Getting There Facts Pack

Update on Regional Transportation Plan Projects • Fall 1999

Metro Regional Services
Creating livable communities
Transportation hotline: (503) 797-1900
Web site: www.metro-region.org

METRO

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1857 | FAX 503 797 1794
Internet arthurc@metro.or.gov

CHERI ARTHUR
Secretary
TRANSPORTATION DEPARTMENT

Regional Government

METRO

1999 Regional Transportation Plan
Adoption Timeline

1999

August 5	**Council approval of RTP Resolution** - directs staff to complete draft RTP document
October 1	**"Release Draft" RTP available for public review; 60-day comment period begins**
October 7	JPACT receives "Getting There" newsletter, RTP subarea tabloids and overview of draft
October 13	MPAC receives "Getting There" newsletter, RTP subarea tabloids and overview of draft
Mid-October	Joint JPACT/Trans. Comm. hearings on draft RTP (in Clackamas, Gresham, Beaverton and Portland)
November 5	"Adoption Draft" released, incorporating technical revisions from TPAC and MTAC
November 10	MPAC begins discussion of draft RTP
November 18	JPACT begins discussion of draft RTP
November 24	**MPAC action on draft RTP**
December 2	Council hearing on draft RTP (at Metro)
December 9	**JPACT action on draft RTP**
December 14	Council Transportation Committee forwards final recommendations on draft RTP to Council
December 16	**Council adoption of draft RTP by Ordinance;** public comment period ends

RTP Adoption

Technical Review

Transportation Policy Alternatives Committee (TPAC)
TPAC will review the October 1 "Release Draft" RTP at a series of workshops, and minor revisions will be incorporated into a November 1 "Adoption Draft." TPAC will also forward substantive revisions to JPACT with the "Adoption Draft." TPAC will forward final RTP recommendations to JPACT on November 23. TPAC workshops are scheduled for:

- Friday, October 15, 9:00-Noon
- Friday, October 22, 9:00-Noon

For more information on the workshops, contact Cheri Arthur at 797-1857.

Metro Technical Advisory Committee (MTAC)
Because the RTP update also includes revisions to the Regional Framework Plan and the Metro Code, MTAC will review these elements, and make recommendations to MPAC. MTAC is tentatively scheduled to review the RTP revisions at their regular meetings, as follows:

- Thursday, October 21
- November - Forward RTP recommendations to MPAC

For more information on the MTAC meetings, contact Paulette Copperstone at 797-1562.

Public Review

Public Materials
The Draft RTP includes the following public review materials:

- Draft RTP Document and Appendix that are proposed for adoption
- "Getting There" booklet that provides an overview of the plan
- Subarea tabloids that describe proposed transportation improvements in detail

Public Comment Period
The comment period will extend from October 4 through December 16. Public review materials will be available from Metro during that time. Comments should be submitted to Metro.

Local Review
Many local agency comments will be reviewed as part of the technical review process. Formal agency comments will also be considered by JPACT, MPAC and the Council. Coordinating committees and local governments should submit comments by November 12 for review by Metro advisory committees.

Public Hearings
Joint JPACT/Council Transportation Committee hearings are tentatively scheduled for mid-October.

Adoption of the Ordinances

Policy Advisory Committees
Metro's Joint Policy Advisory Committee on Transportation (JPACT) will review the draft RTP document and accompanying Framework Plan and Metro Code revisions, and make a recommendation to the Council. JPACT is scheduled to review the RTP at their regular November 18 meeting and make a recommendation to Council on December 9.

The Metro Policy Advisory Committee (MPAC) will review the elements of the RTP update that affect the Framework Plan and Metro Code. They are scheduled to review these elements on November 10 and make a recommendation to the Council on November 24.

Council Review and Adoption
The Council Transportation Committee is scheduled to review the draft RTP document and accompanying revisions to the Framework Plan and Metro Code, and forward their final recommendations to the full Council on December 14. A Council hearing for the draft RTP is scheduled for December 2, with final action on December 16.

Public Comment Meetings

METRO

Oregon Department of Transportation

People all across this region share a very important resource: our transportation system. Its health is vital to our economy, our community and our lives. In October, Metro and the Oregon Department of Transportation (ODOT) are holding a series of joint meetings around the region seeking public comment on the Regional Transportation Plan, on how to fund the projects in the Regional Transportation Plan and on projects that could receive funding through the Supplemental Statewide Transportation Improvement program with part of the revenue from the increase in gas tax and vehicle registration fee recently approved by the Oregon Legislature.

Regional Transportation Plan

Metro has spent the past several years working with our local partners as well as citizens, community groups, and businesses to update the Regional Transportation Plan. That plan lays out the priority projects for roads as well as alternative transportation options such as bicycling, transit, and walking. It also works to ensure that all layers of the region's transportation system work together in the most effective way possible. In addition to discussion on individual projects, citizens are encouraged to talk about ways to help finance these long-term transportation needs. *(See back page for timeline).*

Supplemental Statewide Transportation Improvement Program

The 1999 Legislature recently passed a 5-cent increase in the state gas tax and a $5 increase in the annual vehicle registration fee. Part of these gas tax and registration fee increases will fund a program to pay for highway projects statewide. In Clackamas, Columbia, Hood River, Multnomah and Washington counties, there is $189 million available over a six-year period for highway projects. An initial list of projects and project selection criteria is available by calling 731-8245. The complete list of projects, with additions by the Joint Policy Advisory Committee on Transportation, will be available on October 15, 1999.

HOW TO GET INVOLVED

Use the public meetings to learn more and provide input on both the RTP and STIP:

5:30 p.m., Wed., October 20
Conestoga Intermediate School
12250 SW Conestoga Drive, Beaverton

5:30 p.m., Thurs., October 21
Gresham City Hall
1333 NW Eastman Parkway, Gresham

5:30 p.m., Tues., October 26
Metro Regional Center
600 NE Grand Avenue, Portland

5:30 p.m., Thurs., October 28
Monarch Hotel
12566 SE 93rd Ave, Clackamas

Submit comments on RTP to:

Mail: Metro—RTP Comments
600 NE Grand Avenue
Portland, OR 97232

Fax: (503) 797-1794
E-mail: arthurc@metro.dst.or.us
Call: (503) 797-1900

Submit comments on Supplemental STIP to:

Mail: ODOT—Supplemental STIP Comments
123 NW Flanders
Portland, OR 97209

Fax: (503) 731-8259
Call: (503) 731-8245

Moving into the new millennium

We are poised on the threshold of new challenges as we enter the 21st century. One of the most visible concerns affects us all: traffic congestion.

Metro's main task is to maintain this region's livability as we plan for more growth in population. Keeping communities livable is our primary goal, now and into the next millennium.

The Regional Transportation Plan, summarized in this newsletter, is the culmination of four years of work by citizens, local government partners and Metro. The plan sets out a collective vision for the future of our region. In doing so, it reflects Metro's commitment to link transportation, land use and environmental planning so that our future can reflect our values.

A balanced transportation system is at the heart of the plan, including walking, bicycling, driving, using transit and keeping freight moving to national and international destinations.

The plan also incorporates the 2040 Growth Concept, which is based on using land wisely. The 2040 Growth Concept directs new development to population centers and along existing transportation corridors.

When 2020 arrives, we hope people will look back and recognize everyone's current efforts to protect the livability of the Portland metropolitan region.

Sincerely,

Mike Burton
Metro Executive Officer

Rod Monroe
Metro Council Presiding Officer

METRO
Regional Services

600 NE Grand Ave.
Portland, OR 97232-2736
(503) 797-1700

INSIDE

Getting There

Metro's Regional Transportation Plan in brief

FALL 1999

Presenting our new Regional Transportation Plan

A more balanced transportation system is planned for the future – including cars and trucks, buses and light rail, walking and bicycling. Convenient access to jobs and shopping, cultural and recreational events is planned to contain sprawl.

Imagine the year 2020 – larger cities with more people – and then think of the traffic! Whatever you think about congestion now, consider how it could increase in the next 20 years. But there's hope for continued livability in the form of the Regional Transportation Plan, described in this newsletter.

The future of transportation

The new Regional Transportation Plan is a blueprint for improving the region's transportation system in the next 20 years. The plan begins to carry out the 2040 Growth Concept to protect the region's livability while planning for continued growth in this region. The plan shows how to keep people and goods moving throughout our metropolitan area.

With the area's unprecedented growth in population, our travel has increased twice as much. Use of cars is increasing, due partially to two-income households with people traveling to work alone, often on long commutes. Building homes, business and shopping far apart also contributes to the increase in driving.

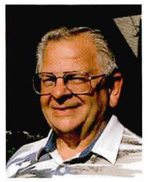
We need to:

- expand some roads and highways in developing parts of the region
- improve bus and light rail service and the ability to walk to stations
- build new sidewalks and bicycle lanes for safety and access
- limit delays for national

continued on page 2

Regional Transportation Plan *(continued)*

MAYOR VIEW



Charles J. Becker

Mayor of Gresham

"This transportation plan represents what is best about this region: a commitment to work together to tackle tough issues and support our shared vision for truly livable communities. It recognizes the impact of the transportation system on land use and its ability to shape our future."

and international freight movement

- develop new strategies to improve how our system works.

Metro's goal is to provide a balanced range of transportation choices in this region. The plan recognizes that the car will continue to be the primary choice of personal travel. However, the Regional Transportation Plan sets goals for all forms of urban travel: cars, buses, light rail, walking, bicycling and trucking. The plan includes a list of strategies for local and regional transportation changes.

Why is the plan needed?

More and more traffic is clogging our roads. Twelve percent of roads in the urban tri-county area are now congested. It takes longer to get to work and to school, to shopping and recreation. In the future, more than a quarter of our roads could be clogged during peak periods. We can't build our way out of congestion, but we can lessen the impact of traffic by expanding transportation choices and improving roads and bridges to make them work better.

What will the plan accomplish?

The plan sets a new direction for the future. Planning by all government partners in the region will be guided by the following strategies:

The Regional Transportation Plan will guide the transportation plans of all of the region's cities, counties, Tri-Met and Port of Portland.

- Reduce the need to drive by making jobs and shopping more convenient to where people live.
- Expand transportation choices by providing safe and convenient alternatives to driving.
- Avoid sprawl and reinforce main streets and traditional downtowns by targeting transportation projects.
- Sustain economic health by providing access to jobs and industry.
- Balance transportation and land use plans to protect livability in the region.
- Maintain access to natural areas around the region.

How can transportation serve new growth?

The plan ties together transportation and land use policies from the adopted Regional Framework Plan (1997) and the 2040 Growth Concept. These policies include expansion of regional and town centers within established transportation corridors. The plan addresses state planning requirements and looks at future transportation needs through the year 2020 – when our children and grandchildren will be using the transportation system that we build.

Transportation can benefit from the careful placement of new developments. This means building new homes and businesses close to existing transportation, where roads already exist and people can walk to the bus or MAX. This could help reduce the need to expand the transportation system. It

Metro: Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

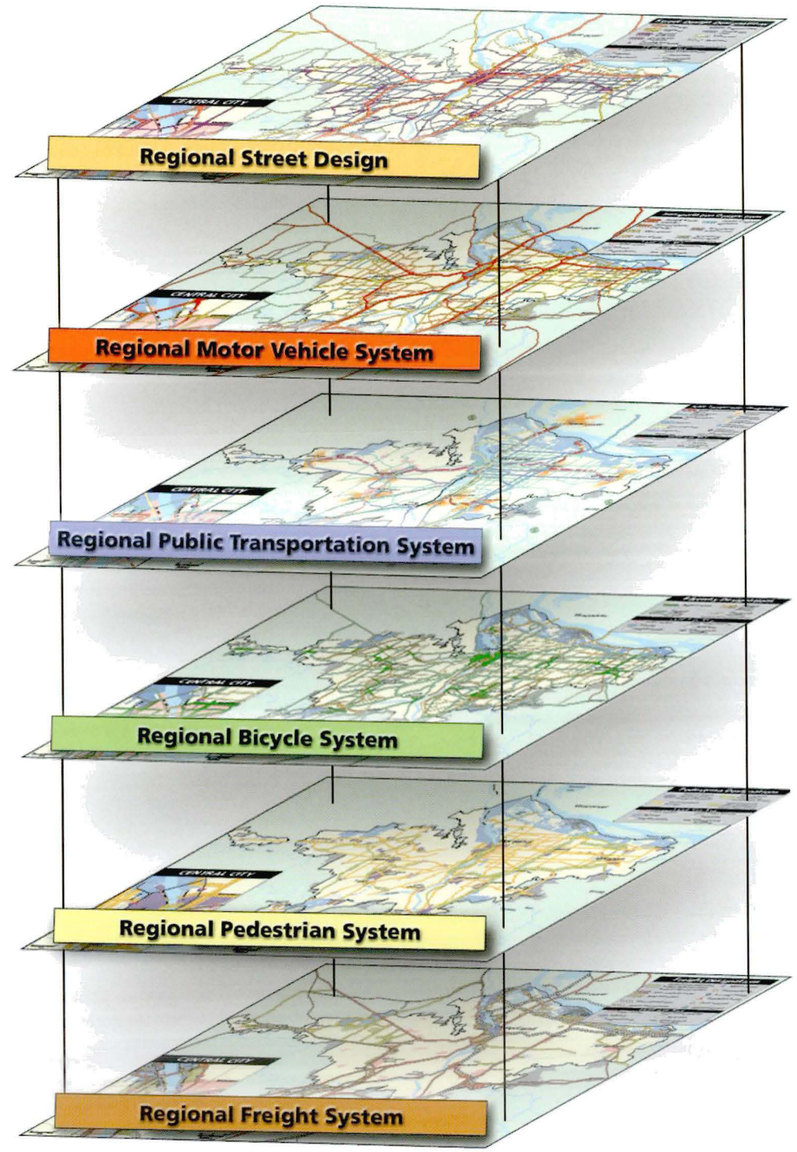
Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

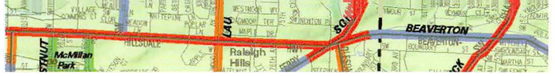
Metro's web site: www.metro-region.org

1999-10409-TRN 99294sg

Building the Regional Transportation Plan



The Regional Transportation Plan brings together all aspects of our transportation system: street design, arterial streets, highways, public transportation, bikeways, pedestrian walkways and freight movement. They combine to create a collective vision for transportation for the next 20 years.



Transportation funding puzzle *(continued)*

Metro for consideration.

The Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council then selected projects for funding that support a balance of alternatives, promote 2040 land use objectives, provide geographic equity and meet air quality standards.

The federal transportation act (ISTEA) adopted in 1991 ushered in a new era, calling for integrated planning and financing for all travel methods. This region has met the federal challenge with a comprehensive and integrated long-range plan for transportation and land use.

How projects get funded

There is a selection process that all projects must go through before being accepted for funding:

Step 1 - Application
Application is submitted by state, regional or local jurisdiction.

Step 2 -Initial criteria
Elected officials establish "threshold criteria" that must be met to ensure consistency with regional planning goals.

Step 3 - Technical ranking
A technical score is calculated based on how well the project supports the 2040 Growth Concept and meets transportation goals. Project categories include: pedestrian, transit oriented development, bicycle, road modernization, road reconstruction, transit, freight, transportation demand management and boulevard projects.

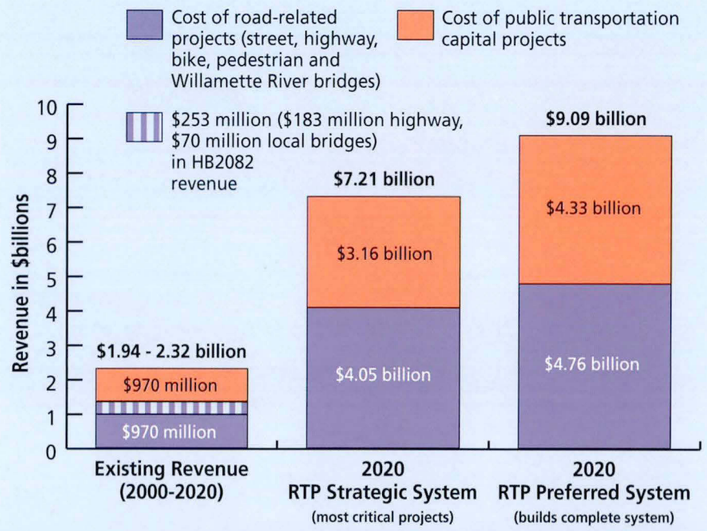
Step 4 - Selection
If the funding amount is available and project meets all necessary criteria, the project is recommended for public hearing and funding by JPACT and Metro Council elected officials.

Where the money comes from

The region's transportation system is funded through a combination of federal, state, regional and local money sources. Federal funds are given to this region with differing requirements on how they can be spent. The state generates funds through a series of user fees that are constitutionally limited to road use, including a gas tax, taxes on heavy trucks, vehicle/truck registration fees and drivers license fees. Tri-Met and SMART (Wilsonville) collect regional transit funds through a business payroll tax and fares. Local sources include county gas taxes, dedicated property tax levies and other development-related fees.

How to close the gap?

Transportation needs exceed available revenue



The strategic system is projected to cost $7.21 billion, of which more than half includes street, highway, bike, pedestrian and Willamette River bridges projects.

also means placing new transportation projects in areas that most need access, and where the region has decided future growth should occur within the urban growth boundary. This will help slow traffic growth by providing good alternatives to driving alone to work, shopping or cultural events and entertainment.

How will the plan's projects be funded?

Metro's funding strategy is to use limited state and federal dollars to support projects in our major transportation corridors. The plan requires more funding to maintain the existing roads, bridges and other transportation facilities while improving the efficiency of the overall system. Maintenance and safety projects will come before building new projects. Roads, bridges and transit systems are some of our largest public investments. However, funds are scarce and many projects must wait until funding is available. See pages 20–22 for more detailed funding information.

Why does the plan matter?

With a growing population, the transportation system becomes even more important. The Regional Transportation Plan is needed as a guide that transportation plans of all of the region's cities, counties, Tri-Met, Oregon Department of Transportation and Port of Portland must follow. It clearly sets transportation strategies in the urban area for the next 20 years. Decisions made today about how to make room for future growth and travel around the region will have lasting impacts on our environment and quality of life. The Regional Transportation Plan is a big part of Metro's overall strategy to protect our valued livability.

How does the plan protect the environment?

The plan expands our choices of travel within the region. Even on an occasional basis, the use of bus or MAX, walking, bicycling or sharing a ride can help the region maintain its clean air, conserve energy and reduce pressure to expand the urban growth boundary. By linking transportation and land use planning, there are many ways to limit driving alone to nearby destinations, such as biking to a neighborhood coffee shop or walking to a restaurant close to work. Also, Metro's new Green Streets project will help fish passage through our cities by replacing or repairing old culverts to allow for better stream flows under roads.

Taking transit and riding bicycles can help meet state goals of reducing the miles we drive, reducing dependence on the automobile and driving alone.

How did the plan evolve?

The Metro Council adopted the first Regional Transportation Plan in 1983. Since then, it has been updated every three to five years to reflect changes in the region. The council adopted an interim plan in 1995 to address new federal requirements. In 1996, transportation plan policies were updated to carry out land use policies found in Metro's Regional Framework Plan and the 2040 Growth Concept. The 1999 plan builds on the new policies and looks at state planning requirements and future needs through the year 2020. The current plan received extensive review and feedback during the past four years from the public, from the 21-member citizen advisory committee, and from our government partners throughout the region.

How does the plan tie in with statewide planning goals?

The plan includes goals required by the state Transportation Planning Rule. The goals for the next

Decisions made today about how to make room for future growth and travel around the region will have lasting impacts on our environment and quality of life. The Regional Transportation Plan is a big part of Metro's overall strategy to protect our valued livability.

Regional Transportation Plan *(continued)*

CITIZEN VIEW

Paul Koch

Oregon City

Chair

Regional Transportation Plan

Citizen Advisory Committee

"The involvement of all citizens in regional transportation planning is vital to the long-term livability of this region. There are no easy answers to the problems of transportation. One way to ensure that the plans reflect what we as citizens want and desire for the future is to participate."

A closer look at the Regional Transportation Plan

This newsletter contains a brief summary of nearly 1000 proposed projects in the updated Regional Transportation Plan. The projects represent the most needed improvements to meet the 20-year demand, as funding becomes available.

For more information

To receive a more complete list of projects in your area of interest, stop by Metro or call the transportation hotline, (503) 797-1900, option 2. Leave your name and address and ask for "Getting There" transportation fact sheets in one or more of the following areas:

1. West Columbia Corridor (industrial areas)
2. Portland Central City (and neighborhoods)
3. East Multnomah County
4. Pleasant Valley and Damascus (urban reserves)
5. Urban Clackamas County
6. South Washington County (including Washington Square)
7. North Washington County (including Beaverton and Hillsboro)
8. Also, new transit projects are described in a publication called Regional Transit Service Strategy for 2020

Visit Metro's transportation web site at www.metro-region.org for a look at the Regional Transportation Plan. You can also send e-mail to the Transportation Department at trans@metro.dst.or.us or fax a request to (503) 797-1949. Leave your name, address, ZIP code and phone number and staff will send you information or return your call during business hours. For the hearing impaired, call (503) 797-1804.

20 years include reducing the miles we drive by 10 percent per person, reducing dependence on the automobile and driving alone, reducing parking spaces by 10 percent per person and preserving rural lands. Metro is now linking transportation and land use planning, another state goal.

What happens next?

With adoption of the plan, city and county governments will update local plans to reflect the new regional policies. In this way, the transportation planning system throughout the tri-county urban area can be coordinated and upgraded to serve a growing population.

Auto tax comparisons

Compared with other state auto-related taxes, Oregon ranks among the lowest in the nation. Many nearby states have higher total auto registration and related fees, sales taxes and gas taxes.

The average gas and auto taxes currently paid in Oregon is $162.60 per year. In comparison, Washington residents pay $564, Nevada residents pay $455.10 and Idaho residents pay $316.80. In California, average total gas and auto taxes come to $466.20 per year.

Utility costs are another comparison. The proposed average Oregon road use taxes are $27.10 per month, based on a two-car household. In comparison, an average monthly electric bill is $61.50 and water/sewer charges are $45.70. Natural gas is $37.55; cable TV $29.40; local phone $25 and trash pickup $17.20. A two-zone bus pass is $41 per month.

Funding future projects

Metro funds transportation projects with federal money through the Metropolitan Transportation Improvement Program.

The MTIP was updated recently to determine which projects in the plan will be funded during the four-year period of October 1999 through September 2003. Local governments and transportation agencies, such as Tri-Met, cities, counties and Port of Portland, submitted requests for projects to

Legislative funding package

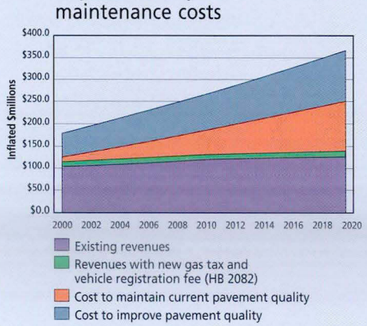
The 1999 Oregon Legislature took steps to partially close the funding gap. A package of transportation funding measures (House Bill 2082) was passed by the legislature and may be referred to voters in May 2000.

The package includes a 5-cents-per-gallon gas tax increase, and a $10-per-biennium auto registration fee increase. The truck weight-mile fees would be replaced with a new 29-cent tax on diesel fuel and an increase in truck registration fees. In addition, it allows counties to enact a $10 per year add-on to the vehicle registration fee.

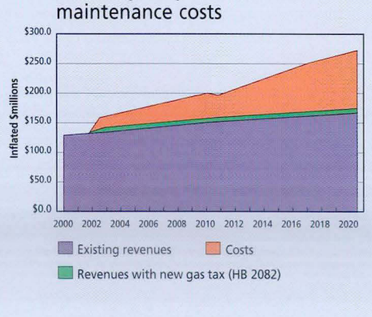
If this package is enacted, it would help close the gap for two areas of need. It would fund approximately $180 million of unfunded modernization projects on the state highway system in the metro area ($600 million statewide). It would also allow the state, cities and counties to address some of the backlog of unmet maintenance and preservation needs of our highway and road system.

Operating and maintaining what's on the ground

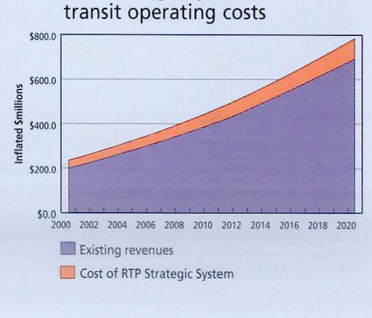
City and county maintenance costs



State highway maintenance costs



RTP Strategic System: transit operating costs



Projections show that existing funding sources to maintain our road system already fall 7 percent short of need. The shortfall will grow to 44 percent because resources don't increase as quickly as costs and needs. While transit funds do grow, transit service needs to grow faster than current funding levels to make service more convenient to more people.

Transportation funding puzzle

MAYOR VIEW

Lou Ogden

Mayor of Tualatin

"An effective transportation system is paramount to a meaningful growth management plan for our region. Wise investment of our precious few resources can only occur when all of us partner together working co-operatively and strategically. Fortunately for us and the taxpayers we represent, regional collaboration has resulted in a transportation plan that leverages local, regional, state and federal dollars to create the best integrated system possible within our means."

How to finance the future?

The Regional transportation Plan identifies three funding scenarios to help give elected officials and residents a picture of how different levels of investments can address future transportation needs.

The plan considers funding at three investment levels:

- *Existing resources system* – limited to current funding levels which fall short of maintaining the system already in place.
- *Preferred system* – includes all future projects necessary to meet the adopted goals and standards for the transportation system.
- *Strategic system* – lies in between the other two systems, and is made up of the most critical programs that are needed to keep pace with future growth.

The plan studies these investment levels during three time periods: short-term (five years), medium-term (10 years) and long-term (20 years).

Metro's existing resources system is estimated at $1.94 billion through the year 2020 for the most-needed road-related and transit projects.

But Metro estimates that to keep up with growth and build all necessary road-related and transit projects, the preferred system would require approximately $9.09 billion.

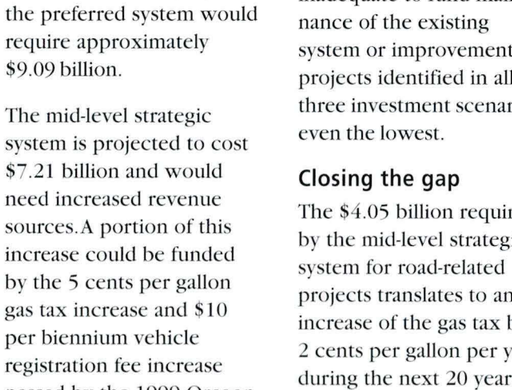
The mid-level strategic system is projected to cost $7.21 billion and would need increased revenue sources. A portion of this increase could be funded by the 5 cents per gallon gas tax increase and $10 per biennium vehicle registration fee increase passed by the 1999 Oregon Legislature.

Now, here's the concern: state and local funding sources are currently too low to adequately maintain our existing transportation system. They are clearly inadequate to fund maintenance of the existing system or improvement projects identified in all three investment scenarios, even the lowest.

Closing the gap

The $4.05 billion required by the mid-level strategic system for road-related projects translates to an increase of the gas tax by 2 cents per gallon per year during the next 20 years – an average increase of about $12 per vehicle per year for 20 years.

Oregon's auto taxes are among the lowest in the nation



When you add up all the state taxes and fees charged to drivers, Oregon ranks lowest of seven western states – Washington, California, Idaho, Nevada, Arizona and Montana.

Linking the 2040 Growth Concept and transportation

Protecting the nature of the region

Metro was involved in a long-range planning process that included many residents and most local governments. The 2040 Growth Concept effort was started in 1992 because of the rapid population growth in this region and the concern that we were losing our quality of life.

The purpose of the 2040 Growth Concept is to develop a plan for protecting the nature of the region. This effort is based on the values people in this region hold – such as access to nature, ability to get around the region, clean air and water, safe and stable neighborhoods and a strong regional economy.

Adopted in 1995, the 2040 Growth Concept directs most development to population centers and along major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and keeping freight moving to national and international destinations.

Focusing new jobs, housing and services in these centers and corridors provides many benefits and has important implications for the region's transportation system.

Reducing the need to drive

The 2040 Growth Concept supports the goal of providing jobs and shopping closer to where people live. A diverse and well-designed community provides closer access to a variety of jobs, recreation, shopping and other services. This reduces the need to drive longer distances, thus lessening traffic.

Protecting the environment

By asking residents to examine tradeoffs, we learned that a small expansion of the urban growth boundary and greater protection of environmentally sensitive areas were ideas that generated strong support. Metro has identified areas outside the urban growth boundary for future growth called urban reserves. These urban reserves will allow the region to expand slowly and carefully, and will only require an 8 percent increase of land during the next 10 to 30 years.

In addition, Metro has adopted a Stream and Floodplain Protection Plan that will help preserve rivers, streams and wetlands while reducing future risk of flood damage. Habitat for fish and wildlife in the region is also being examined.

Using land wisely

Using urban land wisely allows for more cost-effective and efficient provision of road, sewer, water and stormwater systems. Our technical analysis showed that without the 2040 Growth Concept, the region's urban growth boundary would need to be expanded by about 50 percent to accommodate forecasted housing and employment growth. This would result in the need for costly extensions of existing transportation and utility systems.

Providing transportation choices

More people will walk, take transit or ride a bike if our transportation system provides safe and convenient opportunities. Focusing new jobs and housing close to restaurants, stores and other services makes walking, bicycling and riding buses more convenient. These travel options allow people who can't drive (or choose not to drive) to get where they need to go. Finally, more households may choose not to own a car, or decline a second car, if

People are more likely to walk, take a bus or ride a bike if our transportation system provides safe and convenient opportunities to do so.

Buckman Heights Apartment complex in Northeast Portland encourages transit, bicycling and walking. As a result, less than one parking space for every two apartments is needed. Residents may use two carsharing cars and several shared bikes. There are 92 bicycle spaces and many bus routes nearby.

2040 Growth Concept *(continued)*

MAYOR VIEW

Ralph Brown

Mayor of Cornelius

"Working as a Metro region, we are able to work cooperatively to solve transportation problems. Regional transportation planning allows small cities a chance to interact with large cities and counties to plan for the future. Cornelius has benefited greatly from this process."

Orenco Station town center in Hillsboro (top) provides a welcoming commercial area for residents who can bicycle or walk to shops, restaurants and business from nearby houses and apartments.

Multiplexes at Orenco Station (bottom) are among the many housing choices in the 190-acre development. Residents are within walking distance of Westside MAX light rail and the town center, providing a village atmosphere.

there are a number of travel options. Money could be saved that would otherwise be spent on car payments, fuel, insurance and maintenance.

Keeping the economy strong

Experience has shown that economic vitality occurs in areas with the best transportation. Therefore, it is important that the Regional Transportation Plan invests transportation funds in areas that need the best access. These areas include the central city, regional centers, industrial areas and facilities where goods move from one form of transportation to another, such as from trucks to ships or rail. It also includes investing in areas where the region decides future development should occur.

This means targeting investments to areas that have been identified as major centers of activity in the 2040 Growth Concept. These kinds of investment decisions are now being made as part of the current Regional Transportation Plan.

For more information

Call Metro's 2040 hotline at (503) 797-1888 and leave your name, address and a message. You can also send e-mail to Metro's Growth Management Services Department at 2040@metro-region.org and information will be sent to you.

Coping with traffic congestion

While the Regional Transportation Plan assumes that the automobile will continue to be a primary transportation option, it also recognizes that the amount of miles we drive - and therefore the degree of congestion on our roads - is directly related to the availability of varied and dependable transportation choices. For the most part, our road system is built to accommodate the heavy rush hour demand. It stands to reason that if demand is spread over more hours of the day or reduced through use of alternative travel choices, congestion will be better managed and the need to build costly road expansion projects reduced.

The transportation choices and land uses outlined in this newsletter can be tools to reduce growth in traffic congestion. In some cases, people will adjust their travel times to avoid rush hour traffic or workers may arrange to work at home on some days or to share rides with neighbors. Some trips could be made by using an improved transit network, including regional light rail, rapid bus, frequent bus, streetcars, and commuter rail, or by bicycling and walking. Our individual choices can help reduce congestion during peak traffic times.

The Regional Transportation Plan recognizes the following:

- Strategic road and highway improvements are needed to address the most critical areas of congestion.
- A realistic standard for traffic operations, based on what the public has indicated it is willing to fund, translates into some congestion during the morning and evening rush hours.
- Increased congestion can be avoided by providing people with more varied and reliable transportation choices.
- Efficient land use patterns, with employment centers and housing located near one another with easy access to transit and services, will help to manage congestion and sustain communities.

Moving goods and services

Congestion relief is an important focus of the plan's new projects, especially for freight. Our region is a major West Coast distribution center and the economy is dependent on the movement of goods and services to national and international ports. Freight volumes are expected to more than double by the year 2040. Large trucks as well as local goods and service haulers, are heavily dependent on our shared transportation system. Improvements to the regional highways will focus on moving freight through key routes such as I-5, I-84 and I-205 and priority access to key industrial areas, rail yards, marine terminals and the airports.

Traffic management devices

Today, traffic management devices can help keep traffic moving through congested areas and can slow cars down in residential areas. Several techniques can make the road system smarter, including timing of traffic signals, traffic count stations, message signs, fiber optic interconnection and communication with a central management computer.

Traffic relief options apply to new highways

The Traffic Relief Options Study began in 1996 to review the concept of "congestion pricing" or "peak period pricing," which would charge drivers a fee for using major highways during peak hours. This could reduce the number of commuters using congested freeways by diverting them to other routes or dedicated lanes, or to use transit or travel at other times of day.

A citizen task force conducted an in-depth analysis of peak period pricing for the Portland metropolitan area. They concluded that:

- Peak period pricing could be an appropriate tool to manage congestion. It could also generate revenues to help fund needed transportation improvements.
- It should be considered a feasible option when major new highway capacity is added to congested corridors.
- Existing roadways should not be priced at this time.
- In the next two years, the region should identify a specific project to serve as a pilot project to test peak period pricing.

For more information, call the Metro transportation hotline, (503) 797-1900, and ask for the TRO final report.

Bicycles: from the past into the future

One of the best, cleanest and least expensive transportation choices in the region is bicycling. This is helped by the many new bicycle lanes striped on major streets around the region, with more planned for the near future.

A major goal of the plan is to provide a regional network of safe and convenient bikeways, including bike lanes, multi-use paths and bicycle boulevards. The goals include the following:

- Provide a regional, interconnected network of safe and convenient bikeways.
- Provide good bike access to downtown Portland and the regional centers.
- Increase the number of bicycle trips throughout the region.
- Ensure that transportation projects are designed to accommodate bicyclists.
- Encourage bicyclists, pedestrians and motorists to share the road safely.

There is a coordinated bicycle planning effort in the region, involving Metro, city of Portland, Clackamas, Multnomah and Washington counties, Tri-Met and the Oregon Department of Transportation.

Planned bicycle facilities fall into three categories:

Bike lanes – Striped sections of the roadway designated for bicycles. Bike lanes are planned on many major streets throughout the region. One example is Greeley/Interstate, connecting the Portland central city to North and Northeast Portland. In Washington County, bike lanes on Cornell Road will help fill gaps in the regional bikeway system. Another example is the Division Street boulevard project in Gresham, which includes bike lanes and sidewalks as part of the project.

More bicycling will be encouraged through the addition of new bike lanes and bicycle boulevards around the region. Providing a regional, interconnected network of safe and convenient bikeways is one of the plan's goals.

Bicycle boulevard – A street with little traffic that becomes a through street for bicyclists while maintaining local access for cars. One example is the Tillamook bikeway in Northeast Portland, which includes a boulevard retrofit in the Hollywood town center.

Multiuse paths – Separated from car traffic, multi-use paths are used by bicyclists, pedestrians, skaters and other non-motorized travelers. An example for future construction is the Clackamas regional center trail, which connects area residents to North Clackamas Park.

Bike There! bike map on sale for a greener, cleaner community

Want to pedal your way to a better community? Metro's new and improved bike map is available. If you like to cycle, the bike map can help you find the best and safest way to travel around the region. Streets are color-coded for safety, and new bike lanes and paths are highlighted. Other features include shaded elevation, topography and water-resistant synthetic paper. You can purchase the bike map for $6 from many local bike shops and bookstores and through Metro's web site at www.metro-region.org. Additional information about the bike map is available through Metro's web site or by calling the transportation hotline, (503) 797-1900, option 6.

Regional highways

Highways give us the most direct link to our jobs. In addition, these routes provide access for trucks to move freight destined for national and international ports. The regional economy depends on highways to keep people and goods moving efficiently. This is why highways are some of the most critical items on the future projects map.

In the past, many of our major streets and highways have been widened to accommodate more traffic. However, further widening of our system would displace homes and jobs, in addition to incurring high costs in construction and environmental impacts. This is why a balanced approach to planning for the region's 20-year transportation needs has evolved. Highway projects will be balanced with alternatives, such as transit, bicycling and walking.

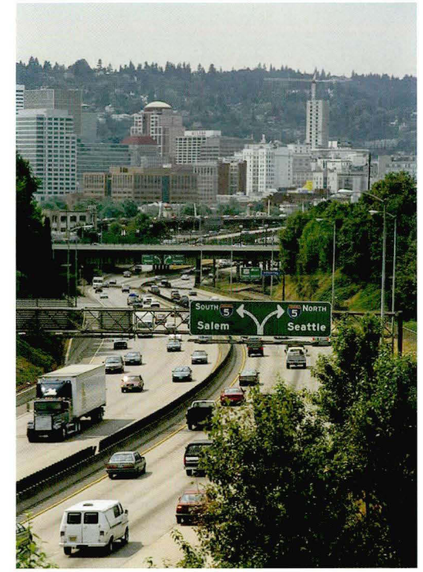
The following are major projects needed in the region's highway corridors, to be constructed as funds become available:

Interstate 5 corridor

Improvements in the I-5 corridor are focused on preserving mobility for freight and commuters. Congestion will likely continue to exist during the morning and evening rush hours, but not during other times of the day. The planned Interstate MAX light rail, from the Rose Quarter to the Expo Center, will provide an alternative to driving on North I-5.

Some of the improvements planned for I-5 include:

- Provide three through lanes in each direction from the Fremont Bridge to Vancouver. A bridge replacement or expansion is under consideration across the Columbia River.
- Add truck-climbing lanes on I-5 between Terwilliger Boulevard and the Ross Island Bridge.
- Construct new freeway access from the Central Eastside Industrial District to I-5.
- Construct a full interchange at I-5 and Columbia Boulevard.
- Widen the I-5/Nyberg Road interchange and Tualatin-Sherwood Road to maintain access to the Tualatin industrial area.
- Reconstruct the I-5/Highway 217 interchange in phases to maintain access from I-5 to the Beaverton area.
- Construct new freeway access from the Ross Island Bridge and I-405.



Banfield (I-84) is a busy eastside route but it cannot be widened because of the impacts to the surrounding communities and the environment. Instead, light rail service will expand and more bus service will be provided on nearby streets.

Sunset Highway (Highway 26)

Westside MAX light rail is expected to slow traffic growth on the Sunset Highway by providing a convenient alternative to driving. Long-planned improvements from Sylvan to Highway. 217 will be completed, as well, such as widening the freeway to six lanes from Highway. 217 to Northwest 185th to maintain access to jobs in this rapidly growing area.

Banfield (I-84)

Widening I-84 is limited by the environmental and neighborhood impacts. Instead, light rail service is proposed to double and expanded park-and-ride is proposed east of I-205. More transit service will be provided on streets parallel to the freeway between Portland and Gresham.

Interstate 205

Rapid growth in Clackamas County is projected for the next 20 years, creating more demand on I-205. A combination of highway improvements (from I-5 to I-84) and high-quality transit is proposed to address this need. Rapid bus would travel from Oregon City to Gateway. A more detailed study will identify actual improvements in this corridor but may include:

- Widening I-205 to six lanes from West Linn to I-5.
- Widening Oregon City bridge to six lanes with

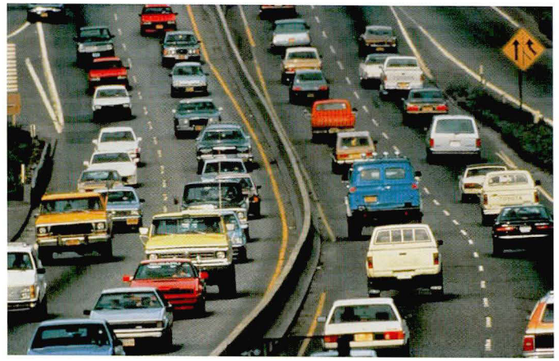
Regional highways *(continued)*

MAYOR VIEW

Rob Drake

Mayor of Beaverton

"The Regional Transportation Plan is an important tool in combining good land use planning and transportation projects. The coordinated planning and transportation efforts help promote regional cooperation and problem solving."



Traffic can be heavy on regional highways, especially during peak travel hours. Improvements are planned on many routes to alleviate auto and freight delays.

auxiliary lanes in each direction.

- Improving streets parallel to I-205, including new overpasses and street extensions near Clackamas regional center.

Proposed Sunrise Highway

Growth in Clackamas County will increase traffic significantly in the Damascus area, creating the need for a new highway in the next 20 years.

Examples of several projects planned for the Sunrise Highway include:

- Build a new four-lane highway, from I-205 to Rock Creek Junction in the near-term.
- An extension from Rock Creek Junction to US 26 is also planned for the long-term, as warranted by development in the Damascus area.

McLoughlin Corridor

A more streamlined highway design is planned along McLoughlin and Highway 224 to improve travel between Portland and Clackamas County. Greatly expanded bus service with the possibility of carpool lanes is under consideration in this corridor. Light rail service may be considered in the future.

Highway 217

Significantly increased traffic on Highway 217 creates the need for expansion. The Highway 217 study will consider auto and freight traffic and possible solutions to congestion in this area. A combination of transit, highway and street projects are proposed to maintain access to Washington Square and Beaverton regional centers. In addition, commuter rail is proposed to link Beaverton to Wilsonville, complementing other transit in this corridor.

Mt. Hood Corridor in Gresham

A Mt. Hood Parkway project will continue to be part of the long-term vision for connecting I-84 to US 26 and providing access to Gresham regional center.

Meanwhile, a series of improvements are proposed to streamline the Hogan Road connection from I-84 to US 26.

Proposed Tualatin-Sherwood Expressway

A new connection on I-5 between Tualatin and Sherwood is proposed to route through traffic around the Tigard and Tualatin town centers. The location of the new route will be studied and the highway could be built as a tollway.

Walking into the millennium

New, wider sidewalks are being built throughout the region to encourage more walking, as part of the regional pedestrian system. This sidewalk is on Northeast Grand Avenue in Portland.

Where would we be without walking? Walking is the most basic and reliable form of transportation. Everyone who can walk is a pedestrian, even those who need mobility assistance. In neighborhoods with good sidewalks and access to transit, more than 20 percent of all travel is on foot.

Metro wants to continue encouraging walking, which is our link to cars, bicycles, buses, trucks and light rail. It is also a valuable form of transportation to accomplish short trips in your neighborhood or to shops near work. Walking can link neighbors and communities, as well.

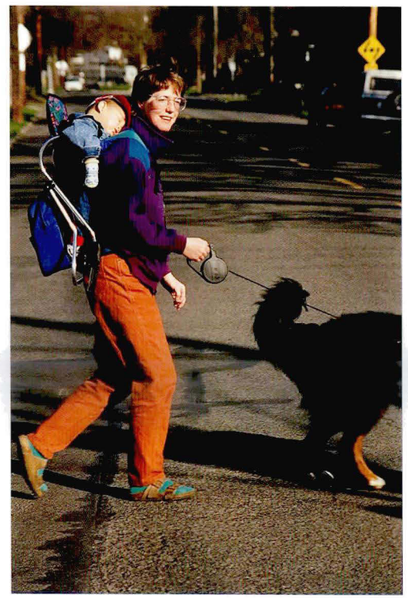
Improving streets to make them pedestrian-friendly is one goal of the Regional Transportation Plan. This will allow people to walk safely in attractive areas, especially to transit and major centers. Community design can also help foster convenient walking routes. Walking trips are expected to more than double in the next 20 years, so pedestrian improvements are necessary.

Metro's Regional Transportation Plan calls for the development of a regional pedestrian system to make streets more walkable and improve walkways to public transit. Needed improvements include sidewalks, multiuse paths, curb extensions, bus shelters, safer street crossings, lighting, street trees, benches, landscaping and wide planting strips that buffer walkers from cars.

The design of pedestrian-friendly neighborhoods, with well-connected streets and sidewalks and nearby shopping, fosters nearly four times more walking trips than other areas.

Examples of specific improvements in the plan to encourage walking are as follows:

- Retrofit existing streets in the Lloyd District, Hillsdale, Washington Square, Beaverton, Gateway and other centers to include wider sidewalks, safer street crossings, bus shelters, curb extensions and benches at major transit stops.
- Improve streets and corridors that connect to light rail transit in regional centers, such as Gresham, Gateway, Beaverton and Hillsboro.
- Provide wide sidewalks along major transit corridors – particularly at transit stations and bus stops – with landscaped buffers, bus shelters and benches, curb extensions and marked or signal crossings.
- Construct new multiuse trails throughout the region, including along Phillips, Rock and Fanno creeks.
- Fill in missing sidewalks on arterial streets throughout the region.



Walking can be our link to nearby schools, parks, neighbors and shopping. Pedestrian-friendly design, with well-connected streets and wider sidewalks, is planned throughout the region.

Public transit *(continued)*

MAYOR VIEW

Carolyn Tomei

Mayor of Milwaukie

"In working with Metro and the other governments in the region, my mission has been to provide a broad range of transportation choices to Milwaukie residents, support the livability of our community and ensure that our community is connected to the entire metropolitan region. The RTP reflects a careful balance between the transportation goals of the entire region and of local communities. Milwaukie is very pleased to be a partner in this planning effort."

Portland's central city. Improvements planned for the next 20 years will provide transit service that better meets the needs of a growing region by offering:

- Faster, more direct connections to different communities, minimizing the need to travel to downtown Portland to transfer.
- Better routes to serve neighborhoods, employment areas and schools.
- Efficient, reliable service with adequate space for passengers at all times.
- Improved bus connections for better access to light rail.
- New low-floor, air-conditioned buses with security cameras and bigger windows, providing service to all, including those using mobility devices.
- Improved bus stops, with shelters, lighting, phones, maps, schedules, better sidewalks and electronic signs with accurate bus arrival times.
- Support of transportation management associations to improve commute options for employees (see box at right).

Alternatives to rush hour

Transportation management associations, which are private enterprises or private/public partnerships, offer alternatives to employees driving to work alone during rush hour. TMAs can promote ride sharing, transit, walking, biking, work schedule changes and telecommuting to reduce rush hour traffic congestion. One TMA will be located in each regional center.

The Lloyd District TMA formed to reduce traffic congestion around the Lloyd Center area. The TMA has joined with Tri-Met to offer a PASSport program that increased the use of bus passes from 2,500 to nearly 5,000 employees in the Lloyd District during the past year.

The Lloyd District TMA negotiated four new bus lines, adding direct access from Southeast and Southwest Portland and Clark County. New bike lanes and bike parking facilities have also been added to the area. Businesses that participate in the TMA have seen a significant reduction in employees driving to work, thus complying with Oregon's commute rule.

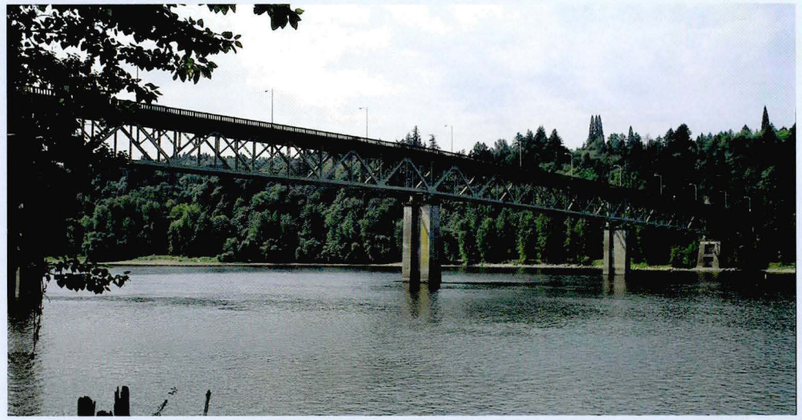
Bridge improvements

Bridges provide the only access across our rivers, often connecting people with jobs. The region's bridges are aging and in need of repair to maintain their usefulness into the future. Since few new bridges are proposed, bridge repair and preservation plays an important part in the Regional Transportation Plan.

The following are several bridge projects in the plan:

- Preserve the Willamette River crossings with repairs and painting, including the Broadway, Burnside, Morrison and Sauvie Island bridges.
- Preserve or replace the Sellwood Bridge with a two-lane bridge, adding bicycle and pedestrian improvements (see box).
- Restore the St. Johns Bridge.
- Study the need for a new North Willamette crossing from US 30 to the Rivergate industrial area.
- Construct a new bridge from Marine Drive to Hayden Island for access to marine terminals.

Sellwood Bridge improvements



Metro's South Willamette River Crossing Study concluded in July 1999. The study examined new bridge locations, as well as four-lane and two-lane Sellwood Bridge alternatives. Due to other funding priorities and potential adverse community impacts of new or bigger bridges, the Metro Council and local elected officials recommended that the Sellwood Bridge be maintained or replaced as a two-lane structure. They also recommended improvements to the Ross Island and I-205 bridges, more transit and bicycle improvements, widening Southeast McLoughlin and Highway 224 (as necessary), and working to provide more jobs in Clackamas County to reduce demand for long-distance commuter trips.

Hawthorne Bridge improvements

The Hawthorne Bridge underwent a $20.7 million renovation in 1998-99. More than $4.7 million of Metro transportation improvement funds went to replacing the surface of the bridge deck and for widening the shared bicycle and pedestrian sidewalks on the bridge and ramps. The rest of the funding, approximately $16 million, was authorized by JPACT from federal bridge repair funding administered by the Oregon Department of Transportation.

Designing streets for cars and people

MAYOR VIEW

Vera Katz

Mayor of Portland

"The key to being a thriving city is being part of a thriving region. Portland is lucky to have wonderful partners at Metro and surrounding cities that understand the importance of linking transportation, housing and jobs. The Regional Transportation Plan will help us reduce congestion, improve the environment and keep us connected as not just Portlanders, but Oregonians."

Whatever your destination and however you travel, well-designed streets can get you there. The design of streets directly affects our quality of life. Street design is one way the 2040 Growth Concept can be carried out, by linking the way a street is designed to the land uses it serves. In this way, neighborhoods can be protected for pedestrians, bicycles and local traffic, with through traffic and truck travel encouraged in major transportation corridors.

Metro has worked with the region's residents and governments to develop new policies for street design. The result has been the creation of new street design classifications: boulevards, streets and roads. Boulevards emphasize people; roads are for cars and trucks; and streets balance all modes of travel. The policies apply to regionally significant streets throughout the metropolitan area, primarily arterial or major street networks.

Focus on boulevards

Boulevards are located in regional and town centers and along main streets. They are often the centerpiece of a community and the focus of civic activities.

Although they often carry heavy traffic, they are designed for walking and transit. Designs include improved pedestrian crossings at every intersection, wider sidewalks with on-street parking, benches, bus shelters and curb extensions. These people-friendly elements are intended to slow traffic and make walking, bicycling and the use of transit safer and more inviting. Boulevards can encourage more livable communities with nearby services within walking distance.

Boulevard improvements will encourage more walking and transit use on major streets around the region. Boulevards will include wider sidewalks with on-street parking, benches, bus shelters and corner curb extensions with improved pedestrian crossings, such as on 122nd Avenue in East Porland..

Boulevard projects are a transportation priority in this region. Streets that will be redesigned to become boulevards include:

- McLoughlin Boulevard in Milwaukie
- Sandy Boulevard
- West Burnside
- Hawthorne
- Division Street in East Multnomah County
- Barbur Boulevard
- Capitol Highway
- Beaverton-Hillsdale Highway
- Main and Adair streets in Cornelius

The plan includes many other boulevard projects throughout the region.

Commuter rail

Commuter rail uses existing railroad tracks for diesel-powered passenger train cars that typically run long distances, mostly during rush hours. Washington County is seeking funding for an 18-mile commuter rail line from Beaverton's MAX station to Wilsonville, with a possible future extension south to Salem. Corridors for other commuter rail studies could include McMinnville to Portland, Lake Oswego to Portland and Canby to Portland.

Streetcars

Streetcar lines are returning to the Portland area. Streetcars run on new tracks set in the middle of existing streets. A new central city streetcar line is being built from Portland State University in downtown Portland to Good Samaritan Hospital in Northwest Portland. Future streetcar lines to be studied include one from North Macadam to connect to Portland State.

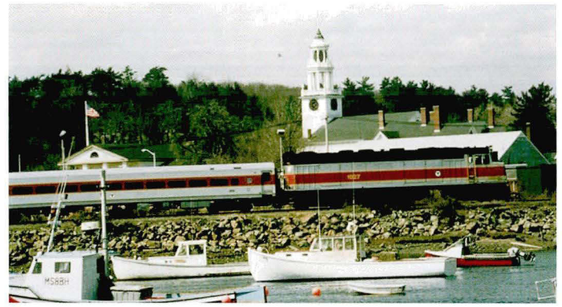
Rapid bus

New rapid bus service will provide fast, frequent and reliable service with limited stops along major transit corridors. The service may run on reserved bus lanes. Stations will include schedule kiosks, ticket machines, lighting and benches, covered shelters and bike parking.

- An interim rapid bus system will be developed from downtown Portland to Clackamas Town Center and Oregon City. A new Milwaukie Transit Center will be built.
- New rapid bus service will be enhanced on the Powell/Foster Corridor to Damascus.
- Service will be improved along Barbur Boulevard and 99W to connect King City, Tigard and Portland.
- Studies will be done for rapid bus lines along I-205 from Vancouver to Oregon City and from Oregon City to as far west as the Beaverton Transit Center.

Frequent bus

"Frequent bus" means high-frequency local bus service along main streets or major routes with frequent stops. Stations feature covered bus shelters, lighting, benches and curb extensions. Frequent bus service will be enhanced on Sandy Boulevard, Killingsworth/82nd, MLK/Lombard, Hawthorne Boulevard, Division Street, Hall Boulevard, Kruse Way and Highway 43 and Belmont/NW 23rd Avenue, as well as Beaverton-Hillsdale Highway and Tualatin Valley Highway.



The commuter train (top) operates in the Boston area. Commuter rail is being studied for Washington County, between Beaverton and Wilsonville.

Portland's central city streetcar, opening in 2001, will be similar in style to this European design (bottom). Portland's streetcar will operate between PSU and Good Samaritan Hospital, with future planned extensions.

New buses

One of the major funding decisions is to purchase more buses to alleviate rush-hour overcrowding on the region's most-used transit routes. Providing new buses during peak use is one of the best ways to keep and gain new ridership. Service improvements during off-peak times are also being funded, as well as bus service to new areas. Added bus shelters and better schedule information will also be provided.

Regional transit service strategy

Metro and Tri-Met have worked with residents and government partners to define a long-term transit strategy for the region. Future transit service will focus on regional centers, such as Gresham, Beaverton, Clackamas and

Public transit keeps us moving

The Beaverton Transit Center (top) serves bus and Westside MAX, the newest addition to the light rail system. Light rail is proposed for North Portland.

Eastside transit connections may be made easily at the Gateway Transit Center (bottom), where MAX awaits riders from bus connections. More transit, such as rapid bus, frequent bus and streetcars, is planned for this region.

In Portland, transit trips per person increased by 4.4 percent between 1990 and 1995, while other cities experienced an average decline of more than 9 percent. In fact, transit use in Portland increased faster than the population and faster than traffic growth.

Public transit has become more important to our region's transportation system in the past 25 years. Since the Portland Transit Mall was built in the 1970s, bus ridership has grown steadily. With the addition of light rail and the upcoming streetcar line, the types of transit service offered in Portland have also grown. New ideas, such as commuter rail and rapid bus, add to the potential of transit use in our growing region.

Light rail and rapid bus will become the backbone of the transit system, connecting regional centers to each other and to the central city. Light rail service will operate at least every 10 minutes during the day, seven days a week. Rapid bus will operate every 15 minutes during the day, seven days a week. Light rail or rapid bus will connect regional centers and the central city.

On an average weekday in 1998, about 186,000 riders used the bus and rail systems. By 2020, that number is expected to increase to more than 500,000 riders. The Regional Transportation Plan identifies the need for fast, convenient transit access to all parts of the region.

The following types of transit projects or expansions are planned for the metropolitan area:

Light rail transit

Light rail provides speedy and convenient service between downtown Portland and Gresham and Hillsboro regional centers. Extensions are currently under study for future regional service.

- Light rail is currently being built from Gateway to Portland International Airport under a public/private funding package.
- A light rail line on North Interstate Avenue, from the Rose Garden to the Expo Center, is under study and construction is expected to begin in 2001. A future extension may be considered to Vancouver, Wash.
- If funded, a future light rail extension may travel from Portland to Clackamas County. Until then, more frequent buses will serve Highway 99E/Highway 224 from Clackamas Town Center to Portland.
- Future rail service will be evaluated to Oregon City and in the Highway 217 and Barbur Boulevard corridors.

Livable streets

Division Street boulevard

Before

After

Division Street brings many of Gresham regional center's destinations together. It is a bus corridor that connects to light rail. It ties Gresham's historic downtown to the new development called Civic Neighborhood. It connects Gresham with Portland and provides neighborhood access to parks, shopping centers and schools.

Yet Division is completely auto-oriented. A major five-lane arterial, it has heavy traffic and lacks even basic sidewalks in many areas. It acts as a neighborhood divider rather than a connector.

A new boulevard design (lower picture, above) was developed for Division. When completed, the street will become the new heart of Gresham regional center. The boulevard will have broad sidewalks, street trees, lighting, bicycle lanes and on-street parking. Travel lanes for cars and transit will be divided with a raised and landscaped median that also serves as a pedestrian refuge. Division Street is an example of how major streets in the region can be made more attractive and functional for multiple uses.

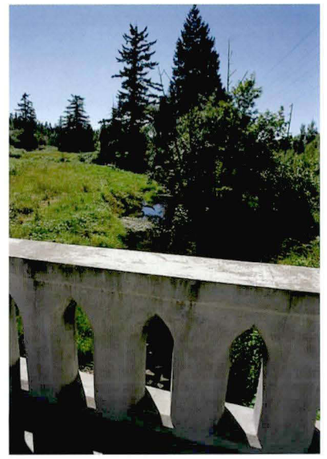
New fish-friendly bridge

Steelhead have traditionally used Mt. Scott Creek in Clackamas County. The creek passes under Sunnyside Road in an old box culvert that does not provide fish passage when water is low. The culvert will be removed and replaced with a new bridge over the road near 117th Avenue. The bridge will allow steelhead to more easily pass under Sunnyside Road. It will also provide a wider crossing for traffic, including bike lanes and sidewalks. A proposed pathway under the bridge could connect to a future Mt. Scott multiuse path connecting to a regional park.

Green Streets for fish passage

What happens when roads must cross over streams? Metro is working to make sure that regional transportation projects do not block fish passages. With the recent federal listing of salmon and steelhead and proposed listing of cutthroat trout as threatened species, new attention is focusing on urban fish habitat, stream passage and water quality.

The new Green Streets program will provide new guidelines for transportation projects to ensure fish-friendly design solutions. For example, more than 150 culverts around the region were found to need repair to allow fish to pass under roads. Metro is identifying culverts that should be replaced in the near future. Federal and state transportation programs must allocate funds to replace or repair these fish access problems.



Johnson Creek is a free-flowing stream, spanned by the Seventh Street Bridge in Gresham. The bridge protects the steelhead and trout from road impacts. The Green Streets program will promote similar "fish-friendly" designs to protect streams around the region.

Major regional corridors

Transportation Strategy for Major Corridors

Regional Centers
Town Centers
Central City

MILES 0 1 2

N

September 1999

See separate fact sheets for more detailed information on planned projects in your area.

I-5 North Corridor
A combination of highway, light rail and bus improvements are planned to serve heavy travel demand in this corridor. Several improvements to I-5 will provide three through-lanes in each direction from the Fremont Bridge to Vancouver, Wash. Light rail service is planned along Interstate Avenue, providing a high-quality transit alternative to freeway traffic. Improved highway access to surrounding port and rail terminals is also planned.

Sunset Corridor
Substantially increased MAX and bus service is proposed for northern Washington County, as well as completion of improvements to US 26 to keep pace with growth and maintain access to the Hillsboro regional center and Sunset industrial area. Expansion to a total of six lanes is proposed from Highway 217 to 185th Avenue, as well as many parallel street improvements.

Tualatin Valley Highway Corridor
This highway has become somewhat degraded, despite its popularity as a connection between the Beaverton and Hillsboro regional centers. Expected growth in the area will require additional lanes along TV Highway and more limited driveway access. Options for making these changes to the highway will be developed through a corridor refinement plan. Expanded bus service is also planned in this corridor.

Banfield Corridor
Physical and financial realities prevent new freeway lanes along this route, despite heavy demand. Instead, light rail service is proposed to double, in addition to a new park-and-ride east of I-205 and expanded bus service and system management on a number of parallel streets between Portland and Gresham.

Highway 217 Corridor
A combination of transit and highway projects are proposed to serve increased traffic along the Highway 217 corridor, and maintain access to the Beaverton and Washington Square regional centers. Improvements such as added general purpose, express, priced or HOV lanes will be analyzed during the next year, including improvements to parallel streets. In addition, commuter rail is proposed to link Beaverton to Wilsonville, complementing improved bus service and possible light rail service.

Mount Hood Corridor
Although the Mt. Hood Parkway is not warranted in the 20-year plan, a series of improvements to streamline the Hogan Road connection from I-84 to Highway 26 are proposed. The full Mt. Hood Parkway project would continue to be part of the long-term vision.

McLoughlin Corridor
A more streamlined highway design is planned along McLoughlin Boulevard and Highway 224 to improve travel between Portland and Clackamas County. Greatly expanded bus service with the possibility of HOV lanes is under consideration. Light rail service in this corridor may be revisited in the future, as well.

Tualatin-Sherwood Connection
A new connection between I-5 and 99W is proposed to move through-traffic away from the Tigard and Tualatin town centers. The location of the new route will be studied in more detail before a project is built, and it could be constructed as a tollway facility.

I-5 South Corridor
Growth in traffic between the Metro region and the Willamette Valley is expected to continue and could require major expansion of I-5. A detailed corridor plan will look at all options for serving heavy travel demand in this corridor, including possible commuter rail service and a major park-and-ride facility in southern Wilsonville.

I-205 Corridor
Rapid growth in Clackamas County is expected to continue during the next 20 years, placing heavy demand on I-205. A combination of highway capacity improvements from I-5 to I-84, and high-quality transit service, including rapid bus from Oregon City to Gateway, is proposed to address this need. A detailed study will identify actual improvements to be implemented along this corridor.

Sunrise Corridor
Rapid growth is expected in the Damascus and Pleasant Valley areas, and the full Sunrise Highway project is proposed to serve traffic that currently uses Highway 212. The project would be phased, bypassing the Damascus community only when needed. Highway 212 is proposed to serve as an urban arterial, and bus service linking Damascus and Pleasant Valley to the Clackamas and Gresham regional centers and the Portland central city is also proposed.

Future Transportation Projects

In just the last 35 years, most of our major highway and light rail lines were built, making up the backbone of the region's transportation system.

Now there is a new emphasis on preserving these existing facilities, while carefully expanding the system, where necessary. This strategy will provide the best use of scarce transportation dollars into the year 2020.

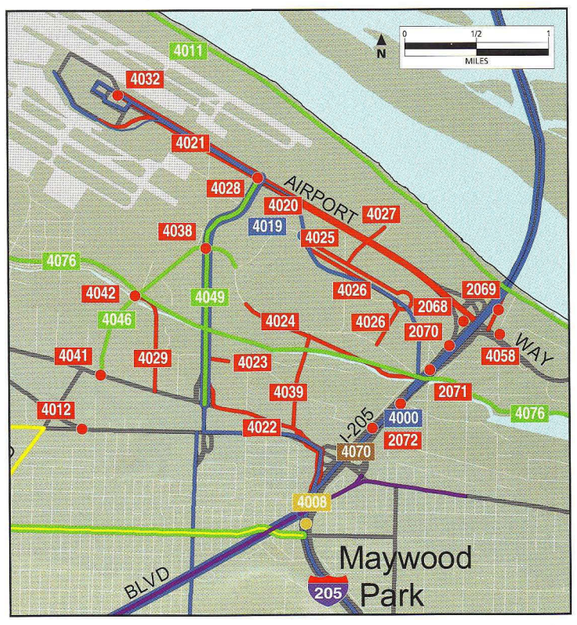
Shown on the map are summaries of the future projects needed in each transportation corridor. For more details on specific projects, see page 4 to order fact sheets for various areas around the region.

Priority projects by area

CITIZEN VIEW

Bill Stewart
Freight delegate
Regional Transportation Plan
Citizen Advisory Committee

"Good freight mobility is particularly important to the Portland area as we have traditionally served as a distribution center for much of the Northwest. A Regional Transportation Plan that recognizes the importance of freight is critical to the long-term well being of the regional economy."



Columbia Corridor 2000-2005

1139 St. Johns Bridge Restoration
Complete restoration improvements to the bridge.

1152 I-5 Freight Mobility Study
Study to identify improvements to N. Lombard Street to provide better truck access to Rivergate and protect adjacent neighborhoods from freight truck traffic.

4011 NE Marine Drive Bikeway
Retrofit existing street with bike lanes from I-5 to 122nd Avenue to improve access to the Columbia Corridor.

4013 US 30 Bypass – Phase 1 Refinement Study
Study to refine long-term improvements defined in the Columbia Corridor Study, including consideration of additional system and access management strategies.

4014 US 30 Bypass Study – Phase 2
Study to define improvements needed to support US 30 Bypass as a long-term primary freight route from I-5 to I-84.

4015 US 30 Bypass Improvements Study
Study to define improvements needed for better transition of freight movement from Lombard Street to Columbia Boulevard within the US 30 Bypass corridor.

4012 N./NE Lombard/ Killingsworth Traffic Management Improvements
Implement comprehensive traffic management plan in the corridor to improve traffic flow. This project includes better signalization at MLK Boulevard, Interstate Avenue; Greeley Avenue, Portsmouth Avenue and Philadelphia Avenue message signs; fiber optic interconnection and communication with the city of Portland's central management computer.

4016 North Willamette Crossing Study
Future study to determine the need for a new bridge from US 30 to the Rivergate industrial area.

2010-2020

4072 N. Force/Broadacre/ Victory Bikeway
Provide a signed bikeway connection to the I-5 river crossing.

Portland International Airport Industrial Area 2000-2005

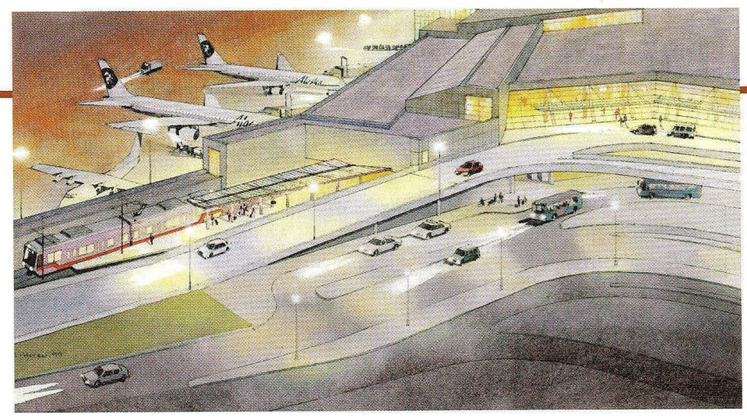
4020 Airport Way Improvements, East
Widen Airport Way to three lanes in both directions from 82nd Avenue to I-205.

4022 East End Connector
Construct an at-grade intersection connection from Columbia Boulevard at 82nd Avenue to US 30 Bypass/I-205 interchange and widen I-205 southbound on-ramp at Columbia Boulevard. This project is intended to better distribute traffic between Columbia Boulevard and Lombard Street.

4023 Marx Drive Extension
Construct a two-lane extension of Marx Drive to 82nd Avenue.

4024 Alderwood Road Extension
Construct a three-lane extension of Alderwood Road to Clark Road.

4025 International Parkway Extension – Phase 1
Construct a three-lane extension of International Parkway to Cascade Avenue.



Light rail to the airport is already under construction and will provide passenger service from Gateway to the main terminal (as shown in this rendering.)

4027 Airport Way/Cascade Grade Separation
Construct a grade-separated crossing at the intersection of Airport Way and Cascade Avenue and widen Airport Way to four lanes in each direction from a new overcrossing to I-205.

4030 NE 11/13th Avenue Connector
Construct a new three-lane roadway and bridge at Columbia Boulevard.

4032 Airport Way Terminal Entrance Roadway Relocation
Relocate and widen Airport Way at the terminal entrance to maintain access and circulation in the terminal area.

4037 Columbia and Lombard Intersection Improvements
Widen turn lanes at the intersection of MLK and Columbia boulevards and MLK Boulevard and Lombard Street.

4040 47th Avenue Intersection and Roadway Improvements
Widen and reconfigure intersection at 47th Avenue and Columbia Boulevard to better facilitate truck turning movements to the cargo area located within the airport area.

4041 Columbia Boulevard/ Alderwood Improvements
Widen and signalize the intersection at Alderwood Road and Columbia Boulevard to better facilitate truck turning movements to the cargo area located within the airport area.

4042 Cornfoot Road Intersection Improvement
Widen turn lanes and signalize the intersection at Alderwood Road and Cornfoot Road.

4049 NE 82nd Avenue Bikeway
Retrofit the existing street with bike lanes from Columbia Boulevard to Airport Way to improve access to the Columbia Corridor.

4054 N. Columbia Pedestrian Improvements – Phases 1 and 2
Construct sidewalks and safer pedestrian crossings.

4055 Airtrans/Cornfoot Intersection Improvement
Signalize the intersection and reconfigure traffic flow to provide efficient movement of traffic to adjacent properties.

4057 N./NE Marine Drive Traffic Management Improvements
Implement comprehensive traffic management plan in the corridor to improve traffic flow. This project includes three new traffic signals between N. Portland Road and 185th Avenue, better signalization, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

4058 NE Airport Way Traffic Management Improvements
Implement comprehensive traffic management plan in the corridor to improve traffic flow. This project includes three new traffic signals between I-205 and 158th Avenue, better signalization, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

2006-2010

4021 Airport Way Improvements, West
Widen Airport Way to three lanes in both directions from 82nd Avenue to the airport terminal.

4029 Cornfoot Road Extension
Construct a two-lane extension of Cornfoot Road from Alderwood Road to Columbia Boulevard to better facilitate truck access to the cargo area located within the south airport area.

4038 82nd Avenue/ Alderwood Road Improvement
Modify the traffic signal at the intersection of 82nd Avenue and Alderwood Road and construct a right turn lane on southbound 82nd Avenue and a second right turn lane on westbound Alderwood Road.

4043 33rd/Marine Drive Intersection Improvement
Signalize the intersection at 33rd Avenue and Marine Drive.

4046 NE Alderwood Bikeway
Retrofit the existing street with bike lanes from Columbia Boulevard to Alderwood trail to improve access to the Columbia Corridor industrial and employment areas.

4050 N./NE Columbia Boulevard Bikeway
Retrofit the existing street with bike lanes from Lombard Street east to MLK Boulevard to improve access to the Columbia Corridor industrial and employment areas.

4056 Columbia Boulevard – Traffic Management Improvements
Implement comprehensive traffic management plan in the corridor to improve traffic flow. This project includes better signalization between N. Burgard Street and I-205, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

This digital rendering shows the proposed new marine cargo complex on West Hayden Island including the new bridge access proposed in the Regional Transportation Plan.

Regional Highways 2000-2005

4003 I-5 Interstate Bridge and I-5 Widening
Add capacity to the I-5/ Columbia River bridge and widen I-5 from Columbia Boulevard to the Interstate Bridge based on final recommendations from I-5 Trade Corridor Study.

4009 I-5 Trade Corridor Study
Study to define an appropriate mix of improvements from I-405 to I-205, including adding capacity and transit service within the corridor.

2006-2010

2068 I-205 Direct Ramp
Redesign the I-205 off-ramp at Airport Way.

4005 I-5 North Improvements
Widen I-5 to three lanes in each direction from Lombard Street to the Expo Center exit.

4006 I-5/Columbia Boulevard Improvement
Construct a full diamond interchange at I-5 and Columbia Boulevard.

4008 I-205 North Corridor Study
Develop a long-term traffic management plan for I-205 from I-84 to the Columbia River to limit congestion and improve traffic flow.

2011-2020

2069 I-205 Interchange Improvement
Construct a new I-205 northbound on-ramp from Airport Way.

2070 I-205 Interchange Improvement
Widen the existing I-205 southbound on-ramp from Airport Way.

2071 I-205 Auxiliary Lane
Construct new north- and southbound auxiliary lanes from Airport Way to Columbia Boulevard.

2072 I-205 Auxiliary Lane
Construct new north- and southbound auxiliary lanes from I-84 to Columbia Boulevard.

4004 I-5 Reconstruction and Widening
Reconstruct and widen I-5 from I-84 to Greeley Avenue in addition to various bridge and ramp improvements along this section of I-5 to improve access to the Lloyd District and Rose Quarter.

Regional Transit

The projects listed in the Regional Transit section identify major transit capital projects and other improvements that enhance rapid bus and frequent bus service. Capital improvements for rapid bus routes and stations would include transit preferential treatments such as queue-by-pass lanes and signal preemption, park-and-ride facilities, possible off-street station areas and station amenities such as schedule information, ticket machines, lighting, benches, covered shelters and bicycle parking. Capital improvements for frequent bus routes and stations would include transit preferential treatments such as signal preemption and passenger amenities such as schedule information, covered shelters, curb extensions, lighting and benches. (See Transit Service Strategy fact sheet for additional information on transit service.)

2000-2020

1000 and 1002 Light Rail Expansion
Extend light rail service from the Rose Quarter transit center north to the Portland Metropolitan Exposition Center and then potentially to Vancouver, Wash.

4002 Transit Station and Park-and-Ride Lot Upgrades
Construct, expand and/or upgrade transit stations and park-and-ride lots throughout the subarea, including facilities in St. Johns, Linnton, Parkrose and Kenton.

2000-2005

4000 Airport Light Rail
Complete new light rail transit service from Gateway regional center to the Portland International Airport terminal.

4019 Light Rail Station/ Track Realignment
Constructs new light rail station in conjunction with development of the Portland International Center.

2006-2010

1135 MLK/Lombard Frequent Bus
Provide capital improvements that enhance new frequent bus service along MLK Boulevard and Lombard Street from downtown Portland to St. Johns.

4001 Killingsworth Frequent Bus
Provide capital improvements that enhance new frequent bus service along Killingsworth Street from Swan Island to the Clackamas regional center.

Regional Trails 2000-2005

4073 Kelley Point Park Access Trail/40 Mile Loop Trail
Construct a multiuse trail for bicycles and pedestrians along the north bank of the Columbia Slough.

4074 Rivergate Bicycle and Pedestrian Trail
Construct a multiuse trail for bicycles and pedestrians along the Columbia Slough in the Rivergate area.

4076 Columbia Slough Greenway Trail Study
Future study to determine the feasibility of constructing a multiuse trail from Kelley Point Park to Blue Lake Regional Park.

CITIZEN VIEW

Bob Walsh
President
Port of Portland Commission

"The ability to move freight quickly and efficiently is key to the region's economic vitality and competitiveness. As freight volumes in the region are projected to double in the next 30 years, the Port of Portland recognizes the Regional Transportation Plan as an important tool in planning for the future."

2011-2020

4028 Airport Way/82nd Grade Separation
Construct a grade-separated overcrossing at the intersection of Airport Way and 82nd Avenue.

4039 NE 92nd Avenue
Improve the street between Columbia Boulevard and Alderwood Road to better facilitate circulation in the Portland International Center development. Scope of project is not fully defined.

Rivergate Industrial Area 2000-2005

4062 Marine Drive Improvement – Phase 1
Reconstructs Marine Drive to five lanes from the Terminal 6/ Marine Drive intersection to 2.5 miles east, including bike lanes, sidewalks and vegetated buffer of adjacent trail and natural resource area from the Columbia Slough to the N. Marine Drive overpass. This project also signalizes the intersection at the Terminal 6 entrance and Marine Drive to improve safety.

4065 South Rivergate Entry Overpass
Construct an overpass from the intersection at Columbia Boulevard and Lombard Street to South Rivergate entrance to separate rail and vehicular traffic.

4066 Columbia River Channel Deepening Study
Study to determine the feasibility of deepening the Columbia River channel from Astoria to Portland.

4068 Rivergate Rail Expansion
Expand railroad capacity in the Rivergate industrial area to increase bulk capacity for mineral and agricultural products and improve train flows within the industrial area.

2006-2010

4061 West Hayden Crossing
Construct new four-lane bridge from Marine Drive to Hayden Island to serve as the primary access to marine terminals on the island.

4063 N. Lombard Improvements
Widen Lombard Street to four lanes from Purdy Street to Ramsey Street.

4069 Hayden Island Rail Access
Increase rail access to Hayden Island.

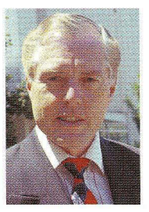
4070 Additional Tracks – Kenton Line
Construct additional rail tracks for staging of Pacific Northwest unit trains.

2011-2020

4064 Marine Drive Improvement – Phase 2
Reroute rail tracks and construct an above-grade rail crossing at the Rivergate West entrance to improve safety and reduce vehicle and rail traffic conflicts.

4067 Columbia River Channel Deepening
Deepen the Columbia River channel to 43 feet from the mouth of the river in Astoria to Portland to better serve the new class of larger container ships.

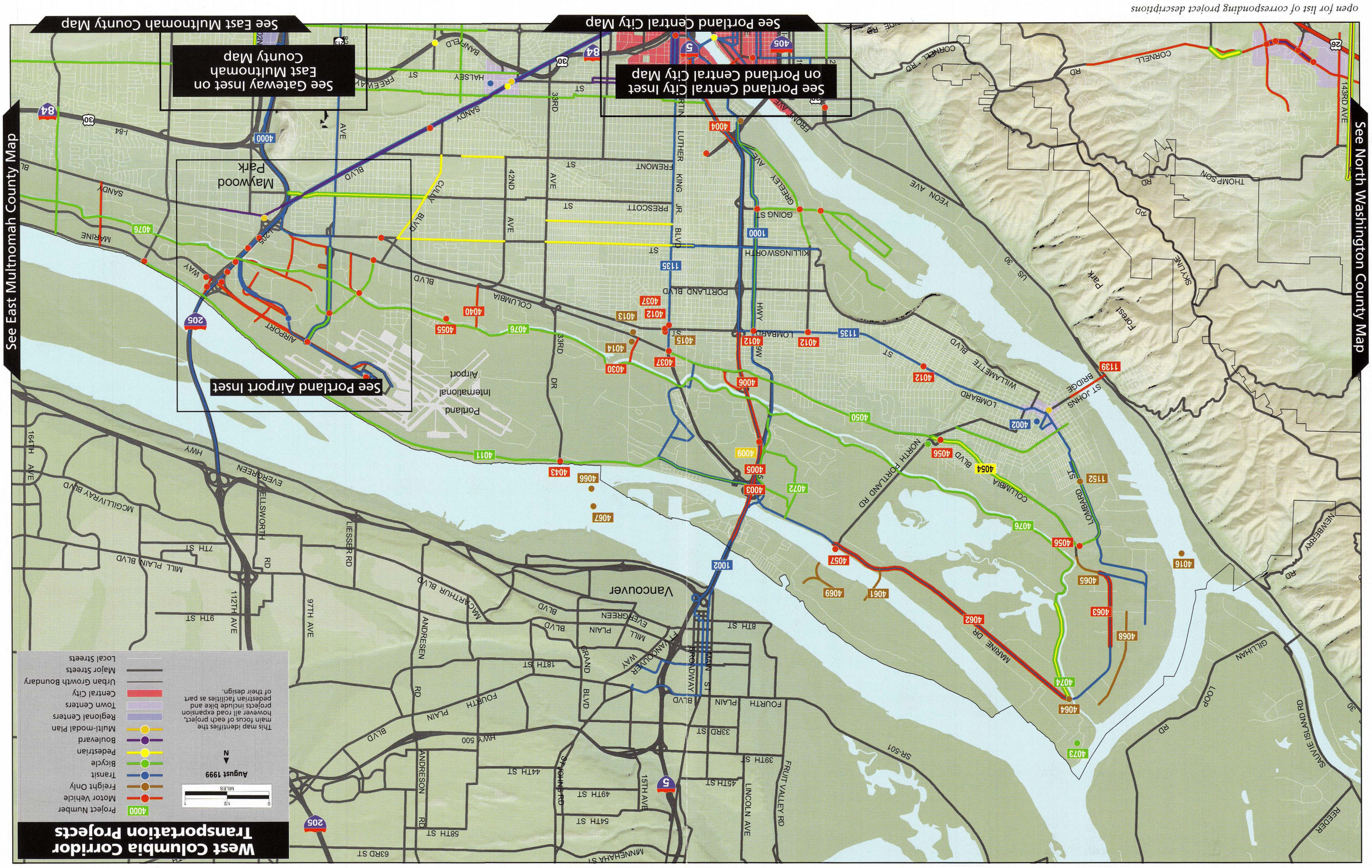
COUNCILOR VIEW

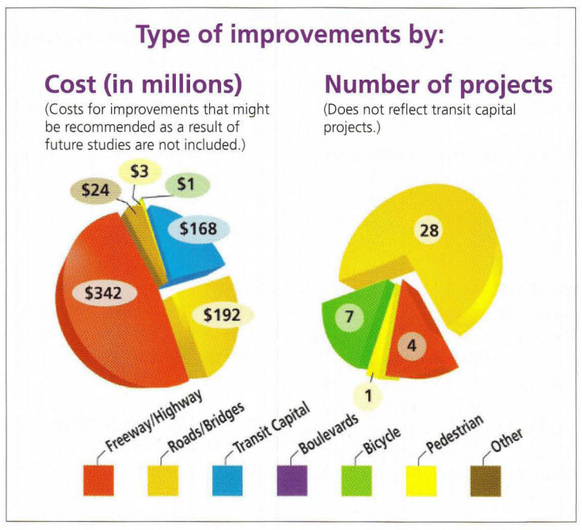


Presiding Officer
Rod Monroe
Metro Council
District 6

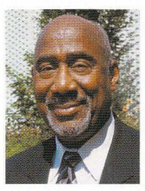
"Native Oregonians, as well as those who have just moved here, know the same thing: that this Metro region is a very special place to live. This Regional Transportation Plan works to preserve what makes the region so special while protecting our precious resources."

open for list of corresponding project descriptions





COUNCILOR VIEW



Ed Washington
Metro Council
District 5

"As we look to the future, there are two basic issues that we must balance. One is how to plan for a road transportation system that really works because it is such an important link in our economy. The second issue is to provide alternatives that help protect the health of the people and the livability of their neighborhoods."

Linking land use and transportation

The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision of where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: retrofits of major streets for walking, biking and transit; new street connections and capacity improvements; new multiuse paths and better bike-pedestrian connections to existing paths; and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that focus primarily on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-205, I-84 and the Mount Hood Parkway in East Multnomah County.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the Transportation Department at trans@metro-region.org

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site:
www.metro-region.org

Printed on recycled-content paper.
1999-10452-TRN • 99296

1

INSIDE

METRO
Regional Services
Creating livable communities

Getting There
West Columbia Corridor

Update on Regional Transportation Plan Projects

FALL 1999

A close-up look at the 20-year regional transportation blueprint for West Columbia Corridor from I-205 to Rivergate

Industry throughout the region will require many freeway and rail improvements during the next 20 years to maintain access to the marine terminals on the Willamette and Columbia rivers (Terminal 6 pictured).

Planned transportation projects

More than 50 projects and programs have been identified to serve the West Columbia Corridor subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea. The projects are grouped by proposed construction date; actual timing depends on the availability of funding.

- Complete the I-5 Trade Corridor study to determine the scope and phasing of transit and road-related improvements in the corridor. Implement identified 20-year improvements.

- Implement and refine Columbia Corridor study recommendations to address full corridor needs from the Rivergate industrial area to I-205, including the development of a streamlined connection in the US 30 Bypass corridor that reduces the need for peak-period freight use of I-84 and inner northeast portions of I-5.

- Expand transit service to include light rail transit from the Rose Quarter transit center to Expo Center, then potentially to Vancouver, and from Gateway to Portland International Airport in addition to express bus, taxi service, inter-city shuttles and other shuttle service to the airport.

- Make capacity improvements along NE Portland Highway, I-5, Marine Drive and Lombard Street to maintain an acceptable level of freight access to marine terminals in the Rivergate and West Hayden Island intermodal areas and rail-loading facilities in the Union Pacific Yard near Swan Island.

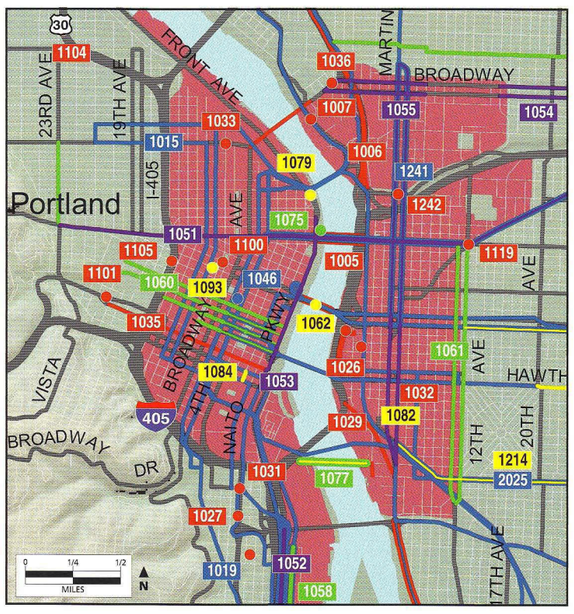
- Capacity improvements to I-205 and Airport Way to maintain an acceptable level of access to passenger and freight terminals in the airport area.

- Complete a corridor study of I-205 that focuses on freight mobility, access to the airport and future general purpose capacity needs. *See urban Clackamas County fact sheet for improvements in this corridor.*

- Build new street connections in the Portland International Center, including Marx Drive, Alderwood Road, International Parkway and Cornfoot Road extensions.

turn to back page

Priority projects by community



CITIZEN VIEW

Lois Achenbach
Northeast Portland
Regional Transportation Plan
Citizen Advisory Committee

"The streetscape will reflect a more human scale to encourage walking. Benches will dot pedestrian ways to provide resting places for shoppers and transit riders; medians will provide refuges for crossing wide busy streets."

Portland Central City

2000-2005

1016 Rose Quarter Track Reconstruction Replace light rail track at the Rose Quarter transit center.

1027 South Portland Improvements Implement study recommendations to improve access to the central city by all modes.

1028 Kerby Street Interchange Realign I-405 off-ramp at Kerby Street to improve local access and calm traffic.

1029 Water Avenue Extension Construct new two-lane extension of street with sidewalks, bicycle lanes and landscaping to improve access to the Willamette River Greenway.

1032 Southern Triangle Circulation Improvements Improve traffic movement and access to the Central Eastside Industrial District and the central city.

1033 Lovejoy Ramp Reconstruction Remove the Lovejoy ramp to support development of housing in the River District area. Project also will include sidewalks and transit facilities.

1034 Lower Albina RR Crossing Construct a new roadway overcrossing of rail facilities to separate truck and rail freight movements. This project is intended to eliminate freight truck delay experienced when trains block multiple local street intersections.

1035 SW Columbia Street Reconstruction Rebuild street to improve access to central city by all modes.

1036 Broadway/Flint Arena Access Realign intersection to improve access to the Rose Garden arena.

1051 E./W. Burnside Street Traffic Management Improvements Boulevard retrofit of street from SE 12th Avenue to NW 23rd Avenue, including pavement reconstruction, wider sidewalks, curb extensions, safer crossings and traffic management to limit motorist delays.

1052 North Macadam Improvements and Traffic Management Improvements Boulevard retrofit of street from Bancroft Street to Ross Island Bridge, including pavement reconstruction, wider sidewalks, curb extensions, safer crossings and traffic management to limit motorist delays.

1053 Naito Parkway Improvements and Traffic Management Improvements Boulevard retrofit of street from NW Davis Street to SW Market Street, including pavement reconstruction, median islands, bicycle lanes, wider sidewalks, curb extensions, safer crossings and traffic management to limit motorist delays.

1054 Broadway/Weidler Improvements – Phase 2 and 3 Boulevard retrofit of street from 15th Avenue to 24th Avenue including wider sidewalks, curb extensions, safer crossings, street trees and traffic signals.

1058, 1060, 1061, 1064, 1069 Bicycle Lane Retrofits Retrofit existing streets with bicycle lanes throughout the central city, along SW Moody, SW Salmon/Taylor/Madison/Main, SE 11th/12th Avenue bikeway, N. Interstate bikeway and E. Burnside.

1080 Hawthorne Boulevard Pedestrian Improvements Make street safer for pedestrians and improve access to transit from 20th Avenue to 60th Avenue with better lighting, safer street crossings, bus shelters and benches. This project also will include bicycle parking and bicycle facility upgrades on parallel streets.

1084 Clay/Second Pedestrian/Vehicle Signal Install a new traffic signal to make street safer for pedestrian crossings.

1093 Central City Pedestrian Enhancements Study Future study to identify needed pedestrian improvements to address locations lacking pedestrian crossings, difficult bridge crossings and access over freeways.

1096 Barbur/I-5 Corridor Study Study to identify needed improvements for motor vehicle, truck, bicycle, pedestrian and transit travel in the corridor.

1100 Central City Traffic Management Improvements Limit traffic congestion and improve traffic flow in the central city by improving traffic signal operations along arterial streets.

1104 and 1207 Traffic Management Improvements Limit traffic congestion and improve traffic flow in the central city by using computer technology to improve traffic signal operations along NW Yeon/St. Helens and Barbur Boulevard.

2006-2010

1025 I-5/North Macadam Access Improvements Construct new northbound I-5 off-ramp to Macadam Avenue.

1037 Bybee Boulevard Overcrossing Replace existing bridge with a four-lane bridge with standard clearance.

1101, 1102 and 1103 Traffic Management Implement comprehensive traffic management plan along Jefferson Street, Macadam Avenue, Going Street and SW/NW 14th/16th Avenue to limit traffic congestion and improve traffic flow. These projects include better signalization, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

2011-2020

1004 I-5 South Improvements Add auxiliary lanes from Terwilliger Boulevard to the Ross Island Bridge, Capitol Highway to 99W and I-205 to the Charbonneau interchange and widen the northbound I-5 on-ramp to northbound I-205 to two lanes.

1024 I-5/McLoughlin Ramps Construct new on-ramp from McLoughlin Boulevard to I-5 north.

1026 Water Avenue Ramps on I-5 Construct new freeway access from the Central Eastside Industrial District to I-5.

1031 I-405/US 26 Connector Construct new freeway access from the Ross Island Bridge to I-405 to US 26.

1055 MLK/Grand Improvements Retrofit existing street with boulevard design features, including construction of wider sidewalks, curb extensions, safer street crossings and street trees.

Swan Island Industrial Area

2000-2005

1109 Going Street Rail Overcrossing Widen intersection at Swan Island entrance to improve access to industrial area.

1113 Swan Island Bicycle Lane Retrofit Retrofit existing street with bicycle lanes to improve access to employment and industrial areas within the Columbia Corridor.

Hollywood Town Center

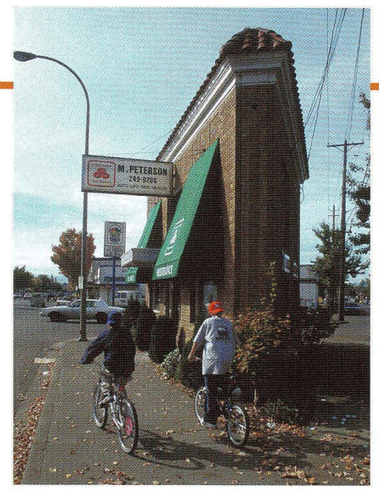
2000-2005

1119 Sandy Boulevard/Burnside/12th Avenue Intersection Redesign existing intersection to make it safer for all modes of travel.

1120 Sandy Boulevard Multi-Modal Improvements – Phase 1 Redesign intersections from 12th to 47th avenues to improve safety for all modes of travel.

1125 NE/SE 50s Bicycle Boulevard Retrofits Retrofit existing streets with a bicycle boulevard design, providing an important connection between Northeast Portland and Southeast Portland.

1130 Hollywood Town Center Pedestrian District Improvements Identify improvements that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as better lighting and crossings.



A "boulevard" retrofit to make it easier for people to walk, bike or use transit is proposed for Sandy Boulevard, where heavy traffic now divides the Hollywood town center.

1133 Hollywood Town Center Plan Study to identify long-term transportation needs for motor vehicle, truck, bicycle, pedestrian and transit travel in the town center.

2006-2010

1121 and 1122 Sandy Boulevard Multi-Modal Improvements – Phase 2 Redesign intersections from 47th to 109th avenues to improve safety for all modes of travel.

St. Johns Town Center

2000-2005

1145 N. St. Louis/Fessenden Bikeway Retrofit bicycle lanes on existing street from Columbia Way to Willamette Boulevard.

1146 N. Greeley/Interstate Bikeway Retrofit bicycle lanes on existing street from Willamette Boulevard to Russell Street. This project provides a regional corridor bikeway from North Portland to the central city.

1150 St. Johns Town Center Pedestrian District Enhance pedestrian access to transit, improve safety and enhance the streetscape, such as better lighting and crossings.

1151 St. Johns Town Center Plan Study to identify long-term transportation needs for motor vehicle, truck, bicycle, pedestrian and transit travel in the town center.

1152 I-5 Freight Mobility Study Study to identify improvements to N. Lombard Street to provide better truck access to Rivergate and protect adjacent neighborhoods from freight truck traffic.

2011-2020

1144 N. Portland Road Bikeway Retrofit existing street with bicycle lanes from St. Louis to Richmond to improve access to the town center.

Lents Town Center

2000-2005

1157 SE 92nd Avenue Bikeway Retrofit bicycle lanes on existing street from Stark Street to Lincoln Street and Powell Boulevard to Foster Road.

1158 Lents Town Center Pedestrian District Enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

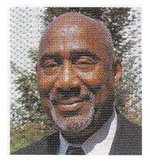
1159 Foster Road Pedestrian Access to Transit Improvements Make street safer for pedestrians and improve access to transit from Powell Boulevard to the town center with wider sidewalks, lighting, safer crossings, bus shelters and benches.

1163 Lents Town Center Plan Study to identify long-term transportation needs for motor vehicle, truck, bicycle, pedestrian and transit travel in the town center.

2006-2010

1164 I-205 Ramp Study Study possible I-205 ramp improvements at Powell Boulevard and Foster Road.

COUNCILOR VIEW



Ed Washington
Metro Council
District 5

"As we look to the future, there are two basic issues that we must balance. One is how to plan for a road transportation system that really works because it is such an important link in our economy. The second issue is to provide alternatives that help protect the health of the people and the livability of their neighborhoods."

Hillsdale Town Center

2000-2005

1168 Hillsdale Intersection Improvements Redesign the intersection at Beaverton-Hillsdale Highway, Capitol Highway and Bertha Boulevard to improve safety.

1172 SW Bertha Bikeway Improvements Widen street from Vermont Street to Beaverton-Hillsdale Highway to construct bicycle lanes.

1174 and 1175 Capitol Highway Pedestrian and Bicycle Improvements Construct bicycle lanes, sidewalks and better crossings for pedestrian and bicycle safety and improve access to transit.

2006-2010

1177 SW Sunset Pedestrian and Bicycle Improvements Construct bicycle lanes, sidewalks and crossing improvements for pedestrian and bicycle safety and improve access to transit.

1181 Beaverton-Hillsdale Highway Traffic Management Improvements Implement comprehensive traffic management plan along Beaverton-Hillsdale Highway to limit traffic congestion and improve traffic flow. This project includes better signalization, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

2011-2020

1169 SW Vermont Bikeway – Phase 1 and 2 Retrofit existing street with bicycle lanes from Oleson Road to Terwilliger Boulevard to improve access to the town center.

1171 SW 30th Avenue Bikeway Retrofit existing street from Beaverton-Hillsdale Highway to Vermont Street with bicycle lanes to improve access to the town center.

1176 SW Beaverton-Hillsdale Highway Pedestrian and Bicycle Improvements Retrofit existing street from Capitol Highway to 65th Avenue to include better sidewalks and crossings, bicycle lanes and other improvements that enhance access to transit such as curb extensions.

Raleigh Hills Town Center

2000-2005

1189 SW 62nd Avenue at Beaverton-Hillsdale Highway Install a median refuge to make it safer for pedestrians to cross Beaverton-Hillsdale Highway.

2006-2010

1184 Beaverton-Hillsdale Highway/Scholls Redesign Redesign Beaverton-Hillsdale Highway and Scholls Ferry Road intersection to improve safety for all modes of travel.

1185 Oleson Road Improvements Upgrade existing street to urban standards from Fanno Creek to Hall Boulevard. This project involves constructing bicycle lanes and sidewalks where they do not currently exist and providing lighting, better crossings, bus shelters, benches and a new traffic signal at 80th Avenue.

2011-2020

1186 Scholls Ferry Bikeway Retrofit existing street with bicycle lanes from Beaverton-Hillsdale Highway to the Multnomah County line to improve access to the town center.

West Portland Town Center

2000-2005

1193 West Portland Town Center Safety Improvements Construct safety improvements, including traffic signals at the intersection of Capitol Highway, Taylors Ferry Road, Huber Street and Barbur Boulevard, and better sidewalks and crossings.

1195 Barbur Boulevard Design Retrofit existing street within town center to include better sidewalks, curb extensions and safer street crossings.

1198 SW Taylors Ferry Bikeway Retrofit existing street from Capitol Highway to city limits to include bicycle lanes and will involve widening the shoulder and drainage improvements.

1200 Pedestrian Overpass near Markham School Construct a pedestrian crossing over I-5 connecting SW Alfred Street and 52nd Avenue.

1202 SW Capitol Highway Pedestrian and Bicycle Improvements Retrofit existing street from Multnomah Boulevard to Taylors Ferry Road to construct bicycle lanes, sidewalks and safer street crossings for pedestrian and bicycle safety and to improve access to transit.

Projects to improve traffic circulation and pedestrian crossings are proposed for the Raleigh Hills town center.

CITIZEN VIEW

Patty Lee
Southwest Portland
Regional Transportation Plan
Citizen Advisory Committee

"I really feel that only excellent, fast bus service will help get people where they need to go. Bus routes that help people move east to west within Southwest Portland are particularly important."

Portland Main Streets

2000-2005

1211 Garden Home/Oleson/Multnomah Improvements Reconstruct intersection and provide better sidewalks and crossings to improve access to town center from Multnomah Boulevard to 71st Avenue.

1214 Division Street Transit Improvements – Phase 1 Construct improvements that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1217 Multnomah Pedestrian District Construct improvements in Multnomah along Capitol Highway and Multnomah Boulevard that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1219 Belmont Pedestrian Improvements Identify improvements along Belmont from 12th to 43rd Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1220 Fremont Pedestrian Improvements Identify improvements along Fremont from 42nd Avenue to 52nd Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

2006-2010

1206 West Portland I-5 Crossings Study Study to identify possible new connections over I-5 to serve motor vehicle, pedestrian and bicycle travel.

2006-2010

1245 Capitol Highway – Phase 2 Implement West Portland town center study recommendations.

2011-2020

1201 West Portland Town Center Pedestrian District Retrofit Barbur Boulevard and Capitol Highway and intersecting streets within the town center to include better sidewalks and crossings, curb extensions, bus shelters and benches.

1221 Killingsworth Pedestrian Improvements Identify improvements along Killingsworth from Williams to 33rd and 42nd to Cully that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1223 NE Alberta Pedestrian Improvements Construct improvements along Alberta from MLK Boulevard to 33rd Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1224 NE Cully/57th Pedestrian and Bicycle Improvements Construct improvements that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

1227 SE Tacoma Main Street Study Study to identify boulevard-type improvements from Sellwood to McLoughlin Boulevard that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings

1229 SE Woodstock Main Street Study to identify improvements along Woodstock from 39th to 49th Avenue that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as better lighting, bus shelters, benches and crossings.

1239, 1240 and 1242 Traffic Management Improvements Implement comprehensive traffic management plan along Sandy Boulevard, 82nd Avenue and MLK/Interstate Avenue to limit traffic congestion and improve traffic flow. These projects include traffic count stations, better signalization, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

1247 SE Holgate Bikeway – Phase 1 Stripe bicycle lanes along street from 42nd Avenue to the Portland city limits.

1253 NE Prescott Pedestrian and Bicycle Improvements Construct bicycle lanes, sidewalks and crossing improvements for pedestrian and bicycle safety and to improve access to transit.

2014 Ventura Park Pedestrian District Retrofit existing streets along eastside MAX to include better sidewalks and crossings, curb extensions, bus shelters and benches at major transit stops.

2006-2010

1231 Tacoma Street Traffic Management Implement comprehensive traffic management along Tacoma Street to limit traffic congestion and improve traffic flow. These projects include better signalization, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

2011-2020

1222 SE Milwaukie Pedestrian Improvements Identify improvements along Milwaukie from Yukon Street to Tacoma Street that enhance pedestrian access to transit, improve safety and enhance the streetscape, such as traffic signals, better lighting, bus shelters, benches and crossings.

Banfield Station Communities

2006-2010

1263 Banfield Pedestrian Improvements Retrofit existing streets along eastside MAX and at intersecting streets to include better sidewalks and crossings, curb extensions, bus shelters and benches.

Willamette River Bridges

2000-2005

1005, 1006 and 1007 Willamette River Bridges Rehabilitation These projects provide a range of improvements to the Broadway, Burnside Morrison and Sauvie Island bridges, including sidewalk repair, deck replacement, painting and lift span repair.

1077 Caruthers Bicycle/Pedestrian Bridge If a new light rail bridge is constructed across the Willamette River, include bike/pedestrian facilities to connect to downtown.

1079 Steel Bridge Pedestrian Way (RATS Phase 1) Construct bicycle and pedestrian overcrossing to improve access to the Steel Bridge and the East Bank esplanade.

2006-2010

1012 Sellwood Bridge Implement South Willamette River Crossing Study recommendations for the Sellwood Bridge.

1013 Willamette River Bridges Accessibility Project Relocate light poles at the Sellwood Bridge.

1062 Willamette River Bridges Accessibility Project Improve bicycle and pedestrian access to the Morrison Bridge.

1075 Willamette River Bridges Accessibility Project Improve bicycle and pedestrian access to the Burnside Bridge.

1139 St. Johns Bridge Restoration Complete restoration improvements to the bridge.

Regional Transit

The projects listed in the Regional Transit section identify major transit capital projects and other improvements that enhance rapid bus and frequent bus service. Capital improvements for rapid bus routes and stations would include transit preferential treatments such as queue-by-pass lanes and signal preemption, park-and-ride facilities, possible off-street station areas and station amenities such as schedule information, ticket machines, lighting, benches, covered shelters and bicycle parking. Capital improvements for frequent bus routes and stations would include transit preferential treatments such as signal preemption, and passenger amenities such as schedule information, covered shelters, curb extensions, lighting and benches. (See Transit Service Strategy fact sheet for additional information.)

2000-2020

1000, 1001 and 1002 Light Rail Expansion Extend light rail service from the Rose Quarter transit center north to the Portland Metropolitan Exposition Center and south to Clackamas regional center, then potentially to Vancouver, Wash. Provide interim bus service along McLoughlin Boulevard and Highway 224 from Clackamas regional center to the Portland central city until light rail service can be provided in this corridor.

1011 Transit Station and Park-and-Ride Upgrades Expand and/or upgrade transit stations and park-and-ride lots in various locations, including the River District, St. Johns, Lents, Hollywood, Parkrose, Hillsdale and Barbur transit centers.

2000-2005

1015 Central City Streetcar Construct streetcar between Portland State University and Good Samaritan Hospital.

1019 Barbur Boulevard Rapid Bus Provide improvements that enhance rapid bus service along Barbur Boulevard from downtown Portland to Tigard.

1046 Transit Mall Restoration Provide improvements to transit mall in downtown Portland in conjunction with construction of light rail transit.

1228 Powell Boulevard/Foster Road High-Capacity Transit Corridor Study Study the potential for high-capacity transit service or other improvements from the Ross Island Bridge to Damascus town center to address travel demand in the corridor.

1232 NW 23rd/Mt. Tabor Frequent Bus Provide improvements that benefit new frequent bus service along Belmont connecting to NW 23rd Avenue.

2006-2010

1118 Sandy Boulevard Frequent Bus Provide capital improvements that enhance frequent bus service along Sandy Boulevard.

1135 MLK/Lombard Frequent Bus Provide capital improvements that enhance new frequent bus service along MLK Boulevard and Lombard Street from downtown Portland to St. Johns.

1233 Hawthorne Boulevard Frequent Bus Provide improvements that enhance new frequent bus service along Hawthorne Boulevard.

1241 Grand Avenue/MLK Boulevard Frequent Bus Construct improvements that enhance frequent bus service, such as timing of traffic signals and restriping travel lanes.

2025 Division Street Frequent Bus Provide capital improvements that benefit frequent bus service along Division Street from downtown Portland to Gresham.

7023 Powell/Foster Corridor Rapid Bus Provide improvements that enhance new rapid bus service along Powell/Foster corridor from downtown Portland to Damascus.

Regional Trails

2006-2010

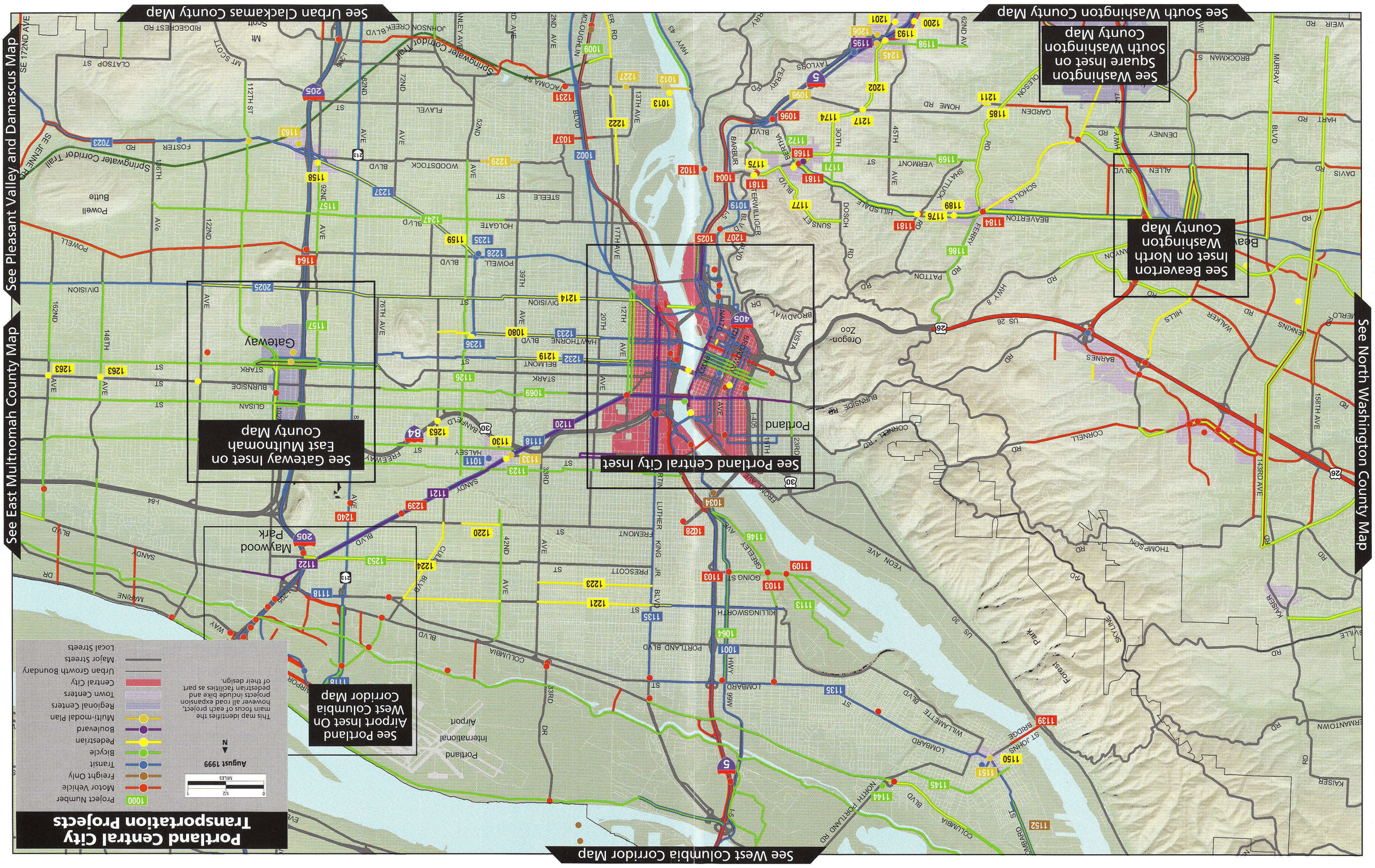
1009 Springwater Trail Connection Construct multiuse path designed for bicycle and pedestrian use from the Sellwood Bridge to the Springwater Corridor trail.

COUNCILOR VIEW

David Bragdon
Metro Council
District 7

"The draft Regional Transportation Plan includes many different kinds of projects. I believe some will work better than others. Now is the time for you to let me know what you think so that together we can make the best decisions possible for our community."

open for list of corresponding project descriptions



- Retrofit major streets in centers and main streets with "boulevard" designs, including Grand/MLK Boulevard and Broadway/Weidler Street couplets in the Lloyd District, Sandy Boulevard in the Hollywood town center, Hawthorne Boulevard and Division Street in Southeast Portland and Barbur Boulevard, Capitol Highway and Beaverton-Hillsdale Highway in Southwest Portland. Boulevard designs include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

- Preserve the Willamette River bridges, including sidewalk repair, deck replacement, painting and liftspan repair. Implement South Willamette River crossing recommendations for the Sellwood Bridge.

- Emphasize system management strategies and traffic calming throughout Southeast Portland to improve traffic flow and mitigate impact of spillover east/west traffic in the Banfield corridor, particularly along arterial streets parallel to I-84 such as Halsey, Glisan, Burnside and Stark.

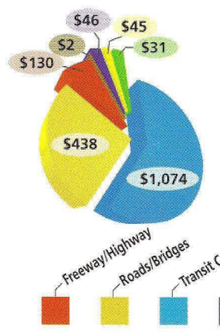
COUNCILOR VIEW

Presiding Officer
Rod Monroe
Metro Council
District 6

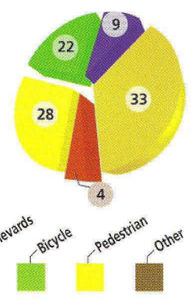
"Native Oregonians, as well as those who have just moved here, know the same thing: that this Metro region is a very special place to live. This Regional Transportation Plan works to preserve what makes the region so special while protecting our precious resources."

Type of improvements by:

Cost (in millions)
(Costs for improvements that might be recommended as a result of future studies are not included.)



Number of projects
(Does not reflect transit capital projects.)



Linking land use and transportation

The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision of where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: retrofits of major streets for walking, biking and transit; new street connections and capacity improvements; new multiuse paths and better bike-pedestrian connections to existing paths; and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that focus primarily on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-5, I-84, I-205, 99E, US 30 and NE Portland Highway in this subarea.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the Transportation Department at trans@metro-region.org

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site: www.metro-region.org

Printed on recycled-content paper.
1999-10453-TRN • 99295

2

INSIDE

METRO
Regional Services
Creating livable communities

Getting There
Portland Central City

Update on Regional Transportation Plan Projects

FALL 1999

A close-up look at the 20-year regional transportation blueprint for Portland central city and neighborhoods

Transportation improvements in the central city are aimed at linking emerging neighborhoods such as the River District, North Macadam and River-Place (pictured) to the heart of downtown.

Planned transportation projects

Nearly 120 projects and programs have been identified to serve this subarea during the next 20 years. These projects are considered to be the most critical in terms of serving expected growth in this subarea. The projects are grouped by proposed construction date; actual timing depends on the availability of funding.

- Make capacity improvements to I-5 north of Lombard, I-5 south near I-405, 99E to Milwaukie, US 26 west of Sylvan and US 30 in the Columbia Corridor to address predicted increases in traffic that are expected to impact the movement of people and goods to the central city and through the region.

- Add a light rail extension from Rose Quarter transit center to the Expo Center, Clackamas regional center to Rose Quarter transit center, then potentially to Vancouver, Wash., in addition to more frequent service along eastside and westside MAX. Interim bus transit service will serve the McLoughlin Boulevard/Highway 224 corridor from Clackamas regional center to the Portland central city until light rail service can be provided.

- Conduct a detailed I-5 North corridor study and phase implementation of future transit and road-related improvements needed to enhance interstate travel, particularly goods movement to and from the region in this corridor. *See West Columbia Corridor fact sheet for improvements in this corridor.*

- Add rapid bus improvements along Powell Boulevard/Foster Road to downtown Portland. Evaluate how to implement high-capacity transit service along the Powell/Foster corridor, given the right-of-way constraints in the corridor and expected urbanization of the Damascus area.

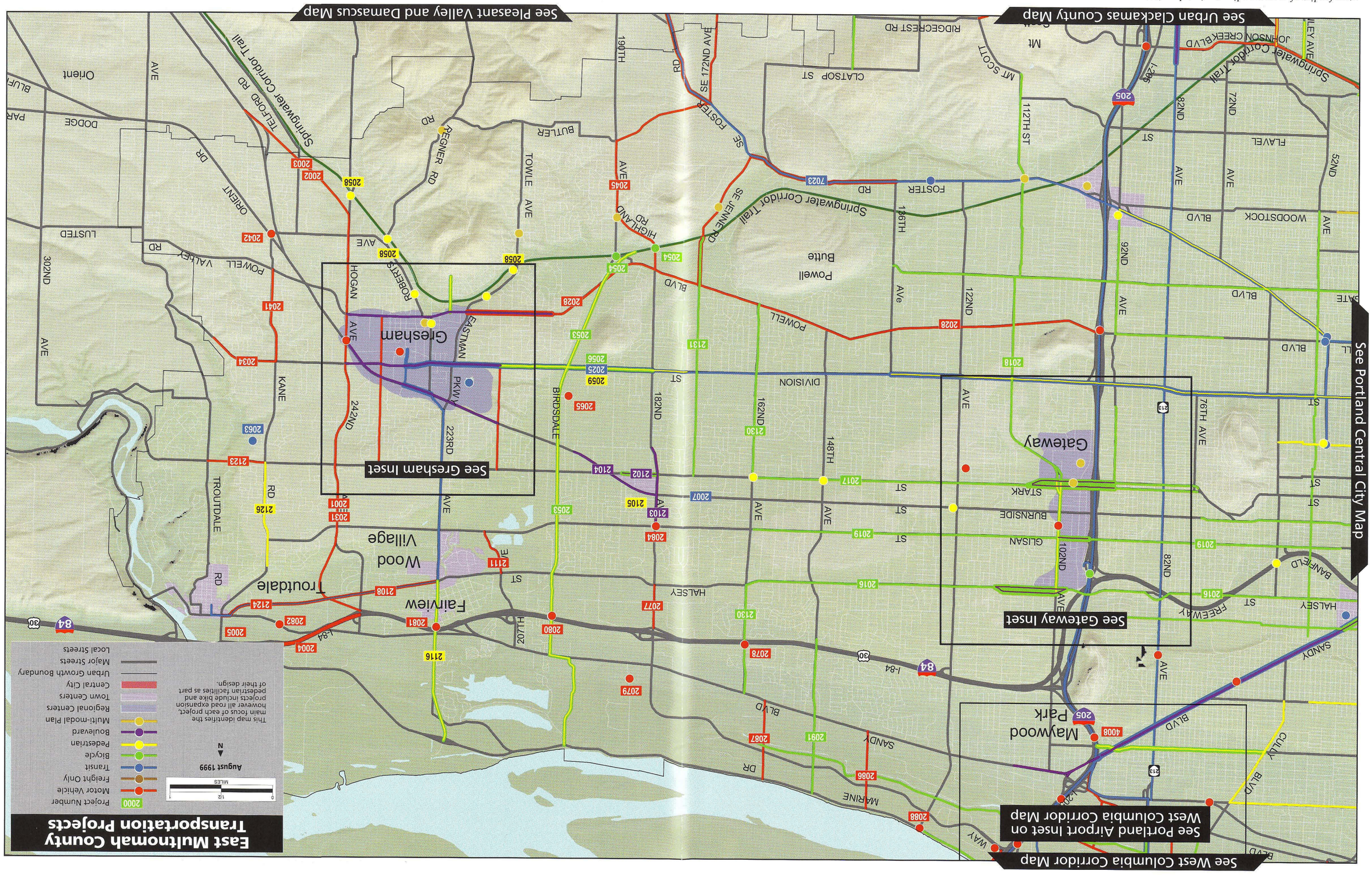
- Complete a corridor study of Barbur Boulevard to determine feasibility and timing for high-capacity transit service along this route.

- Complete streetcar improvements in downtown Portland, and rapid and frequent bus improvements from the central city to Gresham, Gateway and Clackamas regional centers and Milwaukie, Tigard, Wilsonville and Hillsdale town centers.

- Expand park-and-ride facilities along the Banfield corridor east of I-205 where such facilities do not conflict with planned land uses.

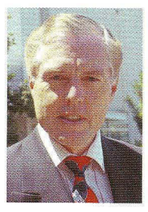
turn to back page

open for list of corresponding project descriptions



- Implement a transportation management association with employers in Gresham and Gateway.
- Develop a regional strategy to evaluate the need for expanding park-and-ride facilities in and near Gateway where such facilities do not conflict with planned land uses.

COUNCILOR VIEWS



Presiding Officer
Rod Monroe
Metro Council
District 6

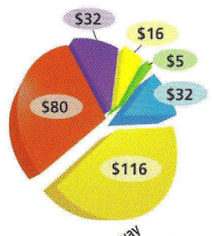
"Native Oregonians, as well as those who have just moved here, know the same thing: that this Metro region is a very special place to live. This Regional Transportation Plan works to preserve what makes the region so special while protecting our precious resources."

Rod Park
Metro Council
District 1

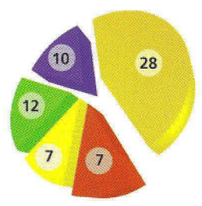
"This plan brings a portion of much-needed resources to the East County area. But is it the right mix of transportation projects? I need to hear from you to make sure this will work for you and your family."

Type of improvements by:

Cost (in millions)
(Costs for improvements that might be recommended as a result of future studies are not included.)



Number of projects
(Does not reflect transit capital projects.)



Freeway/Highway · Roads/Bridges · Transit Capital · Boulevards · Bicycle · Pedestrian · Other

Linking land use and transportation

The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision for where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: retrofits of major streets for walking, biking and transit; new street connections and capacity improvements; new multiuse paths and better bike-pedestrian connections to existing paths; and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that focus primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-205, I-84 and the I-84/US 26 connector in East Multnomah County.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the Transportation Department at trans@metro-region.org

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site:
www.metro-region.org

Printed on recycled-content paper.
1999-10454-TRN • 99297

3

INSIDE

Road expansion
I-84/US 26 connector
I-84
I-205
Airport access
New street connections

Transit
Expanded transit service
Pedestrian access
Bus shelters and benches
Employee commuting programs
Transit-oriented development

"Boulevard" retrofits
Gresham
Gateway
Rockwood
Troutdale

Bicycle and pedestrian facilities
Wider sidewalks
Street lighting and landscaped buffers
Bike lanes
Multiuse paths
Springwater Trail access

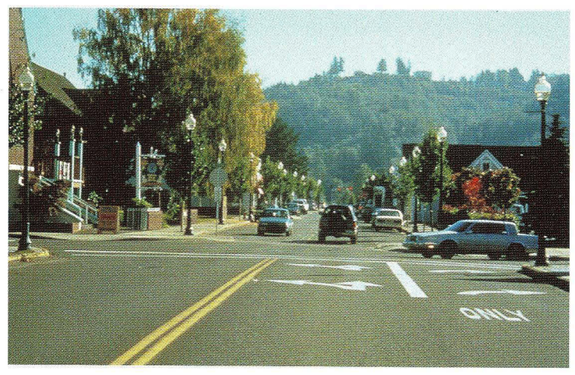
METRO
Regional Services
Creating livable communities

Getting There
East Multnomah County

Update on Regional Transportation Plan Projects

FALL 1999

A close-up look at the 20-year regional transportation blueprint for East Multnomah County



Metro's goal is to provide a range of transportation choices and to create livable communities now and in the future. Main Avenue in Gresham is a good example of a street that works for pedestrians, bicyclists, transit riders and motorists.

Planned transportation projects

Nearly 75 projects and programs have been identified to serve East Multnomah County during the next 20 years. The following projects are considered to be the most critical in terms of serving planned growth in this subarea. The projects are grouped by proposed construction date; actual timing depends on the availability of funding.

- Build interim phases of the I-84/US 26 connector, connecting the Gresham regional center to the highway system and providing safe, convenient connections from North and Northeast Portland to Mt. Hood and Central Oregon. Additional right-of-way preservation and access management will be needed along the Hogan Road/242nd Avenue corridor.
- Conduct a detailed I-205 corridor study and phase the implementation of additional transit and road-related improvements needed to enhance interstate travel, particularly moving goods to and from the region. The long-term vitality of the eastern portion of the Columbia Corridor depends on continued access to the regional highway system, intermodal facilities in the western portion of the corridor, Portland International Airport and the pool of workers in Oregon and Washington.
- Develop a Gateway traffic management plan that identifies projects to mitigate cut-through traffic on residential streets, improve traffic flow on regional streets and provide better bicycle and pedestrian connections and access to transit.
- Retrofit major streets in the Gresham, Gateway, Troutdale and Fairview regional centers and town centers with "boulevard" designs, including Division Street, Burnside Street, Eastman Parkway in Gresham and Stark and Washington streets in Gateway. These boulevard designs will include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.
- Expand Gateway transit service to include rapid bus service from Oregon City along I-205, light rail to Portland International Airport and improved Banfield light rail frequencies.
- Expand Gresham transit service to include frequent bus from downtown Portland along Division Street, and from Pleasant Valley/Damascus and primary bus on all other transit corridors.

turn to back page

Priority projects by community

Gateway Regional Center 2000-2005

1157 SE 92nd Avenue Bikeway
Retrofit bicycle lanes on existing streets from Stark Street to Lincoln Street and Powell Boulevard to Foster Road.

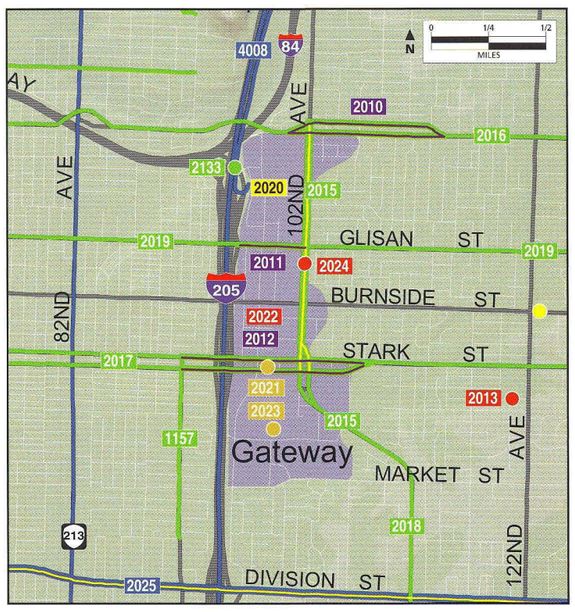
2012 SE Stark/Washington Improvements
Boulevard retrofit of street from 92nd to 108th Avenue including bike lanes, wider sidewalks, curb extensions and safer street crossings. This project also provides traffic safety improvements and traffic management to limit motorist delays.

2014 Ventura Park Pedestrian District
Retrofit existing streets along Eastside MAX to include better sidewalks and crossings, curb extensions, bus shelters and benches at major transit stops.

2015 NE/SE 102nd/Cherry Blossom Bikeway
Retrofit the existing street with bike lanes from Halsey to Market Street to improve access to the regional center.

2016 NE Halsey/92nd Avenue Bikeway
Retrofit the existing street with bike lanes from 92nd Avenue at Tillamook Street to 102nd Avenue at Halsey Street to Portland city limit to improve access to the regional center.

2017 SE Stark/Washington Bikeway
Retrofit the existing street with bike lanes from 75th Avenue to the Portland city limits (outside of the Gateway regional center) to improve access to the regional center.



2019 NE Glisan Bikeway
Retrofit the existing street with bike lanes from 47th to 162nd Avenue to improve access to the regional center.

2020 Gateway Regional Center Pedestrian District
Retrofit existing streets within the regional center and pedestrian corridors linking to Eastside MAX to include better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

2021 Gateway Regional Center Transportation Plan
Study to identify long-term transportation needs for motor vehicle, truck, bicycle, pedestrian and transit travel in the regional center.

2024 102nd Corridor Safety Project
Provide full signal remodels at Glisan and Halsey streets, minor signal modifications, overhead signing along the corridor and reconfiguring of 102nd at Stark and Washington streets.

2006-2010

2010 Halsey/Weidler Boulevard and Traffic Managment Improvements
Boulevard retrofit of these streets within the regional center, including wider sidewalks, curb extensions and crossing improvements, and improving traffic management to limit motorist delays.

2011 Glisan Street Boulevard and Traffic Management Improvements
Boulevard retrofit of the street within the regional center including wider sidewalks, curb extensions and crossing improvements, and improving traffic management to limit motorist delays.

1231 Tacoma Street Traffic Management Improvements
Implement comprehensive traffic management along Tacoma Street to limit traffic congestion and improve traffic flow. These projects include better signalization, message signs, fiber optic interconnection and communication with the city of Portland's central management computer.

2022 Gateway Traffic Management
Implement comprehensive traffic management plan throughout the regional center to reduce cut-through traffic on residential streets and improve traffic flow on regional streets. This project also includes utility improvements.

2023 Gateway Transportation Management Association Startup
Implement a transportation management association program with employers in the regional center.

2011-2020

2018 SE 111th/112th Avenue Bikeway
Retrofit existing streets with bike lanes from Mt. Scott Boulevard to Market Street.

Gresham Regional Center 2000-2005

2041 257th Avenue Improvements
Construct arterial improvements from Division Street to Powell Valley Road including bike lanes, sidewalks, traffic signals, landscaping, lighting and drainage.

2042 257th Avenue Intersection Improvements
Realign the intersection of 257th Avenue/Palmquist Road/US 26 to increase safety for all modes of travel.

2047 Division Street Improvements
Boulevard retrofit of street from Wallula Street to Hogan Road including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2049 Powell Boulevard Improvements
Boulevard retrofit of street from Birdsdale Road to Hogan Road including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2057 Gresham Regional Center Pedestrian and Ped-to-MAX Improvements
Retrofit existing streets within the regional center and pedestrian corridors linking to Eastside MAX to include better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

2065 Phase 3 Signal Optimization
Implement comprehensive traffic management plan throughout Gresham and Multnomah County to limit traffic congestion and improve traffic flow. This project includes traffic cameras, better signalization, variable message signs, highway advisory radio emitters throughout city and county facilities for detection and management of arterial incidents, especially near I-84.

2006-2010

2028 Powell Boulevard Improvements
Widen the street to five lanes from I-205 to Eastman Parkway including sidewalks and bike lanes.

2035 Cleveland Street Reconstruction
Reconstruct the existing street from Stark Street to Powell Boulevard.

2011-2020

2031 Hogan Corridor Improvements
Move the regional freight route designation from 181st/Burnside Road to 242nd Avenue from I-84 to US 26 and revise road signs in that corridor.

2032 Burnside/Hogan Intersection Improvement
Improve safety of the intersection by adding a southbound through-lane on Hogan Road.

Projects to improve traffic circulation and pedestrian crossings are proposed in the heavily traveled Gateway regional center.

2045 190th/Highland Drive Improvements
Reconstruct and widen the street to five lanes from Butler Road to Powell Boulevard with sidewalks and bike lanes.

2048 Burnside Street Improvements
Complete boulevard retrofit of street from Wallula Street to Hogan Road including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2056 Division Street Bikeway
Retrofit the existing street with bike lanes from 182nd to Wallula Avenue.

2062 Gresham Regional Center Transportation Management Association Startup
Implement a transportation management association program with employers in the regional center.

2011-2020

2063 Study Light Rail Extension to Mt. Hood Community College
Future study to determine the feasibility of extending light rail to Mt. Hood Community College.

2036 Wallula Street Reconstruction
Reconstruct the existing street from Division Street to Stark Street.

2059 Division Street Pedestrian-to-Transit Access Improvements
Make street safer for pedestrians and improve access to transit from 175th Avenue to Wallula Avenue with wider sidewalks, lighting, crossings, bus shelters and benches.

Columbia Corridor 2000-2005

2077 181st Avenue Widening
Widen street to three lanes southbound from Halsey Street to eastbound on-ramp at I-84.

2078 162nd Railroad Crossing Improvements
Reconstruct and widen a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2080 202nd Railroad Crossing Improvement
Reconstruct and widen a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2081 223rd Railroad Crossing Improvement
Reconstruct and widen a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2086 NE 138th Avenue Improvements
Replace the deteriorating timber bridge to improve safety and access to the Columbia Corridor industrial and employment areas.

2087 NE 158th Avenue Improvements
Upgrade the existing street to urban standards from Sandy Boulevard to Marine Drive. This project addresses storm drainage issues and includes constructing bike lanes, sidewalks and a bridge to replace culverts along the Columbia Slough.

2088 NE Marine Drive/122nd Avenue Improvements
Add a traffic signal to the intersection and widen the dike to install a left turn lane on Marine Drive.

2006-2010

2091 NE/SE 148th Avenue Bikeway
Retrofit the existing street with bike lanes from Marine Drive to I-84 multiuse path.

The Division Street "boulevard" project is designed to link the new Gresham civic neighborhood with the historic downtown district and is the centerpiece of the regional center plan. The first phase of this project received funding in 1999.

2011-2020

2079 185th Railroad Crossing Improvement
Reconstruct and widen a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2082 Columbia River Highway Railroad Crossing Improvement
Reconstruct and widen a narrow railroad overcrossing to more safely accommodate motor vehicles, trucks, buses, pedestrians and bicycles.

2084 181st Avenue Intersection Improvement
Improves the intersection of 181st Avenue and Glisan Street.

2085 181st Avenue Intersection Improvement
Improve the intersection of 181st Avenue and Burnside Road.

Rockwood Town Center 2000-2005

2102 Stark Street Improvements
Complete the boulevard retrofit of the street from 181st to 197th including bike lanes, wider sidewalks, curb extensions and crossing improvements.

2104 Burnside Road Boulevard Improvements
Complete the boulevard retrofit of the street from 181st Avenue to 197th Avenue including bike lanes, wider sidewalks, curb extensions and safer street crossings.

2006-2010

2103 181st Avenue Improvements
Complete the boulevard retrofit of street from Glisan Street to Yamhill Street including bike lanes, wider sidewalks, curb extensions and safer street crossings.

Fairview-Wood Village Town Center 2000-2005

2108 Halsey Street Improvements – Wood Village
Widen the street to three lanes from 223rd Avenue to 238th Avenue including sidewalks and bike lanes.

2111 207th Connector
Complete the project currently under construction along 207th Avenue.

2006-2010

2116 NE 223rd Avenue Bikeway and Pedestrian Improvements
Retrofit the existing street with bike lanes and sidewalks from Halsey Street to Marine Drive.

2011-2020

2105 Rockwood Town Center Pedestrian and Ped-to-MAX Improvements
Retrofit the existing streets within the town center and pedestrian corridors linking to Eastside MAX to include better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

Troutdale Town Center 2000-2005

2123 Stark Street Improvements
Widen the street to five lanes from 257th Avenue to Troutdale Road including sidewalks and bike lanes.

2126 257th Avenue Pedestrian Improvements
Retrofit existing street from Cherry Park Road to Stark Street to widen sidewalks, move overhead utilities underground and install a raised median, traffic signals, lighting and landscaping.

2006-2010

2124 Halsey Street Improvements
Widen to three lanes with a boulevard design from 238th to 257th Avenue including bike lanes, wider sidewalks, curb extensions and safer street crossings.

Burnside Station Communities 2000-2005

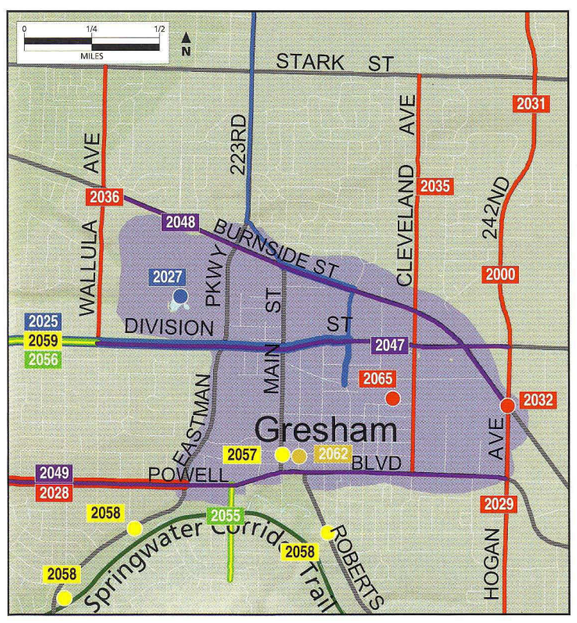
2130 162nd Avenue Bikeway
Retrofit the existing street with bike lanes from Sandy Boulevard to Halsey Street and Stark Street to Powell Boulevard.

Regional Highways 2000-2005

2000 Hogan Corridor Improvements
Widen 242nd Avenue from Stark Street to Palmquist Road and implement access management strategies.

2001 Hogan Corridor Improvements
Construct a new interchange at I-84, extending new interchange connection south to Stark Street.

2002 I-84/US 26 Connector Right-of-Way Preservation
Preserves right-of-way for future construction of a principal arterial connection along the 242nd Avenue corridor from Palmquist Road to US 26.



2006-2010

4008 I-205 North Corridor Study
Develop a long-term traffic management plan for I-205 from I-84 to Columbia River to limit congestion and improve traffic flow.

2011-2020

2003 Hogan Corridor Improvements
Construct a new four-lane principal arterial from Palmquist Road to US 26.

2004 I-84 Widening
Widens I-84 to six lanes from 238th Avenue to the Sandy River Bridge.

Regional Transit

The projects listed in the Regional Transit section identify major transit capital projects and other improvements that enhance rapid bus and frequent bus service. Capital improvements for rapid bus routes and stations would include transit preferential treatments such as queue-by-pass lanes and signal preemption, park-and-ride facilities, possible off-street station areas and station amenities such as schedule information, ticket machines, lighting, benches, covered shelters and bicycle parking. Capital improvements for frequent bus routes and stations would include transit preferential treatments such as signal preemption and passenger amenities such as schedule information, covered shelters, curb extensions, lighting and benches. (See Transit Service Strategy fact sheet for additional information on transit service.)

2000-2020

2007 Transit Station and Park-and-Ride Lot Upgrades
Construct, expand and/or upgrade transit stations and park-and-ride lots throughout the subarea, including Troutdale, Gateway, Gresham, Rockwood and Fairview/Wood Village.

2006-2010

2025 Division Street Frequent Bus
Provide capital improvements that benefit frequent bus service along Division Street from downtown Portland to Gresham.

2027 Civic Neighborhood Light Rail Station/Plaza
Complete redevelopment of the land adjacent to the Gresham City Hall MAX stop to include a new light rail station with retail services.

2011-2020

2055 SW Walters Road/Springwater Trail Access
Provide bicycle access to the Springwater Corridor Trail from Seventh Avenue to Powell Boulevard. Upgrade the pedestrian signal to full traffic signal at Walters Road.

2058 Springwater Trail Pedestrian Access
Provide pedestrian access to the Springwater Corridor Trail at Eastman Parkway, Towle Road, Roberts Road, Regner Road and Hogan Road. This project includes wider sidewalks and lighting.

Regional Trails 2000-2005

2053 Gresham/Fairview Trail
Construct a 5.2-mile multiuse path designed for bicycle and pedestrian use from the Springwater Corridor Trail to Marine Drive.

2133 I-205 Multiuse Path Crossing Improvements
Construct safer bicycle and pedestrian crossings, improving access to the I-205 multiuse path at various locations.

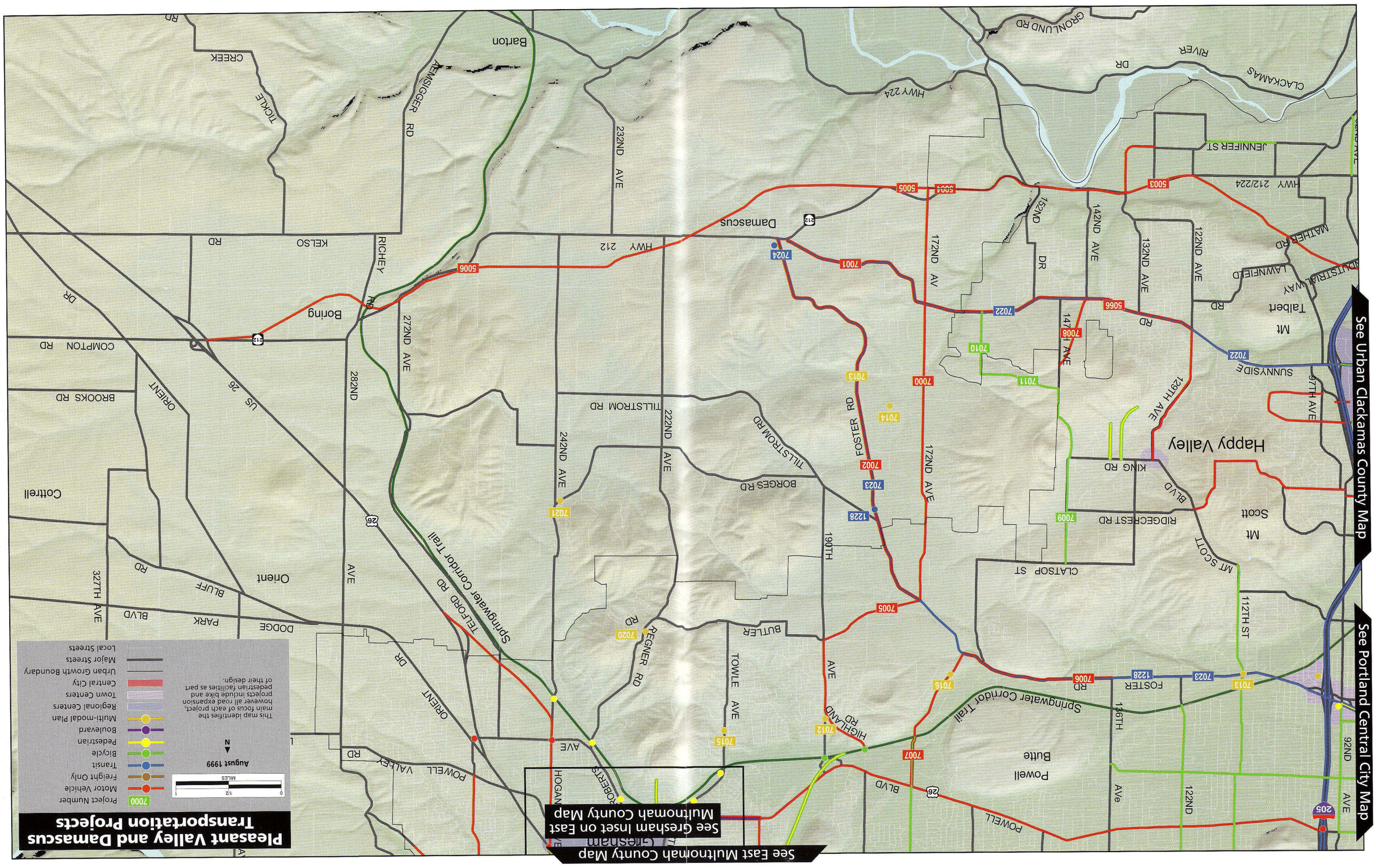
2011-2020

2054 Springwater Trail Connections
Provide bicycle access to the Springwater Corridor Trail at 182nd Avenue and 190th Avenue.

CITIZEN VIEW

Paul Spanbauer
Gresham
Regional Transportation Plan
Citizen Advisory Committee

"Better north-south connections are needed to link I-84 and US 26. We need to work together to accomplish this and reach consensus on the best solutions."



- Further evaluate how to implement high-capacity transit service along the Powell Boulevard/Foster Road corridor given the right-of-way constraints in the corridor.

- Make capacity improvements to major routes, including 172nd Avenue, Foster Road, Sunnyside Road, Towle Road, 190th Avenue and Highland Drive.

COUNCILOR VIEW

Rod Park
Metro Council
District 1

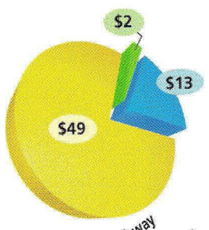
"This plan brings a portion of the much-needed resources to the East County area. But is it the right mix of transportation projects? I need to hear from you to make sure this will work for you and your family."

Bill Atherton
Metro Council
District 2

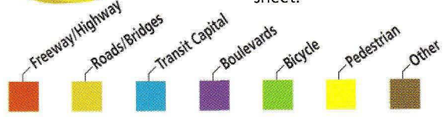
"Please know this is a *draft* plan. Serious blank spots, such as paying to maintain existing facilities (let alone build new ones), need to be filled in."

Type of improvements by:

Cost (in millions)



This graph does not include costs for future streets or improvements that might be recommended as a result of future studies or corridor plans identified for this subarea. Costs for the Sunrise Highway are included in the urban Clackamas County fact sheet.



Linking land use and transportation

The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision of where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: retrofits of major streets for walking, biking and transit; new street connections and capacity improvements; new multiuse paths and better bike-pedestrian connections to existing paths; and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that focus primarily on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including Sunrise Highway corridor in the Damascus area.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the Transportation Department at trans@metro-region.org

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site: www.metro-region.org

Printed on recycled-content paper.
1999-10455-TRN • 99299

4

INSIDE

METRO
Regional Services
Creating livable communities

Getting There
Pleasant Valley & Damascus

Update on Regional Transportation Plan Projects

FALL 1999

A close-up look at the 20-year regional transportation blueprint for Pleasant Valley and Damascus

The proposed Sunrise Highway is expected to take much of the freight burden and through traffic off Sunnyside Road (pictured) and the existing Highway 212.

Planned transportation projects

More than 20 projects and programs have been identified to serve the Pleasant Valley and Damascus subarea as it urbanizes during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea. Additional projects will be identified as future planning for this area occurs. The projects are grouped by proposed construction date; actual timing depends on the availability of funding.

- Phase Sunrise Highway construction as follows: complete the I-205 to Rock Creek segment first, followed by right-of-way acquisition of remaining segments, then construction of Boring to US 26 segment, and last, construction of the middle segment from Rock Creek to Boring after the Damascus town center develops. Final highway design should examine use of express lanes, high-occupancy vehicle lanes and/or priced lanes as phases are constructed and there is potential for the highway to serve as a "hard edge" for the urban growth boundary in this area. Configuration of interchange locations should be examined as part of future street plans for the urban reserve areas and incorporated in the final draft environmental impact statement for the highway.

- Complete a future street plan of arterial and collector streets adequate to serve expected growth in the Pleasant Valley and Damascus area while protecting environmentally sensitive areas and adjacent rural reserves from the impacts of urbanization. This plan may include a major north/south axis that links 172nd Avenue to Highland Drive at 182nd Avenue and other possible street connections. The plan also will address the potential impact of traffic generated in Pleasant Valley and Damascus urban reserves on Southwest Gresham neighborhoods.

- Expand transit service to include rapid bus service along Powell Boulevard/Foster Road to downtown Portland, primary bus service from Pleasant Valley to Gresham along Eastman Parkway/Towle Road and frequent bus service from Damascus to Clackamas regional center along Sunnyside Road and from Damascus to Gresham along 172nd Avenue.

turn to back page

Priority projects by community

Pleasant Valley and Damascus Town Centers

2000-2005

7013 Foster Road Corridor Plan
Future study to identify right-of-way and transportation needs along the Foster Road corridor from I-205 to Highway 212 in Damascus.

7014 Damascus/Pleasant Valley Future Street Plan
Develop street plan for Damascus and Pleasant Valley urban reserves to serve planned growth in the area. Throughout the 20-year planning period, implement a multi-modal local and collector street system as development occurs.

2006-2010

5066 West Sunnyside Road Improvements
Widen the street to five lanes from 122nd Avenue to 172nd Avenue.

7001 East Sunnyside Road Improvements
Widen the street to three lanes from 172nd Avenue to Highway 212. This project includes sidewalks and bike lanes.

7002 Foster Road Improvements
Widen the street to three lanes from 172nd Avenue to Highway 212. This project includes sidewalks and bike lanes.

2006-2010

7005 190th Avenue Extension
Construct a new five-lane connection from 190th/Butler Road to 172nd/Foster Road with sidewalks and bike lanes.

7006 SE Foster Improvements
Widen the street to three lanes from 136th Avenue to Jenne Road.

7007 SE Jenne Road Improvements
Widen the street to three lanes from Foster Road to Powell Boulevard.

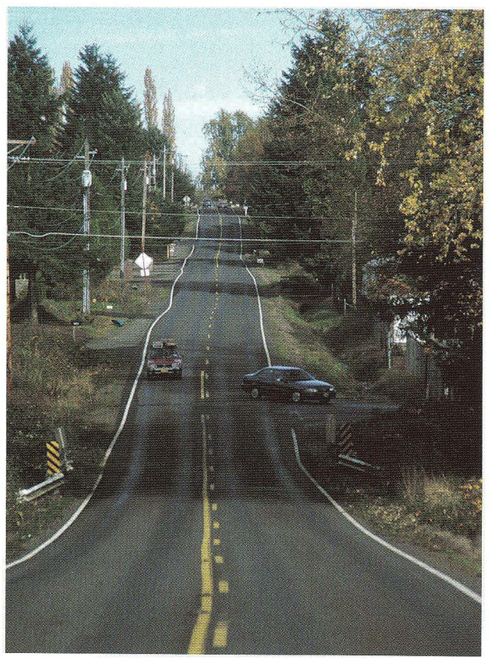
7008 147th Avenue Improvements
Realign 147th Avenue to 142nd Avenue at Sunnyside Road to provide additional access into town center.

7009 SE 145th/147th Bike Lanes
Widen the street from Clatsop Street to Monner Road to include bike lanes.

7012 Highland Corridor Plan
Study Highland Drive from Powell Boulevard to Foster Road to develop a corridor plan to address north-south access to urban reserves.

7015 Towle/Eastman Corridor Plan
Study Towle Road/Eastman Parkway from Powell Boulevard to 190th Avenue to develop a corridor plan to address north-south access to urban reserves.

7016 Jenne Road Traffic Management Plan
Develop a comprehensive traffic management plan for the street from Powell Boulevard to Foster Road to manage the impacts of planned growth in the urban reserves.



Although only a narrow farm-to-market road today, 172nd Avenue is envisioned to be the major route serving Pleasant Valley and Damascus connecting the area to the proposed Sunrise Highway and Gresham.

Development is already occurring in the Pleasant Valley area. Metro has received a federal grant (see sidebar) to complete a future street plan that provides an adequate street system and does not overburden existing farm roads.

2011-2020

7000 172nd Avenue Improvements
Widen the street to five lanes from Foster Road to Highway 212. This project includes sidewalks and bike lanes.

7010 SE 162nd Avenue Bike Lanes
Widen the street from Monner Road to Sunnyside Road to include bike lanes.

7011 SE Monner Bike Lanes
Widen the street from 147th Avenue to 162nd Avenue to include bike lanes.

7020 Regner/222nd Corridor Plan
Study to develop traffic management plan for the street from Roberts Avenue to Highway 212 to manage the impacts of planned growth in nearby urban reserves and identify an urban-to-urban connector route that serves the corridor.

7021 Hogan/242nd Corridor Plan
Study to develop traffic management plan for the street from Palmquist Road to Highway 212 to manage the impacts of planned growth in nearby urban reserves and identify an urban-to-urban connector route that serves the corridor.

Regional Highways

2000-2005

5003 Sunrise Highway
Construct a new four-lane highway from I-205 to Rock Creek/152nd Avenue. This project includes construction of interchanges at 122nd Avenue and 152nd Avenue and modification of I-205 interchange.

5004 Sunrise Highway Right-of-Way Preservation
Preserve right-of-way for future four-lane highway from 152nd Avenue to 242nd Avenue.

Metro has received a grant to develop a Green Streets handbook that will be used to design transportation projects that will help to protect streams and other natural features in the developing Pleasant Valley and Damascus area.

2011-2020

5005 Sunrise Highway
Construct a new four-lane highway from Rock Creek/152nd Avenue to 242nd Avenue.

5006 Sunrise Highway
Construct a new four-lane highway from 242nd Avenue to US 26.

Regional Transit

The projects listed in the Regional Transit section identify major transit capital projects and other improvements that enhance rapid bus and frequent bus service. Capital improvements for rapid bus routes and stations would include transit preferential treatments such as queue-by-pass lanes and signal preemption, park-and-ride facilities, possible off-street station areas and station amenities such as schedule information, ticket machines, lighting, benches, covered shelters and bicycle parking. Capital improvements for frequent bus routes and stations would include transit preferential treatments such as signal preemption and passenger amenities such as schedule information, covered shelters, curb extensions, lighting and benches. (See Transit Service Strategy fact sheet for additional information.)

2000-2005

1228 Powell Boulevard/Foster Road High-Capacity Transit Corridor Study
Study the potential for high-capacity transit service or other improvements from the Ross Island Bridge to Damascus town center to address travel demand in the corridor.

2006-2010

7022 Sunnyside Road Frequent Bus
Provide improvements that enhance new frequent bus service along Sunnyside Road from Clackamas regional center to Damascus.

2011-2020

7023 Powell/Foster Corridor Rapid Bus
Provide improvements that enhance new rapid bus service along Powell Boulevard/Foster Road corridor from downtown Portland to Damascus.

7024 Transit station
Construct a new transit station in support of expanded transit service to this area.

All eyes on Damascus-Pleasant Valley urban reserves

Metro has received two planning grants that focus on identifying the future transportation and land-use needs of the Damascus-Pleasant Valley urban reserves while addressing the impacts of urbanization on local communities and the environment. Urban reserves are areas located outside the urban growth boundary that have been designated by the Metro Council to accommodate future growth.

Urban reserve planning
Metro was awarded a $500,000 grant by the Federal Highways Administration to create a plan for protecting and enhancing the unique natural features of the Damascus-Pleasant Valley area as it urbanizes during the next 20 years. Metro will work in partnership with Gresham, Portland, Clackamas County, the Johnson Creek Watershed Council and the community to develop the plan. Issues to be addressed include:

- developing a future transportation system for all types of travel that serves the community, provides good access to the rest of the region and avoids impacts to the environment
- planning for local services, such as grocery stores and medical facilities, to meet the needs of residents
- providing for a range of housing types and prices
- preserving and enhancing streams and wetlands, to prevent pollution and downstream flooding
- protecting open spaces and planning for public access to them.

For more information about the transportation and community and system preservation pilot program, call Mary Weber, Metro, (503) 797-1735.

Green Streets
Designing future streets for environmentally sensitive areas poses a challenge for planners. How can these streets meet the needs of those using them without adversely impacting streams, wetlands and wildlife? With the support of a state of Oregon transportation growth management grant, Metro will address this question. The Green Streets project will look at the conflicts between good transportation design, expected growth and the need to protect streams and wildlife corridors from urban impacts. The project will propose new regional street connectivity standards tailored to urban reserves and create a handbook that recommends best practices and street design solutions that protect the environment. For more information, call Tom Kloster, Metro, (503) 797-1832.

A new town center is planned at the historic heart of the Pleasant Valley community. Proposed transportation projects are designed to provide access to this area.

CITIZEN VIEW

Paul Koch
Oregon City
Chair
Regional Transportation Plan
Citizen Advisory Committee

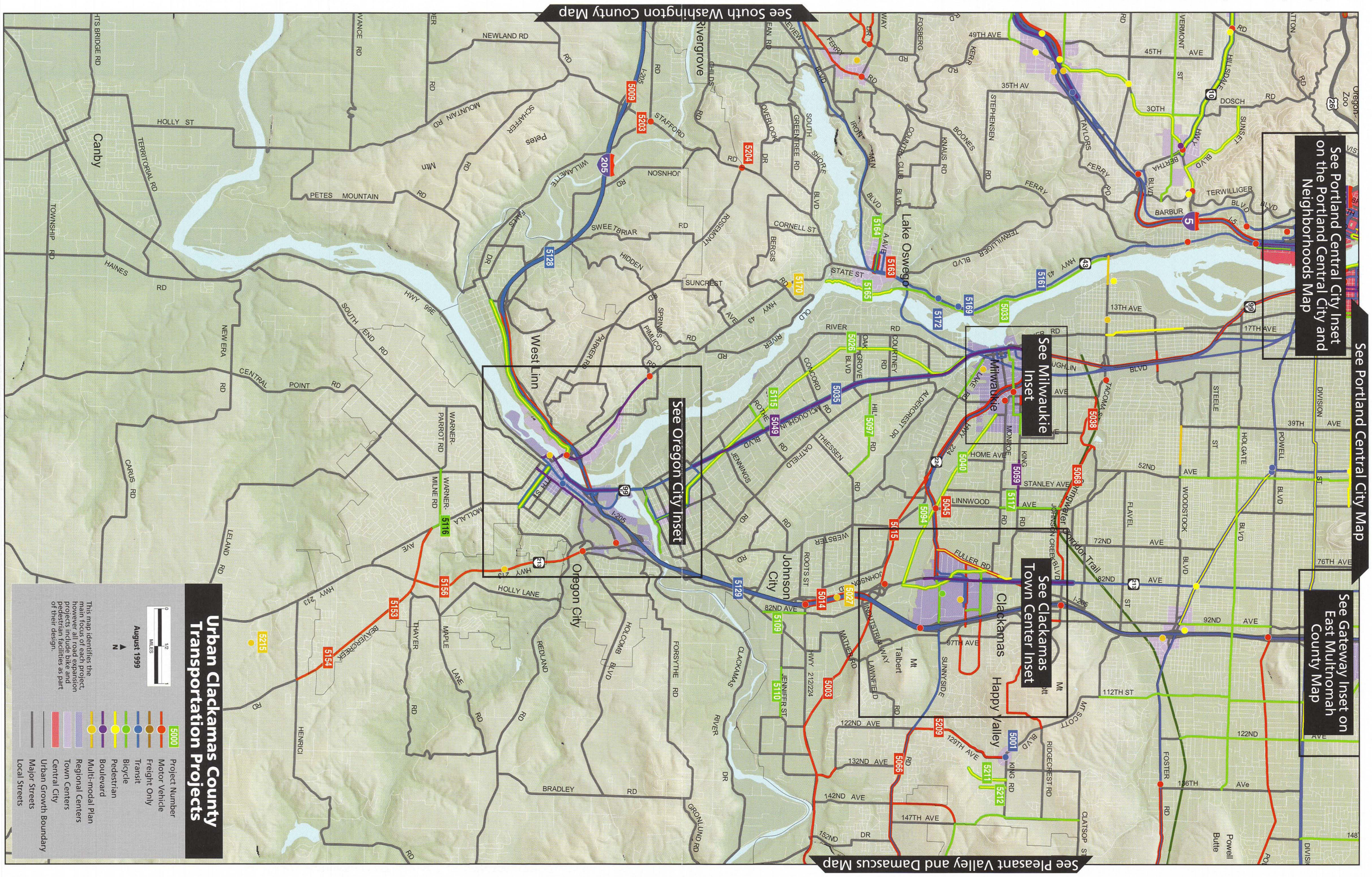
"The involvement of all citizens in regional transportation planning is vital to the long-term livability of this region. There are no easy answers to the problems of transportation. One way to ensure that the plans reflect what we as citizens want and desire is to participate."

COUNCILOR VIEW

Presiding Officer
Rod Monroe
Metro Council
District 6

"Native Oregonians, as well as those who have just moved here, know the same thing: that this Metro region is a very special place to live. This Regional Transportation Plan works to preserve what makes the region so special while protecting our precious resources."

open for list of corresponding project descriptions



Provide excursion rail and frequent bus improvements between Portland and Lake Oswego.

- Conduct a high-capacity transit study to examine rail transit opportunities in the Lake Oswego area including the Macadam/Highway 43 corridor to Portland and existing rail connections from Lake Oswego to Milwaukie and Tualatin.
- Retrofit major streets in regional centers and town centers with "boulevard" designs, including 82nd Avenue and Sunnyside Road in Clackamas regional center, McLoughlin Boulevard in Oregon City and Milwaukie and A Street in Lake Oswego. Boulevard designs include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.
- Make capacity improvements to streets parallel to I-205, including new overcrossings and street extensions near the Clackamas regional center, to better serve local travel and preserve regional mobility along the corridor.
- Implement a transportation management association with employers in Clackamas, Oregon City and Milwaukie. Consider a TMA and other transportation demand management strategies to address congestion in the vicinity of the Clackamas industrial area.

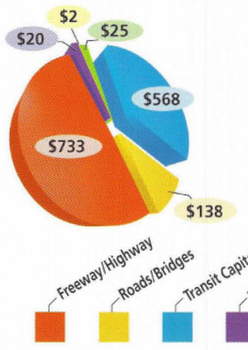
COUNCILOR VIEW

Bill Atherton
Metro Council
District 2

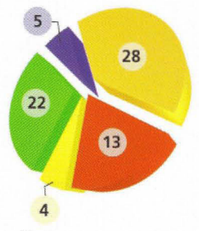
"Please know this is a *draft* plan. Serious blank spots, such as paying to maintain existing facilities (let alone build new ones), need to be filled in."

Type of improvements by:

Cost (in millions)
(Costs for improvements that might be recommended as a result of future studies are not included.)



Number of projects
(Does not reflect transit capital projects.)



Linking land use and transportation

The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision of where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: retrofits of major streets for walking, biking and transit; new street connections and capacity improvements; new multiuse paths and better bike-pedestrian connections to existing paths; and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including the Sunrise Highway corridor, I-205, McLoughlin Boulevard/224 and Highway 213 in urban Clackamas County.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the Transportation Department at trans@metro-region.org

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site:
www.metro-region.org

Printed on recycled-content paper.
1999-10456-TRN • 99298

5

INSIDE

Road expansion
Phased Sunrise Highway
I-205
Highway 99E/224
New street connections

Transit
Expanded transit service
Pedestrian access
Bus shelters and benches
Employee commuting programs

"Boulevard" retrofits
Clackamas regional center
Oregon City
Milwaukie
Lake Oswego

Bicycle and pedestrian facilities
Wider sidewalks
Street lighting and landscaped buffers
Bike lanes
Multiuse paths
Springwater Trail access

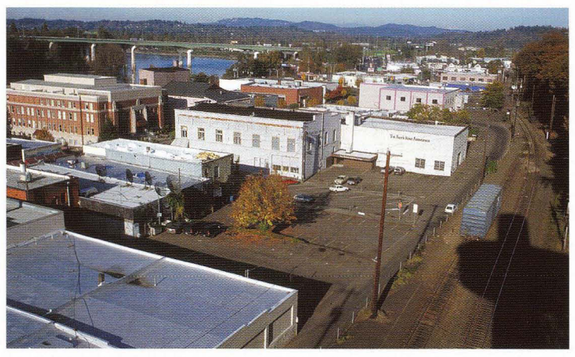
METRO
Regional Services
Creating livable communities

Getting There
Urban Clackamas County

Update on Regional Transportation Plan Projects

FALL 1999

A close-up look at the 20-year regional transportation blueprint for urban Clackamas County



Proposed transportation projects in the Oregon City regional center will link the historic downtown (pictured) to planned development near the Oregon Trail Center.

Planned transportation projects

Nearly 100 projects and programs have been identified to serve the urban Clackamas County subarea during the next 20 years. These projects are considered to be the most critical in terms of serving expected growth in this subarea. Projects are grouped by proposed construction date; actual timing depends on the availability of funding.

- Conduct a detailed I-205 corridor study to identify and phase implementation of additional transit and road-related improvements needed to enhance interstate travel, particularly goods movement to and from the region and strategies for meeting future general-purpose capacity needs, including possible express lanes, high-occupancy vehicle lanes and/or priced lanes.
- Implement South Willamette River Crossing Study recommendations for the Sellwood Bridge.
- Phase Sunrise Highway construction as follows:
  - complete I-205 to Rock Creek segment first
  - followed by right-of-way acquisition of remaining segments
  - then construction of Boring to US 26 segment
  - and last, construct middle segment from Rock Creek to Boring after the Damascus town center develops.

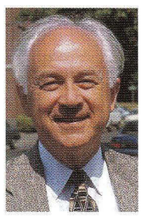
Final highway design should examine use of possible express lanes, high-occupancy vehicle lanes and/or priced lanes, as phases are constructed and there is potential for the highway to serve as a "hard edge" for the urban growth boundary in this area. *See Pleasant Valley and Damascus fact sheet for improvements.*

- Make capacity improvements along the Highway 99E/224 corridor including widening to six lanes with some access management and intersection grade separation and light rail service from Milwaukie to the Clackamas regional center. Local transportation system plans should monitor local collector routes and mitigate spillover effect from traffic congestion along corridor.
- Construct improvements to facilitate connections between Washington Square, Oregon City, the Clackamas and Gateway regional centers and between Oregon City and Milwaukie. Construct long-range light rail transit from the Clackamas regional center to Milwaukie and Portland central city. Prior to construction of light rail transit, define interim high-capacity transit improvements to serve the McLoughlin Boulevard/Highway 224 corridor from the Clackamas regional center to the central city.

turn to back page

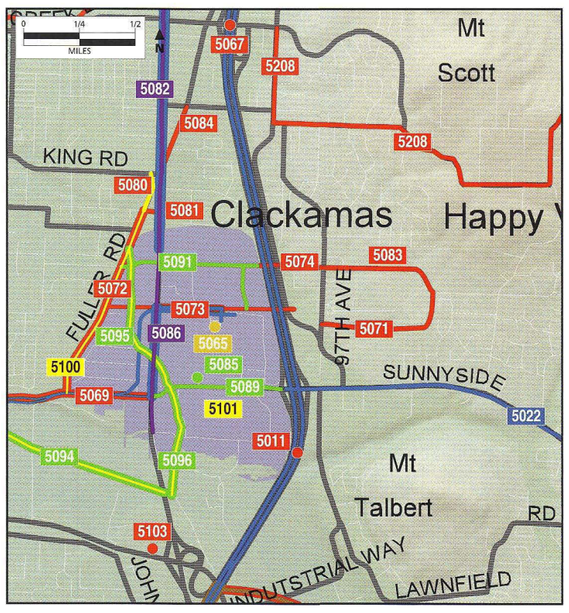
Priority projects by community

CITIZEN VIEW



Paul Koch
Oregon City
Chair
Regional Transportation Plan
Citizen Advisory Committee

"The involvement of all citizens in regional transportation planning is vital to the long-term livability of this region. There are no easy answers to the problems of transportation. One way to ensure that the plans reflect what we as citizens want and desire is to participate."



Clackamas Regional Center 2000-2005

5065 Clackamas Regional Center Transportation Management Association Startup
Implement a transportation management association program with employers in the regional center.

5073 Monterey Improvements
Widen street to five lanes from 82nd Avenue to new overcrossing of I-205. This project will include sidewalks and bike lanes.

5086 82nd Avenue Boulevard Design Improvements
Retrofit the street with a boulevard design from Monterey Avenue to Sunnybrook Road including wider sidewalks, curb extensions and safer street crossings.

5100 Fuller Road Pedestrian Improvements
Widen the street from Harmony Road to King Road to construct new curbs and sidewalks.

5103 Clackamas County Transportation Management Improvement Plan
Implement advanced transportation system management and intelligent transportation system plan for county facilities, including signal timing, signal interconnects and traffic control and incident management strategies.

2006-2010

5066 West Sunnyside Road Improvements
Widen the street to five lanes from 122nd Avenue to 172nd Avenue.

5069 Harmony Road Improvements
Widen the street to five lanes from Sunnyside Road to Highway 224.

5072 West Monterey Extension
Construct a two-lane extension of street from 82nd Avenue to Price Fuller Road to improve east-west connections by all modes of travel.

5082 82nd Avenue Multi-Modal Improvements
Widen the street to construct sidewalks and bike lanes, better crossings and street lighting. Project also includes new traffic signals.

5089 Sunnyside Road Bikeway
Retrofit bike lanes to existing street from 82nd Avenue to I-205.

5091 Causey Avenue Bikeway
Retrofit bike lanes to existing street from I-205 to Fuller Road.

5109 82nd Drive Bicycle Improvements
Widen the street from Jennifer Street to the Fred Meyer store to include bike lanes.

2011-2020

5067 Johnson Creek Boulevard Interchange Improvements
Upgrade the interchange at I-205 and Johnson Creek Boulevard to include a loop ramp, new northbound on-ramp and realign the southbound off-ramp.

5068 Johnson Creek Boulevard Improvements
Widen the street to three lanes and widen the bridge over Johnson Creek to improve freight access to I-205.

5071 William Otty Road Extension
Construct a two-lane extension of street from a new frontage road east of I-205 to Valley View Terrace to improve east-west circulation. This project includes sidewalks and bike facilities.

5074 Causey Avenue Extension
Construct a three-lane extension of the street over I-205 to new frontage road east of freeway to improve east-west circulation. This project includes sidewalks and bike facilities.

5080 Fuller Road Improvements
Widen the street to three lanes from Harmony Road to Monroe Road to improve north-south circulation in the regional center area. This project includes removing auto access to King Road.

5081 Boyer Drive Extension
Construct a two-lane extension of street from 82nd Avenue to Fuller Road to improve east-west circulation. This project includes sidewalks and bike facilities.

5083 Causey Avenue Extension
Construct a two-lane extension of the street from the I-205 frontage road to William Otty Road to improve east-west circulation. This project includes sidewalks and bike facilities.

5084 Fuller Road Extension
Construct a two-lane extension of the street from Otty Road to 82nd Avenue at King Road to improve north-south circulation. This project includes sidewalks and bike facilities.

5085 Clackamas Regional Center Bike/Pedestrian Corridors
Construct bicycle and pedestrian facilities as part of new and existing developments in the Clackamas regional center.

5101 Clackamas Regional Center Pedestrian Improvements
Retrofit existing streets within the regional center to include better sidewalks and street crossings, lighting, curb extensions, bus shelters and benches.

Clackamas Industrial Area 2000-2005

5110 Jennifer Street Bicycle Improvements
Construct a shared bicycle and pedestrian path along the south side of street from 106th Avenue to 120th Avenue.

Clackamas Corridor 2000-2005

5097 Hill Road Bike Lanes
Retrofit bike lanes on the existing street from Oatfield Road to Thiessen Road.

5115 Roethe Road Bicycle Improvements
Widen the street from River Road to Highway 99E to include shared bike and pedestrian path. This project also installs curbs and drainage.

5117 Linwood Road Bike Lanes
Widen the street from Monroe Street to Johnson Creek Boulevard to include bike lanes.

2011-2020

5116 Warner Milne Bikeway
Retrofit the street with bike lanes from Central Point Road to Highway 213 to provide access to Oregon City employment area.

Oregon City Regional Center 2000-2005

5148 McLoughlin Boulevard Relocation Study
Study to evaluate moving the segment of McLoughlin Boulevard from the Clackamas River to the Southern Pacific tunnel to improve access to the Willamette River.

Clackamas regional center has emerged as the commercial hub of Clackamas County. Proposed projects will improve traffic circulation and make travel in the area easier for transit riders, bicyclists and pedestrians.

2006-2010

5137 Washington Street Improvements
Retrofit the street with a boulevard design from Abernathy Road to Fifth Street including wider sidewalks, curb extensions and safer street crossings.

2011-2020

5135 McLoughlin Boulevard Improvements
Boulevard retrofit of the street from the Clackamas River to the Southern Pacific railroad tunnel, including bike lanes, wider sidewalks, curb extensions and better crossings.

5150 Oregon City Transportation Management Association Startup Program
Implement a transportation management association program with employers in the regional center.

Oregon City Corridor 2000-2005

5153 Beavercreek Road Improvements – Phase 2
Widen the street to five lanes from Highway 213 to Clackamas Community College. This project includes access management, a median, bike lanes and sidewalks.

2006-2010

5154 Beavercreek Road Improvements – Phase 3
Widen the street to four lanes from Clackamas Community College to Henrici Street. This project includes access management strategies in addition to bike lanes and sidewalks.

5156 Beavercreek Road Improvements – Phase 1
Widen the street to five lanes from Highway 213 to Molalla Avenue. This project includes access management strategies and a boulevard design with bike lanes, wider sidewalks, lighting and safer street crossings.

2011-2020

5155 Seventh Street Corridor Improvements
Retrofit the street from High Street to Taylor Street to make it safer for bicyclists and pedestrians and to improve access to transit. This project includes bike lanes, better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

Milwaukie Town Center 2000-2005

5036 King Road Improvements/ 34th Avenue Extension
Construct a two-lane extension of King Road from 32nd Avenue to 42nd Avenue to improve local street connectivity for all modes. This project will include sidewalks, bike lanes and new traffic signals at Oak Street, Monroe Street, Harrison Street and 34th Avenue.

5038 Johnson Creek Boulevard Phase 2 Improvements
Reconstruct the street from 32nd Avenue to 45th Avenue. This project will include sidewalks, bike lanes and landscaping along the south side of the street.

5045 Linwood/Harmony/Lake Road Improvements
Modify the intersection to include turn lanes on Harmony and Linwood roads.

5049 McLoughlin Boulevard Improvements
Retrofit the street with a boulevard design from Highway 224 to River Road including wider sidewalks, curb extensions and better crossings.

5050 Harrison Street Bikeway
Retrofit bike lanes on the existing street from Highway 99E to King Road.

5051 Lake Road Bikeway
Retrofit bike lanes on the existing street from 21st Avenue to Oatfield Road.

2006-2010

5040 Railroad Avenue Bike/ Pedestrian Improvement
Retrofit bike lanes and sidewalks on the existing street from 37th Avenue to Linwood Road.

5059 King Road Boulevard Improvement
Boulevard retrofit of the street from 42nd Avenue to Linwood Avenue, including bike lanes, wider sidewalks, a median and access management.

2011-2020

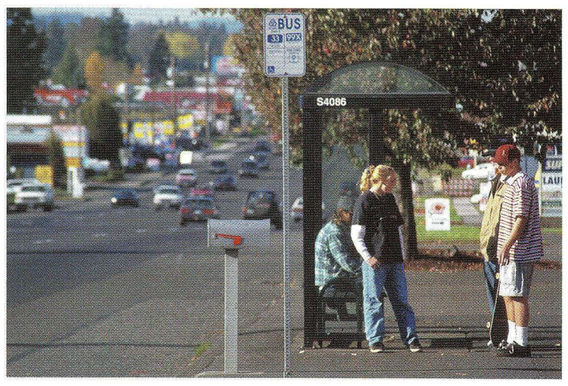
5046 Railroad Crossing Improvements
Make railroad crossings at Harrison Street, 37th Avenue and Oak Street safer for all modes of travel.

5062 Milwaukie Transportation Management Association Startup
Implement a transportation management association program with employers in the town center.

Lake Oswego Town Center 2000-2005

5169 Trolley Trestle Repairs
Repair trestles along rail line from Lake Oswego to Portland.

5170 Highway 43 Traffic Management Plan
Study to develop long-term comprehensive traffic management plan for corridor from McVey Road to I-205 to limit traffic congestion, improve traffic flow and address alternative mode needs in the corridor.



Improvements for transit riders, pedestrians and bicyclists are planned along McLoughlin Boulevard between Milwaukie and Oregon City to reinforce already heavy transit use.

CITIZEN VIEW

Ed Gronke
Milwaukie
Regional Transportation Plan
Citizen Advisory Committee

"I would like to see an integrated transportation system, using the best features of an efficient highway system, a dependable, attractive and economical public transit system and a network of bicycle and pedestrian paths. Such a system, if properly designed and implemented, would add to the livability of the area while enhancing the economic vitality of this region."

2006-2010

5163 A Avenue Reconstruction
Reconstruct the street from State Street to Third Avenue to address deteriorating pavement conditions and rebuild sidewalks.

5164 A Avenue Bikeway
Retrofit the street from Iron Mountain Road to State Street to include a bicycle facility.

West Linn Town Center 2000-2005

5193 Willamette Falls Drive Improvement
Reconstruct the street from 10th Street to Highway 43 to include sidewalks and bike lanes.

5195 Highway 43 Improvements
Retrofit the street with a boulevard design from Pimlico Drive to the Willamette River including wider sidewalks, curb extensions and better crossings.

2011-2020

5192 Highway 43/Willamette Falls Intersection Improvements
Add capacity and make the intersection safer for all modes of travel.

5194 Highway 43 Intersection Improvements
Add capacity and make intersections at Failing Street, Pimlico Drive and Jolie Pointe safer for all modes of travel.

Stafford Urban Reserves 2000-2005

5203 Stafford Road Improvements
Realign the intersection at Borland Road and add a traffic signal and left turn lanes to improve safety and access within the Stafford urban reserve areas.

2006-2010

5204 Stafford Road
Realign the intersection and construct turn lanes at Rosemont Road. This project will include upgrades to the traffic signal.

Beavercreek Urban Reserves 2006-2010

5215 Beavercreek Future Street Plan
Develop a future street plan for the Beavercreek urban reserves to serve planned growth in the area.

Happy Valley Town Center 2000-2005

5211 Scott Creek Lane Pedestrian Improvements
Construct a pedestrian path from 129th Avenue to Mountain Gate Road including a bridge crossing of Scott Creek.

5212 137th Avenue Bike and Pedestrian Improvements
Construct bicycle and pedestrian facilities along street from King Road to Rolling Meadows.

2011-2020

5208 Idleman Road Improvements
Reconstruct and widen the street to three lanes from Johnson Creek Boulevard to Mt. Scott Boulevard.

5209 122nd/129th Improvements
Widen the street to three lanes from Sunnyside Road to King Road.

Gladstone Town Center 2011-2020

5122 Portland Avenue Bikeway
Retrofit the street with bike facilities from Clackamas Boulevard to Jersey Street. Bikeway design to be determined.

5123 Clackamas Boulevard Bikeway
Retrofit the street with bike facilities from 82nd Drive to McLoughlin Boulevard. Bikeway design to be determined.

Regional Highways 2000-2005

5003 Sunrise Highway
Construct a new four-lane highway from I-205 to Rock Creek/152nd Avenue. Project includes construction of interchanges at 122nd Avenue and 152nd Avenue and modification of I-205 interchange.

5004 Sunrise Highway Right-of-Way Preservation
Preserve right-of-way for future four-lane highway from 152nd Avenue to 242nd Avenue.

5011 I-205 North Auxiliary Lane Improvements
Complete construction of auxiliary lanes north of Sunnyside Road to the interchange at Johnson Creek Boulevard and south of Sunnyside Road to the interchange at Sunnybrook Road.

5018 Highway 213 Intersection Improvements**
Reconstruct the intersection of Beavercreek Road and Highway 213 to include a new traffic signal, two left turn lanes and bicycle and pedestrian facilities.

5027 I-205 South Corridor Study
Develop long-term traffic management plan for I-205 from I-5 to I-84 to limit congestion and improve traffic flow.

5031 Highway 213 Corridor Study
Develop long-term traffic management plan and identify projects to implement the plan for Highway 213 south of I-205.

2006-2010

5017 Highway 213 Intersection Improvements**
Modify intersections at Washington Street and Abernethy Road to improve safety.

5029 Highway 99E/224 Access Management Plan
Develop long-term access management plan for corridor from Tacoma Street to I-205 to limit congestion and improve traffic flow.

5030 Highway 213 Green Corridor Plan
Develop a green corridor plan for Highway 213 south of Leland Road to protect rural uses from the impacts of urban travel.

2011-2020

5005 Sunrise Highway
Construct a new four-lane highway from Rock Creek/152nd Avenue to 242nd Avenue.

5006 Sunrise Highway
Construct a new four-lane highway from 242nd Avenue to US 26.

5009 I-205 Improvements*
Widen the freeway to six lanes from West Linn to I-5.

5012 I-205 Bridge Improvements*
Widen the Oregon City bridge to six lanes with auxiliary lanes in each direction.

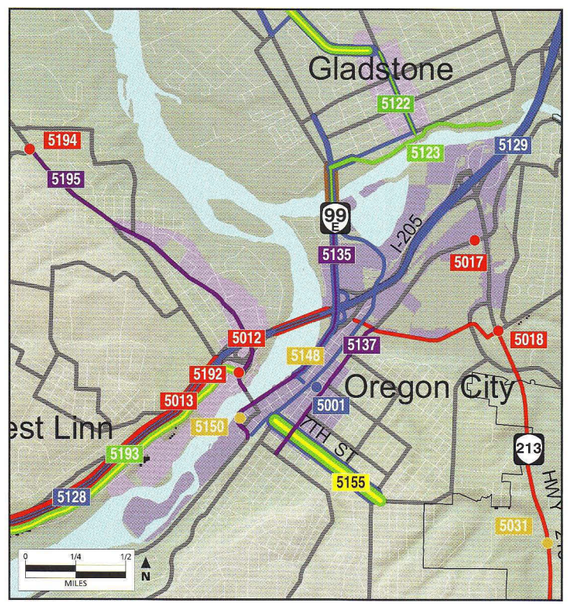
5013 I-205 Climbing Lanes*
Construct a new southbound truck climbing lane at the I-205 bridge from Highway 43 to 10th Street in West Linn.

5014 I-205 Auxiliary Lanes*
Construct a new auxiliary lane in each direction from 82nd Drive to Highway 212.

5015 Highway 99E/224 Improvements
Construct one reversible travel lane from Ross Island Bridge to Harold Street and widen the highway to six lanes from Harold Street to I-205. Project includes access management strategies along corridor, particularly from Highway 224 to I-205.

Regional Transit

The projects listed in the Regional Transit section identify major transit capital projects and other improvements that enhance rapid bus and frequent bus service. Capital improvements for rapid bus routes and stations would include transit preferential treatments such as queue-by-pass lanes and signal preemption, park-and-ride facilities, possible off-street station areas and station amenities such as schedule information, ticket machines, lighting, benches, covered shelters and bicycle parking. Capital improvements for frequent bus routes and stations would include transit preferential treatments such as signal preemption and passenger amenities such as schedule information, covered shelters, curb extensions, lighting and benches. (See Transit Service Strategy fact sheet for additional information on transit service.)



2000-2005

5001 Transit Station and Park-and-Ride Lot Upgrades
Construct, expand and/or upgrade transit stations and park-and-ride lots throughout the subarea including Oregon City, Milwaukie, Gladstone, Happy Valley, West Linn, Damascus and Pleasant Valley.

5035 McLoughlin Boulevard Rapid Bus
Provide improvements that enhance rapid bus service along McLoughlin Boulevard between Milwaukie and Oregon City.

5161 Macadam Frequent Bus
Provide improvements that enhance frequent bus service along Macadam Avenue between Lake Oswego and downtown Portland.

5172 Lake Oswego Trolley Study
Study to evaluate phasing of future trolley commuter service between Lake Oswego and Portland.

2006-2010

5128 Oregon City Rapid Bus
Provide improvements that enhance rapid bus service between Tigard, Tualatin and Oregon City transit centers.

7022 Sunnyside Road Frequent Bus
Provide improvements that enhance new frequent bus service along Sunnyside Road from Clackamas regional center to Damascus.

2011-2020

5129 Oregon City Rapid Bus
Provide improvements that enhance rapid bus service along I-205 between Vancouver and Oregon City.

Regional Trails 2000-2005

5026 Portland Traction Co. Multiuse Trail Planning
Complete planning, design and construction of a multiuse trail from Milwaukie to Gladstone.

5032 North Clackamas Greenway Corridor Study
Study to determine the feasibility of constructing a multiuse trail for bicyclists and pedestrians from Milwaukie to Clackamas regional center.

5033 Willamette River Greenway Corridor Study
Study to determine the feasibility of constructing a multiuse trail for bicyclists and pedestrians from the Sellwood Bridge to Lake Oswego town center.

5095 Phillips Creek Greenway Trail
Construct a multiuse trail for bicyclists and pedestrians from Causey Avenue to Mt. Scott Greenway Trail.

5096 District Park Trail
Construct a multiuse trail for bicyclists and pedestrians from Phillips Creek Trail to Mt. Scott Trail.

2006-2010

5094 Clackamas Town Center Connector
Construct a multiuse path for bicyclists and pedestrians from the North Clackamas Park to Philips Creek.

5165 Willamette Greenway Path
Construct a multiuse path for bicyclists and pedestrians from Roehr Park to George Rogers Park.

COUNCILOR VIEW

David Bragdon
Metro Council
District 7

"The draft Regional Transportation Plan includes many different kinds of projects. I believe some will work better than others. Now is the time for you to let me know what you think so that together we can make the best decisions possible for our community."

* Improvement could vary based on recommendations from I-205 South Corridor Study (Project 5027).

**Improvement could vary based on recommendations from Highway 213 Corridor Study (Project 3031).

Priority projects by community

Washington Square Regional Center 2000-2005

6012 Western Avenue Corridor Improvements
Implement transportation system management strategies in the corridor between Allen Boulevard and Canyon Road, and extend Western Avenue north to connect to Canyon Road near Walker Road.

6014 Greenburg Road Improvements
Widen the street to five lanes from Washington Square Road to Shady Lane. This project includes a northbound Highway 217 off-ramp improvement and boulevard design treatment of the street, such as wider sidewalks, landscaped buffer, safer street crossings and lighting.

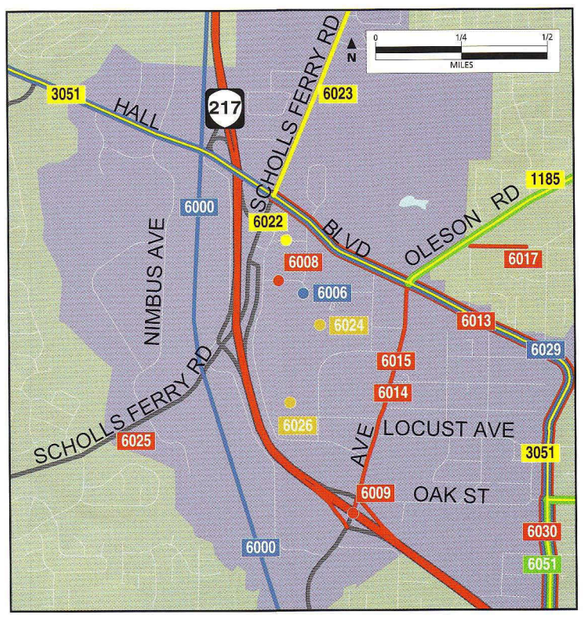
6015 Greenburg Road Improvements, North
Widen the street to five lanes from Hall Boulevard to Washington Square Road. This project includes sidewalks and bike lanes.

6019 Oak Street Improvements
Construct sidewalks and bike lanes along street from Hall Boulevard to 80th Avenue. This project also upgrades a traffic signal.

6024 Washington Square Regional Center Plan
Study to identify long-term transportation needs for motor vehicle, truck, bike, pedestrian and transit travel in the regional center.

6025 Scholls Ferry Road Transportation System Management Improvements
Implement appropriate system management strategies such as signal interconnects, signal re-timing and lane channelization to improve traffic flow from Highway 217 to 125th Avenue.

6026 Washington Square Regional Center Transportation Management Association Startup Program
Implement a transportation management association program with employers in the regional center.



2006-2010

6009 Highway 217 Ramp Improvements
Widen Greenburg Road off-ramps and install ramp meters at interchange on-ramps.

6013 Hall Boulevard Improvements
Widen the street to five lanes from Scholls Ferry Road to Locust Street. This project includes bike lanes and sidewalks.

6018 Scholls Ferry Intersection Improvement
Realign the intersection at Allen Boulevard to improve safety.

2011-2020

1185 Oleson Road Improvements
Construct bicycle lanes and sidewalks where they do not currently exist and provide lighting, better crossings, bus shelters, benches and a new traffic signal at 80th Avenue from Fanno Creek to Hall Boulevard.

6008 Washington Square Connectivity Improvements
Implement new local street connections based on regional center plan recommendations.

6010 Highway 217 Interchange Improvements
Modify on- and off-ramps at Denney Road to include lights and covered culverts.

6017 Taylors Ferry Road Extension
Construct a three-lane extension of the street from Washington Drive to Oleson Road. This project includes bikeways and sidewalks.

6022 Washington Square Regional Center Pedestrian Improvements
Retrofit streets within the regional center to make them safer and improve access to transit including Scholls Ferry Road, Hall Boulevard, Greenburg Road, Oleson Road, Cascade Avenue and intersecting neighborhood streets. This project includes better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

6023 Scholls Ferry Pedestrian Improvements
Make the street safer for pedestrians and improve access to transit from Beaverton-Hillsdale Highway to Hall Boulevard. This project includes better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

Tigard Town Center 2000-2005

6030 Hall Boulevard Improvements
Widen the street to five lanes from Locust Street to Durham Road. This project includes bike lanes and sidewalks.

6033 Walnut Street Improvements – Phase 1
Install a traffic signal at 121st Avenue.

6040 72nd Avenue Improvements
Widen the street to five lanes from 99W to Hunziker Road. This project includes a median, bike lanes and sidewalks with planter strips.

6046 Walnut Street Improvements – Phase 2
Modifies intersection at Gaarde Street.

6051 Hall Boulevard Bikeway and Pedestrian improvements
Retrofit the street from Oak Street to 99W to include bike lanes, sidewalks and better street crossings to improve safety.

6054 Highway 99W Access Management Plan
Develop an access management plan for 99W from I-5 to Durham Road.

2006-2010

3051 Hall Boulevard Pedestrian Access to Transit Improvements
Construct wider sidewalks, better crossings, bus shelters and benches to improve pedestrian access to transit from Beaverton to Tigard.

6034 Walnut Street Improvements – Phase 3
Widen the street to three lanes from Gaarde Street to 121st Avenue. This project includes bikeways and sidewalks.

6036 Bonita Road Improvements
Widen the street to four lanes from Hall Boulevard to Bangy Road. This project includes bikeways and sidewalks.

6037 Durham Road Improvements
Widen the street to five lanes from Upper Boones Ferry Road to Hall Boulevard. This project includes bikeways and sidewalks.

6041 72nd Avenue Improvements
Widen the street to five lanes from Hunziker Road to Bonita Road. This project includes center turn lane, bike lanes and sidewalks.

6042 72nd Avenue Improvements
Widen the street to five lanes from Bonita Road to Durham Road. This project includes bike lanes and sidewalks.

6044 Dartmouth Street Extension
Construct a three-lane extension of the street over Highway 217 to limit congestion on 99W in Tigard.

6045 Dartmouth Street Improvements
Widen the street to four lanes from 72nd Avenue to 68th Avenue. This project includes turn lanes, bike lanes and sidewalks.

6047 Highway 217/72nd Avenue Interchange Improvements
Complete the interchange reconstruction with additional ramps and a two-lane overcrossing extending from Hunziker Road to 72nd Avenue.

6049 Highway 99W Bikeway
Retrofit the street from Hall Boulevard to Greenburg Road to include bike lanes.

6055 Highway 99W System Management
Interconnect traffic signals along 99W from I-5 to Durham Road to limit congestion and improve traffic flow.

6056 Highway 99W Intersection Improvements
Modify the traffic signal and add turn lanes at Hall Boulevard.

2011-2020

6039 99W Improvements
Widen the highway to seven lanes from I-5 to Highway 217 with access management to limit congestion and improve traffic flow.

Washington Square regional center has become a commercial hub for the southwest part of the region. Proposed projects will improve traffic circulation and make travel in the area easier for transit riders, bicyclists and pedestrians.

6043 Upper Boones Ferry Road
Widen the street to five lanes from I-5 to Durham Road.

King City Town Center 2000-2005

6059 Beef Bend Improvements
Widen the street to three lanes from King Arthur to 131st Avenue. This project includes sidewalks.

6061 King City Sidewalks
Upgrade the street from 131st Avenue to Fischer Road to include sidewalks.

2006-2010

6062 King City Town Center Plan
Study to identify long-term transportation needs for motor vehicle, truck, bike, pedestrian and transit travel in the town center.

Tualatin Town Center 2000-2005

6066 I-5 Interchange Improvement
Widen the Nyberg Road overcrossing to four lanes and widen the southbound off-ramp from I-5 to Nyberg Road to limit congestion and improve traffic flow. This project includes sidewalks along overcrossing.

6070 Lower Boones Ferry Improvements
Retrofit the street from Boones Ferry Road to Bridgeport to include bike lanes, sidewalks and interconnected traffic signals.

6072 Tualatin Road Improvements
Widen the street from 115th Avenue to Boones Ferry Road to include sidewalks, bike lanes and safer railroad crossings.

6079 Tualatin Town Center Pedestrian Improvements
Retrofit the streets within the town center to include better sidewalks and street crossings, lighting, curb extensions, bus shelters and benches. Streets included in this project are Nyberg Road, Boones Ferry Road, Tualatin Road, Tualatin-Sherwood Road, Sagert Road and intersecting neighborhood streets.

6080 Tualatin River Pedestrian Bridge
Construct a cantilevered pedestrian and bicycle multiuse path on railroad trestle across the Tualatin River from Durham City Park to Tualatin Community Park.

6081 Nyberg Road Pedestrian and Bike Improvements
Retrofit the street from 65th Avenue to I-5 to complete sidewalks and bicycle facilities.

6082 Tualatin Freight Access Plan
Develop an interim freight circulation plan for the Tualatin industrial area to address traffic congestion and freight access issues in the Tualatin-Sherwood Road corridor.

CITIZEN VIEW

Joe Walicki
Beaverton
Alternative mode delegate
Regional Transportation Plan
Citizen Advisory Committee

"There are some good projects in the Regional Transportation Plan, especially for pedestrians and bicyclists. Citizens should care about the plan because it is the basis for future planning and for elected representatives to make decisions about how scarce transportation funds will be spent."

2006-2010

6067 Boones Ferry Road Improvements
Widens street to three lanes from Durham Road to Elligsen Road in Wilsonville. This project includes completion of sidewalks and bikeways.

6071 Tualatin-Sherwood Road Improvements
Widen the street to five lanes from 99W to Teton Avenue. This project includes bike lanes, sidewalks and traffic signal modifications at Oregon and Cipole streets.

6073 124th Avenue Improvements
Construct a new three-lane street from Tualatin Road to Tualatin-Sherwood Road to improve access to the industrial area. This project includes bikeways and sidewalks.

2011-2020

6069 Hall Boulevard Extension
Construct a two-lane extension of the street from Durham to Tualatin Road. This project crosses the Tualatin River and includes sidewalks and bikeways.

6077 Tualatin-Sherwood Road Bikeway
Retrofit the street from I-5 to Lower Boones Ferry Road to include bike lanes.

6078 Boones Ferry Road-Martinazzi Bike/Ped Path
Construct a new multiuse path for use by bicyclists and pedestrians from Boones Ferry Road to Martinazzi Street.

Wilsonville Town Center 2006-2010

6086 Kinsman Road Extension
Construct a two-lane extension of the street from Kinsman Road to Boeckman Road with sidewalks and bike lanes. This project provides an alternate north-south route parallel to I-5 for local travel needs.

6087 Kinsman Road Extension
Construct a two-lane extension of the street from Boeckman Road to Ridder Road with sidewalks and bike lanes. This project provides an alternate north-south route parallel to I-5 for local travel needs.

6090 Boeckman Road Extension
Construct a three-lane extension of the street from Boeckman Road to Grahams Ferry Road with sidewalks and bike lanes. This project increases east-west street connectivity to serve local travel needs.

6091 Boeckman Road I-5 Overcrossing
Widen the street to five lanes from Parkway Avenue to 100th Avenue. This project includes sidewalks and bike lanes.

6097 Stafford Road Safety Improvements
This project addresses safety issues from I-205 to Boeckman Road.

6101 Wilsonville Road Bikeway
Retrofit the street from Rose Lane to Willamette Way West to include bike lanes.

6102 Parkway Avenue Bikeway
Provide signs and re-stripe the street from Boeckman Road to Town Center Loop to create wide outside lanes that are shared by bikes and motor vehicles, and a center turn lane.

6105 Town Center Loop Bike and Pedestrian Improvements
Retrofit the street from Parkway Avenue to Wilsonville Road to include bike lanes and sidewalks.

Sherwood Town Center 2000-2005

6110 Highway 99W Circulation Improvements Study
Study to evaluate the potential use of frontage roads along 99W to manage access in the corridor, limit congestion and improve traffic flow.

6111 Beef Bend/Elsner Road Extension
Construct a two-lane realignment of the street from Scholls Ferry Road to 99W. This extension would be designed with limited access.

6113 Oregon Street Improvements
Widen the street to three lanes from the Tualatin-Sherwood Road to Murdock Street. This project includes a new traffic signal at Tualatin-Sherwood Road.

2011-2020

6117 Sherwood Town Center Pedestrian Improvements
Make street safer for pedestrians and improve access to transit along Sherwood Road, Oregon Street, Pacific Street and intersecting streets. This project includes better sidewalks and crossings, lighting, curb extensions, bus shelters and benches.

The plan proposes a new connection between I-5 and 99W designed to remove through traffic and related congestion that could hamper growth in Tualatin's town center.

Murray/Scholls Town Center 2000-2005

6121 Murray Boulevard Extension
Construct a four-lane extension of the street from Scholls Ferry Road to Barrows Road at Walnut Street. This project includes sidewalks and bike lanes.

2006-2010

6122 Davies Road Connection
Construct a three-lane extension of the street from Scholls Ferry Road to Barrows Road. This project includes bikeways and sidewalks.

2011-2020

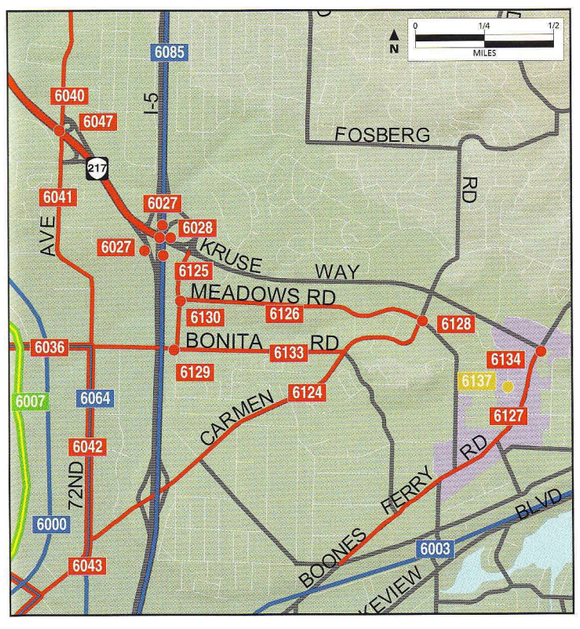
6119 Murray/Scholls Town Center Connectivity Improvements
Construct a two-lane Teal Road collector extension to Town Center Loop Road and Barrows Road, transit collectors from Murray Boulevard to Town Center Loop Road and new neighborhood route connections.

Lake Oswego Corridor 2006-2010

6124 Carmen Drive Improvements
Reconstruct and widen the street to four lanes from I-5 to Quarry Road to improve access from I-205 to the Kruse Way employment area. This project will include left turn lanes at major intersections.

6125 Bangy Road Improvements
Widen the street to four lanes from Bonita Road to Kruse Way to improve internal access and circulation within the Kruse Way employment area. This project will include left turn lanes at major intersections.

6126 Meadows Road Improvements
Widen the street to four lanes from Bangy Road to Carmen Drive to improve internal access and circulation within the Kruse Way employment area. This project will include left turn lanes at major intersections.



6127 Boones Ferry Road Improvements
Widen the street to five lanes from Kruse Way to Washington Court. This project will include sidewalks and bike lanes.

6128 Carmen Drive Intersection Improvements
Realign the intersection at Meadows Road, including a new traffic signal and turn lanes.

6129 Bangy Road Intersection Improvements
Add traffic signals and turn lanes to the intersection at Bonita Road.

6130 Bangy Road Intersection Improvements
Add traffic signals and turn lanes to the intersection at Meadows Road.

6131 Willamette River Greenway
Construct a multiuse path for bicyclists and pedestrians from Roehr Park to Tryon Creek.

Lake Grove Town Center 2000-2005

6137 Lake Grove Town Center Plan
Study to identify long-term transportation needs for motor vehicle, truck, bike, pedestrian and transit travel in the town center.

2006-2010

6133 Bonita Road Improvements
Reconstruct and widen the street to three lanes from Bangy Road to Carmen Drive. This project will include sidewalks and bike lanes.

6134 Kruse Way Intersection Improvements
Upgrade the traffic signal at the Boones Ferry Road intersection.

Regional Highways 2006-2010

6027 I-5/217 Interchange
Complete Phase 2 reconstruction of I-5/Highway 217 interchange.

6028 I-5/217 Interchange
Complete the Phase 3 reconstruction of I-5/Highway 217 interchange. Project includes new southbound Highway 217 to northbound I-5 fly-over ramp.

2006-2010

6005 Tualatin-Sherwood Connector
Construct a four-lane tollway connection from I-5 to 99W. This project would be designed to have limited access. Final alignment of the project will be determined based on recommendations from a study.

Regional Transit

The projects listed in the Regional Transit section identify major transit capital projects and other improvements that enhance rapid bus and frequent bus service. Capital improvements for rapid bus routes and stations would include transit preferential treatments such as queue-by-pass lanes and signal preemption, park-and-ride facilities, possible off-street station areas and station amenities such as schedule information, ticket machines, lighting, benches, covered shelters and bicycle parking. Capital improvements for frequent bus routes and stations would include transit preferential treatments such as signal preemption, and passenger amenities such as schedule information, covered shelters, curb extensions, lighting and benches. (See Transit Service Strategy fact sheet for additional information on transit service.)

2000-2020

6000 Beaverton-Wilsonville Commuter Rail
Provide new peak-hour commuter rail service from Wilsonville to Beaverton.

6002 Wilsonville-Salem Commuter Rail Extension
Study to extend commuter rail service from Wilsonville to Salem using existing railroad tracks.

6003 Tualatin-Portland Commuter Rail Extension
Study to extend commuter rail service from Tualatin to Union Station via Lake Oswego and Milwaukie. This project uses existing railroad tracks.

6006 Transit Station and Park-and-Ride Lot Upgrades
Construct, expand and/or upgrade transit stations and park-and-ride lots throughout the subarea, including Tualatin, Washington Square, Sherwood, Lake Oswego, Lake Grove, King City, Murray/Scholls and Wilsonville.

2000-2005

6064 Hall Boulevard Frequent Bus
Provide improvements that enhance frequent bus service between Tualatin, Tigard, Beaverton and Sunset transit centers.

2006-2010

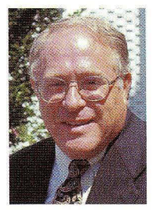
6029 Hall/Kruse Frequent Bus
Provide improvements that enhance frequent bus service between Beaverton, Washington Square, Tigard and Lake Oswego transit centers.

Regional Trails 2000-2005

6007 Fanno Creek Greenway
Initiate planning and preliminary engineering to extend the greenway from Tigard to Tualatin.

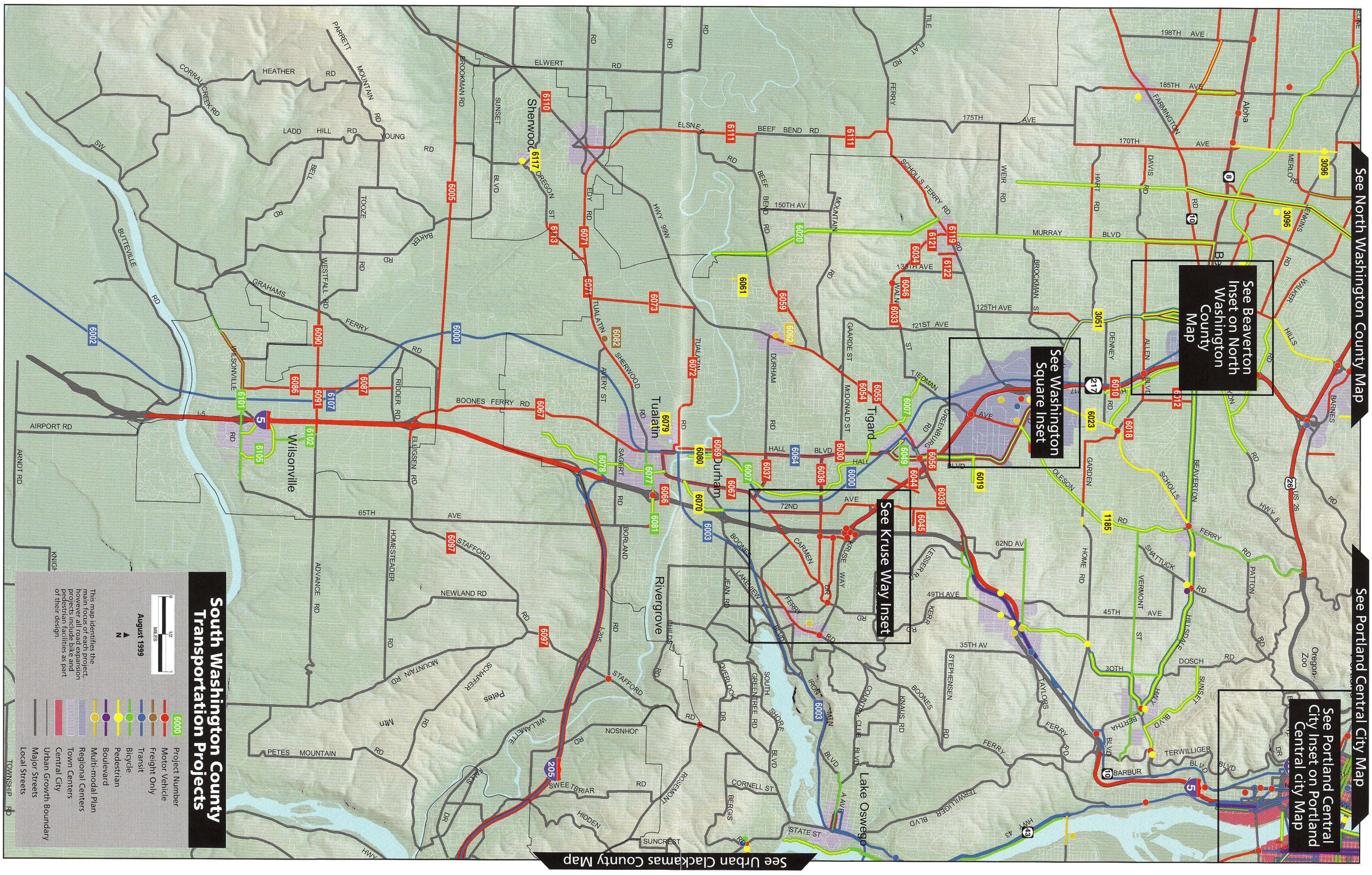
6020 Powerline Trail Corridor
Plan, design and construct a multiuse path from Farmington Road to the lower Tualatin Greenway.

COUNCILOR VIEW



Bill Atherton
Metro Council
District 2

"Please know this is a *draft* plan. Serious blank spots, such as paying to maintain existing facilities (let alone build new ones), need to be filled in."



open for list of corresponding project descriptions

- Make capacity improvements to I-5/Nyberg Road interchange and Tualatin-Sherwood Road to maintain adequate access to and from the Tualatin industrial area.

- Conduct a more detailed I-5 South corridor study to identify future travel demand from outside the region and consider high-capacity transit solutions to address travel demand in the corridor. Support intercity-transit service to the extent that it benefits the I-5 corridor.

- Implement system management strategies along 99W and new street connections and capacity improvements to streets parallel to 99W to improve local circulation and limit congestion on 99W, including extension of Hall Boulevard across the Tualatin River.

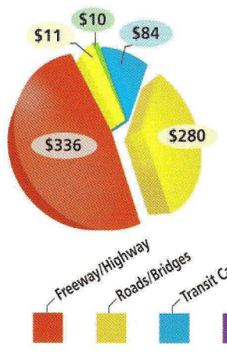
COUNCILOR VIEW

Jon Kvistad
Metro Council
District 3

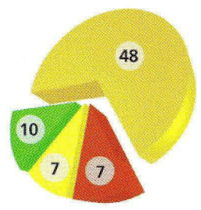
"Our biggest challenge is to find the best places to spend the relatively little amount of transportation money we have. We must be fiscally responsible while looking for creative solutions to the overwhelming problems we face in Washington County and throughout the region."

Type of improvements by:

Cost (in millions)
(Costs for improvements that might be recommended as a result of future studies are not included.)



Number of projects
(Does not reflect transit capital projects.)



Linking land use and transportation

The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision of where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international goods movement.

The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: retrofits of major streets for walking, biking and transit; new street connections and capacity improvements; new multiuse paths and better bike-pedestrian connections to existing paths; and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including I-5 and Highway 217 in South Washington County.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the Transportation Department at trans@metro-region.org

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site:
www.metro-region.org

Printed on recycled-content paper.
1999-10340-TRN • 99295

6

INSIDE

Road expansion
I-5 to 99W connector
Highway 217
I-5
New street connections

Transit
Expanded transit service, including commuter rail
Pedestrian access
Bus shelters and benches
Employee commuting programs

"Boulevard" retrofits
Washington Square
Sherwood
Tualatin
Tigard
Wilsonville

Bicycle and pedestrian facilities
Wider sidewalks
Street lighting and landscaped buffers
Bike lanes
Multiuse paths

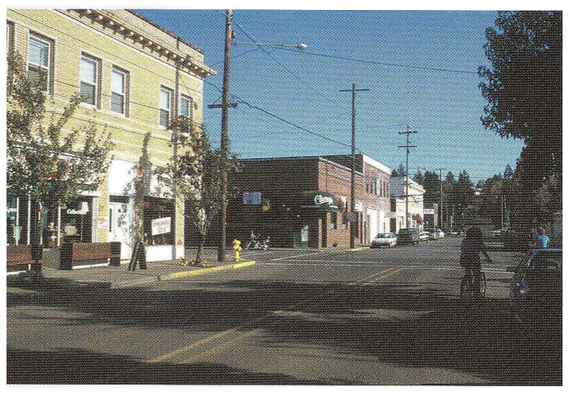
METRO
Regional Services
Creating livable communities

Getting There
South Washington County

Update on Regional Transportation Plan Projects

FALL 1999

A close-up look at the 20-year regional transportation blueprint for South Washington County



Proposed projects will make streets safer for pedestrians and improve access from growing neighborhoods to the historic Main Street in the Sherwood town center.

Planned transportation projects

More than 70 transportation projects and programs have been identified to serve the South Washington County subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea. The projects are grouped by proposed construction date; actual timing depends on the availability of funding.

- Conduct a more detailed Highway 217 corridor study to identify future transit and road-related improvements and construction phasing to address travel demand in the corridor, including possible express lanes, high-occupancy vehicle lanes and/or priced lanes. The study should address the competing needs of serving local trips to the Washington Square and Beaverton regional centers and longer trips through the corridor. *See North Washington County fact sheet for improvements in this corridor.*

- Make capacity improvements to streets parallel to Highway 217, including new over-crossings in the vicinity of Washington Square and Tigard, to better serve local travel and preserve regional mobility along the corridor.

- Improve transit to the Washington Square area, including commuter rail from Wilsonville to Beaverton with possible extensions to Salem and downtown Portland via Lake Oswego and Milwaukie; provide frequent bus improvements along Hall Boulevard from Tualatin to Beaverton.

- Retrofit major streets in regional and town centers with "boulevard" designs, including Hall Boulevard and Greenburg Road in Washington Square, Sherwood Road and Oregon Street in Sherwood and Wilsonville Road and Town Center Loop in Wilsonville. Boulevard designs include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

- Conduct a corridor study to further examine phasing implementation of the I-5 to 99W connector to the north or south of Sherwood to improve regional access from I-5 to 99W. Phasing should reflect conditions along Tualatin-Sherwood Road and the impacts of congestion on Tualatin town center and adjacent industrial area.

turn to back page

Priority projects by community

Beaverton Regional Center 2000-2005

3019 Beaverton Connectivity Improvements 1
Complete several downtown Beaverton street connections to improve access and circulation within the regional center by all modes of travel.

3021 Jenkins Road Improvement
Widen the street to three lanes from Cedar Hills Boulevard to Murray Boulevard. Project will also include sidewalks and bike lanes.

3023 Highway 217 Interchange Improvements
Construct a new frontage road adjacent to the highway from Walker Road to Tualatin Valley Highway, braided ramps at Tualatin Valley Highway and other ramp improvements at Beaverton-Hillsdale Highway, Walker Road and Allen Boulevard.

3026 Millikan Extension
Construct a new three-lane extension of Millikan Way to connect to Cedar Hills Boulevard at Henry Street with sidewalks and bike lanes.

3027 Davis Improvements
Widen the street to three lanes from 160th Avenue to 170th Avenue, and include sidewalks and bike lanes to improve safety.

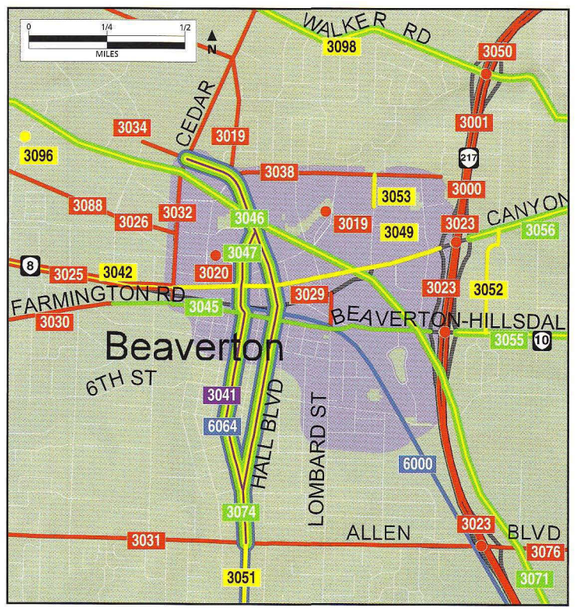
3028 Hart Improvements
Widen the street to three lanes from Murray Boulevard to 165th Avenue. Project also will include sidewalks, bike lanes and a traffic signal at 155th Avenue to improve safety.

3029 Lombard Improvements
Realign the street and add turn lanes from Broadway Avenue to Farmington Road to improve access to the regional center. This project also will include sidewalks.

3030 Farmington Road Improvements
Widen the street to five lanes from Hocken Avenue to Murray Boulevard. This project also will include sidewalks, bike lanes, an additional left turn lane at Murray and intersection improvements at Hocken to improve safety.

3033 125th Avenue Extension
Construct a two-lane extension of the street with turn lanes from Brockman Street to Hall Boulevard. This project also will include sidewalks and bike lanes to improve safety.

3034 Hall Boulevard Extension
Extend Hall Boulevard from Cedar Hills Boulevard to Hocken/Terman Avenue. This project is a three-lane extension that includes sidewalks and bike lanes.



3041 Hall/Watson Improvements
Retrofit the street with a boulevard design from Allen Boulevard to Cedar Hills Boulevard, including wider sidewalks, curb extensions and safer street crossings.

3046 Hall Boulevard Bikeway
Retrofit bike lanes on the existing street from Beaverton-Hillsdale Highway to Cedar Hills Boulevard.

3047 Watson Avenue Bikeway
Retrofit bike lanes on the existing street from Beaverton-Hillsdale Highway to Hall Boulevard.

3049 Downtown Beaverton Pedestrian Improvements
Make the street safer for pedestrians within the regional center along Hocken Avenue, Cabot Street, 110th Avenue, 113th Avenue and Tualatin Valley Highway. This project includes wider sidewalks, bike lanes, lighting and safer crossings.

3052 110th Avenue Pedestrian Improvements
Complete the sidewalks where they are missing from Beaverton-Hillsdale Highway to Canyon Road.

3053 117th Avenue Pedestrian Improvements
Make the street safer for pedestrians and improve access to light rail at Center Street with wider sidewalks, lighting and safer street crossings.

3063 Murray Boulevard Improvements
Interconnect the traffic signals from Tualatin Valley Highway to Allen Boulevard to limit traffic congestion and improve traffic flow in the corridor.

2006-2010

3020 Beaverton Connectivity Improvements 2
Complete several downtown Beaverton street connections to improve access and circulation within the regional center by all modes of travel.

3022 Jenkins Road Improvement
Widen the street to five lanes from Murray Boulevard to 158th Avenue. This project also will include sidewalks and bike lanes.

3024 Cedar Hills Interchange Improvement
Install an eastbound US 26 traffic signal and reconfigure roadway to improve traffic flow.

3032 Cedar Hills Boulevard Improvements
Widen the street to five lanes from Farmington Road to Walker Road. This project also will include sidewalks and bike lanes.

3042 Tualatin Valley Highway/ Canyon Road Boulevard Improvements
Retrofit the street with a boulevard design from Murray Boulevard to Highway 217, including wider sidewalks, curb extensions, safer street crossings, bus shelters and benches.

3045 Farmington Road Bikeway
Retrofit bike lanes on existing street from Hocken Avenue to Highway 217.

3051 Hall Boulevard/Watson Pedestrian-to-Transit Improvements
Make the street safer for pedestrians and improve access to transit within the regional center from Cedar Hills Boulevard to Tigard. This project includes wider sidewalks, lighting and better crossings.

2011-2020

3031 Allen Boulevard Improvements
Widen the street to five lanes from Highway 217 to Murray Boulevard. The project will include sidewalks and bike lanes.

3036 158th/Merlo Road Improvements
Widen the street to five lanes from 170th Avenue to Walker Road. The project will include sidewalks and bike lanes.

3038 Center Street Improvements
Widen street to three lanes from Hall Boulevard to 113th Avenue. Project also will include sidewalks and bike lanes.

3054 Murray Boulevard Bike/ Pedestrian Improvements
Make the street safer for bicycles and pedestrians from Scholls Ferry Road to Tualatin Valley Highway by constructing pedestrian refuges and better crossings at intersection and filling in gaps in the bicycle network.

3055 Beaverton-Hillsdale Highway Pedestrian and Bicycle Improvements
Make the street safer for bicyclists and pedestrians and improve access to transit from 65th Avenue to Highway 217, with bike lanes, wider sidewalks, better crossings, bus shelters and benches.

3056 Canyon Road/Tualatin Valley Highway Bike and Pedestrian Improvements
Make the street safer for bicyclists and pedestrians from 91st Avenue to Highway 217 with bike lanes, sidewalks and better crossings.

Beaverton Corridor 2000-2005

3074 Hall Boulevard Bikeway
Complete the regional bicycle system from Farmington Road to Highway 217 by constructing bike lanes from 12th Avenue to south of Allen Boulevard.

3075 Cedar Hills Boulevard Improvements
Improve pedestrian and bicycle safety and access to transit with wider sidewalks, lighting, safer street crossings, bike lanes, bus shelters and benches.

2006-2010

3067 185th Avenue Improvements
Widen the street to five lanes from West View High School to Springville Road. This project will include sidewalks and bike lanes.

2011-2020

3076 Allen Boulevard Improvements
Widen the street to five lanes from Highway 217 to Western Avenue. This project will include sidewalks and bike lanes.

Westside Station Community 2000-2005

3085 170th Avenue Improvement
Widen the street to three lanes from Rigert Road to Blanton and to five lanes from Blanton to Alexander Road with sidewalks and bike lanes to improve safety.

3094 Cornell Road Bikeway
Retrofit bike lanes on existing street from Elam Young Parkway to Ray Circle.

3095 170th Avenue Pedestrian Improvements
Improve pedestrian safety and access to light rail transit by completing missing sidewalks from Tualatin Valley Highway to Elmonica light rail station.

3096 Pedestrian Access to MAX
Improve pedestrian safety and access to light rail transit with wider sidewalks, lighting and better crossings in areas adjacent to light rail stations.

2006-2010

3091 Quatama Street Improvements
Widen the street to three lanes from 205th Avenue to 227th Avenue and extend the street south to Baseline Road at 227th Avenue. This project will include sidewalks and bike lanes.

3107 SW 205th Avenue Improvements
Widen the street to five lanes from light rail to Baseline Road. This project will include a new bridge, sidewalks and bike lanes.

2011-2020

3086 158th Avenue Improvements
Widen the street from Walker Road to Jenkins Road to include bike lanes.

3087 Millikan Way Improvements
Widen the street to five lanes from Tualatin Valley Highway to 141st Avenue. This project will include sidewalks and bike lanes.

3088 Millikan Way Improvements
Widen the street to three lanes from 141st Avenue to Hocken Road. This project will include sidewalks and bike lanes.

3093 Murray Boulevard Bikeway
Retrofit bike lanes on existing street from Farmington Road to Tualatin Valley Highway.

3098 Walker Road Bike/Pedestrian Improvements
Retrofit bike lanes and sidewalks on existing street from Canyon Road to Cedar Hills Boulevard.

Hillsboro Regional Center 2000-2005

3102 Baseline Road Improvements
Widen the street to three lanes from 201st Avenue to 231st Avenue. This project also will include sidewalks and bike lanes to improve safety.

3104 NW Aloclek Drive Extension
Construct a three-lane extension of the street from Amberwood Drive to Cornelius Pass Road. This project will also include sidewalks and bike lanes.

3105 East/West Collector
Construct a new three-lane street from 185th Avenue to 231st Avenue. This project also will include sidewalks and bike lanes.

3106 229th/231st/234th Avenue Connector
Construct a new three-lane street from Century High School to light rail transit. This project will also include a new bridge, sidewalks, bike lanes and widening 231st Avenue to three lanes.

3108 Baseline Road Improvements
Widen the street to three lanes from Lisa Avenue to 201st Avenue. This project also will include sidewalks and bike lanes to improve safety.

3110 Jackson School Road Improvements
Reconfigure the intersection at US 26 to improve safety. This project restricts turn movements and cross-intersection travel.

3111 First Avenue Improvements
Make the street safer for pedestrians from Grant Street to Glencoe High School, with wider sidewalks, better street crossings and transit improvements.

3113 10th Avenue Improvements
Construct a new right turn lane and widen sidewalks in light rail station area from Main Street to Baseline Road.

3114 NE 28th Avenue Improvements
Widen the street to three lanes from Grant Street to Main Street. The project also improves safety and access to light rail with bike lanes, wider sidewalks, better lighting, safer crossings and landscaped buffers.

3119 Tualatin Valley Highway Improvements
Make boulevard retrofit of street within the regional center from Shute Park to 10th Avenue including wider sidewalks, curb extensions and safer street crossings.

3122 St. Mary's Urban Reserves Future Street Plan
Study the area to define a future street plan for the urban reserve areas located south of Tualatin Valley Highway in Washington County.

3123 Hillsboro Regional Center Transportation Management Association Startup
Implement a transportation management association program with employers in the regional center.

3124 Tualatin Valley Highway System Management
Interconnect the traffic signals from 209th Avenue to 10th Avenue in Hillsboro to limit traffic congestion and improve traffic flow in the corridor.

3127 Hillsboro Regional Center Pedestrian Improvements
Improve pedestrian safety and access to transit within the regional center with wider sidewalks, lighting, safer street crossings, bus shelters and benches.

2006-2010

3112 First Avenue Improvements
Reconfigure First Avenue to provide protected left turn lanes and update signal phasing at Oak Street and Baseline Street.

3115 10th Avenue Improvements
Construct third northbound travel lane from Washington Street to Main Street to improve traffic flow and relieve vehicle queuing at light rail crossing.

3116 10th Avenue Improvements
Construct additional northbound turn lane from Walnut Street to Baseline Street and reconfigure westbound Baseline Street approach to 10th Avenue to improve safety.

3128 Cornell Road Improvements
Widen the street to five lanes from Arrington Road to Main Street. This project will include sidewalks and bike lanes.

Sunset Industrial Area 2000-2005

3130 Evergreen Road Improvements
Widen the street to three lanes from Glencoe Road to 15th Avenue. This project also will include sidewalks and bike lanes to improve safety.

3132 Cornelius Pass Road Improvements
Widen the street to five lanes from US 26 to West Union Road. This project also will include sidewalks and bike lanes to improve safety.

3133 Cornelius Pass Road Interchange Improvement
Add capacity to the interchange and northbound Cornelius Pass Road to improve traffic flow and freight access to US 30.

3134 Cornelius Pass Road Improvements
Widen the street to five lanes from Tualatin Valley Highway to Baseline Road. This project also will include sidewalks, bike lanes and traffic signals to improve safety.

3135 Cornelius Pass Road Improvements
Widen the street to five lanes from Baseline Road to Aloclek Drive. This project also will include sidewalks and bike lanes to improve safety.

3136 Brookwood/Parkway Avenue Improvements
Widen the street to three lanes from Baseline Road to Airport Road and five lanes from Cornell Road to Airport Road. This project also will include sidewalks and bike lanes to improve safety.

3137 Brookwood Avenue Improvements
Widen the street to three lanes from Tualatin Valley Highway to Baseline Road. This project also will include sidewalks and bike lanes to improve safety.

3138 Murray Light Rail Overcrossing and Pedestrian Improvements
Widen the existing light rail crossing to four lanes. This project also will include bike lanes, wider sidewalks, lighting, better crossings and landscaped buffers.

3142 Johnson Street Extension
Construct a three-lane extension of the street from 170th Avenue to 209th Avenue with sidewalks and bike lanes.

3150 Cornell Road System Management
Interconnect traffic signals from 185th Avenue to 25th Avenue to limit traffic congestion and improve traffic flow in the corridor.

2006-2010

3131 Evergreen Road Improvements
Widen the street to five lanes from 15th Avenue to 253rd Avenue. This project also will include sidewalks and bike lanes.

3140 229th Avenue Extension
Construct a three-lane extension of street from Wagon Way to West Union Road. This project also will include sidewalks and bike lanes.

3141 170th/173rd Improvements
Widen the street to three lanes from Baseline Road to Walker Road. This project also will include sidewalks and bike lanes.

3143 Walker Road Improvements
Widen the street to five lanes from Cedar Hills Boulevard to 158th Avenue. This project also will include sidewalks and bike lanes.

3144 Walker Road Improvements
Widen the street to five lanes from Amberglen Parkway to 158th Avenue. This project also will include sidewalks and bike lanes.

3147 25th Avenue Improvements
Widen the street to three lanes to include bike lanes to improve safety.

2011-2020

3139 US 26 Overcrossing
Construct a new crossing of US 26 from Bennett Avenue to Wagon Way.

3218 Cornelius Pass Road Extension
Construct a three-lane extension from Tualatin Valley Highway to 209th Avenue. This project will include sidewalks and bike lanes.

Forest Grove Town Center 2000-2005

3154 Forest Grove Northern Arterial
Construct a new three-lane arterial connection from Quince Street to Highway 47. This project also will include sidewalks and bike lanes to improve safety.

3162 Tualatin Valley Highway (Pacific/19th) Bikeway
Retrofit bike lanes on existing street from Hawthorne Street to E Street.

3163 Forest Grove Town Center Pedestrian Improvements
Improve pedestrian safety and access to transit within the town center with wider sidewalks, lighting, crossings, bus shelters and benches.

2006-2010

3153 David Hill Road Connection
Construct a new two-lane street from Thatcher Road to Sunset Drive to link the northwest sector of the city to Highway 47.

3157 Sunset Drive Improvements
Widen the street to three lanes from University Avenue to Beal Road. This project also will include sidewalks, bike lanes and a new traffic signal.

3158 Forest Grove to US 26 Improvements
Realign Martin Road and Cornelius-Schefflin Road with widened paved shoulders to improve safety.

3159 Highway 8 Improvements
Retrofit the street with a boulevard design from Quince Street to B Street including wider sidewalks, curb extensions, safer street crossings, bus shelters and benches.

3160 Verboort Road Intersection Improvements
Signalize intersection at Highway 47 to improve safety.

2011-2020

3156 Forest Grove Connectivity Improvements
Construct two-lane collector streets parallel to Tualatin Valley Highway to improve local circulation and access within the town center.

Sunset Town Center 2000-2005

3177 Cedar Hills Boulevard/Barnes Road Intersection Improvement
Reconstruct intersection and approaches to add new travel lanes and turn lanes and upgrades traffic signals.

2006-2010

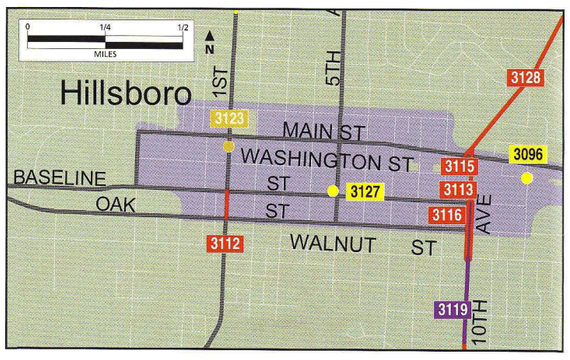
3178 Westhaven Road Pathways
Improve access to Sunset transit center by constructing off-road pathway between Morrison Street to Springcrest Road west of 95th Avenue.

2011-2020

3176 90th/98th Avenue Extension
Construct a two-lane extension of the street with bicycle and pedestrian facilities from Leahy Road to Barnes Road.

Cedar Mill Town Center 2000-2005

3183 Cornell Road Improvements
Widen the street to three lanes from 143rd Avenue to Saltzman Road. This project will also include sidewalks and bike lanes.



3185 Barnes Road Improvement
Widen the street to five lanes from Saltzman Road to 119th Avenue. This project also will include sidewalks and bike lanes.

3186 Murray Boulevard Improvements
Widen the street to five lanes from Science Park Drive to Cornell Road. This project also will include sidewalks and bike lanes.

3193 Cornell Road Boulevard Treatment
Retrofit the street with boulevard design, including wider sidewalks, raised medians, landscaping, street furniture, curb extensions and safer street crossings.

2006-2010

3190 143rd Avenue Improvements
Widen the street to three lanes from Cornell Road to West Union Road. This project will also include sidewalks and bike lanes.

2011-2020

3181 Cornell Road Improvements
Widen the street to five lanes from US 26 to 143rd Avenue. This project will also include sidewalks and bike lanes.

3184 Cornell Road Improvements
Widen the street to three lanes from Saltzman Road to Miller Road. This project will include safer street crossings and bus shelters.

3187 US 26 Overcrossing
Construct a new multi-modal crossing linking 143rd Avenue near Cornell Road with Meadow Drive to improve local circulation across US 26.

3188 Saltzman Road Improvements
Widen the street to three lanes from Cornell Road to Burton Street. This project will include sidewalks and bike lanes.

3191 Cornell Road Intersection Improvements
Modifiy the intersections at Saltzman Road, Barnes Road, Murray Boulevard and Trail Avenue to make them safer for all modes.

Bethany Town Center 2000-2005

3197 Bethany Boulevard Improvements – Phase 1
Widen the street to three lanes from Bronson Road to West Union Road. This project also will include sidewalks, bike lanes and a soundwall.

2011-2020

3198 Bethany Boulevard Improvements – Phase 2
Widen the street to five lanes from Bronson Road to West Union Road. This project will include sidewalks and bike lanes.

Farmington Town Center 2000-2005

3222 185th Avenue Bike and Pedestrian Improvements
Construct bike lanes and sidewalks along one side of the street from Kinnaman Road to Blanton Street.

2006-2010

3216 185th Avenue Improvements
Widen the street to three lanes from Tualatin Valley Highway to Bany Road. This project will include sidewalks and bike lanes.

3217 Farmington Road Improvements
Widen the street to three lanes from 185th Avenue to 209th Avenue. This project also will include sidewalks and bike lanes.

2011-2020

3214 Farmington Road Improvements
Widen the street to five lanes from 172nd Avenue to 185th Avenue. This project also will include sidewalks and bike lanes.

3215 Kinnaman Road Improvements
Widen the street to three lanes from Farmington Road to 209th Avenue. This project also will include sidewalks and bike lanes.

3220 Farmington Town Center Pedestrian Improvements
Improve pedestrian safety and access to transit within town center with wider sidewalks, better crossings, lighting, bus shelters and benches.

Tanasbourne Town Center 2006-2010

3204 Cornell Road Improvements
Widen the street to five lanes from 179th Avenue to Bethany Boulevard. This project also will include sidewalks and bike lanes.

2011-2020

3205 173rd/174th Undercrossing
Construct a new two-lane undercrossing from Cornell Road to Bronson Road. This project also will include sidewalks and bike lanes.

3208 Tanasbourne Town Center Pedestrian Improvements
Improve pedestrian safety and access to transit within the town center with wider sidewalks, safer street crossings, lighting, bus shelters and benches.

3210 185th Avenue Pedestrian Improvements
Improve pedestrian safety and access to transit from Westview High School to West Union Road, filling in gaps in the sidewalk system and constructing wider sidewalks, better crossings, lighting, bus shelters and benches.

Cornelius Main Street 2000-2005

3167 Highway 8 Intersection Improvement
Install traffic signals at 19th/20th Avenue and reconfigure intersection to improve safety.

3169 Main Street Improvements
Retrofit the street with a boulevard design from 10th Avenue to 19th Avenue, including wider sidewalks, curb extensions and safer street crossings.

2006-2010

3166 Highway 8 Intersection Improvement
Widen the intersection at 10th Avenue to support freight traffic.

3168 Baseline Street/Adair Street Couplet Intersection Improvements
Install a traffic signal at the intersection of 14th Avenue to improve safety.

3170 West Couplet Enhancement
Retrofit the street with a boulevard design from First Avenue to 10th Avenue, including wider sidewalks, curb extensions, safer street crossings, bus shelters and benches.

Regional Highways 2000-2005

3006 US 26 Improvements
Complete Phase 2 and 3 of US 26 improvements from Camelot Court to Sylvan Road by adding third through lane and collector distributor system.

3016 Washington County Traffic Management Improvements
Purchase hardware for new traffic operations center to serve Washington County and conduct needs analysis.

3062 Tualatin Valley Highway System Management
Interconnect traffic signals from Beaverton to Hillsboro to tie into Washington County signal system.

3121 Tualatin Valley Highway Refinement Planning
Refinement planning to identify phased strategy to implement a limited-access facility in this corridor. Study area is from Cedar Hills Boulevard to Minter Bridge.

2006-2010

3007 US 26 Improvements
Widen eastbound US 26 to three lanes from Highway 217 to Camelot Court.

3008 US 26 Improvements
Widen US 26 to three lanes in each direction from Highway 217 to Murray Boulevard.

3060 Tualatin Valley Highway Access Management
Implement access management strategies from 117th Avenue to Hillsboro.

3061 Tualatin Valley Highway System Management
Interconnect traffic signals from 209th Avenue to Highway 217 to limit congestion and improve traffic flow.

2011-2020

3000 Highway 217 Improvements
Add a north and southbound express lane and/or HOV lane from I-5 to US 26.

3001 Highway 217 Improvements
Widen the northbound Highway 217 to three lanes from Tualatin Valley Highway to US 26 with ramp improvements.

3002 US 26/217 Interchange Improvement
Reconfigure the interchange with braided ramps.

3009 US 26 Improvements
Widen the freeway to six lanes from Murray Boulevard to 185th Avenue with possible high-occupancy vehicle lane.

3025 Tualatin Valley Highway Improvements
Widen the highway to seven lanes from Cedar Hills Boulevard to Murray Boulevard, six lanes with limited access from Murray Boulevard to Brookwood Road and five lanes from Brookwood Road to 10th Avenue to limit congestion.

Regional Trails 2000-2005

3012 Rock Creek Greenway Multiuse Path
Construct a multiuse path along Rock Creek Greenway. This project includes several bridges and street crossing improvements in addition to construction of the multiuse path.

3013 Bronson Creek Greenway Study
Study to determine the feasibility of new multiuse trail along Bronson Creek Greenway.

3014 Powerline Beaverton Trail Corridor Study
Complete planning, design and construction of new multiuse trail that connects Bronson Creek Greenway to Farmington Road.

3015 Beaverton Creek Greenway Study
Study to determine the feasibility of new multiuse trail along Beaverton Creek Greenway.

3071 Fanno Creek Greenway Multiuse Path
Construct a multiuse path along Fanno Creek Greenway from Allen Boulevard to Denney Road east of Highway 217 and from Highway 217 east to Allen Boulevard near the Scholls Ferry Road intersection.

3072 Beaverton Powerline Multiuse Trail
Construct a new multiuse trail for bicyclists and pedestrians from Farmington Road to Scholls Ferry Road.

3092 Powerline Rock Creek Multiuse Trail
Construct a multiuse path for bicyclists and pedestrians just north of US 26.

3194 Cedar Mill Multi-Use Path
Construct a multiuse path north of Cornell Road from 113th Avenue to 119th Avenue and help fill the gap between existing bicycle and pedestrian facilities.

Regional Transit

The projects listed in the Regional Transit section identify major transit capital projects and other improvements that enhance rapid bus and frequent bus service. Capital improvements for rapid bus routes and stations would include transit preferential treatments such as queue-by-pass lanes and signal preemption, park-and-ride facilities, possible off-street station areas and station amenities such as schedule information, ticket machines, lighting, benches, covered shelters and bicycle parking. Capital improvements for frequent bus routes and stations would include transit preferential treatments such as signal preemption, and passenger amenities such as schedule information, covered shelters, curb extensions, lighting, and benches. (See Transit Service Strategy fact sheet for additional information on transit service.)

2000-2020

3018 Transit Center and Park-and-Ride Upgrades
Construct, expand and/or upgrade the transit stations and park-and-ride lots throughout the subarea, including Cornelius, Westside MAX stations, Forest Grove, Beaverton, Hillsboro, Aloha and Cedar Mill transit centers.

3164 Tualatin Valley Highway Frequent Bus
Provide improvements that enhance frequent bus service between Forest Grove and Hillsdale via Tualatin Valley Highway and Beaverton-Hillsdale Highway.

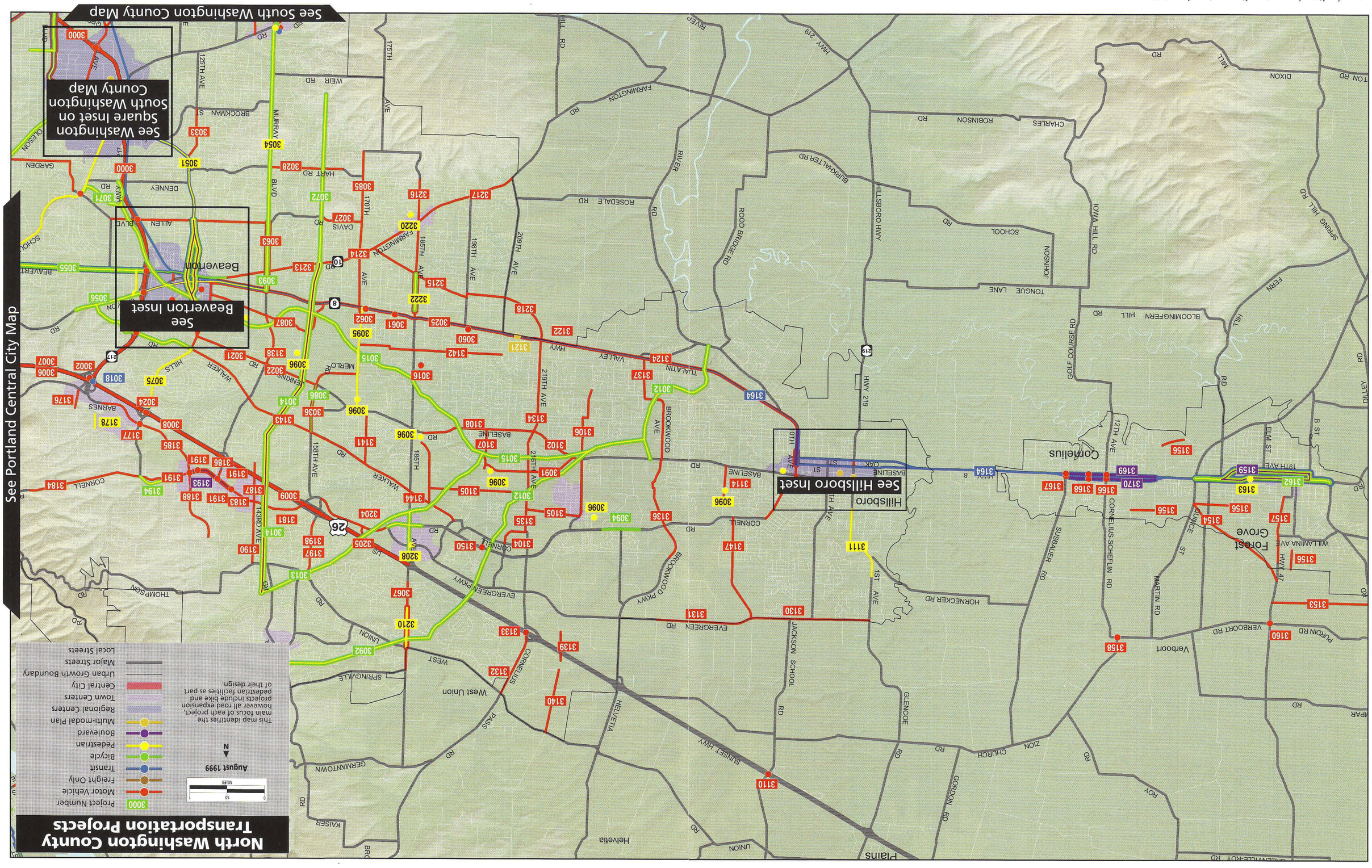
6000 Beaverton-Wilsonville Commuter Rail
Provide new peak-hour commuter rail service between Wilsonville to Beaverton.

6064 Hall Boulevard Frequent bus
Provide improvements that enhance frequent bus service between Tualatin, Tigard, Beaverton and Sunset transit centers.

COUNCILOR VIEW

Jon Kvistad
District 3
Metro Council

"Our biggest challenge is to find the best places to spend the relatively little amount of transportation money we have. We must be fiscally responsible while looking for creative solutions to the overwhelming problems we face in Washington County and throughout the region."



and Beaverton regional centers and longer trips through the corridor.

- Make capacity improvements to streets parallel to Highway 217 including new overcrossings in the vicinity of Washington Square and Tigard, to better serve local travel and preserve regional mobility along the corridor.

- Make capacity improvements to Cornell and Walker roads to maintain adequate access to and from the Sunset industrial area via US 26 and Highway 217.

- Implement transit improvements, including commuter rail from Wilsonville to Beaverton, increased frequencies on Westside MAX and improvements that enhance frequent bus service on Beaverton-Hillsdale Highway, Tualatin Valley Highway, Hall Boulevard and Cedar Hills Boulevard.

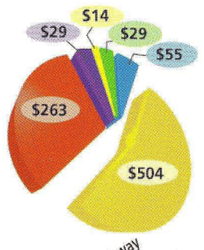
COUNCILOR VIEW

Susan McLain
Metro Council
District 4

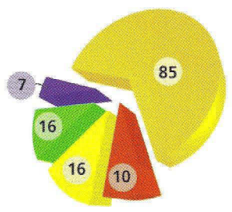
"We are looking out five, 10, even 20 years to plan for a region that is livable. Our goal is to create a balanced transportation system that serves everyone. That means protecting our roadways while searching for alternative forms of transportation that really work for people."

Type of improvements by:

Cost (in millions)
(Costs for improvements that might be recommended as a result of future studies are not included.)



Number of projects
(Does not reflect transit capital projects.)



Freeway/Highway
Roads/Bridges
Transit Capital
Boulevards
Bicycle
Pedestrian
Other

Linking land use and transportation

The 2040 Growth Concept

Adopted in 1995, the 2040 Growth Concept is a 50-year vision of where expected growth should occur in the Portland metropolitan region. This vision is based on using urban land wisely and directs development to centers and along existing major transportation corridors. It relies on a balanced transportation system that accommodates walking, bicycling, driving, using transit and national and international freight movement.

The Regional Transportation Plan

The Regional Transportation Plan sets a regional framework that coordinates city, county, Tri-Met, Oregon Department of Transportation and Port of Portland transportation plans. It identifies specific transportation projects and programs needed to improve our choices for travel and create livable communities throughout the region as envisioned in the 2040 Growth Concept. It also identifies a financial strategy to achieve this vision. Examples of the types of projects included in the plan are: retrofits of major streets for walking, biking and transit; new street connections and capacity improvements; new multiuse paths and better bike-pedestrian connections to existing paths; and expanded transit service to destinations throughout the region.

In addition, the Regional Transportation Plan identifies other projects that primarily focus on improving regional mobility and access to industrial areas and facilities where goods move from one transportation mode to another. These improvements are primarily focused along major highway corridors throughout the region, including US 26, Highway 217 and Tualatin Valley Highway in North Washington County.

For more info

To learn more about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900, or TDD, (503) 797-1804. You can also send e-mail to the Transportation Department at trans@metro-region.org

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site:
www.metro-region.org

Printed on recycled-content paper.
1999-10458-TRN • 99300

7

INSIDE

METRO
Regional Services
Creating livable communities

Getting There
North Washington County

Update on Regional Transportation Plan Projects

FALL 1999

A close-up look at the 20-year regional transportation blueprint for North Washington County

The mix of housing, shops and streets that are pleasant to walk on make the development at Orenco a model for other light rail stations in the region.

Planned transportation projects

More than 130 transportation projects and programs have been identified to serve the North Washington County subarea during the next 20 years. These projects are considered to be the most critical in terms of serving planned growth in this subarea. The projects are grouped by proposed construction date; actual timing depends on the availability of funding.

- Develop a phased strategy to widen Tualatin Valley Highway as a predominantly limited-access, divided facility to serve as the primary connection between Beaverton and Hillsboro. Develop and adopt an access management plan that supports planned improvements in the corridor as part of the Beaverton, Hillsboro and Washington County transportation system plans.

- Make capacity improvements to streets parallel to Tualatin Valley Highway, including Farmington, Baseline and Walker roads, to better serve local travel along the corridor.

- Phase improvements to widen US 26 to six lanes from the Sylvan interchange to 185th Avenue, including ramp improvements, to maintain adequate access to the central city and the Sunset industrial area.

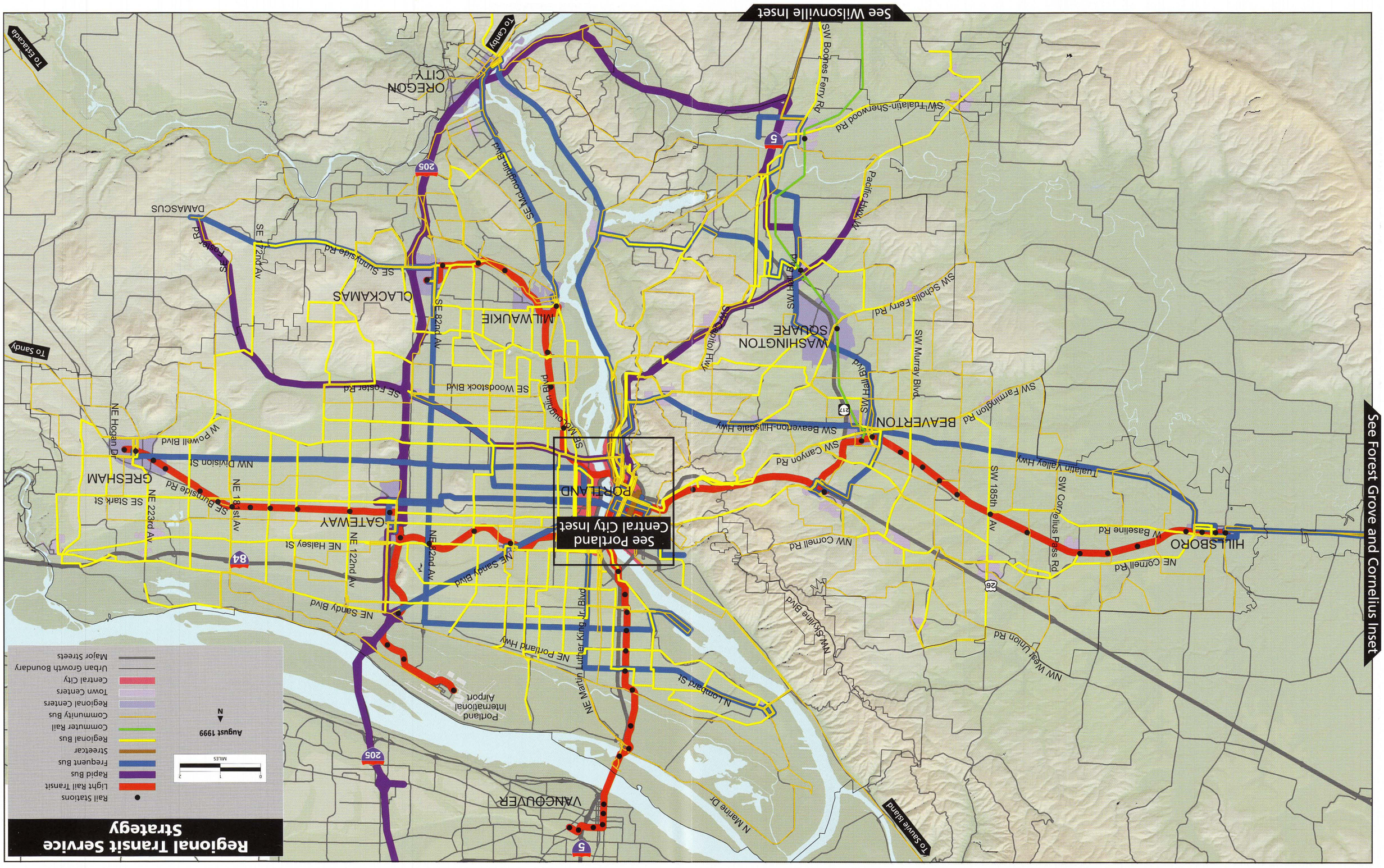
- Retrofit major streets in centers and main streets with "boulevard" designs, including Canyon Road, Hall/Watson couplet and the Tualatin Valley Highway in the Beaverton regional center and the Tualatin Valley Highway in the Hillsboro regional center and the Cornelius town center. Boulevard designs will include better sidewalks and street crossings, bikeways, curb extensions, lighting, bus shelters and benches.

- Consider additional overcrossings on US 26 west of Highway 217 and emphasize more street connectivity in Beaverton and Hillsboro to support local travel needs by all modes of travel.

- Conduct a detailed Highway 217 corridor study to identify future transit and road-related improvements and construction phasing to address travel demand in the corridor, including possible express lanes, high occupancy vehicle lanes and/or priced lanes.

- The study should address the competing needs of serving local trips to the Washington Square

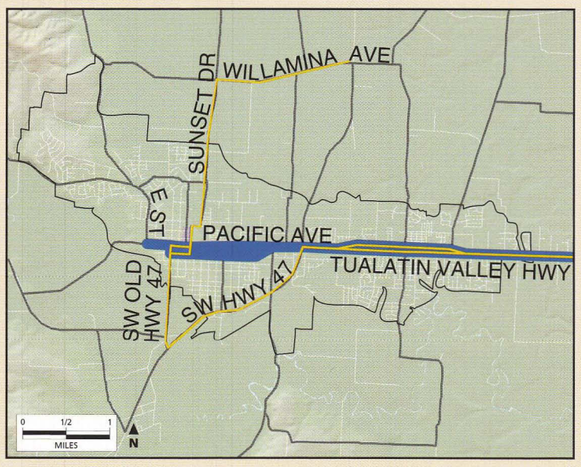
turn to back page



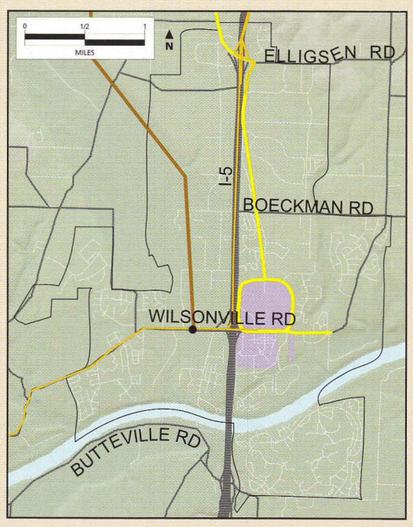
continued from front page

When implemented together, the improvements described in this fact sheet will provide a transit system that better meets current and expected travel needs by offering:

- Faster, more direct connections to different communities and regional destinations – minimizing the need to go to downtown Portland to transfer.
- New community and local routes to better serve neighborhoods, employment areas and schools.
- Efficient, reliable service with adequate passenger capacity at all times.
- Improved bus connections with light rail so that more people can have easy access to this regional fixed-route form of transit.
- New low-floor air-conditioned buses with security cameras and bigger windows, providing access to the regional transit network for everyone, including individuals who use mobility devices.
- Improved bus stops with amenities such as shelters, special lighting, phones, maps, schedules, better sidewalks and electronic signs showing actual bus arrival times.
- Support of transportation management associations, coalitions of employers dedicated to improving commute options for their employees and customers.



Forest Grove and Cornelius inset



Wilsonville inset

Metro's Regional Transportation Plan
Fall 1999 Facts Pack

Getting There newsletter, The RTP in brief

Transportation strategy fact sheets:
1 West Columbia Corridor
2 Portland Central City
3 East Multnomah County
4 Pleasant Valley and Damascus
5 Urban Clackamas County
6 South Washington County
7 North Washington County
8 Transit Service Strategy

Metro – Protecting the nature of our region

"It's better to plan for growth than ignore it."

Planning is Metro's top job. Metro provides a regional forum where cities, counties and citizens can resolve issues related to growth – things such as protecting streams and open spaces, transportation and land-use choices and increasing the region's recycling efforts. Open spaces, salmon runs and forests don't stop at city limits or county lines. Planning ahead for a healthy environment and stable economy supports livable communities now and protects the nature of our region for the future.

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and the Oregon Zoo. It also oversees operation of the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition-Recreation Commission.

For more information about Metro or to schedule a speaker for a community group, call (503) 797-1510 (public affairs) or (503) 797-1540 (council).

Metro's web site:
www.metro-region.org

Printed on recycled-content paper.
1999-10441-TRN • 99649

8

INSIDE

METRO
Regional Services
Creating livable communities

Getting There

Transit Service Strategy

Update on Regional Transportation Plan Projects

FALL 1999

Regional Transit Service Strategy for 2040

Although most of today's bus service focuses on neighborhood routes, future service will include faster "rapid bus" service in several corridors, and more convenient "frequent bus" for short hops along busy main streets and corridors.

Regional transportation strategy

The Regional Transportation Plan is a 20-year transportation blueprint for the region. As part of the current update to the RTP, Metro and Tri-Met have worked with residents and local government partners to define long-term transit needs for the region. Metro's role is to establish a 20-year plan for regional transit improvements, such as major bus or rail service, through the RTP. Metro also links long-term transit and land-use planning in the region.

Tri-Met makes these transit improvements happen through annual updates and expansions to its service plan. In addition, Tri-Met plans improvements to community-level transit service, such as local bus lines or lift services. In determining where expanded transit service is most needed each year, annual growth trends, ridership and traffic congestion are all considered.

Other public transit operators in the region include SMART, which serves the Wilsonville area, and C-Tran, which serves Clark County and includes bus service to points in Portland. Metro works with these operators, as well, to ensure that planned transit service is adequate to meet our 20-year needs.

Transit plays an important role in managing congestion on our roads, helping to keep our air clean, offering us choices for getting around and supporting community goals. Transit plays a vital role in successfully implementing the Region 2040 Plan. By improving transit quality, adding more service and providing different types of transit options, the region can achieve substantial increases in ridership.

Transit can be a viable alternative to driving by serving a variety of destinations daily throughout the metropolitan region. Future transit service will focus on regional centers, such as Gresham, Beaverton and Clackamas, and the Portland central city. Transit must also reinforce other land uses that depend on frequent transit services, most notably main streets, town centers, light rail station areas and major street corridors.

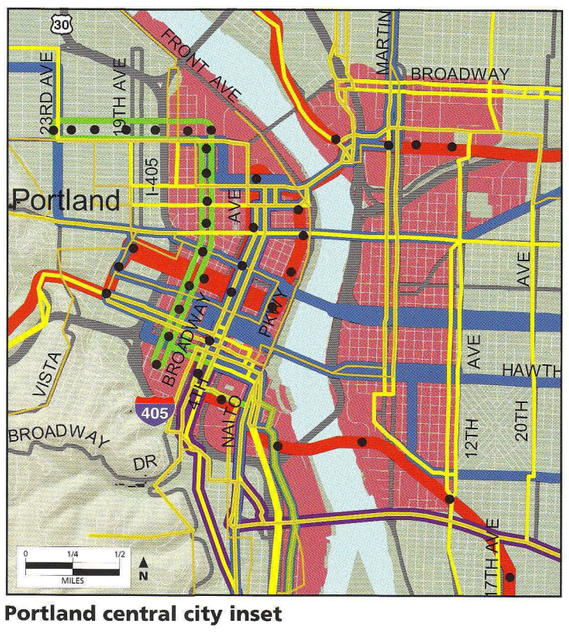
turn to back page

Regional transit strategy

CITIZEN VIEW

Lois Achenbach
Northeast Portland
Regional Transportation Plan
Citizen Advisory Committee

"If it provides convenient access to the whole region, our mass transit system – with the cooperation of citizens and Tri-Met – will reap the economic and ecological advantages of fewer automobiles on our roads. Proximity to all public venues, be they government offices, churches, sports facilities or greenspaces, near and far, is paramount."



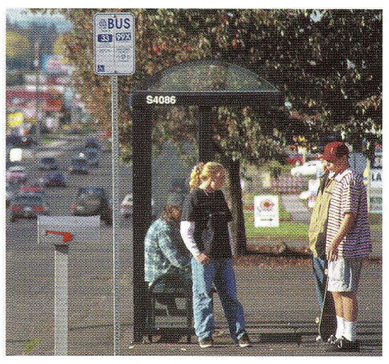
Portland central city inset

Transit service for 2040

Tri-Met is the primary transit provider for the Metro region, although other providers may serve special transportation needs. SMART, for example, serves the Wilsonville area and provides intercity connections to the Tualatin and Barbur transit centers.

Several different transit types have been identified to provide service in the region. Each type of service is tailored to serve varying land uses and to meet a variety of travel meeds.

The future transit system won't end at the bus door. Major improvements are needed at bus stops to make transit riders more comfortable and safe.



Regional transit network

The regional transit network is designed to provide high-quality transit service to areas expected to have the greatest concentration of employment and housing. The 2040 Growth Concept land-use components served by this network are the Portland central city, regional and town centers and main streets.

Light rail transit and rapid bus service

Light rail transit and *rapid bus* service will serve as the backbone of the transit system, connecting regional centers to each other and to the central city.

Light rail transit service will operate:

- at least every 10 minutes during the day, with less frequent service at night
- seven days a week
- up to 24 hours, but not less than 20 hours per weekday of service.

Rapid bus service will operate:

- at least every 15 minutes during the day, with less frequent service at night
- seven days a week
- up to 20 hours of service per weekday.

New regional public attractions (such as stadiums, convention centers) would be served by light rail transit or rapid bus service.

(The red and purple lines on the map show existing and planned light rail transit and rapid bus service, respectively.)

Rapid bus service offers fast, reliable bus service, possibly along reserved lanes, with stations generally spaced every half-mile or more. Rapid bus stations would be similar to light rail stations, with large shelters and other amenities.

Rapid bus service may be provided along future rail corridors if analysis of the corridor indicates that construction of interim improvements are desirable. These improvements would be "rail-ready" where long-term rail is planned.

Frequent bus and streetcar service

Frequent bus service provides access to the Portland central city, regional and town centers and main streets.

Frequent bus service will operate:

- at least every 10 minutes during the day, with less frequent service at night
- seven days a week
- up to 24 hours, but not less than 20 hours per weekday of service.

(Frequent bus service is shown in dark blue on the map.)

Streetcars operate at a similar frequency of service as frequent bus but on rail vehicles operating in the street right-of-way. This service would operate at least every 15 minutes, serving more locally oriented trips in the Portland central city.

(Streetcar service is shown in green on the map.)

Frequent bus and streetcar services are designed to focus on frequency and reliability rather than on speed between two points. Passenger amenities and transit preferential treatments could include:

- space stops every two to four blocks
- station-like improvements at major transfer points and destinations, including real-time bus information for riders
- special street features such as curb extensions, reserved bus lanes, direct routing and signal pre-emption.

Transit preferential treatments would be provided along rail lines and streets served by rapid bus and frequent bus lines. In congested areas, special intersection improvements would allow transit vehicles with 60-100 passengers to get through reliably. By assuring timely service, transit becomes a more desirable choice for travelers.

The region's goal is to achieve 90 percent on-time performance for buses on rapid and frequent bus lines.

Regional bus service

A more extensive grid network of east-west/north-south *regional bus* service would create a basic level of regional coverage to provide access to the central city, regional centers, main streets, corridors and light rail station areas.

Regional bus service will operate:

- at least every 15 minutes during the day, with less frequent service at night
- seven days a week
- up to 20 hours per weekday of service.

(This service is shown in dark yellow on the map.)

Commuter rail service

Commuter rail is a passenger rail service similar to Amtrak trains that would operate on existing freight tracks and is being considered in several corridors. Commuter rail stations are typically spaced one to five miles apart, allowing faster travel times over longer distances. Generally, service would be focused on the peak commute hours, but could be offered during other times of the day when demand exists or where rail capacity is available.

(Commuter rail service between Wilsonville and Beaverton is shown in brown on the map.)

Under construction in the central city, new streetcar service will better link the Portland State University area with the rapidly growing Pearl and River districts.

Community transit network

The community transit network is designed to provide transit service to neighborhoods, employment areas and schools and to connect those areas to the regional transit network.

Communuty bus service

Community bus service would connect neighborhoods and suburban employment areas with the regional transit network.

Community bus service will operate:

- at least every 30 minutes during the day, with less frequent service at night
- on weekends as demand warrants.

(This service is shown in light yellow on the map and represents general coverage, not specific commitments to routing.)

While the routing of light rail, rapid bus and frequent bus service is adopted as policy by the Regional Transportation Plan, specific routing of community bus lines are reviewed and adjusted annually as part of service planning by Tri-Met and SMART.

Other community transit network service types, including *minibuses*, *para-transit* and *park-and-ride* facilities, would connect low-density or developing areas with the regional, frequent, rapid bus or rail lines. Para-transit service provides on-time demand-responsive service comparable to the fixed-route transit system for individuals who are not able to use the fixed-route system.

(These services are not depicted on the map.)

Most new development expected in the region is planned to be within a five-minute walk of a public rail, rapid, frequent or regional bus route. Private para-transit service, such as taxicabs or shuttles, would be provided in areas not served by fixed-route service so that everyone within the metropolitan area has access to transit.

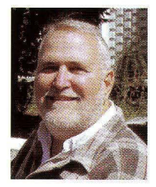
Transit supports livability

Transit has a significant role in creating livable communities. Transit can help communities meet their goals for how they want to grow and change.

Communities successfully pursuing these goals will take a big step toward being safer, more livable places in a number of ways. Quality transit service can help:

- *Slow increases in traffic congestion.* Frequent and reliable transit service that goes to a variety of destinations during most hours of the day can help slow automobile-related congestion that accompanies population and employment growth and provide people with a choice to avoid congestion. It can help local governments guide development, limiting sprawl and travel distances, and frees up road space for trucks to keep freight and goods moving in the region.
- *Promote opportunities for jobs and economic development.* Transit connects people to jobs, particularly entry-level jobs, and assists employers by providing access throughout the region. Transit also reduces the need for parking at the work site, improves access for clients and shoppers and offers a less stressful alternative to driving.
- *Enhance public safety.* Transit contributes to the creation of busy, attractive communities with round-the-clock activity, making for a safer pedestrian environment.
- *Serve the needs of youth and seniors.* Transit helps seniors, persons with disabilities and youth access necessary services, jobs, recreational opportunities and cultural events.
- *Revitalize communities.* Transit encourages reinvestment in older neighborhoods across the region.
- *Link jobs and housing.* Employment centers are emerging throughout the region. Transit gets more employees to work without driving.
- *Improve air quality and save energy.* Transit reduces the need to drive and therefore reduces related fuel consumption and vehicle emissions.

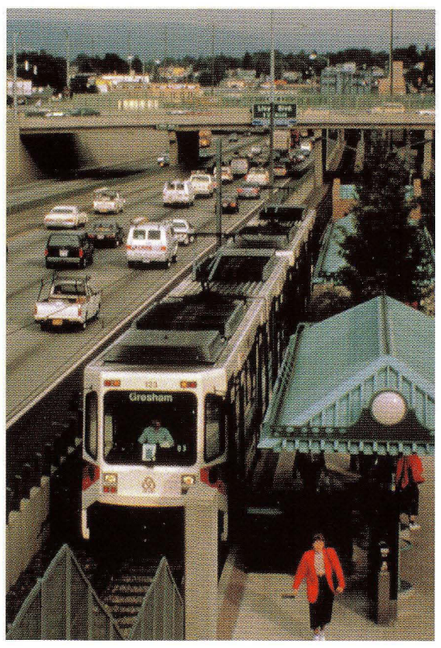
CITIZEN VIEW



Jon Putnam
Tigard
Citizen member
Metro Transportation Policy
Alternatives Committee

"I would like to see an increasing regional commitment to community transit options and improved mobility for seniors and the disabled. I look forward to the day when community transit connects smaller communities to themselves and then to the regional fixed route system. More low-floor accessible express buses with shorter travel times are needed, as well as programs that provide transit options for elderly and disabled citizens to enhance their mobility and quality of life."

Light rail transit will continue to serve as the backbone of the region's transit system, linking regional centers and the central city, and giving commuters an alternative to congested freeways.



CITIZEN VIEW

LeAnn Bennett Osborne
Wilsonville
Smart Stakeholders Committee

"Increased population and development seems to be inevitable for Portland. With growth comes increased traffic and longer commute times.

Personally, I see more MAX trains in our future, running the length of I-5 from Vancouver to Wilsonville, and elsewhere. In addition, we'll need more park-and-rides and a better express bus system, few stops, fast trips and comfort (air conditioning!)."

Portland central city and neighborhoods

The grid network of transit lines in Portland will be expanded and strengthened by the transit projects and programs identified to serve this area during the next 20 years. Transit investments would be tied to planned land uses and street classifications. The following service improvements are most critical in serving expected growth in this area during the next 20 years:

- For the short-term, add new light rail transit service from North Portland to the Expo Center via Interstate Avenue, with a future possible extension to Vancouver, Wash. More frequent rush-hour service on eastside, westside and airport light rail would be added to meet increases in demand.
- For the long-term, add new light rail transit service from downtown Portland to the Clackamas regional center, also serving Southeast Portland neighborhoods. Interim bus transit service improvements in the McLoughlin Boulevard/Highway 224 corridor from the Clackamas regional center to the Portland central city would be provided until light rail transit service is funded and constructed.
- Expand transit service to include new rapid bus service along Barbur Boulevard/Highway 99W from Portland central city to King City, I-205 from Vancouver Mall to the Oregon City regional center via Gateway and Clackamas regional centers, and along Powell Boulevard/Foster Road from the Portland central city to Damascus. A corridor study of Barbur Boulevard would determine the feasibility and timing for high-capacity transit service (including light rail transit) along this route.
- Expand transit service to include frequent bus service along N. Lombard, NE Sandy, NE Martin Luther King Jr. Boulevard, NE/SE 82nd Avenue, SE Hawthorne Boulevard, NW 23rd Avenue, NE Broadway and SW Beaverton-Hillsdale Highway.
- Add cross-town regional bus lines to run on NE Prescott, SE 92nd Avenue and SE 20th/28th avenues.
- Extend new streetcar service from the North Macadam redevelopment area through the Portland central city to Northwest Portland.
- Improve frequency of buses and longer service days on most regional bus lines so that buses come at least every 15 minutes during the daytime, seven days a week.
- Extend hours of operation on light rail transit and frequent bus lines.
- Develop transportation management associations in key employment areas such as the Swan Island, Hollywood and Lents town centers in addition to existing associations in the Lloyd District and Marquam Hill.
- Improve service to non-office employment areas in cooperation with business associations and transportation management associations.
- Improve service reliability through use of transit preferential treatments and service adjustments such as special lanes, signals, modified stop spacing and more direct routes.
- Enhance passenger waiting areas with shelters, paving, lighting and customer information.
- Create new and improved community transit service that offers access to developing and under-served residential and employment areas.

West Columbia corridor

Access to jobs is an important need to be met by the transit improvements for this area. The following service improvements are most critical in serving expected growth in this area during the next 20 years:

- Expand transit coverage and shuttle service to provide connections to airport light rail and regional bus lines. Enhance and expand demand management programs, including incentives for transit, carpool and vanpool use as a key element in the overall strategy.
- For the short-term, add new light rail transit service from North Portland to the Expo Center via Interstate Avenue, with a future possible extension to Vancouver, Wash. More frequent rush-hour service on eastside, westside and airport light rail would be added to meet increases in demand.
- Initiate new express bus, taxi service and shuttle service to the corridor in conjunction with the Columbia Corridor Association.

East Multnomah County

The following service improvements are most critical in serving expected growth in this area during the next 20 years:

- Expand the network of regional transit routes in this area to provide east-west and north-south bus service running every 15 minutes during the daytime. This would improve local travel options in East Multnomah County and provide direct access to eastside light rail transit stations and rapid bus stations along I-205.
- Expand Gateway transit service to include rapid bus service from Oregon City along I-205, light rail transit to Portland International Airport and improved Banfield light rail frequencies.
- Expand Gresham transit service to include frequent bus service from downtown Portland along Division Street, frequent bus service from the Clackamas regional center to Pleasant Valley and regional bus service on all other transit corridors.
- Implement a transportation management association with employers in the Gresham and Gateway regional centers.
- Develop a regional strategy to evaluate the need for expanding park-and-ride facilities in and near Gateway, where such facilities do not conflict with planned land uses.
- Establish new primary bus service along NE Halsey, SE Stark, NE 181st, NE 162nd and NE 148th avenues and frequent or rapid bus service along Division Street between Gresham and Portland.
- Create new and improved community transit service that offers access to developing and under-served residential and employment areas.

North Washington County

The following service improvements are most critical in serving expected growth in this area during the next 20 years:

- Expand the network of regional transit routes in this area to provide east-west and north-south bus service running every 15 minutes during the daytime. This would improve local travel options, improve access to town centers and regional centers, and provide direct access to westside light rail transit.
- Provide new and expanded service to areas under-served today and emerging employment and residential areas. In addition, regional connections via rapid bus, commuter rail and frequent bus lines would connect North Washington County more directly with other parts of the region.
- Expand transit service to Beaverton to include commuter rail service from Wilsonville, increased frequencies on westside light rail and frequent bus service on Beaverton-Hillsdale Highway and Tualatin Valley Highway.
- Add rapid or frequent bus service along Tualatin Valley Highway between Beaverton and Forest Grove, along Hall Boulevard between Tigard and Washington Square and rapid bus service between Tualatin and Oregon City.
- Help create and support a Hillsboro regional center transportation management association.
- Create new and improved community transit service that offers access to developing and under-served residential and employment areas.

South Washington County

The following service improvements are most critical in serving expected growth in this area during the next 20 years:

- Improve coverage and frequency of transit service to provide more direct north-south as well as east-west connections that make transit more useful for suburban trips.
- Add rapid bus service along SW Barbur Boulevard/Highway 99W to connect King City, Tigard and Portland.
- Add frequent bus service along Hall Boulevard from Tualatin to Beaverton, along Kruse Way between Lake Oswego and Tigard transit centers, along Tualatin Valley Highway from Beaverton to Forest Grove, and along SW Beaverton-Hillsdale Highway between Southwest Portland and Beaverton.
- Add commuter rail service with peak-hour service between Wilsonville and Beaverton. Study the potential for all-day service and commuter rail service to Salem and between Union Station and Wilsonville via Lake Oswego and Milwaukie
- Help create and support a Washington Square regional center transportation management association.
- Offer new and improved community transit service to developing and under-served residential and employment areas.

Urban Clackamas County

The following service improvements are most critical in serving expected growth in this area during the next 20 years:

- Expand frequency and hours of service on existing transit lines, expand service to areas with no service today and improve regional connections to East Portland across the Willamette River to Tualatin, Lake Oswego and Southwest Portland.
- Expand transit service to include rapid bus service along I-205 connecting the Oregon City, Clackamas and Gateway regional centers. Extend light rail service from the Clackamas regional center to the Portland central city, then potentially to Vancouver, Wash., and from Oregon City to Milwaukie. Provide excursion rail and frequent bus service between Portland and Lake Oswego.
- Define interim transit service improvements in the McLoughlin Boulevard/Highway 224 corridor from the Clackamas regional center to the central city.
- Conduct a study to examine rail transit opportunities in the Lake Oswego area, including the Macadam/Highway 43 corridor to Portland and potential use of existing freight rail connections from Lake Oswego to Milwaukie and Tualatin.
- Help create and support a transportation management association with employers in the Clackamas, Oregon City and Milwaukie regional centers. Consider a TMA and other demand management strategies to address congestion in the vicinity of the Clackamas industrial area.
- Offer new and improved community transit service to developing and under-served residential and employment areas.

Pleasant Valley and Damascus

The following service improvements are most critical in serving expected growth in this emerging area during the next 20 years:

- Expand transit service to provide more coverage in the urban reserve areas and to connect the areas to the Clackamas and Gresham regional centers and the grid of regional transit lines in Southeast Portland.
- Add new rapid bus service along Powell Boulevard and Foster Road to downtown Portland.
- Add new frequent bus service from Damascus to the Clackamas regional center along Sunnyside Road.
- Add new regional bus service connecting the Gresham regional center to the Clackamas regional center via the Pleasant Valley town center.
- Add new community bus service connecting the Damascus and Pleasant Valley town centers to the Gresham regional center.
- Offer new and improved community transit service to developing and under-served residential and employment areas.

Special service will continue to expand, providing door-to-door transit access to disabled and elderly passengers. Small buses will also be used to provide door-to-door service to major employment centers and industrial areas.

City of
WILSONVILLE
in OREGON

30000 SW Town Center Loop E
Wilsonville, Oregon 97070
(503) 682-1011
(503) 682-1015 Fax
(503) 682-0843 TDD

December 2, 1999

Mr. Rod Monroe
Metro Presiding Officer
600 NE Grand Ave.
Portland, OR 97232

Dear Mr. Monroe and members of the Metro Council:

I am writing to provide supplemental information for your record on the proposed addition to the Urban Growth Boundary of two Urban Reserve areas adjoining Wilsonville. I don't intend to restate comments made by Mayor Lehan at your hearing on November 18, but there is some additional information that you may find helpful.

At the November 18 hearing, the Mayor indicated that information received from Metro's staff listed the number of jobs in the City of Wilsonville at 17,013 and the number of housing units at 5,329 (for a 3.19:1 ratio of jobs to housing). It is my understanding that Metro's staff, in looking beyond Wilsonville's city limits, to what may be described as Wilsonville's market area, has come up with a ratio that is approximately 2.74 jobs per household. Obviously, still a significant imbalance.

Our staff has reviewed our vacant residential lands and the lands that have been committed to residential development in Wilsonville over the last few years. We have determined that, excluding the Dammasch property, less than 50 acres of vacant land remain within the current city limits that are planned for residential development and not already committed to (i.e., approved for) development. While this does not include lands that may be redeveloped to allow for increases in residential densities, it clearly indicates a need for developable residential property that can best be met through the development of the Dammasch Master Plan (in Urban Reserve Area 41). Based on development in Wilsonville over the last five years, those 50 vacant acres will not even meet the community's residential growth needs for two years.

As an additional indication of Wilsonville's efforts to help implement Metro's 2040 Plan, I should point out that in the last five years, more than 70% of the new housing developed in Wilsonville have been multiple family units.

Wilsonville is located at the southern edge of the Metro region and we have a somewhat unique jobs to housing imbalance. We are located too far from the nearest Regional Center (Washington Square) to reasonably assume that our jobs should be balanced with Washington Square housing.

Wilsonville continues to support the inclusion of Urban Reserve Area 39 (the school site) and the master planned portion of Area 41 (the Dammasch area) within the Urban Growth Boundary as soon as possible.

Thank you.

Stephan Lashbrook, AICP
Planning Director

CC: Metro Councilors
Mayor Lehan & City Council

STOEL RIVES LLP
ATTORNEYS

STANDARD INSURANCE CENTER
900 SW FIFTH AVENUE, SUITE 2600
PORTLAND, OREGON 97204-1268
Phone (503) 224-3380 Fax (503) 220-2480
TDD (503) 221-1045
Internet: www.stoel.com

December 2, 1999

ROBERT D. VAN BROCKLIN
Direct Dial
(503) 294-9660
email rdvanbrocklin@stoel.com

DELIVERED BY HAND

Metro Council
600 NE Grand Avenue
Portland, OR 97232

Re: Urban Reserve Area 45

Dear Members of the Council:

This office represents a number of individuals who own property in Urban Reserve Area ("URA") 45. This group is working to have the majority of URA 45 included within the Metro jurisdictional boundary and brought within the regional urban growth boundary.

The subject area includes some 300 acres, all of which Metro has indicated are exception lands. The group is currently in the process of finalizing its Metro jurisdictional boundary annexation application which it intends to submit to Metro this month. The group is preparing materials and analysis related to the applicable review criteria, including with respect to public facilities and services and the relevant comprehensive plan, public facilities plan, regional framework and functional plans.

Thank you for your attention to this matter. We look forward to providing detailed information about this proposal in the annexation application and supplemental materials to be provided to Metro in the near future.

Very truly yours,

Robert D. Van Brocklin

RVB:mlb

Portlnd1-2020939.1 0099999-00001

Sherwood Urban Reserve Area 45 ----Dec. 2, 1999

Presiding officer and councilman my name is Tom Aufenthie and I live at 15674 Highpoint Dr.Sherwood, Ore.I represent Sherwood Citizens for Voter approved annexations . I offer the following comments on your Preliminary staff report of Nov. 24, 1998 for URA 45

The alternative analysis on page 3 discusses the reasons for excluding exception lands from consideration for inclusion in the urban growth boundary..Three of these reasons are small acreage single family residential areas, steep slopes, and settlement patterns. Each of these apply to the Ladd Hill road area and the isolated Eastern parcel included in URA 45..Yet these parcels were included in URA 45.

Your attention is directed to the center of the map of the area and to the parcel on the East side..

Comments on goal 14 factors addressed in the 1998 Staff report include:
Factor 1. The need to accommodate growth has a discussion on the top of page 7 about the need to build complete communites..Sherwood has no large employer and has in fact just lost one of its oldest and largest employers known as the Tannery. However the city is residential rich..Adding more residential area at this time just adds to a less compact development pattern which is not one of Metros goals.In summary, it appears that Sherwood has a jobs/housing imbalance which is not being addressed.

Factor 2 . The discussion on page 7 of the need for housing, employment and livability is simply devoid of any discussion of employment needs.. An analysis of the suitability of adding more residential land to Sherwood could demonstrate that it is only exacerbating the jobs/housing imbalance..

Factor 3. The discussion of public services on page 8 assumes that all services within a URA region will be built at the same time and will benefit from the economies of scale..this assumption seems ridiculous..Its bias is that it tends to lower the cost estimates. I would like to point out Sherwoods downtown which is described as within a mile is in fact over 2.5 miles from the URA and has been confused with Sherwoods "Old Town" area..

The discussion of transportation on page 11 describes Baker road as running E-W when in fact it runs N-S as evident on the map provided to you..There is no E-W connection across area 45 contrary to the description and in fact the Eastern portion of the URA is isolated.This portion also has no access from parallel city streets as noted in the Oct. 12 DKS engineering report submitted to WestLake consultants..This isolated portion also has some extraordinarily costs associated with sewer/roads/ and service that is not addressed seperately in the report but merely lumped together.. It should be noted on page 13 (chart) that Sherwood has the second highest transportation costs of all the tier one properties..

Factor 4. The discussion of an Efficient urban growth form is inadequate in that it fails to discuss the peninsula of land along steep Ladd hill road and the Eastern portion of the URA.I can't believe this is what is meant as a compact growth form..The staff analysis on page 15 includes a discussion of the extension of the street grid system which is simply not possible on the Eastern portion and is limited elsewhere..Please take a look at the map.I repeat here that the downtown area is 2.5 miles away and not in proximity as discussed in this report..

Factor 5.The discussion of this factors elements of energy,economic and social consequences bears some examination.In particular it is noted there is no economic report specific to the area or the region..Perhaps it is here that one could discover the jobs/housing imbalance in Sherwood..

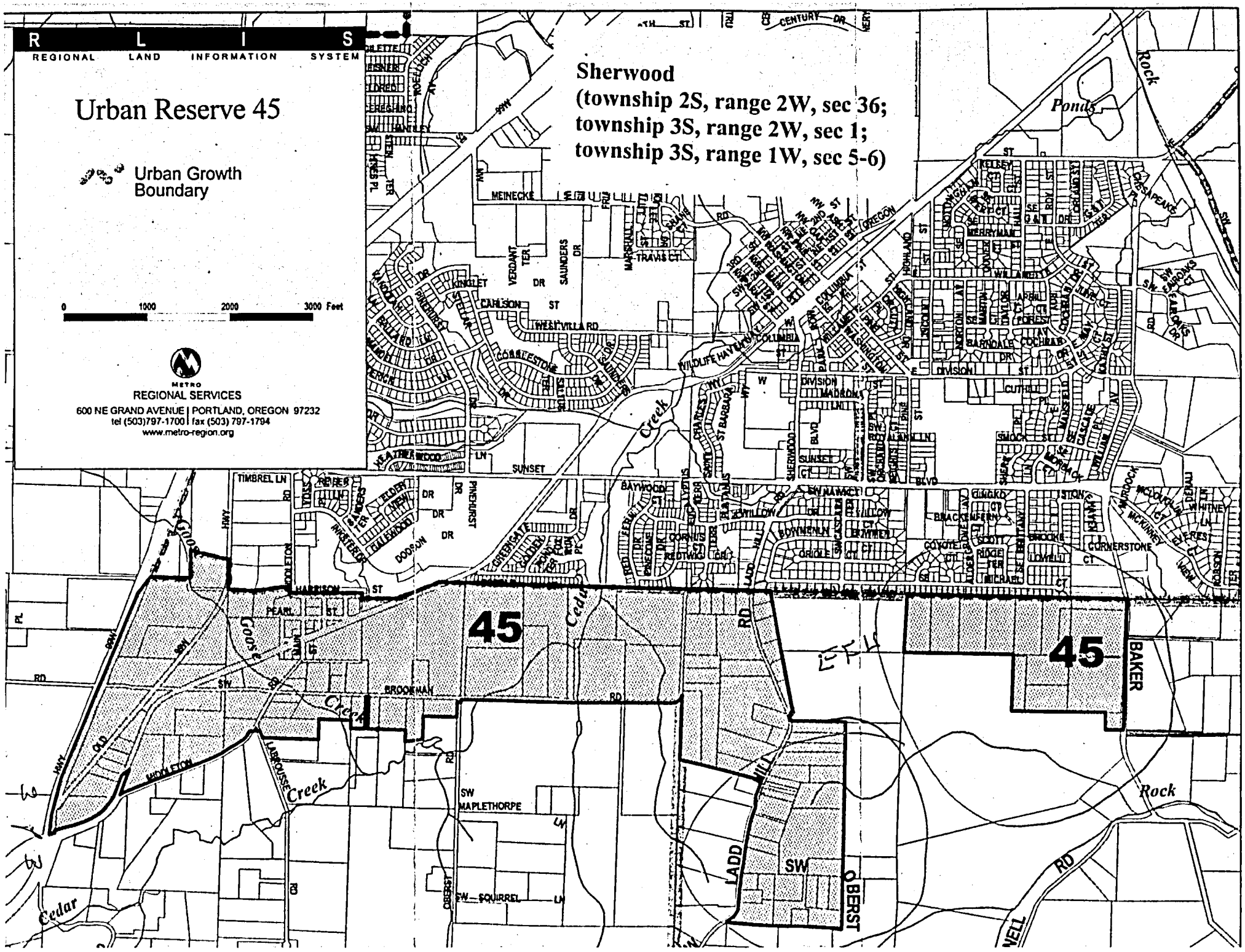
Particularly disturbing is the statement on page 18, that, "Adverse impacts shall not be significantly more adverse than would result from the needed lands being located in other areas requiring an amendment of the UGB."Unless more specificity is brought to bear I can only assume that the URAs adjacent to areas that are jobs rich and housing poor would have signicantly less adverse impact than URA 45..As far as I can tell this argument is without merit..

The discussion of Social, energy and affordable housing is not site specific to Sherwood..If it was it would note that the qualities noted as most wanted in public surveys such as reduced commuting time will not occur for most people in URA 45 as they will be required to commute elsewhere..The net result is increased energy use, air pollution and more crowded transportation routes..

I believe the council has an inadequate factual and legal basis for a decision on URA 45.

Thank you for the apportunity to comment..I am hopeful that your staff will consider my comments in any revision of their draft report on area 45..

Tom aufenthie
15674 Highpoint Dr.
Sherwood, Or. 97140
ph. 625-1608


R L I S
REGIONAL LAND INFORMATION SYSTEM
Urban Reserve 45
Urban Growth Boundary
0 1000 2000 3000 Feet
METRO
REGIONAL SERVICES
600 NE GRAND AVENUE | PORTLAND, OREGON 97232
tel (503)797-1700 | fax (503) 797-1794
www.metro-region.org
Sherwood
(township 2S, range 2W, sec 36;
township 3S, range 2W, sec 1;
township 3S, range 1W, sec 5-6)
45
45
Cedar Creek
Goose Creek
Rock Creek
Ponds
Rock
BAKER
LADD
HARRISON ST
BROOKMAN RD
SW MAPLETHORPE LN
SW SQUIRREL LN
MEINECKE RD
SUNSET
DIVISION
CENTURY DR

Resolution NO. 99-2860 is for the purpose of appointing Jennifer Allen, Ron Hernandez and Juliet Hyams to the Metro Central Enhancement Committee

To date, the Metro Central Enhancement Committee has awarded $1,414,361 million dollars to 111 projects. The committee of six citizen members is entering its eighth funding cycle, with grants due this December 15, 1999. Over their two-year term, these three new committee members will award another $400,000 making a large impact on the livability of their community.

As chair of this committee, I am pleased to introduce:

Jennifer Allen nominated by Forest Park Neighborhood Association. Ms. Allen has a BA and a Master of Environment Studies degree from Yale University and a Ph.D. degree in Environmental Science and Public Policy from George Mason University. She was an environmental consultant for Willamette Restoration Initiative, the Portland Development Commission, the International Sustainable Development Foundation, and The World Bank, Washington D.C. She was the Executive Vice President of Ecotrust, Portland. She has also been a board member of Forest Park Neighborhood Association. Her experience in working in the field of sustainable development for non-profit organizations and government agencies and community vitality will be a great addition to the committee and community.

Ron Hernandez nominated by The Friends of Cathedral Park Neighborhood Association. Mr. Hernandez is the senior project manager for Commercial Furnishings. Inc. He is presently a Citizen Advisory Committee member for the Columbia Boulevard Waste Water Treatment Plant. He was past chair and board member for 8 years on the Cathedra Park Neighborhood Association and presently on the Friends of Peninsula Crossing Trail. He has a vested interest in the peninsula, north Portland and the community.

Juliet Hyams nominated by the Northwest District Association to serve on this committee. She is currently the First Vice President of Northwest District Association. She has been a neighborhood activist in North Portland and wishes to create a stronger tie between Metro, the community and the City. Her interest lies in recycling and waste management.

All three new committee members will be an asset to this committee.

METRO RETENTION SCHEDULE AND RECORDS INVENTORY PROJECT
OCTOBER 1999 TO APRIL 2000

Background

- The Metro Archive Program has been evolving since 1992.
- Metro entered an IGA with the State Archivist to write a special records retention schedule for the agency in October 1999.
- Project completion date is April 17, 2000.
- The State Archives Division is conducting this project at no cost to Metro.

Goal of Project

The end product of this project is a state-approved special Metro Records Retention Schedule covering all Metro programs, including MERC and the Oregon Zoo. This will be the first comprehensive Metro records retention schedule (some program areas have had records retention schedules done in the past by outside contractors). Once the schedule is approved by the State Archivist, it will be effective for five years. Every five years it will be reviewed, revised, and updated by the State Archives and Metro staff.

Purpose

In Oregon, the State Archivist is responsible for authorizing the destruction of public records. The mechanism by which the State Archivist grants authorization is a records retention schedule signed by the agency agreeing to abide by the retentions established in the schedule, and by the State Archivist, authorizing these same retentions as satisfying all administrative, fiscal, legal, and historical needs of the agency and the state.

Process

1. Stacey Heller Weeks, Cathy Westfeldt and Larry Morgan of the State Archives have been working with Becky Shoemaker and Karen Green since October. They are interviewing representatives from every Metro program to describe the purpose of each program, identify what records (regardless of format) are created to document the program's functions and mandates, and to establish the retention period based on administrative, legal, fiscal, and historical needs of the program and Metro. Success of this project depends on management support and staff cooperation.

2. The draft retention schedule will be reviewed by Metro program management and staff, Secretary of State Audits Division, State Archives Records Management Manager and appraisal team, and the State Archivist.

3. Implementation workshops will be conducted by the State Archives Division to train Metro staff on how to use the records retention schedule. These workshops will be conducted at the end of the project.

4. The State Archives Division will submit a report of its observations on the records management practices of Metro, which will outline recommendations for improving records and information management practices.

Benefits of Implementing a Records Retention Schedule and Records Management Program

- A State Archivist approved records retention schedule that is Metro's legal authorization to destroy records.
- Reduction of liability for keeping information too long or not long enough.
- Increased efficiency in information retrieval leading to improved customer service, internal communication flow, and management decision making.
- Cost savings in off-site and on-site storage, office-space allocations, and reduced staff time and resources devoted to information management and retrieval
- Improved policies and procedures for the systematic management of Metro's information assets.
- Provide guidance on Metro's electronic document management policies and procedures.
- Identification, protection, and preservation of Metro's vital and historical records.
- Improved disaster contingency planning.

METRO RECORDS RETENTION SCHEDULE AND INVENTORY PROJECT
PROPOSED SCHEDULE

I. PROPOSED TIMELINE

The following table describes the scope of the Metro Record Inventory Project, staff and time requirements, and proposed meeting/completion dates:

Scope of Services	Attendees/Time Required	Targeted Meeting Date(s)/ Completion Dates
Management Orientation Workshop	Metro Directors; approximately 20 minutes	Meeting Date: October 20, 1999
Department Orientation Workshops	Program Managers/Records Personnel; approximately 45 minutes	Monday, October 25, 1999 Wednesday, October 27, 1999
Program Interviews/Inventories	Program Managers/ Records Personnel; approximately 60-90 minutes [each meeting]	Meeting dates TBA; completion February 15, 2000
Metro Council Presentation	Metro and State Personnel; approximately 15 minutes	Meeting Date: December 2, 1999
Draft Process/Agency Review	State Personnel and Metro Personnel	Completion date: March 1, 2000
State Audit/Archives Review/Historic Value Review	State Personnel	Completion date: April 3, 2000
Management Review	Metro Personnel	Completion date: April 17, 2000
Implementation Workshops	State Personnel and Metro Records Coordinators	Completion date: May 8, 2000
State Report on Records Management Practices	State Personnel	Completion date: May 8, 2000

II. COORDINATION AND ORGANIZATION OF PROJECT

Metro's project coordinators will arrange appointments for the State archivists to interview program staff. Two teams will work concurrently, working with one department at a time to complete an inventory of records and gather pertinent information regarding current record keeping practices. The organization of the project is as follows:

Metro Department	Metro Project Coordinator/State Archivist
Council Office	Becky Shoemaker/Cathryn Westfeldt & Larry Morgan
Office of the Executive Officer	Becky Shoemaker/Cathryn Westfeldt & Larry Morgan
Office of the Auditor	Becky Shoemaker/Cathryn Westfeldt & Larry Morgan
Office of General Counsel	Becky Shoemaker/Cathryn Westfeldt & Larry Morgan
Human Resources	Becky Shoemaker/Cathryn Westfeldt & Larry Morgan
Administrative Services	Becky Shoemaker/Cathryn Westfeldt & Larry Morgan
Growth Management Services	Karen Green/Stacey Heller Weeks
Transportation Planning	Karen Green/Stacey Heller Weeks
Regional Environmental Management	Karen Green/Stacey Heller Weeks
Regional Parks and Greenspaces	Karen Green/Stacey Heller Weeks
Oregon Zoo	Karen Green/Stacey Heller Weeks & Larry Morgan
Metropolitan Exposition-Recreation Commission	Karen Green/Stacey Heller Weeks & Larry Morgan

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE METRO URBAN GROWTH BOUNDARY AND THE 2040 GROWTH CONCEPT MAP IN ORDINANCE 95-625A IN THE URBAN RESERVE AREAS 39 AND 41 IN ~~WASHINGTON~~ CLACKAMAS COUNTY	))))))	ORDINANCE NO 99-834 Introduced by Growth Management Committee

WHEREAS, the Metro Council designated urban reserve areas in Ordinance No. 96-655E, including urban reserve areas 39 and 41; and

WHEREAS, urban reserve study areas were shown on the 2040 Growth Concept map adopted as part of the Regional Urban Growth Goals and Objectives in Ordinance No. 95-625A and the map was amended by Ordinance No. 96-655E to show urban reserve areas; and

WHEREAS, ORS 197.298(1)(a) requires that land designated as urban reserve land by Metro shall be the first priority land for inclusion in the Metro Urban Growth Boundary; and

WHEREAS, in August, 1999 the Metro Council requested that local governments notify Metro of land needs to meet 2040 Growth Concept implementation, including jobs/housing considerations, that could be the subject of the Urban Growth Boundary amendments; and

WHEREAS, the City of Wilsonville responded to the Council's notice requesting Urban Growth Boundary amendments for urban reserve areas 39 and 41; and

WHEREAS, notice of Proposed Amendment for these urban reserve areas 39 and 41, consistent with Metro Code and ORS 197.610(1), was received by the Oregon Department of Land Conservation and Development at least 45 days prior to the December 9, 1999 first evidentiary hearing; and

WHEREAS, notice of hearings was published and mailed in compliance with Metro Code 3.01.050(b), (c) and (d); and

WHEREAS, hearings were held before the Council Growth Management Committee on November 16, December 7 and 9, 1999, and before the full Metro Council on December 9 and 16, 1999; and

WHEREAS, the staff report for these areas was available at least seven days prior to the December 16, 1999 final hearing; and

WHEREAS, the Metro Council considered all the evidence in the record, including public testimony at the November, and December, 1999 public hearings to decide proposed amendments to the Urban Growth Boundary; and

WHEREAS, the Metro Code requires that all land added to the Metro Urban Growth Boundary shall be subject to comprehensive plan amendments consistent with Title 11 of the Urban Growth Management Functional Plan and consistency with the 2040 Growth Concept; now therefore,

THE METRO COUNCIL HEREBY ORDAINS AS FOLLOWS:

1. The City of Wilsonville shall be the local government responsible for adopting comprehensive plan amendments consistent with the Urban Growth Management Functional Plan for areas added to the Metro Urban Growth Boundary by this ordinance.

2. Regional design types consistent with the City of Wilsonville's special land need for housing and the Metro 2040 Growth Concept for the land added to the Metro Urban Growth Boundary by this ordinance as shown on attached Exhibit A are hereby adopted.

3. The 2040 Growth Concept map adopted as part of Ordinance No. 95-625A is hereby amended to show the Metro Urban Growth Boundary amendment in Exhibit B as within the UGB, instead of urban reserves.

4. The Metro Urban Growth Boundary is hereby amended to add urban reserve areas 39 and 41, as shown on the map in Exhibit B, attached, and incorporated by reference herein. The Council hereby designates the area shown in Exhibit B as the area subject to conceptual planning under Title 11 of the Urban Growth Management Functional Plan, Metro Code 3.07.1110 *et seq.*

5. The City of Wilsonville shall comply with the requirements of the Urban Growth Management Functional Plan, including Title 11, for the land shown in Exhibit B within two years of adoption of this ordinance.

6. Pursuant to Metro Code 3.01.040(b)(5) the comprehensive plan text amendments identified in Exhibit C, are necessary to ensure implementation of the 2040 Growth Concept in the area added to the Metro Urban Growth Boundary by this Ordinance.

7. This amendment of the Metro Urban Growth Boundary is based on Findings of Fact and Conclusions in Exhibit D, attached hereto and incorporated by reference herein.

8. In support of Findings and Conclusions adopted in Exhibit D of this Ordinance, the Council hereby designates as the record herein those documents submitted and before the Council for consideration on these lands during the period between the October 1999 Growth Management hearing and the December 16, 1999 Metro Council final hearing and final adoption of this ordinance.

9. Consistent with ORS 268.390(3) and ORS 195.025(1), Clackamas ~~and~~ Washington ~~Counties~~ COUNTY and the ~~cities of~~ CITY OF Wilsonville, ~~Tualatin and Sherwood~~ shall include the area added to the Urban Growth Boundary by this Ordinance as shown on the map in Exhibit B in applicable text and map provisions of their comprehensive plans.

ADOPTED by the Metro Council this _____ day of _____ 1999.

_____
Rod Monroe, Presiding Officer

ATTEST:

_____
Recording Secretary

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

i:\r-o\99-834.doc
OGC/KDH/kvw 11/30/99

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AUTHORIZING THE EXECUTIVE OFFICER TO PURCHASE PROPERTY IN THE FOREST PARK TARGET AREA	))))	RESOLUTION NO. 99-2866 Introduced by Mike Burton Executive Officer

WHEREAS, in July 1992, Metro completed the Metropolitan Greenspaces Master Plan which identified a desired system of natural areas interconnected with greenways and trails; and

WHEREAS, at the election held on May 16, 1995, the Metro area voters approved the Open Spaces, Parks and Streams Bond Measure (Bond Measure 26-26) which authorized Metro to issue $135.6 million in general obligation bonds to finance land acquisition and certain park-related capital improvements; and

WHEREAS, on February 15, 1996, via Resolution 96-2274A, the Metro Council adopted a refinement plan for the Forest Park Target Area which identified property owned by Agency Creek Management Company as a Tier 1 acquisition; and

WHEREAS, Agency Creek Management Company owns approximately ~~240~~ 332 acres ("the Property") and Metro has an Option to Purchase the Property at a price that is above Metro's appraised value; and

WHEREAS, a significant portion of the value of the property is in the approximately 300 acres of trees designated for commercial forest uses; the value of the trees is dependent on growth and timber market conditions; and timber values are at ~~a historic low~~ a recession low point at this time; therefore the value of the property is likely to rise in the next 12 to 24 months; and

WHEREAS, acquisition of the Agency Creek property would fulfill the objective of the Forest Park refinement plan which states, "Protect additional lands along the corridor at the north end of the Park, including a buffer for the Ancient Forest, through acquisitions, easements and voluntary management agreements;" and

WHEREAS, acquisition of the Agency Creek property would facilitate and effect cost reductions to the implementation of the Ancient Forest Preserve Master Plan, adopted by the Metro Council via Resolution No. 96-2345; and

WHEREAS, acquisition of the Agency Creek property would prevent future commercial timber harvest which would negatively impact the regionally significant Burlington Bottom wetland area; and

WHEREAS, strong support for the acquisition of the Agency Creek property has been voiced by citizens and groups such as the Friends of Forest Park and The Nature Conservancy; and

WHEREAS, the Agency Creek property provides nesting and roosting habitat for numerous bird species such as neo-tropical song birds and birds of prey, including bald eagles; and

WHEREAS, a survey of the Property has disclosed some minor encroachments which may not be resolved until after the scheduled closing date, since resolution of these items may take longer than the contract period; and

WHEREAS, the minor encroachments disclosed by survey can most likely be resolved by quitclaim, easement, license, or otherwise after closing, which will not reduce the appraised value of the Property or its use as open space pursuant to the Bond Measure 26-26; and since these encroachment issues are a part of the transaction prior to closing, they should be resolved post-closing without requiring that they go through the "Easement Policy" Resolution No. 97-2539B, which generally applies to post-closing requests for easements on Metro park property; and

WHEREAS, pursuant to the Open Spaces Implementation Work Plan, paying above Metro's appraised value is an "unusual circumstance;" and

WHEREAS, the Open Spaces Implementation Work Plan requires Metro Council's specific approval for acquisitions which involve an "unusual circumstance;" now therefore

BE IT RESOLVED,

That the Metro Council authorizes the Metro Executive Officer to purchase those properties in the Forest Park Expansion target area, as identified in Exhibit A ("Property"), in accordance with the terms set forth in the Option Agreement and for the purchase price set forth in the Option Agreement; and also authorizes the Metro Executive Officer to resolve after closing, via quitclaim, easement, license, or otherwise, without going through the Easement Policy, those encroachments on the Property as disclosed by survey.

ADOPTED by the Metro Council this _____ day of _____, 1999.

_____
Rod Monroe, Presiding Officer

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

Staff Report

CONSIDERATION OF RESOLUTION NO. 99-2866 FOR THE PURPOSE OF AUTHORIZING THE EXECUTIVE OFFICER TO PURCHASE PROPERTY IN THE FOREST PARK TARGET AREA

Date: ~~November 5~~December 1, 1999 **Presented by: Charles Ciecko**

Jim Desmond

Proposed Action

Resolution No. 99-2866 requests authorization for the Executive Officer to purchase properties in the Forest Park Target Area.

BACKGROUND AND ANALYSIS

In May 1995, the Metro area voters approved the Open Spaces, Parks and Streams Bond Measure that authorized Metro to issue $135.6 million in general obligation bonds to finance land acquisition and certain park-related capital improvements. On February 9, 1996, via Resolution 96-2274A, the Metro Council adopted a refinement plan that outlined a land protection strategy for the Forest Park regional target area.

One of the objectives of the refinement plan is to:
"Protect additional lands along the corridor at the north end of the Park, including a buffer for the Ancient Forest, through acquisitions, easements and voluntary management agreements."

After nearly three years of negotiations, Metro has acquired an option from the Agency Creek Management Company to purchase its ~~340~~332-acre property, located west of St. Helen's Highway in the Linnton and Burlington areas (See attached map). The property was identified as a Tier 1 site in the refinement plan. During the due diligence process, an appraisal issue emerged which constitutes "unusual circumstances," as defined in the Open Space Implementation Work Plan, and which require Metro Council approval before Metro can exercise its option to purchase. There are also minor encroachments on the property, which are not "unusual circumstances" as they do not materially affect value or impair the property's use as open space, but which may need to be resolved after closing, and which therefore should be exempted from the "Easement Policy," Resolution No. 97-2539B.

Valuation

The Agency Creek property is suitable for two to three homesites, and zoned for Commercial Forestry uses. The site borders the Ancient Forest Preserve, owned by the Friends of Forest Park, on two sides. Ancient Forest Preserve capital improvements were identified by Multnomah County as a "local share" project site in the Open Spaces, Parks and Streams bond measure. The subject property contains approximately 250 acres of ten-year-old trees (future merchantable timber) and approximately 65 acres of merchantable timber remain. Approximately 44 acres of the merchantable timber contains scattered old growth trees that are in excess of 100 years old. Due primarily to changes in the zoning laws of Multnomah County since Metro and the landowner

entered into negotiations, and the current recession in timber prices, the appraised value of the property is below the negotiated option price.

The seller is unwilling to sell the property to Metro for the appraised value because a rebound in timber prices will likely occur and thereby enhance the value of the property, and because Agency Creek's holding costs related to the property are minimal, thereby allowing the company to hold the property and "wait out" the current devalued timber prices. Metro staff wishes to close on the property at the negotiated option price now for the following reasons:

a) Metro has spent nearly three years negotiating with the seller to come to an agreed price and Metro's option to purchase the property expires soon;
b) the property is significant in terms of its size, resource value and connectivity to other open space areas of importance;
c) the Multnomah County Local Share component of the Ancient Forest Preserve Master Plan will be facilitated and expedited by allowing more flexibility in trail and parking lot placement; and
d) cost reductions in parking lot and trail construction at the Ancient Forest Preserve will be realized as a result of acquiring the Agency Creek property, which cost reductions were not considered in the appraised value of the property.

Exemption from Easement Policy

Metro commissioned a survey of the property, which survey disclosed that several neighboring landowners encroached across lot lines onto the Agency Creek property. These sorts of minor encroachments do not constitute "unusual circumstances," as they are not uncommon for a property of this size, particularly where one side of the property borders a residential neighborhood. The encroachments, which together total less than one acre of land, do not reduce the appraised value of the property, consist of some storage sheds, a hot tub, a septic field, a deck addition to a house, and some dog cages. Metro staff is working with Agency Creek and the landowners to resolve these issues, but the process could take longer than the time remaining in the option period. Therefore, Metro staff is requesting Council approval to resolve these issues post-closing, via quitclaim, easement, license, or otherwise, without requiring that such actions go through the Easement Policy, which generally applies to post-closing requests for easements on Metro park property. Because these encroachments are "part of the deal," they should be exempted from the Easement Policy.

In accordance with the Open Spaces Implementation Work Plan adopted by Metro Council, the Open Spaces Acquisition Committee met on November 15, 1999 and on November 29, 1999, and recommended that the property be purchased by Metro on these terms.

FINDINGS

Acquisition of this property with above-stated terms is recommended based on the following:

- The lowest purchase price at which the landowner will agree to sell is above current appraised value. Approximately ~~40~~50% of the appraised value of the property is based on current timber prices, which are at a ~~historic~~ recession point. One of the

"public interest" factors cited in the Work Plan which should be considered is "the likelihood that the market value of the property will rise quickly within the subsequent 12-24 month period, rendering the purchase price a reasonable one within a relatively short time frame." Although the market value of the property may come up to equal the purchase price within the next 12 to 24 months, Metro's option on the property expires within the next 30 days and the opportunity to acquire the land may be permanently lost.

- The Agency Creek property lies in Tier 1 and fulfills the stated objectives of the Forest Park Expansion Refinement Plan. It also helps to fulfill some objectives of the Multnomah Channel Target Area Refinement Plan, including the Tier III objective of "Acquire land or otherwise protect specific Tualatin Mountain streams which drain to Multnomah Channel...." McCarthy and Burlington Creeks run through the property.

- Acquisition of the Agency Creek property would facilitate the implementation of the Ancient Forest Preserve local share project. Implementation costs would be reduced, as the current logging road system and level areas suitable for parking on the property would reduce the need for a significant portion of the $169,000 trail and parking area construction costs identified by the Master Plan adopted by the Metro Council via Resolution No. 96-2345 in June 1996.

- Future timber harvest on the property will negatively impact the water quality of the regionally significant wetland areas managed by the Oregon Department of Fish and Wildlife which lie directly below the Agency Creek property (Burlington Bottom).

- The acquisition has strong support from the Friends of Forest Park, The Nature Conservancy, and other citizens and organizations. Russell Hoeflich of The Nature Conservancy stated in a letter to Metro, "We strongly urge you and the Metro Council to take whatever action is necessary to acquire this [the Agency Creek] property."

- The property is also in the Tualatin Range bird flyway and the trees provide valuable habitat and protection for numerous species. The site provides nesting and roosting habitat for a variety of neo-tropical songbirds and birds of prey such as bald eagles.

- The encroachments are not significant and will not affect Metro's ability to use the property as open space, and should be exempted from the Easement Policy when resolved post-closing.

- The Acquisition Committee met on November 15, 1999 and on November 29, 1999, and recommended purchase of the property for the purchase price set forth in the purchase and sale agreement and the terms set forth herein.

BUDGET IMPACT

Bond funds would supply acquisition money. As this site has been reforested and achieved the "free to grow" stage, landbanking costs are expected to be similar or below those of other unimproved forested properties.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends passage of Resolution No. 99-2866.

Sherwood Urban Reserve Area 45 ----Dec. 2, 1999

Presiding officer and councilman my name is Tom Aufenthie and I live at 15674 Highpoint Dr.Sherwood, Ore.I represent Sherwood Citizens for Voter approved annexations . I offer the following comments on your Preliminary staff report of Nov. 24, 1998 for URA 45

The alternative analysis on page 3 discusses the reasons for excluding exception lands from consideration for inclusion in the urban growth boundary..Three of these reasons are small acreage single family residential areas, steep slopes, and settlement patterns. Each of these apply to the Ladd Hill road area and the isolated Eastern parcel included in URA 45..Yet these parcels were included in URA 45.

Your attention is directed to the center of the map of the area and to the parcel on the East side..

Comments on goal 14 factors addressed in the 1998 Staff report include:
Factor 1. The need to accommodate growth has a discussion on the top of page 7 about the need to build complete communites..Sherwood has no large employer and has in fact just lost one of its oldest and largest employers known as the Tannery. However the city is residential rich..Adding more residential area at this time just adds to a less compact development pattern which is not one of Metros goals.In summary, it appears that Sherwood has a jobs/housing imbalance which is not being addressed.

Factor 2 . The discussion on page 7 of the need for housing, employment and livability is simply devoid of any discussion of employment needs.. An analysis of the suitability of adding more residential land to Sherwood could demonstrate that it is only exacerbating the jobs/housing imbalance..

Factor 3. The discussion of public services on page 8 assumes that all services within a URA region will be built at the same time and will benefit from the economies of scale..this assumption seems ridiculous..Its bias is that it tends to lower the cost estimates. I would like to point out Sherwoods downtown which is described as within a mile is in fact over 2.5 miles from the URA and has been confused with Sherwoods "Old Town" area..

The discussion of transportation on page 11 describes Baker road as running E-W when in fact it runs N-S as evident on the map provided to you..There is no E-W connection across area 45 contrary to the description and in fact the Eastern portion of the URA is isolated.This portion also has no access from parallel city streets as noted in the Oct. 12 DKS engineering report submitted to WestLake consultants..This isolated portion also has some extraordinarily costs associated with sewer/roads/ and service that is not addressed seperately in the report but merely lumped together.. It should be noted on page 13 (chart) that Sherwood has the second highest transportation costs of all the tier one properties..

Factor 4. The discussion of an Efficient urban growth form is inadequate in that it fails to discuss the peninsula of land along steep Ladd hill road and the Eastern portion of the URA.I can't believe this is what is meant as a compact growth form..The staff analysis on page 15 includes a discussion of the extension of the street grid system which is simply not possible on the Eastern portion and is limited elsewhere..Please take a look at the map.I repeat here that the downtown area is 2.5 miles away and not in proximity as discussed in this report..

Factor 5.The discussion of this factors elements of energy,economic and social consequences bears some examination.In particular it is noted there is no economic report specific to the area or the region..Perhaps it is here that one could discover the jobs/housing imbalance in Sherwood..

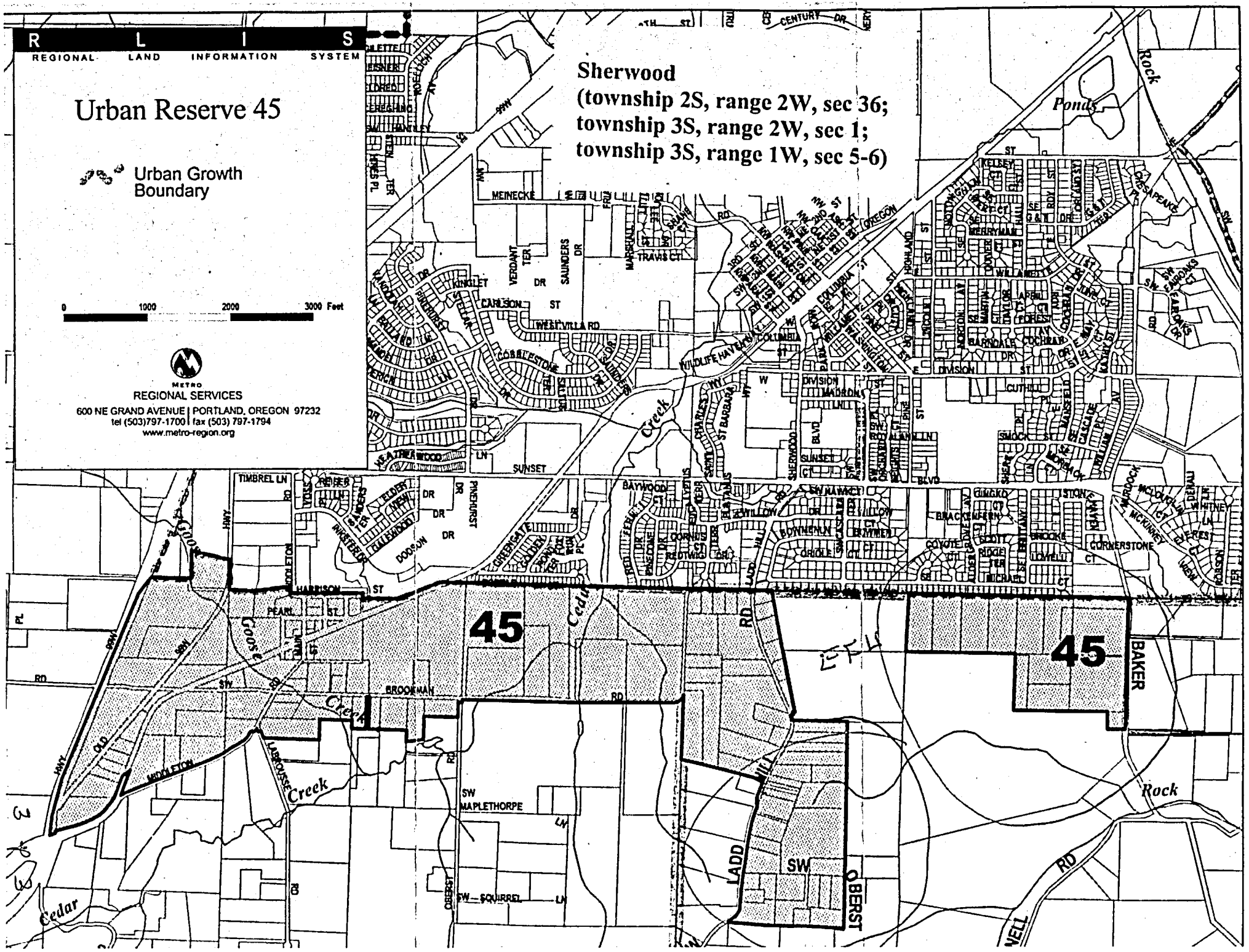
Particularly disturbing is the statement on page 18, that, "Adverse impacts shall not be significantly more adverse than would result from the needed lands being located in other areas requiring an amendment of the UGB."Unless more specificity is brought to bear I can only assume that the URAs adjacent to areas that are jobs rich and housing poor would have signicantly less adverse impact than URA 45..As far as I can tell this argument is without merit..

The discussion of Social, energy and affordable housing is not site specific to Sherwood..If it was it would note that the qualities noted as most wanted in public surveys such as reduced commuting time will not occur for most people in URA 45 as they will be required to commute elsewhere..The net result is increased energy use, air pollution and more crowded transportation routes..

I believe the council has an inadequate factual and legal basis for a decision on URA 45.

Thank you for the apportunity to comment..I am hopeful that your staff will consider my comments in any revision of their draft report on area 45..

Tom aufenthie
15674 Highpoint Dr.
Sherwood, Or. 97140
ph. 625-1608


R L I S
REGIONAL LAND INFORMATION SYSTEM
Urban Reserve 45
Urban Growth Boundary
0 1000 2000 3000 Feet
METRO
REGIONAL SERVICES
600 NE GRAND AVENUE | PORTLAND, OREGON 97232
tel (503)797-1700 | fax (503) 797-1794
www.metro-region.org
Sherwood
(township 2S, range 2W, sec 36;
township 3S, range 2W, sec 1;
township 3S, range 1W, sec 5-6)
45
45
Cedar Creek
Rock Creek
Goose Creek
LaBrousse Creek
Ponds
MEINECKE
CARLSON ST
WEST VILLA RD
SUNSET
HARRISON ST
PEARL ST
BROOKMAN RD
SW MAPLETHORPE LN
SW SQUIRREL LN
TIMBREL LN
BAKER
LADD HILL RD
OBERST
MIDDLETON
OLD HWY 99W
HWY 99W
Cedar

Dec. 2, 1999 Testimony to Metro Council on

METRO'S REGIONAL TRANSPORTATION PLAN

Metro's Regional Transportation Plan is supposed to be the region's transportation blueprint for the next 20 years. A future vision I do not share.

This plan is primarily an extensive laundry list of obsolete highway projects that individually may temporarily unsnarl some traffic bottle necks --- but collectively will promote more auto traffic. This in turn will create still larger more costly bottle necks to fix in the future. The public transit component is pitifully inadequate. It's more like a modest 5 year plan than a creative 20 year vision.

If approved and funded, this RTP will add over 600 lane miles of freeway and arterial traffic, cause peak hour congestion to more than double and result in a 2% increase in vehicle miles traveled per person (rather than the 10% decrease called for in the statewide planning goal). Also it will not cause a significant shift to public transit.

To solve our future transportation problems (problems that will be far worse if oil prices inflate faster than Metro has anticipated), we must control our temptation to expand an already bloated highway system and instead invest wisely in effective public transportation.

The core of an effective transit system is a rational, connected bus network providing 20-24 hour, 7 day a week service every 10-15 minutes. This service should be allowed to operate unimpeded by other traffic as much as possible.

* **The proposed bus plans in the RTP options lack adequate frequency, speed and critical linkages.**

In high demand corridors buses should be supplemented with rail service. This was the guiding principle that led to the construction of MAX. In fact the demand is growing so fast on MAX that within 10 to 15 years, longer trains will be needed to accommodate the peak rush.

Downtown will become a major light rail bottle neck. The traffic, short blocks and pedestrian activity are not compatible with longer trains and a subway will be needed by 2020.

*** The imminent capacity problems on MAX are not addressed in the RTP.**

Additional light rail will be needed, especially on the Barbur and North/South Corridors. A line between Oregon City and Vancouver should have been under construction by now.

Unfortunately Metro planners, in their zeal to accommodate political interests, proposed extending the line into areas of low demand, far north into Clark County and to Clackamas Town Center which triggered voter disapproval in these counties.

*** A much needed Barbur light rail line is not in the RTP yet Metro planners continue proposing Clackamas Town Center as a prime destination in spite of public rejection.**

Commuter rail service is an excellent way to alleviate peak hour congestion in major travel corridors. In addition it can provide fast convenient all day access to outlying communities such as Newberg, McMinnville, Canby, Woodburn, Camas, Longview, Forest Grove, Wilsonville and Salem. The proposed Beaverton to Wilsonville commuter line, if extended to Milwaukie, would be good short term start of a commuter rail system.

*** Over 100 miles of rail lines in the metropolitan area serving primary travel corridors are not being considered for passenger service in the RTP.**

Within the next 20 years, a new multimodal transportation station should be considered on the east side, probably near the Rose Quarter, where convenient intermodal connections can be made between long distance trains, regional high speed trains, commuter trains, light rail trains, intercity buses, local buses and even airplanes, (by providing ticketing and baggage handling services as a complement to the excellent light rail access soon to be provided to the airport).

If the proposed Regional Transportation Plan is the blueprint for improving the regions transportation system in the next 20 years, then this blueprint needs to go back to the drawing board for some extensive revisions.

Jim Howell 3325 NE 45th Ave., Portland OR 97213, 284-7182

PROPOSED
143 rd
OVERCROSSING

WHERE IS IT?

- JUST WEST OF SUNSET HIGH SCHOOL
- AT THE EASTERN END OF CORNELL OAKS
- CONNECTING 143rd AT CORNELL ROAD THROUGH SCIENCE PARK DRIVE AND MEADOW DRIVE TO WALKER ROAD (AT THE NORTHERN ENTRANCE TO NIKE)

IT WILL NOT PROVIDE SIGNIFICANT BENEFITS

- IT DOES NOT REDUCE TRAFFIC ON CORNELL ROAD @ 143RD AT ALL (0%)
- IT REDUCES TRAFFIC ON MURRAY INTERCHANGE BY ONLY 7%
- IT REDUCES TRAFFIC ON CORNELL INTERCHANGE BY ONLY 8%
- IT CAN NOT DELIVER TRUE NORTH/SOUTH CONNECTIVITY BECAUSE OF THE BARRIER OF THE NIKE CAMPUS AT ITS SOUTHERN END

IT IMPACTS EXISTING DEVELOPMENT

- IT INCREASES TRAFFIC ON GREENBRIER PARKWAY BY 90% OVER DESIGNED LEVELS
- IT GREATLY CHANGES CHARACTER OF THE NEIGHBORHOOD ON MEADOW DRIVE DUE TO INCREASED TRAFFIC
- IT WOULD CAUSE THE DEMOLITION OF WEISS SCIENTIFIC GLASS BLOWING BUILDING

ADDITIONAL IMPACTS ON EXISTING DEVELOPMENT

- IT INCREASES TRAFFIC FLOWS ON SCIENCE PARK DRIVE
- IT DRAMATICALLY REDUCES THE UTILITY OF PROPERTY PURCHASED BY LEUPOLD & STEVENS INC. FOR FUTURE EXPANSION.
- THIS COULD PUT A BLACK CLOUD OVER ANY PLANS FOR THEIR EXPANSION

IT IS VERY EXPENSIVE

- IT IS CURRENTLY PROJECTED TO COST $15,000,000
- THIS WILL PROBABLY BE A LOW ESTIMATE
- MUCH BETTER USES OF FUNDS ARE ALMOST CERTAINLY AVAILABLE

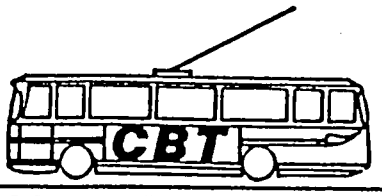
ALTERNATIVE OF POWERLINE BEAVERTON TRAILCORRIDOR STUDY -RTP PROJECT NO 3014

- IT WOULD PROVIDE BICYCLE AND PEDESTRIAN ACCESS NORTH/SOUTH (TWO PARTS OF THE MULTI MODAL SOLUTION)
- IT WOULD COST FAR LESS AT $2,700,000
- THERE WOULD BE NO NEGATIVE AND MANY POSITIVE IMPACTS TO EXISTING BUSINESSES AND NEIGHBORHOODS

IN SUMMARY

- THERE WOULD BE VERY LITTLE POSITIVE BENEFIT GAINED
- THERE ARE LARGE NEGATIVE IMPACTS ON EXISTING BUSINESS AND NEIGHBORING RESIDENTIAL COMMUNITY
- IT WOULD BE VERY EXPENSIVE
- IT IS AN IDEA WHICH SHOULD BE REJECTED

JIM HOWELL



CITIZENS for BETTER TRANSIT

To: Transportation Policy Alternatives Committee, March 1990
From: Ray Polani
Subject: Request for a study of a Transit Intensive Regional Transportation Plan to be included in the fiscal year 1991 Unified Work Program

The proposed study would develop the base data needed to produce a Transit Intensive Regional Transportation Plan. This contingency plan would be invaluable in the event of sudden changes in national transportation priorities. Possible sizable increases in fuel prices and diversion of federal transportation funds to more pressing national needs could raise havoc with our current highway intensive transportation plan. A relatively low-cost, fuel efficient transit strategy could save our area from a future mobility crisis.

The modest amount of funds needed to develop this plan now, could save valuable time and resources later on. It also would be a valuable tool to evaluate light rail and highway projects in the context of the current Regional Transportation Plan.

Study Elements.

1. Improved and expanded transit network design
   a. Improved bus network (routing, headways and preferential treatment)
   b. Additional high capacity corridors (LRT)
   c. New circumferential corridors (Bus, Railbus, LRT)
   d. Commuter service beyond metro area (rail, Bus)

2. Travel demand forecast using input from improved and expanded transit network design
   a. Modify base highway network to exclude highways not currently in place.and include "fantom lines" to replicate transit corridors not in the highway network. This assumes travel demand will change as a result of providing superior transit facilities between zones not served well by the highway network.
   b. Make land use assumptions that concentrate a high percentage of projected growth within walking distance of the rail stations. (During the past 30 years, 50% of Toronto's apartment contruction and 90% of its office development has occurred within walking distance of its metro system).

3. Input the travel forecast model with transit supportive assumptions.
   a. Moderate fares
   b. Parking costs highest near the rail system
   c. High auto operating costs (due to increased fuel, parking and registration)
   d. Constrained auto traffic flow consistent with existing capacity
   e. Unreliability factor for corridors of constrained flow (due to accidents, breakdowns)
   f. Comfort and reliability factor for rail travel

4. Research availability of existing regional rail corridors for passengers and freight use
   a. Negotiated purchase
   b. Condemnation
   c. Joint use agreements

5. Develop costs for this transit intensive alternative
   a. Capital (right-of-way, fixed infrastructure, rolling stock)
   b. Operating (cost less projected farebox revenue)

We agree that many of the assumptions made in a transit intensive scenario are not realistic in the present political climate, but we believe the approved regional transportation plan is also not realistic given many obvious global trends. Political reality will move in the direction of more transit the way it is already happening in California, the heart of the auto-dependent culture of today.

This plan will help set the upper limit of what can be expected from transit intensive development so that future decision makers will have a broader spectrum of options to choose from as national priorities change.

For the financing of the study we recommend that 2%-3% of Metro's Fiscal 1991 planning budget be diverted to this critical project ($ 100- $150,000).

TIME Nov. 8, 1999

WILL WE RUN OUT OF

BY MARK HERTSGAARD

No, we'll have plenty of carbon-based fuel to see us

THE METAPHORICAL ANSWER TO THIS QUESTION IS MORE IMPORTANT THAN THE literal, but the literal is irresistibly short: No, unfortunately not. Humans will have at our disposal as much gasoline as we can burn in the 21st century. Nor are we likely to run out of heating oil, coal or natural gas, the other carbon-based fuels that have powered industrial civilization for 200 years.

Why won't we run out? And why is that unfortunate? After all, these fuels provide nearly 80% of the energy humans use to keep warm, to light buildings and run computers, to power the cars that get us around, the tractors that plant food, the hospitals that serve our sick. If these fuels were to vanish tomorrow, worldwide chaos would follow and humans would die in the hundreds of millions.

So why not rejoice at having lots of fuel to burn? Let me try to answer that by telling you about my friend Zhenbing.

I met Zhenbing in China in 1996, near the end of a six-year journey around the world to write a book about humanity's environmental future. A 30-year-old economics professor who was liked on sight by virtually everyone he met, Zhenbing was my interpreter during five weeks of travel throughout China. A born storyteller, he often recalled his childhood in a tiny village northwest of Beijing. Like most Chinese peasants of that era, Zhenbing's parents were too poor to buy coal. Instead, in a climate like Boston's, where winter temperatures often plunged below zero, they burned dried leaves to heat their mud hut. Their home's inside walls were often white with frost from November to April.

In 1980, China's economic reforms began putting enough money in people's pockets to enable even peasants like Zhenbing's parents to buy coal. Today coal supplies 73% of China's energy, and there is enough beneath the country to last an additional 300 years at current consumption rates. Plainly, that is good news in one respect. Burning coal has made the Chinese people (somewhat) warm in winter for the first time in their history. But multiply Zhenbing's story by China's huge population, and you understand why 9 of the world's 10 most air-polluted cities are found in China and why nearly 1 of every 3 deaths there is linked to the horrific condition of the air and water.

Equally alarming is what China's coal burning is doing to the planet as a whole. China has become the world's second largest pro-

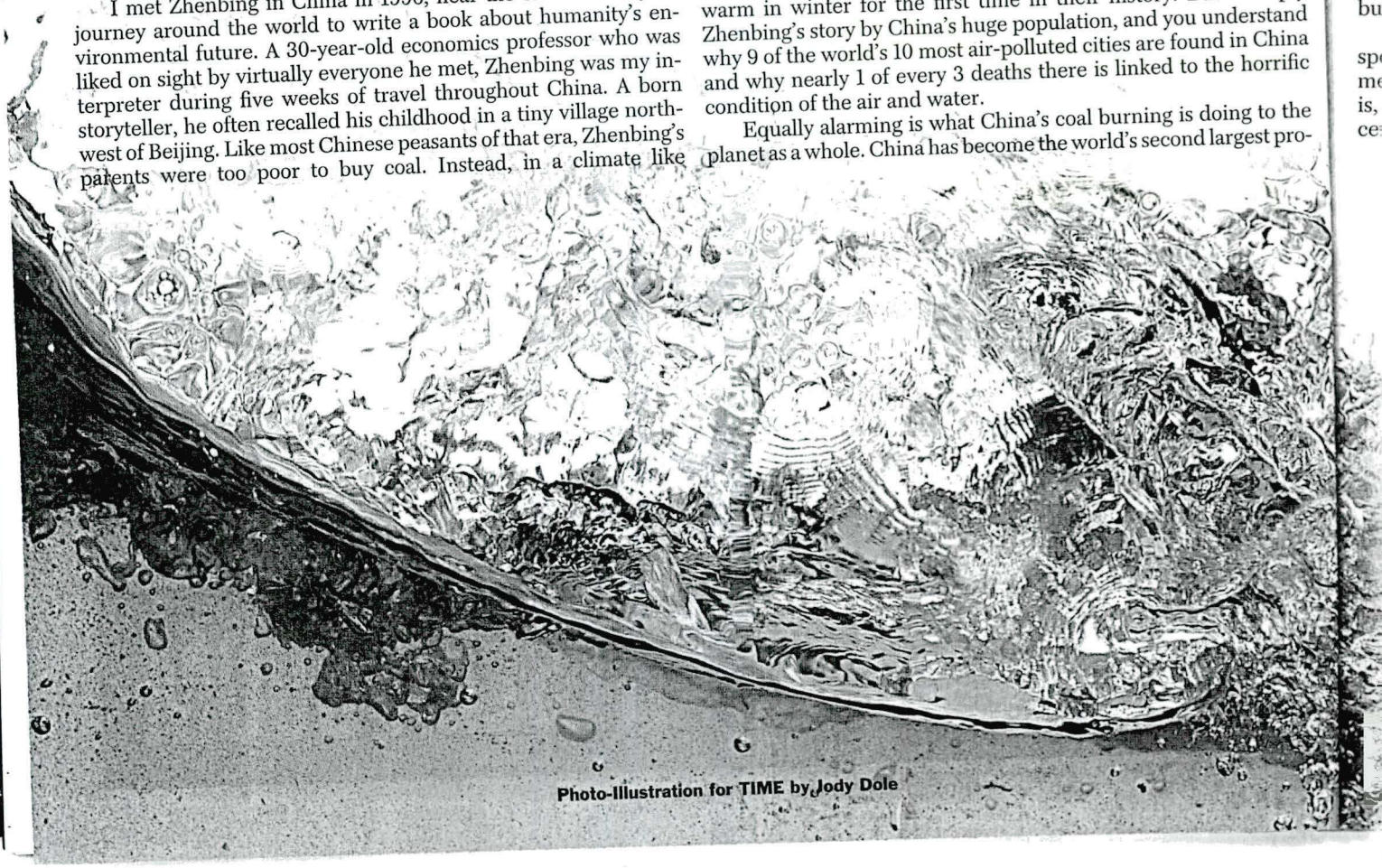
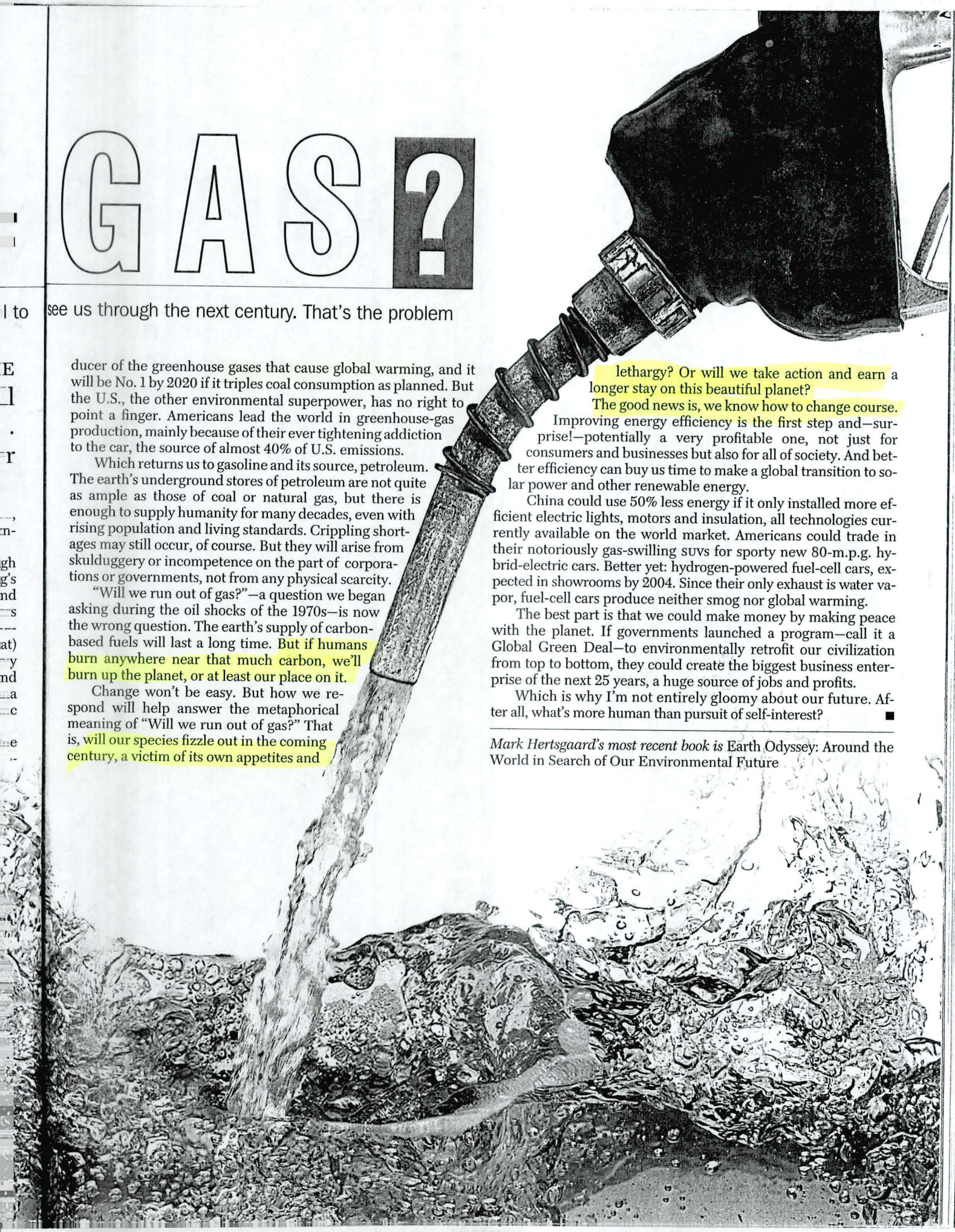


Photo-Illustration for TIME by Jody Dole

GAS?

see us through the next century. That's the problem



ducer of the greenhouse gases that cause global warming, and it will be No. 1 by 2020 if it triples coal consumption as planned. But the U.S., the other environmental superpower, has no right to point a finger. Americans lead the world in greenhouse-gas production, mainly because of their ever tightening addiction to the car, the source of almost 40% of U.S. emissions.

Which returns us to gasoline and its source, petroleum. The earth's underground stores of petroleum are not quite as ample as those of coal or natural gas, but there is enough to supply humanity for many decades, even with rising population and living standards. Crippling shortages may still occur, of course. But they will arise from skulduggery or incompetence on the part of corporations or governments, not from any physical scarcity.

"Will we run out of gas?"—a question we began asking during the oil shocks of the 1970s—is now the wrong question. The earth's supply of carbon-based fuels will last a long time. But if humans burn anywhere near that much carbon, we'll burn up the planet, or at least our place on it.

Change won't be easy. But how we respond will help answer the metaphorical meaning of "Will we run out of gas?" That is, will our species fizzle out in the coming century, a victim of its own appetites and lethargy? Or will we take action and earn a longer stay on this beautiful planet?

The good news is, we know how to change course. Improving energy efficiency is the first step and—surprise!—potentially a very profitable one, not just for consumers and businesses but also for all of society. And better efficiency can buy us time to make a global transition to solar power and other renewable energy.

China could use 50% less energy if it only installed more efficient electric lights, motors and insulation, all technologies currently available on the world market. Americans could trade in their notoriously gas-swilling SUVs for sporty new 80-m.p.g. hybrid-electric cars. Better yet: hydrogen-powered fuel-cell cars, expected in showrooms by 2004. Since their only exhaust is water vapor, fuel-cell cars produce neither smog nor global warming.

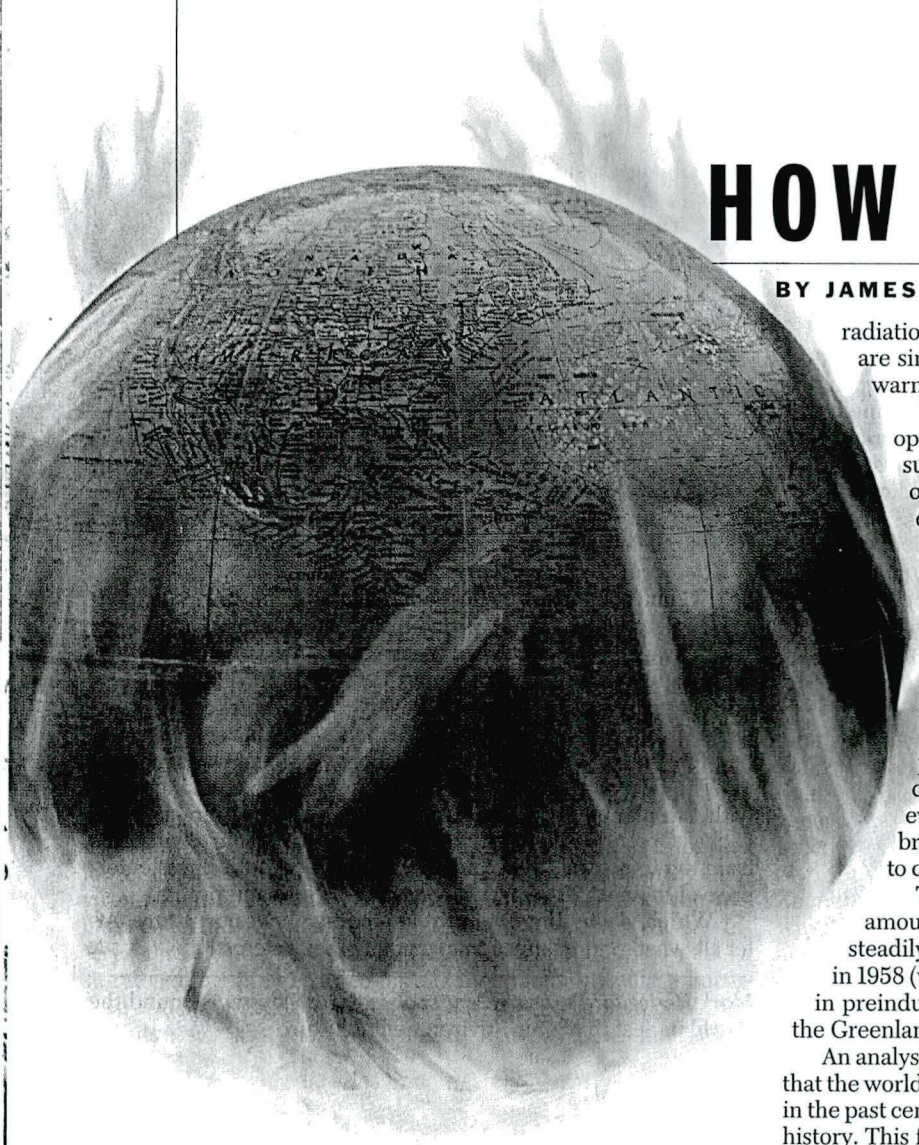
The best part is that we could make money by making peace with the planet. If governments launched a program—call it a Global Green Deal—to environmentally retrofit our civilization from top to bottom, they could create the biggest business enterprise of the next 25 years, a huge source of jobs and profits.

Which is why I'm not entirely gloomy about our future. After all, what's more human than pursuit of self-interest? ■

Mark Hertsgaard's most recent book is Earth Odyssey: Around the World in Search of Our Environmental Future

HOW HOT

BY JAMES TREFIL



NOT SO LONG AGO, PEOPLE TALKED ABOUT global warming in apocalyptic terms—imagining the Statue of Liberty up to its chin in water or an onslaught of tropical diseases in Oslo. Recently, however, advances in our understanding of climate have moved global warming from a subject for a summer disaster movie to a serious but manageable scientific and policy issue.

Here's what we know. Since sunlight is always falling on the earth, the laws of physics decree that the planet has to radiate the same amount of energy back into space to keep the books balanced. The earth does this by sending infrared radiation out through the atmosphere, where an array of molecules (the best known is carbon dioxide) form a kind of blanket, holding outgoing radiation for a while and warming the surface. The molecules are similar to the glass in a greenhouse, which is why the warming process is called the greenhouse effect.

The greenhouse effect is nothing new; it has been operating ever since the earth formed. Without it, the surface of the globe would be a frigid −20°C (−4°F), the oceans would have frozen, and no life would have developed. So the issue we face in the next millennium is not whether there will be a greenhouse effect, but whether humans, by burning fossil fuels, are adding enough carbon dioxide to the atmosphere to change it (and our climate) in significant ways.

You might think that, knowing what causes greenhouse warming, it would be an easy matter to predict how hot the world will be in the next century. Unfortunately, things aren't that simple. The world is a complex place, and reducing it to the climatologist's tool of choice—the computer model—isn't easy. Around almost every statement in the greenhouse debate is a penumbra of uncertainty that results from our current inability to capture the full complexity of the planet in our models.

There is one fact, though, that everyone agrees on: the amount of carbon dioxide in the atmosphere is increasing steadily. It is near 360 parts per million today, vs. 315 p.p.m. in 1958 (when modern measurements started) and 270 p.p.m. in preindustrial times (as measured by air bubbles trapped in the Greenland ice sheet).

An analysis of admittedly spotty temperature records indicates that the world's average temperature has gone up about 0.5°C (1°F) in the past century, with the '90s being the hottest decade in recent history. This fact is quoted widely in the scientific community, although there are nagging doubts even among researchers. Recent satellite records, using different kinds of instrumentation, fail to show a warming trend.

If we accept that there has been moderate warming, we turn to computer models to see if humans are to blame and what will happen to the earth's climate in the future. These models are complex because climate depends on thousands of things, from Antarctic sea ice to sub-Saharan soil conditions. While the electronic simulations are monuments to the ingenuity and perseverance of their creators, they provide us with, at best, a fuzzy view of the future. They have difficulty handling factors like clouds and ocean currents (two major influences on climate), and if you fed the climate of 1900 into any of them, they couldn't predict the climatic history of the 20th century. Like everything else in this frustrating field, the models' limitations force us to make important decisions in the face of imperfect knowledge.

The most authoritative predictions about future warming come from the Intergovernmental Panel on Climate Change, a worldwide

Photo-Illustrations for TIME by 2Face

In the past decade we have experienced SEVEN of the TEN warmest years on record

No one knows for sure, but the potential perils of climate change make it unwise for us to ignore the greenhouse effect

WILL IT GET ?

consortium of more than 2,000 climate scientists. The current forecast is that by 2100 the earth's temperature will go up 1° to 3.5°C (2° to 7°F), with the best guess being an increase of 2°C (4°F).

At the lower end of this predicted warming range, the temperature rise would take us back to the conditions that existed between A.D. 950 and 1350, when the climate was 1°C (2°F) warmer than it is now. This time period is regarded as one of the most benign weather regimes in history. To find temperature swings at the upper end, you have to go back 10,000 years, to when the earth was exiting the last Ice Age. Temperatures during the Ice Age were 5°C (10°F) cooler than they are now, and there was a series of incidents during which global temperatures changed as much as 10°F in a matter of decades. If that were to happen now, expanding oceans might flood coastlines and generate fiercer storms. And as weather patterns changed, some places could get wetter and some dryer, and the ranges of diseases could expand. Civilization has seen—and endured—such changes in the past, but they may come much more swiftly this time, making it harder to withstand the jolts.

The main reason for the spread in the IPCC predictions is uncertainty about how much carbon dioxide will be added to the atmosphere by human activity, because how we will respond to the threat of climate warming is the greatest imponderable of all. We can probably develop technologies to deal with excess carbon—some scientists talk about removing it from smokestacks and stashing it underground—but the most direct way to control carbon dioxide in the atmosphere is not to put it there in the first place. This is the point of the 1997 Kyoto Protocol—signed by 84 nations but not ratified by the U.S. Senate—which would limit developed countries' carbon emissions from cars, power plants and other major users of fossil fuels.

It makes no sense to overreact to the prospect of global warming, but it makes no sense to ignore it either. A prudent policy that stresses conservation and alternate energy sources seems to me to be wise insurance in an uncertain age. After all, our grandchildren will thank us for developing high-mileage cars, energy-efficient appliances and cheap solar energy, no matter how the future of global warming plays out. ■

James Trefil is a George Mason University physics professor and author of 101 Things You Don't Know About Science and No One Else Does Either

... AND THEN HOW COLD?

Warming may affect sea currents, triggering an ice age

It seems obvious that trapping more of the sun's heat will make the planet hotter. But what seems obvious isn't always true. According to some respected scientists, there's a chance that global warming could plunge us into, of all things, an ice age.

The argument hinges on the Gulf Stream, the ocean current that brings warm surface water north and east and heats Europe. As it travels, some of the water evaporates; what's left is saltier and thus denser. Eventually the dense surface water sinks to the sea bottom, where it flows back southward. And then, near the equator, warm, fresh water from tropical rivers and rain dilutes the salt once again, allowing the water to rise to the surface, warm up and begin flowing north again.

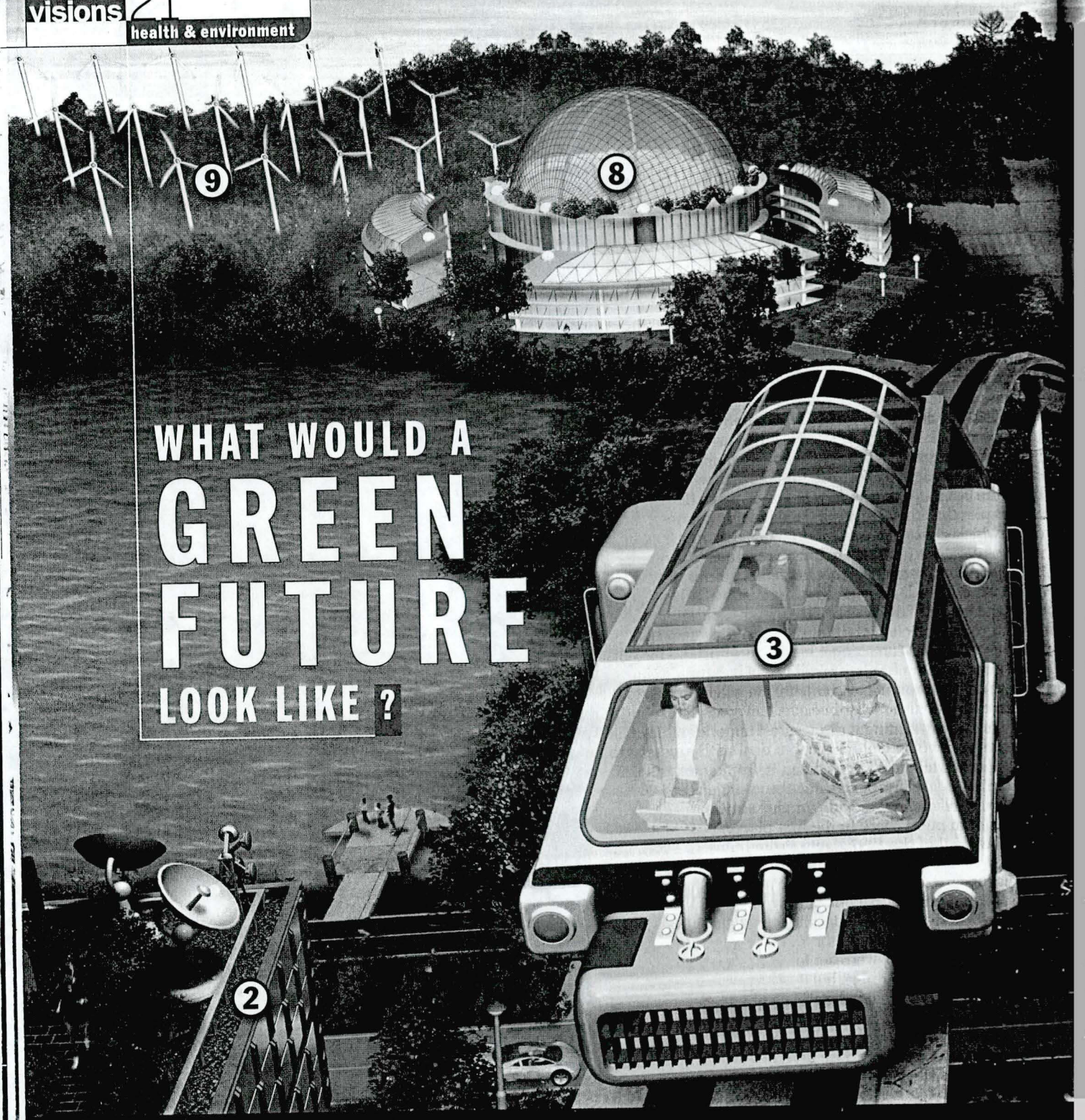
But with global warming, melting ice from Greenland and the Arctic Ocean could pump fresh water into the North Atlantic; so could the increased rainfall predicted for northern latitudes in a warmer world. Result: the Gulf Stream's water wouldn't get saltier after all and wouldn't sink so easily. Without adequate resupply, the southerly underwater current would stop, and the Gulf Stream would in turn be shut off.

If that happens, Europe will get very cold. Rome is, after all, at the same latitude as Chicago, and Paris is about as far north as North Dakota. More snow will fall, and the bright snow cover will reflect more of the sun's energy back into space, making life even chillier. Beyond that, the Gulf Stream is tied into other ocean currents, and shutting it down could rearrange things in a way that would cause less overall evaporation. Because atmospheric H_2O is an important greenhouse gas, its loss would mean even more dramatic cooling—a total of perhaps as much as 8°C (17°F).

Worst of all, the experts believe, such changes could come on with astonishing speed—perhaps within a decade or less. And while we might have a great deal of trouble adjusting to a climate that gets 2°C (4°F) warmer over the next century, an ice age by midcentury would be unimaginably devastating. The lingering uncertainty about whether our relentless production of greenhouse gases will keep heating our planet or ultimately cool it suggests that we should make a better effort to leave the earth's thermostat alone.

—By Michael D. Lemonick

In the last ICE AGE, about 18,000 years ago, glaciers came as far south as Pittsburgh



WHAT WOULD A GREEN FUTURE LOOK LIKE?

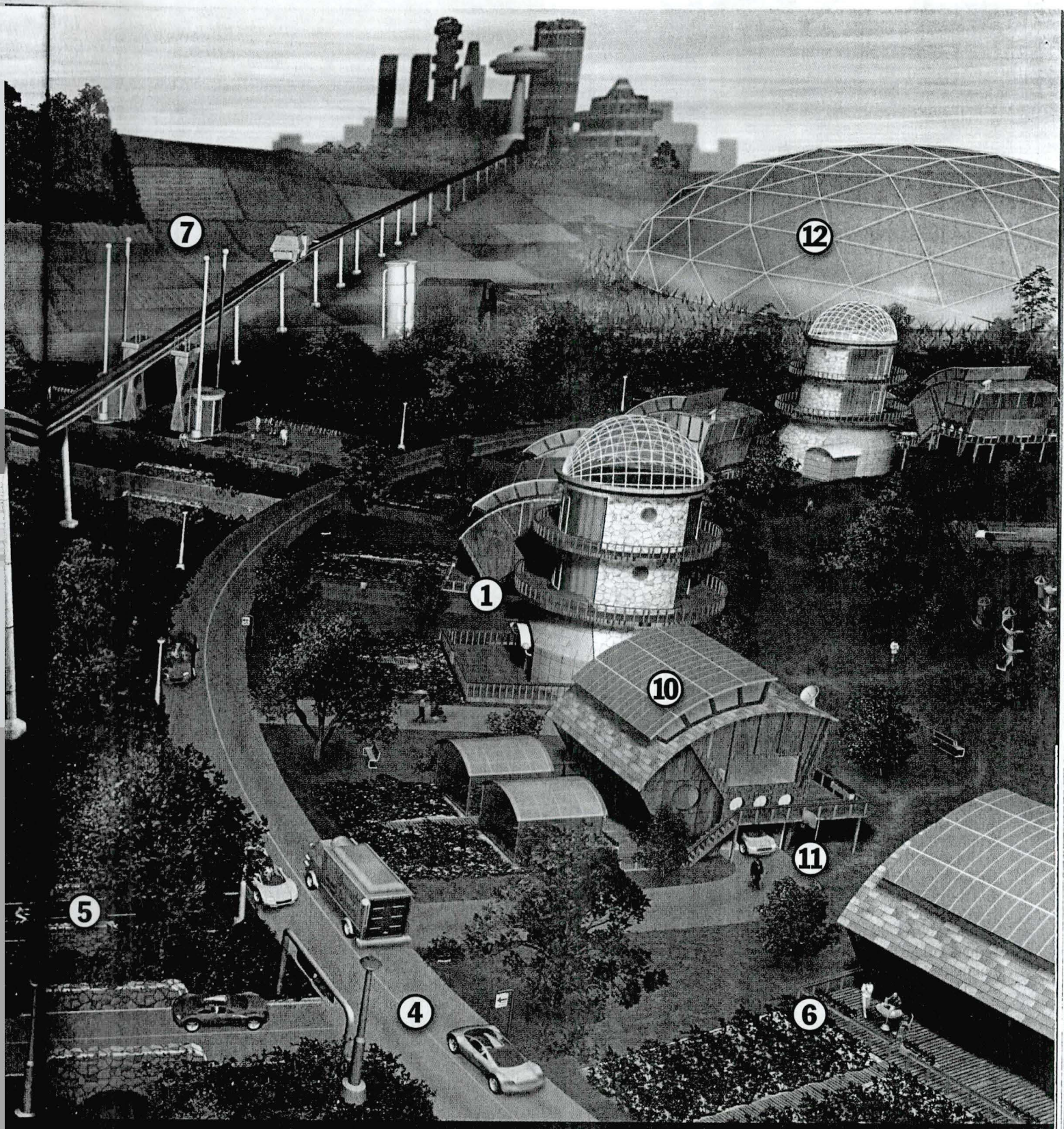
By the year 2025 many of us will no longer tolerate the scourges of 20th century suburban life: the marathon commutes, the maddening traffic jams, the pollution spewing from tailpipes and chimneys. We'll demand neighborhoods where the air is pristine and places to work, shop and play are close at hand

WORK / TRANSPORT

Lots of us will work in our houses or apartments (1), telecommuting with our computers. Others will make a short hop to a nearby office park (2). Those who have to go downtown will prefer swift mass transit (3). Cars and trucks (4) will still be used, but they will run on clean, hydrogen-powered fuel cells. To keep ourselves in shape and save money, we'll spend more time on bicycles (5)

FOOD

We'll favor fruits, grains and vegetables grown close to home, either in our backyard gardens (6) or on nearby organic farms (7). It won't take much energy to get the fresh produce to local markets. Since the farms will employ natural forms of pest control rather than potentially toxic chemicals, there will be much less of a buildup of suspected carcinogens in the food supply



SHOPPING

Even in an era of online marketing, there may still be a mall (8), but it will be relatively small and easy to get to, with sidewalks and bike racks instead of a mammoth parking lot. An airy place where a flood of natural light will cut down on energy use, the mall will be a two-way operation: when you're through using any product you buy there, the stores will be required to take it back for recycling

ENERGY

Our power will come from sources cleaner than fossil fuels. Some energy will flow from modern-day windmills (9), but much of it will be generated in our own homes. Rooftop solar panels (10) will supply electricity to our appliances and to a basement fuel cell (11), which will produce hydrogen. When the sun is not shining, the cell will operate in reverse, using the hydrogen to make electricity

WASTE

Sewage will be piped into enclosed marshes (12), where selected plants, fish, snails and microbes will purify the wastewater before it enters streams and reservoirs. No longer will inadequate treatment of wastewater promote algal blooms that threaten other aquatic life

BY CHARLES P. ALEXANDER
ILLUSTRATION BY DON FOLEY

ENTER INTO RECORD FOR
1) RTP UPDATE
2) SHUR UGB AMENDMENTS
SUBMITTED BY:
STEVE LAFRANCE FOR CAIG

South Hillsboro Urban Reserve Areas Transportation Review

Prepared for

Washington County

Prepared by

DKS Associates

September 13, 1999

DKS Associates

921 S. W. Washington Street, Suite 612
Portland, OR 97205-2824
Phone: (503) 243-3500
Fax: (503) 243-1934

September 14, 1999

Mr. Andy Back, Senior Planner
Washington County
Land Use and Transportation Department
155 North First Avenue
Hillsboro, OR 97124

Subject: Transportation Review for the South Hillsboro Urban Reserve Areas #51 through 55 in the City of Hillsboro, Oregon

Dear Andy,

DKS Associates is pleased to submit this final report to Washington County for its use in the on-going review of the South Hillsboro Plan Area. We have enclosed four printed copies and one unbound original document for your use.

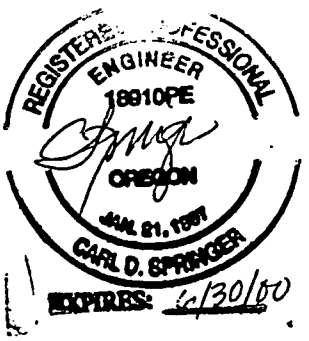
We have enjoyed working closely with you and the project team in developing our approach to assessing the transportation impacts of this important area. This final report reflects comments made by the City of Hillsboro and Mr. Steve Larrance on our July 30, 1999 Draft Final report.

We would be glad to present or discuss these findings with staff or the county commissioners at your discretion. If you have any further questions or comments, please call me.

Sincerely,

DKS Associates, Inc.

Carl D. Springer, P.E.
Project Manager



Cc: Wink Brooks, City of Hillsboro (1 copy)
Wayne Kittelson, Kittelson & Associates (1 copy)
Tom Lancaster, Lancaster Engineering (1 copy)
Steve Larrance (1 copy)
Scott Higgins, Metro (1 copy)

X:\PROJECTS\1999\p99065 (Cornelius)\P99083 (S. Hillsboro Review)\Cover Letter.doc

Table of Contents

LIST OF TABLES

APPENDICES

Introduction and Summary

Introduction

DKS Associates has completed its review of the system-level transportation impacts associated with the South Hillsboro Urban Reserves (SHUR) Area. The study purpose was to provide the Washington County Board of County Commissioners and their staff with an independent review of the city's transportation plan and system impact assessment.

The City of Hillsboro and the consultant that performed the initial transportation planning for the Concept Plan collaborated in milestone meetings to guide the study direction. The approaches taken by DKS Associates for estimating travel activity and impacts of the SHUR was based on published data for large mixed-use developments and on Metro travel data for comparable neighborhoods around the metropolitan area.

Summary of Findings

The following discussion highlight the major findings of this technical analysis.

- **Regional Network Congested with Current Funding Programs Regardless of Urban Reserve Development** – The 2020 peak period travel demands will exceed system capacity on several regional facilities near the subject site. Cornelius Pass Road, 185th Avenue, Farmington Road and particularly TV Highway will have peak hour travel demands above planned capacity given the set of improvements described by Metro in their Existing Resources Regional Transportation Plan (RTP). The high travel demand will occur whether or not the urban reserve lands are developed, although SHUR development will exacerbate these conditions. The most severe conditions on TV Highway extend from Brookwood Avenue east to Highway 217 and include the northern frontage of the South Hillsboro site.
- **SHUR Generates 7,500 New Vehicle Trips on Local and Regional Facilities** — The net new traffic added to the regional street system will be approximately 7,500 vehicle trips in the p.m. peak hour if the SHUR develops as conceived in the city's concept area plan. This trip generation value accounts for internal traffic (1,000 trips) and pass-by traffic (400 trips) that may use the new commercial facilities within SHUR. The trip generation estimates for SHUR are summarized below in Table 1.

Table 1: SHUR Net Vehicle Trips Off-Site

Description	*Daily Trips*	*PM In*	*PM Out*	*PM Total*
Total Vehicle Trips	87,281	5,254	3,649	8,904
Less Retail Pass-By Trips (30%)		-199	-215	-414
Less Internal Trips (11%)		-578	-401	-979
Net Vehicle Trips Generated		4,477	3,033	7,510

- **SHUR Travel Patterns Predominantly North and East of Urban Reserves** – The Metro model travel forecasts showed about three-quarters of SHUR traffic during peak hours will use road facilities north and east of the site. Travel to and from the west will be approximately 18 percent, and the remaining 6 percent will use facilities to and from the south. The table below summarizes the trip distribution in the cardinal directions and notes the major arterial facilities used for this travel.

Table 2: Off-Site Trip Distribution during Peak Hours

Travel To and From	*Arterial Facilities*	*Percent of Site Trips*
North	Brookwood Avenue Century Boulevard Cornelius Pass Road 185th Avenue	38%
East	TV Highway Farmington Road	38%
West	TV Highway Baseline Road	18%
South	River Road Farmington Road 209th Avenue	6%

- **Pending Metro Performance Standards Applied** – The 2-hour peak period level of service criteria recommended in the by Metro in the Draft Regional Transportation Plan was applied to evaluate transportation system performance. This criterion uses a 2-hour peak period travel demand forecast and, at a minimum, it accepts one hour at LOS E and one hour at LOS F conditions. This is a departure from county performance standards.
- **Off-Site Impacts with Urban Reserve Development** – The road facilities primarily impacted by urban reserve development are TV Highway, Cornelius Pass Road, and Century Boulevard, Farmington Road and 209th Avenue. If substantial capacity improvements at not made to TV Highway (as provided in Metro's Strategic Funding RTP), the impacts will also affect its parallel facilities including Alexander, Johnson, Blanton, and Kinnaman.
- **Metro Strategic RTP Improvements Could Serve Most of the Travel Demands Even With Urban Reserve Development** – The system improvements contained in the Spring 1999 Strategic Funding RTP street network mitigates most of the congested facilities during peak periods. The Metro suggested improvements on TV Highway would create

an expressway facility similar to Highway 212 in Milwaukie and Highway 99E near Tacoma Avenue with roadway over-crossings, grade-separated interchanges, and very limited access to adjoining land. The Draft Strategic RTP allocates $33.2 million for this improvement. Additional costs for land acquisition and business impact requirements could increase the total project to over $100 million.

- **TV Highway Improvements Require Further Study** – The suggested Metro recommendation for an expressway facility on TV Highway has not been studied by ODOT, Washington County or either affected city and these solutions have not been adopted into their respective transportation plans. Further study of the TV Highway Corridor is needed to document the specific needs and to develop a preferred alternative. This investigation would balance the benefits of high capacity street improvements assumed in the Strategic RTP and the costs of such improvements including the impacts to existing and planned land development (both takings and access modifications).

Travel Demand Forecast

Approach and Methodology

The primary tools used in this review was the 2020 travel demand models developed by Metro staff that forecast two-hour peak period travel volumes. Two alternative road system networks were included in the evaluation:

- Existing Resource Network – This network relies on current funding sources and programs to add system capacity. In Washington County, this is largely limited to MSTIP funded projects.
- Strategic Network – This network includes many additional system improvements that were identified by Metro and local agency staff that will be needed to serve forecasted 2020 activity levels. These additional improvements in the study area are summarized in the RTP list in *Appendix A*. Possible funding programs for the added improvements have not been identified.

The cost estimates shown in the RTP are preliminary and do not include land acquisition or business impact requirements. The recent Farmington Road improvement project demonstrated that associated costs for land acquisition and business impact requirements can substantially increase the total project costs relative to street improvement costs. Farmington Road cost $17 million to widen for 1.3 miles ($13 million per mile). The TV Highway expressway project in the Strategic Network (#3025) is six miles long and it includes several new grade-separated structures. The total costs could exceed $100 million.

Methodology

The Metro regional model is a comprehensive travel demand forecasting tool for the Portland Metropolitan Area that follows the four-step modeling process[1] and actually consists of a series of individual models that have been calibrated to represent regional travel activity. Our review focused on the following specific elements of the modeling process as they apply to the South Hillsboro Concept Plan Area:

- street capacity and connectivity,
- land development, and
- expected travel activity (total vehicle trips, percent of internal trips, etc.).

[1] The traditional four-step travel demand forecast modeling process involves estimating trip generation (person trip ends), trip distribution (pairs of person trip ends around the region), travel mode (mode of transport – auto, truck, transit, etc.), and trip assignment (route taken to complete trip).

Street Network and Connectivity

The 2020 Existing Resources and Strategic Auto networks were reviewed for the planning area to compare it with the local transportation system envisioned in the concept plan. The plan area is described by four traffic analysis zones (TAZ 244 through 248). Also included in the 2020 model networks are Tri-Met transit services including the Westside light rail train service, and local and regional bus services. A higher frequency bus service on TV Highway is included in both networks.

On-Site Network

The original model networks were compared to the proposed concept plan area street system per the city's report. The most recent model network (4/16/99) has incorporated the plan area's higher-level streets (community street, regional boulevard) with moderate free-flow speeds (35 mph) and hourly vehicle capacity (900 vehicle per hour). These designations are consistent with three-lane minor arterial and major collector facilities found elsewhere in the study area (Brookwood Avenue, Francis Street, Lois Street). The planned function of the new on-site streets are summarized below:

East-West Street Connections: On-site street facilities in the concept plan connect to several east-west collector and minor arterial facilities that parallel Tualatin Valley Highway. This will enable site vehicle traffic to better use alternative routes to TV Highway and lessen the peak hour demands that would otherwise be added to that facility. The on-site east-west streets connect to existing streets including SW Blanton Street, SW Kinnaman Road, SE Alexander and SE Davis.

North-South Street Connections: The existing railroad service immediately south of TV Highway severely restricts new street access from the plan area. North-south connections are shown to SW Cornelius Pass Road, Century Boulevard, and SW Brookwood Avenue.

The model's transportation network does not include the commuter rail or street car components that are suggested as options in the preferred concept area plan. These public transit elements require co-ordination with agencies and lands outside of the concept plan area, and, to date, they have not been incorporated into either the transportation system plan for Hillsboro or the latest Regional Transportation Plan improvements. These are distinguished from the above street improvements that can be planned, funded and constructed entirely within the bounds of the planning area.

Overall, the on-site street elements of the 2020 model networks appear to reasonably represent the preferred concept plan circulation system. The following network modifications were made:

- Blanton Street was extended westerly to connect with the southerly extension of Cornelius Pass Road.
- The concept plan area were subdivided from four to nine TAZs to isolate development outside of the plan boundary (just south of TV Highway) and to add more definition to the plan area.

Off-Site Network

No new off-site street system improvements were considered outside of the concept plan area beyond those currently envisioned in the Regional Transportation Plan (RTP) with the few corrections noted below. The analysis evaluates the impacts of the concept plan on the

transportation system given the existing system and planned improvements that are identified in the latest RTP[2].

TV Highway – One of the more substantial RTP street improvements on the Strategic network was along TV Highway between 10th Street in Hillsboro and Cedar Hills Boulevard in Beaverton. The improvement would more than double capacity from 2,150 vehicle per hour (vph) in each direction today to 4,500 vph after the improvement. (See letter from Metro to Washington County with this improvement recommendation and ODOT's letter to Metro regarding TV Highway in *Appendix B*)

This RTP project is not explicitly contained in the state, county or city transportation plans. The county plan calls for seven-lanes on TV Highway in this area, and the city plan notes that by 2015 TV Highway will be close to capacity (this review focuses on 2020 horizon year). ODOT has not adopted such improvements into their regional plan but they recognize the need for improved access management.

In order to achieve 4,500 vehicles per hour capacity, significant access changes must occur in the TV Highway Corridor. The model assumes three interchange treatments, four or five flyovers or underpasses and five or six "right in, right out " locations between Brookwood Avenue and Hocken Avenue. All other roads and business driveways would be cut-off from direct access to TV Highway. Between Brookwood Avenue and 198th Avenue, one interchange, two flyovers and two "right in, right outs" are assumed. Further refinement study is needed to fully document the capacity needs, and to develop alternative measures to increase corridor capacity. The suggested expressway concept by Metro is only one possible solution. Other alternatives could include improved capacity and connectivity of parallel roads, and other locations for grade separations and access controls.

At a planning level, access changes of this magnitude are necessary to achieve the high capacity assumed in the model. The precise access elements and their locations should be identified in a more detailed corridor study. However, near the South Hillsboro Urban Reserve, this level of capacity cannot be achieved with at-grade intersections.

Miscellaneous Corrections – Based on input from city and county staff regarding network corrections, the following network modifications were made:

- **Farmington Road** – The Existing Resource network was showed 1800 vph capacity west of 185th Avenue where no planned improvements are identified. This was corrected to be 900 vph.
- **Century Boulevard** – The segment between Evergreen Road and Cornell Road was added to the both networks, and the segment between Evergreen Road across US 26 to Jacobson Road was added to the Strategic Auto network. These revisions will be incorporated into the next round of RTP network improvements.

Land Development Assumptions

The proposed concept plan land development is distributed around three major neighborhoods on-site: Butternut Creek, Ladd-Reed, and Gordon Creek. The specific allocations for each neighborhood are not identified in the concept plan, but the overall mix of development is summarized below in Table 3. The South Hillsboro Urban Reserve plan area includes up to 8,500 new residential dwelling units, one middle school, two elementary schools, and over 600,000 square feet of building area for office, industrial and commercial uses.

---

2 *Regional Transportation Plan*, Metro, Round 3 – April 16, 1999, Strategic Auto Funding scenario.

An estimate was made for the employment associated with each of these land development categories as a means of comparing it with other communities in the Metro region. The conversion from building area to employment was done using data developed by Metro in their 1990 employment density surveys for office, commercial and industrial uses. The school administrative staff employment projections were based on similar facilities in the Beaverton School District. For details of the conversion, refer to the attached Table A.

Table 3: Concept Plan Area Land Development (Preferred Alternative)

Description	*Plan Quantity*	*Households*	*Estimated Employment (1)*
Middle School	750 students		50
Elementary School	1650 students		110
Office/Light Industrial	341,000 s.f.		1,362
Shopping Center	183,000 s.f.		261
Supermarket	105,000 s.f.		155
Quality Restaurant	42,000 s.f.		70
Senior Housing	1,170 units	1,170	
Apartment	2,845 units	2,845	
Single Family Detached	4,544 units	4,544	
Concept Plan Area Total		**8,559**	**2,008**

Notes: (1) Refer to the Table A for specific conversion factors applied to each land use category. The estimated total 2,008 employment compares well with the 2,000 employees cited in *South Urban Reserve Concept Plan*, p. 98.

The above land use total for the concept plan area were compared to the amounts allocated for the plan area in the Metro 2020 model as summarized below in Table 4. Overall, the total number of households is about 1,000 units higher, retail employment is essentially the same, but the number of non-retail employees is about 3,100 less. In discussions with Metro staff[3], the large difference for non-retail employment was attributed to older data for the urban reserves that pre-dated the most recent city planning efforts for the concept plan. Metro staff suggested that the model allocations should be adjusted to reflect the most current concept plan, and that the difference should be re-allocated within the sub-regional area such that totals for this portion of the county remain unchanged.

Table 4: Comparison of Plan Description to Metro Allocation

Description	*Households*	*Retail Employees*	*Non-Retail Employees*
Concept Plan	8,559	486	1,522
Metro 2020 Allocation (1)	7,551	392	4,644
Difference	1,008	94	-3,122

Note: (1) Metro data for TAZs 244-248 are the net increase between 1994 and 2020 levels. The existing uses in 1994 are deducted in this manner. A portion of the difference can be attributed to planned growth along TV Highway that lies outside of the urban reserve area boundaries and inside TAZ 244. This includes approximately 600 households and 700 non-retail employees.

[3] Telephone conversation with Dennis Yee, Metro Data Resources, (503)797-1578 on 4/29/1999.

Comparison of Plan Area to Selected Metro Communities

The evaluation of a large mixed-use project requires a more comprehensive review of travel demand than typical transportation impact studies. It is appropriate to note that no database currently exists from which to draw actual observations and experience of the other similar urban developments. The large scale (1,650 acres) and density (8,500 households) require consideration of the travel activity that will occur within the project bounds as well as traffic added onto the surrounding street system. To provide guidance in this area of the assessment, the review team elected to review other areas of the Portland Metro region to try and bracket both the land use mix and the associated travel activity patterns. In this case, the most significant element to be determined was the internal trip capture or intra-zonal trips.

Five neighborhoods and community centers throughout the Metro region were selected[4] for comparison purposes to the concept plan area. Specifically, the mix of local jobs and housing within the defined areas were used as a basis for evaluating the percentage of internal trips within the South Hillsboro Plan area. In most cases, development in these comparison areas have reached a mature state and have little, if any, in-fill opportunities or peripheral growth. The exception is the Bethany Area that had substantial remaining growth[5] along the northern periphery and at the Bethany Town Center commercial area as of 1994.

The 1994 model allocations for these neighborhood areas are shown in Tables 5 and 6 below in the upper sections of each table. The lower section of each table shows the 2020 allocations for the Bethany and the South Hillsboro Area according to the Metro model and the city's concept plan, respectively. Table 6 shows the TAZs included in the neighborhood group, the total number of households, the total number of employees including retail and non-retail categories. Table 6 provides several demographic indicators for each neighborhood to compare the proportion of households served by retail employment, the ratio of total employment to households, and the average size of the TAZs included in the neighborhood definition.

A review was made of Table 6 to identify communities in 1994 that were comparable to the expected development in South Hillsboro in 2020. The first conclusion from the review was that none of the selected areas were close matches. The most extreme case was the Lloyd Center area that was dramatically different in nearly all aspects, especially the very high jobs/housing ratio (8 jobs per household) and the high proportion of local retail uses. Also, the Hollywood and Hawthorne/Belmont areas compared rather poorly with the plan area with significantly higher ratios of jobs to households although overall housing densities were comparable.

---

[4] List of candidate areas were developed during a meeting at Washington County on April 2, 1999 that included staff from the City of Hillsboro, Washington County, Metro, Kittelson & Associates and DKS Associates.

[5] The Bethany Area expects up to 9,600 households, 460 retail employees, and 3,100 non-retail employees by 2020 according to Metro model allocations. The 1994 level represents about two-thirds of the 2020 housing and one-quarter of the 2020 employment.

Table 5: Land Use Allocations for Selected Metro Areas

Community Area	*TAZs*	*Households*	*Total Employees*	*Retail Employees*	*Non-Retail Employees*
1994 Model Land Use Allocations					
St. Johns	921-924	6,580	4,879	1,174	3,705
Lloyd Center	847-849,714	2,210	19,637	3,555	16,082
Hawthorne/Belmont	779-780,786-787	4,582	4,243	1,184	3,059
Hollywood	717-718,856	2,715	4,123	890	3,233
Bethany	163-165,168-171, 204-205,207-208	6,402	889	132	756
2020 Model Land Use Allocations					
Bethany		9,607	3,582	460	3,122
S. Hillsboro Plan Area	244-248 (1)	7,551	5,036	392	4,644
S. Hillsboro Plan Area	Per city plan	8,559	2,008	486	1,522

Notes:
(1) These values are the net change between 1994 and 2020 land use in the selected TAZs.

Table 6: Comparative Demographic Ratios for Selected Metro Areas

Community Area	*Total Gross Acres*	*Ratio of HH/Retail Employees*	*Ratio of Jobs/HH*	*Average Households Per Acre*	*Average Acres Per TAZ*
1994 Model Land Use Allocations					
St. Johns	2,406	6	0.7	2.7	602
Lloyd Center	447	1	8.9	4.9	112
Hawthorne/Belmont	567	4	0.9	8.1	142
Hollywood	469	3	1.5	5.8	156
Bethany	3,102	48	0.1	2.1	282
2020 Model Land Use Allocations					
Bethany	3,102	21	0.4	3.1	282
S. Hillsboro Plan Area (Metro)	1,450	18	0.6	5.5	363
S. Hillsboro Plan Area (City)	1,450	18	0.2	5.9	363

The remaining two communities, St. John's and Bethany, appears to have sufficient similarity to the South Hillsboro area to guide how travel activity might occur. The St. John's area has higher ratios of jobs to housing and larger average TAZs that contribute to more local trips because of the gravity-model trip distribution. The St. John's area was selected as an upper limit for internal trip percentage comparison with the plan area.

The other community is the Bethany area that has comparable jobs/housing ratio for total employment and a lower ratio of houses with local retail employment in 1994. By 2020, the higher growth in employment relative to housing in Bethany makes this area the most comparable of all the communities surveyed. This is true despite the fact that housing density in Bethany is about half the level expected in South Hillsboro. The Bethany area was selected as the lower limit for comparison with the 2020 Bethany area as the most likely target for internal trip activity.

Expected Travel Activity

The trip generation estimates for the plan area were developed using Institute of Transportation Engineers (ITE) data[6] and the results were compared to the Metro trip forecasts for the same community areas that were used in the previous section.

Trip Generation Methodology

The trip generation analysis was based on accepted traffic engineering principles. Given the size, density, design, amount of mixed -use and location of the study area, there limited empirical evidence regarding how such a development would differ from standard ITE trip generation rates. In some cases, this analysis may overestimate the trip generation from the site (for example, the impact of design on vehicle trip generation). In other cases, trip generation may be underestimated (for example, there is some evidence that per capita vehicle trip generation grows over time - the analysis uses 1997 trip generation rates and assumes they stay constant out to 2020.) The vehicle trip generation was determined based on individual land uses for the concept plan shown previously in Table 3.

The total vehicle trips were reduced to account for pass-by trips at the retail uses per ITE recommendations, then further reduced for potential internal vehicle trips that start and end on site. The internal trip activity assumed in the city's concept plan was 30% of all trips during the p.m. peak hour[7]. This is a very significant assumption as it relates to impact assessment, and it was reviewed critically by comparing it with the Metro model forecasts and by a separate internal trip capture method developed by ITE for mixed-use developments.

The first calculation for internal trips was based on Metro forecasts for the comparable communities previously identified. The number of vehicle trips that start or end outside TAZs (internal-external and external-internal trips), and the total vehicle trips that both start and end within the TAZs (internal or intra-zonal trips) were tabulated. A ratio was taken of the total internal trips to the total vehicle trips to calculate the internal trip percentage for each group of TAZs.

The ITE method for evaluating internal trip capture in mixed-use developments[8] calculates the number of trip origins and destinations for uses on site, and matches up the trip pairs based on surveys conducted at other mixed-use sites. This is a useful construct for understanding required balancing of trip activity although the sampling of comparable sites is limited[9]. The results show an overall percentage of internal trips within the mixed-use development. The available survey data for this method did not include school uses. Given that the p.m. peak hour of school activity is primarily staff travel, it was assumed that the internal trip percentage derived for other uses applied equally to the school uses.

---

6 *Trip Generation*, Institute of Transportation Engineers, Sixth Edition, 1997; and *Trip Generation Handbook*, Figure 5.5: Shopping Center Pass-By Trips, Institute of Transportation Engineers, 1998.

7 *Hillsboro South Urban Reserve Concept Plan: Transportation Element*, Kittelson & Associates, Inc., October 29, 1998, page 16. Assumed internal trip components during the p.m. peak hour included 50% of school trips, other public trips, and office trips, 70% of all retail trips, 20% of social/recreational trips, and another 725 trips that would occur on transit (either bus or commuter rail).

8 *Trip Generation User's Guide: Recommended Practice*, Institute of Transportation Engineers, 1998, Chapter 7: Multi-Use Development, pp. 80-92.

9 A greater proportion of retail trips paired with residential trips on-site could substantially increase the overall internal trip capture. The ITE data suggests about 10% of retail trips has origins or destinations from residential uses on site. A higher value of 30% was assumed for the plan area.

Total Trip Generation

The plan area vehicle trip generation was calculated by two methods: the first treated each retail use separately (grocery store, restaurant and shopping center), and the other grouped all of them together into one category for shopping centers. As summarized in Table 7, the total trip generation ranges from 8,904 to 10,292 trips during the p.m. peak hour (see attached *Appendix C* for details). Either calculation method is consistent with standard practice, but the grouped retail method is more appropriate for long-range planning purposes because the specific retail uses may be re-defined as the plan is implemented.

Table 7: Total Vehicle Trip Generation for South Hillsboro Plan Area

Method	*Daily Trips*	*PM In*	*PM Out*	*PM Total*
Separate Retail Uses	96,367	6,062	4,230	10,292
Grouped Retail Uses	87,281	5,254	3,649	8,904

The totals in Table 7 include all vehicle trips including pass-by trips to the retail uses and internal trips that start and end within the South Hillsboro plan area. In the next two sections, these later components are estimated and deducted from the total trips to identify net new vehicle trips off-site of the plan area.

Retail Pass-By Trips

The retail pass-by trips that will be attracted to the plan area are proportional to the total building area of the retail uses (330,000 square feet). These pass-by trips would already be on the transportation system with or without the proposed development, and should be deducted from the site trip generation. According to ITE *Trip Generation* data, the retail pass-by trips for this size of development may be up to 30% of the p.m. peak hour total. For the above case, there will be 414 pass-by trips of the total 1,381 retail trips.

Internal Trips

The Metro model internal trip data compiled for the five selected areas showed a range from 2 to 16 percent internal trips (see Table 9). The highest internal trip rate was in St. Johns while the lowest was in Hollywood and the Hawthorne/Belmont areas. Referring back to Table 6, each of these areas have a relatively good mix of jobs/housing and yet the Metro model intra-zonal trip rates vary significantly. It appears that the average size of the TAZ is a factor in the determination of intra-zonal trips (see number of acres per TAZ in table). The Bethany area showed 7 percent internal trips in 1994 and 6 percent in 2020.

The ITE internal trip capture calculation was made for the South Hillsboro Plan Area (see attached Tables C1). It was found that the internal trip capture ranged was 8 percent assuming the default origin-destination values presented by ITE. As stated previously, this calculation is based on ITE sampled data for mixed-use developments, and these parameters may not directly transfer to the case under study. If the retail-residential component is increased from 10 percent to 30 percent, the overall trip capture increases to 11 percent.

Given the above findings from the ITE method of internal trip calculation and the Metro model analysis, the most reasonable internal trip rate for the South Hillsboro Plan Area is between 6 (Bethany) and 16 percent (St. Johns). Recognizing the limitations of the ITE data set for internal trip calculation, a rate of 11 percent was selected for this study.

Net Added Vehicle Trips

The vehicle trips that will be added to the adjoining street system was calculated by subtracting the retail pass-by trips and internal trips from the total site trips. The results are summarized below in Table 8. The total off-site vehicle trips added by the South Hillsboro Plan Area during the p.m. peak hour is 7,500 vehicle trips.

Table 8: Net Vehicle Trips Off-Site for South Hillsboro Plan Area

Method	*Daily Trips*	*PM In*	*PM Out*	*PM Total*
Total Vehicle Trips	87,281	5,254	3,649	8,904
Less Retail Pass-By Trips (30%)		-199	-215	-414
Less Internal Trips (11%)		-578	-401	-979
Net Vehicle Trips Generated		4,477	3,033	7,510

The vehicle trip totals for the South Hillsboro Area and the other selected Metro areas used in this study are summarized in Table 10 on the following page. The 1994 trip totals for the other selected Metro areas are shown at the top of the table. More importantly, the South Hillsboro plan area trip totals are listed as determined by the Metro model for the 1-hour and 2-hour periods, along with three trip totals done using ITE methods.

The most striking finding is that the 1-hour Metro trip volumes for South Hillsboro is 7,402 (7,874 less 472 intra-zonal trips is 7,402 trips entering or leaving the plan area), and it is nearly identical to the 7,510 net added trips expected in 1-hour per the ITE method (Selected for Study). Despite the differences noted previously as to land use and internal trip capture, the net vehicle trips added street system in the peak 1-hour are essentially the same using both methods for the plan area. Another finding is that the ratio of plan area 1-hour trip totals (7,874) to the 2-hour trip totals (15,143) per the Metro model is 52 percent. If both hours of the 2-hour period were the same, the ratio would be 50 percent. Therefore, the site will have very similar hourly volumes during the 1st peak hour as the 2nd peak hour in the afternoon. This implies that the site peaking pattern is very flat between the two hours and that the system conditions on-site will be comparable throughout the 2-hour peak period.

Table 9: Vehicle Trip Summary for Selected Metro Areas

Community Area/ Analysis Year and Peak Period	*TAZs*	*Internal-External*	*External-Internal*	*Total*	*Intra-Zonal (1)*	*% Intra-Zonal of Total Trips*
1994 PM 2-Hour Vehicle Trips (Metro model)						
St. Johns	921-924	6,046	7,465	13,511	2,171	16%
Lloyd Center	847-849,714	16,102	11,566	27,668	1,779	6%
Hawthorne/Belmont	779-780,786-787	4,605	4,984	9,589	328	3%
Hollywood	717-718,856	3,548	3,379	6,927	154	2%
Bethany	163-165,168-171, 204-205,207-208	3,820	6,844	10,664	746	7%
2020 PM 2-Hour Vehicle Trips (Metro model)						
Bethany	Same as above	6,459	10,216	16,675	946	6%
S. Hillsboro Plan Area	244-248	6,585	8,558	15,143	909	6%
2020 PM 1-Hour Vehicle Trips (Metro model)						
S. Hillsboro Plan Area	244-248	3,417	4,457	7,874	472	6%
2020 PM 1-Hour Vehicle Trips (per ITE methods) (2)						
S. Hillsboro Plan Area		3,649	5,254	8,903	979	11%

Notes:

(1) Intra-zonal trips are INCLUDED in the for internal-external, external-internal and total trips. Intra-zonal trip includes all trip pairs between zones within the study area.

(2) ITE trip totals do not include pass-by trips associated with retail activities.

Adopted Model Refinements

1. The study area TAZs were divided to better match up with the on-site street system and the Plan Area boundaries. This should be done prior to making new travel demand forecasts for the purpose of impact assessment. The current four TAZs were subdivided so as to retain the current boundaries and form up nine total TAZs for the plan area.
2. A link was added in the network to extend Blanton Street westerly to the southerly extension of Cornelius Pass Road. No other modifications to the existing street system on-site or off-site are required within the general study area.
3. The vehicle trip totals in the study area (TAZs 244-248) for the 2-hour Metro model were factored to match the estimates determined using the ITE methods. This adjustment will effectively correct for differences in land use within the concept plan area.
4. The Metro 2-hour volumes were be adjusted to reflect the higher internal trip capture rate determined in this analysis. The ratio between the Metro 1-hour and 2-hour trip totals was found to be 1.92. To estimate the equivalent trip totals for the study area using the ITE methods, the 1-hour totals were multiplied by 1.92. A summary of the trip recommendation for the South Hillsboro Plan Area is shown below in Table 10.

Table 10: Vehicle Trip Generation Summary for South Hillsboro Area

Description	*Internal-External*	*External-Internal*	*Total*	*Intra-Zonal (1)*	*% Intra-Zonal*	*Total Trips Off-Site*
Metro 2-Hour Strategic Model	6,585	8,558	15,143	909	6%	14,234
Metro 1-Hour Strategic Model	3,417	4,457	7,874	472	6%	7,402
ITE 1-Hour Estimate	3,649	5,254	8,903	979	11%	7,924
2-Hour Vehicle Trips (2) *Recommended for Study*	7,019	10,104	17,123	1,880	11%	15,243

Notes:
(1) Intra-Zonal trips included in totals for Internal-External and External-Internal trips
(2) ITE 1-hour trip estimates factored by 1.92 to determine 2-hour trip totals. The 1.92 is the ratio of the Metro 2-hour total divided by the Metro 1-hour total.

Future System Performance Assessment

Applying the adopted model refinements noted in the previous chapter, new 2020 travel forecasts were prepared. The forecasted traffic volumes were evaluated to determine the change in system performance with South Hillsboro Urban Reserves Area development.

2020 Travel Demand Forecasts

Travel forecasts for year 2020 were prepared by DKS Associates with the Existing Resources network and the Strategic Auto network. Separate travel forecasts were made with and without the proposed plan development. The Existing Resources network has significantly less system capacity improvements of the two networks. It represents improvements that are expected with no changes to the current funding programs that are available today. The Strategic Auto network includes substantial improvements that require resources above and beyond current funding levels. The most significant improvement in the South Hillsboro Plan Area are major capacity enhancements to TV Highway between Brookwood Avenue and Murray Boulevard.

Trip Distribution

The project area traffic was isolated for both street network scenarios to determine the trip distribution calculated by the Metro model. This was done using a "select link" analysis for the centroid connectors to the study area TAZs. The results were compiled for major travel corridors in the study area, and for four screen lines located at the perimeter of the plan area. The project trip distribution is presented below in Table 11 and the detailed listing for major travel corridors is summarized in Table 12.

Table 11: Percent of Site Traffic Crossing Selected Screen Lines

Screen Line	*Boundary*	*Existing Resources Network*	*Strategic Auto Network*
A-A	East of 185th Avenue	36%	38%
B-B	North of TV Highway	36%	38%
C-C	South of Farmington	8%	6%
D-D	West of Brookwood	20%	18%
Total		100%	100%

Overall, the project trip distribution is evenly balanced north and the east of the site. The external origins and destinations north and east of the site ranges from 36 to 38 percent for the two road network. The distribution to and from the west ranges from 18 to 20 percent.

The southern trip distribution is relatively minor, from 6 to 8 percent of the total off-site trips. However, the roadways south of the site are largely rural facilities, and less well suited to service the increased traffic volumes than urban facilities.

For specific road facilities (see Table 12) it was found that the distribution was generally the same for both street networks. The exception was for improved portions of TV Highway that had a higher percentage of project traffic with Strategic Auto improvements (up to 28%) relative to the Existing Resources network (15%). However, the overall east-west travel demand was very similar between the two networks. A careful review of the two select link plots showed that for the Existing Resources network, the portion of site traffic that could not be served by TV Highway was assigned to parallel facilities. The most impacted facilities included Blanton Street, Kinnaman Street, Alexander Street, and Millikan Way.

Table 12: Off-Site Project Trip Distribution on Selected Road Facilities

		Project 2-Hour Volume		*Percent of Total Off-Site Project Vehicle Trips*	
Street	Segment	Ex. Res.	Strategic	Ex. Res.	Strategic
Farmington Road	w/o River Road	64	65	0.6%	0.6%
	w/o 209th Avenue	165	165	1.5%	1.4%
	w/o 185th Avenue	81	104	0.8%	0.9%
	w/o Murray Boulevard	392	96	3.7%	0.8%
TV Highway	w/o River Road	882	1,039	8.2%	8.9%
	w/o Brookwood Avenue	1,706	1,501	15.9%	12.9%
	w/o Cornelius Pass Road	1,532	2,678	14.3%	23.0%
	w/o 185th Avenue	1,593	3,116	14.9%	26.8%
	w/o Murray Boulevard	1,297	2,609	12.1%	22.4%
	w/o Cedar Hills	1,175	1,805	11.0%	15.5%
Baseline Road	w/o Cornell Road	20	63	0.2%	0.5%
	w/o Brookwood Avenue	59	107	0.6%	0.9%
	w/o Cornelius Pass Road	205	143	1.9%	1.2%
	w/o 185th Avenue	64	133	0.6%	1.1%
Cornell Road	w/o Brookwood Avenue	11	11	0.1%	0.1%
	w/o Shute Road	58	58	0.5%	0.5%
	w/o Cornelius Pass Road	270	46	2.5%	0.4%
	w/o 185th Avenue	52	54	0.5%	0.5%
185th Avenue	n/o Farmington Road	217	42	2.0%	0.4%
	n/o TV Highway	73	729	0.7%	6.3%
	s/o Baseline Road	835	638	7.8%	5.5%
	n/o Walker Road	202	261	1.9%	2.2%
Cornelius Pass Road	n/o TV Highway	1,675	2,209	15.6%	19.0%
	n/o Baseline Road	771	1,234	7.2%	10.6%
	n/o Cornell Road	505	576	4.7%	4.9%
Century Boulevard	n/o TV Highway	778	932	7.3%	8.0%
	n/o Baseline Road	635	458	5.9%	3.9%
Brookwood Avenue	n/o TV Highway	842	835	7.9%	7.2%
	n/o Baseline Road	438	480	4.1%	4.1%
	n/o Cornell Road	337	314	3.1%	2.7%

Two-Hour 2020 Travel Forecasts

The 2020 travel forecast EMME/2 plots are attached in *Appendix D* for the following cases:

- Existing Resources Network with Project
- Existing Resources Network without Project
- Strategic Auto Network with Project
- Strategic Auto Network without Project

The volume plots show the assigned 2-hour volumes for all roadways within the greater study area. The color of the links reflects the resulting ratio of assigned volume to road capacity (v/c ratio). The legend on the plots show that if less than 80% of the capacity is used, the link color is black. Between 80 to 90%, the link color is green and from 90 to 100% it is blue. Over 100% the link is red. This reflects facilities where the expected demand exceeds capacity for the two-hour period. In addition to the volume plots is a network plot showing the assumed link capacities and speeds for each case.

The 2020 volumes for selected regional roadways are summarized below in Tables 13 and 14 for both networks. The leftmost columns indicate the percentage of project traffic from the urban reserve areas (see Table 13) relative to the forecasted total traffic volumes. The facilities with the project-added traffic over ten percent include TV Highway, Cornelius Pass Road, and Century Boulevard. Another comparison was made with the project-added traffic to the future background traffic (see Table 14). This calculation shows the change volume relative to the expected future volume that would occur without the urban reserve development.

Table 13: Site Traffic Volumes Impacts Relative to 2020 Total Traffic

Street	Segment	*Total 2-Hour Traffic Volume*		*Project Traffic As A Percent of Total Traffic*	
		Ex. Res.	Strategic	Ex. Res.	Strategic
Farmington Road	w/o River Road	2,330	1,806	2.7%	3.6%
	w/o 209th Avenue	2,554	2,222	6.5%	7.4%
	w/o 185th Avenue	3,329	3,441	2.4%	3.0%
	w/o Murray Boulevard	7,849	6,651	5.0%	1.4%
TV Highway	w/o River Road	7,270	7,000	12.1%	14.8%
	w/o Brookwood Avenue	7,837	7,898	21.8%	19.0%
	w/o Cornelius Pass Road	8,685	11,548	17.6%	23.2%
	w/o 185th Avenue	9,799	12,859	16.3%	24.2%
	w/o Murray Boulevard	9,890	13,961	13.1%	18.7%
	w/o Cedar Hills	10,957	13,561	10.7%	13.3%
Baseline Road	w/o Cornell Road	1,320	1,346	1.5%	4.7%
	w/o Brookwood Avenue	3,483	3,430	1.7%	3.1%
	w/o Cornelius Pass Road	3,755	2,304	5.5%	6.2%
	w/o 185th Avenue	4,708	4,560	1.4%	2.9%
Cornell Road	w/o Brookwood Avenue	6,112	6,311	0.2%	0.2%
	w/o Shute Road	5,828	4,800	1.0%	1.2%
	w/o Cornelius Pass Road	9,479	7,637	2.8%	0.6%
	w/o 185th Avenue	7,742	6,526	0.7%	0.8%
185th Avenue	n/o Farmington Road	2,253	1,417	9.6%	3.0%
	n/o TV Highway	5,461	5,386	1.3%	13.5%
	s/o Baseline Road	7,359	5,976	11.3%	10.7%
	n/o Walker Road	8,940	8,277	2.3%	3.2%
Cornelius Pass Road	n/o TV Highway	4,206	6,247	39.8%	35.4%
	n/o Baseline Road	2,607	4,168	29.6%	29.6%
	n/o Cornell Road	6,534	6,052	7.7%	9.5%
Century Boulevard	n/o TV Highway	2,249	3,329	34.6%	28.0%
	n/o Baseline Road	4,047	3,482	15.7%	13.2%
Brookwood Avenue	n/o TV Highway	2,437	2,869	34.6%	29.1%
	n/o Baseline Road	3,782	3,028	11.6%	15.9%
	n/o Cornell Road	3,987	3,732	8.5%	8.4%

Table 14: 2020 Site Traffic Volumes Relative to 2020 Background Volumes

		Total 2-Hour Background Traffic Volume(No Project)		*Project Traffic As A Percent of Total Background Traffic*	
Street	Segment	Ex. Res.	Strategic	Ex. Res.	Strategic
Farmington Road	w/o River Road	2,266	1,741	2.8%	3.7%
	w/o 209th Avenue	2,389	2,057	6.9%	8.0%
	w/o 185th Avenue	3,248	3,337	2.5%	3.1%
	w/o Murray Boulevard	7,457	6,555	5.3%	1.5%
TV Highway	w/o River Road	6,388	5,961	13.8%	17.4%
	w/o Brookwood Avenue	6,131	6,397	27.8%	23.5%
	w/o Cornelius Pass Road	7,153	8,870	21.4%	30.2%
	w/o 185th Avenue	8,206	9,743	19.4%	32.0%
	w/o Murray Boulevard	8,593	11,352	15.1%	23.0%
	w/o Cedar Hills	9,782	11,756	12.0%	15.4%
Baseline Road	w/o Cornell Road	1,300	1,283	1.5%	4.9%
	w/o Brookwood Avenue	3,424	3,323	1.7%	3.2%
	w/o Cornelius Pass Road	3,550	2,161	5.8%	6.6%
	w/o 185th Avenue	4,644	4,427	1.4%	3.0%
Cornell Road	w/o Brookwood Avenue	6,101	6,300	0.2%	0.2%
	w/o Shute Road	5,770	4,742	1.0%	1.2%
	w/o Cornelius Pass Road	9,209	7,591	2.9%	0.6%
	w/o 185th Avenue	7,690	6,472	0.7%	0.8%
		-	-		
185th Avenue	n/o Farmington Road	2,036	1,375	10.7%	3.1%
	n/o TV Highway	5,388	4,657	1.4%	15.7%
	s/o Baseline Road	6,524	5,338	12.8%	12.0%
	n/o Walker Road	8,738	8,016	2.3%	3.3%
		-	-		
Cornelius Pass Road	n/o TV Highway	2,531	4,038	66.2%	54.7%
	n/o Baseline Road	1,836	2,934	42.0%	42.1%
	n/o Cornell Road	6,029	5,476	8.4%	10.5%
		-	-		
Century Boulevard	n/o TV Highway	1,471	2,397	52.9%	38.9%
	n/o Baseline Road	3,412	3,024	18.6%	15.1%
		-	-		
Brookwood Avenue	n/o TV Highway	1,595	2,034	52.8%	41.1%
	n/o Baseline Road	3,344	2,548	13.1%	18.8%
	n/o Cornell Road	3,650	3,418	9.2%	9.2%

System Impact Analysis

A system level impact analysis was done by tabulating the forecasted peak period conditions based on the volume-to-capacity (v/c) ratio. The results are summarized below in Table 15. All of the facilities listed in Table 15 are designated regional facilities by Washington County and Metro. According to pending Metro guidelines, the minimum acceptable performance standard is Level of Service F for the first hour, and Level of Service E for the second hour during the peak travel period. Any road segment that is shown to be at Level of Service F for the two-hour period, as represented by a v/c ratio > 1.00, is unacceptable by these standards. Therefore, the most significant impacts are the cases where the project added traffic causes a road facility to cross from acceptable to unacceptable. These locations are noted in the following narrative.

Impact Findings

- The majority of arterial road segments sampled in the Existing Resources network (17 out of 32 links) will reach unacceptable levels (v/c ratio greater than 1.00). This occurs with or without the added SHUR project traffic.
- None of the sampled road segments will be significantly impacted, as defined in this study, under the Existing Resources network. In other words, the addition of project traffic does not cause any of the sampled arterial street links to drop from acceptable to unacceptable conditions.
- However, since the majority of links are forecast to exceed capacity, it is difficult to determine the magnitude of the possible impacts of added project traffic on the Existing Resources Network.
- The Strategic Auto Network generally performs very well in the study area without the project-added traffic. A total of six road segment will exceed capacity. These occurs on:
  - Farmington Road west of 170th Avenue
  - Farmington Road west of Murray Boulevard
  - Baseline Road west of 185th Avenue
  - 185th Avenue south of TV Highway
  - Cornelius Pass Road north of Cornell Road
  - Century Boulevard north of Baseline Road
- Major impacts of the project on the Strategic Auto Network are noted at the following locations where the added project traffic degrades conditions from acceptable to unacceptable (v/c ratio > 1.00):
  - TV Highway west of Brookwood Avenue
  - 185th Avenue north of Baseline Road
  - Century Boulevard north of TV Highway
- The TV Highway capacity improvements in the Strategic Auto Network attracts more vehicles to the corridor because of significant reductions in peak hour travel time. In addition, the TV Highway improvement help to relieve parallel east-west facilities.

A technical comparison of the study assumptions and findings relative to the city's SHUR plan efforts is attached in Appendix E.

Table 15: 2020 Roadway Link Impact Analysis

		Existing Resources Network		*Strategic Network*	
Street	*Segment*	*No Project*	*With Project*	*No Project*	*With Project*
Farmington Road	w/o River Road	○	□	○	○
	w/o 209th Avenue	■	■	□	□
	w/o 185th Avenue	◆◆	◆◆	□	□
	w/o 170th Avenue	◆◆	◆◆	◆◆	◆◆
	w/o Murray Boulevard	◆◆	◆◆	◆◆	◆◆
TV Highway	w/o River Road	□	■	□	■
	w/o Brookwood Avenue	□	■	■	◆◆
	w/o Century Boulevard	◆◆	◆◆	○	□
	w/o Cornelius Pass Road	◆◆	◆◆	○	○
	w/o 185th Avenue	◆◆	◆◆	○	○
	w/o Murray Boulevard	◆◆	◆◆	○	□
Baseline Road	w/o Cornell Road	□	□	○	○
	w/o Brookwood Avenue	□	■	□	□
	w/o Cornelius Pass Road	□	■	○	○
	w/o 185th Avenue	◆◆	◆◆	◆◆	◆◆
Cornell Road	w/o Brookwood Avenue	□	■	□	□
	w/o Shute Road	□	□	○	○
	w/o Cornelius Pass Road	◆◆	◆◆	○	□
	w/o 185th Avenue	◆◆	◆◆	■	■
185th Avenue	n/o Farmington Road	◆◆	◆◆	□	□
	s/o TV Highway	◆◆	◆◆	◆◆	◆◆
	n/o TV Highway	○	○	○	○
	n/o Baseline Road	◆◆	◆◆	■	◆◆
	n/o Walker Road	◆◆	◆◆	■	■
Cornelius Pass Road	n/o TV Highway	○	■	□	■
	n/o Baseline Road	◆◆	◆◆	■	■
	n/o Cornell Road	◆◆	◆◆	◆◆	◆◆
Century Boulevard	n/o TV Highway	■	■	■	◆◆
	n/o Baseline Road	◆◆	◆◆	◆◆	◆◆
Brookwood Avenue	n/o TV Highway	■	■	○	■
	n/o Baseline Road	■	■	□	■
	n/o Cornell Road	□	□	○	○

Legend

Volume to Capacity Ratio	Symbol
< 0.80	○
0.80 to 0.90	□
0.90 to 1.00	■
> 1.00	◆◆

Appendix A: RTP Projects in Study Area (Round 2, 4/16/99)

RTP Project List - Round 2
April 6, 1999

New Unique ID	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Round 2 Existing Resource Concept	Round 2 RTP Strategic System	Est. Project Cost in 1998 dollars ("*" indicates Metro estimate)	RTP Program Years
3006	Region	ODOT	US 26 Improvements	US 26 between Sylvan and Highway 217	Complete interchange improvements by adding third through-lane and collector distributor system from Camelot Court to Sylvan Road (Phase 2 and 3)	√	√	$ 22,000,000	2000-05
3007	Region	ODOT	US 26 Improvements	EB from Highway 217 to Camelot Court	Widen EB US 26 to three lanes	√	√	$ 9,000,000	2006-10
3008	Region	ODOT	US 26 Improvements	Highway 217 to Murray Boulevard	Widen US 26 to six lanes with ramp improvements	√	√	$ 12,000,000	2006-10
3009	Region	ODOT	US 26 Improvements	Murray Boulevard to 185th Avenue	Widen US 26 to six lanes		√	$ 26,000,000	2011-20
3010	Region	MultCo/WashCo	Cornelius Pass Road	US 26 to US 30	Improve to better accommodate freight movement			$ 25,000,000	
3016	Region	Washington Co.	Washington County ATMS	Washington County	Acquire hardware for new traffic operations center		√	$ 400,000	2000-05
3019	Beaverton RC	Beaverton	Beaverton Connectivity Improvements I	(1) Henry Street: Millikan to Center, (2) Dawson/Westgate: Karl Braun to Hall, (3) Rose Biggi: Canyon to Westgate, (4) Trula Way to Millikan (5) Electric to Whitney to Carousel to	Complete central Beaverton street connections	√	√	$ 13,200,000	2000-05
3020	Beaverton RC	Beaverton	Beaverton Connectivity Improvements II	144th, (6) new conn.:Henry & 114, (7) new conn.: Hall and Cedar Hill (8) Griffith to 114th	Complete central Beaverton street connections	√	√	$ 13,300,000	2006-10
3021	Beaverton RC	Washington Co.	Jenkins Road Improvement	Boulevard	Widen to three lanes		√	$ 3,100,000	2006-10
3022	Beaverton RC	Washington Co.	Jenkins Road Improvement	Murray Boulevard to 158th Avenue	Widen to five lanes		√	$ 1,870,000	2006-10
3023	Beaverton RC	WashCo/Beav /ODOT	Highway 217 Interchange Improvements	NB/SB at Walker Road, SB at TV Highway and NB/SB at BH Highway	Improve Highway 217 interchanges		√	$ 2,600,000	2000-05
3024	Beaverton RC	ODOT/WashCo	Cedar Hills Interchange Improvement	Cedar Hills and US 26 interchange	Improve interchange with EB ramp signals/ramp storage		√	$ 500,000	2006-10
3025	Beaverton RC	ODOT/WashCo	TV Highway Improvements	Cedar Hills Boulevard to 10th Avenue	Widen to seven lanes Cedar Hills to Murray; six lanes limited access from Murray to Brookwood and five lanes from Brookwood to 10th		√	$ 33,200,000	2011-20
3026	Beaverton RC	Beaverton	Millikan Extension	Hocken to Cedar Hills	Three lane extension to connect with Cedar Hills at Henry Street	√	√	$ 4,300,000	2000-05
3027	Beaverton RC	Beaverton/WashCo	Davis Improvements	160th Avenue to 170th Avenue	Three lane improvement to add bike and pedestrian facilities	√	√	$ 1,600,000	2000-05
3028	Beaverton RC	Beaverton	Hart Improvements	Murray to 165th	Three lane improvement with sidewalks, bikeways and signal at 155th Avenue	√	√	$ 7,100,000	2000-05
3029	Beaverton RC	Beaverton	Lombard Improvements	Broadway to Farmington	Three lane improvement to realign road with segment to the north with pedestrian facilities	√	√	$ 1,600,000	2000-05
3030	Beaverton RC	Beaverton	Farmington Road Improvements	Hocken to Murray Boulevard	Widen to five lanes; improve intersection at Murray Boulevard		√	$ 7,686,000	2000-05
3031	Beaverton RC	Beaverton	Allen Boulevard Improvements	Highway 217 to Murray Boulevard	Widen to five lanes		√	$ 5,400,000	2011-20
3032	Beaverton RC	Beaverton	Cedar Hills Boulevard Improvements	Farmington Road to Walker Road	Widen to five lanes with sidewalks and bike lanes		√	$ 3,700,000	2006-10
3033	Beaverton RC	Beaverton	125th Avenue Extension	Brockman Street to Hall Boulevard	Two-lane extension with turn lanes L793from Brockman Street to Hall Boulevard		√	$ 8,818,000	2000-05
3034	Beaverton RC	Beaverton	Hall Boulevard Extension	Cedar Hills Boulevard to Terman/Hocken	Widen to three lanes with bikeways and sidewalks		√	$ 1,500,000	2000-05
3035	Beaverton RC	Beaverton	Center Street Improvements	Hall Boulevard to 113th Avenue	Widen to five lanes			$ 3,200,000	
3036	Beaverton RC	Beaverton	158th/Merlo Road Improvements	170th Avenue to Walker Road	Widen to five lanes with sidewalks and bike lanes		√	$ 4,000,000	2011-20
3037	Beaverton RC	Beaverton	Nimbus Road Extension	Hall Boulevard to Denney Road	Extend two-lane roadway			$ 8,300,000	
3038	Beaverton RC	Beaverton	Center Street Improvements	Hall Boulevard to 113th Avenue	Widen to three lanes with bikeways and sidewalks		√	$ 3,200,000	2011-20
3039	Beaverton RC	Beaverton	Scholls Ferry Road Improvements	Highway 217 to 125th Avenue	Widen to seven lanes with access management	√		$ 15,760,000	
3041	Beaverton RC	Beaverton	Hall/Watson Improvements	Allen Boulevard to Cedar Hills Boulevard	Complete boulevard design improvements	√	√	$ 445,000	2000-05
3042	Beaverton RC	ODOT/Beaverton/ Tri-Met	TV Highway/Canyon Road Boulevard Improvements	Murray Boulevard to Highway 217	Improve sidewalks, lighting, crossings, bus shelters and benches		√	$ 8,000,000	2006-10
3045	Beaverton RC	Beaverton	Farmington Road Bikeway	Hocken to Highway 217	Retrofit to include bike lanes		√	$ 2,800,000	2006-10
3046	Beaverton RC	Beaverton	Hall Boulevard Bikeway	BH Highway to Cedar Hills Boulevard	Retrofit to include bike lanes	√	√	$ 68,000	2000-05
3047	Beaverton RC	Beaverton	Watson Avenue Bikeway	BH Highway to Hall Boulevard	Retrofit to include bike lanes	√	√	$ 59,000	2000-05

*2015 Committed Network is Base Network

RTP Project List - Round 2
April 6, 1999

New Unique ID	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Round 2 Existing Resource Concept	Round 2 RTP Strategic System	Est. Project Cost in 1998 dollars ("**" indicates Metro estimate)	RTP Program Years
3049	Beaverton RC	Beaverton	Downtown Beaverton Pedestrian Improvements	Hocken Avenue/TV Highway/113th Avenue/110th Avenue/Cabot Street	Improve sidewalks, bike lanes, lighting, crossings, bus shelters and benches	√	√	$ 1,120,000	2000-05
3050	Beaverton RC	Beaverton/WashCo /Tri-Met	Walker Road Pedestrian Improvements	Polsky/108th to Highway 217	Improve sidewalks, lighting, crossings, bus shelters and benches			$ 100,000	
3051	Beaverton RC	WashCo/Beaverton /Tri-Met	Hall Boulevard/Watson Pedestrian-to-Transit Improvements	Cedar Hills Boulevard to Tigard TC	Improve sidewalks, lighting, crossings, bus shelters and benches		√	$ 1,600,000	2006-10
3052	Beaverton RC	Beaverton	110th Avenue Pedestrian Improvements	B-H Highway to Canyon Road	Fill in missing sidewalks	√	√	$ 30,000	2000-05
3053	Beaverton RC	Beaverton	117th Avenue Pedestrian Improvements	light rail transit to Center Street	Improve sidewalks, lighting, crossings	√	√	$ 30,000	2000-05
3054	Beaverton RC	Washington Co.	Murray Boulevard Bike/Pedestrian Improvements	Scholls Ferry Road to TV Highway	Safety islands and pedestrian crossing improvements at intersections, fill in bicycle network gaps		√	$ 500,000	2011-20
3055	Beaverton RC	ODOT/Beaverton	Beaverton-Hillsdale Highway Pedestrian and Bicycle Improvements	65th Avenue to Highway 217	Improve sidewalks, lighting, crossings, bus shelters and benches; stripe bike lanes		√	$ 10,500,000	2011-20
3056	Beaverton RC	ODOT	Canyon Road/TV Highway Bike and Pedestrian Improvements	SW 91st Avenue to Highway 217	Bike lanes, sidewalks and pedestrian crossings	√	√	$ 1,465,000	2011-20
3057	Beaverton RC	Beaverton	Denney Road Bike/Pedestrian Improvements	Nimbus Avenue to Scholls Ferry Road	Improve sidewalks, crossings and fill in bicycle network gaps			$ 210,000	
3060	Beaverton RC	ODOT/WashCo	TV Highway Access Management	117th Avenue to Hillsboro	Access management		√	$ 15,000,000	2006-10
3061	Beaverton RC	ODOT/WashCo	TV Highway System Management	TV Highway from Highway 217 to 209th	Interconnect signals on TV Highway from 209th Avenue to Highway 217	√	√	$ 1,500,000	2006-10
3062	Beaverton RC	ODOT/WashCo	TV Highway System Management	Beaverton to Hillsboro	Interconnect signals to tie into Washington County signal system	√	√	$ 1,000,000	2000-05
3063	Beaverton RC	Washington Co.	Murray Boulevard Improvements	TV Highway to Allen Boulevard	Signal coordination	√	√	$ 50,000	2000-05
3066	eaverton Corrido	Washington Co.	Springville Road Improvements	Kaiser to 185th Avenue	Widen to include bike lanes			$ 750,000	
3067	eaverton Corrido	Washington Co.	185th Avenue Improvements	Rock Creek Boulevard to Springville	Widen to five lanes with bike lanes and sidewalks		√	$ 5,000,000	2006-10
3068	eaverton Corrido	Washington Co.	Garden Home/92nd Avenue Improvements	Allen Boulevard to Oleson Road	Widen to three lanes with bikeways and sidewalks			$ 4,500,000	
3071	Region	Beaverton/WashCo /THPRD	Fanno Creek Greenway Multi-Use Path	Allen Boulevard to Denney Road east of Highway 217 and from Highway 217 to Allen Boulevard near Scholls Ferry Road	Completes Fanno Creek Greenway multi-use path		√	$ 1,500,000	2000-05
3073	eaverton Corrido	Washington Co.	Barnes Road Bikeway	Burnside to Leahy Road	Retrofit to include bike lanes			$ 500,000	
3074	eaverton Corrido	Beaverton	Hall Boulevard Bikeway	12th Street to south of Allen Boulevard	Retrofit to include bike lanes; intersection turn lanes at Allen Boulevard		√	$ 1,438,000	2000-05
3075	eaverton Corrido	Beaverton	Cedar Hills Boulevard Pedestrian Improvements	Butner Road to Walker Road	Improve sidewalks, lighting, crossings, bus shelters and benches			$ 177,000	
3076	eaverton Corrido	Beaverton	Allen Boulevard Improvements	Highway 217 to Western Avenue	Widen to five lanes with bike lanes and sidewalks		√	$ 1,000,000	2011-20
3077	eaverton Corrido	Beaverton	Western Avenue Pedestrian Improvements	5th Street to 800 feet south of 5th Street	Improve sidewalks, lighting, crossings, bus shelters and benches			$ 48,000	
3078	eaverton Corrido	ODOT	Canyon Road Bicycle and Pedestrian Improvements	US 26 to 110th Avenue	Retrofit to include bike lanes/sidewalks			$ 13,500,000	
3079	eaverton Corrido	Beaverton	Allen Boulevard Bike/Ped Projects	Western Avenue to Scholls Ferry Road	Retrofit to include bike lanes and fill in missing sidewalks			$ 253,000	
3082	Beaverton IA	Beaverton	Western Avenue Bike Lanes	B-H Highway to Allen Boulevard	Retrofit to include bike lanes			$ 294,000	
3101	Hillsboro RC	Hillsboro	Jackson Road Improvements	Evergreen Road to Grant Street	Widen to three lanes with sidewalks and bike lanes			$ 3,500,000	
3102	Hillsboro RC	Washington Co.	Baseline Road Improvements	Lisa to 231st Avenue	Widen to three lanes with bike lanes and sidewalks	√	√	$ 20,000,000	2000-05
3103	Hillsboro RC	Washington Co.	Baseline Road Improvements	Lisa to Brookwood Road	Widen to five lanes with bike lanes and sidewalks			$ 6,000,000	
3104	Hillsboro RC	Hillsboro	NW Aloclek Drive Extension	NW Amberwood Drive to Cornelius Pass Road	New three-lane facility with sidewalks and bike lanes		√	$ 2,000,000	2000-05
3105	Hillsboro RC	Hillsboro	E/W Collector	185th Avenue to 231st Avenue	New 3-lane facility		√	$ 4,600,000	2000-05

*2015 Committed Network is Base Network

RTP Project List - Round 2
April 6, 1999

New Unique ID	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Round 2 Existing Resource Concept	Round 2 RTP Strategic System	Est. Project Cost in 1998 dollars ("*" indicates Metro estimate)	RTP Program Years
3106	Hillsboro RC	Washington Co.	229th/231st/234th Connector	Borwick Road to Baseline and Century High School to Borwick Road; Baseline to LRT	New 3-lane facility and bridge; widen 231st Avenue to three lanes	√	√	$ 23,200,000	2000-05
3108	Hillsboro RC	Washington Co.	Baseline Road Improvements	Lisa to 201st Avenue	Widen to 3 lanes with bike lanes and sidewalks		√	$ 7,500,000	2000-05
3109	Hillsboro RC	ODOT/WashCo/ Hillsboro	Hillsboro to US 26 Improvements	Shute Road/Cornell Corridor	Improve primary access route from regional center to US 26			n/a	
3110	Hillsboro RC	ODOT/WashCo	Jackson Road Improvements	Jackson Road at US 26	Improve Jackson School Road intersection with channelization	√	√	$ 500,000	2000-05
3111	Hillsboro RC	Washington Co.	First Avenue Improvements	Grant Street to Glencoe High School	Improve sidewalks and pedestrian crossings and make transit improvements	√	√	$ 700,000	2000-05
3112	Hillsboro RC	ODOT	First Avenue Improvements	Oak Street to Baseline Street	Rechannelize NB and SB to provide protected left turn lanes and signal phasing at 1st/Oak and 1st/Baseline	√	√	$ 165,000	2006-10
3113	Hillsboro RC	Hillsboro	10th Avenue Improvements	Main Street to Baseline Road	Add right turn lane	√	√	$ 1,500,000	2000-05
3114	Hillsboro RC	Hillsboro	NE 28th Avenue Improvements	Grant Street to East Main Street	Widen to three lanes with sidewalks, bike lanes, street lighting and landscaping		√	$ 2,500,000	2000-05
3115	Hillsboro RC	Hillsboro	10th Avenue Improvements	Washington Street to Main Street	Widen to provide third NB through lane	√	√	$ 575,000	2006-10
3116	Hillsboro RC	Hillsboro	10th Avenue Improvements	Walnut Street to Baseline Street	Construct one additional NB turn lane and rechannelize WB Baseline Street approach to 10th Avenue	√	√	$ 1,530,000	2006-10
3119	Hillsboro RC	ODOT	TV Highway Improvements - Hillsboro	Shute Park to Baseline/Oak Street to Tenth	Complete boulevard design improvements	√	√	$ 2,000,000	2000-05
3120	Hillsboro RC	ODOT/Wash. Co.	TV Highway Pedestrian Improvements	10th to Cornelius Pass Road	Improve sidewalks, lighting, crossings, bus shelters and benches			$ 8,300,000	
3121	Hillboro RC	ODOT	TV Highway Refinement Planning	SE Minter Bridge Road to Cedar Hills Boulevard	Refinement planning to identify phased strategy to implement a limited access facility in this corridor		√	n/a	2000-05
3122	Hillsboro RC	Hillsboro/WashCo.	St. Mary's Urban Reserves Future Street Plan	St. Mary's urban reserve areas	Complete future street plan		√	n/a	2000-05
3123	Hillsboro RC	Tri-Met/Hillsboro	Hillsboro Regional Center TMA Startup			√	√	see Tri-Met total	2000-05
3124	Hillsboro RC	ODOT	TV Highway System Management	209th Avenue to 10th Avenue	Interconnect signals	√	√	$ 1,500,000	2000-05
3127	Hillsboro Corrido	ODOT/Hillsboro/ WashCo	Hillsboro RC Pedestrian Improvements	18th, 21st, Oak, Maple and Walnut streets	Improve sidewalks, lighting, crossings, bus shelters and benches	√	√	$ 1,500,000	2000-05
3128	Hillsboro RC	Washington Co.	Cornell Road Improvements	Arrington Road to Main Street	Widen to five lanes	√	√	$ 6,000,000	2006-10
3129	Sunset IA	ODOT	Glencoe Interchange Improvements	Glencoe Road and US 26	Improve interchange to facilitate traffic flows on and off of US 26			$ 12,000,000	
3130	Sunset IA	WashCo/Hillsboro	Evergreen Road Improvements	Glencoe Road to 25th Avenue	Widen to three lanes to include bikeways and sidewalks	√	√	$ 12,800,000	2000-05
3131	Sunset IA	WashCo/Hillsboro	Evergreen Road Improvements	15th Avenue to 253rd Avenue	Widen to five lanes to include bikeways and sidewalks		√	$ 5,300,000	2006-10
3132	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	US 26 to West Union Road	Widen to five lanes, including sidewalks and bike lanes		√	$ 3,500,000	2000-05
3133	Sunset IA	Washington Co./ ODOT	Cornelius Pass Road Interchange Improvement	US 26/Cornelius Pass Road	Construct full diamond interchange and southbound auxiliary lane to facilities traffic flows on and off US 26		√	$ 5,000,000	2000-05
3134	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	TV Highway to Baseline Road	Widen to five lanes including sidewalks, bike lanes and signals at Johnson and Francis	√	√	$ 9,000,000	2000-05
3135	Sunset IA	Washington Co.	Cornelius Pass Road Improvements	Baseline Road to Aloclek Drive	Widen to five lanes including sidewalks and bike lanes		√	$ 15,000,000	2000-05
3136	Sunset IA	Washington Co.	Brookwood Avenue Improvements	Baseline Road to Airport Road	Widen to 3 lanes from Baseline to Cornell Road and to 5 lanes from Cornell Road to Airport Road	√	√	$ 10,900,000	2000-05
3137	Sunset IA	Washington Co.	Brookwood Avenue Improvements	TV Highway to Baseline Road	Widen to three lanes including sidewalks and bike lanes		√	$ 7,500,000	2000-05

*2015 Committed Network is Base Network

RTP Project List - Round 2
April 6, 1999

New Unique ID	2040 Link	Jurisdiction	Project Name (Facility)	Project Location	Project Description	Round 2 Existing Resource Concept	Round 2 RTP Strategic System	Est. Project Cost in 1998 dollars ("*" indicates Metro estimate)		RTP Program Years
3138	Sunset IA	Washington Co.	Murray LRT Overcrossing and Pedestrian Improvements	Jenkins Road to Millikan Way	Expand LRT bridge from 2 to 4 lanes and improve sidewalks, lighting crossings, bus shelters, benches and landscaped buffers on bridge approach		√	$ 6,700,000		2000-05
3139	Sunset IA	Hillsboro	US 26 Overcrossing - Sunset IA	NW Bennett Avenue to NW Wagon Way	Construct two-lane new overcrossing with sidewalks and bike lanes to better connect areas north and south of US 26		√	$ 4,500,000		2011-20
3140	Sunset IA	Hillsboro	229th Avenue Extension	NW Wagon Way to West Union Road	New three-lane facility with sidewalks and bike lanes		√	$ 2,300,000		2006-10
3141	Sunset IA	Washington Co.	170th/173rd Improvements	Baseline to Walker	Improve to 3 lanes	√	√	$ 6,800,000		2006-10
3142	Sunset IA	Washington Co.	Johnson Street Extension	170th Avenue to 209th Avenue	Three lane extension (two lanes westbound and one lane eastbound with turn lanes), including bike lanes and sidewalks		√	$ 1,000,000		2000-05
3143	Sunset IA	Washington Co.	Walker Road Improvements	Cedar Hills to 158th Avenue	Widen to five lanes including sidewalks and bike lanes		√	$ 20,000,000		2006-10
3144	Sunset IA	Washington Co.	Walker Road Improvements	158th Avenue to Amberglen Parkway	Widen to five lanes including sidewalks and bike lanes		√	$ 10,000,000		2006-10
3145	Sunset IA	Washington Co.	Walker Road Improvements	Highway 217 to Cedar Hills Boulevard	Widen to five lanes including sidewalks and bike lanes			$ 26,500,000		
3146	Sunset IA	WashCo/Hillsboro	Cornelius Pass Intersection Improvements	Intersection at Quatama	Improve Quatama/Cornelius Pass Road intersection			$ 500,000		
3147	Sunset IA	Hillsboro	25th Avenue Improvements	Cornell Road to Evergreen	Widen to include bike lanes		√	$ 2,000,000		2006-10
3150	Sunset IA	Washington Co.	Cornell Road System Management	185th Avenue to 25th/Baseline	Implement signal timing at Tannasbourne/185th to 25th /Baseline		√	$ 300,000		2000-05
3151	Sunset IA	Tri-Met	US 26 Corridor TDM Program		n/a			$ 1,300,000		
3207	Tanasbourne TC	Washington Co.	185th Avenue Improvements	Improve 185th Avenue and Cornell Road with "boulevard" design treatment, including improved sidewalks and bus stops, curb extensions, street trees, lighting, etc., within the town center.	Complete boulevard design improvements			$ 4,000,000	*	
3208	Tanasbourne TC	Washington Co.	Tanasbourne TC Pedestrian Improvements	Cornell, Evergreen Pkwy and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches		√	$ 200,000	*	2011-20
3209	Tanasbourne TC	Washington Co.	Springville Road Pedestrian Improvements	Kaiser to 185th	Improve sidewalks, lighting, crossings, bus shelters and benches			$ 500,000	*	
3210	Tanasbourne TC	Washington Co.	185th Avenue Pedestrian Improvements	Westview HS to West Union Road	Improve sidewalks, lighting, crossings, bus shelters and benches		√	$ 45,000		2011-20
3213	Farmington TC	Washington Co.	Farmington Road Improvements	Murray Boulevard to 172nd Avenue	Widen to five lanes with bikeways and sidewalks		√	$ 15,200,000		2000-05
3214	Farmington TC	Washington Co.	Farmington Road Improvements	172nd Avenue to 185th Avenue	Widen to five lanes; complete boulevard design improvements		√	$ 10,000,000		2011-20
3215	Farmington TC	Washington Co.	Kinnaman Road Improvements	Farmington to 209th Avenue	Widen to two lanes WB, 1 lane EB, turn lane and bikeways and sidewalks		√	$ 5,200,000		2011-20
3216	Farmington TC	Washington Co.	185th Avenue Improvements	TV Highway to Bany Road	Widen to three lanes		√	$ 8,000,000		2006-10
3217	Farmington TC	Washington Co.	Farmington Road Improvements	185th Avenue to 209th Avenue	Widen to three lanes		√	$ 5,000,000		2006-10
3218	Farmington TC	Washington Co.	Cornelius Pass Road Extension	South of TV Highway to 209th Avenue	Construct new three-lane facility		√	$ 14,000,000		2011-20
3219	Farmington TC	Washington Co.	Farmington Road Improvements	Kinnamon to 185th Avenue	Widen to five lanes with sidewalks and bikeways			$ 8,000,000		
3220	Farmington TC	WashCo/ODOT	Farmington TC Pedestrian Improvements	Farmington Road, Kinnaman, 170th and intersecting streets	Improve sidewalks, lighting, crossings, bus shelters and benches		√	$ 1,000,000		2011-20
3221	Farmington TC	Washington Co.	Kinnaman Road Pedestrian Improvements	Farmington to 198th	Improve sidewalks, lighting, crossings, bus shelters and benches			$ 200,000		
3222	Farmington TC	Washington Co.	185th Avenue Bike and Pedestrian Improvements	Kinnaman to Blanton	Add bike lanes and sidewalks one-side only		√	$ 2,000,000		2000-05

*2015 Committed Network is Base Network

Appendix B: Relevant Correspondence

M E M O R A N D U M

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1700 | FAX 503 797 1794

METRO

DATE: April 6, 1999

TO: Andy Back, Washington County

FROM: Tom Kloster, Metro

SUBJECT: Tualatin Valley Highway Model Refinements

* * * * * * *

This is a follow-up to our recent discussions regarding model refinements for the TV Highway Corridor. We are aware that the County is undertaking a transportation study of the South Hillsboro Urban Reserve, and the study is using the round 2 RTP strategic system for a basis of the analysis.

As we've previously discussed, the Round 2 modeling included a capacity of 6000 vehicles per hour in each direction. This probably over-estimates the kind of facility we are envisioning as part of the Strategic System, and, at this time we anticipate reducing the capacity to 4500 vehicles per hour in each direction as part of Round 3.

As you move forward with the South Hillsboro Urban Reserve analysis, here are some recommended changes to be made to the Round 2 strategic system that we will be using in our final round of RTP modeling:

1. Capacity of 4500 in each direction between Murray and Century Drive.
2. Capacity of 3400 between Century and Brookwood and Murray and Hocken (this is intended to provide a transition between the 6 lane limited access facility and the 5 lane arterial at either end).
3. "Interchange-like" treatments at Murray, 185th and Cornelius Pass
4. Four or five flyovers or underpasses at various minor arterial/major collector locations such as Century Blvd., 198th and 170th .
5. Five or Six "right-in/right out" locations on both the north and south side of the Highway.
6. Generally, there shouldn't be any centroid connectors to the Highway itself.

We recognize that these modeling changes do not represent a policy choice for TV Highway, and have recommended in the draft RTP findings that a more detailed study be conducted to identify specific improvements for this corridor. However, we do believe it's important that the South Hillsboro Urban Reserve study reflect Metro's latest approach to modeling TV Highway as part of the RTP Strategic System.

Oregon
John A. Kitzhaber, M.D., Governor

Department of Transportation
Region 1
123 NW Flanders
Portland, OR 97209-4037
(503) 731-8200
FAX (503) 731-8259

December 3, 1998

FILE CODE: PLA

Jon Kvistad, Presiding Officer
And Members of Metro Council
Metro
600 NE Grand Ave.
Portland OR 97232-2736

Re: Hillsboro/Farmington Urban Growth Boundary Amendment

The Oregon Department of Transportation asks that you enter the following comments into the record of the above case:

- Tualatin Valley (TV) Highway (Oregon Highway 8), which would be the principal route of access to this area is currently at capacity (LOS E) during the PM Peak hour.

- Forecasts of traffic volumes in 20 years by Metro indicate TV Highway will be over capacity (LOS F) during the peak hour.

- Forecasts by Hillsboro and Beaverton in their draft TSPs, and Washington County's TSP indicate TV Highway will need either significant Access Management or widening to 7 lanes, or both to meet LOS standards.

- The inclusion of this area into the UGB will add additional traffic to TV Highway, adding to the existing LOS deficiencies.

- The new LOS Standards (2 hours of LOS E is acceptable) proposed by Metro and being considered by ODOT would still be exceeded on this facility.

- The current Metro Regional Transportation Plan includes short term TSM (Transportation System Management) Improvements, and recognizes that there is a larger long-term problem but does not address it.

- The 1992 revision of the 1989 RTP update identified 10 year priority projects on TV Highway as follows: 1) initiating TSM improvements on Tualatin Valley Highway from Highway 217 to 21st (Hillsboro) and, 2) conducting a detailed reconnaissance or preliminary engineering study to determine the full extent of improvements required in this section. The call in the RTP for a reconnaissance to determine "the full extent of improvements needed" indicates uncertainty about whether it is possible to widen TV highway in any economically feasible way; but that a study was needed to confirm this. No

study has been done. The cost of providing a solution to the capacity problem was assumed to be large.

- The 1995 RTP update to meet federal requirements (Interim Federal RTP) includes a list of recommended projects that are critical to realizing the goals objectives and policies set forth in this plan. The list includes $6 million for the TSM projects on TV Highway: bike and pedestrian improvements and signal projects; but nothing additional.

- The 1995 Interim Federal RTP also includes a "financially constrained" list of projects. This list is based on reasonable revenue forecasts and contains only two signal projects on TV Highway for total of $1.5 million.

- The RTP is currently in the process of another update to incorporate the 2040 land use concept. As noted above, modeling shows that TV Highway is still over capacity in all scenarios.

- The draft projects list for the current RTP update lists the above mentioned improvements: TSM - Interconnect signals on TV Highway from 10th Avenue to Highway 217; $4.0 million; Pedestrian improvements; $8.3 million.

- The draft projects list for the current RTP update also lists the two projects suggested by the local TSPs: (1) "Widen to seven lanes from Cedar Hills to Murray; six lanes limited access from Murray to Brookwood and five lanes from Brookwood to 10th", $33.2 million (2) "Access management", $15 million.

- ODOT is concerned that these projects may not be feasible to implement – first their costs are now estimated at $60.5 million and must compete for limited available funding; and second, no analysis of project development impacts has been done to determine whether the right of way and land use impacts of widening and converting a portion of TV Highway to a limited access facility can be overcome.

- Finally, as you know, there is a pending LUBA appeal by ODOT (and others), concerning the above issues (and others). The results of that appeal may affect the timing and/or ability to bring this area into the UGB and develop it.

Thank you for the opportunity to enter these comments in the record.

Fred Eberle, for

Leo Huff
Planning Manager

Appendix C: Trip Generation Calculations

Table B1: ITE Trip Generation Summary for Concept Plan Area

Description	ITE Code	Quantity	Units	Daily Rate	Daily Trips	PM Peak Hour Trips In	PM Peak Hour Trips Out	PM Peak Hour Trips Total
Middle School	522	750	Student	1.45	1,088	56	64	120
Elementary School	520	1650	Student	1.02	1,683	197	232	429
Business Park	770	341	KSF	14.37	4,894	111	393	504
Shopping Center	820	183	KSF	55.26	10,108	451	489	940
Supermarket	850	105	KSF	111.51	11,653	666	590	1,256
Quality Restaurant	831	42	KSF	12.47	521	207	102	309
Elderly Housing	253	1170	DU	3.48	4,072	255	126	381
Apartment	220	2845	DU	6.63	18,862	1,182	582	1,764
SF Detached	210	4544	DU	9.57	43,486	2,937	1,652	4,589
Total Trip Ends					96,367	6,062	4,230	10,292
	Deduction for Internal Trips (1)			8%		(460)	(321)	(781)
	Deduction for Retail Passby Trips (2			30%		(397)	(354)	(752)
	Net New Vehicle Trips Added to Adjacent Streets					5,205	3,555	8,760

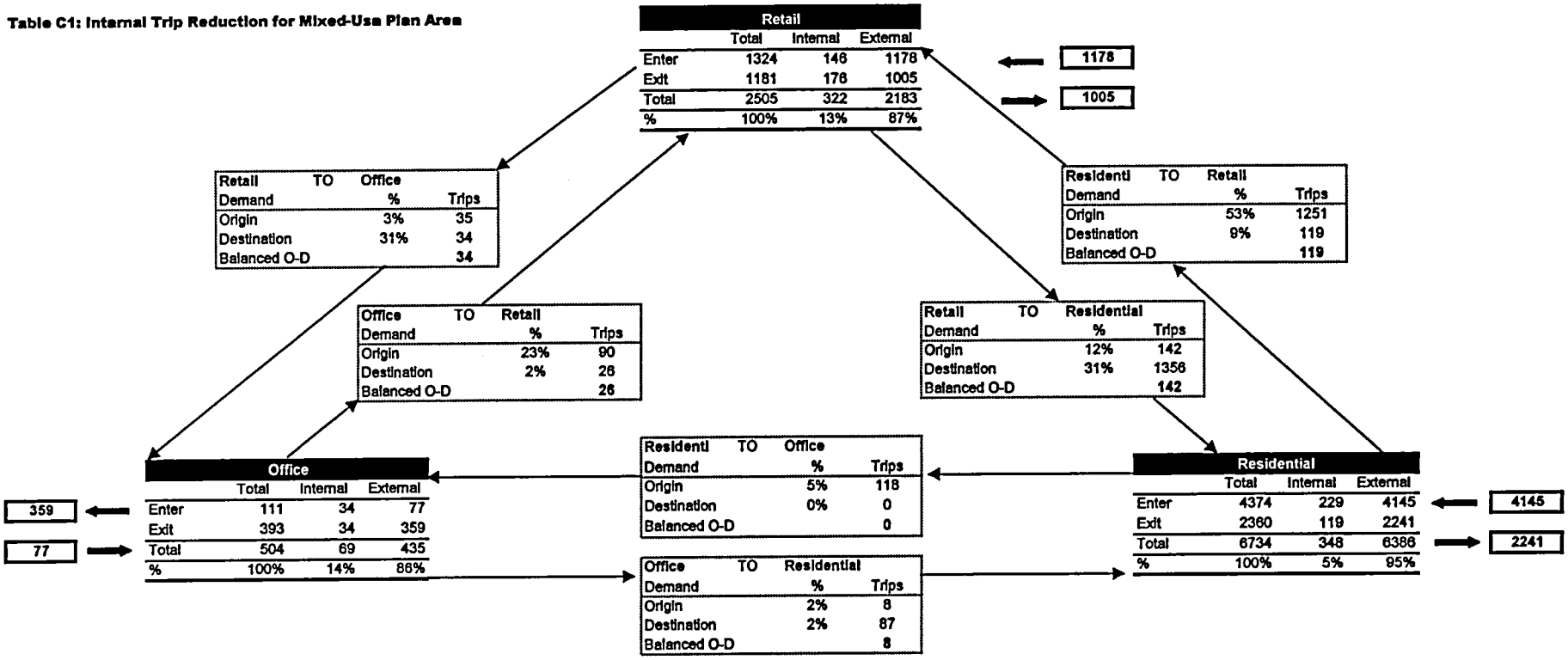
Notes:

Source: *Trip Generation*, Institute of Transportation Engineers, Sixth Edition, 1997

(1) Based on Internal Capture calculation shown in Table C1. PM peak hour school trips are primarily staff trips, and were assumed to have the same overall percentage of staff living locally versus outside of the plan area.

(2) Retail passby trips discounted 30% based on 330,000 s.f. shopping center area and findings from *Trip Generation Handbook*, Figure 5.5: Shopping Center Pass-By Trips, ITE, 1998.

Table C1: Internal Trip Reduction for Mixed-Use Plan Area



Net External and Internal Trips for Multi-Use Development

	Retail	Office	Residential	Total	Internal Capture
External Trips Entering	1,178	77	4,145	5,400	
External Trips Exiting	1,005	359	2,241	3,604	
Total External Trips	2,183	435	6,386	9,004	
Total Single-Use Trip Gen. Estimate	2,505	504	6,734	9,743	
Net Internal Trips	322	69	348	739	8%

Source: *Trip Generation User's Guide: Recommended Practice*, Institute of Transportation Engineers, 1998. Chapter 7: Multi-Use Development, pp. 80-92

Table B2: ITE Trip Generation Calculation

Description	ITE Code	Quantity	Units	Daily Rate	Daily Trips	PM Peak Hour Trips In	PM Peak Hour Trips Out	PM Peak Hour Trips Total	Notes
Middle School	522	750	Student	1.45	1,088	56	64	120	
Elementary School	520	1,650	Student	1.02	1,683	99	116	215	(1)
General Office	710	341	KSF	9.99	3,402	78	382	461	(2)
Shopping Center	820	330	KSF	44.51	14,688	663	718	1,381	(2)
Elderly Housing	253	1,170	DU	3.48	4,072	239	135	374	(3)
Apartment	220	2,845	DU	6.63	18,862	1,182	582	1,764	
SF Detached	210	4,544	DU	9.57	43,486	2,937	1,652	4,589	
Total Trip Ends					87,281	5,254	3,649	8,904	
	Deduction for Internal Trips			11%		(578)	(401)	(979)	(4)
	Deduction for Retail Pass-by Trips			30%		(199)	(215)	(414)	
	Net New Vehicle Trips Added to Streets					4,477	3,033	7,510	

(1) Site peak hour factored by 50% to represent street peak hour

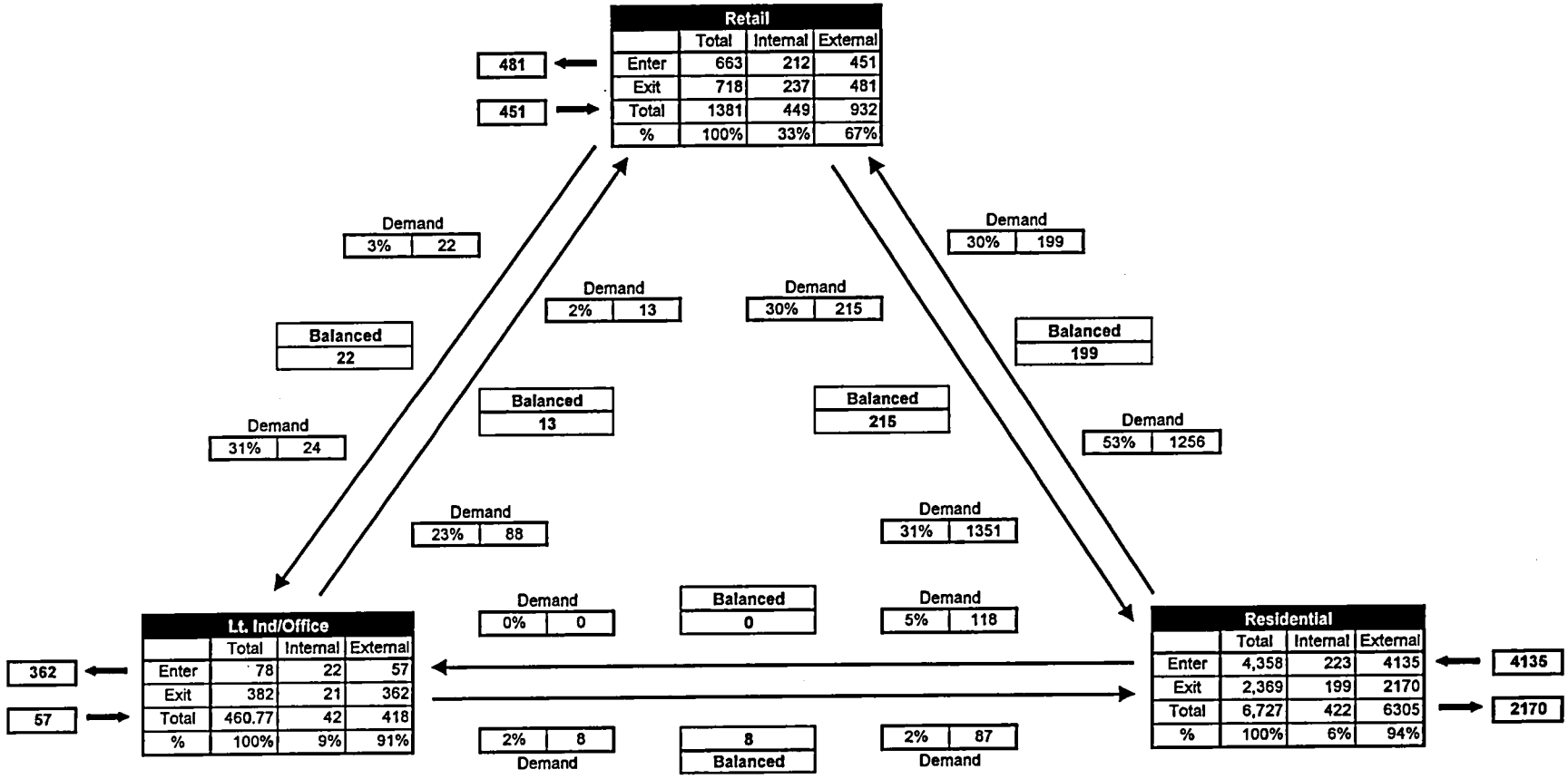
(2) Applied ITE regression equations

(3) Based on ITE data and local survey data for elderly housing. ITE data sample size very limited.

(4) Internal trip reduction based on calculation in Table C. PM peak hour school trips assumed to be similar to overall uses.

Subtotals by Land Use Groups	Daily Trips	PM Peak Hour Trips In	PM Peak Hour Trips Out	PM Peak Hour Trips Total	% of Total
Residential	66,420	4,358	2,369	6,727	76%
Office	3,402	78	382	461	5%
Retail	14,688	663	718	1,381	16%
School	2,771	155	180	335	4%
Total Trip Ends	87,281	5,254	3,649	8,904	100%

Table C2: Internal Trip Reduction for Mixed-Use Plan Area



Net External Trips for Multi-Use Development					
	Retail	Lt. Ind/Office	Residential	Total	
Enter	451	57	4,135	4,642	
Exit	481	362	2,170	3,013	
Total	932	418	6,305	7,655	Internal Capture
Single-Use Trip Gen. Est.	1,381	461	6,727	8,569	11%

Source: *Trip Generation User's Guide: Recommended Practice*, Institute of Transportation Engineers, 1998. Chapter 7: Multi-Use Development, pp. 80-92

Note: Retail trips assumed to have 30% origin/destinations from internal residential uses. This contrasts with standard factors of 9 to 12%.

Appendix D: EMME/2 Traffic Volume Plots, 2020 2-hour PM Peak

LIST OF EMME/2 TRAVEL DEMAND MODEL PLOTS (IN ORDER)

2020 Existing Resources 2-Hour Model Network – Link Capacity and Speeds

2020 Existing Resources 2-Hour Traffic Volumes (No Project)

2020 Existing Resources 2-Hour Traffic Volumes (With Project)

2020 Strategic Plan 2-Hour Model Network – Link Capacity and Speeds

2020 Strategic Plan 2-Hour Traffic Volumes (No Project)

2020 Strategic Plan 2-Hour Traffic Volumes (With Project)

Detailed 2020 Existing Resources 2-Hour Volumes (With Project) – Black and white

Detailed 2020 Strategic Plan 2-Hour Volumes (With Project) – Black and white

Detailed 2020 Strategic Plan 2-Hour Volumes (With Project) – Downtown Hillsboro

Appendix E: Technical Comparison

The technical assumptions and findings from the DKS Associates review of the South Hillsboro Urban Reserve Area was compared to the methodology and findings used for the City of Hillsboro plan[10] for this area. The technical assumptions are summarized in Table E-1 and the findings are summarized in Table E-2.

Table E-1: Technical Assumptions

Description	*DKS Associates SHUR Review*	*City of Hillsboro SHUR Plan*
Maximum Development Potential	8,500 dwelling units 2,000 employees	Same
Trip Generation Sources	Institute of Transportation Engineers *Trip Generation*, Sixth Edition	Same
Travel Demand Forecasting *Percent of Internal Trips On-Site*	2020 two-hour travel volumes based on new forecasts using Metro travel demand model. 11 percent	2015 one-hour travel volumes. Overlaid manual assignment to Hillsboro TSP forecasts. 30 percent
Background Street Network Improvements	Metro model networks for Existing Resources & Strategic Auto based on Round 2 data (see Appendix A)	Existing Resources network (referred to as the "Constrained Network" at the time of that study).
System Performance Criteria	Metro two-hour level of service standard for roadways in urban areas (LOS F 1st hour, LOS E during 2nd hour)	Peak period traffic was forecasted for one-hour. These volumes
Other Issues	TV Highway improvements assumed in the Strategic Model network double capacity to expressway conditions between Brookwood in Hillsboro to Murray Boulevard in Beaverton. Above improvements not reflected in any state, county or city plans, and will cost more to construct than shown in the Draft RTP.	Five-lane TV Highway assumed consistent with Hillsboro TSP.

[10] *South Urban Reserve Concept Plan, Urban Reserve Site #51-55*, City of Hillsboro, November 16, 1998 (Draft).

Table E-2: Technical Findings

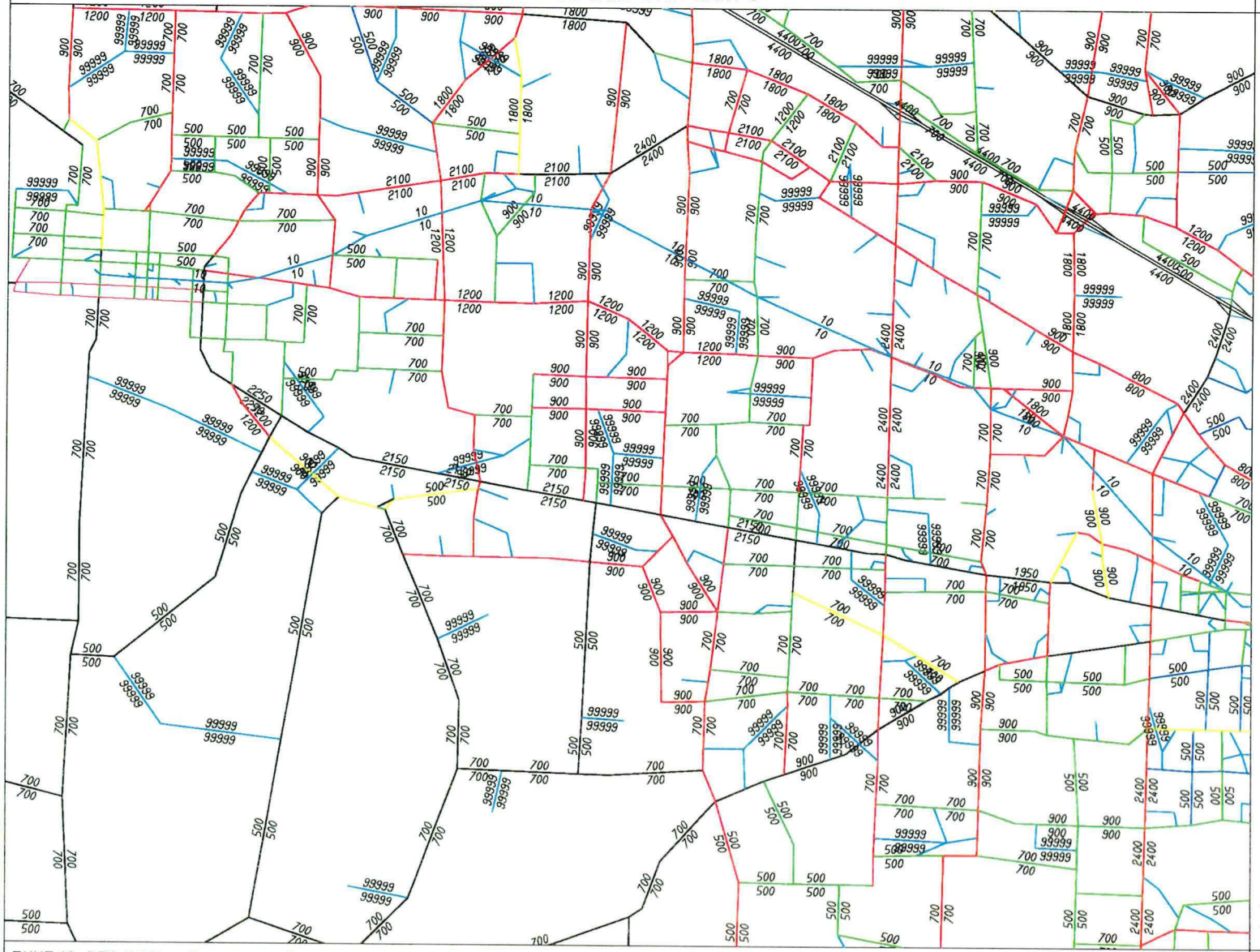
Description	*DKS Associates SHUR Review*		*City of Hillsboro SHUR Plan*	
Total Off-Site Vehicle Trips	7,510	(1-hour)	6,085	(1-hour)
	15,243	(2-hours)	n/a	(2-hours)
Site Trip Distribution				
North	38%		50%	
South	6%		2%	
East	38%		28%	
West	18%		20%	
Peak One-Hour Site Traffic Added to Major Facilities(Two-Way Total Volume)	*(See Table 11 for Site Traffic Distribution for Existing Resource and Strategic)*		*(Taken from Figure 5 in Technical Appendix)*	
TV Hwy. East of 185th Ave.	690 to 1,050 vehicles		165 vehicles	
TV Hwy. West of 219th Ave.	735 to 1,300		100	
TV Hwy. West of Brookwood	1,070 to 1,150		715	
185th Avenue South of Baseline	560 to 640		335	
Cornelius Pass South of Baseline	1,540		950	
Century Bl. North of Baseline	695 to 885		695	
Other Issues	Major improvements to TV Highway are required to maintain acceptable performance. The assumption of this analysis was a doubling of capacity compared to today's condition.		Additional study needed for TV highway access controls and corridor management plan.	

DKS ASSOCIATES

BASE NETWORK

USER DEFINED LINK DATA 3

emme/2



LINKS:
mod=c
COL-IND: UL2

VDF
- 0-5 (>=40 mph)
- 6 (35 mph)
- 7 (30 mph)
- 8 (25 mph)
- 9-10(15-20mph)
- >=11(other)

XXXXX=CAPACITY (VPH)

WINDOW:
1431.9/124.948
1441.2/131.927

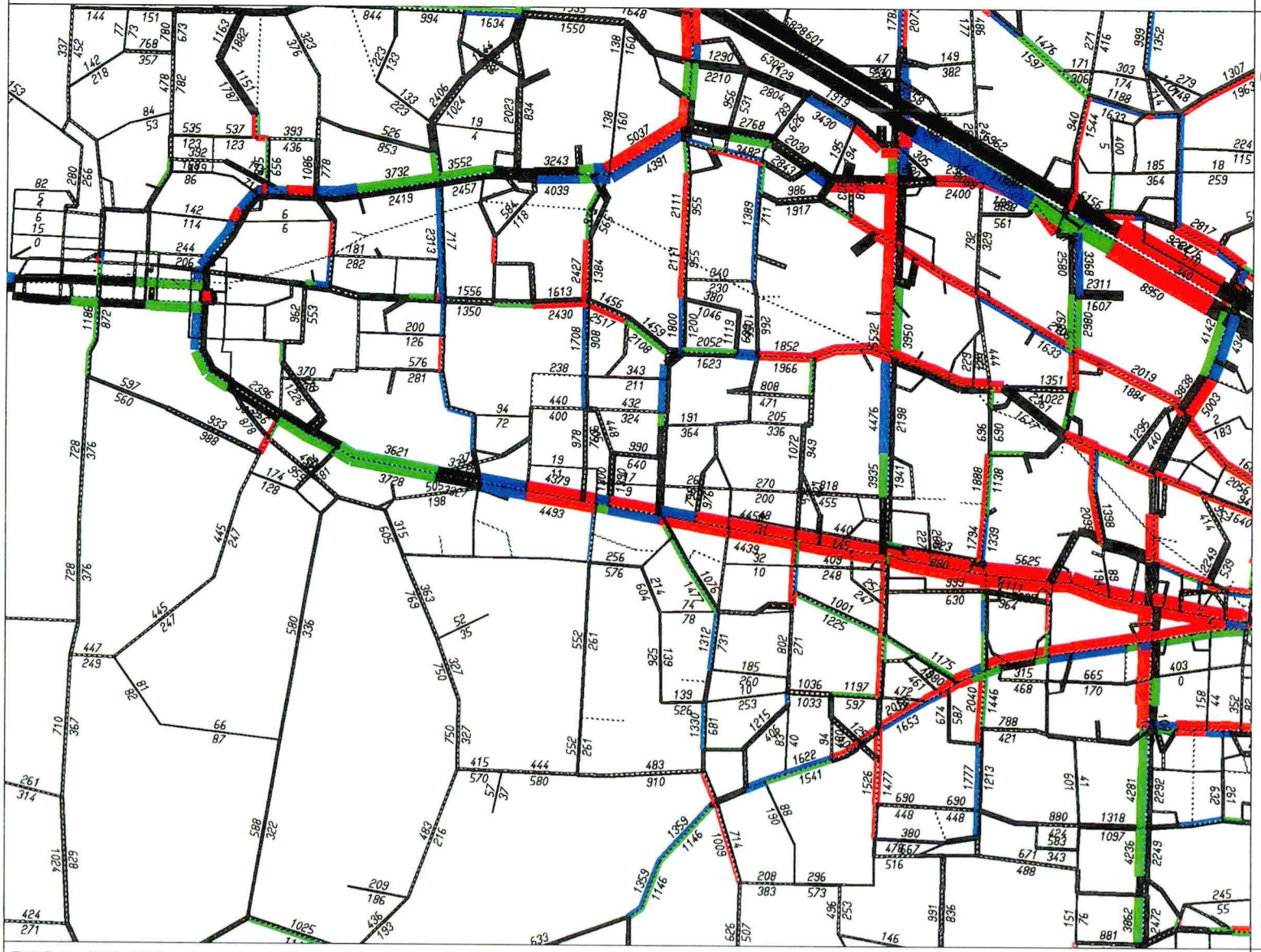
EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 20000: 2020 Exist Res 2 hour

99-07-26 15:47
MODULE: 2.13
DKS2000....jxs

DKS ASSOCIATES

AUTO VOLUMES

emme/2



LINKS:
mod=c

COL-IND: UL2

VOLUME/CAPACITY RATIO

- < 0.8
- 0.8-0.9
- 0.9-1.0
- > 1.0

XXX=VOLUME(VPH)

SCALE: 650

2000
4000
6000
8000
10000

WINDOW:
1431.9/124.948
1441.2/131.927

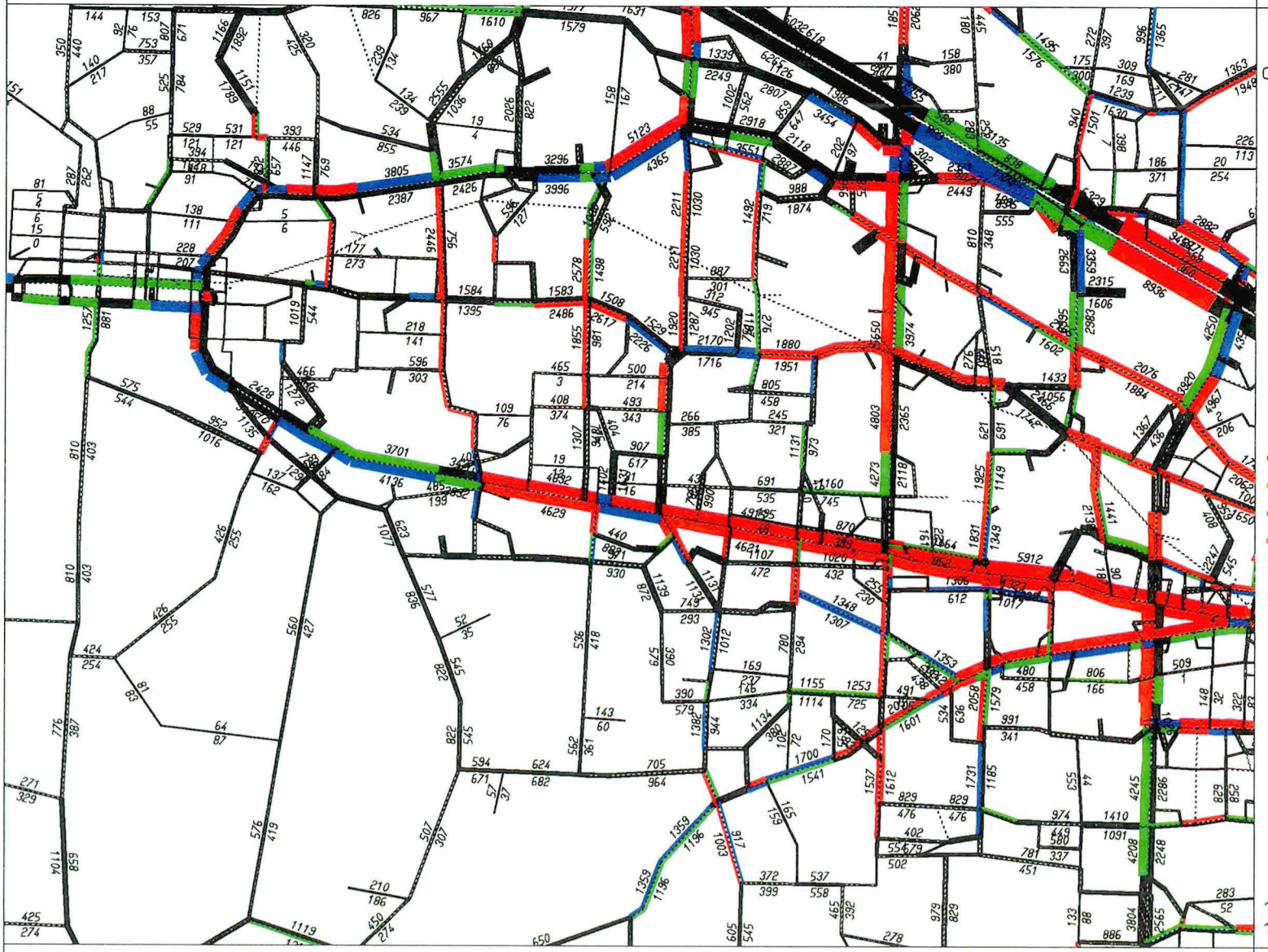
EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 21000: 2020 Exist Res 2 hour (No Project)

99-07-26 11:55
MODULE: 6.12
DKS2000....jxs

DKS ASSOCIATES

AUTO VOLUMES

emme/2



LINKS:
mod=c
COL-IND: UL2

VOLUME/CAPACITY RATIO
< 0.8
0.8-0.9
0.9-1.0
> 1.0
XXX=VOLUME(VPH)

SCALE: 650
2000
4000
6000
8000
10000

WINDOW:
1431.9/124.948
1441.2/131.927

EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 20000: 2020 Exist Res 2 hour

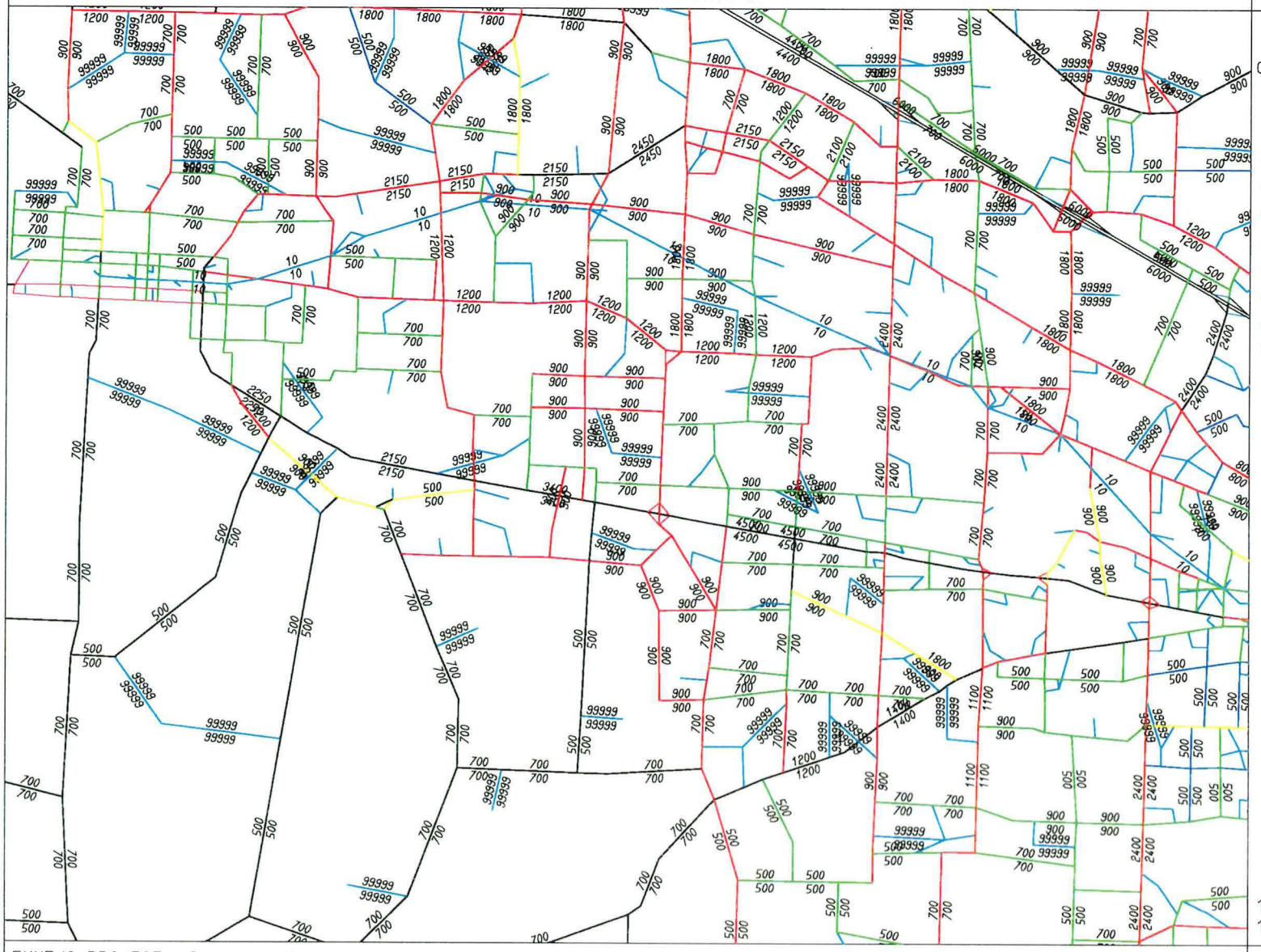
99-07-26 15:45
MODULE: 6.12
DKS2000....jxs

DKS ASSOCIATES

BASE NETWORK

USER DEFINED LINK DATA 3

emme/2



LINKS:
mod=c
COL-IND: UL2

VDF
- 0-5 (>=40 mph)
- 6 (35 mph)
- 7 (30 mph)
- 8 (25 mph)
- 9-10(15-20mph)
- >=11(other)

XXXXX=CAPACITY (VPH)

WINDOW:
1431.9/124.948
1441.2/131.927

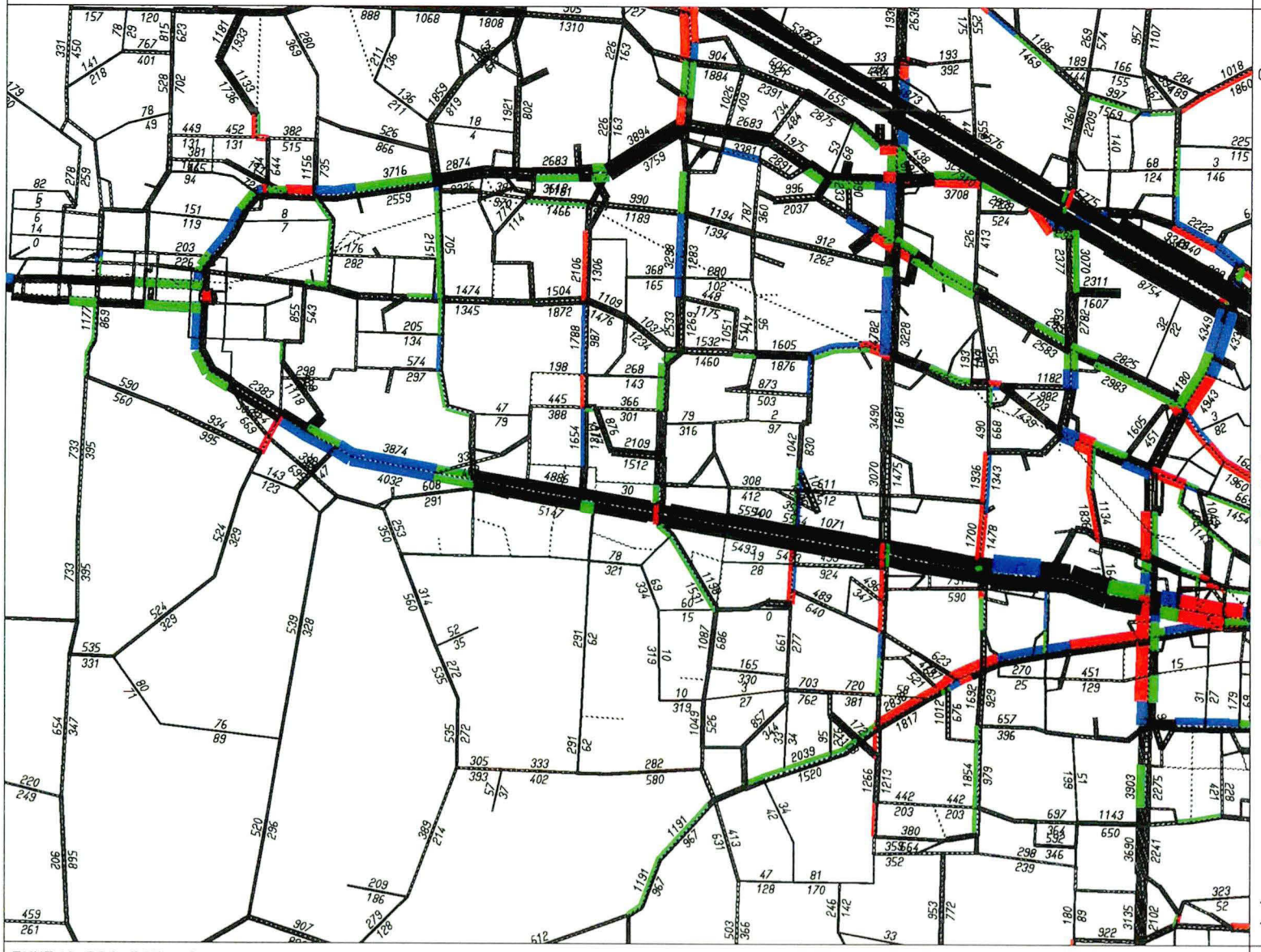
EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 11000: 2020 South Hillsboro Base

99-07-26 11:52
MODULE: 2.13
DKS2000....jxs

DKS ASSOCIATES

AUTO VOLUMES

emme/2



LINKS:
mod=c

COL-IND: UL2

VOLUME/CAPACITY RATIO

- < 0.8
- 0.8-0.9
- 0.9-1.0
- > 1.0

XXX=VOLUME(VPH)

SCALE: 650

2000
4000
6000
8000
10000

WINDOW:
1431.9/124.948
1441.2/131.927

EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 12000: 2020 South Hillsboro (No Project)

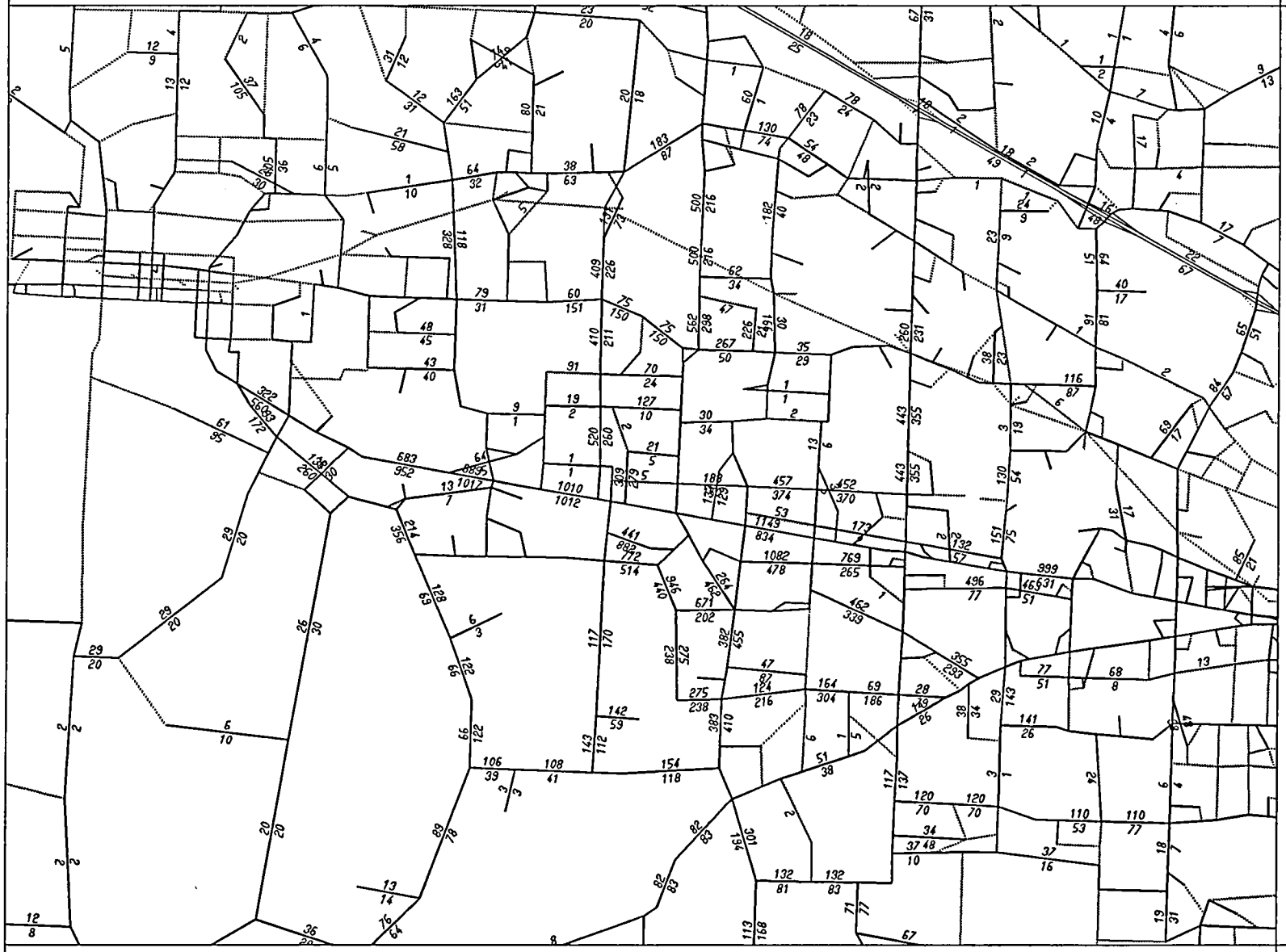
99-07-26 11:56
MODULE: 6.12
DKS2000....jxs

DKS ASSOCIATES

BASE NETWORK

ATTRIBUTE @SEL: AUTO + TRUCK PCE'S SELECT LINK

emme/2



LINKS:
mod=c

WINDOW:
1431.9/124.948
1441.2/131.927

EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 20000: 2020 Exist Res 2 hour
ATTRIBUTE @sel: auto + truck PCE's select link

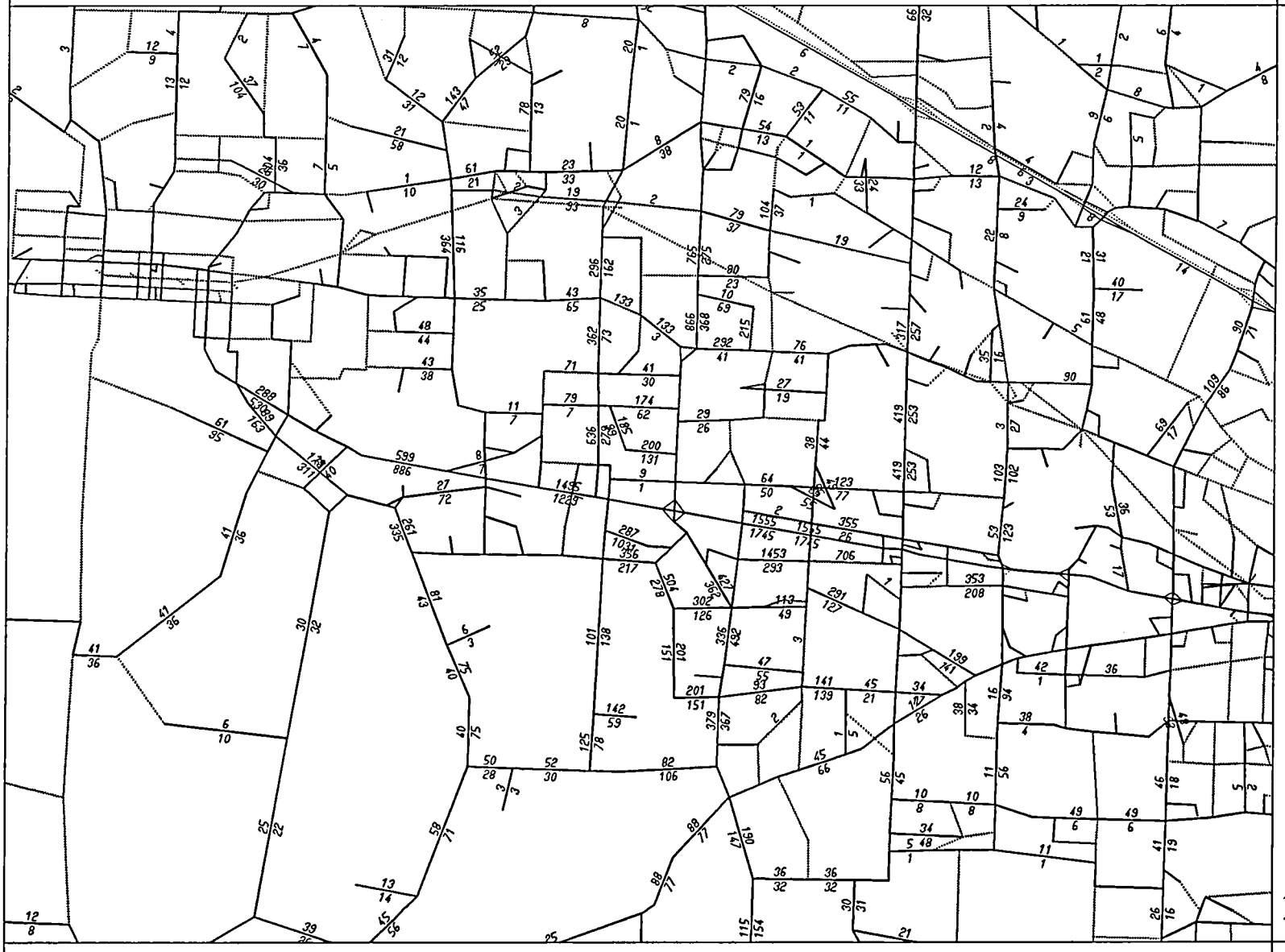
99-07-27 09:11
MODULE: 2.13
DKS2000....jxs

DKS ASSOCIATES

BASE NETWORK

ATTRIBUTE @SEL: AUTO + TRUCK PCE'S SELECT LINK

emme/2



LINKS:
mod=c

WINDOW:
1431.9/124.948
1441.2/131.927

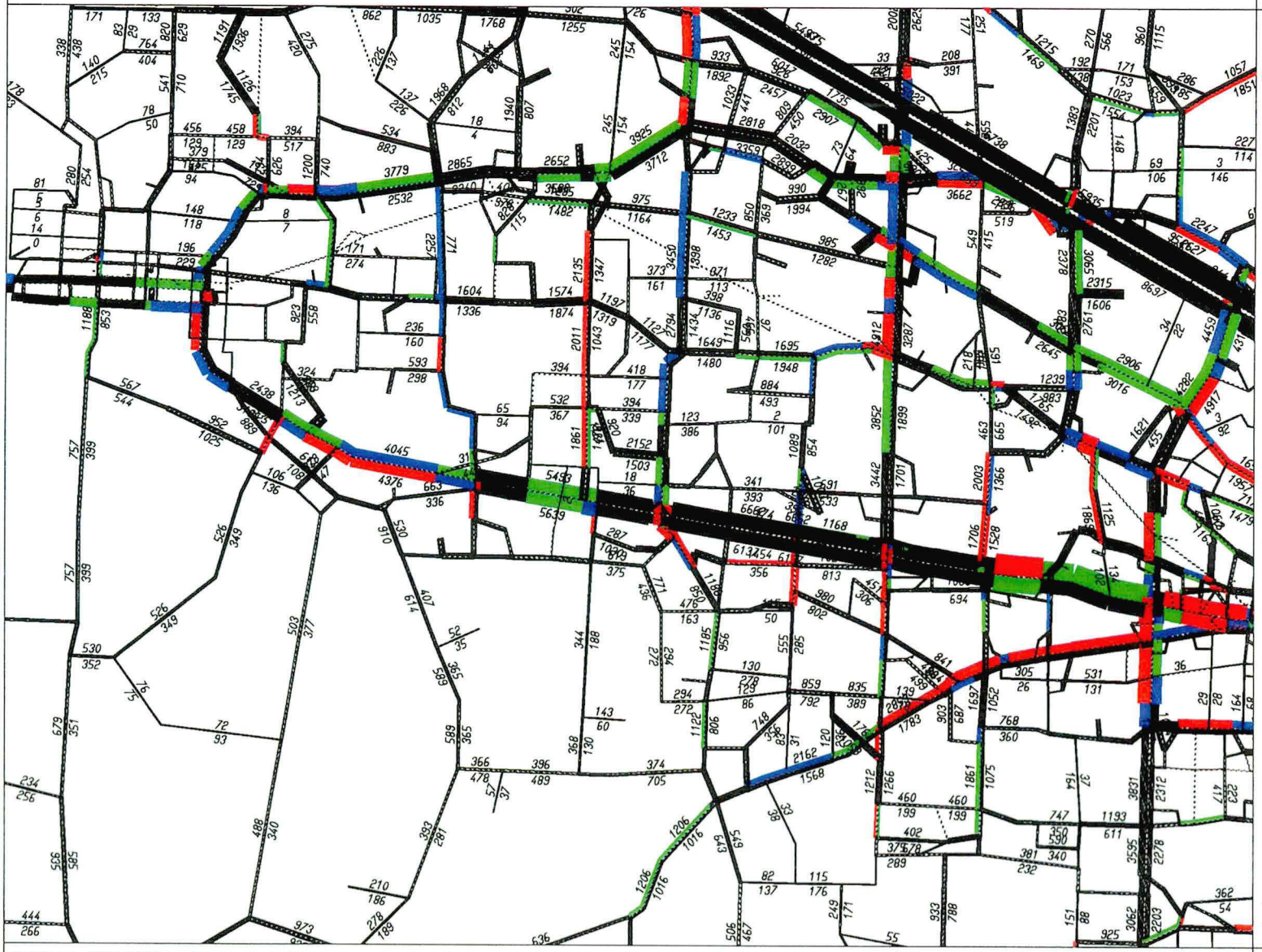
EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 11000: 2020 South Hillsboro Base
ATTRIBUTE @sel: auto + truck PCE's select link

99-07-26 11:57
MODULE: 2.13
DKS2000....jxs

DKS ASSOCIATES

AUTO VOLUMES

emme/2



LINKS:
mod=c
COL-IND: UL2

VOLUME/CAPACITY RATIO
< 0.8
0.8-0.9
0.9-1.0
> 1.0
XXX=VOLUME(VPH)

SCALE: 650
2000
4000
6000
8000
10000

WINDOW:
1431.9/124.948
1441.2/131.927

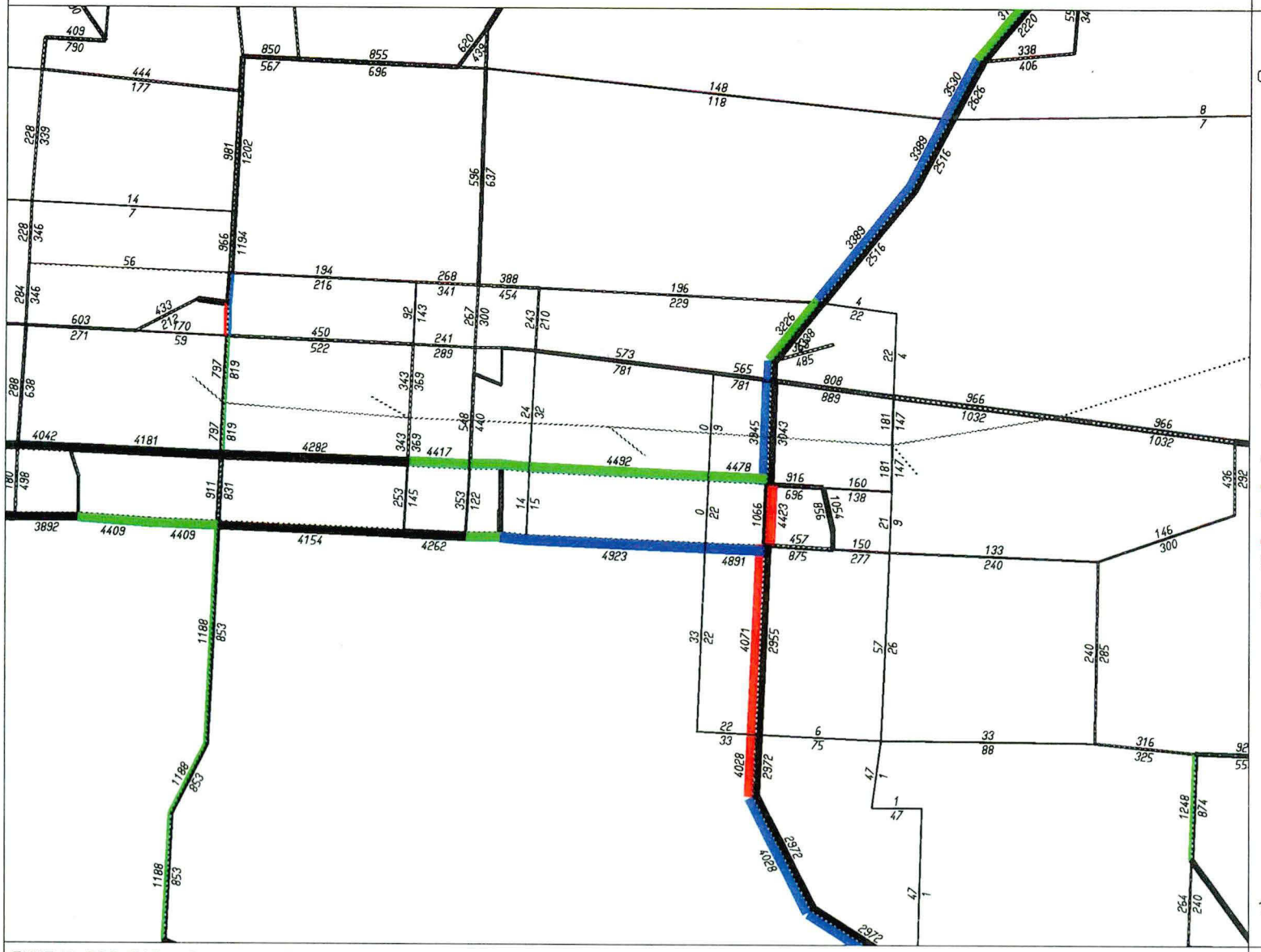
EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 11000: 2020 South Hillsboro Base

99-07-26 11:55
MODULE: 6.12
DKS2000....jxs

DKS ASSOCIATES

AUTO VOLUMES

emme/2



LINKS:
mod=c

COL-IND: UL2

VOLUME/CAPACITY RATIO

- < 0.8
- 0.8-0.9
- 0.9-1.0
- > 1.0

XXX=VOLUME(VPH)

SCALE: 650

2000
4000
6000
8000
10000

WINDOW:
1432.3/129.156
1434/ 130.48

EMME/2 PROJECT: Regional Transportation Plan
SCENARIO 11000: 2020 South Hillsboro Base

99-07-27 16:40
MODULE: 6.12
DKS2000....jxs