BELLEVUE TRANSIT BRIEFING REPORT



CITY OF BELLEVUE October 2012

Transportation Department



CONTENTS

Introduction
Bellevue Transit Status Report 7
Transit Master Plan Forum Report 23
Transit Improvement Survey Report 47
Transit Network Profile 69
Formal Letters 105
Service Element Scope of Work 113



INTRODUCTION

The Transit Briefing Report represents an important reference document for the Bellevue Transit Master Plan (TMP) process as work progresses in developing a transit service vision. This report is a compilation of the following documents produced in support of the TMP.

- Bellevue Transit Status Report Details the service and infrastructure improvements completed since the adoption of the 2003 Bellevue Transit Plan and highlights transit usage levels and unmet needs in Bellevue that will be taken into account in the TMP process.
- Transit Master Plan Forum Report Summarizes the major themes expressed by members of the Transportation, Planning, Arts, and Human Services Commissions and the Parks and Community Services

PHOTO BY John Tiscornia

Board at an event held on September 18, 2012. The Executive Summary is attached; the entire report (122 pages) can be found at: http://www.bellevuewa.gov/pdf/ Transportation/TMP_Forum_Full_Report.pdf

- Transit Improvement Survey Report Identifies the opinions of current transit riders, former transit riders, and non-riders in Bellevue regarding service quality and priorities (feedback from 4,252 people who took an online questionnaire between February and March 2012). The Executive Summary is attached; the entire report (338 pages) can be found at: http://www.bellevuewa.gov/pdf/Transportation/TIS_Summary_Report.pdf.
- Transit Network Profile Evaluates the transit system operating in Bellevue. The Executive Summary is attached; the entire report (473 pages) can be found at: http://www.bellevuewa.gov/pdf/Transportation/BellTransit NetworkProfile2012Final.pdf.
- 5. Formal Letters Two formal letters were received from Seattle Children's Hospital and Mr. James MacIsaac. These two letters are part of a growing list of letters received from other organizations including: Friends of Youth, AtWork!, Bellevue College, Senior Services, HopeLink, and the Bellevue School District. These other letters are compiled in Appendix D of the Phase I Outreach Report which can be found at: http://www.bellevuewa.gov/pdf/ Transportation/061112_TransitPlanTechAppendix.pdf
- 6. Service Element Scope of Work Defines the Service Element the first phase of the overall Transit Master Plan process. This document describes the project background, approach, scope of work, budget, and schedule for an Agreement ("Agreement") between the City of Bellevue ("City") and Nelson\Nygaard ("Consultant") for transit service consultant services in support of the Bellevue Transit Master Plan.

SECTION 1: BELLEVUE TRANSIT STATUS REPORT

BELLEVUE TRANSIT STATUS REPORT



CITY OF BELLEVUE October 2012

Department of Transportation

STATUS REPORT

On June 2, 2003 the Bellevue City Council adopted the Bellevue Transit Plan (see Figure 1). The 2003 Plan was a major step forward in articulating what improvements are needed in transit service and capital investments throughout Bellevue and served as an important reference document for collaborations with the City's transit service providers. The service and capital partnerships resulting from this vision have enhanced transit's role in Bellevue.

INFRASTRUCTURE IMPROVEMENTS

Since the adoption of the 2003 Bellevue Transit Plan, hundreds of millions of dollars in HOV access ramps, transit centers, park-and-ride lots, and speed and reliability projects were completed in Bellevue in support of transit operations. Figure 2 on page 4 reflects the array of transit capital projects completed since 2003 including:

 Bellevue Transit Center – In 2003, Sound Transit expanded the Bellevue Transit Center to include ten bus bays, shelter improvements and rider amenities. Additional bus stops and roadway improvements on 108th Avenue NE, 106th Avenue NE and east of the transit center on Northeast Sixth Street have improved transit and traffic flow in downtown Bellevue and enable more than 100 buses during peak periods to move efficiently through the transit center. *Total funding: \$16 million.*



Figure 1 The Bellevue Transit Master Plan builds on the successes of the City's 2003 Transit Plan by positioning the City to leverage partnerships with regional transit agencies to enhance the existing bus system.



Eastgate Park & Ride Expansion





I-90 Two-Way Transit HOV





Eastgate Direct Access Ramp



Access Downtown

Bellevue Transit Center

RapidRide B Line

Figure 2 Looking to the future, these capital projects in support of transit will be dwarfed by the upcoming investment in the East Link light rail extension from Seattle to Bellevue.

- Eastgate Park & Ride In 2004, King County expanded the Eastgate Park & Ride from a 696 stall facility to a structured complex that can accommodate 1,646 vehicles. In spite of the large number of parking spaces, the Eastgate Park and Ride is already at capacity with a utilization ratio of 97 percent (Second Quarter 2012). *Total funding:* \$27 million.
- Bellevue HOV Access Project (Access Downtown)

 Completed in 2005, the Bellevue Access HOV project makes it easier to travel in an out of downtown Bellevue from the freeway. The project provides a new interchange on I-405 at Northeast Sixth Street for buses and carpools, giving buses direct access to the expanded Bellevue Transit Center. It improves freeway interchanges at NE 4, NE 8, and SE 8 streets including improvements to nearby city street intersections. *Total funding:* \$144 million.
- Eastgate Transit Access Ramps WSDOT and Sound Transit partnered in 2006 to complete the Eastgate Transit Access to connect the existing 142nd Place SE bridge to the I-90 HOV lanes. The addition of two ramps (one on the east and one on

the west side of I-90) allows a direct connection for bus and HOV users to 142nd Place SE and the Eastgate Park and Ride without having to cross the general lanes to exit the highway. *Total funding:* \$19 *million*.

- I-90 Two-Way Transit & HOV Operations -• WSDOT and Sound Transit are working together to improve on-time reliability and access for transit and HOV on I-90. The project will provide full-time HOV lanes for eastbound and westbound traffic on the outer I-90 roadways and will retain the existing reversible lane operations in the center roadway until East Link light rail construction is ready to begin. HOV direct access on- and offramps will enable buses and carpools to access the HOV lanes without crossing other lanes of traffic. The project is being implemented in three stages; stages 1 and 2 were completed in 2008 and 2012 respectively. The third and final stage is in design; 2015 is the expected completion date on construction. Total funding: \$188 million.
- RapidRide B King County Metro's RapidRide B Line started running between the Downtown Bellevue and Redmond Transit Centers via Crossroads and Overlake in 2011. Customers enjoy enhanced frequencies (service at least every 10 minutes during the busiest morning and evening travel hours and 15 minute service during off-peak periods), real time bus arrival signs, well-lit shelters, and speed and reliability enhancements offered by transit signal priority (TSP) improvements that helps synchronize traffic signals with an approaching RapidRide bus.

SERVICE IMPROVEMENTS

Since the completion of the 2003 Bellevue Transit Plan, a number of significant service improvements have been made between Downtown Bellevue,



Figure 3 Central Eastside All-Day Transit Service (Effective October 2011). Crossroads, Eastgate, and Factoria. Today, these centers enjoy more frequent service – depicted in Figure 3 as blue lines – operating approximately every 15 minutes during most portions of the day. Other All-Day service routes – depicted as green lines – operate approximately every 30 minutes during most portions of the day. The additional service means that buses today run more frequently on City streets, enhancing the opportunity for Bellevue residents to choose transit as an alternative to driving and providing greater access to those who do not drive.

Enhancements to transit service span, frequency, and coverage on the Eastside have been reinforced with improved cross-lake service enhancements. In support of SR-520 tolling in 2011 the region set in motion the Lake Washington Urban Partnership Agreement that added 130 bus trips to routes on SR-520 for a total of 700 every weekday.

TRANSIT USAGE

Increased usage of transit is correlated to the numerous investments aimed at improving travel options in Bellevue. Public transportation ridership in Bellevue has grown steadily (see Figure 4) since the adoption of the 2003 Plan; average weekday transit ridership in Bellevue rose from 21,900 (in 2003) to 40,250 (in 2011), an 84 percent increase.

Ridership gains (2003 to 2011) are seen in all of Bellevue's mobility management areas (see Figure 5 on page 8). For example, average weekday ridership increased by 232 percent in Eastgate, 110 percent in Downtown Bellevue, 80 percent in Crossroads, and 23 percent in Factoria.

Additional information on transit usage to Downtown Bellevue is found in the **2011 Mode Share Survey for Downtown Summary Report**: (i) 17% of commute trips to Downtown occur via transit; (ii) 25% of Downtown workers report that they commute by transit to Downtown, at least occasionally; (iii) 32% of



Figure 4 Average weekday transit boardings and alightings in the City of Bellevue (Fall 2003 to Fall 2011).



Figure 5 Average Weekday Transit Ridership in Bellevue's Mobility Management Areas (2003-2011).

V:\tr\arcgis\planning\Transit\transit_ridership_mma_trends_8x11.mxd

commuters coming from Seattle report using transit one or more time in the previous week; (iv) 16% of commuters coming from within Bellevue report using transit one or more time in the previous week; and, (v) 21% of commuters coming from the north (Kirkland, Snohomish County) report using transit one or more time in the previous week.

UNMET TRANSIT NEEDS

While the major activity centers in Bellevue enjoy more frequent service than they did in 2003 many areas of Bellevue are not well served by transit. Figure 6 presents a color coded map depicting areas of Bellevue with unmet transit needs (in red). This "TransitScore" map, developed by the popular website WalkScore, depicts a "usefulness value" based on frequency, type of route (rail or bus) and the distance to the nearest stop on the route. It calculates a transit score (0 to 100) based on how well the area is served by public transit. The map and data illustrates the fact that residents and employees in Seattle have more transit options than those in Bellevue and elsewhere in the region.

Despite recent transit improvements, there is more that can be done to provide better travel options in Bellevue. In fact, public support for transit consistently ranks the highest across an array of transportation strategies on how to handle traffic and congestion in Bellevue.

The **2012 Budget Survey Report** (see Figure 7) found that most Bellevue residents agree that the city should work with regional transit agencies to improve local and regional public transportation serving Bellevue. Three out of five (61%) residents strongly agree with this strategy. With just under half (46%) agreeing, the idea of creating additional capacity by widening the roads received only modest support.

CHANGING TRANSIT LANDSCAPE

The Transit Master Plan (TMP) project (an update of the 2003 Bellevue Transit Plan) will allow Bellevue to build on the successes that followed the implementation of the previous plan. While the 2003 Plan provided a useful framework for engaging with transit agencies, the plan is nearly ten years old and in need of an



Figure 6 The TransitScore for Bellevue is 39 (described as "Some Transit – A few nearby public transportation options") while Seattle enjoys a TransitScore of 59 (described as "Good Transit – Many nearby public transportation options").



Figure 7 Initiating the Transit Master Plan responds to strong public support for transit in Bellevue. This is a recurring message in the current and all previous budget survey efforts documenting the priorities of Bellevue residents.



Figure 8 The TMP reviews Bellevue's "geographic value" thereby aligning it with Metro's focus on creating a more efficient and productive transit system in accordance with its new Strategic Plan and associated service guidelines.

APIDRIDE



Figure 9 The recession that began in 2008 has led to shrinking sales tax revenues, which accounts for 62% of Metro's operating revenue.

update. The following are some notable changes in Bellevue and the region that will be taken into account in the TMP process.

- Regional Policy Changes In 2010, the King County Council formed the Regional Transit Task Force (RTTF) to develop a policy framework to guide service investments or, if necessary, service reductions. The RTTF identified short term and long-term objectives for transit service investment and developed policy guidance for service implementation based on those objectives. Among the most significant changes was the elimination of the 40/40/20 formula approach to expending new operating dollars in three King County geographic subareas: South King County (40%), East King County (40%), and Seattle/Shoreline (20%). The new policy framework outlined in King County Metro's Strategic Plan for Public Transportation (2011-2021) emphasizes that service reduction and service expansion decisions be made based on the following priorities: productivity, social equity, and geographic value (see Figure 8).
- Financial Uncertainties The Bellevue Transit Master Plan is timely in the current environment where King County Metro's financial outlook is uncertain, and service cuts and fare hikes are a real possibility. By approving a temporary \$20 vehicle license fee in 2011 to supplement declining revenues (see Figure 9), the King County Council prevented dramatic cuts to transit service in late 2011 and 2012 that would have been necessary to deal with operating fund shortfalls. This funding measure allowed Metro to avoid deep service cuts in 2012, but does not fully address longerterm financial challenges. Given this financial uncertainty, the TMP develops a transit service vision for Bellevue that makes better use of the region's limited resources as efficiently and effectively as possible.



- East Link The 2003 Bellevue Transit Plan did not take into account the 2008 voter-approved Sound Transit 2 (ST 2) Plan to extend light rail (LRT) from Seattle, across Lake Washington on Interstate 90, through Bellevue and on to Overlake Transit Center in Redmond (see Figure 10). The TMP process will analyze local transit connections to the LRT trunk to ensure that service is best configured to maximize access and connections.
- Evolving Land Use Vision As Bellevue grows and matures, TMP strategies will become increasingly important to supporting the transportation system and level-of-service standards in Bellevue's Comprehensive Plan. It will incorporate local land use plans that have been approved since the previous transit plan was adopted in 2003. Planning changes include the updated Bel-Red Subarea Plan (see Figure 11), the Wilburton

Figure 10 Before construction begins in 2015 on EastLink, Sound Transit must finalize the route design, stations, construction methods and mitigation. East Link is projected to begin service in 2023.



Figure 11 Transit reinforces Bellevue's Downtown and the Bel-Red and Eastgate/I-90 corridors as economically vibrant focal points that serve as gateways to the city of Bellevue.



Figure 12 Considering the range of ways that transit engages with some of the most pressing challenges of our time, support for transit is likely to increase in the future.

Subarea Plan and the Eastgate/I-90 Land Use and Transportation Project. The Downtown Transportation Plan Update is currently under development and will also be coordinated with the TMP.

Evolving Transportation Vision – As Bellevue's population is projected to grow by approximately 28,000 residents and 48,000 jobs by 2030, the increased demand from growth could outpace available transportation capacity. Enabling people to substitute single occupancy vehicle trips for transit trips has the potential to convey multiple public benefits such as: increased transportation options; improved safety for all road users; reduced growth of traffic congestion; decreased air, water, and noise pollution; support for climate change emission reduction goals; and stimulation of the local economy (see Figure 12).

Demographic Changes – The following trends in Bellevue contribute to increased demand for public transportation services: (1) High-tech employment increased by over 12 percent in the past decade signaling that the next generation of work force will be dominated by "knowledge workers" who tend to want more vibrant lifestyle centers supported by transit. (2) The number of 45 to 64 year olds increased by 57 percent since 1990 and the number of older adults by 34 percent. As baby boomers continue to age, the proportion of older adults in Bellevue requiring affordable travel options is expected to increase further. (3) The percentage of individuals in poverty increased between 1990 and 2010 going from 5.6% in 1990 to about 6.7% in 2010. According to the 2011-2012 Bellevue Human Services Needs Update more than one-third of survey respondents rated "inadequate public transportation" as a problem and 40% of respondents reported having difficulty "finding public transportation to get to work or other places." (4) About 35% of households spent 30 percent or more of their incomes on housing in 2010, up from 31 % in 2000 and 28 % in 1990. Transit helps residents balance their budgets by giving them the option to use their cars less or own fewer cars. A household with two working adults using public transportation can save more than \$9,743 annually compared to a similar family without access to transit.



"Other than having my daughters or friends take me places, transit is my main source of transportation."

> Marj Leidy Bellevue Resident

SECTION 2: TRANSIT MASTER PLAN FORUM REPORT

BELLEVUE TRANSIT MASTER PLAN FORUM



CITY OF BELLEVUE October 2012

Department of Transportation

THANK YOU!

The City of Bellevue would like to thank the following individuals who took the time to participate in the Transit Master Plan Forum:

Mayor Conrad Lee (Bellevue City Council) Councilmember Kevin Wallace (Bellevue City Council) Scott Lampe, Vice-chair (Transportation Commission) Vic Bishop (Transportation Commission) Tom Tanaka (Transportation Commission) John Carlson, Chair (Planning Commission) Diane Tebelius, Vice-Chair (Planning Commission) Hal Ferris (Planning Commission) Kevin Turner (Planning Commission) Pat Sheffels (Planning Commission) Jay Hamlin (Planning Commission) Aaron Laing (Planning Commission) Genevieve Tremblay, Vice Chair (Arts Commission) Arina Fateeva (Arts Commission) Kris Liljeblad (Arts Commission) Lynne Robinson, Chair (Parks & Community Services Board) Dallas Evans (Parks & Community Services Board) Stuart Heath (Parks & Community Services Board) Erin Powell (Parks & Community Services Board) Mark Van Hollebeke (Parks & Community Services Board) John Bruels, Chair (Human Services Commission) Michael Yantis, Vice-Chair (Human Services Commission) Stefanie Beighle (Human Services Commission) James McEachran (Human Services Commission) Olga Perelman (Human Services Commission) Janet Stout (Human Services Commission) Hannah Kimball (Citizen) Richard Englund (Citizen) Howard Katz (Citizen) Stephen Hunt (Citizen) Connie Adams (Citizen) Serwin Lee (Seattle Transit Blog)

CONTENTS

BACKGROUND	1
SUMMARY OF THEMES	4
APPENDIX	1

FIGURES

Figure 1, Photo 1
Figure 2, Forum Invitation
Figure 3, Photo
Figure 4, Photo
Figure 5, Photo
Figure 6, Photo
Figure 7, Photo
Figure 8, Photo
Figure 9, Photo
Figure 10, Photo
Figure 11, Photo
Figure 12, Photo

Neaknesses Doesn 4 connect naishborh

RANSE MASTER PLAN FORUM

BACKGROUND

On July 9, 2012 the Bellevue City Council initiated the Bellevue Transit Master Plan an update of the City's 2003 Transit Plan. To help guide the project, Council approved a set of project principles intended to provide direction over the course of the project (see Attachment A - Project Principles). Per Council direction, staff is broadening the Transit Master Plan engagement effort to allow for additional opportunities for informal discussions among representatives of the Transportation, Planning, Arts, and Human Services Commissions and the Parks and Community Services Board (see Figure 2 on next page). **Figure 1** Staff member, Tresa Berg, records information as Forum participants work through the challenges of providing for Bellevue's transit needs.

This report details the results from a Transit Master Plan Forum held on September 18 from 6:00 PM to 8:00 PM (see Attachment B - Forum Agenda). Bellevue Mayor Conrad Lee and Councilmember Kevin Wallace joined 24 Board and Commission members and six residents in a priority setting discussion that will inform the City's transit service vision.

Many of the Forum participants arrived early enough to consider the contents of presentation boards (see Figure 3) showing the results from the community outreach process, service level coverage, daily ridership, demographic characteristics, residential and employment density, transit facilities, speed and reliability projects, and changes in transit ridership since the previous 2003 Transit Plan (see Attachment C - Forum Presentation Boards).

At 6 PM, Mayor Lee welcomed Forum participants and thanked them for their willingness to help clarify the future role of transit in





Join Us!

Please join Bellevue city staff and your colleagues on Bellevue's Boards and Commissions in shaping the city's transit service vision.

On July 9, 2012 the Bellevue City Council initiated the Bellevue Transit Master Plan (TMP) an update of the City's 2003 Transit Plan.

Per Council direction, Bellevue staff will facilitate an informal discussion on transit among members of the Transportation, Planning, and Human Services Commissions and the Parks and Community Services Board.

WHAT:Transit Master Plan ForumWHEN:Tuesday, September 18 (from 6 to 8 PM)WHERE:City Hall (Conference room 1E-108 and 1E-113)

We look forward to seeing you there!

For more information contact: Franz Loewenherz, Senior Transportation Planner, floewenherz@bellevuewa.gov 425-452-4077 Visit our project website: http://www.bellevuewa.gov/bellevue-transit-plan.htm

Figure 2 Formal invitations were distributed to Bellevue Board and Commission members who were briefed in advance of the Transit Master Plan Forum at their regularly scheduled meetings.

Bellevue (see Figure 4). Mayor Lee introduced Franz Loewenherz, project manager, who walked participants through an overview of the Bellevue Transit Master Plan project purpose, scope, and timeline (see Attachment D - Forum Presentation). Mr. Loewenherz clarified that the Forum will help inform the City's actions as it responds to the rapidly changing environment within which public transportation operates.

From 6:20 PM to 8:00 PM, Forum participants engaged in a roundtable discussion about competing priorities (see Attachment E -Forum Discussion Topics). The discussion topics were used to consider transit's role in Bellevue and to solicit Board and Commission member opinions on service and resource allocation decisions (see Figure 5).

The Forum was arranged so that each table was supported by both a staff facilitator and scribe. Facilitators helped move the discussions along and ensured that each of the participants was provided an opportunity to weigh-in on the discussion questions. Scribes tracked participant comments. Staff emailed the draft notes to Forum participants who were offered the opportunity to review and suggest edits before being combined into this report (see Attachment F - Summary of Discussions).

The next section of the report summarizes the four main themes from the Transit Master Plan Forum.



Figure 3 Forum participants considering existing transit conditions.



Figure 4 Mayor Lee acknowledged that because of their affiliation with a City Board or Commission, Forum participants were uniquely positioned to help staff in developing a fully integrated and user-friendly network of transit services for Bellevue that supports the city's growth, economic vitality, and enhanced livability.



Figure 5 Forum participants were asked to consider trade-off scenarios.

SUMMARY OF THEMES

Transit is an essential component of the City's mobility strategy and an increasingly important tool for addressing Bellevue's anticipated growth in travel.

> Forum participants spoke of the many ways that transit benefits Bellevue; including: (i) Economic Benefits – Businesses, especially large employers, frequently locate in communities with strong public transit services; (ii) Environmental Benefits – Cities benefit from reduced traffic congestion and improved air quality when people take transit; (iii) Community Benefits – Since transit requires less land and energy than the private car to move the same number of people, it is often cheaper to meet mobility needs with transit rather than through other measures such as road widening or new parking facilities; and, (iv) Individual Benefits – Public transportation provides an affordable, and for many, necessary, alternative to driving. The following is a sampling of comments from Forum participants on how transit benefits Bellevue:

Tom Tanaka, Transportation Commission "An important benefit of transit is that whenever a transit trip replaces a single auto trip it eases the congestion that hurts all businesses and all commuters. Bellevue could not reach its projected growth without transit. We can't just build roads to meet our growth."

Vic Bishop, Transportation Commission "We need a transit system to serve Downtown Bellevue, otherwise it won't grow."



Figure 6 Forum participants including Arina Fateeva (Arts Commission), Aaron Laing (Planning Commission), James McEachran (Human Services Commission), Lynne Robinson (Parks & Community Services Board), and Vic Bishop (Transportation Commission). City of Bellevue support staff including Terry Smith, Sean Wellander, and Alex O'Reilly.

Mark Van Hollebeke, Parks & Community Services	"Transit draws businesses to Bellevue; for instance, the B-Line has created ease of movement from Microsoft's Main Campus to Downtown. The B-Line is better than the Shuttle. It runs more often and is bigger."
Kris Liljeblad, Arts Commission	"The growth of transit use reflects the increased needs among people trying to reduce fuel consumption, reduce cost, and reduce environmental impact."
Hal Ferris, Planning Commission	"Transit creates more active communities. People walk more (health benefits) A good transportation system is fundamental to viability, the city will stagnate, and residents who want that will choose not to live here."
John Bruels, Human Services Commission	"For some people transit is the only source or option for transportation."
• • • • • • • • • • • • • •	

• • •

. . .

• • •

. ..

•

•

•

More can be done to improve transit serve for people who depend on transit due to age or disability, in areas of lower density, and at non-peak hours (midday, evening, and weekend).

Forum participants believe that transit in Bellevue, as it currently operates, is well used by work commuters and those attending special events in Seattle. Transit was considered to be inconvenient for shopping trips, doctor's appointments, and midday, evening, and weekend travel. The following is a sampling of comments from Forum participants on what types of transit improvements are needed in Bellevue:



Figure 7 Forum participants including Mayor Conrad Lee (City Council), Diane Tebelius (Planning Commission), John Carlson (Planning Commission), Mark Van Hollebeke (Parks & Community Services Board), and Michael Yantis (Human Services Commission). City of Bellevue support staff including Paul Krawczyk, Gwen Rousseau, and Tresa Berg.

Pat Sheffels, Planning Commission

"Transit in Bellevue primarily benefits the working commuter, especially those who work in downtown Bellevue. Transit in Bellevue does not serve seniors well; and it does not work well for appointments, shopping and errands.... In 2030 there will be more elderly who won't be able to walk 5 blocks from their home to a bus stop. Bellevue has changing demographics that need non-commute transit: young singles that don't own cars; more minorities, more households without kids. These groups need short trip, more convenient, more predictable transit.... A shuttle could connect seniors and the disabled to Bellevue's hospital zone."

Richard Englund, Bellevue Network on Aging

Hal Ferris, Planning Commission

Scott Lampe, Transportation Commission "The Boomer generation is beginning to get past 60. Lots of them are looking to give up their car and take up transit, so we need to make it convenient for them to do so."

"I take the bus wherever I need to go when I'm downtown. When I have an evening meeting, I drive because buses drop off after 7 PM."

"The challenge is getting people from neighborhood areas to reliable transit."
Kris Liljeblad, Arts Commission

"I mostly use the bus for work trips and sporting events. I fully recognize that a lot of people depend on transit for other types of trips. Different times of day and different types of riders when contrasting with peak times. I get frustrated when I have to stand because there aren't enough seats.... In terms of trading off peak services vs. midday, particularly regarding social equity ... fundamentally you have to maintain baseline services midday."



Figure 8 Forum participants including Kevin Turner (Planning Commission), John Bruels (Human Services Commission), Dallas Evans (Parks & Community Services Board), Olga Perelman (Human Services Commission), Jay Hamlin (Planning Commission), and Genevieve Tremblay (Arts Commission). City of Bellevue support staff including Kevin McDonald, Scott MacDonald, and Judy Clark.

Current sources of funding won't cover everything that needs to be done; as such, the near-term focus needs to be on maximizing ridership.

When presented with trade-off scenarios (e.g., peak vs. off-peak; route directness vs. service area coverage), the majority of Forum participants advocate for helping the greatest number of people get to where they need to go by preserving/enhancing service where there is already high ridership. The following is a sampling of comments from Forum participants on the importance of maximizing ridership:



Figure 9 Forum participants including Stefanie Beighle (Human Services Commission), Stuart Heath (Parks & Community Services Board), Pat Sheffels (Planning Commission), and Tom Tanaka (Transportation Commission). City of Bellevue support staff including Paul Inghram, Janet Lewine, and, Mike Mattar.

Stuart Heath, Parks & Community Services Board	"Given the current budget constraints, the highest priority for the fixed route buses is giving a positive experience to peak riders Metro and Sound Transit may be able to accomplish more by focusing their services."
Tom Tanaka, Transportation Commission	"I serve on the Board of HopeLink; I know transit is a big issue for those struggling in our community. Still, the success of transit is tied to the success of serving working commuters. Our future requires it; we can't build enough additional freeway lanes and roads to meet peak demand. We need to serve transit commuters."
Howard Katz, Bellevue Network on Aging	"I often see that buses are packed in the mornings and evenings, but appear to be empty in the middle of the day. So I see it as peak-oriented, with less service being needed during the day."
Stefanie Beighle, Human Services Commission	"The park & rides are full, buses are packed, and the ride is slower than taking the car. I would rather not stand all the way to Seattle."
Vic Bishopp, Transportation Commission	"Far and away the dominant market share of transit are the work trips."

•

• •

• •

• •

• •

• •

• •

Dallas Evans, Parks & Community Services Board

"A weakness to our current system is that the "backbone is missing." The dominant ideology is to try to appease everyone. We need a plan that serves high density land use and gets people to change their travel behaviors versus pleasing everyone. Look at Portland, Oregon's transit system as an example of a good system. At the beginning there was low ridership but business and communities developed around the routes and now it is of the best transportations systems in the country."

Kris Liljeblad, Arts Commission

Pat Sheffels, Planning Commission

Hal Ferris, Planning Commission "Some neighborhoods will always be difficult to serve ... There is pressure on King County and Sound Transit to reduce unproductive service. To expect that service is going to grow in the short-term is unrealistic. For now we should maintain strong productivity on the transit service we have."

"It is hard to ignore the existing development that was built out before transit came along. We can work toward tying land use to transit in new or redeveloping areas like Bel-Red, but not for most of Bellevue."

"There is a geographic coverage issue; that said, it's not realistic to serve low-density single family areas with constant service. There are ways we can do things to incentivize people to take the bus (e.g., more P&R). We need to maintain the peak service."

We need to make strategic investments to support future development and growth in ridership.

Encouraging long-term ridership growth involves building capacity to meet future demand for transit service by: (i) providing service where there is anticipated to be high ridership, typically where there is some mix of: higher residential or commercial density; major activity centers; measures that discourage driving, such as limited parking; (ii) building and supporting park and ride facilities that help people access the transit system; (iii) improving the way people make transit connections so they can reach more destinations in less time; and, (iv) investing in speed and reliability enhancements such as transit priority measures and bus rapid transit. Forum participants spoke of the need to make the following types of strategic investments to grow ridership:

to be mede encier and fector on th

Dallas Evans, Parks & Community Services Board	would make decisions to ride based off of the convenience I favor setting up high-ridership corridors for transit that serve high density areas. Businesses and residents can choose to be near these transit corridors, or not. To the point about an aging population, older people make a decision to stay in their homes or not."				
Scott Lampe,	"If you look at the demand for Downtown Bellevue, there's a much				
Transportation	greater flow North-South, not East-West. We need Bus Rapid				
Commission	Transit on I-405."				

Vic Bishop, Transportation Commission

"The I-405 master plan is being ignored. It had a major transit component."

Pat Sheffels, Planning Commission "Bus priority of some kind is needed on NE 8th and on 148th where the bus has "pocket" pull-outs at some stops. No one will let the bus back into traffic. It's a big loss of time for busses."



Figure 10 Forum participants including Janice Stout (Human Services Commission), Erin Powell (Parks & Community Services Board), Hal Ferris (Planning Commission), Scott Lampe (Transportation Commission), and Kris Liljeblad (Arts Commission). City of Bellevue support staff including Emily Leslie, Joseph Adriano, and Kurt Latt.

Aaron Laing, Planning Commission

"RapidRide is a success. Maybe look at doing one along Bellevue Way."

Howard Katz, Bellevue Network on Aging "In Paris and New York City, transit is how I did things. I didn't know my way around, and in Paris couldn't even speak the language, but I had my map so I could do it. If we had a bus system like that with a lot of easy transfers, I would use it."



Figure 11 Forum participants including Howard Katz (Bellevue Network on Aging), Richard Englund (Bellevue Network on Aging), Hannah Kimball (Bellevue Network on Aging), Serwin Lee (Seattle Transit Blog), and Stephen Hunt (King County Metro). City of Bellevue support staff including Cathy VonWald, Andreas Piller, Bernard Van de Kamp, and Darek Jarzynski.

Hal Ferris, Planning Commission

"Until 2030, we'll just keep getting denser around East Link nodes.... Bel-Red is an example where the uses will be walkable. Density of services will available, also in Eastgate and Factoria.... People need access points that are safe and clean. Just as we work on transit/street plans, include dedicated right-of-way to promote reliability, dependability. If parking is free, people will use it. Don't have parking minimums in high transit areas. In some cities, there's a parking maximum. If you don't build the parking, and if you have good transit, people will use it."

Sherwin Lee, Seattle Transit Blog

Mark Van Hollebeke, Parks & Community Services Board "The impact that transit priority measures have on cars tends to be minimal. Queue jump lanes and HOV lanes are some examples of transit priority measures, which is what is pictured in the Forum packet. One local example is on NE Pacific St in Montlake. People sometimes complain that car lanes are congested while the transit lane is mostly empty, but this is actually a sign that it is working. On a four-lane highway, an HOV lane accounts for only one-quarter of the total lane area, but it may account for 40 percent of the person trips because all the vehicles that use it are high-occupancy."

"Transfers are not desirable, but you can make them better by making bus routes more frequent. Maybe one transfer is ok, but 2 or 3 – no way."



Kris Liljeblad, Arts Commission

"In the long-term, service will feed Light Rail, with Bus Rapid Transit feeding. Station areas will need to accommodate those transfers between all the feeder buses. This will require curb space and some signal priority may be needed in station nodes.... Frequency is really critical for a quality of service.... Coordinated signals make sense in heavy transit corridors. It's difficult to have quality service when it's unpredictable as it gets stuck in congestion. Keep buses on schedule. Priority should be adaptive signal, then add transit priority, where there are routes that are difficult to keep on schedule."



Figure 12 Forum participant Councilmember Kevin Wallace (City Council) and Franz Loewenherz (project manager).

SECTION 3: TRANSIT IMPROVEMENT SURVEY REPORT

BELLEVUE TRANSIT IMPROVEMENT SURVEY



CITY OF BELLEVUE October 2012

Transportation Department

11111111111

FOREWARD

"It doesn't matter what people like me think." -Anonymous Non-Rider, March 14, 2012

In fact, it does.

We value the public's input a great deal in planning the future of transit service in Bellevue, and we hope this document, future outreach efforts, and the plans that are ultimately proposed will serve as a testament to this truth. Of course, limited resources will necessitate difficult trade-offs between valid and competing interests, and no matter what the outcomes, it is certain that we will not be able to please everyone, everywhere, without exception. But with the extensive feedback we received to our Transit Improvement Survey between February and March 2012, the results of which have been carefully analyzed and are summarized in the following pages, we will strive to ensure that our future transit network plans respond to the concerns and accommodate the priorities that the public has identified. After all, transit is here to serve you-the public-and our plans will not be successful if the results do not meet your needs.

Thank you once more to everyone who participated in our 2012 Transit Improvement Survey. To those who were unable to provide input to this survey, it is not too late to get involved in the conversation and have your voice heard. This was only the first step in our on-going engagement of the public in a discussion about the future of transit in Bellevue. If you would like to be informed of future outreach efforts or learn more about where the City is in the transit planning process, please visit the Bellevue Transit Master Plan project webpage at www.bellevuewa.gov/bellevue-transit-plan.htm.

-The City of Bellevue Transportation Department



CONTENTS

Forewardii
1 • INTRODUCTION
Purpose
Outreach
Survey Organization
Executive Summary 7
Market Profile
Perception of Service Qualities 9
Transit Service Priorities
2 • RESULTS
Respondent Profile 12
Perceptions and Priorities
Current Transit Users 28
Perceptions and Priorities
Former Transit Users 54
Never Used Transit
Trip Purpose
Perceptions and Priorities
Work
School
Shopping
Social
Special Events 146
Other
References
Appendix - Tables
Acknowledgements A164

FIGURES

1 • INTRODUCTION 1								
Figure 1.1 Figure 1.2	Flow chart of survey questions User type							
2 • RESUL	TS							
Figure 2.1	User type							
Figure 2.2	City boundaries14							
Figure 2.3	User type by location of residence 15							
Figure 2.4	Zip code boundaries							
Figure 2.5	User type by income							
Figure 2.6	Transit service priorities by income. 23							
Figure 2.7	Concerns, comments, & questions about transit in Bellevue27							
Figure 2.8	Trip purpose of current users28							
Figure 2.9	Destinations of current transit users by city of residence							
Figure 2.10	Destination regions in and around Bellevue							
Figure 2.11	Frequency of transit use by period of day and place of residence 36							
Figure 2.12	Frequency of transit use by time of day and place of residence 41							

Figure 2.13	Frequency of transit use by place of residence					
Figure 2.14	Frequency of driving alone by place of residence					
Figure 2.15	Municipal investment priorities47					
Figure 2.16	Former transit users trip purpose54					
Figure 2.17	Former transit users main reason for no longer riding					
Figure 2.18	Former transit users reasons for no longer riding					
Figure 2.19	Phrasing of interested former transit users					
Figure 2.20	Non-rider reasons for not riding61					
Figure 2.21	Non-rider frequency of travel by mode and place of residence for commute trips					
Figure 2.22	Non-rider required improvements to consider riding63					
Figure 2.23	Non-rider frequency of travel by mode and place of residence for non-commute trips64					
Figure 2.24	Phrasing of interested non-riders67					
Figure 2.25	Trip purposes					
Figure 2.26	Frequency of ridership by trip purpose and place of residence 72					

Figure 2.27	Qualities of transit service prioritized by trip purpose
Figure 2.28	Work: routes
Figure 2.29	Work: access
Figure 2.30	Work: destination regions in and around Bellevue
Figure 2.31	Work: origins
Figure 2.32	Work: employment destinations91
Figure 2.33	Work: common issues
Figure 2.34	Standing loads on Route 243 92
Figure 2.35	Work: municipal investment priorities
Figure 2.36	School: length of use100
Figure 2.37	School: access
Figure 2.38	School: routes
Figure 2.39	School: origins
Figure 2.40	School: destinations 103
Figure 2.41	School: common issues 109
Figure 2.42	School: municipal investment priorities
Figure 2.43	Shopping: routes118
Figure 2.44	Shopping: no automobile access . 118
Figure 2.45	Shopping: access119
Figure 2.46	Shopping: origin

Figure 2.47	Shopping: destination
Figure 2.48	Shopping: satisfaction with services
Figure 2.49	Shopping: municipal investment priorities
Figure 2.50	Social: routes
Figure 2.51	Social: access
Figure 2.52	Social: origins138
Figure 2.53	Social: destinations139
Figure 2.54	Social: municipal investment priorities
Figure 2.55	Special events: routes148
Figure 2.56	Special events: access149
Figure 2.57	Special events: origins150
Figure 2.58	Special events: destinations 151
Figure 2.59	Special events: municipal investment priorities
Figure 2.61	Other: routes
Figure 2.60	Other: access
Figure 2.62	Other: municipal investment priorities
Figure 2.63	Other: origins
Figure 2.64	Other: destinations

TABLES

2 • RESUL	_TS
Table 2.1	User type by residence12
Table 2.2	User type by residence
	condensed
Table 2.3	User type by zip code
Table 2.4	User type by income
Table 2.5	Perception of transit service qualites by user type
Table 2.6	Perception of information availability by user type
Table 2.7	Perception of service qualities and information by income
Table 2.8	Service priorities by income24
Table 2.9	Common characteristics by frequency of transit use
Table 2.10	Discretionary: frequency and trip purpose
Table 2.11	Discretionary: trip purpose32
Table 2.12	Origin-destination pairs of current transit users
Table 2.13	Frequency by time of day and place of residence
Table 2.14	Perception of service qualities and information among current transit users by place of residence44
Table 2.15	Perception of service qualities and information by time in Bellevue45
Table 2.16	Municipal investment priorities of current transit users
Table 2.17	Advocacy priorities of current transit riders
Table 2.18	Preferred budget shortfall solutions of current transit riders51
Table 2.19	Free parking and employer transit passes
Table 2.20	Phrases of interest used by former riders

Table 2.21	Former riders: reasons for completing this survey58
Table 2.22	Non-rider: frequency by mode for commute trips62
Table 2.23	Non-rider: frequency by mode for non-commute trips64
Table 2.24	Phrases of interest used by non-riders
Table 2.25	Non-riders: reasons for completing this survey
Table 2.26	Current riders: frequency by trip purpose
Table 2.27	Current riders: frequency by trip purpose and place of residence71
Table 2.28	Current riders: access by trip purpose73
Table 2.29	Current riders: park & ride access by trip purpose
Table 2.30	Current riders: perception of transit service qualities and information by trip purpose74
Table 2.31	Current riders: priorities of service qualities by trip purpose (frequency approach)
Table 2.32	Current riders: priorities of service qualities by trip purpose (points- aggregated approach)
Table 2.33	Current riders: priorities of service qualities ranked by trip purpose80
Table 2.34	Current riders: priorities of service qualities by trip purpose (points- aggregated approach)
Table 2.35	Work: frequency
Table 2.36	Work: length of use
Table 2.37	Work: reasons for transit use84
Table 2.38	Work: select reasons for use by place of residence
Table 2.39	Work: transfers

Table 2.40	Work: origin-destination	Table 2
Table 2.41	Work: common issues	
Table 2.42	Work: priorities of transit service	Table 2 Table 2
Table 2.43	Work: municipal investment	Table 2
Table 2 44	Work: advocacy priorities	Table 2
Table 2.44	Work: preferred budget shortfall	
	solutions	Table 2
Table 2.46	School: frequency	Table 2
Table 2.47	School: length of use	
Table 2.48	School: types of routes by school attended104	Table 2
Table 2.49	School: all routes by school	Table 2
	attended105	Table 2
Table 2.50	School: priorities of transit service qualities	Table 2
Table 2.51	School: weekday frequency and schedule reilability108	Table 2
Table 2.52	School: common issues	
Table 2.53	School: perception of reliability by school attended	Table 2 place o
Table 2.54	School: municipal investment	Table 2 Table 2
Table 2.55	School: advocacy priorities 114	
Table 2.56	School: preferred budget shortfall solutions	Table 2
Table 2.57	Shopping: frequency	Table 2
Table 2.58	Shopping: reasons for use by place of residence	Table 2
Table 2.59	Shopping: transit facilities used119	
Table 2.60	Shopping: origin-destination121	Table 2
Table 2.61	Shopping: perception of transit service qualities	Table 2
Table 2.62	Shopping: priorities of transit service qualities	

89	Table 2.63	Shopping: municipal investment priorities
94	Table 2.64	Shopping: advocacy priorities 131
	Table 2.65	Shopping: preferred budget shortfall solutions
96	Table 2.66	Social: frequency134
98 fall	Table 2.67	Social: reasons for use by place of residence
99	Table 2.68	Social: origin-destination140
100	Table 2.69	Social: priorities of transit service qualities
hool 104	Table 2.70	Social: municipal investment priorities
	Table 2.71	Social: advocacy priorities144
105 rvice	Table 2.72	Social: preferred budget shortfall solutions
107 and	Table 2.73	Special events: frequency of attending events
108 109	Table 2.74	Special events: frequency transit use146
y by 111	Table 2.75 place of resi	Special events: reasons for use by dence147
	Table 2.76	Special events: origin-destination .152
112	Table 2.77	Special events: priorities of transit service qualities
rtfall 115	Table 2.78	Special events: municipal investment priorities
116	Table 2.79	Special events: advocacy priorities
	Table 2.80	Special events: preferred budget shortfall solutions
811 Ut 101	Table 2.81	Other: frequency158
sit	Table 2.82	Other: other transit uses159



PHOTO BY John Tiscornia

PURPOSE

The City of Bellevue is updating its 2003 Transit Plan with a comprehensive 20-year look ahead to the type of system that will be required to meet Bellevue's transit needs through 2030. The Transit Master Plan will develop short- and long-term policies, programs, and projects that help foster a high-quality transit system that is easier, more effective, and more enjoyable for residents, employees, and visitors in Bellevue. Who are some of the system's current users, how do they use it, and what are their priorities?

The Transportation Department conducted the Transit Improvement Survey between February and March of 2012 as part of an ongoing effort to better understand the perspectives and ideas of Bellevue's current, former, and potential transit ridership. "...effective network planners look beyond self-interested demands and think more broadly about what motivates people to use transit. This doesn't mean substituting our judgment for the customer's, but it does mean trying to discern underlying patterns in the diverse comments that agencies receive, and thinking about how various service changes would improve transit's ability to attract riders and fit the larger goals of the city or region it serves."

– Jarrett Walker, Human Transit, p.23-24



PHOTO BY John Tiscornia

The objectives of this survery include:

- Identify common characteristics of transit use in Bellevue and any variation that exists based on individuals' trip purpose, place of residence, destination, or demographic characteristics.
- Determine what motivates different groups to use transit, why others have stopped, and why some have never tried using transit here before.
- Identify which qualities of transit service—such as speed or frequency of service—are most important to current and potential transit users.
- Determine how various groups access transit, what routes they use, and what their perception is of the convenience, accessibility, and reliability of transit in Bellevue.
- Identify users' priorities for municipal investment in transit, municipal advocacy to regional transit agencies, and their preferred solutions in the event of future budget shortfalls at King County Metro.
- Determine how incentives like employerprovided ORCA passes—or conversely, free parking—affect respondents' decision to use transit when commuting to work or school.
- Determine how easy users think it is to obtain and understand bus route maps and schedule information, both at home and while on the go.
- Learn about the experiences, issues, and concerns of those who have used transit locally and any ideas they have that may help improve service in the community.

After the survey period closed, the responses were collected, formatted, and published in the *Outreach Report: Technical Appendix* in June 2012. Since then, those responses have been analyzed, write-in comments have been reviewed and categorized, and the results of those efforts are presented herein.

OUTREACH

The underlying intent of the outreach is to have as great a variety of respondents' voices reflected in the transit plan's proposals as possible. To that end, the following list documents some of the publicizing efforts used to engage diverse audiences with the Transit Improvement Survey:

- The Transportation Improvement Survey was linked from the City's webpage for the Transit Master Plan update (www.bellevuewa.gov/ bellevue-transit-plan.htm).
- Outreach cards were distributed by volunteers recruited at Park & Rides, the downtown Bellevue Transit Center, and Crossroads Mall.
- The City of Bellevue worked with the Bellevue Downtown Association (BDA) to get the message out to buildings and with King County Metro to get the word out to commute trip reduction (CTR) affected businesses.
- The BDA was helpful in having the postcards distributed to hospitality and health care businesses (placed in the mailboxes of swing shift employees who are difficult to reach).
- Church organizations were asked to message their congregations by email, newsletters, and public announcements.
- The City of Bellevue coordinated with HopeLink to get the word out to Medicaid recipients. HopeLink generously mailed postcards to 1,400 residences.
- Several local groups with an interest in nonauto transportation—including Cascade Bicycle Club, Bellevue School District, and the Seattle Transit Blog—posted information on their websites (the Technical Appendix includes a screenshot of each).





Bellevue Transit Master Plan

貝爾優市政府正透過「交 通管理計劃」審視現時貝 爾優的公共汽車服務,以及 向金郡的公共交通服務公 司提出改善建議.您的回應 可以影響貝爾優交通設施 的將來,請就下列兩個問題 提出意見:

Bellevue Transit Master Plan 1. 您認為貝爾優的交通設施有甚麼好的地方? 君喜欢这足的海军,十分方便! 的雪草, 专城之, 形场长冬 2. 您認為貝爾優的交通設施有甚麼不好的地方? Repied Ride in & Royte 此去年中人一增力一个斤车站(摘 12 Rodmond 30 Belleviers

- The City of Bellevue worked with neighborhing cities, Redmond and Kirkland, to help get the word out. The City of Kirkland did a video spot on the survey which can be found at http://kirkland.granicus. com/MediaPlayer.php?view_id=13&clip_ id=2384).
- A media release video was produced in cooperation with Bellevue TV (http://www. youtube.com/watch?v=ZYYZZn-_0Vo).t

FLOW CHART of SURVEY QUESTIONS



Figure 1.1 Respondents were first asked whether they currently use transit in Bellevue, formerly used transit in Bellevue, or have never used transit in Bellevue. Based on this response, respondents were then directed to a series of questions specific to their use type before answering questions applicable to all user types.

SURVEY ORGANIZATION

Figure 1.1 depicts the flow of questions respondents were asked throughout the survey. Respondents were initially prompted to identify themselves as either current users of transit in Bellevue, former users of transit in Bellevue, or as someone who has never used transit in Bellevue (question 1). Based on this response, respondents were then directed to a series of questions specific to their user type before answering questions applicable to all user types. In addition to common multiple-choice response selections, many questions offered respondents the opportunity to provide write-in responses via either an 'other' choice or an optional comment box.

Current transit users were further segmented based on trip purpose(s). Respondents were asked to identify whether they use transit for trips to work, school, shopping and/or other errands, social and/or recreational purposes, special events, and/or other identifable purposes. Former transit users were also segmented by trip purpose(s), though in less depth. Former transit users and those who have never used transit in Bellevue were also asked about why they stopped/do not use transit, what changes might get them to start using transit, and how they typically travel. All respondents were asked questions about their place of residence, length of time living, working, or attending school in Bellevue, automobile ownership, bicycle ownership, age group, employment status, parking availability at work and school, transit pass ownership, and annual household income group.

Each of these different characteristics helps to relate survey respondents with identifiable user groups. Two such user groups, in this case based on access to an automobile for personal use, are the 'discretionary rider', who has a car but chooses to use transit instead, and those without a car, sometimes referred to (controversially) as 'captive riders'. Some characteristics more common of the latter group "The market segments traditionally used in transportation planning are most often based on socioeconomic characteristics—such as income, gender or automobile ownership—or type of commute, namely city-to-city, suburb to city or city-to-suburb."

-Cambridge Systematics for Pace Suburban Bus Service, *Market Research Report*, p. ES-4. are that they tend to be either young or elderly, are students, young professionals, or retired, include the disabled, and/or have a lower annual household income than 'discretionary riders'. In *Human Transit*, Jarrett Walker explains why the term 'captive rider' is inaccurate:

"Transit dependence, like wealth itself, is a spectrum, with vast numbers of people in gray areas between 'choice' and 'captive'. For example, many people with low incomes own a car out of necessity but... [i]f we give these people credible alternatives to car ownership, they can experience the result as liberating... Often they will find better things to spend that money on, such as education... and we can achieve both environmental and social good by giving them the option to own fewer cars."

-Jarrett Walker, Human Transit, p.43

Still, in the context of a market research survey such as this, being able to associate different trends in transit use and service priorities to different user groups makes it possible to ensure that the needs of all kinds of transit users are represented in our planning efforts. As a result we may better understand how the needs of work commuters differ from those going to school, that using transit to shop is almost twice as common among those without access to a car as among those with a car, and that as age increases, so does the degree to which respondents prioritize increasing Park & Ride vehicle capacity.

The following section presents a summary of some of the most notable findings from the Transit Improvement Survey. A more comprehensive examination of the survey results is provided in the main text.

EXECUTIVE SUMMARY

A total of 4,252 people took the Transit Improvement Survey. Of these, 52.7% (2,241) are current users, 16.1% (684) are former users, and 31.2% (1,327) have never used transit in Bellevue (see Figure 1.2). Bellevue residents more commonly identified themselves as current transit users than respondents overall (61.5%). The results of this survey analysis fundamentally address three broad questions:

- Who uses transit in Bellevue and how?
- How do people perceive various qualities about transit service in Bellevue?
- What are peoples' priorities for transit service in Bellevue?

Market Profile

All Respondents

53%			16%	<mark>6%</mark> 31%)		
0	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000 4,252

Bellevue Residents

	62 %	17%	22%	
		1		
0	250	500	750	1,000 1,082

Non-Bellevue Residents

	49 %		15%	15% 36%				
0	500	1,000	1,500	2,000	2,500 2,602			

Figure 1.2 Percentage of respondents who identified as current, former, nor non-users of transit in Bellevue.

Current user of transit Bellevue Former user of transit Bellevue

Never used transit in Bellevue

Commuting to/from work is the most common trip purpose among transit users in Bellevue.

- 68.8% of respondents use transit in Bellevue to commute to work. (See Figure 2.8 on page 28)
- Nearly two-thirds have a direct trip between their point of origin and place of employment.
 - 30.8% of work trips include one transfer and 8.6% include two or more. (See Table 2.39 on page 88)
 - 24.7% of work commuters estimated a typical wait time of 10 minutes between connecting buses, while another 25.0% wait 15 minutes or more for a connection. (See page 88)

Most respondents use transit for more than one trip purpose.

• Only 23.0% are single-purpose transit users; approximately 30% each use transit for two or three different trip purposes. (See page 28)

Most respondents who use transit in Bellevue do so regularly (3 or more times per week). (See Table 2.9 on page 29 and Table A.8 on page A20)

- 69.5% of respondents are regular transit users for one or more trip purposes, compared to
 63.3% infrequent riders and 45.0% occasional riders.
- 3 in 4 work and school commuters are regular riders.
 - 75.7% of work- and 74.0% of school commuters use transit three or more times per week.
- Those without access to an automobile are especially likely to be regular riders.
 - 90.1% of those without access to an automobile are regular riders.
- Regular ridership is strongly peak-oriented. (See Figure 2.11 on page 36 and Table 2.13 on page 38)
 - Over half of all regular riders use transit during the morning and afternoon peak (56.9% and 54.0%, respectively), while less than 20% use transit during other times of the day.

Those who use transit for shopping or social purposes are most likely to be infrequent riders.

 62.7% of shopping transit users and 76.1% of social transit users use transit less than once per week. (See Table 2.9 on page 29 and Table A.8 on page A20)

- Infrequent riders are especially likely to ride mid-day, in the evening, and late at night.
 - 47.2% of those who use transit mid-day do so infrequently, and 59.8% of infrequent riders use transit in the evening and/or night.

Those who use transit to attend special events are almost equally likely to do so regularly or occasionally. (See Table 2.9 on page 29 and Table A.8 on page A20)

• This is the only trip purpose for which users are more likely to access transit from a Park & Ride than by walking to a bus stop. (See Table 2.28 on page 73).

Urban centers attract the most transit trips. (See Figure 2.9 on page 33 and Table 2.12 on page 35)

- Downtown Seattle is the most common destination (77.9% of respondents), followed by Downtown Bellevue (64.4%) and the University District (31.4%)
- Factoria (25.0%), Crossroads (23.6%), and Eastgate (16.1%) are other common destinations among Bellevue residents and those of various other Eastside cities.

Transit use in Bellevue is inversely related to income.

- As income increases, the percentage of respondents who are transit riders decreases and those who are non-riders increases. (See Figure 2.5 on page 18)
- Frequency of transit use tends to decline as income increases. (See Table 2.9 on page 29)

1 in 10 transit users in Bellevue does not have access to a car.

• 88.7% are discretionary riders. (See Table 2.11 on page 32)

Bellevue residents drive alone more commonly than residents of other municipalities.

33.4% of Bellevue residents drive alone daily and 31.3% use transit daily, compared with 25.0% and 41.7%, respectively, among transit users overall. (See Figure 2.13 and Figure 2.14 on pages 42-43, and Table A.10 on page A26)

A perception that traveling by transit takes too long is the most common reason why former riders no longer use transit and why non-riders have never used transit.

• To consider using transit, 46.1% of non-riders indicated that service would need to be closer to their home/destination(s), and 35.9% would need speed of service to improve. (Figure 2.22 on page 63)

Parking availability and pricing have a significant influence on transit use.

 Among non-commute transit users, the hassle and cost associated with parking consistently rank among the top three reasons why respondents use transit. (See Table 2.58 on page 117, Table 2.67 on page 135, and Table 2.75 on page 147)

Employer-provided ORCA cards are an effective incentive to encourage employee transit use, but the provision of free parking is a stronger disincentive.

- More than 4 out of 5 (82.5%) work commuters whose employers provide a transit pass cited this as a motivating factor to ride. (See Table 2.37 on page 84)
- 25% more former riders have access to employer-provided free parking than current transit users.
 Although the percentage of employers offering a transit pass is only 8.4% lower, 42% fewer former riders have a transit pass than among respondents overall. (See Table 2.19 on page 56)

Perception of Service Qualities

Transit service in Bellevue is considered to be more reliable than it is convenient. (See Table 2.5 on page 19, Table 2.7 on page 22, and Table 2.14 on page 44)

- Still, roughly half of all work and school commuters have been late to work, class, or a meeting due to late buses. (See Figure 2.33 on page 92, Figure 2.41 on page 109)
- Write-in responses suggest that dissatisfaction with the convenience of transit service in Bellevue tends to relate to issues of accessibility, travel time, and transferring. (See Table A.6 on page A16)

Accessibility is rated favorably, but write-in responses reveal barriers still exist for some.

• Common issues include having a long or physically challenging walk to the nearest stop, an absence of sidewalks, and an insufficient supply of parking at Park & Rides. (See Table A.5 on page A14)

Route and schedule information is much easier to obtain from home than while on the go.

 89.2% of respondents think information is easy to obtain at home, but only 57.0% think it is easy to obtain information on the go. There is significant interest in expanding the provision of real-time arrival information at stops.

Transit Service Priorities

Frequency of weekday service was most commonly ranked the most important and schedule reliability the second most important quality of transit service among most trip purposes. (See Table A.17 on page A42)

 In terms of the aggregate importance assigned through ranking, reliability is the most important priority among school, social, and special event transit users. (See Table A.36 on page A73, Table A.64 on page A121, and Table A.79 on A147)

Respondents' three highest priorities for municipal investment in transit address concerns about speed and reliability, information, and Park & Ride capacity. (See Table 2.16 on page 47)

- 30.3% support investment in roadway and traffic signal infrastructure.
- 20.6% support investment in providing real-time arrival information at major stops.
- 13.4% support increasing vehicle capacity at Park & Ride facilities, and support increases with age.

Respondents want the City to emphasize improving frequency during peak hours and to reduce overcrowding when advocating for improvements to transit agencies. (See Table A.13 on page A34)

- Bellevue residents are more likely than respondents overall to support increasing frequency throughout the day and to expand service coverage into un-served Bellevue neighborhoods.
- Park & Ride vehicle capacity is widely considered to be inadequate and requires investment. Support for such measures increases with age.

When considering how to address a hypothetical future budget shortfall, respondents tend to favor revenue-increasing solutions over service reduction solutions. (See Table A.15 on page A39)

- Nearly half of all transit users support extending the Congestion Reduction Charge (CRC).
- Support for seeking new revenue sources is highest among the young, low-income, and car-less, while support for raising fares and reducing costs by optimizing service is highest among older and wealthier respondents. Few support reducing off-peak and night service.

SECTION 4: TRANSIT NETWORK PROFILE

City of Bellevue

Transit Network Profile Executive Summary



0

Bellevue Transit Master Plan Updated August 2012

Contents

Section I: Document Guide			
Introduction	I-6		
Bellevue Transit Network Profile	I-6		
King County Metro Service Guidelines	I-7		
Route Profiles Layout	I-8		
Organization of Information Presented	I-8		
All-Day Route Service-Level Assessment	1-10		
Peak-Only Route Service-Level Assessment	I-11		
Section II: Network Summary	II-15		
Transit Corridor Groups	II-16		
Core Service Network	II-18		
All-Day Service Network	II-20		
Peak-Only Service Network	11-21		
Service Families	II-22		
Frequent Service Network	II-23		
Service Headways	II-24		
Fall 2010	II-24		
Fall 2011	II-26		
Network Performance	II-28		
Ridership by Mobility Management Area (MMA)	II-28		
Productivity and Cost Efficiency	II-29		
King County Metro Network Productivity	II-30		
Summary of Performance Measures	II-32		



Route	Å	Annual Ride	s			Annual Passen	ger Mi	le		Annual Fare R	evenue			Annual Operati	ng Co	st	Farebo	x Recove	ry
noute												Rank						rauo	Rank
550		1,905,541				25,145,580			\$	3,388,304.84			\$	6,540,362.57				51.8%	
271		1,280,562				7,758,466			\$	1,515,704.31			s	7,238,125.41				20.9%	22
230		1,013,994				3,007,078			\$	1,008,310.40			\$	4,778,147.35				21.1%	21
255		1,012,989				9,505,587			\$	1,426,212.63			s	5,923,638.84				24.1%	16
253		918,944				2,466,460	1.9%	14	\$	935,397.73			s	3,049,369.79				30.7%	9
245		812,197				2,733,510	2.1%	12	\$	881,617.11			s	5,103,273.30				17.3%	29
240		732,339				2,886,404			\$	773,376.36			s	3,711,863.58				20.8%	23
554		717,759				14,008,427			\$	1,120,509.49			\$	4,827,727.93				23.2%	18
560		610,752				7,870,942			\$	741,824.25			\$	5,082,704.30				14.6%	35
566		505,968				7,952,593			\$	810,505.90	4.0%	9	\$	4,143,705.05	4.9%	8		19.6%	24
535		420,937	3.0%	- 11		5,894,619			\$	661,193.45	3.3%	14	\$	2,455,158.52	2.9%	13		26.9%	13
218		375,185	2.6%	12	_	4,841,476	3.8%	9	\$	897,350.03	4.4%	7	\$	1,768,527.77	2.1%	14		50.7%	
221		361,456	2.6%	13		1,571,325	1.2%	20	\$	382,822.41	1.9%	16	s	2,899,409.58	3.4%	-11		13.2%	
532		341,194	2.4%	14		5,943,502	4.6%	7	\$	704,255.50	3.5%	12	\$	1,610,096.32	1.9%	16		43.7%	
212		316,677	2.2%	15		2,689,195	2.1%	13	\$	695,972.93	3.4%	13	\$	1,381,212.28	1.6%	18		50.4%	
234		315,133	2.2%	16		1,798,941	1.4%	17	\$	349,751.68	1.7%	17	s	2,792,160.14	3.3%	12		12.5%	39
233		235,478	1.7%	17		835,453	0.7%	24	\$	244,390.10	1.2%	20	\$	1,313,097.93	1.6%	20		18.6%	26
222		216,501	1.5%	18		800,312	0.6%	26	\$	200,185.65	1.0%	21	\$	1,763,420.02	2.1%	15		11.4%	41
		173,004	1.2%	19		2,173,435	1.7%	16	\$	390,122.66	1.9%	15	\$	1,418,753.81	1.7%	17		27.5%	12
556		159,165	1.1%	20		2,325,060	1.8%	15	s	126,800.76	0.6%	29	\$	896,304.25	1.1%	24		14.1%	
249		149,425	1.1%	21		549,590	0.4%	32	\$	157,509.74	0.8%	25	\$	1,366,140.81	1.6%	19		11.5%	40
216		126,733	0.9%	22		1,665,010	1.3%	19	\$	284,089.19	1.4%	18	\$	959,495.86	1.1%	22		29.6%	10
555		107,767	0.8%	23		1,463,182	1.1%	21	\$	192,176.55	0.9%	22	\$	762,058.08	0.9%	26		25.2%	14

III-35

Section III: Route Profiles

О

Corridor Group I	III-36
Corridor Group 2	111-74
Corridor Group 3	111-84
Corridor Group 4	III-104
Corridor Group 5	111-114
Corridor Group 6	III-154
Corridor Group 7	III-164
Corridor Group 8	III-210
Corridor Group 9	III-220
Corridor Group 10	III-284
Corridor Group II	III-302
Corridor Group 12	III-320
Corridor Group 13	III-330
Corridor Group 14	III-372
Corridor Group 15	111-398
Corridor Group 16	III-408
Corridor Group 17	111-418
Section IV: Appendices	IV-451
Glossary	IV-452
Selected King County Metro Maps	IV-456
Central Fastside All-Day Transit Service Fall 2011	IV-456
RanidRide B Line	IV-457
Bellevue School District Supplemental Boutes	IV_458
Spring 2011 Performance Highlights	IV-468
	IV_470
ACKIOWICUSCIIICIUS	17-7/2
Routes Quick Reference

organized numerically

RapidRide B Line	III-38	Route 243	III-116
Route III	III-304	Route 245	III-410
Route 114	III-3I2	Route 246	III-96
Route 167	III-156	Route 247	III-400
Route 210	III-222	Route 249	III-58
Route 211	III-230	Route 250	III-166
Route 212	III-238	Route 253	III-66
Route 215	III-246	Route 255	- 74
Route 216	III-254	Route 256	III-182
Route 217	III-262	Route 261	III-190
Route 218	III-270	Route 265	III- I 98
Route 219	III-420	Route 266	III-202
Route 221	III-76	Route 271	- 24
Route 222	III-86	Route 272	III-134
Route 225	III-286	Route 280	III-430
Route 226	III-428	Route 342	III-322
Route 229	III-294	Route 532	III-358
Route 230	III-332	Route 535	III-366
Route 232	III-40	Route 550	111-212
Route 233	III-48	Route 554	III-278
Route 234	III-340	Route 555	III-142
Route 235	III-348	Route 556	III-148
Route 237	III-350	Route 560	III-382
Route 240	III-374	Route 566	III-390
Route 241	III-94	Route 925	III-438
Route 242	III-106	Route 926	III-442



1-4

Ο



Section I Document Guide

Overview of Contents, Organization, Methods, and Sources

DOCUMENT GUIDE

Introduction

Bellevue Transit Network Profile

This document provides a comprehensive examination of the transit system operating in Bellevue, Washington as of April 2012. It is intended to support the city's current efforts to update its 2003 Transit Plan; the resulting Bellevue Transit Master Plan will provide guidance related to the service, funding, and policy actions needed to meet Bellevue's transit needs through 2030.

Compiled between fall 2011 and spring 2012, the timing of this document provided the unique opportunity to examine transit in Bellevue at a moment of substantial network restructuring. Between the introduction of the RapidRide B Line service, King County Metro's adoption of a new Strategic Plan and accompanying Service Guidelines, and the many route additions, deletions, and revisions implemented in October 2011 as a result of these, Bellevue's transit network is notably different today than it was one year ago. Additional service revisions were implemented in February and are presently being planned for June and September 2012, and while these restructuring periods will have less dramatic impacts on Bellevue residents and commuters than the October 2011 restructuring did, the anticipated changes are noteworthy nonetheless.

As such, this document presents Bellevue's transit network simultaneously at three time scales—as it operates today, how this came to be as a result of Metro's most recent service revisions, and what further changes might be anticipated this year. The data presented is generally focused on Fall 2010—the most recent fall quarter of service with data available at the time of writing—though 2009 data is used for service level assessments, consistent with how Metro conducted the analyses in planning the October 2011 service revision. Maps typically depict Fall 2011 routing unless otherwise noted.

The network examined herein is comprised of fifty-two routes, forty of which are in operation today. Forty-two of the routes are designated as King County Metro service; eight are designated as Sound Transit service (six of which are operated by Metro, two by Community Transit). Data presented for each route includes the type and family of service, hours and frequency of operation, destinations served, ridership statistics, productivity and efficiency measures, and performance trends in recent years. Where applicable, route service level assessment is also provided in accordance with Metro's current Service Guidelines. All data presented on the following pages is the result of extensive data collection efforts by the respective transit agencies and analysis by Metro, Sound Transit, and staff in the City of Bellevue Transportation Department.

What is Bellevue's Transit Master Plan?

The Bellevue Master Transit Plan is the city's primary document concerning bus service in and around the city. While the city doesn't operate its own transit system, it can leverage additional transit investments to/from Bellevue with supportive land uses that maximize existing transit facility investments. Additionally, efforts to improve the average speed of buses in Bellevue will result in improved provision of cost-efficient and effective bus transit service and potential for increased ridership.

The Transit Master Plan is a tool to better align with King County Metro's focus on creating a more productive transit system in accordance with its new Strategic Plan for Public Transportation and associated Service Guidelines, which have a significant influence on King County's transit resource allocation decisions. The Transit Master Plan will develop short- and long-term policies, programs, and projects that foster a high-quality transit system that is easier, more effective, and more enjoyable for residents, employees, and visitors in Bellevue. Specifically, the plan will recommend improvements to create a transit system that is fast, reliable, safe, comfortable, and accessible for all users.

The Bellevue Transit Master Plan will address many critical issues, including:

- —Integrating transit capital facilities and services with walking and biking infrastructure, and using transit to make great places;
- -Enhancing bus transit performance through roadway investments such as traffic signal priority; and
- -Coordinating with Metro and Sound Transit to create a seamless, fully integrated, and user friendly network of transit services.

King County Metro Service Guidelines

This analysis is consistent with Metro's Service Guidelines, adopted in July 2011 in conjunction with the agency's Strategic Plan for Public Transportation 2011-2021. The information contained herein is therefore immediately useful for evaluating Metro's existing services and for serving as the basis for recommending adjustments that will maintain a high degree of mobility in Bellevue, even as service reductions are contemplated by transit agencies due to budget shortfalls.

By using the Service Guidelines and related performance measures, Metro strives to provide an all-day and peak-hour network that supports regional growth plans, responds to existing ridership demand, provides productive and efficient service, ensures social equity, and provides geographic value through a network of connections between major urban and activity centers.

The Guidelines establish three distinct analytical processes for assessing route performance: the first addresses route productivity by considering the measures *rides per platform hour* and *passenger miles per platform mile*, the second addresses service quality by examining passenger loads and schedule reliability, and the third assesses the level of service provided by individual routes according to the type of service they provide—all-day or peak-only. In this document, the first two analyses—productivity and service quality—are presented at the network level in the Network Summary section. The third analysis—all-day and peak-only level of service—is provided as part of the route profiles presented for every Bellevue-serving route, as applicable.

The analysis process for all-day routes follows three distinct steps to determine the appropriate level of service for each route. The process begins by examining three performance categories—land use, social equity, and geographic value—and their respective performance measures, including household and job density, the percentage of a corridor's population that is classified as low-income or minority, and whether the corridor provides the primary connection between designated centers. Points are awarded based on an established scale, with the total providing the initial suggested level of service for peak, off-peak, and night-time hours. The second stage of the assessment examines the load, cost recovery, and demand for late-night service at the suggested level of service. Adjustments to the initial suggested levels of service are assigned based on the figures obtained in this step, thereby providing the final suggested service levels. The existing and final levels of service are then compared to determine whether corridors are currently over- or under-served.

It is important to emphasize that Metro's service level assessment process is corridor-based, not route-based, and that only those corridors categorized as serving an all-day need are assessed in the way described above. Peak-only routes, which comprise more than half of the routes operating in Bellevue, are assessed by only two measures: whether they are at least 20 percent faster and if they serve at least 90 percent as much ridership compared with their all-day alternatives. This alternative-based performance assessment is presented for all Metro peak-only routes contained in this document.



Metro Guidelines for Service Adjustment

Guideline	Measures
Productivity	Rides per platform hour Passenger miles per platform mile
Passenger Loads	Load factor
Schedule Reliability	On-time performance Headway adherence Lateness
All-Day and Peak Networks	Current service relative to All-Day and Peak Networks

King County Metro uses the above guidelines when adding or reducing service and in the ongoing development and management of transit service. The complete Service Guidelines (2011) are available online at...

http://www.bellevuewa.gov/pdf/Transportation/King_County_ Metro_-_Service_Guidelines_%28July_2011%29.pdf

DOCUMENT GUIDE

Route Profiles Layout

Organization of Information Presented

The following structure is presented for each route throughout the document. Except in special circumstances, such as for routes newly introduced in October 2011 or all-day routes comprised of multiple Metro-defined corridors, each route profile has an eight-page spread following a consistent template.



Route Overview & Service Statistics

The first two route profile pages present basic route information including a description, route map, service characteristics, destinations and transit facilities served, connections to other transit services, and route operating statistics and performance measures.



Historic & Comparative Performance Measures

Page three presents a series of historic performance charts—annual ridership and productivity—and a table summarizing notable trends in each. Page four provides a chart comparing the productivity and cost efficiency of each route to all other routes in the Bellevue transit network.



Stop-Level Boarding & Alighting Activity

Pages five and six present average weekday boarding and alighting activity for each stop a bus makes in Bellevue. These provide an indication of the origins and destinations common to riders of the route, as well as help to determine which high-traffic stops may benefit from investments in stop amenities such as shelters.



Performance Evaluation & Service Revisions

The seventh page of each route provides a performance-based service level assessment consistent with Metro's Service Guidelines. The page takes one of two forms depending on whether the route provides all-day or peak-only service—the graphic on the left is the format for the former. All-day routes serving multiple Metro-defined corridors have an additional page for each corridor evaluated. The final page of each route profile is reserved for information about recent, future, and potential service revisions. For routes that have not recently been modified and have no revisions planned for 2012, this page is intentionally left blank.

I-9

All-Day Route Service-Level Assessment

according to Metro Service Guidelines

King County Metro defines all-day routes as those that operate throughout the day, provide connections between designated regional growth centers, manufacturing/industrial centers, and other areas of concentrated activity, and serve a variety of travel needs and trip purposes. The following is a cursory review of Metro's two-step, point-based assessment process for all-day service, as presented in this document. Interested readers are encouraged to consult Metro's Service Guidelines for a more thorough explanation of the process.

Step I: Set Service Levels



Measure: Estimated farebox recovery by time of day. Assumes Step 1 service level.

Adjustments: Service is increased if estimated farebox recovery exceeds thresholds differentiated by time of service. Measure: Provision of connections at night.

Adjustments: Night service is added if the corridor provides a primary connection between regional growth centers or if it has frequent peak service.

Measure: Estimated ratio of riders to vehicle capacity by time of day. Assumes the service level established by Step 1.

Adjustments: Service is increased by one or two service levels if load factors of greater than 0.8 or 1.5 are estimated, respectively.

Peak-Only Route Service-Level Assessment

according to Metro Service Guidelines

Peak-only service complements the all-day network by providing faster travel times and accommodating very high demand for travel to and from major employment centers and, in areas of lower population density, park-and-ride lots. Assessment of peak-only service is considered by Metro to be the third step in a corridor's evaluation process, following the steps presented on page 10. In this document, peak service assessment is presented in the format depicted below.



Data Notes & Disclaimers

King County Metro

Farebox Revenue Data by Route

King County Metro does not have plans to continue estimating farebox revenue by route in the future. Actual fare revenues are not available to Metro at the individual route level, so the data contained in this report reflects estimates made by Metro based on average peak and off-peak fares for one- and two-zone routes. This method results in fare revenue estimates that are directly related to the number of rides and does not account for variation in fare revenues that may result from the use of reduced-fare passes, such as those available to seniors and students, among others.

Operating Cost Data by Route

King County Metro does not have plans to continue estimating operating cost by route in the future. While a reasonable estimate can be calculated based on scheduled hours of service and the type of bus assigned, which is the process used by Metro to estimate the figures that appear in this report, this process is labor-intensive, and there is typically considerable delay in the availability of cost data. Though illustrative, the results of these annual estimates are not perfectly accurate reflections of actual operating costs for several reasons. Because the estimates are based on scheduled—not actual—operation, they cannot account for variation that may be experienced in daily operations such as bus operator overtime or vehicle substitutions. Estimates are also subject to fluctuation depending on how Metro Operations staff assign vehicles to scheduled services, which can affect the number of platform hours operated and hence the actual cost. For example, if Operations staff change how drivers or vehicles are assigned in such a way that platform hours are reduced to improve operating efficiency, such as through interlining routes (or increased to accommodate known problems with existing assignment patterns), the cost of providing a service may vary even if that change has no impact on revenue service provided. Finally, the route level operating cost estimates are the result of extrapolation of data from a single service period (e.g. Fall 2010) to the entire year. These therefore do not reflect any changes to scheduled service that may be made within the course of a single year.

Revenue Hour per Platform Hour and Revenue Mile per Platform Mile by Route

These measures are typically used by King County Metro only at the system-wide level and are not commonly considered at the individual route level. Like operating cost data, as described above, these ratio measures are subject to how Operations staff assign vehicles and drivers to scheduled service, among other scheduling constraints. Acknowledging these limitations, these measures are provided at the route level in this report primarily for general illustrative purposes.

Sound Transit

Farebox Revenue Data

The ORCA regional smart card began operations in July 2009, making 2010 the first full fiscal year of ORCA operations. With the introduction of the ORCA system, Sound Transit now has access to detailed revenue and ridership data for all modes and routes related to the use of the ORCA smart card. ORCA-generated revenues account for approximately 57 percent of total fare revenue in 2010 and is expected to increase to more than 70 percent of total fare revenues by the end of 2012 once the transition of all business accounts is complete. As such, please note that in order to provide detailed revenue and ridership amounts for sales channel/payment type, passenger type, and route level, various assumptions were made due to the lack of system generated reports for each revenue stream. The farebox revenue and farebox recovery figures that appear in this report for Sound Transit routes are therefore approximations based on extrapolation using these assumptions.



II-14

С



Section II Network Summary

Categorization of Bellevue's Transit Routes organized by various defining characteristics

NETWORK SUMMARY

Transit Corridor Groups

Bellevue Transit Network



The routes comprising the Bellevue transit network can be categorized according to the major destinations and corridors served; the map on the right depicts the seventeen unique resultant groups (excluding the Local & Regional Circulators group). This document organizes routes according to these service groupings—as opposed to strict numerical order—thereby facilitating more direct comparison between similar routes.





NETWORK SUMMARY

Core Service Network

Top Routes by Annual Ridership based on Fall 2010 data

Bellevue's Core Service Network is the collection of King County Metro and Sound Transit routes considered to be the most important to realizing an effective transit system in the city. It is comprised of the ten highest-ridership routes operating in Bellevue within a given year, and it is hence subject to change annually as services are revised and ridership patterns change.

In 2010, the core routes have the distinction of being the only ten with more than 500,000 annual rides. Although the 'core' was defined as being the top ten routes by ridership prior to any consideration of how many riders those routes might carry, the distinction of being the only ten routes with 500,000+ riders lends credence to this break point.

The significance of Seattle as a major generator of ridership and an important origin and destination for Bellevue transit users is evidenced by half of the core routes having a terminus there-three Downtown, one in the University District, and one in West Seattle.

Two of the routes comprising Bellevue's Core Network in 2010—Routes 230 and 253—were deleted as part of Metro's Fall 2011 service revision, either to be replaced by the RapidRide B service or otherwise restructure to improve the network's efficiency. Additionally, adjustments were made to the routing of Routes 240 and 245 as part of the same restructuring period.

Corridor Group 14, connecting Downtown Bellevue to Renton and South King, is not only the group appearing most frequently in Bellevue's core network, it is also the only multi-route group to have all of its routes among the core network-an indication of the importance of Renton and South King County as generators of Bellevue ridership. Corridor Groups 2, 3, 4, 6, 10, 11, 12, 15, and 17 are not represented among the core routes, which is consistent with these generally being the smaller groups and/or those with routes of a more specialized character.



Kirkland to Factoria via Overlake, Crossroads, Eastgate Metro Corridor 31C



Bellevue to Renton via Newcastle, Factoria Metro Corridor 12C



Issaguah to Downtown Seattle via Eastgate, Mercer Island Sound Transit Express Bus

Bellevue to Sea-Tac Airport, West Seattle via Renton, Burien, White Center Sound Transit Express Bus



Auburn to Overlake via Kent, Renton, Bellevue Sound Transit Express Bus



Network Summary

All-Day Service Network

All-day routes operate throughout the day, providing connections from morning through evening between designated regional growth centers, manufacturing/industrial centers, and other areas of concentrated activity, serving a variety of travel needs and trip purposes.



Peak-Only Service Network

Peak-only service provides faster travel times and accommodates very high demand for travel to and from major employment centers and Park & Ride lots during morning and afternoon commuting periods. Peak services operate between 5-9 AM and 3-6 PM.



Service Families

Frequency and Areas Served

based on 2010 operations

Metro Service Families

Sorvico Familios	Poutos	Annual R	idership	Annual Rev	enue Hours
Service rammes	Koutes	Rides	% of Total	Hours	% of Total
Very Frequent Connects centers with 15 minute headways or better, operating 16 to 20 hours daily.	B Line, 550	1,905,541	14%	47,465	10%
Frequent Connects centers with 30 minute headways or better (15 during peak hours), operating 16 to 20 hours daily.	234, 235, 245, 255, 271	3,420,881	25%	117,972	26%
Local Connects neighborhood services and centers with 30+ minute headways.	221, 222*, 230*, 233*, 240, 242, 246, 249, 253*, 272*, 925, 926*, 535, 560, 566	5,446,623	41%	214,492	47%
Hourly Infrequent service (60+ minute headways) to low-density areas.	_	0	0%	0	0%
Peak Peak-hour service on weekdays, connecting regional employment centers.	111, 114, 167, 210, 211, 212, 215, 216, 217, 218, 219, 225*, 229*, 232, 237, 243, 247*, 250, 256*, 261*, 266*, 342, 532, 555, 556	2,663,174	20%	75,477	17%
Night Owl Late night service connecting local and regional employment areas.	280	11,381	< 0.1%	821	< 0.1%

Figures based on 2010 data. Some route frequencies have since been adjusted.

Bellevue Service Categories

Sorvico Familios	Routos	Annual R	idership	Annual Reve	enue Hours
Service rammes	Koutes	Rides	% of Total	Hours	% of Total
Community Service Routes exclusively serving Bellevue, connecting neighborhoods and local destinations.	219, 222*, 246, 249, 925, 926*	492,372	4%	31,072	7%
Eastside Service Routes connecting Bellevue with other Eastside communities.	B Line, 221, 230*, 232, 233*, 234, 245, 253*	3,732,429	28%	123,349	27%
Regional Service Routes connecting Bellevue to other regional destinations, notably including Seattle.	111, 114, 167, 210, 211, 212, 215, 216, 217, 218, 225*, 229*, 237, 240, 242, 243, 247*, 250, 255, 256*, 261*, 265, 266*, 271, 272*, 280, 342, 532, 535, 550, 555, 556, 560, 566	9,222,798	69%	301,806	66%
* Pouto dolotod Fall 2011				Eiguros bass	d on 2010 data

* Route deleted Fall 2011

Figures based on 2010 data.

The charts above categorize the routes comprising Bellevue's transit network according to the service family standards set forth by Metro's Service Guidelines (see table at right) and the Bellevue service categories as defined by the 2003 Transit Plan.

As indicated, regional services account for over two-thirds of all Bellevue transit ridership and revenue hours. Though peak routes are the most numerous by a wide margin, frequent and local services each account for larger shares of total ridership.

Summary of Typical Service Levels by Family

Someine Formily		Frequency		Days of	Hours of
Service Family	Peak	Off-Peak	Night	Service	Service
Very Frequent	15 or better	15 or better	30 or better	7 days	16-20 hrs
Frequent	15 or better	30	30	7 days	16-20 hrs
Local	30	30-60	*	5-7 days	12-16 hrs
Hourly	60 or worse	60 or worse	—	5 days	8-12 hrs
Peak	8 trips/day min		—	5 days	Peak

* Night service on local corridors is determined by ridership and connections

Frequent Service Network

All-Day Routes Providing Service Every 15 Minutes or Better

based on Fall 2011 service period



Service Headways

Fall 2010

			Weekday				Saturday			Sunday	
Route	AM Peak (5:00-9:00)	Midday (9:00-15:00)	PM Peak (15:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)
B Line	-	—	—	—	—	—	—	—	—	—	—
111	20-30	—	20-30	—	_	—	_	—	_	_	_
114	30	_	30	_	_	—	_	_	_	_	_
167	30	—	30	—	—	—	—	—		—	—
210	20	—	30	—	—	—	—	—	—	_	—
211	30	—	30	—	—	—	—	—	_	—	—
212	7-25	—	7-30	—	—	—	—	—	_	—	—
215	30	—	30	—	—	—	—	—	_	—	—
216	30	—	30	—	—	—	—	—	—	_	—
217	3 trips	—	3 trips	—	—	—	—	—		—	—
218	9-30	—	10-30	—	—	—	—	—	_	—	—
219	60	—	60	—	—	—	—	—	_	—	—
221	30	30	30	30-60	l trip	30	60	—	60	60	—
222	30	30	30	60	—	30	60	—	30	60	—
225	3 trips	—	3 trips	—	—	—	—	—	_	—	—
226	_	_	_	_	_	—	_	_	_	_	_
229	30	—	30	—	—	—	—	—	_	—	—
230	30	30	30	30-60	—	30-60	30-60	—	60	60	—
232	30	—	30	—	—	—	—	—	_	—	—
233	30	30	30	60	—	60	—	—	_	—	—
234	30	30	30	60	—	60	—	—	60	—	—
235	—	—	—	—	—	—	—	—	—	—	—
237	3 trips	—	2 trips	—	—	—	—	—	_	—	—
240	30	30	30	30-60	60	30	60	60	60	60	60
241	—	—	—	—	—	—	—	—	—	—	—
242	12-30	—	30	—	—	—	—	—	_	—	—
243	3 trips	_	2 trips	_		—		_			_
245	15	30	15	30	60	30	30	60	30-60	60	60
246	30	60	30	_	_	_	_	_	_		_

			Weekday				Saturday			Sunday	
Route	AM Peak (5:00-9:00)	Midday (9:00-15:00)	PM Peak (15:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)
247	3 trips	—	2 trips	_	—	_	—		—	—	—
249	30	60	30		_	60	_	_		_	_
250	30	—	30		—	—	—	—		—	—
253	30	30	30	30-60	60	30-60	30-60	60	60	60	60
255	15-30	30	20-30	30-60	60	30	60	60	30	60	60
255 Variant	10-15	30	10-15	30-60	60	30	60	60	30	60	60
256	30	—	30	—	—	—	—	—	—	—	—
261	30	—	30	—	—	—	—	—	—	—	—
265	15-20	—	15-20		—	—	—		—	—	—
266	20	—	20	_	_	—	_	—	_	_	—
269	20-30	3 trips	20-30	l trip	—	—	—	—		—	—
271	30	30	30	60	—	30	60	—	60	60	—
271 Variant	10	15-30	10	30	—	30	60	—	60	60	—
272	15-30	4 trips	20-60		—	—	—		—	—	—
280	—	—	—	—	2 trips	—	—	2 trips	—	—	2 trips
342	30	—	30		—	—	—	—	—	—	—
532	10-30	—	15-30	_	_	—	—		—	—	—
535	30	30	30	60	—	60	60		60	60	—
550	6-10	15	6-10	30	30	15	30	30	30	30	30
554	30	15-30	20-30	30-60	60	30	60	60	30	60	60
555	30	l trip	30	_	_	—	—	—	—	—	—
556	30	l trip	30	_	_	—	—		—	—	—
560	30	60	30	60	60	60	60	60	60	60	60
560 Variant	30	30	30	30-60	60	60	60	60	60	60	60
566	7-30	30	10-30	30-60	_	—	_	_	_	—	_
925	—	DART	DART	_	_	—	_			_	
926	30	60	30			_	_				

О

Note: Routes 226, 235, 241, and the RapidRide B Line were first introduced in Fall 2011.

О

Ο

Service Headways

Fall 2011

			Weekday				Saturday			Sunday	
Route	AM Peak (5:00-9:00)	Midday (9:00-15:00)	PM Peak (15:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)
B Line	10	15	10	15	30	15	15	30	15	15	30
111	20-30	_	20-30		_	_		_	_	_	_
114	30	—	30	—	—	—	—	—	—	—	—
167	30	_	30	—	—	_	—	_			_
210	4 trips	—	4 trips		—	—	—	—	—	_	_
211	30	—	30		—	—	—	—	—	—	—
212	7-15	—	7-15		—	—	—	—	_	—	—
215	30	—	30		—	—	—	—	_	—	—
216	30	—	30		—	—	—	—		—	—
217	3 trips	—	3 trips		—	—	—	—	—	_	_
218	9-30	—	10-30		—	—	—	—	—	_	_
219	2 trips	—	3 trips		—	—	—	—	—	—	—
221	30	30	30	30-60	l trip	30	60	—	60	60	—
222	—	—	—	—	—	—	—	—	—	—	—
225	—	—	—	—	—	—	—	—	—	—	—
226	30	30	30	60	—	30	60	—	60	60	—
229	—	—	—	—	—	—	—	—	—	—	—
230	—	_	—	—	_	—	_	_	_	_	_
232	30	—	30		—	—	—	—	_	—	—
233	—	—	—		—	—	—	—	_	—	—
234	30	30	30	60	_	60	_	_	60	_	_
235	30	30	30	30	30-60	60	60	60	60	60	60
237	3 trips	_	2 trips		—	_	—	—	_	_	—
240	30	30	30	30-60	60	30	60	60	60	60	60
241	30	30	30	60		30	60	_	60	60	_
242	20-30	_	30	_	_	_	_	_			_
243	3 trips	_	2 trips	_		_		_	_		_
245	15	15	15	30	60	30	30	60	30-60	60	60
246	30	60	30	_		_			_		

			Weekday				Saturday			Sunday	
Route	AM Peak (5:00-9:00)	Midday (9:00-15:00)	PM Peak (15:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)	Daytime (5:00-18:00)	Evening (18:00-22:00)	Night (22:00-1:00)
247	—	—	—	—	—	—	—	—	—	—	—
249	30	30	30	—		45	_	_	45	—	_
250	30	_	30	_	_	_		_	_	_	
253		—	—		—	_	—	_	_	—	_
255	20	30	20	30	60	30	30-60	60	30-60	30-60	60
255 Variant	10	15	10	30	60	30	30	60	30-60	30-60	60
256	—	—	—	—	—		—	—	_	—	—
261		_		_	—		—	_		—	_
265	15-20	_	15-20	_	_						_
266	—	—	—	—	—	_	—	—	—	—	—
269	20-30	3 trips	20-30	l trip	—	—	—	—	—	—	—
271	10-30	30	30	60	30	30	60	—	60	60	—
271 Variant	5-10	15	5-10	30	—	30	60	—	30-60	60	—
272	—	—	—	—	—	—	—	—	—	—	—
280	—	—	—	—	2 trips	—	—	2 trips	—	—	2 trips
342	30	—	30	—	—	—	—	—	—	—	—
532	10-30	_	15-30		—					—	_
535	30	30	30		—	60	60			—	_
550	6-10	15	6-10	30	30	15	30	30	30	30	30
554	30	20	20-30	30-60	60	30-60	60	60	30-60	60	60
555	30	l trip	30		_					_	
556	30	l trip	30		—	_	—	—	_	—	—
560	30	60	30	60	60	60	60	60	60	60	60
560 Variant	30	—	30	—	—	—	—	—	—	—	—
566	7-30	30	10-30	30-60	_	_	_	_	_	_	_
925	—	DART	DART	_		_	_			_	
926	_	_	_	_	_	_	_	_	_	_	

Note: Routes 222, 225, 229, 230, 233, 247, 253, 256, 261, 266, 272, and 926 were deleted as part of the Fall 2011 service revision.

Network Performance

Ridership by Mobility Management Area (MMA)

between 2003 and 2011



The chart and map above depict the change in transit ridership in Bellevue between 2003 and 2011 by Mobility Management Area (MMA). The trend among all areas has been an increase in transit use over this period, but the magnitude of increase varies significantly among the MMAs. Downtown and Eastgate have experienced the most dramatic gains, while others like North Bellevue and Newport Hills have realized more modest increases. It is notable that no single year can be characterized as having universally the highest ridership—2008 represents a local maximum for many of the MMAs, but ridership peaked in South Bellevue in 2010 and in Downtown and Crossroads in 2011.



Productivity and Cost Efficiency

based on 2010 operations



The chart above depicts the performance of Bellevue-serving routes according to three distinct metrics: productivity and cost efficiency define the x- and y-axes, respectively, while cost per ride is indicated by the size of the bubbles corresponding to each route. The best-performing routes are those in the top-right quadrant of the chart, such as 253, 550, and 230. The worst-performing routes, conversely, are generally those in the lower-left quadrant, including 210, 250, and 232. Because the relationship between productivity and cost efficiency is irregular, routes like 218 and 926 may perform exceptionally well with respect to one metric while performing especially poorly in regards to another. Cost per ride can be said to roughly follow a similar pattern, though the most expensive route to operate per ride—Route 219—does not conform perfectly to this trend.

By considering the corridor group-based color-coding of the route icons, it can be seen that two-zone routes connecting Seattle to Bellevue and other Eastside communities (blue and green icons) tend to have greater productivity and lower costs per ride than average, despite above-average cost per vehicle revenue hour. By contrast, routes operating wholly within Bellevue (yellow icons) or between Eastside communities (red and brown icons) tend to have lower productivity and higher operating costs per ride.

Note that Sound Transit Routes 564 and 565 are present in the above chart but are not referenced elsewhere in this document. This is because these routes were replaced by Route 566 in February of 2010—several months before the Fall 2010 quarter used herein as the baseline for performance measurement.

King County Metro Network Productivity

Bellevue Routes Serving the Seattle Core

Fall 2010

		0							0				
	Pe	eak	Off-	Peak	Ni	ight		Pe	eak	Off-	Peak	Ni	ght
Route	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi/ Plat Mi	Route	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi Plat Mi
111	19	11.5		_	_	_	219	4.1	0.8		_	_	
114	17.5	10.2			_	_	221	15.8	5.6	16.5	5.9	8.6	2.3
167	22.1	16.9		_	_	_	222	16.8	3.9	14.8	5.0	7.4	1.9
210	10.6	5.0		_	_	_	230E	35.3	8.0	25.8	5.9	26.6	
211	14.9	4.7	_	_	_	_	230W	26.2		20.6	5.3	11.3	3.5
212	34.4	14.7	_	_	_	_	232	14.2	4.2			_	_
215	17.3	9.7	_	_	_	_	233	21.4	4.9	22.6	6.8	10.5	2.4
216	20.6	12.3		_	_	_	234	15.7	6.6	13.2	5.6	6.2	2.9
217	26.9	12.2	_	_	_	_	237	15.2	5.7			_	_
218	36.5	17.2	_	_	_	_	240	29.1		25.0	8.9	13.6	3.4
225	28.8	12.5	_	_	_	_	242	15.5	8.1	—	_	_	_
229	24.7	13.4	—	—	—	—	245	19.5	5.7	21.2	5.8	11.8	2.5
243	23.0	8.6	—	—	—	—	246	10.3	2.2	7.5	1.1	—	—
250	11.2	5.5	—	—	—	—	247	6.3	1.9	—	—	—	—
255	28.8	15.0	22.6	13.9	14.7	10.4	249	14	3.6	12.6	4.7	5.4	2.0
256	16.1	6.6	—	—	—	—	253	33.4	10.1	38.2	8.6	27.7	5.6
261	18.8	7.3	_	—	—	_	342	13.9	6.4	—	—	—	—
266	13.2	6.7	—	—	—	_	925 DART	1.0		1.0		—	—
271	20.9	9.0	25.9	11.8	13.5	5.9	926 DART	7.3	1.9	6.9	1.8	—	—
272	15.0	6.5	_	—	—	_							
280	-	—	—	—	9.8	4.5	Fall 2010 Th	resholds					
							Тор 25%	21.1	7.0		8.6	17.4	
Fall 2010 Th	resholds						Bottom 25%	8.4	2.2	10.4	2.4	7.8	2.2
Тор 25%	41.1	12.9	49.7	13.9	28.7	7.3	Figures based o	on Fall 2010	performand	e data.			

Bellevue Routes Not Serving the Seattle Core

Adapted from Metro's Fall 2010 Route Productivity report, the above tables depict the two measures of productivity identified by Metro's Service Guidelines—rides per platform hour and passenger miles per platform mile—for all Metro routes serving Bellevue. These measures help Metro identify which routes require modification due to notably strong or weak performance, determined by whether a route ranks among the top or bottom 25th percentile for that measure and operating period. Ranking among the bottom 25th percentile indicates a potential need for service reduction, replacement, or elimination, while ranking among the top 25 percent may indicate a potential need for improved service frequency. Because routes serving the Seattle core tend to exhibit greater productivity than routes that do not, the analysis is segmented to avoid geographically inequitable restructuring practices that may otherwise result from this tendancy.

Note that the 'Top 25%' and 'Bottom 25%' thresholds indicated above refer to the 25th percentile of all King County Metro routes, not the 25th percentile among Bellevue-serving routes.

Bottom 25%

8.2

Spring 2011

Bellevue	Routes	Serving	the	Seattle	e Core	

	Pe	eak	Off-	Peak	Ni	ght
Route	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi/ Plat Mi
111	20.8	12.8	_	_	—	_
114	17.8	10.4	_	_	_	_
167	22.3	16.7	—	_	—	_
210	10.7	5.0		_	_	_
211EX	16.9	4.8	—	—	—	-
212	36.7	15.8	—	—	—	-
215	19.7	11.1	—	—	—	—
216	21.2	13.9		_	_	_
217	30.4	16.0	—	_	_	—
218	37.6	20.8	_	_	_	_
225	24.5	12.4	_	_	_	_
229	27.2	14.3	_	_	_	_
243	24.2	8.9	_	_	—	_
250	9.2	4.5	—	_	—	-
255	27.0	14.7	20.5	12.1	17.5	11.8
256	17.9	9.4	_	—	—	_
261	17.2	7.2	—	—	—	-
266	13.5	7.1	—	—	—	—
271	23.3	10.0	26.7	13.6	16.9	7.9
272	14.3	6.1	_	—	_	—
280*	_	_	_	—	9.8	—
Spring 2011	Threshold	s				
Тор 25%	42.0	12.9	52.6	15.2	32.0	8.4
Bottom 25%	18.6	7.9	29.4	9.8	17.7	5.8

Bellevue Ro	utes Not	Serving th	ne Seattle	e Core		
	Pe	ak	Off-	Peak	Ni	ght
Route	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi/ Plat Mi	Rides/ Plat Hr	Pass Mi/ Plat Mi
219	4.2	0.5	—	_	_	—
221	17.0	5.0	17.8	5.7	12.5	2.7
222	15.6	3.3	16.0	4.7	8.3	2.4
230 E	36.3	8.6	25.9	9.6		6.5
230 W	28.2	7.2	21.4	7.9	11.9	4.5
232	15.5	4.8	_	_	_	_
233	23.0	5.5	22.2	6.4	13.5	3.2
234	16.2	5.7	12.7	5.6	8.8	3.3
237	13.7	5.1	_	_	—	—
240	27.9	9.9	24.5	12.6	12.9	5.5
242	16.7	9.1	—	_	_	_
245	22.4	6.2	20.2	6.0	15.7	3.7
246	9.6	1.8	8.5	2.0	—	—
247	4.8	1.3	—	_	_	_
249	15.6	4.5	14.9	5.3	5.0	1.4
253	35.2		36.4	12.5	31.5	8.9
342	14.7	4.7	—	—	—	—
925 DART	1.0	0.5	—	—	—	—
926 DART	8.4	2.2	7.4	1.9	_	—
Spring 2011	Threshold	s				
Тор 25%	27		27.4	9.3	20.3	6.2
Bottom 25%	9.8	2.9	12.7	3.3	8.8	2.6

Figures based on Spring 2011 performance data.

 \ast Passenger miles data was unavailable on some routes and time periods due to a lack of APC data.

The above tables depict the same measures of productivity for the Spring 2011 service quarter, adapted from the King County Metro 2011 Service Guidelines Report published in March 2012. While many of the routes previously identified as being among the top or bottom 25th percentile in Fall 2010 continued to be ranked as such in Spring 2011, there are several instances in which this is not the case. In general, even those routes ranked among the bottom 25 percent performed better in Spring 2011 than they did in Fall 2010.

Network Summary

Summary of Performance Measures

D	Annual Ride	s		Annual Passens	ger Mi	le		Annual Fare Re	evenue		Anr	nual Operati	ng Co	st	Farebox Recovery	Annual Platfor	m Hou
Route			otal Rank % Total I		Rank	Rank % Total Rank			x % Total Rank			Rank	Katio _{Rank}	% Total			
550	1 905 541	13.5%		25 145 580	19.6%	1	\$	3 388 304 84	16.7%	1	\$	6 540 362 57	7 7%	2	51.8%	53 482 40	7.8%
271	1,200,572	0.0%		7,750,444	4 10/		•		7.5%	•	•	7,000,105,41	0.0%		20.0% 22	55,102.17	0.7%
2/1	1,200,362			7,730,400			\$	1,515,704.31			\$	7,236,125.41	0.0%		20.7% 22	37,417.17	0.7 /6
230	1,013,994			3,007,078			\$	1,008,310.40			\$	4,//8,14/.35	5.7%		21.1% 21	40,472.10	5.9%
255	1,012,989			9,505,587	7.4%	3	\$	1,426,212.63			\$	5,923,638.84	7.0%		24.1% 16	42,581.06	
253	918,944	6.5%		2,466,460	1.9%	14	\$	935,397.73	4.6%		\$	3,049,369.79	3.6%	10	30.7% 9	26,512.54	3.9%
245	812,197	5.7%		2,733,510	2.1%	12	\$	881,617.11	4.3%		\$	5,103,273.30	6.0%		17.3% 29	43,098.42	6.3%
240	732,339			2,886,404			\$	773,376.36			\$	3,711,863.58	4.4%		20.8% 23	30,886.81	
554	717,759			14,008,427			\$	1,120,509.49			\$	4,827,727.93	5.7%		23.2% 18	39,477.70	
560	610,752			7,870,942			\$	741,824.25			\$	5,082,704.30	6.0%		14.6% 35	41,562.71	
566	505,968			7,952,593			\$	810,505.90	4.0%	9	\$	4,143,705.05	4.9%	8	19.6% 24	33,884.25	
535	420,937	3.0%	Ш	5,894,619			\$	661,193.45	3.3%	14	\$	2,455,158.52	2.9%	13	26.9% 13	26,416.60	3.9%
218	375,185	2.6%	12	4,841,476	3.8%	9	\$	897,350.03	4.4%	7	\$	1,768,527.77	2.1%	14	50.7% 2	10,275.85	1.5%
221	361,456	2.6%	13	1,571,325	1.2%	20	\$	382,822.41	1.9%	16	\$	2,899,409.58	3.4%	Ш	13.2% 38	24,678.42	3.6%
532	341,194	2.4%	14	5,943,502	4.6%	7	\$	704,255.50	3.5%	12	\$	1,610,096.32	1. 9 %	16	4 <mark>3.7%</mark> 5	17,324.04	2.5%
212	316,677	2.2%	15	2,689,195	2.1%	13	\$	695,972.93	3.4%	13	\$	1,381,212.28	1.6%	18	50.4% 3	9,213.07	1.4%
234	315,133	2.2%	16	1,798,941	1.4%	17	\$	349,751.68	1.7%	17	\$	2,792,160.14	3.3%	12	12.5% 39	23,486.07	3.4%
233	235,478	1.7%	17	835,453	0.7%	24	\$	244,390.10	1.2%	20	\$	1,313,097.93	1.6%	20	18.6% 26	11,091.84	1.6%
222	216,501	1.5%	18	800,312	0.6%	26	\$	200,185.65	1.0%	21	\$	1,763,420.02	2.1%	15	11.4% 41	15,003.38	2.2%
Ш	173,004	1.2%	19	2,173,435	1.7%	16	\$	390,122.66	1.9%	15	\$	1,418,753.81	1.7%	17	27.5% 12	9,123.53	1.3%
556	159,165	1.1%	20	2,325,060	1.8%	15	\$	126,800.76	0.6%	29	\$	896,304.25	1.1%	24	14.1% 36	7,329.33	1.1%
249	149,425	1.1%	21	549,590	0.4%	32	\$	157,509.74	0.8%	25	\$	1,366,140.81	1.6%	19	11.5% 40	1,754.48	1.7%
216	126,733	0.9%	22	1,665,010	1.3%	19	\$	284,089.19	1.4%	18	\$	959,495.86	1.1%	22	29.6% 10	6,148.28	0.9%
555	107,767	0.8%	23	1,463,182	1.1%	21	\$	192,176.55	0.9%	22	\$	762,058.08	0.9%	26	25.2% 14	6,231.57	0.9%
215	107,653	0.8%	24	1,753,282	1.4%	18	\$	256,607.55	1.3%	19	\$	1,075,873.71	1.3%	21	23.9% 17	6,222.00	0.9%
242	92,361	0.7%	25	964,212	0.8%	23	\$	142,116.93	0.7%	28	\$	849,543.43	1.0%	25	16.7% 31	5,964.40	0.9%
167	83,843	0.6%	26	1,156,743	0.9%	22	\$	121,512.42	0.6%	30	\$	567,738.67	0.7%	34	21.4% 20	3,797.05	0.6%
229	79,779	0.6%	27	782,085	0.6%	27	\$	180,217.50	0.9%	23	\$	467,045.00	0.6%	39	38.6% 6	3,225.75	
246	76,922	0.5%	28	192,404	0.2%	42	\$	105,762.88	0.5%	37	\$	958,031.36	1.1%	23	11.0% 42	8,454.41	1.2%
261	76,052	0.5%	29	483,157	0.4%	35	\$	146,050.70	0.7%	26	\$	529,865.19	0.6%	36	27.6%	4,038.45	0.6%
272	75,239	0.5%	30	600,328	0.5%	29	\$	93,642.09	0.5%	39	\$	691,806.64	0.8%	30	13.5% 37	5,024.74	0.7%
232	75,228	0.5%	31	489,967	0.4%	34	\$	116,162.32	0.6%	33	\$	743,043.80	0.9%	27	15.6% 33	5,290.33	0.8%
114	73,911	0.5%	32	826,684	0.6%	25	\$	159,670.41	0.8%	24	\$	637,889.28	0.8%	31	25.0% 15	4,231.93	0.6%
342	67,082	0.5%	33	656,710	0.5%	28	\$	109,635.43	0.5%	35	\$	713,321.85	0.8%	29	15.4% 34	4,812.71	0.7%
225	63,313	0.4%	34	526,955	0.4%	33	\$	145,165.10	0.7%	27	\$	325,648.98	0.4%	42	44.6% 4	2,201.50	0.3%
211	62,884	0.4%	35	337,110	0.3%	40	\$	116,914.11	0.6%	32	\$	537,223.59	0.6%	35	21.8% 19	4,211.75	0.6%
250	58,962	0.4%	36	586,650	0.5%	30	\$	118,356.37	0.6%	31	\$	716,909.99	0.8%	28	16.5% 32	5,269.33	0.8%
266	58,172	0.4%		561,159	0.4%	31	\$	112,732.05	0.6%	34	\$	607,906.14	0.7%	32	18.5% 27	4,392.49	0.6%
256	53,747	0.4%		379,393	0.3%	38	\$	82,438.39	0.4%	41	\$	474,167.63	0.6%	37	17.4% 28	3,334.50	0.5%
217	52,169	0.4%		377,806	0.3%		\$	85,375.66	0.4%		\$	268,616.66			31.8% 8	1,942.25	0.3%
243	51,347	0.4%		379,960	0.3%		\$	107,453.03			\$	302,279.96			35.5% 7	2,235.35	0.3%
210	45,556	0.3%		407,155	0.3%		\$	98,214.27			\$	572,814.53	0.7%	33	17.1% 30	4,285.46	0.6%
926	36,307	0.3%		117,104	0.1%		\$	43,062.83	0.2%		\$	472,889.34	0.6%	38	9.1% 43	5,049.00	0.7%
237	25,384	0.2%		229,092	0.2%		\$	45,843.40	0.2%		\$	241,957.78			18.9% 25	1,667.26	0.2%
247	15,151	0.1%		97,837	0.1%		\$	19,566.88			\$	329,196.98			5.9% 45	2,391.79	0.4%
219	13,217	0.1%		45,819	0.0%	46	\$	18,652.37			\$	392,149.67			4.8% 46	3,219.22	
280	11,381	0.1%	46	32,379	0.1%		\$	11,029.08	0.1%	46	\$	172,048.43	0.2%	46	6.4% 44	1,164.54	0.2%
Total	14,165,358			127,970,13	4			20,324,565	5			84,432,722	2		_	681,880)
Average	307,943			2,781,959	959			441,838		1,835,494				22.5%	14,823		
Median	107,710			899,832				169,944				927,168			20.2%	6,227	
All figures	from King County Me	etro a	nd Sc	und Transit annual	2010	perfo	rman	ce data Route	0 265	is no	t includ	led because	it did	not	begin operation in Bell	evue until Fall 20	11

II-32



rs	Annual Platform Miles	Annual Revenue Hours	Rides per	Cost per	Revenue Hours	Passenger Mile	
Rank	% Total Rank	% of Total Rank	Platform Hour Rank	Platform Mile Rank	per Platform Hour Rank	per Platform Mile Rank	
2	753,461. <mark>34</mark> 6.7% 3	47,465.40 9.6% I	35.63 2	\$ 8.68 13	0.89 3	22.36 7	
1	824,069 7.4% I	42,133 <mark>.94</mark> 8.6% 2	21.55 14	\$ 8.78	0.71 13	53.97 2	
6	494,063 4.4% 9	27,378.78 5.6% 8	25.05 7	\$ 9.67 2	0.68 18	36.63 3	
	689,299 6.2% 6	28,540.27 5.8% 6	23.79 9	\$ 8.59 14	0.67 19	54.94	
	287,586 2.6% 14	18,718.17 3.8% 10	34.66 3	\$ 10.60 I	0.71 14	32.63 5	
	533,163 4.8% 8	29,625.85 6.0% 5	18.85 19	\$ 9.57 3	0.69 17	14.83 12	
	405,871 3.6% 11	22,685.79 4.6% 9	23.71 10	\$ 9.15 5	0.73 12	20.73 8	
	722,641.00 6.5% 5	36,360.28 7.4% 4	18.18 21	\$ 6.68 35	0.92 2	N/A	
	737,302. <mark>00 6.6% 4</mark>	38,699.75 7.9% 3	14.69 32	\$ 6.89 31	0.93	8.35 30	
	794,070.00 7.1% 2	27,412.48 5.6% 7	14.93 30	\$ 5.22 44	0.81 6	7.97 31	
	570,725.47 5.1% 7	16,993.05 3.4% 13	15.93 26	\$ 4.30 45	0.64 24	10.74 25	
18	281,263 2.5% 15	3,980.84 0.8% 24	36.51	\$ 6.29 38	0.39 46	33.09 4	
12	317,266 2.8% 13	18,476.53 3.8% 11	14.65 33	\$ 9.14 6	0.75 10	15.09 11	
14	444,740.14 4.0% 10	10,183.97 2.1% 15	19.69 17	\$ 3.62 46	0.59 32	14.20 16	
19	182,883 1.6% 18	4,181.50 0.8% 23	34.37 4	\$ 7.55 21	0.45 43	23.59 6	
13	317,437 2.8% 12	17,671.49 3.6% 12	13.42 37	\$ 8.80 10	0.75 9	16.71 10	
17	147,332 1.3% 21	8,439.52 1.7% 16	21.23 15	\$ 8.91 8	0.76 7	14.78 14	
15	193,221 1.7% 16	11,047.38 2.2% 14	14.43 34	\$ 9.13 7	0.74	11.36 23	
20	188,799 1.7% 17	5,066.10 1.0% 21	18.96 18	\$ 7.51 23	0.56 36	11.51 22	
22	160,109.63 1.4% 20	5,561.66 1.1% 18	21.72 13	\$ 5.60 43	0.76 8	12.22 21	
16	144,037 1.3% 22	8,118.57 1.6% 17	12.71 39	\$ 9.48 4	0.69 16	10.82 24	Best-Performing Route
25	134,844 1.2% 23	3,546.94 0.7% 26	20.61 16	\$ 7.12 28	0.58 33	12.35 19	Top 25% of Routes
23	124,503.94 1.1% 24	5,229.78 1.1% 20	17.29 24	\$ 6.12 39	0.84 4	8.84 28	by category
24	181,260 1.6% 19	3,320.63 0.7% 27	17.30 23	\$ 5.94 41	0.53 38	9.67 27	36 by category
26	118,525 1.1% 25	3,614.28 0.7% 25	15.49 27	\$ 7.17 27	0.61 30	14.82 13	46 Worst-Performing Route by category
37	68,466 0.6% 35	2,257.77 0.5% 34	22.08 12	\$ 8.29 15	0.59 31	16.90 9	
	58,421 0.5% 38	I,708.50 0.3% 40	24.73 8	\$ 7.99 18	0.53 39	13.39 17	
21	108,148 1.0% 27	5,519.98 1.1% 19	9.10 43	\$ 8.86 9	0.65 22	3.64 43	
36	66,023 0.6% 36	2,593.49 0.5% 32	18.83 20	\$ 8.03 17	0.64 25	7.32 32	
30	92,389 0.8% 30	3,150.75 0.6% 29	14.97 29	\$ 7.49 25	0.63 27	14.64 15	
27	117,194 1.0% 26	3,039.14 0.6% 30	14.22 35	\$ 6.34 37	0.57 34	4.18 41	
34	81,305 0.7% 33	2,301.23 0.5% 33	17.47 22	\$ 7.85 19	0.54 37	10.17 26	
31	103,414 0.9% 29	3,169.27 0.6% 28	13.94 36	\$ 6.90 30	0.66 21	6.35 35	
43	42,210 0.4% 43	1,351.50 0.3% 42	28.76 5	\$ 7.71 20	0.61 29	12.48 18	
35	71,709 0.6% 34	I,997.50 0.4% 38	14.93 31	\$ 7.49 24	0.47 42	4.70 39	
28	106,425 0.9% 28	2,968.13 0.6% 31	11.19 40	\$ 6.74 34	0.56 35	5.51 37	
32	83,664 0.7% 31	1,926.60 0.4% 39	13.24 38	\$ 7.27 26	0.44 45	6.71 33	
38	57,467 0.5% 39	2,140.67 0.4% 36	16.12 25	\$ 8.25 16	0.64 26	6.60 34	
	30,906 0.3% 45	1,258.00 0.3% 43	26.86 6	\$ 8.69 12	0.65 23	12.22 20	
	44,327 0.4% 42	1,181.48 0.2% 44	22.97 11	\$ 6.82 33	0.53 40	8.57 29	
33	82,004 0.7% 32	2,136.56 0.4% 37	10.63 41	\$ 6.99 29	0.50 41	4.97 38	
29	62,799 0.6% 37	4,237.25 0.9% 22	7.19 44	\$ 7.53 22	0.84 5	3.69 42	
45	40,394 0.4% 44	736.89 0.1% 46	15.22 28	\$ 5.99 40	0.44 44	5.67 36	
	50,445 0.5% 41	I,490.22 0.3% 4I	6.33 45	\$ 6.53 36	0.62 28	1.94 44	
	56,931 0.5% 40	2,148.90 0.4% 35	4.11 46	\$ 6.89 32	0.67 20	0.80 45	
46	29,569 0.3% 46	821.27 0.2% 45	9.77 42	\$ 5.82 42	0.71 15	4.48 40	
	11,202,679	492,588	_	_	_	-	
	243,537	10,708	18.44	7.50	0.65	13.94	
	129,674	4,081	17.30	7.50	0.65	11.36	

C

SECTION 5: FORMAL LETTERS

JAMES W. MACISAAC, P.E.

381 - 129th P	Place NE ** Bellevue, WA 98005 ** Phone/Fax (206) 459-4653						
	E-mail: jmacisaac381@hotmail.com						
DATE:	DATE: September 13, 2012						
TO: FROM:	Bellevue Transportation Commission Jim MacIsaac						
SUBJECT:	Bellevue Transit Master Plan						

Commissioners:

Thank you for the opportunity to comment on the forthcoming Bellevue Transit Master Plan.

It appears that prior plans were lofty goals and little more than wishes for future transit mode shares of daily and peak period person trips. Hopefully this plan update will match future transit mode share estimates with future transit services planned or needed for Bellevue, and a funding approach to achieving the future service plan.

Bellevue CBD Issue

For example, attached is an illustration of 2010 existing and 2030 daily transit ride estimates TO downtown Bellevue. Note that in 20 years transit ridership is estimated to increase 6 times over existing use – from 7,600 daily transit trips to 46,700 daily transit trips. The East Link FEIS estimates that only 6,000 of those trips will be served by East Link. Can the existing downtown Bellevue bus transit center accommodate bus volumes with a 5.4-fold increase in bus transit riders? Will the Bellevue Transit Master Plan develop a transit service plan to accommodate the increase in bus service needs? And address its funding needs?

This illustration of downtown Bellevue transit access patterns is representative of the access patterns and transit mode shares that the BKR model is producing for all major employment areas of Bellevue – CBD, Bel-Red Corridor, Microsoft/high-tech area, I-90 Corridor – by 2030.

I-405 BRT System Issue

Look again at the attachment for the transit access patterns for the Bellevue CBD. By 2030 the BKR model estimates that only 17% of transit ridership will be from Seattle and 9% from the Redmond/Microsoft (SR-520) corridor. East Link will serve many of those corridor trips that can get to its rail stations with very limited amounts of park-ride facilities (none in Seattle).

But the rest of the region must be served by bus routes. Note that 31% of the Bellevue CBD transit trips are estimated to approach via the I-405 North corridor – nearly twice the transit ridership from Seattle. An estimated 19% of transit riders will approach via the I-405 South corridor – greater than Seattle. That finds that 50% of Bellevue transit trips must be served via the I-405 corridor – three times the transit trips coming from Seattle. Yet, currently each of the I-405 corridors has only two regional bus routes and only a few Metro Transit bus routes.

As you know, all Eastside transportation agencies adopted the I-405 Corridor Transportation Plan. A major element of that plan was top priority for a north-south BRT-lite* system in the I-405 corridor. Such a system could likely be implemented for about the same cost (plus inflation) as the Regional Express bus system and infrastructure improvements that Sound Transit implemented with its Sound Move (Phase 1 Regional Transit plan) for East King County.

Sadly that element of the <u>adopted</u> I-405 Corridor Plan has been set aside by Sound Transit to devote all of its ST2 East King regional transit funding for the next 20 to 30 years to the East Link light rail line. If it presses for funding of an ST3 phase, it will likely give top priority to extending that rail line. Metro transit has no funding to pursue a BRT-lite* system in the I-405 corridor.

Conclusion

The Bellevue Transit Master Plan must give major attention to describing a 2030 transit system that will serve its 2030 goals, strategic plans and rider estimates. It must also develop a potential funding strategy to produce the 2030 transit service plan.

A major element of the Bellevue Transit Master Plan must be the planned BRT-lite* system in the I-405 corridor that would serve 50% of the transit access needs of the Bellevue major employment areas. It will be three-county in reach (Snohomish, King, Pierce) and therefore be a top priority in Regional Transit planning. If assigned to Sound Transit for implementation, it **must** be given top priority for any ST3 program proposal.

If a transit plan needed to accommodate the 2030 strategic plan cannot find funding, then the City of Bellevue must develop a traffic model that reflects only a funded transit plan.

Respectfully offered, Jim MacIsaac

* BRT-lite means express bus routes operating on shared HOV or HOT lanes rather than on exclusive transit lanes or guideways.


Source: CBD Plan Update Presentation to the Bellevue Transportation Commission – July 2012





October 10, 2012

Franz Loewenherz Sr. Transporation Planner City of Bellevue 450 110th Avenue. NE PO Box 90012 Bellevue, WA 98009

RE: Bellevue Transit Master Plan

Dear Mr. Loewenherz,

Seattle Children's is very interested in giving input into the city of Bellevue's Transit Master Plan.

Children's Bellevue Clinic and Surgery Center is large and growing player in Bellevue's Medical District. On an Avenuerage day, 200 staff work at the Clinic to perform as many as 25 surgeries and see over 325 patients.

Children's is committed to encouraging transit and other non-drive-alone commuting among our staff. Our comprehensive transportation program provides free transit passes, free bikes, highly subsidized vanpools and a \$3.25 commute bonus for staff who leAvenue their cars at home. At the same time we carefully manage our parking through daily parking charges.

Although the commute benefits are the same at both facilities, there are stark differences in mode split between our Seattle Main Campus (39.3% drive alone with 5.7 vehicle miles trAvenuelled) and our Bellevue Surgery Clinic (64.2% and 9.4 VMT.)

We believe the Bellevue Transit Master Plan provides a great opportunity to address some of the challenges that make it difficult for our staff and our patients to choose transit when they come to our clinic.

Please accept the following recommendations for inclusion into the plan:

1) Improve transit connections between the Medical District and the Bellevue Transit Center

We see opportunities to consolidate existing service on routes 234, 235 and 226 so that they serve the same stops both directions on 116th Avenue NE south of NE 12th Street. By staggering this service the connections to the Bellevue Transit Center could run every 10 minutes.

2) Create a direct connection between the University District and the Medical District

The route 271 currently provides service from University District to Bellevue and continues to Issaquah crossing I405 on NE 4th Street. If re-routed to cross I405 over the 12th Avenue Bridge,

4800 Sand Point Way NE PO Box 5371 Seattle, WA 98145-5005 TEL 206-987-5908 Email paulo.nunesueno@seattlechildrens.org



route 271 could create a direct connection between University District in Seattle and Bellevue's Medical District. This makes a vital link between for the 5,000 Children's employees who ahve access to frequent all day shuttle to the University District, the 10,000 staff, students and faculty at the University of Washington Medical Center and the growing employment center in the Medical District.

3) Improve crossing of NE 116th for transit users

The north bound King County Metro Transit route 234 stops in front of our clinic. The south bound stop is directly across the street but there is no marked crossing at that location. We encourage the city to pursue opportunities to improve this crossing movement perhaps by adding a mid-block crossing which would shorten the walk to the south bound bus stop to 50 feet rather than the current 700 feet to needed to reach the bus stop after crossing at NE 12th Street.

4) Improve the pedestrian environment along NE 116th Street

The city of Bellevue has made significant improvements to the pedestrian realm on the NE 12th Street and NE 10th Street crossings over 1405. The wide and sometimes protected walk ways over the bridges create excellent pedestrian levels of service. Unfortunately when arriving at the Medical District pedestrians encounter narrow sidewalks adjacent to fast moving traffic that are often interrupted by driveways and utility poles.

Children's encourages the city of Bellevue to pursue improvements along NE 116th Street to match the excellent facilities now available on the NE 10th and NE12th I405 bridge crossings.

Thank you for considering our input. Please let us know if there are other opportunities available for us to participate in shaping this exciting plan. We look forward to working with you to make transit a more effective option for our patients and staff.

Best regards,

Paulo Nunes-Ueno Director | Transportation and Sustainability Seattle Children's

> 4800 Sand Point Way NE PO Box 5371 Seattle, WA 98145-5005

TEL 206-987-5908 Email paulo.nunesueno@seattlechildrens.org

SECTION 6: SERVICE ELEMENT SCOPE OF WORK

ATTACHMENT A-1 SCOPE OF WORK

BELLEVUE TRANSIT MASTER PLAN SERVICE ELEMENT September 20, 2012

This document describes the project background, approach, scope of work, budget, and schedule for an Agreement ("Agreement") between the City of Bellevue ("City") and Nelson\Nygaard ("Consultant") for transit service consultant services in support of the Bellevue Transit Master Plan.

PROJECT BACKGROUND

The City Council envisions a fully integrated and user-friendly network of transit services for Bellevue that supports the city's growth, economic vitality, and enhanced livability, and has developed the following set of project principles to direct development of the Transit Master Plan (see Attachment A-2).

- 1. Support planned growth and development in Bellevue with a bold transit vision that encourages long-term ridership growth.
- 2. Engage community stakeholders in setting the priorities for transit delivery.
- 3. Determine where and how transit investments can deliver the greatest degree of mobility and access possible for all populations.
- 4. Incorporate other transit-related efforts (both bus and light rail) underway in Bellevue and within the region.
- 5. Identify partnership opportunities to further extend transit service and infrastructure.
- 6. Develop measures of effectiveness to evaluate transit investments and to track plan progress.

Guided by these project principles, Bellevue staff will embark on a planning process that includes multiple engagement opportunities with the following community stakeholders and partner agencies.

- City Council: On July 9, 2012 the Bellevue City Council initiated the Bellevue Transit Master Plan an update of the City's 2003 Transit Plan. To help guide the project, Council approved a set of project principles intended to provide direction over the course of the project. Staff will seek Council's concurrence on key plan components (service, capital, and policy elements) throughout the plan development process. Consistent with previous transit planning efforts, the Bellevue Council will be presented with the final Transit Master Plan report for adoption; which, upon acceptance, will inform updates to the Comprehensive Plan, Land Use Code, and potential city-led transit initiatives.
- Transportation Commission: There will be regular staff briefings to the Transportation Commission to ensure continuity through the plan development process. Staff will seek the Transportation Commission's concurrence on key plan components (service, capital, and policy elements) and approval of the final report before it is submitted to Council for adoption.
- Other Boards & Commissions: Per Council direction, staff is broadening the Transit Master Plan engagement effort to allow for additional opportunities for informal discussions among members of

the Transportation, Planning, Arts, and Human Services Commissions and the Parks and Community Services Board. Two strategies will be employed to enhance communication between members of these boards and commissions: (i) Members of the Planning Commission, Human Services Commission, Arts, and Parks and Community Services Board will be invited to attend all staff briefings on the Transit Master Plan to the Transportation Commission. (ii) A Transit Master Plan discussion forum will be held for the Transportation, Planning, Arts, and Human Services Commissions and the Parks and Community Services Board on Tuesday, September 18 (from 6 to 8 PM) at City Hall to help inform Bellevue's transit service vision.

- Community Stakeholders: A comprehensive public engagement strategy will provide meaningful input on transit services and facilities from a range of stakeholders including residents, workers, students, businesses, major institutions, neighboring cities, agencies, and others (e.g., Network on Aging, Bellevue School District, Bellevue College, Chamber of Commerce, Bellevue Downtown Association). Special attention will be required to enlist the participation of "under-represented" communities such as immigrants, low-income and non-native English speakers.
- Partner Agencies: A high level of coordination will occur between partner agencies and the multiple City departments influenced by the Transit Master Plan. King County Metro Transit, Sound Transit, Puget Sound Regional Council, City of Redmond, City of Kirkland and others will be consulted throughout the plan development.

PROJECT APPROACH

The Bellevue Transit Master Plan (TMP) project, an update of the 2003 Bellevue Transit Plan, will allow Bellevue to build on the successes that followed the adoption of the previous plan. Consistent with the 2003 Plan, the TMP comprises three major elements supported by extensive public outreach and data-driven technical research. Although presented sequentially in the scope of work, the service, capital, and policy elements are not envisioned as stand-alone work products. Each of these plan elements inform and are informed by the overall process.

1. Service Element: The service element will explore existing and future market conditions that influence transit performance in Bellevue. The outcome of this effort will be the identification of



the city's transit service priorities—a refinement of the project principles adopted at the on-set of the project—including route-level recommendations that are responsive to different financial scenarios (reduction, status-quo, expansion) and attune to different time horizons (short-, medium-, and long-term).

- 2. **Capital Element:** The capital element will identify strategies to improve access to and efficient and reliable delivery of transit service in Bellevue. A secondary purpose is to identify facilities and amenities for passenger comfort and convenience. The capital element will be closely coordinated with Bellevue's station area planning studies and the Downtown Transportation Plan Update and will draw from other recent plans (e.g., Eastgate/I-90 Project, Bel-Red, FATS, Ped-Bike).
- 3. **Policy Element:** The policy element will explore different strategies the City might undertake to support transit including the implementation of development guidelines that direct future land uses to facilitate improved access and use transit. These strategies have the potential to increase transit ridership along affected corridors, thereby aligning with Metro's resource allocation decisions in its Strategic Plan for Public Transportation 2011-2021 and associated Service Guidelines.

CONSULTANT TASKS AND DELIVERABLES

The first step in developing transit service recommendations is to fully understand the market that currently exists and how it may change over time. In particular, land use patterns, population and employment density, and projected travel patterns will play a crucial role in assessing transit's potential in Bellevue. The result of this analysis will be recommended transit service modifications aimed at relieving overcrowding, improving schedule reliability, expanding service coverage, improving service to major generators, providing more direct linkages between communities, eliminating service where no longer necessary, and reducing inconvenience to passengers by improving scheduled connections and/or providing more direct services where many transfers are now required.

Task 1: Existing Transit Market

The City's transit system is intimately woven into existing demographic, economic, and social conditions. For instance, by understanding the major employment areas of the city, one can better determine the location and times of day when transit is required. This task involves extensive use of geographic information systems (GIS), route performance data, and market research to provide:

- (i) an understanding of key demographic data that influences transit performance;
- (ii) an overview of the current bus network structure, services provided in terms of miles and hours, and services consumed (i.e. ridership);
- (iii) an assessment of transit service availability, connectivity, and competitiveness in terms of service area coverage, frequency of service by day-of-week and time period, proximity of bus routes to and directness of service between major activity centers and residential neighborhoods, and comparison of bus versus automobile travel times;
- (iv) an assessment of physical barriers to accessing transit;
- (v) an appraisal of route performance as measured by efficiency, effectiveness, and reliability;
- (vi) an estimate of how improved transit services will affect social equity throughout the city; and
- (vii) an appreciation of public opinion regarding transit service in Bellevue based on the 4,250 responses to the City's online transit survey, transit agency customer comments, and findings from other reports, including the 2011-2012 Bellevue Human Services Needs Update, wherein 40 percent of respondents reported having difficulty "finding public transportation to get to work or other places."

Given Metro's focus on creating a more efficient and productive transit system, the Bellevue TMP will need to develop strategies that align the City's interests and priorities with Metro's Strategic Plan and associated Service Guidelines. In this context, it is important to develop a transit service vision for Bellevue that makes better use of the region's limited resources as efficiently and effectively as possible.

To support this Bellevue TMP objective, the Consultant will evaluate the performance of the existing route network to ensure that current operations are being used effectively. Some transit services in Bellevue have growing demand or are already exceeding capacity. Other routes and time periods are known to be not well used. Efficient and productive services find the middle ground between over-supply and overcrowding. To achieve this balance, transit agencies can change the frequency of service, when and how long a particular service is offered (the span of service), and the spacing between stops, and jurisdictions like Bellevue can change the level of priority given to transit, such as through infrastructure improvements like HOV lanes or signal priority.

Bellevue staff compiled a detailed route profile report and maps depicting demographic conditions to assist the Consultant in evaluating existing transit market conditions. Bellevue staff is also completing a detailed review of an online questionnaire that will summarize the major themes expressed by current transit riders, former transit riders, and non-riders. The Consultant will be provided this information along with additional analyses on a range of topics including a review of RapidRide B Line scheduling that suggests there might be excessive layover time in this BRT-style service. Finally, the Graphics Consultant and City staff will create detailed maps for the project including representations of transit services available during the base, peak, night, and weekend periods in Bellevue.

The Consultant will develop a technical memo appraisal of current market characteristics and route performance in Bellevue. The memo should make ample use of performance metrics highlighting particular routes that might be very productive on average, but might have an unproductive segment or time of day. Conversely, some services are particularly busy, but only at certain times. The memo should also include the following representative types of tables, figures, and supporting narrative: (i) summary of service frequencies and operating characteristics of routes serving Bellevue; (ii) destinations served by Bellevue routes by service frequency during each time period; and, (iii) route performance assessment consistent with Metro's service guidelines. The Consultant will share with the Graphics Consultant illustrations developed on previous projects (including the Seattle Transit Master Plan) that can be repurposed for the Bellevue Transit Master Plan project.

Deliverables:

- The Consultant will prepare a technical memo that makes ample use of performance metrics in its assessment of the existing transit market in Bellevue.
- The Consultant will prepare sketch maps of the existing transit market and share illustrations developed on previous projects that will be reproduced by Bellevue's graphics consultant for inclusion in the technical memo.
- The Consultant will respond to one round of comments from City staff for this technical memorandum and slide presentation.

Task 2: Future Transit Market

This task will look to the future and identify ways to address the challenges and opportunities of changing demographics, land use characteristics, and travel patterns affecting transit performance. Demand estimates are critical to designing the future transit network and predicting the viability of the system. The City's Bellevue-Kirkland-Redmond (BKR) travel demand model will be used to analyze the potential passenger demand for multiple routing and financial scenarios (as limited by horizon years and number of scenarios).

Production/attraction travel data between Mobility Management Areas (MMAs) in Bellevue and between these MMAs and other Eastside and regional destinations will be used by Bellevue staff to generate flow maps between these travel districts. This information will be used by the Consultant to compare the existing service structure to the pattern and volumes of future travel demand and to

optimize transit service delivery by identifying where route modifications might result in more efficient operations.

EastLink represents a significant consideration in Bellevue's future transit market. The 2003 Bellevue Transit Plan did not take into account the 2008 voter-approved Sound Transit 2 (ST 2) Plan to extend light rail from Seattle, across Lake Washington on Interstate 90, through Bellevue and on to Overlake Transit Center in Redmond. The 2010 East Link Transit Integration Plan, created by Sound Transit and King County Metro staff, serves as a "best guess" prediction of how the bus network will operate in the future with East Link LRT. Bellevue modeling staff have had to interpret the East Link Transit Integration Plan to define the transit network used in future transportation forecasting scenarios.

In Task 2, the Consultant will conduct a detailed review of the representation of the East Link Transit Integration Plan in the city's current BKR travel demand model. The Consultant will characterize the overall bus/rail integration plan and may suggest alternative refinements to its interpretation as depicted in the BKR model.

The Consultant will also review the sufficiency of service routing and scheduling assumptions and planned bus accommodations at East Link stations and identify opportunities to enhance service delivery and the rider experience when transferring between the local and regional transit network at East Link stations in Bellevue. The Consultant will, among other elements of its technical memo, clearly document Sound Transit/Metro assumptions related to bus integration (e.g., number of bus bays, layover space, kiss-and-ride and paratransit van accommodations) at EastLink stations in Bellevue.

Deliverables:

- The Consultant will participate in a series of discussions with Bellevue modeling staff in a review of the BKR model and its characterization of the 2010 East Link Transit Integration Plan.
- The Consultant will prepare a technical memo that assesses the future transit market in Bellevue.
- The Consultant will respond to one round of comments from City staff for this technical memorandum.

Task 3: Transit Service Vision

This task assesses opportunities for new service, modifications to existing services, and potential reductions of service so Metro and Sound Transit can better allocate scarce resources more effectively. Recognizing that a one-size-fits-all approach to bus service may not meet every community's needs, King County Metro adopted a <u>Five-year implementation plan for alternatives to traditional transit service</u> <u>delivery</u> (June 2012). Consistent with this direction, the Consultant is expected to propose transportation services of the right size, scale, and type in Bellevue.

The Consultant will consider the trade-off discussions by Bellevue's Board and Commissioners at the Transit Master Plan Forum (9/18/12) in defining which of the following service attributes should be prioritized in support of the City's transit vision: service frequency, service directness, span of service, service area coverage, and transit travel time. Findings from this forum will be used by the Consultant, along with the results from all preceding tasks, in developing a phased strategy for addressing Bellevue's unmet transit needs. Unmet transit needs will be addressed with prioritized route-level recommendations matched to current and forecasted travel patterns, responsive to a range of financial scenarios (reduced funding, stable funding, and growing resources), and attune to different time horizons (short-, medium-, and long-term).

The Consultant's route-level proposals technical memo should include the overarching rationale supporting the recommendation (e.g., system simplicity, directness, convenience, reliability) along with

performance metrics about the overall positive net benefit for transit customers and use of resources (e.g., cost implications, efficiencies realized, anticipated productivity gains). Route level recommendations will be prioritized in a high/medium/low ranking to highlight the relative importance to supporting the overall transit service vision.

Bellevue staff will support this task by providing the Consultant with visual displays of transit propensity that will be useful for identifying areas where transit service should be expanded, and where service is being provided in low propensity areas which could be more cost-effective if served by alternative service delivery methods. The Consultant will also review the BKR travel demand forecasts to determine the predominant future travel patterns to/from and within Bellevue. All BKR model data will be processed and delivered to the Consultant by City of Bellevue staff in graphical or tabular format. The City's BKR model will also be used to estimate ridership variations associated with service options developed by the Consultant, taking into account such trade-offs as service directness and service coverage, which tend to have an inverse relationship.

The development of near-term transit recommendations will begin with a strategy session facilitated by the Consultant, who will convene Sound Transit and King County Transit staff in an open exchange of ideas. This strategy session will involve evaluating and prioritizing service alternatives consistent with the project principles. The two City Council adopted principles (see Attachment A-2) that most closely relate to this task are: (i) support planned growth and development in Bellevue with a bold transit vision, and (ii) determine where and how transit investments can deliver the greatest degree of mobility and access possible for all populations. It is critical that the Consultant develop creative and practical transit service recommendations based on a realistic appraisal of available resources.

The mid-term transit vision developed in this task will prepare the City for the traffic circulation impacts associated with the EastLink construction period. The Consultant will interview Metro, Sound Transit, and Bellevue staff to arrive at routing recommendations that respond to the closure and reconstruction of the South Bellevue Park & Ride, tunneling work on NE 6th Street that affect westbound approach access to the Bellevue Transit Center, and potentially the construction of Bellevue Way Arterial HOV improvements. The Consultant will identify both transit service (routes that should be considered for upgrades/restructuring during this period) and capital (interim commuter parking and layover facilities) mitigation measures that the City will reference in its future discussions with Metro and Sound Transit.

The long-term transit vision developed in this task will prepare the City for the start of EastLink operations in Bellevue. The Consultant will also identify additional future regional transit investments such as the detailed Sound Transit Phase 3 planning study that will commence in 2015 and implementation of the Bus Rapid Transit project elements identified in WSDOT's Interstate 405 Master Plan.

The Graphics Consultant and City staff will create detailed maps developed from the Consultant's sketches of the transit service vision. The Consultant will also share with the Graphics Consultant illustrations developed on previous projects (including the Seattle Transit Master Plan) that can be repurposed for the Bellevue Transit Master Plan project.

Deliverables:

- The Consultant will facilitate a series of strategy sessions with City and transit agency staff to arrive at a shared transit service vision for Bellevue.
- The Consultant will develop a technical memo that makes ample use of performance metrics in its prioritization of route-level recommendations.
- The Consultant will prepare sketch maps showing proposed route-level modifications that will be reproduced by the Graphics Consultant for inclusion in the technical memo.

- The Consultant will assess the applicability of alternative service delivery methods that might be appropriate in Bellevue.
- The Consultant will integrate into the technical memo an assessment of the percent of destinations accessible in a given amount of time.
- The Consultant will integrate into the technical memo an analysis that highlights the community's internal strengths and weaknesses and external opportunities and threats in realizing the transit service vision.
- The Consultant will respond to one round of comments from City staff for this technical memorandum.

Task 4: Partnership Opportunities

The Consultant will undertake an analysis of <u>partnership opportunities</u> that the City might want to consider with other government organizations (e.g., Bellevue School District, Bellevue College, Metro, Sound Transit), human service agencies, and private corporations, to improve transit service delivery in Bellevue. The City of Bellevue's speed and reliability partnership with both Redmond and King County Metro in implementing the RapidRide B line is an example of this type of public sector leadership. Jurisdictions elsewhere in the region (e.g., Seattle and Redmond) are also using direct financial partnerships to secure additional transit service in their communities.

Deliverables:

- The Consultant will join City staff in a series of meetings with institutions (e.g., Bellevue School District) to clarify potential partnership opportunities to improve transit service delivery in Bellevue.
- The Consultant will develop a technical memo that assesses potential partnership opportunities.
- The Consultant will respond to one round of comments from City staff for this technical memorandum.

Task 5: Project Management

The Consultant will manage the contract tasks and budget in general accordance with the contract. Propose reallocation of budget resources among budgeted tasks, or changes to the timeline may be approved with concurrence of the City.

Deliverables:

- The Consultant will develop an agenda for and participate in a project kick-off meeting at a mutually agreed-upon time subsequent to receiving a notice to proceed.
- The Consultant will prepare invoices and progress reports on a monthly basis, and submit these to the City of Bellevue project manager. Progress reports will document the specific work accomplished and the completion status for each task identified in this scope of work, public the budget status for each task.

CITY OF BELLEVUE PROJECT MANAGEMENT

Franz Loewenherz Senior Planner, Bellevue Transportation Department 425-452-4077, floewenherz@bellevuewa.gov

BUDGET

The budget for this project will not exceed \$50,000.

WORK PROGRAM SCHEDULE

All of the work outlined in this Service Element scope of work and all deliverables will be completed prior to February 28, 2013.

	2012				2013	
Task	September	October	November	December	January	February
1: Existing Transit Market		7	T			
2: Future Transit Market			1	r		
3: Transit Service Vision						*
4: Partnership Opportunities						*

Technical Memorandum

The Service Element is the first phase of the overall Transit Master Plan process that will be completed by the end of 2013 as indicated in the graphic below.

