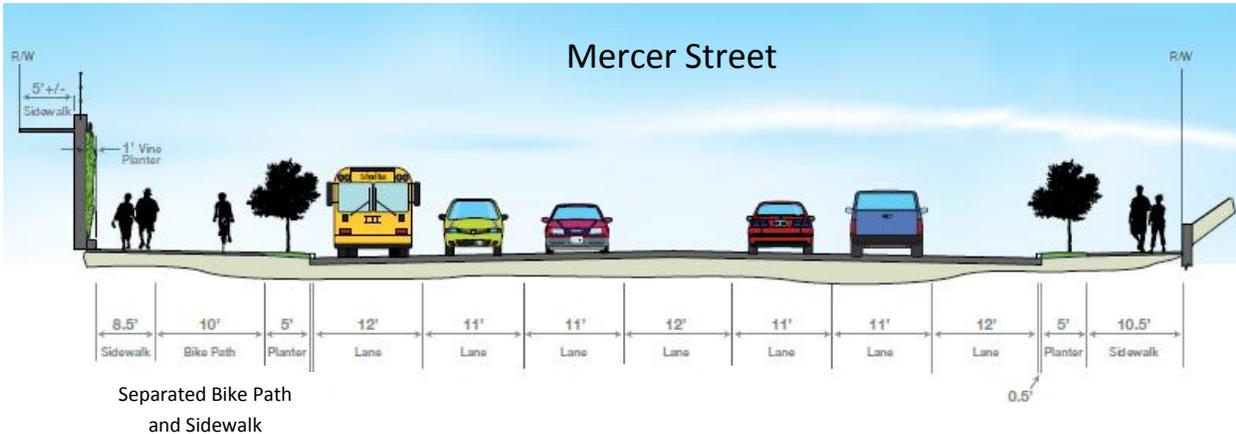


## Public Health Benefits of Mercer West Project

The Mercer West Project will build or improve sixteen blocks of sidewalk and complete a one-mile gap in the regional bicycle trail system, which will result in a significant increase in the number of pedestrian and bicycle trips in the surrounding area. The project builds a 1,200-foot long, 17.5-foot wide concrete pathway for both bicycles and pedestrians under the SR 99 Bridge between Fifth Avenue N and Dexter Avenue N. This pathway includes a 10-foot wide, two-way bike path separated from vehicular traffic by a raised planting strip at least 5-foot wide. A sidewalk at least 7.5-foot wide is on the other side of the bike path from the raised planting strip. The path connects with new bike lanes on Mercer Street between Fifth Avenue N and Fifth Avenue W as well as to a new bike path along Fifth Avenue N.



These facilities complete a gap in the Lake-to-Bay Trail, which will link the Elliott Bay Trail, via the Thomas Street Pedestrian and Bicycle Overpass, and the Cheshiahud Trail around Lake Union. These linkages connect the Uptown and South Lake Union neighborhoods to a regional trail system that extends throughout Western Washington enabling bicycle travel as far as Boston.

Research shows that increased physical activity due to additional pedestrian and bicycle trips results in significant health benefits, including reduced risk of coronary heart disease, hypertension, colon cancer, and diabetes. The 2004 study *Cost-Benefit Analysis of Physical Activity Using Bike/Pedestrian Trails*<sup>1</sup> quantified the net benefits of money spent on trail development from a health standpoint. The study found that every \$1 investment in trails for physical activity led to \$2.94 in net direct annual medical benefit.

Taking a conservative approach, this analysis only looks at the cost of the concrete used in construction of the 1,200-foot separated pathway for pedestrians and bicycles. While the pathway varies in width, we have used the minimum width, 7.5 feet, in the calculations. The pathway will be paved in six inches of concrete, providing a long life. Another conservative assumption is the use of the net benefit amount from the 2004 study. Health care costs have increased much more dramatically than most sectors of the economy.

Net Health Benefit of Trail Connection

	Amount
Volume of concrete	1,166.67 cu. yd.
Cost of concrete	\$196,233
Annual health benefit	\$ 576,926
Total Monetized Benefits – 3 percent discount rate	<b>\$10,046,098</b>
Total Monetized Benefits – 7 percent discount rate	<b>\$6,723,255</b>

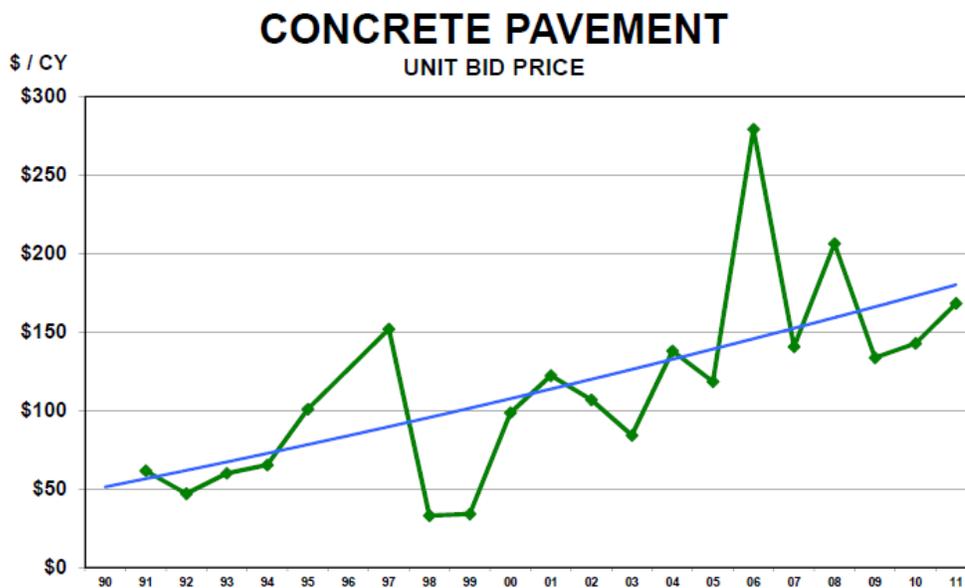
1. Wang, Guijang, Macera, Caroline, Scudder-Soucie, Barbara, Schmid, Tom, Pratt, Michael, Buchner, David; Journal: Health Promotion Practice, April 2005, Vol. 6, No. 2, 174-179.

WSDOT Highway Construction Costs - December 2011

This is a recap of prices bid last quarter and includes a comparison to the previous quarter. It also compares the current year to date bid price for an item to the average from the previous year. All averages are the weighted average of a set of data. It is intended to provide insight into the cost of an item by showing the range of prices bid. The estimated cost of future projects is dependent on many factors and the unit price selected is determined by an evaluation of past history, future trends and specific details of the project. The average price listed for each item below is not intended to be the bid price used in an estimate.

**Concrete Pavement: \$180.00 per cubic yard**

The unit bid price increased by \$13.96 from the average unit bid price of \$166.04 per cubic yard last quarter. Only one contract was awarded containing concrete pavement so no price range is available. WSDOT awarded 2,540 cubic yards of concrete pavement during the fourth quarter of 2011 and 42,313 cubic yards of concrete pavement during the third quarter. The average unit bid price in 2011 is **\$168.20** compared to \$142.75 in 2010.



For more information, please call the WSDOT Construction Office at (360) 705-7822 or visit <http://www.wsdot.wa.gov/biz/construction>

1/23/2012