

SW Washington Regional Transportation Council
1351 Officer's Row
Vancouver, WA 98661

Bridge Design Contest Sparks Creativity

Kids on both sides of the river showcased their creative side when they participated in a contest co-sponsored by the White Salmon Enterprise, Hood River News and several local businesses, including Da Kine, Discover Bicycles, Hood River Outfitters, Hood River Parks and Recreation, McDonalds, Pietro's Pizza and Walmart. The contest was open to youth between the ages of 5 and 18 in the Bingen, Hood River and White Salmon areas. Contestants submitted a great selection of creative entries. Recreation was a popular theme; several proposed bridge designs incorporated skate parks, fishing platforms and bungee

jumping. One proposal harnessed the wind power of the Gorge with wind turbines above and below the bridge. Prizes were awarded to winning entries at a public open house in February, 2002. Congratulations to the following talented winners:



were awarded to winning entries at a public open house in February, 2002. Congratulations to the following talented winners:

- Barry Claman
- Breanna Moreau
- Roberto Nunez
- Parker Young
- Logan Carlstrom
- Kevin Harris
- Chase Young
- Grant Young

(not all winners are pictured at left)

Want to Know More?

To find out more about the project and comment:

- Request a presentation to your neighborhood, business and civic group; call Dale Robins, 360-397-6067.
- Ask to be added to our mailing list by contacting RTC by phone (360-397-6067) or e-mail (sr35@rtc.wa.gov).
- Visit our Web site at www.rtc.wa.gov/studies/sr35.

Who to Contact for More Information

Please contact:
Dale Robins, Project Manager
Southwest Washington
Regional Transportation Council
1351 Officers Row
Vancouver WA 98661
Phone: 360-397-6067
Fax: 360-696-1847
E-Mail: sr35@rtc.wa.gov

Web site address:

www.rtc.wa.gov/studies/sr35

Volume 5

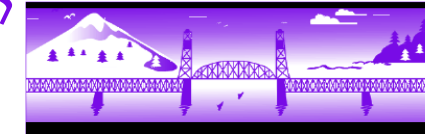
Summer, 2002

Project Status Pending

The second tier of this study of potential improvements to the bridge over the Columbia River between Hood River and White Salmon/Bingen is complete. During this phase of the study, the project team narrowed crossing improvement options from an initial set of 17 down to eight, and finally to three possible long-term alternatives. The project team, with guidance from advisory committee members, also identified recommended short and medium-term improvements.

A decision to conduct the third tier of the study is pending. If conducted, this third tier will evaluate the remaining long-term options in more detail and recommend a preferred alternative. It would result in a draft environmental impact statement summarizing possible impacts of a new bridge, as well as a financing plan to pay for it. Regional Administrators from the Oregon and Washington State Departments of Transportation currently are reviewing the results of the study to date. They will confer with other state transportation officials as they determine whether to continue the study. Their decision hinges in part on the ability of the two states and local communities to pay for long-term improvements. If the study does not proceed, construction of a new or significantly improved bridge is very unlikely during the next 20 years.

SR-35 Columbia River Crossing Project Update



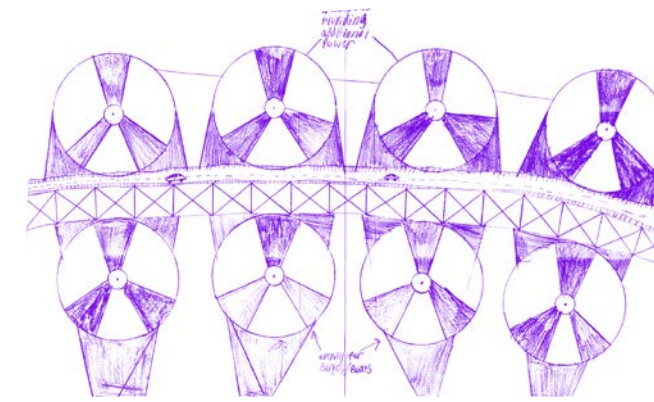
Alternatives Narrowed

The study made significant progress during the last several months as alternative locations for a new or improved bridge were reduced from three possible corridors to one. The remaining options are concentrated in the corridor near the existing bridge. Alternatives in the "East" and "City Center" corridors were eliminated from further study. This recommendation is based on technical analysis by the project team, review and discussion by the project's Steering and Local Advisory Committees, and concurrence by regional administrators for the Oregon and Washington State Departments of Transportation.

Primary reasons for eliminating selected options from further study include:

East Corridor

- Relatively high potential environmental impacts, including possible effects on wildlife at Bingen Pond.
- Potentially significant land use issues and complications related to Oregon's statewide land use planning goals and regulations, as well as Columbia River Gorge National Scenic Area requirements.



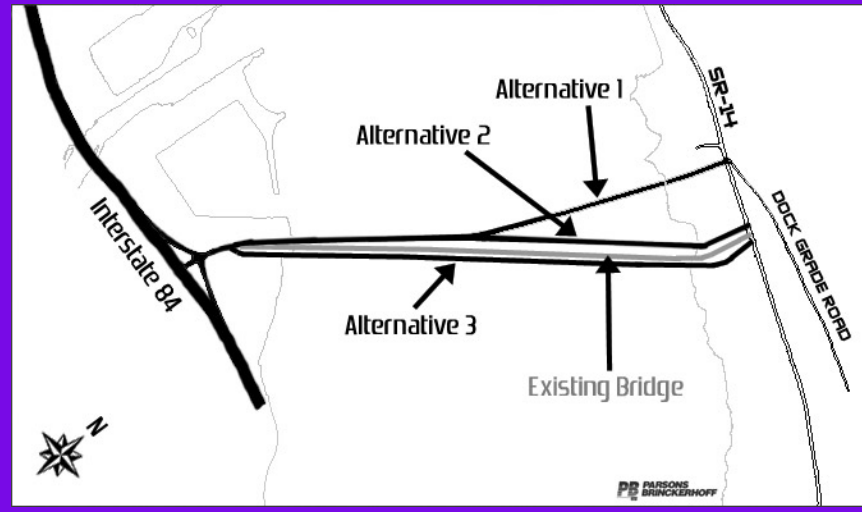
One winning entry from the bridge design contest for youth incorporated the clever addition of wind turbines
—by Barry Claman
(for more details, see back page)



This project is sponsored by the Southwest Regional Transportation Council and Oregon and Washington State Departments of Transportation in cooperation with the cities of Bingen, Hood River and White Salmon, and Hood River, Klickitat and Skamania Counties.



SR-35 Columbia River Crossing Study LONG-TERM ALTERNATIVES



City Center Corridor

- Potentially significant impacts on windsurfing and other recreational activities in the corridor, with resulting effects on the local economy.
- Topographical conditions that make location of a bridge landing on the Washington side of the corridor impractical.
- Potentially significant land use impacts near the Port of Hood River and high relative costs (two to three times the cost of a bridge) for the City Center tunnel option.

Existing Bridge Options

- Alternatives that make use of the existing bridge for bicycles and pedestrians would cost significantly more due to the need to retrofit the bridge. They also would have higher visual and environmental impacts (with two bridges) than other alternatives, with no major advantages.

The three remaining alternatives are located near the existing bridge. All three tie into the existing bridge access road on the Oregon side near the existing toll booth. Two of the alternatives would touch down on the Washington side slightly east and west of the current bridge location. The other alternative would land on the Washington side approximately ¼ mile west of the existing bridge, intersecting with Dock Grade Road. Each remaining alternative would include facilities for autos/trucks, bicycles and pedestrians. In each case, the new bridge would be designed to allow river traffic to pass under the bridge without the need to raise and lower it, with no "lift span" or drawbridge section needed. More detailed evaluation and design of these alternatives may be conducted in a third phase of the study, if it moves forward (see page 1).

Short and Medium-Term Improvements Identified

In addition to narrowing the range of possible future long-term improvements, short and medium-term alternatives also have been identified and recommended by the project team and advisory committees. Both short and medium-term improvements would need to be implemented and funded by the agency having jurisdiction over the location being improved. Total estimated cost for these improvements is \$2.7 million. Medium-term options would only be implemented if construction of a new bridge were at least 10 years in the future. Short and medium-term alternatives include:

Short-Term (one to five years)

- **Construct a roundabout or traffic signal at I-84 eastbound ramps and Oregon 35/Hood River Bridge access road.** This would reduce or eliminate traffic backups onto I-84 at peak hours.
- **Convert the toll booth to one-way southbound.** At peak traffic hours, northbound traffic at the toll booth backs up through the adjacent four-way stop intersection. This is expected to happen more frequently even in the short term; in the long-term it could cause backups on the I-84 exit ramps. Converting to a one-way toll would reduce potential backups and operating costs.
- **Establish a bridge replacement fund.** A moderate increase in toll would be dedicated to this fund to help pay for a future new bridge. In the short-term, this would be collected by the Port of Hood River under an interagency agreement with the Washington State and Oregon Departments of Transportation.

Medium-Term (six to 10 years)

- **Add a signal at the I-84 westbound ramps at the Hood River Bridge access road.** This would reduce backups and delays here.
- **Signalize the four-way stop at the Port/retail entrance or convert it to a roundabout.** This intersection eventually will become a bottleneck, creating backups at the toll booth or near the I-84 interchange. Signalizing the intersection would help avoid these problems.
- **Restrict or close turns at the private driveway onto the Hood River Bridge access road.** This would reduce conflicts between bridge traffic and vehicles turning into or out of this driveway. As traffic increases and congestion worsens in the future, it is important to minimize this potential safety hazard.
- **Reconstruct toll booth and add automated toll collection system.** This would reduce lines at the southbound toll booth entrance by allowing regular bridge users to use automated toll collection.
- **Signalize the SR-14/Hood River Bridge access road intersection.** Eventually, this intersection will create significant delays for travelers which could result in higher accident rates. Adding a signal will improve safety and efficiency here.

Cost and Financing of Improvements Evaluated

The feasibility of replacing the current bridge will depend in large part on how much it will cost to build and the ability to finance it. Given other current and future statewide transportation needs and available resources in Oregon and Washington, some portion of a new bridge would have to be



*Adventure is the main attraction of this exciting bridge design contest entry, where skateboard ramp and car jump are integral. Slower vehicles will be glad for the safety net—
—by Chase Young*

funded by local communities and residents. To help determine how much of the total cost of the bridge improvements could be funded locally, the project team studied the economic and financial feasibility of a new bridge, including:

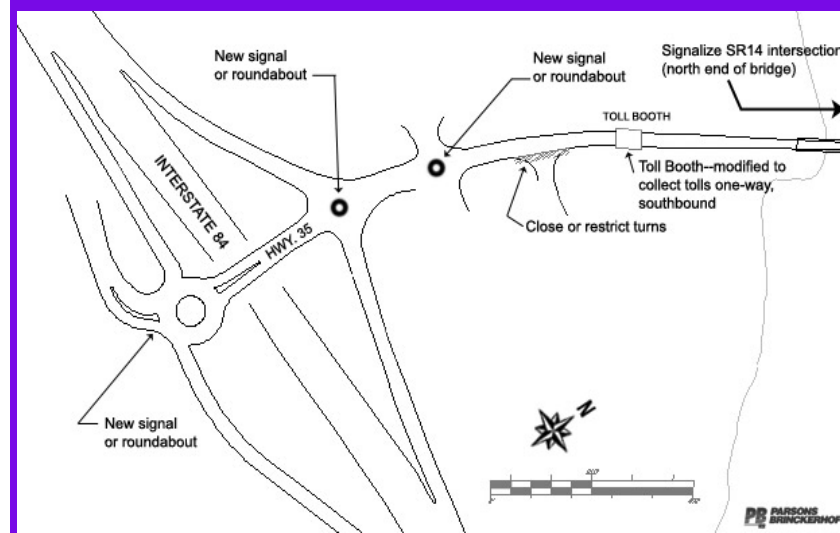
- Possible cost of a new bridge
- Relative support for different types of funding methods
- Willingness to pay specific toll amounts or other fees
- Percent of the total cost that could be paid by local communities

Approximate costs of a new bridge were based on preliminary design concepts and typical construction costs for similar projects built elsewhere. Cost estimates for a new bridge range from \$110 to \$140 million for construction, design and construction administration. However, they do not include

possible costs to address environmental impacts or right-of-way costs for land needed for bridge approaches and associated facilities. These items would increase the total estimated cost. Costs were identified for two different sized bridges. One would be approximately 65 feet wide and include three 12-foot-wide travel lanes, eight-foot-wide shoulders on both sides, and a 10-foot-wide bicycle/pedestrian lane on one side. A narrower, less costly bridge also is being considered. It would include two travel lanes, narrower shoulders on both sides, and a bicycle/pedestrian facility on one side.

The financial feasibility study incorporated the results of opinion polls of local residents and other bridge users who were asked about relative support for different ways to pay for bridge improvements, including willingness to pay specific toll amounts.

SR-35 Columbia River Crossing Study SHORT & MEDIUM-TERM ALTERNATIVES



Results of the financial analysis include:

- ☑ Residents favor user fees (e.g., tolls) over other financing methods such as property or other taxes.
- ☑ Most residents would be willing to pay between \$1.00 and \$1.50 per trip to use a new bridge.
- ☑ A \$2.00 toll would generate the highest potential toll revenue. Higher tolls would discourage use of the bridge, lowering traffic and resulting in less money collected overall.
- ☑ If higher tolls were phased in over the next 10 years, future toll revenues, collected over the next 30 years, could be expected to pay for about \$50 million of the cost of the new bridge — 30 to 40%, depending on total costs.