

**ANALYSIS OF THE *CONNECT*
OREGON PROGRAM THROUGH TWO
PROJECT SELECTION CYCLES**

Final Report

SPR 304-561



**ANALYSIS OF THE *CONNECT* OREGON PROGRAM
THROUGH TWO PROJECT SELECTION CYCLES**

Final Report

SPR 304-561

by

Teddie A. Baker and Michael E. Bufalino
Oregon Department of Transportation
555 13th Street NE
Salem, Oregon 97301

Mark L. Ford
Mark Ford and Associates LLC
4582 Brock Loop South
Salem, Oregon 97302

and

Steven R. Kale
S R Kale Consulting LLC
2750 Jory Hill Road South
Salem, Oregon 97306

for

Oregon Department of Transportation
Research Section
200 Hawthorne Ave. SE, Suite B-240
Salem OR 97301-5192

and

Federal Highway Administration
400 Seventh Street, SW
Washington, DC 20590-0003

August 2009

1. Report No. FHWA-OR-RD-10-04		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Analysis of the <i>ConnectOregon</i> Program Through Two Project Selection Cycles				5. Report Date August 2009	
				6. Performing Organization Code	
7. Author(s) Teddie A. Baker and Michael E. Bufalino Oregon Department of Transportation 555 13 th Street NE Salem, Oregon 97301 Teddie.A.Baker@odot.state.or.us Mark@MarkFordAssociates.com Michael.Bufalino@state.or.us Steven R. Kale S R Kale Consulting LLC 2750 Jory Hill Road South Salem, Oregon 97306 steve@srkaleconsult.com				8. Performing Organization Report No.	
9. Performing Organization Name and Address Oregon Department of Transportation Research Section 200 Hawthorne Ave. SE, Suite B-240 Salem, OR 97301-5192				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. SPR 304-561	
12. Sponsoring Agency Name and Address Oregon Department of Transportation Research Section 200 Hawthorne Ave. SE, Suite B-240 Salem, OR 97301-5192				13. Type of Report and Period Covered Final Report	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract The Oregon Legislature passed a law establishing the Multimodal Transportation Fund in 2005. The fund was part of what became known as the <i>ConnectOregon</i> program, with the purpose of making public and private investments in aviation, marine, rail, and transit. The legislation provided \$100 million in state lottery bond revenues to fund the program. In 2007, the legislature provided another \$100 million. For the \$200 million available through <i>ConnectOregon</i> , a total of 181 project applications were received, and 73 were selected for funding. By June 30, 2009, 27 projects had been completed, and most of the others were under construction or in design. This report is intended to help inform other states considering a collaborative approach to multimodal transportation funding programs. The report is comprised of the following sections: <ul style="list-style-type: none"> • an overview of <i>ConnectOregon</i> legislation and administration; • procedures for submitting, reviewing, evaluating, and prioritizing <i>ConnectOregon</i> applications and for making final funding recommendations; • a comparison of <i>ConnectOregon</i> I and <i>ConnectOregon</i> II results by region, mode, and size of funding request; and • a discussion of participant feedback and lessons learned. 					
17. Key Words CONNECT OREGON, MULTIMODAL TRANSPORTATION FUNDING, FUNDING PROGRAM			18. Distribution Statement Copies available from NTIS, and online at http://www.oregon.gov/ODOT/TD/TP_RES/		
19. Security Classification (of this report) Unclassified		20. Security Classification (of this page) Unclassified		21. No. of Pages 38	22. Price

SI* (MODERN METRIC) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS					APPROXIMATE CONVERSIONS FROM SI UNITS				
Symbol	When You Know	Multiply By	To Find	Symbol	Symbol	When You Know	Multiply By	To Find	Symbol
<u>LENGTH</u>					<u>LENGTH</u>				
in	inches	25.4	millimeters	mm	mm	millimeters	0.039	inches	in
ft	feet	0.305	meters	m	m	meters	3.28	feet	ft
yd	yards	0.914	meters	m	m	meters	1.09	yards	yd
mi	miles	1.61	kilometers	km	km	kilometers	0.621	miles	mi
<u>AREA</u>					<u>AREA</u>				
in ²	square inches	645.2	millimeters squared	mm ²	mm ²	millimeters squared	0.0016	square inches	in ²
ft ²	square feet	0.093	meters squared	m ²	m ²	meters squared	10.764	square feet	ft ²
yd ²	square yards	0.836	meters squared	m ²	m ²	meters squared	1.196	square yards	yd ²
ac	acres	0.405	hectares	ha	ha	hectares	2.47	acres	ac
mi ²	square miles	2.59	kilometers squared	km ²	km ²	kilometers squared	0.386	square miles	mi ²
<u>VOLUME</u>					<u>VOLUME</u>				
fl oz	fluid ounces	29.57	milliliters	ml	ml	milliliters	0.034	fluid ounces	fl oz
gal	gallons	3.785	liters	L	L	liters	0.264	gallons	gal
ft ³	cubic feet	0.028	meters cubed	m ³	m ³	meters cubed	35.315	cubic feet	ft ³
yd ³	cubic yards	0.765	meters cubed	m ³	m ³	meters cubed	1.308	cubic yards	yd ³
NOTE: Volumes greater than 1000 L shall be shown in m ³ .									
<u>MASS</u>					<u>MASS</u>				
oz	ounces	28.35	grams	g	g	grams	0.035	ounces	oz
lb	pounds	0.454	kilograms	kg	kg	kilograms	2.205	pounds	lb
T	short tons (2000 lb)	0.907	megagrams	Mg	Mg	megagrams	1.102	short tons (2000 lb)	T
<u>TEMPERATURE (exact)</u>					<u>TEMPERATURE (exact)</u>				
°F	Fahrenheit	(F-32)/1.8	Celsius	°C	°C	Celsius	1.8C+32	Fahrenheit	°F

*SI is the symbol for the International System of Measurement

DISCLAIMER

This document is disseminated under the sponsorship of the Oregon Department of Transportation and the United States Department of Transportation in the interest of information exchange. The State of Oregon and the United States Government assume no liability of its contents or use thereof.

The contents of this report reflect the view of the authors who are solely responsible for the facts and accuracy of the material presented. The contents do not necessarily reflect the official views of the Oregon Department of Transportation or the United States Department of Transportation.

The State of Oregon and the United States Government do not endorse products of manufacturers. Trademarks or manufacturers' names appear herein only because they are considered essential to the object of this document.

This report does not constitute a standard, specification, or regulation.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	BACKGROUND.....	1
2.0	OVERVIEW OF THE <i>CONNECT</i> OREGON PROGRAM.....	3
2.1	LEGISLATION	3
2.2	PROGRAM ADMINISTRATION.....	5
2.3	ADMINISTRATIVE RULE	6
2.4	PUBLIC OUTREACH	6
2.5	PROCESS FOR REVIEWING APPLICATIONS AND SELECTING PROJECTS FOR FUNDING	7
2.5.1	<i>Submission of Applications (Step 1)</i>	8
2.5.2	<i>Completeness and Feasibility Reviews (Steps 2 and 3)</i>	8
2.5.3	<i>Committee Review (Steps 4, 5, and 6)</i>	9
2.5.4	<i>Final Recommendations and Approval of Applications for Funding (Steps 7 and 8)</i>	11
3.0	APPLICATIONS SUBMITTED AND APPROVED FOR FUNDING	13
3.1	APPLICATIONS SUBMITTED AND APPROVED FOR FUNDING BY REGION	15
3.2	APPLICATIONS SUBMITTED AND APPROVED FOR FUNDING BY MODE	16
3.3	APPLICATIONS SUBMITTED AND APPROVED BY AMOUNT OF FUNDING REQUESTED.....	17
4.0	PROJECT STATUS	19
5.0	PARTICIPANT FEEDBACK AND LESSONS LEARNED	21
5.1	PARTICIPANT FEEDBACK.....	21
5.2	LESSONS LEARNED	21
6.0	CONCLUSION	25
7.0	REFERENCES.....	27

LIST OF TABLES

Table 2.1: Comparison of Legislation for <i>ConnectOregon</i> I and <i>ConnectOregon</i> II	4
Table 2.2: <i>ConnectOregon</i> II Modal Review Outline	10
Table 3.1: Examples of Applications Approved for Funding.....	15
Table 3.2: Applications Submitted and Approved by Region.....	16
Table 3.3: Applications Submitted and Approved by Mode	17
Table 5.1: Selected Comments from Members of the Final Review Committee	22

LIST OF FIGURES

Figure 2.1: <i>ConnectOregon</i> Regions	5
Figure 2.2: <i>ConnectOregon</i> II Review and Selection Process.....	7
Figure 3.1: <i>ConnectOregon</i> I: Selected Projects	13
Figure 3.2: <i>ConnectOregon</i> II: Selected Projects	14

1.0 INTRODUCTION

Oregon lawmakers in 2005 approved \$100 million in state lottery bond revenues for a Multimodal Transportation Fund, part of a new program known as *ConnectOregon* (ODOT 2009a; Rodwell, Jackley, and Kale 2007). Funds were to be used for grants and loans to support air, marine, rail, and transit improvements and could not be used for projects that were eligible for highway gas tax funding. Legislation passed in 2007 for a second phase of the program; it was referred to as *ConnectOregon II* and provided another \$100 million of state lottery bond revenues.

Together, the two phases of *ConnectOregon* were intended to improve connections between the highway system and other modes of transportation, to better integrate components of the transportation system, and to improve the flow of commerce and reduce delays. This report has the following objectives:

- provide an overview of *ConnectOregon* legislation and administration;
- summarize procedures for submitting, reviewing, evaluating, and prioritizing *ConnectOregon* applications and for making final funding recommendations;
- compare *ConnectOregon I* and *ConnectOregon II* results by region, mode, and size of funding request; and
- discuss participant feedback and lessons learned.

1.1 BACKGROUND

States across the nation need more funding for transportation infrastructure investments. Funding challenges are being addressed in part by federal, state, and local funding sources, and in part by the private sector. Federal surface transportation funding legislation identifies programs for highways and transit and to a lesser extent for other components of the transportation system. Each state has its own funding programs for transportation improvements. Local jurisdictions also may have programs for generating revenues to invest in transportation. Transportation funding is often restricted in how it can be used. In many states, including Oregon, highway gas tax revenues can only be used for roadway improvements. Multimodal funding sources are few in number and widely scattered geographically.

Several recent studies review funding sources for modal and multimodal freight transportation projects. The Transportation Research Board in 2003 published a National Cooperative Highway Research Program (NCHRP) report on *Financing and Improving Land Access to U.S. Intermodal Cargo Hubs* (Shafran and Strauss-Weider 2003). The report reviews access improvements for a number of major cargo hubs. It also discusses federal and state programs for financing improvements, including 21 state-level funding mechanisms in 17 states.

The Federal Highway Administration (FHWA) published a 2007 guidebook identifying federal funding programs and financing tools, state grant and loan programs, and other funding methods and tools (FHWA 2007). The guidebook reviews programs authorized through SAFETEA-LU (Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users) as well

as programs from other federal agencies. The guidebook also identifies federal financing tools such as the TIFIA (Transportation Infrastructure Finance and Innovation Act) credit program, RRIF (Rail Rehabilitation and Improvement Financing), State Infrastructure Banks, Garvee Bonds, and private activity bonds. At the state level, the guidebook provides 27 examples of grant and loan programs in 17 states, and it presents case studies of freight financing in 31 states. Of the 27 examples, 15 are identified as applicable to more than one mode.

To obtain funding from government programs, applicants typically need to compete with one another. This may include providing information for criteria established through a program's authorizing legislation or set by administrative bodies. It may also include evaluation and ranking of applications or projects submitted for funding. Freight project evaluation criteria often fall into the categories of mobility, economic development effects, safety/security, and other freight-friendly areas, according to a recent guidebook published through the NCHRP program (*Cambridge Systematics, Inc., Prime Focus, LLC, and Heanue 2007*). Similarly, another NCHRP freight guidebook identifies categories of criteria for evaluating and ranking projects in metropolitan areas as follows: safety and security, mobility and system performance, economic development and land use, growth management, intermodalism and multimodalism, environmental impact, and quality of life (*Cambridge Systematics, Inc. 2007*). Some of the criteria for evaluating and ranking freight projects would also apply to passenger projects and multimodal projects.

Several examples illustrate the usage of prioritizing criteria. In Colorado, regional planning commissions prepare transportation plans identifying and prioritizing the long-range transportation needs for all modes (*CDOT 2009*). In Missouri, a "Framework for Transportation Planning and Decision Making" is used to score different types of projects from highway capacity to public transit (*Cambridge Systematics, Inc. and HDR, Inc 2007*). In Washington State, the Freight Mobility Strategic Investment Board uses about 25 factors to prioritize rail and highway projects for funding (*Schmidt 2007*).

In Oregon, the Oregon Transportation Commission (OTC) and the Oregon Department of Transportation (ODOT) have developed eligibility criteria and prioritization factors for modernization, pavement preservation, and bridge replacement and rehabilitation projects that are included in the Statewide Transportation Improvement Program (*ODOT 2009b*). Projects must satisfy the eligibility criteria before they are given further consideration for funding. The prioritization factors are to be used to ensure consistent consideration of the relative merits of projects.

Awareness of the need for a multimodal funding program in Oregon has been growing over the last 20 years. Factors contributing to this awareness include the Intermodal Surface Transportation Efficiency Act of 1991 and more recent federal surface transportation funding legislation, the formation of an Oregon Freight Advisory Committee (OFAC) in 1998, and completion of a statewide freight study in 1999 (*ODOT 1999*). With *ConnectOregon*, the Oregon legislature created a program to address multimodal transportation needs that were not adequately funded through other programs. Public- and private-sector parties can apply for funding through the program. Applicants are required to provide matching funding, which can come from public or private sources. The remainder of this report provides more detail on the *ConnectOregon* program.

2.0 OVERVIEW OF THE *CONNECT* OREGON PROGRAM

With the passage of Senate Bill 71, the Oregon Legislature created the *ConnectOregon* program (*Oregon Legislature 2005*). House Bill 2278, passed two years later, provided a second round of funding, known as *ConnectOregon II* (*Oregon Legislature 2007*). The legislature's creation of the program was a key step toward implementing multimodal provisions in the 2006 *Oregon Transportation Plan* as well as a response to the need for transportation investments to support the state's economy (*ODOT 2006*). Creation of the program reflected a widespread view that government and businesses lacked sufficient capital and technical capacity (e.g., engineering, labor, and equipment) to undertake multimodal transportation projects, and that public investment in such projects could help promote job creation. The following discussion provides more detail about the *ConnectOregon I* and *II* legislation, program administration, administrative rules, and processes for submitting, reviewing, evaluating, and selecting applications for funding.

2.1 LEGISLATION

Table 2.1 summarizes key legislative provisions in Senate Bill 71 and House Bill 2278. For *ConnectOregon I*, four modal advisory committees were identified: State Aviation Board, Freight Advisory Committee, and ODOT public transit and rail advisory committees. For *ConnectOregon II*, House Bill 2278 added a marine committee from the state's Economic and Community Development Department.

The legislation identified six considerations for *ConnectOregon I* and five considerations for *ConnectOregon II*. The Oregon Transportation Commission (OTC) was required to use these considerations in making decisions on which applications to approve for funding.

For *ConnectOregon I*, 15 percent of the funding was directed to each of five regions (Figure 2.1) identified in Senate Bill 71 and which largely corresponded with ODOT's five administrative regions. For *ConnectOregon II*, 10 percent of the funding was directed to each of the five regions identified under *ConnectOregon I*.

House Bill 2278 stipulated that recipients of *ConnectOregon II* funding would pay two percent of their project's total cost to ODOT to conduct a statewide multimodal transportation study. This provision was not included in the legislation for *ConnectOregon I*.

Table 2.1: Comparison of Legislation for *ConnectOregon I* and *ConnectOregon II*

<i>ConnectOregon I</i>	<i>ConnectOregon II</i>
<ul style="list-style-type: none"> • Prior to selecting aeronautic and airport transportation projects, the commission shall solicit recommendations from the State Aviation Board. • Prior to selecting freight transportation projects, the commission shall solicit recommendations from the Freight Advisory Committee. • Prior to selecting public transit and rail projects, the commission shall solicit recommendations from its public transit and rail advisory committees. 	<ul style="list-style-type: none"> • Prior to selecting aeronautic and airport transportation projects, the commission shall solicit recommendations from the State Aviation Board. • Prior to selecting freight transportation projects, the commission shall solicit recommendations from the Freight Advisory Committee. • Prior to selecting public transit and rail projects, the commission shall solicit recommendations from its public transit and rail advisory committees. • Prior to selecting marine projects, the commission shall solicit recommendations from the Economic and Community Development Department.
	<p>In addition to any other fees or payments required for grants or loans from the Multimodal Transportation Fund, between July 1, 2007, and July 1, 2013, each recipient of moneys from the fund shall pay two percent of the recipient's total project costs to the Department of Transportation. The department shall use the funds received under this subsection to conduct a statewide multimodal study of the transportation system. . . .</p>
<p>In selecting transportation projects the commission shall consider</p> <ul style="list-style-type: none"> • Whether a proposed transportation project reduces transportation costs for Oregon businesses, • Whether a proposed transportation project benefits or connects two or more modes of transportation, • Whether a proposed transportation project is a critical link in a statewide or regional transportation system that will measurably improve utilization and efficiency of the system, • How much of the cost of a proposed transportation project can be borne by the applicant for the grant or loan, • Whether a proposed transportation project creates construction and permanent jobs in this state, and • Whether a proposed transportation project is ready for construction. 	<p>In selecting transportation projects the commission shall consider:</p> <ul style="list-style-type: none"> • Whether a proposed transportation project reduces transportation costs for Oregon businesses or improves access to jobs and sources of labor, • Whether a proposed transportation project results in an economic benefit to this state, • Whether a proposed transportation project is a critical link connecting elements of Oregon's transportation system that will measurably improve utilization and efficiency of the system, • How much of the cost of a proposed transportation project can be borne by the applicant for the grant or loan from any source other than the Multimodal Transportation Fund, and • Whether a proposed transportation project is ready for construction.
<p>The Oregon Transportation Commission shall allocate at least 15 percent of the net proceeds of the lottery bonds authorized by section 2 of this 2005 Act to each region described in this section.</p>	<p>To the extent that proposed transportation projects meet the qualifications established by the Oregon Transportation Commission by rule, the commission shall allocate at least 10 percent of the net proceeds of the lottery bonds authorized by section 1 of this 2007 Act to each region described in this section.</p>

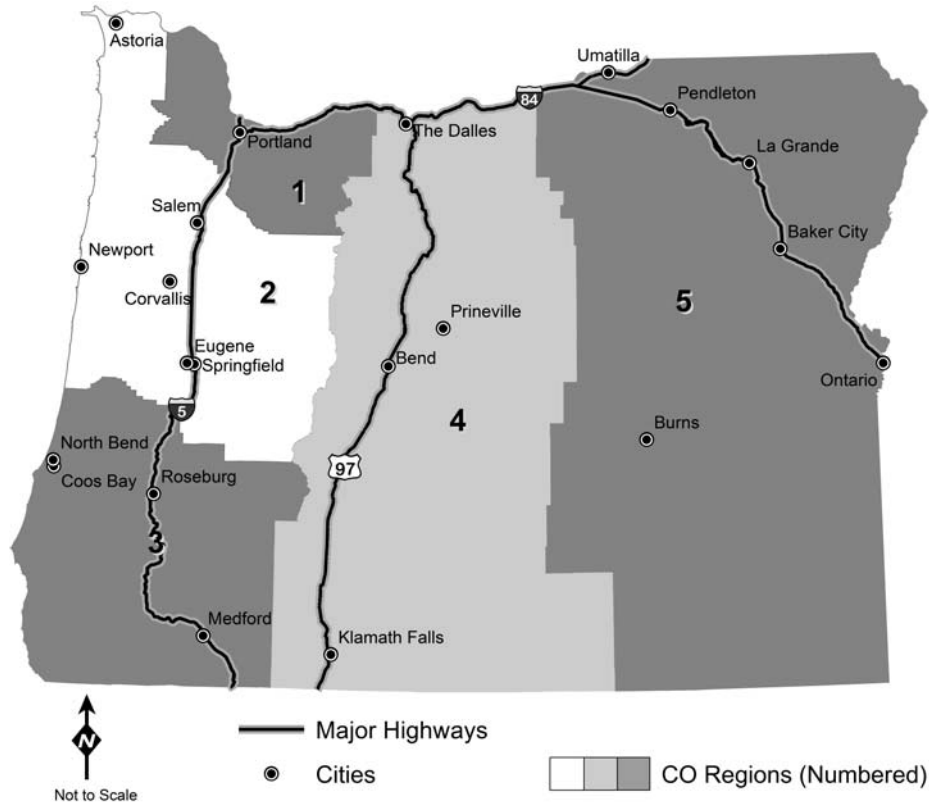


Figure 2.1: *ConnectOregon* Regions

2.2 PROGRAM ADMINISTRATION

To oversee the *ConnectOregon* I program, ODOT formed a steering committee comprised of ODOT’s interim director, chief of staff, chief administrators from modal divisions, and the Freight Mobility Section (FMS) manager. The FMS was given lead responsibility for program management, including coordination of ODOT policy and technical team meetings, development of program documents such as the funding application and instructions for reviewers, and communication with applicants and application reviewers.

For *ConnectOregon* II, ODOT formed a policy team chaired by ODOT’s Transportation Development Division administrator and comprised of executive level managers from the ODOT Director’s office and modal divisions. An ODOT legislative liaison was assigned to serve on the policy team and to coordinate communications with legislators, the Governor’s office, leadership of other state agencies, and other elected officials. ODOT also formed a technical team managed by the FMS manager and comprised of FMS staff, ODOT’s Administrative Rules Coordinator, and designees from the Oregon Department of Aviation, Oregon Economic and Community Development Department (OECDD), and ODOT’s Communications Division, Transit Division, Rail Division, and Highway Division (Local Governments Section).

2.3 ADMINISTRATIVE RULE

To establish guidance for program participants, ODOT developed an administrative rule for *ConnectOregon I*, and updated the rule for *ConnectOregon II* (*Oregon State Archives 2009*). The rule establishes standards for determining project eligibility and application procedures for grants or loans. Included in the rule are discussions of:

- definitions,
- application submission periods, requirements, and review,
- project selection,
- grant and loan awards and match, and
- project administration, including
 - provisions for project agreements between ODOT and applicants receiving funding approval,
 - sanctions for funding recipients in non-compliance with program requirements,
 - procedures for protests by project applicants or recipients, and
 - provisions for waiving non-statutory requirements.

The version of the rule for *ConnectOregon II* differs slightly from the version for *ConnectOregon I*, primarily reflecting the differences in legislative language between Senate Bill 71 and House Bill 2278. The process for updating the rule included review by the *ConnectOregon II* policy team. Additionally, ODOT's *ConnectOregon* legislative liaison served as the hearing officer for the public hearing held for the updated rule.

2.4 PUBLIC OUTREACH

Throughout the *ConnectOregon* process, ODOT held public outreach sessions and solicited and tracked comments from potential and actual participants in the program. Prior to the due dates for submitting *ConnectOregon I* applications, ODOT staff made PowerPoint presentations to more than 50 groups statewide. For *ConnectOregon II*, ODOT sponsored five pre-application public meetings around the state as well as a one-day videoconference. The purpose of this outreach was to raise awareness, present program information, and answer questions from potential applicants. Fewer pre-application public outreach meetings were held for *ConnectOregon II* than for *ConnectOregon I*, because ODOT believed public awareness was much greater for the second round of funding. For both *ConnectOregon I* and *II*, ODOT provided a web site and periodic e-mail updates to communicate with interested parties.

2.5 PROCESS FOR REVIEWING APPLICATIONS AND SELECTING PROJECTS FOR FUNDING

Legislation for both *ConnectOregon I* and *ConnectOregon II* contained language declaring a state of emergency, which allowed the legislation to go into effect when the governor signed it into law. This highlighted the importance of the program as well as expectations for an efficient and fast-tracked review of applications. For *ConnectOregon I*, the governor signed the bill into law on August 29, 2005. To begin implementing the legislation, ODOT staff prepared application materials and developed a draft administrative rule followed later by a final rule. A similar process occurred with *ConnectOregon II*, which the governor signed into law on August 1, 2007. For both *ConnectOregon I* and *ConnectOregon II*, approximately 320 days passed between the governor's signing of the legislation and the OTC's approval of applications for funding.

The process for reviewing applications and selecting projects for funding for both *ConnectOregon I* and *ConnectOregon II* is shown in Figure 2.2. The discussion below describes the steps in the process and provides examples of where the process differed between the two *ConnectOregon* funding cycles.

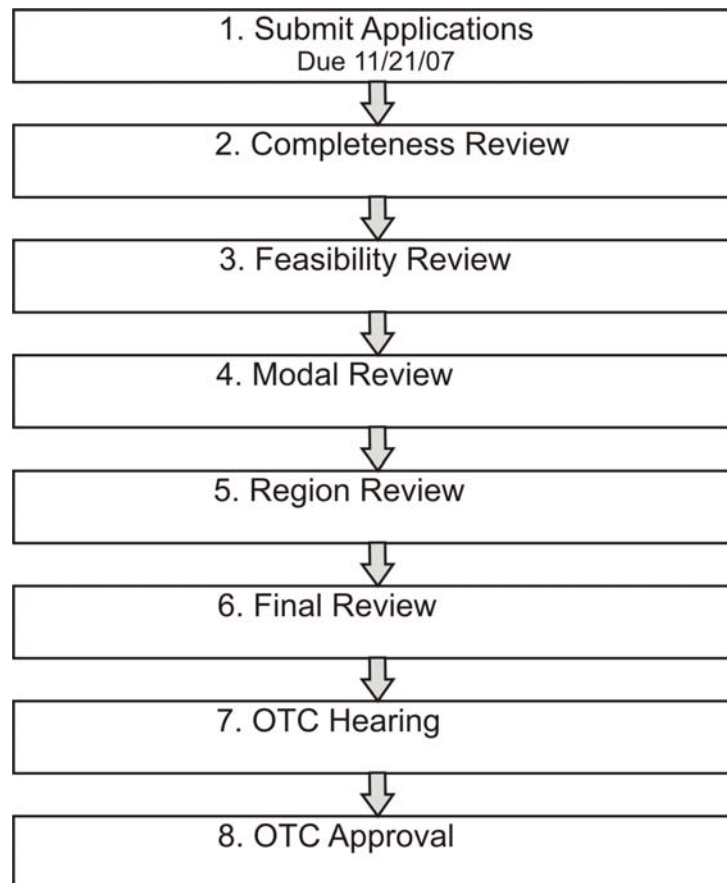


Figure 2.2: *ConnectOregon II* Review and Selection Process

2.5.1 Submission of Applications (Step 1)

To provide more detailed information on applying for *ConnectOregon* funding, ODOT developed application instructions. Similar to *ConnectOregon* I, instructions for *ConnectOregon* II detailed the timeline for submitting an application, procedures for receiving information about the program and getting answers to questions, application process and review, qualifications of applicants, project eligibility, and guidance on filling out and submitting the application (*ODOT 2009c*).

Prior to submitting applications for *ConnectOregon* II, interested parties were asked, but not required, to submit an “Intent to Apply” form. The form was developed to get an indication of how many applications might be submitted, to identify whether additional staff resources might be needed to process the applications, and to help ensure that interested parties received the most current information about the program.

For *ConnectOregon* I, the 65-day application period began on December 14, 2005 and ended on February 17, 2006. The 79-day application period for *ConnectOregon* II occurred from September 3 to November 23, 2007. Compared to *ConnectOregon* I, the application process for *ConnectOregon* II began in fewer days after the bill became law in part as a result of experiences learned from the *ConnectOregon* I process. The longer application period for *ConnectOregon* II reflected a desire among applicants to have more time to complete applications. Additionally, the *ConnectOregon* II application had the following features:

- Included a revised set of considerations per provisions in HB 2278 and additional language regarding legal authority and other legal issues;
- Requested more quantitative data, more precise information about budgets, and more detailed information about milestones; and
- Incorporated a variety of structured checklists.

2.5.2 Completeness and Feasibility Reviews (Steps 2 and 3)

After submission of applications, the review and evaluation process began. Early steps for both *ConnectOregon* I and *ConnectOregon* II included a “completeness review” during which agency staff reviewed each application to see if all of the requested items were submitted. Other early steps included eligibility and feasibility reviews. For the latter, an independent consultant worked with agency staff to review technical information in the applications. If the reviews indicated more information was needed, agency staff would ask applicants to provide the missing materials by a specified date. For applications where staff or consultant review suggested a project was ineligible or technically infeasible, the steering committee for *ConnectOregon* I or the policy committee for *ConnectOregon* II decided whether the applications could proceed through the review and evaluation process. ODOT staff and consultants conducted completeness and feasibility reviews in approximately one month for *ConnectOregon* I and in 40 days for *ConnectOregon* II.

2.5.3 Committee Review (Steps 4, 5, and 6)

Modal, regional, and final review committees evaluated and ranked applications after the completeness and feasibility reviews were completed. As noted above, the Oregon legislature authorized the four modal review committees for *ConnectOregon* I and five modal review committees for *ConnectOregon* II. The OTC authorized the creation of the regional and final review committees, which were not required in the authorizing legislation.

Membership for the regional committees was drawn primarily from ODOT Area Commissions on Transportation (ACTs), which are OTC-chartered advisory bodies that address all aspects of the transportation system, including how regional and local transportation issues affect the statewide system (*ODOT 2009d*). Two areas which do not have ACTs, the Eugene-Springfield and Portland metropolitan areas, were represented on regional committees by representatives of local elected bodies and, in the case of the Portland area, by representatives of the business community.

Review committees for *ConnectOregon* I established their own procedures to evaluate and prioritize projects. One result was substantial variation in procedures used among committees. Thus ODOT developed “Instructions to Reviewers for *ConnectOregon* II Projects” to help standardize the process among committees and to provide guidance for committee members (*ODOT 2009e*). The guidance document:

- detailed how ODOT staff would facilitate a completeness review of applications;
- provided contact information for *ConnectOregon* II staff as well as instructions to staff, chairs, and members of each review committee; and
- identified the dates when the OTC would hold a public hearing and when it would select projects for funding.

To assist committee members, *ConnectOregon* II staff developed forms and templates to record and assess information from the applications. *ConnectOregon* II staff also provided committee staff with a variety of materials, the majority of which were developed at the same time the application was developed. A few elements of the reviewer information were developed later, including a collaborative review of the economic benefit to the state. This review was completed by ODOT economists and business development officers from the OECDD. The ODOT *ConnectOregon* legislative liaison was instrumental in coordinating this review process. Other work by staff included assembling and delivering application materials, and sorting applications into tiers as follows:

- Tier 1 (thoroughly meets all five *ConnectOregon* II factors that the legislation and administrative rule directed the OTC to consider for funding approval);
- Tier 2 (thoroughly meets all three strategic considerations);
- Tier 3 (meets one or two of the strategic considerations); and
- Tier 4 (does not meet thoroughly any of the three strategic considerations).

“Thoroughly” was defined as demonstrating “through application responses and through the requested independent verification that the project will accomplish the intent of the legislation” (18). “Strategic” considerations were those relating to whether the proposed project a) reduces transportation costs for Oregon businesses or improves access to jobs and sources of labor; b) results in an economic benefit to Oregon; and c) is a critical link connecting elements of Oregon’s transportation system and will measurably improve utilization of the system.

The modal review process is described in Table 2.2. As shown, *ConnectOregon II* staff received applications and prepared documents for use by the committees. Committee staff then made presentations to the various committees. For each committee, staff performed the initial sorting of projects which was then reviewed and modified by the committee. Committees then ranked and prioritized projects. Staff prepared a final report on committee findings which were reviewed and approved by committee chairs.

Table 2.2: ConnectOregon II Modal Review Outline

Step	Task	Explanation	Responsible Party
Pre Meeting	Delivery of information to modal committee staff	Delivery of project documents including: applications, feasibility reports, and standardized committee reporting material	<i>ConnectOregon II</i> staff
	Staff presentation for meeting	Modal review committee staff ensures all documents are distributed to the committee members Modal review committee staff sort projects into tiers	Committee staff
Meetings	Sorting	Draft project sorting is presented to modal review committee Modal review committee discusses staff sorting and adopts or amends staff sorting	Committee staff Committee
		Ranking	Projects are ranked as High, Medium, or Low Committee
	Prioritizing	Projects are prioritized (1 through n, with 1 indicating the highest ranking)	Committee
Post Meeting	Reporting	Complete standardized committee report material and obtain approval of the report by the committee chair	Committee staff

Regional committees followed a similar review process. In both modal and regional review processes staff’s initial sorting of applications into tiers was modified when committee member views differed from staff views. Throughout the review process, instructions to reviewers were updated with refinements and clarifications, such as directions on applying the economic benefit review during the tiering process, defining “construction readiness,” and clarifying how to treat matching funds greater than 20 percent of a project’s cost.

Modal and region reviews occurred concurrently and took 60 days for *ConnectOregon* I. For *ConnectOregon* II, modal reviews took about 40 days, and were followed by region reviews which required a similar number of days. The revised modal and region review process for *ConnectOregon* II reflected the thinking that region reviewers would benefit from knowing the results of the modal review process prior to beginning the region reviews.

2.5.4 Final Recommendations and Approval of Applications for Funding (Steps 7 and 8)

To facilitate steps 7 and 8, *ConnectOregon* staff provided a final review committee with recommendations from the other committees, worked with the OTC to schedule a public hearing and a meeting date for the final review committee, and provided other staff support for the final review committee. Over a two-day period, the final review committee, which was comprised of representatives from the modal and regional committees, reviewed rankings of applications from the other committees prior to making its recommendations. To help coordinate the decision-making process, ODOT contracted with an independent facilitator. Applicants for funding were not allowed to make presentations to the final review committee.

After reviewing the materials, the final review committee developed its recommendations and delivered them to the ODOT Director. For *ConnectOregon* II, the recommendations were presented in a “Final Recommendation Report,” which documented a) development of the *ConnectOregon* II program; b) the application review process by the modal and regional review committees; and c) actions of the final review committee (*ODOT*). The report included a variety of appendices, including committee member comments about the overall process. The final review committee submitted its report to the OTC, which then held a public hearing and discussion of the recommended projects followed a month later by OTC approval of applications recommended for funding.

3.0 APPLICATIONS SUBMITTED AND APPROVED FOR FUNDING

For *ConnectOregon I*, 103 applications were submitted for funding. After completeness, feasibility, and eligibility reviews, three applications were declared ineligible and one was withdrawn. The remaining 99 applicants requested \$227 million in funding. In July 2006 the OTC approved 43 applications totaling approximately \$99.5 million in funding. The projects funded are shown in Figure 3.

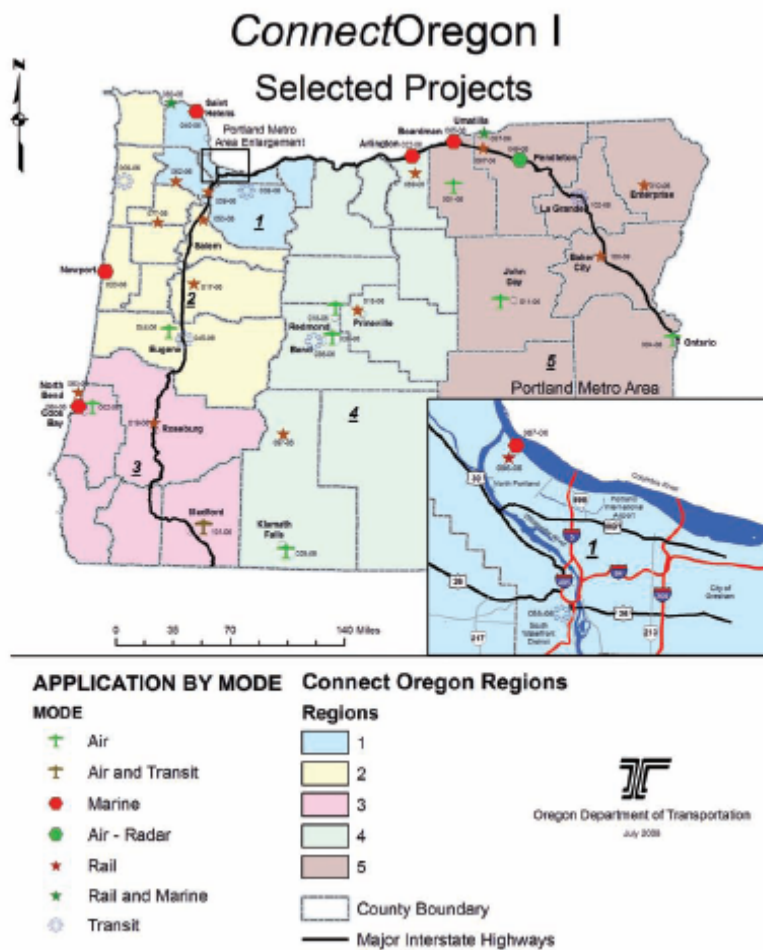


Figure 3.1: *ConnectOregon I*: Selected Projects

For *ConnectOregon II*, 78 applications were submitted, seven were declared ineligible or not feasible, and one was withdrawn. The remaining 70 applicants requested \$179 million in funding. In June 2008 the OTC approved 30 applications totaling approximately \$99.6 million in funding. The projects funded in *ConnectOregon II* are shown in Figure 4.

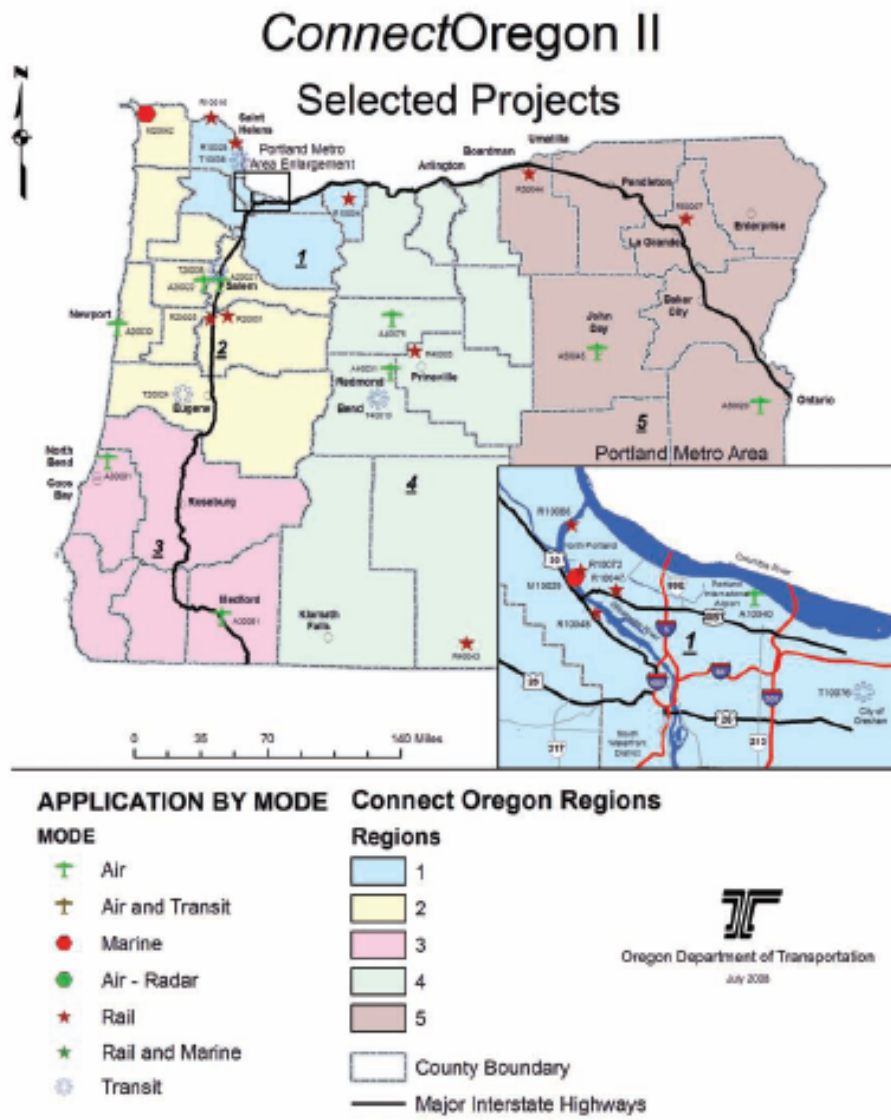


Figure 3.2: *ConnectOregon II*: Selected Projects

For the two funding cycles together, 43 percent of the submitted applications were approved for funding, and of the funding requested, 48 percent was approved. Three applications were approved for grant and loan funding; none was approved solely for loans. Table 3.1 provides selected examples of applications approved for funding. Several of the completed and proposed projects are highlighted in a brochure developed for the *ConnectOregon* program (ODOT 2009f). The following discussion summarizes some of the key findings by region, mode, and size class of funding requested.

Table 3.1: Examples of Applications Approved for Funding

ConnectOregon I	ConnectOregon II
Region 1	Region 1
Portland and Western Railroad: Tigard Rail Switching Yard	BNSF Railway: East St. Johns Siding Extension
Port of Portland: Container Terminal 6 – Post Panamax Crane	Port of Portland: PDX North Runway Extension
Region 2	Region 2
City of Lebanon/Albany & Eastern Railroad: Lebanon Reload Facility	Port of Astoria: Pier 2 North Face Upgrade
Lane Transit District/City of Springfield: Pioneer Parkway Bus Rapid Transit	Salem-Keizer Transit District: Keizer Transit Center
Region 3	Region 3
Coos County/North Bend Airport: Airport Terminal Expansion	Coos County Airport District: Air Traffic Control Tower, Southwest Oregon Regional Airport
Rogue Valley International-Medford Airport: Multimodal Improvement Project	Medford Sky Air Cargo LLC: Multimodal Express Air Cargo Expansion
Region 4	Region 4
City of Redmond: Redmond Municipal Airport Terminal Expansion	City of Bend: Central Oregon Intermodal Transit Center
Columbia Plateau Growers: Shutler Rail Freight Siding	City of Redmond: Air Cargo Ramp
Region 5	Region 5
Port of Morrow: Terminal 3 Marine Transportation Improvements	Grant County: Airport Terminal Building
Port of Umatilla: Upland Distribution Center	Port of Morrow: Morrow Multimodal Rail Logistics Center

3.1 APPLICATIONS SUBMITTED AND APPROVED FOR FUNDING BY REGION

Table 3.2 shows the number of applications submitted and approved for funding by region. Region 1 includes the Portland metropolitan area, which accounts for about 45 percent of Oregon’s population (*US Census Bureau 2007*). Region 2 includes the Corvallis, Eugene-Springfield, and Salem metropolitan areas, and accounts for about 30 percent of the state’s population. Region 3 includes the Ashland-Medford metropolitan area, and accounts for about 13 percent of the state’s population. Region 4 includes the Bend metropolitan area and accounts

for about eight percent of the state’s population. No metropolitan areas are located in Region 5, which accounts for about five percent of the state’s population (*US Census Bureau 2007*).

Table 3.2: Applications Submitted and Approved by Region

Region	Applications Submitted				Applications Approved			
	CO I		CO II		CO I		CO II	
	#Apps	\$Million	#Apps	\$Million	#Apps	\$Million	#Apps	\$Million
Region 1	20	48.8	18	58.4	9	27.3	11	46.1
Region 2	24	50.0	27	57.6	7	19.3	8	22.3
Region 3	13	26.8	4	11.9	5	16.9	2	5.4
Region 4	17	44.0	15	38.5	8	17.6	5	10.6
Region 5	25	48.2	14	48.4	13	16.8	4	15.1
Multiple Regions	4	17.6	0	0	1	1.6	0	0
Total	103	235.4	78	214.8	43	99.5	30	99.6

CO I=ConnectOregon , CO II=ConnectOregon II

Over the two funding cycles, applicants from Region 1 had the most applications approved for funding, the highest success rate (approved applications as a proportion of submitted applications) and the highest success rate of funding approved. Applicants from Region 2 submitted the most applications, requested the most funding, and had the lowest success rate of approved applications among the regions. Applicants from Region 3 submitted the fewest applications, requested the least funding, and had the fewest applications approved for funding. Applicants from Region 4 submitted the second fewest applications, requested the second lowest amount of funding, and had the second lowest success rate of approved applications and approved funding. Applicants from Region 5 submitted the second greatest number of applications; from ConnectOregon I to ConnectOregon II, Region 5 experienced the biggest drop in the number and percentage of applications approved for funding. Only one multiple-region application was approved for funding over the two funding cycles.

3.2 APPLICATIONS SUBMITTED AND APPROVED FOR FUNDING BY MODE

Table 3.3 shows applications submitted and approved for each mode over the two funding cycles. Of the four modes, aviation applicants had the lowest success rate of approved applications and approved funding. Marine applicants submitted the fewest applications, requested the least funding, and had the highest success rate of approved applications and approved funding. Rail applicants submitted the most applications, requested the most funding, had the most applications approved for funding, and had more funding approved than the other three modes combined. Transit applicants submitted the second fewest applications, requested the second lowest amount of funding, and had a success rate of approved applications that was

about the same as the success rate for applicants statewide. While, for *ConnectOregon I*, multiple-modes had an average success rate, no applications were approved for the second cycle. Overall, multiple-mode applicants were less successful than single-mode applicants in obtaining funding approval.

Table 3.3: Applications Submitted and Approved by Mode

Mode	Applications Submitted				Applications Approved			
	CO I		CO II		CO I		CO II	
	#Apps	\$Million	#Apps	\$Million	#Apps	\$Million	#Apps	\$Million
Aviation	30	59.5	22	56.1	10	18.3	10	26.9
Marine	13	26.0	6	11.1	7	16.8	2	5.5
Rail	37	90.4	32	109.7	17	39.1	13	56.6
Transit	16	35.7	11	15.0	6	13.8	5	10.6
Multiple Modes	7	23.8	7	22.9	3	11.5	0	0
Total	103	235.4	78	214.8	43	99.5	30	99.6

CO I = ConnectOregon , CO II = ConnectOregon II

3.3 APPLICATIONS SUBMITTED AND APPROVED BY AMOUNT OF FUNDING REQUESTED

The proportion of applications by amount of funding requested was similar for *ConnectOregon I* and *ConnectOregon II*, with 54 percent (CO I) and 60 percent (CO II) requesting \$1 million or more, 25 percent (CO I) and 23 percent (CO II) requesting \$500,000 to \$999,999, and 21 percent (CO I) and 17 percent (CO II) requesting less than \$500,000. While funding requested by amount was similar for *ConnectOregon I* and II, success rates were not. From *ConnectOregon I* to *ConnectOregon II*, the success rate increased by 10 percentage points for applicants requesting \$1 million or more and by six percentage points for applicants requesting \$500,000 to \$999,999, but dropped by 16 percentage points for applicants requesting less than \$500,000.

4.0 PROJECT STATUS

ODOT's Local Government Section (LGS) manages the execution of agreements between ODOT and project applicants, monitors progress toward meeting project milestones and timelines as identified in project agreements, and processes reimbursement requests from grantees. For *ConnectOregon I*, the LGS executed the first agreement with an applicant on October 27, 2006, 107 days after the OTC approved the list of applications to be funded.

For *ConnectOregon II*, the LGS executed the first agreement with an applicant on July 24, 2008, 34 days after the OTC approved the list of applications to be funded. For both *ConnectOregon I* and *ConnectOregon II*, the LGS executed agreements with about three-fourths of the applicants within six months after the OTC approved funding.

For *ConnectOregon I*, 25 projects (58 percent of all projects approved for funding) were completed as of June 30, 2009. The funding approved for these projects was just over one-half of the \$99.5 million approved for all *ConnectOregon I* projects. Of the remaining *ConnectOregon I* projects, eight projects were under construction, five were in design, and five were cancelled as of June 30, 2009. The five cancelled projects were terminated due to business-related reasons, environmental concerns, or contract issues; a few other projects in the construction or design phase have been delayed for similar reasons or concerns. Funding for the cancelled projects was shifted to a previously unfunded project that ranked just below the cut-off point for the 43 projects the OTC initially approved for funding. By region, the most completed projects were in *ConnectOregon Regions 1 and 5*. By mode, aviation and rail accounted for the greatest number of projects completed.

For *ConnectOregon II*, a project to repair flood-damaged rail trackage and one to construct an air cargo apron were the only projects that had been completed by June 30, 2009. Six projects were under construction, 20 projects were in design, one had started but had not proceeded to design, and one had not started. As of June 30, 2009, no shifting of funding had occurred with *ConnectOregon II*.

5.0 PARTICIPANT FEEDBACK AND LESSONS LEARNED

ODOT staff maintained a listing of comments and questions to help understand stakeholder concerns and to develop application and other materials to facilitate the process of developing, reviewing, evaluating, and prioritizing applications. Some of the feedback from participants and lessons learned are discussed below.

5.1 PARTICIPANT FEEDBACK

For *ConnectOregon I*, no formal record of participant comments is available. For *ConnectOregon II*, 23 of 26 final review committee members provided comments on the process for making project funding recommendations to the Director of ODOT (*ODOT*). Their comments, made after they had developed their final recommendations, to some extent reflected views of modal and regional committees from which the final review committee members were selected. A review of the comments suggests a general belief that the process worked well but that a few aspects could be improved. Several committee members expressed hope that *ConnectOregon III* funding would be authorized. Of committee members who participated in the process for both *ConnectOregon I* and *ConnectOregon II*, several thought the process for the latter had improved over the process for the former. A few committee members commented on the ability of applicants requesting relatively small amounts of funding to compete with those requesting higher amounts. Other feedback from *ConnectOregon II* final review committee members can be categorized into program comments and review and evaluation process comments. These are summarized in Table 6.

5.2 LESSONS LEARNED

For *ConnectOregon I*, ODOT received comments from participants in the process and from members of the Final Review Committee. Comments from the final review committee are summarized in Table 5.1.

Table 5.1: Selected Comments from Members of the Final Review Committee

Program Comments
1. Increase the total funding available.
2. Invent a process for funding small (less than \$500,000 or less than \$1 million) projects, perhaps with a set-aside for such projects.
3. Clarify how the funding considerations are to be applied.
4. Improve the process for encouraging loan applications.
5. Make sure transportation needs of rural Oregon are appropriately considered.

Review and Evaluation Process Comments
1. Clarify whether regional review committees are to rank applications for their region only or statewide.
2. Seek ways to obtain more consistency between modal committee rankings and regional committee rankings.
3. Review further the efficacy of whether regional committees should begin their review after completion of reviews by modal committees.
4. Improve the process for sorting applications into High, Medium, and Low tiers.
5. Clarify the requirement for matching funds and how this is addressed in decisions about classifying projects in tiers.
6. More carefully review the completeness and accuracy of information on applications.
7. Develop procedures for better coordination between ODOT regional staff and ODOT <i>ConnectOregon</i> staff.
8. More fully consider the economic benefits of bus and rail transit applications on job development and mobility.
9. More fully consider the economic impact of funding projects in rural areas versus the impact in highly urbanized areas.
10. Include organization represented on name tags for review committee members.

Through these comments, other feedback and experience, staff identified a number of lessons learned. Examples include having modal review groups develop their priority lists before regional review groups develop theirs, identifying consistent methods for ranking applications, and having consistent procedures for public input (*Rodwell, Jackley and Kale 2007*). Each of these was addressed in an in-house implementation plan and other materials developed to facilitate application and review processes for *ConnectOregon II*.

ODOT staff undertook a similar effort to identify lessons learned with *ConnectOregon II*. The lessons are in part based on comments from participants, from staff working with the program, and from other observers. If funding is obtained for future cycles of *ConnectOregon*, the following are some of the possible action items based on lessons learned from the process for *ConnectOregon II*.

- To better understand regional and Area Commission on Transportation (ACT) interests early in the process, consider adding an ODOT regional staff member to the *ConnectOregon* Technical Team.
- Review the usage of in-house staff and consultants to conduct the feasibility review of applications.
- Discontinue usage of the Intent to Apply form.
- In developing the application form questions regarding the considerations to be addressed, consider adding separate questions specific to the mode for which funding is being requested.
- Request more detail on the application form regarding project scope, schedule, budget, and management.
- In the application instructions, provide examples of completed budgets.
- Finalize reviewer instructions prior to the submittal date.
- Define and publish how considerations will be evaluated prior to the due date for applications.
- Have staff from the regions staff the regional review teams.
- Clarify whether there are separate regional and statewide “pots” of funding if the legislature approves additional *ConnectOregon* funding in the future.
- Consider moving the *ConnectOregon* review to time periods when ACTs are not heavily involved with other responsibilities.
- To help ensure a qualified pool of applicants statewide, conduct additional outreach in some parts of the state.

6.0 CONCLUSION

Federal surface transportation funding and other legislation has increased the number of options available for multimodal transportation funding. These programs, however, are few in number and are frequently not applicable to Oregon's transportation funding needs. To expand the availability of funding for non-highway modes, the Oregon Legislature created the *ConnectOregon* program. Since 2005, more than 70 applications for aviation, marine, rail, and transit projects have been authorized for just under \$200 million of funding through *ConnectOregon* I and II. As of June 30, 2009, 27 projects had been implemented, and many of the others were under construction or in the project design phase.

Throughout the phases for submitting applications, reviewing and evaluating applications, and recommending applications for funding, program participants and observers have offered ideas and suggestions for improving the program. ODOT has tracked external and internal input and has made a number of changes designed to improve the program. Accordingly, *ConnectOregon* II legislation differed from *ConnectOregon* I legislation, in part due to input provided by participants in *ConnectOregon* I.

Legislative voting has reflected bi-partisan support for the first two cycles of *ConnectOregon* funding. Both Senate Bill 71 for *ConnectOregon* I and House Bill 2278 for *ConnectOregon* II were passed without a single dissenting vote. The *ConnectOregon* program is one of a number of sources contributing to multimodal investments in the state's transportation system. Private investments as well as investments from other public sources are needed to address the system's short- and long-term funding needs. The strength of the program will depend on a variety of factors, including the strength of Oregon's economy statewide and regionally.

7.0 REFERENCES

Cambridge Systematics, Inc. and HDR, Inc. *NCHRP Report 591: Factors that Support the Planning-Programming Linkage*. TRB, National Research Council, Washington, D.C., 2007. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_591.pdf. Accessed April 5, 2009.

Cambridge Systematics, Inc., Prime Focus, LLC, and K. Heanue. *NCHRP Report 594: Guidebook for Integrating Freight into Transportation Planning and Project Selection Processes*. TRB, National Research Council, Washington, D.C., 2007. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_594.pdf. Accessed April 5, 2009.

Cambridge Systematics, Inc., TransManagement, Inc., TransTech Management, Inc. and K. Heanue. *NCHRP Report 570: Guidebook for Freight Policy, Planning, and Programming in Small- and Medium-Sized Metropolitan Areas*. TRB, National Research Council, Washington, D.C., 2007. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_570.pdf. Accessed April 5, 2009.

CDOT. Statewide/Regional Planning. Colorado Department of Transportation, Denver. <http://www.dot.state.co.us/StatewidePlanning/PlansStudies/>. Accessed April 5, 2009.

FHWA (Federal Highway Administration). *Financing Freight Improvements*, FHWA-HOP-06-108, Washington, D.C., 2007. <http://ops.fhwa.dot.gov/freight/publications/freightfinancing/freightfinancing.pdf>. Accessed April 5, 2009.

ODOT. Freight Moves the Oregon Economy. Oregon Department of Transportation, Salem, 1999. <http://www.oregon.gov/ODOT/TD/TP/FME.shtml>. Accessed April 5, 2009.

ODOT. *2006 Oregon Transportation Plan*. Oregon Department of Transportation, Salem. 2006. <http://www.oregon.gov/ODOT/TD/TP/ortransplanupdate.shtml>. Accessed April 5, 2009.

ODOT. *ConnectOregon* Overview. Oregon Department of Transportation, Salem. <http://www.oregon.gov/ODOT/COMM/CO/overview.shtml>. Accessed April 5, 2009a.

ODOT. Draft Project Eligibility Criteria and Prioritization Factors for the 2010-2013 Development STIP and Construction STIP. Oregon Department of Transportation, Salem. 2009b. <http://www.oregon.gov/ODOT/TD/TP/docs/1013stipcmte/DRAFT2.pdf>. Accessed April 5, 2009.

ODOT. *ConnectOregon II* Application Instructions. Oregon Department of Transportation. Salem. 2009c.

www.oregon.gov/ODOT/COMM/CO/docs/APPLICATION_INSTRUCTIONS.pdf. Accessed April 5, 2009.

ODOT. Area Commissions on Transportation. Oregon Department of Transportation, Salem. 2009d. http://www.oregon.gov/ODOT/COMM/act_main.shtml. Accessed April 5, 2009.

ODOT. Instructions to Reviewers for *ConnectOregon* II Projects. Oregon Department of Transportation, Salem. 2009e. <http://www.oregon.gov/ODOT/COMM/CO/reviewerinfo.shtml>. Accessed April 5, 2009.

ODOT. *ConnectOregon*: Moving Goods, Moving People, Moving the Economy. Oregon Department of Transportation, Salem. 2009f. http://www.oregon.gov/ODOT/COMM/CO/docs/ConnectOregon_brochure_f.pdf. Accessed April 5, 2009.

ODOT. *ConnectOregon* II Final Recommendation Report. Oregon Department of Transportation, Salem.

Oregon Legislature. 73rd Oregon Legislative Assembly, 2005 Regular Session, Senate Bill 71. Salem. <http://www.leg.state.or.us/05reg/measures/sb0001.dir/sb0071.en.html>. Accessed April 5, 2009.

Oregon Legislature. 74th Oregon Legislative Assembly, 2007 Regular Session, House Bill 2278. Salem. <http://landru.leg.state.or.us/07reg/measures/hb2200.dir/hb2278.en.html>. Accessed April 5, 2009.

Oregon State Archives. Oregon Administrative Rules, Chapter 738, Division 125. Salem. http://arcweb.sos.state.or.us/rules/OARS_700/OAR_731/731_035.html. Accessed April 5, 2009.

Rodwell, J.F.; J.L. Jackley; and S.R. Kale. *ConnectOregon* Program for Funding Multimodal Transportation Projects. In *Transportation Research Record: Journal of the Transportation Research Board, No. 1994*, Transportation Research Board of the National Academies, Washington, D.C., 2007, pp. 1-8.

Schmidt, K. Project Selection Process, Presentation to the Washington Public Ports Association, May 16, 2007. <http://www.fmsib.wa.gov/projects/PortsAssnProjectSelection5-07.ppt>. Accessed April 5, 2009.

Shafran, I. and A. Strauss-Weider. *NCHRP Report 497: Financing and Improving Land Access to U.S. Intermodal Cargo Hubs*. TRB, National Research Council, Washington, D.C., 2003. http://trb.org/publications/nchrp/nchrp_rpt_497.pdf. Accessed April 5, 2009.

US Census Bureau. Annual Estimates of the Population for Counties of Oregon: April 1, 2000 to July 1, 2007. U.S. Department of Commerce, Bureau of the Census, Washington, D.C. 2007. <http://www.census.gov/popest/counties/tables/CO-EST2007-01-41.xls>. Accessed April 5, 2009.