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[Bob Poole's Bio](#)

[More Surface
Transportation News](#)

In this issue:

- [Is it a VMT charge or VMT tax?](#)
- [Good news for PPPs in stimulus bill](#)
- [The Public Sector Comparator: when to choose PPPs](#)
- [Inter-city high-speed rail: not so fast](#)
- [Denver as a model?](#)
- [California finally gets PPP legislation](#)
- [Upcoming Conferences](#)
- [News Notes](#)
- [Quotable Quotes](#)

Finance Commission Recommends VMT Charge—or Tax?

The Surface Transportation Infrastructure Financing Commission did an outstanding job in its report, *Paying Our Way: A New Framework for Transportation Finance*, released on February 26th. As I wrote in my February 2009 column for *Public Works Financing*, the report not only documents the dire situation of under-investment and mal-investment in highways and transit, but it offers a serious way forward by proposing that this country phase out fuel taxes as the principal highway funding source in favor of charges per vehicle mile traveled (VMT). That reinforces the critically important principle of user-pays, at a time when that principle is in danger of being set aside (examples include the use of general-fund monies for highways and transit via the recent stimulus bill, increasing diversions of highway “user tax” monies to non-highway purposes, and continued calls from state DOTs and others for “tax credit bonds” which also rely on general funds rather than user-generated revenues).

But while praising the Commission’s report—especially in contrast with

the grandiose and unrealistic Policy & Revenue Commission's majority report last year—I want to raise an important issue that has started to be discussed in transportation circles, such as the Congestion Pricing list-serve (con-pric@lists.umn.edu) and the *National Journal* transportation blog (<http://transportation.nationaljournal.com>). That issue is the difference between a VMT *charge* and a VMT *tax*.

The Financing Commission report itself referred to it as a VMT *charge*, and if this new mechanism is actually going to be a real user fee (i.e., a payment for using roadway infrastructure), that is certainly the correct term. Others have begun referring to it as a “VMT tax,” either assuming that this is simply a matter of semantics or that “VMT charge” is simply a euphemism for a new form of tax that would replace the previous fuel tax.

This is not a distinction without a difference. Tolls that are proportional to miles driven are an example of a pure VMT charge. They are the price one pays to the infrastructure provider (the toll road agency or company) for use of that infrastructure. The provider uses those revenues just as any other network utility would: for the capital and operating costs of the infrastructure. Different rate structures for different categories of user (industrial, commercial, or residential in the case of electricity) are quite appropriate, as are pricing variations to better manage demand (“peak-shaving”) so as to reduce the need for costly capacity needed only to handle peak loads. This kind of user-pays pricing structure also directly generates revenue for those portions of the network needing additional investment to handle demand greater than capacity.

Unfortunately, although I think many of the Commission members would prefer this kind of public utility model for roadway infrastructure, the task they were given by Congress was not to redesign the institutional structure of how we manage roadways. Rather, they were asked to analyze the current and projected adequacy of the federal Highway Trust Fund and its fuel-tax revenue source and to recommend alternative approaches to paying for highways and transit in that context. So while some may see the Commission's recommendations as fairly radical, they are actually quite conservative, in that they do not question the underlying structure of a centralized federal fund disbursing monies at the direction of Congress for both highways and transit. I'm led to the conclusion, therefore, that what the Commission has proposed, in fact, can more accurately be described as a VMT tax than a VMT fee.

The counter-argument, put forth by Peter Samuel of tollroadsnews.com, is that even a VMT tax will set in motion forces that make it more like a user fee than the gas tax. For example, it makes no sense to have the VMT tax/fee be the same rate in urban areas as on rural highways; the cost of building and operating urban expressways is much higher than that of rural Interstates, and we know that variable pricing is a very powerful tool for reducing congestion. Thus, charging based on VMT gives us the means to do something more like real road pricing than would ever be possible with fuel taxes—even if the revenues still feed a

central fund that gets doled out by politicians.

I think that's correct, and therefore I support the Commission's call for transitioning from fuel taxes to VMT charges/taxes. But we should be clear about what we are and are not getting via this change.

[» return to top](#)

Some Good News for PPPs in Stimulus Bill

While I'm not a fan of the \$787 billion stimulus bill enacted by Congress last month, the measure does contain two provisions that are positive for public-private partnership transportation projects. The first provision exempts private activity bonds (PABs) such as those used for PPP projects from the alternative minimum tax (AMT), making such bonds fully tax-free. This applies to PABs issued in 2009 and 2010, as well as new PABs issued to refund bonds issued between 2004 and 2009. Unfortunately, the measure did not increase or remove the current \$15 billion cap on total highway/intermodal PAB issuance, leaving that still to be addressed in the forthcoming reauthorization bill.

The second provision permits the Secretary of Transportation to use up to \$200 million of the \$1.5 billion allocation for discretionary grants to support the TIFIA (Transportation Infrastructure Finance & Innovation Act) credit program for transportation projects with their own revenue sources. Since TIFIA has been running short of money at the same time as financing of PPP projects has become more difficult due to the credit crisis, this is a very welcome development—assuming Secretary LaHood takes advantage of it. Nearly two dozen trade associations, companies, and public sector agencies signed a joint letter to the Secretary, coordinated by the American Road & Transportation Builders Association, urging him to use the \$200 million for this purpose.

In other TIFIA news, the outgoing Bush DOT published a Notice of Proposed Rule-Making on January 21st to make project selection more rigorous by, among other things, requiring a benefit/cost assessment of proposed projects, permitting the interest rates for financings to reflect relative project risk, and allowing the inclusion of up-front concession payments as an allowable project cost, as long as the proceeds were spent on eligible transportation infrastructure. But on February 16th, the new administration withdrew the proposed rules for further study.

[» return to top](#)

The Public Sector Comparator: When to Choose the PPP Approach

During the past two years, former Transportation Secretary Mary Peters and her team encountered criticism from some congressional leaders for allegedly promoting PPP toll roads (i.e., toll roads developed under long-term concession agreements) for "ideological" reasons, rather than because they delivered best value to the public in particular situations.

And in Texas, the long-running 2007-2008 controversy over toll concession projects led to interim legislation giving first priority to local toll authorities to develop all new toll projects, with PPP toll roads to be used only as a last resort.

In response to these concerns, two public bodies proposed that rigorous methodologies be put in place to decide whether a PPP approach would be the better choice, on a case-by-case basis. In its February 2008 report to Congress on PPPs in transportation, the Government Accountability Office cited the experience of the United Kingdom, Canada, and Australia in using quantitative tests to assess value for money (VfM), in particular the Public Sector Comparator (PSC) methodology. Likewise, Texas's Legislative Study Committee on Private Participation in Toll Projects recommended the use of the PSC methodology to determine, case by case, whether a public-sector toll agency or a PPP concession firm should develop each specific project.

So how does the PSC methodology work? As the GAO's report (GAO-08-44) describes it, "[A] PSC test examines life-cycle project costs, including initial construction costs, maintenance and operation costs, and additional capital improvement costs that will be incurred over the course of the concession term. A PSC can also look at the value of various types of risk transfer to the private sector, whereby the more risk transferred to the private sector, the more value to the public sector." It goes on to explain that the use of a PSC test is required for all PPP projects in the United Kingdom; that is also true for all long-term PPP projects in British Columbia. GAO's report also noted that PSC tools continue to evolve to incorporate lessons learned from experience, citing recent revisions in Australia.

With a number of examples to choose from, I downloaded a detailed guidebook from Partnerships Victoria (Australia) called "Public Sector Comparator: a Technical Note," and spent much of a recent long plane flight going through its 103 pages. (www.partnerships.vic.gov.au). I commend it to your attention, if you want to understand the state of the art of rigorous assessment of whether a proposed PPP approach delivers greater value than a public-sector approach.

As used in Victoria, the PSC consists of four parts, each quantified. Its aim is to reflect the "full and true cost to government" of taking on the project, so that this cost can be compared to private-sector bids. It is based on using the net present value of all cash flows, based on the specified government discount rate over the life of the concession period. The four components of the PSC are as follows:

1. Raw PSC—the base cost under the public procurement/public ownership method, including all capital and operating costs.
2. Competitive Neutrality—cost adjustments aimed at accounting for differences between public and private sector, such as the latter's requirement to pay taxes, so as to eliminate resource allocation distortions arising from such factors.

3. Transferable Risk—the value of those risks transferable to the private sector, but which are retained by the public agency if the traditional approach is pursued.
4. Retained Risk—the value of those risks which would remain with the public agency in any case.

The guidance document provides a whole chapter on each of these components, as well discussions of how to use the PSC in the procurement process. Helpful quantitative examples are included.

Similar materials are available from Partnerships UK and Partnerships BC. In the course of researching this issue as a member of the Texas Study Committee, I've come to see real value in a rigorous, quantitative procedure like the PSC. Compared to either the arbitrary "first dibs" for public-sector toll agencies favored by some in Texas or the endless wrangling there last year over trying to establish a "market valuation" for the planned SH 161 toll road, the PSC offers a way to de-politicize such questions, discovering where the best value lies on a project-by-project basis.

[» return to top](#)

Inter-City High Speed Rail: Not So Fast

It's unfortunate that President Obama has made inter-city high-speed rail his "signature issue," as noted in Neal Peirce's March 8th syndicated column. The \$8 billion inserted into the stimulus bill at the last minute has created expectations for Japanese-style bullet trains on 11 long-planned corridors, but those hopes are likely to go unrealized. Moreover, by promoting expanded passenger rail service in these corridors, this policy may hinder many people's hope of shifting more long-haul freight from truck to rail, as an energy-saving and greenhouse gas (GHG) reduction policy.

Let's start with the basics. True high speed rail (HSR) that goes 150-200 mph requires entirely separate rights of way with shallow grades, very broad curves, and no 60 mph freight traffic. That's what Japan, France, Spain, Germany, and Italy are doing, and the taxpayer cost is tens of billions per line. Former Amtrak CEO Alex Kummant, in 2007 House testimony, estimated that an exclusive HSR corridor between New York and Washington would cost \$10 billion—exclusive of new right of way (in some of the most expensive urban areas in the country). So it's laughable to think that \$8 billion (even if supplemented by the \$5 billion more the Administration proposes over the next five years) could provide more than a small down payment on 11 corridors, most of them far longer than the 200+ mile New York to Washington one. The proposed California HSR is estimated by its proponent to cost \$50.2 billion, but a recent Reason Foundation "due diligence" report put the more likely cost at up to \$81.4 billion (see www.reason.org/ps370.pdf).

That's why every serious assessment of the stimulus bill's HSR section

has concluded that the \$8 billion (plus the possible \$5 billion more) will almost certainly be spent not on new bullet-train routes but on upgrades to the existing shared passenger/freight tracks, aiming to get Amtrak trains up to speeds of 90 mph rather than 60 or 70 mph. But that raises the question of getting the best use out of America's railroad infrastructure. While it's possible, with lots of passing sidings and expensive signaling systems, to operate both fast passenger trains and slower (and much longer) freight trains on the same trackage, the performance of both is hindered. U.S. freight railroads still have serious difficulties attracting time-sensitive freight, because it takes so long (an intermodal trip from Tacoma to Columbus or Cincinnati takes 7 to 12 days) and is so uncertain (e.g., 7 to 12 days). Today's high-tech, just-in-time logistics system cannot operate with either long times or schedule uncertainty, which is why so much freight moves by truck instead of rail.

In contrast with the United States, European countries over the last 50 years have opted to use their railroad networks primarily for passenger service (except for the new, separate HSR lines). If you compare goods-movement in Europe (the 27 EU countries) and the United States, you find that as of 2005, rail carried only 10.3% of all freight ton-miles in Europe, compared with 40.9% in the USA. Trucks in Europe handled 44.8% of ton-miles, compared with 30.5% here. That different mix of goods transport (other categories include pipeline, inland waterway, air freight, and coastwise shipping) has consequences for GHG emissions. In response to my query, Wendell Cox pulled together preliminary estimates of goods-movement GHGs for Europe and the United States and posted them at www.demographia.com/db-euusfreightghgs.pdf. (These are preliminary estimates, and Cox welcomes feedback.) What they show is that the GHG intensity of goods movement in Europe is 193 grams/ton-mile compared with 155 grams/ton-mile in the United States. In other words, the current U.S. policy of using its railroad network mostly for freight is "greener" than the European policy of using its network primarily for passenger service.

There are also serious questions of whether any true HSR route (on new, exclusive right of way) could cover its operating and maintenance costs out of passenger fare revenues, even if 100% of its capital costs were met via a vastly bigger national (\$200 billion?) tax-funded program. Before this country heads down that route, we need rigorous due-diligence reports on every such proposal, done by parties with no stake in the outcome.

[» return to top](#)

Denver as our Model Community?

I was intrigued by a recent *New York Times* op-ed by columnist David Brooks titled "I Dream of Denver." That headline introduced Brooks' summary of a recent Pew Research Center study about where Americans would like to live and what kind of lifestyle they would like to

have. The results will not please advocates of "smart growth."

For example, only 52% of those living in cities rated their communities as excellent or very good, compared with 68% of those in suburbs and 71% in rural areas. And nearly half said they would like to live in a different type of community than what they now live in. When asked to name the metro area they would like to move to, seven of the top 10 were in the west: Denver, Phoenix, Portland, Sacramento, San Diego, San Francisco, and Seattle. As Brooks interprets the results, "These are places you can imagine yourself leading an active outdoor lifestyle, . . . places with loose social structures and relative social equality, without the Ivy League status system of the Northeast or the star structure of L.A." And, "These places are car-dependent and spread out, but they also have strong cultural identities and pedestrian meeting places. . . . They are neither traditional urban centers nor atomized suburban sprawl."

Those of us working in transportation policy need to keep such findings in mind. It seems to me our job is not to tell Americans how and where they should live and work, but rather to try to develop transportation systems that help them fulfill their aspirations.

[» return to top](#)

Finally, California Gets PPP Enabling Legislation

Like many of my colleagues, I was beginning to despair that California's dysfunctional political system would ever get its act together to develop a legislative framework under which tolling and public-private partnerships could start addressing that state's massive shortcomings in transportation infrastructure. But apparently, the twin pressures of a massive (\$42 billion over 18 months) state budget deficit and the credit markets crunch altered the political calculus. Last month the legislature passed SB 4, which permits increased use of design-build contracts and permits PPP toll roads.

The PPP enabling provisions are mostly a set of amendments to the hopelessly unworkable pilot project legislation enacted in 2005. Besides permitting only four projects, designating them as aimed at goods movement (but not restricting them only to trucks), and permitting only trucks to be tolled, the measure's truly fatal flaw required every negotiated concession agreement to be voted on by the legislature. That would create such political risk that no company or consortium would invest the time and effort to take part in a competition and negotiate a concession agreement, only to have it vetoed after all that time and effort.

By contrast, SB 4 does not limit the number of projects, does not limit projects only to goods movement, permits tolling of cars and trucks, permits both solicited and unsolicited proposals, provides for a limited

degree of protection from competing free roads, and creates a Public Infrastructure Advisory Commission, which some see as Gov. Schwarzenegger's hoped-for counterpart of Canada's Partnerships BC. Concession agreements do have to be submitted to the Commission and the Legislature, but only to provide an opportunity for comments; there is no legislative approval step.

Sources who have reviewed the bill so far have not spotted any major flaws, so I'm crossing my fingers that this may, finally, be the real thing.

» return to top

Upcoming Conferences

I don't have space to list all possible transportation conferences of interest; those listed here are only ones that a Reason colleague or I will be speaking at.

5th Annual Public Private Partnerships USA Summit, Washington, DC, March 11-13, 2009, Ronald Reagan Building/International Trade Center. Details at: www.cityandfinancial.com/pfiam5.

7th Annual Preserving the American Dream Conference, Seattle-Bellevue, WA, April 17-19, 2009, Hyatt Regency Bellevue. Details at: <http://americandreamcoalition.org/seattleregistrationform.php>.

International Transport Forum's Forum 2009, Leipzig, Germany, May 26-29, 2009, Leipzig Conference Center. Details at: www.internationaltransportforum.org/2009/forum2009.html.

2nd International Symposium on Freeway and Tollway Operations, Honolulu, HI, June 20-24, 2009, Hyatt Regency Waikiki. Details at: <http://2isfo.eng.hawaii.edu/registration.html>.

» return to top

News Notes

Reason "Gridlock" Video on ABC Special

The popular Reason.TV video in which Drew Carey challenges conventional wisdom on traffic congestion will be among the topics discussed in a John Stossel ABC News 20/20 special, "Bailouts, Big Government, and Bull," scheduled to air on March 13th. Stossel interviews Carey to understand his interest in public policy issues and the resulting Drew Carey Project (DCP) at Reason.TV. Excerpts from "Gridlock" and several other DCP videos will be shown.

Limits of Real-Time Traffic Advice

I've never been a great enthusiast for the touted benefits to drivers of real-time traffic congestion information, for two reasons. First, in most seriously congested urban areas, there are few real alternatives even if

you get real-time warnings of severe congestion ahead. Second, the more people who get such information, the more that any actual alternative routes will get jammed with people trying to escape the severe congestion. The latter point has been explored mathematically in "The Price of Anarchy in Transportation Networks" *Physical Review Letters* (August 7, 2008).

Global Database on HOV Lanes

Those seeking HOV lanes that might be converted to HOT lanes now have a new reference tool. McCormick Rankin Corporation has produced a global database on such lanes, to assist the Transportation Research Board's HOV Committee. The five sections of the database cover the United States, Canada, Australia/New Zealand, Europe, and Other. Go to www.mccormickrankin.com/hov.asp.

Sourcebook on Traffic Incident Management "Quick Clearance"

Incidents and work zones are the source of half or more of traffic congestion in large urban areas, with incidents generally accounting for the largest share. In this new report for the Federal Highway Administration, the Texas Transportation Institute provides a guide to Quick Clearance Laws, including their rationale, data on effectiveness, and guidelines on drafting effective language. Go to: www.ops.fhwa.dot.gov/publications/fhwahop09005/quick_clear_laws.pdf.

New Study on Highway Impact on Economic Growth

The National Bureau of Economic Research last month released a new working paper called "The Contribution of Highways to GDP Growth," by Barbara M. Fraumeni. It's available at: www.nber.org/papers/w14736.

Update on ASCE Report Card

In last month's issue of this newsletter, I expressed concerns over the opacity of the American Society of Civil Engineers' "2009 Report Card for America's Infrastructure." Perhaps that concern was premature, because the February issue of the Eno Foundation's *EnoBrief* e-newsletter (www.enotrans.com) tells us that ASCE plans to release a "full detailed report outlining each category's condition, specific policy recommendations, infrastructure information, and a new interactive website in late March." Here's hoping it makes clear the underlying quantitative basis for the Report Card's letter grades.

[» return to top](#)

Quotable Quotes

"I . . . predict that the magnitude of fuel-tax increases necessary to even come close to meeting the formidable needs of transportation investment (which are described in the Policy Commission's report, *Transportation for Tomorrow*) will be politically impossible for the foreseeable future. But

I believe there are at least two other reasons why additional revenues from fuel taxes won't be forthcoming. First, motorists, with some justification, have little confidence that the proceeds from higher fuel taxes will be spent wisely. Once that confidence is lost, it is very difficult to regain. Secondly, the gas tax is a highly regressive tax in the sense that it disproportionately hits the poor."

--Prof. Rick Geddes, member of the Policy & Revenue Commission, in "The Future of Surface Transportation Funding in America," *Tollways*, Autumn 2008.

"Five percent of the stimulus package is being spent the way President Obama said it would—on infrastructure, roads and bridges. The rest is just a bunch of pork."

--Robert A. Voltmann, president and CEO, Transportation Intermediaries Association, in *Traffic World*, Feb. 23, 2009.

"With the economy the way it is right now, trying to propose a 10 cent a gallon increase in the gasoline tax is not going to fly anywhere in America, including Washington, DC. . . . There are a lot of ideas out there. We need to be open-minded and think outside the box on this. We need to take everybody's ideas, whether it's tolling a new road, tolling a new bridge, or public-private partnerships. That's the kind of out-of-the-box stuff we need to be thinking about."

--Secretary of Transportation Ray LaHood, *Wall Street Journal*, March 4, 2009.

[» return to top](#)