Maritime and Ports

Take Care of the System

Critical Investments in the areas of:

- Channel Deepening, Dredging and Jetty Maintenance and Replacement .....(maintain and increase federal commitment)
- Dockside and Marina Dredging.....$1 million per year
- Dock Rehabilitation .....$2 million per year

Improve Safety

Critical Investments in the areas of:

- Intermodal Container Security.....$2.5 million per year

Increase Capacity

Critical Investments in the areas of:

- Columbia River Channel Deepening .....(maintain federal commitment)
- Transportation Infrastructure at Ports
  Channels, docks, and equipment.....$35 million per year
  Rail System Upgrades.....$25 million per year
  Road Access to Port Facilities .....$1.6 million per year

Available Resources:

- Oregon Transportation Plan
- Marine Transportation System Study
- Port master plans and transportation improvement plans
- *Connect*Oregon applications

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Background

The majority of marine freight in Oregon moves on the Columbia River below Portland and on the Willamette River in Portland. The Columbia-Snake River System is navigable by barge as far east of Portland as Lewiston, Idaho. Much of the freight moved by barge is transloaded to/from ships, primarily in Portland.

Oregon has 23 port districts. Nine port districts move freight through intermodal marine terminals. Deep-draft freight terminals are located at Coos Bay-North Bend, at Newport and at three ports on the Oregon side of the Columbia River (Astoria, St. Helens, and Portland). Shallow draft terminals are located in The Dalles, Arlington, Boardman (Morrow), and Umatilla.

Ports and marine freight play a significant role in the economy. Ports are also a key link in moving freight between transportation modes. They have the equipment and facilities needed to move freight between air, marine, pipeline, rail, and truck transportation.

The Oregon Transportation Plan is the state's long-range multimodal transportation plan. It is an overarching policy document that focuses on state, local and public aspects of Oregon's transportation system. Identifying what should be done to maintain and improve the transportation system ("feasible needs") is a major component of the Plan.

The 2006 update of the Plan estimated the difference between the resources that are available today and those that would be required to meet "feasible needs." "Feasible needs for the marine infrastructure are distinct from the "land-side" improvements at marine terminals that are needed to support their function or to move freight between transportation modes. The annual resources available to maintain and improve the marine infrastructure were estimated to be $51.3 million (2004 dollars). Feasible needs were estimated to be $56.2 million (2004 dollars).

The investment options described on the attached pages are not intended to represent a plan to meet feasible needs. They propose specific improvements in the marine transportation system provided additional resources can be identified. They assume that both public and private funding for the marine transportation system remains in place and continues to be invested as it is today.

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Channel Dredging and Jetty Maintenance

What is being done today?
The U.S. Army Corps of Engineers maintains the federally authorized channel depths for the Columbia and Snake River systems, the Lower Willamette River, Coos Bay and harbor, and Yaquina Bay and harbor. The Oregon Transportation Plan update estimates that channel maintenance costs about $35 million per year (2004 dollars).

The Corps is also responsible for the maintenance of the jetties that protect coastal harbor entrances and the pile dikes that maintain the Columbia River shipping channel. The Corps spends about $3.2 million per year (2004 dollars) to monitor and maintain these jetties.

Why is it important?
River currents and marine tides erode channels and deposit silt, sand and gravel. Maintenance dredging is essential to ensure that channels remain at the proper depth and that vessels can pass safely.

What happens if the investment is not made?
Maintenance dredging is a major concern for the ports on the Oregon coast. Without maintenance of the jetties and channels, harbor facilities are not likely to remain viable for freight, commercial and sport fishing, recreational boating, and Coast Guard activities. Channels will fill in and become unusable. Businesses that depend on reliable marine transportation will move elsewhere or close. Significant public and private investments in docks and upland improvements will be reduced in value.

The Marine Transportation System Study notes that the Columbia River jetties are overdue for major repair. The jetties could be breached during a large storm, and large volumes of sand could be deposited in the Columbia River navigation channel. This would disrupt navigation and commerce.

Maintenance and rehabilitation of other coastal jetties has also been deferred. The Coos Bay north jetty was breached during a storm three years ago. While the Corps was able to complete temporary repairs, funding has not been appropriated for the engineering analysis needed to make long term repair.

How much does the investment cost?
Channel and jetty maintenance is largely a federal responsibility. The U.S. Army Corps of Engineers does the channel dredging and jetty maintenance work with funds appropriated by Congress. However, Congress has not appropriated sufficient resources and there is significant deferred maintenance in this area, especially for Oregon's smaller coastal ports. Jetty repairs for the Columbia River, Coos Bay and Yaquina Bay would cost about $60 million. Additional funding would be needed to maintain and repair jetties at other coastal ports.

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Investments in channel dredging and jetty maintenance require continuation and increase of federal commitments in this critical area. The Oregon and Northwest congressional delegations, state agencies, local government, and the private sector must work to assure that annual federal appropriations for Corps projects are made.

Dockside and Marina Dredging

What is being done today?
Dredging of the channels that serve moorages outside of the federally authorized channels is a local port responsibility. Ports request assistance from the U.S. Army Corps of Engineers. These requests are granted occasionally. The Port of Portland and other ports also dredge to maintain serviceable channel depth.

Why is it important?
Silt and other materials settle into basins and marinas and alongside docks, restricting channel depths and widths. Businesses that depend on reliable marine transportation may move elsewhere. Significant public and private investments in docks and upland improvements could be reduced in value if dredging is not done when needed.

What happens if the investment is not made?
Some ports continue to function for a time by restricting operations to high tide; others restrict operations to shallow draft or partially loaded vessels. Restricted operations adversely affect business, such as fishing and fish buying. In addition, restricted operations may have safety implications during storms. Eventually, the water in marinas and around docks becomes too shallow for use.

For example, the Port of Astoria spends $1 million per year to remove about 175,000 cubic yards of silt to maintain access to its docks and facilities. This protects businesses that employ 230 people and bring 25,000 visitors to the area. It also protects public and private investments of almost $30 million.

How much does the investment cost?
An investment of $1 million per year would address the ports' dockside and marina maintenance dredging requirements, based on information received from coastal ports. This is in addition to requests granted by the federal government and spending by the port districts themselves.

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Dock Rehabilitation

What is being done today?
Docks are repaired or rebuilt as funds become available. This is usually in connection with a specific development project or grant opportunity.

Why is it important?
Docks and moorages make the link between landside and marine transportation. They are essential for the movement of freight, for Oregon's fisheries, and for recreation.

What happens if the investment is not made?
Docks and moorages, whether built of timber or steel and concrete, deteriorate. Ports make repairs and perform routine maintenance, but cannot halt deterioration due to long-term exposure to the marine environment.

How much does the investment cost?
An additional investment of $2 million per year would address ports' dock and moorage rehabilitation needs. Ports' improvement plans identify a number of dock, marina, and moorage replacement or rehabilitation projects.

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Intermodal Container Security and Safety

What is being done today?
Oregon ports are adding their ability to handle intermodal containers by both ship and barge. The Maritime Transportation System Study anticipates that container traffic at Oregon ports will increase from about 300,000 units in 2000 to 500,000 units in 2010. Examples of projects that support and facilitate this increased volume are the Columbia River Channel Deepening Project and Port of Portland's purchase of post-Panamax container cranes.

The Transportation Security Administration is providing assistance to ports to improve the ability to screen intermodal containers. The goal of the effort is to provide safer, more reliable and more efficient intermodal freight mobility. While improving the capacity to handle intermodal containers enhances freight mobility, benefits Oregon's economy and mitigates congestion, it must also ensure that national security goals are met.

Why is it important?
Containers are screened at foreign ports of departure. Nevertheless, containers have been used to ship illegal immigrants and drugs into the country. There are also concerns that terrorists could use containers to smuggle bombs and bomb making material, including nuclear weapons, and biological weapons into the U.S.

What happens if the investment is not made?
Improving the container screening process at U.S. ports of entry is necessary. However, the screening process could become a bottleneck at Oregon ports if facilities at larger ports, such as Seattle, Tacoma, or Los Angeles / Long Beach, are better equipped.

How much does the investment cost?
An investment of $2.5 million per year can leverage federal funds to continue improving port security.

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Columbia River Channel Deepening

What is being done today?
The Columbia River Channel Deepening project is a major addition to the capacity of the maritime transportation system. The project will deepen the 600-foot-wide Columbia River channel from 40 to 43 feet. The U.S. Army Corps of Engineers began deepening the channel in 2005 after 16 years of planning and development work.

Why is it important?
The world's shipping fleet is changing. Over 80 percent of the vessels in trans-Pacific trade are the larger, more fuel-efficient ships that are constrained by the 40-feet depth in the Columbia River channel. The channel deepening project enables these large vessels to call at Columbia River ports and improves access of businesses, farmers, ports, and communities to world trade.

What happens if the investment is not made?
If the Columbia River channel is not deepened, the Oregon and other states will lose their competitive edge in the world market and suffer adverse economic consequences.

How much does the investment cost?
The project's total cost is estimated to be about $150.5 million. The states of Oregon and Washington are each providing matching funds of $27.7 million; the balance, about 65 percent of the cost, will be federally funded.

The U.S. Army Corps of Engineers began dredging operations in 2005 and completed about 25 percent of the project by the end of the year. Another major section of the channel is expected to be deepened in 2006.

However, additional effort is needed to keep the project moving forward. Future federal appropriations must occur in order to complete it. The Oregon and Northwest congressional delegations, state agencies, local government, and the private sector must work to assure that annual federal appropriations for this project are made.

Capacity Improvements to Docks and Facilities

What is being done today?
Improvements to docks and facilities are usually made as part of or the support for economic development projects. These can range from improving moorages (e.g., deeping a moorage so that longer, larger capacity vessels can dock), to rehabilitating or expanding the capacity of docks (e.g., building a longer dock), to purchasing equipment (e.g., container cranes), to improving rail facilities (e.g., grade crossings, storage tracks).

The Marine Transportation System Study, transportation improvement plans, and other sources identify numerous near term (1 – 5 year) projects that will expand the capacity of Oregon ports. Examples include:

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- Coos Bay Channel Deepening / Widening to support development of a container port ($100 million).
- Coos Bay Branch of the Central Oregon & Pacific Railroad to support development of a container port ($100 million at build out).
- Lower Coos Bay Turning Basin ($4 million to $7 million)
- Improved Rail Access at Port of Portland facilities (rail leads, storage tracks) ($11 million)
- Port of Portland's Terminal 6 – 800 foot dock expansion ($26 million)
- Terminal 6 – 3 post Panamax container cranes ($33.4 million)
- Umatilla Terminal Access Road ($1 million)

Why is it important?

Capacity expansion projects at ports are economic development projects. These improvements provide the additional freight handling capacity to support economic development. They are also essential to maintaining and improving Oregon ports' competitive position among west coast ports. Continued reliance on existing docks, cranes, rail facilities and highway access could result in loss of business to more up-to-date and efficient ports.

What happens if the investment is not made?

Attracting development and growing the economy is difficult when the necessary transportation infrastructure is not available to support the development.

How much does the investment cost?

Improvements like the examples listed above are multifaceted investments in the transportation infrastructure. Additional marine capacity must be supported by improved rail and highway access to ports and vice-versa. Annual investments could be made in the transportation infrastructure at ports:

- $35 million per year – additional vessel and freight handling capacity in channels, docks and equipment
- $25 million per year – additional rail line upgrades, rail leads, and storage tracks.
- $1.6 million per year – improved road access. Note that city and county arterial roads make up the first and last "leg" of most freight routes. Investments to improve the capacity county and city roads and streets are estimated to be in range of the $200 million per year.