

**State Bridge Program
2010-2013 Construction STIP
Bridge Project Criteria Statewide Summary Report**

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Project Selection Process

The State Bridge Program is a statewide program managed by the Bridge Engineering Section. Candidate projects that will rebuild or extend the service life of an existing bridge (including replacement) are identified through the use of a Bridge Management System, consistent with the Oregon Transportation Commission's (OTC) project eligibility criteria for this program. The project eligibility criteria are a first screen so that additional efforts can be focused to determine which projects will be evaluated further. Projects must satisfy these eligibility criteria before they are given additional consideration.

For the 2010-2013 STIP development cycle, 594 (out of 2,700) bridges were identified as having significant structural or functional needs by the Bridge Management System. To reduce the list to a more manageable size for further analysis, those bridges that indicated a deficiency in only one of the following categories: seismic, scour or rail, and had no other deficiencies were eliminated from further consideration. This reduced the list of bridges under consideration to 400. The Bridge Engineering Section used an iterative, collaborative process involving engineering and other technical specialists to narrow the list of 400 bridges to 101 "most needy" bridges. From this point on, oversight, assistance and Regional coordination was provided by the ODOT Bridge Leadership Team. The list was reviewed by each Region in June 2007 and 46 additional bridges were recommended for consideration. In August of 2007, a desk scoping list of 98 bridges was approved. Based on the desk scoping estimates, in September 2007, a "financially constrained" list of 46 bridges for field scoping was approved. In spite of the intent to financially constrain the list prior to field scoping, the completed field scoping estimates were substantially higher than the desk scopes. After a further round of reviewing project priorities with the Bridge Leadership Team and the Regions, the final recommended program of 25 new projects for construction in 2012 and 2013 was approved.

In addition to the target approved for the 2010-2013 STIP, the OTC authorized additional target for the 2008-2011 State Bridge Program. Finally, additional obligation authority authorized for structurally deficient bridges in the SAFTEA-LU 2008 Appropriations Bill, enabled the State Bridge Program to fund more bridge projects. Projects funded from both of these special sources were presented to the OTC separately – outside of the normal 2010-2013 STIP development process. However, all the new projects are included in this summary. The attached bridge projects summary table includes all projects that will be eventually included in the 2010-2013 STIP, including those that will carry over from the 2008-2011 STIP.

Prioritization factors are established by the OTC to ensure consistent consideration of the relative merits of candidate projects. The project prioritization factors established by the OTC for the State Bridge Program are:

- Support of the Bridge Options Report;
- Support of Oregon Highway Plan policies;
- Projects that support freight mobility;
- Project readiness (an assessment of the likelihood of a project getting to construction in the time frame contemplated); and
- Leverage of other funds and benefits.

For the last three STIP cycles, particular emphasis has been given to selecting projects that are consistent with the “corridor-based” strategy of the Bridge Options Report and are located on the Oregon State Highway Freight System or National Highway System. (The application of each factor to the final candidate projects of the State Bridge Program is addressed below.) In addition, the collapse of the I-35 Bridge in Minneapolis in August 2007 brought national focus to structurally deficient bridges. Structurally deficient means that some aspect of the bridge is in poor condition. A classification of “structurally deficient” does not imply that the bridges are unsafe. When an inspection reveals a safety problem, the bridge is posted for reduced loads, scheduled for repairs, or in unusual situations, closed until repairs are completed. ODOT completed an emergency inspection program of all Oregon bridges with a design similar to the Minneapolis bridge under Executive Order in order to ensure public safety. Nevertheless, the 179 ODOT bridges that are classified as structurally deficient in 2008 remain of interest and concern to members of the Bridge Leadership Team and the OTC. An emphasis has been given in selecting new projects on bridges that are structurally deficient.

Beyond these top priority projects, and within the financial constraints of the program, projects were also selected to address load capacity and safety issues, and other structural and functional needs on the remainder of the system. As a result, 25 new projects statewide are recommended to the OTC for inclusion in the 2010-2013 STIP for the State Bridge Program.

Public Involvement Process

The OTC will make the final selections for all projects included in the STIP. The Commission considers the advice and recommendations that it receives from Area Commissions on Transportation (ACTs), Metropolitan Planning Organizations (MPOs) and regional and statewide advisory groups. ACTs have a primary role of making recommendations to the OTC regarding project selection for projects of local or regional significance. ACTs may choose to review projects for other STIP programs that have advisory committees or processes in place, including the State Bridge Program which determines project eligibility based on criteria established by the OTC and a management system. The ACT may advise ODOT on any special circumstances or opportunities that apply to these other proposed projects.

The final, financially constrained proposed State Bridge Program for the 2010-2013 STIP was provided to the ODOT ACT representatives during June, 2008. Early draft programs were made available to the Regions through the Bridge Leadership Team in January, 2008. Two regions, Region 4 and Region 5, took advantage of the opportunity for early public involvement.

Region 4 provided the preliminary Bridge Program to the Lower John Day Area Commission on Transportation (LJDACT), the Central Oregon Area Commission on Transportation (COACT) and the South Central Area Commission on Transportation (SACT) during April, 2008.

Region 5 has plans to provide the Bridge Program to the North East Area Commission on Transportation (NEACT) and the South East Area Commission on Transportation (SEACT) during May and June 2008.

All of the Regions have plans to review the proposed 2010-2013 STIP with the ACTs and MPOs, as applicable, within their Regions during the summer of 2008. This schedule is consistent with the STIP development timeline. In addition to the ACT and MPO presentations, public involvement for the 2010-2013 STIP includes a formal public review process which begins with the distribution of the draft STIP document in September, 2008. Final approval of the 2010-2013 STIP by the OTC is anticipated in August, 2009.

Project Eligibility

Project identified through the Bridge Management System: all of the 2010-2013 Construction STIP state bridge program projects were identified through the Bridge Management System.

Project will rebuild or extend the service life of an existing bridge: the entire 2010-2013 Construction STIP state bridge program projects rebuild or extend the service life of an existing bridge.

Project Prioritization

Support of the Bridge Options Report: More than half of the 2010-2013 Construction STIP state bridge program projects are located on NHS or the Oregon Highway Freight System routes, consistent with the “corridor-based” strategy of the Bridge Options Report (BOR).

Support of OHP policies: The State Bridge Program STIP for 2010-2013 supports the following OHP policies:

- 1A- by applying the state highway classification system to guide program priorities for investment. Some criteria currently in use in the Bridge Management System use different condition thresholds depending on the functional classification of the highway route of a deficient bridge. In general, the State Bridge Program goals favor STIP projects on freight and NHS routes in its investment hierarchy.

- 1B- because the rehabilitation and replacement of state-owned bridges will help maintain the mobility and safety of the highway system, enhance livability and economic competitiveness by extending the useful life of a bridge or reducing the possibility of the failure of a bridge due to deterioration or other unsafe conditions.
- 1C- by concentrating state bridge projects on freight and NHS routes to address load capacity and safety issues, while also giving priority to bridges with structural condition and functional problems on the remainder of the system.
- 1G- by maintaining and improving existing infrastructure.
- 2A- by continued program coordination with Washington State regarding improvements to the bi-state Columbia River bridges.
- 2F- as the replacement and rehabilitation of state-owned bridges improves safety for all users of the highway system.
- 4A- by concentrating state bridge projects on freight and NHS routes and by addressing load capacity issues on these routes and the connecting road system.

Projects that support freight mobility: Most of the proposed projects are located on Oregon Highway Plan freight routes. Addressing freight mobility issues including load capacity, vertical and lateral clearances has been a priority of the State Bridge Program since the development of the 2006-2009 STIP (the first post OTIA III STIP). About half of the proposed bridge project address load capacity issues. Most of the remainder addresses an emerging issue for state bridges – deck condition. Nearly 38% of ODOT’s structurally deficient bridges result from poor deck conditions.

Project readiness (an assessment of the likelihood of a project getting to construction in the time frame contemplated): The State Bridge Program works closely with the Regions, primarily through the Tech Centers to ensure that project delivery consideration are incorporated into the project selection process.

Leverage of other funds and benefits: The best opportunities for leverage of other funds that the proposed program of state bridge projects may be able to take advantage of are internal to ODOT. In some cases, selected bridge projects may be combined with other (usually other Bridge or Preservation) projects which can save traffic control, mobilization and other costs that would be incurred if each bridge was bid separately. Bridge projects typically result in community benefits such as public safety and enhanced bicycle and pedestrian access, since the project often includes widening existing bridges or replacement using full shoulder widths. In addition, bridge replacement projects have collateral environmental benefits. New bridges are designed and constructed with greater sensitivity to the riparian habitat than was the case with older design and construction considerations. Increasingly, animal habitat features, such as bat boxes, are designed and constructed into the bridge structure itself. With a shift in focus from “worst first” to a “corridor-based” approach, the State Bridge Program is contributing significantly to a reduction in freight movement restrictions, and supporting continued economic development within Oregon.

Conditions of Approval and Other Relevant Information: None