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Fact Sheet

Planned Transportation Improvements

The Seattle Urban Mobility Plan is being developed at a time of significant change in land use and transportation infrastructure for Seattle and the region. This fact sheet discusses the significant transportation projects that are expected to affect mobility in the central Seattle area. These improvements include both regional and local highway and transit projects. Improvements for other modes including bicycle and pedestrian facilities, ferry service, and freight are addressed in other sections of this Briefing Book.

As is true in many urban communities, infrastructure investment has not kept pace with capacity or maintenance demands. Responsibility for maintaining and improving transportation infrastructure varies – as do funding sources. Regional highways including SR 99, SR 520, I-5 and I-90 fall under the jurisdiction of WSDOT. Other facilities under state jurisdiction and serving the downtown include SR 519 and the Washington State Ferry Colman Dock terminal. Rail and bus transit infrastructure and services are provided by Sound Transit, King County Metro Transit, Community Transit, and Pierce Transit. Intercity rail service is provided by WSDOT-sponsored AMTRAK Cascades. The City of Seattle maintains the remaining arterial and local street system.

A variety of funding sources are used to fund transportation infrastructure. Because major transportation infrastructure projects often rely on new revenue, substantial funding packages have been enacted by legislation or public vote. Most recently the following funding packages have been approved:

- **2003 Nickel Funding Package** – Statewide program raising $3.9 billion through gas tax, automobile sales tax and truck fees. Key projects in the study area receiving funds from this package are the Alaskan Way Viaduct replacement and the SR 520 Bridge replacement.
- **2005 Transportation Partnership Package** – Statewide program raising $7.1 billion through increasing gas taxes, and fees on automobile weights, truck fees and mobile home fees. Funding from this package would substantially support the Alaskan Way Viaduct replacement and the SR 520 Bridge replacement.
- **2006 Bridging the Gap** – City of Seattle program raising $365 million through a levy, parking tax and employee hours tax. Revenue from this package would fund badly needed maintenance and preservation projects with an emphasis on providing, replacing or restoring facilities for pedestrians, bicyclists and transit.
- **2006 Transit Now** – King County program raising $50 million annually. Revenue from this program will fund added service hours, create bus rapid transit service in five corridors, and improve Metro's existing Rideshare and paratransit services. In addition, Transit Now will fund new buses, including hybrid diesel-electric coaches.

To meet existing and future transportation needs while maintaining the integrity of the transportation system, major transportation system improvement projects in the study area have been programmed for implementation by state and local agencies. Provided on the following pages is a summary of the significant transportation projects that are expected to affect mobility in the central Seattle area. The planned transportation projects have been identified from three primary sources: the Washington State Highway System Plan; the Metropolitan Transportation Plan Destination 2030; and the City of Seattle Transportation Plan. Also, two additional projects from the Sound Move-2 program are listed: East Link Light Rail Transit project from Seattle to Redmond and the North Link Light Rail Transit extension from the University to Northgate. Although the Sound Move-2 funding proposal was not approved in the recent public vote, these two projects have been under development for several years, and would have a significant impact on improving mobility for the central Seattle area. Additional informa-

tion about these projects can be found in Section 13-C of this Briefing Book.

While many regional and local transportation improvements are needed, because of the size and complexity many are not fully funded. Notable projects from these plans that are anticipated to be in place by the 2030 horizon year are identified. Figure 1 is a table that provides the project limits, responsible agency, completion status, and details on level of funding. Figure 2 illustrates the regional transportation projects and Figure 3 illustrates the central Seattle area projects.

Figure 1 Planned Transportation Projects

Project	Location/Limits	Responsible Agency	Anticipated Completion Year	Comments/ Status
Regional Projects				
SR 520 Bridge Replacement and HOV Project	Six-mile project area begins at I-5 in Seattle and extends to 108th Avenue NE in Bellevue (just west of I-405)	WSDOT	2012	Financial plan is unidentified. Tolling option is possible.
SR 99 Alaskan Way Viaduct and Seawall Replacement (North and South Sections only)	North Section: Denny Way to Battery Street Tunnel South Section: King Street to S Holgate	WSDOT	2012	Comprised of six projects on the northern and southern sections of the viaduct, but does not include the central section. These improvement projects are funded.
I-90 Two-Way Transit and HOV Operations	Mount Baker Tunnel to Bellevue Way SE	WSDOT	2009	Initial Phase Under Construction.
I-5 Pavement Reconstruction and Bottleneck Improvement	16 miles between Tukwila and Northgate	WSDOT	2017	Includes consideration of access changes to downtown. Environmental analysis and preliminary design are funded.
I-405 Corridor Program	Along I-405 from I-5 and SR 518 to SR 527	WSDOT	Varied from 2007 to 2012	Partially funded.
Sound Transit East Link	Downtown Seattle to Redmond	Sound Transit	2020 (pending funding)	Will replace the I-90 reversible center roadway lanes with light rail transit. Not currently funded.
Sound Transit Central Link	Downtown Seattle to Sea-Tac Airport	Sound Transit	2009	Under construction.
Sound Transit University Link	Downtown Seattle to University of Washington	Sound Transit	2016	Final design is scheduled for completion in late 2008. Applying for federal funding.
Sound Transit North Link	Downtown Seattle to Northgate	Sound Transit	TBD	Funding has not been determined for the design phase of the project.

Figure 1 Planned Transportation Projects (cont.)

Project	Location/Limits	Responsible Agency	Anticipated Completion Year	Comments/ Status
Central Seattle Area Projects				
RapidRide Bus Rapid Transit	Proposed locations are as follows: • Aurora Avenue North (SR99) from Shoreline to Downtown Seattle • Ballard to Downtown Seattle along 15th Avenue NW and Elliott Avenue W • W Seattle to Downtown Seattle (possible extension to U-District via the downtown transit tunnel and I-5 • Bellvue to Redmond on NE 8th Street and 156th Avenue SE via Crossroads and Overlake • SeaTac to Federal Way via SR 99	King County	2017 (for the entire King County Transit Now Program)	Funded.
Mercer Corridor Project	Dexter Avenue to Fairview Avenue	Seattle	2011	Under design and right-of-way acquisition. Construction is not fully funded.
South Lander Street Grade Separation	1st Avenue to 4th Avenue	Seattle	2011	30% design completed. About 30% project cost is funded.
King Street Station Renovation	303 S. Jackson Street, Seattle	WSDOT	Depends on the completion of various agreements	Negotiations between BNSF Railway and SDOT, WSDOT, Amtrak are on-going.
Spokane Street Viaduct Widening Project	1st Avenue to 6th Avenue	Seattle	Construction will begin in 2008; completed in 2010	Includes new Eastbound 4th Avenue South loop ramp that will touch down on 4th Avenue south of Spokane Street. Construction scheduled to begin in 2008, but may be phased.
Magnolia Bridge Replacement Project	W Galer Street and Magnolia Way W to W Garfield Street and 15th Avenue W	Seattle	Construction will begin in 2009	Preferred replacement option has been selected. Design work will begin in 2008.
Pike and Pine/ Westlake Hub Regional Transit Corridor Improvements	Pike and Pine between Broadway and 1st Avenue	Seattle	2009	Funding is available for design and construction between 8th and Broadway and for design only from 1st to 8th.
First Hill Streetcar	International District to Capital Hill	Sound Transit	N/A	Under consideration as a candidate project for a future ballot measure.
SR 519 Phase 2	S Atlantic Street and 1st Avenue S; S Royal Brougham Way	WSDOT	2009	Under Design; Phase 2 construction is funded.
North CBD Transit Access Improvements	Stewart, Olive and Howell between 2nd and Yale/I-5	Seattle and KCMetro	2009	Funded.

Figure 2 Regional Transportation Projects

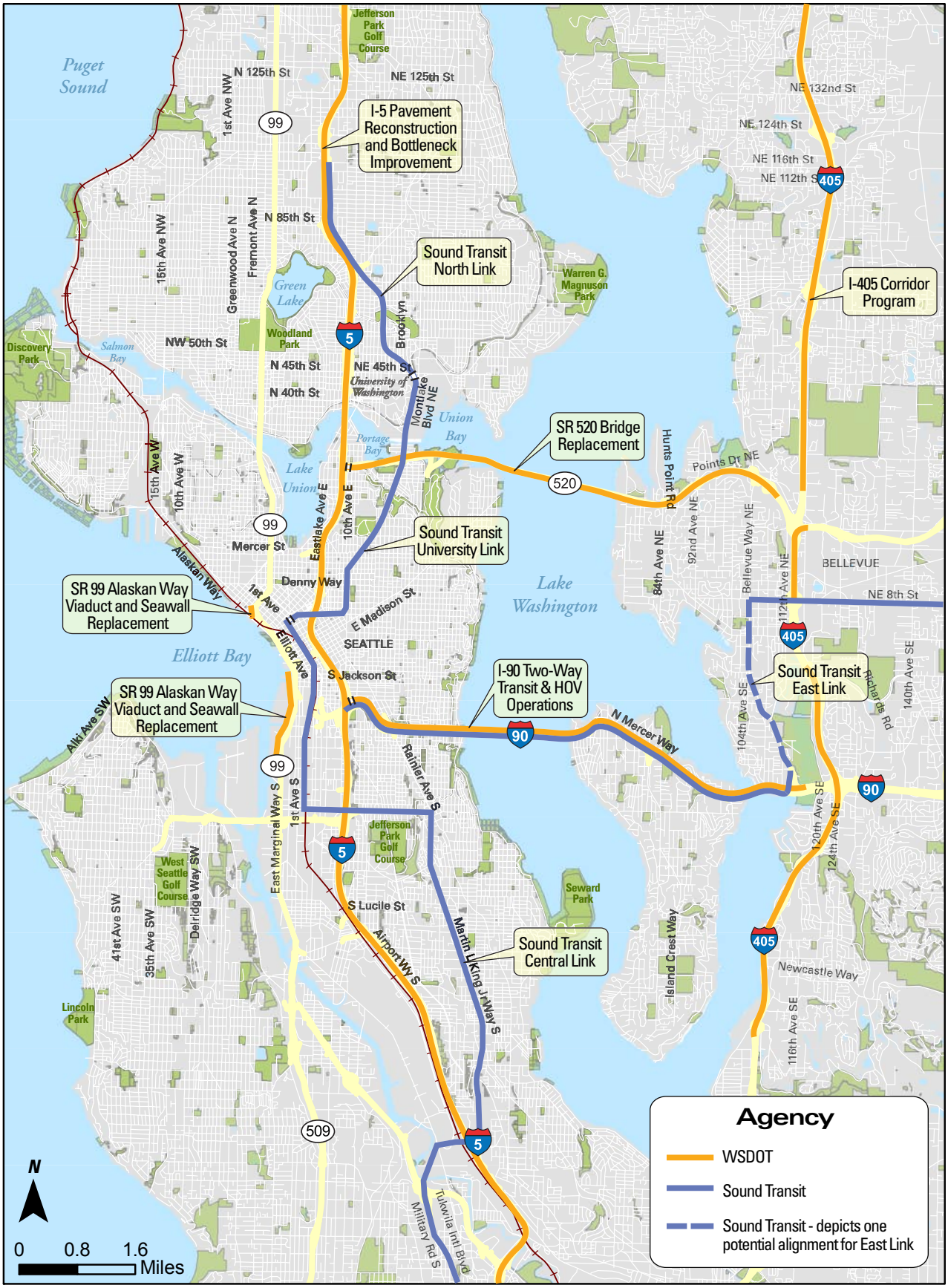


Figure 3 Central Seattle Area Transportation Projects

Note: North CBD Transit Access progect not shown.

Fact Sheet

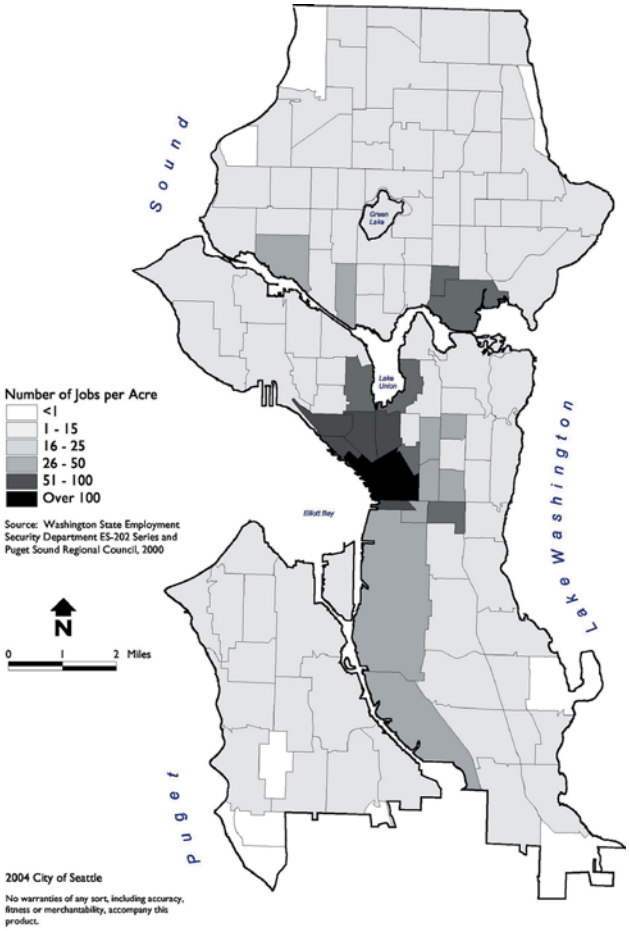
Existing and Planned Land Uses

In 2007, the four counties that make up the Central Puget Sound Region had a population of approximately 3,600,000. The city of Seattle, the largest city in the region, has an estimated population of 586,000. Seattle is a relatively densely built city, ranking 23rd largest in population nationally but 15th in terms of density. While growth in both the city and the region have outpaced national trends, recent growth outside the urban area has dominated King County. In 1960 the city of Seattle accounted for 60% of the population in King County; this percentage declined to 32% by 2007 despite significant growth within Seattle, due to rapid development elsewhere in the county. Despite the fact that Seattle is a fully built city, with little vacant land, it continues to accommodate new jobs, housing units and population and plans to accept even more.

Density of employment and population are shown in Figures 1 and 2 respecitvely for the year 2000. Central Seattle is clearly an employment engine for the region. Population density is more scattered, however higher population densities do exist in First Hill/Capitol Hill and Belltown.

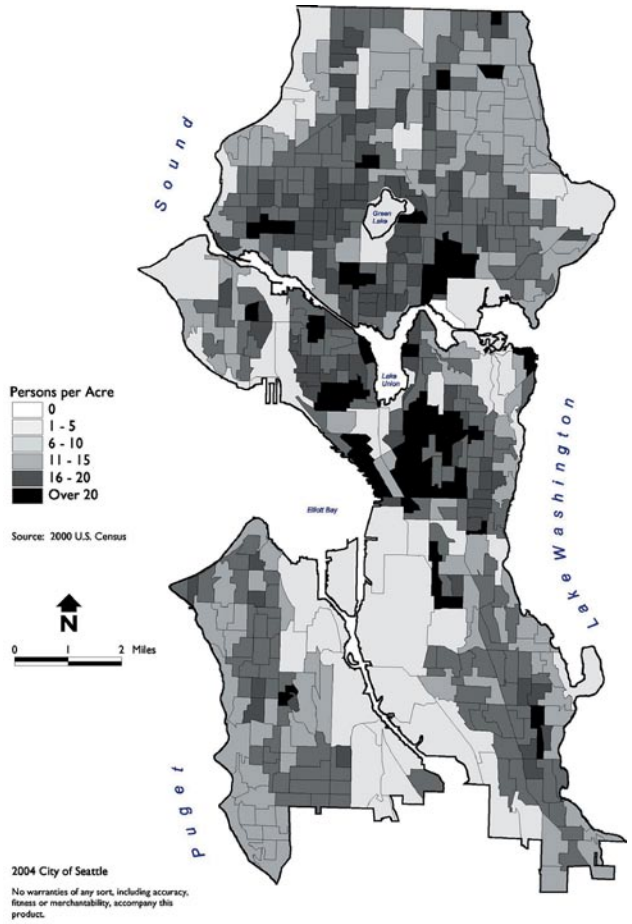
The Washington State Growth Management Act of 1990 requires that counties and cities plan together to accommodate the population growth

Figure 1 Employment Density



Source: City of Seattle Comprehensive Plan

Figure 2 Population Density



Source: City of Seattle Comprehensive Plan

forecasted by the state for each county. The Countywide Planning Policies jointly developed and adopted by King County and the cities in the county, assign portions of the expected growth to each jurisdiction. Under those policies, Seattle has agreed to work toward taking a large share of the total population growth expected in King County. The methods by which the city would accommodate that growth are spelled out in the city's Comprehensive Plan.

In King County, the state's population forecast has been translated into households in order to facilitate monitoring. In the 12 years since the city first adopted its comprehensive plan, it has had a net increase of over 33,000 housing units, which represents about one-third of the total household growth in the county in that time period. Over that time, the city's population has grown to an all-time high estimate of 586,000.

State forecasts indicate that between 2006 and 2022, the county needs to plan for an additional 106,000 households in the urban areas. Seattle's portion of that total is 38,000 households, or 35% — even though Seattle represents less than 20% of the urban land. The city updated its comprehensive plan in 2004 to address this future growth.

The countywide and city plans also address employment growth. Between 2006 and 2022, Seattle is expected to accommodate 92,000 or 34% of the county's total 267,000 new jobs. Job growth has been more erratic than household growth throughout the county over the past decade. For instance, Seattle showed spectacular job growth between 1995 and 2000, adding 85,000 jobs above the 425,000 jobs that were there in 1995. During the same period, the county as a whole added only 78,000 jobs. However, from 2001 through 2004, the city lost nearly 50,000 jobs before beginning a recovery in 2005. The county experienced a similar job loss and turn-around in that period.

The city's fundamental strategy for accommodating growth is to direct most growth to locations designated as urban centers and urban villages. Urban centers are part of the countywide and regional strategy embodied in the Countywide Planning Policies, which contain descriptions and minimum density standards for these intended high-density, mixed-use areas. Seattle contains six of the total 16 designated urban centers in the county. In addition, Seattle's plan designates about two dozen urban villages, which are expected to be somewhat less dense concentrations of mixed uses. The urban village strategy tries to match growth to the existing and intended character of the city's neighborhoods. Figure 3 shows the locations and types of urban villages. Seattle has designated four categories of urban villages that include:

1. **Urban Centers** – the densest neighborhoods in the city; serve as regional centers and neighborhoods (in the Urban Mobility Plan study area: Uptown, Downtown, South Lake Union, First Hill/Capitol Hill, the University Community, and Northgate)
2. **Manufacturing/Industrial Centers (MIC)** – home to industrial businesses; regional as well as local (near the Urban Mobility Plan study area: Duwamish MIC, Interbay MIC)
3. **Hub Urban Villages** – provide a balance of housing and employment; less dense than Urban Centers
4. **Residential Urban Villages** – provide goods and services for local residents; may not include employment (Upper Queen Anne, Eastlake, Madison-Miller, 23rd & Union-Jackson)

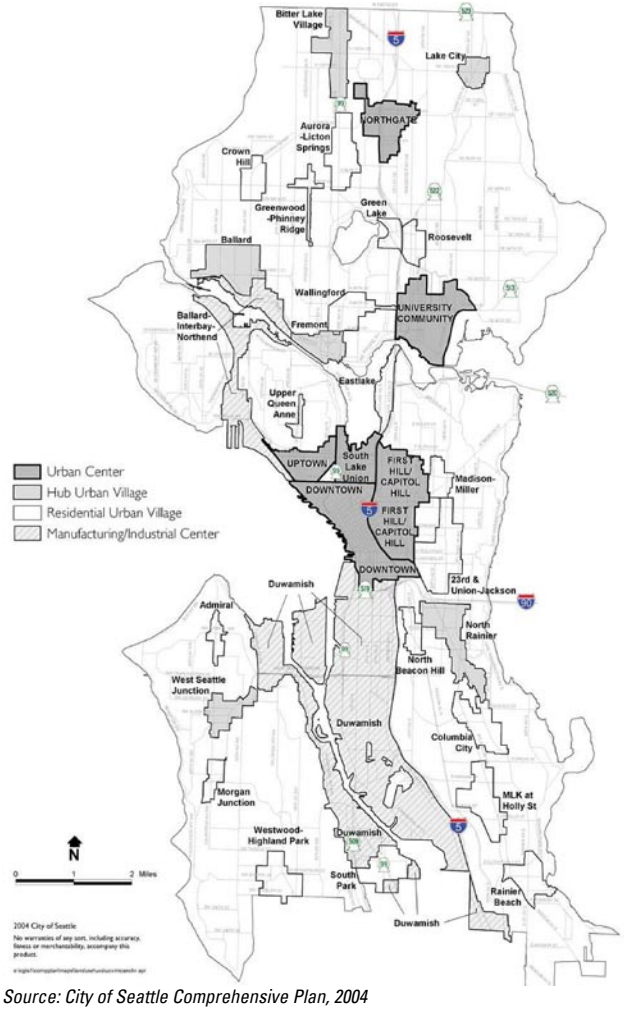
Urban villages not only indicate where existing and future population and employment growth should occur, but also where public investments in infrastructure and services should be made, particularly transit service.

Four of Seattle's six urban centers are contiguous to one another, and together they represent significant proportions of Seattle's current jobs, households and growth potential. These four centers — Downtown, First Hill/Capitol Hill, Uptown and South Lake Union — constitute the area known as Center City. The other two urban centers are the University District and Northgate.

The four urban centers in Center City encompass approximately 2,500 acres, or less than 5% of the city's total land area, yet they are home to about 17% (47,000) of the city's households and nearly 50% (232,000) of the city's jobs.

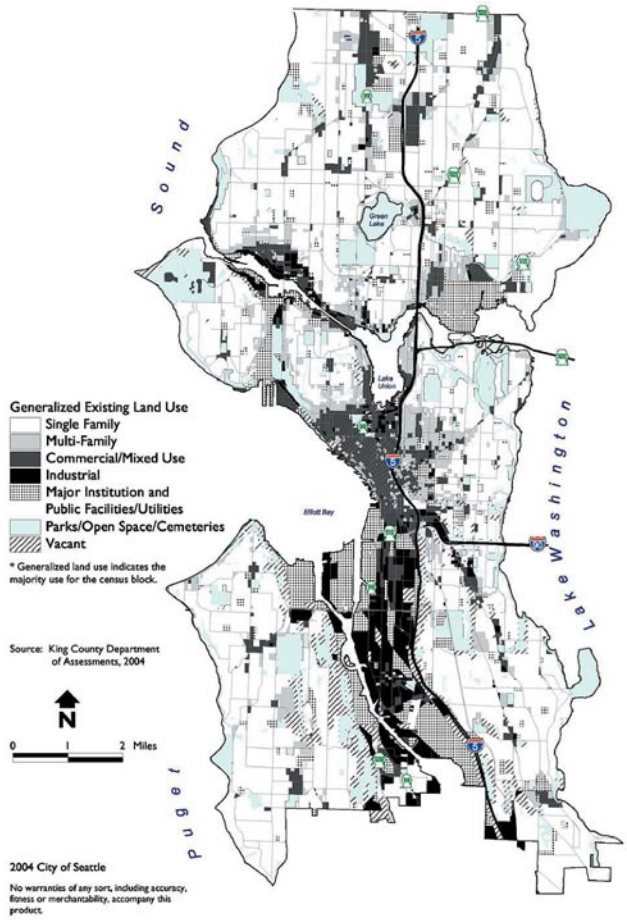
The city's 20-year growth targets would locate about 50% of the city's future households and 60% of its future jobs in Center City. Specifically,

Figure 3 Urban Centers, Urban Villages & Manufacturing/Industrial Centers



Source: City of Seattle Comprehensive Plan, 2004

Figure 4 Generalized Existing Land Use



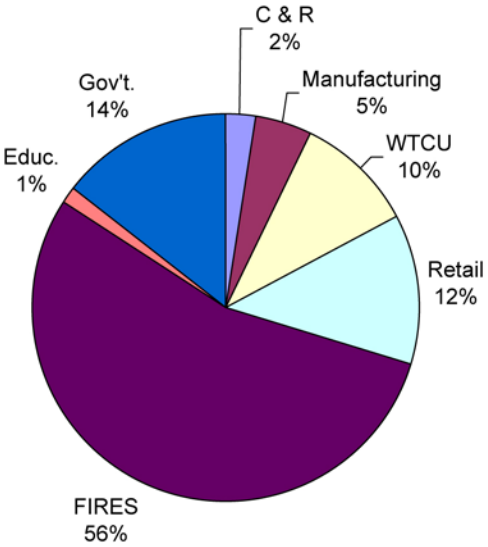
the targets include an additional 22,500 households, which would bring the household density to 28 units per acre. The job target of an additional 50,000 would raise the employment density to 113 jobs per acre. From 2005 through the third quarter of 2007, Center City added over 3,000 housing units, with over 3,800 units that have been permitted but not yet built.

Overall, the city has zoning capacity to accommodate over 120,000 additional households and over 250,000 jobs. That capacity provides the city the ability to increase both households and jobs by about 50% beyond current levels. This also provides sufficient land capacity to accommodate the current growth targets.

Figure 4 shows generalized existing land use for Seattle. As shown, much of the immediate downtown Seattle area is commercial/mixed use, multi-family, or major institution/public facilities/utilities, which includes Port facilities, rail yards, and bus bases. Areas surrounding downtown include significant amounts of land developed with multiple family housing and a major industrial area to the south. It is notable that there is little vacant land remaining in Seattle.

In 2000, there were 536,471 jobs in the city of Seattle; downtown Seattle accounted for over 165,000 of those jobs. First Hill/Capitol Hill accounted for 21,000 jobs, Uptown accounted for 16,000 jobs, and South Lake Union accounted for 21,000 jobs. Figure 5 shows the 2004 composition of jobs in the Center City area according to census designations. The majority of employment (over 50%) is in the Finance, Insurance, Real Estate and Services (FIRES) sector. Other notable employment categories include Government (14%); Retail (12%) and Wholesale, Transportation, Communications and Utilities (WTCU) (10%). Manufacturing is only 5%; but it should be noted that this Center City data does not include the Duwamish MIC.

Figure 5 Year 2004 Center City Employment (%)



C&R = Construction and Resources
WTCU=Wholesale, Transportation, Communications, and Utilities
FIRES = Finance, Insurance, Real Estate and Services

Source: PSRC

Seattle is involved with the ongoing process of PSRC's VISION 2040, which describes the region's growth strategy and includes projections of population and employment to 2040. The draft preferred alternative in VISION 2040 includes higher population and employment growth targeted towards Regional Centers of which Seattle has six existing urban centers. Four of these urban centers are within the Center City area. VISION 2040 is currently in draft form, but will be finalized in early 2008.

Opportunities

While land use is a difficult challenge in light of anticipated growth, specific opportunities include:

Positive political will – The discussion regarding substitution of sustainable transportation solutions (transit, bicycling, walking, transportation demand management) for expensive transportation infrastructure is at the forefront. Ensuring the discussion includes land use is important; specifically the issue of density needs to be linked to optimizing transportation choices. Any plan for transportation infrastructure improvements or strategies must be coupled with policy changes that ensure the investments are optimized.

Regional Strategy – While VISION 2040 is still a draft, the notion of increased population in the city - including density - has regional support.

Seattle Comprehensive Plan – Much work has been completed in the comprehensive plan regarding urban villages and the linkage to transportation. It appears that future land use plans recognize a need to plan for denser residential and mixed-use development along transportation corridors. Station area plans are in place for the current and anticipated development of the Link Light Rail line.

Sustainability – The city has made a significant commitment to sustainability, from Mayor Nickels' climate change initiative to the establishment of the Office of Sustainability and the Environment. Traffic congestion is recognized as a significant contributor to climate change, and funded plans such as Bridging the Gap, King County's Transit Now, and the Seattle Bicycle Master Plan are targeted at offering transit, bicycle and pedestrian solutions. The city embraces the Triple Bottom Line (recognizing the importance of business, society and the environment). Seattle citizens are generally supportive of sustainable solutions.

Fact Sheet

The Role of Travel Demand Modeling in Guiding Seattle's Transportation Futures

What Is a Four-Step Travel Demand Model?

For over half a century, the Four-Step Travel Demand Model has been a primary tool for estimating future travel demand for transportation planning projects in the United States. These models use a series of calculations that estimate travel behavior based on assumed land use patterns, socio-economic data and a given transportation system.

Four-step models were originally employed during the 1950s to forecast the future demand for highway infrastructure, focusing on the predicted number of automobile trips between regional activity centers. Over time, four-step models have evolved to include non-automobile modes of travel and to address a number of related factors including land use impacts.

In a typical travel demand modeling exercise, a study area is divided into geographic subareas called Travel Analysis Zones (TAZ). These analysis zones can range in size from a few blocks in dense urban areas to several square miles in rural areas. The travel demand model predicts travel demand between these zones using four sequential steps:

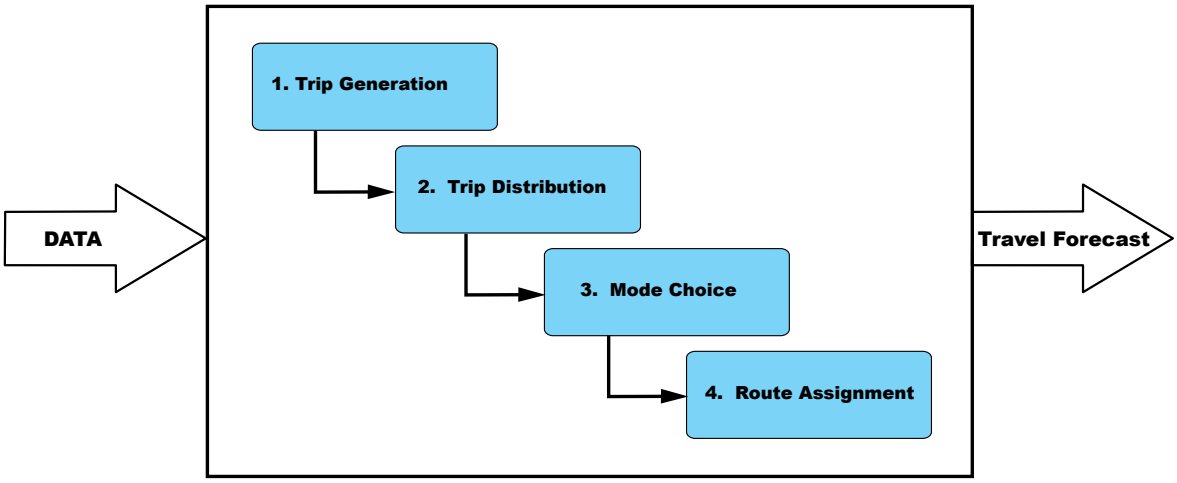
1. **Trip Generation**
2. **Trip Distribution**
3. **Mode Choice**
4. **Route Assignment**

Trip Generation – determines the number of trips generated in each analysis zone based on land use and socio-economic parameters. For instance, highly populated zones with affluent households in low-density developments tend to generate more total person trips.

Trip Distribution – determines originating and destination zones of each predicted trip looking at the relative attractiveness of individual zones. For example, zones with more retail space will attract more shopping trips. And all things being equal, trips will be distributed to closer zones minimizing travel time.

Mode Choice – determines the travel mode used for individual trips based on cost, convenience and travel time comparisons between modes. In more robust models, travel time parameters address in- and out-of-vehicle times, which include travel to transit or time required to park a vehicle. Up to this point in the process, all trips are analyzed as person trips. The mode choice component of the model can assign people to single-occupant vehicle trips, higher occupancy vehicle or transit

The Four-Step Modeling Process



vehicle trips. Some models, including Seattle's, also assign person trips to non-motorized modes including walking and cycling.

Route Assignment – determines which path each trip will take between its origin and destination. This step assigns automobile trips to specific roadways and transit trips to unique bus routes. This is an iterative process seeking to minimize travel time based on traffic congestion. For example, if too many trips are assigned to a given street, the resulting congestion causes excessive delays and trips need to be reassigned to alternate paths until the overall system is balanced.

Before being used to forecast future scenarios, model results are calibrated against known information, adjusting estimated results. This is ideally done at each step of the four-step process.

Are four-step models effective when examining transit and other non-auto modes in urban areas?

Just like a photograph can not reproduce the richness of human vision, traffic models can not replicate the complex and nuanced decision making people use every day in choosing how and where to travel. Traffic models are better in general at predicting a future where people continue to make decisions in similar ways as they have in the past. Major changes, for example $5.00 a gallon gasoline would create change that is much harder to predict.

There are a number of specific limitations to four-step modeling in dense urban areas where travel decisions are complex and many people use multiple modes each day. The following limitations commonly result in inaccurate results when analyzing travel in urban areas.

- **Trip purpose** – historic four-step models focus on work trips that originate from home and return there afterwards. This attention on commute trips is often a result of better information being available for commute trips from statistically reliable sources like the census. However, the number of non-work trips (shopping, school/college, personal errands etc) often exceeds work travel. Recent national studies show that up to 70% of peak hour travel is not work related in many urban areas. Non-work trips are more likely to be shorter and more likely to be made on foot, by bike, or other modes than long distance commute trips.
- **Zone based travel** – the model analyzes trips that start and end at centers of analysis zones. Many non-automobile trips travel just across zone boundaries (not all the way to the center of a zone) or remain within a single analysis zone. As a result, the model may assume trips are longer than they are in reality and will therefore underestimate the use of walking and bicycling.
- **Homogeneity** – although demographics and land use can vary widely within a zone, demographic and land use characteristics are considered constant across an individual analysis zone. Those factors that facilitate or hinder the use of alternate modes including density, access to transit, access to safe walking and biking paths, and a nearby mix of uses, can vary even within small zones. Multi-use, dense development increases non-auto use substantially and most models are not sensitive to these changes.
- **Mode bias** – the basic model does not account for individuals' propensity to use transit modes that offer benefits other than reduced speed or cost. These would include bus rapid transit or rail transit which offer intangible benefits proven to increase ridership over conventional bus service. In addition, few applications of the model account for land uses that facilitate walking and bicycling (such as sidewalk/street connectivity and/or short blocks) or transit riding when making mode choice decisions.
- **Travel time** – most models do not account for changes to travel behavior resulting from changes in peak-period travel times. Trips are typically assigned to peak, midday etc. at the start of the modeling process rather than allowing trips to be made dynamically as some trips shift out of the peak to avoid congestion or in response to Transportation Demand Management (TDM) measures. Seattle's model does account for "peak spreading" but may not go far enough as some strategies can cause significant shifts out of the peak.
- **Parking parameters** – models often use park-

ing cost as a surrogate for parking supply. In downtown areas where parking is especially restricted, the model may not accurately account for the link between available parking and auto use.

Planning agencies use various model inputs based on their local conditions and/or available data. In Seattle, the model considers factors such as household size, numbers of workers, and household income to estimate person trips. Even with the best information, a model is an attempt to predict human behavior which is an imperfect science; and more imperfect at more micro levels.

What has been done to make the four-step model a more effective tool for urban planning?

Modeling is a time-consuming and expensive undertaking. Because many agencies may have an interest in modeling efforts, significant coordination is often required to change model algorithms or assumptions.

A number of planning agencies have enhanced the four-step model to address its inherent limitations including:

- Use of more robust socio-economic data in algorithms
- Use of smaller analysis zones to limit socio-economic and land use variations within zones as well as to limit trip lengths within zones and to nearby zones
- Definition of a greater number of trip purpose categories
- Addition of built environment factors to account for transit, pedestrian or bicycle friendly land uses

These adjustments improve the effectiveness of four-step models in forecasting demand of multiple modes in urban areas; however, they do not fully resolve the four-step model's natural limitations.

Experience in other cities have shown that there are a number of factors that go into travel decisions that may not be accurately captured by current regional models. The table below shows the impact of multi-use development and good transit service on different travel demand modes as measured in Portland, Oregon. The table shows that in neighborhoods with multi-use denser development, auto use declines significantly. While transit use increases, the most significant change is to walking, with people more willing to walk in situations where they can meet their daily needs on foot. While over 85% of all trips in the Portland region are made by auto, in neighborhoods like downtown, where there is both good transit and mixed-use development, the auto mode share drops significantly. This is likely to be experienced to an increasing degree in Seattle, with both residential and other development projects coming on-line.

The Impact of Dense Multi-Use Development on Mode Share

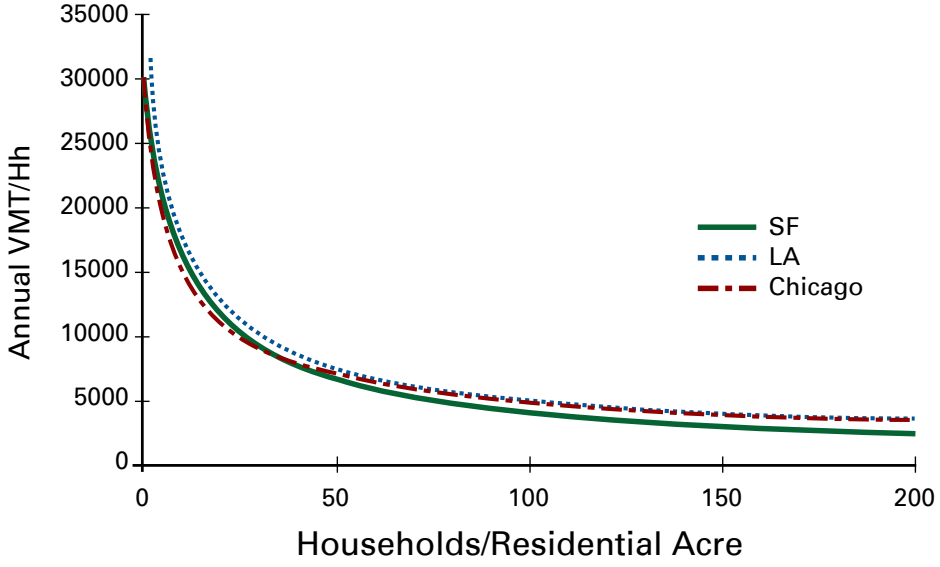
Land Use Type	Mode Share (percent)					Vehicle Miles per Capita	Auto Ownership per Household
	Auto	Walk	Transit	Bike	Other		
Good Transit and Mixed Use	58.1	27.0	11.5	1.9	1.5	9.80	0.93
Good Transit Only	74.4	15.2	7.9	1.4	1.1	13.28	1.50
Suburban Multnomah Co.	81.5	9.7	3.5	1.6	3.7	17.34	1.74
Portland Region	87.3	6.1	1.2	0.8	4.6	21.79	1.93

Source: City of Portland, 2002

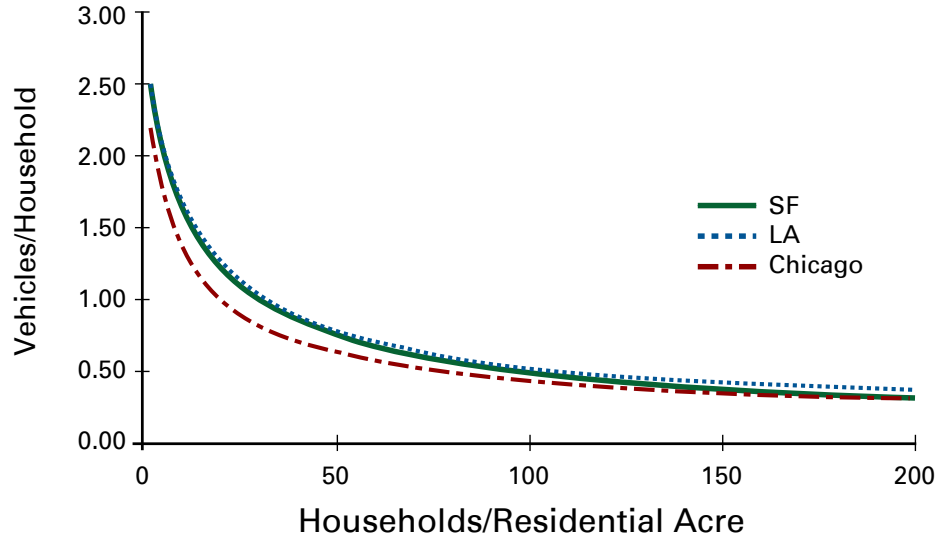
These statistics are based on actual surveys and were not predicted by the travel model. Residential density has also been found to be directly related to vehicle miles traveled in ways that would not typically be predicted by travel demand models. The figure below shows vehicle miles traveled per household compared with household density. Regardless of the city surveyed, the curve is almost identical. This curve has been found to hold among all income levels, which is contrary to what models would typically expect.

Auto ownership in general also declines with increasing density. Travel models would generally expect only the lowest income families to be non-auto households.

Vehicle Miles Traveled vs Residential Density



Auto Ownership vs Residential Density



What is the situation in Seattle?

The Seattle travel model is based on the one used by the Puget Sound Regional Council. These models have been enhanced to address many of the limitations of the basic four-step model. These include:

- The PSRC model uses additional trip purpose classifications to account for work, school, college, shopping and "other" trips from home as well as trips not originating at home and commercial vehicle trips.
- PSRC makes extensive use of household surveys which accurately measure current behavior on the regional level. The sample size of these surveys may not allow for more subtle analysis of differences in behavior in smaller areas, such as downtown Seattle, compared to other parts of the region.
- The PSRC model has a component called the Time of Day module, which accounts for "peak spreading" when trips can not be accommodated on a given facility at the busiest times of day.
- The Seattle model has reduced TAZ sizes and increased available land use types within each zone. This allows the model to be smarter about mode choice, particularly for short-dis-

tance trips that people are more likely to make by walking or cycling.

- The Seattle model has recently been improved in its ability to predict parking cost increases, particularly in areas that are increasing in density and undergoing redevelopment.

While improvements have been made to the model, it is not a perfect predictor of behavior. For example, the model has predicted increasing traffic volumes on I-5 and on downtown streets, which have both been essentially unchanged for a number of years, despite overall growth.

Modeling work conducted during 2007 to evaluate various transit and roadway investments in Seattle Center City has shown that there are a number of further enhancements needed for the Seattle model to be an effective forecasting tool for complicated urban transportation projects. The city is currently working with its partners, the Washington State Department of Transportation, King County Department of Transportation and the Puget Sound Regional Council to make further enhancements to the model's ability to predict behavior within downtown without affecting overall regional algorithms.

Initial evaluation of these enhancements suggests that the model will be significantly more accurate in predicting travel behavior with these adjustments. The travel demand model will be one of a variety of tools used to evaluate options for replacing the Alaskan Way Viaduct on Seattle's Central Waterfront.

While the travel demand model is far from perfect, it remains the only analysis tool available to predict future travel behavior that has been subjected to rigorous regional scrutiny. The travel demand model remains an important analysis tool, though not the only tool for evaluating the effectiveness of alternatives in the future.

Sources:

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