



# PI BayArea Plan

Draft Transportation  
Investment Strategy

# What We Heard From the Public

## 1. Improve the Bay Area economy.

- Provide better access to housing and transportation for people from all walks of life

## 2. Support housing density.

- If it means better economic opportunities, improved transit, or if it helps to protect open space in Bay Area

## 3. Highest support for transit expansion and maintaining roads.

- Extending commuter rail, maintaining highways and roadways, and improving public transit for low-income residents are the highest rated transportation priorities

## 4. Land-use strategies and transportation investments should aim to reduce driving and greenhouse gas emissions.

- Allow new affordable housing, offices, and shops to be built in city / town centers near public transit

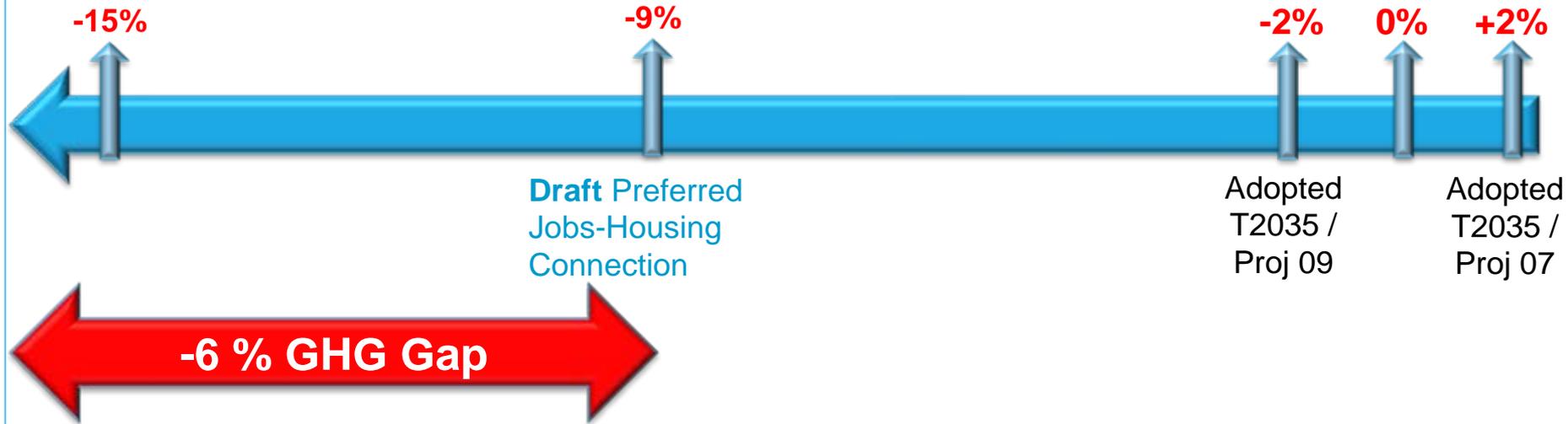
## 5. The Bay Area's transit system needs improvements.

- Support transit that is more frequent, affordable, cleaner and safer with connections that work better for local and intermodal systems

# How Proposed Investment Strategy Responds to What We Heard

- 1. The Three Es of Sustainability – economy, environment & equity – are the policy framework for the Plan.**
  - Proposed investments call for transit frequency and expansions serving established communities, job centers, Priority Development Areas, and communities of concern
- 2. The OneBayArea Grant framework is central to the Proposed Investment Strategy.**
  - OneBayArea Grants will reward jurisdictions that plan and build more housing, particularly affordable housing, with transportation dollars
- 3. The long-standing “Fix-It First” policy set by the Commission remains the Plan’s top priority.**
  - Proposed investments call for 88% of Plan revenues directed to operating and maintaining our existing road and transit networks
- 4. Highly effective transit expansion projects are included in the Plan.**
  - Furthers Res.3434 delivery and supports region’s next generation of rail and bus rapid transit priorities based on rigorous performance assessment, and identifies a funding plan to deliver them
- 5. Includes Transit Sustainability Project’s (TSP) recommendations.**
  - Proposed investments fund service improvements aimed at increased speed and reliability on major bus and light-rail corridors

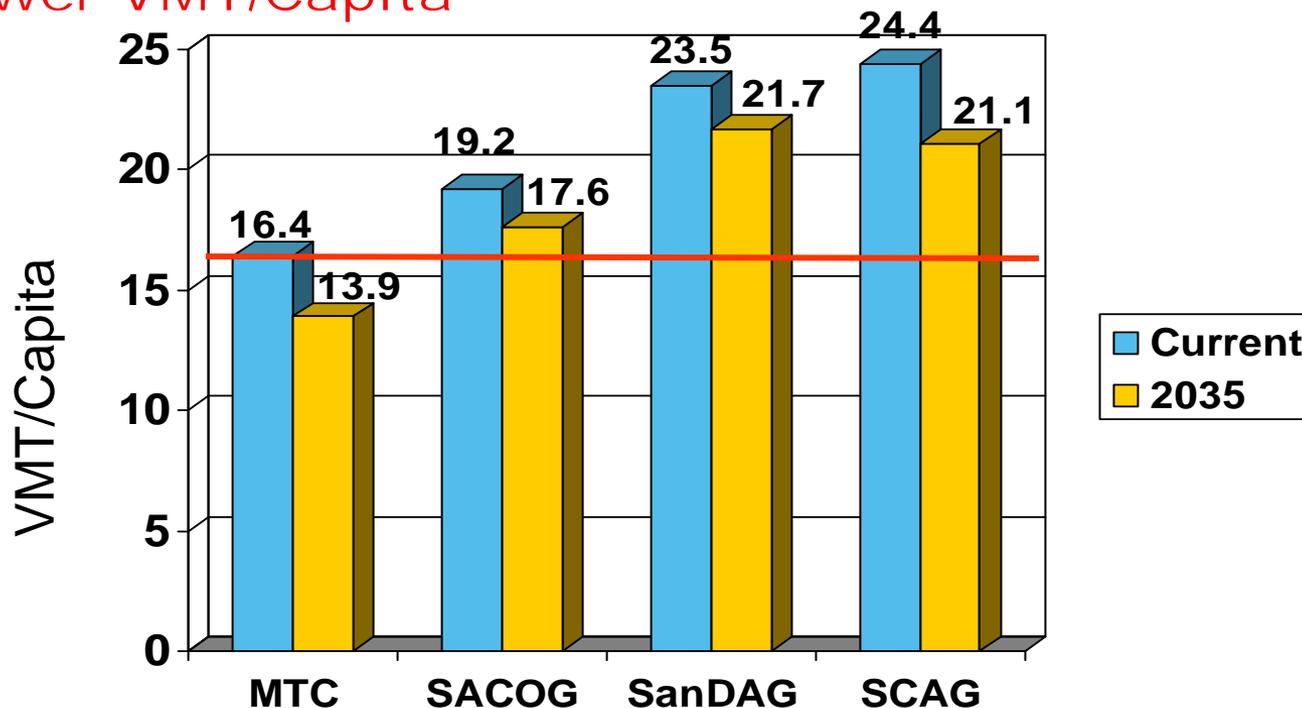
# GHG Emission Reductions Update - 2035



- Bay Area's target for 2020 (-7 %) is achieved
- Planned transportation projects have a marginal effect on GHG emissions
  - Operations & Maintenance
    - Cost: \$242 B (88%)
    - GHG: Underpins GHG reductions from land use strategy
  - Capacity-Increasing Projects
    - Cost: \$35 B (12%)
    - GHG: regional effects vary slightly by mode and by project

# Bay Area's Relatively Efficient Travel Patterns, Robust Transit System, and slower growth

= Lower VMT/Capita

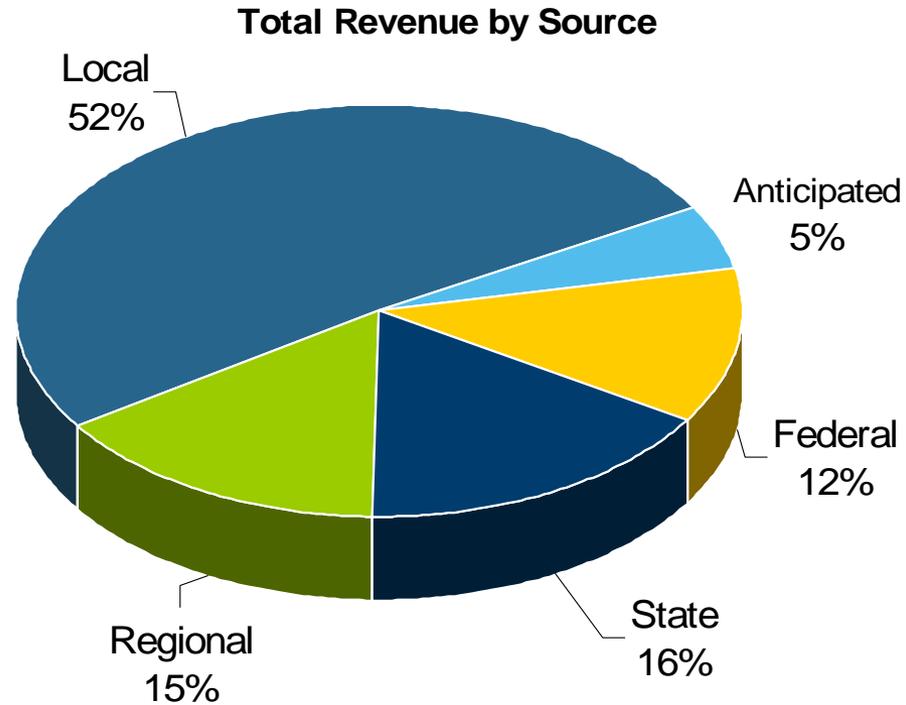


**Achieving the 2035 VMT/Capita (a proxy for GHG emissions) means that:**

- The average Bay household must travel 30% less than the average Sacramento household and 50% less than the average SoCal household; and,
- New Bay Area households must travel about 75% less than existing households.

# Plan Bay Area 28-Year Revenues -- \$277 Billion\*

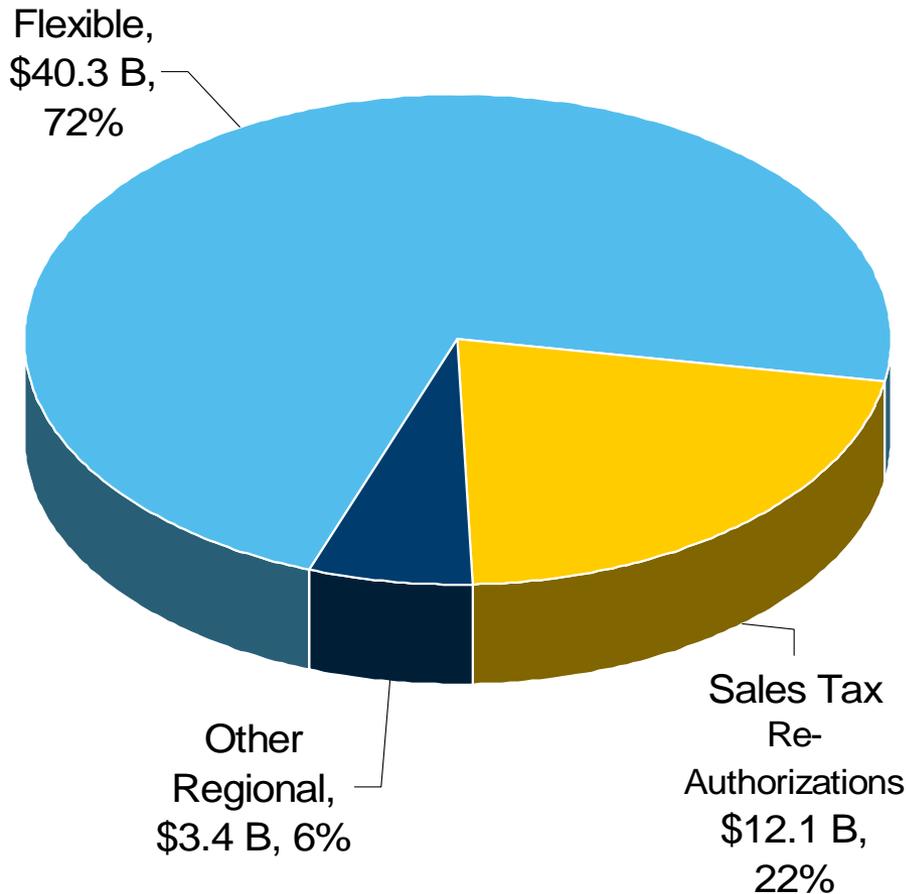
- **Committed Revenue - \$186 B**
- **Conditioned Discretionary - \$35 B**
  - \$34 B (97%) to Transit Operating and Maintenance
  - \$1 B (3%) to Other
- **Revenues Available for Trade-Offs - \$56 B**
- **Total - \$277 B**



*\*represents an \$11 billion increase from February (\$9 billion for regional and Santa Clara express lanes and \$2 billion for San Francisco cordon pricing).*

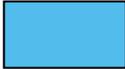
# Plan Bay Area Revenue Available for Trade-Offs -- \$56 Billion

Trade-Off Revenue by Source



Flexible	\$ Billions, YOES
STIP	8.6
STP & CMAQ	7.4
Regional Gas Tax	5.1
Anticipated	14.0
New & Small Starts	2.5
New Bridge Tolls	2.7
<i>Subtotal</i>	\$40.3
Other Regional	\$ Billions, YOES
STA & JARC	0.8
TFCA & AB 434	0.1
High Speed Rail	2.5
<i>Subtotal</i>	\$3.4
Sales Tax Re-Authorization	\$ Billions, YOES
Sales Tax	\$12.1
<b>Grand Total</b>	<b>\$55.8</b>

# Six Strategies for Addressing the Three Es

	<b>Economy</b>	<b>Equity</b>	<b>Environment</b>
<b>1. Close the GHG Gap</b>			
<b>2. Fix-It First</b>			
<b>3. Apply the OneBayArea Grant Framework</b>			
<b>4. Fund High-Performers</b>			
<b>5. Squeeze More Efficiency Out of Our Existing System</b>			
<b>6. Make the Transit System Sustainable</b>			

# Investment Strategy #1: Close the GHG Gap

## Climate Policy Initiatives

### Proposed Approach

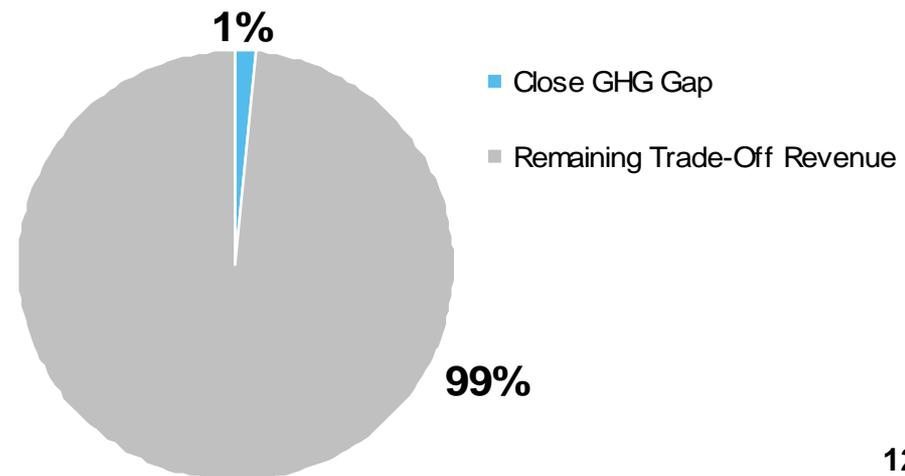
- Implement innovative policy initiatives to help region achieve and possibly exceed its greenhouse gas emission reduction targets

### Related Performance Targets

- Reduce per-capita GHG emissions from cars and light-duty trucks
- Reduce VMT per capita
- Increase non-auto mode share

### Trade-Off Investment Proposal

**\$0.7 Billion**



# Two Investment Options – Option A



## Climate Policy Initiatives: Clean Vehicles/Smart Driving Emphasis

Policy Initiative	Cost (in millions of YOES)	Per-Capita CO <sub>2</sub> Emissions Reductions (2035)
<b>Electric Vehicle Acceleration</b> •Regional Public Charger Network	\$240	-1%
<b>Vehicle Buy-Back &amp; Plug-In or Electric Vehicles Purchase Incentives</b>	\$180	-1%
<b>Car Sharing</b> •For Profit and Non-Profit Car Sharing (includes clean vehicle car sharing) •Peer-to-Peer Car Sharing (includes clean vehicle car sharing)	\$4	-1%
<b>Vanpool Incentives</b>	\$6	-1%
<b>Clean Vehicles Feebate Program</b>	\$25 for admin costs	-1%
<b>Smart Driving Strategy</b> •Tire Pressure Cap Rebate Program •In-vehicle Fuel Economy Meters Rebate Program •Education Campaign	\$230	-2%
<b>Total</b>	<b>\$685</b>	<b>-7%</b>

# Two Investment Options – Option B



## Climate Policy Initiatives: Fuel Efficiency Emphasis

Policy Initiative	Cost (in millions of YOES)	Per-Capita CO <sub>2</sub> Emissions Reductions (2035)
<b>55 mph Speed Limit on Bay Area Freeways</b>	\$260	-6%
<b>Smart Driving Strategy</b> <ul style="list-style-type: none"><li>•Tire Pressure Cap Rebate Program</li><li>•In-vehicle Fuel Economy Meters Rebate Program</li><li>•Education Campaign</li></ul>	\$230	-2%
<b>Total</b>	<b>\$490</b>	<b>-8%</b>

## Investment Strategy #2:

# Fix-It First

### Proposed Approach

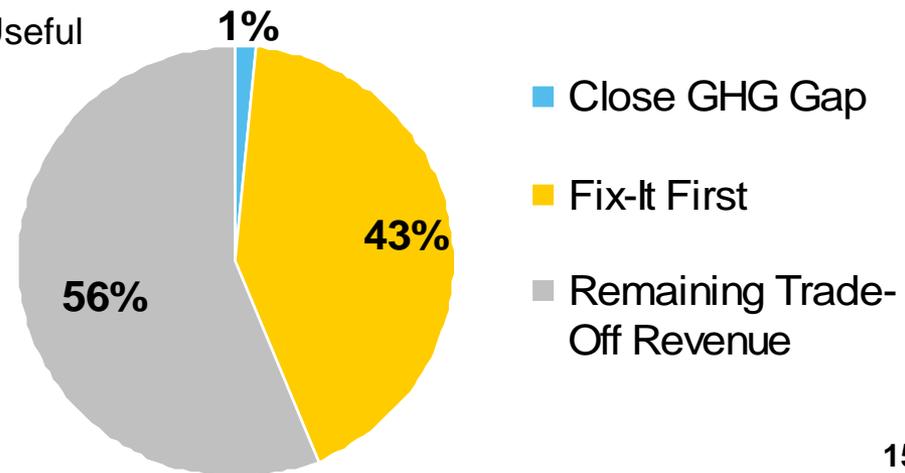
- Continue T2035 Functional Investment Approach
  - Maintain existing pavement conditions
  - Fully fund revenue vehicles and 70%+ of total other Score 16 assets
- Fully fund operating needs for existing transit services
- Invest in State Bridge Rehab & Retrofit
- Falls short of new Plan Bay Area targets (see below)

### Related Performance Targets

- Maintain transportation system
  - Local Streets & Roads – Pavement Condition Index of 75 and corresponding Non-Pavement State of Repair
  - Transit Rehab – Replace All Assets by End of Useful Life
  - Reduce distressed state highway lane miles

### Trade-Off Investment Proposal

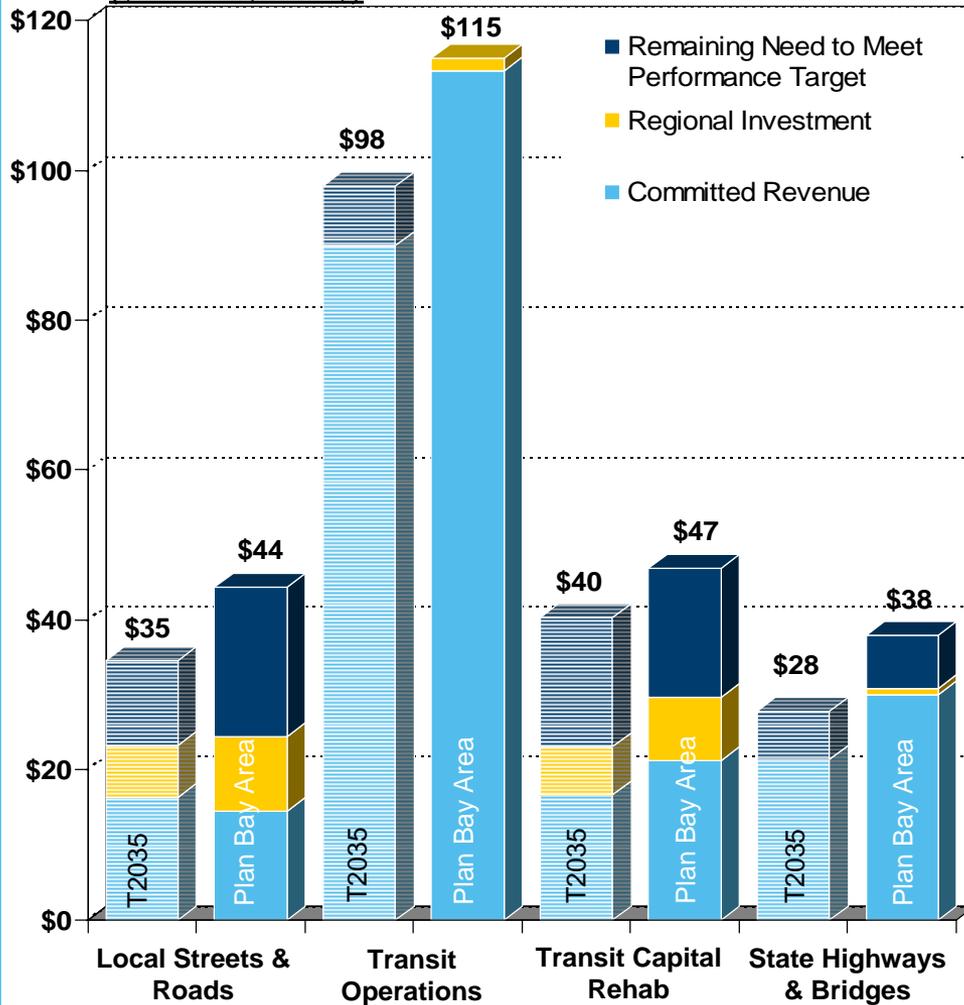
**\$24 Billion**



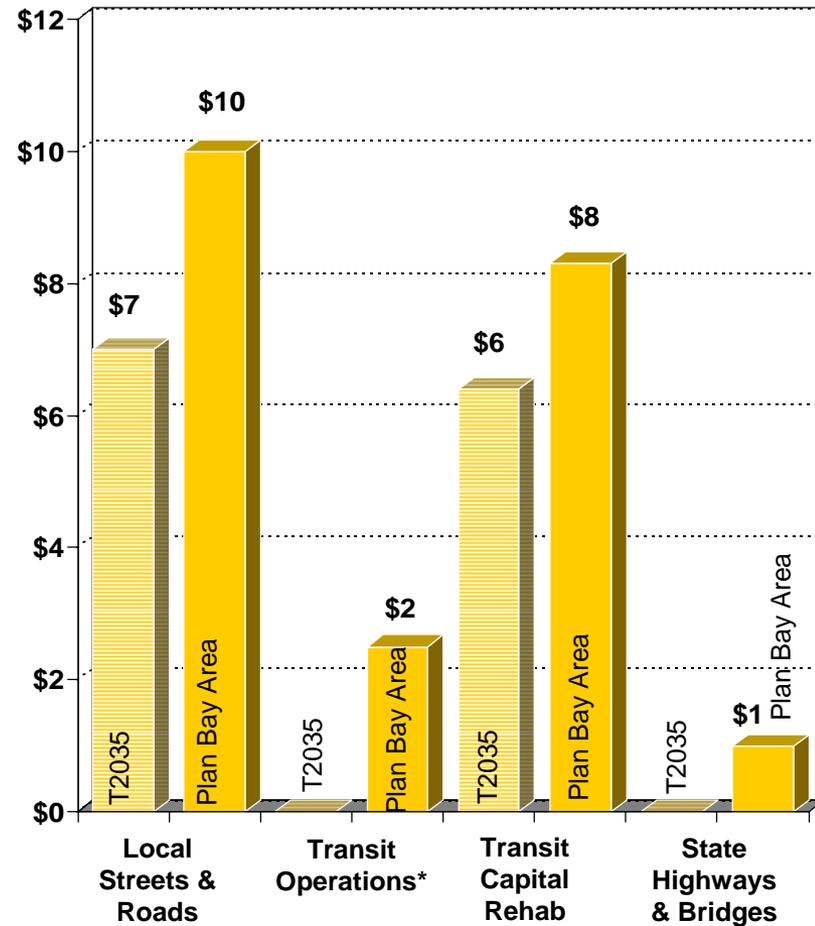
# Investment Strategy #2: Fix-It First

## Maintenance & Operations Needs and Revenues Summary

(\$ Billions, YOES)



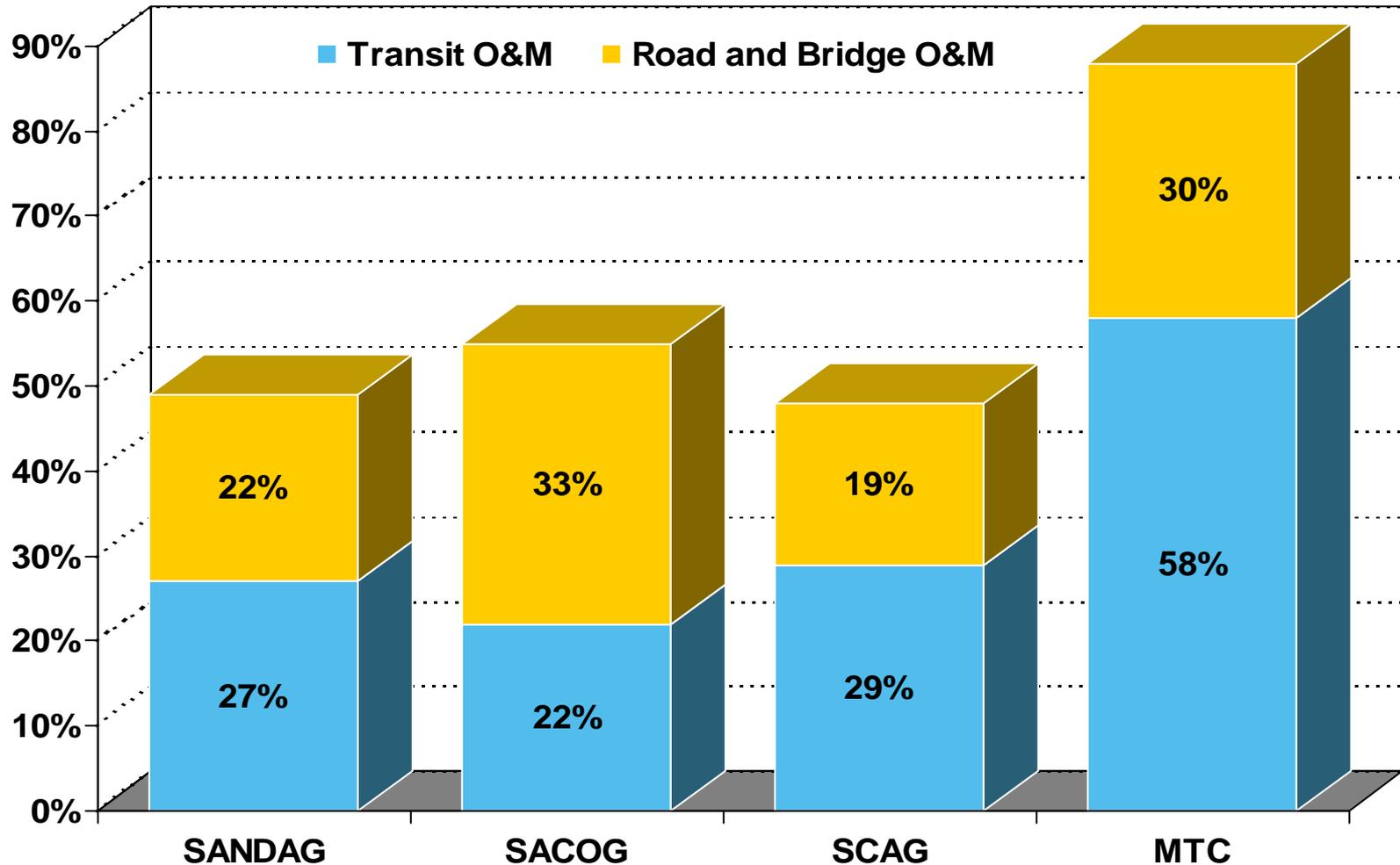
## Regional Investment Detail



\*Includes funding for Lifeline

## Investment Strategy #2:

# Plan Bay Area Emphasizes Fix-It First Comparison of O&M Expenditures with other Regions



## Investment Strategy #3:

# OneBayArea Grant Framework

## Proposed Approach

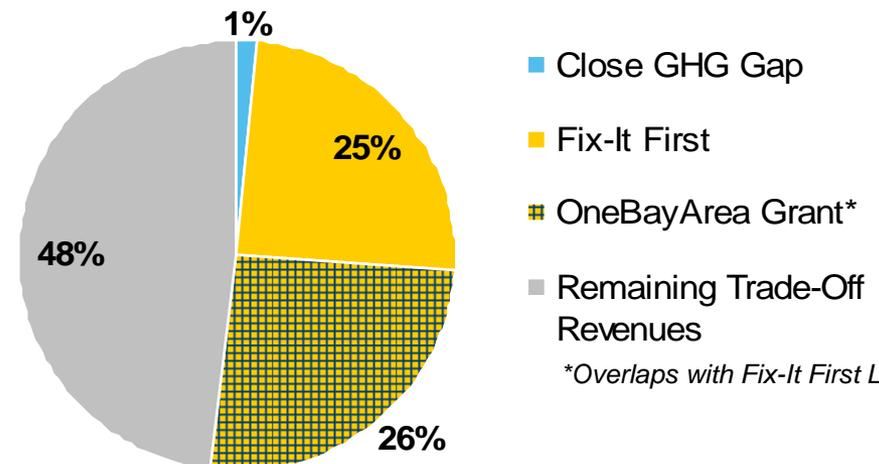
- Reward jurisdictions that produce housing near transit and create healthy communities
- Target investments in PDAs
- Support planning efforts for transit-oriented development in PDAs
- Support PCAs

## Related Performance Targets

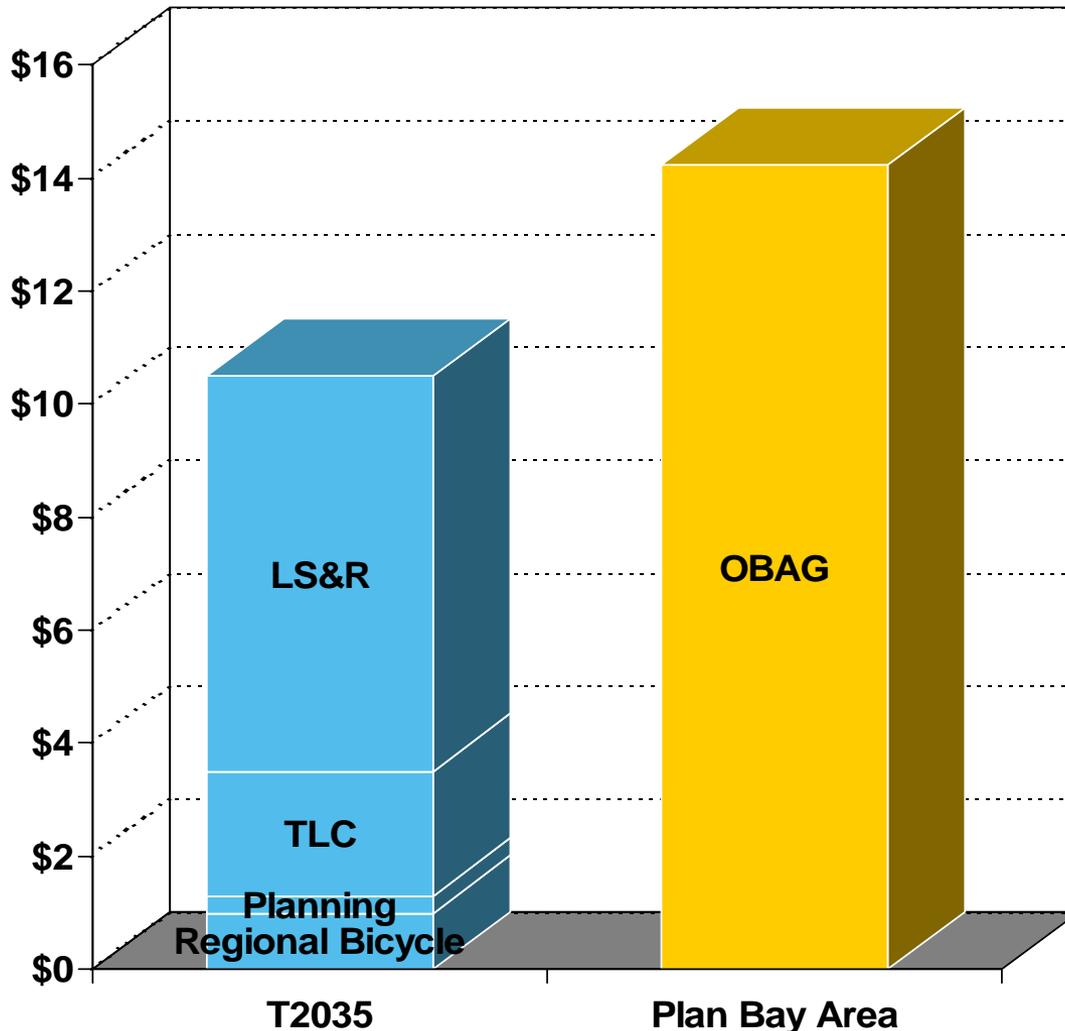
- House all of the region's projected housing growth
- Reduce VMT per capita
- Increase average daily time spent walking or biking
- Preserve open space
- Reduce per-capita GHG emissions
- Increase non-auto mode share

## Trade-Off Investment Proposal

**\$14 Billion**



# OneBayArea Grant Framework



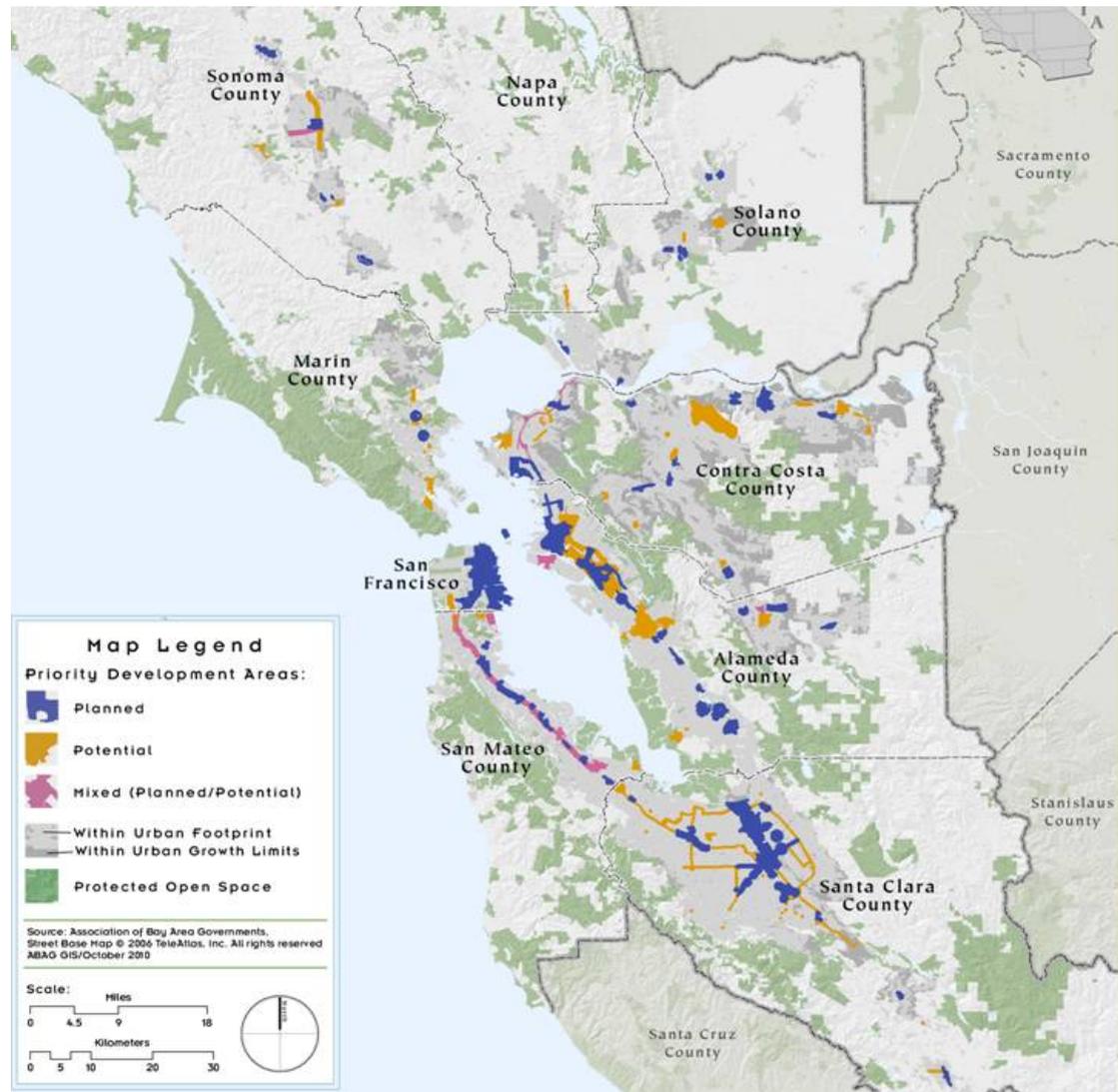
## Initiatives Include:

- Regional Bicycle Program
- Regional Planning
- Transportation for Livable Communities (TLC)
- Local Streets and Roads (LS&R) Operations and Maintenance
- OneBayArea Grant (OBAG)

## Investment Strategy #3:

# Focus Growth Around Transit

- SCS Forecast Bay Area growth in Priority Development Areas:
  - 75% new housing
  - 64% new jobs
- More intense development near high quality transit
- A well maintained multi-modal transportation system is fundamental to the success of the Sustainable Communities Strategy



## Investment Strategy #4:

# Fund High-Performers

### Proposed Approach

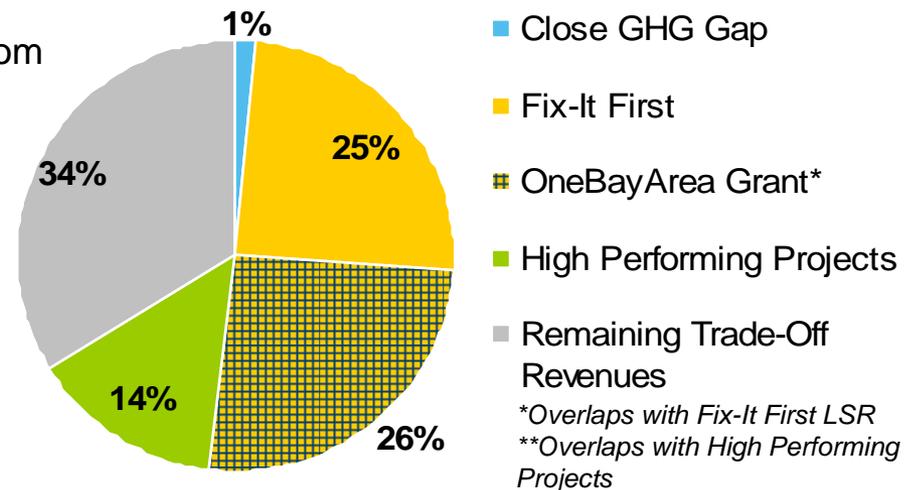
- Develop regional funding strategy to implement high-performing projects that received performance score of:
  - Benefit / Cost  $\geq 10$  and Targets Score  $\geq 2$  or
  - Benefit / Cost  $\geq 5$  and Targets Score  $\geq 6$
- Set the stage for next generation of capital transit investments and identify New Starts / Small Starts candidates
- Early High Speed Rail investment strategy on Peninsula Corridor



### Related Performance Targets

- Increase Gross Regional Product
- Reduce per-capita greenhouse gas emissions from cars and light-duty trucks
- Reduce VMT per capita

### Trade-Off Investment Proposal \$8 Billion



## Investment Strategy #4:

# Resolution 3434 Project Status: Roughly Half of Projects Open or in Construction

Project	Project Cost (YOE \$)	Status
Caltrain Express: Baby Bullet	128	<i>Open</i>
Regional Express Bus	102	<i>Open</i>
BART to Warm Springs	890	<i>Construction</i>
East Contra Costa BART Extension (eBART)	462	<i>Construction</i>
Transbay Transit Center: Phase 1	1,589	<i>Construction</i>
BART/Oakland Airport Connector	484	<i>Construction</i>
Sonoma-Marin Rail IOS	360	<i>Construction</i>
Expanded Ferry Service to South San Francisco (Berkeley, Alameda/Oakland/Harbor Bay, Hercules, and Richmond; and other improvements)	180	<i>Construction</i>
MUNI Third Street Light Rail Transit Project - Central Subway	1,578	<i>Construction</i>
BART: Warm Springs to Berryessa	2,330	<i>Construction</i>
Downtown to East Valley: Light Rail & Bus Rapid Transit Phases 1 & 2	559	<i>Approved Env</i>
Caltrain Electrification	785	<i>Approved Env</i>
BART: Berryessa to San Jose/Santa Clara	3,962	<i>Approved Env</i>
Transbay Transit Center/Caltrain Downtown Extension: Phase 2	2,596	<i>Approved Env</i>
AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit	205	<i>Env</i>
Van Ness Avenue Bus Rapid Transit	125	<i>Env</i>
Tri-Valley Transit Access Improvements to/from BART	168	<i>Env</i>
AC Transit Enhanced Bus: Grand-MacArthur corridor	41	<i>Env</i>
Caltrain Express: Phase 2	427	<i>Env</i>
Dumbarton Rail	701	<i>Env</i>
Capitol Corridor: Phase 2 Enhancements	254	<i>Env</i>
ACE ROW Acquisition for Service Expansion	150	<i>TBD</i>
<b>TOTAL</b>	<b>\$ 18,076</b>	

# Transit Expansion Priority New Starts / Small Starts Status Report



- The Bay Area is poised to begin construction on a number of major transit expansion projects and has secured commitments for over \$1 billion in federal funding:

Project Funding Plans (Dollars in Millions)				Total	Federal Share
	Local	State	Federal		
BART to Silicon Valley	\$1,179	\$251	\$900	\$2,330	39%
San Francisco Central Subway	\$488	\$632	\$1,107	\$2,227	50%
Van Ness Bus Rapid Transit (BRT)	\$30	\$2	\$93	\$126	74%
East Bay BRT	\$78	\$50	\$77	\$205	38%

Note: Totals may not sum due to rounding.

- On March 12, VTA executed its full funding grant agreement (FFGA) for the \$900 million federal share
  - SFMTA expects to receive its FFGA for \$942 million by summer 2012
- Roughly \$2.5 billion in New Starts / Small Starts is estimated over the 28-year Plan Bay Area, after accounting for the two New Starts projects above

## Investment Strategy #4:

# New Starts / Small Starts: Region's Next Generation

- Evaluated existing Resolution 3434 projects and high performers against the following criteria:

- Benefit / Cost Analysis
- Plan Bay Area Targets
- Readiness
- Local Match
- TOD Potential
- Equity Targets
- Regional Connectivity

- Two “Big” Starts and Three “Small” Starts emerged highest in ranking

Project	Cost (YOE\$, Millions)	Project Assessment		Readiness	Local Match	TOD Potential (Jobs + Housing within 1/2 mile of station/ stop)	Meeting Equity Targets	Regional Connectivity	Overall (H/M/L)
		Benefit/ Cost	Plan Bay Area Targets						
BART to San Jose/Santa Clara (Phase 2: Berryessa to Santa Clara)	3,962	5	7.0	65% Design	34%	34,071	H	H	H
Transbay Transit Center - Phase 2B (Caltrain Downtown Extension)	2,596	4	7.5	30% Design	10%	122,498	H	H	H
AC Transit Grand-MacArthur BRT	37	18	5.5	No Env	15%	89,986	H	H	H
Van Ness BRT	126	6	6.5	Env Expected 2012	21%	185,054	H	M	H
AC Transit East Bay BRT	205	5	5.5	Env Expected 2012	8%	365,075	H	M	H

## Investment Strategy #4:

# New Starts / Small Starts: Region's Next Generation

- Proposed Plan Bay Area funding plan for 5 projects, including New Starts / Small Starts recommendation totaling ~\$1.8 billion:

"Big" Starts			Proposed Funding Strategy					
Project	Cost (YOE\$, Millions)	Committed Funding	New Starts	New Bridge Tolls	HSR	Sales Tax Extensions/ Other Local	Express Lanes	Joint Development
BART to San Jose/Santa Clara (Phase 2: Berryessa to Santa Clara)	3,962	1,504	1,100		378	298	682	0
Transbay Transit Center - Phase 2B (Caltrain Downtown Extension)	2,596	639	650	300	557	350		100
<b>TOTAL</b>	<b>6,558</b>	<b>2,143</b>	<b>1,750</b>	<b>300</b>	<b>935</b>	<b>648</b>	<b>682</b>	<b>100</b>

"Small" Starts			Proposed Funding Strategy	
Project	Cost (YOE\$, Millions)	Committed Funding	Small Starts	New/ Augmented Sales Tax
AC Transit Grand-MacArthur BRT	37	0	30	7
Van Ness BRT	126	67	30	29
AC Transit East Bay BRT	205	115	28	63
<b>TOTAL</b>	<b>368</b>	<b>181</b>	<b>88</b>	<b>99</b>

- Proposal retains ~\$660 million reserve for projects in planning stages for future consideration and discussion

## Investment Strategy #4:

# Transit Expansion: California High-Speed Rail Peninsula Corridor Early Investment Strategy

- On March 28, 2012, MTC approved an MOU and \$1.5 billion funding strategy for an early investment strategy for the Peninsula corridor

### Program Costs (in \$ millions, year of expenditure)

Advance Signal System / Positive Train Control (PTC)	\$ 231
Electrification and Electric Multiple Units (EMUs)	\$ 1,225
<b>Total</b>	<b>\$ 1,456</b>

- The funding strategy leverages \$600 million in Proposition 1A funding through commitments of regional, local, and federal formula funding
- Establishes full funding plan for Electrification, a Resolution 3434 project and high performer in the Plan Bay Area evaluation



*“The Governor has told us he wants a plan that will get high-speed rail trains on the track sooner and in a less costly manner than previous plans called for. If that can be accomplished by electrifying Caltrain’s lines and using that right-of-way, then it’s certainly something we want to consider.”*

— Dan Richard  
Board Chair, California High-Speed Rail Authority

## Investment Strategy #5:

# Squeeze More Efficiency Out of Our Existing System

- **Regional Express Lanes Network**
- **San Francisco Pricing Program**
- **Freeway Performance Initiative**

## Proposed Approach

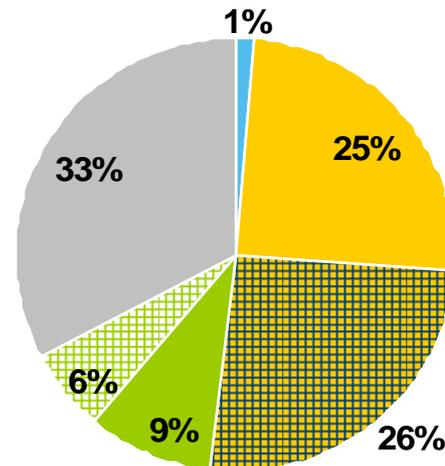
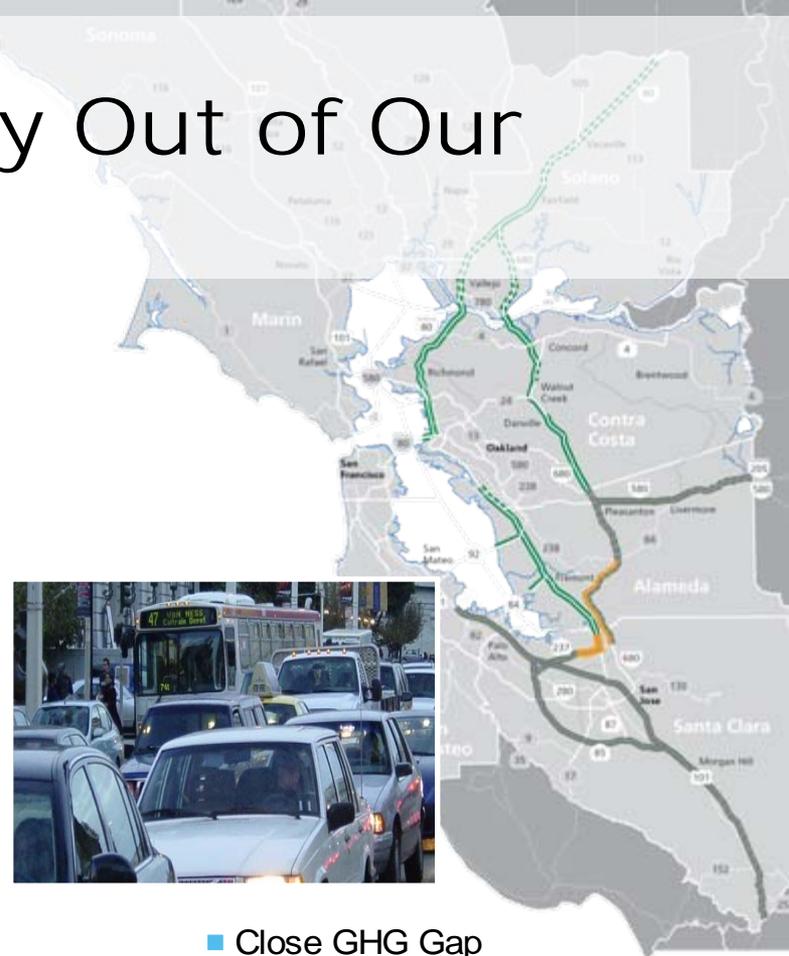
- Improve reliability and reduce delay in congested corridors
- Charge drivers a fee to drive in a specific, congested areas and use revenue to fund transportation improvements
- Maximize efficiency and management of existing freeway, highway and arterial infrastructure, while limiting expansion to only most essential locations
- Benefits exceed costs by a factor of 5:1

## Related Performance Targets

- Increase gross regional product
- Reduce per-capita GHG emissions
- Reduce VMT per capita
- Increase non-auto mode share

## Trade-Off Investment Proposal

**\$3 Billion**



- Close GHG Gap
- Fix-It First
- OneBayArea Grant\*
- High Performing Projects
- System Efficiencies\*\*
- Remaining Trade-Off Revenues

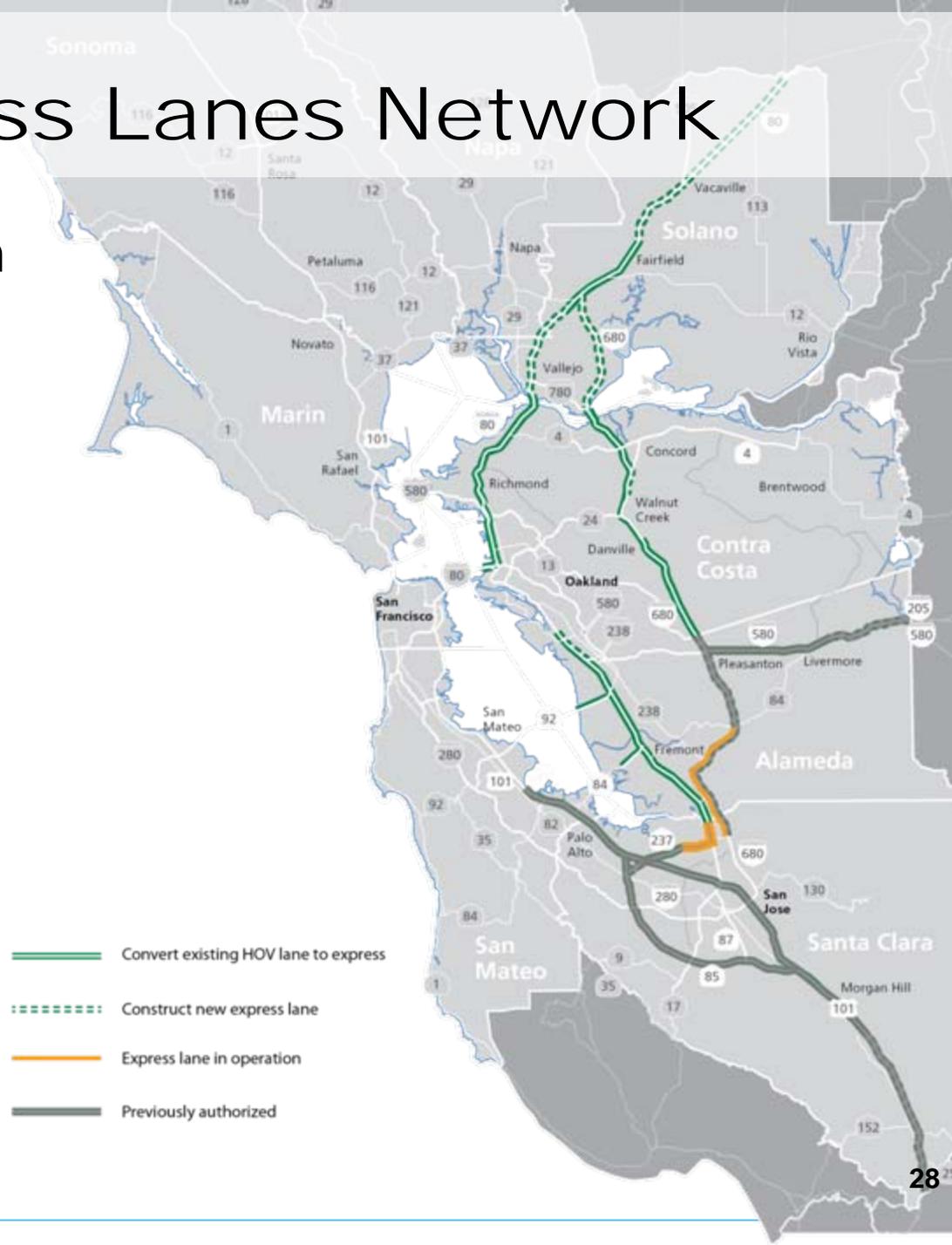
\*Overlaps with Fix-It First LSR

\*\*Overlaps with High Performing Projects

## Investment Strategy #5:

# Regional Express Lanes Network

- Total Cost: \$3.6 Billion
- Total Miles: 290
  - Conversion Miles: 150
  - New Lane Miles: 120
  - Operational Gap Closure Miles: 20



# Make the Transit System Sustainable

## Objectives:

- **Improve financial position:**  
Contain costs, cover a greater percentage of operating and capital costs with a growing share of passenger fare revenues; secure reliable streams of public funding.
- **Improve service for the customer:**  
Strengthen the system so that it functions as an accessible, user-friendly and coordinated network for transit riders, regardless of mode, location or jurisdiction.
- **Attract new riders to the system:**  
Strengthen the system so that it can attract and accommodate new riders in an era of emission-reduction goals, and is supported through companion land use and pricing policies.

## Recommendations:

- **Performance measures and targets to guide financial and service improvements**
- **Investment and incentive:**  
Transit Performance Initiative
- **Targeted institutional changes**
  - Functional consolidation
  - Strengthened coordination
  - Completion of in-progress institutional consolidations
- **Scheduled for Commission adoption in April 2012**

# Transit Sustainability Framework

Transit Sustainability Project Goal	Performance Measure / Program	Target
Improve Financial Condition	Cost Per Hour or Cost Per Passenger or Cost Per Passenger Mile	5% real reduction in metric over 5 year period and no growth beyond CPI thereafter
Improve Service for Customer	Transit Performance Initiative: Investment and Incentive Programs and Regional Customer Satisfaction Survey	Continuous Improvement
Attract New Riders to the System	Transit Performance Initiative: Investment and Incentive Programs and Regional Customer Satisfaction Survey	Increase ridership levels at or above the rate of population growth in the counties / corridors in which service operates

## Investment Strategy #6:

# Transit Performance Initiative

## Proposed Approach

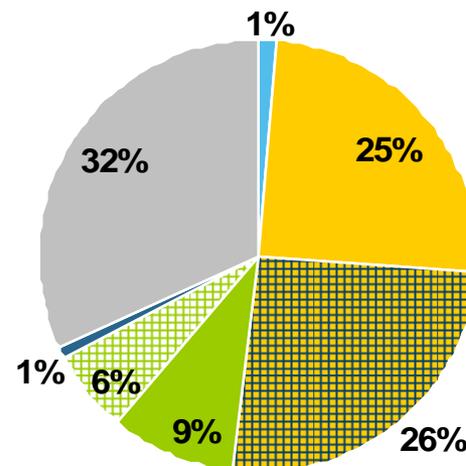
- Make regional investment in supportive infrastructure to achieve performance improvements in major transit corridors
- Reward agencies that achieve improvements in ridership and service productivity

## Related Performance Targets

- Reduce per-capita GHG emissions
- Reduce VMT per capita
- Increase non-auto mode share

## Trade-Off Investment Proposal

**\$0.5 Billion**



■ Close GHG Gap

■ Fix-It First

■ OneBayArea Grant\*

■ High Performing Projects

■ System Efficiencies\*\*

■ Transit Sustainability

■ Remaining Trade-Off

\*Overlaps with Fix-It First LSR

\*\*Overlaps with High Performing Projects

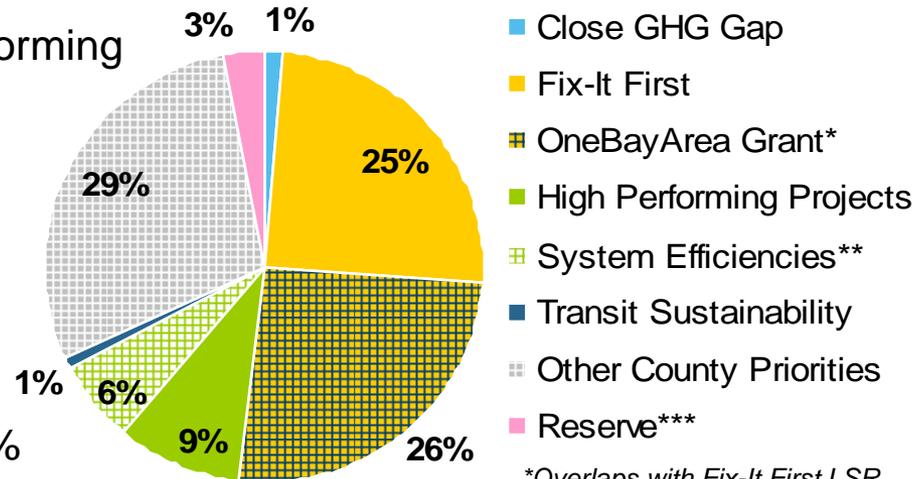
# County Priorities Reinforce Investment Strategies

## Discretionary revenue requests submitted by counties -- \$29 Billion

- County requests overlap with OneBayArea Grant and High Performing Project investment proposals

## County Discretionary Revenue Proposal

- Fix-It First = 52%
  - Transit, 27%
  - Roads and Bridges O&M, 25%
- Expansion = 34%
  - Transit, 17%
  - Roads and Bridges O&M, 17%
- Bicycle, Pedestrian, and Other\* = 14%

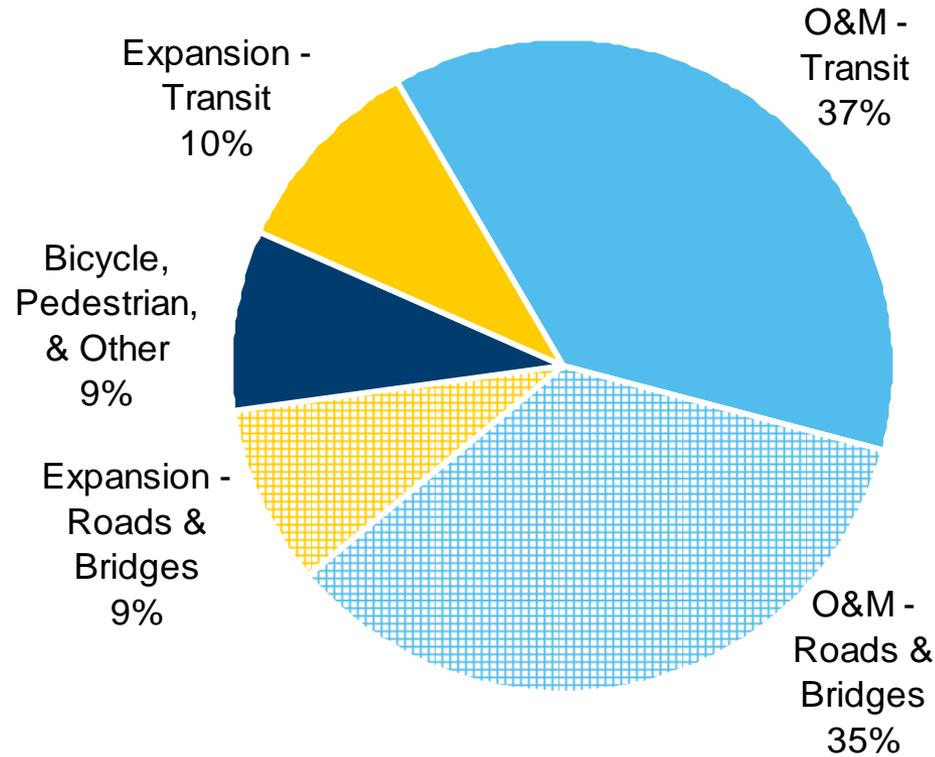


\*Overlaps with Fix-It First LSR  
 \*\*Overlaps with High Performing Projects  
 \*\*\*For future New Starts / Small Starts and High Speed Rail Projects

*\*Complete Streets & System Efficiency elements are also included in the expansion and Fix-It First categories*

# Trade-Off Summary

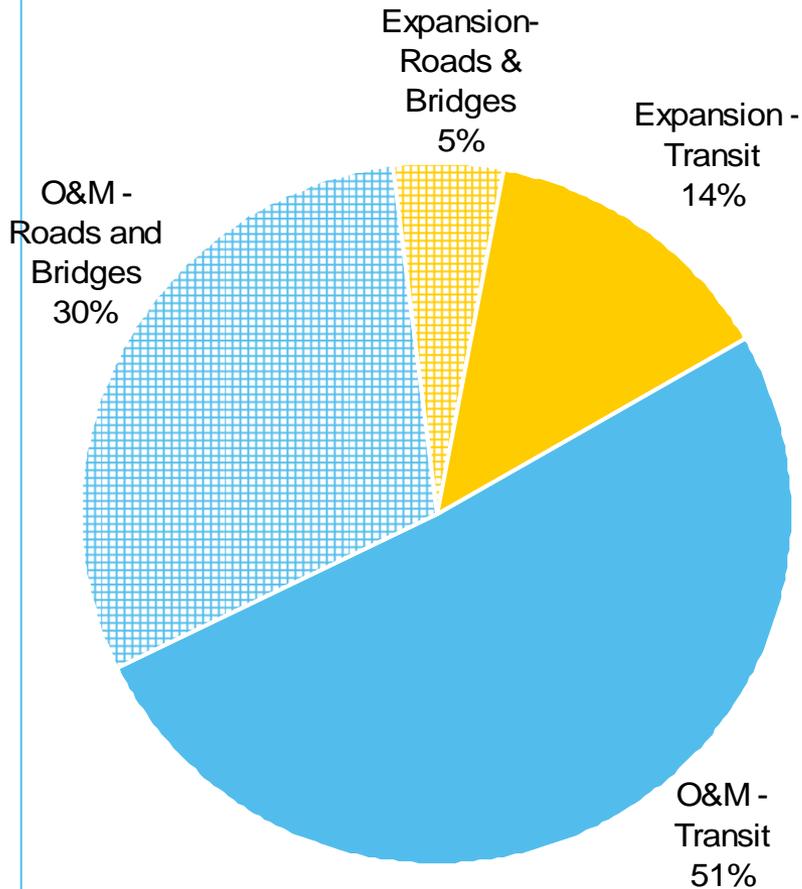
## Proposed Trade-Off Expenditure by Function



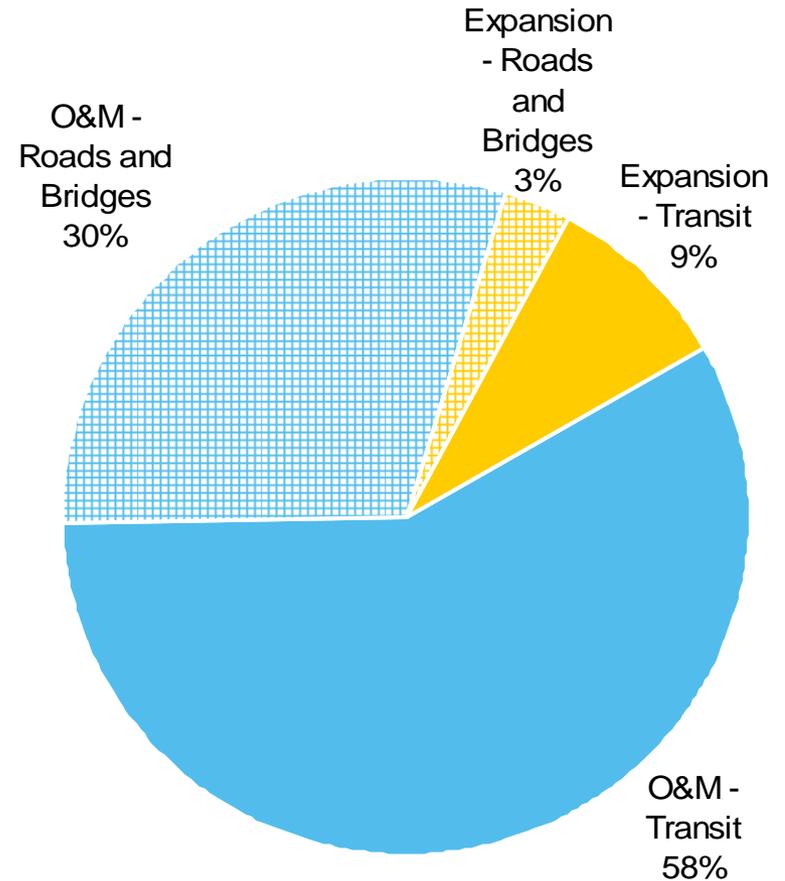
- Proposed Trade-Off Expenditures: \$56 B
  - 72% directed to Maintenance & Operations
  - 47% directed to Public Transit

# Plan Bay Area Summary

## T2035 by Function - \$218 B



## Plan Bay Area by Function - \$277 B



■ See detail in Appendices 1-3

# Next Steps

- Seek ABAG / MTC approval on preferred land use / transportation strategy on May 17
- Present alternatives to be evaluated in Plan Bay Area EIR on June 8
- Release draft Plan Bay Area and EIR in December 2012
- Adopt final Plan Bay Area and certify final EIR in April 2013