossroads Shopping Center
Crossroads to Overlake	156th Avenue NE and 148th Avenue between Crossroads Shopping Center and Overlake
Crossroads/Overlake to Redmond	West Lake Sammamish and NE 24th Street between Crossroads/Overlake and Redmond
Bellevue Transit Center to Kirkland	Bellevue Way and 112th Avenue NE between Downtown Bellevue and Kirkland
Downtown Bellevue Improvements	Improvements in Downtown Bellevue
All Other Corridor Improvements	All Other Corridor Improvements

For each corridor, projects have been assigned based on the criteria in Table XIV-2

Table XIV-2
Project Types and Criteria for Corridor Assignment

Project Type	Criteria
Pedestrian Projects	Projects located within ¼ mile of corridor
Bus Stop Amenities Projects	Bus Stops located along the corridor
Arterial HOV Projects	Arterial HOV projects along the corridor
Pavement Overlay Projects	Pavement Overlay needs along the corridor
Transit Signal Priority Projects	TSP projects at intersections along the corridor
Transit Center Projects	Transit Center improvements that serve the corridor
Park-and-Pool Projects	Park-and-Pool lots that could support service along the corridor

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As Bellevue continues to develop its transit vision and strategy, the categorization of projects by the service corridors included in this section provides an outline for discussing corridor specific investments and targets from both a capital and service perspective. Table 3 summarize all the costs for each project category for each corridor. Tables XIV-4 through XIV-77 present the improvements for each corridor. Figures XIV-2 through XIV-15 show how costs are apportioned.

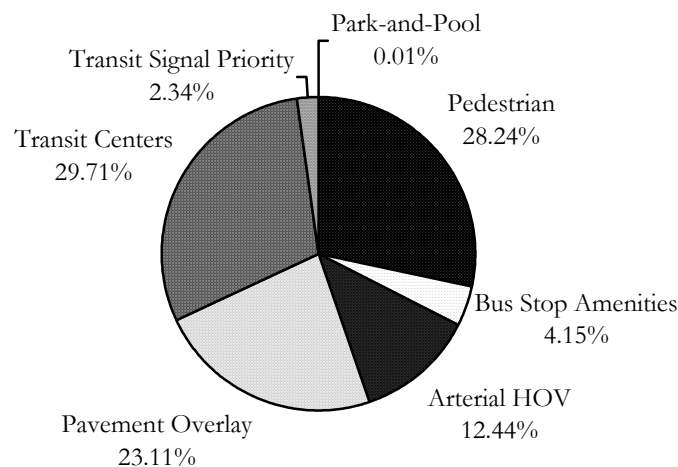
Table XIV-3
Summary Costs of Project Categories for Each Corridor

Corridor Links	Pedestrian	Bus Stop Amenities	Arterial HOV	Pavement Overlay	Transit Centers	Transit Signal Priority	Park-and-Pool	Total
Bellevue Transit Center to Crossroads	\$ 2,922,500	\$ 524,000	\$ 1,570,000	\$ 2,917,299	\$ 3,750,000	\$ 295,000	\$ 1,000	\$ 11,979,799
Bellevue Transit Center to Overlake	\$ -	\$ 545,500	\$ -	\$ -	\$ -	\$ 300,000	\$ 1,000	\$ 846,500
Bellevue Transit Center to Bellevue Community College	\$ -	\$ 90,000	\$ -	\$ 2,049,777	\$ -	\$ 340,000	\$ 1,000	\$ 2,480,777
Bellevue Transit Center to Factoria	\$ 2,347,300	\$ 1,050,000	\$ 1,065,000	\$ 2,128,360	\$ 3,120,000	\$ 345,000	\$ -	\$ 10,055,660
Factoria to Renton	\$ -	\$ 37,500	\$ -	\$ -	\$ -	\$ 35,000	\$ -	\$ 72,500
Factoria to Eastgate	\$ -	\$ 353,000	\$ -	\$ 3,010,900	\$ -	\$ 235,000	\$ 1,000	\$ 3,599,900
Eastgate to Bellevue Community College (Issaquah)	\$ -	\$ 80,500	\$ -	\$ -	\$ -	\$ -	\$ 1,000	\$ 81,500
Eastgate to Bellevue Community College	\$ -	\$ 182,500	\$ 1,290,000	\$ -	\$ 4,200	\$ 170,000	\$ -	\$ 1,646,700
Bellevue Community College to Crossroads	\$ 1,014,700	\$ 677,000	\$ 3,814,000	\$ 834,680	\$ -	\$ 325,000	\$ 8,000	\$ 6,673,380
Crossroads to Overlake	\$ 134,300	\$ 437,000	\$ 1,475,000	\$ 1,011,111	\$ -	\$ 235,000	\$ 1,000	\$ 3,293,411
Crossroads to Overlake (Redmond)	\$ -	\$ 68,000	\$ -	\$ 558,389	\$ -	\$ -	\$ -	\$ 626,389
Bellevue Transit Center to Kirkland	\$ -	\$ 432,000	\$ 130,000	\$ -	\$ -	\$ 110,000	\$ -	\$ 672,000
Downtown Bellevue	\$ -	\$ 529,000	\$ 5,645,000	\$ 342,545	\$ -	\$ 390,000	\$ 1,000	\$ 6,907,545
All Other	\$ 56,800	\$ 567,500	\$ -	\$ 5,647,396	\$ -	\$ 265,000	\$ 5,000	\$ 6,541,696
Total	\$ 6,475,600	\$ 5,573,500	\$ 14,989,000	\$ 18,500,457	\$ 6,874,200	\$ 3,045,000	\$ 20,000	\$ 55,477,757

Table XIV-4
Bellevue Transit Center to Crossroads Corridor Project Summary
NE 8th Street between Downtown Bellevue and Crossroads Shopping Center

Routes:	253, 230, 261, 272
Daily Corridor Passenger Boardings:	1,083 (excludes BTC)
Total Capital Projects Identified:	46
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	7.5 min peak, 15 min midday 6 min peak, 10 min midday
Total Cost of Capital Projects:	\$12,621,799
Pedestrian (2 projects)	\$2,922,500
Bus Stop Amenities (30 projects)	\$524,000
Arterial HOV (2 projects)	\$1,570,000
Pavement Overlay (3 projects)	\$2,917,299
Transit Centers (2 projects)	\$3,750,000
Transit Signal Priority (6 projects)	\$295,000
Park-and-Pool (1 project)	\$1,000

Figure XIV-2
Share of Cost for Proposed Projects
Bellevue Transit Center to Crossroads Corridor



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**Table XIV-5
Bellevue Transit Center to Crossroads Corridor
Pedestrian Projects**

Project No.	Street	Between	Description	Cost
S829	NE 6th St	148th Ave NE to 164th Ave NE	Construct sidewalks on one side where missing; Sign trailhead to NE 8th St and Lake Hills Greenbelt	\$1,392,700
S861	156th Ave	NE 20th St to SE 24th St	Construct s/w on both sides where missing; Construct boardwalk or WW on one side on SE 16th-11th St; Section immediately S of SE 16th should be environmentally sensitive (asphalt path & swale); upgrade s/w in Crossroads area to improve pedestrian safety	\$1,529,800
Total Cost:				\$2,922,500

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**Table XIV-6
Bellevue Transit Center to Crossroads Corridor
Bus Stop Amenities Projects**

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
67460	NE 8 ST	156 AV NE	S	\$40,000
67470	NE 8 ST	156 AV NE	S	\$40,000
67480	NE 8 ST	153 AV NE	S	\$40,000
67500	NE 8 ST	148 AV NE	P	\$2,000
67510	NE 8 ST	143 AV NE	S	\$40,000
67520	NE 8 ST	140 AV NE	P	\$2,000
67530	NE 8 ST	136 AV NE	P	\$2,000
67540	NE 8 ST	134 AV NE	L	\$500
67550	NE 8 ST	130 AV NE	L	\$500
67560	NE 8 ST	126 AV NE	P	\$2,000
67570	NE 8 ST	124 AV NE	S	\$40,000
67580	NE 8 ST	120 AV NE	S	\$58,000
67610	NE 8 ST	108 AV NE	S	\$58,000
68081	NE 8 ST	118 AV NE	P	\$20,000
68085	NE 8 ST	116 AV NE	S	\$40,000
68090	NE 8 ST	120 AV NE	P	\$20,000
68100	NE 8 ST	124 AV NE	P	\$2,000
68110	NE 8 ST	126 PL NE	P	\$2,000
68120	NE 8 ST	130 AV NE	L	\$500
68130	NE 8 ST	131 AV NE	L	\$500
68135	NE 8 ST	136 AV NE	P	\$2,000
68140	NE 8 ST	140 AV NE	P	\$2,000
68150	NE 8 ST	140 AV NE	S	\$40,000
68160	NE 8 ST	143 AV NE	P	\$2,000
68165	NE 8 ST	143 AV NE	P	\$2,000
68167	NE 8 ST	143 AV NE	P	\$20,000
68180	NE 8 ST	148 AV NE	P	\$2,000
68190	NE 8 ST	153 AV NE	P	\$2,000
68200	NE 8 ST	156 AV NE	S	\$40,000
68210	NE 8 ST	156 AV NE	P	\$2,000
Total Cost:				\$524,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

**Table XIV-7
Bellevue Transit Center to Crossroads Corridor
Arterial HOV Projects**

Project	Cost
Implement Transit Queue Jump Lanes and Transit Signal Priority on Eastbound NE 8th Street at 120 th Avenue NE	\$570,000
Implement Transit Queue Jump Lanes and Transit Signal Priority on Eastbound NE 8th Street at 148 th Avenue NE	\$1,000,000
Total Cost:	\$1,570,000

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Table XIV-8
Bellevue Transit Center to Crossroads Corridor
Pavement Overlay Projects

Roadway	From	To	Action	Cost
NE 8th Street	100th Ave NE	116th Ave NE	Rehab	\$381,465
NE 8th Street	140th Ave NE	156th Ave NE	Recon	\$856,667
NE 8th Street	116th Ave NE	140th Ave NE	Recon	\$1,679,167
Total Cost:				\$2,917,299

Table XIV-9
Bellevue Transit Center to Crossroads Corridor
Transit Center Projects

Project	Cost
Construct a turnaround and layover area for full-sized buses in the Crossroads area	\$750,000
Construct a transit center in Crossroads	\$3,000,000
Total Cost:	\$3,750,000

Table XIV-10
Bellevue Transit Center to Crossroads Corridor
Transit Signal Priority Projects

Location	Cost
NE 8th & 156th	\$75,000
NE 8th & 143rd	\$35,000
NE 8th & 140th	\$25,000
NE 8th & 124th	\$50,000
NE 8th & 108th	\$75,000
NE 8 th & 110th	\$35,000
Total Cost:	\$295,000

Table XIV-11
Bellevue Transit Center to Crossroads Corridor
Park-and-Pool Projects

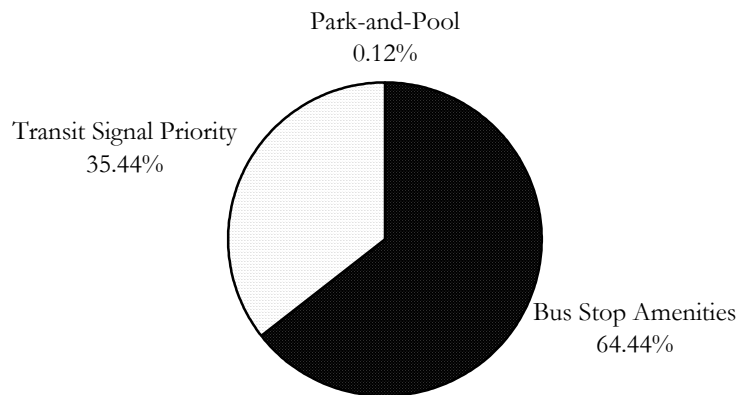
Location	Permit Cost
Crossroads Bible Church - 14434 NE 8th St	\$1,000

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Table XIV-12
Bellevue Transit Center to Overlake Corridor Project Summary
Bel-Red Road and Northrup Way between Downtown Bellevue and Overlake

Routes:	220, 249
Daily Corridor Passenger Boardings:	340 (excludes BTC)
Total Capital Projects Identified:	83
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	10 min peak, 30 min midday 10 min peak, 12 min midday
Total Cost of Capital Projects: Pedestrian (no projects) Bus Stop Amenities (73 projects) Arterial HOV (no projects) Pavement Overlay (no projects) Transit Centers (no projects) Transit Signal Priority (9 projects) Park-and-Pool (1 project)	\$846,500 \$545,500 \$300,000 \$1,000

Figure XIV-3
Share of Cost for Proposed Projects
Bellevue Transit Center to Overlake Corridor



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Table XIV-13
Bellevue Transit Center to Overlake Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type¹	Cost
65264	116 AV SE	SE 64 ST	L	\$500
65267	116 AV SE	SE 64 ST	L	\$500
67596	NE 12 ST	116 AV NE	L	\$500
68058	NE 12 ST	112 AV NE	P	\$20,000
68062	NE 12 ST	116 AV NE	L	\$500
68063	NE BEL-RED RD	148 AV NE	P	\$20,000
68064	NE 12 ST	120 AV NE	L	\$500
68065	NE BEL-RED RD	130 AV NE	L	\$500
68066	NE BEL-RED RD	124 AV NE	P	\$20,000
68067	NE BEL-RED RD	132 AV NE	L	\$500
68068	NE BEL-RED RD	140 AV NE	L	\$500
68069	NE BEL-RED RD	143 AV NE	P	\$20,000
68306	NE 13 ST	179 PL NE	L	\$500
68351	116 AV NE	NE 19 ST	L	\$500
68352	116 AV NE	NE 19 ST	L	\$500
68353	116 AV NE	NE 12 ST	L	\$500
68354	116 AV NE	NORTHUP WY	L	\$500
68355	116 AV NE	NORTHUP WY	L	\$500
68370	NE 24 ST	156 AV NE	P	\$20,000
70682	116 AV NE	NE 8 ST	P	\$20,000
70686	116 AV NE	NE 8 ST	L	\$500
70865	116 AVE NE	NE 2 PL	P	\$20,000
71208	NE 24 ST	136 PL NE	L	\$500
71320	NE 24 ST	156 AV NE	P	\$20,000
71865	NE 20 ST	148 AV NE	L	\$500
71866	NE 20 ST	NE BEL-RED RD	P	\$20,000
72861	116 AV NE	NE 34 ST	L	\$500
72862	116 AV NE	NE 34 ST	L	\$500
73047	116 AV NE	2385 (ADDRESS)	L	\$500
73051	116 AV NE	1601 (ADDRESS)	L	\$500
73052	116 AV NE	1040 ADD. (ABODIO)	L	\$500
73053	116 AV NE	1041 ADD. OP-1040	P	\$20,000
73054	116 AV NE	1600 ADD. OP-1601	L	\$500
73055	116 AV NE	NE 12 ST	L	\$500
73056	116 AV NE	2112 (ADDRESS)	L	\$500
74445	NORTHUP WY	116 AV NE	L	\$500
74446	NORTHUP WY	3000 NORTHUP	P	\$20,000
74447	NORTHUP WY	3000 NORTHUP	P	\$20,000

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Table XIV-13 (continued)
Bellevue Transit Center to Overlake Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
74448	NORTHUP WY	NE 33 PL	P	\$20,000
74451	NORTHUP WY	NE 33 PL	P	\$20,000
74452	NORTHUP WY	NE 24 ST	L	\$500
74453	NORTHUP WY	NE 28 ST	P	\$20,000
74454	NORTHUP WY	124 AV NE	L	\$500
74455	NORTHUP WY	NE 28 ST	P	\$20,000
74472	NORTHUP WY	130 AV NE	L	\$500
74474	NE 20 ST	132 AV NE	L	\$500
74476	NE 20 ST	13433 (AT SHIRLEY'S)	L	\$500
74478	NE 20 ST	140 AV NE	L	\$500
74480	NE 20 ST	14309 (AT CAMERA W)	L	\$500
74524	NE 20 ST	148 AV NE	L	\$500
74525	NE 20 ST	NE BEL-RED RD	P	\$20,000
74526	NE 20 ST	14408 (AT MELCO DR)	L	\$500
74528	NE 20 ST	14230 (OP CAMERA W)	L	\$500
74535	NE 20 ST	140 AV NE	L	\$500
74537	NE 20 ST	136 PL NE	P	\$20,000
74538	NE 20 ST	136 PL NE	P	\$20,000
74542	NE 20 ST	13424 (At Mr. Plywood)	L	\$500
74544	NE 20 ST	132 AV NE	L	\$500
80565	116 AV SE	SE 1 ST	P	\$2,000
80570	116 AV SE	SE 1 ST	S	\$40,000
80571	116 AV NE	NE 2 PL	P	\$20,000
80572	116 AV NE	NE 2 PL	P	\$20,000
81633	NORTHUP WY	130 AV NE	P	\$20,000
81635	NORTHUP WY	124 AV NE	L	\$500
81637	NORTHUP WY	NE 24 ST	L	\$500
84821	NE BEL-RED RD	152 AV NE	P	\$20,000
84822	NE BEL-RED RD	143 AV NE	L	\$500
84824	NE BEL-RED RD	140 AV NE	P	\$20,000
84825	NE BEL-RED RD	148 AV NE	L	\$500
84826	NE BEL-RED RD	132 AV NE	L	\$500
84828	NE 12 ST	124 AV NE	L	\$500
84829	NE BEL-RED RD	NE 20 ST	L	\$500
84832	NE 12 ST	120 AV NE	L	\$500
Total Cost:				\$545,500

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

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Table XIV-14
Bellevue Transit Center to Overlake Corridor
Transit Signal Priority Projects

Location	Cost
NE 24th & 140th	\$25,000
Bel-Red Rd & 124th	\$35,000
Bel Way & Northup	\$35,000
156 th & Bel Red	\$35,000
Northup & 130th	\$35,000
Northup & 148th	\$35,000
NE 8 th & Bel Red	\$25,000
Northup & 124th	\$50,000
Northup & 116th	\$25,000
Total Cost:	\$300,000

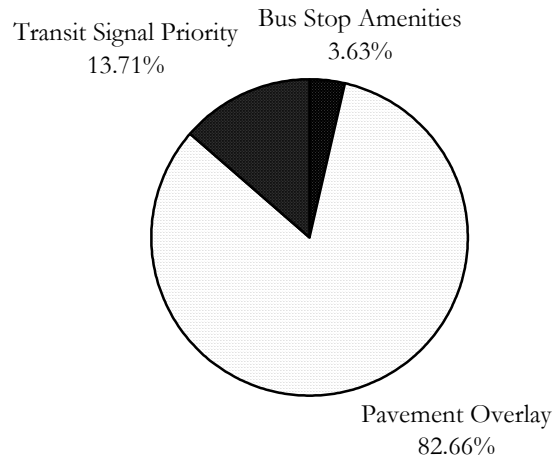
Table XIV-15
Bellevue Transit Center to Overlake Corridor
Park-and-Pool Projects

Location	Permit Cost
First Congregational Church - 15022 Bel Red Rd	\$1,000

Table XIV-16
Bellevue Transit Center to Bellevue Community College Corridor Project Summary
Lake Hills Connector/ 145th Place between Downtown Bellevue and Bellevue Community College

Routes:	271
Daily Corridor Passenger Boardings:	193 (excludes BTC and BCC)
Total Capital Projects Identified:	29
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	30 min peak, 30 min midday 15 min peak, 30 min midday
Total Cost of Capital Projects: Pedestrian (no projects) Bus Stop Amenities (17 projects) Arterial HOV (no projects) Pavement Overlay (2 projects) Transit Centers (no projects) Transit Signal Priority (9 projects) Park-and-Pool (1 project)	\$2,480,777 \$90,000 \$2,049,777 \$340,000 \$1,000

Figure XIV-4
Share of Cost for Proposed Projects
Bellevue Transit Center to Bellevue Community College Corridor



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Table XIV-17
Bellevue Transit Center to Bellevue Community College Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
67022	142 PL SE	SE 32 ST	S	\$40,000
68591	145 PL SE	SE 13 PL	L	\$500
68592	145 PL SE	SE 22 ST	L	\$500
68593	145 PL SE	SE 16 ST	L	\$500
68594	145 PL SE	SE 16 ST	L	\$500
68595	145 PL SE	SE 22 ST	L	\$500
68596	145 PL SE	LK HILLS BLVD	P	\$2,000
68597	140 AV SE	LK HILLS CONN.	P	\$20,000
68598	LK HILLS CONN.	140 AV SE	P	\$2,000
68599	145 PL SE	144 AV SE	L	\$500
68611	145 PL SE	LAKE HILLS BLVD	L	\$500
68614	145 PL SE	144 AV SE	L	\$500
70803	LK HILLS CONN.	134 AV SE	L	\$500
70805	LK HILLS CONN.	134 AV SE	L	\$500
70807	LK HILLS CONN.	SE 8 ST	L	\$500
70813	LK HILLS CONN.	SE 8 ST	L	\$500
79878	142 PL SE	SE 32 ST	P	\$20,000
Total Cost:				\$90,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-18
Bellevue Transit Center to Bellevue Community College Corridor
Pavement Overlay Projects

Roadway	From	To	Action	Cost
LAKE HILLS CONNECTOR	116 TH AVE SE	140 TH AVE SE	Recon	\$1,349,333
4 TH ST (NE)	104 TH AVE NE	116TH AVE NE	Recon	\$700,444
Total Cost:				\$2,049,777

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Table XIV-19
Bellevue Transit Center to Bellevue Community College Corridor
Transit Signal Priority Projects

Location	Cost
Richard Rd & Lk Hills Conn	\$35,000
NE 4th St & NB Ramp	\$25,000
NE 4th St & 110th	\$50,000
Main St. & 116th	\$35,000
Lk Hills Conn & 140th	\$35,000
Kamber Rd & 145th Pl	\$50,000
City Hall & SE 1st	\$35,000
BCC & 145th Pl	\$50,000
SE 41 st & Factoria	\$25,000
Total Cost:	\$340,000

Table XIV-20
Bellevue Transit Center to Bellevue Community College Corridor
Park-and-Pool Projects

Location	Permit Cost
First Baptist Church - 506 140th Ave SE	\$1,000

Table XIV-21
Bellevue Transit Center to Factoria Corridor Project Summary
112th Avenue SE, Bellevue Way, 108th Avenue SE, and Beaux Arts
between Downtown Bellevue and Factoria

Routes:	550, 560, 222, 240
Daily Corridor Passenger Boardings:	2,530 (excludes BTC)
Total Capital Projects Identified:	128
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	15 min peak, 20 min midday 10 min peak, 15 min midday
Total Cost of Capital Projects: Pedestrian (7 projects) Bus Stop Amenities (102 projects) Arterial HOV (2 projects) Pavement Overlay (4 projects) Transit Centers (2 projects) Transit Signal Priority (10 projects) Park-and-Pool (no projects)	\$10,055,660 \$2,347,300 \$1,050,000 \$1,065,000 \$2,128,360 \$3,120,000 \$345,000

Figure XIV-5
Share of Cost for Proposed Projects
Bellevue Transit Center to Factoria Corridor

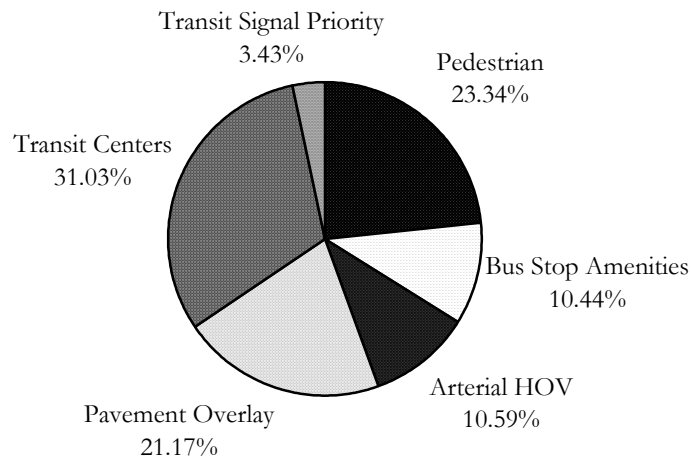


Table XIV-22
Bellevue Transit Center to Factoria Corridor Pedestrian Projects

Project No.	Street	Between	Description	Cost
S911	Lake Washington Blvd	NE 10th St to 100th Ave NE	Improve driveway aprons so that sidewalk is wheelchair safe (reconstruct driveways that cross sidewalk)	\$161,700
S917	Old Bellevue Sidewalks	100th Ave to Bellevue Way	Construct s/w on NE 1, 102 & 103 Ave where missing; Consider design of 1st/2nd connector; CIP Downtown s/w Program; Install ped Xings, esp. to park	\$43,700
S920	NE 2nd Pl	108th Ave NE to 111th Ave NE	Construct sidewalk on both sides; developers should build	\$463,300
S924	105th Ave NE	NE 2nd St to NE 4th St	Construct sidewalk along entire length of west side	\$359,100
S926	110th Ave NE	NE 12th St to Main St	Construct sidewalk on both sides where missing & new 110th section (NE 2nd-4th)	\$370,800
S928	111th Ave NE	NE 2nd St to NE 4th St	Construct sidewalk on both sides; developers should build	\$590,700
S973	NE 2nd	112th Ave NE to 114th Ave NE	Sidewalks on both sides	\$358,000
Total Cost:				\$2,347,300

CAPITAL ELEMENT

Table XIV-23
Bellevue Transit Center to Factoria Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
67620	BELLEVUE WY NE	NE 4 ST	S	\$58,000
67625	105 AV NE	NE 2 ST	P	\$20,000
67630	BELLEVUE WY NE	NE 1 ST	P	\$20,000
67640	BELLEVUE WY SE	MAIN ST	P	\$2,000
67650	BELLEVUE WY SE	SE 3 ST	P	\$2,000
67660	BELLEVUE WY SE	SE 6 ST	P	\$20,000
67670	BELLEVUE WY SE	SE 6 ST	P	\$2,000
67700	BELLEVUE WY SE	SE 11 ST	P	\$20,000
67720	BELLEVUE WY SE	SE 16 ST	P	\$2,000
67740	108 AV SE	SE 22 ST	L	\$500
67750	108 AV SE	SE 23 ST	L	\$500
67760	108 AV SE	SE 25 PL	L	\$500
67770	108 AV SE	SE 28 ST	L	\$500
67780	108 AV SE	SE 30 ST	L	\$500
67790	108 AV SE	SE 34 ST	L	\$500
67880	108 AV SE	SE 34 ST	L	\$500
67890	108 AV SE	SE 29 ST	L	\$500
67900	108 AV SE	SE 28 ST	L	\$500
67910	108 AV SE	SE 25 PL	L	\$500
67920	108 AV SE	SE 23 ST	L	\$500
67922	108 AV SE	BELLEVUE WY SE	L	\$500
67925	108 AV SE	BELLEVUE WY SE	L	\$500
67930	108 AV SE	SE 22 ST	L	\$500
67932	108 AV SE	SE 3 ST	L	\$500
67935	108 AV SE	SE 2 ST	L	\$500
67938	108 AV SE	SE 12 ST	L	\$500
67939	108 AV SE	SE 14 ST	L	\$500
67940	108 AV SE	SE 20 ST	L	\$500
67943	108 AV SE	SE 10 ST	P	\$20,000
67944	108 AV SE	SE 12 ST	L	\$500
67947	108 AV SE	SE 14 ST	L	\$500
67950	BELLEVUE WY SE	108 AV SE	L	\$500
67960	BELLEVUE WY SE	SE 16 ST	L	\$500
67990	BELLEVUE WY SE	SE 10 ST	P	\$20,000
68000	BELLEVUE WY SE	SE 6 ST	P	\$20,000
68010	BELLEVUE WY SE	SE 6 ST	P	\$20,000
68020	BELLEVUE WY SE	SE 3 ST	P	\$20,000
68035	BELLEVUE WY NE	MAIN ST	P	\$20,000
68042	NE 4 ST	105 AV NE	P	\$20,000
68804	ADDR 15727 DRWY	NE 4 ST	P	\$20,000
69030	104 AV SE	SE 8 ST	L	\$500
69040	104 AV SE	CEDAR CREST LN	L	\$500
69050	104 AV SE	SE 14 ST	L	\$500
69060	104 AV SE	SE 16 ST	L	\$500
69070	104 AV SE	1659 (ADDRESS)	L	\$500
69080	104 AV SE	SE 20 ST	L	\$500
69090	104 AV SE	SE 22 ST	L	\$500
69100	104 AV SE	104 PL SE	L	\$500
69110	104 AV SE	SE 25 ST	L	\$500

CAPITAL ELEMENT

Table XIV-23 (continued)
Bellevue Transit Center to Factoria Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
69120	104 AV SE	SE 27 ST	L	\$500
69128	104 AV SE	SE 28 ST	L	\$500
69140	105 AV SE	SE 29 ST	L	\$500
69150	106 AV SE	SE 32 ST	L	\$500
69160	106 AV SE	SE 34 ST	L	\$500
69170	106 AV SE	SE 34 ST	L	\$500
69180	106 AV SE	SE 32 ST	L	\$500
69200	105 AV SE	SE 28 ST	L	\$500
69210	104 AV SE	SE 27 ST	L	\$500
69220	104 AV SE	SE 25 ST	L	\$500
69230	104 AV SE	104 PL SE	L	\$500
69240	104 AV SE	SE 22 ST	L	\$500
69250	104 AV SE	SE 20 ST	L	\$500
69260	104 AV SE	1644 (ADDRESS)	L	\$500
69270	104 AV SE	SE 16 ST	L	\$500
69280	104 AV SE	SE 14 ST	L	\$500
69290	104 AV SE	CEDAR CREST LN	L	\$500
69300	104 AV SE	SE 10 ST	L	\$500
69402	BELLEVUE WY NE	103 AV NE	L	\$500
70600	BELLEVUE WY SE	108 AV SE	P	\$20,000
74158	112 AV NE	ADDR 2229 DRWY	P	\$20,000
74462	112 AV NE	BELLWD OFF PK Ent.	P	\$20,000
79868	FACTORIA BLVD SE	SE 38 ST (OPP 7-11)	S	\$58,000
79870	FACTORIA BLVD SE	SE 38 ST	P	\$2,000
79880	FACTORIA BLVD SE	SE 40 LN	P	\$20,000
79890	FACTORIA BLVD SE	SE 42 ST	P	\$20,000
80390	FACTORIA BLVD SE	SE 42 ST	P	\$20,000
80400	FACTORIA BLVD SE	SE 40 LN	P	\$20,000
80410	FACTORIA BLVD SE	SE 38 ST	P	\$20,000
80412	FACTORIA BLVD SE	SE 38 ST (OPP BANK)	S	\$40,000
82740	112 AV SE	MAIN ST	P	\$20,000
82741	112 AV SE	MAIN ST	P	\$20,000
82750	112 AV SE	SE 1 PL	P	\$20,000
82760	112 AV SE	SE 4 ST	P	\$20,000
82790	112 AV SE	SE 4 ST	P	\$20,000
82800	112 AV SE	SE 4 ST	P	\$20,000
84250	112 AV SE	SE 8 ST	P	\$20,000
84260	112 AV SE	SE 15 ST	P	\$20,000
84270	BELLEVUE WY SE	113 AV SE	L	\$500
84300	112 AV SE	SE 15 ST	P	\$20,000
84310	112 AV SE	SE 8 ST	P	\$20,000
85410	I-90 (WB ON RAMP)	RICHARDS ROAD	S	\$40,000
85487	108 AV NE	NE 2 PL	P	\$20,000
85489	108 AV NE	NE 2 ST	P	\$20,000
85640	NE 4 ST	108 AV NE	S	\$58,000
85650	NE 4 ST	BELLEVUE WY NE	P	\$20,000
85670	NE 4 ST	102 AV NE	P	\$20,000
85730	108 AV NE	NE 2 ST	P	\$20,000
85737	108 AV NE	MAIN ST	P	\$20,000

CAPITAL ELEMENT

Table XIV-23 (continued)
Bellevue Transit Center to Factoria Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
85750	BELLEVUE WY NE	NE 4 ST	P	\$20,000
86750	BELLEVUE WAY NE	NE 6 ST	P	\$20,000
Total Cost:				\$1,050,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-24
Bellevue Transit Center to Factoria Corridor Arterial HOV Projects

Project	Cost
Construct a southbound HOV Lane on Bellevue Way SE between South Bellevue Park-and-Ride and I-90	\$980,000
Signalize South Bellevue Park-and-Ride north access	\$85,000
Total Cost:	\$1,065,000

Table XIV-25
Bellevue Transit Center to Factoria Corridor Pavement Overlay Projects

Roadway	From	To	Action	Cost
110 TH AVE NE	MAIN ST	12 TH ST (NE)	Rehab	\$167,055
112 TH AVE SE	MAIN ST	BELLEVUE WAY SE	Recon	\$702,694
106 TH AVE NE	MAIN ST	12 TH ST (NE)	Recon	\$470,611
112 TH AVE NE	MAIN ST	12 TH ST (NE)	Recon	\$788,000
Total Cost:				\$2,128,360

Table XIV-26
Bellevue Transit Center to Factoria Corridor Transit Center Projects

Project	Cost
Construct a permanent dedicated layover area behind Factoria Mall	\$120,000
Construct a transit center in Factoria	\$3,000,000
Total Cost:	\$3,120,000

Table XIV-27
**Bellevue Transit Center to Factoria Corridor
 Transit Signal Priority Projects**

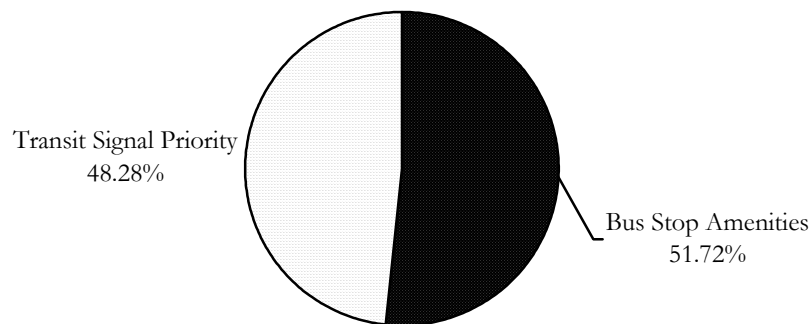
Location	Cost
SE 8th & 112th	\$25,000
SE 26 th & Richard Road	\$25,000
NE 4th St & Bel Way	\$25,000
NE 4th St & 108th	\$50,000
NE 4th St & 106th	\$50,000
Main St. & Bel Way	\$25,000
Bel Way & 112th	\$50,000
3600 Block & Factoria	\$35,000
112th & Bel Way	\$25,000
108th & Bel Way	\$35,000
Total Cost:	\$345,000

CAPITAL ELEMENT

Table XIV-28
Factoria to Renton Corridor Project Summary
*Factoria Boulevard, Coal Creek Parkway, and 119th Avenue SE
between Factoria and Renton*

Routes:	240
Daily Corridor Passenger Boardings:	165
Total Capital Projects Identified:	28
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	30 min peak, 60 min midday 30 min peak, 30 min midday
Total Cost of Capital Projects: Pedestrian (no projects) Bus Stop Amenities (27 projects) Arterial HOV (no projects) Pavement Overlay (no projects) Transit Centers (no projects) Transit Signal Priority (1 project) Park-and-Pool (no projects)	\$72,500 \$37,500 \$35,000

Figure XIV-6
Share of Cost for Proposed Projects
Factoria to Renton Corridor



CAPITAL ELEMENT

Table XIV-29
Factoria to Renton Corridor Project Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
64790	FACTORIA BLVD SE	COAL CREEK PKWY SE	P	\$2,000
64800	COAL CREEK PKWY SE	124 AV SE	L	\$500
64810	COAL CREEK PKWY SE	119 AV SE	L	\$500
64820	COAL CREEK PKWY SE	119 AV SE	L	\$500
64821	COAL CREEK PKWY SE	119 AV SE	L	\$500
64830	COAL CREEK PKWY SE	124 AV SE	L	\$500
64840	FACTORIA BLVD SE	COAL CREEK PKWY SE	L	\$500
65250	COAL CREEK PKWY SE	FACTORIA BLVD SE	L	\$500
65500	119 AV SE	SE 58 ST	P	\$2,000
65510	119 AV SE	SE 56 ST	L	\$500
65520	119 AV SE	SE 52 ST	P	\$20,000
65530	119 AV SE	SE 49 PL	L	\$500
65540	119 AV SE	SE 48 ST	L	\$500
65550	119 AV SE	LK HEIGHTS ST	L	\$500
65560	119 AV SE	COAL CREEK PKWY SE	L	\$500
65570	119 AV SE	COAL CREEK PKWY SE	L	\$500
65580	119 AV SE	LK HEIGHTS ST	L	\$500
65590	119 AV SE	SE 47 ST	L	\$500
65600	119 AV SE	SE 49 PL	L	\$500
65610	119 AV SE	SE 52 ST	L	\$500
65620	119 AV SE	SE 54 PL	L	\$500
65630	119 AV SE	SE 58 ST	P	\$2,000
68671	118 AV SE	2500 (ADDRESS) DRWY	L	\$500
68672	118 AV SE	2500 (ADDRESS) DRWY	L	\$500
68673	118 AV SE	3010 (ADDRESS) DRWY	L	\$500
68674	118 AV SE	3010 (ADDRESS) DRWY	L	\$500
99052	COAL CREEK PKWY SE	124 AV SE	L	\$500
Total Cost:				\$37,500

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-30
Factoria to Renton Corridor Project Transit Signal Priority Project

Location	Cost
Coal Creek & Factoria	\$35,000

CAPITAL ELEMENT

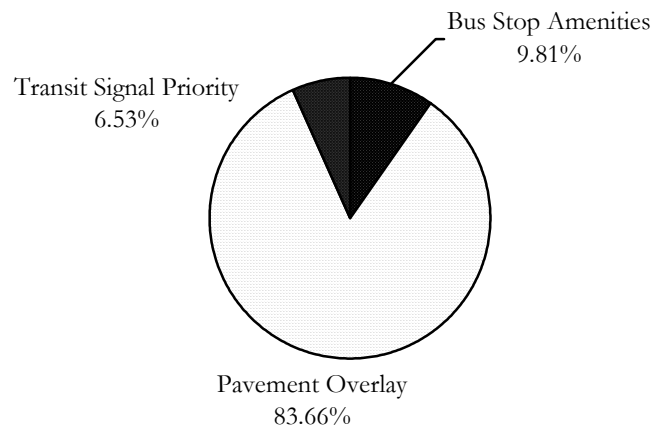
Table XIV-31

Factoria to Eastgate Corridor Project Summary

Factoria Boulevard, SE 36th Street, Eastgate Way, and Newport Way between Factoria and Eastgate

Routes:	245, 222, 926
Daily Corridor Passenger Boardings:	1,336 (includes Factoria & Eastgate)
Total Capital Projects Identified:	50
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	10 min peak, 15 min midday 7.5 min peak, 10 min midday
Total Cost of Capital Projects: Pedestrian (no projects) Bus Stop Amenities (40 projects) Arterial HOV (no projects) Pavement Overlay (4 projects) Transit Centers (no projects) Transit Signal Priority (5 projects) Park-and-Pool (1 project)	\$3,599,900 \$353,000 \$3,010,900 \$235,000 \$1,000

Figure XIV-7
Share of Cost for Proposed Projects
Factoria to Eastgate Corridor



CAPITAL ELEMENT

Table XIV-32
Factoria to Eastgate Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
64610	SE NEWPORT WY	17025 (MAILBOX)	L	\$500
64750	SE ALLEN RD	138 AV SE	P	\$20,000
64760	SE ALLEN RD	SE NEWPORT WY	P	\$2,000
64770	SE NEWPORT WY	133 AV SE	L	\$500
64780	SE NEWPORT WY	129 PL SE	P	\$20,000
64845	SE NEWPORT WY	FACTORIA BLVD SE	P	\$2,000
64860	SE NEWPORT WY	133 AV SE	L	\$500
64870	SE ALLEN RD	SE NEWPORT WY	L	\$500
64880	SE ALLEN RD	138 AV SE	L	\$500
64951	SE 36 ST	150 AV SE	L	\$500
64952	SE 36 ST	150 AV SE	L	\$500
64953	SE 36 ST	142 PL SE	L	\$500
64960	SE NEWPORT WY	151 AV SE	L	\$500
64980	SE NEWPORT WY	156 AV SE	L	\$500
65014	SE NEWPORT WY	SR-901 (W LK SAM PK)	L	\$500
65020	SE NEWPORT WY	SE 42 PL	L	\$500
65157	SE NEWPORT WY	SOMERSET BLVD SE	L	\$500
65159	SE NEWPORT WY	SOMERSET BLVD SE	L	\$500
65300	SE EASTGATE WY	RICHARDS RD	P	\$20,000
65335	SE EASTGATE WY	SE 35 PL	P	\$20,000
67012	SE 35 PL	SE EASTGATE WY	P	\$20,000
67018	SE 35 PL	EASTGATE WY	L	\$500
67024	SE 36 ST	142 PL SE	P	\$20,000

CAPITAL ELEMENT

Table XIV-33
Factoria to Eastgate Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
67025	SE 36 ST	142 PL SE	L	\$500
67026	SE 36 ST	136 PL SE	P	\$20,000
67028	SE 36 ST	13451 DRWY (GRP H)	P	\$20,000
67032	SE 36 ST	132 AV SE	P	\$20,000
67034	SE 36 ST	FACTORIA BLD SE	P	\$20,000
72889	SOMERSET BLVD SE	SOMERSET LN	L	\$500
74761	FACTORIA MALL	GOTTSCHALKS W ENTR	L	\$500
79862	SE 36 ST	FACTORIA BLVD SE	P	\$20,000
79864	SE 36 ST	132 AV SE	P	\$20,000
79872	SE 36 ST	13451 (GRP HEA) DRWY	P	\$20,000
79874	SE 36 ST	136 PL SE	P	\$20,000
79876	SE 36 ST	142 PL SE	P	\$20,000
79900	FACTORIA BLVD SE	SE NEWPORT WY	P	\$20,000
80380	FACTORIA BLVD SE	SE NEWPORT WY	P	\$20,000
Total Cost:				\$353,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-34
Factoria to Eastgate Corridor Pavement Overlay Projects

Roadway	From	To	Action	Cost
36 TH ST (SE)	128 TH AVE SE	150 TH AVE SE	Recon	\$578,667
128TH AVE SE	EASTGATE WAY	NEWPORT WAY SE	Recon	\$808,333
NEWPORT WAY (SE)	128TH AVE SE	150 TH AVE SE	Recon	\$537,733
EASTGATE WAY (SE)	RICHARDS RD	35 TH PL (SE)	Recon	\$1,086,167
Total Cost:				\$3,010,900

Table XIV-35
Factoria to Eastgate Corridor Transit Signal Priority Projects

Location	Cost
Newport Way & Factoria	\$50,000
Newport Way & 148th	\$50,000
I-90 WB On & Richard Rd	\$35,000
I-90 Off & Richard Rd	\$25,000
Eastgate Way & 139th Ave SE	\$50,000
Eastgate Way & 156th	\$25,000
Total Cost:	\$235,000

Table XIV-36
Factoria to Eastgate Corridor Park-and-Pool Project

Location	Permit Cost
Aldersgate Methodist Church- 14230 SE Newport Wy	\$1,000

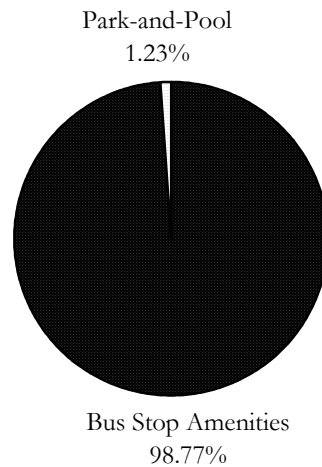
CAPITAL ELEMENT

Table XIV-37

Eastgate/Bellevue Community College to Issaquah Corridor Project Summary
Eastgate Way and West Lake Sammamish between Eastgate/Bellevue Community College and Issaquah

Routes:	554, 271
Daily Corridor Passenger Boardings:	23 (excludes Eastgate/BCC)
Total Capital Projects Identified:	6
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	30 min peak, 30 min midday 15 min peak, 30 min midday
Total Cost of Capital Projects: Pedestrian (no projects) Bus Stop Amenities (5 projects) Arterial HOV (no projects) Pavement Overlay (no projects) Transit Centers (no projects) Transit Signal Priority (no projects) Park-and-Pool (1 project)	\$81,500 \$80,500 \$1,000

Figure XIV-8
Share of Cost for Proposed Projects
Eastgate/Bellevue Community College to Issaquah Corridor



CAPITAL ELEMENT

Table XIV-38
Eastgate/Bellevue Community College to Issaquah Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
65015	W LAKE SAMM.PKWAY SE	SE NEWPORT WY	L	\$500
65320	SE EASTGATE WY	150 AV SE	P	\$20,000
65323	SE EASTGATE WY	160 AV SE	P	\$20,000
65328	SE EASTGATE WY	158 AV SE	P	\$20,000
65329	SE EASTGATE WY	158 AV SE	P	\$20,000
Total Cost:				\$80,500

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-39
Eastgate/Bellevue Community College to Issaquah Corridor
Park-and-Pool Project

Location	Permit Cost
First Baptist Church - 15005 SE 38th St	\$1,000

Table XIV-40
Eastgate to Bellevue Community College Corridor Project Summary
148th Avenue SE, Landerholm Circle, and Perimeter Road
Between Eastgate and Bellevue Community College

Routes:	245, 222, 271, 926
Daily Corridor Passenger Boardings:	471 (excludes Eastgate)
Total Capital Projects Identified:	19
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	10 min peak, 15 min midday 6 min peak, 15 min midday
Total Cost of Capital Projects: Pedestrian (no projects) Bus Stop Amenities (10 projects) Arterial HOV (4 projects) Pavement Overlay (no projects) Transit Centers (1 project) Transit Signal Priority (4 projects) Park-and-Pool (no projects)	\$1,646,700 \$182,500 \$1,290,000 \$4,200 \$170,000

Figure XIV-9
Share of Cost for Proposed Projects
Eastgate to Bellevue Community College Corridor

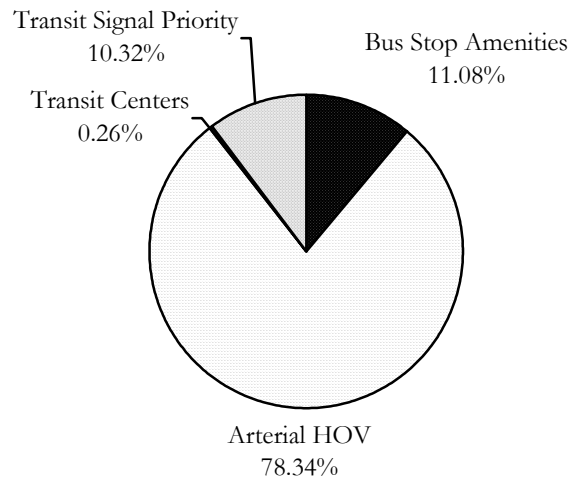


Table XIV-41
Eastgate to Bellevue Community College Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
65305	SE EASTGATE WY	146 PL SE	P	\$20,000
65310	SE EASTGATE WY	148 AV SE	P	\$20,000
65325	SE EASTGATE WY	146 PL SE	P	\$20,000
65327	SE EASTGATE WY	14360 (ADD.) DRWY	S	\$58,000
67019	139 AV SE	SE EASTGATE WY	P	\$20,000
68582	LANDERHOLM CIR	148 AV SE	P	\$20,000
68583	LANDERHOLM CIR	148 AV SE	L	\$500
72983	KELSEY CK RD	TYE RIVER RD	P	\$2,000
72985	KELSEY CK RD	TYE RIVER RD	P	\$2,000
79879	139 AV SE	SE EASTGATE WY	P	\$20,000
Total Cost:				\$182,500

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

CAPITAL ELEMENT

Table XIV-42
Eastgate to Bellevue Community College Corridor Arterial HOV Projects

Project	Cost
Improve turn radii for eastbound right-turn 148th Avenue at Landerholm Circle	\$230,000
Improve turn radii for westbound right-turn 139th Ave SE at SE 32nd Street	\$100,000
Upgrade SE Perimeter Road between Landerholm Circle and 142nd Place to accommodate full-sized buses.	\$960,000
Upgrade SE 32nd Street between 139th Avenue and 140th Place to accommodate full-sized buses.	Inc. in Eastgate PR Project
Total Cost:	\$1,290,000

Table XIV-43
Eastgate to Bellevue Community College Corridor Transit Center Project

Project	Cost
Improve amenities at the existing BCC stops	\$4,200

Table XIV-44
**Eastgate to Bellevue Community College Corridor
Transit Signal Priority Projects**

Location	Cost
SE 38th & 148th	\$35,000
SE 36th & 132nd	\$35,000
SE 36th & 142nd Place SE	\$50,000
Eastgate Way & 148th	\$50,000
Total Cost:	\$170,000

Figure XIV-10
Share of Cost for Proposed Projects
Bellevue Community College to Crossroads Corridor

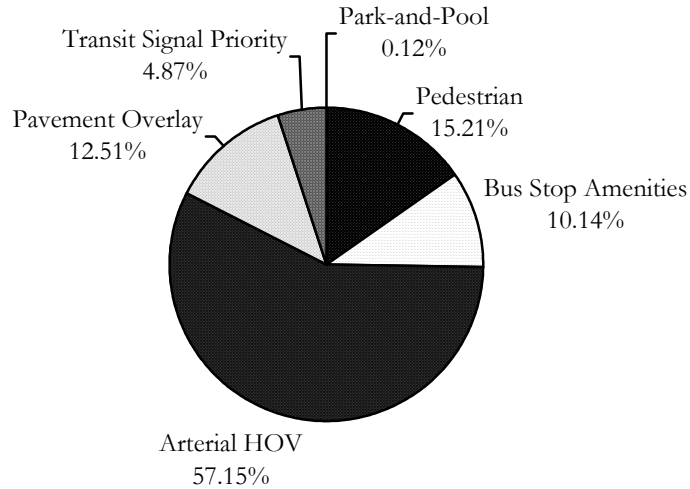


Table XIV-45
Bellevue Community College to Crossroads Corridor Project Summary
148th Avenue, 156th Avenue, and 164th Avenue between BCC and Crossroads Shopping Center

Routes:	222, 245, 926, 272
Daily Corridor Passenger Boardings:	816 (excludes BCC)
Total Capital Projects Identified:	120
Service Frequency Recommendations	
Short-Term (Fall '01)	10 min peak, 30 min midday
Long-Term (Fall '07)	10 min peak, 15 min midday
Total Cost of Capital Projects:	\$6,673,380
Pedestrian (2 projects)	\$1,014,700
Bus Stop Amenities (99 projects)	\$677,000
Arterial HOV (1 projects)	\$3,814,000
Pavement Overlay (1 projects)	\$834,680
Transit Centers (no projects)	
Transit Signal Priority (9 projects)	\$325,000
Park-and-Pool (8 projects)	\$8,000

CAPITAL ELEMENT

Table XIV-46
Bellevue Community College to Crossroads Corridor
Pedestrian Projects

Project No.	Street	Between	Description	Cost
P718	Hillaire to Crossroads	NE 6th St to NE 8th St	Acquire easement and construct paved connection; Location of easement yet to be determined	\$62,900
S886	160th/158th /159th Pl SE /NE	NE 4th St to SE 16th St	Construct sidewalk on one side	\$951,800
Total Cost:				\$1,014,700

Table XIV-47
Bellevue Community College to Crossroads Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type¹	Cost
66710	164 AV NE	NE 24 ST	P	\$2,000
66720	164 AV NE	NE 24 ST	P	\$20,000
66730	164 AV NE	NE 20 ST	L	\$500
66740	164 AV NE	NE 18 ST	L	\$500
66750	164 AV NE	NE NORTHUP WY	L	\$500
66760	164 AV NE	NE 12 ST	L	\$500
66770	164 AV NE	NE 11 ST	L	\$500
66780	164 AV NE	NE 8 ST	P	\$2,000
66790	164 AV NE	NE 6 ST	P	\$20,000
66800	164 AV NE	NE 4 ST	L	\$500
66810	164 AV NE	NE 2 ST	L	\$500
66820	164 AV SE	MAIN ST	L	\$500
66830	164 AV SE	SE 2 ST	L	\$500
66840	164 AV SE	LK HILLS BLVD	L	\$500
66850	164 AV SE	SE 7 ST	L	\$500
66860	164 AV SE	SE 9 ST	L	\$500

CAPITAL ELEMENT

Table XIV-47 (continued)
Bellevue Community College to Crossroads Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
66870	164 AV SE	SE 12 ST	L	\$500
67160	164 AV SE	SE 12 ST	L	\$500
67170	164 AV SE	SE 9 ST	L	\$500
67180	164 AV SE	SE 7 ST	L	\$500
67190	164 AV SE	LK HILLS BLVD	L	\$500
67200	164 AV SE	SE 2 ST	L	\$500
67210	164 AV NE	MAIN ST	L	\$500
67220	164 AV NE	NE 2 ST	L	\$500
67230	164 AV NE	NE 4 ST	P	\$20,000
67240	164 AV NE	NE 6 ST	P	\$20,000
67250	164 AV NE	NE 8 ST	L	\$500
67260	164 AV NE	NE 11 ST	L	\$500
67270	164 AV NE	NE 13 PL	L	\$500
67280	164 AV NE	NE 16 PL	P	\$20,000
67290	164 AV NE	NE 18 ST	L	\$500
67300	164 AV NE	NE 20 ST	L	\$500
67310	164 AV NE	NE 24 ST	L	\$500
67320	164 AV NE	NE 24 ST	L	\$500
68438	156 AV NE	NE 10 ST	S	\$40,000
68440	156 AV NE	NE 8 ST	S	\$40,000
68460	156 AV NE	NE 4 ST	P	\$2,000
68470	156 AV NE	NE 1 ST	P	\$20,000
68480	156 AV SE	MAIN ST	L	\$500
68490	156 AV SE	SE 4 ST	P	\$20,000
68500	LK HILLS BLVD	156 AV SE	P	\$20,000
68510	LK HILLS BLVD	154 AV SE	P	\$2,000
68520	LK HILLS BLVD	150 PL SE	P	\$20,000
68530	LK HILLS BLVD	SE 12 PL	P	\$20,000
68540	148 AV SE	LK HILLS BLVD	P	\$2,000
68550	148 AV SE	SE 16 ST	L	\$500
68560	148 AV SE	SE 22 ST	P	\$2,000
68570	148 AV SE	SE 24 ST	P	\$2,000
68584	148 AV SE	SE 28 ST	P	\$20,000
68590	148 AV SE	SE 28 ST	P	\$20,000
68610	148 AV SE	SE 24 ST	P	\$2,000
68620	148 AV SE	SE 22 ST	P	\$2,000
68630	148 AV SE	SE 16 ST	P	\$2,000
68640	LK HILLS BLVD	148 AV SE	P	\$2,000
68650	LK HILLS BLVD	SE 12 PL	P	\$20,000
68660	LK HILLS BLVD	150 PL SE	P	\$20,000
68670	LK HILLS BLVD	154 AV SE	P	\$2,000
68680	156 AV SE	SE LK HILLS BLVD	P	\$20,000
68700	156 AV NE	MAIN ST	P	\$20,000
68710	156 AV NE	NE 1 ST	P	\$20,000
68720	156 AV NE	NE 4 ST	P	\$20,000
68740	156 AV NE	NE 8 ST	P	\$20,000
68750	156 AV NE	NE 10 ST	S	\$40,000
68780	156 AV NE	1616 (ADDRESS)	S	\$58,000
71650	156 AV SE	SE 8 ST	L	\$500

CAPITAL ELEMENT

Table XIV-47 (continued)
Bellevue Community College to Crossroads Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
71652	156 AV SE	SE 10 ST	L	\$500
71654	156 AV SE	SE 16 ST	L	\$500
71656	156 AV SE	SE 20 PL	L	\$500
71662	161 AV SE	SE 24 ST	L	\$500
71664	161 AV SE	SE 28 PL	L	\$500
71666	161 AV SE	SE 31 ST	L	\$500
71668	161 AV SE	SE 33 PL	L	\$500
71670	161 AV SE	SE 33 PL	L	\$500
71672	161 AV SE	SE 31 ST	L	\$500
71674	161 AV SE	SE 28 PL	L	\$500
71676	161 AV SE	SE 24 ST	L	\$500
71682	156 AV SE	SE 20 PL	L	\$500
71684	156 AV SE	SE 16 ST	L	\$500
71686	156 AV SE	SE 10 ST	P	\$20,000
72874	148 AV SE	SE 45 PL	L	\$500
72875	148 AV SE	SE 46 ST	L	\$500
72900	LK HILLS BLVD	156 AV SE	L	\$500
72910	LK HILLS BLVD	159 PL SE	L	\$500
72920	LK HILLS BLVD	160 AV SE	L	\$500
72930	LK HILLS BLVD	163 AV SE	L	\$500
73050	LK HILLS BLVD	163 AV SE	L	\$500
73060	LK HILLS BLVD	160 AV SE	L	\$500
73070	LK HILLS BLVD	159 PL SE	L	\$500
73085	158 AV SE	SE 47 PL	L	\$500
73244	148 AV NE	4685 (ADD.) DRWY	P	\$20,000
73246	148 AV NE	4207 PP #4309	P	\$2,000
84850	148 AV NE	NE 10 ST	L	\$500
84880	148 AV NE	NE 3 ST	L	\$500
84890	148 AV SE	MAIN ST	P	\$20,000
84900	148 AV SE	SE 8 ST	P	\$2,000
84910	148 AV SE	SE 8 ST	L	\$500
84920	148 AV NE	MAIN ST	P	\$2,000
84930	148 AV NE	NE 3 ST	L	\$500
84950	148 AV NE	NE 10 ST	L	\$500
Total Cost:				\$677,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-48
Bellevue Community College to Crossroads Corridor
Arterial HOV Project

Project	Cost
Implement HOV Lane and Transit Queue Jump Lanes and Transit Signal Priority on 148th Avenue between Lake Hills and SE 24th Street	\$3,814,000

CAPITAL ELEMENT

Table XIV-49**Bellevue Community College to Crossroads Corridor Pavement Overlay Project**

Roadway	From	To	Action	Cost
148 TH AVE NE (NB)	EASTGATE WAY	BELL. RED. ROAD	Rehab	\$834,680

Table XIV-50**Bellevue Community College to Crossroads Corridor
Transit Signal Priority Projects**

Location	Cost
SE 8th & 148th	\$35,000
SE 28th & 148th	\$35,000
SE 24th St & 148th	\$50,000
SE 16th & 148th	\$25,000
Main St & 156th	\$35,000
Main St & 148th	\$35,000
Lk Hill Blvd & 148th	\$50,000
SE 22 nd & 148 th	\$35,000
Northup & 164th	\$25,000
Total Cost:	\$325,000

Table XIV-51**Bellevue Community College to Crossroads Corridor
Park-and-Pool Projects**

Location	Permit Cost
14536 Main St	\$1,000
15220 Main St	\$1,000
14615 SE 22nd St	\$1,000
411 156th Ave NE	\$1,000
14700 Main St	\$1,000
15760 NE 4th St	\$1,000
141 156th Ave SE	\$1,000
15727 NE 4th St	\$1,000
Total Cost:	\$8,000

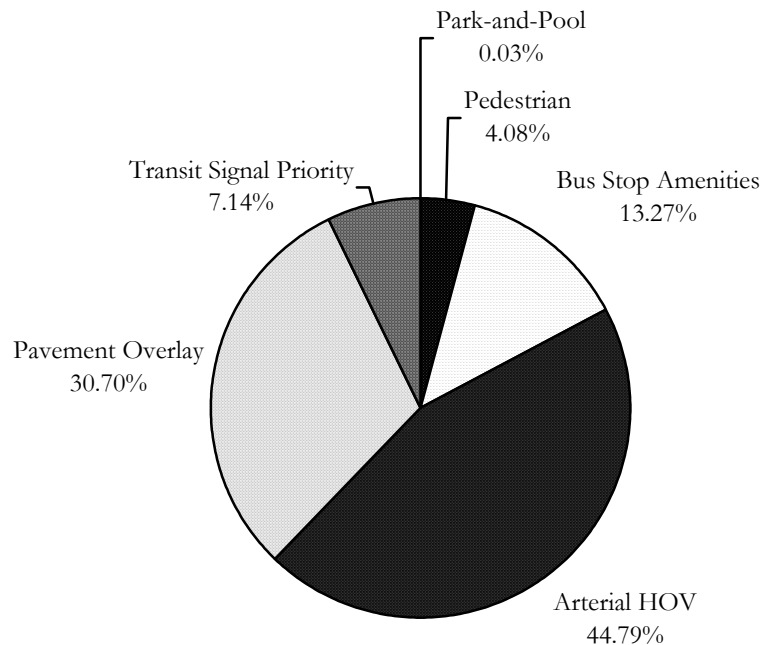
CAPITAL ELEMENT

Table XIV-52
Crossroads to Overlake Corridor Project Summary

156th Avenue NE and 148th Avenue between Crossroads Shopping Center and Overlake

Routes:	222, 253, 230, 245, 229, 225
Daily Corridor Passenger Boardings:	973
Total Capital Projects Identified:	39
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	7.5 min peak, 12 min midday 5 min peak, 12 min midday
Total Cost of Capital Projects:	\$3,293,411
Pedestrian (2 projects)	\$134,300
Bus Stop Amenities (29 projects)	\$437,000
Arterial HOV (4 projects)	\$1,475,000
Pavement Overlay (1 projects)	\$1,011,111
Transit Centers (no projects)	
Transit Signal Priority (5 projects)	\$235,000
Park-and-Pool (1 project)	\$1,000

Figure XIV-11
Share of Cost for Proposed Projects
Crossroads to Overlake Corridor



CAPITAL ELEMENT

Table XIV-53
Crossroads to Overlake Corridor Pedestrian Projects

Project No.	Street	Between	Description	Cost
M626	Highland Middle School	148th Ave NE to 156th Ave NE @ NE 16th	Acquire easements; Construct path/sidewalk; SSS	\$94,200
P736	Crossroads Park East Access	Crossroads Park to 164th Ave NE	Paved path; Sign; Acquire easement	\$40,100
Total Cost:				\$134,300

Table XIV-54
Crossroads to Overlake Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
68360	156 AV NE	NE NORTHUP WY	S	\$40,000
68390	156 AV NE	NE 24 ST	P	\$2,000
68400	156 AV NE	NE NORTHUP WY	P	\$2,000
68410	156 AV NE	NE 16 PL	S	\$40,000
68420	156 AV NE	NE 15 PL	S	\$58,000
68435	156 AV NE	NE 13 ST	S	\$58,000
68770	156 AV NE	NE 15 ST	S	\$58,000
68782	156 AV NE	NE NORTHUP WY	P	\$20,000
68784	156 AV NE	NE 28 ST	P	\$2,000
71331	152 AV NE	NE 24 ST	P	\$20,000
73240	148 AV NE	NE 51 ST	P	\$2,000
73242	148 AV NE	VFW POST (2995)	P	\$20,000
73248	148 AV NE	NE 40 ST	P	\$20,000
73250	148 AV NE	NE 37 PL	P	\$2,000
73260	148 AV NE	NE 36 ST	P	\$2,000
73270	148 AV NE	NE 34 ST	P	\$20,000
73282	148 AV NE	NE 32 ST	P	\$2,000
73290	148 AV NE	NE 29 PL	P	\$20,000
73351	148 AV NE	NE 55 ST	P	\$2,000
84810	148 AV NE	NE 24 ST	P	\$20,000
84820	148 AV NE	NE 20 ST	P	\$2,000
84830	148 AV NE	NE 15 ST	P	\$20,000
84840	148 AV NE	NE 13 PL	L	\$500
84860	148 AV NE	NE 8 ST	P	\$2,000
84870	148 AV NE	NE 6 ST	L	\$500
84940	148 AV NE	NE 8 ST	L	\$500
84960	148 AV NE	NE 12 ST	L	\$500
84970	148 AV NE	NE 15 ST	L	\$500
99049	152 AV NE	2956 (ADDRESS)	L	\$500
Total Cost:				\$437,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-55
Crossroads to Overlake Corridor Arterial HOV Projects

Project	Cost
Improve turn radii for southbound right-turn 156th Avenue at Northup Way	\$390,000

CAPITAL ELEMENT

Improve turn radii for eastbound right-turn 156th Avenue at NE 24th Street	\$320,000
Improve turn radii for southbound right-turn 164th Avenue at Northup Way	\$325,000
Improve turn radii for northbound right-turn 164th Avenue at Northup Way	\$440,000
Total Cost:	\$1,475,000

Table XIV-56
Crossroads to Overlake Corridor Pavement Overlay Project

Roadway	From	To	Action	Cost
156 TH AVE NE	8 TH ST (NE)	26 TH ST (NE)	Recon	\$1,011,111

Table XIV-57
Crossroads to Overlake Corridor
Transit Signal Priority Projects

Location	Cost
NE 24th & Bel_red	\$50,000
NE 24th & 164th	\$50,000
NE 24th & 156th	\$50,000
NE 13th & 156th	\$35,000
124th &	\$50,000
Total Cost:	\$235,000

Table XIV-58
Crossroads to Overlake Corridor
Park-and-Pool Project

Location	Permit Cost
Bellewood Presbyterian Church - 10936 NE 24th St	\$1,000

CAPITAL ELEMENT

Table XIV-59

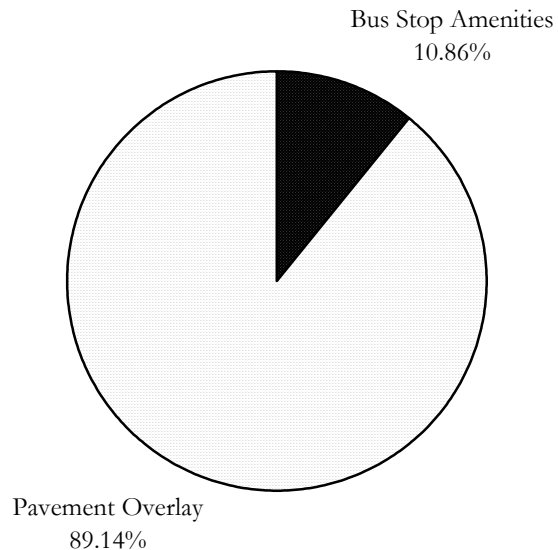
Crossroads/Overlake to Redmond Corridor Project Summary

West Lake Sammamish and NE 24th Street between Crossroads/Overlake and Redmond

Routes:	249
Daily Corridor Passenger Boardings:	55 (in Bellevue only)
Total Capital Projects Identified:	17
Service Frequency Recommendations	
Short-Term (Fall '01)	15 min peak, 20 min midday
Long-Term (Fall '07)	15 min peak, 15 min midday
Total Cost of Capital Projects:	\$626,389
Pedestrian (no projects)	
Bus Stop Amenities (16 projects)	\$68,000
Arterial HOV (no projects)	
Pavement Overlay (1 projects)	\$558,389
Transit Centers (no projects)	
Transit Signal Priority (no projects)	
Park-and-Pool (no projects)	

Figure XIV-12

**Share of Cost for Proposed Projects
Crossroads/Overlake to Redmond Corridor**



CAPITAL ELEMENT

Table XIV-60
Crossroads/Overlake to Redmond Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
66700	NE 24 ST	162 AV NE	L	\$500
68372	NE 24 ST	160 AV NE	P	\$20,000
71270	NE 24 ST	169 AV NE	L	\$500
71280	NE 24 ST	167 AV NE	P	\$2,000
71290	NE 24 ST	164 AV NE	P	\$20,000
71300	NE 24 ST	162 AV NE	L	\$500
71310	NE 24 ST	160 AV NE	P	\$20,000
71380	NE 24 ST	164 AV NE	L	\$500
71390	NE 24 ST	167 AV NE	L	\$500
71400	NE 24 ST	171 AV NE	L	\$500
71151	W LK SAMM PKWY NE	NE 2 PL	L	\$500
71152	W LK SAMM PKWY NE	NE 2 PL	L	\$500
71153	W LK SAMM PKWY NE	177 LN NE	L	\$500
71154	W LK SAMM PKWY NE	177 LN NE	L	\$500
71155	W LK SAMM PKWY NE	NE 15 PL	L	\$500
71156	W LK SAMM PKWY NE	NE 15 PL	L	\$500
Total Cost:				\$68,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-61
Crossroads/Overlake to Redmond Corridor
Pavement Overlay Project

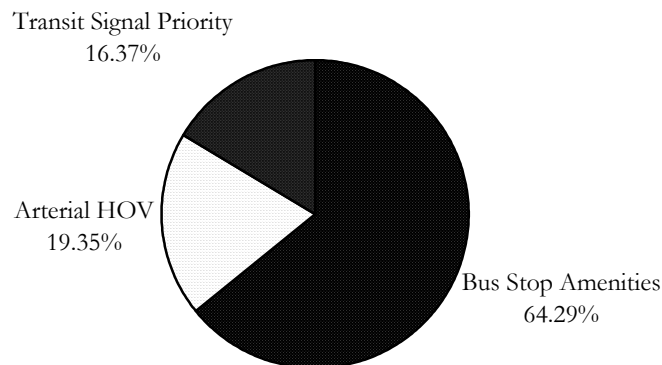
Roadway	From	To	Action	Cost
24 TH ST (NE)	BELL. RED. ROAD	172 ND AVE NE	Recon	\$558,389

CAPITAL ELEMENT

Table XIV-62
Bellevue Transit Center to Kirkland Corridor Project Summary
Bellevue Way and 112th Avenue NE between Downtown Bellevue and Kirkland

Routes:	230, 234
Daily Corridor Passenger Boardings:	1,173 (excludes BTC)
Total Capital Projects Identified:	45
Service Frequency Recommendations Short-Term (Fall '01) Long-Term (Fall '07)	15 min peak, 15 min midday 10 min peak, 10 min midday
Total Cost of Capital Projects: Pedestrian (no projects) Bus Stop Amenities (41 projects) Arterial HOV (1 project) Pavement Overlay (no projects) Transit Centers (no projects) Transit Signal Priority (3 projects) Park-and-Pool (no projects)	\$672,000 \$432,000 \$130,000 \$110,000

Figure XIV-13
Share of Cost for Proposed Projects
Bellevue Transit Center to Kirkland Corridor



CAPITAL ELEMENT

Table XIV-63
Bellevue Transit Center to Kirkland Corridor Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
67636	110 AV NE	NE 12 ST	S	\$58,000
67637	110 AV NE	NE 10 ST	P	\$20,000
68930	BELLEVUE WY NE	NE 30 PL	P	\$2,000
68940	BELLEVUE WY NE	NE 28 PL	L	\$500
68950	BELLEVUE WY NE	NE 26 ST	L	\$500
68960	BELLEVUE WY NE	NE 24 ST	L	\$500
68970	BELLEVUE WY NE	NE 22 PL	L	\$500
68980	BELLEVUE WY NE	NE 20 ST	L	\$500
68990	BELLEVUE WY NE	NE 17 ST	L	\$500
69000	BELLEVUE WY NE	NE 15 ST	L	\$500
69010	BELLEVUE WY NE	NE 12 ST	P	\$2,000
69320	BELLEVUE WY NE	NE 12 ST	L	\$500
69330	BELLEVUE WY NE	NE 15 ST	L	\$500
69340	BELLEVUE WY NE	NE 17 ST	L	\$500
69350	BELLEVUE WY NE	NE 20 PL	L	\$500
69360	BELLEVUE WY NE	NE 22 PL	L	\$500
69370	BELLEVUE WY NE	NE 24 ST	L	\$500
69380	BELLEVUE WY NE	NE 26 ST	L	\$500
69390	BELLEVUE WY NE	NE 28 PL	L	\$500
69400	BELLEVUE WY NE	NE 30 PL	L	\$500
74441	108 AV NE	NE 39 ST	L	\$500
74442	108 AV NE	NE 38 PL	P	\$20,000
74450	S KIRKLAND P & R	SHELTER LOAD ZN	P	\$2,000
74460	108 AV NE	NE NORTHUP WY	S	\$58,000
74461	112 AV NE	NE 24 ST	P	\$20,000
74463	112 AV NE	HIDDEN VALLEY PK	L	\$500
74464	112 AV NE	NE 15 ST	L	\$500
74465	112 AV NE	NE 14 ST	L	\$500
74466	112 AV NE	NE 26 PL	L	\$500
74512	112 AV NE	NE 12 ST	P	\$20,000
74514	112 AV NE	NE 14 ST	L	\$500
74516	112 AV NE	NE 15 ST (BLDGS BC)	L	\$500
74517	112 AV NE	UNISYS (DRWY)	P	\$20,000
74518	112 AV NE	EVERWOOD PARK	P	\$20,000
74519	112 AV NE	NE 24 ST	P	\$20,000
74520	108 AV NE	NE NORTHUP WY	P	\$20,000
74533	108 AV NE	NE 39 ST	L	\$500
80489	112 AV NE	NE 4 ST	P	\$20,000
80492	112 AV NE	NE 4 ST	S	\$58,000

CAPITAL ELEMENT

Table XIV-63 (continued)
Bellevue Transit Center to Kirkland Corridor
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
85040	108 AV NE	NE 38 PL	P	\$20,000
85770	BELLEVUE WY NE	NE 10 ST	S	\$40,000
			Total Cost:	\$432,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-64
Bellevue Transit Center to Kirkland Corridor Arterial HOV Project

Project	Cost
Signalize South Kirkland Park-and-Ride entrance	\$130,000

Table XIV-65
Bellevue Transit Center to Kirkland Corridor
Transit Signal Priority Projects

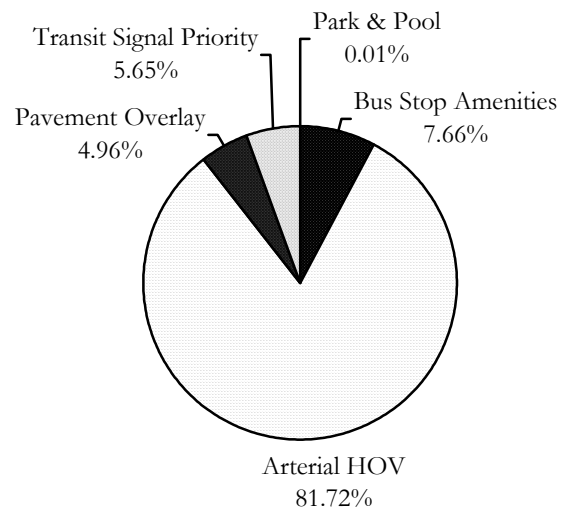
Location	Cost
SR 520 WB On & 108th	\$25,000
Northup & 108th Ave NE	\$50,000
NE 24 th & Bel Way	\$35,000
Total Cost:	\$110,000

CAPITAL ELEMENT

Table XIV-66
Downtown Bellevue Improvements Summary
Projects Located in Downtown Bellevue

Routes:	167, 230, 232, 233, 234, 240, 249, 253, 261, 271, 280, 342, 885, 530, 532, 535, 550, 555, 560, 565
Daily Corridor Passenger Boardings:	3,800
Total Capital Projects Identified:	57
Total Cost of Capital Projects:	\$6,907,545
Pedestrian (no projects)	
Bus Stop Amenities (37 projects)	\$529,000
Arterial HOV (3 projects)	\$5,645,000
Pavement Overlay (4 projects)	\$342,545
Transit Centers (no projects)	
Transit Signal Priority (12 projects)	\$390,000
Park-and-Pool (1 project)	\$1,000

Figure XIV-14
Share of Cost for Proposed Projects
Downtown Bellevue Improvements



CAPITAL ELEMENT

**Table XIV-67
Downtown Bellevue Improvements
Bus Stop Amenities Projects**

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
67612	NE 8 ST	106 AV NE	P	\$2,000
68023	106 AVE NE	NE 10 ST	P	\$20,000
68026	106 AVE NE	NE 10 ST	P	\$20,000
69022	NE 10 ST	102 AV NE	S	\$58,000
69024	NE 10 ST	BELLEVUE WY NE	S	\$58,000
69025	NE 10 ST	108 AVE NE	S	\$58,000
69027	NE 10 ST	108 AV NE	P	\$20,000
69029	NE 10 ST	BELLEVUE WY NE	P	\$20,000
70596	NE 8 ST	100 AV NE	P	\$20,000
70607	NE 8 ST	BELLEVUE WY NE	P	\$20,000
70608	NE 8 ST	102 AV NE	S	\$40,000
70610	100 AV NE	NE 10 ST	P	\$20,000
70619	NE 8 ST	100 AV NE	P	\$2,000
72932	NE 8 ST	98 AV NE	P	\$2,000
73048	NE 8 ST	98 AV NE	L	\$500
73049	NE 8 ST	106 AV NE	P	\$2,000
80491	I-405 (NB ON RAMP)	NE 4 ST	P	\$2,000
80493	I-405 (SB ON RAMP)	NE 4 ST	P	\$20,000
80495	NE 4 ST	I-405 (ES)	P	\$20,000
80497	NE 4 ST	I-405 (WS)	P	\$20,000
82810	MAIN ST	112 AV NE	P	\$20,000
82821	MAIN ST	108 AV NE	L	\$500
82832	MAIN ST	103 AV NE	L	\$500
82834	MAIN ST	100 AV NE	P	\$20,000
82836	100 AV NE	NE 4 ST	P	\$20,000
85646	NE 4 ST	I-405 (NB ON RAMP)	P	\$20,000
85669	NE 8 ST	102 AV NE	P	\$2,000
85683	100 AV NE	NE 4 ST	L	\$500
85685	MAIN ST	100 AV NE	P	\$20,000
85720	MAIN ST	BELLEVUE WY SE	L	\$500
85728	MAIN ST	112 AV NE	L	\$500
			Total Cost:	\$529,000

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

CAPITAL ELEMENT

Table XIV-68
Downtown Bellevue Improvements
Arterial HOV Projects

Project	Cost
Construct a Contraflow Lane on Southbound 108th Avenue NE	\$5,630,000
Construct a Northbound Right-Side Bus Only-Lane on Northbound 108th Avenue NE	Included in above project budget
Widen westbound left turn lane from NE 8th Street to 108th Avenue NE	\$15,000
Total Cost:	\$5,645,000

Table XIV-69
Downtown Bellevue Improvements
Pavement Overlay Projects

Roadway	From	To	Action	Cost
6 TH ST (NE)	110 TH AVE NE	112 TH AVE NE	Rehab	\$49,490
1 ST ST (NE)	LAKE WA. BLVD.	8 TH ST (NE)	Recon	\$46,111
10 TH ST (NE)	100 TH AVE NE	102 ND AVE NE	Recon	\$79,444
108 TH AVE NE	8 TH ST (NE)	12 TH ST (NE)	Recon	\$167,500
Total Cost:				\$342,545

Table XIV-70
Downtown Bellevue Improvements
Transit Signal Priority Projects

Location	Cost
NE 8th & Mall	\$35,000
NE 8th & 106th	\$50,000
NE 8th & 102nd	\$35,000
NE 8th & 100th Ave	\$25,000
NE 6th & 112th	\$25,000
NE 12th St & 110th	\$25,000
NE 10th St & Bel Way	\$35,000
NE 10th & Lk Washington	\$35,000
NE 2 nd & 106 th	\$25,000
NE 2 nd & Bel Way	\$25,000
NE 4 th & 112 th	\$50,000
NE 4 th & 116th	\$25,000
Total Cost:	\$390,000

Table XIV-71
Downtown Bellevue Improvements
Park-and-Pool Project

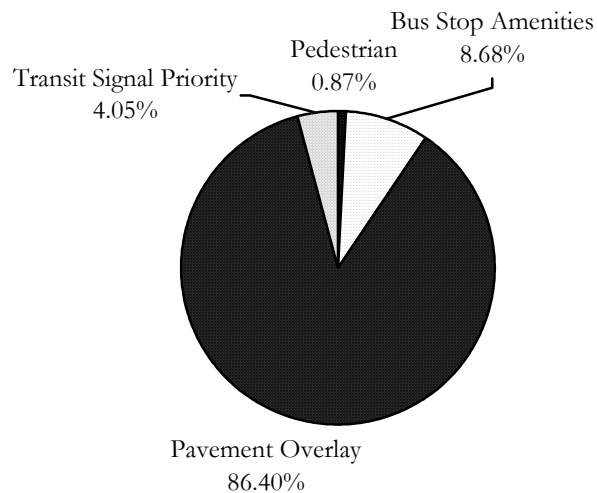
Location	Permit Cost
New Hope Ministries - 752 108th Ave NE	\$1,000

CAPITAL ELEMENT

Table XIV-72
All Other Corridor Improvements
Located throughout Bellevue

Routes:	Varies
Daily Corridor Passenger Boardings:	965
Total Capital Projects Identified:	322
Total Cost of Capital Projects:	\$6,541,696
Pedestrian (1 project)	\$56,800
Bus Stop Amenities (299 projects)	\$567,500
Arterial HOV (no projects)	
Pavement Overlay (6 projects)	\$5,647,396
Transit Centers (no projects)	
Transit Signal Priority (9 projects)	\$265,000
Park-and-Pool (5 projects)	\$5,000

Figure XIV-15
Share of Cost for Proposed Projects
All Other Corridors Improvements



CAPITAL ELEMENT

Table XIV-73
All Other Corridor Improvements
Pedestrian Projects

Project No.	Street	Between	Description	Cost
P717	Hillaire Access Trail	NE 4 th St to SE 16 th ST	Acquire easement and construct paved trail if possible.	\$56,800
Total Cost:				\$56,800

Table XIV-74
All Other Corridor Improvements
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
64045	COAL CREEK PKWY	I-405 (SB ON RAMP)	L	\$500
64056	SE 63 ST	155 AV SE	L	\$500
64057	SE 63 ST	155 AV SE	L	\$500
64605	W LK SAMM PKWY SE	SR 901	L	\$500
64835	SE 41 PL	124 AV SE	P	\$20,000
64862	SE 56 ST	123 AV SE	L	\$500
64864	SE 56 ST	128 AV SE	L	\$500
64866	125 AV SE	SE 60 ST	L	\$500
64868	SE 63 PL	127 PL SE	L	\$500
64871	SE 63 PL	127 PL SE	L	\$500
64873	125 AV SE	SE 60 ST	L	\$500
64875	SE 56 ST	128 AV SE	L	\$500
64877	SE 56 ST	123 AV SE	L	\$500
65023	W LK SAMM PKWY SE	SR-901	L	\$500
65265	SE 60 ST	118 AV SE	L	\$500
65266	SE 60 ST	118 AV SE	L	\$500
65268	LAKEMONT BLVD SE	FOREST DR SE	L	\$500
65269	LAKEMONT BLVD SE	FOREST DR SE	L	\$500
65292	SE 63 ST	149 AV SE	L	\$500
65294	SE 63 ST	149 AV SE	L	\$500
65295	SE 63 ST	FOREST DR SE	L	\$500
65296	FOREST DR SE	142 AV SE	L	\$500
65297	FOREST DR SE	142 AV SE	L	\$500
65298	FOREST DR SE	HIGHLAND DR	L	\$500
65299	FOREST DR SE	HIGHLAND DR	L	\$500
65301	FOREST DR SE	SOMERSET DR SE	L	\$500
65302	FOREST DR SE	SOMERSET DR SE	L	\$500
65410	SE 69 WY	128 AV SE	L	\$500
65420	SE 69 WY	125 AV SE	L	\$500
65432	123 AV SE	SE 68 PL	L	\$500

CAPITAL ELEMENT

Table XIV-74 (continued)
All Other Corridor Improvements
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
65450	123 AV SE	SE 65 PL	L	\$500
65460	123 AV SE	SE 64 PL	L	\$500
65470	123 AV SE	SE 62 ST	L	\$500
65480	SE 60 ST	123 AV SE	P	\$2,000
65490	SE 60 ST	119 AV SE	L	\$500
65640	SE 60 ST	119 AV SE	L	\$500
65652	123 AV SE	SE 60 ST	L	\$500
65660	123 AV SE	SE 61 ST	L	\$500
65670	123 AV SE	SE 64 PL	L	\$500
65680	123 AV SE	SE 65 PL	L	\$500
65690	123 AV SE	123 PL SE	L	\$500
65700	123 AV SE	SE 69 WY	L	\$500
65710	SE 69 WY	123 AV SE	L	\$500
65720	SE 69 WY	125 AV SE	L	\$500
65730	SE 69 WY	128 AV SE	L	\$500
66880	SE 14 ST	165 AV SE	L	\$500
66890	SE 14 ST	167 AV SE	L	\$500
66900	168 AV SE	SE 16 ST	L	\$500
66910	168 AV SE	SE 19 ST	L	\$500
66920	168 AV SE	SE 21 PL	L	\$500
66930	168 AV SE	SE 26 ST	L	\$500
66940	SE 26 ST	169 AV SE	L	\$500
66950	SE 26 ST	170 AV SE	L	\$500
66960	SE 26 ST	171 AV SE	L	\$500
66966	W LK SAMM PKWY SE	SE 12 PL	L	\$500
66967	W LK SAMM PKWY SE	SE 12 PL	L	\$500
66980	W LK SAMM PKWY SE	SE 31 PL	L	\$500
66990	SE 34 ST	168 PL SE	L	\$500
67000	SE 34 ST	166 AV SE	L	\$500
67010	SE 34 ST	163 PL SE	L	\$500
67020	SE 34 ST	163 PL SE	L	\$500
67030	SE 34 ST	166 AV SE	L	\$500
67035	SE 26 ST	RICHARDS RD	L	\$500
67036	128 AV SE	SE 27 ST	L	\$500
67038	123 AV SE	SE 17 PL	L	\$500
67040	SE 34 ST	168 PL SE	L	\$500
67045	121 AV SE	SE 10 ST	L	\$500
67050	W LK SAMM PKWY SE	SE 31 PL	L	\$500
67060	W LK SAMM PKWY SE	SE 26 ST	L	\$500
67070	SE 26 ST	171 AV SE	L	\$500
67080	SE 26 ST	170 AV SE	L	\$500
67090	SE 26 ST	169 AV SE	L	\$500
67100	168 AV SE	SE 26 ST	L	\$500
67110	168 AV SE	SE 21 PL	L	\$500
67120	168 AV SE	SE 19 ST	L	\$500
67130	168 AV SE	SE 17 ST	L	\$500
67140	SE 14 ST	167 AV SE	L	\$500
67150	SE 14 ST	165 AV SE	L	\$500
67330	NE NORTHUP WY	165 AV NE	L	\$500

CAPITAL ELEMENT

Table XIV-74 (continued)
All Other Corridor Improvements
Bus Stop Amenities Projects

67340	NE NORTHUP WY	168 AV NE	L	\$500
67350	NE NORTHUP WY	169 PL NE	L	\$500
67360	NE NORTHUP WY	170 AV NE	L	\$500
67370	NE NORTHUP WY	NE 10 ST	L	\$500
67380	NE 8 ST	172 PL NE	L	\$500
67390	NE 8 ST	172 AV NE	L	\$500
67400	NE 8 ST	170 PL NE	L	\$500
67410	NE 8 ST	167 AV NE	L	\$500
67420	NE 8 ST	165 AV NE	L	\$500
67430	NE 8 ST	164 AV NE	S	\$58,000
67440	NE 8 ST	164 AV NE	P	\$20,000
67450	NE 8 ST	164 AV NE	P	\$2,000
68220	NE 8 ST	164 AV NE	P	\$20,000
68230	NE 8 ST	164 AV NE	P	\$20,000
68240	NE 8 ST	164 AV NE	P	\$20,000
68250	NE 8 ST	165 AV NE	L	\$500
68260	NE 8 ST	167 AV NE	L	\$500
68270	NE 8 ST	170 PL NE	L	\$500
68280	NE 8 ST	172 AV NE	L	\$500
68290	NE 8 ST	172 PL NE	L	\$500
68300	NE NORTHUP WY	NE 10 ST	L	\$500
68303	180 AV NE	NE 16 ST	L	\$500
68304	180 AV NE	NE 16 ST	L	\$500
68305	NE 13 ST	179 PL NE	L	\$500
68307	176 AV NE	NE 13 ST	L	\$500
68308	NE 13 ST	177 AV NE	L	\$500
68310	NE NORTHUP WY	170 AV NE	L	\$500
68320	NE NORTHUP WY	169 PL NE	L	\$500
68330	NE NORTHUP WY	168 AV NE	L	\$500
68340	NE NORTHUP WY	165 AV NE	L	\$500
68555	NEWPORT KEY (ENT)	118 AV SE	L	\$500
68585	COAL CREEK RD	142 PL SE	L	\$500
68586	COAL CREEK RD	142 PL SE	L	\$500
68612	SE 24 ST	148 AV SE	P	\$20,000
68613	SE 24 ST	145 PL SE	P	\$20,000
68802	I-405 (SB OFF RAMP)	COAL CREEK PKWY	L	\$500
68807	SE 66 ST	COAL CK PKWY SE	L	\$500
68888	SE 22 ST	150 AV SE	L	\$500
68889	SE 22 ST	150 AVE SE	L	\$500
69190	SE 30 ST	105 AV SE	L	\$500
70029	NE 2 ST	126 AV NE	L	\$500
70031	124 AV NE	NE 4 ST	L	\$500
70032	124 AV NE	NE 5 ST	L	\$500
70033	NE 2 ST	126 AV NE	L	\$500
70034	128 AV NE	MAIN ST	L	\$500
70035	128 AV NE	MAIN ST	L	\$500
70036	128 AV SE	SE 4 PL	L	\$500
70037	128 AV SE	SE 4 PL	L	\$500
70038	128 AV SE	SE 7 PL	L	\$500
70039	128 AV SE	SE 7 PL	L	\$500

CAPITAL ELEMENT

Table XIV-74 (continued)
All Other Corridor Improvements
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
70183	98 AV NE	NE 24 ST	L	\$500
70185	98 AV NE	NE 27 ST	L	\$500
70187	98 AV NE	NE 30 ST	L	\$500
70520	NE 23 ST	98 AV NE	P	\$20,000
70530	100 AV NE	NE 24 ST	L	\$500
70540	100 AV NE	NE 22 ST	L	\$500
70550	100 AV NE	NE 20 ST	L	\$500
70560	100 AV NE	NE 18 ST	L	\$500
70570	100 AV NE	NE 16 ST	L	\$500
70580	100 AV NE	NE 14 ST	L	\$500
70590	100 AV NE	BELFAIR LANE 2*2	L	\$500
70620	100 AV NE	NE 14 ST	L	\$500
70630	100 AV NE	NE 16 PL	L	\$500
70640	100 AV NE	NE 18 ST	L	\$500
70650	100 AV NE	NE 20 ST	L	\$500
70660	100 AV NE	NE 22 ST	L	\$500
70764	140 AV NE	NE 55 ST	L	\$500
70766	140 AV NE	NE 48 PL	L	\$500
70768	140 AV NE	NE 44 PL	L	\$500
70770	140 AV NE	NE 42 ST	L	\$500
70772	140 AV NE	NE 40 ST	L	\$500
70774	140 AV NE	NE 37 PL	L	\$500
70776	140 AV NE	NE 34 PL	L	\$500
70778	140 AV NE	NE 30 PL	L	\$500
70780	140 AV NE	NE 26 PL	L	\$500
70782	140 AV NE	NE 24 ST	L	\$500
70784	140 AV NE	NE 20 ST	L	\$500
70786	140 AV NE	NE 20 ST	L	\$500
70790	140 AV NE	NE 14 ST	L	\$500
70792	140 AV NE	NE 12 ST	L	\$500
70796	140 AV NE	NE 8 ST	P	\$20,000
70798	140 AV NE	NE 3 ST	L	\$500
70801	140 AV NE	NE 1 ST (DEAD END)	L	\$500
70804	140 AV SE	SE 3 PL	P	\$20,000
70806	140 AV SE	SE 5 ST	L	\$500
70808	140 AV SE	SE 7 ST	L	\$500
70811	SE 8 ST	121 AV SE	L	\$500
70812	SE 8 ST (WILBUR P&R)	I-405 (SB OFF RAMP)	P	\$2,000
70815	121 AV SE	SE 8 ST	L	\$500
70817	121 AV SE	SE 10 ST	L	\$500
70822	SE 8 ST	118 AV SE	P	\$20,000
70825	SE 8 ST	121 AV SE	L	\$500
70826	140 AV SE	SE 7 ST	L	\$500
70828	140 AV SE	SE 5 ST	L	\$500
70830	140 AV SE	SE 3 PL	P	\$20,000
70832	140 AV SE	SE 1 ST	L	\$500
70834	140 AV NE	NE 1 ST	L	\$500
70836	140 AV NE	NE 3 ST	L	\$500
70838	140 AV NE	NE 8 ST	L	\$500

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Table XIV-74 (continued)
All Other Corridor Improvements
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
70842	140 AV NE	NE 12 ST	L	\$500
70844	140 AV NE	NE 14 ST	L	\$500
70846	140 AV NE	NE BEL-RED RD	L	\$500
70850	140 AV NE	NE 20 ST	L	\$500
70852	140 AV NE	NE 24 ST	L	\$500
70854	140 AV NE	NE 26 PL	L	\$500
70856	140 AV NE	NE 30 PL	L	\$500
70858	140 AV NE	NE 34 PL	L	\$500
70860	140 AV NE	NE 37 PL	L	\$500
70862	140 AV NE	NE 40 ST	L	\$500
70864	140 AV NE	NE 42 ST	L	\$500
70866	140 AV NE	NE 44 PL	L	\$500
70868	140 AV NE	NE 48 PL	L	\$500
70870	140 AV NE	NE 55 PL	L	\$500
70872	140 AV NE	NE 62 ST	L	\$500
71132	W LK SAMM PKWY SE	SE 40 PL	L	\$500
71134	SE 38 ST	166 AV SE	L	\$500
71135	SE 38 ST	W LK SAMM PKWY SE	L	\$500
71137	KAMBER RD(140 PL)	SE 20 ST	L	\$500
71138	KAMBER RD(140 PL)	SE 20 ST	L	\$500
71139	SE 26 ST	RICHARDS RD	L	\$500
71658	SE 24 ST	156 AV SE	L	\$500
71660	SE 24 ST	158 AV SE	L	\$500
71661	SE 24 ST	161 AV SE	L	\$500
71675	SE 24 ST	161 AV SE	L	\$500
71678	SE 24 ST	158 AV SE	L	\$500
71680	SE 24 ST	156 AV SE	L	\$500
72810	SE 38 ST	150 AV SE (TM)	L	\$500
72811	SE 38 ST	150 AV SE	L	\$500
72870	150 AV SE	SE 38 ST	P	\$20,000
72871	150 AV SE	SE 38 ST	L	\$500
72872	150 AV SE	SE NEWPORT WY	L	\$500
72873	150 AV SE	SE NEWPORT WY	L	\$500
72876	HIGHLAND DR	147 PL SE	L	\$500
72877	HIGHLAND DR	147 PL SE	L	\$500
72878	HIGHLAND DR	SOMERSET BLVD SE	L	\$500
72879	SOMERSET BLVD SE	HIGHLAND DR	L	\$500
72880	150 AV SE	SE EASTGATE WY	P	\$20,000
72881	SOMERSET BLVD SE	143 AV SE	L	\$500
72882	SOMERSET BLVD SE	143 AV SE	L	\$500
72884	SOMERSET BLVD SE	SOMERSET LN	L	\$500
72885	SOMERSET BLVD SE	SE 44 ST	L	\$500
72886	SOMERSET BLVD SE	SE 43 ST	L	\$500
72887	SOMERSET BLVD SE	SE 43 ST	L	\$500
72888	SOMERSET BLVD SE	SE 44 ST	L	\$500
72891	FOREST RIDGE SCH	ACADEMIC BLDG	L	\$500
72892	151 AV SE	SE 49 ST	L	\$500
72893	150 AV SE	SE 46 WAY	L	\$500
72897	151 AV SE	SE 49 ST	L	\$500

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Table XIV-74(continued)
All Other Corridor Improvements
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
72898	150 AV SE	SE 46 WAY	L	\$500
72934	NE 8 ST	96 AV NE	L	\$500
72936	NE 8 ST	95 AV NE	L	\$500
72940	NE 8 ST	92 AV NE	L	\$500
72950	NE 1 ST	NE 10 ST	L	\$500
73040	NE 1 ST	NE LK WASH BLVD	L	\$500
73042	NE 8 ST	92 AV NE	L	\$500
73044	NE 8 ST	94 AV NE	L	\$500
73046	NE 8 ST	96 AV NE	L	\$500
73080	150 AV SE	SE EASTGATE WY	P	\$20,000
73082	SE 46 WY	151 PL SE	L	\$500
73084	SE 46 WY	154 PL SE	L	\$500
73086	SE 46 WY	159 AV SE	L	\$500
73088	SE 46 WY	161 AV SE	L	\$500
74154	128 AV SE	ADDRESS 522	L	\$500
74155	INTL SCHOOL PARK	128 AVE SE	P	\$20,000
79856	128 AV SE	SE 26 PL	L	Base Zone
79858	SE 26 ST	RICHARDS RD	L	Base Zone
79877	SE 37 ST	15220 (DRWY)	L	\$500
79892	RICHARDS RD	SE 32 ST	P	\$500
79906	RICHARDS RD	SE 26 ST	L	\$500
80325	NEWPORT HILLS PR	113 PL SE	L	\$20,000
80331	LK WASH BLVD SE	SE 59 ST	L	\$500
80332	LK WASH BLVD SE	SE 59 ST	L	\$500
80334	SE 60 ST	114 PL SE	L	\$500
80335	SE 60 ST	114 PL SE	L	\$500
80409	124 AV SE	SE 41 PL	P	\$500
80566	123 AV SE	SE 17 PL	L	\$500
81480	130 AV NE	NE 24 PL	L	\$20,000
81482	130 AV NE	NE 26 PL	L	\$500
81484	130 AV NE	NE 28 PL	L	\$500
81485	NE 32 ST	125 AV NE	L	\$500
81486	130 AV NE	NE 30 ST	L	\$500
81488	130 AV NE	NE 32 ST	L	\$500
81490	130 AV NE	NE 32 PL	L	\$500
81492	131 AV NE	NE 33 ST	L	\$500
81494	131 AV NE	NE 36 ST	L	\$500
81496	NE 36 ST	134 AV NE	L	\$500
81498	134 AV NE	NE 37 PL	L	\$500
81500	134 AV NE	NE 37 PL	L	\$500
81502	NE 40 ST	132 AV NE	L	\$500
81504	132 AV NE	4206 (DRWY)	L	\$500
81506	132 AV NE	NE 47 ST	L	\$500
81508	132 AV NE	NE 50 ST	L	\$500

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Table XIV-74 (continued)
All Other Corridor Improvements
Bus Stop Amenities Projects

Stop No.	Street	Cross-Street	Stop Type ¹	Cost
81510	132 AV NE	NE 51 PL	L	\$500
81512	132 AV NE	NE 54 PL	L	\$500
81602	132 AV NE	NE 54 PL	L	\$500
81604	132 AV NE	NE 51 PL	L	\$500
81606	132 AV NE	NE 50 ST	L	\$500
81608	132 AV NE	NE 47 ST	L	\$500
81614	134 AV NE	3806 (MAILBOX)	L	\$500
81616	NE 36 ST	134 AV NE	L	\$500
81618	131 AV NE	NE 36 ST	L	\$500
81620	131 AV NE	NE 33 ST	L	\$500
81622	131 AV NE	130 AV NE	L	\$500
81626	130 AV NE	NE 30 ST	L	\$500
81628	130 AV NE	NE 28 PL	L	\$500
81630	130 AV NE	NE 26 PL	L	\$500
81632	130 AV NE	NE 24 PL	L	\$500
82718	I-405 (SB OFF RAMP)	SE 8 ST	P	\$2,000
82720	MAIN ST	106 AV SE	L	\$500
82730	MAIN ST	108 AV SE	L	\$500
82780	I-405 (NB ON RAMP)	112 AV SE (EXIT 9)	P	\$2,000
82785	I-405 (NB ON RAMP)	COAL CREEK PKWY SE	P	\$2,000
82787	I-405 (NB ON RAMP)	SE 8 ST	P	\$2,000
84275	I-405 (SB ON RAMP)	COALCREEK PKWY SE	L	\$500
84280	I-405 (SB OFF RAMP)	112 AV SE (EXIT 9)	L	\$500
84827		130 AV NE	L	\$500
99751	123 AV SE	SE 20 PL	L	\$500
99752	123 AV SE	SE 25 ST	L	\$500
Total Cost:				\$567,500

¹ S = Superstop P = Primary Local Stop L = Local Transit Stop

Table XIV-75
All Other Corridor Improvements
Pavement Overlay Projects

Roadway	From	To	Action	Cost
124 TH AVE NE	8 TH ST (NE)	NORTHUP WAY	Rehab	\$224,840
8 TH ST (NE)	156 TH AVE NE	NORTHUP WAY	Recon	\$728,611
NORTHUP WAY	LAKE WA. BLVD	8 TH ST (NE)	Recon	\$2,531,111
148 TH AVE NE	BELL. RED. ROAD	60 TH ST NE	Recon	\$1,021,667
108 TH AVE NE	840' S/O NORTHUP WAY	CITY LIMITS	Recon	\$398,667
150 TH AVE SE	EASTGATE WAY	SE NEWPORT WAY	Recon	\$742,500
Total Cost:				\$5,647,396

Table XIV-76
All Other Corridor Improvements
Transit Signal Priority Projects

Location	Cost
SE 8th & I-405 NB On	\$25,000
NE 8th & 164th	\$50,000
NE 29th & 148th	\$35,000
NE 22nd & 148th	\$25,000
Main St & 140th	\$25,000
Coal Creek & Forest Drive	\$35,000
520 Ramp & 148th	\$35,000
SE 8 th & I-405 NB on	\$25,000
I-90 Ramp & 148 th	\$35,000
Total Cost:	\$265,000

Table XIV-77
All Other Corridor Improvements
Park-and-Pool Projects

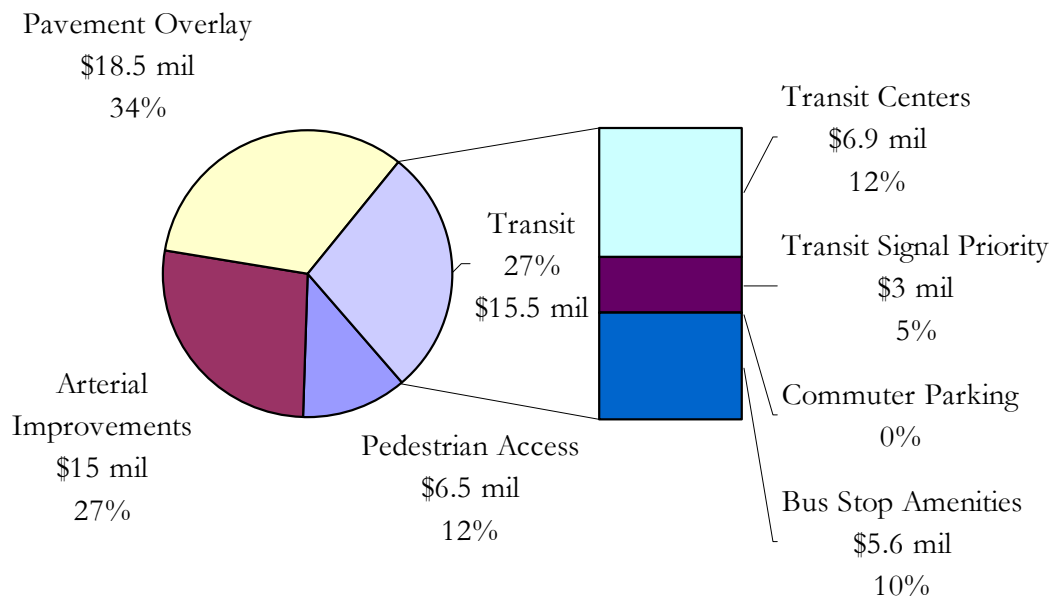
Location	Permit Cost
Neighborhood Church - 5501 148th Ave NE	\$1,000
Seventh-Day Adventist Church - 2211 140th Pl SE	\$1,000
St. Louise Catholic Church – 625 140th Ave NE	\$1,000
St. Peters United Methodist Church – 15 140th Ave NE	\$1,000
Temple B'Nai Torah - 17222 NE 8th St	\$1,000
Total Cost:	\$5,000

CHAPTER XV – FUNDING ALTERNATIVES

The role of the Capital Element of the *Bellevue Transit Plan* is to provide a framework for assessing and prioritizing transit-oriented capital investment projects over the next 10 years. As part of this assessment, a variety of system needs and recommended projects have been identified. In combination, the recommended projects have the potential to improve the circulation of transit services in Bellevue, provide enhanced access to transit services in the City, and augment the attractiveness of transit as a travel option in Bellevue. However, the cost of these projects as well as underlying system needs is staggering (Figure XV-1). Based on the analysis in the previous chapters, \$55.5 million is necessary to fully implement all transit capital funding needs.

Only 27 percent of the \$55.5 million total, or \$15.5 million, is necessary for transit-only improvements. Transit-only improvements include transit center, transit signal priority, commuter parking, and passenger amenity improvements. The remaining \$40 million is for improvements with both transit and broader modal benefits. These include pavement overlay, pedestrian access, and arterial HOV improvements.

Figure XV-1
Transit Capital Funding Needs



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Projects with broader modal benefits were included in the analysis because clearly, improvements to pavement, pedestrian access, and arterial HOV have a beneficial impact on transit ridership. Each, however, also helps the city meet its overall priorities. For example, the pavement overlay projects will improve the overall transit experience by fixing pavement in poor condition, which slows buses. This improvement will also improve freight mobility, fire response time, and overall safety; it is not a “transit-only” benefit. Along the same line, pedestrian access projects provide much needed links between neighborhoods and bus stops. Pedestrian access projects also address overall city policies on pedestrian mobility. The types of improvements are discussed below:

- **Pedestrian Access Improvements to Transit: \$6.5 million** for the highest priority projects. These projects scored the highest possible but are just a small subset from a project list that identifies more than \$119 million in needs.
- **Bus Stop Amenities: \$5.6 million** for combined improvements to 823 bus stops in Bellevue, including ADA access improvements at 113 locations.
- **Arterial Improvements: \$15 million** for eighteen projects to improve safety, as well as transit speed and reliability.
- **Pavement Overlay: \$18.5 million** for the highest priority projects. Total needs for pavement overlay is nearly \$27.4 million.
- **Transit Centers: \$6.9 million** for implementing long- and short-term transit center recommendations.
- **Transit Signal Priority: \$3 million** to implement TSP improvements at the 169 individual approaches at 82 intersections where TSP could provide speed and reliability improvements.
- **Commuter Parking:** No additional funding is necessary to meet parking needs in the I-90 corridor in Bellevue through 2006. Meeting commuter parking needs for the I-90 corridor in Bellevue through 2015 will require an additional \$13.9 million in expenses.

The level of readily available resources for capital improvements required by the transit service network in Bellevue is limited and can not support all the potential projects identified within the Capital Element.

The City’s recognition of this lack of resources for transportation is reflected in the Council’s interest statement related to the findings of the Blue Ribbon Commission on Transportation:

BR-2

Transportation Revenue. Funding must be dramatically increased at all levels: state, regional and local. The City supports greater reliance on a user-fee based approach, clearly establishing a link between those using the system and those paying for it, in a manner understandable to and supported by the public.

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This section of the Capital Element outlines some of the existing and potential funding sources for the projects envisioned within the Capital Element. However, a discussion of new potential “user-fee” sources is not undertaken as this is a strategy still being considered at the regional and state level. Additionally, direct linkages between funding sources and individual projects are not provided here. Instead the information in this section is intended as a template for discussion of funding options for Bellevue’s transit vision from existing sources.

Potential Federal Funding Opportunities

There are a number of federal funding opportunities that may be available to an urban non-transit agency for transit-oriented capital projects. These programs include:

- Urbanized Area Formula Grants
- Capital Investment Programs
- Flexible Funds (includes STP and CMAQ funds)

Each of these federal funding sources is outlined below.

Urbanized Area Formula Grants

Under the funding process of the Urbanized Area Formula Grants, funds are allocated by statutory formula to individual transportation management areas (TMA = urbanized areas with populations of 200,000 or more). The level of funding earmarked for an individual TMA is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, fixed guideway route miles, population, and population density. The Greater Seattle TMA received \$62,041,338 in the 2002 apportionment.

Urbanized Area Formula Grants may be used for the planning, engineering design and evaluation of transit projects and other technical transportation-related studies. These monies may also be used for capital investments in bus and bus-related activities including the construction of maintenance and passenger facilities.

However any use of these grant monies requires some level of local match. The level of local funds required depends on the nature of the project. The Federal share of any individual project budget cannot exceed 50 percent for operating assistance projects, 80 percent for capital projects, and 90 percent for bicycle projects or vehicle-related equipment to comply with the Americans With Disabilities Act or the Clean Air Act.

Capital Investment Programs

Capital Investment Programs provide funds for large projects that cannot be funded from an agency’s Urbanized Area Formula apportionment. There are four Capital Investment Programs:

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- **Fixed Guideway Modernization** (40% of Capital Investment Program Funds)
- **New Starts and Extensions** (40% of Capital Investment Program Funds)
- **Bus and Bus Facilities** (20% of Capital Investment Program Funds)
- **Clean Fuels Formula Grant Program** (Funded through a takedown from the Bus & Bus Facilities and the Urbanized Area Formula Programs).

Allocation of these funds is at the discretion of the Transportation Secretary; however, Congress fully earmarks all available funding.

Of the program areas outlined above, it is the Bus and Bus Facilities Program that may offer funding opportunities for Bellevue transit projects. In this program area, eligible purposes for Capital Investment Program funds include transfer facilities, bus malls, transportation centers, intermodal terminals, park-and-ride stations, and development of passenger amenities such as shelters and bus stop signs.

As with other federal funding sources, some level of local funding match is required for use of these funds. The federal share of a project funded by Capital Investment Program funds shall not exceed 80 percent.

For 2002, \$29,007,851 was earmarked for projects in Washington State under this program. This included \$1,584,046 for the Bellevue Transportation Center.

Flexible Funds

Flexible Funds are certain legislatively specified funds that may be used either for transit or highway purposes. This provision was first included in the Intermodal Surface Transportation Efficiency Act of 1999 (ISTEA) and has continued within the Transportation Equity Act for the 21st Century (TEA-21).

Flexible funds allow local areas to choose to use certain Federal surface transportation funds based on local programming priorities, not on restrictive definitions of program eligibility. Flexible Funds include the Federal Highway Administration's Surface Transportation Program (STP) and Congestion Mitigation and Air Quality Improvement Program (CMAQ) and the FTA's Urban Formula Funds.

Washington State's 2003 appropriation of STP and CMAQ funds that qualify under the flexible funding provision include \$27,000,000 under CMAQ and \$80,000,000 under STP. Although Washington State is not required to designate any of these funds for transit, STP and CMAQ funding can be programmed for a variety of capital programs. Including roadway development and street improvements, investments in TSP technology, as well as development of park-and-ride facilities.

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Summary of Federal Funding Opportunities

As outlined, there are a few federal funding programs that provide opportunities for funding in-part the transit capital improvements envisioned by Bellevue. With regard to the types of improvements outlined in the Capital Element of the *Bellevue Transit Plan*, certain investment types would readily lend themselves to consideration for particular federal funding sources. These potential funding “linkages” are outlined in Table XV-1.

Table XV-1
Summary of Federal Funding Opportunities and Related Transit-Oriented Capital Investments

Capital Investment Type	Potential Federal Funding Option
<i>Pavement Overlay to Support Transit</i>	Flexible Funds - STP/CMAQ
<i>Pedestrian Linkages to Transit</i>	Flexible Funds - STP/CMAQ
<i>Transit Signal Priority</i>	Flexible Funds - STP/CMAQ
<i>Arterial HOV</i>	Flexible Funds - STP/CMAQ
<i>Commuter Parking Facilities</i>	Flexible Funds - STP/CMAQ
	Capital Investment Program - Bus and Bus Facilities
<i>Transit Center Development</i>	Capital Investment Program - Bus and Bus Facilities
	Urbanized Area Formula Grants
<i>Turning Radius Improvements</i>	Flexible Funds - STP/CMAQ
<i>Bus Stop Improvements</i>	Urbanized Area Formula Grants
	Capital Investment Program - Bus and Bus Facilities

State Funding Opportunities

At this point, state funding opportunities for transit improvements are fairly limited. The Public Transportation System Program established in 1990 and administered by the Transportation Improvement Board (TIB) is no longer accepting new projects. Washington State’s 2003 Transportation Demand Management Programs (Commute Trip Reduction, Vanpool, and Park-and-Ride) are dependent on the outcome of Referendum 51.

Regardless, there are some state and local funding programs that consider transit or could benefit transit:

- Public Works Trust Fund loans for roadway improvements
- TIB’s Transportation Partnership Program
- TIB’s Congested Corridor Program (dependent on Referendum 51)

CAPITAL ELEMENT

- TIB's Arterial Improvement Program
- TIB's Pedestrian Safety and Mobility Program

However, these programs are not earmarked for transit-only. Therefore, access to these funds would require that the envisioned transit improvements be woven into larger projects related to the primary purpose of the program.

Regional Transit Partners

Although the City of Bellevue has taken a leadership role in developing a transit-oriented strategy for addressing its transportation needs, its role as a non-transit provider requires its partnering with transit providers to ensure that Bellevue's vision for its transit service network and related improvements are realized. Among other benefits, the transit providers have access to capital program funds that are designed to serve transit-specific needs.

Much of this funding has been locally generated and has been contributed by City residents and businesses. In light of this, partnering with King County Metro (Metro) and Sound Transit is a critical strategy for developing the Bellevue transit vision and bringing it to fruition. Recognition of the City's responsibility for helping to guide investments by its transit partners is reflected in policies within the Comprehensive Plan:

Policy TR-70

Secure a share of regional transit system facilities and service priorities for Bellevue residents proportional to the City's contributed share of regional transit revenues.
[Amended Ord. 5058]

Policy TR-86

Support joint projects, including the contribution of City matching funds, with adjoining cities, unincorporated King County, the transit provider, or the state, where such partnerships may help establish or accelerate a project beneficial to the City.

King County Metro

Bellevue has partnered with Metro on a number of projects, including the development of a Transit Signal Priority project on NE 8th Street. With regard to future partnerships to fund transit-oriented capital improvements, the City Council recognizes the City's potential role in this regard, as reflected in policy direction adopted on May 8, 2000:

KCM-27

Evaluate the need for City financial contributions to transit services and amenities as part the biennial update of the Capital Investment Plan.

CAPITAL ELEMENT

In addition to existing Metro-Bellevue joint-projects, there are other existing opportunities for partnering with Metro. Within Metro's 2002–2007 Public Transportation Fund Capital Program, there are a handful of budgeted projects from which Bellevue may be able to obtain additional funds for transit capital needs in Bellevue. These programs and their purposes are outlined below:

- **Bus Zone Safety and Access:** Ongoing bus stop improvements including shelters, installation of vandalism-resistant shelter components, ADA improvements, lighting, etc.
- **Bus Zone Comfort/Safety – Six-Year Plan:** Passenger and pedestrian improvements at transfer points and other key transit locations. Includes lighting, ADA, and shelters. This project was specifically linked with the 1996–2001 Six-Year Plan and will sunset at the end of 2003.
- **Bellevue Signal Priority:** King County is working with the City of Bellevue to design and install traffic signal priority for buses at several intersections in the Overlake area.
- **East King County Transit Improvements:** Provides financing for speed and reliability improvements throughout East King County. Funded projects are developed in partnerships with jurisdictions with the goal of implementing road and signal improvements that will improve the flow of transit.
- **Regional Transit Signal Priority:** This project is intended to support the implementation of TSP for transit throughout the region.

Table XV-2 outlines the present level of funding in these project areas.

Table XV-2
King County Public Transportation Fund Capital Program

<i>Metro Project</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>Total</i>
Bus Zone Safety & Access	\$2,532,716	\$3,540,981	\$3,271,981	\$3,382,616	\$3,382,000	\$2,327,250	\$18,437,544
Bus Zone Comfort/Safety-Six Year Plan	\$614,571	\$241,056					\$855,627
Bellevue Transit Priority	\$265,000	\$289,000	\$340,000	\$265,000	\$225,000	\$225,000	\$1,609,000
East King County Transit Improvements	\$646,000	\$711,000	\$335,000	\$215,000	\$195,000	\$195,000	\$2,297,000
Regional Signal Priority	\$1,178,000	\$1,208,000	\$1,460,000	\$2,460,000	\$2,530,000	\$2,480,000	\$11,316,000
Total	\$5,236,287	\$5,990,037	\$5,406,981	\$6,322,616	\$6,332,000	\$5,227,250	\$34,515,171

CAPITAL ELEMENT

With regard to the projects outlined within the Capital Element, there are potential linkages between these eligible Metro funds and the different project types. These “funding linkages” are summarized in Table XV-3.

Table XV-3
King County Funding Opportunities and Related Transit-Oriented Capital Investments

Capital Investment Type	Potential King County Funding Option
<i>Pedestrian Linkages to Transit</i>	Bus Zone Comfort/Safety – Six Year Plan
<i>Arterial HOV</i>	East King County Transit Improvements
<i>Turning Radius Improvements</i>	East King County Transit Improvements
<i>Transit Signal Priority</i>	Regional Transit Signal Priority
	Regional Transit Signal Priority
<i>Bus Stop Improvements</i>	Bus Zone Safety and Access
	Bus Zone Comfort/Safety – Six Year Plan

Sound Transit

As part of its Phase 1 plan, Sound Transit has and continues to develop transit capital projects in Bellevue including the new Downtown Bellevue Transit Center and the I-405/Downtown Access Project. Bellevue has played and continues to play an active role in Sound Transit’s planning process to ensure that appropriate service and capital investments are made in Bellevue. This dedication is reflected in part in the City Council interest statement regarding Sound Transit adopted on May 18, 1998:

REX-1

Implement an integrated regional and local transit system successfully resulting in:

- Improved transit service over today’s service levels to meet the mobility needs of residents, employees and visitors to Bellevue.
- Increased proportion of trips made by transit, thus making efficient use of available roadway capacity in support of continued economic development.
- Capital investments that are community assets by virtue of their attractive design, efficient operations, and their ability to serve as catalysts for future development.

Further, Bellevue remains dedicated to involvement in future planning of service and capital facilities by Sound Transit as reflected in the following Comprehensive Plan policy:

Policy TR-69a

Provide regional leadership for Sound Transit Phase 2 planning efforts. [New Ord. 5247]

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With regard to near term investments, Sound Transit presently has a surplus of tax revenues collected from East King County residents and businesses. Under Sound Transit's planning policies, these funds should be invested in additional transit improvements in the East King County region. Ensuring adherence to this doctrine and engaging in the planning process for allocation of these revenues has been a Bellevue policy since 1998:

REX-2

To the extent excess East King County subarea revenues are collected, support additional Sound Transit capital and service investments beyond those originally identified in Sound Move for Downtown Bellevue, in recognition of its position as the State's second largest downtown employment center behind Downtown Seattle.

The latest projection from Sound Transit's finance department regarding unanticipated revenues outlined an estimated \$61 million (YOE) as available for potential programming under Sound Transit's allocation policies for such revenues. This is based on the present Phase 1 period of 1996–2006. At this point, only \$9 million of this total has been earmarked for specific projects.¹ As such, \$52 million is available for additional project needs in the East King County subarea.

A primary criterion for Sound Transit investments is whether the project in question is a part of the regional transportation system and, in the case of Phase 1 additional investments, in-line with the vision of *Sound Move*—the regional transit plan. Under this criterion, projects of every type are outlined in the Capital Element that could be considered eligible for support.

The evaluative criteria applied to the potential projects in the *Bellevue Transit Plan* favor projects that are served by regional services or provide direct access to such services. As such, the priority projects identified in this plan should be strong candidates for unanticipated revenue funding and/or inclusion in Phase 2.

Regardless, keeping Bellevue staff and decision-makers involved in helping to shape the disposition of Phase 1 unanticipated revenues and the development of the Phase 2 plan in a manner that is consistent with Bellevue's transit vision, should remain a top priority.

Local Funding

Beyond the potential funding opportunities with local, state, and federal partners, is the allocation of locally generated revenues to capital improvements in the City. The priority and schedule of funding for capital investments in the City of Bellevue managed within the Capital Investment Program (CIP) planning process. Overall, the CIP plan is intended to directly link capital investments to measurable outcomes identified in the City's Comprehensive Plan.

¹ The 2002 Service Implementation Plan outlined a need of \$9 million for bus replacement on ST Express Route 550. This has been approved by the ST board and will be reflected in ST's 2003 budget.

CAPITAL ELEMENT

Given the City's dedication to a transit-oriented strategy for addressing transportation needs in the City, one change in CIP policy worth consideration is creating a *Transit Capital Program* within the CIP. Such a program would support the Transportation Element of the Bellevue Comprehensive Plan and be influenced by the *Bellevue Transit Plan*.

In turn, the improvements identified in the *Bellevue Transit Plan* could be directed to this Transit Capital Program. The prioritization and evaluative criteria outlined in the Capital Element of this plan would be used as the Project Prioritization Criteria for the program. Among other things, this would provide an opportunity to better coordinate efforts underway at Metro and Sound Transit for improving transit services and facilities. In addition, it could assure a steady funding source for the smaller scale projects identified through this study.

The level of dedicated funding for programming in Transit Capital Program would have to be determined in light of all competing needs in the City.

Local Partnerships

A final area of opportunity for funding of transit development projects are partnerships with private sector interests and community groups. A number of Bellevue policies point toward the potential role of public-private partnerships in transit projects.

A core strategy available to the City of Bellevue is working with developers within the development review process to integrate transit facilities into the design of development projects. The use of this process is reflected in a number of Comprehensive Plan policies:

Policy TR-53a

Work with private developers and the transit providers to integrate transit facilities and pedestrian and bicycle connections into residential, retail, manufacturing, commercial office, and other types of development. [Amended Ord. 5058]

Policy TR-7

Incorporate transit-supportive and pedestrian-friendly design features in new development through the development review process. Examples include:

- Orient the major building entries to the street and closer to transit stops;
- Avoid large surface parking areas between the building frontage and the street;
- Provide pedestrian pathways that minimize distances to activities and to transit stops;
- Where feasible, cluster major buildings within developments to improve pedestrian and transit access;
- Provide weather protection in key areas, such as covered walkways or arcades connecting buildings in major developments, and covered waiting areas for transit and ridesharing;

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- Design for pedestrian safety, including adequate lighting and paved, hazard-free surfaces;
- Provide bicycle connections and secure storage convenient to major transit facilities;
- Use design features to create an attractive, interesting pedestrian environment that will stimulate pedestrian use;
- Design transit access into large developments, considering bus lanes, stops, and shelters as part of project design; and
- Encourage the availability of restrooms for public use.

Policy TR-13

Require new development to incorporate physical features designed to promote use of alternatives to single-occupant vehicles, such as:

- Preferential parking for carpools and vanpools;
- Special loading and unloading facilities for carpools and vanpools; and
- Transit facilities, including comfortable bus stops and waiting areas, adequate turning room, and where appropriate, signal preemption and queue-jump lanes; and bicycle parking and related facilities.

Another potential area of partnership that the City has been active in and should continue participating in are more typical public-private partnerships through actual contributions to facilities to avoid parking investments and/or transit-oriented development projects linked with facility investments. As with leveraging of the development review and permitting process, dedication to these strategies is reflected in adopted City policy:

KCM-11

Joint development at new and existing park-and-ride lots should also be evaluated for possible public-private partnerships. Consistency with local/neighborhood land uses is critical.

KCM-26

The City of Bellevue recognizes the importance of transit-friendly design and where appropriate, transit-oriented development (TOD). Evaluate opportunities for advancing TOD principles in all long-range transportation and land use plans where appropriate. Consistency with local/neighborhood land uses is critical.

Policy TR-76

To promote transit use and achieve land use objectives, transit system planning shall include:

- Provision of supportive land uses, including mixed use and night-time activities;
- A safe, pedestrian-friendly environment, with restrictions on auto access;

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- Integration of multiple access modes, including buses, carpools and vanpools, bicycles and pedestrians;
- Urban design and community character;
- Protection of nearby neighborhoods from undesirable impacts; and
- Potential transit-oriented development opportunities with the private and public sectors. [Amended Ord. 5058, 5247]

There is a final partnership strategy worth consideration that could assist with support of City goals for passenger amenities: partnering with community, neighborhood, and business groups for sponsorship of amenity improvements.

Like many other transit agencies—such as Tri-Met in Portland, Oregon and the Denver RTD—Metro manages an Adopt-a-Stop program that allows individuals and organizations to volunteer to maintain a bus stop. The program commitment consists of picking up trash at the bus stop and, in some cases, removal of graffiti. However, this program idea can be expanded upon to allow businesses, homeowners' associations or individuals to sponsor the addition of site amenities such as benches, landscaping, or art at transit stops. Recognition could take the form of a placard at the stop of a “sponsored by” indication on the stop flag.

A more dramatic “sponsorship” model would include full development of a stop and or shelter with a theme that reflects the sponsoring entity in some manner without being a pure advertisement. This type of bus stop sponsorship is being successfully employed by the Orlando, Florida’s transit agency - Lynx.

Conclusions

A core goal of the *Bellevue Transit Plan* is to provide a framework that allows for the objective evaluation of potential transit capital facilities. Such evaluation not only assesses overall facility need but underlying project priority. This prioritization remains critical as the transportation funding environment remains a competition for scarce resources.

As outlined, there are some existing and potential funding sources for the projects envisioned within the Capital Element. However, given that Bellevue is not a transit operator, local opportunities for funding remain the most promising. These opportunities include partnerships with transit agencies, partnerships with private interests, and earmarking of locally generated funds.

POLICY ELEMENT

CHAPTER XVI- POLICY ELEMENT

Project Purpose

Bellevue’s long-range vision on the City’s growth and related transportation needs are outlined in its Comprehensive Plan. Comprehensive Plan policies serve as the “umbrella” by which all other policy is created and implemented and project-specific solutions are developed. As outlined, the Bellevue City Council considers transportation a top priority. Further, the Council views transit solutions as an increasingly important part of the local and regional transportation system—as reflected in the City’s overall goal for the Transportation Element of its Comprehensive Plan:

To maintain and enhance mobility for residents and businesses through the creation and maintenance of a balanced system of transportation alternatives that:

- Provides a wide range of travel choices,
- Supports the land use vision of the City,
- Protects our neighborhoods from adverse transportation impacts,
- Reflects the regional role of the City in transportation issues, and
- Reduces the overall dependency on automobiles throughout the City.

As part of any comprehensive planning process, it is vital to (1) revisit existing guiding policies to assess the applicability of those policies, (2) reference them in development of plans and alternatives, and, (3) if necessary, propose modification of those policies to better reflect present conditions.

Policy discussions for existing guidelines are discussed in each of the previous chapters. Table XVI-I summarizes the number of existing policies that have been documented, as well as their location.

Table XVI-1
Policy Summary by Transit Plan Chapter

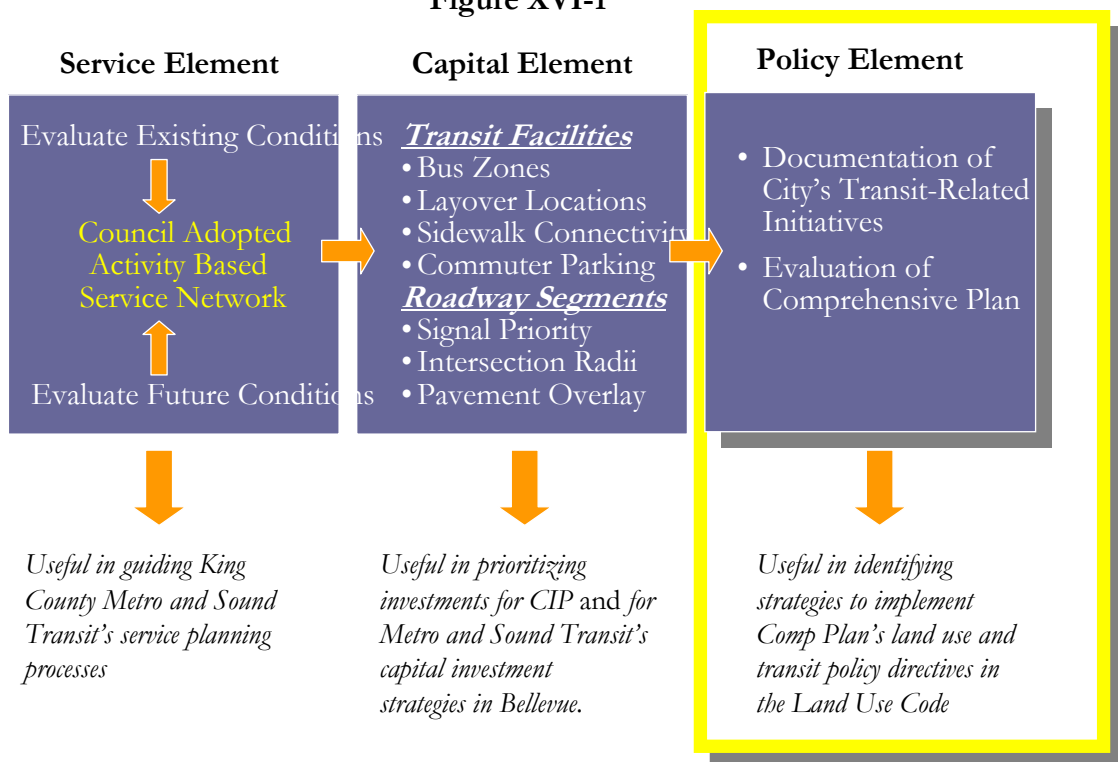
Improvement Type	Chapter Reference	Relevant Policies
Service	Chapters I-V	9
Pedestrian Accessibility to Transit	Chapter VII	2
Bus Stop Amenities	Chapter VIII	6
Arterial Improvements	Chapter IX	2
Pavement Overlay	Chapter X	0
Transit Centers	Chapter XI	5
Transit Signal Priority	Chapter XII	2
Commuter Parking	Chapter XIII	5
Finance	Chapter XV	13

POLICY ELEMENT

Although it has been initiated as the third-phase of the *Bellevue Transit Plan*, the Comprehensive Planning Policies and related directives examined within the Policy Element have been used to develop and shape the conclusions of the other plan elements (Figure XVI-1).

The third element of the *Bellevue Transit Plan* also recognizes that the recently adopted King County Metro (Metro) Six-Year Transit Development Plan for 2002 to 2007 includes service allocation policies that are predicated on the commitments made by local jurisdictions to aggressively implement local land use plans, growth management strategies, and regulations to facilitate development that is supportive of transit services (as reflected in Metro Strategy S-4). The Bellevue Council takes its partnership with Metro seriously and has already undertaken a number of strategic transit initiatives over the last several years to improve the environment within which transit operates in the City of Bellevue. The policy element of the *Bellevue Transit Plan* reflects the policy support for this partnership as reflected in the City's Comprehensive Plan and explores the different strategies the City is undertaking in support of transit.

Figure XVI-1



Project Approach

The goal of the Policy Element is to provide a comprehensive listing and review of Bellevue's transit-related policies and objectives. The sources of these policies are Bellevue's

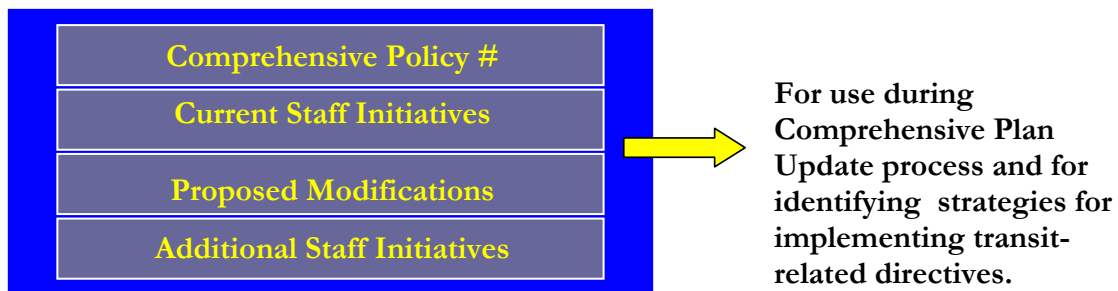
POLICY ELEMENT

Comprehensive Plan, as well as more specific directives adopted by the City Council since adoption of the Comprehensive Plan.¹

As noted, the primary direction for transit initiatives in the City of Bellevue can be found in the policies embodied in the Comprehensive Plan. These policies are revisited in the Policy Element to assess their continued applicability, outline current staff initiatives in support of these directions, propose modifications where and if necessary, and provide recommendations for additional staff-driven initiatives in the area where fit. Figure XVI-2 outlines this project approach for the Policy Element.

The result of this effort is a list of considerations for the pending Comprehensive Plan update to ensure its continued relevance in directing City transit development. Further, where applicable, additional strategies that the City might undertake to support transit in the form of new initiatives are provided.

**Figure XVI-2
Policy Element Project Approach**



¹ The complete list of comprehensive plan transit-related policies and council interest statements related to transit are included in Appendix K.

CHAPTER XVII - REVIEW OF COMPREHENSIVE PLAN TRANSIT POLICIES

As part of any comprehensive planning process, it is vital to revisit existing guiding policies to assess the applicability of those policies, reference them in development of plans and alternatives, and, if necessary, propose modification of those policies to better reflect present conditions.

As noted, Bellevue’s long-range vision concerning the City’s growth and related transportation needs is outlined in its *Comprehensive Plan*. Comprehensive Plan policies serve as the “umbrella” by which all other policy is created and implemented and project-specific solutions are developed. As such, the Comprehensive Plan policies related to transit are revisited in this section to assess their continued applicability, to outline current staff initiatives in the policy area, to propose modifications where and if necessary, and, in some cases, to provide recommendations for additional staff-driven initiatives. Table XVII-1 at the conclusion of this chapter should be used to reference proposed language changes and recommendation by policy.

Where possible, policies serving like initiatives are examined together.

Non-Motorized Access to Transit

A number of Comprehensive Plan policies address the issue of non-motorized access to transit. Some recommendations on implementing improvements to non-motorized access to transit have been outlined within the Capital Element of this plan. Within this section, the supporting policies are addressed here in the following categories:

- Working with Developers
- Prioritizing Non-Motorized Projects
- Leveraging Other Project Plans
- Partnerships with Transit Providers

Working with Developers

Policy TR-7

Incorporate transit-supportive and pedestrian-friendly design features in new development through the development review process. Examples include:

- Orient the major building entries to the street and closer to transit stops;
- Avoid large surface parking areas between the building frontage and the street;
- Provide pedestrian pathways that minimize distances to activities and to transit stops;
- Where feasible, cluster major buildings within developments to improve pedestrian and transit access;
- Provide weather protection in key areas, such as covered walkways or arcades connecting buildings in major developments, and covered waiting areas for transit and ridesharing;

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- Design for pedestrian safety, including adequate lighting and paved, hazard-free surfaces;
- Provide bicycle connections and secure storage convenient to major transit facilities;
- Use design features to create an attractive, interesting pedestrian environment that will stimulate pedestrian use;
- Design transit access into large developments, considering bus lanes, stops, and shelters as part of project design; and
- Encourage the availability of restrooms for public use.

Policy TR-53a

Work with private developers and the transit providers to integrate transit facilities and pedestrian and bicycle connections into residential, retail, manufacturing, commercial office, and other types of development. [Amended Ord. 5058]

Current Staff Initiatives

These design features are being implemented now through the City's Land Use Code regulations and design review process. Staff works with the Development Review group on a weekly basis to make sure that new developments include the frontage improvements as outlined in the *Pedestrian and Bicycle Transportation Plan Update*.

As part of this process, staff reviews submitted pre-applications for development and compares the proposed site plans with the *Pedestrian and Bicycle Transportation Plan Update*. As a result of this comparison, recommendations for improvements such as sidewalks, setbacks for future bicycle lanes, trails, and so forth are made for the envisioned project. Additionally, recommendations for more direct connections from the street or bus stop to the building entrance, or at a minimum, a sidewalk from the building to the street sidewalk are outlined. Finally, recommendations are often made for inclusion of bicycle racks for new developments, especially those in high-density areas, or schools or activity centers.

This review process and recommendations are supported by a number of pedestrian-friendly codes in the Development Manual:

- | | |
|-----------|---|
| 14.60.70 | Transportation Management Program-specifies elements of a program to reduce single-occupant vehicle trips by requiring employer support of alternate mode choices. |
| 14.60.110 | Street Frontage Improvements-requires the construction of sidewalk or other pedestrian facility fronting the development site. |
| 14.60.115 | Americans with Disabilities Act-provides that street frontage improvements and non-motorized facilities shall meet the ADA requirements. |
| 14.60.190 | Non-motorized Facilities-references the Pedestrian and Bicycle Transportation Plan Update. Requires the provision of non-motorized facilities where called out in the Plan. |
| 14.60.241 | Sight Distance Requirements for Pedestrian Safety-specifies design sight distance criteria for vehicle access points crossing pedestrian facilities. |

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Recommendation

Staff intends to use the guidelines in the *Pedestrian and Bicycle Transportation Plan Update* to improve implementation of policies on provision of bicycle connections and secure bicycle storage convenient to major transit facilities. Further, development of criteria to establish the level of bicycle parking required for specific uses will be undertaken.

No language changes are recommended to Policies TR-7 and TR-53a at this time.

Prioritizing Non-Motorized Projects

Policy TR-57

Assign high priority to pedestrian and bicycle projects that serve the following objectives:

- Address safety issues,
- Provide access to activity centers,
- Provide linkages to the transit and school bus systems,
- Complete planned pedestrian or bicycle facilities or trails, and
- Provide system connectivity or provide connections to the existing portions of the system to develop primary north-south or east-west routes

Minimal energy paths, the route between two given points requiring the least amount of energy for a bicyclist or pedestrian to traverse, shall be recognized and developed.

[Amended Ord. 5168]

Current Staff Initiatives

Staff developed methodologies for prioritization of non-motorized access projects within the *Pedestrian and Bicycle Transportation Plan Update*. Prioritization of pedestrian projects to reflect the role of access to transit is explicitly outlined within the Capital Element of the *Bellevue Transit Plan*.

Recommendation

Within Chapter VII of the Capital Element of the *Bellevue Transit Plan* are specific criteria for prioritizing pedestrian projects in support of access to transit. These criteria are recommended for use when considering Priority A projects within the *Pedestrian and Bicycle Transportation Plan Update*. Priority A projects are of higher priority because they address pressing safety issues or provide key connections within the Pedestrian and Bicycle Systems. The use of ranking criteria outlined in the Capital Element of this plan to further assess these projects should be incorporated into the City's *Pedestrian and Bicycle Transportation Plan Update*.

No language changes are recommended to Policy TR-57 at this time.

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Leveraging Other Project Plans

Policy TR-22

Incorporate pedestrian and bicycling improvements into roadway projects, and incorporate transit/high-occupancy vehicle improvements where feasible.

Current Staff Initiatives

The incorporation of non-motorized improvements into roadway projects occurs through the CIP process. All potential non-motorized projects are initially identified through the City's *Pedestrian and Bicycle Transportation Plan Update*. As CIP projects are designed, staff ensures that elements included in the *Pedestrian and Bicycle Transportation Plan Update* are incorporated into the overall scope of the CIP project. Examples of this process are the pedestrian and bicycle improvements being made as part of improvements to Lake Washington Boulevard (which provides a connection to the Newport Hills Park-and-Ride lot), Richards Road, 140th Avenue, and Kamber Road.

In addition to consideration through the CIP process, staff seeks out opportunities within planned improvements in the Pavement Overlay Program to determine where non-motorized facilities can be included as part of overlay projects. Finally, staff works with NEP staff to fund non-motorized projects (usually trails or sidewalks). Coordination with the Overlay Program and NEP are often funded through the Pedestrian Access Improvement Program, which has an annual fund of \$325,000.

Recommendation

No additional staff initiatives or language changes to Policy TR-22 are recommended at this time.

Policy TR-6

Locate new community facilities near major transit routes and in areas convenient to pedestrians and bicyclists.

Current Staff Initiatives

The new community facilities that have been approved in the past few years are the Bellevue Art Museum and the Environmental Education Center in Mercer Slough. As envisioned by Policy TR-6, both of these facilities have pedestrian and bicycle access. Further, the Bellevue Art Museum is very accessible by transit service.

Recommendation

Proceed with current approach to determining siting for community facilities. No language changes are recommended to Policy TR-6 at this time.

POLICY ELEMENT

Partnerships with Transit Providers

Policy TR-53b

Develop partnerships with the transit providers to implement projects identified in the Transit Neighborhood Links Study to provide better access to transit service. [Amended Ord. 5058]

Policy TR-58

Encourage transit use by improving pedestrian and bicycle linkages to the existing and future transit and school bus systems, and by improving the security and utility of park-and-ride lots and bus stops.

Current Staff Initiatives

The City is an active partner with King County and Sound Transit on the development and improvement of transit centers and park-and-ride lots. As a partner, the City makes recommendations to the transit agencies on ways to improve security, and maximize mobility and access. Examples include the Eastgate Park-and-Ride lot, and the Bellevue Transit Center.

For the Eastgate Park-and-Ride lot, the City was successful in getting the proposed garage relocated to allow for the bus drop off and waiting area toward the front, facing Eastgate Way. This provided a more open and secure location, and improved access for pedestrians and bicyclists. For the Bellevue Transit Center, the City was instrumental in developing a bicycle station and improved wayfinding as part of the overall project.

The City has completed a number of projects as a result of the Transit Neighborhood Links Study. One example is the bus stop/shelter located on the south side of NE 8th Street, east of 116th Avenue. Another project currently underway is the South Bellevue Park-and-Ride neighborhood link project. This project will provide for a pedestrian connection between the South Bellevue Park-and-Ride lot, and the neighborhood to the west of 112th Avenue. Metro is a contributing partner to both of these projects.

With regard to access to school bus stops, the City works with the school districts in their role as a “transit provider” to make improvements where possible, within existing funds. One example is on NE 40th Street, west of 148th Avenue. In this case, the Bridle Trails neighborhood has requested that the City provide a pedestrian path on the south side of the roadway to allow students to safely reach their bus stop. The City is using the Pedestrian Access Improvement Program to fund this project. This project is scheduled to be built Fall 2002.

Recommendation

No additional staff initiatives or language changes to Policies TR-53b and TR-58 are recommended at this time.

POLICY ELEMENT

Transportation Demand Management

Comprehensive Plan policies related to Transportation Demand Management are examined here in the following areas:

- Commute Trip Reduction and Parking Management
- Marketing and Outreach to Promote Transit Alternatives

Commute Trip Reduction and Parking Management

Policy TR-8

Coordinate with other Eastside jurisdictions, the private sector, and the transit provider to develop and implement uniform or compatible transportation demand management regulations and strategies that are consistent with and which implement the state Commute Trip Reduction Act and address the following factors:

- Parking;
- Services to increase high-occupancy vehicle use;
- Demand management program elements, including incentives; and
- Reporting, monitoring, and performance evaluation standards.

Policy TR-9

Require large employers to implement a commute trip reduction program for employees, as mandated by the Commute Trip Reduction Act. Evaluate program effectiveness every two years and, in coordination with other Eastside jurisdictions, lower the employer threshold, if needed, to achieve the City's goals for reducing use of single-occupant vehicles.

Policy TR-10

Work with other jurisdictions in King County to establish and implement compatible programs to limit the supply of commuter parking for single-occupant vehicles. Consistent with the Countywide Planning Policies, introduce parking pricing techniques to discourage single-occupant vehicles, such as:

- Establish methods to charge for parking single-occupant vehicles;
- Impose a parking tax, through state-enabling legislation; and
- Provide tax incentives and other credits to employers, which eliminate employee parking subsidies.

Current Staff Initiatives

The City's efforts to increase transit ridership through parking policies are reflected in the Commute Trip Reduction Ordinance and the Traffic Standards Code.

The Commute Trip Reduction Ordinance requires employers who employ more than 100 employees to implement a trip reduction program. The program requires employers to reduce the percentage of employees that commute using single-occupant vehicles. The City

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assists Bellevue-area employers in meeting their trip reduction goals by offering technical assistance, incentives, and public information.

The City of Bellevue Traffic Standards Code currently requires developers to implement transportation management programs to reduce use of single-occupant vehicles. To achieve a reduction in single-occupant vehicle driving, a program may include the following elements: (i) An information kiosk that posts transit and ridesharing information; (ii) Preferential parking for carpools and vanpools; (iii) Financial incentive for ridesharing; (iv) Guaranteed ride home; and/or (v) Employee transportation coordinator.

Recommendation

With regard to parking policies and related incentives for new development, as part of the Development Manual Update process, staff is proposing to include a new initiative in section 14.60.070 that would require developers to provide 50 percent discounted parking for carpool and vanpool participants. Also, a financial incentive equal to at least the current value of a one-zone KCM transit pass (\$54 per month) would have to be offered to carpool and vanpool participants.

The City has not undertaken strategies outlined in the above Comprehensive Plan that create economic disincentives for development of parking or use of SOVs (i.e., higher parking prices for SOV vehicles). Additionally, assessment of possible lowering the CTR threshold has not been evaluated. As such, it is recommended that additional consideration and assessment of parking policies is undertaken to support these Comprehensive Plan directives:

- 1) Conduct a study to assess the parking needs in the area and alternative policy options available (including an assessment of: methods to charge for parking single-occupant vehicles; a parking tax through state-enabling legislation; and tax incentives and other credits to employers that eliminate employee parking subsidies).
- 2) Develop a comprehensive parking policy and management plan.
- 3) Examine potential impacts of lowering CTR participation requirement on SOV usage as well as implementation impacts.

A final recommendation related to Parking Management in Bellevue is the creation of a “Ride Free Area” (RFA) in Downtown Bellevue. There is strong support for consideration of this initiative in the Bellevue business community. In response to this support, King County Metro is expected to provide a report to the Regional Transit Committee, by June 2003, which identifies the issues associated with (1) extension of the existing downtown Seattle RFZ, (2) implementation of a RFA for another Seattle urban neighborhood, and (3) implementation of a RFA in one or more suburban cities. Given that Bellevue is not explicitly identified in the scope of this report, the City should work with King County to ensure that this examination includes an assessment of a Downtown Bellevue RFA.

No language changes to Policies TR-8, TR-9, and TR-10 are recommended at this time.

POLICY ELEMENT

Marketing and Outreach to Promote Transit Alternatives

Policy TR-16

Promote increased citizen awareness of travel alternatives available for mid-day as well as commute trips.

Policy TR-73a

Work in partnership with transit providers to market and promote regional transit services [New Ord. 5247]

Current Staff Initiatives

During the past several years, the City has partnered with King County and Sound Transit to market and promote regional transit services. As part of the City's Transportation Demand Management activities, the City coordinated promotional efforts to improve awareness of transit services and increase transit ridership among commuters and residents.

The City administers several programs to help increase transit ridership. The programs include the Commute Trip Reduction program, the Residential Pass program, the Access Downtown Rideshare program, and the Bel-Red/Overlake Trip Reduction program. All of these programs offer incentives to commuters and residents for using public transit and ridesharing services. The City plans to continue and possibly expand these programs in the future.

In addition to the programs that the City administers, the City promotes regional transit services through various communication methods, which include the following activities:

- Publish the Bellevue Transit Map;
- Post information on the City's One Less Car web site;
- Print and distribute promotional posters and brochures;
- Conduct transportation fairs;
- Issue media releases.

Recommendation

To reflect the focus of the City's present outreach tasks accomplished under this policy directive, staff recommends modification of Policy TR-73a in the following manner:

Work in partnership with transit providers to market and promote regional transit services to commuters, residents, and employers. [New Ord. 5247]

No language changes to Policy TR-16 are recommended at this time.

POLICY ELEMENT

HOV/HCT Improvements

A number of Comprehensive Plan policies relate to expansion of state highway capacity especially in the area of HOV network development.

Policy TR-68b

Support completion of the regional HOV system. Work with state and regional agencies to improve HOV access to the freeway system and freeway-to-freeway HOV linkages at I-405/SR 520, I-405/I-90 and I-5/SR 520.

Policy TR-68d

Work with state and regional agencies to ensure adequate capacity for both general purpose and HOV traffic on state highways.

Policy TR-68f

Support multi-modal transportation solutions including general-purpose lanes, high-capacity transit, HOV lanes, transit and non-motorized improvements that use the best available technologies.

Policy TR-68g

Support options for the I-90 bridge to maintain general-purpose capacity and freight mobility and to provide for 24-hour two-way transit and HOV operations.

Policy TR-68h

Support High-Capacity Transit (HCT) facilities on I-90 and SR 520, with service to Downtown Bellevue included as an integral part of each option

In addition, related ROW preservation specific policies are addressed below.

Current Staff Initiatives

The primary efforts by the City in advancing these policies have been in its partnerships with the State and regional partners. For instance, Bellevue is working with Sound Transit and WSDOT to improve HOV access into Bellevue through Access Downtown and the Eastgate direct access project. Also, the City continues to be actively involved in the I-405 Corridor Program, the Trans-Lake Washington Project, and the I-90 Two-Way Transit/HOV Project. In all of these efforts, the City has been a strong supporter of multimodal transportation solutions: forging agreements for I-405 improvements that include HOV system completion, TDM and non-motorized improvements, advocating for the completion of the HOV system on I-90, and working toward a SR 520 solution.

Finally, the City has been at the forefront of other regional projects advocating for system improvements. Recent activities have included a lead role in shaping the Metro Six-Year Transit Plan, advocating for Sound Transit Phase 2 planning, as well as continuing to invest in multimodal solutions through its own CIP.

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Recommendation

No additional staff initiatives or language changes to Policies TR-68b, TR-68d, TR-68f, TR-68g, or TR-68h are recommended at this time.

ROW Preservation

Policy TR-72

Identify and preserve necessary right-of-way for regional transit facilities. [Amended Ord. 5058]

Current Staff Initiatives

The City recognizes that to ensure future expansion of the HCT network and to provide support to transit, ROW preservation needs to be undertaken in the near term.

In this regard, it is Sound Transit Phase 2 planning—scheduled to begin in Fall 2002—which will provide the mechanism for identifying necessary ROW for regional facilities. Corridor work has already identified potential new routes for regional transit in the SR 520 and I-90 corridors that may require the acquisition of ROW. The City has been actively involved in the pre-planning process for Phase 2 and will ensure it has a seat at the regional table throughout the process.

Recommendation

No additional staff initiatives or language changes to Policy TR-72 are recommended at this time.

Commuter Parking

As outlined in the Commuter Parking section of the Capital Element, existing capacity for park-and-ride and park-and-pool lots cannot presently meet forecast demands. The Comprehensive Plan does provide policies that reflect strategies for addressing these needs:

Policy TR-50

Work with the transit providers to maintain and improve public transportation services to meet employer and employee needs. Develop and implement attractive transit commuter options, such as park-and-ride facilities and local shuttle systems with sufficient frequencies to increase use of transit for commuting and reduce reliance on private automobiles. [Amended Ord. 5058]

Policy TR-70b

Provide a safe system of park-and-ride and park-and-pool lots to serve activity centers in the region and on the Eastside to:

- Intercept trips by SOV closer to the trip origins,
- Reduce traffic congestion, and
- Reduce total vehicle miles traveled. [Previously Policy TR-68 Ord. 5247]

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Policy TR-70d

Encourage transit providers and the State to provide new and expanded park-and-ride lots to adequately serve City residents and to develop additional capacity outside Bellevue at other strategic Eastside locations to serve outlying residents. [New Ord. 5247]

In addition, leased lot specific policies are addressed below.

Current Staff Initiatives

The City of Bellevue has been very active in underscoring the present need for the development of additional Commuter Parking options for Bellevue residents and commuters in the region. This commitment has been reflected in the City's collaboration with the region's transit providers, including expansion of the Eastgate Park-and-Ride and participating in the *King County Park-and-Ride Demand Estimation Study* (December 2000) that identified the long-range park-and-ride needs for the county.

Within the Capital Element of this plan, it is recommended that Bellevue continue to consider expansion of existing park-and-rides, as well as potential development of new permanent park-and-rides to serve commuter demand. Additionally, the Commuter Parking section outlines specific actions for increasing park-and-pool lots to address near term demand issues.

Recommendation

Move forward with Capital Element recommendations. Actively consider permanent park-and-ride options and opportunities for expanding leased lot capacity.

No language changes are recommended at this time to Policies TR-50, TR-70b, or TR-70d.

Leased Lot Development

Policy TR-70e

Work with transit providers and local property owners to develop new leased park-and-ride lots. [New Ord. 5247]

Current Staff Initiatives

This policy specifically underscores the use of leased parking (i.e. non-permanent park-and-ride lots) for addressing commuter demand. The Commuter Parking section of the Capital Element outlines considerations for the expansion of park-and-pool capacity and opportunities for streamlining the permit process in this regard.

Recommendation

Move forward with Capital Element recommendations: actively consider opportunities for expanding leased lot capacity including streamlining of permitting process. No language changes are recommended to Policy TR-70e at this time.

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Partnerships

The City of Bellevue has taken a leadership role in developing a transit-oriented strategy for addressing its transportation needs. In this regard, it recognizes the role of partnerships in realizing Bellevue's vision for its transit network. Comprehensive Plan policies related to partnering in the following areas are examined here:

- Working with Developers
- Working with Transit Partners
- Working with Sound Transit

Working with Developers

Policy TR-7

Incorporate transit-supportive and pedestrian-friendly design features in new development through the development review process. Examples include the following:

- Orient the major building entries to the street and closer to transit stops;
- Avoid large surface parking areas between the building frontage and the street;
- Provide pedestrian pathways that minimize distances to activities and to transit stops;
- Where feasible, cluster major buildings within developments to improve pedestrian and transit access;
- Provide weather protection in key areas, such as covered walkways or arcades connecting buildings in major developments, and covered waiting areas for transit and ridesharing;
- Design for pedestrian safety, including adequate lighting and paved, hazard-free surfaces;
- Provide bicycle connections and secure storage convenient to major transit facilities;
- Use design features to create an attractive, interesting pedestrian environment that will stimulate pedestrian use;
- Design transit access into large developments, considering bus lanes, stops, and shelters as part of the project design; and
- Encourage the availability of restrooms for public use.

Policy TR-13

Require new development to incorporate physical features designed to promote use of alternatives to single-occupant vehicles, such as:

- Preferential parking for carpools and vanpools;
- Special loading and unloading facilities for carpools and vanpools;
- Transit facilities, including comfortable bus stops and waiting areas, adequate turning room, and where appropriate, signal preemption and queue-jump lanes; and
- Bicycle parking and related facilities.

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Policy TR-53a

Work with private developers and transit providers to integrate transit facilities and pedestrian and bicycle connections into residential, retail, manufacturing, commercial office, and other types of development. [Amended Ord. 5058]

Current Staff Initiatives

These design features are being implemented now through the City's Land Use Code regulations and the design review process. Staff works with the Development Review group to make recommendations for inclusion of non-SOV supportive elements. Through this process, staff reviews submitted pre-applications for development and considers site plans. Among other efforts, site plans are compared with the *Pedestrian and Bicycle Transportation Plan Update* to shape recommendations for improvements such as sidewalks, setbacks for future bicycle lanes, creating more direct connections from the street or bus stop to the building entrance, and inclusion of bicycle racks.

Recommendation

At this point, staff has been active in reviewing plans and recommending changes; however, a system does not presently exist for assessing the impact of these recommendations. The Development Review group uses the recommendations to work with the developers on an individual basis, but the final results are not consistently relayed back to staff. The establishment of a post-recommendation assessment process—whether via semi-regular meetings with the Development Review group on this topic or review of final plans—would help shape future efforts in this area by outlining what types of recommendations and drivers for such recommendations (regulatory requirements or incentive based) have been successful.

Other recommendations for changes in the Development Manual have been included in other sections and include the following:

- Staff intends to use the guidelines in the *Pedestrian and Bicycle Transportation Plan Update* to improve implementation of policies on provision of bicycle connections and secure bicycle storage convenient to major transit facilities.
- Reexamine the parking provisions of the Land Use Code to include preferential parking and special loading and unloading facilities for carpools and vanpools.
- Develop criteria for the amount of bicycle parking that is needed for specific uses.

No language changes to Policies TR-7, TR-13, and TR-53a are recommended at this time.

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Working with Transit Partners

Policy TR-47

Work with the transit providers to implement Bellevue's transit vision. Plan to make transit an attractive travel option for local residents, employees, businesses, and users of regional facilities. [Amended Ord. 5058]

Policy TR-53

Work with the transit providers to create, maintain, and enhance a system of supportive facilities and systems such as transit centers, passenger shelters, park-and-ride lots, bus queue by-pass lanes, bus signal priorities, pedestrian and bicycle facilities, pricing, and incentive programs. [Amended Ord. 5058]

Policy TR-86

Support joint projects, including the contribution of City matching funds, with adjoining cities, unincorporated King County, the transit provider, or the state, where such partnerships may help establish or accelerate a project beneficial to the City.

Current Staff Initiatives

The City has been very active in partnering with its transit providers in the areas of capital and service development. Further, the development of the *Bellevue Transit Plan* reflects the close relationship between Bellevue and the transit providers to help shape the overall transit vision for the City.

Project-specific efforts jointly undertaken by Bellevue and its transit partners have been referenced throughout this Plan including: use of ADA grant funds to construct shelters, implementation of TSP projects on NE 8th, and numerous TDM initiatives.

Recommendation

Bellevue should continue its active role in the region and in creating opportunities for partnership with its transit providers. No language changes to Policies TR-47, TR-53, or TR-86 are recommended at this time.

Policy TR-70

Secure a share of regional transit system facilities and service priorities for Bellevue residents proportional to the City's contributed share of regional transit revenues. [Amended Ord. 5058]

Current Staff Initiatives

Among the other goals for development of the *Bellevue Transit Plan* has been supporting this policy and outlining the types of investments that should be made. An example of Bellevue's success in this area has been the increased level of Metro service included in the latest six-year plan update.

Previously, resources for new bus service was allocated to Metro Transit's three subareas—Seattle/North County, South County, and Eastside-based on populations. In the latest

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update, the active involvement of the Bellevue City Council and staff has resulted in an allocation formula that increases the overall Eastside share by 43 percent—40 percent of new service versus 28 percent in the last planning process. These additional service hours for the Eastside will result in buses running more frequently on Bellevue's streets, thus enhancing the opportunity for citizens to choose transit as an alternative to driving.

Recommendation

Bellevue should continue its active role in securing its fair share of transit improvements for the City and the region. Areas where this role has been and will continue to be critical is shaping the allocation of Sound Transit's unanticipated revenues, responding to any adjustments in Sound Transit's Phase 1 planning horizon, and development of Sound Transit's Phase 2 plan.

No language changes to Policy TR-70 are recommended at this time.

Working with Sound Transit

Policy TR-69

Participate actively in Sound Transit Phase 1 efforts to develop and implement the regional transit system. Work to ensure that Eastside services and facilities are high priorities for system implementation, including direct HOV access to Downtown Bellevue and the Eastgate Park-and-Ride lot, and expansion of the Bellevue Transit Center. [Amended Ord. 5058, 5247]

Current Staff Initiatives

Bellevue has been very active in supporting the initiatives outlined in this policy. With regard to the specific project identified, Bellevue is working with Sound Transit and WSDOT to improve HOV access into Bellevue through the Access Downtown Project and the Eastgate direct access project. Development of the Eastgate Park-and-Ride lot is being coordinated with development of the direct access ramp. Bellevue Transit Center will be complete in Fall 2002. At this point, all Eastside Phase 1 service and capital investments are expected to be complete by 2006, the present envisioned end of Phase 1.

Recommendation

Bellevue should continue its active role in shaping Sound Transit's Phase 1 planning, especially in light of potential extension of Phase 1. No language changes to Policy TR-69 are recommended at this time.

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Policy TR-69a

Provide regional leadership for Sound Transit Phase 2 planning efforts. [New Ord.5247]

Current Staff Initiatives

Bellevue has been very involved in laying the groundwork for the Phase 2 planning process. Bellevue began advocating for the initiation of Phase 2 planning in 2000, directly through Sound Transit staff, the Sound Transit Board, through ETP, and via major corridor studies such as SR 520, I-90 and I-405. City staff, with City Council endorsement, has developed a conceptual workplan for Phase 2 and has recruited support from several other jurisdictions. Phase 2 planning is scheduled to begin in Fall 2002.

Recommendation

Bellevue should continue its active role in the development of Sound Transit's Phase 2 plan. No language changes to Policy TR-69a are recommended at this time.

Service Planning

The Service Element of this plan has been shaped and influenced by a number of Comprehensive Policies:

Policy TR-48

Work with the transit providers to establish a hierarchy of transit services focused on three major elements:

- Neighborhood Services
- Local Urban Service
- Inter-Community and Regional Services [Amended Ord. 5058]

Policy TR-49

Work with the transit providers to establish transit hubs at activity areas in the City. Strategic locations for transit hubs include Downtown Bellevue, Crossroads, Eastgate and Factoria. Direct the most intensive levels of transit service to the designated transit hubs, which have been strategically located in the designated Urban Center and Activity Centers of Bellevue. Work with the City of Redmond to establish a transit hub at Overlake. [Amended Ord. 5058]

Policy TR-70a

Work with transit providers to maintain and expand direct and frequent regional bus routes to support the City's land use and mode split goals. [New Ord. 5247]

Policy TR-70c

Increase the frequency of transit serving the permanent park-and-ride lots in the I-90 corridor to better balance commuter usage of the lots. [New Ord. 5247]

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Policy TR-73

Integrate local transit services and facilities with the regional transit services and facilities and modes serving Bellevue and the Eastside. [Amended Ord. 5058, 5247].

Policy TR-76a

Provide regional leadership in evaluating the potential for high-capacity transit to be successful on the Eastside. [Amended Ord. 5058, 5247]

Policy TR-76b

Work with Sound Transit to ensure that any HCT service to and within the Eastside serves Downtown Bellevue as the major hub of the Eastside. [New Ord. 5247]

Policy TR-76c

Work with Sound Transit to ensure that HCT services to Downtown Bellevue are provided at levels commensurate with services provided to other urban centers. [New Ord. 5247]

Current Staff Initiatives

These directives and related Council interest statements drove the Service Element of the *Bellevue Transit Plan*. Among other things, the Service Element makes several recommendations including:

- Increasing the span of service and service frequency to better support the City's growth and development
- Improving connectivity between Bellevue and other major Eastside destinations, activity centers, and regional centers
- Improving downtown service circulation and coverage
- Supporting coordination of Sound Transit and Metro services to meet Bellevue transit service goals

In this regard, the Service Element also established a hierarchy of transit services focused on three major elements: (i) Bellevue-Bellevue connections; (ii) Bellevue-Eastside connections; and (iii) Bellevue-Regional connections.

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Recommendation

Continue to move forward with the recommendations of the Service Element. In addition, modify the language of Policy TR-48 to reflect definitions included in the Service Element:

Work with the transit providers to establish a hierarchy of transit services focused on three major elements:

- Bellevue-Bellevue Connections
- Bellevue-Eastside Connections
- Bellevue-Regional Connections

No other policy language changes are recommended at this time.

Funding

As outlined in the financing section of the Capital Element, the level of readily available resources for improvements to the transit service network in Bellevue is limited and cannot support all the potential projects identified within the Capital Element. In recognition of this lack of resources for transportation, it is necessary to revisit some Comprehensive Plan policies.

Policy TR-17

Support establishment of federal and state gasoline taxes at levels, which provide a disincentive for use of single-occupant vehicles, and use the proceeds to fund increased transit and other travel alternatives.

Current Staff Initiatives

Within this policy, the City's primary concern is creating funding for transportation improvements. As such, Bellevue's present legislative agenda includes supporting initiatives that establish federal and state gasoline taxes at levels that will provide adequate funding for transportation improvements that keep pace with our region's and community's growth.

Recommendation

In light of the focus on funding shortfalls in transportation projects, the following modification of Policy TR-17 is recommended:

Support establishment of federal and state gasoline taxes at levels to provide adequate funding for transportation improvements that keep pace with our region's and community's growth.

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Policy TR-86

Support joint projects, including the contribution of City matching funds, with adjoining cities, unincorporated King County, the transit provider, or the state, where such partnerships may help establish or accelerate a project beneficial to the City.

Current Staff Initiatives

The City of Bellevue recognizes the value of partnerships for bringing projects to fruition. There are a number of examples of funding partnerships including the development of two Transit Signal Priority projects on NE 8th in Bellevue.

Recommendation

No language changes to Policy TR-86 are recommended at this time.

Roadway Network Policies

Bellevue's street system has to be able to support transit as well as private auto and commercial traffic. As such, the City also considers transit when applying street system policies.

Policy TR-39

Classify City streets according to their function, so that needed traffic capacity may be preserved, and planned street improvements will be consistent with those functions.

Current Staff Initiatives

As part of the development of the *Bellevue Transit Plan*, transit corridors classifications have been developed to provide an objective framework for prioritizing of transit projects outlined in the plan. This is included in Appendix H of the Capital Element.

Recommendation

Continue to use the developed transit corridor classification in evaluating transit-related projects as well as in consideration of land-uses adjacent to transit corridors. No language changes to Policy TR-39 are recommended at this time.

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Policy TR-34

Observe the following guidelines in adopting and revising arterial level of service standards by Mobility Management Area:

1. Reflect the availability of alternative travel options and community goals that may be as important as managing congestion, such as goals for land use, neighborhood protection from wider streets, or economic vitality. For example, allow more congestion in some areas of the City under the following conditions:
 - In return for stronger emphasis on transit, walking, and other alternatives to the single-occupant vehicle, and
 - Where the impacts of wider streets are judged to be worse than the congestion they are designed to solve.
2. Establish roadway levels of service adequate to prevent system failure and to protect residential neighborhoods from cut-through traffic.

Current Staff Initiatives

Bellevue staff is conducting the Eastside Concurrency Study that is exploring opportunities to allow more congestion in some areas of the City in return for stronger emphasis on transit, walking, and other alternatives to the single-occupant vehicle.

Recommendation

No additional staff initiatives or language changes to Policy TR-34 are recommended at this time.

Transit System Planning

With regard to overall planning of the transit system, Bellevue recognizes that transit needs to be incorporated with existing and planned land-uses as well as adjacent neighborhoods.

Policy TR-76

To promote transit use and achieve land use objectives, transit system planning shall include:

- Provision of supportive land uses, including mixed use and night-time activities;
- A safe, pedestrian-friendly environment, with restrictions on auto access;
- Integration of multiple access modes, including buses, carpools and vanpools, bicycles and pedestrians;
- Urban design and community character;
- Protection of nearby neighborhoods from undesirable impacts; and
- Potential transit-oriented development opportunities with the private and public sectors. [Amended Ord. 5058, 5247]

Current Staff Initiatives

The Downtown Subarea Plan and Downtown Implementation Plan, which are being updated, encourage mixed use and nighttime activities and other transit-oriented

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development. The West Lake Hills Neighborhood Investment Strategy (NIS) examined the area's community character and made recommendations to reinforce its character.

Bellevue will initiate study of transit-oriented development (TOD) outside of the Downtown area.

Recommendation

Recommended staff initiatives in support of this policy:

- 1) Continue to construct and upgrade sidewalks in neighborhoods where they fit the neighborhood's character and provide access to transit stops.
- 2) Examine opportunities for transit-oriented development when updating the Eastgate and Crossroads Subarea Plans.
- 3) If additional NIS's are funded in the future, they should examine providing access to transit in ways that strengthen the neighborhood's character.
- 4) Continue to look for opportunities for stronger midblock pedestrian connections in the Downtown.

Proposed language change to Policy TR-76 to better reflect the policy's intent:

To promote transit use and achieve land use objectives, planning shall include consideration of:

- Provision of supportive land uses, including mixed use and nighttime activities;
- A safe, pedestrian-friendly environment, with restrictions on auto access;
- Integration of multiple access modes, including buses, carpools and vanpools, bicycles and pedestrians;
- Urban design and community character;
- Protection of nearby neighborhoods from undesirable impacts; and
- Potential transit-oriented development opportunities with the private and public sectors.

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Conclusions

As outlined in this chapter, the City has undertaken a number of initiatives to support the Comprehensive Plan's vision for transit in Bellevue. However, this chapter also provided suggested additional policy strategies and language changes that the City should consider to ensure its continued support its transit vision. Table XVII-1 provides a reference of specific Comprehensive Plan policies where additional staff initiatives of language changes have been proposed.

**Table XVII-1
Policy Summary**

Policy Reference Number	Additional Staff Initiative	Suggested Language Change
Policy TR-7	x	
Policy TR-8	x	
Policy TR-9	x	
Policy TR-13	x	
Policy TR-17		x
Policy TR-39	x	
Policy TR-48		x
Policy TR-50	x	
Policy TR-53a	x	
Policy TR-57	x	
Policy TR-70	x	
Policy TR-70b	x	
Policy TR-70d	x	
Policy TR-70e	x	
Policy TR-73a		x
Policy TR-76	x	x