# COMMUTER PARKING NEEDS ANALYSIS REPORT

Draft

Bellevue Transit Master Plan

## CITY OF BELLEVUE

February 2014

Transportation Department

Draft

PHOTO BY WSDOT

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**PHOTO BY John Tiscornia**

# INTRODUCTION

Commuter parking facilities play an important role in concentrating transit rider demand, often in lower-density areas that would otherwise be unable to support frequent services. These facilities provide convenient access to transit via automobile or bicycle for people who do not live within convenient walking distance of a standard bus stop. Park-and-ride facilities also serve as a meeting place for carpool and vanpool partners.

As the regional inventory of housing and employment grows, the demand for roadway capacity increases. Because roadway capacity and the ability to expand roadways is limited, park-and-ride lots provide an important amenity that supports the use of alternatives to the single-occupant vehicle, thereby requiring less overall roadway capacity. Further, by concentrating transit boardings at a single point, a more frequent level of service can be supported. This report reviews commuter parking demand assessments for the I-405 and I-90 corridors and considers this demand in light of existing parking facilities.

"For those of us who commute into Downtown Seattle, it isn't very realistic to catch the bus from our neighborhoods and transfer. So we depend upon the Park and Rides. It is therefore crucial that adequate parking spaces be provided at the Park and Rides in order for Bellevue residents to use transit for commuting."

-Sarah, Work and Special Event Transit User
Resident of Bellevue[1]

[1] Write-in comment from the *Transit Improvement Survey Summary Report* (2012).

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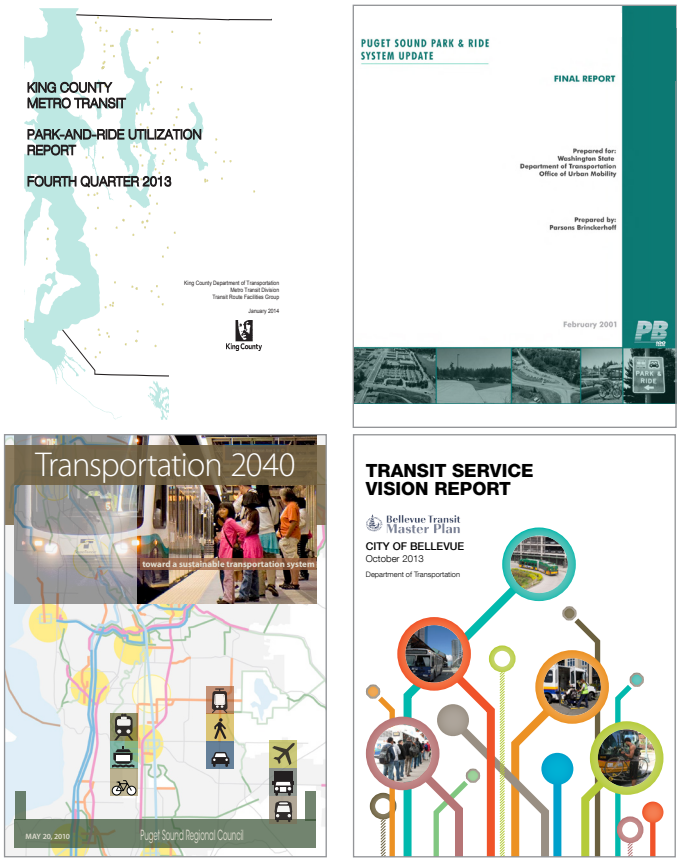


**Figure 1** King County Metro publishes *Park-and-Ride Utilization Reports* (top left) quarterly, while the *Puget Sound Park & Ride System Update* (top right) by WSDOT is the last study reporting on the regional demand for park-and-ride capacity. PSRC's *Transportation 2040* (bottom left) and the TMP's *Transit Service Vision Report* (bottom right) also provide context for this report's assessment of park-and-ride capacity in Bellevue.

This report predicts that if a transit network were established that is consistent with the "Growing Resources Scenario" depicted in Bellevue's Transit Service Vision Report, then there would be an undersupply of parking stalls available along the two study corridors serving Bellevue, I-405 and I-90. If an unlimited supply of parking were available along each of the corridors, the I-90 corridor would be short by approximately 6,300 park-and-ride stalls and the I-405 corridor would be short by approximately 4,600 stalls.

## Background

An assessment of commuter parking facility needs is long overdue. Although King County Metro publishes *quarterly reports* detailing the utilization of all 131 park-and-ride facilities operating in the Metro service area, regional needs were last studied in 2001 when the Washington State Department of Transportation (WSDOT) conducted a study of park-and-ride lots in King, Pierce, Snohomish, and Kitsap Counties (Parsons Brinckerhoff 2001). The *Puget Sound Park & Ride System Update* recommended that the study should be updated every five to ten years to maintain its usefulness as a planning tool. The Puget Sound Regional Council (PSRC) also stated in *Transportation 2040* that transit agencies, WSDOT, and PSRC all recognize the need to re-examine the region's park-and-ride strategy.

This report analyzes capacity, use, and projected demand data for park-and-ride lots along two corridors: I-405 and I-90, as defined by the 2001 WSDOT study. Consistent with the *Bellevue Transit Master Plan*, the planning horizon for this study is through 2030, and projected demand is based on the transit network proposed by the 2030 Growing Resources scenario in Bellevue's Transit Service Vision Report. This assumes an increase in transit

service of about 47 percent from Spring 2012 to accommodate the projected near tripling of transit demand by 2030.

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# CONTEXT

## Comprehensive Plan Policies

In recognition of the important role of commuter parking facilities in providing local and regional access to transit, consolidating demand for service, and reducing vehicle trips and traffic congestion, the City of Bellevue *Comprehensive Plan* includes several policies related to commuter parking facilities. The City is dedicated to providing effective commuter parking options and to working in partnership with transit providers and the State to increase capacity as needed by expanding existing facilities, developing additional facilities, and pursuing lot lease agreements with other local entities.

**POLICY TR-53.** Work with transit providers to maintain and improve public transportation services to meet employer and employee needs. Develop and implement attractive transit commuter options, such as park and ride facilities and local shuttle systems with sufficient frequencies to increase use of transit for commuting and reduce reliance on private automobiles.

**POLICY TR-62.** Work to ensure that the regional transit system includes park and ride lots to serve activity centers in the region and on the Eastside to:

1. Intercept trips by single occupant vehicles closer to the trip origins;
2. Reduce traffic congestion; and
3. Reduce total vehicle miles traveled

**Figure 2** With more than 1,600 stalls, Eastgate Park-and-Ride concentrates ridership, thereby facilitating service by multiple transit routes that provide more frequent service than would otherwise be possible in the surrounding area.

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**POLICY TR-64.** Encourage transit providers and the state to provide new and expanded park and ride lots to adequately serve city residents and to develop additional capacity outside Bellevue at other strategic Eastside locations to serve outlying residents.

**POLICY TR-65.** Work with transit providers and local property owners to develop new leased park and ride lots.

**POLICY TR-75.27.** Provide reliable access to the system for Bellevue residents in cooperation with local and regional transit providers, by ensuring that adequate existing and new park and ride lot capacity, neighborhood bus connections and local and regional express bus services are available.

**POLICY TR-75.30.** Evaluate proposed new park and ride facilities and expansion of existing park and ride facilities to serve light rail transit, for their effectiveness to serve the community and the light rail system, and for their potential environmental and community impacts. New or expanded park and ride facilities should be consistent with the Comprehensive Plan vision for each specific location.

"...[M]ore parking needs to be made available at Park-and-Ride lots to enable more users to ride the buses. I would utilize bus service more if there was a safe place and convenient place for me to park my car!"

-Michelle, Non-Rider
Resident of Snohomish[1]

## Transit Master Plan

The Bellevue Transit Master Plan provides insight into the value of commuter parking facilities in relation to other components of the transit system. In particular, the Bellevue *Transit Improvement Survey*, completed in October 2012, and the *Existing and Future Conditions Report*, completed in August 2013, provide context about the issue of commuter parking in Bellevue in terms of their use and perceived value.

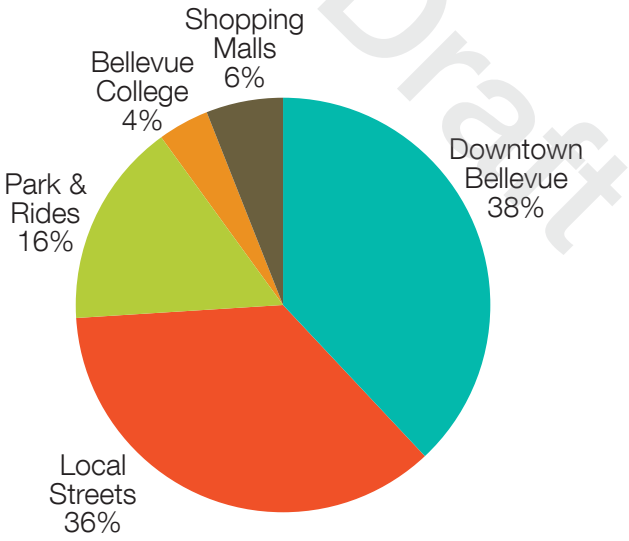
According to the Bellevue Transit Improvement Survey, investment in park-and-ride facilities is the third highest ranked priority among ten alternative municipal investment options. (see Figure 4). However,

[1] Write-in comment from the *Transit Improvement Survey Summary Report* (2012).

Investment in speed and reliability infrastructure and the provision of real-time information are ranked as higher priorities.

While park-and-ride lots are clearly an important amenity supporting transit use in Bellevue, the *Existing and Future Conditions Report* indicates that the majority of people riding transit in Bellevue access bus service at other types of facilities (Figure 3). In Fall 2011, about 38% (15,408/27,889) of daily ons/offs took place in Downtown Bellevue, including at the transit center; about 36% (14,523/27,889) occurred on local streets outside of Downtown Bellevue; and Park & Ride facilities, including Eastgate (2,166), South Bellevue (1,588), Newport Hills (281),

**Figure 3** Transit usage patterns in Bellevue based on Fall 2011 boarding and alighting (ons/offs) data.

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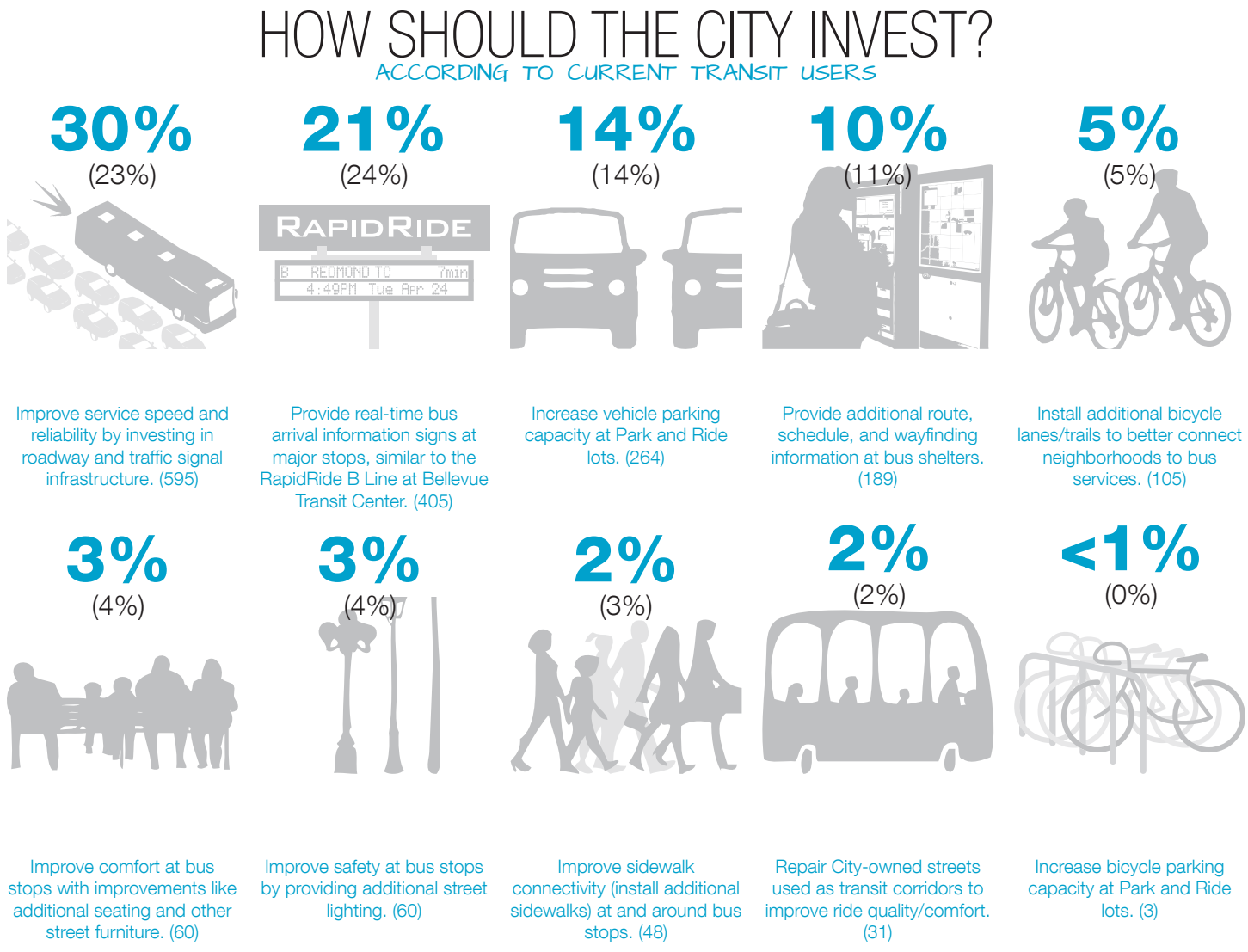


**Figure 4** According to the Bellevue Transit Improvement Survey, transit users requested park-and-ride improvements as the third most common response. This illustration shows the percent of all survey respondents who select each potential improvement (large blue numbers), the percent of Bellevue only respondents who select the improvement (black numbers below in parentheses), and the total number of respondents (in parentheses following each blue description).

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"Park and Rides are full in Bothell and Lynnwood very early - doesn't align with school schedules"
-Elesa, Non-Rider
Resident of Bothell[1]

Wilburton (51), and the Eastgate Direct Access Ramp (2,270), collectively accounted for about 16% of daily boardings and alightings.

## PARK-AND-RIDE USE

For the purpose of this report, park-and-ride usage is measured by corridor. These transit corridors were first established during the process of preparing WSDOT's 2001 *Puget Sound Park & Ride System Update* (Parsons Brinkerhoff, 2001). Corridors provide organizational structure to the existing park-and-ride lots. Capacity needs for park-and-ride lots are considered in general—not in a lot-specific sense—allowing for more flexibility in analyzing the findings and in developing solutions.

Corridor-level analysis allows for the capture of both local park-and-ride demand and demand that may be shifting between facilities within the corridor. Shifts between facilities, called "lot substitutions", are caused when a transit rider travels further, or in some conditions a short distance in the direction opposite of their destination, to reach a lot with more favorable conditions. These favorable conditions often include higher frequency services, a wider range of destinations, or more parking lot capacity. Lot substitution is observed in Bellevue where transit riders pass park-and-ride lots closer to their homes in favor of parking at the South Bellevue Park-and-Ride, where faster and more frequent service is available.

Lots representing the corridor broadly defined by the I-405 freeway are shown in green in the map in Figure 5 on page 7, and lots within the corridor broadly defined by the I-90 freeway are shown in orange on that same map. This map shows Bellevue and its surroundings with selected park-and-ride lots located within the identified corridors.

A review of park-and-ride usage in the Puget Sound Region over the past ten years reveals two trends. First, there is an uneven regional distribution

[1] Write-in comment from the *Transit Improvement Survey Summary Report* (2012).

**Figure 5** Park-and-ride lots in the I-405 (green) and I-90 (orange) corridors.

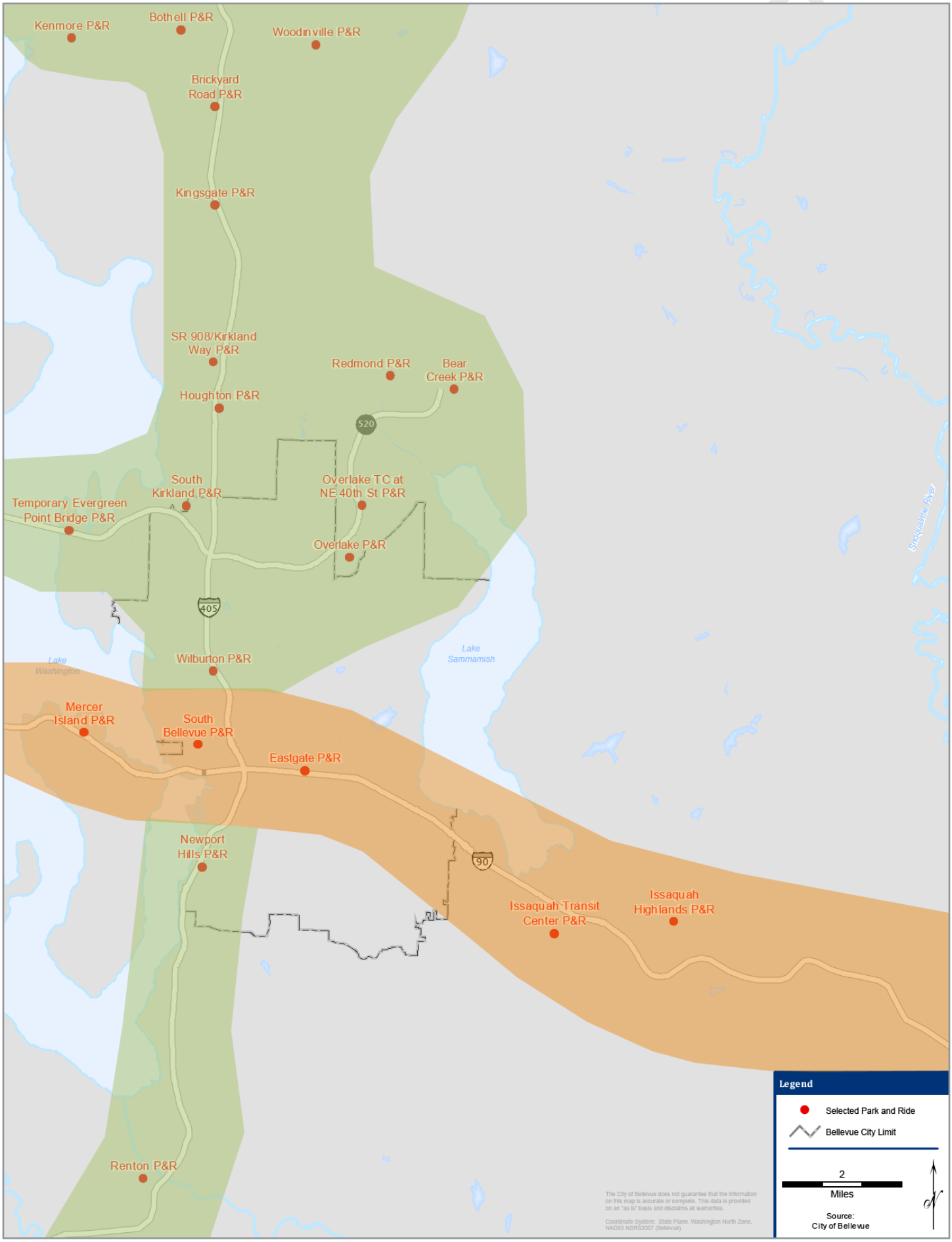

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**Figure 6** The South Bellevue Park-and-Ride is often over capacity, with vehicles parked along the shoulders of the driveway (circled).

of park-and-ride use. Several lots east of Bellevue and/ or an inconvenient distance from the frequent transit network are under-capacity, while several lots in western Bellevue such as the South Bellevue Park-and-Ride are over-capacity, as shown by the images in Figure 6. This imbalance of lot usage indicates that lot location in relationship to the frequent transit network is an important factor to consider when siting new facilities.

Figure 7 on page 9 presents a trend of increasing utilization of park-and-ride lots. Overall usage of park-and-ride lots in both corridors increased from 5,375 stalls used daily in the year 2000 to 8,779 stalls used daily in 2013, a 63% increase. An analysis by corridor reveals that park-and-ride usage rose by 128% (2,497 vehicles) for the I-90 corridor between the years 2000 and 2013, and usage in the I-405 corridor rose by 26% (907 vehicles). Refer to Appendix 1 on page 17 for the complete associated data. Contributing to this increased use is the construction of the new 1,600 stall Eastgate Park-and-Ride facility in 2005. The 2013 opening of a 525 stall parking garage at the South Kirkland Park-and-Ride facility is further increasing usage.

Table 1 on page 9 shows the existing lot capacity and current percent occupancy for park-and-ride and leased lots within the Bellevue city limits. There are a total of 3,377 park-and-ride stalls and a total of 351 leased lot stalls as of December 2013. Occupancy rates for leased lots vary considerably among Metro's quarterly utilization reports.

Park-and-ride usage in Bellevue varies by the size and location of the lot. Two of the most popular lots are profiled in the appendices of this report: South Bellevue Park-and-Ride and Eastgate Park-and-Ride. The South Bellevue Park-and-Ride is a surface parking lot with a 519-stall capacity. It is heavily utilized, especially by users originating a great distance from the lot. 44% of all users commute from a distance of greater than five miles from the lot.

The Eastgate Park-and-Ride is a five story parking structure with a capacity of 1,614 vehicles. The composition of the users of the Eastgate Park-and-Ride differ from those of the South Bellevue Park-and-Ride lot in that 52% of the users commuted between one and three miles to reach the lot. Additional information on the South Bellevue Park-and-Ride lot and the Eastgate Park-and-Ride lot may be found in Appendix 7 and Appendix 8.

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**Table 1** Park-and-Ride & Leased Lots 2013 Capacity & Usage

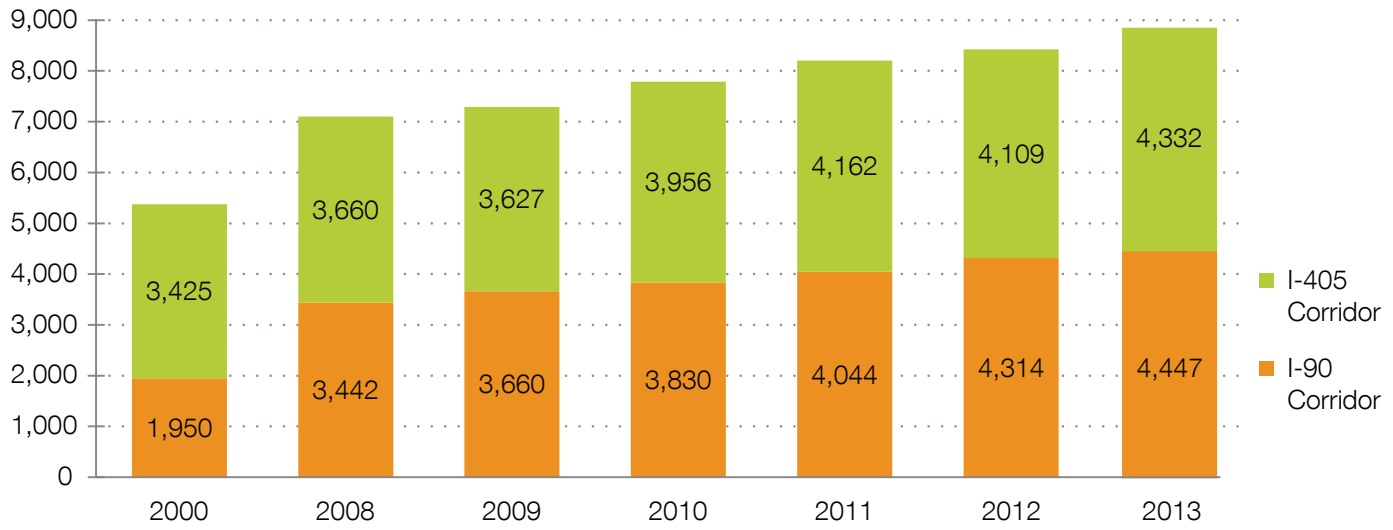
| Park-and-Ride Facility | Lot Capacity | % Occupancy |
|---|---|---|
| **Park-and-Ride Lots:** | | |
| South Bellevue | 519 | 107% |
| Eastgate | 1,614 | 99% |
| Wilburton | 186 | 87% |
| Newport Hills | 275 | 84% |
| S Kirkland (Bellevue and Kirkland) | 783 | 75% |
| **Total** | **3,377** | |
| **Leased Lots:** | | |
| St Luke's Lutheran Church | 30 | 18% |
| St. Thomas Episcopal Church | 64 | 38% |
| Grace Lutheran Church | 50 | 100% |
| Bellevue Christian Reformed Church | 20 | 38% |
| Bellevue Foursquare Church | 35 | 20% |
| St. Andrew's Lutheran Church | 20 | 63% |
| Eastgate Congregational Church | 20 | 100% |
| Newport Covenant Church | 75 | 24% |
| Newport Hills Community Church | 37 | 64% |
| **Total** | **351** | |

# 2030 PARK-AND-RIDE USE

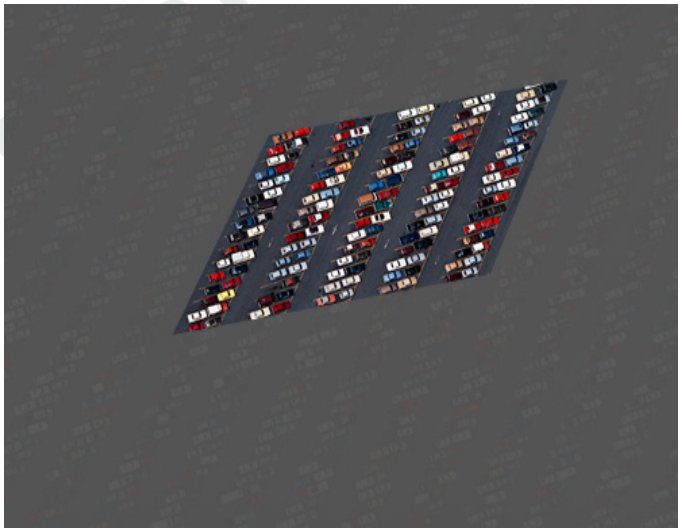
To quantify corridor-level park-and-ride demand under constrained and unconstrained conditions, forecasts for 2030 were developed based on the "Growing Resources Scenario" depicted in Bellevue's Transit Service Vision Report.

Demand projections used the Bellevue-Kirkland-Redmond (BKR) Travel Demand Model (MP0r12), The demand for park-and-ride use in the I-90 and I-405 corridors is estimated using all standard assumptions in the model, except that the unconstrained demand estimates remove capacity as a constraint for all park-and-ride lots.

**Figure 7** Historic utilization of park-and-ride lots for the I-405 and I-90 corridors based on fourth quarter Park-and-Ride useage (King County Metro, 2008 to 2013), (Parsons Brinkerhoff, 2001)



## Constrained



## Unconstrained

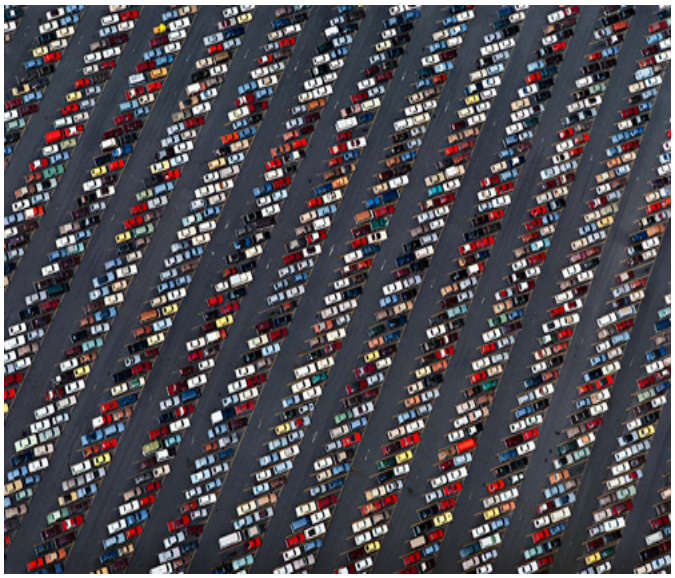


**Figure 8** The parked cars in these images represent the difference between constrained (above) versus unconstrained (below) in the 2030 travel demand forecast.

The following are standard assumptions and sources from the BKR Travel Demand Model:

- Baseline data is derived primarily from a regional survey conducted by the Puget Sound Regional Council (PSRC). This data is validated by census data and data from the PSRC regional household travel survey.
- The base-year model platform is updated annually to reflect changes in the land use and roadway network.
- The model is then validated with observed traffic counts and transit ridership on an annual basis.
- As travel survey data becomes available, enhancements are made to the BKR base model to more accurately project travel demand.
- Trip assignments constrain transit capacity, and park-and-ride capacity typically constrains the mode split process.
- The same park-and-ride attractiveness factors are carried forward from the constrained demand projection to the unconstrained demand projection.
- Attractiveness factors include size and ratio of lot size to average lot size in the system, and these are represented by a proxy figure in the model. Characteristics of transit service quality, such as frequency of service at a given park-and-ride facility, are not specifically considered by the model.

Both constrained and unconstrained scenarios use the same set of assumptions but differ only in that the constrained scenario limits the parking capacity to the expected size of each lot and the unconstrained scenario places no limit to the number of available parking stalls. This concept is graphically illustrated by Figure 8

# Modeling Results

Anticipated demand for park-and-ride lots in 2030 is shown for the I-90 and I-405 corridors in Figure 9 and Figure 10 on page 11, based on the modeling methodology outlined in the previous section. Refer to Appendix 2 to Appendix 5 on page 18 for the complete associated data. These charts show that for the year 2030, both constrained and unconstrained demand for each of the two corridors exceeds projected lot capacity for each corridor. If an unlimited supply of parking were available at all park-and-ride lots in both corridors, the model predicts that an additional 6,300 stalls would be required in the I-90 corridor and an additional 4,600 stalls would be required for the I-405 corridor to meet anticipated commuter parking demand in these corridors.

Model results show that unconstrained demand is approximately 200% greater than constrained demand, suggesting that new riders will likely begin using the system given increased parking availability.

**Figure 9** Constrained and unconstrained demand for park-and-ride lots along the I-90 corridor.

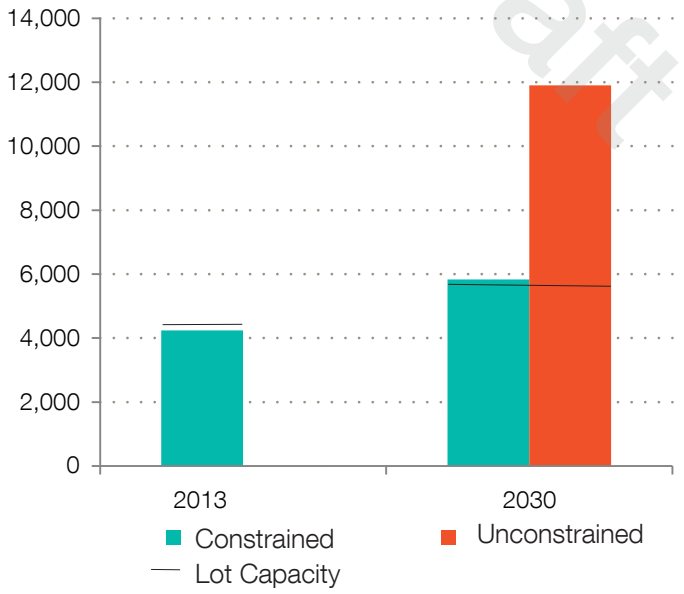
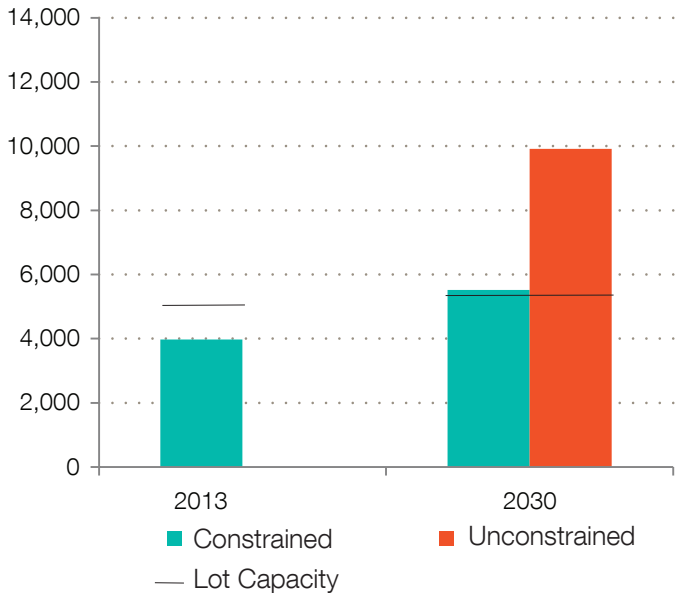



**Figure 10** Constrained and unconstrained demand for park-and-ride lots along the I-405 corridor.




# CONCLUSIONS

This assessment suggests that there is a significant shortage of commuter parking along the I-90 and I-405 corridors. As the park-and-ride usage trends indicate, commuter parking expansions have occurred in high-utility areas due to their locations in proximity to I-405 and I-90 and their central to western location within the City of Bellevue. Indeed, past experience shows that lots are quickly filled shortly after new park-and-ride facilities are built.

The constrained travel demand model indicates that there are approximately 200 stalls for each corridor that are required beyond those provided. When an unlimited supply of stalls is provided in the model— the unconstrained scenario—there is a shortage of approximately 6,300 stalls along the I-90 corridor and a shortage of approximately 4,600 stalls

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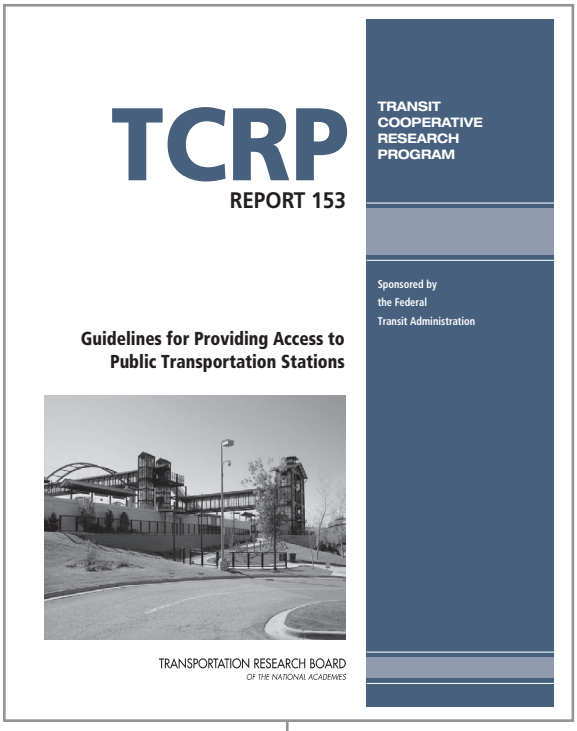
along the I-405 corridor. Thus, each corridor would need to have twice the number of stalls to keep up with the projected unconstrained demand.

# RECOMMENDATIONS

There are many ways to address the projected regional shortage of park-and-ride spaces. This section presents both supply and demand side solutions. From the supply side, It is recommended that new lots be constructed or existing lots be expanded using the guidance from this section regarding sizing and siting strategies. From the demand perspective, it is recommended that service be fast, reliable, and accessible. It is also recommended that service be provided in residential areas through the use of leased lots. While traditional Park-and-Ride lots are located near highways and arterials, leased lots could provide access to the frequent transit network for low density residential areas and their locations would blend in well the character of these neighborhoods. Finally, this section discusses several already underway regional strategies to improve the capacity of park-and-ride lots.

**Figure 11** Transit Cooperative Research Program (TCRP) Report 153: Guidelines for Providing Access to Public Transportation Stations identifies qualities of successful park-and-ride lots.




## Siting / Sizing Strategies

A strategic response to the unmet commuter parking needs in the I-90 and I-405 corridors warrants consideration of guidance found in "Characteristics of a Successful Rapid Transit-Focused Park-and-Ride Lot", within *TCRP Report 153: Guidelines for Providing Access to Public Transportation (see Figure 11)*. This report identifies the following characteristics of successful park-and-ride lots:

- *Locate in advance of congestion.* Park-and-ride lots in combination with rapid transit lines generate the greatest use (and transit ridership) in travel corridors that experience the most intense traffic congestion (i.e., peak-hour peak

direction freeway speeds of less than 30-35 miles per hour. Park-and-ride facilities should intercept motorists in advance of congestion and before points of major route convergence. Sites near junctions of radial transit lines and beltways or major arterial roads can tap a wide catchment area. Access to the lot should be upstream of major congestion points.

- *Locate sufficiently far away from the city center.* Park-and-ride facilities should be located as far from the downtown area as practical to remove the maximum number of travelers (and vehicle miles traveled (VMT) from roadways during peak periods. They generally should be located at least 5 to 8 miles from the city center. They should be far enough away to compensate for the time spent changing travel modes. Increasing parking spaces on the fringes of the downtown area is not desirable, as it could divert existing passengers from feeder transit services and non-motorized access modes.
- *Locate in safe areas.* Park-and-ride facilities should be placed in areas that are perceived as safe by patrons. They should not be located in high-crime areas, or in settings that are considered unattractive to users.
- *Complement and reinforce land development.* Park-and-ride facilities should be compatible with the surrounding environments. Large facilities - especially open-lot parking - should be limited or avoided in town centers, areas of high population and development density, and locations where transit-supportive uses are planned or encouraged around stations. Where garages are built, they should be carefully integrated with their surroundings.
- *Provide good roadway access.* Facilities should be accessible and visible from nearby freeways and arterial roadways.

"If the bus route came closer to where I live I wouldn't need to drive to the Park and Ride. So either the city should have a lot more Park and Ride spaces or have more bus routes in unserved parts of Bellevue."

-Pat, Shopping and Social Transit User
Resident of Bellevue[1]

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"I sometimes have to pass two Park-&-Ride lots on my route before finding a parking space. By that time, I've driven half-way to work."

-Don, All-Around Transit User
Resident of Kirkland[1]

## Demand Side Solutions

- *Serve multiple markets.* Most rapid transit-focused park-and-ride lots serve downtown travelers. However, there is a growing tendency to also serve other large activity centers along the rapid transit lines. The lots should be located between their catchment areas and major activity centers. Motorists will use facilities that can be easily accessed en-route, but are less likely to backtrack.
- *Provide fast and frequent rapid transit service.* Rapid transit should operate at frequencies of 10 to 12 minutes or less during peak periods, while frequencies up to 20 minutes are acceptable during midday hours. Headways of 20 to 30 minutes are acceptable for commuter rail and commuter bus service during commute hours.
- *Serve low-density residential areas.* In general, population densities in park-and-ride catchment areas should be less than 4,000 to 6,000 persons per square mile, or about 4 to 6 dwelling units per net acre.

## Leased Lots

Leased lots, shared use park-and-ride lots, often blend in well with the character of residential neighborhoods and are a good tool to use to better serve low-density residential areas. Other cities along the I-90 and I-405 corridors allow park-and-ride lots as an allowable use. However, the City of Bellevue currently requires applicants to undergo an administrative conditional use permit application process with approval by the Planning Director. An administrative conditional use permit requires the following: a $4,490 submittal fee (2014), mailed notice to property owners within 500 feet of the site, minimum public comment period of 14 days, and permit application and fees for all signs posted.

[1] Write-in comment from the *Transit Improvement Survey Summary Report* (2012).

Processing an administrative conditional use permit will take up to 120 days. This procedure is regulated by the Bellevue City Code 20.20.200, which may be found in Appendix 9 on page 24 of this report.

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## Regional Efforts Underway

Regional efforts are underway to address park-and-ride needs. King County Metro released a work plan in December 2013 stating they are working with PSRC and other regional partners to develop an "Access to Transit Work Plan", which will define the role of park-and-rides and other community infrastructure related to access to transit. PSRC's Transportation 2040 recommends that the region study park-and-rides in more depth, including potentially charging for parking at these facilities. The results of any future study or studies and resulting recommendations can be incorporated into future updates of the plan. Also, Sound Transit has been conducting Parking Pilot studies to offer optional limited permit parking for frequent riders at Issaquah Transit Center, Mukilteo Station, Sumner Station, and Tukwila International Blvd Station. This study also provides real-time customer information about parking availability at select locations, and collaborates with rideshare programs. Finally, King County Metro has been considering the paid use of parking in multi-family apartment buildings during the day to facilitate access to transit.

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Parsons Brinckerhoff. "Puget Sound Park & Ride System Update." Washington State Department of Transportation Office of Urban Mobility. February 2001. http://www.wsdot.wa.gov/NR/rdonlyres/F30205A6-DD95-4835-8813-DC0CE8326BA4/0/PSPRSUBeginning_thru_Chap3.pdf.

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# APPENDICES

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**Appendix 1** Historic utilization of park-and-ride lots for the I-405 and I-90 corridors.

| | 2000 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|
| I-90 Corridor Park-and-Rides | 1,950 | 3,442 | 3,660 | 3,830 | 4,044 | 4,314 | 4,447 |
| I-405 Corridor Park-and-Rides | 3,425 | 3,660 | 3,627 | 3,956 | 4,162 | 4,109 | 4,332 |
| Total Number of P&R spaces used daily | 5,375 | 7,102 | 7,287 | 7,786 | 8,206 | 8,423 | 8,779 |

**Appendix 2** Constrained and unconstrained demand for park-and-ride lots along the I-90 corridor.

| | 2013 | 2030 |
|---|---|---|
| Constrained Model | 4,236 | 5,838 |
| Unconstrained Model | 4,236 | 11,901 |

**Appendix 3** Constrained and unconstrained demand for park-and-ride lots along the I-405 corridor.

| | 2013 | 2030 |
|---|---|---|
| Constrained Model | 3,977 | 5,516 |
| Unconstrained Model | 3,977 | 9,914 |

**Appendix 4** Distances traveled by users to reach the South Bellevue Park-and-Ride.

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| Place of Residence | |
|---|---|
| Survey Date: August 2013 | |
| Park-and-Ride Capacity | 519 |
| # of Washington registered vehicles | 517 |
| < 1 mile | 28 |
| 1-2 miles | 54 |
| 2-3 miles | 84 |
| 3-4 miles | 58 |
| 4-5 miles | 48 |
| > 5 miles | 212 |
| Total | 484 |

Note: Of the 517 Washington-registered vehicles, 6% could not be geocoded.

**Appendix 5** Distances traveled by users to reach the Eastgate Park-and-Ride.

| Place of Residence | |
|---|---|
| Survey Date: August 2013 | |
| Park-and-Ride Capacity | 1,614 |
| # of Washington registered vehicles | 1,078 |
| < 1 mile | 116 |
| 1-2 miles | 309 |
| 2-3 miles | 255 |
| 3-4 miles | 115 |
| 4-5 miles | 41 |
| > 5 miles | 242 |
| Total | 1078 |

Note: Of the 1,078 Washington-registered vehicles, 4% could not be geocoded.

**Appendix 6** Summary of parking demand and capacity for park-and-ride lots in 2013 and 2030.

| Park-and-Ride Facility | BKR SAZ | 2013 Capacity and Use[1] | | Oversupply or Shortage in 2013 | 2030 Capacity and Demand[2] | | | Oversupply or Shortage in 2030 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Lot Capacity | Use | | Projected Capacity | Constrained Demand[3] | Unconstrained Demand[3,4] | Based on Constrained Demand | Based on Unconstrained Demand |
| **I-90 Lots** | | | | | | | | | |
| Mercer Island | 681 | 447 | 447 | 0 | 498 | 520 | 888 | -22 | -390 |
| South Bellevue | 686 | 519 | 555 | -36 | 1,400 | 1,461 | 4,291 | -61 | -2,891 |
| Eastgate | 688 | 1,614 | 1,452 | 162 | 1,614 | 1,686 | 4,457 | -72 | -2,843 |
| Issaquah | 680 | 819 | 776 | 43 | 1,016 | 1,061 | 1,504 | -45 | -488 |
| Issaquah Highlands | 779 | 1,010 | 968 | 42 | 1,010 | 1,055 | 719 | -45 | 291 |
| Preston | 789 | 53 | 38 | 15 | 53 | 55 | 42 | -2 | 11 |
| **Total** | | **4,462** | **4,236** | **226** | **5,591** | **5,838** | **11,901** | **-247** | **-6,310** |
| **I-405 Lots** | | | | | | | | | |
| Kenmore | 703 | 603 | 601 | 2 | 618 | 642 | 1,227 | -24 | -609 |
| Bothell | 705 | 220 | 215 | 5 | 220 | 229 | 409 | -9 | -189 |
| Woodinville | 706 | 438 | 240 | 198 | 438 | 456 | 493 | -18 | -55 |
| Brickyard | 701 | 443 | 362 | 81 | 443 | 462 | 993 | -19 | -550 |
| Kingsgate | 700 | 502 | 507 | -5 | 502 | 524 | 1,029 | -22 | -527 |
| SR 908 / Kirkland Way | 813 | 20 | 17 | 3 | 20 | 21 | 18 | -1 | 2 |
| Houghton | 694 | 470 | 203 | 267 | 470 | 491 | 406 | -21 | 64 |
| Redmond | 696 | 377 | 375 | 2 | 385 | 403 | 814 | -18 | -429 |
| Bear Creek | 699 | 283 | 308 | -25 | 283 | 296 | 609 | -13 | -326 |
| Evergreen Point | 690 | 31 | 38 | -7 | 51 | 53 | 26 | -2 | 25 |
| S Kirkland | 692 | 783 | 304 | 479 | 727 | 760 | 1,756 | -33 | -1,029 |
| NE 40th / Overlake TC | 832 | 222 | 222 | 0 | 369 | 386 | 1,186 | -17 | -817 |
| Overlake | 693 | 203 | 76 | 127 | 203 | 212 | 546 | -9 | -343 |
| Wilburton | 687 | 186 | 143 | 43 | 186 | 194 | 303 | -8 | -117 |
| Newport Hills | 683 | 275 | 218 | 57 | 275 | 254 | 53 | 21 | 222 |
| Renton | 679 | 150 | 148 | 2 | 128 | 133 | 46 | -5 | 82 |
| **Total** | | **5,206** | **3,977** | **1,229** | **5,318** | **5,516** | **9,914** | **-198** | **-4,596** |

1. 2013 Capacity and Use are from the King County Metro Transit, Park-and-Ride Utilization Report, Third Quarter 2013.
2. Capacity and Demand figures for 2030 are projected from Bellevue's BKR model (MP30r6.2).
3. 2030 Demand assumes TMP "Growing Resources Scenario". Demand forecast is based on future service assumptions and BKR model transit ridership growth rates.
4. In addition to the above assumptions, the 2030 Unconstrained Demand places no limitations on the total number of parking stalls available.

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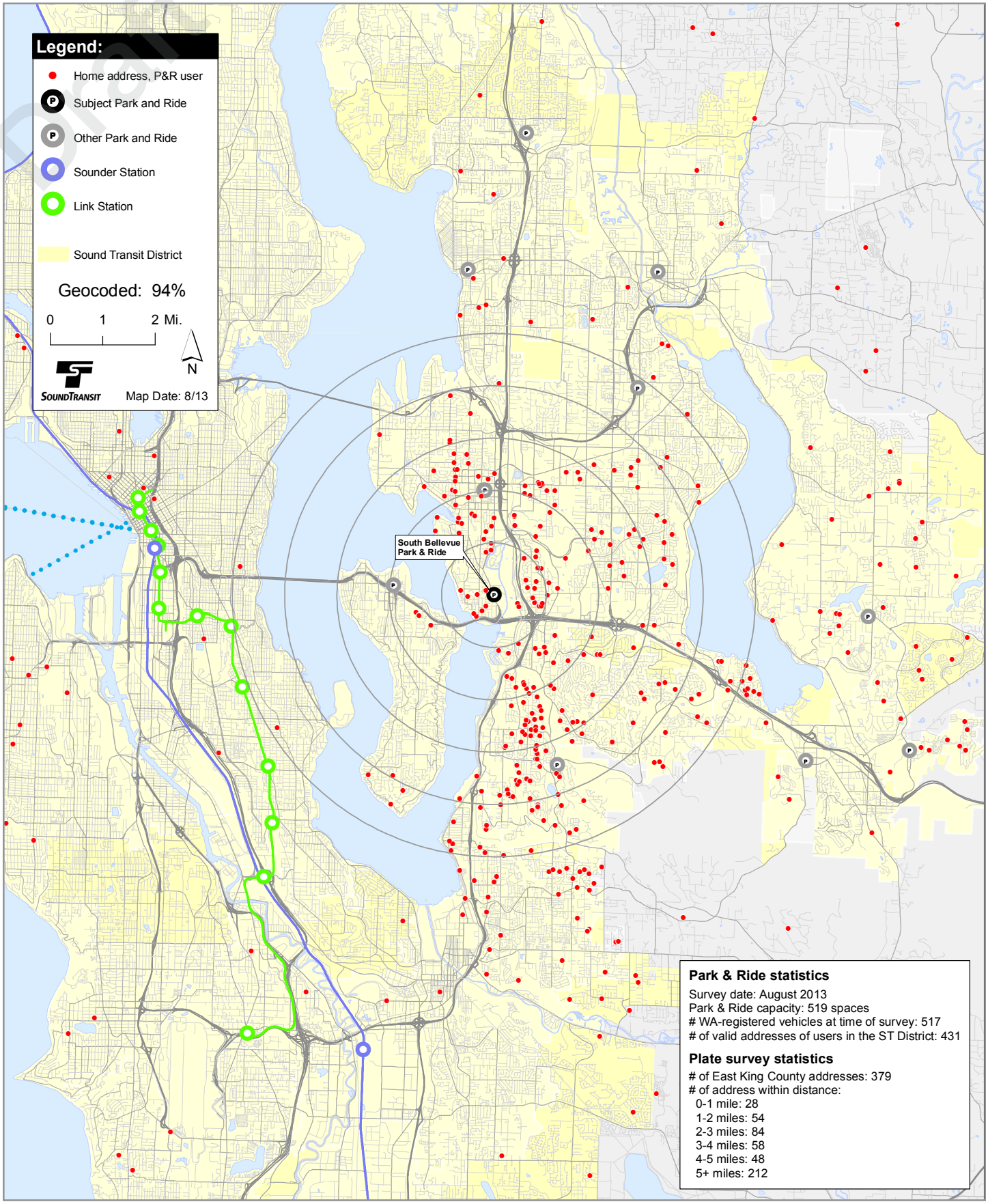
**Figure 12** The South Bellevue Park-&-Ride user origins.

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As indicated by the photos shown in Figure 6, vehicles often park along the unpaved and sloping shoulder and in other places where parking is not allowed after the lot fills. According to a license plate survey conducted by Sound Transit in August 2013, 44% of the lot's demand is generated from further than five miles from the lot. Demand calculations used in this survey were based on the total number of vehicles registered in Washington with addresses that are able to be recognized by Sound Transit's geographic information system (GIS), of which there were 484 vehicles. The pie chart in Figure 13 shows the distribution of park-and-ride users with origins of less than five miles from the lot. Only 6% of South Bellevue Park-and-Ride users commute less than one mile, 78% of the demand is from East King County, and only 6.8% of the demand comes from Seattle. Within East King County, the demand is generally evenly distributed, but south of Bellevue city limits, the I-5 corridor from the edge of Lake Washington to the east 2.5 miles to the east contains 30% of all users, with origins from the two cities of Renton and Newcastle. The South Bellevue Park-and-Ride's market area, as determined by Sound Transit's license plate surve, is illustrated in Figure 12.

**Figure 13** Distances traveled by users to reach the South Bellevue Park-and-Ride.

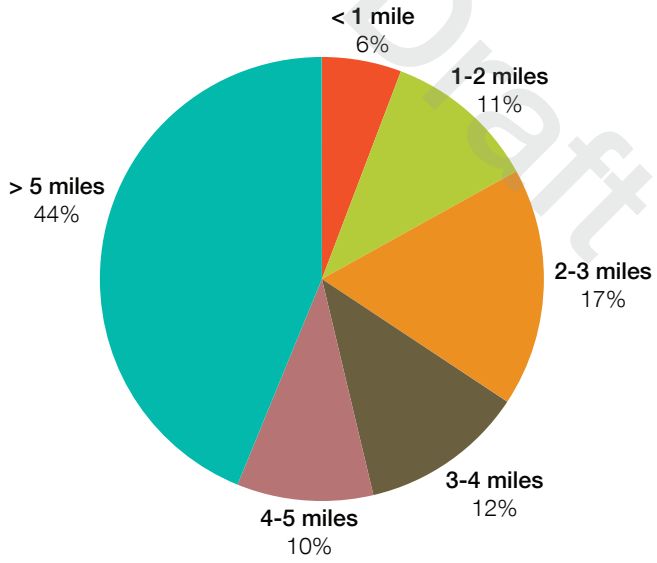


**Figure 14** Distances traveled by users to reach the Eastgate Park-and-Ride.

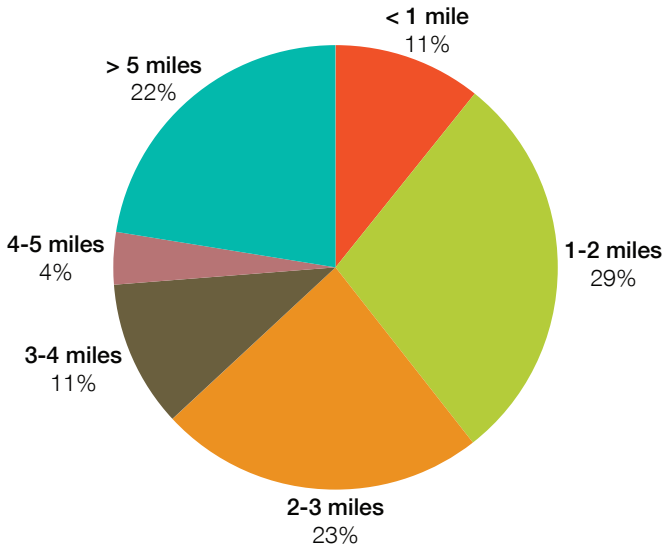


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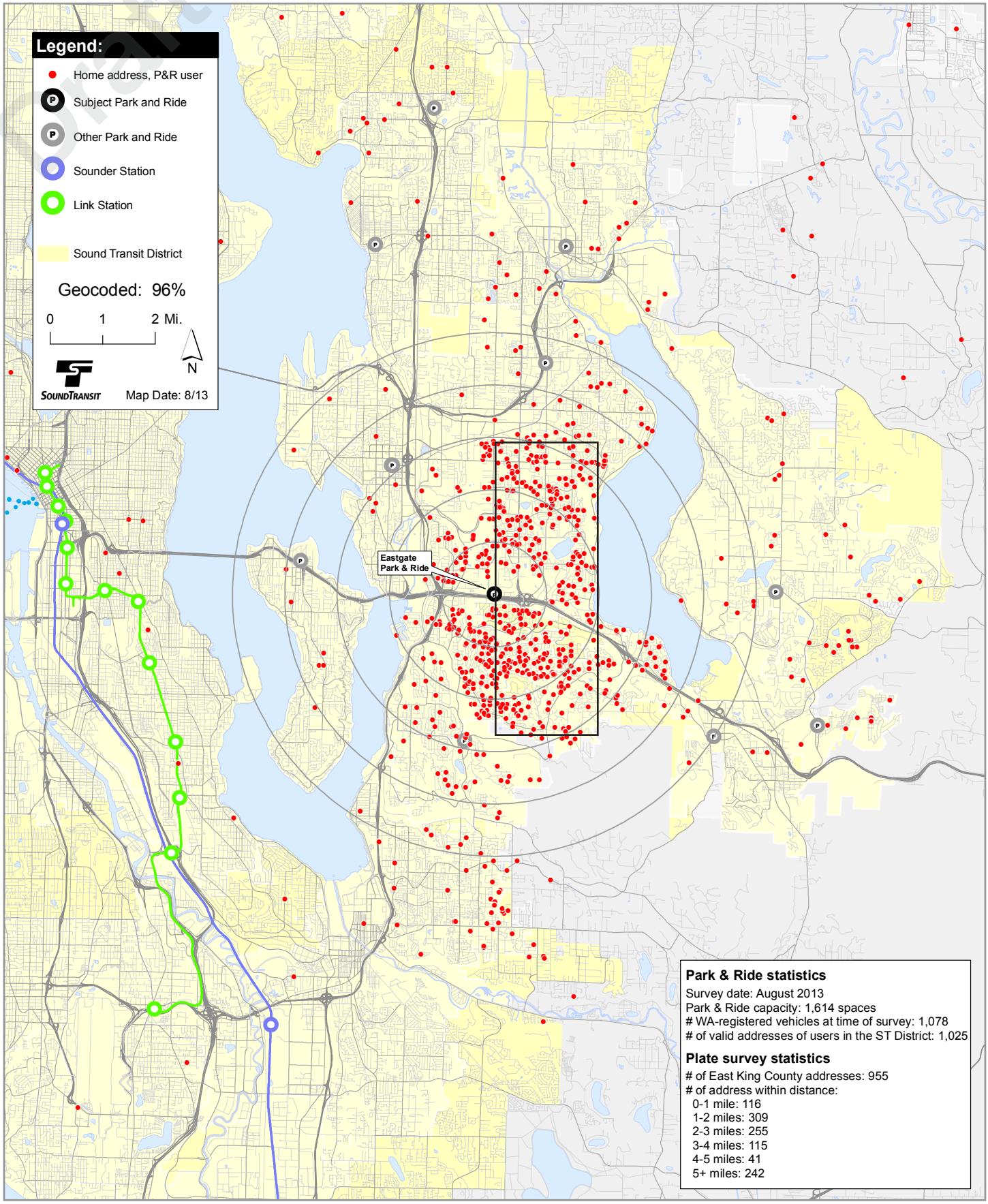
**Figure 15** Eastgate Park-and-Ride user origins.

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The Eastgate Park-and-Ride is a five story parking structure with a capacity of 1,614 vehicles. Sound Transit also conducted a license plate survey of this facility in August 2013. When the survey was conducted, 1,078 Washington-registered vehicles were present. Of these, 89% were registered in East King County, and 52% of the users commuted between one and three miles to reach the lot.Figure 14 shows the distribution of lot usage by distance traveled. The pattern of distribution shows a concentration of use that forms a vertical rectangle bounded by Lake Sammamish to the east, a line extending north and south of the lot to the west, and extending three miles in both directions as shown in Figure 15 on page 22.

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Bellevue City Code 20.20.200

A. The applicant may propose a commuter parking facility providing no more than 50 parking spaces and utilizing the parking area of an existing use through the administrative conditional use process, Part 20.30E LUC. Appeals of decisions made pursuant to this subsection will be decided using the Process II appeal procedures, LUC 20.35.250.

B. The Director of the Development Services Department may approve a commuter parking facility described in subsection A of this section only if he/she finds that:

1. The commuter parking facility is proposed as part of a transportation program.

2. The number of parking spaces proposed for the commuter parking facility is in excess of the actual parking demand for the primary use during overlapping hours of operation.

3. The subject property abuts and gains access from a major, secondary or collector arterial as defined by the Transportation Department.

4. Signage proposed in conjunction with the commuter parking facility is adequate to identify the facility and in keeping with the general character of the immediate vicinity.

5. The location of the commuter parking facility on the subject property will have no significant adverse impact on uses in the immediate vicinity.

C. The Director of the Development Services Department may impose a time limit upon the validity of the administrative Conditional Use Permit granted pursuant to this section in order to ensure periodic review of the commuter parking facility.

# ACKNOWLEDGEMENTS

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