

# The Seattle Times

## Sound Transit's cost overruns for first phase hits about 86 percent

*Sound Transit's cost for its first corridor, SeaTac to the U District, will wind up 86 percent higher than the 1996 initial estimates, according to a new Seattle Times analysis. Should that matter in 2016, with another light-rail expansion on the ballot?*

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Two decades after voters approved taxes for light rail, Sound Transit has at last laid enough track to answer a longstanding taxpayer question: How high were the cost overruns?

The answer is about 86 percent.

The original Sound Move plan in 1996 promised light-rail service from SeaTac to the University District within a decade for \$1.67 billion. But after the winning vote, the plan was broken into five parts and is taking a quarter-century to fulfill, with the last station to open in 2021. Among other problems, a tunnel under Portage Bay cost \$1 billion more than expected, and the segment had to be shifted to Montlake Cut.

The cumulative costs are on track to reach \$4.95 billion, or \$3.10 billion if converted to 1995 dollars, according to a Seattle Times analysis of [transit-agency project reports](#).

Sound Transit officials thought long ago the price would ultimately double, and admitted initial cost estimates were flawed. Still, the agency has not tallied the total costs in a manner readily available to the public.

The Times' new estimate of an 86 percent overrun, said spokesman Geoff Patrick, "is in the ballpark."

"No one at Sound Transit has denied the troubled history of the late 1990s and early 2000s," said the agency's new CEO, Peter Rogoff.

Few people in academia or the media examine megaproject overruns in general, and there is little motivation for governments to announce their figures.

Only in 2016 was it possible to judge the 1996 Sound Transit package. University of Washington and Capitol Hill stations opened in March, Angle Lake Station opens in September, and a tunnel machine will complete its bore through the U District this month — so the last mile of the 1996 plan is 80 percent built.

For years, supporters and opponents have argued about whether Sound Transit is “on time and on budget” and has earned public trust.

Now, with a Sound Transit 3 ballot measure going before voters this fall — to expand light rail, commuter trains and bus-rapid transit at an annual cost of \$326 for a median household — the agency’s performance and reputation are central to the debate.

Major projects in the second voter-approved round, called ST2, are staying near budget, trending at an average 97 percent of their 2008 estimates, according to the agency. Complicated segments, such as a shallow Bellevue tunnel and tracks on the Interstate 90 floating bridge are still ahead.

Maybe the idea of sticker shock has changed.

At least in Seattle, leaders feel less pressure to give the sorts of overly optimistic forecasts that traditionally afflicted world megaprojects, from the Sydney Opera House, to Boston’s Big Dig, to the just-begun Honolulu elevated transit construction.

Seattle-area taxpayers have seen seemingly astronomical figures before for highways and bridges.

“An ambitious program for an ambitious region,” Sound Transit Chairman Dow Constantine said when he announced a \$50 billion, 25-year ST3 program, featuring 60 miles of track extensions and a Chinatown International District-to-Uptown tunnel. A few weeks later, the agency responded to public demand for more service sooner, by raising the total to \$54 billion.

John Niles, a longtime opponent and watchdog, calls the agency “a learning organization” that’s unlikely to blow its estimates this time around.

“They’ve become much better at financial management and putting enough contingency to get things done,” he said. “You could argue, what we have in ST3 is it’s larded. They will never be caught short again.”

Instead, he says the agency shouldn’t attempt Sound Transit 3 until the second round to Lynnwood, Overlake and Highline College is completed in 2023. Voters would then see if promises are kept to serve 280,000 daily passengers in the first two rounds, and improve regional mobility.

## Lessons learned?

A traditional view of megaprojects, dating to mid-20th century highway builder Robert Moses of New York, is that sponsors manipulate figures and indulge boosters' optimism, to win political consent. After that, it's difficult to kill a project. Dig a hole and commit.

Professor Bent Flyvbjerg, now of Oxford University's business school, studied 258 world projects and found that 86 percent exceeded the original budget, by an average 28 percent, in a 2002 study that's still cited because so little research exists. Passenger-rail projects overran an average 45 percent.

The most plausible explanation is "strategic misrepresentation," in other words lying, Flyvbjerg wrote.

Sound Transit's 86 percent overrun for Sound Move is toward the high end of rail projects he examined. It's also close to the 77 percent average that federal economist Don Pickrell found in 10 transit projects, in the early years of U.S. light rail.

Sound Transit in 1996 portrayed its plans as conservative — and the \$1.67 billion was indeed higher than other programs in mid-size cities.

But Seattle-area real-estate prices increased rapidly, tunneling proved costlier than leaders expected and even the surface rail route in Rainier Valley required additional funds, Patrick said.

Seattle's network is an uncommon hybrid that fans sometimes call "light metro," with the potential for three-minute train frequency, tunnels that cost \$600 million per mile, and more separation from surface traffic than Portland, Salt Lake or Dallas lines that cost far less.

"We're building the good [stuff] and nobody else is," wrote Zach Shaner of Seattle Transit Blog. But transit opponent Randal O'Toole of the Cato Institute calls Link among "the worst of both," at high cost yet less capacity than real subways in Boston or New York.

A comparison to the 1996 plans is difficult because so much has changed.

The light-rail line doesn't include the promised a \$350 million First Hill tunnel station. Then-CEO Joni Earl and the board in 2005 scrapped the station as too financially risky. Instead, a slow streetcar was built with ST2 money for \$134 million, not counted here.

UW Station was moved next to Husky Stadium, instead of the original site, west of UW Medical Center and beyond mushy Portage Bay. A Boeing Access Road station was deferred to ST3, and a north Tukwila station dropped. The airport station was built along International Boulevard South instead of within the terminal.

Did Sound Transit learn from mistakes?

That seems to be a trend nationally, says Carole Turley Voulgaris of UCLA, in her forthcoming doctoral dissertation analyzing 68 federally funded U.S. transit projects from 1982-2011.

“Things have gotten better over time,” she said.

Nonetheless, 82 percent of projects wind up costing more than initial estimates, by an average 43 percent, she said. The worst performance, a 54 percent average overrun, happens when a new agency builds its first line. But transit extensions exceed their budget by only 17 percent on average, she found.

“Once you have experience building something, you have a better idea what it will take,” she said.

Rail projects are usually a tough sell the first time around, she said, but once the public sees the trains moving, the second round faces less political resistance, and therefore less incentive for “strategic misrepresentation.”

Voulgaris said naiveté plays a bigger role than spin.

“Any deception is at least self-deception, in the sense the transit agencies aren’t presenting one set of figures to the public and one internally,” she said.

### **“Right way to judge”**

How you judge transit overruns might depend on when you set the clock.

Voters approved more money in 2008 despite news of past overruns. Many of today’s transit enthusiasts were in elementary school when the agency was founded.

“I think the right way to judge what our performance is likely to be on Sound Transit 3 is what has our performance been on these recent projects, where we delivered U-Link ahead of schedule and under budget,” Rogoff said. “No one is looking to re-experience 1999 with ST3 dollars.”

He asserted to reporters gathered at Angle Lake, which in the darker days had been postponed to 2020: “We’re actually looking to open this station four years earlier than was originally planned.”