FREIGHT MASTER PLAN (Truck Access and Circulation Analysis)

INTERIM REPORT



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Portland Freight Committee

With assistance and advice from the Portland Freight Committee (A list of the members of the Portland Freight Committee is provided in this report)

Technical Advisory Committee

Rob Burchfield, City Traffic Engineer Mike Coleman, Traffic Design Ramon Corona, Parking Control Bill Kloos, Signals/Street Lighting/ITS Mark Lear, Traffic Investigations Calvin Lee, Bridges and Structures Ken Lindmark, Modeling Peter Mason, Traffic Investigations

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INTRODUCTION

A recent publication (1999) from the Oregon Department of Transportation, "Freight Moves the Oregon Economy", notes:

"Freight plays a major role in moving the Oregon economy. Most freight moves by truck, rail, waterway, air and pipeline, with trucks accounting for the greatest volume of freight moved nationally and in Oregon."

The sentiment expressed is no less true for Portland, particularly in terms of employment. The Port of Portland has found that about 20 percent of all jobs in the Portland region are influenced by the Port's marine and aviation activities. Over 130,000 jobs are related to aviation and marine activities in the Portland Metropolitan Area.

According to the Oregon Employment Department (2000), transportation related businesses provide jobs that employ 53 percent of workers both in Portland and statewide. Portland has one of the highest ratios of transportation related jobs in the United States, greater than the national average and greater than all but two other cities.

	Transportation			
Metropolitan Area	cluster's share of	Location		
		quotient		
Miami	14.59%	1.744		
Atlanta	13.35%	1.596		
Portland	11.17%	1.335		
Seattle	10.90%	1.303		
Houston	10.71%	1.280		
Cincinnati	10.63%	1.271		
Kansas City	10.44%	1.247		
Los Angeles	10.36%	1.238		
Denver	10.11%	1.209		
New Orleans	9.86%	1.178		
Savannah	8.63%	1.032		
San Francisco	8.47%	1.012		
Detroit	8.42%	1.006		
USA	8.37%	1.000		
Pittsburgh	8.34%	0.997		
New York City	8.01%	0.957		
Baltimore	7.82%	0.934		
Tampa	7.18%	0.859		
San Jose	6.89%	0.824		
Charleston	6.84%	0.817		
Sacramento	5.46%	0.653		

Oregon Employment Department, 2000.

The facilities in Portland extend economic benefits well beyond the Portland area. The Port of Portland's marine terminals and airports connect the City with a vast inland area served by the Columbia River, the rest of the nation and the world. The City of Portland also has two national railroads, the Union Pacific and Burlington Northern Santa Fe. The I-5 Freeway is the primary West Coast truck freight route and I-84 provides truck freight access eastward.

According to the Federal Highway Administration, the amount of freight movement is expected to continue growing, with the West Coast expected to see a doubling of freight tonnage moved by 2020. During that time the percentage of Oregon freight moved by truck will increase.

OREGON	Tons (millions)			Value (billions \$)		
	1998	2010	2020	1998	2010	2020
State Total	291	428	557	201	411	704
By Mode		-				
Air	<1	<1	1	15	42	85
Highway	220	323	420	165	330	555
Other ^a	2	3	4	<1	<1	<1
Rail	53	81	109	18	34	55
Water	16	20	24	3	5	8
By Destination/Market				та (т 19	F.A	
Domestic	258	372	477	180	362	613
International	33	55	81	22	49	90

Table 1. Freight Shipments To, From, and Within Oregon: 1998, 2010, and 2020

Note: Modal numbers may not add to totals due to rounding.

^a The "Other" category includes international shipments that moved via pipeline or by an unspecified mode.

Freight Transportation Profile, Office of Freight Management and Operations, Federal Highway Administration

Truck activities in the City of Portland present a very complex and diverse picture, with many types of goods moved in many ways. Because of its position in the center of the Metropolitan Area there are there are regional truck trips that cross through Portland. Some goods movement by truck is from state to state, with some trucks moving through Portland and the state without stopping. However, most truck trips in Portland are local, either beginning or ending their trip in Portland. Many goods may be moved more than once, and in such cases, trucks will almost certainly be one of the modes used. Many truck trips in Portland provide for the movement of goods (deliveries) to retailers or the final user.

Report Objectives

This report will provide an introduction to and information on the Freight Master Plan Project by the Office of Transportation, the importance of freight to the Portland economy and the integral role that the distribution of goods has played in Portland's development. The following sections of the Interim Report will address:

- <u>Background</u>, an early assessment of the needs and opportunities within the existing truck street system of the City of Portland;
- <u>Freight Master Plan, Project Description and Rationale</u>, a description of the Freight Master Plan Project and the rationale for a freight master plan;
- <u>Portland Freight Committee</u>, an introduction to the Portland Freight Committee;
- <u>Short-Term Opportunities for Success</u>, identification of recommended opportunities for success in the short term; and
- <u>Resolution to Council</u>, requesting the Council's recognition of the importance of freight and the truck street system to Portland's economic future.

The Freight Master Plan will address all modes of freight movement in the City of Portland, including air, rail, ship, pipeline and truck. Because the City of Portland has an obligation to and authority over streets, the emphasis throughout will be the truck street system. It is the City's freight and arterial street system that literally connects all aspects of freight and delivery not only for the City, but for the region and state as well.

BACKGROUND

The geography of Portland dictated that Portland would be an important center for distribution. The combination of geography and infrastructure investments, both public and private, assures that Portland will continue to be an important place for the distribution of freight well into the foreseeable future. Portland is critical to all freight-related economic activities in the State of Oregon. Our advantages now include:

- Deep water access with modern port facilities,
- Inland water ways serving thousands of square miles of some of the richest and most productive agricultural lands in the world,
- Two major rail lines (Union Pacific and Burlington Northern Santa Fe) connecting Portland to the rest of the west coast and the nation,
- Ready access to the national highway system (I-5 and I-84), and
- A modern international airport with a growing air freight component.

Other opportunities for Portland to build on, include:

- Portland is the largest port in Oregon and the third largest port on the West Coast in terms of total tonnage.
- Recent economic forecasts have indicated that Portland can expect to see a doubling of our role in freight movement by 2020.



 $\label{eq:Freight Mobility/Economic Competitiveness for the Portland Region, Portland Freight Committee, 7/29/03$

Delivery (Local Distribution)

To fully address freight considerations in the local transportation system and capture the economic growth potential of trends in freight transport, Portland must identify the needs and opportunities within the existing truck street system. The Portland Transportation System Plan identifies approximately 480 street miles within the truck street system. Approximately 195 miles of truck streets lie within designated Freight Districts. Approximately 285 miles of truck streets lie outside of the Freight Districts and include Minor (110 miles), Major (66 miles) and Regional (109 miles) Truck Streets. However, to achieve the inherent potential represented by these factors we will have to make sure that our local infrastructure is adequate to the task. Metro's Regional Transportation Plan notes that in 1994 the percent of arterial streets experiencing congestion was 6.0%, in 2020 that number is anticipated to reach 15.3%, a 156% increase. Motor vehicle hours of delay on arterial streets in 1994 was 5,438 hours and in 2020 23,418 hours are expected, an increase of 330%. Such increases can mean a diminishment of Portland's competitiveness as a place for freight.

Portland needs to develop strategies to address the relationships and conflicts, for local delivery in and between 2040 centers, main streets, and station communities and the interface of residential neighborhoods and freight districts. Policies and regulations need to be developed that will assure street design, information and operational guidelines that will provide for efficient and competitive delivery of goods to help maintain a competitive position for 2040 centers and other commercial areas within Portland. A Freight Master Plan will also contribute to neighborhood livability, shopping convenience and the reduction of Vehicle Miles of Travel (VMT) by identifying and providing easy and obvious access to commercial areas; by reducing conflicts between delivery and other traffic, on-street parking, the use of local streets.

There is a need to address the delivery system for local goods and services to 2040 centers, main streets and station communities. The Port of Portland and Metro Commodity Flow Analysis for the Portland Metropolitan Area states that, "Certainty of arrival time, historically an issue for only intermediate and perishable items, is now moving into retail and consumer goods as well." In order to support the envisioned 2040 concepts, the timely and reliable delivery of goods and services to local outlets becomes one of the primary tools to reduce vehicle miles of travel (VMT) and congestion by reducing the need for inter-district or regional travel to access those goods and services.

The efficient and orderly delivery of goods and services to local outlets will play a key role in neighborhood and city-wide livability, as well as the efficient use of the transportation infrastructure.

Freight Distribution

Portland's position at the confluence of inland and deep water access, and easy rail access to the rest of the nation, in combination with national highway access and air freight facilities has resulted in national stature in terms of freight and distribution. Regional freight movement and distribution is a key factor in the region's economic well being.

Located within the City of Portland, the publicly owned Port of Portland is the second largest wheat export facility in the United States and third largest export tonnage facility on the West Coast. The Port of Portland includes four major marine terminals, including over 1,000 acres of terminal facilities. These facilities provide for waterborne freight, which include a range of vessels from ocean going vessels to river barges. The terminals handled more than 11,000,000 short tons of cargo in 2001, including wheat, soda ash, potash and hay (exports) and automobiles, petroleum products, steel and limestone (imports). The Portland International Airport is the largest air terminal in the state of Oregon, with 3,229 acres and 3 runways, moving over 12,000,000 passengers in 2001 and nearly 260,000 short tons of cargo.

Also within the City of Portland are major regional railroad facilities for both the Burlington Northern Santa Fe and Union Pacific Railroads. Over 150 freight trains move within the Portland area each day on approximately 63 miles of mainline track, nearly a dozen yards and two freight hub facilities. Significant quantities of petroleum products are delivered to Portland not only by rail and ship, but also by pipeline to the state's largest petroleum storage and distribution facilities.

Truck freight is relied on for the distribution of goods and services regionally and nationally, and Portland is no exception. The Commodity Flow Analysis for the Portland Metropolitan Area states that in 1997 the truck share of this cargo was 63% of total tonnage and that this share will increase to 72% by 2030. Access between the City's freight districts, intermodal and terminal facilities, and to and from the regional freight routes is essential to maintaining and/or growing Portland's role in distribution.



Commodity Flow Forecast Update, Port of Portland, 03/04/03.

Portland also needs to develop strategies to address the relationships and conflicts, for freight movement in and between industrial areas, intermodal and terminal facilities, national and regional highways, and the interface of residential neighborhoods and freight districts.

One example of a conflict that illuminates the need for conflict resolution involving more than Portland is the Columbia River Rail Road Bridge. Rail traffic, barges and ships come into conflict at this crossing, inflicting delays on each other. A recent effort to convince the federal government that this situation should be addressed by the Truman-Hobbs Act was unsuccessful. However, the need for a resolution continues to exist and a role exists for Portland in that effort.

Most of the region's freight centers that generate significant local and regional truck traffic are located within Portland and are in close proximity to residential neighborhoods. This proximity creates potential conflicts between neighborhood livability and truck movement needs. At the same time, the important role that trucks and freight movement play in the City's economy needs to be protected. Future area plans and strategies to implement 2040 priority areas should address these issues.

FREIGHT MASTER PLAN, PROJECT DESCRIPTION

Initiated through and included in the Transportation System Plan (TSP) as the Truck Access and Circulation Analysis, the proposed Freight Master Plan will provide necessary background information on the truck street system, including needs and opportunities. It will include a review and update, as necessary, of the existing Freight Modal Plan, Transportation Freight Policies and Projects in the TSP. It will also address codes, standards and guidelines for the maintenance and improvement of the truck street system.

The Freight Master Plan will develop strategies to address the relationships and conflicts, for local delivery and freight movement in and between industrial areas, intermodal and terminal facilities, national and regional highways, 2040 centers, main streets, and station communities and the interface of residential neighborhoods and freight districts.

Objectives

The objectives of the Freight Master Plan address needs, opportunities, policies and regulations.

- 1. Provide background information to identify needs and inform decision-making, including:
 - Inventory freight and delivery related facilities (i.e., primary destinations).
 - Identify deficiencies in the truck street system in terms of access and mobility.
 - Identify conflicts between truck freight and delivery and neighborhoods or commercial areas.
- 2. Identify opportunities to improve operational efficiency and provide for conflict resolution, including:
 - Identify opportunities to build on the existing truck street system and service programs of the Office of Transportation.
 - Identify short-term opportunities to provide improved efficiency of operations within the truck street system.
 - Develop and implement a programmatic solution for conflict resolution.
 - Investigate funding strategies for local truck street projects.
 - Identify and adopt additional performance indicators for truck street operation.
 - Coordinate truck street system planning with local and regional industrial land inventories and studies.
- 3. Update the Transportation System Plan policies, to provide:
 - Freight and transportation policies that will guide the City's relationship with the freight and delivery industries.
 - Freight and transportation policies that will provide guidance for conflict resolution.
 - A truck street system that will provide access to all elements of the freight and delivery industry.
 - A truck street system that will accommodate the forecast growth in freight movement.
 - A truck street system that will be complementary to economic development goals and strategies.
- 4. Amend or create regulations to provide a consistent approach to improvements and projects, including:

- Criteria to provide freight project prioritization within the identified Transportation System Plan Projects.
- Guidelines or standards for truck street operation, maintenance and construction.

Public Involvement

The Freight Master Plan will include a continuation of the public involvement initiated by the Truck Access and Circulation Analysis, including:

- Portland Freight Committee meetings, and subcommittee or work group meetings of that body,
- Open houses and other informational opportunities provided either within the framework of the work-scope, or upon request to the general public and specific neighborhood or business associations, and to other government agencies or committees,
- Coordination with other state, regional and city advisory committees, and
- Public meetings and/or hearings before the planning commission and city council.

The Portland Freight Committee provides the industry and agency expertise to inform, direct and advise the progress of the proposed Freight Master Plan from the perspective of those involved in the various industries and industry needs. Office of Transportation staff will lead in all public involvement proceedings and coordination with other City agencies, with consultant support as appropriate. Office of Transportation staff will also take primary responsibility for presenting the plan for adoption, with consultant support as appropriate.

Next Steps

The next steps in the development of the Freight Master Plan will include completing background findings, identifying issues and concerns on the part of stakeholders, and reviewing work done in other jurisdictions. Additional work will be done to define the economic impacts and importance of freight in Portland. Analysis of findings, issues, existing policies and the recommended actions of other jurisdictions will follow, along with development of strategies and recommendations, including policies, operations and improvements.

The planned schedule for review and comment by the Planning Commission and recommendations to the City Council for their consideration are for May and June of 2004, respectively. However, if the Office of Transportation is successful with a Transportation Growth Management (TGM) grant that has been applied for, the reviews by the Planning Commission and City Council could slip to a later date. The TGM grant would allow the Office of Transportation to put additional resources into the Freight Master Plan effort.

FREIGHT MASTER PLAN, RATIONALE

Several studies, both previously conducted and proposed, echo the overall concerns for truck access and mobility, but for limited areas. However, the number of studies and the number of areas identified substantiate the need for a system-wide analysis of Portland's truck street system. The area studies identify both intra-city and regional needs.

A system-wide analysis of the truck street system will not only help to answer questions raised by the area studies, it will help to position Portland competitively for new federal funding sources. The Freight Master Plan is also timely for coordination with national, state and regional initiatives to address a global economy that is placing evermore reliance on the efficient movement and delivery of freight. With the Freight Master Plan in place, Portland will be ready to capture the opportunities inherent in the growth of freight movement.

Area Studies

- The Central City Transportation Management Plan (CCTMP), Portland, includes two strategies that relate to a West Clinton Area study. Strategy 6.1 under Central Eastside Circulation states: "Re-examine the effectiveness of the Western Edge Project on reducing non-local and industrial traffic infiltrating the residential neighborhoods in the vicinity of SE 12th Avenue. Identify additional measures if needed." Strategy 6.3 of the CCTMP states: "Develop a truck access plan for industrial land uses in the Central Eastside which improves connections to the regional traffic network and reduces conflicts with non-industrial land uses."
- The proposed Inner Powell/Ross Island Bridgehead Access and Circulation Study, Portland, would identify the need for "improving the access route to the Ross Island Bridge from the Central Eastside Industrial District (CEID)". The Central Eastside Transportation Study (1990) presented several concepts for improving the current traffic and truck access route from the CEID to/from the Ross Island Bridge, but it also suggests that "further investigation may identify other alternatives."
- The 1996 Outer Southeast Community Plan, Portland, identifies the need to study circulation and access issues for industrial traffic in the vicinity of the Lents town center. The Transportation Policy states: "Ensure adequate truck access to industrial sites so that raw materials can be delivered and products shipped. However, keep truck traffic out of residential areas when possible."
- The 1999 Columbia Corridor Transportation Study, Portland, identified system improvements for regional access to and through the Columbia Corridor as the primary strategy to reduce conflicts and impacts from truck traffic on adjacent residential areas and for bicycle and pedestrian use of NE Marine Drive and 33rd Avenue.
- The 2001 St. John's Truck Strategy, Portland, recognized the need for, and recommended actions to mitigate the impacts of truck traffic through the St. John's Pedestrian District, while maintaining access to the St. John's Bridge for trucks. The St. John's Bridge is essential to efficient truck freight movement with origins or destinations in the Guild's Lake, Northwest, Rivergate and Columbia South Shore Industrial Districts.

- The 2002 Economic Development Strategy, Portland Development Commission, has identified freight and freight mobility as key elements in the economy of Portland and the region. Additionally, this strategy identifies several specific issues for freight mobility in the City.
- The North Willamette Crossing Major Refinement Plan, Metro, is proposed to respond to concerns that the St. Johns Bridge will not be adequate in the long term. Projected levels of freight and other traffic between NE Portland Highway (Rivergate) and Highway 30/St. Helens Road, will exceed the St. Johns Bridge capacity by 2030 and traffic, including truck traffic, will be experiencing delays by 2020. Refinement Plans are necessary when the RTP has determined the need for a transportation improvement; a minor refinement plan recognizes that a need for a specific mode improvement exists, and a major refinement plan recognizes the need for determination of mode, function and general location for some range of actions.
- The I-5 Trade Corridor Partnership Major Refinement Plan was initiated to develop recommendations to address freight mobility and access needs within this critical interstate corridor. Participating jurisdictions include Oregon and Washington Departments of Transportation, Ports of Portland and Vancouver, Metro, Clark Co. Regional Transportation Commission, TriMet, Cities of Portland and Vancouver, Multnomah and Clark Counties and others.
- The proposed Northeast Portland Highway Minor Refinement Plan, Portland, recognizes the need for additional improvements for freight movement on NE Portland Highway (US 30 Bypass), linking Rivergate, the marine terminals, Portland International Airport and industrial destinations throughout the region.
- The adopted bridge reconstruction plan, HB 2041, identifies the largest public works need in Oregon history and provides increased funding through the Oregon Transportation Investment Act primarily for bridge reconstruction.
- The proposed Regional Freight Data Collection Project, Port of Portland and Metro, will provide data for assessment of regional freight needs in response to anticipated growth in freight movement.
- The 2003 Truck Access and Circulation Analysis, Portland, has initiated background data collection and analysis for the Freight Master Plan. This project will also produce recommendations (following in this report) for Short-term opportunities for freight system improvement, including:
 - \rightarrow Bridge load rating and improvement prioritization,
 - → Prioritization and coordination for Intelligent Transportation System (ITS) projects,
 - \rightarrow Freeway ramp meter specifics for ramps within freight districts,
 - \rightarrow Consultation services for businesses with traffic or transportation system issues,
 - \rightarrow Truck street improvement guidelines, and
 - \rightarrow Project specific fund generation.

All of the above plans and studies point to a need to better understand the operation and needs of truck freight. Locally, there is a need to illuminate the economic impact and the importance of freight, identify the local barriers and deficiencies within the truck street system, identify the correct prioritization of truck street improvements, and to identify strategies to maximize the efficient operation of the truck street system.

Funding, Coordination and Competitiveness

Assessment of the needs and opportunities within the Portland truck street system is necessary at this time to position Portland to maximize requests for improvement funding. Recent developments in federal transportation funding will make additional monies available for freight-related projects, but are sure to elicit a highly competitive environment for those funds. Projected trends (growth) in freight movement provide Portland an opportunity for economic growth that will only be captured with an efficient truck street system. Additional efforts are ongoing at the state and regional levels to assess the feasibility of additional or alternative funding mechanisms for major transportation improvements, including those necessary to support freight and industry.

Failure to capitalize on the opportunity presented by the Freight Master Plan in the near term could significantly delay opportunities for Portland to successfully compete for new freight-related monies. In a highly competitive business environment with slim margins, such as freight movement, a failure to plan for an efficient truck street system could result in loss of businesses and business revenue in the Portland area.

While the City of Portland has an acknowledged Transportation System Plan, including a Freight Modal Plan, that plan is not as well developed as the other modal plans. This is due largely to the absence of a Freight Master Plan to support and inform all aspects of the Modal Plan. A Freight Master Plan will establish the City's relationship with and to the many elements of freight and in particular to the maintenance and improvement of the truck street system providing access to and connections between those elements.

Action at this time is most appropriate to coordinate with state and regional planning and data collection. Commodity Flow Forecasting recently done for the region and just underway at the state level, and the regional freight data collection effort will provide timely information and resource to this effort. Coordination with the identified needs and project implementation of the I-5 Trade Corridor Partnership offers an opportunity to maximize improvements to the truck street system. Project prioritization and truck street improvement criteria can also be informed by and coordinated with these state and regional efforts. Port of Portland planning for transportation improvements for marine terminals (Port Master Plan just completed) and airport facilities (Conditional Use Master Plan) will also help to inform project selection criteria.

Coordination within the City is also imperative at this time. The 2002 Economic Development Strategy from the Mayor's Office and the Portland Development Commission has identified the importance of freight to the economy of Portland and the region. The Bureau of Planning has just published the Portland Harbor Industrial Lands Survey, and is now embarking on a city-wide industrial land study. Key to both of these land use efforts is the condition and needs of the transportation infrastructure to serve industrial land in the City of Portland.

Additionally, the efforts of the Oregon Freight Advisory Committee and the (Portland Metropolitan Area) Regional Freight Committee can best be coordinated with freight master planning at this time. To facilitate this coordination the Portland Freight Committee has been formed to oversee and advise work being done on the Portland Freight Master Plan. Significant overlap occurs in the membership of these three advisory groups, providing an excellent opportunity at this time for coordination.

PORTLAND FREIGHT COMMITTEE

A key element in promoting and providing for a competitive and efficient environment for freight and delivery in Portland is a partnership with the public institutions and private businesses that comprise that sector for Portland and the region. The Portland Freight Committee, formed in February 2003 represents that very diverse and important sector of the Portland economy. In addition to providing advice and direction to the Freight Master Plan effort, this committee also provides an invaluable resource to the Office of Transportation and the City of Portland.

Mission

The draft mission of the Portland Freight Committee is:

The Portland Freight Committee seeks to ensure coordination of federal, state, regional and local efforts to promote and enhance freight mobility.

The Portland Freight Committee has also identified a number of strategies by which to achieve this mission:

- Provide a forum for discussion, an opportunity for joint action, and a source of knowledge and advice for City transportation decisions affecting freight mobility and local delivery.
- Advocate the importance of a sound freight and delivery transportation system to the economic well being of Portland and the region.
- Coordinate with the Oregon Freight Advisory and Regional Freight Committees.
- Inform and advise City transportation decisions on policy, planning and projects.
- Identify Portland's freight system needs, opportunities and priorities.
- Provide recommendations for traffic operations and maintenance activities.
- Identify short-term actions to further Portland's stature with business and the freight community.

The interconnected nature of freight and delivery in the Oregon economy is mirrored by simultaneous state, regional and local initiatives to understand and respond to the needs of freight and delivery. The following Freight Initiative Organization Chart displays the vertical connections within the state.





Membership

A significant overlap of membership with the Oregon Freight Advisory Committee and the (Metro) Regional Freight Committee provides insight into the horizontal connections between jurisdictions. The makeup of the Portland Freight Committee, which represents a diverse and broad spectrum of businesses, associations and agencies, provides evidence of the pervasiveness of the freight and delivery sector of air economy. The Portland Freight Committee includes the following individuals:

Ogden Beeman

Linda Braden BNSF

William D. Burgel HDR Engineering, Inc., Oregon Freight Advisory Committee

Gary Cardwell NW Container, Oregon Freight Advisory Committee (Alternate) Wayne Plaster NW Container

Everett E. Cutter Oregon Railroad Association, Oregon Freight Advisory Committee

Tom Dechene NBS Realtors

Lisa Duncan *FedEx*

Gary Eichman Oregon Transfer Company

David Eveson (Alternate) Warren Rosenfeld *Calbag Metals*

Duane Furukawa *UPS*

Frank Foti Cascade General, Inc. Ann Gardner Schnitzer Investment Corp.

Matthew L. Garrett Oregon Department of Transportation

Pete George Holman Distribution Center

Lisa Gertler Portland Development Commission

Lanny Gower CNF Transportation

Jerry Grossnickle Bernert Barge Lines, Oregon Freight Advisory Committee

Chris Hammond CEID, Hammond Building Supply

Jeff Harum *Teamsters*

Lee Johnson Jet Delivery

Susie Lahsene Port of Portland, Oregon Freight Advisory Committee

Bill Maris Private Consultant Patti McCoy Columbia Corridor Association

Jim McCulloch CH Murphy/Clark Ullman

Greg Miller Associated General Contractors

Greg Peden Portland Business Association

Robert Russell Oregon Trucking Associations, Oregon Freight Advisory Committee (Alternate) Dick Swennes Oregon Trucking Associations

Charlie Tindall Blue Line Transportation Company

Mark Twietmeyer URS Electronics, Inc.

Ken Twiss NW Copper Works

Tracy Ann Whalen ESCO

Bridget Wieghart *Metro*

Bob Wilhelm, Jr. *Wilhelm Trucking Co.* Other individuals who have served on the Portland Freight Committee or contributed to this effort, include:

Cindy Catto Associated General Contractors

Steve Clark Portland Business Association

Chris Deffebach Metro Karen Guntly Naito Properties

Bruce Halperin Calbag Metals

Greg Heard Yellow Freight

Wayne Kingsley CEID, Portland Spirit Tom Kloster *Metro*

Mike Salsgiver Portland Business Association

Kay Van Sickel Oregon Department of Transportation

SHORT-TERM OPPORTUNITIES FOR SUCCESS

The items listed below are recommended to the City Council for their consideration. This recommendation is made jointly by the Truck Access and Circulation Analysis, Technical Advisory Committee and the Portland Freight Committee as short-term success opportunities. Such opportunities are intended to promote efficient use of the existing truck street system, foster the City's relationship with both the freight and delivery components of the local trucking and distribution businesses, and further the creation of a model Freight Master Plan.

Recommended Short-Term Opportunities

1. Bridge Analysis (Load Rating) Funding, Bridge Repair Prioritization:

<u>Action</u>: Bridges and Structures Section, Bureau of Transportation Engineering and Development, lead. Provide funding for engineering analysis and comparison of bridge inspection information and bridge structural plans for load rating of bridges. Would require identification of funding. Initiate a task force or work group to prioritize bridge repair, emphasizing improvements with identified "priority" corridors. Coordinate with ODOT bridge repair program.

<u>Problem</u>: Many existing Portland bridges have not been through the specific load rating analysis to determine carrying capacity. Bridges are periodically inspected, but load rating requires a comparative analysis of information from inspections and bridge design. Bridge repair, without prioritization could result in less efficient expenditures.

<u>Result</u>: More defined/accurate assessment of bridge carrying capacity. Could result in greater or (possibly) lesser weight allowance than presently allowed. More efficient expenditure of available bridge repair funds.

<u>Coordination</u>: Bridge load rating provides detailed information on the structural capacity of individual bridges. This action would inform bridge repair prioritization and trucking operations, including the City/State Continuous Operations Variance Permit (COVP) process. Bridge repair prioritization coordination with ODOT work on corridor-priority bridge repair program to maintain freight access regionally and locally to terminals, intermodal facilities, and industrial areas.

Costs:

- Bridge Load Rating, varies (\$5,000 \$50,000 per bridge).
- Bridge repair prioritization, low (formation of a task force or working group).

Priority Recommendation: High.

Recommendation:

Funding and Bridge Repair Prioritization, should be included in the Freight Master Plan work scope and furthered through Portland Freight Committee assistance in securing funding for bridge analysis and repair via HB 2014. Identification of local priorities can be furthered through a Portland Freight Committee task force or working group, in conjunction with PDOT staff. 2. Intelligent Transportation Systems (ITS):

<u>Action</u>: Select ITS project(s) from Transportation System Plan (TSP) and/or Capital Improvement Project (CIP) lists for accelerated funding. Selection of ITS priorities must include coordination with state, regional and adjacent local jurisdictions. Development of control and operations of ITS should be closely coordinated with the ODOT, Region 1 Operations Center. Provide information on miles of implemented and planned ITS roadway improvements, and corridor performance. (Note: The Transportation System Plan includes ITS Corridor travel times as an indicator of the transportation system performance, TSP: Chapter 15, Indicators, Performance Measures and Benchmarks, Volume 2, Background and Analysis, Page 15-14.)

Note: NE MLK ITS Corridor, CIP No. SSL261, funded for this year and next, \$100,000.

Note: The TSP includes several ITS projects effecting designated freight streets, including signals, cameras, variable message boards, remote control and monitoring of traffic. The following list includes the identified street, TSP project number, cost estimate and anticipated time frame:

- NE Airport Way (TSP No. 50016), \$2,000,000, 1-5 years.
- N/NE Columbia Boulevard (TSP No. 30008), \$310,000, 6-10 years.
- N/NE Lombard Street (TSP No. 30035), \$210,000, 6-10 years.
- NW Yeon/St. Helens (TSP No. 60023), \$192,000, 11-20 years.
- NW 14th/16th and SW 13th/14th (TSP No. 20002), \$175,000, 11-20 years.
- N/NE Marine Drive (TSP No. 30038), \$750,000, 11-20 years.
- N Going Street (TSP No. 30015), \$255,000, 11-20 years.

<u>Problem</u>: Congestion exacerbated by growing vehicle miles of travel, lack of information to traffic, lack of coordination of signals, and signal phasing.

<u>Result</u>: Better information to traffic (ex: variable message boards, operations control center); improved signal operation to control flow of traffic for certain situations (ex: priority movements or direction, for peak hours).

<u>Coordination</u>: Coordination with ODOT Region 1, Operations Center staff and ODOT ITS program, and adjacent local jurisdictions to assure systematic approach to implementation of ITS improvements.

<u>Cost</u>: High, see above estimates.

Priority Recommendation: High.

Recommendation:

Implement through the Office of Transportation, Capital Improvement Projects List, by identifying and prioritizing ITS projects from the Transportation System Plan Projects List for implementation. Requires close coordination and advice/approval from the Bureau of Transportation System Management, Signals/Street Lighting/ITS Section.

3. Ramp Metering #1:

<u>Action</u>: Provide priority (truck only) queue at freeway ramps in freight districts. Suggest approach to ODOT for analysis and/or application (ex: Delta/Lombard phase of I-5 Trade Corridor improvements). Investigate possibility to use different ramp meter timing for truck priority ramp meters.

<u>Problem</u>: Trucks and autos competing for limited access to freeways from freight districts.

<u>Result</u>: Easier (quicker, less delay) access to freeways, particularly at peak traffic hours. Partially addresses problem of freeway interchange capacity in freight districts for truck traffic.

<u>Coordination</u>: The first phase of the I-5 Trade Corridor Partnership, the Delta Lombard I-5 improvements, offer an opportunity for an initial investigation and pilot project for implementation of this concept. Concept introduced to I-5 Partnership Advisory Group and Delta Lombard I-5 Improvement steering committee.

Cost: Low.

Priority Recommendation: Medium.

Recommendation:

Ramp Metering for trucks should be included in the Freight Master Plan work scope. Discussion and investigation of this opportunity should be pursued as a part of development of the Freight Master Plan, with the Oregon Department of Transportation, Region 1, project management for implementation of Phase 1 (Delta/Lombard) of the I-5 Trade Corridor Recommendations, and/or subsequent phases.

4. Ramp Metering #2:

<u>Action</u>: Place ramp meters far enough back from freeway merge to allow for sufficient acceleration, especially ramps with up grades. Suggest approach to ODOT for analysis and/or application. Related concern, balance ramp meter location so as not to turn local streets into freeway queuing lanes.

<u>Problem</u>: Insufficient distance for truck acceleration to freeway speeds when merging with freeway traffic (in some cases).

<u>Result</u>: More efficient, safer merging of truck traffic with freeway.

<u>Coordination</u>: The first phase of the I-5 Trade Corridor Partnership, the Delta Lombard I-5 improvements, offer an opportunity for an initial investigation and pilot project for implementation of this concept. Concept introduced to I-5 Partnership Advisory Group and Delta Lombard I-5 Improvement steering committee.

Cost: Low.

Priority Recommendation: Medium.

Recommendation:

Ramp Metering for trucks should be included in the Freight Master Plan work scope. Discussion and investigation of this opportunity should be pursued as a part of development of the Freight Master Plan, with the Oregon Department of Transportation, Region 1, project management for implementation of Phase 1 (Delta/Lombard) of the I-5 Trade Corridor Recommendations, and/or subsequent phases.

5. HOV Lanes:

<u>Action</u>: Allow truck use of high occupancy vehicle (HOV) lanes, and/or restrict use of HOV lanes to truck use when not in use for HOV traffic. Address, suggest approach to ODOT for analysis and/or application (ex: I-5 HOV Lane). Collect data and research from other jurisdictions.

<u>Problem</u>: Reduced truck traffic mobility, delays and increased time-in-transit, particularly during peak hours.

<u>Result</u>: Opportunity for reduced time-in-transit for truck traffic on freeways.

<u>Coordination</u>: The first phase of the I-5 Trade Corridor Partnership, the Delta Lombard I-5 improvements, offer an opportunity for an initial investigation and pilot project for implementation of this concept. Concept introduced to I-5 Partnership Advisory Group and Delta Lombard I-5 Improvement steering committee. Concept discussed with Washington DOT staff, data and research will be provided.

Cost: Low.

Priority Recommendation: Medium.

Recommendation:

HOV Lanes for trucks should be included in the Freight Master Plan work scope. Discussion and investigation of this opportunity should be pursued as a part of development of the Freight Master Plan, with the Oregon Department of Transportation, Region 1, project management for implementation of Phase 1 (Delta/Lombard) of the I-5 Trade Corridor Recommendations, and/or subsequent phases.

6. Transportation Consultation Services:

<u>Action</u>: Traffic Investigation Services, Bureau of Transportation System Management, lead. Initiate contact ("case study") to provide traffic investigation services to businesses including:

- Information exchange,
- Record of concerns (logging),
- Traffic routing and traffic/street issues consultation, and issue resolution.

Note: Similar program already exists in "Safe Routes to Schools." Actions could include PDOT partnering with businesses to identify concerns and solutions on transport routes, and most efficient routes for transport. Use initial "case study" to investigate costs, methods and the potential for fees.

<u>Problem</u>: Traffic or street obstacles, and difficulties for local transport or access to and from businesses.

<u>Result</u>: Information exchange, complaint and issue logging (data base), identification of local solutions (create tools), and creation of partnerships with local businesses.

<u>Coordination</u>: Innovative new program offers insight into issues for local freight and delivery operations. Instructs and informs creation of Freight Master Plan and amendment to Transportation System Plan (Freight Modal Plan and/or Projects). Creation of Freight Master Plan provides opportunity to instruct and inform creation of "Best Practices" for freight traffic issues for local jurisdictions throughout the State, via coordination with ODOT.

<u>Cost</u>: Existing program tools in place, low.

Priority Recommendation: High.

Recommendation:

Transportation Consultation Services, should be included in the Freight Master Plan work program, and developed in cooperation with the Traffic Investigations Division, Bureau of Transportation System Management.

7. Street Improvement Criteria:

<u>Action</u>: Traffic Design Section, Bureau of Transportation Engineering and Development, lead. Systematically create and establish criteria or guidelines that recognize planning, construction and repair for truck freight needs for street improvements (ex: turning radii, travel lane dimensions, turn bay dimensions, etc.). Consider phasing development of guidelines, beginning with a list of considerations, with later development of a complete set of guidelines. Guidelines should include recognition of differing circumstances (i.e., street designations, zoning) and different truck types (small, medium and heavy) for different purposes (freight, delivery, drayage, etc.). Review by Freight Committee in near future.

<u>Problem</u>: Some street improvement projects, on designated freight streets or within freight districts or on streets necessary for truck operations, may not always happen with consistent or appropriate consideration of truck needs. There are no guidelines for what those considerations need to be or standards for maintenance or construction.

<u>Result</u>: Street improvement planning, maintenance and construction would include appropriate guidelines or standards to assure adequate operations for trucks.

<u>Coordination</u>: Innovative new guidelines offer an opportunity to better recognize local freight and delivery operations when maintaining or constructing streets. Instructs and informs creation of Freight Master Plan and amendment to Transportation System Plan (Freight Modal Plan and/or Projects). Creation of Freight Master Plan provides opportunity to instruct and inform creation of "Best Practices" for local jurisdictions throughout the State, via coordination with ODOT and Metro.

<u>Cost</u>: Existing program tools in place, low.

Priority Recommendation: High.

Recommendation:

Street Improvement Criteria, should be included in the Freight Master Plan work program, and developed in cooperation with the Traffic Design Division, Bureau of Transportation Engineering and Development.

8. Project Specific Funding Mechanism:

<u>Action</u>: Make use of a project specific levy or local improvement district or other funding mechanism to generate funding for major (capital) improvement projects within the transportation system, either city-wide or based on district or impact area. Initiate a task force or work group to develop this recommendation, funding mechanisms and projects for funding.

<u>Problem</u>: Difficulty in funding major transportation projects with available funds.

<u>Result</u>: Potential for additional funding source for specific major transportation projects. Certainty of project action may create a higher level of confidence by those asked to participate.

<u>Coordination</u>: Other transportation funding mechanisms at the state and local level are being considered. Recognition and coordination with these other efforts is necessary to avoid overburden on potential participants.

<u>Cost</u>: Undetermined.

Priority Recommendation: High.

Recommendation:

Project Specific Funding Mechanism, should be included in the Freight Master Plan work program for consideration by a task force or working group of the Portland Freight Committee, in conjunction with PDOT staff.

Requested Council Action

The Technical Advisory Committee and a subcommittee of the Portland Freight Committee have provided a recommended priority for each of the identified Short-Term Success Opportunities. A very generalized "order" of cost is provided, with the exception of the identified bridge load rating (#1) and ITS projects (#2) that have identified dollar cost estimates. Bridge project prioritization (#1), and project specific funding (#8) include a recommendation for the creation of a task force or working group to further develop these recommendations. A comment on coordination with other jurisdictions and actions is included with all eight items to identify the placement and fit of each recommendation in state, regional or local activities.

The attached resolution requests (in part) that the City Council recognize and support the consideration and/or implementation of the Short-Term Opportunities, directing:

Implementation by Office of Transportation, via the Freight Master Plan, of Opportunities Nos. 1, 3 - 8 (above). Each of these recommended actions can be furthered or implemented through completion of the Freight Master Plan.

- Opportunity 1, Bridge Analysis (Load Rating) Funding and Bridge Repair Prioritization, should be included in the Freight Master Plan work scope and furthered through Portland Freight Committee assistance in securing funding for bridge analysis and repair via HB 2014. Identification of local priorities can be furthered through a Portland Freight Committee task force or working group, in conjunction with PDOT staff.
- Opportunities 3 5, Ramp Metering and use of HOV Lanes for trucks should be included in the Freight Master Plan work scope. Discussion and investigation of this opportunity should be pursued as a part of development of the Freight Master Plan, with the Oregon Department of Transportation, Region 1, project management for implementation of Phase 1 (Delta/Lombard) of the I-5 Trade Corridor Recommendations, and/or subsequent phases.
- Opportunity 6, Transportation Consultation Services, should be included in the Freight Master Plan work program, and developed in cooperation with the Traffic Investigations Division, Bureau of Transportation System Management.
- Opportunity 7, Street Improvement Criteria, should be included in the Freight Master Plan work program, and developed in cooperation with the Traffic Design Division, Bureau of Transportation Engineering and Development.
- Opportunity 8, Project Specific Funding Mechanism, should be included in the Freight Master Plan work program for consideration by a task force or working group of the Portland Freight Committee, in conjunction with PDOT staff.

Implementation, through the Office of Transportation, Capital Improvement Projects List, of Opportunity No. 2, ITS, by identifying and prioritizing projects from the Transportation System Plan Projects List for implementation.

CONCLUSION

The Freight Master Plan will address and coordinate with all modes of freight movement in the City of Portland, including air, rail, ship, pipeline and truck. However, because the City of Portland has an obligation to and authority over streets, the emphasis throughout will be the truck street system. It is the City's designated Truck Streets and arterial street system that literally connects all aspects of freight and delivery not only for the City, but for the region and state as well.

The Freight Master Plan will provide the same level of innovative and "cutting edge" planning for freight and delivery in Portland as did the Pedestrian and Bicycle Master Plans for those transportation modes. Like many of the transportation initiatives that Portland is recognized for, the promotion of an efficient and competitive truck street system is largely a return to a way of doing things that helped to create Portland as a livable community, envied for its style no less than its setting.

Partnerships with a diverse and committed private sector and involved public agencies will help the Freight Master Plan provide leadership in the field of planning for local facilitation of an increasingly important global aspect of doing business. The Freight Master Plan will provide a timely complement state and regional initiatives to identify and define the needs and opportunities of the existing freight infrastructure. It will also provide guidance for the City's future relationships with the freight and delivery industries, contributing to conflict resolution and neighborhood livability.

The Economic Development Strategy 2002, developed by the Portland Development Commission, identifies freight mobility and logistics as a "target" strategy for city investment, due to the positive impacts that would accrue to the economy, for both private revenue and jobs creation. A truck street system that reduces delays and costs to a minimum and that provides efficient service to and between other modes of freight movement is an essential part of the strategy to capture the potential growth in freight and distribution. A truck street system that provides predictable opportunities for transport and delivery, and that assures timely and reliable access in and out of individual companies and 2040 centers is necessary to maintain Portland's competitive advantages in freight mobility the delivery of goods.

RESOLUTION TO COUNCIL

Recognizing the importance of freight and goods delivery and the role the Portland truck street system plays in the economy of Portland, the region and the state, affirming City Council's support for the Portland Freight Committee and implementation of the Freight Master Plan, and forwarding the Portland Freight Committee recommendations for short-term success opportunities.

WHEREAS, the local geography, including inland river and deep water access and easy access east through the Columbia Gorge for surface transportation, has provided a natural advantage for the distribution of goods to and from Portland throughout the region, the nation and the Pacific Rim countries, and

WHEREAS, public infrastructure investments in the Portland region, including two national highways (I-5 and I-84), an international airport, and deep water and inland river marine terminals, provide substantial enhancement of Portland's natural advantages for the distribution of goods, and

WHEREAS, private investments in infrastructure and facilities, including two national rail carriers (Union Pacific and Burlington Northern Santa Fe) and numerous and diverse other private interests and their substantial investments in facilities, further enhance Portland's natural advantages for the distribution of goods.

WHEREAS, the combination of natural advantages and investment have led to the movement of freight providing a key element in Portland's economy, substantial local revenue, and a significant number of living wage jobs to Portland and the region.

WHEREAS, the combination of natural advantages and investment have resulted in comparative advantages for Portland over other Northwest cities, giving Portland an opportunity to further capitalize on the business of distribution and goods delivery.

WHEREAS, the Economic Development Strategy identifies logistics as a targeted industry for City investment due to positive impacts on the local economy, job creation and business retention.

WHEREAS, the efficient movement of goods to retailers and final users will support and promote the concepts of the Regional 2040 Plan, Regional Transportation Plan, and the Portland Comprehensive Plan and Transportation System Plan.

WHEREAS, recent global trends and projections by the Federal Highway Administration and regional government (Metro and the Port of Portland) show an increasing reliance on the efficient and reliable movement of freight and a doubling of freight movement in the next 20 to 30 years, and WHEREAS, recent projections by the Federal Highway Administration and regional government show that the share of freight moved by trucks will increase in the future.

WHEREAS, Portland's truck street system is the critical link to the distribution of goods not only for Portland, but the region and the state, providing the access between terminals, intermodal facilities and highways.

WHEREAS, the public/private partnership provided by the Portland Freight Committee can help to identify both opportunities and needs within the truck street system, and

WHEREAS, the Portland Freight Committee can assist and advise the creation of a Freight Master Plan to forward the relationship between the City and this key element in Portland's economy.

NOW THEREFORE BE IT RESOLVED, the City of Portland recognizes the importance of freight and delivery to the economic well being of the City, region and state, and the importance of a public/private partnership, established by the Portland Freight Committee, to promote that economic well being, and

BE IT RESOLVED, the City of Portland will seek to assure an efficient truck street system that will promote capture of the growth potential in freight movement and the economic advantages accruing therefrom, through implementation of a Freight Master Plan as described in Attachment A, Freight Master Plan Interim Report, and

BE IT RESOLVED, the City of Portland will forward the Portland Freight Committee recommendations for short-term success opportunities in the manner described in Attachment A.

Adopted by the Council:

Prepared by:

GARY BLACKMER Auditor of the City of Portland By

Deputy

Commissioner Jim Francesconi Steve Gerber September 10, 2003