

# **Land Use and Climate Change in California**

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# Where it Began

- Governor Schwarzenegger



- June 1, 2005:  
The Time for  
Action is Now!
- Executive Order  
S-3-05
- Creates Climate  
Action Team

# Climate Action Team



 Responsibility under Executive Order S-3-05 and AB 32 for coordinating climate policy across state government

 Coordinated by Secretary Adams of Cal/EPA

## Members:

 Cal/EPA

 SCSA

 BTH

 OPR

 CalFire

 Parks

 CEC

 Water Board

 CDFA

 DWR


 ARB

 IWMB

 PUC

# Global Warming Solutions Act (AB 32)

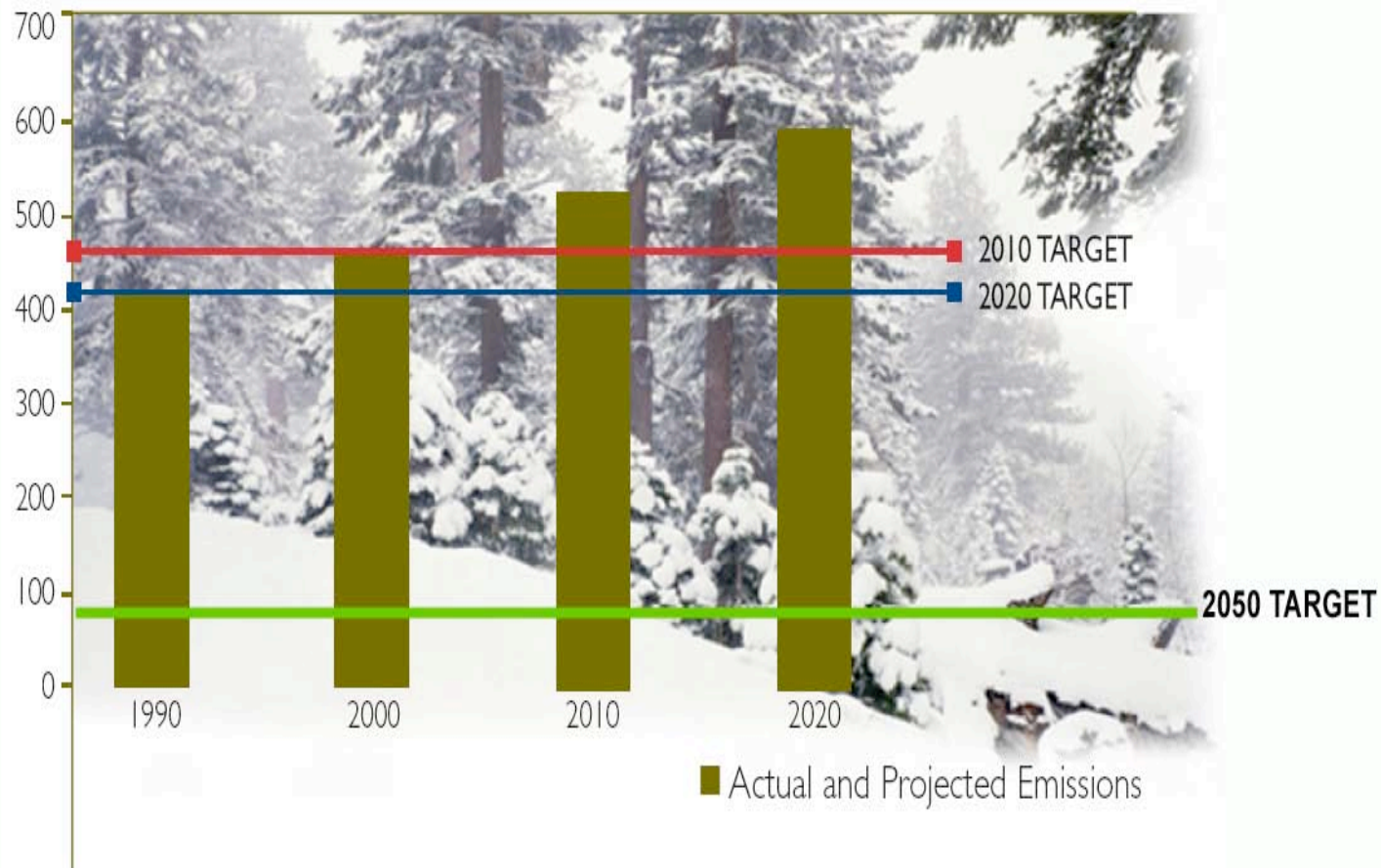
 **September 27, 2006: Governor Signs AB 32**

 Creates greenhouse gas emission limit to reduce emissions to 1990 levels by 2020 (~25-30%)

 ARB sets, monitors, enforces GHG limits

 Regulations, Market Mechanisms, Incentives

# Emission Reduction Targets



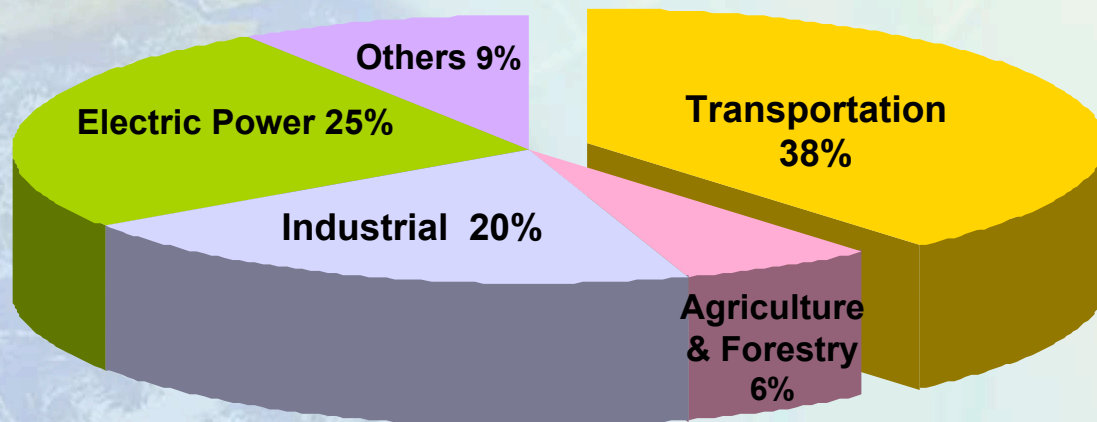
# On-Road Transportation Emissions

Passenger cars and heavy-duty trucks:

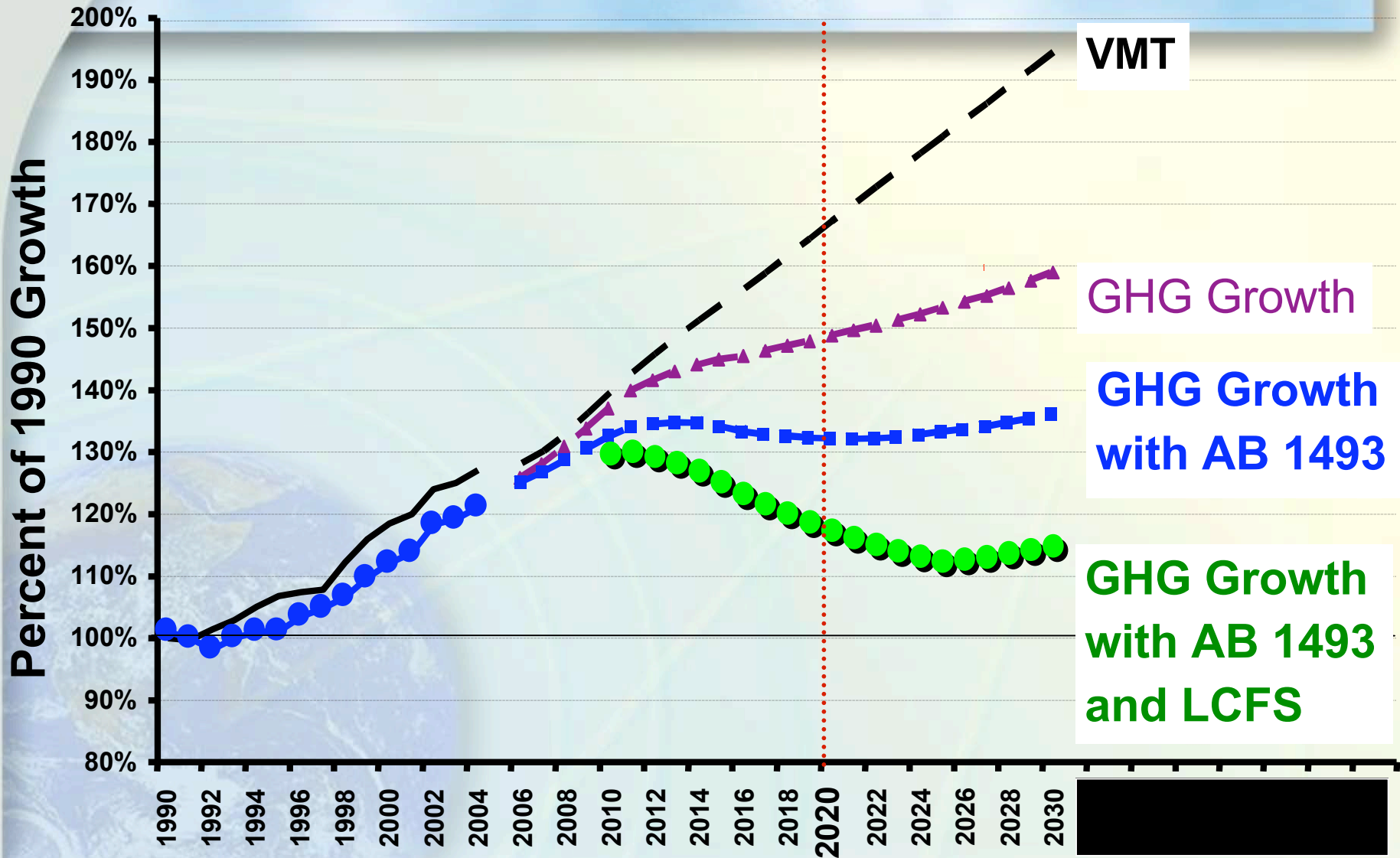
1990 Baseline Emissions:  
**138 MMTCO<sub>2</sub>E**

2004 Baseline Emissions:  
**172 MMTCO<sub>2</sub>E**

2020 Preliminary Forecasted Emissions:  
**216 MMTCO<sub>2</sub>E**



## Historical and Projected Population, Vehicle Miles Traveled (VMT) and GHG Growth

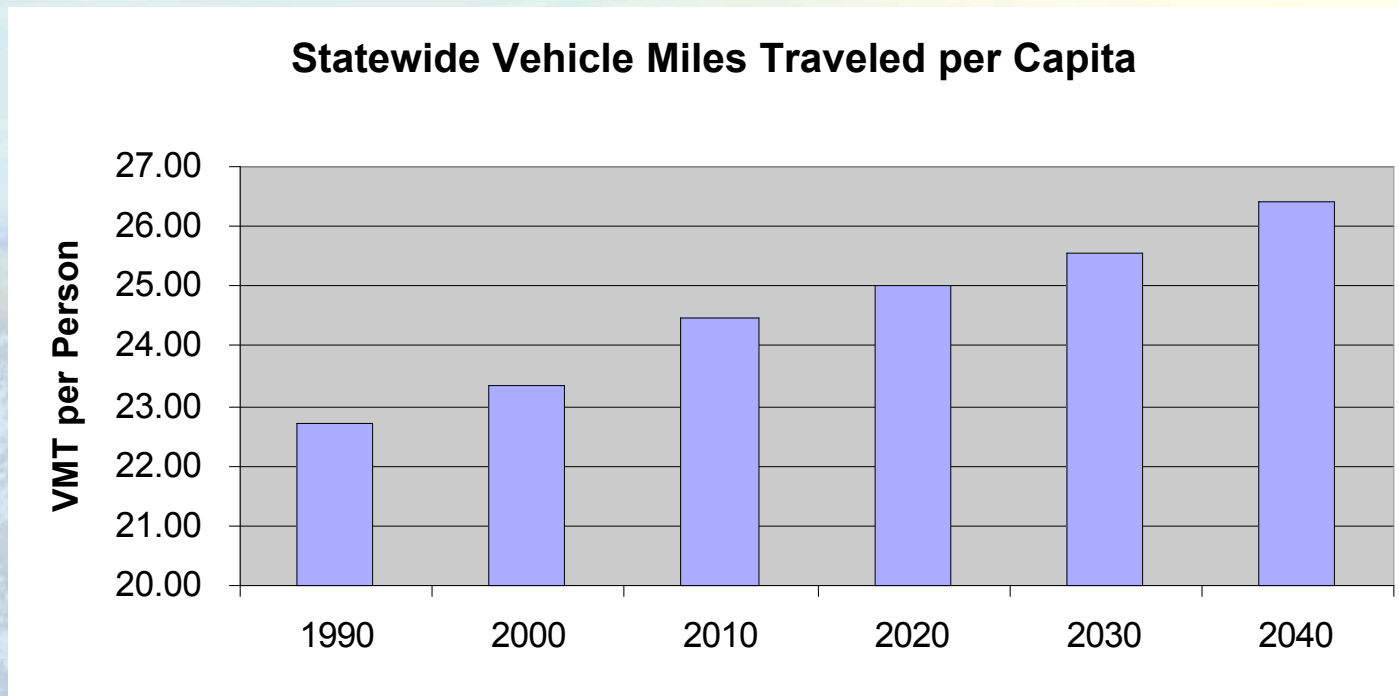


# VMT Reduction and Efficient VMT

- Per capita VMT Reduction
  - A good surrogate for reducing GHGs
  - Effective performance measure for planning
- Efficient VMT
  - There are good speeds and bad speeds for GHGs
  - Reduce extreme congestion through intelligent transportation systems, value pricing, etc.
  - Research emphasizes need to limit adding lane miles

# Trends: Past, Current, Projected

- Billions in transportation investment
- Existing land use patterns and driving behavior
- Vehicle miles traveled per capita projected to continue growing



# Drivers of Vehicle Travel

## Integrated Strategies

### Land Use

Density  
Diversity  
Design  
Destinations

### Alternate Mode Infrastructure

Transit  
Carpool/Vanpool  
Bike  
Walk

### Pricing Signals

Cost per mile  
Cost per gallon  
Parking costs  
Congestion relief costs

### Transportation Conservation

Education  
Incentives to drive less  
TDM Programs

# Land Use Subgroup of CAT (LUSCAT)

- State interagency team:

**CEC**

**HCD**

**ARB**

**DOC**

**Cal/EPA**

**IWMB**

**PUC**

**DPH**

**Caltrans**

**OPR**

**Water Board**

**CTC**

- Coordinate the State's Climate Change land use strategies

- **2008 CAT Report**
- **Stakeholder Input**
  - *Advisory Group*
- **Tool and Resources**

# LUSCAT Potential Strategies

- Transportation Guidance
  - Complete Streets (Caltrans)
- Housing Guidelines
  - Location Efficient Mortgages (HCD)
- Protocols
  - Local Government Protocol (ARB)
- Financing Criteria
  - GHG Criteria for Grant Programs (Water Board)
- Incentives
  - Location Efficient Mortgage (ARB)
- CEQA GHG Update (OPR)

# Perspective on Approaches

## Incentives

**Voluntary Actions**

**Tax breaks**

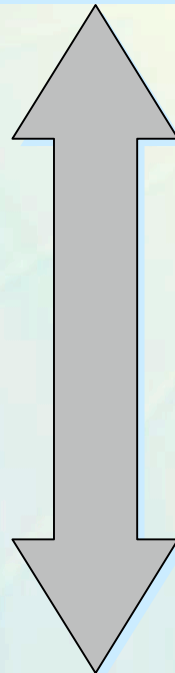
**Regional Targets**

**CEQA thresholds**

**CEQA relief**

**Transit, bike, walk  
infrastructure**

## Requirements



# Related Mitigation Areas



## Green Buildings



GBI, Code Development



## Water/Energy



Residential and Agricultural Usage











## Agriculture



Land Management Practices

# Other Related Efforts

-  Blueprint Planning Process
-  Attorney General's CEQA Actions
-  SB 97
  -  Development of GHG Guidelines for CEQA
-  SB 375 (Steinberg, proposed)
  -  Transportation & Land Use Modeling
  -  Regional GHG Targets
  -  Potential CEQA Relief

# Development of a Land Use Vision for California



Flexible Planning System



Adaptable to Changing Circumstances



Accounts for Growth and Changing Growth Patterns



Integration of Planning Efforts



Incentives and Financial Mechanisms

# Adaptation to Climate Change



## Need for Changes in Planning



Water Supply and Flood Protection



Sea Level Rise



Consideration of Wild Land / Built Interface



Agriculture



Ecosystem Protection and Biodiversity



## Use of Technology – GIS etc



## Need for Expert Assistance



Research



Measure Evaluation

# Questions, Comments

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