U. engineering study recommends variable toll for Big Cottonwood Canyon

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SALT LAKE CITY — A University of Utah engineering study probing the problems of unmanaged access at Big Cottonwood Canyon recommends a variable tolling system that assesses vehicle fees that increase as the canyon becomes more congested.

That recommendation is accompanied by the call for free public transit to provide year-round access to popular recreation sites within the highly used canyon.

The Big Cottonwood Canyon 3T Management Project was done by the senior design class in the engineering department at the University of Utah and includes several components, including a feasibility study that will be presented at 9:30 a.m. Tuesday in the Union Building's West Ballroom.

"I think the students did an outstanding job. It is not only outstanding work, but it serves an incredibly useful purpose for the community," said David Eckhoff, an adjunct environmental engineering professor and longtime affiliate of the Big Cottonwood Community Council.

The community association commissioned the study to tackle the troubles posed by the three T's in the canyon — traffic, toilets and trails.

Steve Bartlett, the students' instructor and an associate professor in civil engineering, said the study points out a startling comparison between Yellowstone National Park and the projected visitation of 3 million people to Big Cottonwood Canyon by 2040.

The canyon, at an estimated 32,000 acres, will host 75 percent of the visitors Yellowstone receives (4.4 million) in a geographic footprint that is 1 percent of Yellowstone's size.

"That factor in and of itself should wake people up to say something needs to be done," Eckhoff said.

Marshall Alford, recreation staff officer with the U.S. Forest Service's Salt Lake Ranger District, said the canyon experiences high vehicle use and high turnover for visitation.
"It is the closest people can go and enjoy a bit of the forest, but a lot of people are out there enjoying it at the same time," Alford said.

Charging a toll for recreational access to Big Cottonwood Canyon is a proposal that has been around for decades — there was a pitch in 1995 for a toll booth — but public distaste and complicated jurisdictional issues killed the idea.

"We realize the biggest hurdle to tolling is public acceptance of tolling," Bartlett said. "But that toll would increase incrementally as traffic increases."

The variable tolling system would include an overhead scanner so vehicles don't have to stop. Revenue generated from the system would direct dollars for more toilet facilities, bike and pedestrian pathways, and trail maintenance in a system designed to be self-sustaining.

There would be no toll for a limited number of vehicles — say under 25 — but that would go up as the number of vehicles increase, peaking at $12.50 if there are 800 or more cars in the canyon.

Daily traffic counts by the Utah Department of Transportation show an average of 4,000 to 5,000 vehicles in Big Cottonwood Canyon. But last Labor Day, there were more than 13,000 cars packed with people eying the fall foliage, Eckhoff said.

"I don't think the average person realizes the intensity of the use up there," he said. "People don't perceive this being the equivalent of a national park or monument, but in reality it is."

Eckhoff has owned a home in the canyon since the late 1980s and has been a permanent resident since 2009.

He's watched the crowds continue to grow each year.

"I've seen fistfights up at Guardsman Pass for parking spots," Eckhoff said. "It's a zoo."
The study looks at options designed to decrease single-vehicle use in the canyon, including parking fees, and frequent and free bus service.

"The goal is to try to shift usage from single-vehicles to buses," Bartlett said, adding that only 4 percent of canyon visitors take advantage of wintertime bus service.

Engineering students proposed solutions that vary from low to high impact in terms of affordability and ease of completion.

A proposed pilot project that grew out of the study, for example, involves the "low-impact" placement of portable toilets over a year's time to identify areas for permanent siting. The study points out there are only 14 stalls, and most of them are closed during the winter.

The canyon community association has identified a need for 58 stalls to alleviate sanitation problems, but the study acknowledges it would be cheaper at the outset to first identify the high-traffic areas before permanent facilities are built.

The U.S. Forest Service has also proposed instituting an "amenity" fee for both Little Cottonwood Canyon and Big Cottonwood Canyon to help cover the costs of maintenance and infrastructure improvements. A decision on implementing that fee has not yet been reached.

The final phase of the U. study will be completed in early May and presented to the Big Cottonwood Canyon Community Council.

The study included outreach to several groups and government entities involved in canyon management — a complex layer of jurisdictions that includes the Forest Service, Utah Department of Transportation, Salt Lake County, Salt Lake City and Unified Police Department.

At the outset, students encountered "political barriers" to the idea of tolling, Bartlett said.

"The public does not like the idea of a toll because these are public lands, and they're right in their backyard," he said. "But the public will pay a fee to camp."