

# Transit and Climate Change

## California Transit Association Legislative Conference 2008

Kurt Karperos  
Air Resources Board  
May 21, 2008  
Sacramento, CA

# Climate Impacts

## California Projected Impacts

75% loss in snow pack

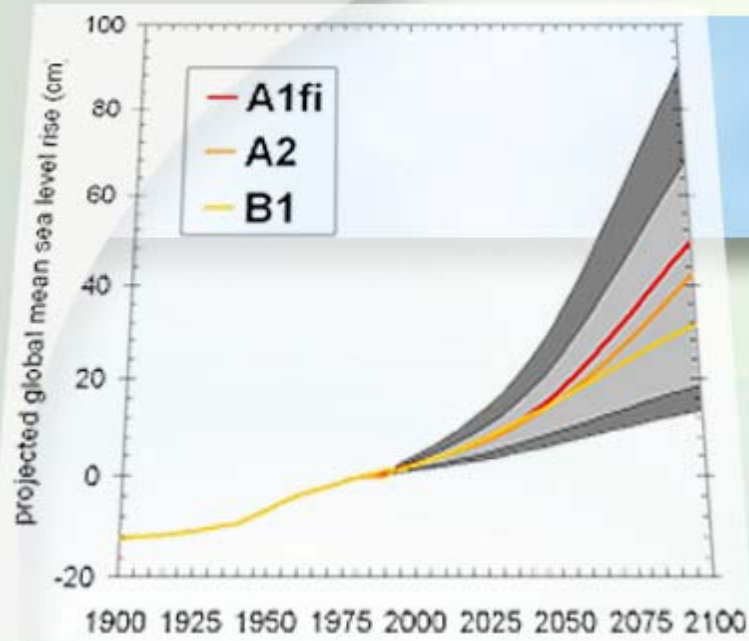
1-2 foot sea level rise

70 more extreme heat days/year

80% more 'likely ozone' days

55% more large forest fires

Twice the drought years

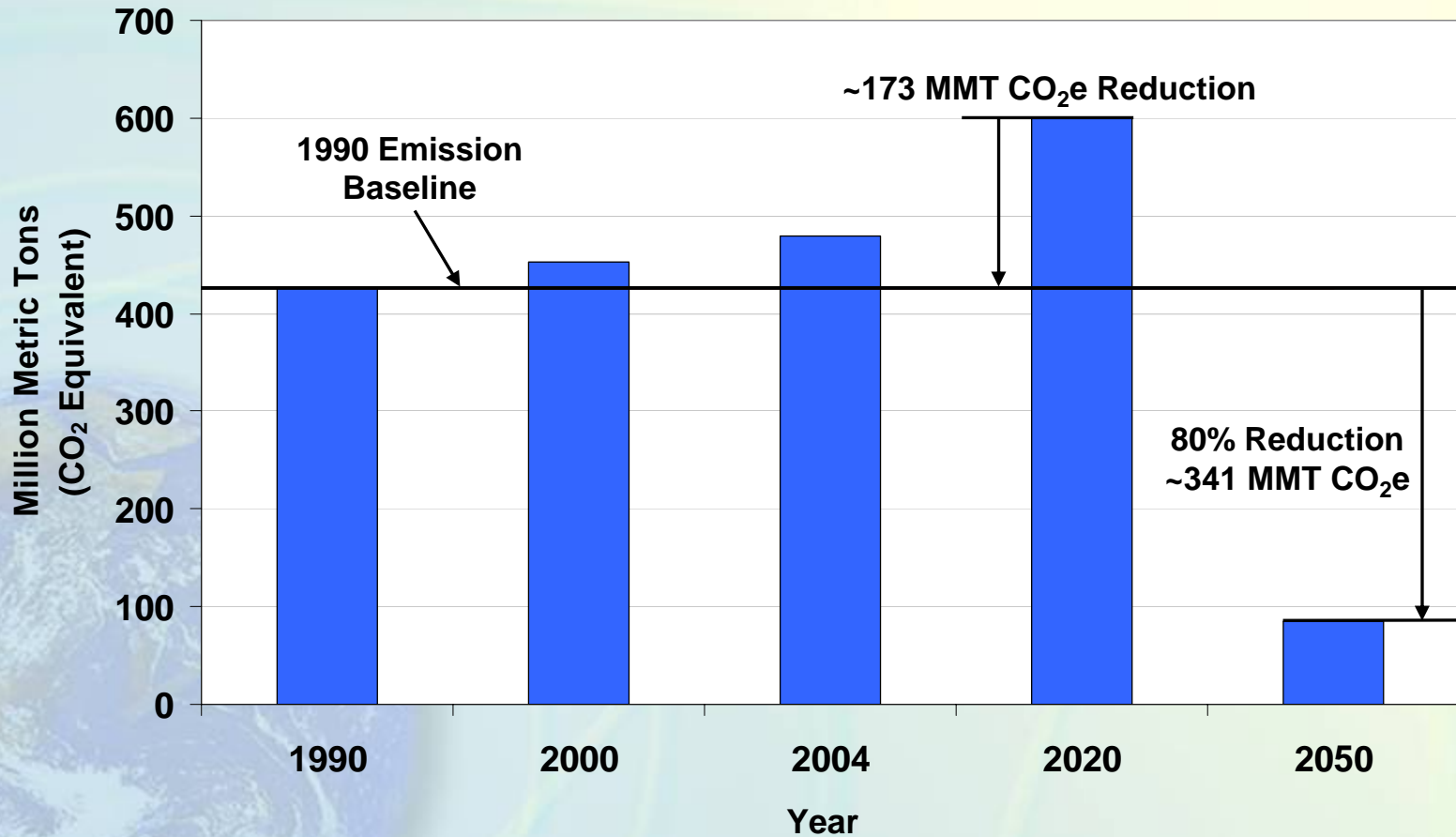


# What Is AB 32?

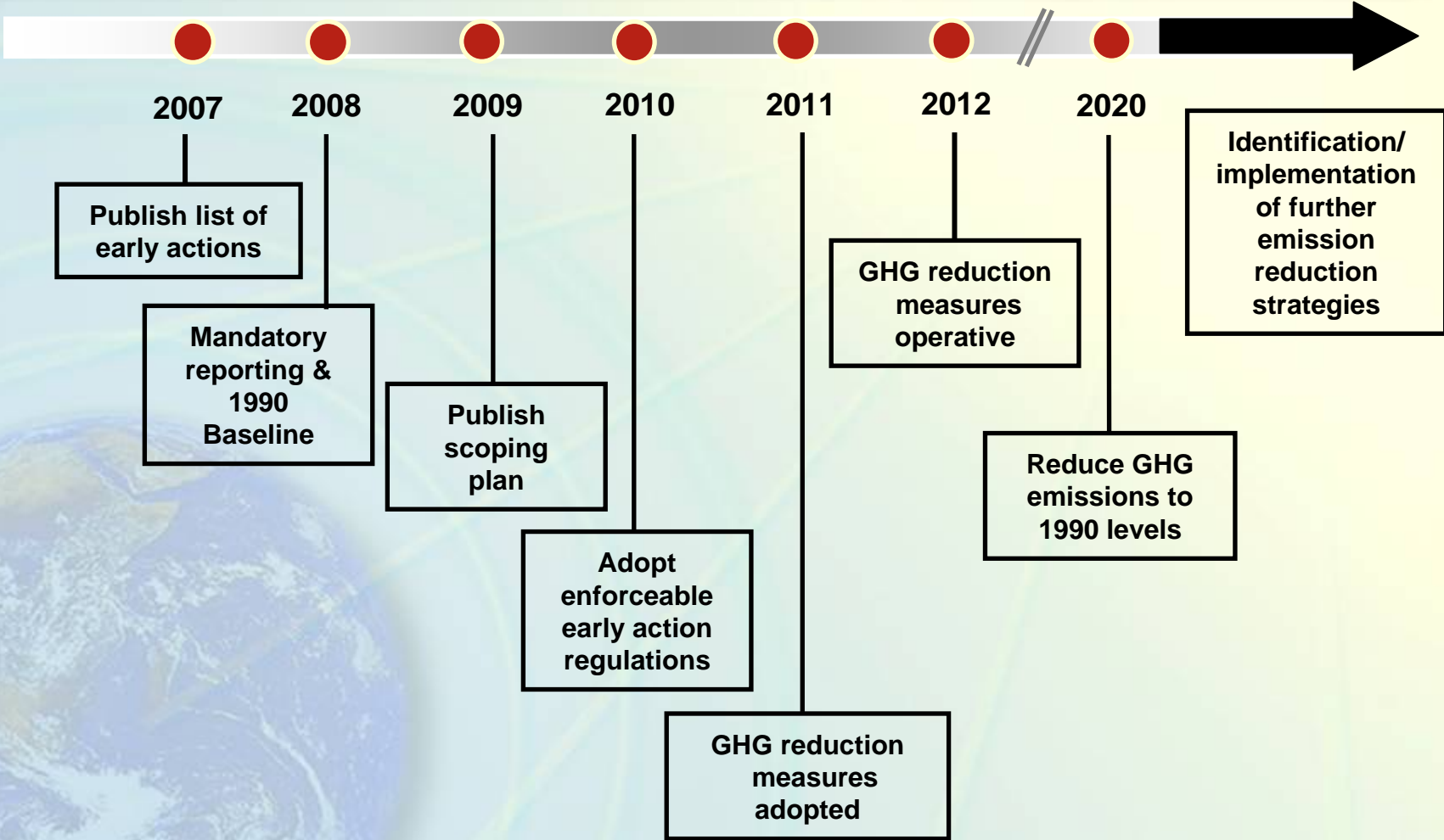
- Sets in statute 2020 GHG emissions limit at 1990 level
  - Acknowledges that 2020 is not the endpoint
- Air Resources Board to monitor/regulate GHG sources
- In collaboration with other state agencies, ARB will develop Scoping Plan by January 1, 2009

# Magnitude of the Challenge

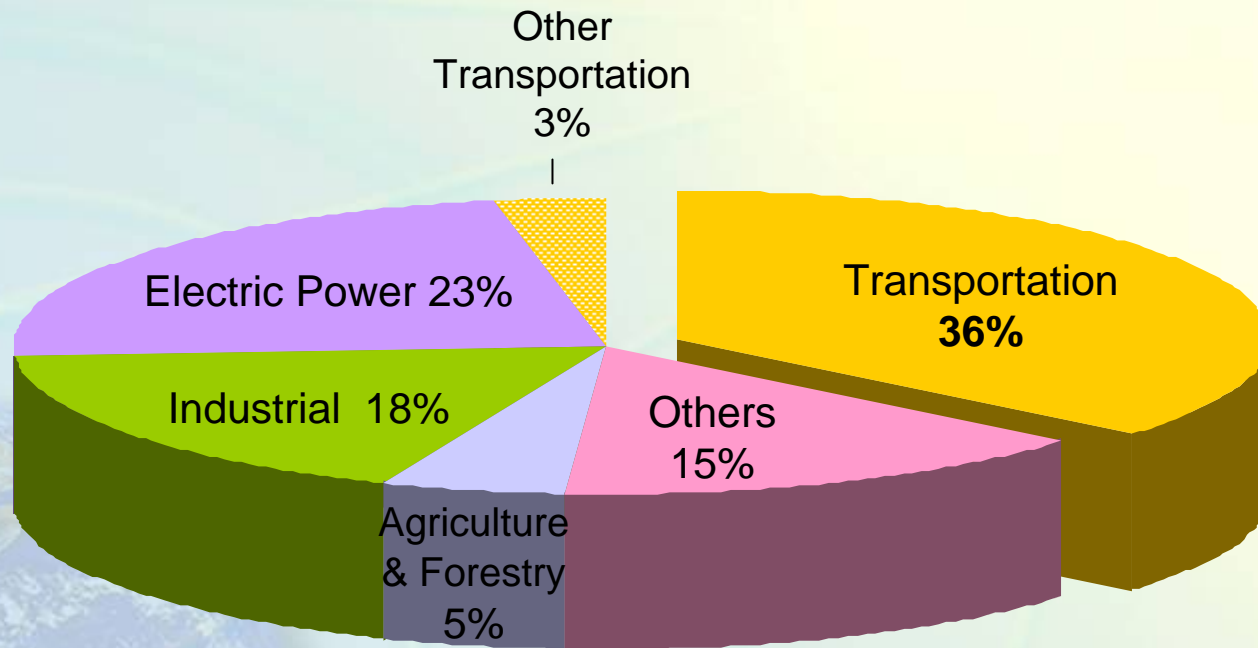
ARB Emissions Inventory



# AB 32 Timeline



# Forecasted GHG Emissions 2020

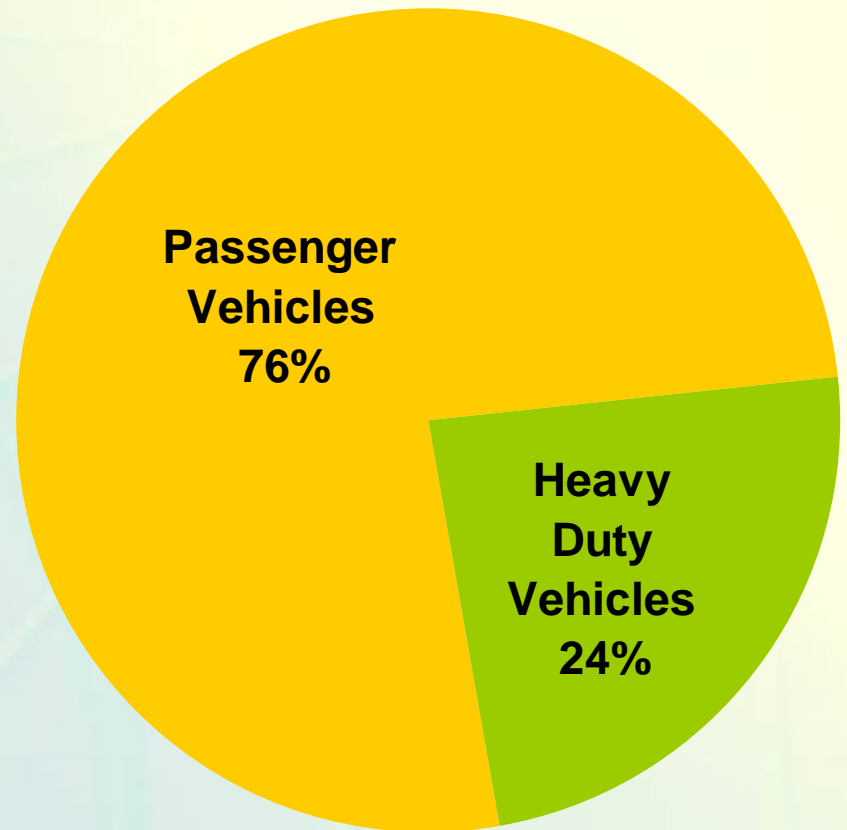


\*Preliminary ARB GHG Projections for 2020; Other Transportation: trains, planes, ships

# On-Road Transportation Sources 2020

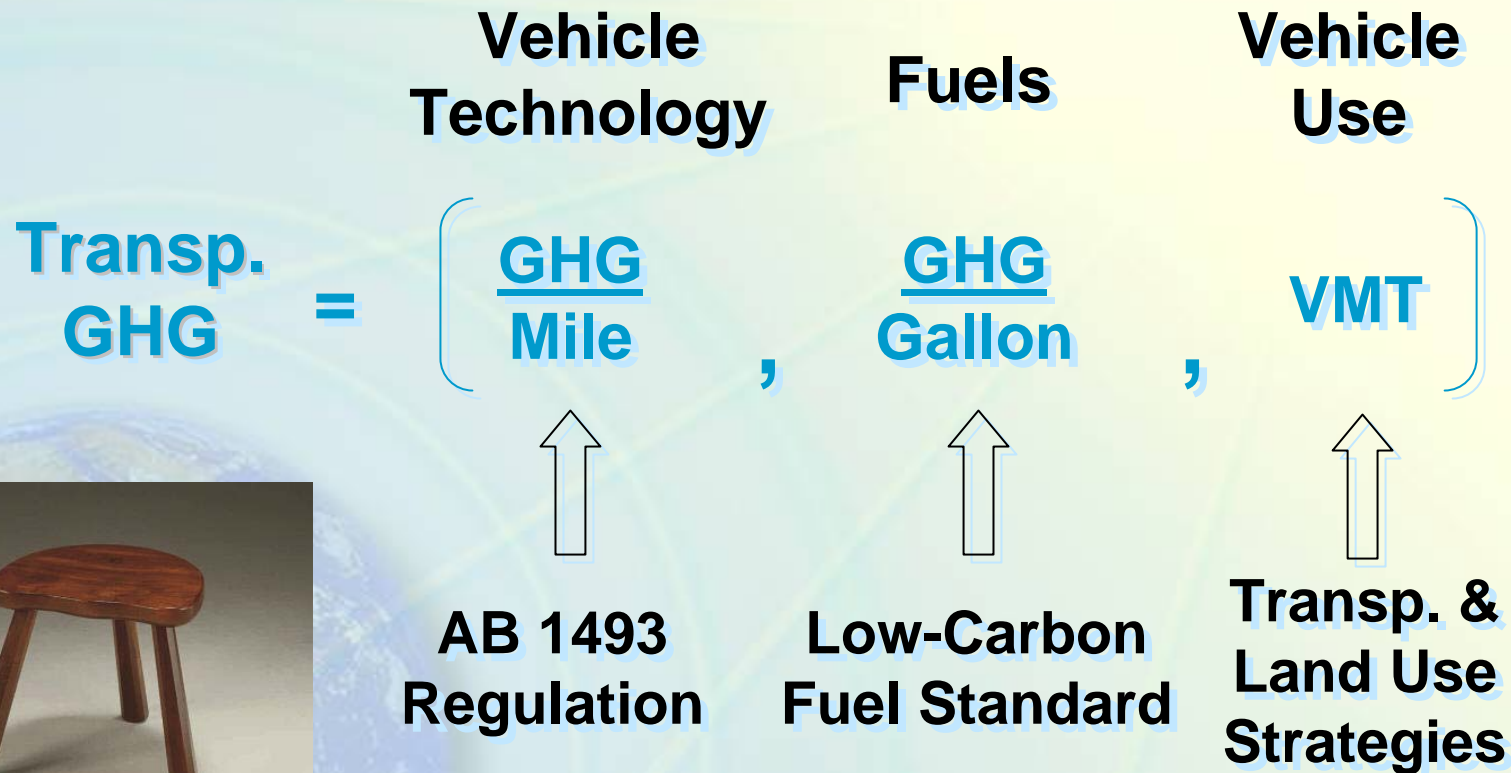
Passenger Vehicles  
~ **160 MMTCO<sub>2</sub>E**

Heavy-Duty Vehicles  
~ **50 MMTCO<sub>2</sub>E**

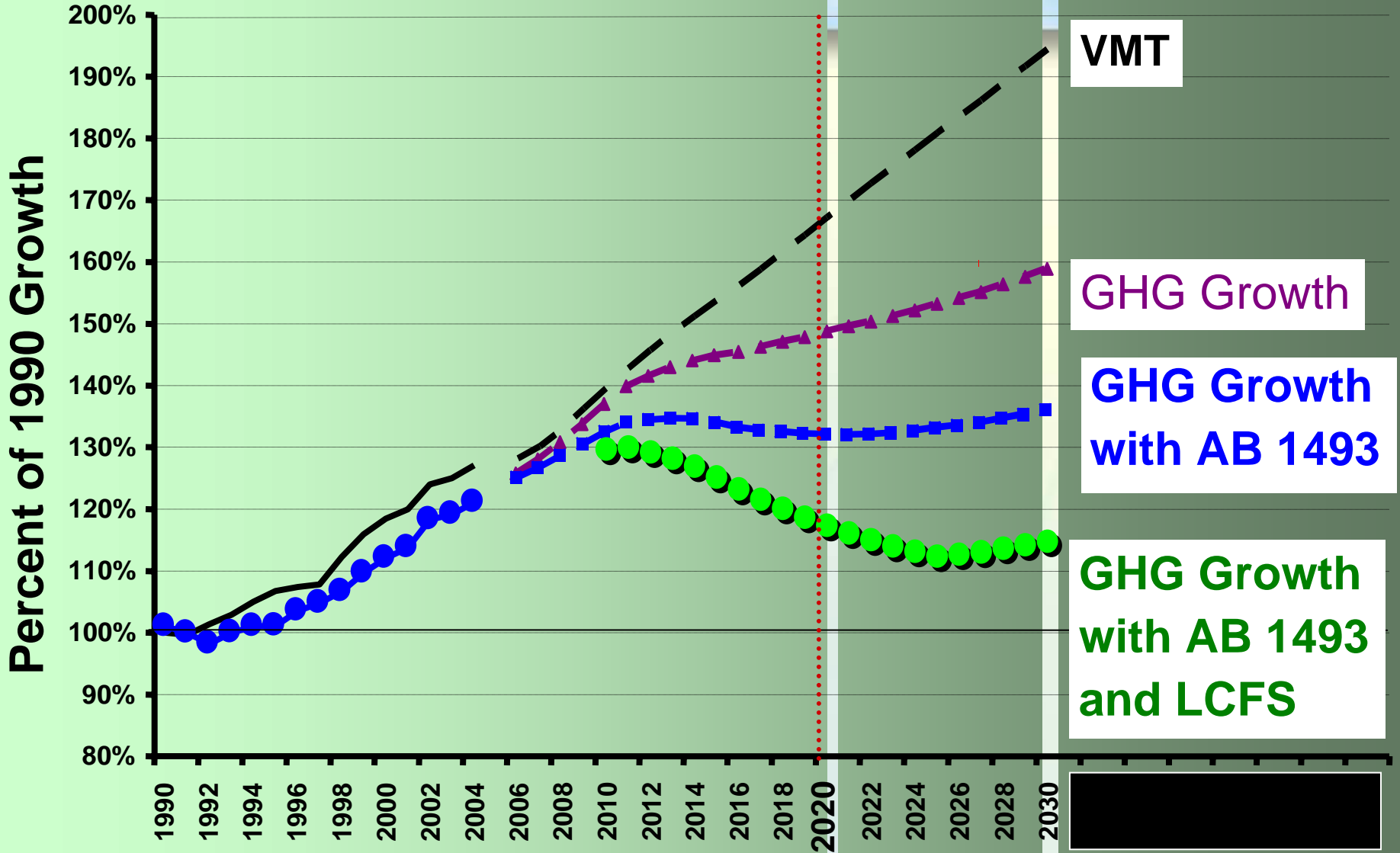


\*Preliminary ARB GHG Projections for 2020

# Transportation GHG

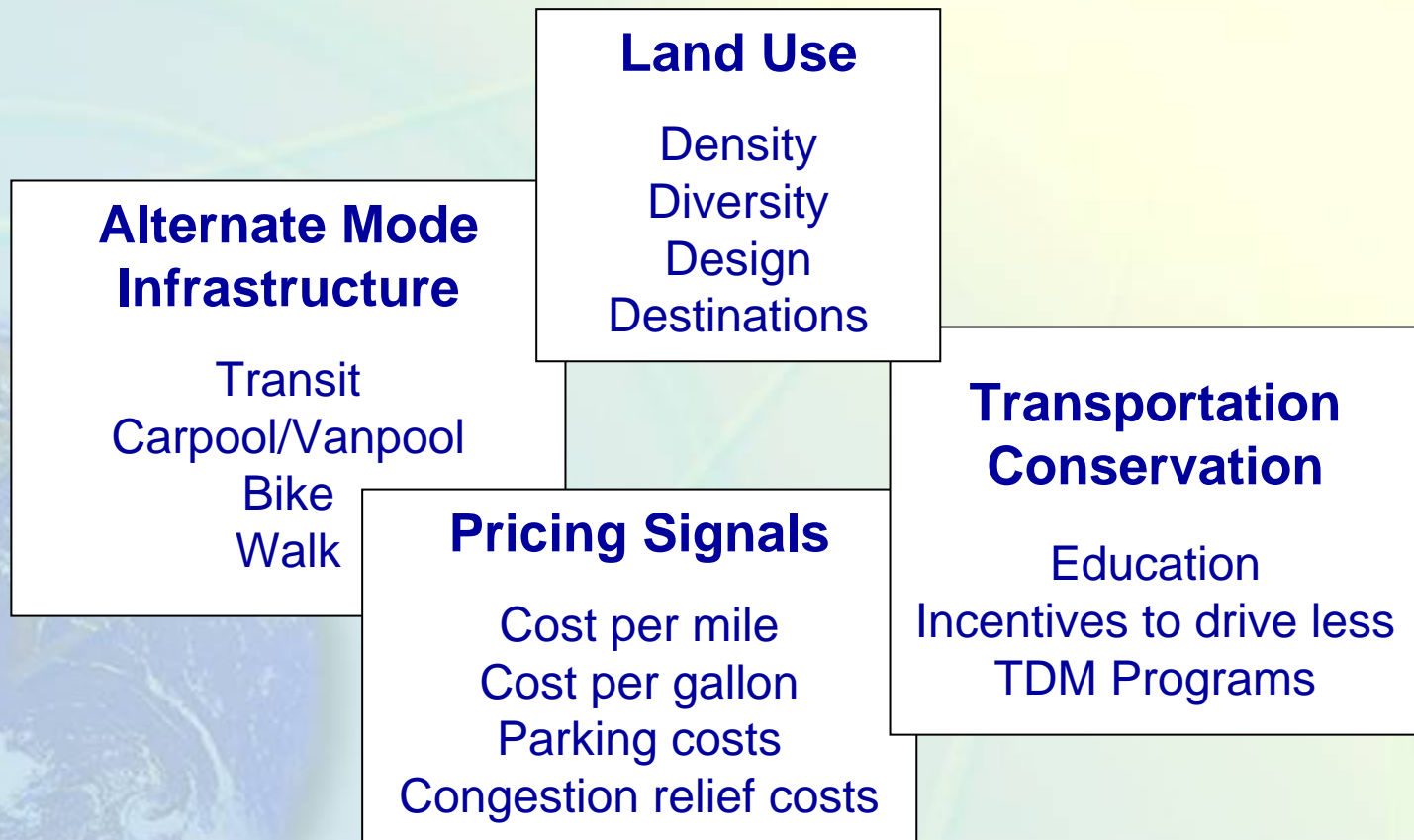


# Historical and Projected Population, Vehicle Miles Traveled (VMT) and GHG Growth



# Drivers of VMT Reduction

## Integrated Strategies



# Land Use: A Long-Term Strategy That Must Begin Now

- Land use strategies mostly impact new growth; benefits accumulate
- Population: +13% by 2020; +40% by 2040
- Multiple benefits:
  - Options to increasingly expensive car travel
  - More access to jobs, services, affordable housing
  - Less land used; more open space
  - More physical activity; improved health
  - Improved water/air quality

# Potential Long-Term Impacts of Growing Smarter

## Sacramento Region -- 2050

Parameter	Base Case 2050	Adopted Plan 2050	Difference
<b>VMT per household per day</b>	<b>47.2</b>	<b>34.9</b>	12.3 fewer miles per household per day, a 25% reduction
<b>People Living in Areas with Good Mix of Jobs and Housing</b>	26%	53%	27% increase
<b>Growth Near Transit</b>	5% New Jobs 2% New Housing	41% New Jobs 38% New Housing	36% more new jobs and homes near transit
<b>Additional Urbanized Land</b>	666 square miles	304 square miles	362 fewer square miles urbanized
<b>Daily Vehicle Minutes of Travel (per household/day)</b>	81 minutes	67 minutes	14 fewer minutes per day
<b>Per Capita CO2 and PM Emissions from vehicles</b>	Set at 100%	85% of Base Case	15% less than the Base Case per capita

Source: SACOG, Regional Blueprint Program, 2005

# Outcome of ARB Haagen-Smit Symposium

## Haagen-Smit Framework for Action

- Set performance-based targets
- Use Blueprint model to help create visions that reach targets
- Assist local actions and ensure accountability

# Haagen-Smit: Enabling Structure for Local Actions

- Apply CEQA to GHG emissions
- Secure new funding. Use current funding wisely.
- Promote large-scale project demonstrations
- Rethink zoning
- Adopt proven measures
- Improve measurement tools
- Exert State leadership
- Engage the public

# Contacts and More Information

- ARB Climate Change Web Site
  - <http://www.arb.ca.gov/cc/cc.htm>
  - Stay informed - sign up for list serve
- California Climate Change Portal
  - <http://www.climatechange.ca.gov>