

OneBayArea



ARB GHG Target-Setting Principles

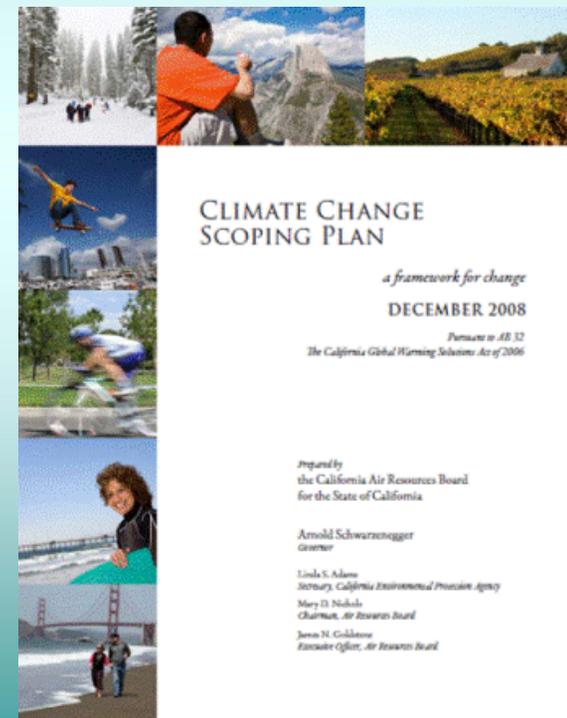
MTC Planning Committee

July 9, 2010



AB 32 Global Warming Solutions Act of 2006

- AB 32 establishes the first comprehensive program of regulatory and market mechanisms in the nation to achieve GHG emissions reductions
- AB 32 sets GHG emissions limit for 2020 at 1990 level
 - Acknowledges that 2020 is not the endpoint
 - Points way towards 80% reduction by 2050
- ARB adopted a Scoping Plan to achieve AB 32's GHG emissions reduction target



California's Three Pronged Approach to Reducing Transportation Greenhouse Gases

(with AB 32 Scoping Plan estimates for GHG reductions in 2020)

- Cleaner vehicles (Pavley, AB 32) - 38 tons
- Cleaner fuels (Low-Carbon Fuel Standard) - 15 tons
- More sustainable communities (SB 375) - 5 tons



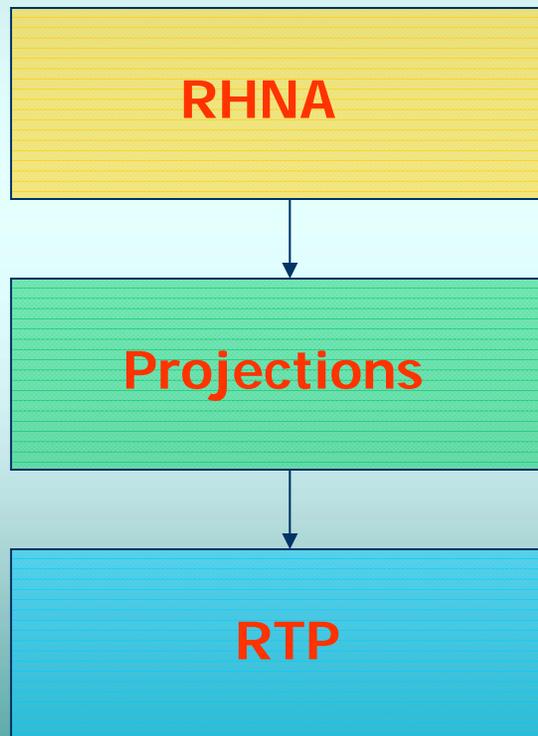
SB 375 Basics

- Directs ARB to develop passenger vehicle GHG reduction targets for CA's 18 MPOs for 2020 and 2035
- Adds Sustainable Communities Strategy as new element to Regional Transportation Plans
- Requires separate Alternative Planning Strategy if GHG targets not met
- Provides CEQA streamlining incentives for projects consistent with SCS/APS
- Coordinates the regional housing needs allocation with the regional transportation planning process

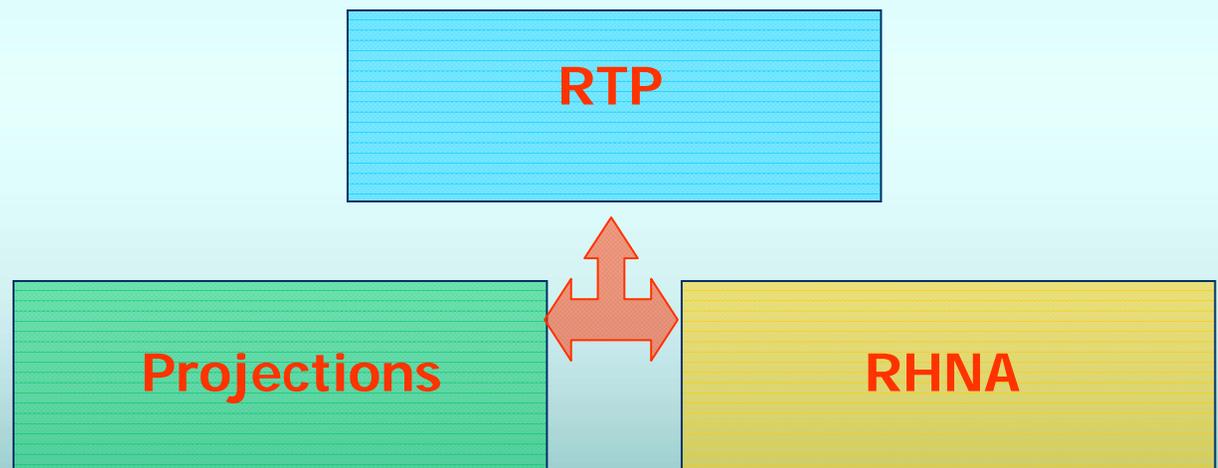


How Has the Process Changed Under SB 375?

Old – Sequential

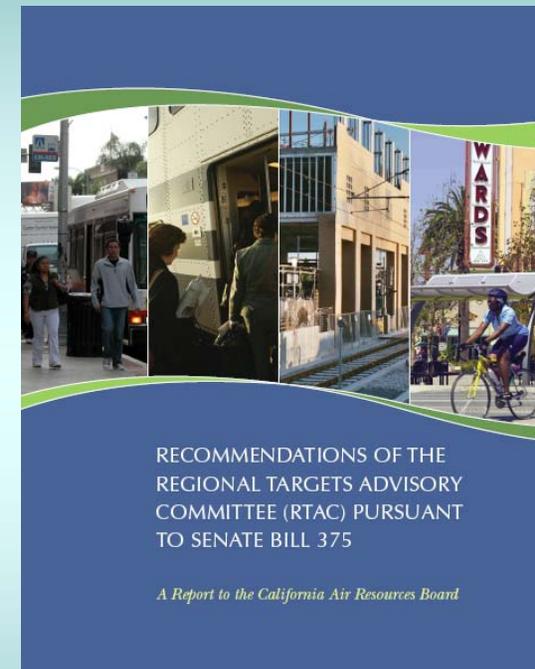


SB 375 - Integrated



Key Regional Targets Advisory Committee Recommendations

- Calls for ARB to implement a consistent target setting process statewide
 - Collaborate and exchange data with MPO
 - Identify an initial statewide target
 - Adjust initial target for particular regions, if needed
 - Set draft and then final targets
- Target metric: percent per-capita GHG emissions reduction from 2005



Extensive MPO/ARB Cooperation

- MPO Executive Directors and ARB senior staff developed joint process:
 - Planning Working Group
 - Modeling Working Group
 - Legal Working Group
- Planning Working Group coordinated target setting analysis
- MPO Executive Directors and ARB senior staff reviewed key assumptions, methodology and results

Conclusions/Findings

- Adopted plans move us in the right GHG direction, and also provide important health, mobility and social equity co-benefits

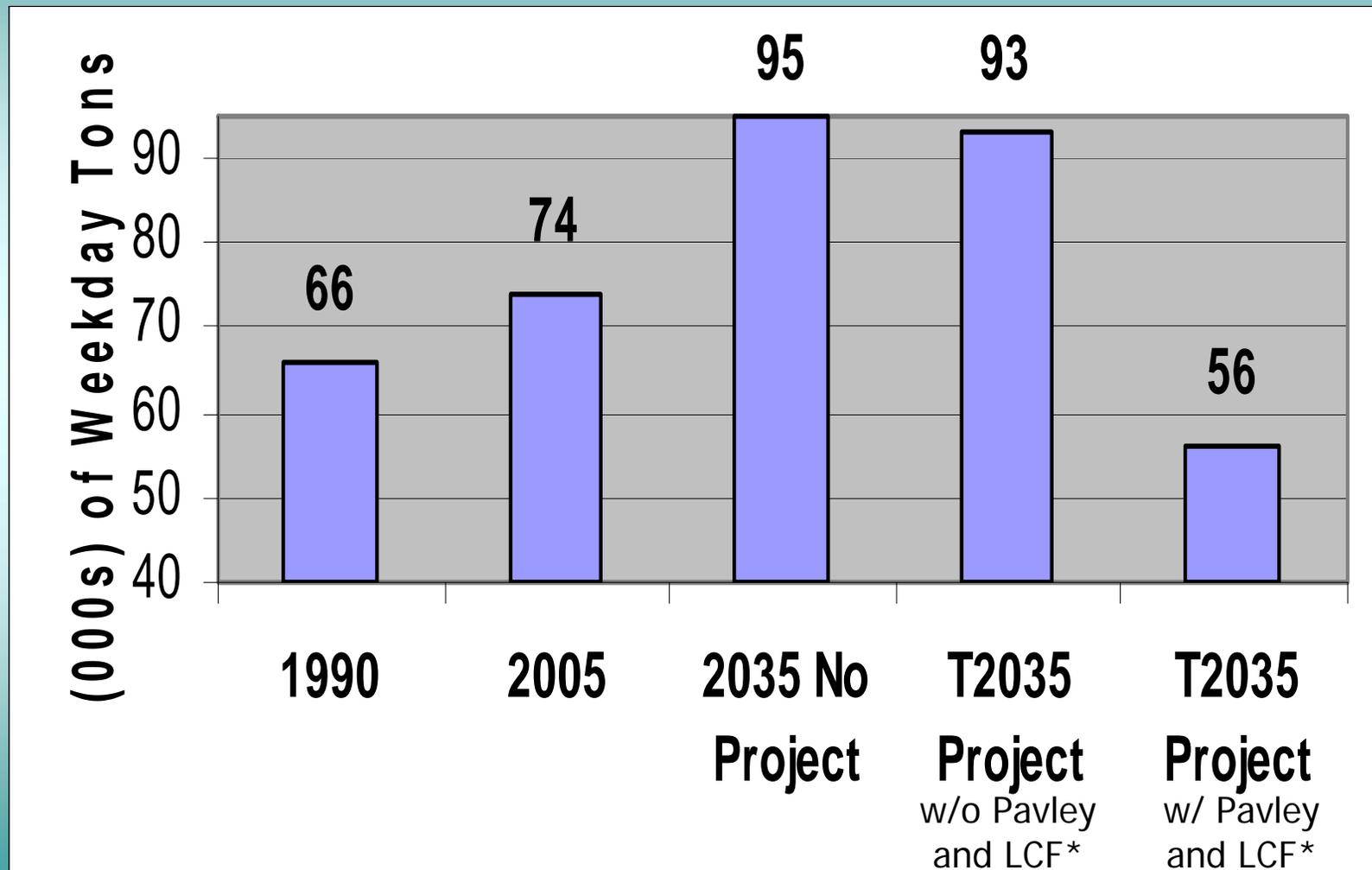
(Average Weekday Pounds Per Capita CO2 Emissions from Passenger Vehicles and Light Duty Trucks)

Region	2005 Base Year	2020 Interim Year	2035 Horizon Year	Change 2005 to 2020 Current Plan		Change 2005 to 2035 Current Plan		Change 2005 to 2035 Most Ambitious	
				Numeric	Percent	Numeric	Percent	2035 Horizon Year	Percent
Bay Area*	20.8	20.1	20.5	-0.7	-3%	-0.3	-2%	18.6	-11%
So Cal/ LA	21.2	20.1	20.5	-1.1	-5%	-0.7	-3%	18.6	-12%
San Diego	26.0	23.7	24.6	-1.4	-9%	-2.4	-9%	21.1	-19%
Sacramento	22.4	21.4	19.6	-1.0	-5%	-2.8	-13%	18.5	-17%

* Corrected results

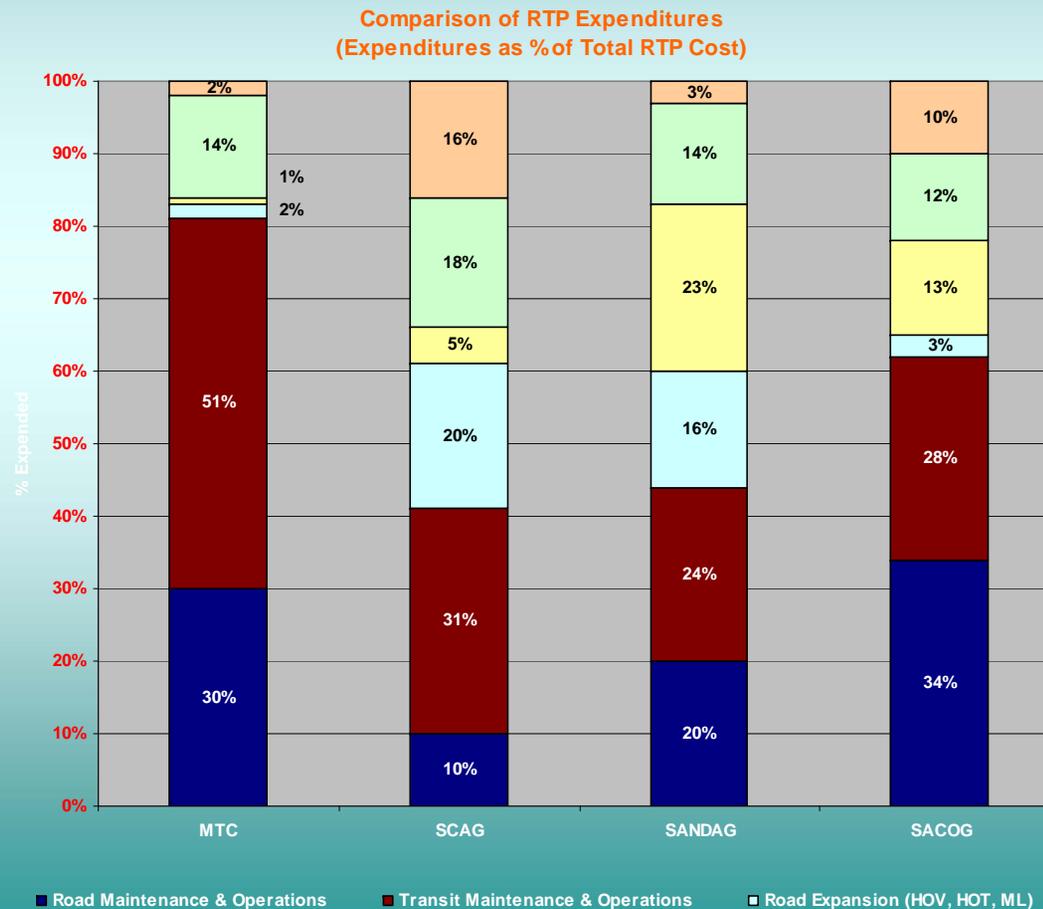
How Do T2035 and ARB Fuel/Fleet Efficiency Standards Affect Bay Area Gross GHG Emissions?

(Average Weekday tons (000) from Passenger Vehicles and Light Duty Trucks)



Conclusions/Findings

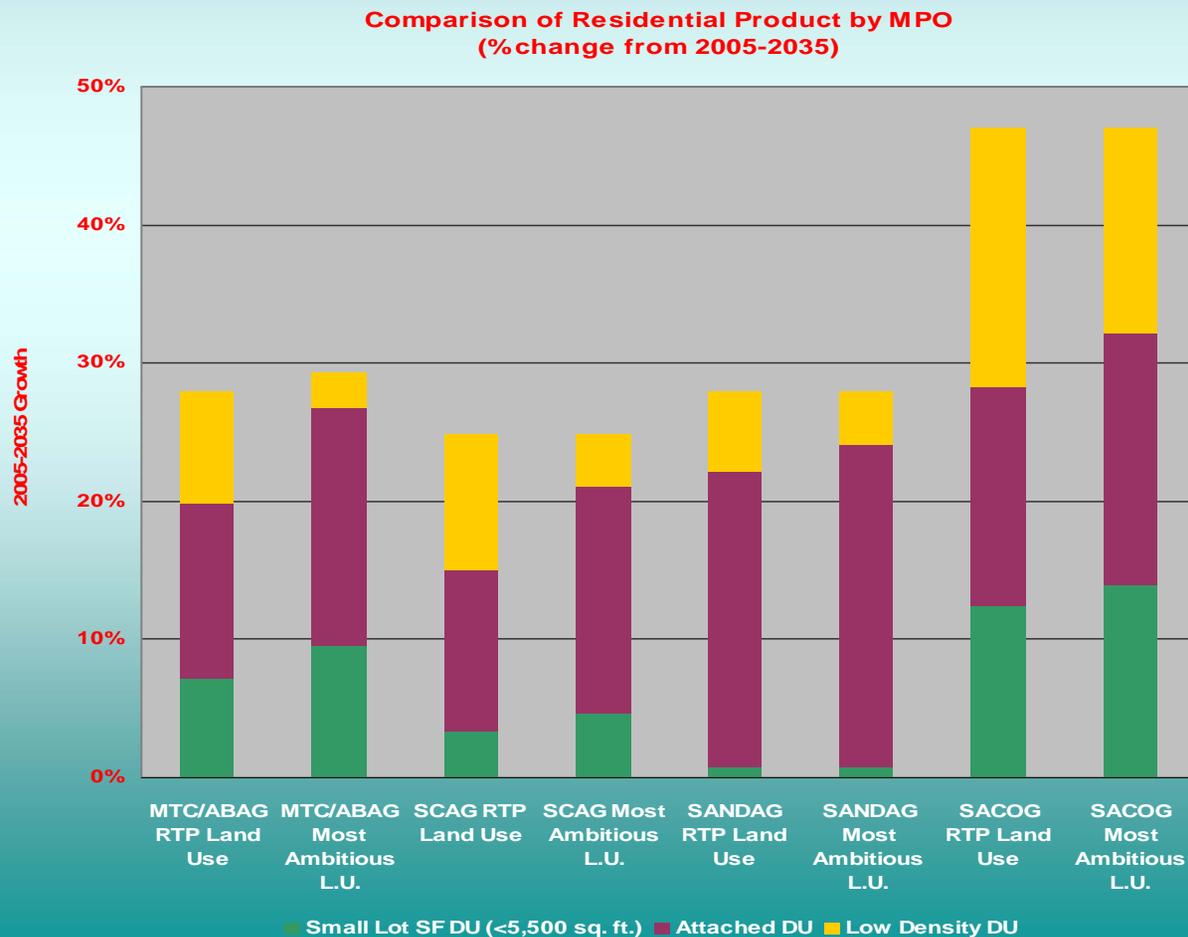
Existing operations and maintenance obligations limit funding flexibility



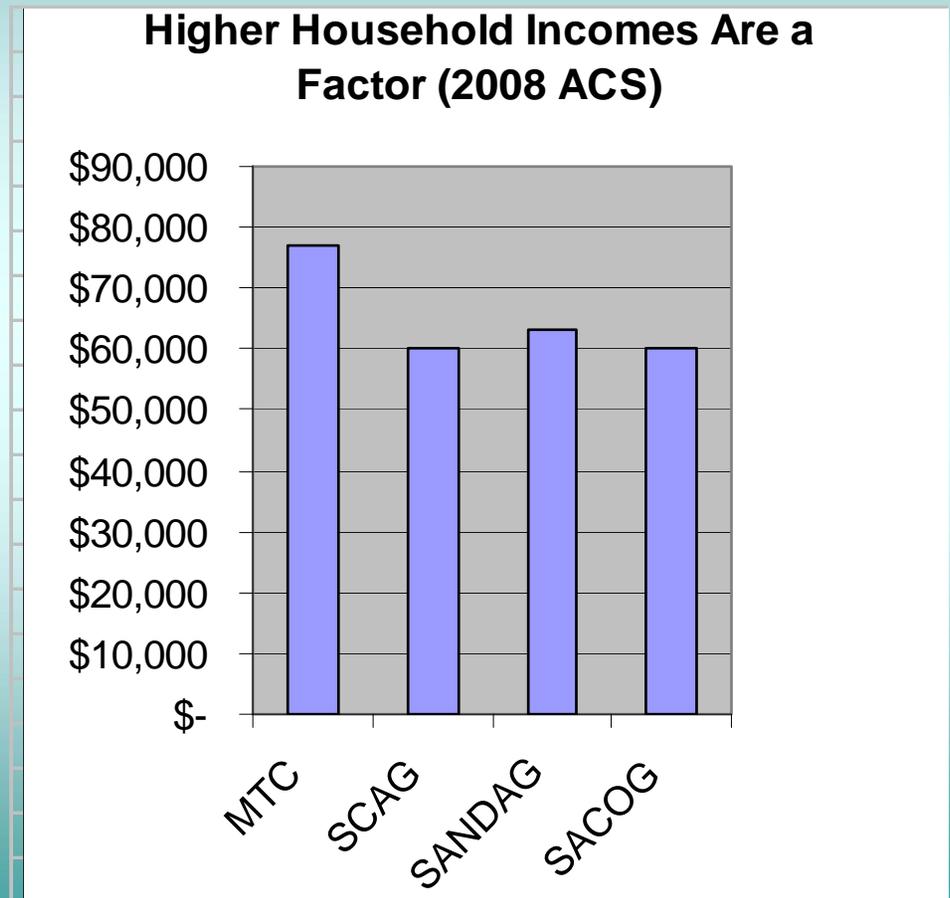
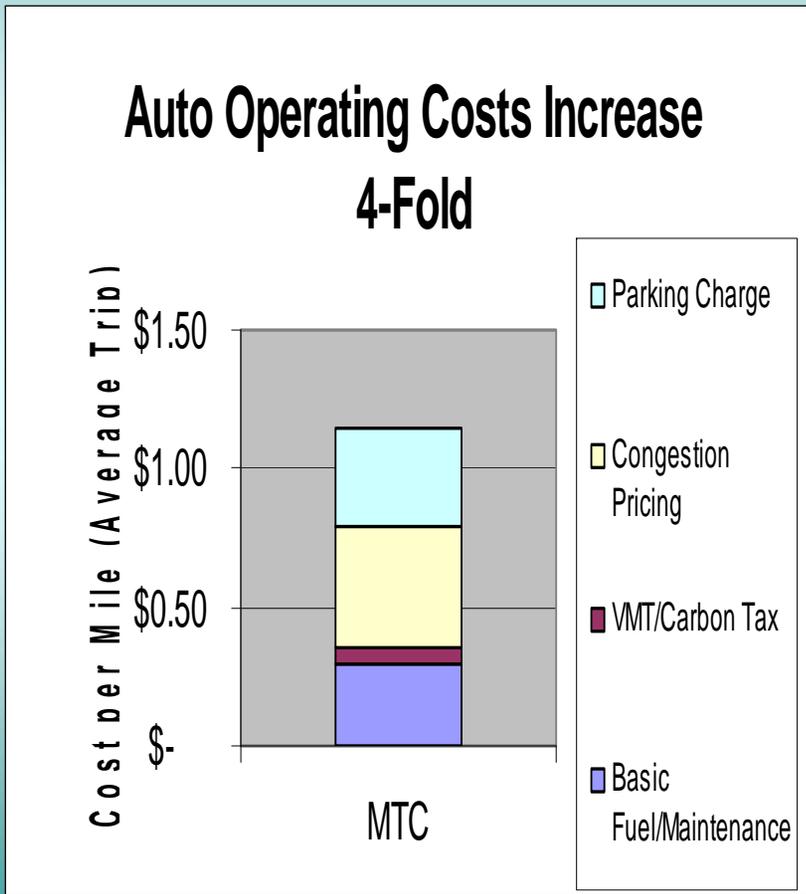
Conclusions/Findings

Some regional variations in GHG reductions may be explained by differences in:

- Levels of highway congestion and capacity investment
- Assumptions regarding TDM programs
- Growth rates and land use distribution



What is Assumed in the Bay Area's Most Ambitious Scenario?

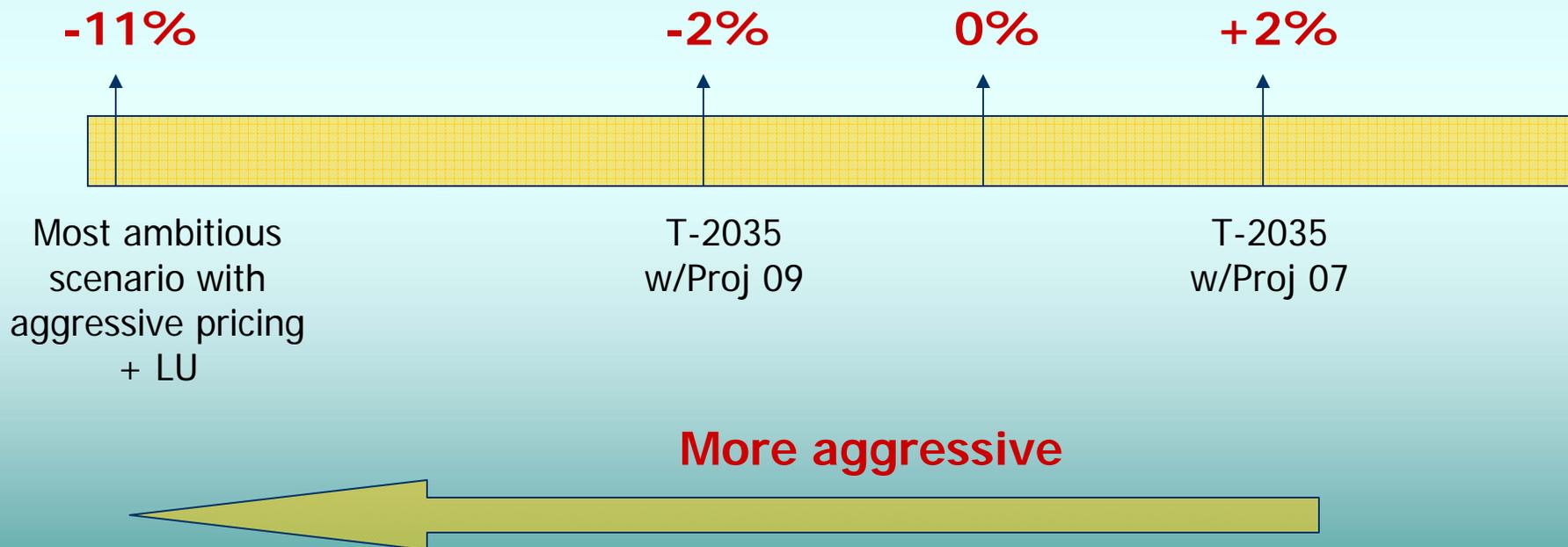


What is Assumed in the Bay Area's Most Ambitious Scenario?

County	Year 2006	Projections 2007	Year 2035	
			Land Use Sensitivity Test	Percent Difference in Year 2035
Alameda	1,518,500	1,938,600	1,946,400	0%
Contra Costa	1,031,100	1,300,600	1,226,200	-6%
Marin	253,800	283,100	293,600	4%
Napa	134,800	155,700	157,000	1%
San Francisco	798,400	956,800	1,169,300	22%
San Mateo	725,700	861,600	912,200	6%
Santa Clara	1,783,900	2,380,398	2,337,400	-2%
Solano	428,300	585,800	501,100	-15%
Sonoma	484,900	568,900	587,957	3%
Bay Area Total	7,159,400	9,031,498	9,131,278	1%

Bay Area GHG Scenarios?

(% per capita - 2005 vs 2035)



ARB Recommendation

Four Large MPOs - 2020 Target Range

Percent Reduction in Per Capita Emissions from 2005 to Target Year

Bay Area Region	5-10%
Sacramento Region	
San Diego Region	
Southern California Region	

ARB Recommendation

Four Large MPOs - 2035 Scenario Results

Percent Reduction in Per Capita Emissions from 2005 to Target Year

Bay Area Region	2% to 11%
Sacramento Region	13% to 17%
San Diego Region	5% to 19%
Southern California Region	3% to 12%

ARB Recommendation

Central Valley MPOs – Target Range

Percent Reduction in Per Capita Emissions from 2005 to Target Year

	2020	2035
Central Valley MPOs	1% – 7%	1% – 7%

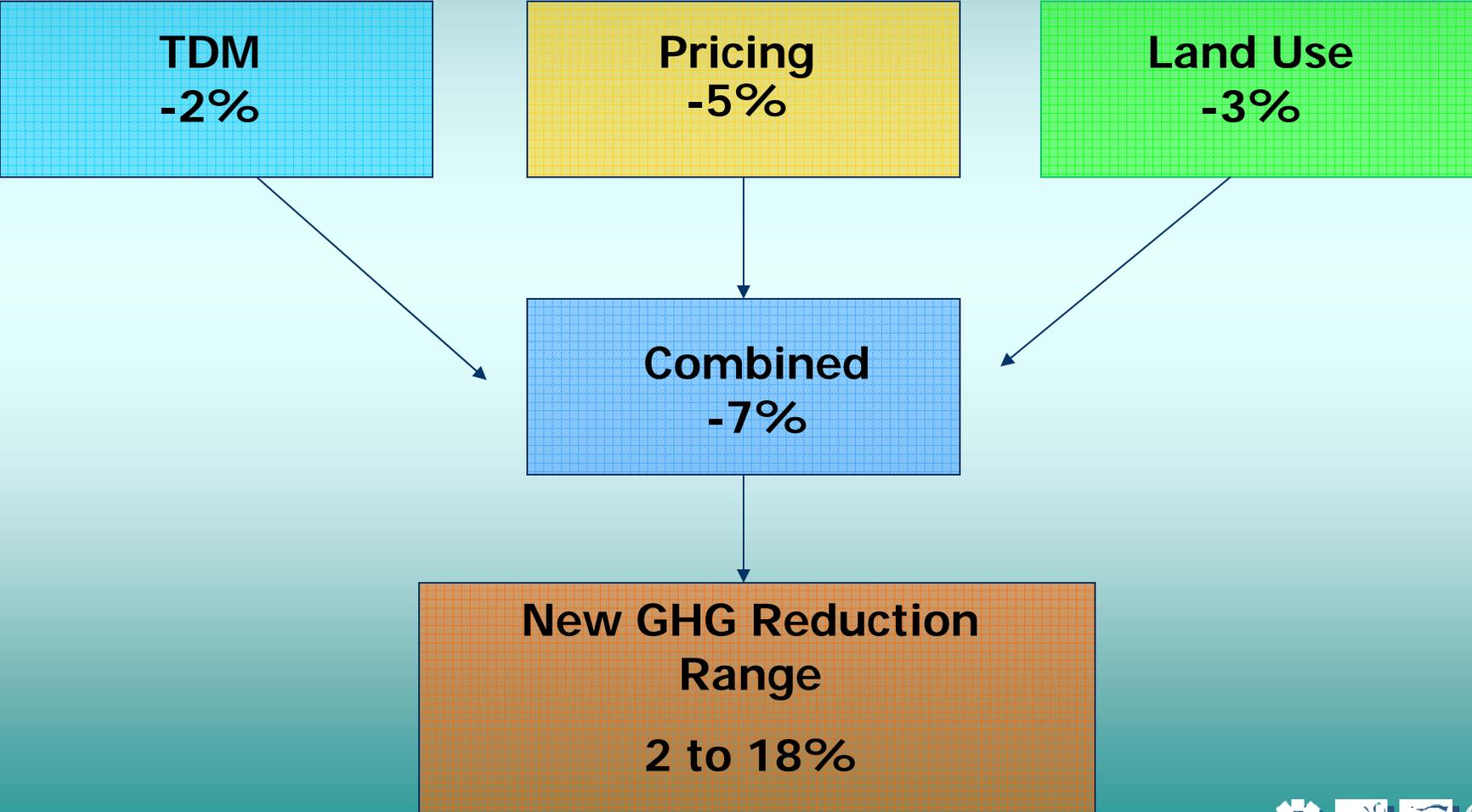
ARB Recommendation Smaller MPOs

- Maintain current level of effort in adopted regional plans

3 New Bay Area Sensitivity Tests (for 2035)

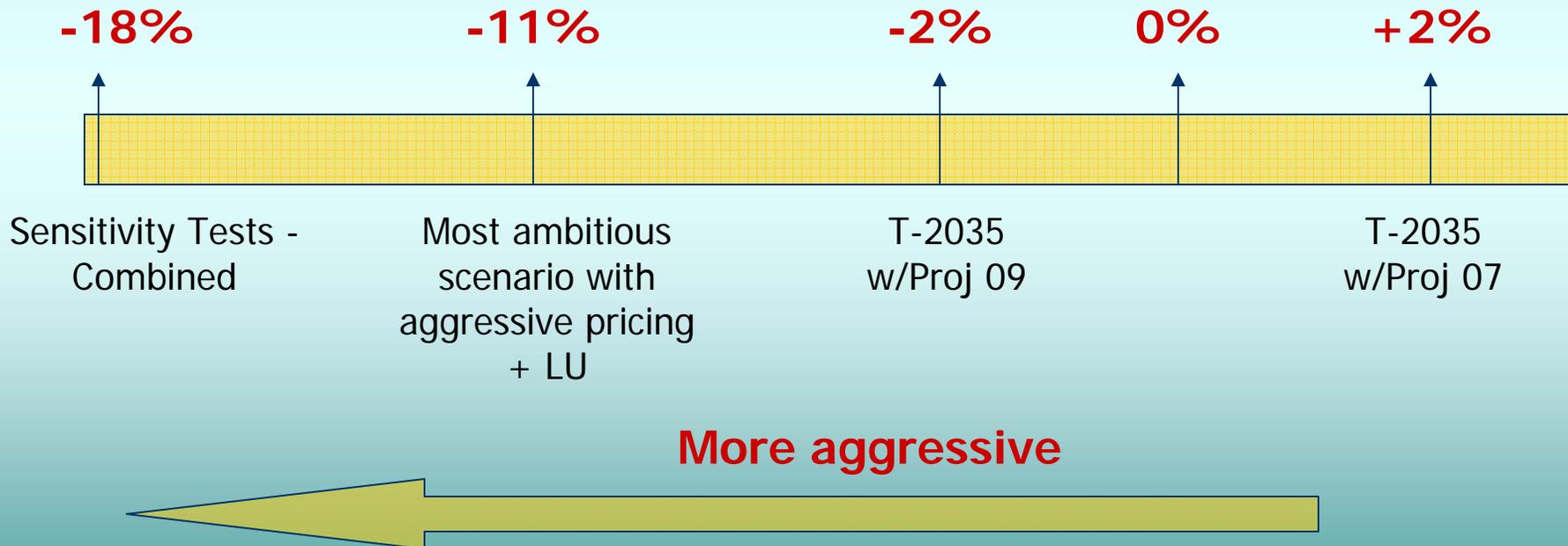
- **TDM** – assumes additional 5% of workers with incomes above \$75,000/yr telecommute daily (compares to 5% of all Bay Area workers that currently work at home)
- **Pricing** – consolidates previously assumed VMT, congestion and carbon tax charge in “Most Ambitious” pricing scenario into single VMT charge of \$0.50 per mile (compares to Express Lanes that charge \$0.10 - \$0.50 per mile)
- **Land Use** – takes “Most Ambitious” land use scenario and:
 1. moves all 2035 forecasted new in-commute growth into Bay Area (approx. 115,000 new households)
 2. Increases forecasted population growth in 3 largest cities by an additional: 200,000 in SF (previous); 54,000 in SJ; and 49,000 in Oakland
 3. Additional population growth in several other “job-rich” PDAs

How do the 3 New Sensitivity Tests Compare to Previous Scenarios (2035)?



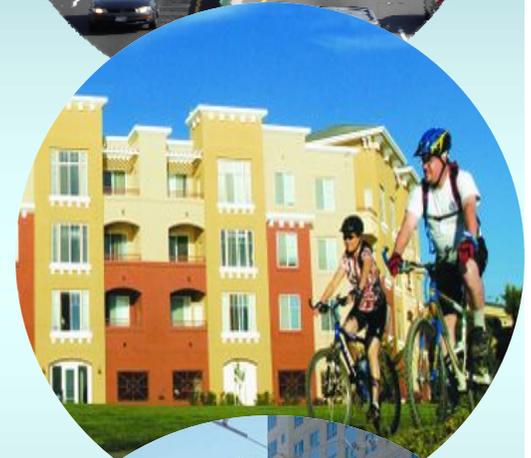
Bay Area GHG Scenarios?

(% per capita - 2005 vs 2035)



What if We Don't Meet GHG Targets?

- If SCS doesn't achieve GHG targets, an Alternative Planning Strategy (APS) must be adopted that demonstrates target achievement
- ARB must accept or reject local determination that SCS/APS achieves targets
- CEQA streamlining possible with SCS or APS



Bay Area Principles for Establishing GHG Emission Targets

- T-2035 is already climate friendly:
 - 80% operate and maintain existing transportation system
 - 14% for transit expansion with TOD Policy
 - 3% for roadway expansion, most of it priced
- T-2035 is estimated to achieve 3% per GHG per capital reduction in 2020 and 2% reduction in 2035
- Strategies to reduce GHG emissions have co-benefits for mobility, air quality, health and community vitality
- MTC & ABAG's new models will be more accurate, but won't produce dramatically different GHG results



Bay Area Principles for Establishing GHG Emission Targets

- Past RTPs have shown pricing and land use can dramatically change travel behavior – but significant local consensus-building and new legislation will be needed.
- ARB should first consider a single statewide target consistent with RTAC recommendation – only adopt “custom” targets based on sound planning assumptions



Bay Area Principles for Establishing GHG Emission Targets

- ARB should establish Bay Area target that does not exceed 7% per capita for 2020 and 10% per capita for 2035
- ARB should work with the legislature to identify financial, regulatory and other incentives that can help regions achieve and exceed GHG targets
- ARB should regularly review GHG targets



- Greenhouse Gas Target – Important Dates
- July 9, 2010 MTC Planning Committee, with ABAG's Administrative Committee and Joint Policy Committee members
- July 21, 2010, ARB target-setting workshop in Oakland
- July 28, 2010 MTC meeting
- September 10, 2010 MTC Planning Committee, with ABAG's Administrative Committee and Joint Policy Committee members
- September 22, 2010 MTC meeting
- September 30, 2010 ARB adopts targets

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