# ABAG/MTC PLAN BAY AREA & DEIR

COMMENTS BY

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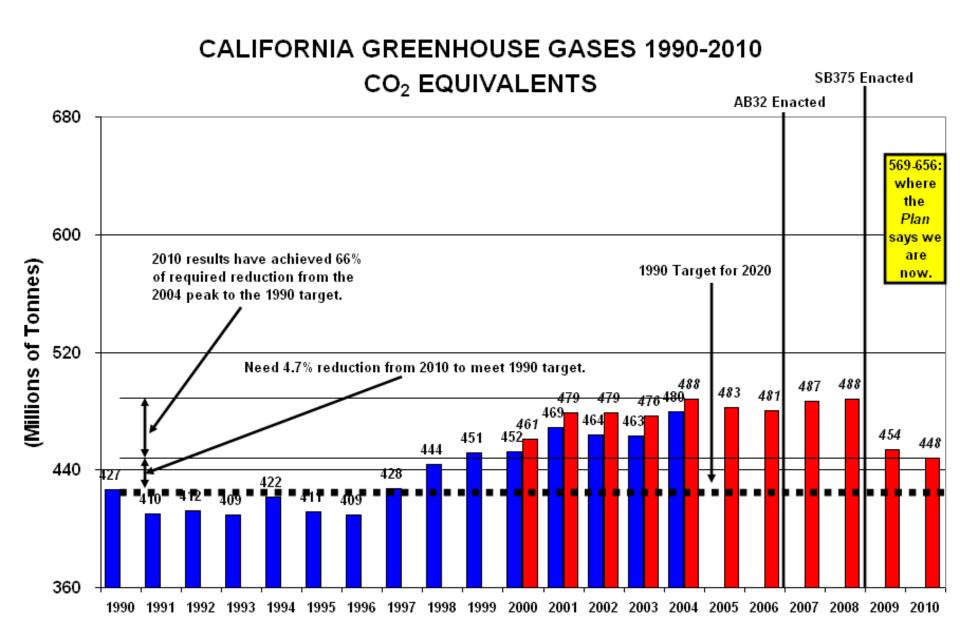
## This is a Plan to Comply with SB375

- LRTPs and RTPs have been with us for decades.
- What is new for this Plan is the requirement to conform to SB375 (Steinberg, 2008):
  - "... achieve certain goals for the reduction of greenhouse gas emissions from automobiles and light trucks" (pickups, SUVs, vans and minivans)
  - "... achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation."

## This is a Plan to Comply with SB375 II

- SB375: "Without improved land use and transportation policy, California will not be able to achieve the goals of AB32."
- AB32 (Nunez, 2006) requires CARB to "...to adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020."
- DEIR, page 2.5-24: "This change, which is estimated to be a
   25 to 35 percent reduction from current emission levels ..."
- With 1990 at 426.60 million tonnes, that would mean current levels are at 569 to 656 million tonnes.

#### We Have Turned the Corner on GHG Emissions



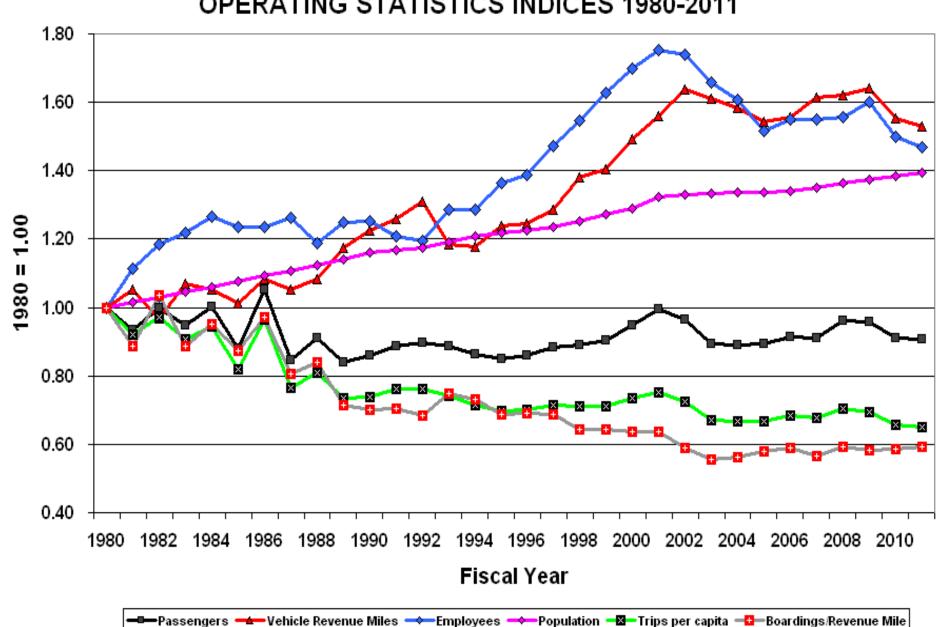
■ 1990-2004 Report

■2000-2010 Report

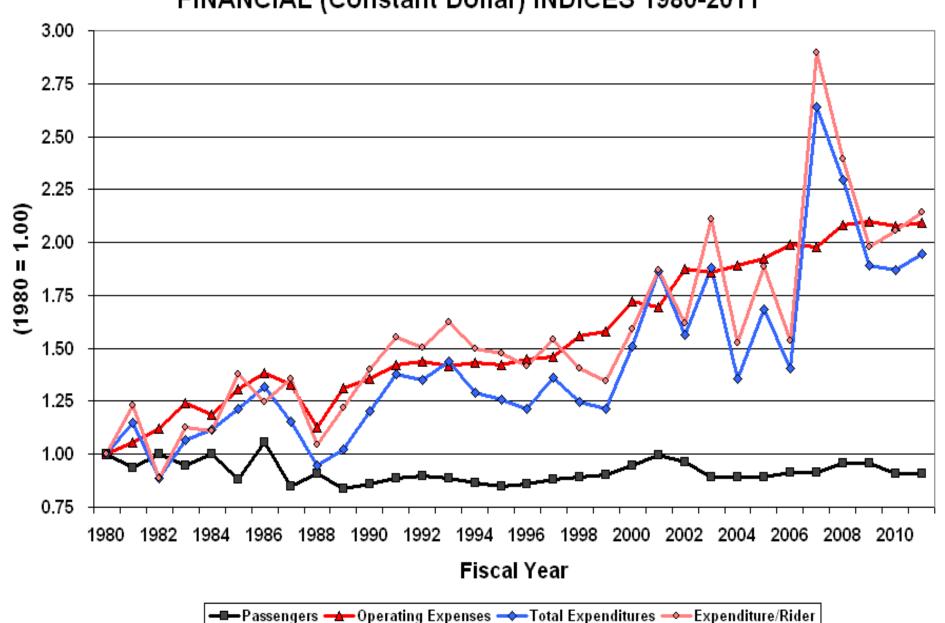
If We Can Exceed the AB32 Target by Continuing What Appears to be Working Very Well, Why Do We Need to Try Risky, Unproven, and **Expensive Experiments to Make** Major Changes in the Way We Live and Get Around in the Bay Area?

The Governmental Transportation **Decision-Making Community in** the Bay Area – the State, Cities, Counties, MTC, Transit Operators, and Others – Have NOT Produced an Enviable Record of Success.

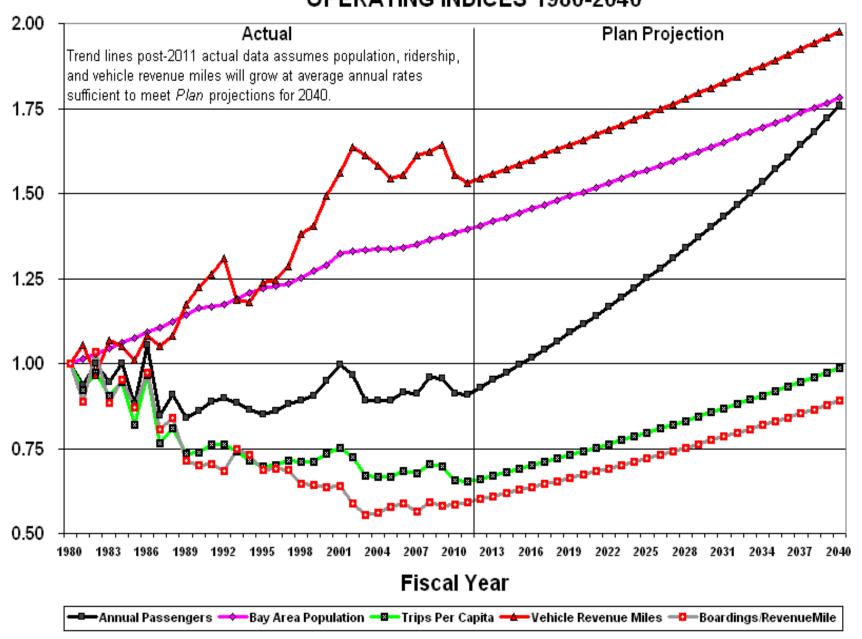
## BAY AREA TRANSIT OPERATORS OPERATING STATISTICS INDICES 1980-2011



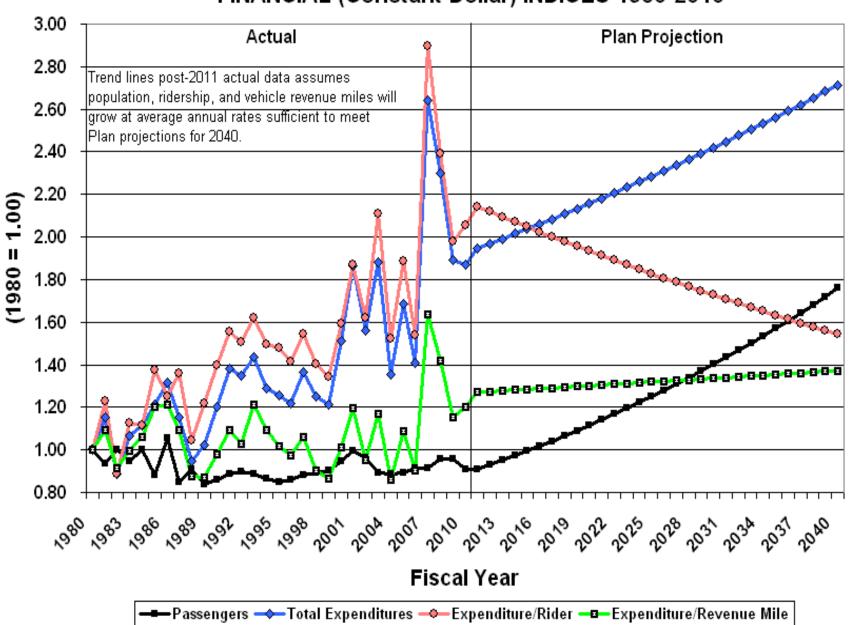
#### BAY AREA TRANSIT OPERATORS FINANCIAL (Constant Dollar) INDICES 1980-2011



## BAY AREA TRANSIT OPERATORS OPERATING INDICES 1980-2040



#### BAY AREA TRANSIT OPERATORS FINANCIAL (Constant Dollar) INDICES 1980-2040



# BAY AREA HAS A TERRIBLE RECORD FOR TRANSPORTATION CONSTRUCTION PROJECT MANAGEMENT

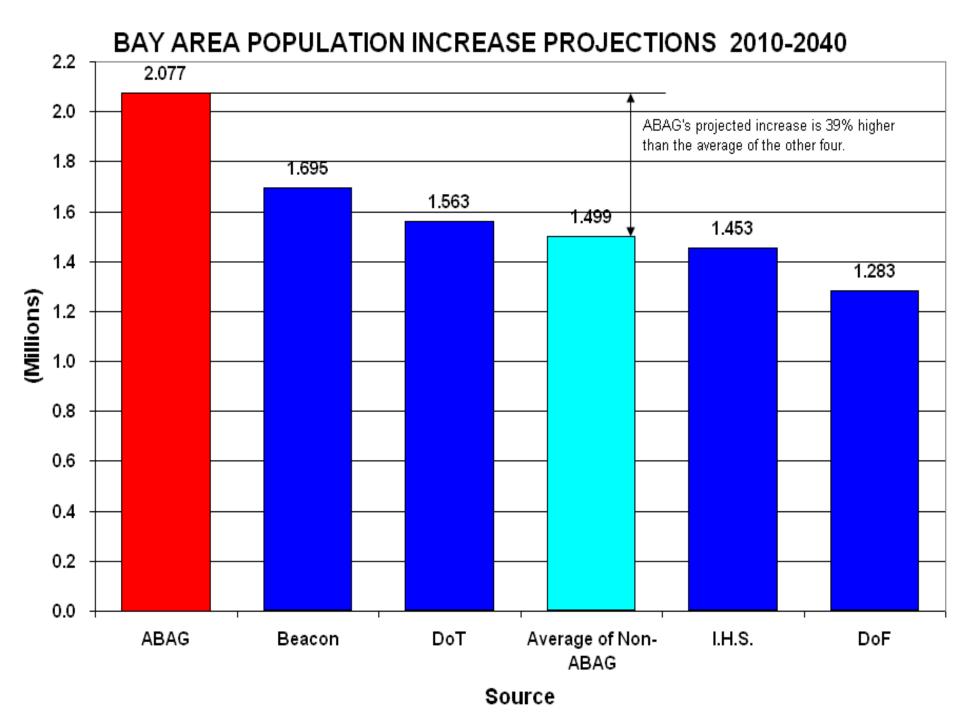
- BART:
  - To SFO
    - Cost 61% over Draft EIS
    - Opened two years late
    - Ridership 44% of projection
  - Dublin/Pleasanton: Cost 68% over projection
  - Warm Springs
    - Had to be delayed due to Dublin/Pleasanton overrun now schedule to open in 2015 – 30 years after voters passed the ballot issue and tax to fund it
    - 68% cost increase

#### **MORE POOR PROJECT MANAGEMENT**

- Bay Bridge Eastern Span
  - Cost over five times first "low-cost" option
  - At least 24 years from quake to new span opening
- Oakland Airport Connector
  - Cost 154% over what the voters were told
  - \$484 million to replace fare-funded shuttle bus
  - Fares likely to be double that of shuttle bus
- San Francisco Central Subway
  - Cost up 143% and construction just began
  - Ridership projections now 65% of original
  - Will *lengthen* trip time for many riders

#### **SMART**

- In 2008, voters approved 70-mile, 14-station line from Cloverdale to Larkspur to open in 2014 for \$646.5 million (YOE \$)
- Voters were assured 20-year funding plan was "reasonable and proper"
- Now looking at 38.5-mile, nine-station line between Santa Rosa and San Rafael opening in late 2015/ early 2016, and only part of promised bicycle/ pedestrian walkway
- Has already required additional funding from MTC and Counties and still no real completion plan



#### **MILES PER GALLON**

- SB375 focuses on CO<sub>2</sub> emissions from light duty vehicles (passenger cars and light trucks)
- *Plan*, pp. 2.2-18/9:
  - "The (air quality) model also incorporates the effects of recent diesel regulations including ARB's truck and bus rules; and greenhouse gas regulations including the Pavely Clean Car Standard and the Low Carbon Fuel standard; however, the newest national fuel standards for model year 2017 through 2025 light-duty vehicles are not included ... Because of this, it is anticipated that emissions in the future will be lower than those calculated ..."

## **MILES PER GALLON (Continued)**

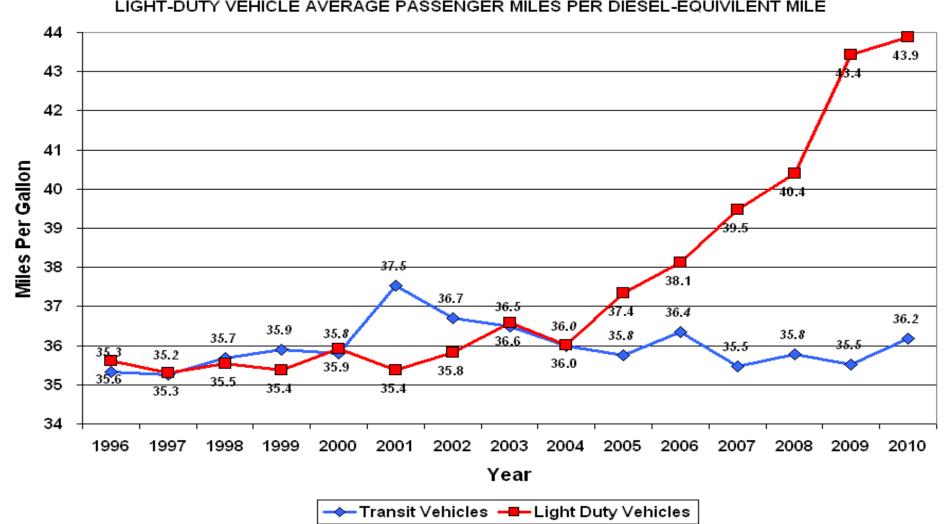
- The Federal government has adopted a 54.5 mpg corporate average fuel economy standard (CAFÉ) for 2025 light-duty vehicles and California has adopted conforming requirements for California vehicles by 2040, a most light-duty vehicles on the road will comply with 54.5 mpg and, very likely, even more fuel-economical standards.
- "... this energy analysis uses an average on-road vehicle fleet fuel economy of 25.03 mpg for 2040." (*Plan*, page 2.4-8)
- Actual 2040 mpg will likely be at least 50% higher.

## MILES PER GALLON (Concluded)

- This has several major impacts on the Plan:
  - The amount of CO<sub>2</sub> generated in 2040 will be far lower than that projected in the *Plan* – probably by at least one-third per vehicle mile traveled.
  - Because the assumptions driving the *Plan* understate average light duty vehicle fuel mileage, motor fuel sales are significantly overstated.
  - Motor fuel user fees and taxes are a major source of funding for the programs in the *Plan*.
  - Therefore, the financial resources in the *Plan* are significantly overstated.
  - This is likely to be partially mitigated because the lower cost of fuel per mile will likely produce some additional driving, but likely not a huge difference.
  - The lower cost of driving will mean fewer people shifting to transit due to the cost of driving.

## TRANSIT IS NOT MORE FUEL-EFFICIENT THAN AUTOMOBILES – AND WILL FALL FURTHER AND FURTHER BEHIND OVER TIME

U.S. TRANSIT INDUSTRY (ALL MODES COMBINED) AND LIGHT-DUTY VEHICLE AVERAGE PASSENGER MILES PER DIESEL-EQUIVILENT MILE

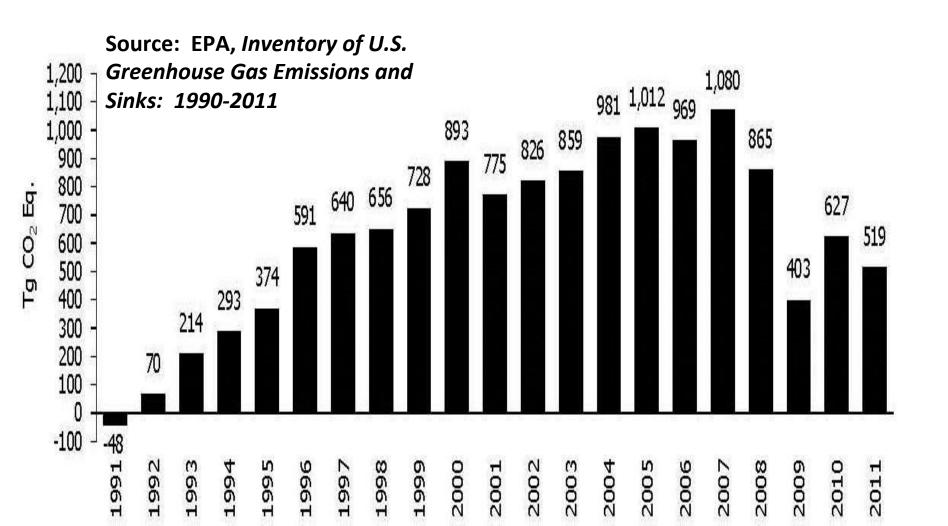


#### **CONCLUSIONS**

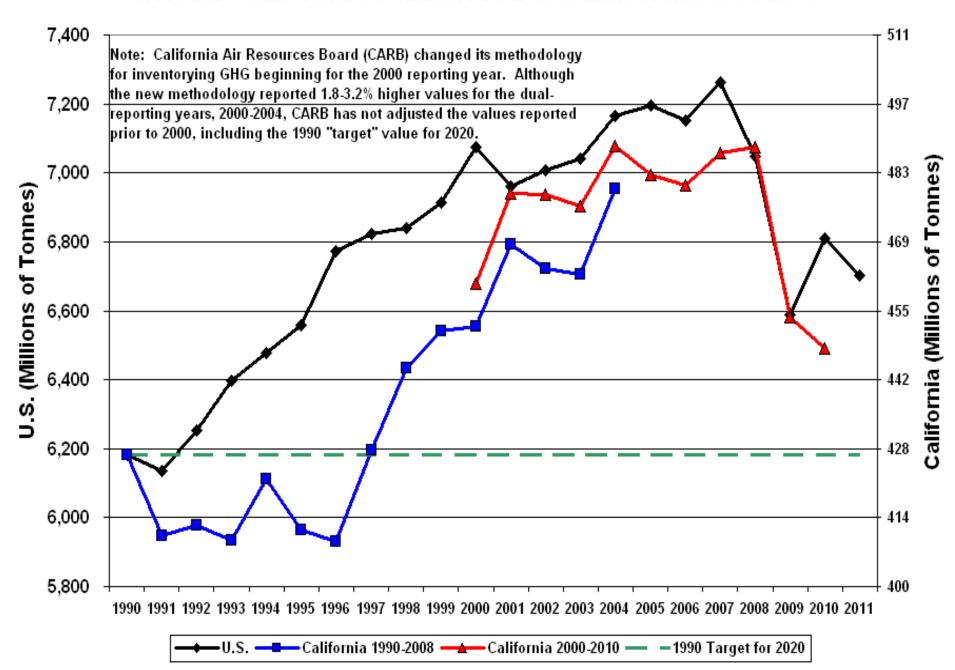
- This is a terrible plan, based on what people would like to believe, rather than facts and rational analysis
- Assumes that, after decades of transit being poorly managed and performing poorly, everything will magically turn around
- Totally unrealistic financial assumptions, including assuming revenues not currently in law and ignoring long history of cost overruns on projects
- Only one thing to do start over and, this time, do it right, which means bringing in people who will work from fact and logic, not develop a large volume of paper that is supposed to justify an impossible and unneeded alternative reality that can't happen

## We Have Turned the Corner on GHG Emissions

Figure ES-3: Cumulative Change in Annual U.S. Greenhouse Gas Emissions Relative to 1990



#### U.S. AND CALIFORNIA GREENHOUSE GAS EMISSIONS 1990-2011

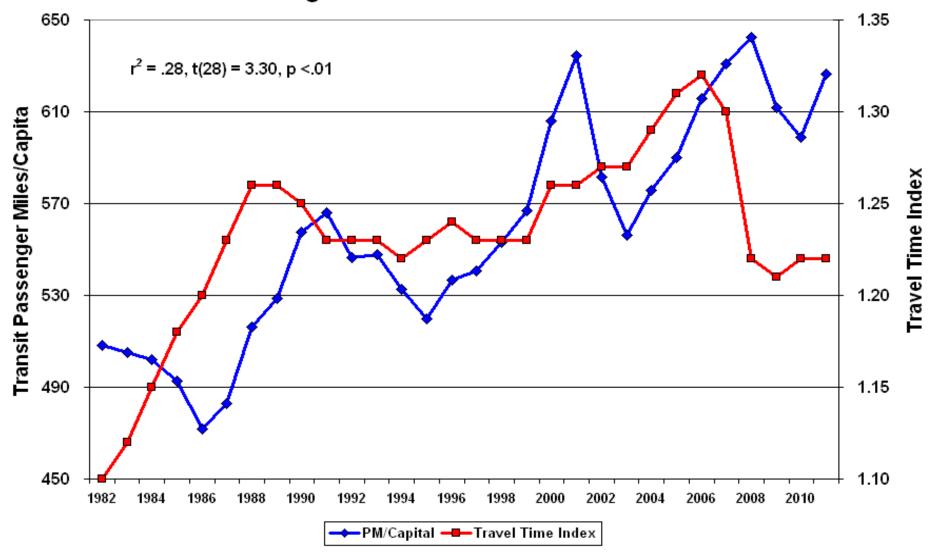


## We May Have Already Hit the 2020 Target

- From CARB GHG Inventory, we needed a 4.7% reduction from 2010 to hit 1990 levels.
- When CARB adjusted the counting methodologies, it increased the GHG reported for 2010-2014 by 2.3% – but didn't change the 1990 target.
- EPA reports that national 2011 GHG levels were 1.6% lower than 2010 levels.
- EPA reports 2012 CO<sub>2</sub> levels which are 80-85% of GHG – 3.8% lower than 2011 levels.

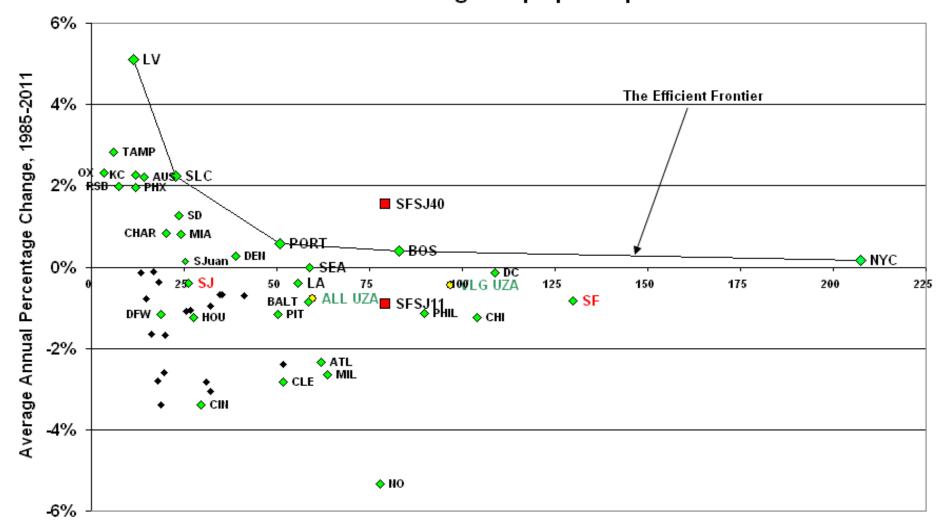
### **Transit Usage Not Related to Congestion**

SAN FRANCISCO-OAKLAND URBANIZED AREA Transit Passenger Miles vs. Travel Time Index 1982-2011

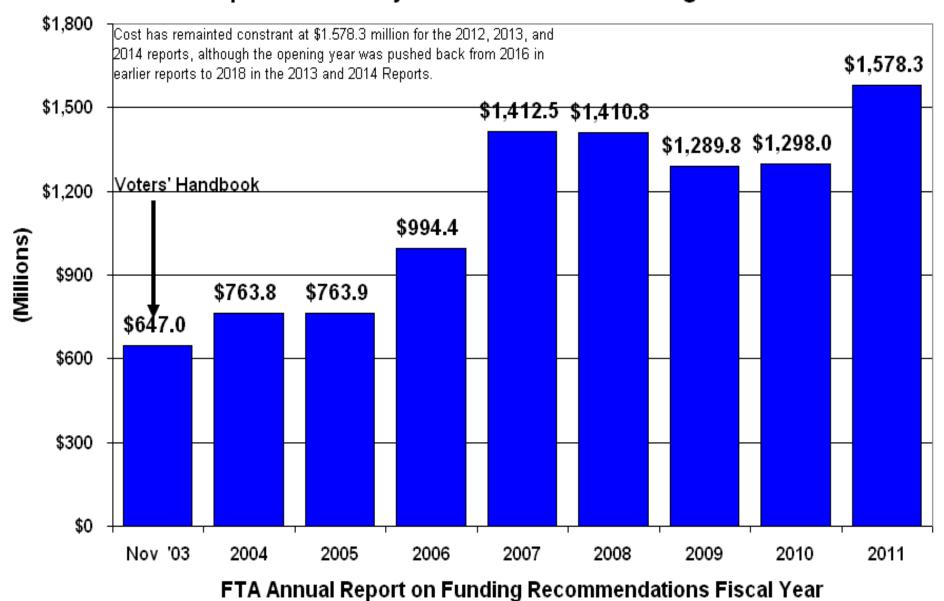


### **Plan** Transit Growth is Unprecedented

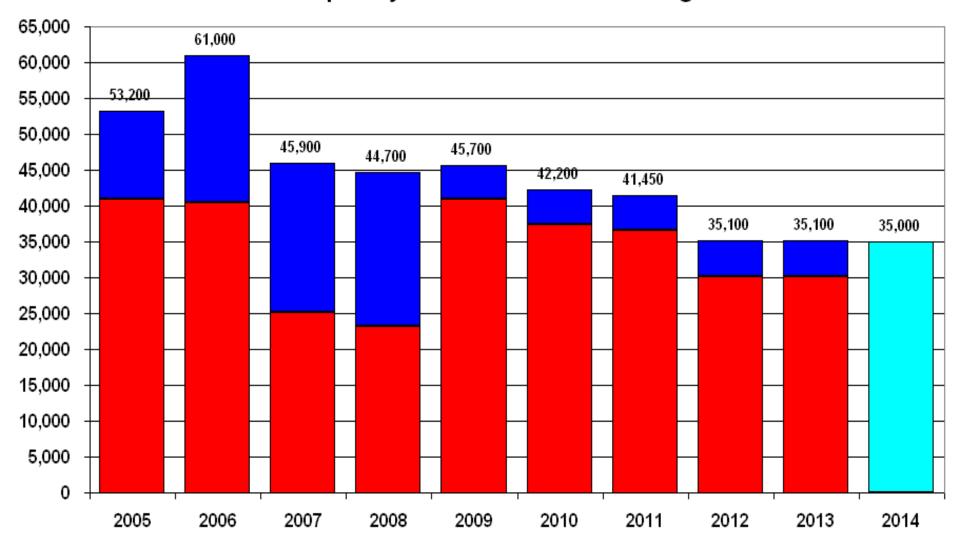
U.S. URBANIZED AREAS OVER 1,000,000 POPULATION IN 2011
Growth in Unlinked Passenger Trips per Capita 1985-2011



## SAN FRANCISCO CENTRAL SUBWAY Capital Cost Projections Sent to Washington



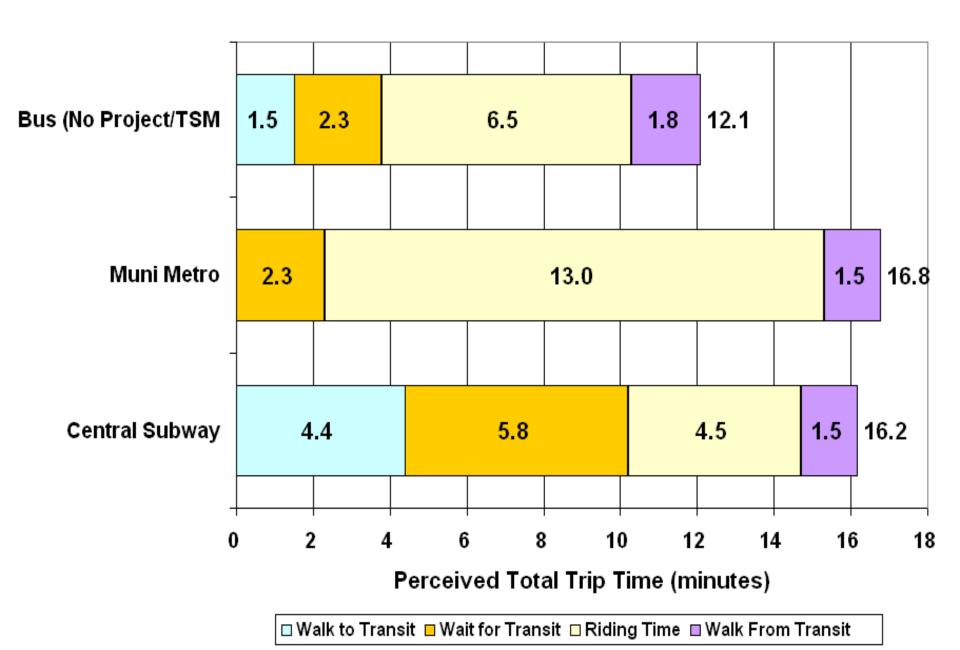
## SAN FRANCISCO CENTRAL SUBWAY Ridership Projections Sent to Washington



FTA Annual Report on Funding Recommendation Year

■ Pre-Existing Transit Riders ■ New Transit Riders ■ Total (No Breakdown Provided)

#### From Powell Street Station to CalTrain



GC §58080(C) The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall consider financial incentives for cities and counties that have resource areas or farmland, as defined in Section 65080.01, for the purposes of, for example, transportation investments for the preservation and safety of the city street or county road system and farm to market and interconnectivity transportation needs. The metropolitan planning organization or county transportation agency, whichever entity is appropriate, shall also consider financial assistance for counties to address countywide service responsibilities in counties that contribute towards the greenhouse gas emission reduction targets by implementing policies for growth to occur within their cities.

GC §65400(b) If a court finds, upon a motion to that effect, that a city, county, or city and county failed to submit, within 60 days of the deadline established in this section, the housing element portion of the report required pursuant to subparagraph (B) of paragraph (2) of subdivision (a) that substantially complies with the requirements of this section, the court shall issue an order or judgment compelling compliance with this section within 60 days. If the city, county, or city and county fails to comply with the court's order within 60 days, the plaintiff or petitioner may move for sanctions, and the court may, upon that motion, grant appropriate sanctions. The court shall retain jurisdiction to ensure that its order or judgment is carried out. If the court determines that its order or judgment is not carried out within 60 days, the court may issue further orders as provided by law to ensure that the purposes and policies of this section are fulfilled. This subdivision applies to proceedings initiated on or after the first day of October following the adoption of forms and definitions by the Department of Housing and Community Development pursuant to paragraph (2) of subdivision (a), but no sooner than six months following that adoption.

- GC §65583, which relates to the housing element and the requirements placed on local governments to comply with the regional plans, provides in (g) (emphasis added):
- (1) If a local government fails to complete the rezoning by the deadline provided in subparagraph (A) of paragraph (1) of subdivision (c), as it may be extended pursuant to subdivision (f), except as provided in paragraph (2), a local government may not disapprove a housing development project, nor require a conditional use permit, planned unit development permit, or other locally imposed discretionary permit, or impose a condition that would render the project infeasible, if the housing development project (A) is proposed to be located on a site required to be rezoned pursuant to the program action required by that subparagraph; and (B) complies with applicable, objective general plan and zoning standards and criteria, including design review standards, described in the program action required by that subparagraph. Any subdivision of sites shall be subject to the Subdivision Map Act. Design review shall not constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code.

  (2) A local government may disapprove a housing development described in paragraph (1) if it makes written findings supported by substantial evidence on the record that both of the following conditions exist:

  (A) The housing development project would have a specific, adverse impact upon the public health or safety unless
- the project is disapproved or approved upon the condition that the project be developed at a lower density. As used in this paragraph, a "specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.
- (B) There is no feasible method to satisfactorily mitigate or avoid the adverse impact identified pursuant to paragraph (1), other than the disapproval of the housing development project or the approval of the project upon the condition that it be developed at a lower density.
- (3) The applicant or any interested person may bring an action to enforce this subdivision. If a court finds that the local agency disapproved a project or conditioned its approval in violation of this subdivision, the court shall issue an order or judgment compelling compliance within 60 days. The court shall retain jurisdiction to ensure that its order or judgment is carried out. If the court determines that its order or judgment has not been carried out within 60 days, the court may issue further orders to ensure that the purposes and policies of this subdivision are fulfilled. In any such action, the city, county, or city and county shall bear the burden of proof.

## The *Plan's* Transit Utilization Proposal is Unworkable

- 2010 "Percent Utilization" data points are incorrect – for "Daily," in 2010:
  - Table shows 27% for Light Rail, Actual was 33%
  - •Table shows 27% for Heavy Rail, Actual was 36%
- The statement, "Utilization levels greater than 80 percent reflects conditions where passengers either would have difficulty in finding a seat or would have to stand during all or part their ride," sets the bar far too high; standing loads can occur when the utilization factor is well short of 50%.
- •Example: The Table says that Heavy Rail (BART) morning peak period load factor is now 40% and will go to 57% in 2040 -- this would mean that BART into San Francisco in the morning peak would have 42% more passengers in each car.
- It appears that the people who prepared this table, and the transit loading portions of the *Plan*, do not understand how transit schedules are developed, the data, or both.

TABLE 2.1-18: UTILIZATION OF PUBLIC TRANSIT SYSTEMS, BY MODE (2010-2040)

	2010 Parcent Utilization?	2040 Plan Percent Utilization	
AM Peak Period (6 AM to 10 AM)			
Local bus	24%	42%	
Light rall <sup>a</sup>	35%	57%h	
Ferry	19%	23%	
Express bus	30%	44%	
Heavy rail <sup>3</sup>	40%	57%	
Commuter rail <sup>e</sup>	7% _	. 22%	
All modes	26%	44%	
PM Peak Period (3 PM to 7 PM)			
Local bus	25%	12%	
Light rail <sup>7</sup>	3/%	59%	
Ferry	. 9%	12%	
Express bus	26%	37%	
Heavy raiP	36%	46?	
Commuter rail*	5%	20%	
All modes	35%	39%	
Celly			
Local bus	19%	34%	
Ught ral F	27%	49%	
Ferry	8%	13%	
Express bus	25%	369	
Heavy rail <sup>a</sup>	27%	36%	
Consmuter rail*	6%	179	
All modes	21%	339	

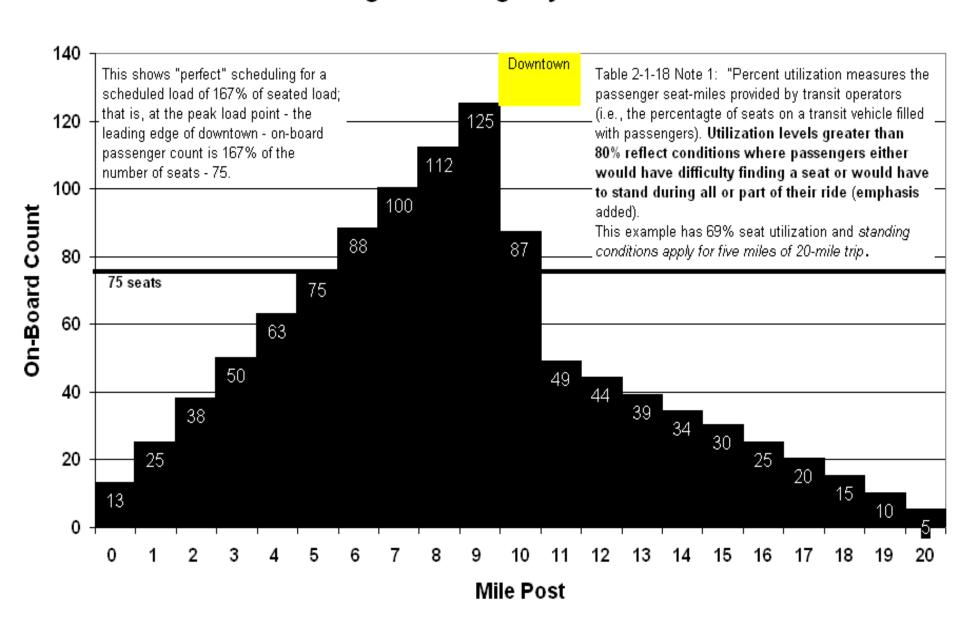
- Percent utilization measures the pessenger sent-miles required by forecasted transit patrons as a percentage of total pessenger seat-miles provided by transit operators (i.e. the procentings of seats or, transit vehicles filled with passangars). Utilization levels greater than 80 percent reflect conditions where passangms either would have difficulty finding a seat or would have to stand during all or part of their risks.
- Roflocts utilization of Muni Metro and VTA lightrail systems.
- 3. Heflects utilization of BAILL heavy rall system.
- 4. Reflects utilization of Caltrain, SMART, Capitol Corridor, and ACE commuter rall systems.

Source: Metropolitan Transportation Commission Travel Demand Forecasts, 2012.

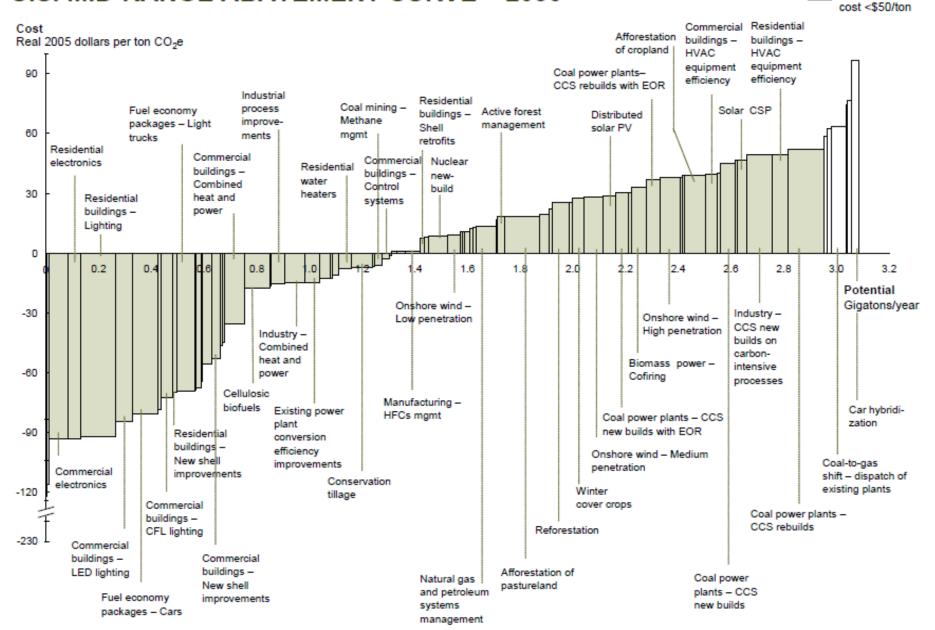
#### Mitigation Measures

None required.

## TYPICAL PEAK HOUR LIGHT RAIL TRIP Passenger Loadings by Mile Post



#### U.S. MID-RANGE ABATEMENT CURVE – 2030



Abatement

Source: McKinsey analysis