



# MAKING A COMPELLING CASE:

## PERFORMANCE-DRIVEN INVESTMENTS IN THE POST-INTERSTATE ERA

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METROPOLITAN TRANSPORTATION COMMISSION  
SSTI BIENNIAL MEETING - MARCH 25, 2014

1

## Impetus for Enhanced Performance Analysis:

*We've run out of money - now we'll have to start thinking!*

2

## Establishing a Level Playing Field:

*How do you compare a pothole to a BRT?*

3

## Performance Assessment in the MAP-21 Era:

*Do more with less, or less with less?*

# POTENTIAL MPO & STATE DOT PERFORMANCE RESPONSIBILITIES

*Yesterday:*  
Performance  
Monitoring

*Today:*  
Performance-  
Based  
Planning

*Tomorrow:*  
Performance-Based  
Programming



States and metropolitan areas across the country are struggling with limited funding in a time of growing maintenance backlogs.

①

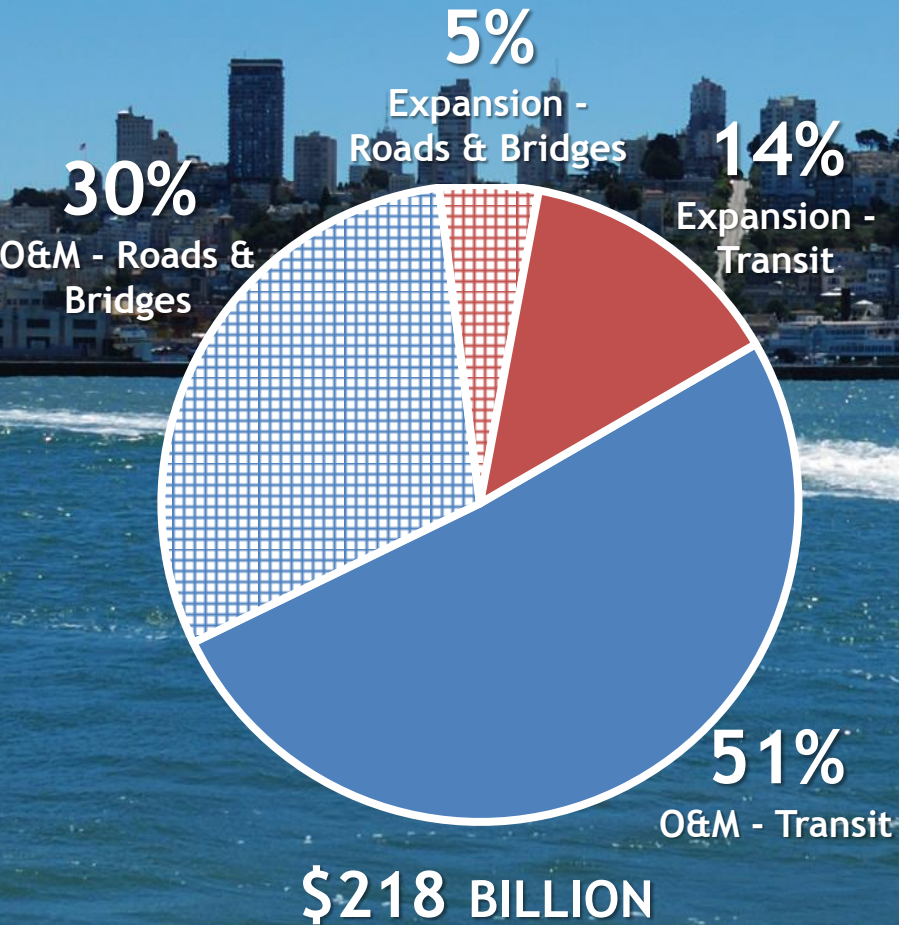
This results in significant challenges when pursuing ambitious targets for system performance.

②

It places a premium on matching constrained expansion dollars to the right expansion projects.

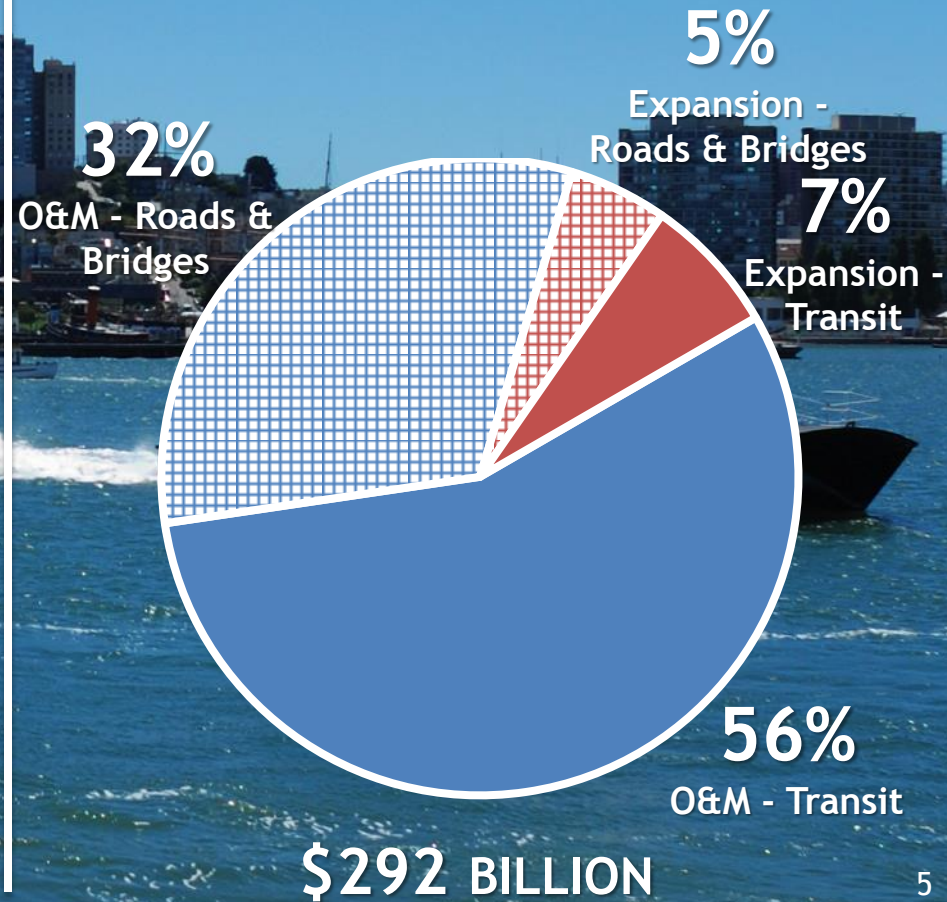
PREVIOUS RTP (ADOPTED IN 2009)

# TRANSPORTATION 2035 CHANGE IN MOTION

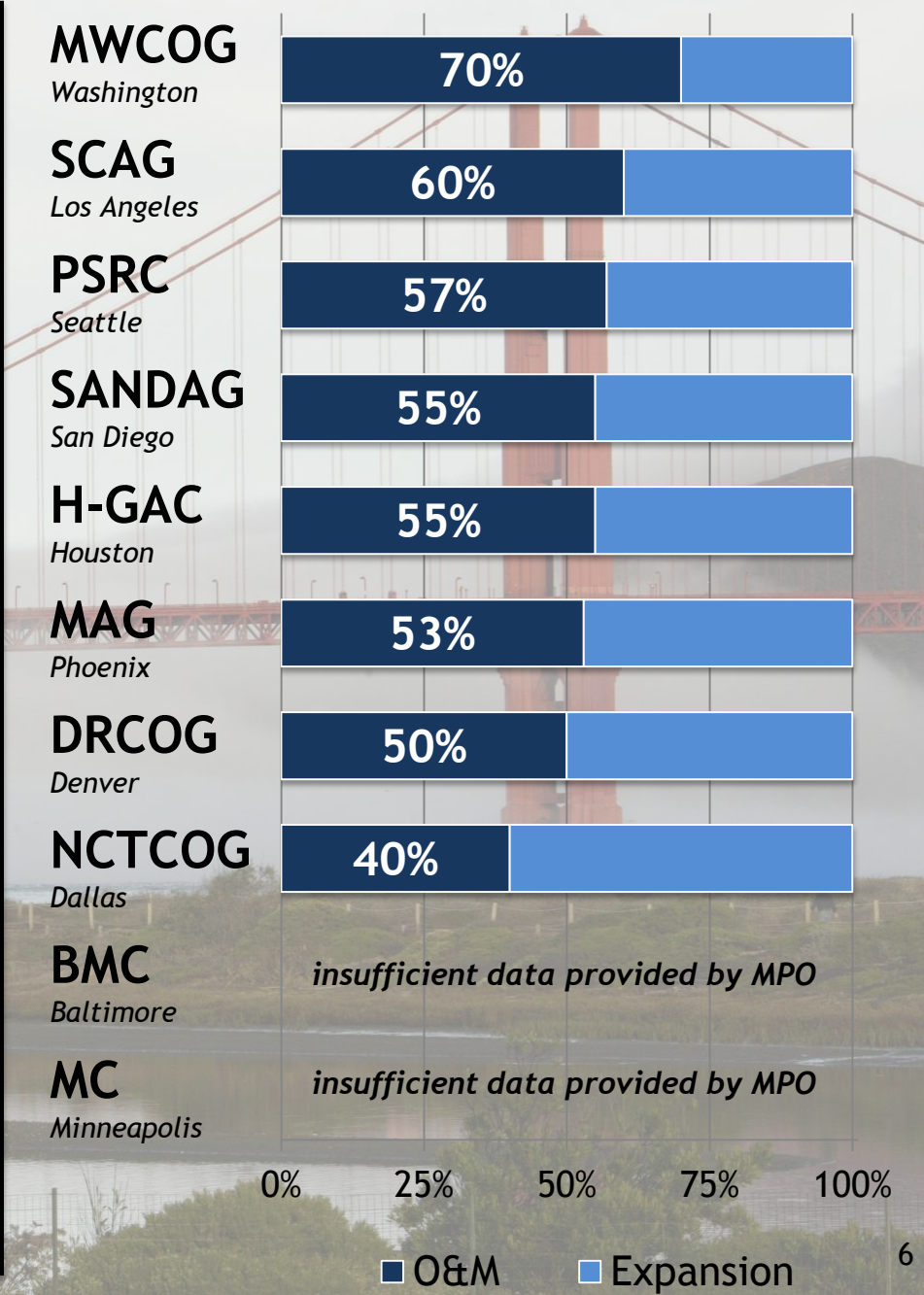
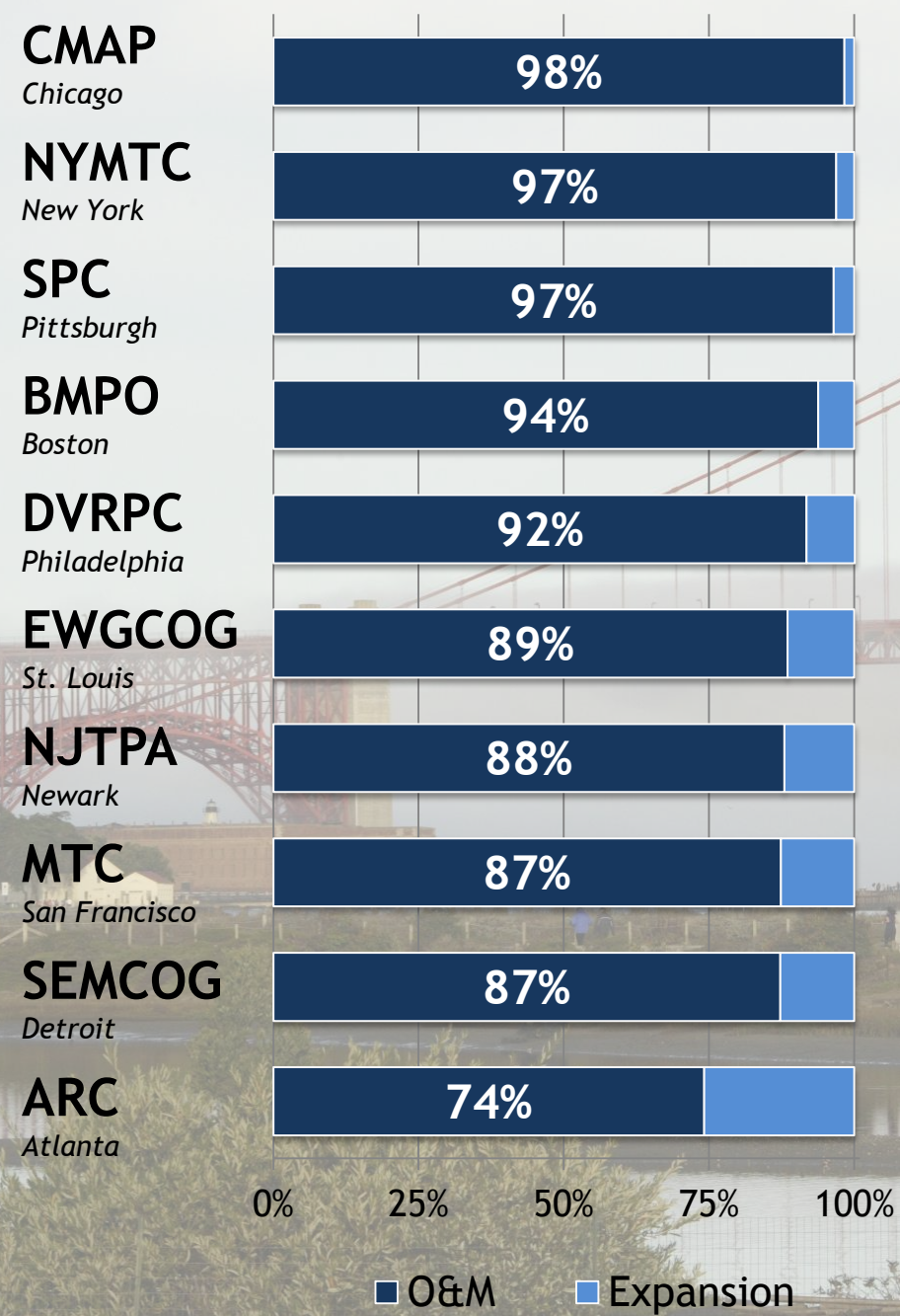


CURRENT RTP (ADOPTED IN 2013)

# BayArea Plan



# TOP 20 MPOs: O&M VERSUS EXPANSION FUNDING



**Funding constraints and ambitious targets are not the only performance challenges for MPOs and state DOTs.**

**Decision-making authority is widely dispersed across many levels of government, making it challenging to advance toward goals and to maximize accountability.**



**Federal Government**



**State Government**



**MPO**



**Transit Agencies**

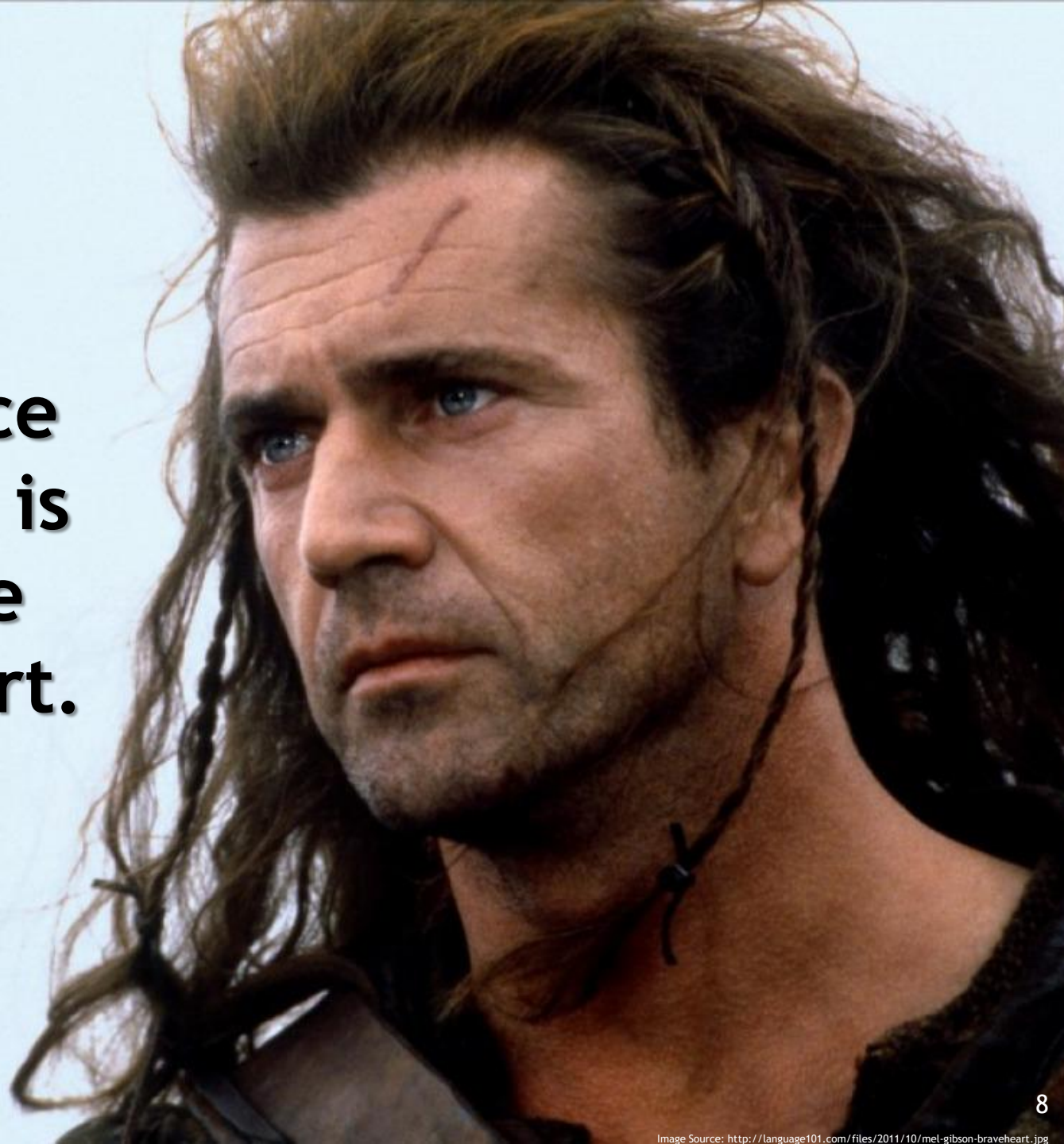


**County Government**



**City Government**

**Performance  
assessment is  
not for the  
faint of heart.**







**LONG-RANGE  
PLANNING  
PROCESS**

**A**

Establish Performance Targets

**B**

Assess Project Performance

**C**

Assess Scenario Performance




**D**

Assess Plan/EIR Performance

**E**

Monitor Performance of Adopted Plan

# BRIEF HISTORY OF PERFORMANCE ASSESSMENT AT MTC

Year	2001	2005	2009	2013
	2001 REGIONAL TRANSPORTATION PLAN			
SCENARIO PLANNING	Transportation investment packages	Transportation investment packages	Transportation investment packages	Integrated transportation & land use scenarios
PERFORMANCE TARGETS	Transportation targets	Transportation targets	Transportation targets	Integrated targets
QUALITATIVE PROJECT ASSESSMENT	None	Goals-based	Goals-based	Targets-based
QUANTITATIVE PROJECT ASSESSMENT	None	None	Limited benefit-cost analysis	Rigorous benefit-cost analysis
NUMBER OF PROJECTS ANALYZED	0	400	700	>1,000

# BayArea Plan

- First regional plan to integrate transportation, land use, and housing
- Sustainable Communities Strategy initiated by California Senate Bill 375



**ECONOMY**



Increase gross regional product



Increase non-auto mode share  
Reduce VMT per capita  
Maintain the transportation system

**ENVIRONMENT**



Reduce per-capita greenhouse gas emissions from cars and light-duty trucks



Direct all non-agricultural development within the urban footprint



Reduce premature deaths from exposure to particulate emissions  
Reduce injuries and fatalities from collisions  
Increase average daily time spent walking or biking

**EQUITY**



House all of the region's projected housing growth



Decrease housing and transportation costs as a share of low-income household budgets

# PERFORMANCE ASSESSMENT FRAMEWORK

PLANNING  
FRAMEWORK

PERFORMANCE  
ASSESSMENT

SCENARIO

SCENARIO-LEVEL  
TARGETS ASSESSMENT

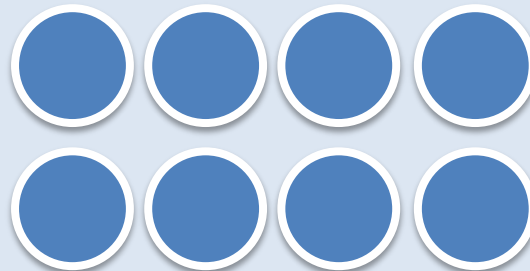
SCENARIO-LEVEL  
EQUITY ASSESSMENT

PROJECT-LEVEL  
TARGETS ASSESSMENT

PROJECT-LEVEL  
BENEFIT-COST ASSESSMENT



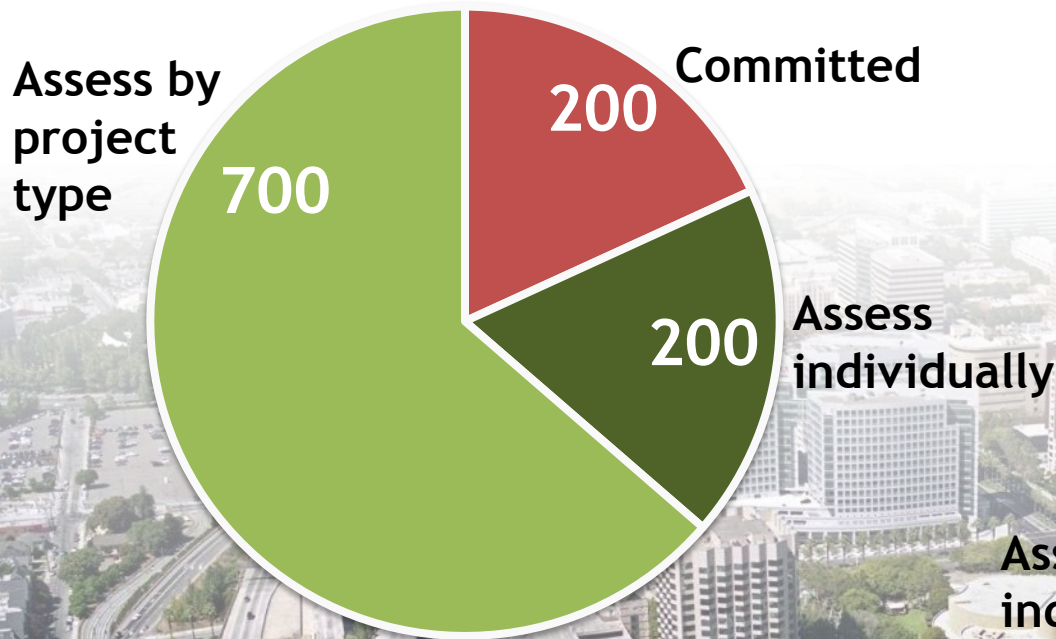
LAND USE  
PATTERN



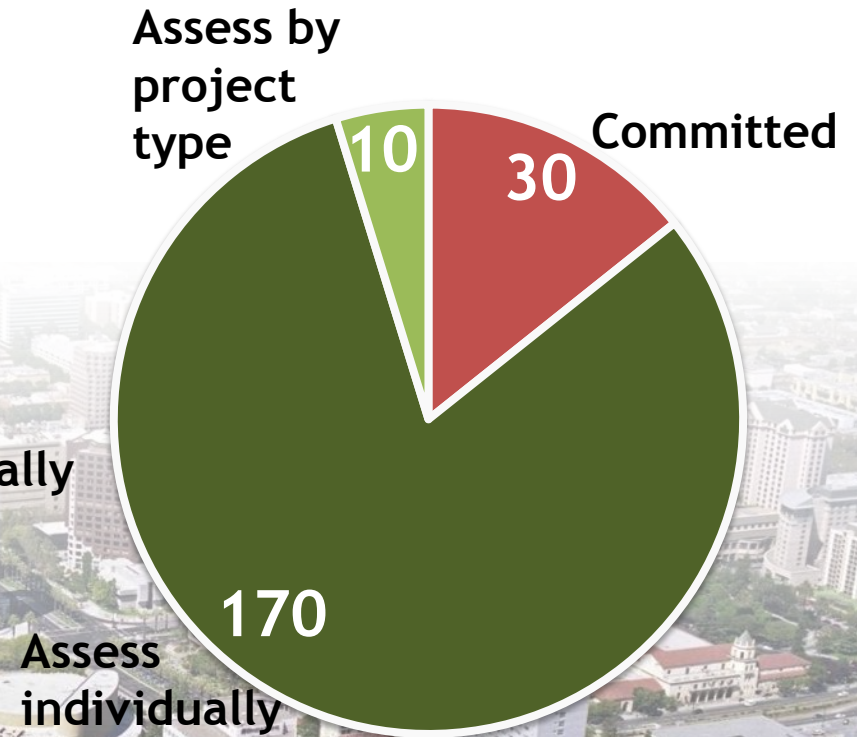
TRANSPORTATION  
PROJECTS

**Only projects that have environmental clearance and full funding secured are treated as committed. This effectively means that only projects under construction or about to begin construction are exempt from performance analysis.**

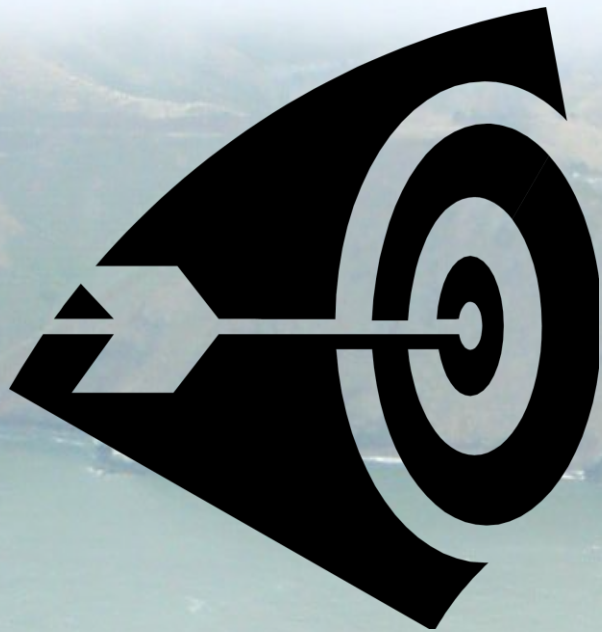
Number of Projects



Cost of Projects (in billions of \$)



# TWO ELEMENTS OF PROJECT PERFORMANCE ASSESSMENT



## TARGETS ASSESSMENT

*Determine impact on targets  
adopted by MTC and ABAG*

Analyzed all **900** uncommitted  
projects



## BENEFIT-COST ASSESSMENT

*Compare benefits & costs*

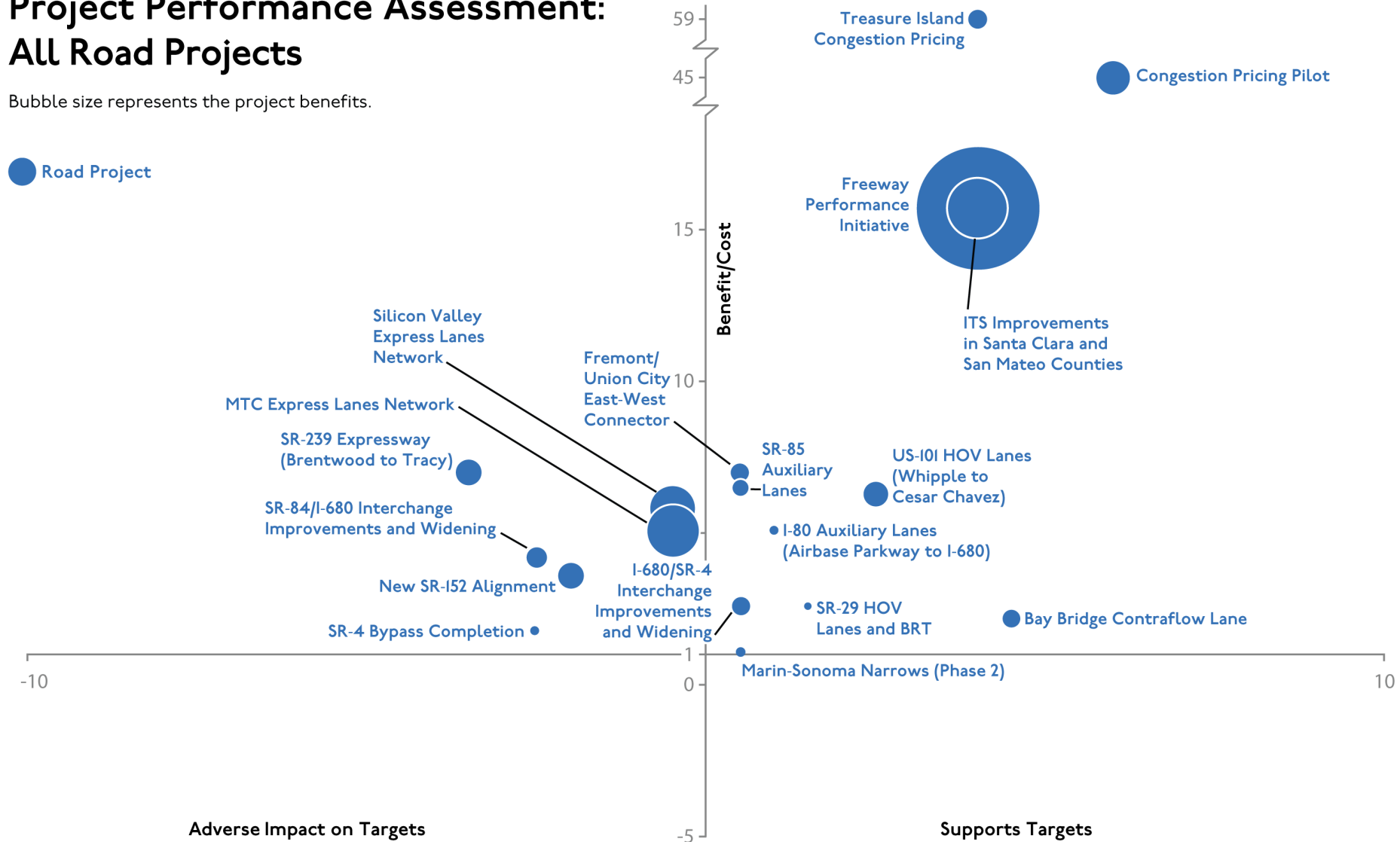
Analyzed most significant projects  
(approximately **100** in total)

# Individual project evaluation allows for greater transparency and accountability.

## Project Performance Assessment: All Road Projects

Bubble size represents the project benefits.

Road Project



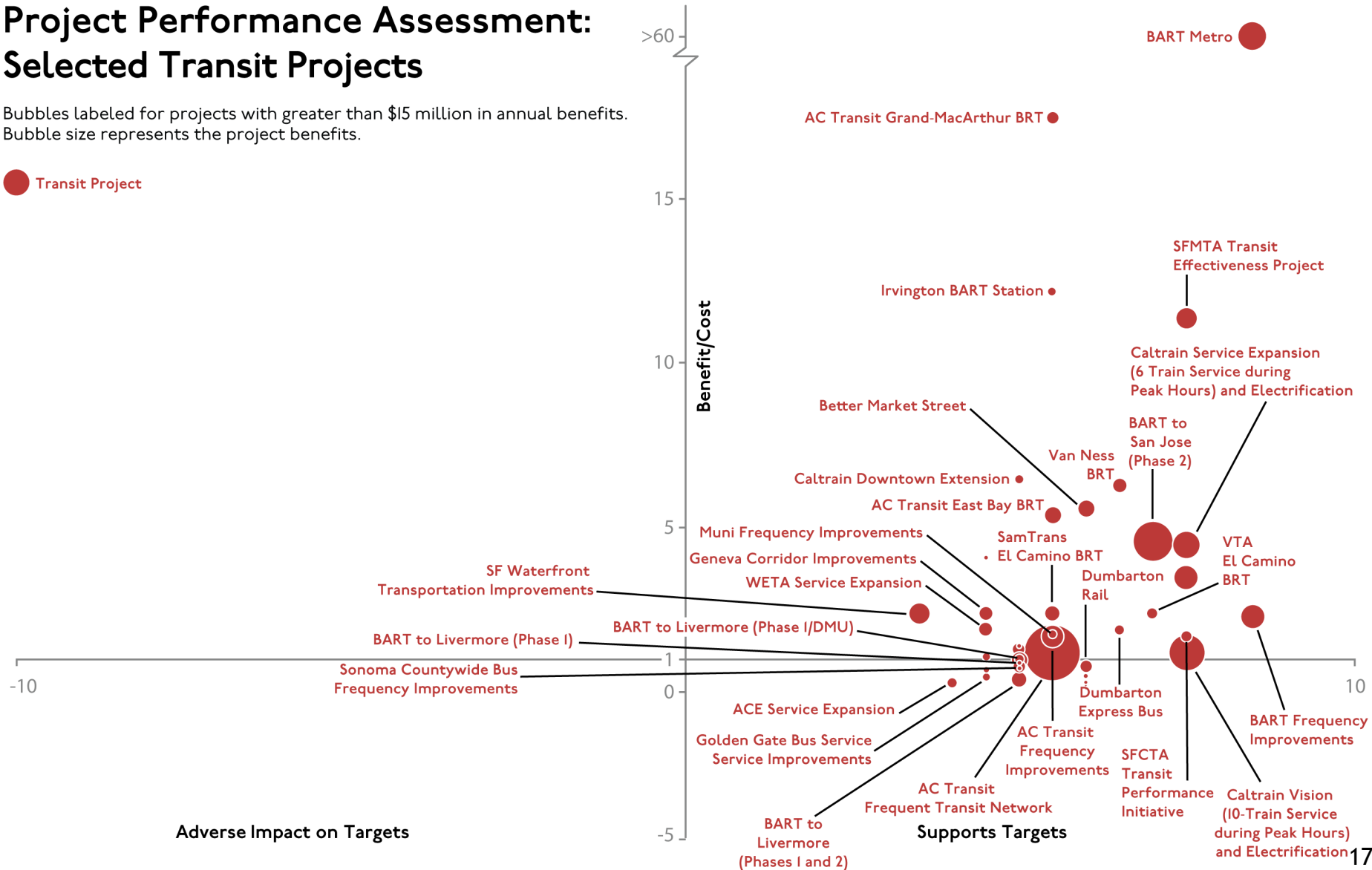


# Individual project evaluation allows for greater transparency and accountability.

## Project Performance Assessment: Selected Transit Projects

Bubbles labeled for projects with greater than \$15 million in annual benefits. Bubble size represents the project benefits.

● Transit Project

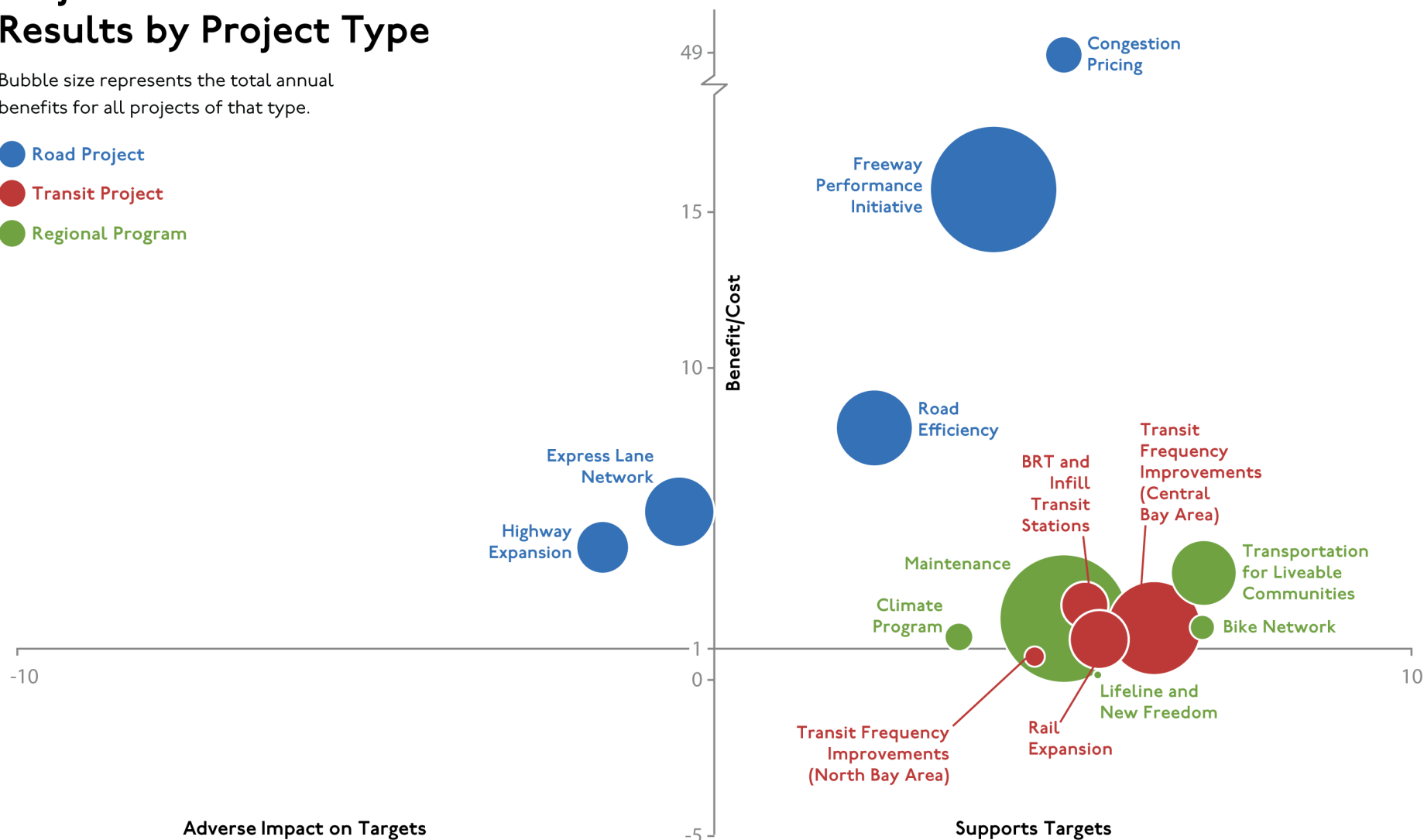


# Analysis results can also be summarized by project type to highlight the performance of overall strategies.

## Project Performance Assessment: Results by Project Type

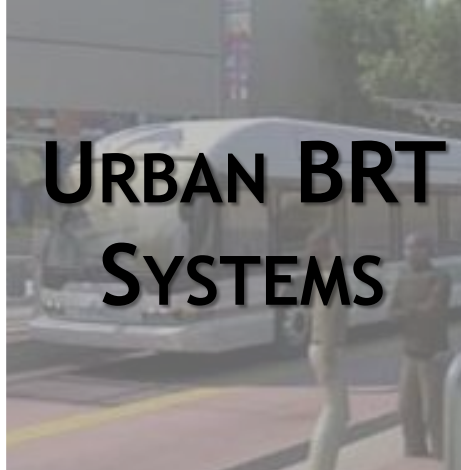
Bubble size represents the total annual benefits for all projects of that type.

- Road Project
- Transit Project
- Regional Program



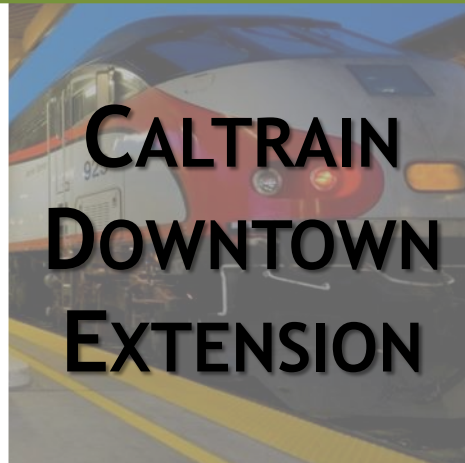
# SAMPLE HIGH-PERFORMING PROJECTS

*PRIORITIZED FOR REGIONAL FUNDING*



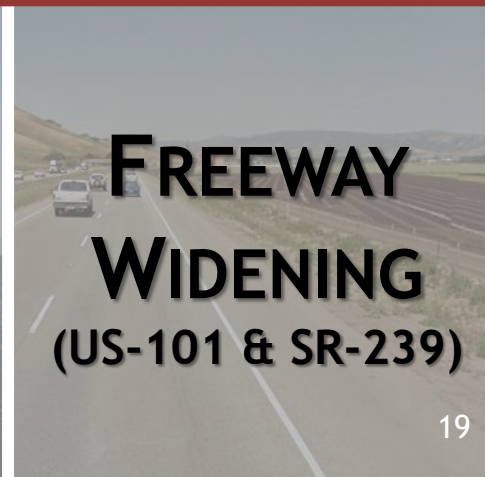
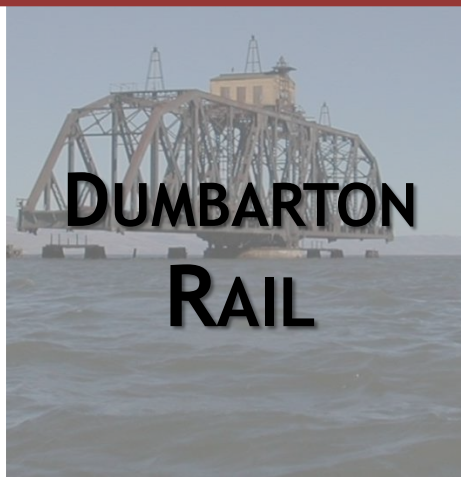
# SAMPLE MODERATE-PERFORMING PROJECTS

*“NOTHING TO SEE HERE, MOVE ALONG”*

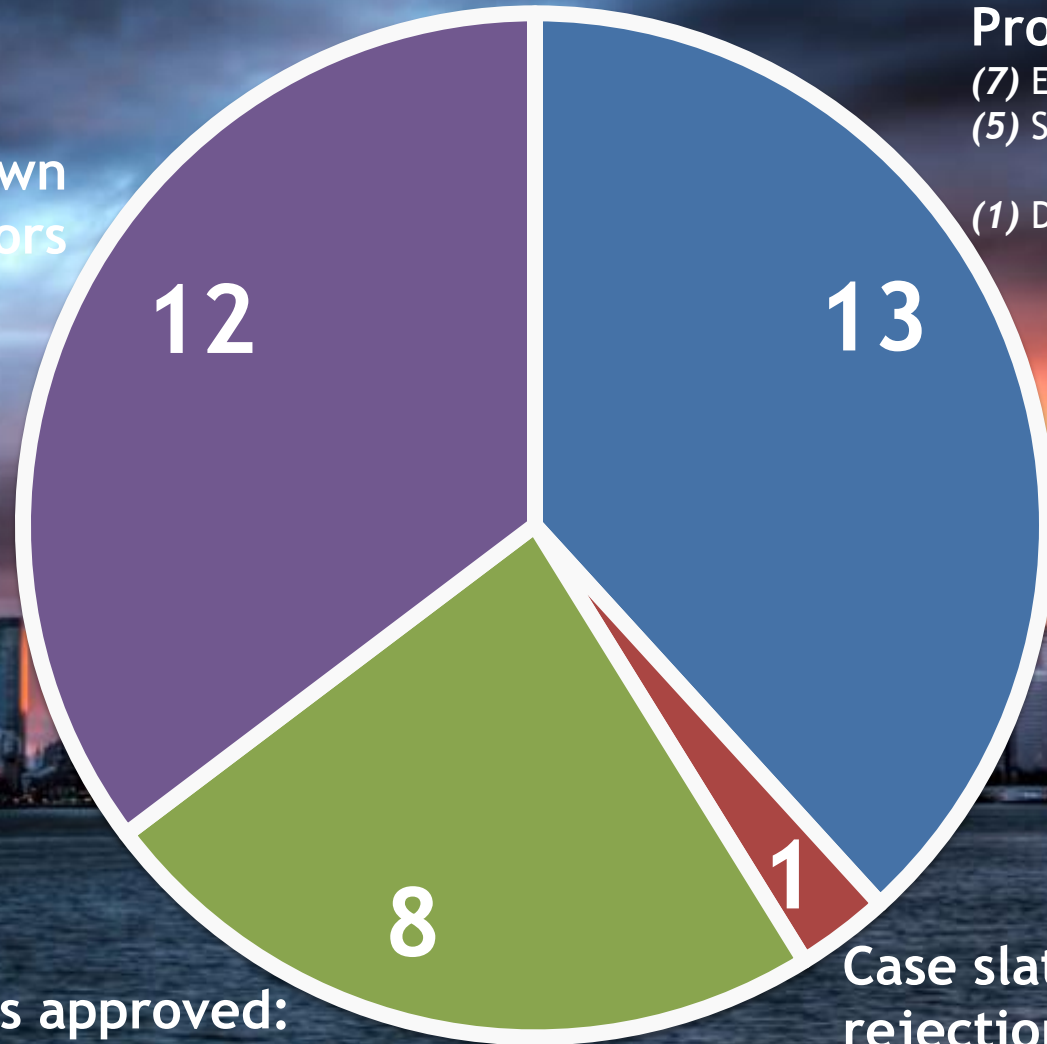


# SAMPLE LOW-PERFORMING PROJECTS

*REQUIRED COMPELLING CASE FOR INCLUSION IN PLAN*



# IMPLICATIONS OF COMPELLING CASE REQUIREMENT FOR LOW-PERFORMING PROJECTS



**Projects re-scoped:**  
(7) Environmental phase only  
(5) Sponsor agreed to fully fund project locally  
(1) Down-scoped to achieve B/C ratio greater than 1

**Projects withdrawn by sponsors**

**Compelling cases approved:**  
(6) Communities of Concern  
(1) Air quality  
(1) Recreational trips

**Case slated for rejection; "settled out of court"**

# LESSONS LEARNED FROM PLAN BAY AREA PERFORMANCE ASSESSMENT

- Given the limited budget for expansion projects, performance data can make the difference.
- Performance results helped to advance good projects and weed out bad ones.
- Tread carefully when picking:
  - a. performance objectives
  - b. which projects to evaluate
- Incorporating state of good repair investments into this performance-based framework is a critical next step.



# HOW CAN STATES & MPOs WORK TOGETHER TO MAXIMIZE THE EFFICACY OF MAP-21?

- Given all of the challenges related to target-setting - and the dispersal of authority between federal, state, regional, and local entities - **close collaboration between states and MPOs will be critical to make the federal performance process meaningful.**
- While MAP-21's target-setting deadlines imply a “top-down” approach where states set targets and metropolitan areas follow, **a more collaborative approach would be more effective for all stakeholders.**
- **MPOs should be active participants in the state target-setting process; a successful process could even develop state targets based on the best of regional goals.**

# HOW CAN STATES & MPOs WORK TOGETHER TO MAXIMIZE THE EFFICACY OF MAP-21?

- MPOs should begin their regional target-setting work as soon as performance measures are finalized; this will maximize consistency with state targets and provide time for necessary analyses related to economic impacts, funding constraints, etc.
- California's target-setting process to comply with the requirements of Senate Bill 375 may be an effective blueprint for MAP-21 target-setting in our state and across the country.
- By developing the Regional Targets Advisory Committee (RTAC) to seek regional input on realistic greenhouse gas targets, the state was able to align differing regional targets with an overall state mandate; this effort resulted in productive dialogue between urban and rural regions and between key stakeholders.

On performance measures, states and MPOs can either sink or swim together.

I vote against sinking.

