

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

Item #5

MEMORANDUM

February 15, 2012

TO: Transportation Planning Board

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

RE: Letters Sent/Received Since the January 18th TPB Meeting

The attached letters were sent/received since the January 18th TPB meeting. The letters will be reviewed under Agenda #5 of the February 15th TPB agenda.

Attachments

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

December 31, 2012

Dear Governor, Mayor, or Legislative Representative:

At its meeting on December 19, 2012, the National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the Washington region, was briefed on the most recent population, household, and employment forecasts for the region through 2040, and on the expected performance over that period of the financially constrained long range transportation plan (CLRP) adopted by the TPB in July of 2012. The [briefing](#) underscored the urgent need for additional transportation revenues, beyond those identified in the CLRP, to ensure that the region's highway and transit systems are adequately maintained over this period, and that increases in capacity can be provided to support population and employment growth throughout the region in a manner that strengthens coordination between transportation and land use.

The TPB develops forecasts of transportation revenues "reasonably expected to be available" through 2040 for supporting the CLRP, in accordance with federal planning regulations. Current forecasts show the states of Maryland and Virginia and the District of Columbia accounting for 39 percent of the total available revenue through 2040. This state funding is the largest single contributor to the expected revenues, followed by transit fares at 24 percent, the federal government at 18 percent, local governments at 12 percent, and tolls and other private sources at seven percent. The TPB also notes and greatly appreciates the Maryland, Virginia and District of Columbia contributions of \$50 million each annually to match the \$150 million provided by the federal government to address major rehabilitation needs of the Metrorail system.

In recognition of the crucial role of the states of Maryland and Virginia and the District of Columbia in providing transportation funding to the Washington region, TPB members agreed to transmit this letter to the governors, mayor, and legislative representatives of the three jurisdictions supporting efforts to enact revenue increases for transportation.

The TPB recognizes that each of the three jurisdictions will need to develop its own approach to raising additional transportation revenue, and the Board does not presume to recommend a specific set of revenue sources for any particular jurisdiction. In general, however, the TPB believes that additional revenues should be sought from:

- increases in fuel taxes and other user-based taxes and fees;
- pricing strategies enabled by emerging technology for all modes of travel, including rates that vary by time of day, type of vehicle, level of emissions, and specific infrastructure segments; and
- inclusion of major transportation investments in legislation to create infrastructure banks or bonding programs.

The TPB also recognizes that needs for transportation maintenance, rehabilitation, and capacity increases will vary considerably throughout each individual jurisdiction. Ideally, new legislative initiatives aimed at raising additional transportation revenues should provide for different areas and

locations to obtain the levels of revenue they need without necessarily imposing the same level and type of fees on every area throughout the individual state or jurisdiction. Local option taxes and fees provide one approach to addressing this need, as do mechanisms to encourage private sector participation in significant transportation investments through development districts, facility-based roadway tolls, or proffers and adequate facilities ordinances designed to reflect additional transportation needs generated by particular development projects. After first addressing growing statewide obligations, states should consider enacting legislation that enables localities to augment state and federal funding with local revenue sources.

Examples of approaches for raising transportation revenues employed locally and in other states and localities are provided in Attachment A to this letter. This attachment was prepared recently for the TPB by Arlee Reno, the lead author of an analysis of financial resources prepared in support of the 2010 update of the CLRP.

The TPB members and staff would be pleased to provide any specific information that you would find helpful in deliberations about alternate approaches to raising transportation revenues, and to appear before appropriate transportation committees for further discussion of these approaches. Please feel free to contact me directly at tturner@cityofbowie.org, or Ronald Kirby, staff director to the TPB, at rkirby@mwkog.org, if you would like any additional information or consultation.

Thank you for considering the views of the TPB with regard to the very important challenge of raising new transportation revenues.

Sincerely,



Todd M. Turner
Chairman
National Capital Region
Transportation Planning Board

Attachment A

Attachment A

Examples of Approaches for Raising Transportation Revenues

Prepared for the TPB by Arlee Reno

December 2012

(1) **Current Gasoline or Motor Fuel Taxes (Per Gallon)** - The motor fuel tax is the most important source of highway revenue. This is comprised of the taxes on motor fuels such as gasoline, diesel, liquefied petroleum gas, and gasohol. Currently, each jurisdiction collects varying levels of all taxes, including the gasoline tax:

- **Virginia** - 17.5 cents per gallon (last adjusted in 1986) with a two percent tax in localities that are part of the Northern Virginia Transportation District;
- **Maryland** - 23.5 cents per gallon (last adjusted in 1992); and
- **District of Columbia** - 23.5 cents per gallon (last adjusted in 2009).

Each of these jurisdictions is examining how to enhance future revenues, including consideration of such sources as motor fuel taxes, tolls, and other sources.

Revenue options related to motor fuel taxes include: 1) raising the motor fuel excise tax; 2) indexing the motor fuel tax; 3) sales tax on fuel; and 4) other taxes such as an oil company franchise tax (Pennsylvania) or a petroleum business tax (New York).

(2) **Raising the Per Gallon Motor Fuel Tax Rates** - For the entire ten year period of 2000 through 2010, twenty-two (22) states and the District of Columbia changed their motor fuel tax rates. Thus, most states including Maryland and Virginia did not raise fuel taxes even over an entire 10 year period. Seven of those who raised rates through indexing are shown below. Motor fuel taxes account for most of the Federal revenues used for highway and transit programs and for almost half of the revenues used by states to fund highway needs. In addition to being one of the main revenue sources for state highway expenditures, state motor fuel tax levies also are commonly distributed to local governments and are used to pay debt service on bonds issued for transportation projects. Ohio and Washington State are examples of states that have increased the motor fuel per gallon tax in recent years.

- **Ohio.** In 2002, the Ohio Legislature designated a task force to evaluate the status of the state gas tax and to provide recommendations on how to meet

the State's transportation needs. As a result, the motor fuel tax rate was increased by 6 cents per gallon to 28 cents per gallon.

- **Washington.** Motor fuel tax rates have been increased twice in recent years. First, the motor fuel tax rate was increased by five cents per gallon in 2003, and a second motor fuel tax rate increase of 9.5 cents per gallon was enacted in 2005. Washington State previously conducted a comprehensive study of the potential role of tolling and is now conducting a comprehensive study of road usage fees.

FHWA's Highway Statistics reports that locally generated motor fuel taxes accounted for approximately three percent of the total local revenues for highways. Similarly, motor fuel taxes account for a small share of the revenue used for transit expenditures, accounting for two percent of the state and local revenues.

- (3) **Indexing the Fuel Tax to Inflation or Prices** - Indexing the fuel tax can protect existing fuel tax revenues from the impacts of inflation. Currently, several states adjust fuel tax rates based either on the consumer price index (CPI) or on changes in fuel prices. States including Florida, Maine, and Wisconsin adjust their fuel tax rates annually based on inflation. Other states, such as Kentucky, Nebraska, North Carolina, New York, Pennsylvania, and West Virginia, have a variable component that is adjusted based on the price of motor fuel. The table below shows examples of states which have successfully increased revenues by using indexing.

States Which Indexed Rates of Motor Fuel Taxes 2000 to 2010

State	Type of Adjustment	Change in Rate 2000 to 2010 in Cents per Gallon
Wisconsin	Annual	25.8 to 30.9
West Virginia	Annual	25.35 to 32.2
Pennsylvania	Annual	25.9 to 31.2
New York	Annual	21.45 to 24.35
Nebraska	Quarterly	23.9 to 27.1
Maine	Annual	19 to 29.5
Kentucky	Annual	16.4 to 25.6

Source: FHWA Highway Statistics, 2010.

- (4) **Sales Tax on Motor Fuel** - In addition to the traditional motor fuel excise taxes, some states also collect sales taxes on motor fuels, including California (6.0 percent), Georgia (4.0 percent), Hawaii (4.0 percent), Illinois (6.25 percent),

Indiana (6.0 percent), Michigan (6.0 percent), and New York (4.0 percent). These rates do not include any county or local taxes that also may be levied on motor fuel in these states. In some instances, revenues from sales taxes on motor fuel are not completely dedicated for transportation, as is the case of California and Georgia, where a portion goes to the general fund. In Indiana, none of the receipts of sales taxes on motor fuels is dedicated for transportation.

States Which Use Sales Taxes in Addition to Motor Fuel Taxes

State	Price Application	Sales Tax Rate
California	Price including tax	6 %
Colorado	Price including tax	3 %
Connecticut	Petroleum products gross	5 %
Georgia	3% fuels and 1 % sales	4 %
Hawaii	Price excluding st/fed taxes	4 %
Indiana	Price excluding taxes	5 %
Michigan	Price including fed tax	6 %
New York	Price including fed tax	4 %

Source: FHWA Highway Statistics, 2010.

- (5) **Vehicle Miles of Travel (VMT) Fees** - Some states are anticipating a time when the fuel tax may not be adequate to fund transportation improvement needs, and are researching alternative fees based on VMT. The University of Iowa conducted an initial pioneering study on the viability of such a system using global positioning systems (GPS) in 2002.¹ The National Cooperative Highway Research Program (NCHRP) and the I-95 Corridor Coalition have conducted recent research on mileage based user fees, and there is a mileage based user fee group which continues to monitor this topic. The state of Oregon also is continuing to field-test technologies for collecting mileage fees. The Oregon DOT (ODOT) has conducted a pilot test designed to demonstrate the technical and administrative feasibility of implementing an electronic collection system for mileage-based user fees and congestion tolls. Other states and regions have conducted field tests, coordinated by the University of Iowa.
- (6) **Sales Taxes and General Revenues** - Martin Wachs of the Rand Corporation, in a November 2012 presentation "Interconnection of Energy Use, Pricing, and Finance" at a Transportation Research Board conference identified that the

¹ Forkenbrock, David J., and Jon G. Kuhl. *A New Approach to Assessing Road User Charges*. Iowa City, Iowa: Public Policy Center, The University of Iowa, July 2002.

largest sources of recent funding increases for transportation have been general revenues and sales taxes. The Center for Transit Excellence has tracked the success or failure of transit ballot measures for sales taxes and bonding and has documented that from 2003 through 2009 from 65 percent to 83 percent of transit ballot measures were approved each year, illustrating the very substantial public support for well targeted revenue measures.

- (7) **New Toll Roads and High-Occupancy Toll (HOT) Lanes** - HOT lanes are lanes for which single-occupancy vehicles (SOV) buy the right to use the excess capacity available in exclusive lanes that are otherwise reserved for high-occupancy vehicles (HOV) that pay no tolls. HOT lanes allow an SOV to pay a toll to use HOV lanes that have excess capacity. New toll facilities such as the Inter-county Connector and new HOT lanes such as on the Virginia beltway have been major regional initiatives. It has been critical that tolls have been recognized in these projects as not sufficient for funding the entire set of improvements, but as important components of overall funding for the projects. There are few if any new facilities which could be funded entirely from tolls.

The new two year federal reauthorization legislation, MAP 21, makes some modest changes to facilitate toll initiatives. FHWA describes the toll provisions of MAP 21 as follows: "MAP-21 makes changes to the statutory provisions governing tolling on highways that are constructed or improved with Federal funds (23 USC 129). One significant change is the removal of the requirement for an agreement to be executed with the U.S. DOT prior to tolling under the mainstream tolling programs (though such agreements will continue to be required under the toll pilot programs). Other changes include the mainstreaming of tolling new Interstates and added lanes on existing Interstates, which was previously allowed only under the *Interstate System Construction Toll Pilot Program* and the *Express Lanes Demonstration Program*. The *Value Pricing Pilot Program*, which allows congestion pricing, is continued (but without discretionary grants), as is the *Interstate System Reconstruction and Rehabilitation Pilot Program*, which allows tolling of all lanes on an existing Interstate highway when required for reconstruction or rehabilitation. MAP-21 also requires that all Federal-aid highway toll facilities implement technologies or business practices that provide for the interoperability of electronic toll collection by October 1, 2016 (four years after the enactment of MAP-21's new tolling requirements)."

- (8) **Local Option Taxes** - Local options taxes have been adopted in one form or another in at least 46 states.² They include mechanisms such as state-authorized local options sales, gasoline, income, and vehicle taxes and fees. The application and level could be at the local or regional level. These taxes are often dedicated to specific transportation projects or programs. Listed below are specific examples of local option taxes.

² University of California at Berkeley. *Local Options Taxes in the United States*. March 2001.

- **Transportation User Fee.** The City of Austin, Texas utility bills include a “Transportation User Fee” (TUF), which averages \$30 to \$40 annually for a typical household (City of Austin Code 14-10).
- **Local Option Gas Taxes (LOGT) – Florida.** Local governments in Florida have the option of implementing up to 11 cent per gallon on local gas taxes for funding transportation improvement projects, including transit. Of the 67 counties in Florida, 16 counties levy the maximum rate (i.e., 11 cents per gallon) of local gas tax. Most counties levy at least 6 cents per gallon.
- **Vehicle Taxes – Ohio.** Local governments in Ohio can levy up to \$20 in vehicle license registration fees, in increments of \$5.
- **Sales Taxes – Missouri.** Local governments in Missouri have the authority (subject to voters’ approval) to implement local sales taxes, ranging from 0.125 percent to 1 percent, for capital improvements and transportation-specific improvements (including roadways, bridges, and transit capital and operations).
- **Property Taxes – Michigan.** Michigan legislation allows for the implementation of property taxes dedicated to public transportation. In 2004, 13 counties in Michigan voted to continue or increase property taxes to support public transportation investments. In 2005, six property tax proposals were approved by voters.
- **Income or Payroll Taxes – Oregon.** Lane County Transit and the Tri-County Metropolitan Transportation District of Oregon (TriMet) levy 0.6 percent and 0.6418 percent, respectively, in payroll and self-employment taxes, which are dedicated to public transportation.

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MEMORANDUM

Date: January 23, 2013

To: National Capital Region
Transportation Planning Board

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

Re: US Department of Energy (USDOE) Forecasts of
Motor Gasoline and Diesel Fuel Consumption through 2040

In policy discussions on raising or indexing the gasoline tax, it is often stated that gasoline consumption is projected to decline due to increased fuel efficiency and use of alternative-fuel vehicles. The attached forecasts by the US Department of Energy do show gasoline consumption declining through 2040, but still amounting to 78 percent of the 2012 total. Diesel consumption is forecast to increase by 37 percent through 2040, and alternative fuels are forecast to increase from 0.3 percent to 6 percent of the total.

Attachment

US DOE ANNUAL ENERGY OUTLOOK JANUARY 2013

TRANSPORTATION FUEL FORECASTS (QUADRILLION BTUS PER YEAR)

BY FUEL TYPE	YEAR			
	2012	2022	2032	2040
MOTOR GASOLINE	16.27	14.69	12.87	12.64
DIESEL	5.75	7.41	7.65	7.90
SUBTOTAL GAS AND DIESEL	22.02	22.10	20.52	20.54
CHANGE FROM 2012 (PERCENT)		0%	-7%	-7%
E85	0.01	0.12	0.16	0.17
CNG	0.04	0.09	0.38	1.05
ELECTRIC	0.02	0.03	0.05	0.07
SUBTOTAL ALTERNATIVES	0.07	0.24	0.59	1.29
CHANGE FROM 2012 (PERCENT)		243%	743%	1743%
TOTAL ALL FUELS	22.09	22.34	21.11	21.83
CHANGE FROM 2012 (PERCENT)		1%	-4%	-1%
PERCENT ALTERNATIVE FUEL	0%	1%	3%	6%

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MEMORANDUM

TO: National Capital Region Transportation Planning Board (TPB)
 FROM: Ronald F. Kirby and Wenjing Pu, Department of Transportation Planning (DTP)
 SUBJECT: TPB Staff Participation at the 2013 Transportation Research Board Annual Meeting
 DATE: January 23, 2013

Overview

Staff of the TPB actively participated in the 92nd Annual Meeting of the Transportation Research Board (TRB) held in Washington, DC from January 13-17, 2013. This participation included nine presentations, membership in 11 standing committees, and numerous attended sessions, workshops, and meetings. Staff were involved in a wide range of topics, including performance-based planning and programming, scenario planning, travel demand forecasting, congestion pricing, travel survey, freight, systems management and operations, data, paratransit and travel demand management. TPB staff presentations and papers are listed below.

Table 1: TPB Staff Presentations at the TRB 2013 Annual Meeting

TRB 2013 Annual Meeting		TPB Staff Presentation	
Session #	Session Title	TPB Staff	Presentation Title
Workshop 124	Big Data Informatics: Innovations in Mining Structured and Unstructured Information for Mobility Decision Making	Wenjing Pu	Hierarchical Performance Measures and Standardized Data Processing in Mining Private-Sector Probe-Based Traffic Data for Performance-Based Planning
Poster Session 294	Congestion Pricing, Parking Pricing, and Managed Lanes Showcase	John Swanson & Benjamin Hampton	Let's Talk About It: Probing Citizen Attitudes Toward Congestion Pricing in the National Capital Region
Poster Session 355	Performance Measurement	Wenjing Pu & Andrew J. Meese	Using New Data Sources to Meet MAP-21 Requirements for Performance-Based Planning: National Capital Region's Experience in Monitoring Congestion and Reliability
Poster Session 416	Multidisciplinary Perspectives on Metropolitan Transportation Planning: Annual Planning Forum	Erin M. Morrow, Jinchul Park, Eric Randall, Daivamani Sivasailam & Daniel Hojun Son	Linking Transportation and Land Use Goals Through Scenario Planning: Case Study of Metropolitan Washington Region
Lectern Session 448	Are Transportation Data Meeting Decision Makers' Needs?	Ronald F. Kirby	Metropolitan Planning Organization Perspective
Lectern Session 764	Past and Present Planning Regulations and Future Implications of MAP-21	Ronald F. Kirby	Regulations and MPO Planning Under MAP-21

Lectern Session 766	Travel Time Estimation and Processing	Wenjing Pu	Standardized Data Processing: Where We Need It in Mining Private-Sector Probe-Based Traffic Data for Highway Performance Measurement
Committee Meeting	ABJ40: Travel Survey Methods	Bob Griffiths & Clara Reschovsky	Presentation: Washington DC's Geo-Focused & Localized Household Travel Surveys
Committee Meeting	ADC20: Transportation and Air Quality Committee	Ronald F. Kirby	Using MOVES to Prepare a PM2.5 Maintenance Plan – Policy and Research Lessons

In addition, TPB staff are official members of the following TRB standing committees:

Table 2: TPB Staff Membership of the TRB Standing Committees

Standing Committee	TPB Staff	Role
ABE50: Transportation Demand Management	Nicholas W. Ramfos	Member
ABJ30: Urban Transportation Data and Information Systems	Clara Reschovsky	Member
ABJ40: Travel Survey Methods	Clara Reschovsky	Member
ABJ60: Geographic Information Science and Applications	Charlene E. Howard	Member
ADB40: Transportation Demand Forecasting	Mark S. Moran	Member
ADB50: Transportation Planning Applications	Erin M. Morrow	Member
AHB10: Regional Transportation Systems Management and Operations	Wenjing Pu	Member
AP060: Paratransit	Wendy K. Klancher	Member
AT025: Urban Freight Transportation	Karin Foster	Member & Secretary
D0889: NCHRP Project Panel on Applying GPS Data to Understand Travel Behavior	Rich Roisman	Member
TH37: TCRP Project Panel on Improving Travel Forecast Models for New Starts-- Mode Specific Constants	Ronald J. Milone	Member