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Design Picked for Wildlife Crossing

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WASHINGTON — At a picturesque spot in the mountains near the ski resorts of Vail and Breckenridge, Colo., two streams of traffic converge: people driving east and west on Interstate 70, and animals — black bears, cougars, bobcats, elk and deer — headed north and south to feed and mate. When they collide, the animal is almost always killed and the vehicle badly damaged, even if the driver is lucky enough to escape injury.

The obvious solution is a bridge or a tunnel for the animals, but how do you build one they will use?

On Sunday, a nonprofit group announced the winner of a [competition](#) to design such a crossing: [Michael Van Valkenburgh & Associates](#), a landscape architecture firm with offices in New York City and Cambridge, Mass. The design team, associated with the national construction firm [HNTB](#), submitted a proposal for a bridge made of lightweight precast concrete panels that are snapped into place and covered with foliage.

The bridge is broad enough to allow for strips — lanes, actually — that resemble forests, shrubs and meadows, with the aim of satisfying the tastes of any of the animals in the area. Miles of fences on either side of the highway would funnel animals to the bridge.

The state has not committed to build such a structure at that spot. The percentage of crashes caused by animals is far higher in other areas, said Stacey Stegman, a spokeswoman for the [Colorado Department of Transportation](#). But state officials are eager to learn what they can from the contest entries as they address the problem of animal-vehicle collisions.

Finalists in the competition, which concluded on Sunday at the [annual meeting of the Transportation Research Board](#) in Washington, took a wide variety of approaches.

One environmentally minded [entry](#), from Balmori Associates of New York, called for building a crossing out of wood from trees killed by beetles. That would prevent the timber from rotting and giving off carbon dioxide, which contributes to [global warming](#), and would avoid using concrete, which releases carbon dioxide when it is made, the designers said.

Experts who helped set up the design competition say the deadly collisions around Vail sometimes involve the Canada lynx, which is listed as a threatened species, one step short of endangered.

More broadly, the highway forms a threatening barrier between nature preserves on either side, increasing the likelihood that the populations will become genetically isolated.

"As you fragment the habitat, the long-term prognosis for wildlife is bad," said Rob Ament, the project manager for the group sponsoring the competition, which bestows a \$40,000 award and was initiated by the [Western Transportation Institute](#) at Montana State University and the [Woodcock Foundation](#) in New York.