

# SR 520 Update

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**Washington State Transportation Commission**  
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# SR 520 Update

## One year later: Traffic

- More than 18 million tolled trips on SR 520 since Dec. 29, 2011.
- Average of 70,000 weekday trips.
- Toll daily volume is generally at or above projected levels.
- Travel times are about five minutes shorter on average during the peaks.
- Weekday traffic volume on I-90 is approximately 11 percent higher. Travel times during peak periods are about one to two minutes longer.
- Weekday volume traffic volumes across Lake Washington are approximately 5 percent lower than pre-tolls.

# SR 520 Update

## One year later: *Good To Go!*

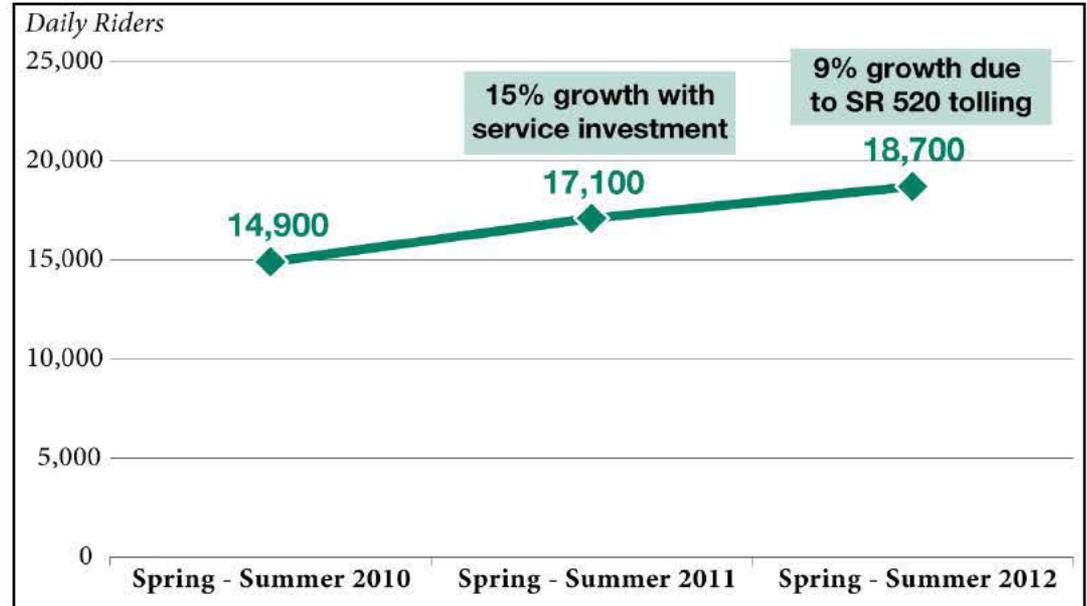
- Between, Dec. 29, 2011 and Nov. 30, 2012, SR 520 tolls have generated approximately \$50 million in gross toll revenue.
- More than 384,000 active *Good To Go!* accounts and 691,000 active *Good To Go!* passes.
- WSDOT forecasted that 72 percent of trips across the bridge in the first year of tolling would be paid with *Good To Go!* accounts.
  - Currently, approximately 84 percent of all toll trips are made by *Good To Go!* account holders (72 percent pass and 12 percent Pay By Plate).
- The vast majority of tolls are paid on time.
  - Approximately 96 percent of SR 520 tolls are paid within 80 days and before the civil penalty phase.
  - The average amount due in civil penalties is \$200.
  - Less than one percent of all toll transactions result in a vehicle registration hold.
  - The average amount owed for vehicle owners with a registration hold is \$365.

# SR 520 Update

## One year later: Transit

- Estimated daily transit ridership through September 2012 was nearly 19,000 – up a total of 25 percent since 2010, including a 9 percent increase since 2011.
- Vanpools crossing the lake on the SR 520 corridor have increased 39 percent since tolling started

## Increased transit ridership in the SR 520 corridor



Source: King County Metro

# SR 520 Update

## One year later: Transit

- Primary Purpose of the Trip: Three out of four (76 percent) respondents indicated work as the primary purpose for riding this bus across SR 520 and 14 percent mentioned school.
- Main Reason for Using the Bus: Saving money surfaced more often than other survey options as main reasons for riding this bus (41 percent), followed by don't drive/don't own a car (21 percent), more convenient than car (20 percent), and expensive, limited parking (18 percent).
- Prior Method of Making the Trip: 47 percent of respondents indicated that they have always made the trip across SR 520 by bus, but 28 percent indicated that before they drove alone, 12 percent indicated that they rode another bus, 6 percent indicated they carpooled, 4 percent indicated they didn't make the trip and 3 percent indicated other (just moved here, worked elsewhere, new job, first trip today).
- Influence of Tolls: 19 percent of respondents started riding this bus after tolling began and 30 percent of all riders said the tolling on SR 520 influenced them to ride this bus.
- 82 percent of respondents perceive traffic on SR 520 to be less congested than it was before tolling.

Source: King County Metro SR 520 On-Board Intercept Survey Report: Spring Post Tolling, July 2012

# SR 520 Update

## One year later: Financial Audit

- As required in SR 520's Master Bond Resolution, the "Washington State System of Eligible Toll Facilities" FY 2012 Financial Statements were audited by an independent CPA firm.
- The "System" is made up of toll facilities that meet certain tests of inclusion. Currently, only SR 520 and the Toll Facility Bond Retirement Account are included in the System.
- CliftonLarsonAllen LLP reported that the financial statements are presented fairly, in all material respects, the respective financial positions of the basic financial statements of the Washington State System of Eligible Toll Facilities as of 6/30/2012 system in conformity with accounting principles generally accepted in the United States of America.
- There were no exceptions noted in the audit of the Washington State System of Eligible Toll Facilities.
- Since FY 2012 is the first year of toll operations on the System, prior year comparative data is not available.

# Proposed Scenarios

- Base Case (2.5 percent increases currently used for financial plan)
- No rate increase for FY 14 (all other years continue with rate increases currently used for financial plan)
- 3.5 percent rate increase for FY 14 (all other years continue with rate increases currently used for financial plan)
- Peak afternoon period is extended until 7:00 pm (currently peak period is 3-6 pm)
- Gradually growing rate increases in order to avoid larger increases later

# No Increase Scenario Results

## SR 520 Corridor Account (#16J) — FINANCIAL PLAN Sensitivity Test Results for No Toll Increase on 7/1/2013 (FY 2014)

Test Case	Decrease in Pay-Go Toll Construction Funding	Minimum Coverage Ratios				Unrestricted Fund Balance <sup>1</sup>				
		1st Tier	3rd Tier	4th Tier <sup>2</sup>	Overall <sup>3</sup>	FY 2014 Period End	FY 2015 Period End	FY 2016 Period End	# FYs w/ Negative Balance	First / Last Fiscal Year with Negative Balance
Base Case Financial Plan (10/25/12)	—	2.00 ×	1.37 ×	1.15 ×	1.00 ×	\$203 K	\$203 K	\$203 K	0	N/A
Sensitivity Test Scenario A: Forego Planned 2.5% Toll Increase in FY 2014 (7/1/2013)*	(\$2,000 K)	1.95 ×	1.34 ×	1.13 ×	0.99 ×	\$203 K	\$203 K	(\$754 K) <i>Decrease of (\$956 K)</i>	28	2016 2043
Minimum Coverage Required for Issuing Additional Bonds (Debt)		2.00 ×	1.30 ×	1.15 ×	1.00 ×					

### Notes:

- <sup>1</sup> Based on existing Base Case Financial Plan debt structuring, with interest earnings included in the available funding for pay-go construction.
  - <sup>2</sup> Resolution No. 1117 requires 1.10× coverage on the 4th Tier in order to issue additional bonds; however, the TIFIA Base Case Financial Plan calls for 1.15×.
  - <sup>3</sup> Coverage inclusive of reserve account deposits, including deferred sales tax, O&M, and R&R reserves.
- \* Revenue impacts of foregone FY 2014 2.5% toll increase based on December 2012 T&R forecasts for IG "Scenario A" from CDM Smith and updated net revenue projections from Parsons Brinckerhoff dated 12/31/2012.

# SR 520 Rate Setting Milestones

	Milestone	WAC Revision Process	
		Maintain 2.5% increase (unrounded), update to the toll rate tables only	Deviate from the 2.5% increase (including rounding)
October	Rate setting kickoff meeting	✓	✓
	Certification of 2.5% increase	✓	
December	Financial plan/funding needs	✓	✓
	WSTC proposed scenarios		✓
January	File CR 101		✓
February	Preliminary scenario results		✓
March	WSTC proposed rates		✓
	File CR 102		✓
	File CR 105	✓	
April	Public Input meetings		✓
	Certification of proposed rates		✓
May	Public Hearing		✓
	Adopt toll rates		✓
	File CR 103	✓	✓

# Motorcycle Usage

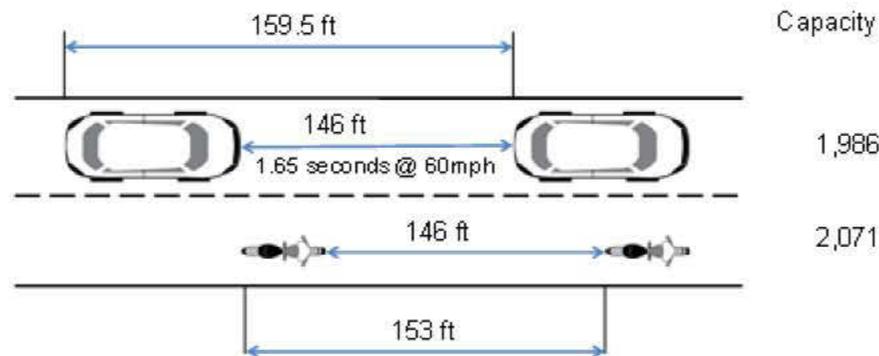
- **Of all active *Good To Go!* tags, motorcycle tags represent 0.7 percent overall.**
- **Manual review of images showed:**
  - Oct 11-13, 2012 – average of 180 daily trips (0.28 percent of total traffic)
  - Nov 8-10, 2012 – average of 164 daily trips (0.25 percent of total traffic)
  - Dec 6-8, 2012 – average of 90 daily trips (0.13 percent of total traffic)
  - Jan 3-5, 2013 – average of 66 daily trips (0.12 percent of total traffic)
- **On Tacoma Narrows Bridge, motorcycle counts must be done manually.**
  - Cash lanes do not tally motorcycles as a class.
  - High number of old-format tags still in use on facility and not identifiable through the current system for calculation.
    - Calendar year 2010 data had 34,337 motorcycle trips out of 14,195,243 – less than a percent (0.24 percent)

# National perspective

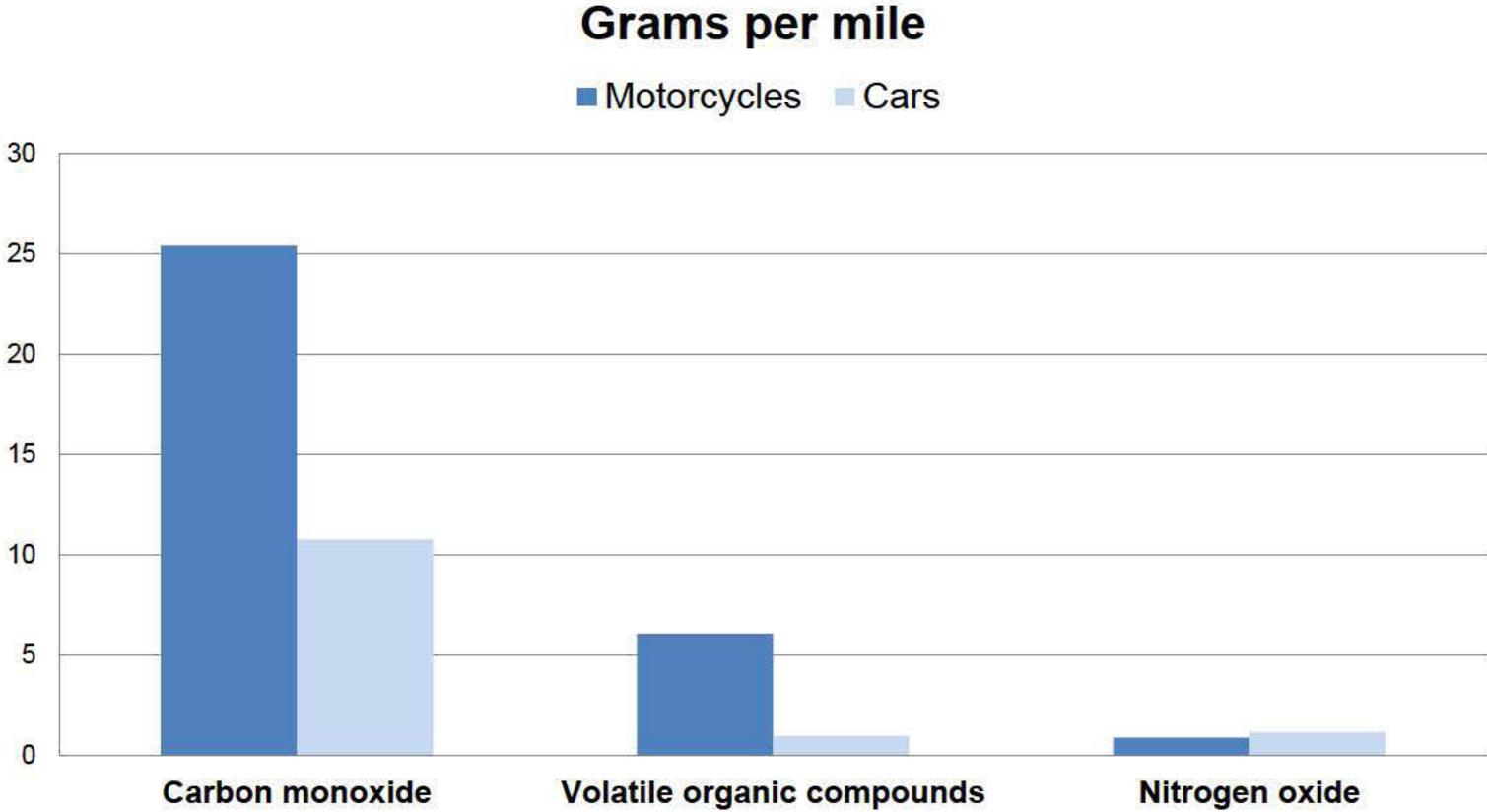
- **Most toll systems do not differentiate motorcycles from other 2-axle vehicles.**
- **Most toll agencies typically treat motorcycles as 2-axle vehicles. Some exceptions include:**
  - Bay Area Toll Authority: 50 percent discounted rate for motorcycles during carpool hours
  - Chesapeake Expressway: Motorcycle cash rates are \$1 regular and \$2 peak weekend (versus \$3 and \$6 respectively for 2 axle vehicles); account holders pay the same toll as other 2 axle vehicles since the toll system does not differentiate between motorcycles and cars.
  - NY State Thruway: Cash rates are the same toll as other 2 axle vehicles, however an account holder may receive a special motorcycle tag which offers a 50 percent discount once the toll authority has been provided proof of motorcycle registration.
- **Many HOT Lanes and Express Toll Lanes provide motorcycle exemptions consistent with HOV policy.**

# Roadway Usage

- **Motorcycles rarely ride side-by-side in a lane and have the same headways as passenger cars.**
- **Motorcycles use 96 percent of a passenger car's space on the roadway. Both are 2 axle vehicles.**

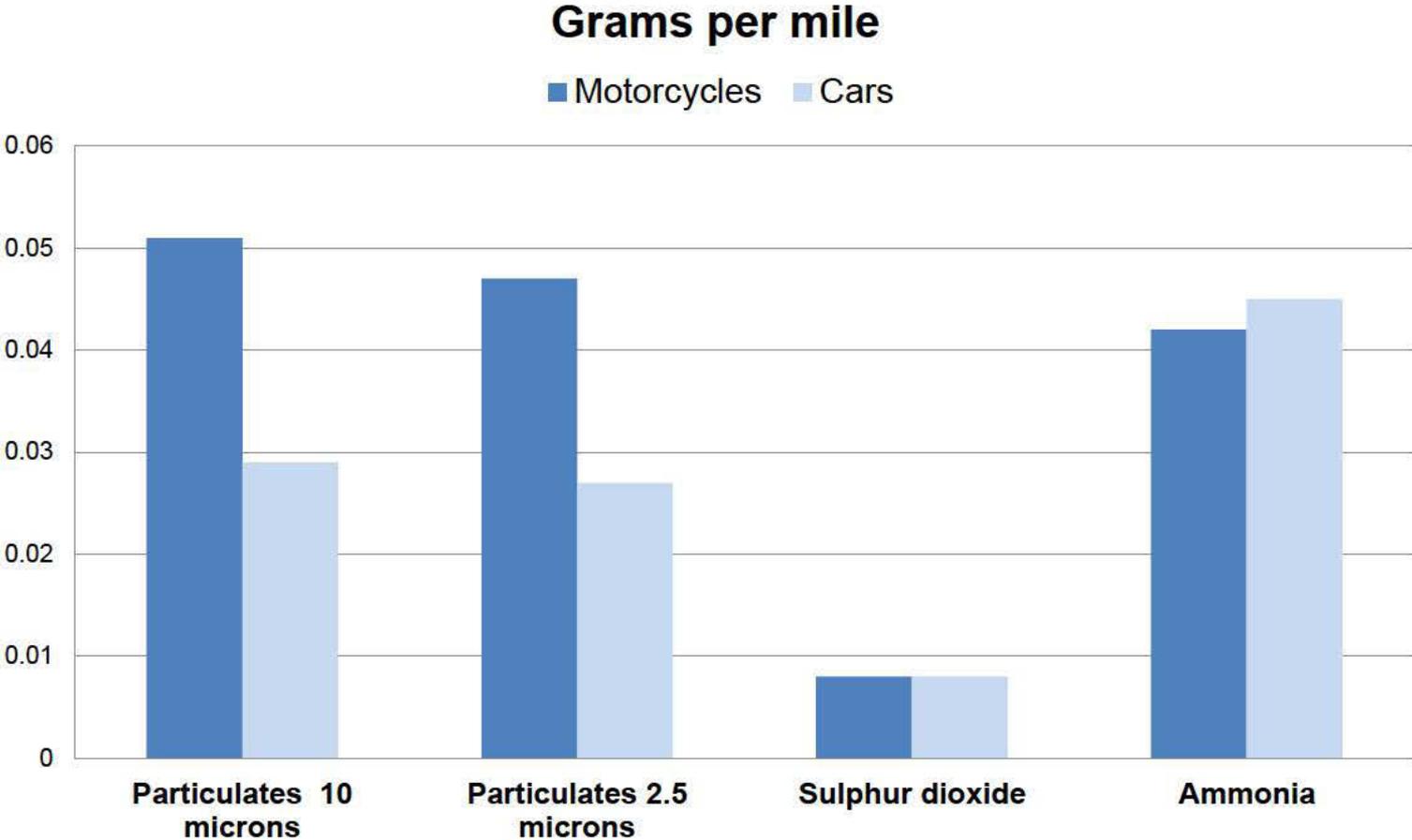


# Environmental effects – emissions



Environmental Protection Agency MOVES Model, 2011

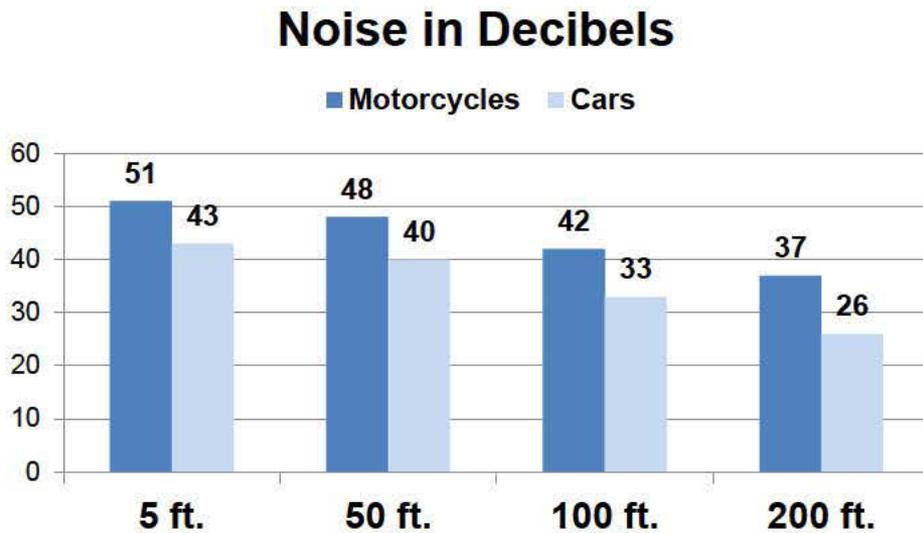
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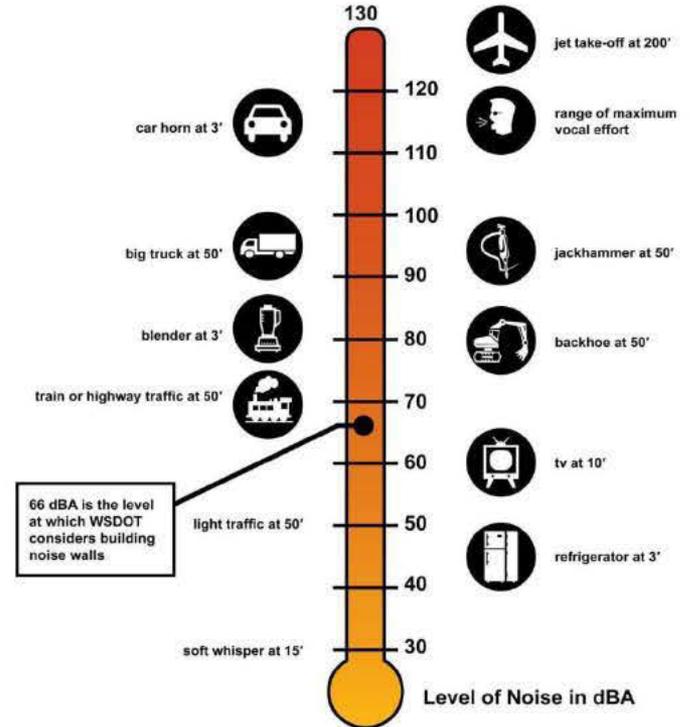
Environmental Protection Agency MOVES Model, 2011

# Environmental effects – noise

- Generally, 3 dBA is considered the minimum audible difference between sound levels. A 10 dBA change is generally perceived to be 2x or 1/2 as loud depending of whether the sound is increasing or decreasing.



Source: FHWA Traffic Noise Model 2.5



# Other considerations

- **Pavement damage caused by light duty vehicles and motorcycles is considered negligible, when compared to that of a heavy truck or bus, and is not used in pavement design.**
- **Fuel Consumption**
  - Light duty vehicles — 23.5 mpg
    - CAFE standards by 2025 will have fuel economy at 54.5 mpg
  - Motorcycles — 43.4 mpg

Source: USDOT Bureau of Statistics, 2010

# Questions?

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