

National Capital Region Transportation Planning Board

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Item #5

MEMORANDUM

December 11, 2008

TO: Transportation Planning Board

FROM: Ronald F. Kirby
Director, Department of
Transportation Planning

RE: Letters Sent/Received Since the November 19th TPB Meeting

The attached letters were sent/received since the November 19th TPB meeting. The letters will be reviewed under Agenda #5 of the December 17th TPB agenda.

Attachments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

DEC - 5 2008

Honorable Martin O'Malley
Governor of Maryland
100 State Circle
Annapolis, Maryland 21401

Dear Governor O'Malley:

On August 18, 2008, the U.S. Environmental Protection Agency (EPA) wrote to you regarding Maryland's recommendations on the status of fine particle pollution (PM_{2.5}) throughout the state. That letter transmitted the EPA's preliminary concurrence with most of Maryland's recommendations on air quality designations for the 2006 24-hour PM_{2.5} standard, submitted in your December 17, 2007 letter to EPA. EPA's August 18, 2008 letter also proposed to modify Maryland's recommendations for the Washington, District of Columbia (D.C.) area because, based upon 2005 to 2007 air quality monitoring data, the Washington, D.C. area is now in attainment. By letter dated August 28, 2008, the Honorable Shari T. Wilson, Maryland's Department of the Environment Secretary, relayed your concurrence with EPA's modifications.

On September 2, 2008, EPA published a notice in the Federal Register to solicit public comments on our intended area designations for the 2006 24-hour PM_{2.5} standard. Based upon public comment received, EPA determined that it was appropriate to further analyze the technical information used to support EPA's recommendations. This letter is to inform you that, based on EPA's further analysis of that technical information, EPA intends to make additional modifications to Maryland's December 17, 2007 recommendations regarding the Baltimore nonattainment area for the 2006 24-hour PM_{2.5} standard. Specifically, EPA intends to add Montgomery and Prince George's Counties, Maryland to the Baltimore nonattainment area. EPA is providing you with an opportunity to discuss such modifications with EPA prior to EPA's final designation determination relating to these counties.

EPA has enclosed a detailed description of the area where EPA intends to make additional modifications to Maryland's recommendations, and the basis for such additional modifications. Should you have additional information that you wish to be considered by EPA in this process, please provide it to EPA Region III by February 3, 2009.

EPA intends to take final action on the boundaries recommended for the Baltimore nonattainment area in EPA's August 18, 2008 modification letter (the City of Baltimore and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties) on December 18, 2008.

EPA intends to make a final designation decision relating to inclusion of Montgomery and Prince George's Counties within the Baltimore nonattainment area for the 2006 24-hour PM_{2.5} standard on or before April 6, 2009.

If you have any questions, please do not hesitate to contact me or have your staff contact Ms. Judy Katz, Director of Region III's Air Protection Division, at 215-814-2654. EPA looks forward to a continued dialogue with you as we work together to implement the PM_{2.5} standards.

Sincerely,



Donald S. Welsh
Regional Administrator

Enclosures

cc: Honorable Shari T. Wilson, Secretary
Maryland Department of the Environment

Mr. George S. Aburn, Director
Air and Radiation Management Administration
Maryland Department of the Environment

Enclosure 1

**Maryland
Area Designations for the 2006 24-Hour
Fine Particle National Ambient Air Quality Standard**

The table below identifies the counties in Maryland that EPA intends to designate as not attaining the 2006 24-hour fine particle standard.¹ A county will be designated as nonattainment if it has an air quality monitor that is violating the standard or if the county is determined to be contributing to the violation of the standard.

Area	Maryland Recommended Nonattainment Counties	EPA's Intended Nonattainment Counties
Baltimore	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County Montgomery County Prince George's County

EPA intends to designate the remaining counties as "attainment/unclassifiable."

¹ EPA designated nonattainment areas for the 1997 fine particle standards in 2005. In 2006, the 24-hour PM_{2.5} standard was revised from 65 micrograms per cubic meter (average of 98th percentile values for three consecutive years) to 35 micrograms per cubic meter. The level of the annual standard for PM_{2.5} remained unchanged at 15 micrograms per cubic meter (average of annual averages for three consecutive years).

Enclosure 2

Description of the Contributing Emissions Score

The Contributing Emissions Score (CES) is a metric that takes into consideration emissions data, meteorological data, and air quality monitoring information to provide a relative ranking of counties in and near an area. Using this methodology, scores were developed for each county in and around the relevant metro area. The county with the highest contribution potential was assigned a score of 100, and other county scores were adjusted in relation to the highest county. The CES represents the relative maximum influence that emissions in that county have on a violating county. The CES, which reflects consideration of multiple factors, should be considered in evaluating the weight of evidence supporting designation decisions for each area.

The CES for each county was derived by incorporating the following significant information and variables that impact fine particle ($PM_{2.5}$) transport:

- Major $PM_{2.5}$ components: total carbon (organic carbon (OC) and elemental carbon (EC)), sulfur dioxide (SO_2), nitrogen oxides (NO_x), and inorganic particles (crustal).
- $PM_{2.5}$ emissions for the highest (generally top 5%) $PM_{2.5}$ emission days (herein called "high days" or "high $PM_{2.5}$ days") for each of two seasons, cold (October-April) and warm (May-September).
- Meteorology on high days using the NOAA HYSPLIT model for determining trajectories of air masses for specified days.
- The "urban increment" of a violating monitor, which is the urban $PM_{2.5}$ concentration that is in addition to a regional background $PM_{2.5}$ concentration, determined for each $PM_{2.5}$ component.
- Distance from each potentially contributing county to a violating county or counties.

A more detailed description of the CES can be found at
http://www.epa.gov/ttn/naaqs/pm/pm25_2006_techinfo.html#C.

G. STANLEY DOORE

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2008 November 17

Michael J. Knapp, President
& Members
Montgomery County Council
100 Maryland Avenue
Rockville MD 20850

Isaiah Leggett, County Executive
Montgomery County Maryland
101 Monroe Street #200
Rockville MD 20850

Choice of transit mode for the Purple Line is crucial from cost, efficiency, flexibility, and service to the public standpoints.

Bus Rapid Transit (BRT) is far less expensive and more flexible than light rail (LRT). BRT also can provide more service than a single corridor LRT trolley line since buses can go into business parks, residential areas and shopping centers before getting onto a BRT busway.

Volume 14, No. 2, 2008 of Intellimotion describes Automated Bus for Bus Rapid Transit on City Streets. See the attached article. Intellimotion is published by California PATH (Partners for Advanced Transit and Highways). PATH is "a collaboration between the California Department of Transportation (Caltrans), the University of California, other public and private academic institutions, and private industry."

The cost of LRT is more than three times that of BRT and LRT doesn't have the flexibility of BRT. BRT can be integrated into traditional bus routes too.

The automated precision bus docking system described in the Intellimotion article says it can stop within one centimeter laterally and, it could negate the need to deploy wheelchair ramps.

Elevated monobeam (cantilevered monorail) is also better than LRT since monobeam can travel up to 70 mph in urban areas and more than 200 mph for intercity travel. It could be a system. Monobeam costs about the same as LRT to construct. Operational driverless elevated monobeam has about the same capacity of heavy rail (HRT) like Metrorail while operational costs are about 60 percent of LRT and HRT. Incidentally, light rail means low capacity while heavy rail means high capacity.

Therefore, it makes no sense to build a LRT Purple Line in Montgomery County or a LRT Red Line in Baltimore. Using the docking technology described in Intellimotion, it can make BRT much more efficient and less expensive than to provide a full guideway system. It could be extended from the automated docking system in the future. Furthermore, if high capacity is needed, elevated driverless monobeam, which would cost a fraction of Metrorail, could be added in certain corridors.

Regards,

Attachment


John Porcari, MD Secretary of Transportation
Metropolitan Washington Council of Governments ✓

Automated Bus for Bus Rapid Transit Debuts on City Street

Sarah Yang
UC Berkeley Media Affairs

The thought of a bus moving along city streets while its driver has both hands off the wheel is alarming. But a special bus introduced today (Friday, Sept. 5), steered not by a driver, but by a magnetic guidance system developed by engineers at the University of California, Berkeley, performed with remarkable precision.

The 60-foot research bus was demonstrated along a one-mile stretch of E. 14th Street in San Leandro that was embedded with a series of magnets. Special sensors and processors on board the bus detected the magnets in the pavement and controlled the steering based upon the information it received. The driver maintained control of braking and acceleration, but the steering was completely automated, allowing the bus to pull into stops to within a lateral accuracy of 1 centimeter, or about the width of an adult pinky finger.

Researchers say such precision docking would help shave precious seconds off of the time to load and unload passengers at each stop, adding up to a significant increase in reliability and efficiency over the course of an entire bus route. For example, precision docking could potentially negate the need to deploy wheelchair ramps and make passenger queuing more efficient.

Moreover, the ability to more precisely control the movement of the bus reduces the width of the lane required for travel from 12 feet - the current standard - to 10 feet, researchers say.

The California Department of Transportation (Caltrans) has provided \$320,000 to fund this Automated Bus Guidance System demonstration project, conducted by the California Partners for Advanced Transit and Highways (PATH) program based at UC Berkeley.



"Today's demonstration marks a significant step in taking the technology off of the test track at UC Berkeley's Richmond Field Station towards deployment onto real city streets," said Wei-Bin Zhang, PATH transit research program leader at UC Berkeley. "We have seen increasing interest among transit agencies in this technology because of its potential to bring the efficiency of public bus service



Chris Peoples, President of AC Transit's Board of Directors



Sean Mazzari, Deputy for Caltrans District 4

to a level approaching that of light rail systems, but at a much lower overall cost."

California PATH researchers have been studying magnetic guidance systems as a means of controlling vehicle movement for nearly 20 years with significant funding from Caltrans and the U.S. Department of Transportation. They have showcased how the technology can control a platoon of passenger cars speeding along high occupancy vehicle (HOV) lanes in Southern California, as well as industrial

vehicles such as snowplows and tractor trailers in Northern California and Arizona. Today's test run along E. 14th Street marks the first application of magnetic guidance technology for use in transit buses on a public road.

"It is our mission to improve mobility across California, and maximizing transportation system performance and accessibility through this technology helps us to achieve our mission,"

Magnet installation.



said Larry Orcutt, chief of the Caltrans Division of Research and Innovation. "The rising cost of fuel has created greater interest in public transit. This technology could convince more people to get out of their cars and onto buses, and as a result, reduce congestion."

In the system demonstrated today, sensors mounted under the bus measured the magnetic fields created from the roadway magnets, which were placed beneath the pavement surface 1 meter apart along the center of the lane. The information was translated into the bus's lateral and longitudinal position by an on-board computer, which then directed the vehicle to move accordingly. For a vehicle traveling 60 miles per hour, data from 27 meters (88 feet) of roadway can be read and processed in 1 second.

Zhang added that the system is robust enough to withstand a wide range of operating conditions, including rain or snow, a significant improvement to other vehicle guidance systems based upon optics. Researchers also pointed out that magnetic guidance technology allows for a bus to safely follow closely behind another. Extra vehicles, much like extra cars on light rail trains, could thus be added during peak commute times.



Wei-Bin Zhang, Program Leader for Transit Research, California PATH

Operations

In the E. 14th Street demonstration, the magnetic guidance system was only used to control the steering for the bus, but on test tracks it has been used for full vehicle control - including braking and accelerating - creating a true "auto-pilot" system for the bus. At any time, the driver can resume manual control of the bus.

Potential applications for the system include automating bus passage through narrow tollbooths and vehicle routing in bus maintenance yards. The system could be integrated into traditional bus routes, as shown on E. 14th Street, or used as part of more advanced bus rapid transit (BRT) systems that could include a dedicated traffic lane. Many cities throughout the world, including 20 in the United States, have deployed some form of BRT, although only a few include dedicated bus-only lanes.

Today's demonstration included a special industry presentation attended by dozens of representatives from California transit agencies interested in whether PATH's magnetic guidance technology might fit with their own BRT plans.

On some routes in the Bay Area, AC Transit currently operates a version of bus rapid transit that includes electronic signs informing riders of when to expect the next bus. However, the transit agency is currently in the midst of preparing an Environmental Impact Report for a proposed BRT project that could include bus-only lanes along an 18-mile stretch from downtown Berkeley near the UC Berkeley campus south to San Leandro's Bay Fair BART station.

"AC Transit is a leader promoting advanced technologies for transit buses. As such, we are continually investigating new technologies to improve the performance, safety and comfort of buses," said Chris Peeples, president of AC Transit's board of directors. "The magnetic guidance system developed at UC Berkeley can both improve safety and provide a smoother ride for our passengers. The system has the potential to make bus rapid transit routes - particularly those that involve bus-only lanes - as efficient as light rail lines, which in turn will make buses more effective in getting people out of their cars."

AC Transit puts the cost of its BRT proposal at \$273 million, while a comparable light rail system would cost around \$2 billion. Zhang said that adding the magnetic guidance technology to AC Transit's proposed BRT project would help it run more like a light rail system for an additional \$5 million. The Valley Transportation Agency has also compared the costs of BRT and light rail systems for its planned Santa Clara Alum Rock Transit Improvement Project. The estimated cost for BRT came in at \$128 million, compared with \$393 million for light rail.

AC Transit is joining Caltrans and the U.S. Department of Transportation in funding the next stage of the Automated Bus Guidance System project as it becomes part of the federal Vehicle Assist and Automation Program. The project will expand to AC Transit routes along Interstate 880 and the San Mateo Bridge, and to a dedicated BRT route in Eugene, Ore.

"Ultimately, it's up to the community to decide which transit option is best for its members," said Zhang. "Our job is to develop the technology that can help improve whatever form of transportation is used." ☺



Bus entering bus stop while under automated steering control.

National Capital Region Transportation Planning Board

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MEMORANDUM

TO: Transportation Planning Board

FROM: Ronald F. Kirby,
Director, Department of
Transportation Planning

SUBJECT: Report on the November 19 & 22, 2008 Community Leadership Institute (CLI)

DATE: December 11, 2008

This memorandum provides a brief report on the fifth edition of the TPB's Community Leadership Institute (CLI), which was held on the evening of Wednesday, November 19, and on Saturday, November 22.

The TPB's Community Leadership Institute is a two-day workshop designed to help participants learn how to get involved more effectively in transportation decision-making in the Washington Region. It has also been useful in helping the TPB reach out to communities and groups that typically have not been involved in the TPB process. A pilot version of the Institute was held in April 2006, and subsequent workshops were conducted in October 2006, June 2007, and April 2008. Over the course of two days, participants learn about how, where and when transportation decisions are made in the Washington region. The curriculum also includes information about the various planning processes at the state, regional and local levels. Information about key regional transportation challenges are woven into the curriculum, including the need for improved coordination between transportation and land use, and the regional transportation funding shortfall.

This was a unique edition of the CLI, as the audience was made up of local-level elected officials who wanted to learn more about the regional transportation planning process and the role of the TPB. This approach was inspired by the participation at the April 2008 CLI by TPB alternate Patrick Wojahn of College Park, who found the sessions worthwhile and potentially of value to other elected officials. The group included one new TPB member, Mayor Todd Turner of the City of Bowie.

The CLI program was altered somewhat from previous versions to be tailored to this distinguished audience, with the largest change being the addition of the Past Chairs Panel during the Saturday session. Past (and current) TPB Chairs Cathy Hudgins, John Mason, and Phil Mendelson, joined past Chair and CLI facilitator Kathy Porter on a panel with decades of combined experience working on regional transportation challenges in the Washington Metropolitan Area. The panel discussion was moderated by another past Chair and other CLI facilitator Peter Shapiro. I'm very grateful for the involvement of all of these individuals, as were the CLI participants.

Feedback from participants was once again positive, with many saying that the background on regional transportation issues and processes will be helpful in their professional and political pursuits.

Attached is a copy of the CLI agenda and the participant list. TPB staff and CLI facilitators are appreciative of the assistance that many of you provided in identifying potential participants. We hope to get into a routine of holding at least two editions of the CLI each calendar year, and given the success of this past event, we may hold another CLI for elected officials.

AGENDA

**National Capital Region
Transportation Planning Board
COMMUNITY LEADERSHIP INSTITUTE**

**November 19 & 22, 2008
Metropolitan Washington Council of Governments
777 North Capitol St, NE
1st Floor Training Center/3rd Floor Board Room
Washington, DC 20002**

Day One: *What's the Problem?*

Wednesday, November 19, 6:00–9:00 p.m.; 1st Floor Training Center

- 6:00 – 6:30** **Sign-in and Dinner**
- 6:30 – 6:45** **Welcome and Introductions**
Peter Shapiro, Former TPB Chair and Former Prince George's County Councilmember; Senior Fellow, Academy of Leadership, University of Maryland
- 6:45 – 7:20** **Transportation Prioritization Exercise**
An exercise to identify participants' priority transportation projects.
Peter Shapiro
- 7:20 – 7:30** **Break**
- 7:30 – 7:45** **Presentation: Overview of the TPB and Regional Transportation Challenges**
Introductory presentation that explains the TPB and the transportation and land-use challenges facing the region. "Transportation funding is tight. Congestion is growing. And the challenges facing our regional transportation system are expected to get worse."
Sarah Crawford, COG/TPB Staff
- 7:45 – 8:30** **What If the Washington Region Grew Differently? (Activity)**
Working in break-out groups, participants will create transportation and land-use scenarios that address regional challenges. (includes time for brief group reports)
Darren Smith, COG/TPB Staff
- 8:30 – 8:50** **Presentation: What If the Washington Region Grew Differently? (Part II)**
TPB scenarios presentation and brief Q&A
Darren Smith
Kathy Porter, Former TPB Chair and Former Mayor of Takoma Park, Md.; Professional Facilitator
- 8:50 – 9:00** **Wrap-up and Distribution of Selected Materials for Saturday Activity**

Day Two: Thinking Regionally, Acting Locally

Saturday, November 22, 8:30 a.m.–2:30 p.m.; 3rd Floor Board Room

- 8:30 – 9:00** **Continental Breakfast**
- 9:00 – 9:05** **Welcome**
Kathy Porter
- 9:05 – 9:25** **Presentation: *Transportation Project Development, Part I: The Process***
Participants will get a basic overview of transportation planning process aspects of community level transportation planning, including the roles and responsibilities of key players.
Ron Kirby, Director, COG Department of Transportation Planning
- 9:25 – 10:45** **Activity: Strategizing for Change**
This exercise will guide participants through the process of gathering information on local projects and experience the relationships among different agencies, officials and community leaders.
Kathy Porter
- 10:45 – 11:00** **Break**
- 11:00 – 11:30** **Activity Reporting Back**
Each group will share their experience from the strategizing activity, and engage in a facilitated discussion.
Kathy Porter
- 11:30 – 12:00** **Presentation: *Transportation Project Development, Part II: The Real World***
Transportation issues often flow beyond jurisdictional boundaries. The presentations will focus on the regional context of project development, including case studies.
Rex Hodgson, COG/TPB Staff
Beth Newman, COG/TPB Staff
Darren Smith, COG/TPB Staff
- 12:00 – 12:30** **Q&A on Morning Activity and Presentations**
Kathy Porter and Peter Shapiro
- 12:30 – 1:00** **Lunch**
- 1:00 – 2:15** **Past Chairs Panel**
Facilitated by Peter Shapiro
Invited Panel:
Phil Mendelson, TPB Chair and Member of the District of Columbia Council
Cathy Hudgins, Former TPB Chair and Current TPB Member, and Member of the Fairfax County Board of Supervisors
John Mason, Former TPB Chair and Current Executive Director, Northern Virginia Transportation Authority
Kathy Porter, Former TPB Chair and Former Mayor of Takoma Park, Md.
- 2:15 – 2:30** **Closing and Evaluations**

**National Capital Region - Transportation Planning Board
COMMUNITY LEADERSHIP INSTITUTE, November 19 & 22, 2008**

FINAL

Participants

1. Carol Braegelmann	Alexandria, VA	Alexandria Transportation Commission	
2. Colleen Clay	Takoma Park	Councilmember, City of Takoma Park	cclay@cns.gov
3. Peter Fosselman	Kensington, MD	Mayor, Town of Kensington	fosselman@comcast.net
4. Eugene Grant	Seat Pleasant, MD	Mayor, City of Seat Pleasant	eugene.grant@seatpleasantmd.gov
5. Janae Grant	Washington, DC	Advisory Neighborhood Commission 5C	5A11@anc.dc.gov
6. Walter Lee James	Bladensburg, MD	Mayor, Town of Bladensburg	wljamesjr@hotmail.com
7. Andy Litsky	Washington, DC	Advisory Neighborhood Commission 6D	alitsky@aol.com
8. Nathan McCray	Greenbelt, MD	United States Senate Environment and Public Works Committee	Nathan_McCray@epw.senate.gov
9. Sedrick Muhammad	Washington, DC	Office of Councilmember Jim Graham	smuhammad@dccouncil.us
		Advisory Neighborhood Commission 1B	
10. Richard Parsons	MD	Former President, Montgomery County Chamber of Commerce	rparsons@rodgers.com
11. Kevin Posey	Alexandria, VA	Alexandria Traffic and Parking Board	kposey12@comcast.net
12. J.B. Shoatz	Washington, DC	Advisory Neighborhood Commission 8B	jbmrcorpany@yahoo.com
13. Jeffrey Slavin	Somerset, MD	Mayor, Town of Somerset	mayor@townofsomerset.com
14. Todd Turner	Bowie, MD	Bowie City Council	tmtturner@cityofbowie.org

Past Chairs Panel

Phil Mendelson, Chairman of the Transportation Planning Board and Member of the District of Columbia Council

Cathy Hudgins, Former Chair of the Transportation Planning Board and Member of the Fairfax County Board of Supervisors

John Mason, Former Chair of the Transportation Planning Board

Kathy Porter, Former Chair of the Transportation Planning Board

Hosts and Organizers

- Ron Kirby, Director, Department of Transportation Planning
- Sarah Crawford, COG/TPB staff – scrawford@mwkog.org
- Rex Hodgson, COG/TPB staff – rhodgson@mwkog.org
- Wendy Klancher, COG/TPB staff – wklancher@mwkog.org
- Beth Newman, COG/TPB staff – bnewman@mwkog.org
- Jonathan Rogers, COG/TPB staff – jrogers@mwkog.org
- Darren Smith, COG/TPB staff – dsmith@mwkog.org
- Peter Shapiro, Director, Rawlings Center for Public Leadership, University of Maryland
- Kathy Porter, Former Mayor, City of Takoma Park, MD