

SR 20 Swantown Road to Barrington Drive Briefing Paper, April 2012

Recently, WSDOT updated most of the cost estimates from the 2005 State Route 20, Swantown Road to Cabot Drive Corridor Pre-design Analysis to reflect updated costs and design standards. The 2011 estimate is double what was estimated in 2005, as shown in the table below.

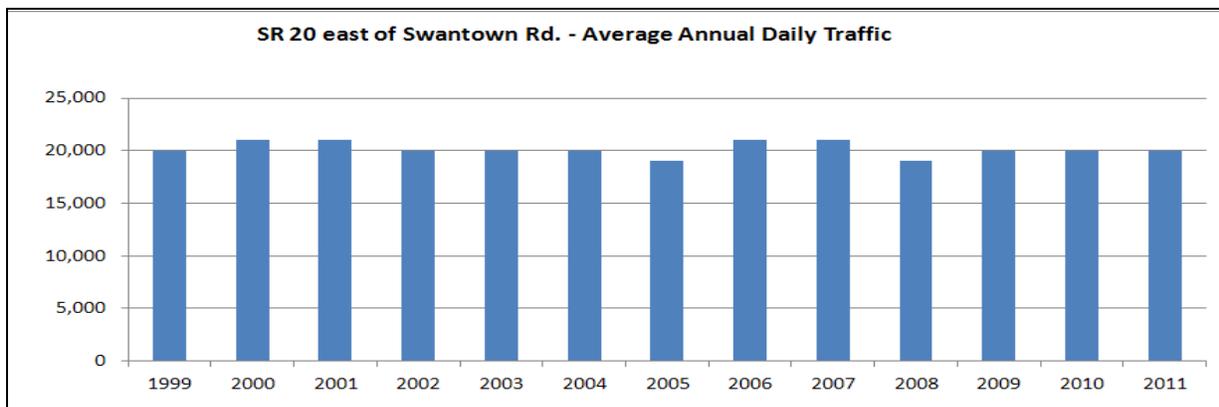
	2005 Pre-design	2011 Scoping
Pre-design Analysis, Phases 1, 2 and 3	\$15.5 Million	\$29.9 Million
Pre-design Analysis, Phase 4	\$7 Million	not estimated
Cost basis	2005 dollars	2011 dollars

Reasons for the cost difference include the following:

- The 2011 “scoping” estimate is at five percent design completed; the 2005 “planning” estimate was less than one percent design completed. The higher the percent design completed, the better the reliability and accuracy of the estimate.
- We know a lot more about roundabout design and costs in 2011 than we did in 2005. Very few roundabouts had been constructed statewide prior to 2006. Since 2007 twenty roundabouts have been built in Whatcom and Skagit Counties alone, and more are coming.
- The 2011 estimate includes the latest standards and requirements for protection of sensitive areas and treatment of storm water runoff.

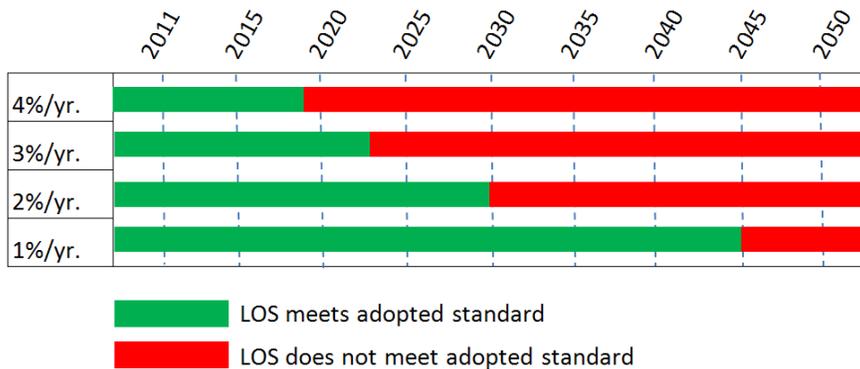
As described in the Pre-design Analysis, phases one through three would widen SR 20 to four lanes from Swantown Road to Barrington Drive, with two lane roundabouts at the intersections with Swantown, Erie, Pioneer and Barrington. Phase four would add roundabouts at 8th Ave and at 3rd Ave-Cabot.

These recommendations were based on corridor improvements needed to address traffic growth forecasts that, in retrospect, haven’t materialized. Traffic volumes in 2011 are similar to those in 1999, as shown in the following chart of average daily traffic on SR 20 near Swantown Rd.



WSDOT’s updated traffic analysis indicates that the intersections along SR20 from Swantown to Barrington continue to operate well within the adopted level of service (LOS) standard in 2011. WSDOT estimates that intersection traffic would need to grow more than 40 percent over 2011 levels before one or more intersections between Swantown and Barrington fall below the LOS standard.

At one percent annual traffic growth, the first intersection to fall below the LOS standard would be SR 20/Barrington Drive, but not until 2045. The chart below provides estimates at higher annual growth rates as well. Even at four percent annual growth, the SR 20/Barrington intersection operates at or better than the LOS standard until 2018.



Over the past five years the frequency of traffic collisions has not significantly changed from year to year, and most importantly, there were no serious injury or fatality collisions during that time.

Even though there is no near term concern with intersection level of service, and collisions are not trending up in either frequency or severity, drivers would still benefit from improved traffic flow on SR 20 in between the intersections, particularly westbound on SR 20 between Pioneer and Swantown, as traffic volumes grow in the future. A key to improving westbound traffic flow would be the elimination of the bottleneck where SR 20 reduces from two lanes to one east of the Erie St. intersection.

Over the past several years WSDOT has evaluated a number of lane and intersection configurations to determine if there are additional lower cost alternatives to the recommendations made in the 2005 Pre-design Analysis. With traffic growing at a much slower rate than originally forecasted, the need for more costly improvements may be delayed further into the future than initially thought. Several lower cost alternatives, once thought to have limited useful life, may be viewed as viable improvements that could maintain reasonable traffic operations for the next 10 to 20 years or more if the moderation in traffic growth continues.

For more information refer to the SR 20 Swantown to Barrington Drive, Corridor Pre-design Analysis, Technical Update completed in April 2012.