In about a year, drivers will have four lanes of clear sailing on 16 miles of Interstate 84 between Nampa and Broadway in Boise.

That sounds like an obvious statement with all the freeway construction in Treasure Valley in the past seven years. But Boise could have easily waited another 20 years or more to have a four-lane freeway linking Idaho’s three biggest cities.

The $495 million project tackled a freeway built as Interstate 80N in 1964-66 for a population of just 162,000 in Treasure Valley. In seven years, the Idaho Transportation Department has upgraded the renamed Interstate 84 for a 21st-century population of 615,000 – about 38 percent of the state population – that is growing at a rate of about 2 percent per year.

This entailed some 20 projects that replaced eight freeway crossings (bridges, interchanges and overpasses), widened five bridges, added a new interchange at Ten Mile Road – and widened 12 miles of freeway to four lanes (Cole Road to Eagle Road already had four lanes since the Flying Wye opened in 2001).

“It was broken into smaller segments so local contractors could bid on them,” said Amy Schroeder, the Idaho Transportation Department’s program manager for the GARVEE program, the funding mechanism for the I-84 work.

GARVEE is the federal Grant Anticipation Revenue Vehicle debt instrument established in 1995 to allow states to issue bonds for large transportation projects and use anticipated future Title 23 federal-aid transportation funding to pay off the bonds.

Twenty-five states have used GARVEE funds for highway projects. Idaho is a pay-as-you-go sort of state. The Idaho Legislature is averse to debt and bonding for highway projects, said Mollie McCarty, the Idaho Transportation Department’s governmental affairs manager.
"With the Legislature, the concept of borrowing is a very sensitive matter," McCarty said. "This has been an opportunity for the Department to show that we can manage this program in a way that other states have not. A lot of states would bond and not know how to get to the end of the project. We only bid for projects when we could get to a completion point."

ITD not only completed the originally planned GARVEE projects in Treasure Valley, but had an $80 million surplus in GARVEE funds that are now in use in construction at the Meridian, Broadway and Gowen interchanges.

In all, Idaho's GARVEE program improved six transportation corridors across the state, two of them in the Treasure Valley. The state issued seven bonds raising $857 million. But there was a legislative stipulation: Debt service has to remain within 30 percent of the federal transportation funding that Idaho receives, which was $276.5 million in Fiscal 2014.

Each year for the next 18 years, ITD is obliged to use $58.8 million of that to repay the seven bonds, McCarty said.

"We have sideboards," she said. "What we hear is how careful Idaho was with its projects."

ITD did not issue bonds until projects came online and needed funding, McCarty said.

Without the GARVEE funding, Schroeder said, the freeway widening would have taken "at least 20 years."

Treasure Valley had two GARVEE corridors, the Caldwell to Meridian corridor, which focused on Franklin Road (Nampa) to Eagle Road, and the Orchard to Isaacs Canyon corridor from Orchard Road to Gowen Road.

The work all started with a longer and wider westbound Eagle Road offramp, which was finished in October 2007.

Widening a freeway from two lanes to four lanes involves more than just adding lanes. In the Boise metro, the major obstacle was 1960s-era bridges designed for nothing more than the two lanes passing underneath in each direction.

Most of the bridges were three-span with two piers and a few were even five-span with four piers.

Translation: Two lanes fit between the piers. Four lanes don't.

This required the reconstruction of the bridges at Franklin, 11th Avenue, Garrity, Robinson, Orchard, and Vista. These are all now two-span bridges with a single pier. The Ten Mile interchange has no piers.

The road widening took place from June 2008 to June 2012 and was broken up into smaller sections with different contractors: Meridian to Ten Mile, Ten Mile to Garrity, Garrity to 11th, 11th to Franklin. One contractor undertook the Orchard to Broadway stretch.

The pavement work right now between Five Mile Road and Meridian Avenue is replacing original 1960s pavement and is part of the Meridian interchange project, Schroeder said.

Once all work is done by the end of 2015, commuters will have a faster trip.

The work is likely to make a difference to the state's largest university. Boise State University is ideally located for anyone living in the surrounding neighborhoods, the North End or along Warm Springs Road, but less so for the multitudes west of the Flying Wye or in Canyon County.
With 22,259 students and more than 3,400 faculty and staff, the BSU population, especially those in Canyon County, will shave time off their commutes with four lanes at their disposal. “For our students and our faculty, every minute of the day counts,” said Nicole Nimmons, executive director of transportation and parking at Boise State. “If they have an extra 15 minutes a day, that’s huge as far as quality of life goes. The extra time saved and increased safety to and from work and school is pretty huge for the entire valley.” Micron Technology’s 5,000 employees will also experience less congestion as they cross town to get to the company’s southeast campus.

The GARVEE work also added a third lane from Garrity to Franklin in Nampa and from Broadway to Gowen in southeast Boise.

The three projects now underway at the Meridian, Broadway and Gowen interchanges were not part of the original GARVEE plan. They were added in 2012 after ITD discovered an $80 million savings in the Treasure Valley projects.

Two-thirds of the Meridian interchange has been rebuilt. The other third was demolished Oct. 24-25 to prepare for reconstruction. Work started at Meridian in April and is scheduled to wrap up in October 2015. “The Broadway and Meridian bridges were very narrow,” Schroeder said. “They had no sidewalks or bike lanes. The Broadway bridge had a tight turning radius for trucks.”

The Broadway and Meridian interchanges will be single-point urban interchanges with a single stoplight in the middle of the bridge to control all directions of traffic. The same single-point concept is already in place at the Vista and Ten Mile interchanges.

Broadway will have two through lanes in each direction and two dedicated left-turn lanes for the eastbound I-84 on-ramp, in the direction of Gowen Road, which is seeing the freeway widened to three lanes in that direction.

Gowen Road is the exit for Micron Technology. The freeway passes over Gowen Road, which had just one lane in each direction. “They were very narrow lanes, like a cattle chute,” Schroeder recalled.

The new Gowen interchange will have two lanes in each direction and the lanes will be wider, with sidewalks and bicycle lanes. Two left-turn lanes will lead from Gowen to the westbound I-84 on-ramp and two right-turn lanes will take drivers from Federal Way to westbound I-84. This is likely be the Interstate 84 drivers will know into mid-century and beyond.

“Generally speaking, our roadway projects are designed to meet an acceptable level of service for at least 20 years, bridges for 50 years,” Schroeder said. “We often attain much longer life than that with planned routine maintenance.”