



# *Transportation and Air Quality Conformity is Coming!*

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## *Why Is DEP Here?*

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- Federal law (Clean Air Act) requires that transportation plans be consistent (conform) to the environmental plans to provide good air quality in areas that are not in compliance with air quality standards.
- Promulgation of a new air standard for the pollutant ozone (smog), will result in parts of Florida not being in compliance.
- A formal process called “conformity” will be required in these areas, where transportation plans must meet an “emissions budget” determined by DEP.



# *The Air Pollutant at Issue: Ozone*

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- “smog”
- Formed through complex series of chemical reactions involving VOC and NO<sub>x</sub>
- There is a public health standard for ozone concentration.
- The state (DEP) must develop a plan to meet the health standard in areas not meeting the standard.
- Because transportation releases large quantities of VOC and NO<sub>x</sub>, its transportation plans must conform to the DEP air quality plan.

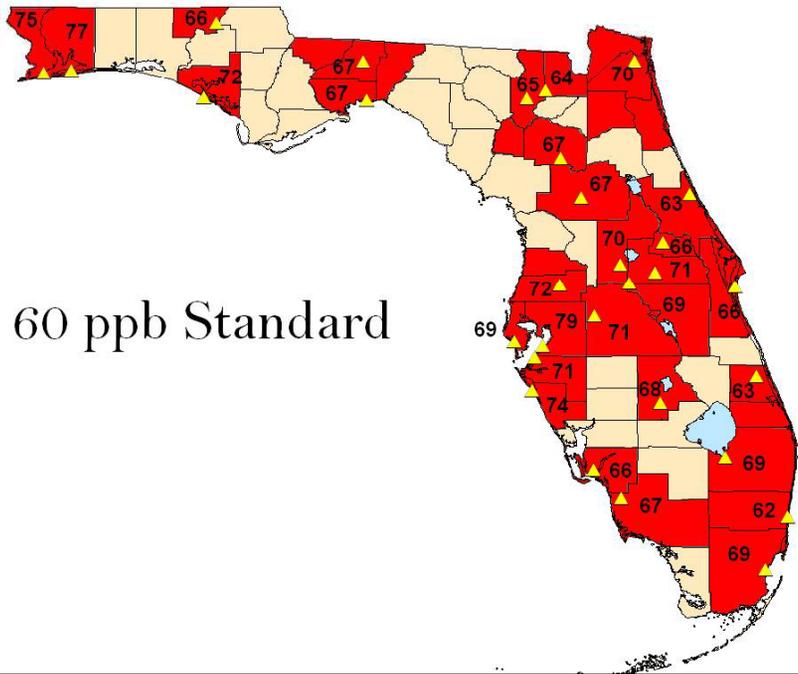
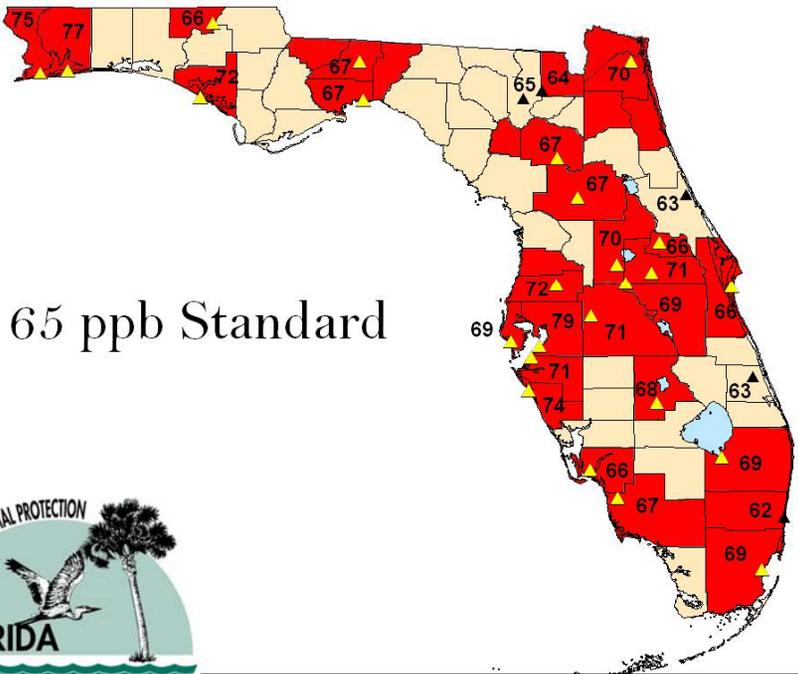
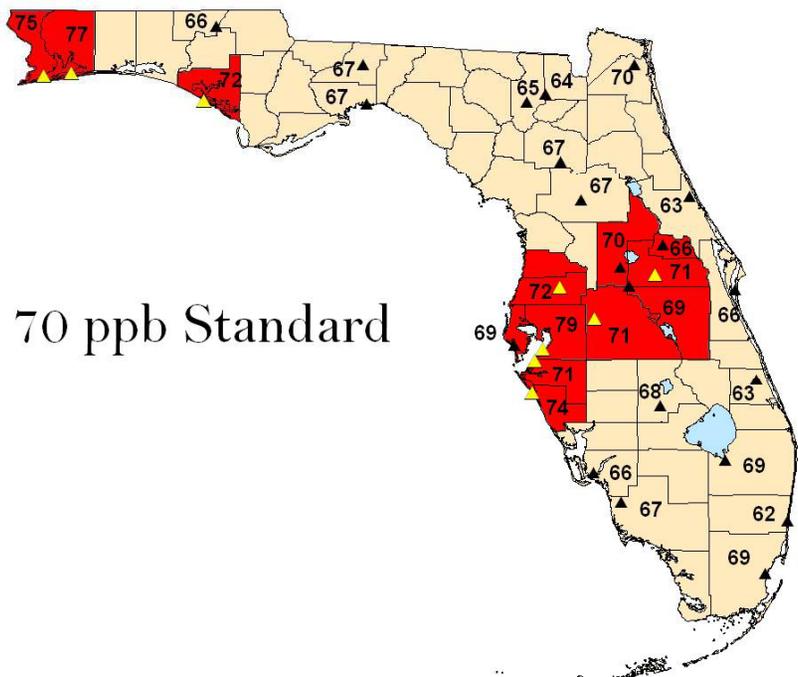
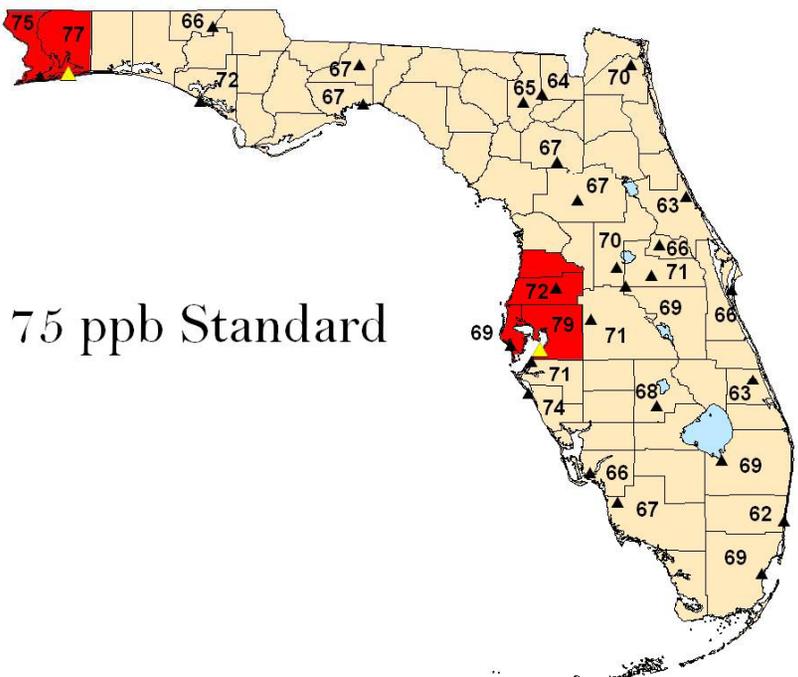


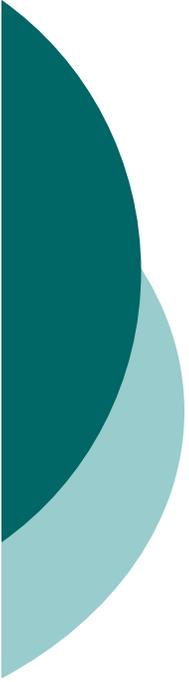
## *The News: Public Health Standard for Ozone is Changing (Again!)*

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- 2008
  - 0.08 ppm, 8-hour to 0.075 ppm, 8-hr.
- 2010
  - ??? To be determined!
  - September 2009 announcement: U.S. EPA to re-evaluate standard, presumably to be consistent with their science board recommendation (0.060 ppm to 0.070 ppm, 8-hour average).







## *Schedule*

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- December 21, 2009 – U.S. EPA to announce a proposed new ozone standard.
- August 2010 – U.S. EPA makes final decision on the new standard.
- Early Spring 2011 – Florida DEP will make recommendation to EPA on nonattainment areas.
- August 2011 – U.S. EPA makes final decision on nonattainment areas
- December 2013 – DEP must submit its State (air quality) Implementation Plan (SIP) to EPA.



## *What Needs to Be Done?*

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- DEP must develop a plan (SIP) for emission reductions of VOC and NO<sub>x</sub>, sufficient for each nonattainment area to come into compliance with the standard by 2013/2016.
- This plan will include a transportation conformity budget for VOC and NO<sub>x</sub>.
- A formal consultation process must be developed (MOU?) among all the various parties in the transportation planning process and the DEP to assure that everyone knows their roles and responsibilities.



# Air Quality

## *TRANSPORTATION CONFORMITY*

August 2012

USEPA

MPO/TPO

FHWA

FDOT

FDEP



Inter Agency  
Consultation (MOU)

Regional Planning Councils, Land  
Use Planning, Citizen's Advisory  
Committees

## Transportation Planning

# What is Conformity?

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- Requires evaluation of emissions from on-road transportation plans, programs, and projects **BEFORE** any element may be implemented
- Applies to maintenance and nonattainment areas
- Transportation Conformity is intended to help SIP achieve its goal of attaining the NAAQS



# What is Conformity?

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Transportation conformity is required under the CAA to ensure that highway and transit project activities receiving federal funds are consistent with (“conform to”) the purpose of the SIP.

Conformity to a SIP is achieved if transportation programs or transit project activities:

- 1) do not cause or contribute to any new air quality violations,
- 2) do not worsen existing violations, and
- 3) do not delay timely attainment of the relevant NAAQS.



# Who is Responsible?

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- Metropolitan Planning Organizations
- Florida Department of Transportation
- Florida Department of Environmental Protection
- U.S. Department of Transportation (FTA/FHWA)
- U.S. Environmental Protection Agency
- State of Florida Governor and Legislature



# Key Elements of a Conformity Determination

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- Interagency Consultation and Public Involvement
- Latest Planning Assumptions and Emissions Model
- Regional Emissions Analysis
- Motor Vehicle Emissions Budget
- Timely Implementation of TCMs
- Fiscal Constraint





# Transportation Control Measures

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Under the Transportation Conformity Rule, Transportation Control Measures (TCMs) are strategies that:  
are specifically identified and can be committed to in State Implementation Plans (SIPs); and

Section 108 of the CAA provides examples of transportation control measures including, but not limited to:

- improved public transit,
- traffic flow improvements and high-occupancy vehicle lanes,
- shared-ride services,
- bicycle/pedestrian facilities, and
- flexible work schedules.



## Transportation Conformity Lapse

A lapse occurs when an MPO is unable to "conform" the latest TIP or LRTP to the federal air quality plan, the SIP by the deadline.

Time and Resources

Not having an EPA-approved SIP with an emissions budget in time for the conformity demonstration.

Reorder planning priorities



Difficulty designing a transportation plan that would control future emissions enough to meet emissions budget

Emissions budget flexibility



Conformity



Lapse

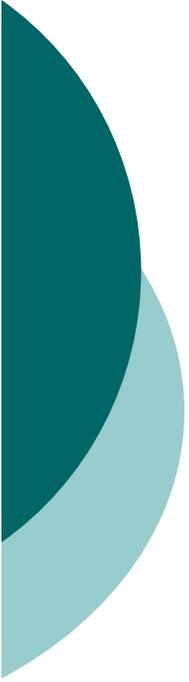
## Exempt Projects

### *Safety*

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Railroad/highway crossing. **Projects that correct, improve, or eliminate a hazardous location or feature.** Safer non-Federal-aid system roads. Shoulder improvements. Increasing sight distance. Highway Safety Improvement Program implementation. **Traffic control devices and operating assistance other than signalization projects.** Railroad/highway crossing warning devices. Guardrails, median barriers, crash cushions. Pavement resurfacing and/or rehabilitation. Pavement marking. Emergency relief. Fencing. Skid treatments. Safety roadside rest areas. Adding medians. Truck climbing lanes outside the urbanized area. Lighting improvements. **Widening narrow pavements or constructing bridges (no additional travel lanes).** Emergency truck pullovers.





## *Mass Transit*

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Operating assistance to transit agencies. Purchase of support vehicles. Rehabilitation of transit vehicles. Purchase of office, shop, and operating equipment for existing facilities. Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.). Construction or renovation of power, signal, and communications systems. Construction of small passenger shelters and information kiosks. **Reconstruction or renovation of transit buildings and structures** (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures). Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way. **Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet.** Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771.



## *Air Quality*

Continuation of ride-sharing and van-pooling promotion activities at current levels. Bicycle and pedestrian facilities.

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## *Other*

Specific activities which do not involve or lead directly to construction, such as:

**Planning and technical studies.** Grants for training and research programs. Planning activities conducted pursuant to titles 23 and 49 U.S.C. Federal-aid systems revisions. Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action. **Noise attenuation.** Emergency or hardship advance land acquisitions (23 CFR 710.503).

Acquisition of scenic easements. **Plantings, landscaping,** etc.

Sign removal. Directional and informational signs. Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities).

**Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes.**





**TABLE 8**  
**TRANSPORTATION EMISSIONS REDUCTION SUMMARY**

Parameter	1990 Base Year Inventory <sup>2</sup>	2000 Validation <sup>1,4</sup>	2005 Emissions Budget <sup>3</sup>	2005 Analysis Year <sup>1,4</sup>	2015 Emissions Budget <sup>3</sup>	2015 Analysis Year <sup>1,4</sup>	2025 Analysis Year <sup>1,4</sup>
<b>Population</b>	<b>815,618</b>	<b>981,521</b>	<b>N/A</b>	<b>1,087,331</b>	<b>N/A</b>	<b>1,262,268</b>	<b>1,433,878</b>
<b>Vehicle Miles Traveled<sup>1</sup></b>	<b>20,395,499<sup>2</sup></b>	<b>22,830,544</b>	<b>N/A</b>	<b>26,701,698</b>	<b>N/A</b>	<b>32,682,248</b>	<b>38,518,928</b>
<b>Total VOC (Tons per day)<sup>1</sup></b>	<b>89.76<sup>2</sup></b>	<b>45.56</b>	<b>53.60</b>	<b>34.43</b>	<b>53.60</b>	<b>20.23</b>	<b>16.28</b>
<b>Total NOx (Tons per day)<sup>1</sup></b>	<b>70.36<sup>2</sup></b>	<b>70.65</b>	<b>91.80</b>	<b>58.84</b>	<b>91.80</b>	<b>25.99</b>	<b>15.78</b>

1. Source: EMIS.OUT
2. Source: 1990 Emissions Inventory; EPA approved revisions to the Florida SIP; Federal Register 3/29/04
3. Source: EPA approved revisions to the Florida SIP; Federal Register 3/29/04
4. Emissions are calculated using MOBILE 6.2 and the FSUTMS/EMIS interface using an emission factor "EMISFAC" of 0.77770 for Hillsborough County.

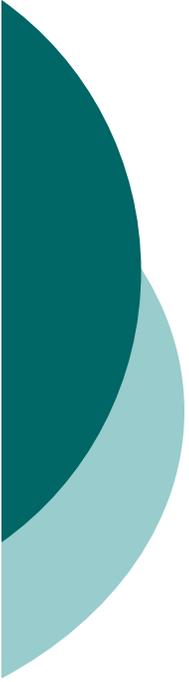


• CMAQ Program has supported more than 16,000+ transportation projects since 1992

• Wide range of eligible projects

- transit improvements
- shared ride services
- traffic flow improvements
- demand management
- bicycle and pedestrian projects
- alternative fuels
- inspection & maintenance programs
- freight services
- experimental pilots
- public / private partnerships
- diesel retrofits
- Idle-reduction facilities





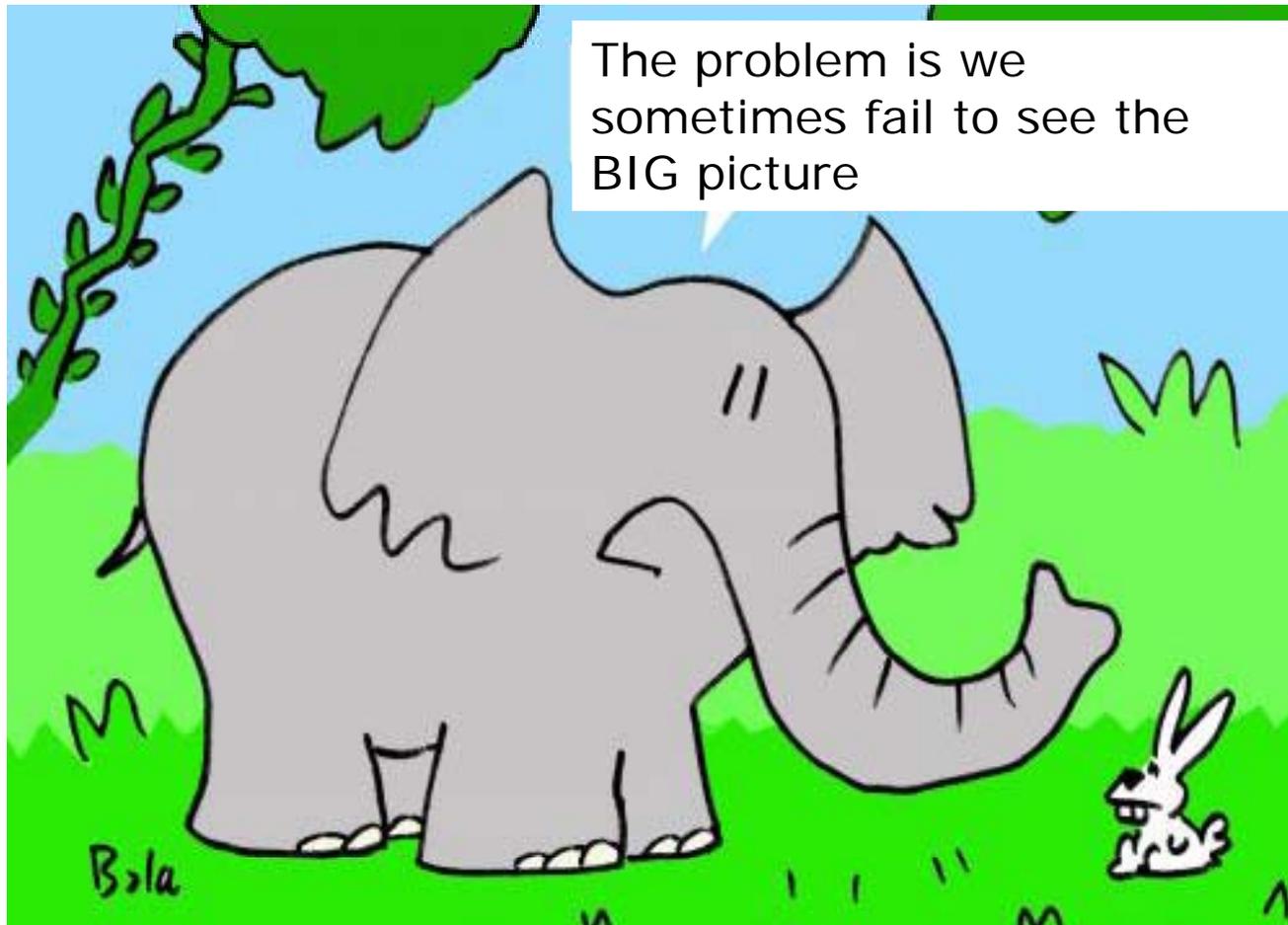
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On September 15, 2009, DOT and EPA proposed a rule establishing improved vehicle fuel economy standards and the first ever national greenhouse gas emission standard for Model years 2012 through 2016 light-duty vehicles.

Model year 2016 light-duty vehicles would have to meet an estimated combined average emission level of 250 grams of carbon dioxide per mile and the overall light-duty fleet would reach 35.5 miles per gallon.

**CO<sub>2</sub>**





Transportation Conformity is An Opportunity to make  
a Land Use/Transportation/Air Quality connection