

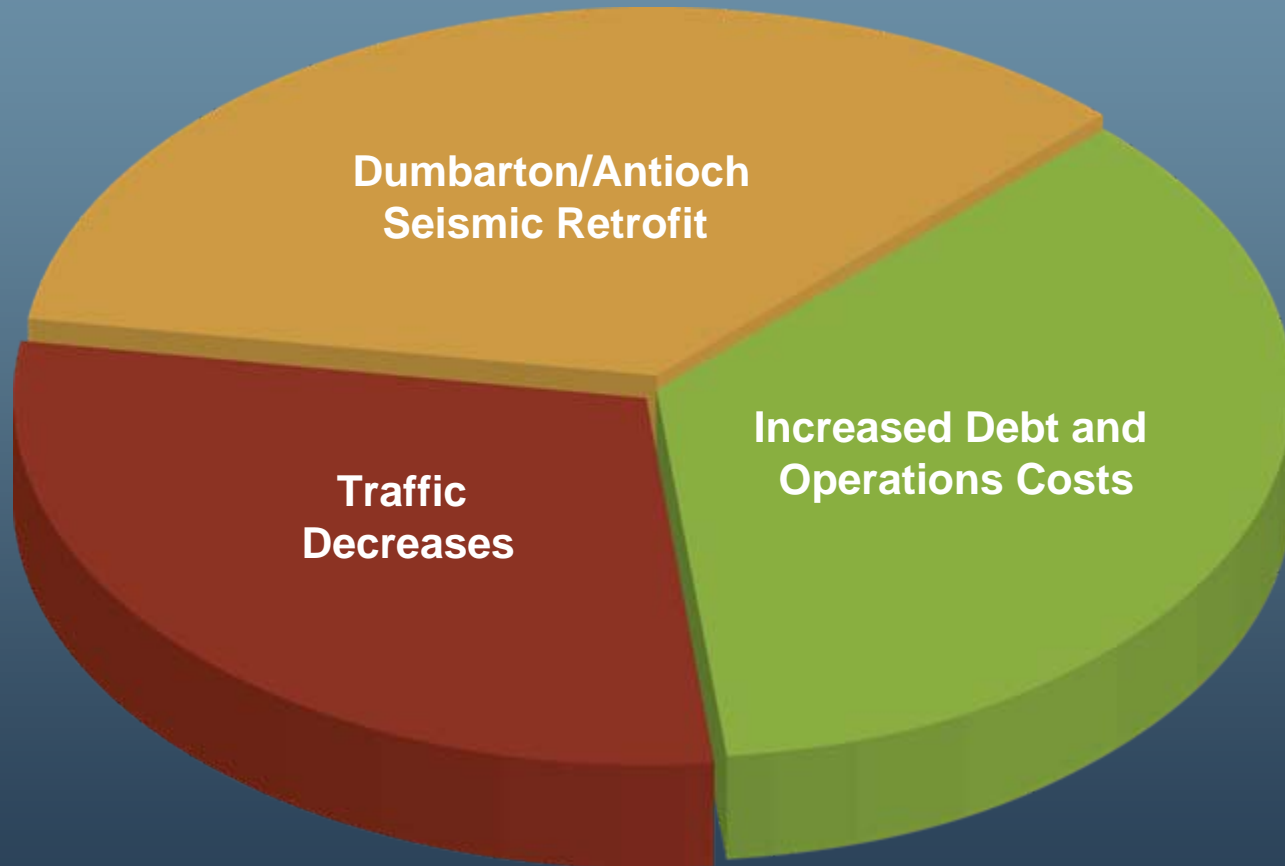
Toll Increase Options for the State-owned Bay Area Bridges



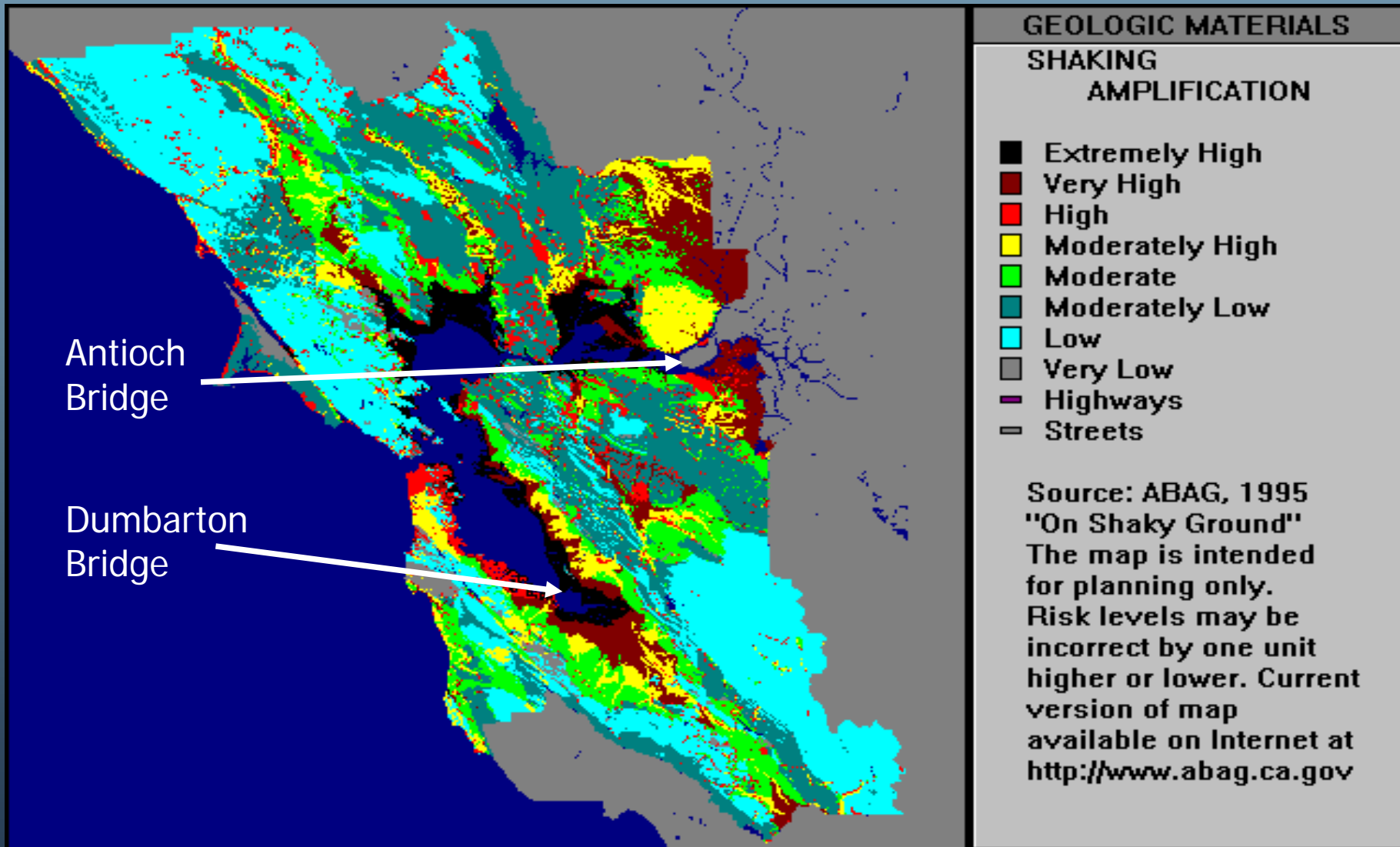
BATA Oversight Committee

October 14, 2009

Major Reasons Driving the Need to Increase Revenues



Bay Area Seismic Risk Levels



Antioch & Dumbarton Bridge Retrofits⁴

Antioch Bridge

- STRUCTURE: Steel plate girder
- OPENED: December 1978
- RETROFIT STRATEGY: Install isolation bearings, strengthen superstructure and substructure
- Retrofit Completion: 2012



Dumbarton Bridge

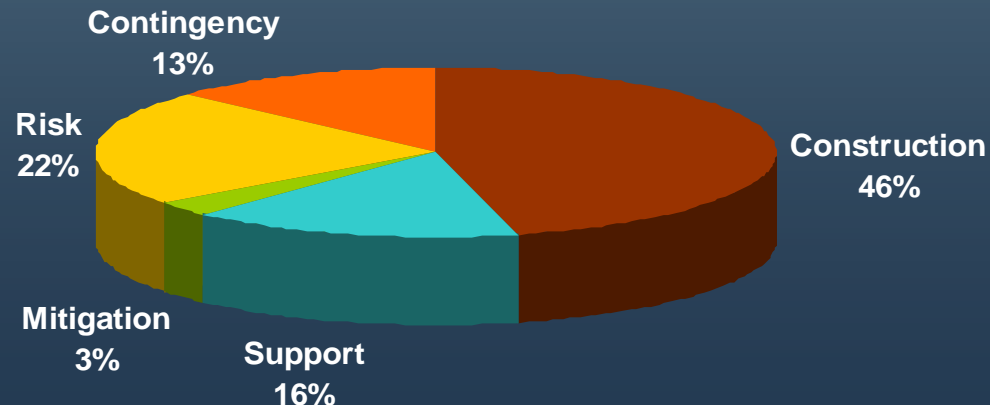
- STRUCTURE: Steel box girder and pre-stressed concrete approach spans
- OPENED: October 1982
- RETROFIT STRATEGY: Install isolation bearings, strengthen superstructure and substructure for main span and approaches
- Retrofit Completion: 2013



Total Project Costs - \$750 Million

(Estimate reduced from \$950 Million in December 2008)

Description	Antioch (\$ Millions)	Dumbarton (\$ Millions)
CONSTRUCTION COST ESTIMATE (ESCALATION TO MID YEAR OF CONSTRUCTION)	\$98	\$195
CONTINGENCIES	45	65
SUBTOTAL CAPITAL COST ESTIMATE	143	260
SUPPORT COST ESTIMATE	39	95
MITIGATION COST ESTIMATE	13	10
RISK COST ESTIMATE	72	118
TOTAL COST ESTIMATE	\$267	\$483



Total Project Costs

Factors affecting revised cost estimate

■ Reduced Project Scope:

- **Dumbarton Bridge:**
 - Reduction of retrofit required for superstructure
 - Minimization of reconstruction of joints
 - Elimination of concrete confinement collars
- **Antioch Bridge:**
 - Elimination of cross bracing for superstructure
 - Modifications to cross bracing between pier columns
 - Simplification of retrofit at hinges

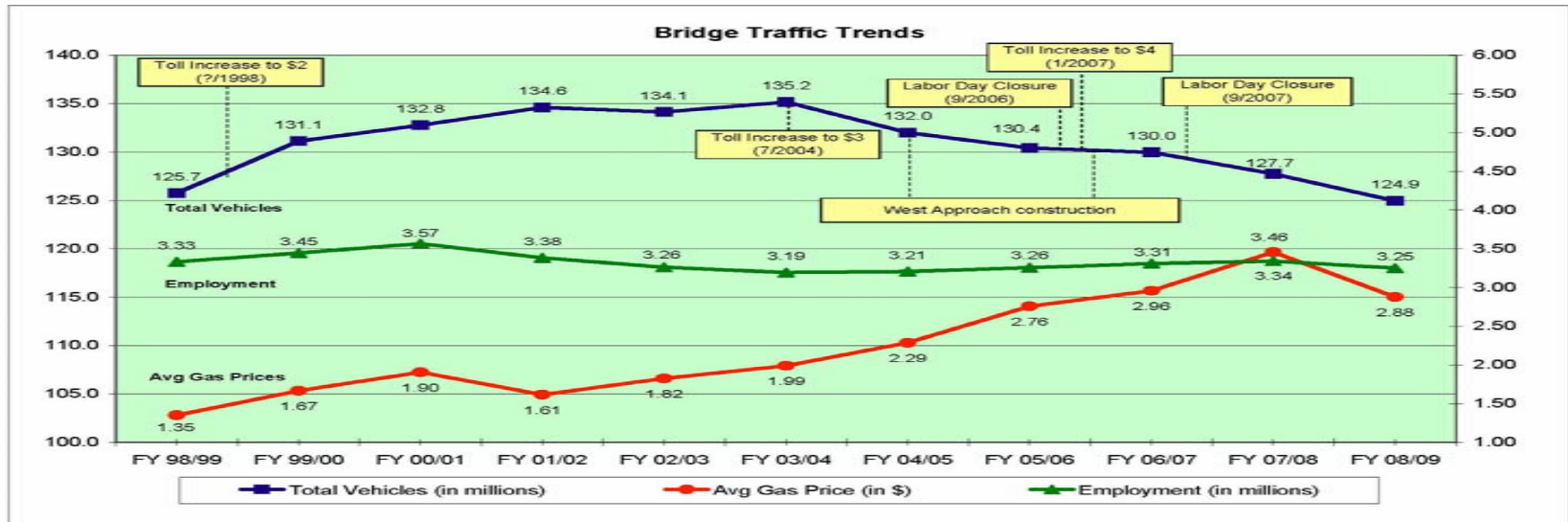
■ Reduced Project Risks:

- Currently at 100% design (December 2008 estimate was based on 35% design)
- Underwater work essentially eliminated
- Added certainty for fabrication of isolation bearings and permitting



Traffic

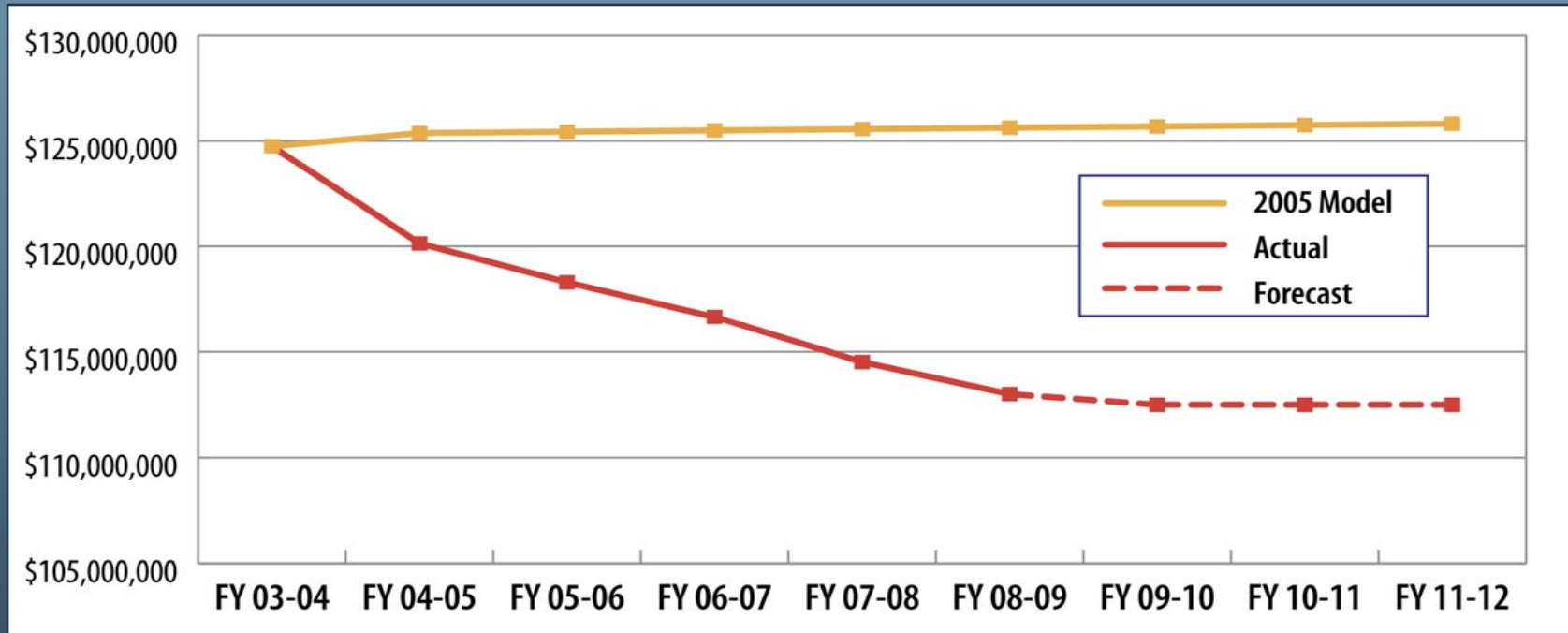
Bridge Traffic Trends (FY 98/99 through FY 08/09)



- **Total traffic has declined 8% from FY 2003-04.** Possible factors include weak economy, higher gas prices and construction activities on the bridges.
- **FY 09-10 first quarter average daily traffic was about 2.0% more** than the same period a year earlier.

Traffic

Actual Base Toll Revenues vs. Assumed Base Toll Revenues in 2005 Finance Model



- Reduction in toll paying traffic accounts for about \$50 million in reduced annual revenues from 2005 model forecasts.

Debt Costs

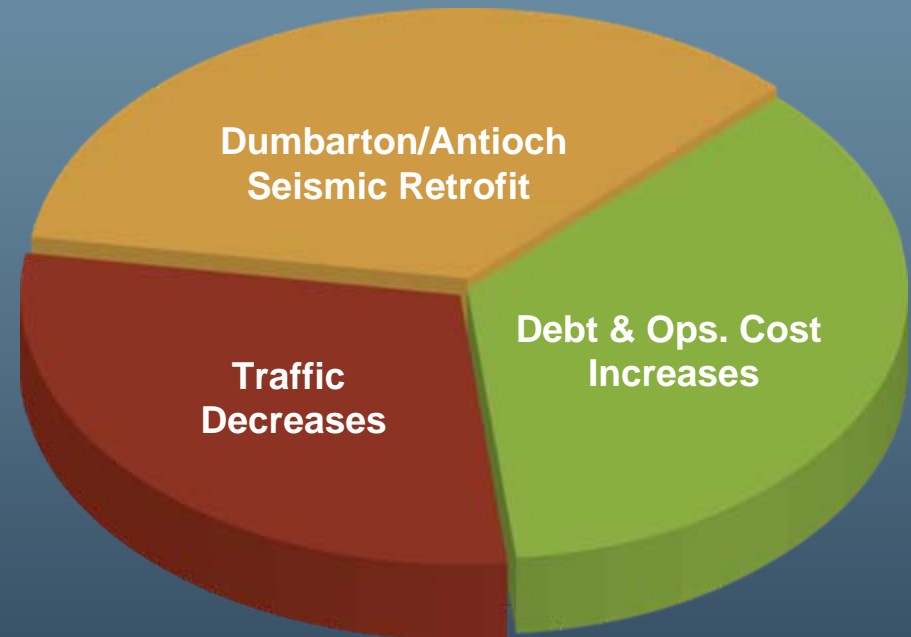
Current Forecast of Debt Cost vs. Assumed Debt Costs In 2005 Finance Model

	2005 Assumptions	2008 Assumptions
Term	30-40 Years	30 Years
Product	Traditional Fixed – 33%	Traditional Fixed – 75%
Future Interest Cost	3.56% - 5.86%	6.25% - 6.75%

- Increased debt cost accounts for about \$35 million in added annual costs from 2005 model forecast.

Funding Strategy

- Pursue operating cost savings
- Improve toll violation collections
- Seek new fund sources
- Increase tolls



Toll Collection Costs

- For FY 2009-10, manual toll collection staff has been reduced by 10 percent.
- For FY 2009-10, operating costs for manual & FasTrak® toll collection are estimated to be \$2.5 million less than FY 2008-09.

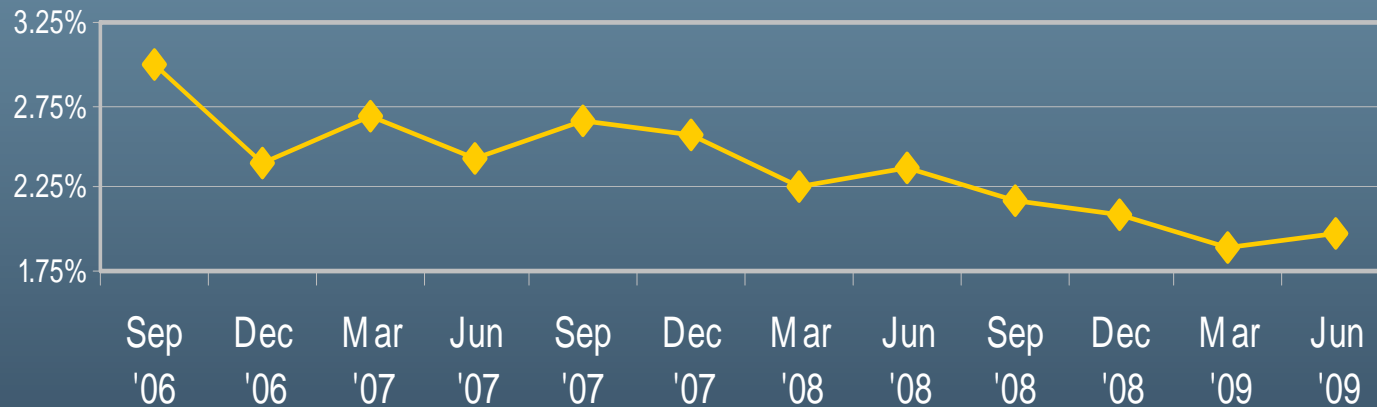
Toll Collection (Manual & FasTrak®) Budgeting

	FY 2008-09 Actual	FY 2009-10 Budget	\$ Difference
	----- (millions) -----		
Toll Collection	\$23.4	\$22.0	-\$1.4
FasTrak® Customer Service Center	\$16.0	\$14.9	-\$1.1
Total	\$39.4	\$36.9	-\$2.5

Toll Violations and Violation Revenues

- **FY 2008-09 toll violations decreased more than 25% from FY 2006-07.**
- **In FY 2008-09, violation collections exceeded expected toll revenues from violations by \$6.6 mil.**

Violations as Percent of Total Transactions



	FY 2006-07	FY 2007-08	FY 2008-09
Violations (Vehicles)	3,489,161	3,180,981	2,599,407
Expected Revenues	\$12,486,285	\$13,073,832	\$10,891,515
Actual Revenues	\$5,523,504	\$14,502,873	\$17,518,274
Net (Loss)/Gain	(\$6,962,781)	\$1,429,041	\$6,626,758

Other Funding Sources

- **AB 1175 (Torlakson) adds Dumbarton & Antioch Bridges into the Toll Bridge Seismic Retrofit Program (TBSRP)**
- **Current forecast of \$86 million balance in SRP Program Contingency**

Toll Generation Requirements

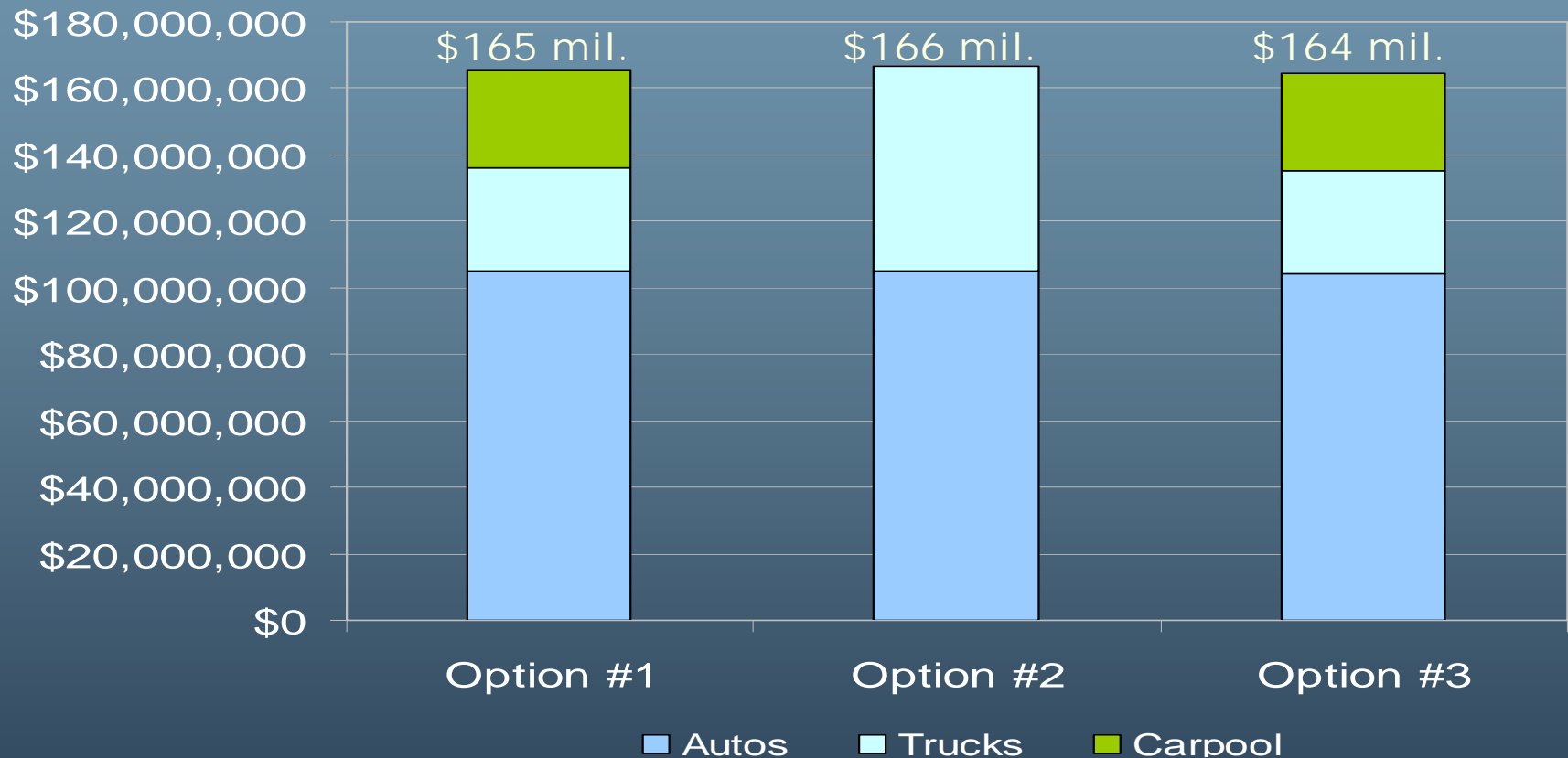
Based on revised finance model, the funding need from a toll increase is about \$160 million in new annual revenues.

Model Assumptions:

- **Projects:**
 - **Completes RM1, RM 2, AB 1171, and Seismic Retrofit programs**
 - **Assumes no funding available from current SRP**
 - **Funds seismic retrofits for Antioch and Dumbarton Bridges**
 - **Funds Rehabilitation Program**
- **Traffic/Revenues:**
 - **Traffic decreases 1% per year through 2011, and then grows at 0.5% per year starting in 2012**

Toll Revenue Options

Toll Revenue Generation Estimates



Option #1 — \$5 for autos, \$3 for carpools, & \$6 per axle for trucks.

Option #2 — \$5 for autos; \$0 for carpools, & \$10 per axle for trucks.

Option #3 — 6 Bridges: Same as Option #1; Bay Bridge \$6 for autos in peak and \$4 for autos in non-peak (M-F), \$5 for autos on weekends.

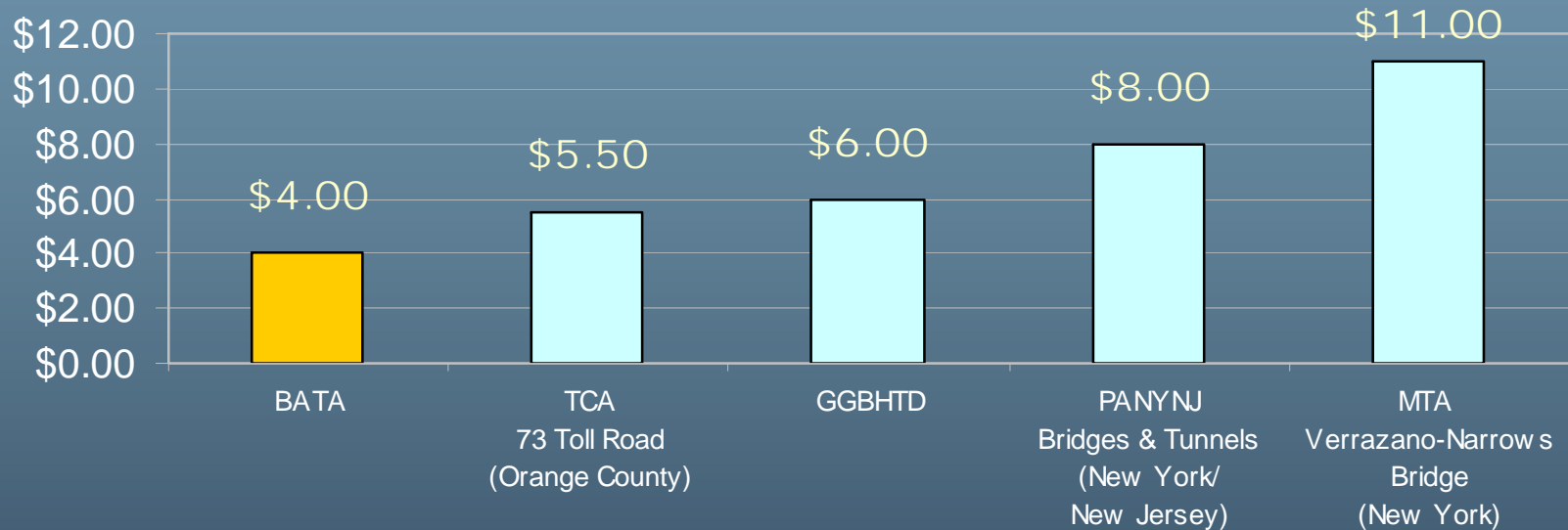
Toll Revenue Options

- **All options raise adequate revenues.**
- **The options limit 2-axle auto toll to a \$1.00 increase** (except Bay Bridge congestion pricing for peak).
- **Truck and Carpool Revenue Generation:**
 - Each \$1.00 per axle increase for trucks, raises about \$8.0 million in revenues.
 - Each \$1.00 increase for carpools, raises about \$10 million in revenues.

Vehicle Class	Current Annual Vehicles	% of Total
2-Axle	109,000,000	89%
3-Axle	615,000	0.5%
4-Axle	450,000	0.4%
5-Axle	1,980,000	1.6%
6-Axle	37,000	0.0%
7+-Axle	4,000	0.0%
Carpool	10,037,000	8.5%
Total	122,123,000	100%

Toll Revenue Options

Comparison of Toll Rates (**Cash**) for Autos (**2-axle Vehicles**)



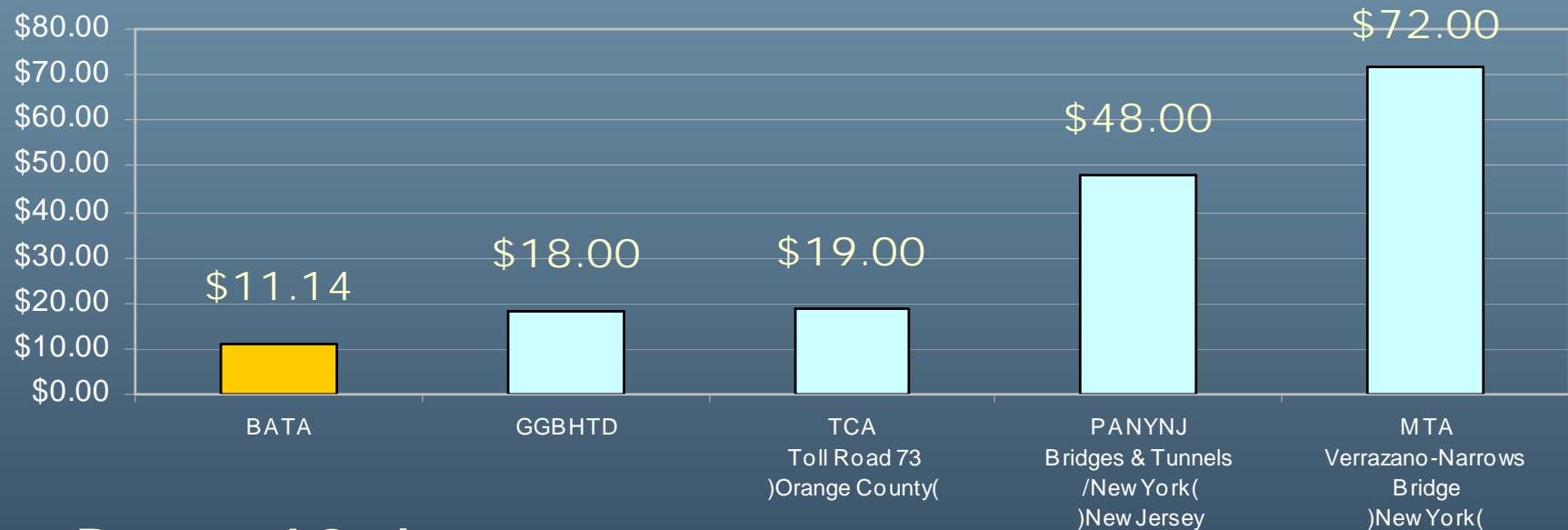
■ Proposed Options:

- **Options #1 and #2:** \$5.00 autos
- **Option #3:** \$6.00 autos in peak, \$4.00 autos in non-peak on Bay Bridge

Note: TCA 73 Toll Road (Catalina View Mainline).

Toll Revenue Options

Comparison of Toll Rates for Multi-Axle Vehicles (Average Cash Tolls for 3- through 9-axle Vehicles)



Proposed Options:

- Options #1 and #3: \$26.00 average toll rate for trucks.
- Option #2: \$40.00 average toll rate for trucks

Note: TCA 73 Toll Road (Catalina View Mainline).

Toll Revenue Options

Comparison of Carpool Toll Rates

Agency/ Facility Type	Cash Toll	Charges for Carpools?	Carpool Toll	Occupancy
BATA (Bridges)	\$4.00	No	\$0	3+/2+
GGB (Bridge)	\$6.00	No	\$0	3+
MTA Verrazano Narrows (Bridge)	\$11.00	Yes	\$2.66*	3+
PANYNJ (Bridges/Tunnels)	\$8.00	Yes	\$2.00*	3+
TCA (Toll Road)	\$5.50	Yes	\$5.25	—

* Must use staffed lanes and meet enrollment requirements.

- Most other toll roads surveyed do not have reduced rates for carpools.

Toll Revenue Options

Option #1:

- **Charges carpools for seismic retrofit portion of toll charges**
 - All carpools would be required to obtain a FasTrak toll tag for reduced rate and FasTrak toll equipment would be required in all carpool lanes.
- **At \$6 per axle, toll rates about double for trucks.**

Vehicle Class	Current Toll	Option #1 Proposed Toll Rates
2-Axle	\$4.00	\$5.00
3-Axle	\$6.00	\$11.00
4-Axle	\$8.25	\$17.00
5-Axle	\$11.25	\$23.00
6-Axle	\$12.00	\$29.00
7+-Axle	\$13.50	\$35.00
Carpool	\$0.00	\$3.00

Toll Revenue Options

Option #2:

- No charge for carpools
- To maintain free passage for carpools, truck charge would need to be \$10 per axle.

Vehicle Class	Current Toll	Option #2 Proposed Toll Rates
2-Axle	\$4.00	\$5.00
3-Axle	\$6.00	\$15.00
4-Axle	\$8.25	\$25.00
5-Axle	\$11.25	\$35.00
6-Axle	\$12.00	\$45.00
7+-Axle	\$13.50	\$55.00
Carpool	\$0.00	\$0.00

Toll Revenue Options

Option #3

(Bay Bridge congestion pricing)

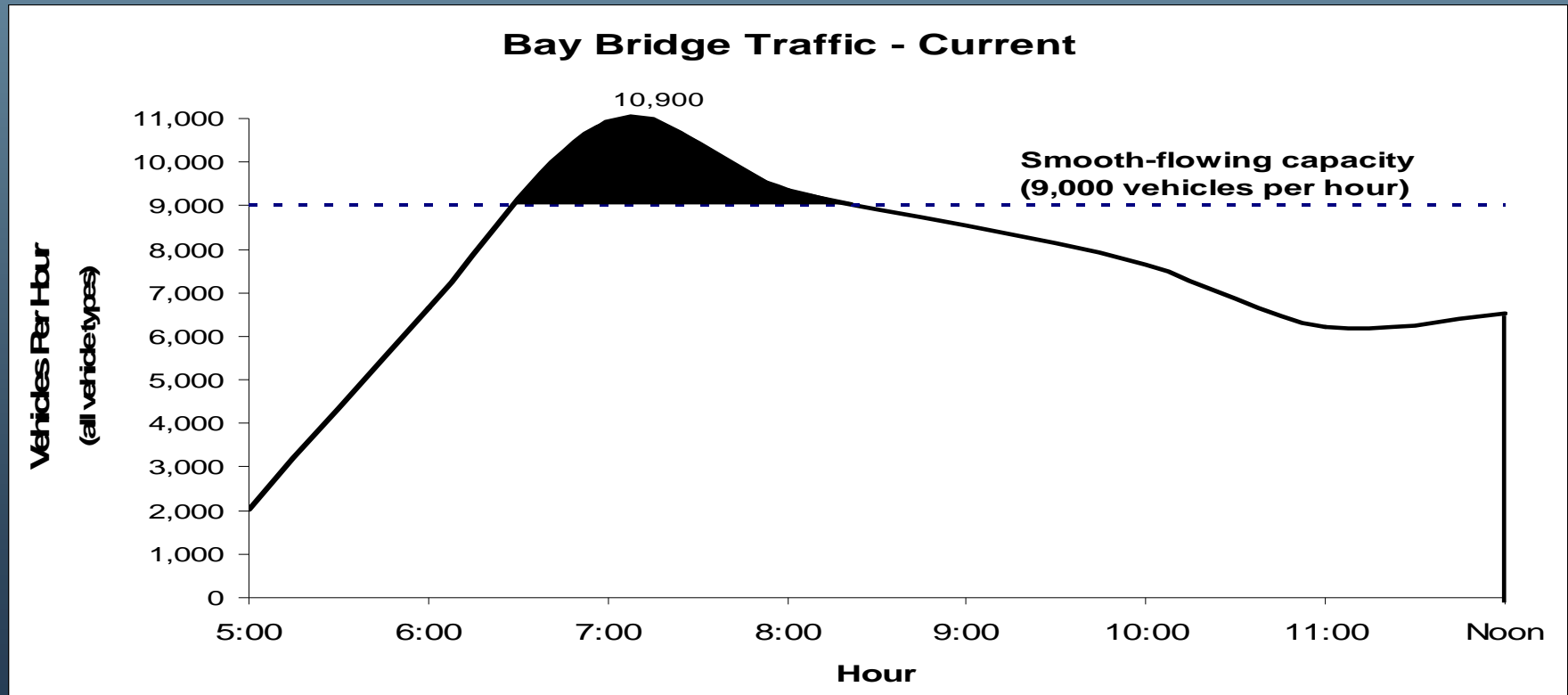
- Preliminary analysis shows congestion pricing could reduce morning peak delay (Maximum delay per vehicle) on the Bay Bridge by 15% to 30%.
- Requires additional testing of ATCAS to ensure system has ability to charge varying tolls by time of day.

Vehicle Class	Current Toll	Option #3 Proposed Toll Rates
		Bay Bridge —
		▪ Peak: M-F \$6.00
		▪ Non-peak: M-F \$4.00
		▪ Weekend: \$5.00
2-Axle	\$4.00	\$5.00
3-Axle	\$6.00	\$11.00
4-Axle	\$8.25	\$17.00
5-Axle	\$11.25	\$23.00
6-Axle	\$12.00	\$29.00
7+-Axle	\$13.50	\$35.00
Carpool	\$0.00	\$3.00

Toll Revenue Options

Option #3 (Bay Bridge congestion pricing):

- Peak hour on the Bay Bridge is between 7:00 a.m. and 8:00 a.m.
- Excess demand creates congestion throughout peak period.

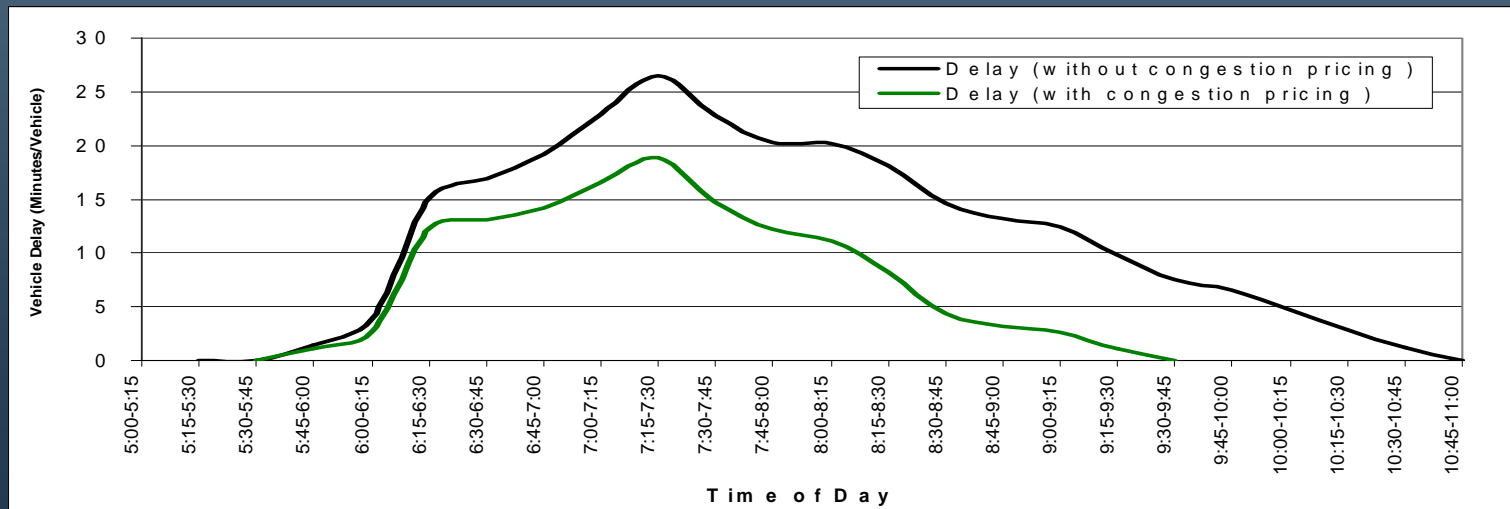


Toll Revenue Options

Option #3 (Bay Bridge congestion pricing):

	Congestion Pricing				
	Current	Low Estimate	% Diff.	High Estimate	% Diff.
Peak Period Vehicles	29,742	28,717	-3.5%	27,926	-6%
Maximum Delay per Vehicle	27 mins.	23 mins.	-15%	19 mins.	-30%

Vehicle Delay - Current vs. Estimated with Congestion Pricing (High Estimate)



Toll Revenue Options

Option #3 (Bay Bridge congestion pricing):

Why Pick the Bay Bridge?

- **#1 most congested travel corridor in the Bay Area.**
- **Good existing transit options: BART, buses and ferries.**
- **Test on one bridge before expanding to others.**

Implementation Schedule

Date	Meeting	Discussion
October 14, 2009	BATA Oversight Committee	Staff presents toll options
November 4, 2009	BATA Oversight Committee	Public comment on options
November 2009	2 Off-site public hearings (Eastbay and Westbay)	Public comment on options
December 9, 2009	BATA Oversight Committee	Staff recommendation on toll option
January 13, 2010	BATA Oversight Committee	Committee action on toll increase
January 27, 2010	BATA	Authority action on toll increase
July 1, 2010		Toll increase is effective



<http://bata.mtc.ca.gov>