

# THE REGIONAL TRANSPORTATION PLANNING PROCESS

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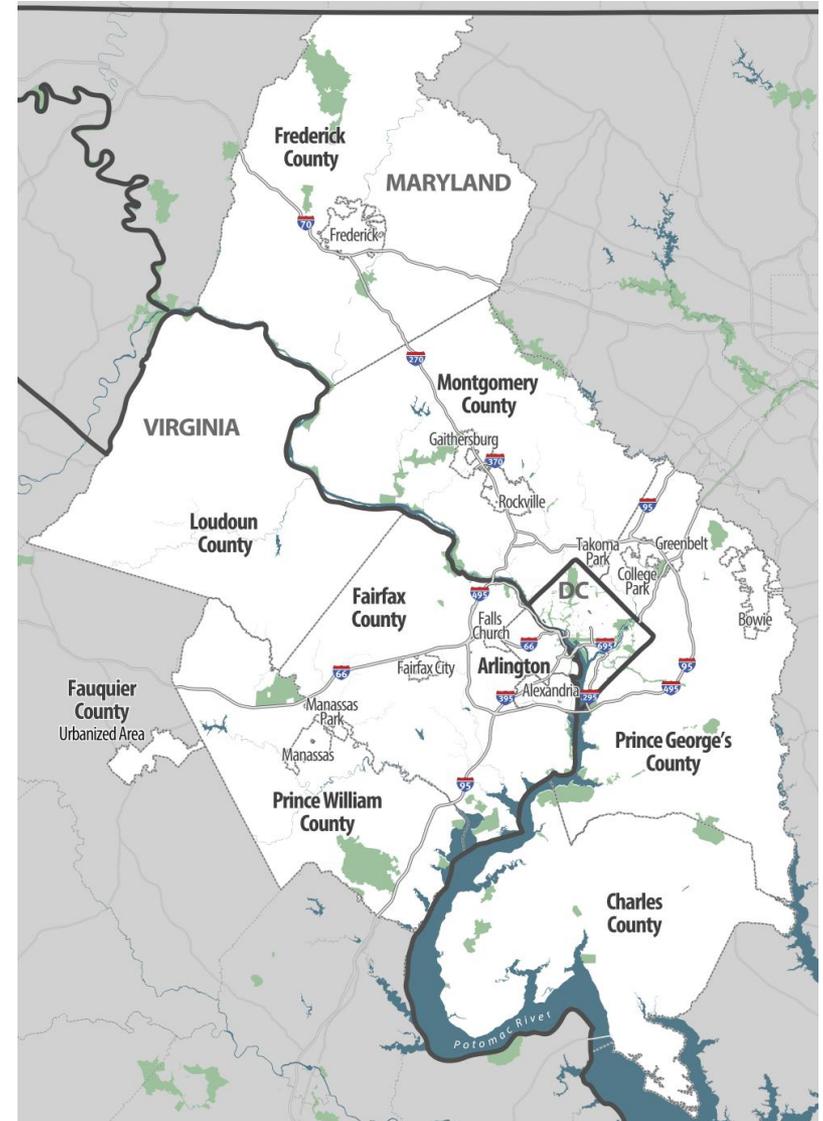
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

# Presentation Outline

- What is the TPB?
- Federal Mandates for MPOs
- TPB Planning Process
- TPB Policy Considerations
- Progress Towards TPB Policy Goals
- TPB Initiatives Beyond Conformity
- What We Can Do

# What is the TPB?

- A regional body comprising:
  - County and City governments
  - State transportation agencies
  - State legislative bodies
  - WMATA
  - Other ex-officio entities
- Federally designated Metropolitan Planning Organization (MPO) for the Washington region
- Independent Board staffed by COG's Department of Transportation Planning



# Federal Mandates for MPOs

- Carry out a “continuing, cooperative, comprehensive” planning process among local, state, regional, and federal transportation partners
- Develop and approve a Constrained Long-Range Transportation Plan (CLRP) and six-year Transportation Improvement Program (TIP)
- Collect and report data about the regional transportation system related to congestion mitigation, air quality, safety, freight, and more
- In Non-Attainment or Maintenance areas:
  - Coordinate the development of the CLRP with the State Implementation Plan (SIP) development process
  - Approve only those transportation plans or programs which conform with the SIP and/or develop transportation control measures for the SIP, as needed

# Clean Air Act Requirements

- EPA establishes National Ambient Air Quality Standards (NAAQS) for six “criteria pollutants”
- States develop State Implementation Plans (SIPs) and/or Maintenance Plans for areas found to be in Non-Attainment of EPA standards
- In Non-Attainment areas, transportation plans and programs must be consistent with the purpose of the SIP



# Air Quality Conformity Analysis

Demonstrates that future vehicle emissions under both the CLRP and TIP will remain below the mobile emissions budgets established in the EPA-approved SIP and/or Maintenance Plan

Under federal law, the Air Quality Conformity Analysis does not include emissions from "point," "non-road," or "area" sources



**Mobile Source**



**Point Source**



**Non-Road Source**



**Area Source**

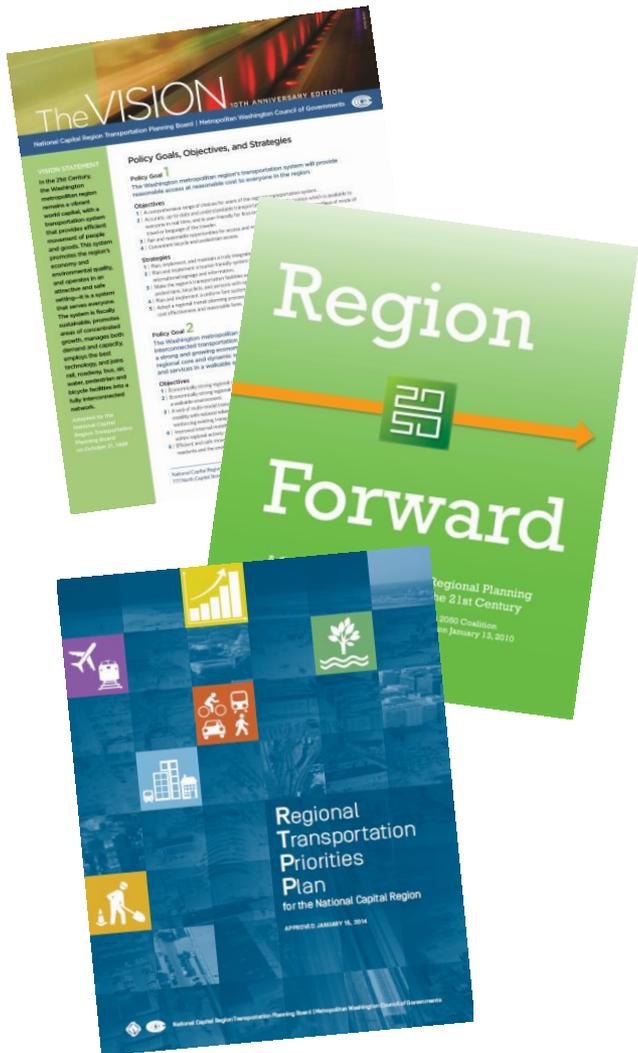
# Roles of the TPB

- Carry out the federally required planning process
- Serve as a forum for regional coordination among Local and State entities and WMATA
- Provide policy guidance and technical resources for decision-making

An overarching goal of the TPB is to encourage decision-makers to consider regional needs when developing local projects and programs for funding and implementation.

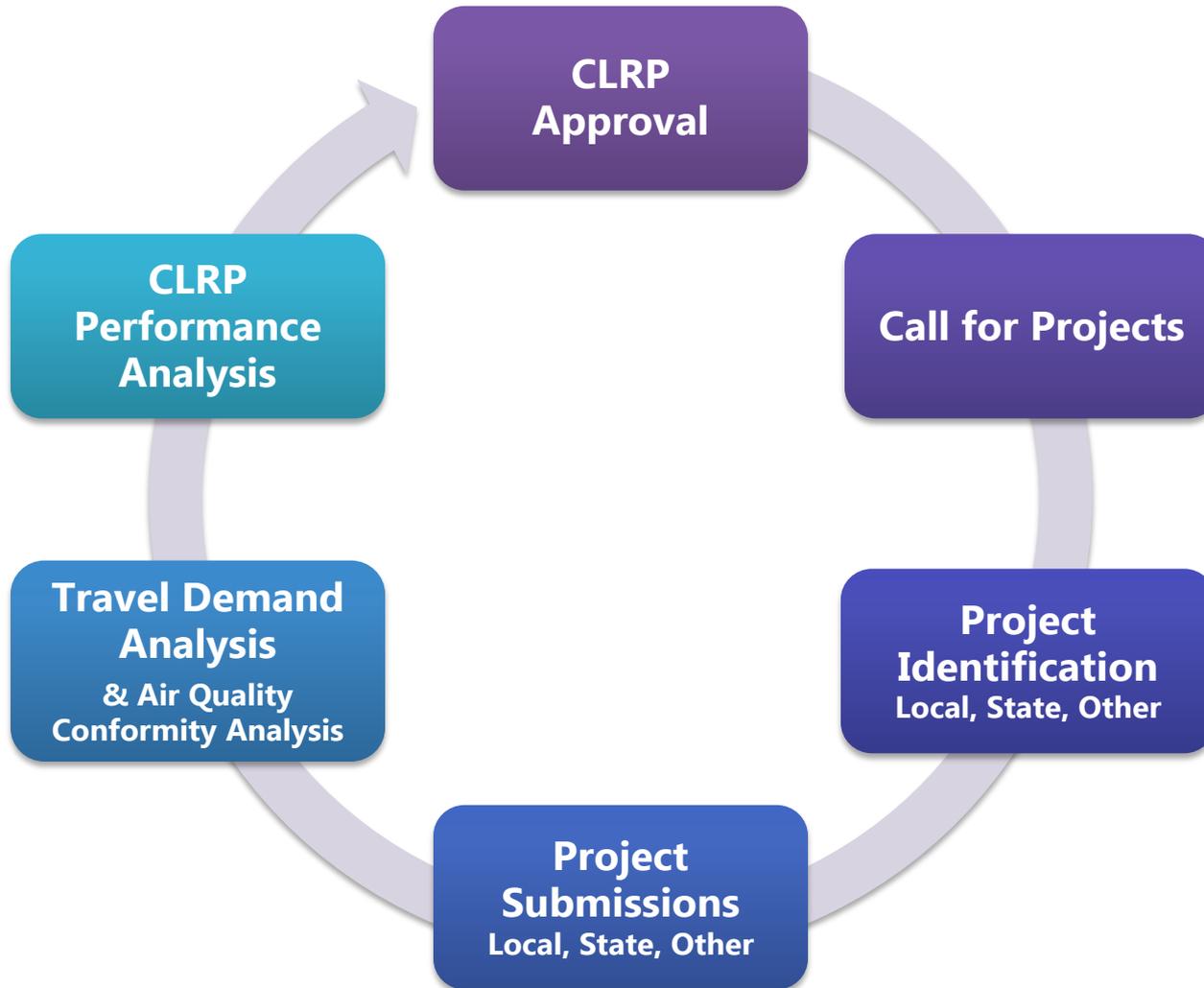
Successful examples of the TPB's "think regionally, act locally" approach include greater focus on Activity Centers and more development around Metrorail stations.

# TPB/COG Policy Framework



- Provide a Comprehensive Range of Transportation Options
- Promote Dynamic Activity Centers
- Ensure System Maintenance, Preservation, and Safety
- Maximize Operational Effectiveness and Safety
- Protect and Enhance the Natural Environment
- Support Interregional and International Travel and Commerce

# The Annual CLRP Cycle



# The Annual CLRP Cycle

## TOP-DOWN/BOTTOM-UP PROCESS



### Transportation Planning Board

- Transportation Planning Goals
- Regional Transportation Priorities Plan
- Scenario Analysis
- CLRP Performance Analysis
- Congestion Management Reports

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### State/Local Governments

- Land use, Economic, and Environmental Policies and Priorities
- Needs assessment
- Transportation Plans and Programs
- Capital Budget Priorities



Call for Projects

Project  
Identification  
Local, State, Other

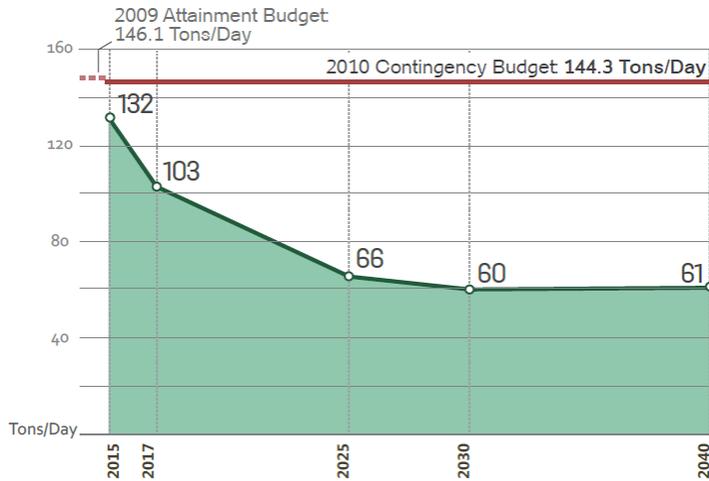
# Progress Towards TPB Policy Goals

In the 2014 CLRP we see...

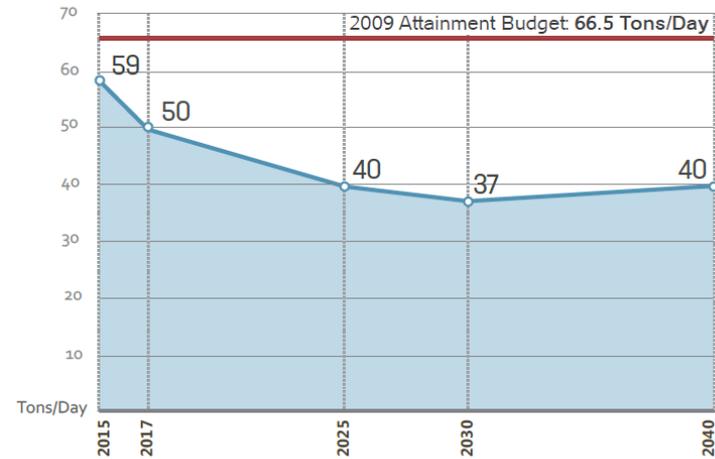
- **More concentrated growth in Activity Centers**  
58% of new population, 76% of new jobs in Activity Centers
- **Greater investment in expanded travel options**  
15% more miles of rail transit, 7% more lane miles of roadway, 2/3 of Activity Centers Connected with high quality transit
- **Increasing use of non-auto modes**  
Transit, walking, and biking growing faster than auto modes, share of single driver trips declining, 2% drop in VMT per capita
- **On-road mobile source emissions of all criteria pollutants remain below approved budgets**

# Achieving Air Quality Conformity

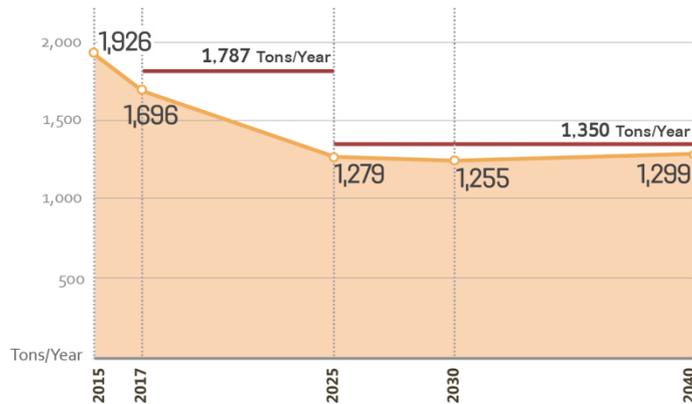
**Mobile Source NOx Emissions**  
(1997 PM2.5 NAAQS, 15 mg/m3)



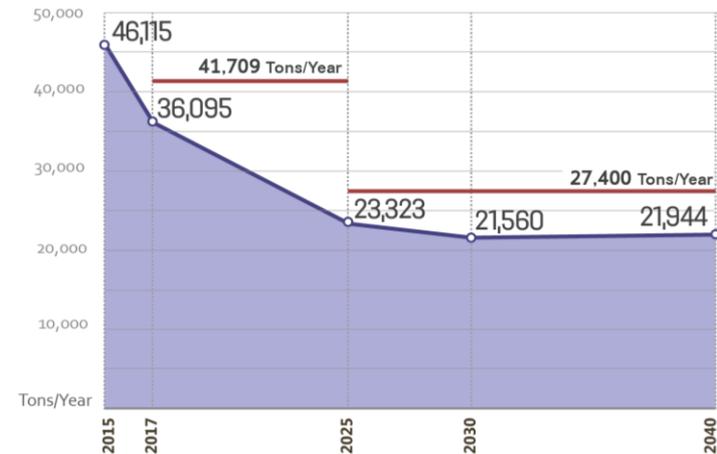
**Ozone Season VOC Emissions**  
(1997 PM2.5 NAAQS, 15 mg/m3)



**PM2.5 Direct Emissions**  
(1997 PM2.5 NAAQS, 15 mg/m3)



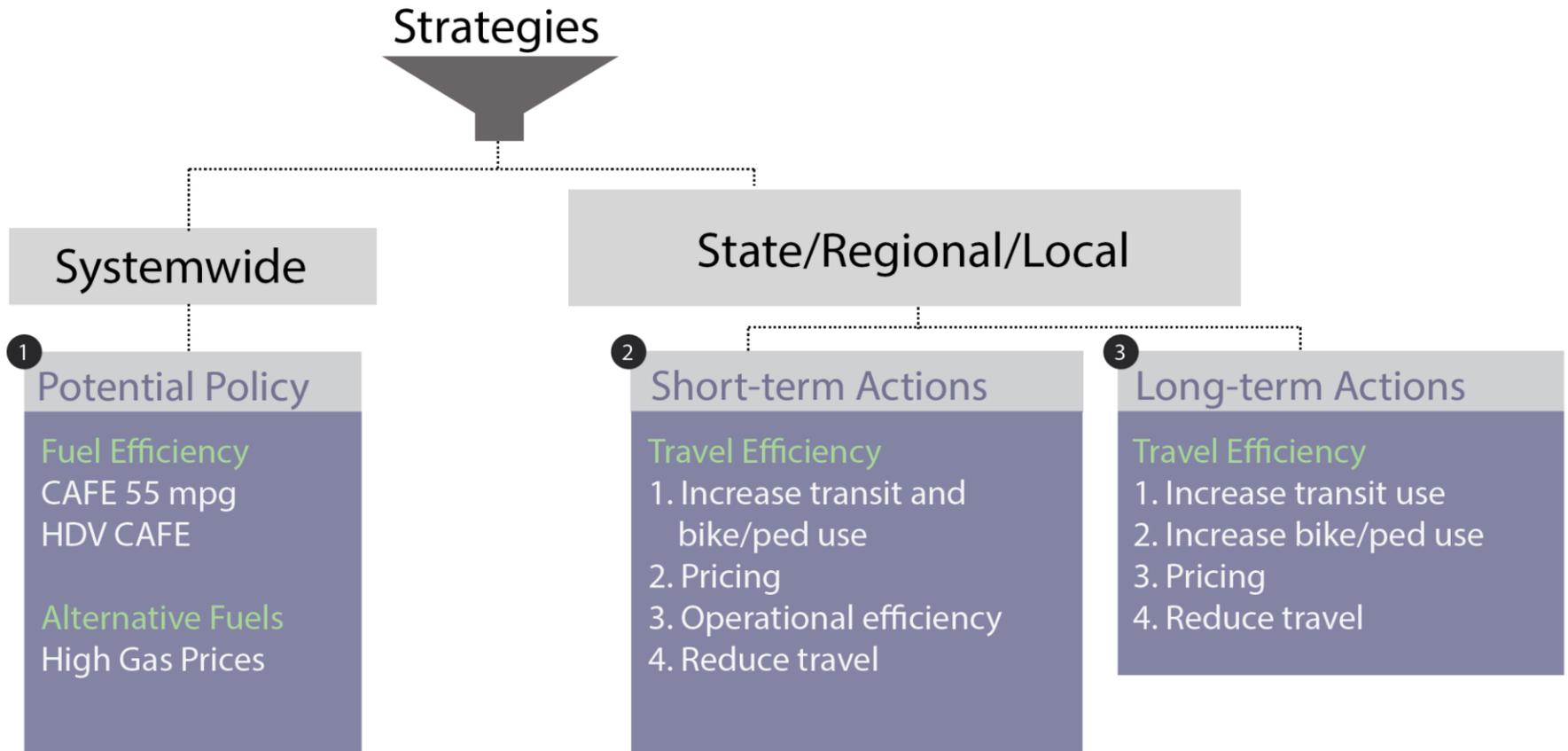
**Precursor NOx Emissions**  
(1997 PM2.5 NAAQS, 15 mg/m3)



# TPB Initiatives Beyond Conformity

- RMAS: Regional Mobility and Accessibility Study (2006)
- CLRP Aspirations Scenario (2010-2013)
- Public Acceptability of Congestion Pricing (2013)
- Value Pricing Network Scenario Study (2008)
- “What Would It Take?” Scenario (2010)
  - Local/Regional/State Strategies
  - Systemwide Strategies
    - Fleet composition, fleet usage, and fuel composition

# “What Would it Take?” Approach

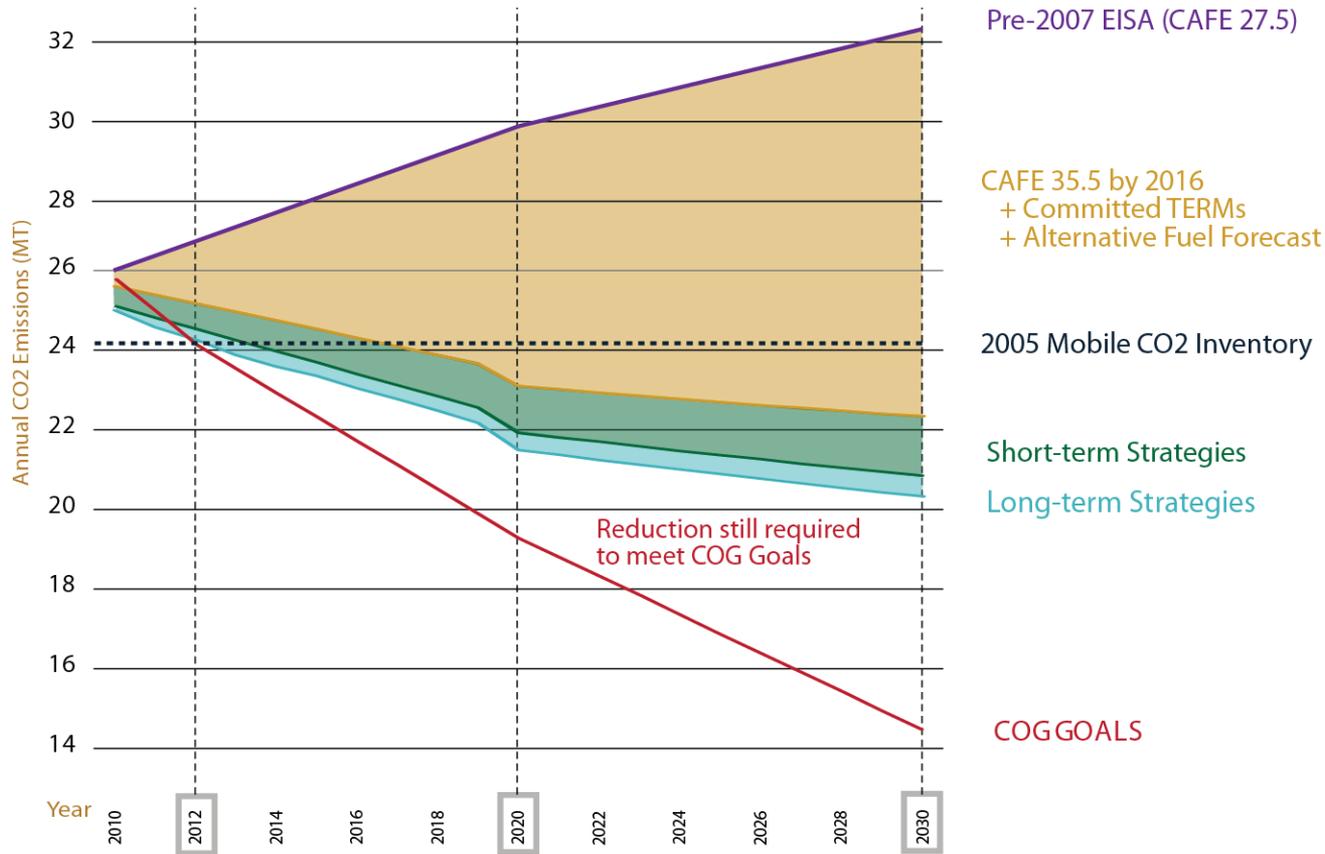


# Potential Local/Regional/State Strategies

Short-term Strategies	1. Increase transit and bike/ped use	Implement kiosks, feeder buses and circulators, real-time bus information, bus priority, free transfers, bike stations, improved bike/ped access to transit, bike sharing
	2. Pricing	Implement parking impact fees, pay-as-you drive insurance, parking cash-out subsidies
	3. Improve operational efficiency	Promote eco-driving (public education campaign), incident management, traffic signal optimization, idling reduction
	4. Reduce travel	Expand telecommuting, carpooling and vanpooling, car-sharing
Long-term Strategies	1. Increase transit use	Major transit expansion, such as the Dulles Rail line, and park and ride lots at rail stations
	2. Increase bike/ped use	Accelerated completion of the TPB Bicycle and Pedestrian Plan
	3. Pricing	Variable pricing of new and existing freeway and select arterial lanes
	4. Reduce travel	Land use strategy encouraging concentrated growth in activity centers and around transit

Such actions would require major policy and funding commitments.

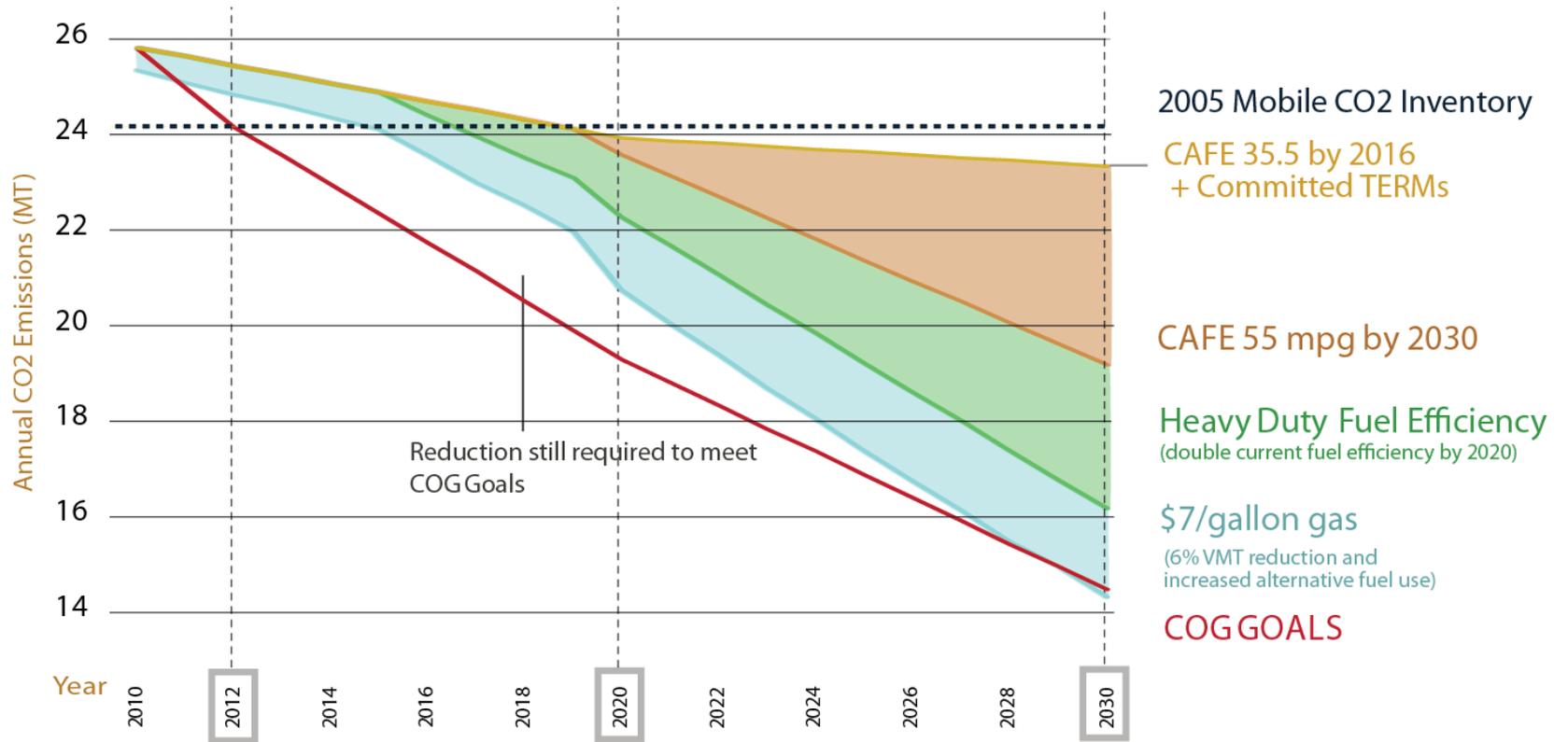
# Potential Local/Regional/State Strategies



Source: What Would it Take? Scenario Study (2010)

These strategies would contribute to reductions in CO2 emissions but fall considerably short of the COG goals.

# Potential Systemwide Strategies



Source: What Would it Take? Scenario Study (2010)

These strategies would provide substantial reductions toward achieving COG CO2 goals.

# Transportation Sector: Progress to Date

- Significant reductions in on-road vehicular (mobile source) emissions in the region since the mid-1990s
- Mobile emissions under the CLRP continue to remain below all federally approved emissions budgets
- The CLRP shows promising trends in achieving regional mobility and emissions goals (more to do)
- Coordination of development patterns and transportation investments effectively addressing mobility and environmental goals (more to do)
- Region continues implementing emission reduction measures outside of the CLRP

# Transportation Sector: Future Outlook

- Healthy regional growth anticipated to place increasing demand on transportation infrastructure
- Tougher environmental standards for criteria pollutants anticipated
- Low-cost emission reductions measures in transportation sector have largely been adopted
- Concerted policy and funding effort needed for next phase of transportation measures
- New action-oriented plan with a comprehensive approach needed to implement additional emissions-reduction strategies

# New Approach: What We Can Do

MWAQC, CEEPC, and TPB can work together to accelerate progress toward the region's greenhouse gas and criteria pollutant reduction goals

Proposed actions:

- Jointly convene multi-sector, multi-disciplinary professional working group
- Identify viable, implementable local, regional, and state actions in each sector (mobile, point, non-road, area)
- Quantify benefits, costs, and implementation schedules
- Jointly develop specific action plan for region
- Take appropriate steps towards implementation at the local, regional, and state levels