

San Francisco Transportation Plan Update

SPUR Annie Alley Forum May 21, 2013



www.sfcta.org/MoveSmartSF
SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

Purpose of the San Francisco Transportation Plan



What is it?

- ► San Francisco's transportation investment program for all modes, operators to year 2040
- ► Supporting policies and strategic initiatives
- Funding and implementation strategy

How will it be used?

► Informs local plans and investments (Transportation Element Update, SFMTA and CCSF capital plans)



- ► Guides SF's input to **regional planning** efforts (BART Strategic Plan, 2017 RTP)
 - Advocating together for San Francisco's fair share
- ► Positions SF for future funding opportunities and policy discussions at state, national level



New transportation goals and city development objectives



2013 Regional Transportation Plan: new projects

- ► Blended High Speed Rail/Caltrain Electrification/Transbay/Downtown extension
- ► BART Metro, Transit Effectiveness Project, SF Pricing Program

SB375, SF Climate Action Strategy

- ► SF goal: reduce GHGs to 80% below 1990 levels by 2050
- Regional Transportation Plan Update includes a Sustainable Communities Strategy

Bicycle and Pedestrian Safety Directives

- ► BoS: 20% Bicycle Mode Share by 2020
- ► Mayor's Directive: 50% reduction in pedestrian injuries by 2020

Demand Management to Support Approved Plans

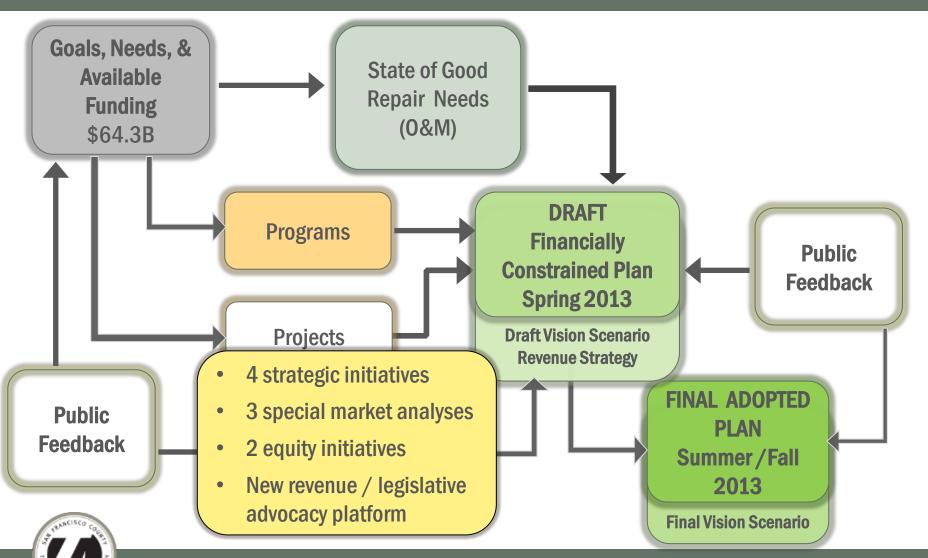
- **▶** Bayview Waterfront, Treasure Island, Park Merced Plans
- SFMTA Parking and Shuttle Management policies





Developing the SFTP





SFTP needs assessment framework



Transportation System Performance

- Total trip-making
- Mode share

- Avg Occupancy (PMT/VMT)
- Transit: Auto Travel Time Ratio

Economic Competitiveness

- Congested Streets, Commute times
- Peak: Off-peak Drive Travel Time
 - Goods movement needs and visitor access

Healthy Environment

- Vehicle miles traveled
- Greenhouse gas emissions
- Active Transportation (walking & biking) Trips

Livability

- Travel safety
- Transfers/Transit trip
- Non-auto trip shares
 - School trip needs

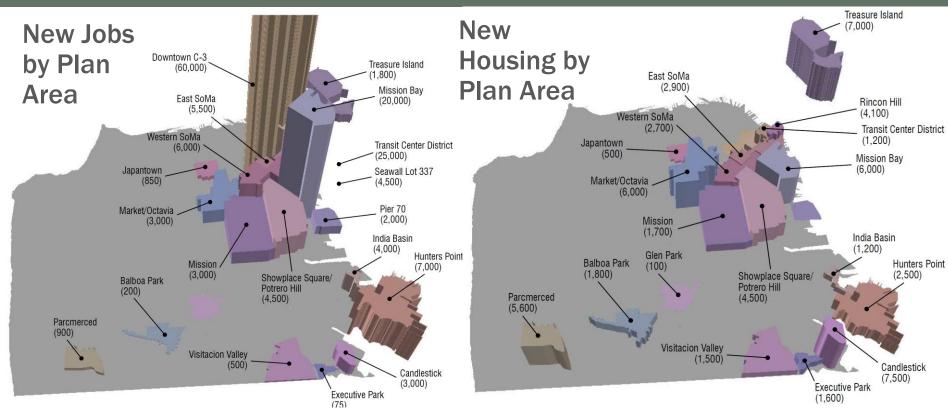
State of Good Repair

- Crowded TransitLines
- Pavement Condition Index
 - Transit Reliability
- Structural Sufficiency

Equity Public Input

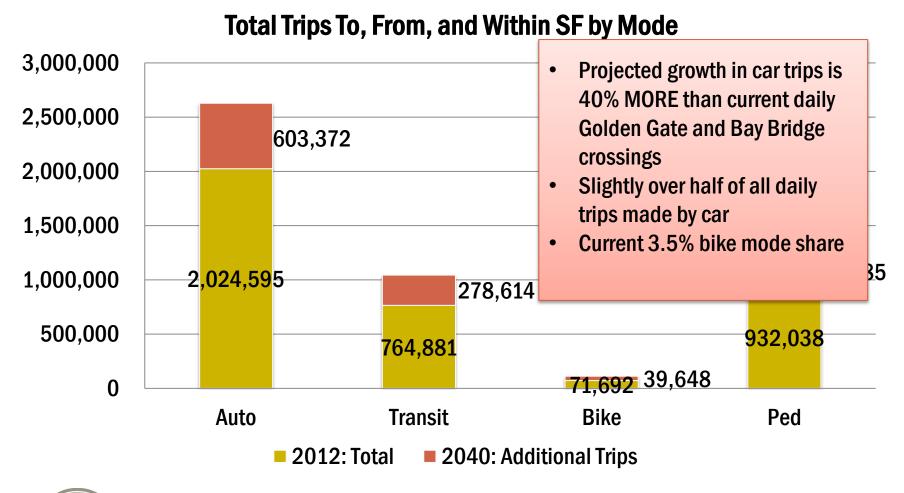


Our growth and transportation challenge Planned growth through 2040



- ► 101,000 new households
- ▶ 191,000 new workers
- ► 603,000 more daily car trips (more than the combined daily volume of Bay Bridge and Golden Gate Bridge crossings)

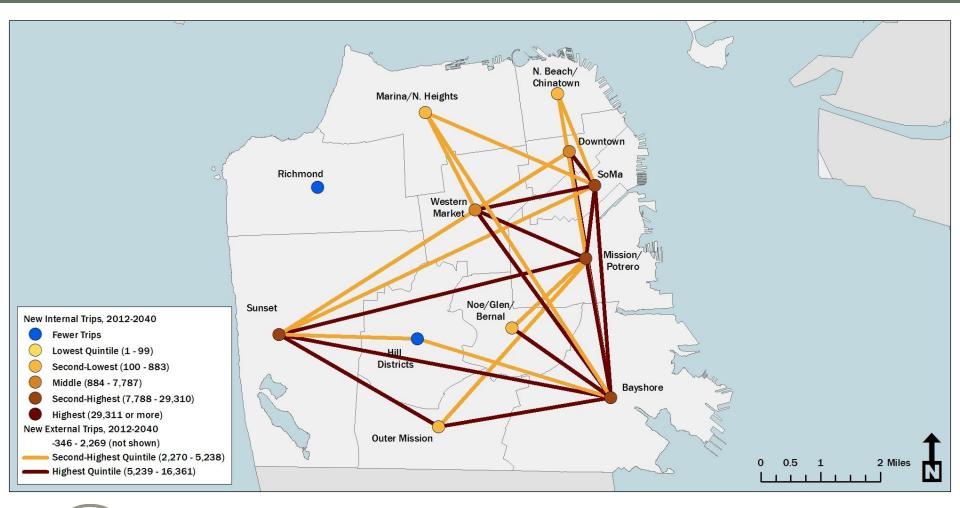
> 5 Million trips to/from/within SF by 2040 33% more trips than today





Change in local auto trips: 2012-40

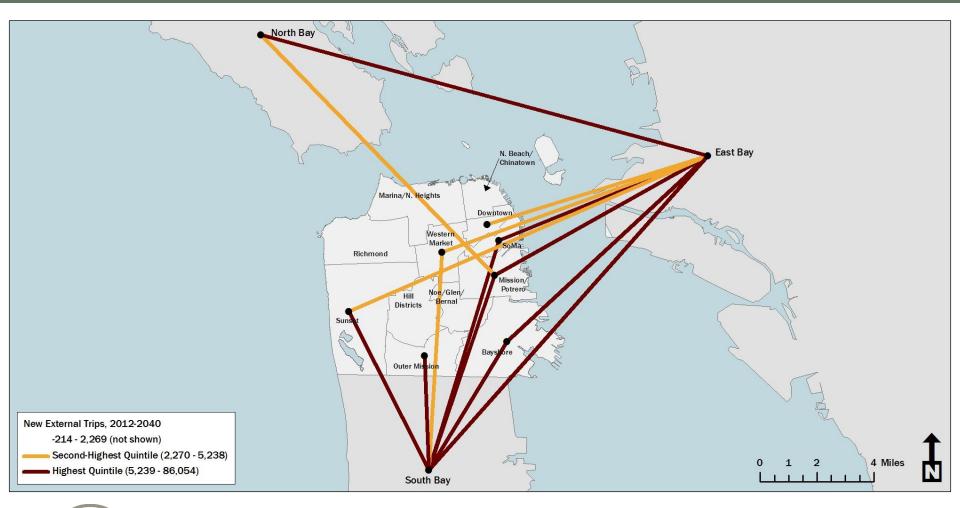






Change in regional auto trips: 2012-40







Muni crowding Morning peak hour, 2012 and 2040



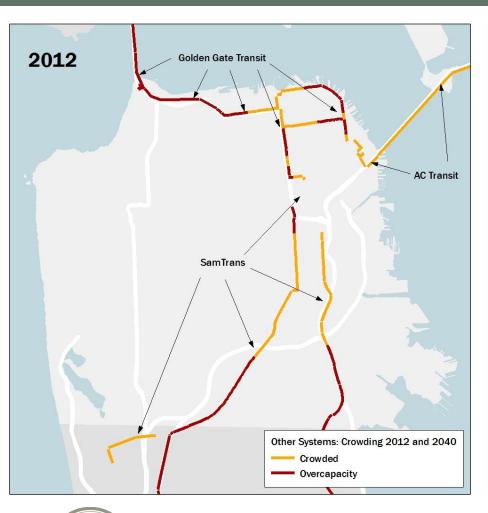


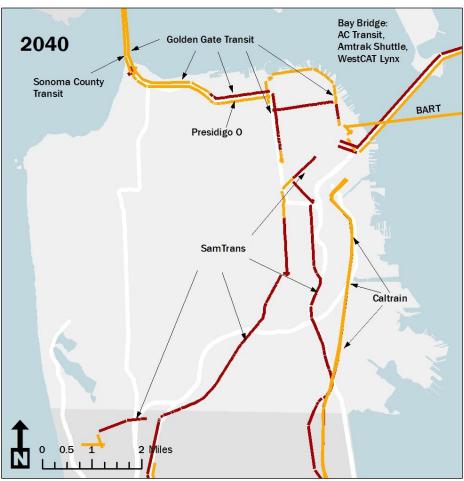




Crowding on regional transit systems | Morning peak hour, 2012 and 2040

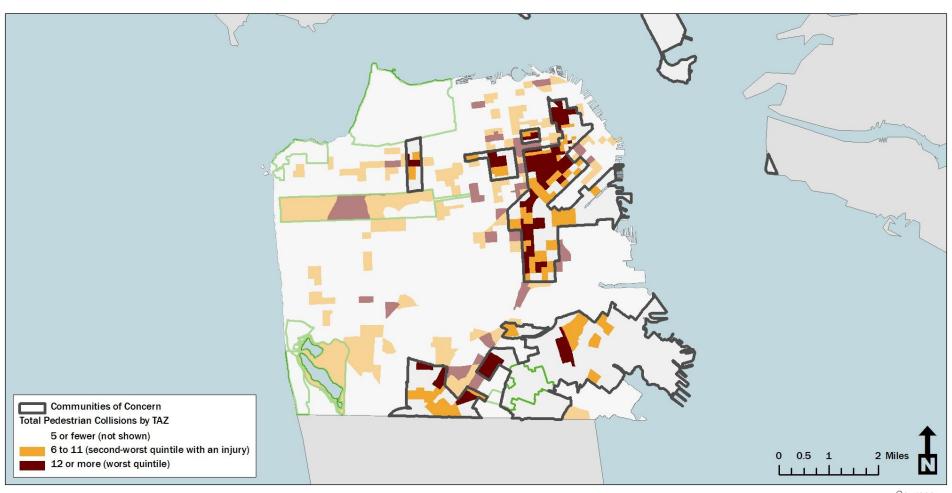








Pedestrian Injuries: Total number of injuries



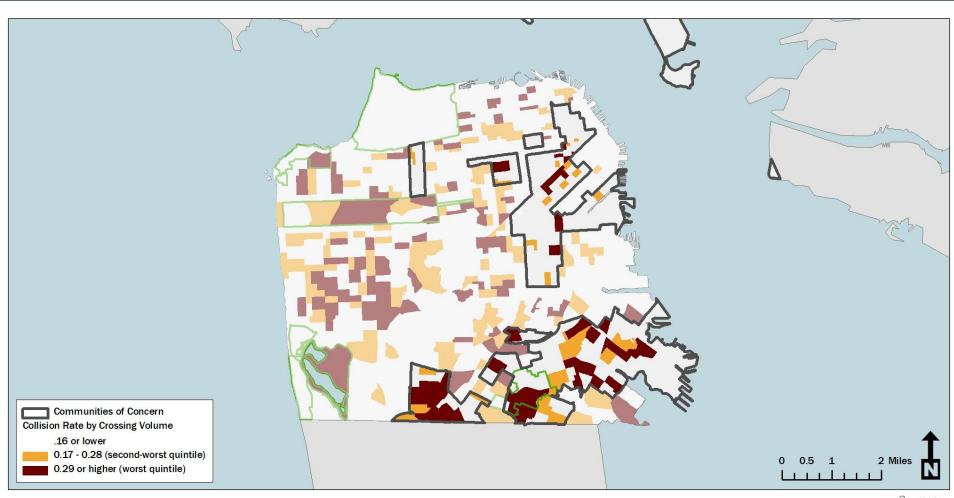


Sources:

Tract Populations: American Community Survey, 2009 Ped Collisions (2007-11): Statewide Integrated Traffic Reporting System (SWITRS)

Pedestrian Injury Rate







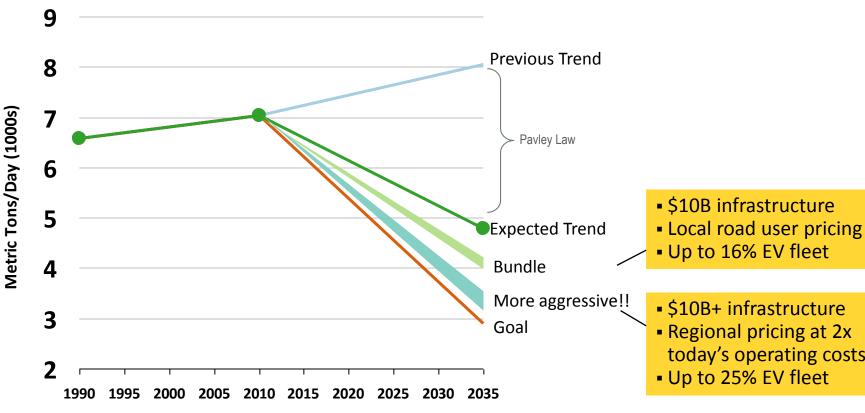
Predicted Crossing Volume: San Francisco Pedestrian Volume Model (2011) Ped Collisions (2007-11): Statewide Integrated Traffic Reporting System (SWITRS)



Example: Healthy Environment Scenario can only approach goal w/aggressive policy change

San Francisco GHG Emissions Trend vs. Goal

(on-road mobile, weekday)



today's operating costs



Source: SF CHAMP 4.1 Draft SCS. SFCTA, 2011

Response to calls for projects: public input



300 submittals from both agencies and the public

- **►** Support for "Fix It First"
- ► Support for projects to improve transit reliability and provide dedicated right-of-way
- ▶ Demand for traffic calming, pedestrian safety and enhancement, and bicycle improvements
- ► Demand for more frequent transit service (to alleviate crowding)





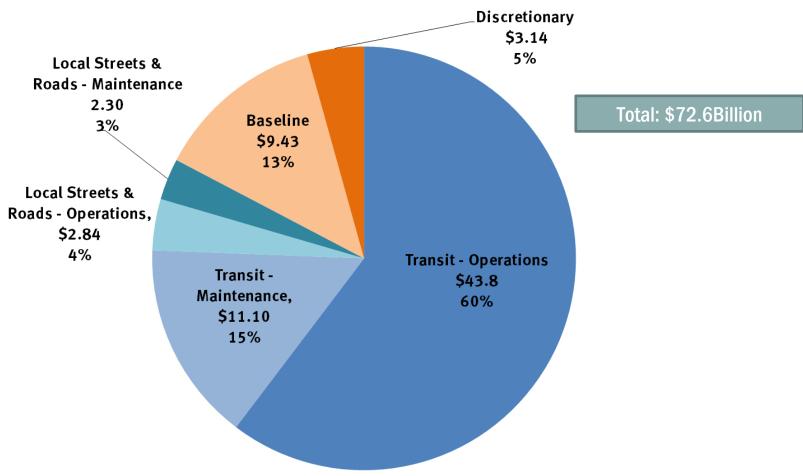




Draft SFTP Financially Constrained Investment Scenario



Expected Transportation Revenue for San Francisco, 2012 through 2040, Billions YOE





SFTP Baseline Projects





Prioritizing discretionary revenue

How should we prioritize \$3.14 billion in uncommitted funds?

State of Good Repair / Operations & Maintenance (O&M)

- ► Improve transit reliability
- ► Pavement quality, state and local structures

Transportation enhancements and programs

- Pedestrian safety, traffic calming
- **▶** Bicycle facilities, Rapid Transit network

Expansion projects

- Relieve crowding; long range strategic rail investments
- Develop freeway management strategies (US101, HWY280)





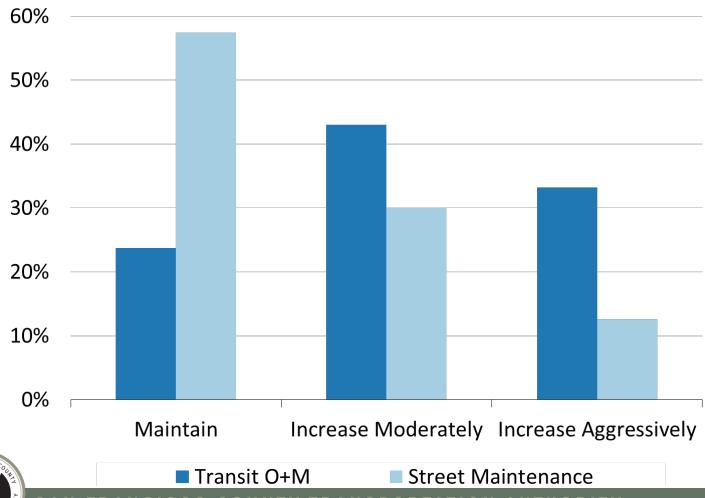




Desire for increase in transit O&M



Investment In Maintenance and Operations





Desire for more investment in walking, cycling, + Muni enhancements

Investment in Programs Street and Signal Upgrades 20% 10% 46% 24% Transportation Demand and Parking Management 20% 29% 23% 29% Bicycling **17%** 21% 45% 18% Regional Transit Enhancement 13% 36% 22% 28% Walking and Traffic Calming 14% 22% 25% 40%

35%

300

Increase Moderately

400

35%

600

■ Increase Aggressively

700

500



200

200

Muni Enhancement

21%

100

Maintain

10%

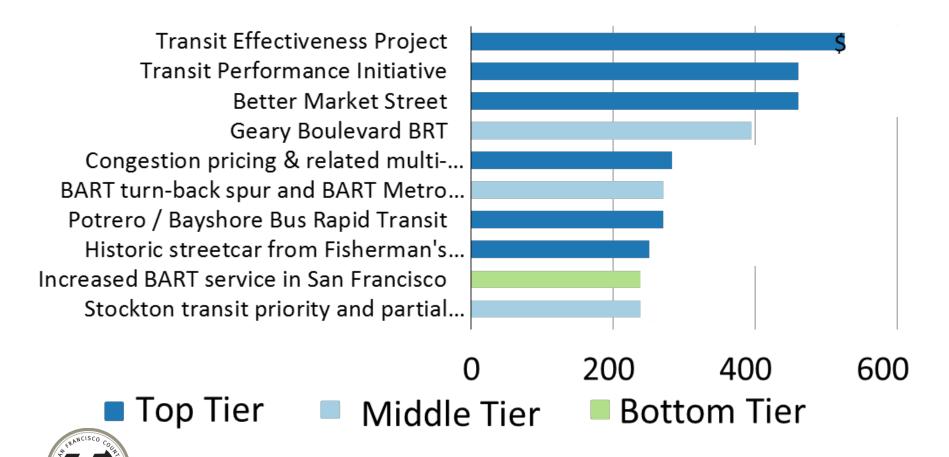
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Reduce

Support for high-performing transit efficiency projects



Demand for Projects (top 10 vote-getters)



Project performance evaluation



Nearly 50 projects and programs were evaluated for cost effective contribution to plan goals

BENEFIT ANNIIAI 17FD SCORE COST SFTP GOALS AND EVALUATION METRICS CAPITAL COST **BENEFIT-COST SCORE ECONOMIC COMPETITIVENESS** Travel time BENEFIT SCORE DIVIDED BY PROJECT LIFE ANNUALIZED COST WORLD CLASS LIVABILITY INFRASTRUCTURE Non-Auto ONE YEAR OF OPERATING COST Mode Sh<mark>are</mark> Transit Crowding ANNUALIZED COST **HEALTHY ENVIRONMENT** Greenhouse Gas Emission



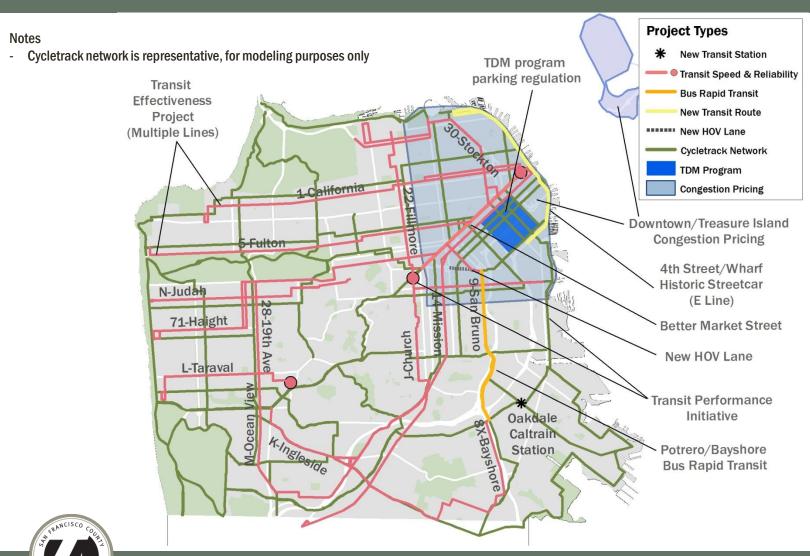
Benefit-cost proxy index – Top tier



Projects with Highest Benefit-Cost Proxy Scores (Listed alphabetically)	Total Cost (cap + op, \$YOE)
Better Market Street	\$258
Bicycle Program	\$252
Congestion Pricing - Cordon and Treasure Island	\$119
Historic Streetcar Expansion – E Turnaround	\$149
HOV Lane on Central Freeway	\$15
New Caltrain Station at Oakdale Avenue	\$62
Potrero / Bayshore BRT	\$128
Transit Effectiveness Project	\$178
Transit Performance Initiative	\$400+
Travel Demand Management Program	\$73M
Total Cost of Top Tier of Projects	\$1,561

Top tier projects





SF priorities are top RTP performers

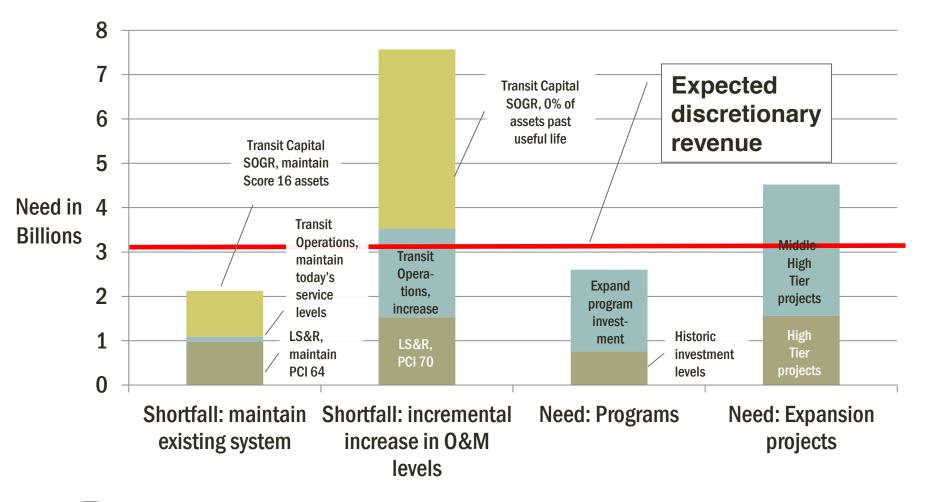


	Project	Quantitativ e B/C ratio	Qualitative (out of 10)
1	BART Metro Program	>60	8.5
2	Treasure Island Congestion Pricing	59	4.0
3	Congestion Pricing Cordon Pilot	45	6.0
4	AC Transit Grant-MacArthur BRT	18	5.5
5	Freeway Performance Initiative	16	4.0
6	ITS Improvements in San Mateo County	16	4.0
7	ITS Improvements in San Clara County	16	4.0
8	Irvington BART Station	12	5.5
9	SFMTA Transit Effectiveness Project	11	7.5
10	Caltrain Electrification + 6 train/hour service	5	7.5
11	BART to San Jose, Phase 2	5	7.0
12	Van Ness Avenue BRT	6	6.5
13	Better Market Street	6	6.0



Needs far exceed expected revenue







Knitting it all together

Investment Scenario Options

► Complementary choices among investment types (e.g. replacement vehicles, rapid transit network development can increase effective level of transit service)

But also:

► Tradeoffs between and within investment types (e.g. Operations, Maintenance, Programs, Expansion), modes, geographic areas and

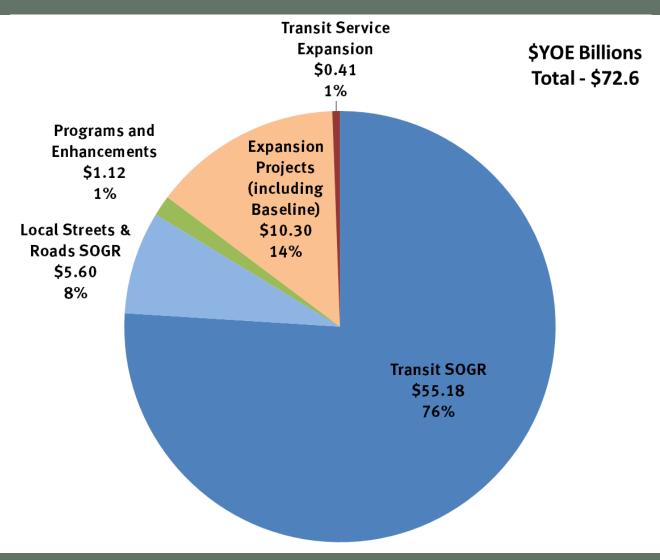
Plan development should consider multiple factors: Need, Performance, Cost-Effectiveness, Public Input, Policy/Plan status, Equity





Draft SFTP Financially Constrained Investment Scenario



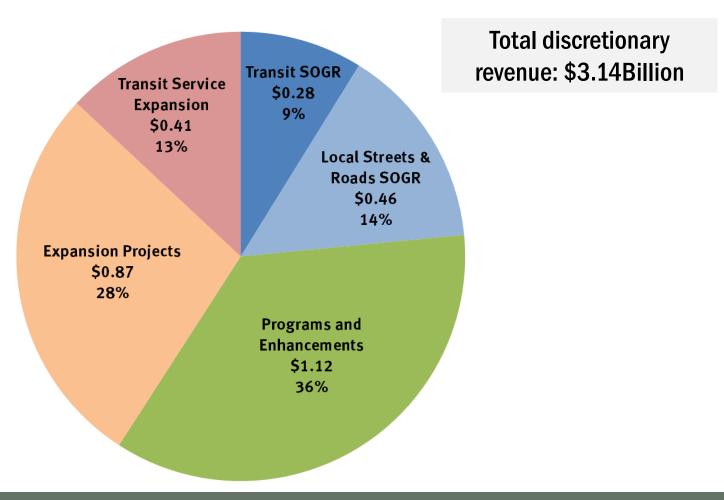




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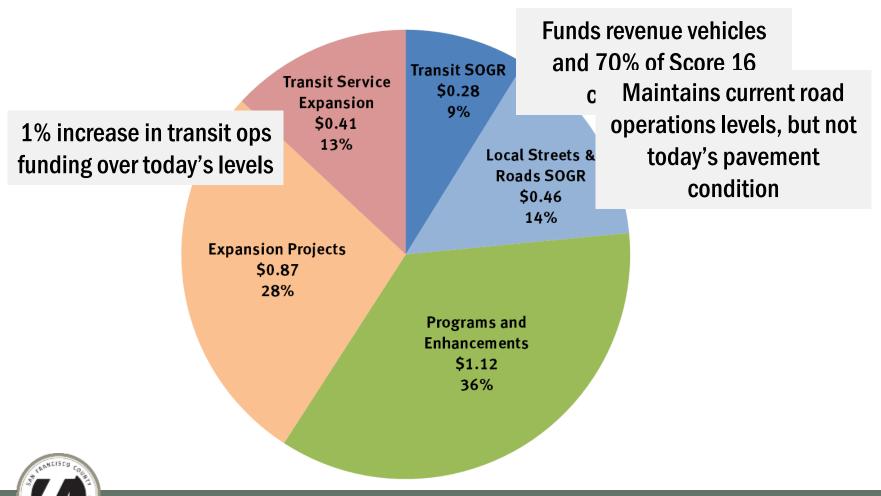
Discretionary Revenue Investment by Type, YOE Billions



Transit service expansion and SOGR



Discretionary Revenue Investment by Type, YOE Billions



Programs and enhancements



Discretionary Revenue Investment by Type, YOE Billions

Program	Historic funding level*	Proposed funding level**	% Increase over historic
Complete streets, signals and signs	\$0.14	\$0.20	43%
Walking and traffic calming	\$0.19	\$0.28	47%
Bicycling	\$0.05	\$0.15	200%
Demand management	\$0.05	\$0.06	20%

28%

Programs and Enhancements \$1.12

36%

* Estimated 28 year total spending based on average annual funding levels from last 10 years

** Proposed 28 year total, 2012 - 2040

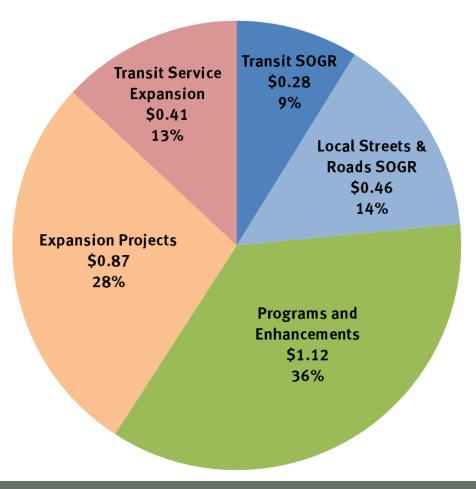
Increased funding for local streets, walking and traffic calming, bicycling, and demand management



Draft SFTP Financially Constrained Investment Scenario



Discretionary Revenue Investment by Type, YOE Billions





Expansion projects inclusion criteria



• All projects from "High" costeffectiveness tier receive funding

- Additional projects from Middle-High Tier included based on:
 - ► Ability to address equity issues
 - ► Approval in Prop K Expenditure Plan or City Development Agreement
 - ► Support for Priority Development Area (PDA) growth



Better Market Street

Congestion Pricing

Caltrain Oakdale Station

E-line extension to Caltrain

Freeway Performance Initiative (FPI)

Potrero / Bayshore BRT

Transit Effectiveness Project

Transit Performance Initiative (TPI)

Middle-High Tier Projects

Bayshore intermodal station

Express buses - Hunter's & Candlestick Points

Geary Boulevard BRT

Geneva TPS / BRT

M-line west side alignment



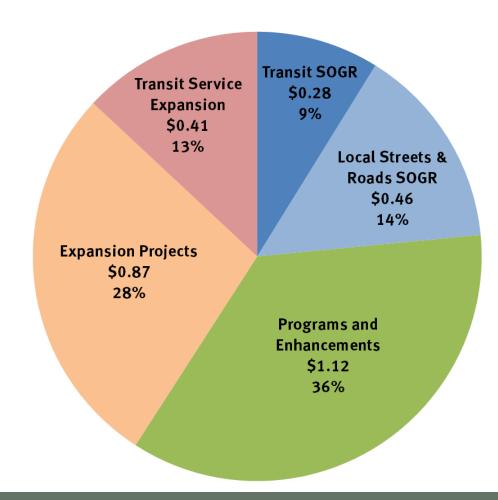
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Questions for feedback



- Level of investment by type are we on the right track?
- How to prioritize within SOGR and Programs?
- How to incorporate equity findings into the investment strategy?

Discretionary Revenue Investment by Type, YOE Billions





Strategic policy initiatives

- Complete Streets: Clarify policies, create a cost-effective complete streets approach
- Next-generation TDM: Broaden, deepen TDM efforts including new ways to leverage Employer/Community-initiated efforts
- **Output** Local-to-regional connection: Re-imagine freeway, transit interfaces with region
- Project delivery / performance effectiveness: Improve project and program delivery, leverage private investment

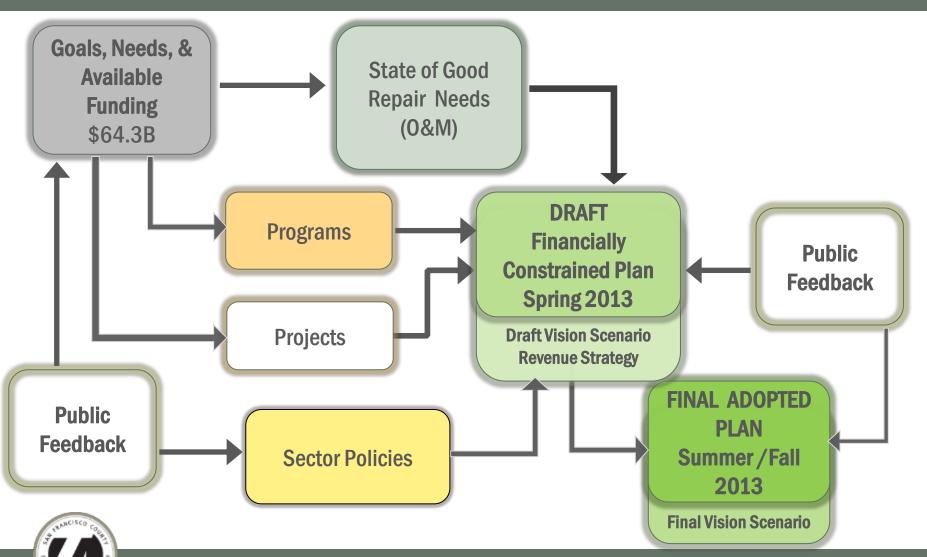






Developing the SFTP





SFTP adoption timeline



	Fall 2012 and earlier	 ▶ Revenue Estimate ▶ Investment Needs/Shortfall Analysis ▶ Public Outreach, Budget Game ▶ 3 Sub-market analyses
•	Winter 2012/13	 ▶ Project Performance Assessment ▶ Core Network Circulation Study ▶ 4 Strategic Initiatives Development
	Spring 2013	 Draft SFTP Preferred and Vision Scenarios 2 Equity initiatives analysis New Revenue Strategy / legislative advocacy platform Authority Board Workshop on SFTP, May 30th
\	Summer 2013	 ▶ Public Outreach ▶ Revised SFTP Preferred and Vision Scenarios ▶ Final SFTP + Plan Adoption in September/Oct. 2013





Thank you!

For meeting schedule through July, see:

www.movesmartsf.org



www.sfcta.org/MoveSmartSF
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