



Governor's Action Team on Energy and Climate Change

State of Florida

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DRAFT TELECONFERENCE MEETING SUMMARY

Transportation and Land Use

Technical Working Group Call #4

April 23, 2008

Members Attending:

| Members | Affiliation |
|-------------------------------|---|
| Eric Hamilton (for Dave Mica) | Florida Petroleum Council |
| Terry Joseph | West Florida Regional Planning Council |
| Larry Peterson | Kitson & Partners |
| Howard Glassman | Florida Metropolitan Planning Organization |
| David Peebles | ETH Bioenergy – Odebrecht |
| Charles Pattison | 1000 Friends of Florida |
| Jeff Day | Publix |
| Tim Chapin | FSU Department of Urban and Regional Planning |
| Preston Robertson | Florida Wildlife Federation |
| Dr. Lonnie Ingram | University of Florida Institute of Food and Agricultural Sciences |
| Janet Bowman | The Nature Conservancy |
| Robert "Buzz" Hoover | Gate Biofuels, LLC and Petroleum Supply with Gate Petroleum Company |

Florida Department of Environmental Protection (DEP): Kelley Smith

Center for Climate Strategies (CCS): Lewison Lem, Tiffany Batac, Bill Cowart, Maureen Mullen

Members of the Public: Yvonne Arens (FDOT), Sarah Doar (Hopping, Green, and Sams), Timothy Smith (Department of Community Affairs), George Cervante (Florida Power & Light), Jim Long (Florida Trucking Assoc.), Ben Stuart (Radey, Thomas, Yon, and Clark), Paul Laury

Agenda Item#1: Introductions and Review of Agenda.

Lewison Lem opened the meeting, introduced members, and took roll call. Lewison noted that all "Potential Members" are now official members of the technical work group. Lewison asked members of the technical work group to check their emails for the Draft Florida Transportation Inventory and Forecast that was just sent out. The draft document was successfully able to go



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through a review process with the DEP prior to today's call so that the TWG could review and discuss.

The goal for this meeting was to introduce and discuss the draft TLU inventory and forecast, continue working through the policy catalog and reviewing the balloting process and next steps.

Agenda Item#2: Review and Approve Prior Call Summary

Terry Joseph noted that Mary Cutierrez from the West Florida Regional Planning Council sat in on the last call for her.

Lewison asked for any other comments or changes on the prior call summary. No other revisions were requested and Terry Joseph moved the minutes for approval. Larry Peterson seconded that motion, approving the minutes with the agreed upon changes.

Agenda Item #3: Status Updates on Action Items

As a follow up to the TWG's last meeting, CCS distributed additional web resources for other state plans and transportation wedge analyses from the US EPA. Lewison noted that a number of these states have completed their processes, and the closest to Florida are the Carolinas, however, the information should be used in context of Florida.

The preliminary inventory and forecast (DEP 2007) was also emailed and an updated document by CCS was also just recently completed and distributed for the call. VMT Forecasts is another area for discussion which Maureen Mullen discussed in more detail with regards to its effect on the inventory and forecast. Yvonne Arens noted that although Kathy Neill was not able to attend the teleconference, she may be able to respond to comments regarding the VMT Forecasts at a later point.

Agenda Item #4: Review of Draft Florida Transportation and Land Use Inventory and Forecast

Maureen Mullen from CCS was reintroduced after presenting the methods and assumptions used in developing the inventory and forecast at the TWG's second teleconference. Maureen reviewed the Draft FL TLU Inventory and Forecast document by first explaining the VMT data. She noted that the VMT projections were obtained from Kathy Neill of the FDOT and are based on a linear projection from 2001-2005 historical VMT data. This causes the VMT to increase



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from 201,531 million miles in 2005 up to 356,000 million miles in 2025. On page 7, the bottom portion of this graph represents the on-road sector - first onroad gasoline, then onroad diesel - which makes up most of the transportation emissions. Table C-7 also breaks down the corresponding sector emissions by vehicles type (by request of DEP). Having the data broken down in this fashion would be helpful so that when you look at any policies specifically related to passenger trucks, etc, you will be able to reference the appropriate data.

The ending result is that emissions are significantly increasing. The total transportation sector shows an increase of 229% over the time period with a 140% increase in gasoline and 319% increase in diesel. Much of this increase is driven by the VMT projections. One other caveat, as discussed earlier, is the ability to obtain vehicle registration data by vehicle age. This is not yet included in this analysis. The new CAFÉ standards are also not yet included in this analysis. The distribution by age or fleet turn over rate will be important here in the overall inventory results. Changes in those items would not have a huge impact but would be important to analyze the effects of CAFÉ standards. Compared to jet fuel/aviation, boats, ships and rail, most of the emissions in the state are being driven by onroad vehicles and significant increases in VMT.

Dr. Lonnie Ingram commented that he is amazed by the use of light duty trucks as compared to normal cars. Dr. Ingram asked if the mileage of the light duty trucks is so bad that it is causing a large contribution to the forecast emissions. Maureen clarified that it is more related to the projected increase in the use of light duty trucks. Buzz Hoover added that the price of diesel relative to the miles per gallon and life of the engine made diesel much more attractive than gasoline burning trucks, causing many autos to switch from gasoline powered engines to diesel powered engines. Bill Cowart also noted that the diesel trucks may be more attractive due to its power performance, for example the Ford F350s and other similar trucks.

Bill Cowart asked if the aviation and boat estimates are based on fuel sales. Maureen Mullen explained that aviation is projected on federal aviation's forecast of operations based on Florida, adjusted to reflect efficiency in passengers per mile. The boat and ship sector is more of an allocation of national fuel to the consumption in the state. Other DOE data is based on fuel sales but opted to take national data but base it on activity because sales do not necessarily reflect the use in the state.

A TWG member asked if there was any correlation with state tourism numbers. Maureen explained that state tourism numbers should be included in the VMT projections. The VMT data, however, does not distinguish between tourists and local residents. Yvonne Arens from FDOT will follow up with Kathy Neill on this issue.



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Larry Peterson pointed out the continued focus on highways and the data does not account for modal shifts.

Lewison asked Yvonne if the historical drivers of VMT in the state of Florida will be the same drivers in the future. Eric Hamilton also asked if fuel consumption was considered in the historical emissions. Maureen noted that the CO₂ is directly based on fuel consumption in the state and that VMT is used to calculate the forecast in addition to CH₄ and N₂O.

A TWG member noted that as a result of federal legislation, a lot of blended fuel is already in place from 2007 legislation, even before an expected E10 mandate in 2010 for Florida. Buzz Hoover, stated that although there might be a mandate later, many metropolitan areas are already using blended E10.

Tim Chapin suggested looking into some longitudinal data for mode shares. There are very few trips on transit or on train compared to other places because travel by auto is dominated in the state. The data could be pulled from census data on commute shares – i.e. how you get to work, whether via bike, ped, train, etc. These are all factors that affect VMT growth.

In the last call a TWG member asked about transportation energy use with regards to speed limits. Bill Cowart explained that there are two ways of thinking about this issue: (1) Steady state speed (cruising) with a maximum fuel economy between 45-55MPH. This is determined by the maximum efficiency and amount of air resistance and rolling resistance, where driving slower is not generally operating at peak efficiency. (2) Average speed with driving cycle. For example, on a major arterial road, the average MPH may be 35MPH, but a driver will lose fuel economy much faster with increased acceleration and deceleration as a result of stop and go traffic (i.e. stopping at stop lights).

A TWG member asked if it would be possible to make calculations for “what if” situations, like at 65MPH, etc.? Bill responded that this was possible and would also need to consider vehicle type, aerodynamics, safety, fuel savings, GHG reductions, and time costs. Yvonne noted that some interstates were not designed to handle 55MPH, depending on when the highway was built.

Agenda Item #5: Discussion of classification (H, M, L) of the FL Catalog of State's Actions

Lewison Lem continued the catalog discussion from the last meeting and Bill Cowart gave a brief overview of section TLU-2. The following outlines the discussion for the remaining



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sections of TLU-2 Land Use Efficiency and Modal Options, TLU-3 Heavy Duty Vehicles, TLU-4 Intercity Passenger Travel and TLU-5 Off-Road Vehicles.

TLU-2: Land Use Efficiency and Modal Options

- 2.1 General Location Efficiency (Transportation Land Use, Smart Growth)
- 2.2 Increasing Low-GHG Travel Options (Mode Share, Alternative Modes)
- 2.3 Incentives and Disincentives (Overlapping Economic Incentives)

2.1 General Location Efficiency

Howard Glassman noted that 2.1.8 Use of Flexible Transit Funding is more of a title than a reality. One of the issues with this is that more of the money is coming from local funding instead of FHWA, for example. 2.2.1 Make Full Use of CMAQ Funds may also be an issue as no CMAQ dollars are coming into Florida.

Bill Cowart also suggested that bundling options in this area may be an approach to think about.

Tim Chapin added that there is some research that came out in the last 3-5 years relating to policies that reduce VMT. The Journal of the APA, for example, stated a 10% increase in densification will reduce VMT by about 4%. Densification is one of the ways to get at reduced VMT as California is looking at it and everything stems from growth management. The point is that from 35 years in Florida, the state hasn't provided any active vision or guidance for densification to happen.

David Peebles agreed that a state growth management plan with emphasis on densification and TOD would cover a lot.

Tim Chapin also noted that 2.1.5 Smart Growth Planning, 2.1.6 Land Use Zoning, 2.1.9 Downtown Revitalization, 2.1.10-11 Infill and Redevelopment, and 2.1.12 all fall under this umbrella of smart growth and growth management. The priority should be an urban strategy and urban thrust to State's policy, and not so much on suburban.

2.2 Increasing Low-GHG Travel Options

This section covers bike, pedestrians, carpooling, and transit measures where the TWG could also think about bundling options.



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Tim Chapin stated that it would be one thing to put money into transit, and another to put money into something that supports transit and a land use pattern that supports the use of those alternative modes. Recent studies show that bike and ped only work when you have a land use pattern that supports those modes. For example, in Tallahassee, there is a lot of talk about improving bus services with marketing, stations, etc. but will not increase ridership because it's difficult to get to where you want to go. A city that has achieved densification, however, like Miami, is a real success in regards to bus transit and to some degree nationally in terms of ridership that gets people from major activity center to major activity center.

Another TWG member asked about best practice aspects. It helps when other cities or counties have gone or are going through their planning and provides a best management practice that could be integrated. FDOT has a transit office putting together materials. A TWG member expressed that examples and "how to's" would be very useful.

2.3 Incentives and Disincentives

It was explained that the idea here is to look at market incentives, and not necessarily subsidies. Shifts in land use patterns, financial barriers, etc. while some are stand alone options (i.e. PAYD) where it is not directly linked but does reduce VMT.

Tim Chapin shared that transportation literature shows that the best way to change transportation behavior is first through pricing, and second through land use. There is evidence that there is a real bang for the buck with some incentives and pricing mechanisms for the best state management plans and can start to see this through gasoline prices. If you want to reduce VMT, that is one way to get behavior change.

Bill Cowart noted that we have started doing pricing in this country with congestion pricing, cordon pricing in San Francisco, and PAYD.

TLU-3 Heavy-Duty Vehicles

3.1 Heavy Duty Vehicle Technologies

3.2 Heavy Duty Vehicle Operations (i.e. anti-idling activities)

3.3 Increasing Low-GHG Heavy Duty Travel Options (Different modal options for moving goods)

3.4 Heavy Duty Vehicle Incentives and Disincentives (i.e. For retiring vehicles, truck only lanes, etc.)



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Jeff Day noted that aerodynamics can have a big influence on fuel economy. Some of the vehicle technologies pay for themselves within 3-4 years. All large trucking firms have generally implemented these but capital costs may be a barrier for smaller firms that do not have the cash flow.

In addition, as related to 3.2.6, the idea was brought up to retrofit existing equipment as it will consume 1gallon/hour compared with an auxiliary power unit about 2/10 of a gallon would be consumed.

George Cervante added that Volvo, for example, is working on significant dual mode trucking for highways. Volvo is a major manufacturer in these which could be a good opportunity to replace equipment sooner. Product introductions for dual hybrid engines for class 8 and 9 trucks are expected early next year or late this year. While unproven at this point, they are considerably promising (3.4.2) to improve older, less efficient vehicles, and may be good to consider the prioritization of this option [incentives to retire or improve older less efficient vehicles] because it is hard for smaller companies to purchase with lack of capital funding.

TLU-4: Intercity Travel (Rail, Aviation, Bus)

Howard Glassman mentioned that commuter rail in 4.2 may be a good investment -- interurban rail, with what legislature is going through right now. It could also go back to travel option under TLU-2.

Another TWG member noted that the emphasis and energy seems to be focused on rail and bus networks to get a commuter rail program on the ground. With Tri-rail, Southwest regional, federal money coming in, and FDOT about to start a statewide process for passenger rail service, 4.2 is an area that is more involved in the legislature as opposed to 4.1 because of the high costs associated with it.

TLU-5: Off-Road Engines and Vehicles (Construction Equipment, Ports, etc.)

Larry Peterson asked what percentage of GHGs is emitted by this equipment. A member of the TWG responded that the percentage is fairly small for GHGs, however, the larger concern is local pollutants from two stroke engines, for example. In cities where there is a major port, the question is more related to goods movement from shipping, and the growth of shipping that is either in port or out of port.



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Agenda Item#7: Review of Balloting Process

CCS will be asking for each member's top ten priorities and make notes for bundling suggestions. Priorities to be recommended to the Action Team are not limited to ten but the TWG will talk through the priorities and balloting results on the next call.

The group will consider options from the full catalog of options created. Members should consider options for both reduction potential and technical feasibility. The members were reminded that this process is intended to be a long range planning process, possibly out to 2050.

The members will be sent a ballot with instructions and the ballots will be due no later than Tuesday May 6, 2008 at 5PM EDT.

Agenda Item#8: Agenda, Time and Date for Next Meetings.

The next meeting of the TLU TWG is scheduled for Wednesday May 14, 2008, 1:00 PM – 3:00 PM EDT.

Agenda Item#9: Public Comments and Announcements.

Jim Long added that one of the options that were not covered is current restrictions on truck configurations for length, weight, etc. If a truck can be safely configured to handle more, it may help in reducing GHGs. Currently, there are federal restrictions and should possibly consider revisiting this to reduce the number of trucks on the road (3.1.4). Many of Western states allow a triple trailer configuration which is twice as efficient as what is allowed in Florida – 50% more efficient, and you can reduce number of trucks by increasing efficiency by those already on the road.