

**Ninth National Conference of
Transportation Asset Management**

**Unmet Transit Funding Needs
in California: FY2011-2020**

April 17, 2012
San Diego, California



Agenda

- Introduction
- Expected Funding Levels
- Expected Funding Needs
- Estimate of Unmet Funding Needs

Scope: Determine California's ten year unmet transit funding needs for FY2011-2020

- Funding levels and expected needs “maintain”:
 - Operations and maintenance
 - System preservation and asset rehabilitation
- But also for growth:
 - System enhancement (performance improvement)
 - System expansion (increased service levels and service to new areas)

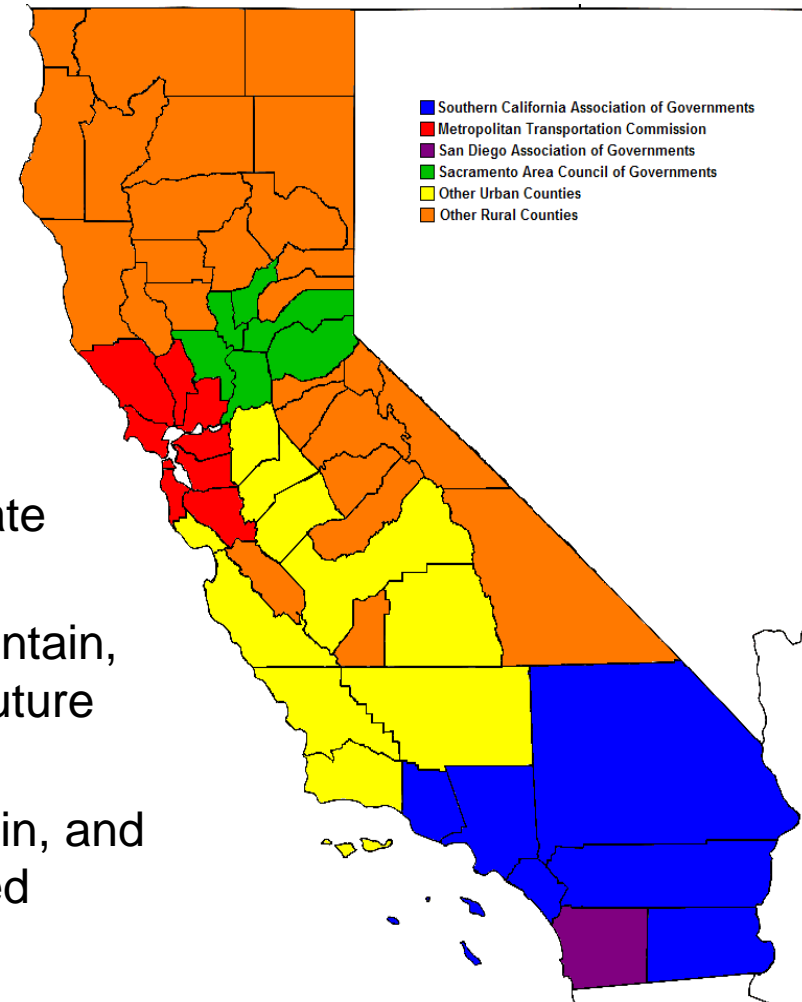
“Public transit”, “Transit”, “Public Transportation” means local or regional transit systems NOT operated by Caltrans and includes bus, rail, ferry and paratransit services open to the public, for which a fare is generally charged. Includes human service transportation providers funded by FTA section 5310; transit providers in non-urbanized areas and in Native American communities, funded by FTA section 5311, intercity transit services (but not the State’s planned High Speed Rail System).

Data Sources...Forecasts

- NTD and State Controller's reporting data provided baseline funding and performance levels by agency
- FTA transit asset data for transit agencies with rail operations
- Operator budget and CAFR data to help account for the funding impacts of recent economic conditions
- Transit demand growth rates from the four largest MPOs: SCAG, MTC, SANDAG, and SACOG
- MPOs, major transit agencies, and select medium and smaller operators directly for:
 - Asset inventory data
 - Planned major transit enhancement projects
 - Funding and expenditure forecasts
 - Regional Transportation Plans

Analysis by Region

- Four major MPOs as well as urban and rural counties:
 - SCAG (blue); MTC (red); SANDAG (purple); SACOG (green)
 - Urban counties (over 200k – yellow); Rural counties (under 200k – orange)
- Funding:
 - **Preservation:** funds to maintain and operate existing assets
 - **Service Expansion:** funds to procure, maintain, and operate assets supporting additional future transit demand
 - **Major New Service:** funds to build, maintain, and operate major projects supporting increased transit performance and capacity



Expected Funding Levels

- Forecast operating funding levels are based on an FY09 base year and escalated using a 17 year trend rate of funding growth, adjusted for FY10 funding changes
- Capital funding levels are based on average levels from FY04-FY09 levels, adjusted for inflation, and escalated at the trend rate

Expected Funding Levels

Region	Type of Operating Funding	Total Operating Funding*	Share of Total Funding
SCAG	Existing + Service Expansion + Major New Service	\$33.2 Billion	38%
MTC	Existing + Service Expansion + Major New Service	\$30.7 Billion	35%
SANDAG	Existing + Service Expansion + Major New Service	\$4.2 Billion	5%
SACOG	Existing + Service Expansion + Major New Service	\$2.6 Billion	4%
Other Urban Counties	Existing + Service Expansion + Major New Service	\$14.5 Billion	17%
Other Rural Counties	Existing + Service Expansion + Major New Service	\$2.2 Billion	3%
Statewide	Total	\$87.5 Billion	100%

Expected Funding Levels

Region	Type of Capital Funding	Total Capital Funding*	Share of Total Funding
SCAG	Preservation	\$7.1 Billion	23%
	Service Expansion + Major New Service	\$6.5 Billion	21%
MTC	Preservation	\$8.4 Billion	27%
	Service Expansion + Major New Service	\$4.0 Billion	13%
SANDAG	Preservation	\$1.1 Billion	3%
	Service Expansion + Major New Service	\$1.0 Billion	3%
SACOG	Preservation	\$0.6 Billion	2%
	Service Expansion + Major New Service	\$1.0 Billion	3%
Other Urban Counties	Preservation	\$0.9 Billion	3%
	Service Expansion + Major New Service	\$82 Million	0%
Other Rural Counties	Preservation	\$112 Million	0%
	Service Expansion + Major New Service	\$0	0%
Statewide Subtotal	Preservation	\$18.2 Billion	59%
	Service Expansion + Major New Service	\$12.7 Billion	41%
Statewide	Total	\$30.9 Billion	100%

Funding Needs

- Each region's forecast rate of transit demand growth determines the future capacity needed
- We created a California transit asset database for TERM based on MTC's regional inventory, FTA rail operator data, data collected from operators, and estimates of other operators' transit assets
 - TERM – Transit Economic Requirements Model
 - Tailored for State of California using available data

Funding Needs

- TERM determines operating costs and needed investments at the asset level:
 - TERM's estimate uses base year performance data including cost per VSH by mode and load factors
 - TERM adds capacity (new vehicles, guideway, and facilities) as dictated by transit demand growth
 - TERM estimates the current “state of good repair” (SGR) investment backlog based on current funding levels
 - TERM programs assets' rehabilitation and replacement using standard, FTA-developed decay curves
- Because TERM does not have the capability to account for major transit enhancement projects, Booz Allen accounted for these separately

Funding Needs...Final Assumptions

- Operating costs totals assume historical inflation rates calculated on a VSH basis
- Capital costs were escalated based on RS Means historical construction cost index data
- TERM's estimated SGR investment backlog is divided evenly across the ten year horizon

10 Year Funding Needs – Operating

Region	Type of Operating Need	Total Operating Need*	Share of Total Need
SCAG	Existing Service Levels	\$37.8 Billion	36%
	Service Expansion	\$5.7 Billion	5%
MTC	Existing Service Levels	\$30.4 Billion	29%
	Service Expansion	\$4.4 Billion	4%
SANDAG	Existing Service Levels	\$4.1 Billion	4%
	Service Expansion	\$1.0 Billion	1%
SACOG	Existing Service Levels	\$3.5 Billion	3%
	Service Expansion	\$0.6 Billion	1%
Other Urban Counties	Existing Service Levels	\$14.2 Billion	14%
	Service Expansion	\$1.0 Billion	1%
Other Rural Counties	Existing Service Levels	\$2.2 Billion	2%
	Service Expansion	\$0.2 Billion	0%
Statewide Subtotal	Existing Service Levels	\$92.2 Billion	88%
	Service Expansion	\$12.9 Billion	12%
Statewide	Total	\$105.1 Billion	100%

10 Year Funding Needs - Capital

Region	Type of Capital Need	Total Capital Need*	Share of Total Need
SCAG	Preservation	\$9.5 Billion	22%
	Service Expansion	\$1.8 Billion	4%
MTC	Preservation	\$22.4 Billion	53%
	Service Expansion	\$2.6 Billion	6%
SANDAG	Preservation	\$2.7 Billion	6%
	Service Expansion	\$0.5 Billion	1%
SACOG	Preservation	\$1.2 Billion	3%
	Service Expansion	\$0.2 Billion	0%
Other Urban Counties	Preservation	\$1.1 Billion	3%
	Service Expansion	\$0.3 Billion	1%
Other Rural Counties	Preservation	\$0.2 Billion	1%
	Service Expansion	\$41 Million	0%
Statewide Subtotal	Preservation	\$37.2 Billion	87%
	Service Expansion	\$5.4 Billion	13%
Statewide	Total	\$42.6 Billion	100%

Major New Service Assumptions

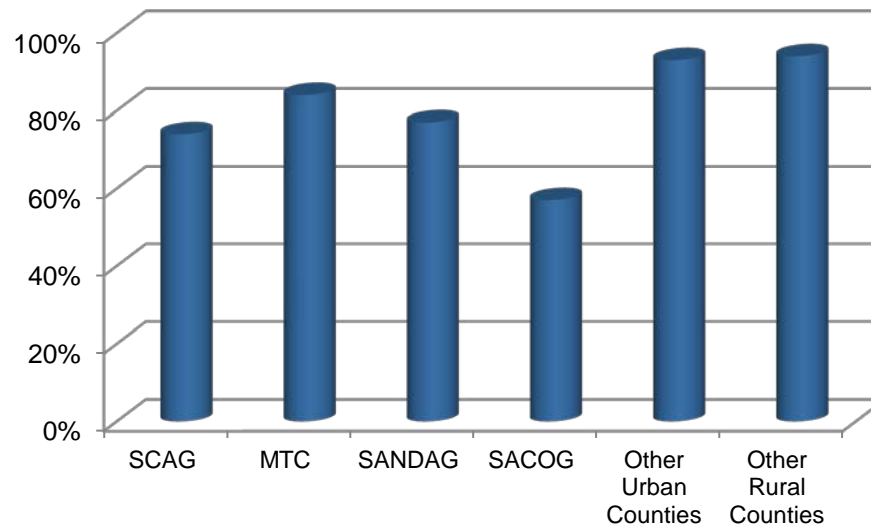
- TERM cannot account for major investments to bring higher quality transit service to meet existing demand such as the Central Subway Project and LACMTA's 30/10 plan
- Survey of major enhancement projects included the four largest MPOs, the other urban counties, and a sample of rural counties

Region	Type of Operating Need	Total Need*
Statewide	Major New Service - Operating	\$4.6 Billion
Statewide	Major New Service - Capital	\$34.8 Billion

The unmet Operating funding need over the next ten years is 20 percent (funding ratio = 80%)

Region	Investment Type	10 Year O&M Funding Needs	10 Year O&M Funding Trend	10 Year O&M Funding Gap	Ratio: Funding to Needs
Statewide Subtotal	Existing Service Levels	\$92.2 Billion	\$87.5 Billion	\$22.2 Billion	80%
	Service Expansion	\$12.9 Billion			
	Major New Service	\$4.6 Billion			
Statewide	Total	\$109.7 Billion	\$87.5 Billion	\$22.2 Billion	80%

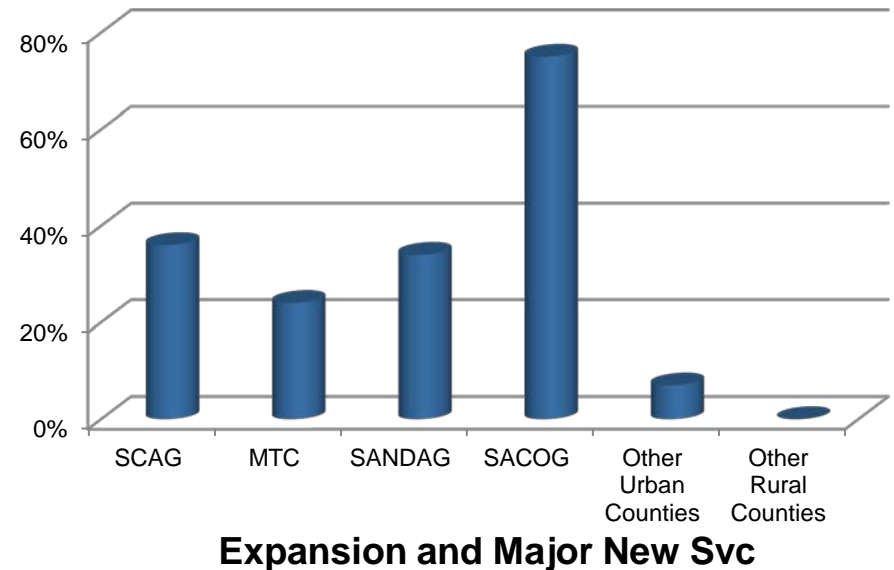
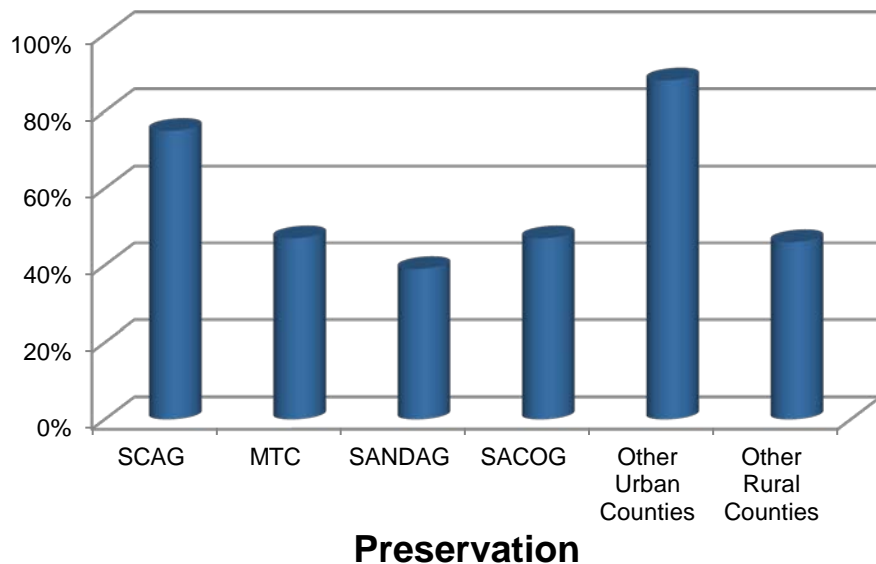
- ▶ The final unmet transit funding needs represent the difference between the unconstrained needs scenario and the expected funding level



The unmet Capital funding need over the next ten years is 60 percent (funding ratio = 40%)

Region	Investment Type	10 Year Capital Funding Needs	10 Year Capital Funding Trend	10 Year Capital Funding Gap	Ratio: Funding to Needs
Statewide Subtotal	Preservation	\$32.7 Billion	\$18.2 Billion	\$14.5 Billion	56%
	Service Expansion	\$5.4 Billion	\$12.7 Billion	\$27.6 Billion	31%
	Major New Service	\$34.8 Billion	\$12.7 Billion	\$27.6 Billion	31%
Statewide	Total	\$72.9 Billion	\$30.9 Billion	\$42.1 Billion	42%

- ▶ The final unmet transit funding needs represent the difference between the unconstrained needs scenario and the expected funding level



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