

520 Tolling Implementation Committee Evaluation Results for Initial Scenarios

July 23, 2008

The 520 Tolling Implementation Committee is charged by the legislature and governor (ESHB 3096) with evaluating issues related to tolling options on 520, and reporting back its findings to the 2009 legislature. A key part of the committee's work is developing data and describing the implications of tolling 520 so that the options can be evaluated, and the public can provide informed comments. The information below represents preliminary estimates of toll rates, funding, performance, and travel changes for four initial scenarios identified by the committee. These estimates are based on a series of assumptions; changes in assumptions will affect the estimates below. Public input is needed to identify next steps, including other tolling scenarios to evaluate.

Evaluation Criteria	2010 No Tolls	2016 No Tolls	Scenario 1	Scenario 2		Scenario 3		Scenario 4		
			Toll new 520 bridge in 2016	Toll current 520 bridge starting 2010		Toll new 520 bridge and 90 bridge starting 2016		Toll 520 bridge starting 2010, and 90 bridge in 2016		
			2016	2010	2016	2016 – 520	2016 – 90	2010	2016 – 520	2016 – 90
“Reasonableness” of Toll Rates* (Toll Rates are shown in 2007 dollars)										
Morning (5 – 9 AM)	N/A	N/A	\$3.05	\$2.15		\$2.60		\$2.60	\$2.60	
Mid-day (9 AM – 3 PM)	N/A	N/A	\$2.10	\$1.05		\$2.10		\$2.10	\$2.10	
Afternoon (3 – 7 PM)	N/A	N/A	\$3.80	\$2.95		\$3.25		\$3.25	\$3.25	
Evenings (7 – 10 PM)	N/A	N/A	\$1.95	\$1.30		\$1.95		\$1.95	\$1.95	
Nights (10 PM – 5 AM)	N/A	N/A	\$0.90	\$0.75 (after 2016)		\$0.90		No charge	\$0.90	
Weekends	N/A	N/A	Varies from \$.75 to \$1.50	Varies from \$0.75 to \$1.50		Varies from \$0.75 to \$1.50		Varies from \$0.75 - \$1.50	Varies from \$0.75 - \$1.50	
Segment	N/A	N/A	Varies from \$0.40 to \$0.80	N/A		Varies from \$0.40 to \$0.75		N/A	Varies from \$0.40 - \$0.75	
Estimated Bridge Performance – Travel Speeds in the Afternoon Commute (3-7PM)										
520	26 mph	25 mph	44 mph	40 mph	36 mph	34 mph		41 mph	34 mph	
90	35 mph	33 mph	29 mph	35 mph	28 mph	40 mph		33 mph	40 mph	
522	19 mph	17 mph	16 mph	18 mph	16 mph	16 mph		19 mph	16 mph	
Estimated Daily Travel Changes										
Choose HOV and transit	N/A	N/A	2.7%	3.2%	1.8%	2.6%	2.0%	3.6%	2.6%	2.0%
Choose a different time	N/A	N/A	1.1%	2.0%	1.7%	0.5%	1.1%	1.6%	0.5%	1.1%
Choose a different route	N/A	N/A	5.8%	7.2%	6.1%	4.6%		7.5%	3.9%	
90 (mid-span)	168,700	155,200	162,100	175,300	162,200	136,200		174,000	136,200	
522 (Kenmore at NE 61 st)	50,000	52,000	52,800	51,400	52,900	54,700		51,600	54,700	
5 (Downtown Seattle)	313,800	316,500	318,300	318,100	317,700	316,400		319,300	316,400	
405 (Downtown Bellevue)	247,600	261,100	261,200	249,900	261,500	259,400		259,400	259,400	
Choose a different destination (no lake crossing)	N/A	N/A	15.5%	1.7%	8.3%	22.3%		19.6%	22.3%	
Estimated Bridge Funding**										
			~\$835 million	~\$900 million		~\$2.3 billion		~\$2.5 billion		

*These are example toll rates for planning purposes. Actual toll rates will depend on a final finance plan and determined by the State Transportation Commission with approval by the State Legislature. .

**Financing assumptions include: Term: 30-year, general obligation/motor vehicle fuel tax bonds. Minimum Debt Service: Annual revenue 1.25 times debt service. Interest Rate: 5.9% for current interest bonds, 6.4% for capital appreciation bonds.

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The Big Picture – What Did We Learn?

Tolling 520 leads to changes in how people travel. The higher the toll rate, the more people change how they travel.

- Some people change to carpools and transit
- Traffic on alternate routes increases
- Largest change is seen in people choosing not to cross the lake

- When 520 is tolled and more transit service is added, travel speeds on 520 increase, but there is little or no change on alternate routes.
- If 90 is also tolled, more drivers choose to stay on 520, but more traffic is seen on alternate routes.
- Of the four initial scenarios, none produce funding from tolls within the legislature’s target of \$1.5 to \$2.0 billion. Two raise less and two raise more.
- Public input will be necessary to identify next steps.

Scenario 1. Start tolling the new 520 bridge in 2016	Scenario 2. Start tolling the 520 bridge in 2010	Scenario 3. Start tolling the new 520 bridge and 90 bridge in 2016	Scenario 4. Start tolling the 520 bridge in 2010, and 90 bridge in 2016
“Reasonableness” of Toll Rates* (Toll Rates are shown in 2007 dollars)			
You would start paying tolls on a new 520 in 2016. You would not pay tolls on 90. This is the highest bridge toll rate (\$0.90 - \$3.80) presented among the four initial scenarios. You’d pay a toll to use the bridge and on any section of the corridor from 5 to 405. You’d also pay a toll at night.	Tolls begin on 520 in 2010. There are no tolls on 90. This is the lowest toll among the four initial scenarios (\$0.75 - \$2.95). You would only pay crossing the lake and begin paying in 2010. You would not pay a toll at night until 2016.	Tolls begin on 520 and 90 in 2016. This toll is in the middle among the four initial scenarios (\$0.90 - \$3.25). You would pay the same on both bridges and would pay tolls on any section from 5 to 405. You would also pay a toll at night.	This is a higher toll rate on 520 in 2010 than Scenario 2. The tolls would range from \$0.90 to \$3.25 each direction. You would pay tolls if you cross the lake. You would not pay a toll at night.
Bridge Funding**			
This scenario raises an estimated \$835 million in funding for a new 520 from tolls, less than the legislature’s target of \$1.5 to \$2.0 billion. Additional sources of funding would be needed to pay for a \$3.7 to \$3.9 billion project.	This scenario raises \$900 million in funding for a new bridge from tolls - less than the legislature’s target of \$1.5 to \$2.0 billion. Additional sources of funding would be needed to pay for a \$3.7 to \$3.9 billion project.	This scenario raises \$2.3 billion in funding for a new bridge from tolls, which is more than the legislature’s target of \$1.5 to \$2.0 billion.	This scenario raises \$2.5 billion in funding for a new bridge from tolls, which is more than the legislature’s target of \$1.5 to \$2.0 billion.
Bridge Performance – Travel Speeds in the Afternoon Commute (3-7PM)			
In 2016 estimated speeds on 520 increase from 25 mph without tolls to 44 mph with tolls. In 2016 estimated speeds on 90 decrease from 33 mph without tolls to 29 mph with tolls on 520. There is little change to speeds on 522.	In 2010 estimated speeds on 520 increase from 26 mph without tolls to 40 mph with tolls. There is little change to speeds on 522 and 90. In 2016 estimated speeds on 520 increase from 25 mph without tolls to 36 mph with tolls. Estimated speeds on 90 decrease from 33 mph without tolls to 28 mph with tolls on 520. There is little change to speeds on 522.	In 2016 estimated speeds on 520 increase from 25 mph without tolls to 34 mph with tolls. Estimated speeds on 90 increase from 33 mph without tolls to 40 mph with tolls on 520. There is little change to speeds on 522.	In 2010 estimated speeds on 520 increase from 26 mph without tolls to 41 mph with tolls. Speeds on 522 and 90 change little. In 2016 estimated speeds on 520 increase from 25 mph without tolls to 34 mph with tolls. Estimated speeds on 90 increase from 33 mph without tolls to 40 mph with tolls. Speeds on 522 change little.
Daily Travel Changes			
The greatest change is people choosing a different route, or a different destination and not crossing the lake.	In 2010 the greatest estimated change is people choosing different routes, changing to carpools and transit, or choosing a different time. A small percentage choose a different destination. In 2016 the greatest estimated change is people choosing different routes, or choosing a different destination and not crossing the lake. A smaller percentage choose carpools and transit or a different time.	The great estimated change in travel is people choosing a different destination and not crossing the lake; a different route; or carpools or transit. A smaller number of people chose to travel during a different time.	In 2010 the greatest estimated change is people choosing a different destination and not crossing the lake; a different route; and carpools and transit. A small percentage choose a different time. In 2016 the greatest estimated change is people choosing a different destination and not crossing the lake; a different route; or carpools or transit. A small percentage choose a different time.