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:

- Barry Daman
- 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).
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 1/4 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 back-ups 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.

Cost and Financing of Improvements Evaluated
The feasibility of replacing the current bridge will depend in large part on how much 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 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.

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

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.