A G E N D A

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1700 | FAX 503 797 1794

METRO

MEETING: **METRO TECHNICAL ADVISORY COMMITTEE**
DATE: August 5, 2009
DAY: Wednesday
TIME: 10:00 a.m. to 12 noon
PLACE: Room 370A&B

TIME	AGENDA ITEM	ACTION REQUESTED	PRESENTER(S)
10:00 a.m.	**CALL TO ORDER AND INTRODUCTIONS**		Chair Robin McArthur
1. 45 min.	**Making the Greatest Place Performance Targets** *Objective: Discuss and get input on recommended MGP performance targets framework, process for refining, and relation to Regional Indicators Project & RTP Measures*	Briefing & discussion	Chris Deffebach Kim Ellis
2. 45 min.	**Regional Transportation Plan** • Draft Regional Freight and Goods Movement Action Plan • RTP Adoption Package *Objectives:* • *Provide update on Regional Freight Plan and obtain input on policy linkages between land use and freight/goods movement goals* • *Discuss RTP adoption package and public comment period*	Discussion	Kim Ellis Deborah Redmond
12 noon	**ADJOURN**		

Next regularly scheduled meeting (MTAC meets the 1st & 3rd Wednesday of the month): August 19, 2009

For further information or to get on this mailing list, contact Paulette Copperstone @ paulette.copperstone@oregonmetro.gov or 503-797-1562

Metro's TDD Number – 503-797-1804

Need more information about Metro? Go to www.oregonmetro.gov

600 NE Grand Ave.
Portland, OR 97232-2736
503-797-1700
503-797-1804 TDD
503-797-1797 fax
www.oregonmetro.gov

Metro | *Memo*

Date: July 31, 2009

To: MTAC and interested parties

From: John Williams, Land Use Planning Manager

Re: Performance Targets for Making the Greatest Place

Purpose

The purpose of this memo is to summarize the framework and approach recommended to guide selection of more detailed measures that will be used to evaluate and monitor the effectiveness of local and regional land use, transportation and investment decisions. The proposed framework and targets are shown in **Attachment 1**.

Action Requested

- Support for the recommended framework and categories of targets to allow staff to further refine the preliminary performance targets in 2010.

Background

In 2008, Council adopted Resolution No. 08-3940 expressing the intent of Metro and its regional partners to use a performance-based approach to guide policy and investment decisions in the region.

The Metro Policy Advisory Committee (MPAC) and the Metro Council resolved to:

- Affirm a definition of a successful region and its constituent communities, which have since become known as the "six desired outcomes."
- Work with regional partners to identify the performance indicators, targets, actions and decision-making process necessary to create successful communities.

In response to the Resolution, the *Making the Greatest Place* (MGP) effort continued to evolve to be both outcomes-based and performance-driven. The Regional Transportation Plan (RTP) update, High Capacity Transit (HCT) plan and Urban Growth Report further developed and applied an outcomes-based evaluation framework that considers economic, environmental and equity benefits and impacts in the decision-making process.

The framework is an organizational construct that blends the three-legs of the sustainability stool concept with the triple-bottom line concept to ensure land use, transportation and investment decisions support the long-term sustainability of the region and provide the best return on public investments.

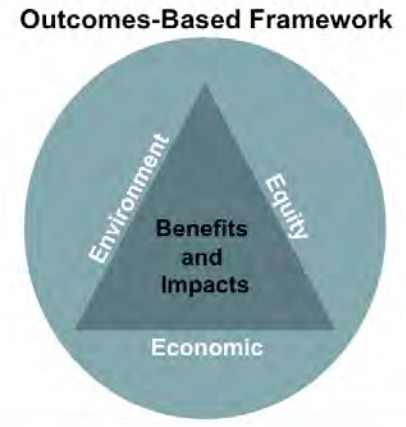


Figure 1. Outcomes-Based Evaluation Framework to evaluate whether land use, transportation and investment decisions help the region make progress toward achieving the Six Desired Outcomes.

Staff Recommendation

Staff proposes using this framework and the following approach to further implement the intent of Resolution No. 08-3940:

- Amend the Regional Framework Plan to formally adopt the six Desired Outcomes as policy.
- Finalize the preliminary list of targets for use in measuring progress toward achieving the six Desired Outcomes, also to be adopted as part of the Regional Framework Plan, as appropriate.

The proposed framework policy and targets are shown in **Attachment 1**. The recommended approach will codify the Desired Outcomes, define broad targets, and allow for more detailed transportation, land use, environmental, equity, and economic measures to be compiled in either an appendix to the framework plan or as part of the Regional Transportation Functional Plan or Urban Growth Management Functional Plan. The measures will help track the effectiveness of various regional and local actions. This will link together the performance measures already adopted (e.g., for Nature in Neighborhoods) and give Metro the flexibility to modify them as new measures or analysis tools are developed through the Regional Indicators process, Regional Transportation Plan or other efforts. In some cases, there are (or will be) state or federal standards that the region must meet. **Attachment 2** illustrates the relationship between the Six Desired Outcomes, proposed Regional Framework Plan policy and more detailed measures that have been or will be developed.

Further refinement of the targets is needed as they are intended to be broad yet descriptive. Many measures have already been defined – some to respond to state requirements and recent federal legislation, some have been identified through the Regional Transportation Plan and High Capacity Transit Plan, some through previous environmental efforts and infrastructure analysis -- yet they have never been assembled or linked together.

Next Steps

Staff is seeking support for the proposed framework and categories of targets. With this support, staff will continue to refine the draft targets with Metro's advisory committees for inclusion in the Regional Framework Plan and appendix in 2010. Both MPAC and JPACT have endorsed a preliminary set of targets for evaluating the Regional Transportation Plan – which served as a starting point for this proposal. The measures the RTP work group developed will be used to evaluate the RTP and determine contribution to achieving the targets and desired outcomes. This evaluation process will help define reasonable targets and test measures. This evaluation may also inform the final set of targets established in 2010.

Over time, effectiveness of the various local and regional actions will be monitored through such existing methods as the State of the Watersheds report (as directed by Title 13), periodic Regional Transportation Plan updates, redevelopment capacity updates as well as new monitoring methods, such as the federally-required Congestion Management Process Report and future updates to the State of the Centers Report and the Regional Mobility Corridor Atlas. Regional and local jurisdictions can use the results of these reports to modify budgets and action plans.

ATTACHMENT 1

Draft "Outcomes" Policy for the Regional Framework Plan

It is the policy of the Metro Council to manage growth in the region to achieve the following outcomes:

- People live and work in vibrant communities where they can choose to walk for pleasure and to meet everyday needs.
- Current and future residents benefit from the region's sustained economic competitiveness and prosperity.
- People have safe and reliable transportation choices that enhance their quality of life.
- The region is a leader in minimizing contributions to global warming.
- Current and future generations enjoy clean air, clean water and healthy ecosystems.
- The benefits and burdens of growth and change are distributed equitably.

Metro and local governments will adopt strategies and take actions to achieve these outcomes, measure the effectiveness of its strategies and actions in achieving the outcomes and adjust the strategies and actions over time to make them more effective. Local government strategies and actions will be defined in the Urban Growth Management Functional Plan and the Regional Transportation Functional Plan. The performance targets shall be included in an appendix to this Regional Framework Plan, as appropriate, and may be revised as more and better data become available. The following targets shall guide selecting more detailed performance measures:

Regional Performance Targets

Wealth creation – By 2035, the share of living-wage jobs in centers, corridors, employment and industrial areas increases by XX percent.
Compact urban form – By 2035, the share of residents who live in centers and corridors increases by XX percent.
Traveler safety – By 2035, crashes, injuries and fatalities decline by XX percent.
Business efficiency – By 2035, the cost of delay for freight and goods movement on the regional freight network declines by XX percent.
Infrastructure resilience – By 2035, the share of the region's infrastructure systems in good condition increases by XX percent.
Climate change – By 2035, the region reduces its greenhouse gas emissions by XX percent.
Active transportation – By 2035, walking, biking and transit trips increases by XX percent.
Energy efficiency – By 2035, the amount of energy used per person declines by XX percent.
Water efficiency – By 2035, the share of the region's wastewater that is recycled or beneficially reused increases by XX percent.
Clean air – By 2035, XX percent of the region's population is exposed to at-risk levels of air pollution.
Clean water – By 2035, XX percent of the region's streams and rivers are fishable[1] and swimmable.
Healthy ecosystems – By 2035, tree and other vegetative cover in the region increases by XX percent and impervious surface declines by XX percent.
Affordability – By 2035, the share of the region's households that are cost-burdened declines by XX percent.
Poverty - By 2035, the share of the region's high school students that qualify for free and reduced lunch programs declines by XX percent.
Access to daily needs – By 2035, the share of region's low-income, minority, senior and disabled populations that live within 30 minutes of essential destinations by bicycle and public transit increases by XX percent.
Access to nature – By 2035, XX percent of the region's residents live within ½-mile of a park, open space or regional trail.

[1] Rivers and streams that have historically been fish-bearing.

Attachment 2

COORDINATED OUTCOME-BASED FRAMEWORK FOR MAKING THE GREATEST PLACE

Six Desired Outcomes

Adopted into the Framework Plan policies

Broad Targets for Achieving Desired Outcomes

Adopted into Framework Plan policies, as appropriate

Measures

- Nature in Neighborhood measures
- State statue requirements
- Transportation measures
- Land use measures

Adopted in Functional Plan or amended into framework plan appendix

Actions

- Local
- Regional

Taken through investment decisions, regulatory actions, partnerships, etc.

Monitoring

Nature in Neighborhoods watershed report – 2 years

Urban growth report – 5 years

Congestion Management Process report - 2 years

Regional Transportation Plan – 4 years

State of the Centers report – to be determined

REVIEW DRAFT

REGIONAL FREIGHT AND GOODS MOVEMENT ACTION PLAN

Note:

This July 2009 working draft does not incorporate RFGM Task Force suggestions and changes. A new section 10.0 will be inserted, which will include near-term action items. Substantial new material will be added to the Executive Summary and Section 11.0, and brought to the Task Force in August 2009.

Contents

EXECUTIVE SUMMARY

The Portland region hosts Oregon's economic crossroads. While this permits the region to have a vibrant, diverse and flourishing economy, it also carries certain responsibilities. This Regional Freight Plan identifies mode-specific issues, policies, strategies and investments designed to support a truly multimodal, sustainable freight network within the Portland metropolitan region. The recommended actions will necessarily require collaboration between public and private sectors; the coordination of freight modes that are often competitors; and the reconciliation of institutional, jurisdictional and political perspectives. Yet stakeholders have evidenced a strong interest in and commitment to improving freight mobility and access, and reducing freight's impacts on the communities it serves. In a volatile economy that demands a thoughtful and dynamic response, that level of engagement will be needed to move strategic projects along the path to implementation.[1]

The Portland-Vancouver area is a globally competitive international gateway and domestic hub for commerce. The multimodal freight transportation system is a foundation for economic activities and we must strategically maintain, operate, and expand it in a timely manner to ensure a vital and healthy economy. A systems approach to plan and manage our multimodal freight transportation infrastructure must recognize and coordinate both regional and local transportation and land use decisions to maintain seamless freight and goods flow and access that benefit us all.

Portland as a global gateway

The ports of Portland and Vancouver processed over 20 million U.S. tons of cargo in 2007. Another to 8 to 10 million tons of inland barge cargo also moves through these facilities. In addition to being the leading grain and mineral bulk harbor on the West Coast, the ports processed nearly 500,000 automobiles in 2007. In total, $12 billion in foreign trade moved through Portland Harbor in 2007. Most of this cargo is transported beyond the Portland metro region, generally by truck and rail. There is also a huge support industry located in Portland associated with moving this freight.

The Port of Portland also operates the largest international airport in Oregon. Portland International Airport acts as the air freight hub for much of Oregon and Southwest Washington. Approximately 288,000 tons of domestic and international air freight shipped through Portland International during 2005.

[1] Freight volumes are down—temporarily, but substantially, since the draft Regional Freight Plan was completed in the early fall of 2008. Although most observers expect a turnaround to result in an increase in those volumes, the timeline and robustness of the recovery is not known. The downturn does offer the region an opportunity to plan and implement vital freight projects in time for the eventual transition to a healthier economy over the long term.

The 2002 Commodity Flow Survey projects an overall doubling of freight tonnage moved in the region by 2030. Currently 1 in 10 jobs in Oregon are transportation related.

Mounting congestion and capacity issues on several freight modes could impede the region's ability to compete globally. Regional congestion and capacity issues already impact several national goods movement corridors traversing the region, including freight rail and trucking corridors.

If the region is to maintain its status as an international freight gateway, immediate steps must be taken to ensure that a flexible, adaptable, efficient and reliable goods movement system is in place.

Made in Oregon

The Portland metro region is home to several traded sector industries that help drive the regional economy, including Nike, Adidas, Columbia, Intel, Lattice Semiconductor, FLIR, Genentech, Precision Cast Parts, Boeing, Oregon Steel Mills and Boise Cascade.

The 2005 Cost of Congestion to the Economy of the Portland Region Study reported that the region has a higher than average dependency on traded sector industries, particularly computer and electronic products; wholesale distribution services; metals; forestry, wood and paper products; and publishing. These business sectors serve broader regional, national and international markets and bring dollars from outside the local economy into the region.

Traded sector industries require well-integrated and highly efficient international and domestic transportation connections to stay competitive in the global economy. These firms have historically located in the region to take advantage of the pipeline, rail, marine, aviation and highway connections it offers.

Increased roadway congestion and decreased system reliability have adversely impacted the productivity of traded sector firms throughout the region. This has led to decreases in equipment productivity, increased labor costs and inefficient use of fuel, leading to increased pollution for combined air cargo, trucking, pipeline, marine and rail carriers. Each of these modes relies on the regional road system for some portion of their operations, and all are impacted by congestion.

Manufacturers, shippers and distributors in the region operate in a time sensitive production environment, with each operating under a unique set of parameters. Missing critical connections due to transportation system failure costs these firms significant sums of money and can also result in a loss of customers over time. This can drive companies to consider relocating outside the region, or prevent companies starting up operations in our region.

Preserving essential industrial lands in the Portland metro region has proven difficult over time. The region's industrial areas are also experiencing diminished access to rail infrastructure and deteriorating performance on freight route connections. Road and rail freight corridors, and the industrial lands they serve, need buffers from residential land uses surrounding them. Further, the types of industries being accommodated in industrial

areas are changing. Many new industries are better characterized as light industrial or distribution operations, with very different operational requirements than their heavy industrial predecessors. Redevelopment of existing industrial lands for modern industrial uses should be studied and supported.

Daily necessities

Modern urban life would be impossible without local goods movement. Nearly all the foodstuffs, clothing, housing materials, medical supplies, etc. that we rely on daily come from outside the region.

The region is forecast to have an additional 1 million residents and 600,000 jobs by 2030, which should drive a proportional increase in local freight volumes.

Local suppliers and retailers require good connections to regional, national and international goods movement systems. They also need reasonably sized lane widths, curve and curb radii, and loading zones.

Roadway congestion and deteriorated system reliability within the region heavily impact the productivity of local parcel, store and fuel delivery firms. This leads to decreases in equipment productivity, inefficient use of fuel, increased pollution and higher operating costs.

Shippers and distributors also operate in a more time sensitive production environment, with each operating under a unique set of parameters. System failure costs these firms significant sums of money, and can also result in a loss of customers over time. This can drive these firms to reevaluate their choice of location.

The current situation

Public sector funding for transportation infrastructure, particularly targeting freight movement, has diminished over time. If nothing changes, competition for available funds will increase, and most (road) funds are likely to be funneled into critical safety projects. The region's funding dilemma is real: the state of Oregon hasn't had a gas tax increase since 1993, and the federal Highway Trust Fund is teetering on insolvency. For most of the first decade of this century, the cost of construction materials has risen significantly on the global market, greatly increasing the cost to construct infrastructure improvements. Simply put, costs to construct improvements having been trending upward rapidly, while available revenues to pay for them are declining.

The private sector portion of the goods movement community has been making great strides in adopting sustainable technologies and wringing efficiencies out of their respective portions of the goods movement system. The public sector must also effectively weigh policies, programs and investments to achieve the maximum benefit for the goods movement system, particularly during a time of uncertain funding for transportation.

This means coordination at all levels of government must occur with the business community to address the immediate and long term freight transportation funding needs.

Key Task Force goals and issues for the regional freight transportation system

A systems approach must be taken in order to address the Regional Freight and Goods Movement Task Force goals of reducing delay, increasing reliability, improving safety and providing more choices to help area businesses remain competitive. Such an approach must target the following issues identified by the Task Force:

Congestion and hotspots – chronic road and rail network bottlenecks impede regional freight/goods movement

Reliability – unpredictable travel time due to crashes, construction, special events, and weather

Capacity constraints – due to physical and operational issues as well as lack of capacity in critical corridors

Network barriers – safety concerns and out of direction travel resulting from weight-limited bridges, low bridge clearances, steep grades, at grade rail crossings and poorly designed turns or intersections

Land use – system capacity and land for industrial uses is being lost to other activities

Impacts – managing adverse impacts including diesel emissions, water quality, noise and land use conflicts

Investing in our regional freight system

The many advantages offered by the Portland metro region's unique location and transportation infrastructure need to be fully realized and capitalized upon if the region is to maximize its economic opportunities during the coming century. This will require strategic investment in the multimodal regional freight and goods movement system. Freight-oriented preservation, management and investment priorities should focus on:

- Core throughway system bottlenecks to improve truck mobility in and through the region – hotspots of note include the Columbia River Crossing influence area, the I-5/I-405 loop and the I-5 corridor south of I-205.
- Improving and protecting the throughway interchanges that provide access to major industrial areas, particularly: I-5/Marine Drive and I-5/Columbia Blvd serving the Columbia Corridor and Rivergate industrial areas; I-205/Hwy 212 serving the Clackamas and Milwaukie industrial areas; and I-205/Airport Way serving Portland International Airport and east Columbia Corridor industrial areas.
- Improving arterial connections to current and emerging industrial areas (e.g., Sunrise Corridor phased improvements recommended by the Sunrise Project Policy Committee and *last mile* local industry connectors, e.g., Columbia/Cascade River District Projects)
- Looking beyond the roadway network to address critical marine and freight rail transportation needs such as completing the Columbia River channel deepening and upgrading main line and rail yard infrastructure.

1.0 Introduction

The Portland metropolitan region has a vibrant and flourishing economy that is more diversified than ever before. Industry has historically located in the region to take advantage of regional and global connections via pipeline, rail, marine, aviation and highway infrastructure. Today, the region is both an international gateway for trade and a hub for distribution and warehousing activities.

The 2005 Cost of Congestion to the Economy of the Portland Region Study reported that the region has a higher than average dependency on traded sector industries, particularly computer and electronic products; wholesale distribution services; metals; forestry, wood and paper products; and publishing. These business sectors serve broader regional, national and international markets and bring outside dollars into the region's economy. These industries depend on a well-integrated and well-functioning international and domestic transportation system to stay competitive in a global economy.

As an international gateway and domestic freight hub, the region is particularly influenced by the dynamic trends affecting distribution and logistics. The 2002 Commodity Flow Survey projected an overall doubling of freight tonnage moved in the region by 2030. The region's forecasted population and job growth, estimated at an additional 1 million residents and 600,000 jobs by 2030, and the associated boost in the consumption of goods and services are significant drivers of projected increases in local freight volume. Much of the projected doubling of freight tonnage passing through the Portland metropolitan region doesn't terminate here, but instead moves well beyond the region's boundaries to the rest of the country.

Complications rising from congestion and capacity issues on several of the region's freight modes impede the region's ability to compete nationally and globally. Congestion has led to reduced productivity, wasted fuel and increased operating costs for businesses. For local shippers and carriers, traffic congestion has led to an erosion of system reliability. Shippers in the region who miss critical connections due to system failure incur costs in a time sensitive production environment and can also lose customers as a result.

Maintaining essential industrial and commercial lands in the Portland metropolitan region has also become more difficult as pressure builds from competing land development, adjacent residential districts, and diminished access to rail and roadway infrastructure.

The private sector portion of the goods movement community has been making great strides in adopting sustainable technologies and wringing efficiencies out of their portions of the goods movement system. The public sector must also effectively weigh channel policies, programs and investment to achieve the maximum benefit for the goods movement system, particularly during a time of uncertain funding for transportation.

The region's goods movement system must improve and adapt if the region is to maintain its economic competiveness in the global economy and its status as an international freight gateway. Immediate action is required to meet the economic opportunities of the 21st century.

The Regional Freight and Goods Movement Action Plan highlights the key issues for the regional freight transportation system and suggests policies and investments to address them.

Freight trends

The global economy is in the midst of a profound change. Twenty-first century innovations in trade policy, communications and transportation have altered the sourcing, production and marketing of products on a global scale.

Due to open trade policies, more freight than ever before is moving across international boundaries.

The rise of worldwide communications networks allow for the inexpensive and instantaneous transfer of information around the globe. These networks have allowed businesses to expand operations and markets, and given rise to new business models like e-commerce, leading to a higher volume of smaller, demand-responsive shipments.

Access to good transportation services has allowed businesses to develop increasingly complex supply chains that are longer and far more specialized, yet increasingly fragile.

As a result of these global trends, U.S. international and domestic trade volumes are expected to grow at an accelerated rate. Trade volumes in Portland are expected to double by 2035, to 600 million tons annually.[2] This is expected to have a profound effect on shippers and the infrastructure they depend upon.

West Coast ports are struggling to keep pace with the increasing volumes of marine and air cargo coming from Pacific Rim trading partners like Japan, China, South Korea and Taiwan. While 2007 and 2008 witnessed a temporary slowing of this trend nationally, Portland Harbor will likely return to the longer-term growth in freight volumes as the economic recovery proceeds. In addition, the ports of Portland and Vancouver are not as constrained by dockside capacity as a number of other West Coast ports.

In total, Pacific Rim trade amounted to $359.2 billion in 2002. Much of the Pacific Rim freight processed by West Coast ports is destined for the rest of the country. However, the financial burden of maintaining and expanding the publicly owned transportation system serving this national need falls to local West Coast trade gateway jurisdictions.

[2] METRO, ODOT, PDC, Port of Portland, Port of Vancouver, Portland and Vancouver International and Domestic Trade Capacity Analysis, 2006.

The North America Free Trade Agreement has also generated large volumes of trade between the U.S., Canada and Mexico on the West Coast, amounting to $73.4 billion in 2002 and growing annually. Trade between major West Coast cities within the U.S. amounted to $182 billion in 2002, for a total of approximately $255 billion in north-south coastal trade. This number has continued to expand rapidly since 2002.

The goods movement industry has responded to this capacity crunch by employing larger trucks, rail cars, ships and planes. This trend places new demands on the goods movement infrastructure and reinforces the need to reconsider our approach to providing goods movement infrastructure. Government and industry must also work together to address increasingly stringent safety and security requirements being placed on the goods movement system.

Against this backdrop of sustained expansion in global trade the region must prepare to compete globally. The viability of the regional and state economy, and the ability to attract and sustain business investment in both, depend on it. Industry needs tangible and continuous improvements in the operating efficiency, capacity, modal redundancy and reliability of the regional goods movement system to remain competitive globally. Government must do its best to work with private sector stakeholders to accomplish this in a sustainable, environmentally sensitive and cost effective manner. Recent fluctuations in fuel prices have merely underscored the importance to industry of having an efficient, reliable and redundant regional goods movement system.

The regional goods movement system is failing certain large shippers: several traded sector firms in the region must truck loads to San Francisco or Seattle/Tacoma to achieve satisfactory international aviation or marine connections. Other resource based industries in, or served by, the Portland metropolitan region's goods movement system are very sensitive to transportation costs and can easily lose global market share with shipping cost increases measured in pennies per pound. Still other area manufacturers have had to repeatedly adjust production schedules to compensate for congestion on the region's runways, roads and rail lines, leading to increased production costs and reduced productivity.

As shippers' supply chain logistics evolve, the definition of "state of the art" warehousing and distribution centers continues to change dramatically. Larger, increasingly truck-biased cross dock facilities are becoming the new standard. Higher fuel costs could lead to decentralization of regional distribution centers nationally, in an effort to reduce the distance trucks need to move to their final destinations. The Portland metro region is well positioned to take advantage of this opportunity.

The local component of the goods movement system is also critically important to the economy and daily life. The local movement of goods and services is focused primarily on trucks. The ability to maneuver on local streets and to park to unload freight is vital for those trying to deliver goods and services to local communities.

With so many new residents expected in the Portland metro region by 2030, family wage job creation is going to be of paramount importance

The region's goods movement infrastructure and unique geographic location are competitive advantages that have created transportation sector jobs for more than a century. These jobs, in turn, serve the industrial and local freight needs of the Portland metro region, the state, the Pacific Northwest, the West Coast and the nation.

Engaging stakeholder to develop a regional freight plan

The center point for the engagement of stakeholders was the Metro Council appointed Regional Freight and Goods Movement Task Force. The 33-member task force included representatives from the multimodal freight industry, community and government agencies. The group was charged with guiding the formation of policy and strategy recommendations for the region's multimodal freight transportation system. Metro Councilor Rod Park served as chairperson for the Task Force. The list of members included:

Steve Akre
OIA Global Logistics

Grant Armbruster
Columbia Sportswear

Steve Bates
Redmond Heavy Haul

Scott Bricker
Bicycle Transportation Alliance

Katy Brooks
Port of Vancouver

Gary Cardwell
NW Container Service

Terry Cleaver
Columbia Grain

Lynda David
Southwest Washington RTC

Tom Dechenne
Norris, Beggs & Simpson

John Drew
Far West Fibers

Ann Gardner
Schnitzer Steel Industries

Pete George
PW George Consulting

Cam Gilmour
Clackamas County

Van Hooper
Sysco Foods

Tom Hughes
City of Hillsboro

Monica Isbell
Starboard Alliance

Susie Lahsene
Port of Portland

Brian McMullen
WSDOT

Jeanne Morgan
Xerox

James Nave
Union Pacific RR

Rod Park
Metro

Michael Powell
Powell's Books

Warren Rosenfeld
Calbag Metals

Robert Russell
Oregon Trucking Association

Paul Smith
City of Portland

John Speight
Portland & Western RR

Paul Thalhofer
City of Troutdale

Jason Tell
ODOT

Elizabeth Wainwright
Merchants Exchange

Tracy Ann Whalen
ESCO Corporation

Rick Williams
Lloyd District TMA

The RFGM Task Force met 11 times between July 2006 and October 2007. Additionally, the task force worked in ad hoc subcommittees to tackle specific issues, such as a regional vision for freight, freight-related RTP goals and objectives, and project prioritization criteria, and brought back recommendations to the full task force. Task Force members also participated in a combined Metropolitan Policy Advisory Committee and Joint Policy Advisory Committee on Transportation meeting held in October 2007.

The long-standing Metro committee on regional freight coordination, the Regional Freight Advisory Committee, served as the technical advisory committee on this plan, providing data, input on analysis, and review of memorandums and reports. The committee is loosely comprised of transportation agencies in the region with an interest in freight issues. Active participants include:

Oregon Department of Transportation
Washington Department of Transportation
Metro
Southwest Washington Regional Transportation Council
Port of Portland
Port of Vancouver
FHWA
Clackamas County
Washington County
Multnomah County
City of Gresham
City of Milwaukie
City of Portland
City of Tualatin
City of Wilsonville

The Regional Freight Advisory Committee met monthly during the course of the planning effort. Some members participated in RFGM Task Force subcommittee meetings.

Targeted stakeholder workshops and presentations were conducted within the 2035 Regional Transportation Plan outreach process. A series of targeted workshops were held in Fall 2006 with various stakeholder groups, including one specifically targeted to the business community, to gather needs and issues. The role of freight in the transportation system was address in each of these targeted workshops. Additionally, several Metro Councilors and key Metro staff were enlisted to talk with business groups in the region about the role of transportation in Portland's economy. Metro spoke with 29 business and advisory groups over the course of the project.

Collectively, these outreach efforts and strategies have educated stakeholders and informed the technical and policy development work on community values, desired outcomes and transportation needs, investment priorities and implementation strategies.

2.0 Goal statement and policy

Goal statement

The RGFM Task Force developed the following goal statement after considerable deliberation:

> The Portland-Vancouver region is a globally competitive international gateway and domestic hub for commerce. The multimodal freight transportation system is a foundation for economic activities and we must strategically maintain, operate, and expand it in a timely manner to ensure a vital and healthy economy.

- We must use a systems approach to plan and manage our multimodal freight transportation infrastructure, recognizing and coordinating both regional and local decisions to maintain seamless flow and access for freight movement that benefits all of us.
- We must adequately fund and sustain investment in our multimodal freight transportation system to ensure that the region and its businesses stay economically competitive.
- We must create first-rate multimodal freight networks that reduce delay, increase reliability, improve safety, and provide choices.
- We must integrate freight mobility and access needs in land use decisions to ensure the efficient use of prime industrial lands, protection of critical freight corridors, and access for commercial delivery activities.
- We must ensure that our multimodal freight transportation system supports the health of the economy and the environment.
- We must enlighten our region's citizens and decision makers about the importance of freight movement on our daily lives and economic well-being.

Integration with the Metro planning process

The Regional Freight and Goods Movement Action Plan is being developed along with broader Metro initiatives evaluating implementation of the regional growth concept (a set of activities under the umbrella of "Making the Greatest Place" or MGP, was developed earlier under the name "New Look") and the update of the region's overall transportation system plan (2035 RTP Update). This project has coordinated both its technical analysis and public participation elements with these other efforts to ensure a consistent and integrated planning approach.

The work program included a New Look (MGP)/RTP coordinated public involvement process that established desired outcomes specific to the regional freight transportation system. It has provided a common base of knowledge about the different elements of the system and has identified issues, needs, and deficiencies within the system. The project has also refined existing regional freight policies and updated the multimodal freight network map. Infrastructure improvements for freight have been called out and

prioritized. Implementation strategies for addressing environmental and community impacts, system management, economic development and financing have been reviewed and recommended. The project will also put forth recommendations for incorporating truck movement into the Creating Livable Streets Design Guide.

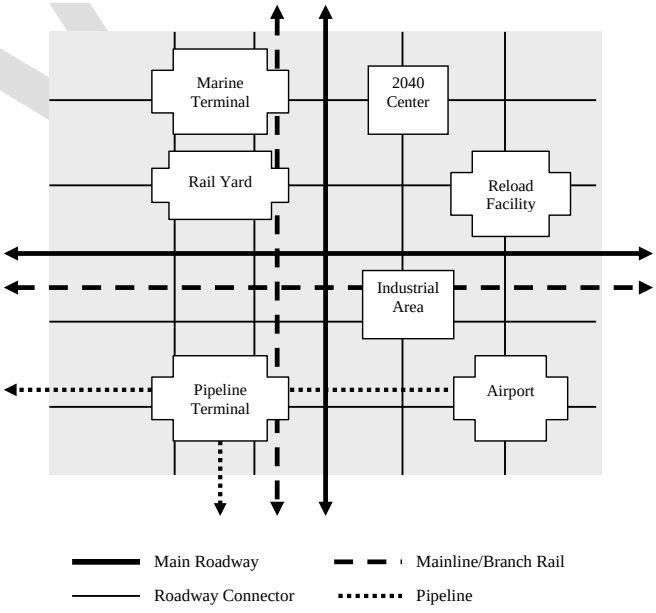
2035 Regional Transportation Plan

Metro periodically reviews and updates the Regional Transportation Plan (RTP) to keep it current with transportation challenges facing the region, and to incorporate new information, technologies and strategies. The updated plan provides a blueprint for building a sustainable transportation future that allows the region to compete in the global economy and preserve the unique qualities and natural beauty that define our region. An overarching aim of the RTP is to move the region closer to the vision of the region's long-range strategy for managing growth, the 2040 Growth Concept. Fundamentally, the RTP defines a framework for making choices about the future of the region – choices about where to allocate limited transportation resources and choices about the future we wish to see for our region and, by extension, the State of Oregon. The Regional Freight and Goods Movement Action Plan for the Portland metro region is an element of the RTP. While the plan targets needs and issues specific to the freight transportation system, key policies and actions are incorporated into the comprehensive RTP.

RTP freight transportation system

The transport and distribution of freight occurs via the regional freight system, a combination of interconnected publicly and privately owned networks and terminal facilities. The concept in Figure 1 shows the components of the regional freight system and their relationships.

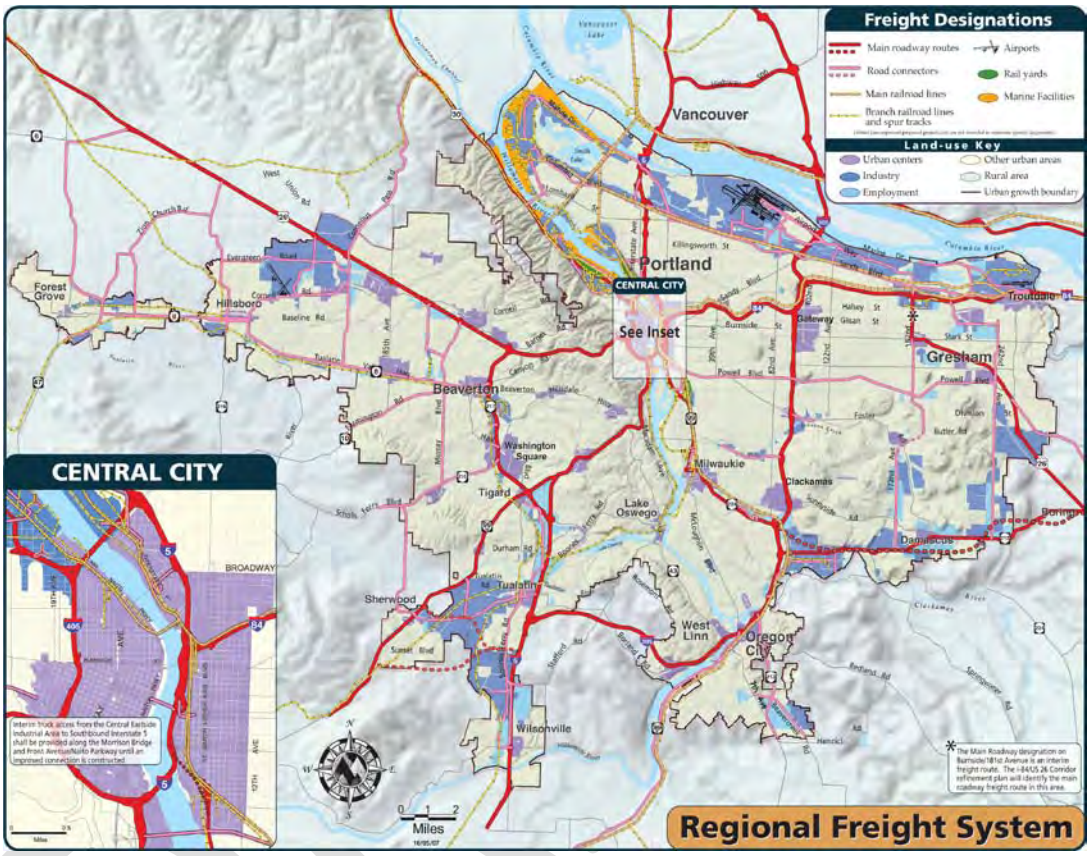
Figure 1. Regional freight concept



Rivers, mainline rail, pipeline, air routes, and arterial streets and throughways connect the region to international and domestic markets and suppliers beyond local boundaries. Inside the region, throughways and arterial streets distribute freight moved by truck to air, marine and pipeline terminal facilities, rail yards, industrial areas and commercial centers. Rail branch lines connect industrial areas, marine terminals and pipeline terminals to rail yards. Pipelines transport petroleum products to and from terminal facilities.

The Regional Freight System Map, shown in Figure 2, applies the regional freight concept on the ground to identify the transportation networks and facilities that serve the region and state's freight mobility needs

Figure 2. Regional freight system



3.0 Key issues on the regional freight transportation system

Between April 2006 and February 2007, Metro staff interviewed nearly two dozen individuals and facilitated discussions at more than 35 meetings with regional stakeholders and analysts.[3] The result was more than 225 discrete comments reflecting desires and concerns regarding the state of the region's freight transportation system. With input for the Regional Freight and Goods Movement Task Force, the collection of comments was refined into a list of key issues that the plan should begin to address. Table 1 provides a summarized list of the key issues and needs.

Table 1. Priority issues for freight
Appendix A contains the actual comments as transcribed by the interviewers.

Issue category	Key issues
Mobility and accessibility	• Road congestion on regional truck routes • Travel time reliability on regional truck routes • Accessibility between intermodal terminals, industrial areas, centers and interstate system • Class 1/short line rail – throughput and velocity, capacity constraints in rail yards, sidings • Improved rail access and service for regional shippers • Barriers: weight/vertical clearance issues on bridges; gaps in connectivity (new roads/bridges) • Safe barge navigation in I-5/BNSF bridges area • At-grade rail crossings – grade separation • River channel deepening

[3] Ibid.

Issue category	Key issues
System management	• Preservation and efficient use of existing capacity • Intelligent Transportation System tools (signal timing, cameras) • Access management • Increase in truck crash rate • Faster response to roadway incidents (crashes) • Truck parking: hours of service limitations • Efficient loading/unloading operations in commercial centers • Advances in traveler information (road conditions, directional signage) • Workforce access to industrial and employment areas • Maintenance dredging and lock repair • Rail system management (directional running, grade crossing info) • Modal redundancy
Land use	• General population growth and impacts to transportation system • Competition between industrial and other uses for interchange capacity • Adequate supply of industrial land served by transportation system (i.e., marine accessible) • Incompatible land uses along rail lines and major truck corridors • Accommodation of truck delivery in pedestrian-friendly areas and corridors (street design trade-offs)
Environment	• Air quality impacts from diesel engine emissions • Residential noise impacts from truck, rail and air cargo operations • Water quality
Investment strategies	• Link transportation investment decisions to regional, state, and national economy. • Expand types and amounts of funding for infrastructure and programs (i.e., gas tax indexing, user pays cost responsibility). • Use public-private partnerships to fund improvements. • Create a role for the public sector in funding private operations. • Use a building block approach to fix corridors (i.e., ITS first, then graduate to other solutions). • Incorporate lifecycle cost (maintenance) into project.
Coordination	• Create better coordination between freight system stakeholders in the region. • Educate decision makers and public about importance of region's freight transportation system. • Consider rail service needs for regional shippers. • Consider freight/goods movement needs in project development.

Issue category	Key issues
Research and data	• Freight system performance over time • Ongoing truck count program • Economic impact assessments of investments

4.0 Freight generation in the region

Manufacturing, warehousing and distribution

The Portland metro region is home to a number of traded sector firms engaged in a broad array of activities. These firms bring wealth from outside the local economy into the region, helping communities to prosper. All of these enterprises have unique goods movement needs, some local, others national or international.

Unlike many areas of the country which have witnessed a substantial decline in manufacturing/industrial employment, the region has experienced growth in the manufacturing sector of the economy during the last two decades. This has created a need to efficiently deliver the materials needed for production (domestically and internationally) and to cost effectively ship finished products. Manufacturers in the region assemble products from components delivered from around the globe and ship components for assembly internationally. The mobility needed to support commerce in the region is as diverse as the commerce itself.

Manufacturers and shippers from throughout Oregon and Southwest Washington depend on the Portland metro region's warehousing, distribution, logistics, customs and multimodal goods movement infrastructure to move raw materials, semi-finished and finished products. These activities create substantial quantities of jobs within the region. Warehousing and distribution services, and related activities, are a major employer within the Portland metro region, with at least 46,000 local jobs attributed to this sector.

These activities are spread throughout the region, with concentrations in the Rivergate, Columbia Corridor, Sunset Corridor, Swan Island, Clackamas-Milwaukee, Springwater-Damascus, inner Eastside, North Wilsonville-Tualatin-Sherwood, Beaverton-Tigard, Beavercreek and Northwest Portland industrial areas.

Port activities

The ports of Portland and Vancouver host more than 1,000 ocean going ships each year. These vessels transport 18 to 20 million short tons of cargo annually to and from public and private facilities located in the Portland-Vancouver Harbor. Another to 8 to 10 million tons of inland barge cargo also moves through these facilities. In total, $12 billion in foreign trade moved through Portland Harbor in 2007. Much of this cargo is

transported beyond the Portland metropolitan area, through key truck and rail corridors.

In addition, the Port of Portland operates the largest international airport in Oregon. It is the hub for the vast majority of air freight activity in the Portland metro region, western Oregon, and Southwest Washington. Approximately 288,000 tons of domestic and international air freight shipped through Portland International during 2005.

5.0 Regional goods movement

Highway

Trucks will remain the predominant mode of freight transport for the foreseeable future, due to their flexibility, speed, adaptability and availability. West Coast truck traffic is expected to increase 200 percent by 2035*, placing increasing pressure on the interstate highway system and local freight corridors. As much as 52 percent of the total truck traffic in the region is through traffic.[4] This reflects the importance of our stewardship role for maintaining the through-put efficiency of the interstate freeway system for national freight movement.

Maintaining access to, and adequate capacity on, designated freight corridors, the National Network, and the National Highway System within the region will remain critical to efficient goods movement. Performance of NN and NHS roads within the region varies, but there are locations with regularly recurring chokepoints. It is not unusual for these chokepoint locations to experience frequent failures, particularly during peak weekday travel times, greatly reducing overall system efficiency and reliability.

Recurring highway system chokepoint locations within the region identified by the RFGM Task Force as having broad impacts to goods movement included:

- I-5/CRC (Columbia River Crossing) and Delta Park: North Marine Drive to Columbia Boulevard operates near or over capacity during all peaks.
- I-5/I-84 Interchange: Operates at or over capacity during the a.m., p.m. and mid-day peaks.
- I-5/I-405 Loop: Is congested through the central city area.
- I-5 Corridor, south of I-205 interchange: the South Metro I-5 Corridor and Boone Bridge is reaching capacity, and carries a larger percentage of trucks that the CRC.
- I-205/OR 224 Interchange: Operates near capacity during the mid-day and p.m. peak hour.
- I-205: I-84 to Northeast Marine Drive: Several interchanges connecting to and sections of I-84 and I-205 within these limits operate near or over capacity during the p.m. peak hour.
- I-205: OR 212 to I-5: I-205, particularly south of the Oregon City I-205 bridge has long had capacity issues; enhanced merge lanes to I-205 are also needed.

[4] *Portland and Vancouver International and Domestic Trade Capacity Analysis, 2006: WCCC Trade and Transportation Study, Cambridge Systematics, 2008*

- OR 217: Inadequate interchange spacing leads to merge/weave congestion chokepoints in the area of the Southwest Beaverton-Hillsdale Highway, Allen Boulevard and Hall Boulevard interchanges.

- I-205/Airport Way: Eastbound to northbound on-ramp is a bottleneck to providing access to and from Portland International Airport

- Non-continuous or challenging parallel arterials and connections: Improving arterial connections to current and emerging industrial areas (e.g., Sunrise Corridor phased connectors) are needed.

- Last-mile chokepoints: Various locations experience congested last-mile local industry connectors (e.g., Columbia/Cascade River District Projects)

Several of these highway segments and interchanges have also been identified as projects of statewide significance due, in part, to their negative impact on the statewide or national goods movement systems.

Rail

Class 1 rail lines[5] operating in the Portland metropolitan area (BNSF Railway and Union Pacific Railroad) have been capacity-constrained due to several long-standing and well documented historical factors. These constraints will worsen as freight volumes at the region's ports and intermodal facilities increase. Capacity chokepoints for the Class 1 railroads in the Portland metropolitan area have primarily centered on the Portland Triangle, located in the industrial/port areas of North Portland and Southwest Vancouver.

Issues in the Portland Triangle area include inadequate siding lengths (Class 1 railroads are now fielding up to 8,000 foot long unit trains), rail bridges with inadequate capacity and lowered sufficiency ratings, at-grade rail crossings, sidings and mainline track sections that are over capacity. Other Class 1 capacity constraints within the region include switch control at the Steel Bridge, and inadequate rail and intermodal yard capacity for current and future needs. Outside the region, railcar clearances and increasing weights will need to be addressed, as the Class 1 railroads look to longer trains and heavier carloads to increase their operating efficiency and revenues.

Short line rail operators have taken over many of the local and regional rail functions formerly performed by the Class 1 railroads. Rail car weights are a critical issue for short line railroads. The Class 1 railroads are now considering rail car weights above 286,000 pounds, which will exceed the carrying capacity of many short line tracks in the region.

[5] Railroads are classified according to their revenue; following decades of decline and mergers, there are now seven Class 1 railroads—constituting largest companies--currently operating in the United States. Class II railroads are also known as regional railroads; Class III includes the short line railroads.

Assisting regional short line railroads with track upgrades could reduce the risk of derailments, a potential public safety issue and certainly a productivity issue for the railroads. It also keeps trucks off the road. The short lines are also having to make-up more trains in their yards, which have limited capacity, before delivering them to the Class 1 rail yards. Assisting short line railroads requires government to show a clear public benefit, since these facilities are privately owned and operated.

Government and the railroads have historically cooperated to implement rail crossing safety improvements. The Class 1 and short line railroads have multiple at-grade crossings of their lines in the region, limiting train speeds and increasing the risk of conflicts between trains, vehicles, pedestrians and bicycles. Improving, eliminating, or grade separating at grade crossings improves safety as the number and size of trains increase. Crossing improvements increase rail and road system productivity by helping longer trains clear crossings more quickly. Crossing improvements are the first step in applying for "quiet zone" status with the Federal Railroad Administration.

Aviation

Combined air cargo providers generally operate on a hub-and-spoke system, where freight is picked up at airports throughout the country in the early evening, flown back to a central destination to be sorted, and then reloaded and flown to its final destination in the early hours of the morning for next day delivery. In order for this system to work, schedules must be maintained. This generally places air freight carriers' trucks on the road during p.m. peak hour traffic.

While traffic flows on the roadways immediately adjacent to Portland International have improved within the last decade, trucks carrying air freight to the airport during the p.m. peak hour face increasing congestion on several area highways leading to the airport. I-205, I-84, I-5, I-405 and US26 all serve locations feeding generating air freight, but have failing p.m. peak hour level of service.

Several traded sector manufacturers within the region are heavy users of air freight. Frequent roadway congestion forces many of these users to move shipping deadlines up, causing firms to lose valuable production time and increasing their production costs. Many shippers in the region were disappointed when direct air freight connections to Asia were lost. They now have to truck their shipments to Sea-Tac or San Francisco International airports to make their desired connections.

Portland International began (May 2009) to implement a project to extend its north runway, as well as a complete overhaul of its south runway. With these improvements runway and taxiway capacity at the airport should be adequate to meet the needs of air freight carriers through the next decade, based on recent statements by the Port of Portland.

Marine

Modern commercial navigation of the Columbia River began in 1877, when Congress approved dredging a navigation channel between the Portland-Vancouver area and the mouth of the river in Astoria. Currently, more than 1,000 ocean-going vessels call on the Portland-Vancouver Harbor each year. Navigation channel depth on the Columbia River continues to be the limiting factor on the size, and therefore the number, of ships that call on the Portland-Vancouver Harbor. Channel deepening has been pursued for several decades, balanced by the need to protect various fish stocks migrating on the river.

The ports of Portland and Vancouver, as well as the other ports located along the lower Columbia River, lead the nation in the shipment of grain. They also ship large quantities of other bulk agricultural commodities from Oregon, Idaho and Washington to the rest of the world. The region's ports will still manage to grow by moving a wide range of marine cargoes, such as energy and transportation project related materials, manufactured goods, automobiles, agricultural and mining related products, and fuel. The ability of the ports of Portland and Vancouver to serve as major ports will be hampered by the size of ships that can traverse the Columbia River channel, since ocean carriers try to reduce per slot vessel (docking) cost by using larger ships.

The ports generate significant volumes of truck and rail traffic in the West Vancouver and Rivergate areas. Congestion during peak commute hours adversely impacts these truck movements. Intermittent congestion also impacts the Class 1 and shortline railroads serving the area.

Barge operators on the Columbia/Snake River system use equipment specifically constructed to operate in the locks on those rivers, adding significantly to their capital costs. In 2004, these barge operators moved 16,262 TEU's[6] and 9,779,000 tons of containers, bulk (wet and dry) and break bulk cargoes on the Columbia/Snake River system. Barges are also used to transport grain, fuel, steel and aggregate related products on the lower Willamette River. It should be noted, however, that most import and export shippers prefer to use truck and rail for any higher value products moving through the ports.

The primary limiting factors to barge movement in the region are the BNSF rail and I-5 bridges crossing the Columbia River and the maintenance of navigable locks on the Columbia and Snake rivers.

[6] Standard container measurements, known as twenty-foot equivalent units.

Pipelines

The Olympic Petroleum pipeline transports 65 percent of the petroleum products that Oregon uses. The pipeline delivers the equivalent of 750 tanker trucks of fuel between the Puget Sound and the Portland tank farm located in the Northwest Portland industrial area every day. The product in the petroleum pipeline generally moves at approximately 4 to 5 miles per hour. The pipeline is privately owned and is regulated by the federal government. [7]

Regional distribution occurs from the tank farm through a Chevron owned pipeline to Portland International Airport and through the Kinder-Morgan pipelines to users and distributors throughout the region. Maintaining good quality access to the tank farm facility is critical, particularly in light of a recent at-grade rail crossing closure on an access road to the tank farm.

The Williams Northwest Pipeline transports natural gas products to northwestern Oregon and Southwest Washington. Northwest Natural Gas operates a private natural gas network that connects to the Williams Northwest Pipeline and radiates through and beyond the Portland metro region. This pipeline network delivers gas directly to end users within and beyond the Portland metropolitan area.

[7] http://www.phmsa.dot.gov/index.html

6.0 Goods movement and land use concerns

While the success of the region's economy is directly tied to its ability to efficiently move freight, it is important to recognize that freight movement and operations can potentially produce adverse impacts on local communities in the form of:

- Increased emissions, noise and vibration, lighting and safety concerns
- Impacts to land uses, community access, and bicycle and pedestrian movements
- Competition for highway and parking capacity
- A perceived (though not often real) reduction in land values
- Impediments to visual quality and redevelopment efforts

These concerns are likely to increase over time as freight volumes increase. Freight carriers and shippers can be impacted when communities seek to restrict access by trucks on certain streets, limit night-time operations, reduce the number of truck loading zones, increase water recreation activities and public access within working waterfront areas, or when communities seek to use a freight railroad's track for passenger rail service. These impacts are not the exclusive domain of freight operations – highways, transit and other transportation systems and services can engender comparable concerns over impacts.

As shippers' supply chain logistics continue to evolve, the definition of "state of the art" warehousing and distribution centers changes as well. Larger, increasingly truck-biased facilities are becoming the new standard. In addition, higher fuel costs could lead to decentralization of regional distribution centers nationally, with the Portland metro region well positioned to take advantage of this opportunity.[8]

Certain key regional intermodal rail to truck transfer facilities are quickly reaching their capacity and are constrained by the physical dimensions of their facilities. A regional discussion regarding retaining or restoring rail access into industrial areas should occur between the warehousing, manufacturing and distribution sectors, and the short line rail operators.

There has been a demand, at times, for conversion of industrial property to mixed-use residential. This is often incompatible with surrounding industrial operations and freight movement. New residential development along truck and rail corridors, and adjacent to industrial sanctuary areas should be discouraged, with land uses that provide a buffer for freight related uses being preferred in these areas. From the viewpoint of freight carriers and shippers, allowing new, incompatible land uses into industrial areas impedes business operations and access, resulting in higher operating costs, reduced safety and efficiency.

[8] **CSCMP Explores, Vol. 5, Spring 2008*

Protecting and redeveloping industrial areas for industrial uses is in keeping with the goal of creating and preserving industrial sanctuaries in the Region 2040 plan, but managing and balancing competing land uses will continue to be difficult as the region grows. Maintaining reliable multi-modal transport options to our industrial areas is critical, particularly truck and rail connections. Providing rail service is becoming particularly difficult as rail operating practices continue to change rapidly.

7.0 Technology and planning in sustainable freight transport

Going green

There are two variables that every commercial carrier must come to grips with: fuel cost and fuel use. The former frequently dictates the lengths to which a carrier will go to conserve fuel, while the later directly impacts the production of greenhouse gases and PM 2.5[9] emissions.

The goods movement industry is responding to the prospect of sustained higher fuel costs and tightening emissions standards. Tools being used to improve powertrain operating efficiency and reduce stationary idling of truck diesel engines include:

- Clean diesel technologies, more efficient powertrains and improved aerodynamics
- Low sulfur and bio-diesel fuels
- On board auxiliary power units
- Parking area power and HVAC hook-ups for trucks
- Ongoing and innovative operational changes that reduce the carbon footprint of freight.

Every operator of commercial vehicles, be they aircraft, marine, rail or truck, has grown increasingly sophisticated at load, route, operator and vehicle optimization in an effort to minimize equipment downtime and maximize profit. Recent increases in the cost of fuel have only intensified efforts to increase operational efficiencies. Still, there is little evidence of a shift to alternative modes due to fuel costs.

The public sector needs to compliment these efforts by optimizing their own facilities and strategies to gain maximum through-put capacity and efficiency where it matters most. This effort needs to include multi-jurisdictional coordination and ongoing participation from the private sector goods movement community. The challenge of increasing the capacity of the goods movement system while remaining environmentally sustainable will require close coordination and cooperation between the private and public sectors.

Transportation system management

Several tools are available for transportation system management on the corridor level. These tools include variable message signs, traveler information systems, incident management and response, traffic signal progression, ramp metering and demand

[9] Particulate matter smaller than 2.5 microns have been shown to affect human health.

(traffic volume) responsive signal timing. Truck signal priority might also be considered in certain situations.

The public sector needs to manage its roadway infrastructure with the same degree of efficiency that the private sector manages their assets. Managing roadway performance through congestion pricing means charging road users on a sliding scale, based on the actual demand for roadway capacity throughout the day, with higher prices occurring during periods of peak travel demand.

Weigh-in-motion scales have been in use for several years, allowing trucks to bypass conventional truck scales, saving time, fuel and wear. Weigh-in-motion systems could be improved through the use of a single, common transponder system for commercial vehicles operating throughout several western states.

Some industrial areas within the Portland metro region have freed up roadway capacity by forming transportation management associations. These associations can facilitate and promote enhanced pedestrian, transit, carpooling and bicycle alternatives to the daily commute. These associations also work with employees to tailor transit services to their work shifts and with employers to facilitate staggered shifts, compressed work weeks and work-from-home programs. These efforts can reduce single occupant vehicle travel within industrial areas during critical peak travel times.

Freight data collection and analysis

Portland State University's Intelligent Transportation Systems lab has begun a project to produce truck travel time estimates using the transponder information from ODOT's Green Light weigh-in motion-system. The system can supplement Tripcheck's traveler information system as well as help calculate key freight measurements by linking the other data collected by the weigh stations to the travel time estimates. The ITS lab at PSU houses and maintains the Portland Oregon Regional Transportation Archive Listing. PORTAL collects data from all of the in-bed loop detection sensors in the Portland area as well as free floating dynamic sensors that can be placed in TriMet buses or other vehicles. The archive also collects weather and incident reports, all of which can be accessed in a variety of methods to help monitor and evaluate traffic improvements and patterns.

Planning, coordination, and education

The RFGM Task Force requested that freight coordination continue at the regional level. Metro staff would like to honor this request through coordination with jurisdictions and organizations having an interest in commerce and freight, and by holding bi-annual meetings of the RFGM Task Force. Ongoing coordination, planning and data collection efforts would allow Metro to be more responsive to requests from the goods movement community.

The RFGM Task Force also recommended that efforts to educate the public on the importance of goods movement, and the critical role it plays in the economy, continue on an ongoing basis.

8.0 Freight plan findings

The following findings were developed or compiled by Metro staff, but are based on RFGM Task Force input, as well as data collected as part of this project.

Trade and the Portland economy

- Trade volumes in the Portland/Vancouver region will double by 2035.
- Continued trade growth will create economic opportunities for the region and state that are dependent on adequate transportation infrastructure.
- The goods movement needs of the Portland-Vancouver region, and the markets it serves, require access to a broad range of modal options and service providers.
- The ability to transport goods into, out of, through and within the region in an efficient, timely and reliable manner is critically important to the economic health of the region and the state as well as West Coast trade.
- Maintaining an efficient, accessible, multimodal goods movement system is essential to attracting and retaining traded sector companies. These firms require access to the global marketplace comparable or superior to any firm they might compete against.

Industrial land supply

- There will be an increased need for industrial waterfront lands to support growth in maritime trade. Industrial land uses are frequently incompatible with, and pressured by, residential development. Extra care must also be taken when placing industrial land uses in close proximity to recreational or environmental resources.
- Industrial sanctuaries should continue to be considered a unique and protected land use. Preserving the region's existing industrial sanctuaries is essential to maintaining economic growth. As industrial land in the region becomes increasingly scarce, active protection of the region's industrial sanctuaries will become critical.
- Protection of industrial sanctuaries should include modernization of existing sites as needed, as long as the industrial nature of the land use is maintained.
- Industrial land users consider residential development incompatible with their operations, while residential property owners take issue with aspects of industrial development. Similarly, locating housing adjacent to primary truck routes or rail lines is also viewed as undesirable by carriers and residential property owners alike.
- Maintaining and improving multimodal freight access to the 2040 industrial sanctuaries is critically important to ensuring long-term viability of industry in the region.

Freight rail

- Rail service characteristics are changing. Class 1 railroads, and even certain short line railroads, are moving towards a "hook (up) and haul" business model, where the railroad focuses on pulling assembled trains long distances between cities.
- Class 1 railroads are currently struggling to meet existing freight demand. They are facing shortages in rolling stock, siding and yard capacity, and track capacity. They are attempting to address these deficiencies in a timely manner, but are struggling to do so.
- In response to projected increases in rail freight volumes, Class 1 railroads intend to haul heavier per car loads and employ longer trains. The former will require upgrading tracks throughout their systems, and the later will likely increase the need to grade separate more intersections over time.
- The current Class 1 railroad business model focuses on delivering service to railheads with intermodal yards or directly to port facilities. The Class 1 railroad intermodal yards in the region are operating near capacity now, and they will need to be expanded. These intermodal yards are predominantly dependent on trucks to move freight to and from their facilities. This may require use of scarce lands within certain Industrial Sanctuaries.
- Short line railroads have generally taken over the role of distributing rail cars throughout the region on their rail networks to end users requiring direct local rail service. Lack of space in Class 1 rail yards means short line railroads need additional marshalling yards on their own properties to make up trains. Identifying locations for these yards is challenging, as it often requires the acquisition of scarce lands within certain industrial sanctuaries.
- Short line railroads and certain private operators are also operating intermodal facilities, frequently offering additional logistics services to shippers. Maintaining and improving both truck and rail access to these satellite intermodal locations is critical.

Trucking

- Trucks will continue to be the dominant mode of transport in the freight transportation system, with West Coast truck volumes expected to increase over 250 percent by 2035. Even though the use of other modes will expand, trucks will maintain their preeminent status as the first and last links in delivering goods to the end user due to their flexibility.
- A trend toward lighter weight, higher value, increasingly time sensitive, producer to retailer shipments is expected to continue, again reinforcing the role of trucking in the freight transportation system hierarchy.

- Truck access between port facilities, industrial sanctuaries and the National Highway System is critically important to shippers, carriers and distributors of freight. These connections are commonly referred to as “first mile/last mile” connections.
- Motor carriers identified correcting regional bottlenecks on the principal NHS roads as their first priority. Motor carriers are also supportive of active Transportation System Management, to include incident management.
- Transportation service providers identified the Columbia River Crossing, I-5 through Delta Park, the I-84/I-5 interchange area, I-205 from OR 224 to I-5, and the Sunrise Corridor projects, as well as improved access to the North Wilsonville-Tualatin-Sherwood and Clackamas industrial areas as their highest regional road improvement priorities.

Air Cargo

Air cargo continues to require efficient access. Area industries producing goods shipped via air freight have had to adjust their production schedules repeatedly due to roadway congestion in order to meet air freight departure deadlines. This has led, in turn, to higher production costs and reduced productivity.

General concerns and observations

- The rail, truck, marine, pipeline and air cargo carriers all invest in their own equipment and infrastructure and are privately owned for-profit businesses. This complicates public sector investment in safety, access, reliability or capacity improvements for these modes.
- Every privately owned carrier, of whatever mode, relies on publicly owned infrastructure for at least a portion of their activities.
- Firms relying on the goods movement system monitor the efficiency, reliability and speed of the existing transportation system and use these measures to evaluate system performance. The vast majority of this information is considered proprietary and is used by shippers to gain an advantage over competitors. Much of this data is also derived from proprietary systems that generate unique data outputs focused on parameters specific to that firm. This can make even anonymous data sharing very difficult.
- The goods movement industry provides over 46,000 family wage jobs within the region.
- Maintaining the Portland metro region’s historic preeminence as a goods movement and industrial hub should remain a regional priority.
- Long-term under investment in transportation infrastructure within the region, for both maintenance and capacity improvements, has led to congestion, weight limits and frequent system breakdown.

- Transportation revenues to fund maintenance and capacity enhancements are at an historical low on the federal, state and local levels.
- An ongoing regional freight data collection effort needs to be undertaken and sustained over time. One of the better efforts to date is PORTAL, operated by PSU, but several other efforts under development also show promise.
- A component of regional freight data collection efforts needs to include interviewing shippers directly on ongoing basis, to capture current supply chain dynamics.
- The importance of freight transportation to the regional economy needs to be reinforced through an ongoing public education effort.

Funding background [

Funding for transportation projects has historically come from several federal, state, regional and local funding sources, as reflected in the following lists. There are several programs funded under the current federal transportation act, the Safe, Accountable, Flexible, Transportation Equity Act: A Legacy for Users (SAFETEA-LU), that can be directed towards freight. The next federal transportation act is expected to specifically address freight movement. Similarly, funding for transportation is expected to be taken up by the Oregon Legislature during their upcoming session.

Change is needed: federal and state fuel tax revenues have been in decline for several years. Oregon has not had a gas tax rate increase since 1993, but the Weight-Mile Tax levied on trucks over 26,000 pounds (GCW) has increased since that date. Nationally, funding for transportation projects has become scarce. The need to replace aging transportation infrastructure and expand facilities in areas of the country experiencing growth has exploded. This need comes at a time when infrastructure project costs have increased significantly during the last several years.

The following funding sources are currently available to the region.

Federal funding sources or programs (FHWA programs, unless otherwise noted):

- Modernization (freight chokepoints, capacity enhancements, dimensional issues on NN/NHS freight routes)
- Preservation (road and bridge maintenance)
- Surface Transportation Program
- National Corridor Infrastructure Improvement Program
- Congestion Management and Air Quality Improvement Program
- Transportation Infrastructure Finance and Innovation Act of 1998 – allowed the creation of state infrastructure banks through a federal credit, generally fund state infrastructure banks (Funds are expected to be repaid.)

- Truck Parking Facilities
- Freight Intermodal Distribution Pilot Grant Program
- Transportation, Community, and System Preservation Program
- Elimination of Hazards and Installation of Protective Devices at Rail-Highway Crossing
- High Risk Rural Roads (e.g., Cornelius Pass)
- Intelligent Transportation Systems Research
- FTA dollars for TDM measures on truck corridors and in industrial areas
- MARAD: provides funding for harbor and channel maintenance
- FAA: various programs for providing airside, landside and runway protection zone funding

State funding sources (generally administered through ODOT):

- Oregon Gas Tax: Oregon's fuel tax on gasoline has not been increased since 1993.
- Existing and Proposed Vehicle Registration Fees: Oregon's next legislative session is expected to revisit vehicle registration fees as a potential source of revenue.
- Oregon Weight Mile Tax: Charged to trucks weighing over 26,000 pounds, the tax is the primary source of tax revenue raised by trucks in the state. Weight Mile Tax receipts are primarily directed at roadway maintenance and system preservation efforts throughout Oregon, with a smaller amount allocated to administering the program.
- Oregon Energy Income Tax Credit: The Oregon Department of Energy offers a tax credit for businesses that invest in reducing energy consumption. Under this program transportation projects that reduce the number of single-occupancy vehicle trips are eligible for the credit. The credit covers up to 35 percent of eligible project costs.
- Connect Oregon I & II: Funded through lottery proceeds, this effort has focused on projects that enhance intermodal connections and improve freight mobility for several modes, to include aviation, marine, and freight rail. It was allocated a total of $200 million for both phases.
- OTIA: The various OTIA funding programs relied on bond proceeds to raise funding for critical statewide infrastructure needs. While this program was a success, these bonds now need to be paid off.

The Connect Oregon and OTIA programs have shown that government and the private sector can collaborate successfully. These programs have delivered tangible benefits to freight movement within the Portland metro region and the state. The Connect Oregon program should be continued. The program has proven particularly useful in funding much needed projects for off-highway modes. Dedicating the loan revenues from the

Connect Oregon program into a revolving fund could help the program be more self sustaining.

Regional funding sources:

- Congestion pricing/use-based toll: Set up a regional congestion pricing program, starting with CRC (both bridges). Enforce through WMT transponders or cell phones. Dedicate revenues generated by trucks to truck oriented projects.
- Vehicle registration fee: Apply a uniform vehicle registration fee to all vehicles.
- Regional funding initiative: Regional transportation improvement districts have experienced success in the Northwest. These packages use increments of vehicle registration fees, fuel taxes, and/or property taxes to fund a specific list of infrastructure improvements. A regional transportation improvement fee is under development for consideration.
- Value capture: Certain transportation projects generate greater tax revenues for a community during their construction and throughout their active lifespan. Projecting this value and using it to help bond the project is another way to help fund certain capital projects, such as shortline railroad intermodal facilities.
- Freight innovation initiative: A fund for innovative, freight-oriented technological and operational efforts using commercial vehicle congestion pricing tolls. Revenues could fund freight-oriented TSM, ITS, fuel consumption reduction or alternative fuel efforts, and technology proof of concepts/trials/ demonstration projects. A small percentage of these funds could also support a regional freight database and associated freight movement research.

Local transportation funding efforts in other regions and states have illustrated that the public is willing to pay for infrastructure under certain conditions. The public needs to see a demonstrable need for the project and how the proposed project will meet that need; it has to feel confident in the cost estimate and projected schedule and also in the constructing agency's ability to deliver a project within that cost and schedule.

9.0 Developing a freight strategy tool kit

Linking Freight Plan goals and issues to targeted solutions

The RFGM Task Force identified specific issues associated with the RTP goals for freight movement. These issues, summarized in the table below, require an ongoing, creative and collaborative approach to problems that are sometimes systemic, sometimes localized, and usually complex. The Task Force recognized that freight problems occur on a multimodal system, and that even when problems appear to be localized bottlenecks or network barriers, there are often multiple underlying causes that extend far beyond the apparent "problem". The interdependent nature of our transportation system, economy and environment all demand that a rigorous analysis of potential solutions be performed, in order to avoid downstream impacts or unintended consequences.

The tables are structured around the Freight Plan goals developed by the Task Force and found in section 2.0 of this document. These goals have been combined under one of the following categories:

System planning for efficient freight mobility and access

This category of issues and solutions speaks to Metro's mission as the Metropolitan Planning Organization for the Portland metro area. It seeks to provide better freight and goods movement data, to analyze that date with freight considerations in mind, and to implement a multimodal plan that facilitates freight movements required for a vibrant regional and state economy.

System management to increase network efficiency

This category comprises the "first step" to improved freight and goods movement operations on the existing system, and includes preservation, maintenance and operations-focused projects and associated planning and coordinating activities.

Public understanding of freight issues

To gain public support for projects and funding of freight initiatives, and to help the public and elected officials make wiser land use decisions, a program of public education is required.

Sustainable freight transportation system

This category of issues and solutions deals with traditional nuisance and hot spot issues associated with "smokestack and tailpipe" problems, but it also recognizes the many current contributions and new opportunities for the evolving green freight community to be part of the larger environmental and economic solution set required in these times, including greenhouse gas curtailments.

Freight-sensitive land use planning

This category targets land use planning and design issues that can affect the ability of freight, goods movement and industrial uses to live harmoniously with their neighbors.

Freight-sensitive land use planning includes everything from long-range aspirations for freight and industrial lands to short-term and smaller scale design and access issues.

Strategic transportation investments

This category of solutions focuses on planning and building capital projects and developing the funding sources, partnerships, and coordination to implement them. It includes the list of regional freight project priorities attached as Appendix B to this report, identifying a wide range of projects from preservation and maintenance to major facility construction.

Freight-oriented preservation, management and investment priorities should focus on:

- Core throughway system bottlenecks to improve truck mobility in and through the region – hotspots of note include the Columbia River Crossing influence area, the I-5/I-405 loop and the I-5 corridor south of I-205.
- Improving and protecting the throughway interchanges that provide access to major industrial areas, particularly: I-5/Marine Drive and I-5/Columbia Blvd serving the Columbia Corridor and Rivergate industrial areas; I-205/Hwy 212 serving the Clackamas and Milwaukie industrial areas; and I-205/Airport Way serving Portland International Airport and east Columbia Corridor industrial areas.
- Improving arterial connections to current and emerging industrial areas (e.g., Sunrise Corridor phased improvements recommended by the Sunrise Project Policy Committee and *last mile* local industry connectors, e.g., Columbia/Cascade River District Projects)
- Looking beyond the roadway network to address critical marine and freight rail transportation needs such as completing the Columbia River channel deepening and upgrading main line and rail yard infrastructure.

Several issues raised by the stakeholders are difficult to resolve, primarily because the improvements suggested involve infrastructure that is under private ownership. In these instances, identified public benefits must be rigorously quantified to demonstrate net benefits associated with public investment. In addition, qualitative benefits must be logically articulated and assessed.

Freight plan goal	Key issues identified by stakeholders	Potential solutions/strategies
System planning for efficient freight mobility and access;. *We must use a systems approach to **plan** and manage our multimodal freight transportation infrastructure, recognizing and coordinating both regional and local decisions to maintain seamless flow and access for freight movement that benefits all of us.*	• Inability to track freight system performance over time • Inability to measure economic impact of investments • Accessibility between intermodal terminals, industrial areas, commercial centers and the interstate system • Improved rail access and service for regional shippers • Consideration of freight and goods movement needs in project development • Protection of modal redundancy	**Data, Research, Modeling and Analysis** • Improve Metro's truck module within the regional travel forecast model • Investigate predictive risk analysis, economic models and/or manual estimates of monetary benefits based on predicted travel time savings, incident clearance, enforcement, etc. • Submit proposals for relevant regional, state and national freight-related research or pilot project opportunities (e.g., Transportation Research Board projects) • Continue and expand work with Portland State University faculty and research staff to improve tools for freight analysis (e.g., truck counts) **Planning and Coordination** • Maintain Regional Freight Technical Advisory Committee meetings (monthly) and hold twice-yearly Task Force meetings (or as needed to provide timely input) • Periodic development, and ongoing advocacy for RTP freight projects list • Coordinate with and through ODOT, Oregon Freight Advisory Committee (OFAC) on statewide freight, port and rail planning to ensure regional issues are addressed • Monitor freight innovations across the country and globally to mine for Portland metro application • Ensure that freight needs are included in all Metro planning efforts, such as corridor refinement plans

Freight plan goal	Key issues identified by stakeholders	Potential solutions/strategies
System management to increase network efficiency *We must use a systems approach to plan and **manage** our multimodal freight transportation infrastructure, recognizing and coordinating both regional and local decisions to maintain seamless flow and access for freight movement that benefits all of us.*	• Travel time reliability on regional truck routes • Efficient use of existing capacity • Increasing truck crash rate • Need for faster response to roadway incidents • Improved traveler information – road conditions, directional signage • Maintenance dredging and lock repair	**Data Collection, Analysis and Planning** • Regional Transportation System Management Plan • Periodic development and refinement of RTP freight projects list • Monitor/comment on ODOT statewide freight planning studies (Statewide Freight Plan, related studies for ports and rail at the state level) • Continued support for use and expansion of tools such as the PORTAL program of real-time traffic delay, etc. • Periodic surveys/interviews with shippers about the services provided by the region's carriers in the multimodal system ***Projects (Operations, Build Options)*** • Access management • Improved incident management • VMS/GPS active (in cab) truck route management • Truck-only lanes, ramp meter bypass lanes, next generation ITS infrastructure for commercial vehicles • Road pricing, congestion pricing, managed lanes studies, pilots or deployment if appropriate • Rail track/yard improvements to eliminate rail/highway conflicts and increase rail functional capacity • Facilitate multiple shippers' combined shipments to meet railroad's operating plans • Increase enforcement of traffic/carrier regulations • Expand rest areas/better utilization of rest areas for extended truck rest areas, including smart truck parking • Continued support for Regional Transportation Options program, Transportation Management Associations, expanded transit service/vanpools, bicycle and pedestrian facility improvements in industrial areas (for workforce access to jobs)

Freight plan goal	Key issues identified by stakeholders	Potential solutions/strategies
Better public understanding of freight issues *We must enlighten our region's citizens and decision-makers about the importance of freight movement on our daily lives and economic well-being.*	• Better coordination between freight system stakeholders in region • Education of decision makers and public about importance of region's freight transportation system	**Education and Coordination** • Improve information exchange between public and private stakeholders via existing state, regional and local freight advisory groups • Improve analysis and communication of freight impacts on regional economy • Quarterly regional freight transportation system stakeholder roundtable • Annual state of regional freight report
Sustainable freight transportation system *We must ensure that our multimodal freight transportation system supports the health of the economy and the environment.*	• Regional air quality impacts from diesel emissions, which, if not addressed, will grow as freight volumes increase • Marine freight movement impact on water quality and habitat (e.g., invasive species introduced through ballast water)	**Air Quality** • Promotion of existing programs such as diesel retrofit technologies, idle reduction regulations, transportation system management tools **Water Quality** • Support of regulations that address environmental quality in riparian areas **Other Environmental** • Aggressively implement clean, green and smart best practices, as appropriate • Legislation to regulate and enforce ballast water release • Reduction of light sources and/or filtering or redirecting lighting • Proactive public outreach strategies • Performance monitoring and review following public and regulatory processes such as environmental justice mitigation, where appropriate

Freight plan goal	Key issues identified by stakeholders	Potential solutions/strategies
Freight-sensitive land use planning *We must integrate freight mobility and access needs in land use decisions to ensure the efficient use of prime industrial lands, protection of critical freight corridors, and access for commercial delivery activities.*	• Inadequate supply of industrial land well served by transportation infrastructure • Incompatible land uses along rail lines and major truck corridors • Incompatible land uses often adjacent to one another resulting in complaints about, and adverse impacts to, freight movement • Inadequate areas for trucks to conduct off and on-street loading and unloading • Competition between industrial and other uses for system capacity • Truck deliveries to local commercial and neighborhood districts that are difficult due to narrow lanes/turning radii • Growing noise impacts from truck, rail and air cargo operations in residential areas • Limited truck parking to meet needs of drivers (hours of service limitations) • Workforce access to industrial areas	**Planning and Coordination** • Coordinate with land use planning efforts to ensure that current and future freight/industrial needs are addressed • Expand regional Brownfields programs to allow return of industrial land to industrial uses • Take advantage of Regional Freight Task Force experts to inform Metro planning activities, e.g., in creating better linkages between commodity flow data and employment projections in determining long-term land use and freight routes • Consider revising "regionally significant industrial land" designation to protect high value industrial areas • Use interchange management plans to protect capacity at key industrial areas • Support affordable housing with access to employment/industrial centers • Advocate for full disclosure to property buyers adjacent to freight/industrial uses • Explore strategies where businesses co-locate in order to share resources (e.g. the local "resourceful use pilot") to conserve resources and use transportation system efficiently **Design and Projects** • Prioritize infrastructure investment to support existing industrial areas • Develop good neighborhood agreements between facilities and residential neighborhoods • Create "Quiet Zones" for rail corridors. • Updating livable streets design guide to better incorporate truck movement and operations. • New strategies to buffer residential and commercial land uses near industrial areas and along major truck, rail, airport and pipeline corridors

Freight plan goal	Key issues identified by stakeholders	Potential solutions/strategies
Strategic transportation investments *We must create first-rate multimodal freight networks that reduce delay, increase reliability, improve safety, and provide choices.* *We must adequately fund and sustain investment in our multimodal freight transportation system to ensure that the region and its businesses stay economically competitive.*	• Network barrier deficiencies such as weight and vertical clearance issues on bridges, at-grade rail crossings • Existing capacity constraints in rail yards and sidings • Road congestion on regional truck routes • Main line rail congestion • Expand types and amounts of funding for freight transportation infrastructure and programs • Role of public sector in funding private operations • Need for public-private partnerships to fund improvements • Transportation investment decisions linked to economy • Concerns about safe barge navigation in I-5/BNSF bridge area	**Project Development and Implementation (not all-inclusive)** • Implement RTP freight projects with focus on identified Task Force priorities, (see Appendix B). • Fill in gaps in truck route alternatives to interstate (e.g., parallel arterials for emergency detours) **Funding Policy and Partnering** • Expanded use of public-private partnerships to fund transportation system expansion • Expanded ability to invest public dollars in private facilities when improvements in those facilities result in public benefits • When funds aren't available for major system improvements, make incremental improvements to those facilities through Intelligent Transportation System and traffic demand strategies, access management and less-costly strategies • Common ground and linkages in the needs of different funding sources, and the opportunities presented by them • Expanded types of programs and amounts of funding for freight transportation infrastructure (gas tax indexing, user pay cost responsibility) • Appropriate coordination with planning, political and advocacy groups, including Oregon delegation, OFAC, West Coast Corridor Coalition, etc., to ensure adequate funding for freight priorities • Regional Freight TAC/RFGM Task Force participation in any regional road pricing pilots or planning studies • Support regional ConnectOregon freight and goods movement projects

10.0 Going forward—from goals to projects on the ground

Section 9 constituted a "tool kit" of freight strategies that responded to a broad range of needs. Section 10 constitutes the Action Plan. Its elements are pulled from the tool kit and elaborated. This section identifies who does what, and includes a timeframe for implementation.

In 2008, the RFGM Task Force a long list of prioritized freight projects submitted for consideration as part of the July/August 2009 RTP project solicitation process. These are included in an appendix to this plan. In addition, a handful of important, achievable near-term items are included and recommended for implementation within this RTP cycle of 2009-2013, to support the approved regional freight and goods movement goals. Although circumstances and regional priorities may shift, the Task Force believes that a four year period is short enough to be relevant to the freight community, yet long enough for activities to be programmed, refined and deployed, as described in this section.

The action items described below are the result of review with the Regional Freight and Goods Movement Task Force, the Regional Freight Technical Advisory Committee (TAC). Many of the actions described are foundational activities that constitute the glue holding the regional freight action plan together—planning, coordinating, research and policy-making that take place on both an ongoing and cyclic basis. Some of the action items below are quite well developed; others will require elaboration during Fall 2009, for inclusion in the Spring 2010 RTP adoption process. The list of efforts will need to find staff, time and funding resources, whether that includes Metro, members of the freight, goods movement and economic development community, or other agencies. Those actions that eventually are adopted by the Task Force and Metro Council, and which do fall within Metro's purview will be incorporated, as appropriate, into Metro's Unified Planning Work Program (UPWP) for FY 2010-2011.

[The Task Force is prioritizing the tool kit at their August meeting, and will be included in the final plan].

11.0 Summary

Why should we invest in freight now?

Portland and Vancouver were founded on vibrant and profitable statewide, regional and international trade. Access to the Pacific Ocean via the Columbia River from the inland empire to the east created the region's original economic engine. The Willamette River delivered the wealth of the various river valleys south and west of the Portland metro region in much the same way. It was through this trade that the Portland metro region established itself as a trade hub and prospered.

Today, the Portland-Vancouver region boasts a strong and diverse regional economy that supports an enviable quality of life. The local economy is still very dependent upon an efficient, reliable and safe freight transportation system that recognizes the region's role as an international gateway and key domestic freight hub.

One critical element of sustaining the region's high quality of life is ensuring that residents have access to high quality, family wage employment. As the region grows, the population will depend on decision makers that appreciate the interdependence of economic, transportation and land use goals.

Strong growth in international, national and regional trade will drive the need for a flexible, adaptable, high performance multimodal freight transportation system. Efforts must consider these new stresses on marine, air, road, rail and pipeline networks and facilities. The region's goods movement system will need to absorb a doubling of freight volumes by 2035, and a 200 percent growth in truck traffic during the same time period.

Many local manufacturing firms that trade internationally, and who could locate globally, have chosen to make the greater Portland-Vancouver region their home because of its connections as an international transportation hub. These firms require a smoothly functioning goods movement system to operate efficiently and maintain profitability. In the absence of such a system, they will consider relocating to an area that meets these requirements.

The logistics and (freight) transportation sectors provide 46,000 jobs to the region by facilitating the transport or trans-shipment of goods entering the region via various modes and routes to intermediate or end users. These firms also perform the vital task of distributing the myriad goods that Oregonians consider essential to the maintenance of our households, businesses and lifestyles. The region has a responsibility to provide a goods movement system that continues serving this requirement.

It is true that the world economy is currently strained, but current and future economic stimulus package components, including funds to reduce the backlog of long-deferred infrastructure maintenance are coming on line. The reauthorization of the surface transportation act is due next year, and early indications are that key freight corridors

and infrastructure will be targeted for special consideration. It is in this context that the region's freight plan will operate.

And as the global economy grows, the Portland metro region will be called upon to address vastly expanded regional, national and international shipping needs reliably, safely, efficiently and sustainably. We have a responsibility to the region, the state, and the nation to maintain an efficient and flexible goods movement system of sufficient capacity to meet future needs.

Boosting the triple bottom line

Policies and programs designed to take advantage of the opportunities hidden in the downturn should begin to be refined and implemented, to ensure that the Portland metro region is flexibly and securely positioned for the future of freight and goods movement. However, in addition to regional policy and program development and implementation, concrete freight-related projects must be built to ensure that the goals of the Regional Freight Plan are met. Maintaining the Portland region's historic preeminence as a goods movement and industrial hub must remain a regional priority; our economic future depends on it. Investment in smart, strategic and green freight system improvements now can help Portland secure not only its economic future by increasing its share of family-wage jobs, but also support development of a green economy that is the Portland area's trademark.

600 NE Grand Ave.
Portland, OR 97232-2736

Metro | *Memo*

Date: July 31, 2009

To: TPAC, MTAC and interested parties

From: Kim Ellis, RTP Project Manager

Re: 2035 Regional Transportation Plan (RTP) adoption package and public comment period

Purpose

The purpose of this memo is to provide background information on the RTP adoption package that will be subject to public comment and next steps for finalizing the plan – adopting the policy framework and core planning elements by the end of the year and final adoption during Summer 2010. Throughout the summer, Metro staff will be updating the 2035 Regional Transportation Plan (RTP) document and other supporting documents in preparation for a 30-day public comment period. The comment period is planned for September 15 through October 15, 2009.

Action Requested

No action is requested. This is informational.

Background

During the past year, RTP work focused on framing and refining transportation and land-use choices as part of the broader *Making the Greatest Place* effort. This comprehensive effort seeks to integrate local and regional land use and transportation investments to focus future population and employment growth in centers, corridors, employment and industrial areas, in keeping with the 2040 Growth Concept.

At the same time, Metro and its regional partners continued to work on related planning efforts that will be included in the RTP: the Sunrise Corridor project, the I-5/99W connector study, the Sellwood Bridge study, the high-capacity transit (HCT) system plan, the regional freight and goods movement plan and the Transportation System Management and Operations (TSMO) plan. Metro also worked with communities around the region to identify their local land use, transportation and public infrastructure-related aspirations for managing growth and the investments needed to support them.

Metro has also convened a bicycle work group to identify policy refinements to respond to public comments received during the federal component of the RTP update and to incorporate active transportation policy recommendations identified by the Blue Ribbon Committee for Trails. Metro will develop other policy refinements in the draft plan to further implement policy direction from the HCT, TSMO and Freight Plans and policy direction from JPACT and MPAC on performance targets. Finally, local governments, the Oregon Department of Transportation, TriMet and South Metro Area Rapid Transit (SMART) also identified investment priorities to include in the draft plan.

Now is the time to pull the pieces of these planning efforts together to finalize the 2035 RTP by the end of 2009. Work is underway to prepare a series of draft documents that will be subject to public comment this fall. The current schedule provides for technical advisory committee review of the draft

RTP documents during the public comment period. Projects and programs submitted by local, state and regional agencies will undergo a system-level performance evaluation, policy review and formal public comment as part of the process of finalizing the RTP.

Summary of RTP Adoption Package and Public Comment Period

The integrated technical and public comment period is scheduled from September 15 to October 15, 2009. The public comment period will also provide an opportunity to comment on other *Making the Greatest Place* elements (including an updated draft of the Urban Growth Report and potential urban and rural reserves) and the following RTP-related documents:

- **Exhibit A: Draft 2035 Regional Transportation Plan**
  The plan document approved in 2007 as part of the federal component of the RTP update will be modified to reflect refinements to policies, projects and strategies identified since 2008. In addition, the plan will be consolidated into the following chapters to improve readability:

  Chapter 1 – THE CASE FOR CHANGE: Why is a new approach needed for planning and investment in the region's transportation system?
  This chapter describes the role of the RTP and its relationship to the *Making the Greatest Place* effort, key trends and challenges affecting the region and the need do things differently to achieve local and regional aspirations.

  Chapter 2– VISION: What is our vision for the transportation system?
  This chapter presents the role of the RTP in helping achieve the region's desired outcomes and policies to guide planning and investment in the regional transportation system.

  Chapter 3 – INVESTMENT STRATEGY: What is our strategy for achieving this vision?
  This chapter documents transportation funding constraints and the strategies recommended to address the region's desired outcomes and transportation needs given limited funding.

  Chapter 4 – PERFORMANCE ASSESSMENT AND MONITORING: How far can we get toward achieving our vision?
  This chapter describes the outcomes-based framework that will be used to evaluate benefits and impacts of the system of investments recommended in Chapter 3 and direct on-going monitoring conducted in between plan updates.

  Chapter 5 – IMPLEMENTATION: How do we implement our strategy?
  This chapter describes implementation processes and actions that will follow this update, setting the stage for addressing issues that remain unresolved at the time the RTP is adopted.

- **Exhibit B: Draft Transportation System Management and Operations (TSMO) Action Plan**
  The draft plan was developed in partnership with agencies across the region. The plan includes a policy framework, strategies and investments recommended to expand current TSMO investment efforts.

- **Exhibit C: Draft Regional Freight and Goods Movement Action Plan**
  The draft plan was developed in partnership with the Regional Freight and Goods Movement Task Force with representatives from the freight industry, community members and government agencies. The plan includes a policy framework, strategies and investments recommended to support a multi-modal, sustainable freight network.

- **Exhibit D: Draft High Capacity Transit (HCT) System Plan**
  The draft plan was developed in partnership with agencies and community members across the region. The plan identifies where new HCT connections could be developed over the next 30 years. The plan provides a policy framework for prioritizing corridors for HCT investment and strategies recommended to leverage the existing HCT system and future HCT investments.

- **Exhibit E: Draft Regional Transportation Functional Plan**
  The draft regional transportation functional plan codifies existing functional plan elements that were included in Chapter 7 of the current 2035 RTP. Additional refinements will be developed in partnership with Metro advisory committees to address new policies and strategies recommended in Exhibits A-D.

The draft documents will be available for review on Metro's website at www.oregonmetro.gov and as printed documents upon request once the comment period begins.

Public Comment Opportunities

During the comment period, six *Making the Greatest Place* open houses will be held around the region. Four of the open houses will be held in conjunction with Metro Council meetings that will include public hearings where oral and written comments may be submitted on several *Making the Greatest Place* products, including the RTP-related documents listed above. Two of the open houses will accept written and online comments only. Efforts will be made to increase participation by minority, low-income and limited English proficiency community members. The table below lists all the open houses and the kinds of comment that may be submitted.

Fall 2009 Open House and Public Hearing Schedule

	Date/Time	Location
#1	**Monday, September 21, 2009** • Open house only • 2 – 4 p.m.	Hillsboro Civic Center 150 E. Main Street
#2	**Tuesday, September 22, 2009** • Open house only • 5 p.m. to 7:45 p.m.	Multnomah County Library, N. Portland branch 512 N. Killingsworth St., Portland
#3	**Thursday, September 24** • Open house begins at 4 p.m. • Public hearing begins at 5 p.m.	Beaverton City Hall 4755 SW Griffith Dr.
#4	**Thursday, October 1** • Open house begins at 4 p.m. • Public hearing begins at 5 p.m.	Gresham City Hall 1333 NW Eastman Parkway
#5	**Thursday, October 8** • Open house begins at 4 p.m. • Public hearing begins at 5 p.m.	Happy Valley City Hall 16000 SE Misty Drive
#6	**Thursday, October 15** • Open house begins at 4 p.m. • Public hearing begins at 5 p.m.	Metro Regional Center Council Chamber 600 NE Grand Avenue, Portland

In addition, RTP-related comments may be submitted via fax to (503) 797-1930, e-mail to rtp@oregonmetro.gov, mail to RTP Public Comment, Metro Planning, 600 NE Grand Avenue, Portland, OR 97232 or through testimony provided at the Metro Council public hearings. All written comments are due at Metro by 5:00 p.m. on Thursday, October 15, 2009. RTP-related comments will be entered into the public record and will be provided to staff and elected officials prior to final consideration and action on the 2035 RTP and related documents.

Final consideration by MPAC, JPACT and the Metro Council is scheduled for November 18 and December 10 and 17, respectively. This action is pending completion of additional work in 2010. The approval action, which involves adoption of the RTP plan elements by resolution, will direct staff to complete the final system analysis (including air quality conformity), prepare findings and a final document, and finalize regional transportation functional plan amendments to guide local plan implementation.

Next Steps

August	Metro staff will begin the performance evaluation and compile draft RTP documents to be released for public comment.
September 15 to October 15	30-day public comment period is planned as part of the Making the Greatest Place effort. Opportunities to comment will be made available on Metro's website and through a series of public hearings and open house events held throughout the region.
October – December	JPACT, MPAC and Metro Council will consider public comments, the preliminary system evaluation, and amendments prior to action (by Resolution).
Winter-Spring 2010	Staff completes the final system analysis (including air quality conformity), prepare findings and a final document, and finalize regional transportation functional plan amendments to guide local plan implementation.
Spring 2010	Final 45-day public comment period will occur prior to final action.
Summer 2010	JPACT, MPAC and Metro Council consider public comments and prior to final action (by Ordinance).
Fall 2010	Consultation with federal and state agencies on conformity and periodic review of the RTP begins.