Changing Face of Transportation Revenues

State legislatures have been busy on the transportation revenue front in 2013. About 30 states considered some kind of transportation investment package this year. Of those, five states—Maryland, Massachusetts, Vermont, Virginia and Wyoming—passed significant packages that, to one degree or another, shook up the way transportation has been funded in those states, in some cases for decades.

Texas forwarded a measure to voters that, if approved in November 2014, could divert revenues from a reserve account to increase transportation funding by $1.2 billion, a short-term, voter-dependent solution that doesn’t come close to meeting the state’s $4 billion annual transportation needs. Oregon produced legislation that could have a significant long-term impact for transportation not only in the Beaver State, but also nationwide. Seven other states—Michigan, Minnesota, Missouri, New Hampshire, Pennsylvania, Washington and Wisconsin—also debated significant transportation revenue measures in 2013 but have been unsuccessful—at least thus far—in getting anything across the finish line. A handful of those states could still have a chance to produce something before the clock runs out on 2013.

Transportation experts point to a variety of reasons for the unusually high level of activity this year: a stagnant federal program and a declining revenue source—the gas tax—among them. While some states—Vermont and Wyoming—opted for straightforward, tried-and-true solutions such as simply raising the gas tax, others—Maryland and Virginia—opted for more complex solutions that draw on multiple strategies and tools.

It would seem that for every trend in transportation funding, there was a counter-trend this year. Success was often hard won and long in coming. Many transportation advocates have discovered patience pays off. But leadership is required, experts say, to both push for investment and to help educate the public on what that investment can bring.

In a series of June 2013 interviews, six transportation experts from around the country weighed in on the reasons for this year’s burst of legislative activity, the states they believe were the most significant stories and what it takes for a state to have success on the transportation revenue front. They also discussed the various trends in transportation funding and finance this year from gas tax increases to tax swaps, from general fund transfers to tolling and public-private partnerships and from mileage-based user fees to taxing electric vehicles. The group of experts included:

- Joung Lee, associate director for Finance and Business Development at the American Association of State Highway and Transportation Officials, known as AASHTO, in Washington, D.C.;
- Lee Munnich, director of the State and Local Policy Program at the University of Minnesota’s Humphrey School of Public Affairs;
- Martin Pietrucha, Ph.D., professor of civil engineering at Penn State University;
- Martin Wachs, Ph.D., distinguished professor emeritus of urban planning at UCLA;
- Gian-Claudia Sciala, Ph.D., postdoctoral scholar at the Urban Land Use and Transportation Center at the University of California Davis; and
- Asha Weinstein Agrawal, Ph.D., director of the Mineta Transportation Institute’s National Transportation Finance Center at San Jose State University.
Why So Many States Looked at Transportation Funding in 2013

When transportation experts look at the 2013 transportation revenue landscape they see a wide variety of approaches being pursued that make it difficult to generalize or identify clear trends.

“It really does seem to be kind of a grab bag of strategies that states are drawing on,” said Gian-Claudia Sciara of the University of California Davis. “Traditional gas tax increases, indexing, looking towards more borrowing in some instances, some unusual types of fuel tax swaps and so forth. So I don’t know that there’s a clear trend. There seems to be a fair amount of diversity among what states are trying. It seems to me that states that have been not doing so much in the experimentation on revenue generation have gone to more traditional things like the gas tax increases and states that have sort of been playing with different approaches over the years are maybe further along in trying different things.”

The diversity of approaches points to the lack of consensus about not only what will allow states to meet transportation needs, but also what will be acceptable politically and otherwise, said Lee Munnich, director of the State and Local Policy Program at the University of Minnesota’s Humphrey School of Public Affairs.

“I think you’re seeing different types of initiatives emerging out there, some of which might be contradictory, but I think as usually happens in this country, states are trying to come up with the best approach that fits (in their state) and somebody that gets something that works, a lot of other states will follow. But right now I don’t think any state has sort of got the magic bullet to solve this one.”

Most believe that among the various approaches, the cream eventually will rise to the top and the fittest will survive and be emulated elsewhere.

“For me this is an absolutely fascinating time because every state can learn from what every other state is doing,” said UCLA’s Martin Wachs. “I think that it will eventually lead to the adoption of particular measures that seem to work more often than not and the rejection of others that have been tried and failed. So it’s a wonderful time for learning.”

Penn State’s Martin Pietrucha points to one simple reason so many states considered the issue of transportation funding in 2013.

“Lack of any kind of support from the federal government for transportation in the states,” he said. “They just feel like they’re not getting enough responsiveness out of Washington on this and, rather than keep wringing their hands, they’re going to start doing something about it themselves. I think there’s a new generation of governors and state highway administrators that are coming in and saying, ‘we’ve got to do things differently,’ so that’s why you’re seeing a lot of the activity at the state level on this. … (State officials are) trying to figure out what are the different ways we can do something here to enhance the revenue stream because we can’t just hang around and think that, at some point, the Congress is going to get its act together to the point where it’s going to be able to raise the federal gas tax at all.”

The gas tax is the key to much of the state activity, the transportation experts said. While it has been the preferred principal source of transportation funding at both the federal and state level for many years, its days appear to be numbered.

“The motor fuel tax … is broken,” said Wachs. “There is increasing vehicle fuel efficiency so that vehicles that used to get … 10 miles per gallon are now getting 25 and 30, so there’s less revenue because we haven’t raised the gas tax in many places, certainly at the federal level since the early ’90s. So both inflation and improved fuel efficiency have reduced the effectiveness of the gasoline tax as a revenue mechanism and it’s necessary to find alternatives.”

Sciara believes the passage in 2012 of a new federal surface transportation authorization bill that included static or reduced levels of funding may have provided a signal to states that help is not on the way.

“I guess there’s just growing recognition of needing to grapple with addressing the shortfall in transportation funding,” she said. “Perhaps with MAP-21’s passage last year, it’s a clear indication that, really, there’s no long-term commitment to any significant increase on the federal side and states have been in a holding pattern for quite a while. So I think that they’re really just taking matters into their own hands and trying to address the problems they’ve been facing.”

But Joung Lee of AASHTO said the state level activities in 2013 were, in many cases, a long time coming and often the product of significant planning efforts, a progression of past policy activities and even the failed revenue campaigns of previous legislative sessions.

“When you look at the stories behind each of the state’s efforts, stuff has been going on for quite a long time,” he said. “Rarely do these types of revenue successes happen on the first try, but rather take at least two or three bites at the apple.”
He cites Virginia and Maryland as examples. Virginia has had a conversation on transportation for some time, he said, and Maryland’s Blue Ribbon Commission issued findings in 2011, but the legislature took no action in 2012.

**The Year’s Biggest Transportation Revenue Stories**

Each transportation expert had some different ideas on which state transportation revenue activities were most significant and why.

The complex solution Virginia policymakers came up with—including what many perceived as a troublesome step away from the gas tax and the concept of a user fee—got much of the media attention in 2013. But a simpler approach in Wyoming ultimately could have a bigger influence nationally because of its political ramifications, some believe.

“(There) you have a Republican Senate, House, governor and even the (Wyoming) Taxpayers Association,” Lee pointed out. “They all came out in favor of a gas tax increase because they realized that (with) their state gas tax being 10 cents lower than the surrounding states, yet the retail price of fuel still being the same as all their surrounding states … all that 10 cent differential is going to oil companies rather than helping to invest in infrastructure. So I think that’s a very compelling case or example that perhaps even provides some (political) cover for other, more conservative legislative leaders (in other states) to say, ‘Hey, our fiscal conservative counterparts did this. Why can’t we?’”

Sciara of UC Davis said Wyoming and Vermont, which also raised its gas tax in 2013, are significant for addressing a problem head-on rather than in the more roundabout way some other states did.

“I actually think the Wyoming case is very interesting with the straight gas tax,” she said. “For a state that has traditionally been very reliant on federal receipts to increase its own state gas taxes, it’s extremely interesting. … (It was) a little bit more complicated in Vermont, I believe, where they sort of switched around the types of taxes they were levying but also a more traditional straight increase there. I do think those are very interesting and noteworthy cases and direct confrontations of the problem.”

But Lee said Virginia is significant as well, especially for its everything-but-the-kitchen-sink approach to transportation funding.

“Virginia is a good one for being able … to look at so many different tools in the toolbox and bring them all together for a comprehensive investment package,” he said.

As the most significant stories of the year, UCLA’s Wachs cited Virginia but also Oregon, which approved legislation to expand its more-than-a-decade-long exploration of a mileage-based fee replacement for the gas tax.

“They are trying rather different things to achieve some similar ends,” he said of the two states. “I think what Oregon is doing promises to have much more national impact in the long term and Virginia is addressing its problems very effectively, but in the short term. And I think the combination of the two would tell (us) where the future lies. I think for the next decade or two, solutions like the Virginia one and other variations on that theme will likely be dominant. Meanwhile, Oregon is quietly—or maybe not so quietly—addressing much more fundamental long-term change that I think is also necessary.”

The University of Minnesota’s Munnich agreed Oregon’s approach will be one to keep an eye on for the future.

“I think everybody will be watching Oregon to see how they do,” he said.

Munnich noted that other states are looking at mileage-based fees. At the federal level Oregon Congressman Earl Blumenauer has been talking up the concept and Congress could look at the option in the next transportation reauthorization, he said.

“It’s a tough issue because politically (the mileage-based fee concept is) not very popular with anybody,” Munnich said. “It’s one of those things where you’ve got to maybe take some first steps and then maybe over time there will be an understanding and acceptance of it if people see it working in some cases. But it’s certainly not going to solve any short-term financing problems for transportation.”
STATE TRANSPORTATION FUNDING ACTIONS

VERMONT’S GAS TAX INCREASE

Gov. Peter Shumlin signed Vermont’s gas tax increase into law April 29, 2013. It took effect two days later. The tax was a compromise made possible by a need that became hard to ignore, the groundwork laid by a transportation funding commission, a fast-moving legislative process and the support of state leaders, including Shumlin.

Vermont faced a $36.5 million shortfall and the possibility of losing $56 million in federal funds if it failed to meet its required match. The Shumlin administration initially proposed a relatively simple gas tax hike that would have been about 8.5 cents per-gallon, split evenly between a per-gallon tax and a percentage tax assessed at the distributor level.

Legislators had their own ideas, however. The House wanted the gas tax indexed to inflation and no diesel tax; the Senate wanted no indexing and a diesel tax. The final compromise was a net gas tax increase of 5.9 cents per gallon. It includes a 2 percent assessment on the price of gasoline and a 0.8 percent decrease in the per-gallon tax. The tax hike could reach 6.5 cents per gallon by the 2016 fiscal year since it is tied to the wholesale price of gasoline. The diesel tax got a 3 cents per-gallon hike over two years. With the issuance of $11 million in bonds, the state will be able to come up with about $32 million in new transportation funds next year.


WYOMING’S GAS TAX INCREASE

Gov. Matt Mead signed Wyoming’s gas tax increase into law Feb. 15, 2013. It raises the fuel tax 10 cents a-gallon and is expected to raise about $70 million in the 2014 fiscal year. The governor had been pushing for a new source of funding for the Wyoming Department of Transportation since he took office in 2011 and said the state could no longer afford to subsidize the department using general funds. The increase was made possible in part by the support of a coalition of 18 organizations led by the Wyoming Taxpayers Association and including the mineral, trucking, tourism and ranching industries, along with associations representing municipalities and counties.

Transportation since he took office in 2011 and said the state could no longer afford to subsidize the department using general funds.


VIRGINIA’S ROAD TO THE FUTURE

Gov. Bob McDonnell signed House Bill 2313 into law May 13, 2013. Known as “Virginia’s Road to the Future,” the measure is the state’s first comprehensive transportation funding plan approved in more than 25 years. The legislation provides more than $3.4 billion in additional statewide transportation funding, more than $1.5 billion for northern Virginia and more than $1 billion in additional funding for Hampton Roads over the next five years. The law:

- Eliminates the 17.5 cents per-gallon excise tax on gasoline and diesel fuel;
- Replaces the motor fuels tax with a 3.5 percent sales tax on the wholesale price of gasoline and a 6 percent sales tax on the wholesale price of diesel fuel;
- Increases the state and local sales tax from 5 percent to 5.3 percent;
- Partially eliminates the 2 percent motor vehicle titling tax exemption by increasing the rate from 3 percent to 4.15 percent;
- Creates a $64 Alternative Fuel Vehicle fee to ensure all drivers are contributing to Virginia’s roads;
- Levies an additional 0.7 percent local sales tax, a 15 cent per $100 Grantor’s Tax, and a 2 percent Transient Occupancy Tax in Planning District 8 (northern Virginia); and
- Levies an additional 0.7 percent local sales tax and a 2.1 percent fuel sales tax in Planning District 23 (Hampton Roads).

The final plan required some concessions on both sides of the aisle. McDonnell asked lawmakers to adopt a plan that would eliminate the per-gallon gas tax, raise the sales tax and take even more of existing revenue for roads. Legislators revised the initiative, increasing the amount of revenue it raises through taxes. Republicans had to swallow the idea of raising taxes while Democrats had to accept diverting as much as $200 million a year in general fund revenue to roads instead of to schools or other services.


TEXAS’ SHORT-TERM, VOTER-DEPENDENT SOLUTION

It took a regular session and three special sessions of the Texas legislature in 2013 for lawmakers to approve a proposed constitutional amendment to go before voters in November 2014. The amendment would divert oil and natural gas tax revenues from a rainy day fund to increase transportation spending by about $1.2 billion in 2015.

While the measure, if approved, would provide a much-needed infusion of cash to make improvements, it’s a one-time, temporary fix that still falls far short of the more than $4 billion the Texas Department of Transportation has said is needed annually just to meet current congestion levels on Texas roads as the state’s population continues to grow.


MARYLAND’S TRANSPORTATION INFRASTRUCTURE INVESTMENT ACT

Gov. Martin O’Malley signed House Bill 1515, the Transportation Infrastructure Investment Act of 2013, into law May 16. The legislation indexes the state gas tax to inflation and phases in a 3 percent sales tax on fuel that will yield increased revenue when gas prices rise.

The sales tax would increase to 5 percent if Congress fails to pass a bill to allow states to tax Internet sales. When fully phased in, Maryland motorists will pay $600 million more in gas taxes annually.

The legislation was the result of an agreement reached by O’Malley, Senate President Thomas V. Mike Miller and House Speaker Michael E. Busch. It followed an unsuccessful legislative effort in 2012 after a blue ribbon commission on transportation funding issued its findings. The Maryland Department of Transportation has said it was running out of money for anything except routine maintenance projects. Supporters expressed a need to address Maryland’s congestion issues since that’s something major employers look at when deciding whether to locate in the region.


MARYLAND’S NEW PUBLIC-PRIVATE PARTNERSHIP GUIDELINES

In addition to the new infrastructure investment package, Maryland lawmakers in April also approved House Bill 560, which revises state guidelines for infrastructure public-private partnerships (P3s). The legislation gives the Board of Public Works—a three-member panel comprised of the governor, comptroller and treasurer—a more prominent role in the P3 approval process.

It endeavors to provide the private sector a more predictable and streamlined process and requires competitive bidding for all projects. In addition, the new law will allow the state to accept unsolicited proposals on transportation projects from private investors. A similar P3 bill didn’t make it out of the 2012 legislative session when it got hung up in concerns about pending litigation against a Baltimore development project.


OREGON’S ROAD USAGE CHARGE PROGRAM

Gov. John Kitzhaber on Aug. 14, 2013, signed Senate Bill 810, which authorizes a program under which up to 5,000 vehicle owners beginning in 2015 will pay a 1.5 cents-per-mile road usage charge and receive a refund of the state gas tax.

Participants will be able to use the level of technology they’re most comfortable with and choose the provider of the technology that will be used to track their mileage. The program is the latest iteration in a more-than-a-decade-long study of mileage-based fees by Oregon officials.

But it wasn’t quite what those officials were seeking as the 2013 legislative session began. They were pushing a House bill that would have imposed a road usage charge on all vehicles rated at 55 miles-per-gallon and above. Opposition from automakers prompted a last minute switch to the Senate bill backup plan.

The Senate bill creates a permanent program without an end date and constitutes a much larger sample than earlier pilot projects that explored the viability of mileage-based fees. The Oregon Department of Transportation is expected to spend $2.8 million over the next two years implementing and marketing the program.


STATE TRANSPORTATION FUNDING ACTIONS
Gas Taxes

Vermont and Wyoming both raised their state fuel taxes in 2013. The increase was 5.9 cents per gallon in Vermont and 10 cents in Wyoming. Despite the political challenges gas tax increases have faced elsewhere in recent years and the need to transition to a different mechanism in the future, transportation experts say such increases are still a perfectly acceptable solution to meeting transportation needs in the short term.

“It’s my own personal view that people are writing the gas tax off too quickly for political reasons,” said Asha Weinstein Agrawal of the Mineta Transportation Institute at San Jose State University. “I think it absolutely works just fine still and, even into the next five or 10 years, it probably will be entirely adequate, especially if states are willing to raise the rate sufficiently. I just don’t see that in three years, half of drivers will be in all electric vehicles or some situation like that, which would really change the way we need to think about the gas tax.”

UCLA’s Wachs sees a slow erosion of the gas tax as such vehicles become more prevalent.

“Each year it’s a little less effective because fuel efficiency is getting greater and because, hopefully, we’re going to transition into a much larger proportion of the fleet that’s electric vehicles,” he said. “But the transition will take 15, maybe 20 years and in the meantime, the gas tax can produce quite a lot of revenue.”

In some states and at the federal level, the high price of gasoline has been used by some to argue against raising gas taxes. But Wachs said that argument simply doesn’t fly.

“As long as the price of gasoline at the pump continues to rise, politicians are reluctant to address this issue with a gasoline tax,” he said. “I find that very interesting because obviously the tax on gasoline as a percentage of the price is decreasing rather than increasing and the fluctuation in gas prices from one week to the next is in many instances greater than the gas tax that any state or the federal government charges and it would seem to me not such a terrible thing to raise the gas tax. We only spend a few hundred dollars per driver per year on gasoline taxes.”

Penn State’s Pietrucha also doesn’t buy the argument.

“I’m not sure that (consumers are) really going to notice another 5 cents on the tax when all of a sudden the price of gasoline itself goes up 80 cents a gallon (on its own),” he said. “And the demand for gas in terms of price has been pretty inelastic.”

Tax Swaps

Another idea that received a lot of attention in 2013 is swapping out one tax for another. Virginia, for example, eliminated its 17.5 cents per gallon gas tax and replaced it with a 3.5 percent sales tax on the wholesale price of gasoline and a 6 percent sales tax on the wholesale price of diesel fuel; it also raised the state sales tax to 5.3 percent. That swap is expected to provide $5.9 billion in additional transportation funding over the next five years.

But transportation experts argue such moves are little more than smoke and mirrors since the taxes are still passed along to drivers. Moreover, they say, these swaps confuse taxpayers who already don’t have a good understanding of how transportation is funded and move us further away from a direct link between what we pay and the transportation benefits we receive, which is central to the user pays principle that has undergirded the transportation system for much of the past century.

“This whole notion of a sales tax on fuel or … wholesale tax, is interesting because (the current per gallon) excise tax is also collected at the wholesale level,” said AASHTO’s Lee.

He said the move allows lawmakers to tell constituents they’re reducing gas taxes, even though the wholesale tax increase will more than make up for taking away the excise tax.

“But if that’s the way to find success in increased revenues then it might be something that you’ll see more of down the pike from other states as well,” Lee said.

Penn State’s Pietrucha said it’s much easier to sell a gas tax decrease to the average constituent than the alternative.

“I think they’re trying to be clever about the whole thing and sort of mask—not in a duplicitous way—but mask where the money’s coming from because the whole idea of a gas tax (increase) in a post-Grover Norquist world … is such a political third rail,” he said.

“Rather than going for a straight on gas tax (increase), they can do things with the sales tax. They can do things with wholesale taxing—removing caps on … those. Some are actually reducing the state gas tax but then getting it to a level where they’re going to be
indexing it to the inflation rate so they'll recover what they may be losing initially and then gain it back and then some and those (increases) will kick in automatically."

The bottom line, Pietrucha said, is that drivers will still pay. "I think they might understand this less, but eventually, if there's an increase in the cost of doing business for the oil producers, no matter how far back up the line they get taxed on things, eventually it's going to work its way down to the consumer," he said.

Many remain concerned, however, that such swaps will decrease the understanding of the average American taxpayer about how the transportation system is funded.

"I think it further disconnects the tax from the user and that's something that's potentially worrisome," said Sciara of UC Davis. "The user pays principle allows us to maintain a relationship between benefits received and payments made. It's not a perfect relationship but it is one that we think can influence people's behavior. Going forward with concerns about linking transportation to environmental concerns, linking transportation choices to more efficient use of fuels and trip making, it's not a relationship that we want to dissolve I would think."

UCLA's Wachs doesn't like the idea of dissolving the relationship either, but says Virginia's plan doesn't have to be the death knell for the user fee concept. "The gasoline tax is already an indirect or second-best or third-best user fee," he said. "So it's not the death of user fees, but it's an even more indirect user fee. Obviously it's ultimately paid for by the people who are driving still. But it makes the connection between the price you're paying to use the roads and the way you're paying for it even more indirect. It doesn't eliminate the idea of user fees, but it makes the connection a little more hazy and to my mind that's not a good thing."

But Lee sees the Virginia plan as more multi-faceted than just a step away from the concept of a user fee. "I think Virginia's approach is 'We're gonna be totally unbiased in terms of how we derive our transportation revenues' and that's what I've heard from the Virginia transportation secretary at one of our AASHTO board meetings," he said. "Virginia's plan is really just kind of a combination of a lot of different approaches so there was no kind of consistent ideology presented in it."

Lee points to the plan's inclusion of a fee on electric vehicles, an attempt to capture revenues from drivers who currently don't pay any gas tax, as a continuation of the user fee concept in another form.

**Short-Term Funding**

Some transportation experts say short-term, temporary solutions to transportation funding such as the one Texas lawmakers sent to voters for consideration ultimately can be counterproductive in the long run in terms of eventually addressing the overall need.

"I think those are examples of states trying to do what they can under the circumstances, although not always the wisest things really," said Sciara of UC Davis. "I think those one-shot measures take a lot of time, they take a lot of expenditure of energy and political capital and also, let's say, voter goodwill and good faith. And what we really need is to see states—and really at the federal level as well— (take) a more comprehensive approach to funding transportation for the long-term so that people have confidence in our ability to maintain and improve the transportation system that we have."

The concern is that going all out for a solution that is less than adequate can make it difficult to pass a more comprehensive approach later. "There's a threshold to the public's attention span and willingness to comprehend the ins and outs of how we pay for things, what we need to do, the types of remedies that are possible and why (certain) ones are better than others," Sciara said. "Expending the time and energy to bring the public along is something that's very important and when you do that for fixes that are temporary, that are not long-term, that are just based on shuffling funds around, I think that does damage and doesn't help us in the long term."

But AASHTO's Lee said the difference between temporary measures and transitional ones often hinges on
the risk appetite of state policymakers. He cited as an example Virginia Gov. Bob McDonnell, who is term limited but wanted to leave a strong legacy and chose transportation to make his stand.

“ If you’re in a situation where, perhaps, you have to face a re-election fight and can’t risk any kinds of actions to undermine your success at the ballot, then perhaps they won’t be able to put down a transformational kind of transportation package,” Lee said.

### Tolling & Public-Private Partnerships

In addition to approving a transportation revenue package in 2013, Maryland lawmakers also revised guidelines that allow the state to enter into public-private partnerships to build transportation projects. The measure will allow Maryland to follow in the footsteps of its neighbor, Virginia, which in recent years has brought in the private sector on a number of infrastructure projects, including managed toll lanes on the Capital Beltway outside Washington, D.C.

“We see more and more states enacting some sort of a framework for public-private partnerships than before,” said Lee. “We don’t expect all the states that have the framework to actually deliver P3 projects, but I think it’s just a good indication of the fact that you just can’t rely on the traditional pay-as-you-go or the grant-funded approach to transportation anymore. You really do have to make the best use of existing tools but look for tools that can help you do things that you weren’t able to do before.”

Transportation experts warn, however, that private sector investment is not free money that lets policymakers off the hook in the search for new revenues. “It doesn’t deal with the larger funding issue but it certainly is part of the solution,” said Munnich of the University of Minnesota. “There still needs to be a revenue stream if you’re going to do toll roads. … That’s the fundamental problem.”

Munnich expects to see more toll and P3 projects that seek to manage traffic on existing roads to get more out of the existing system in the years ahead.

He said Minnesota, for instance, has created managed lanes and high-occupancy toll lanes known as MnPASS lanes. The state also is converting shoulder lanes into regular lanes in peak periods and creating bus-only lanes, all in an effort to maximize the existing system and better prioritize and manage traffic.

“That doesn’t solve the need for longer-term investments, but trying to figure out ways of getting more out of the existing system—that needed to be done in any case,” Munnich said.

UCLA’s Wachs also believes we’re likely to see more high-occupancy toll lanes and similar projects in the years ahead as urban congestion gets progressively worse.

“I’d like to see us move more in that direction because it gives us more capacity to deal with congestion and to affect people’s choices,” he said. “Some people think you should be free to choose any road at any time and it should never be congested and so forth. That’s OK except it’s enormously expensive for any state to maintain that kind of a situation.”

Some worry about equity concerns associated with drivers being able to buy their way into less congested lanes. But Sciara of UC Davis says it’s unfair to label toll lanes as only for the wealthy.

“I think some of those projects really can benefit everyone and to write them off as ‘Lexus lane’ types of projects really simplifies them and really does not do justice to the types of benefits they can afford to
all users under certain circumstances," she said. "We know that people with higher incomes would tend to use those facilities more frequently, but there are users with lower incomes who would certainly benefit from having those facilities available to them, having those options under certain circumstances."

In general, though, Sciara thinks the growth of public-private partnership-financed transportation projects in the United States may not be as rapid as some expect.

"I think you'll continue to see some activity on that front, but I think it will be slower," she said. "Until we have a solid number of examples of very successful projects like that that are easier for the public to understand how they work and how benefits accrue to the public, that will be slow."

**Mileage-Based User Fees**

The Oregon legislature in 2013 approved legislation to authorize a program under which up to 5,000 vehicle owners starting in 2015 will pay a 1.5 cents per-mile road use charge and receive a refund of the state gas tax. It allows the state to take the next step in its more-than-a-decade-long exploration of mileage-based user fees, which many believe will one day replace gas taxes as the preferred revenue source to fund transportation.

"You're not going to find anybody seriously suggesting (the gas tax) as a sustainable, long-term revenue source," said AASHTO's Lee. "There has to be some sense of being able to move away from the gas tax eventually and look at something like a road user fee, (vehicle miles traveled) framework and some of the other options out there."

But Lee said the political will around the country is lacking to make the push for mileage fees or any other alternative revenue source.

"It doesn't matter if we can come up with the most creative revenue ideas out there," Lee said. "As long as the political gridlock continues, this impasse is not going to end, unfortunately. It's not that we're not smart enough to come up with new ways to provide revenues. It's just that the political leadership hasn't been there yet, especially at the federal level."

Of course, the mileage-based fee concept faces its own built-in hurdles to overcome as well.

"Quite understandably, there are a lot of challenges technically, administratively and politically," said Agrawal of the Mineta Institute. "I could imagine in the next five or 10 years, for example, we might have one or two or three states try some sort of a broadly applied mileage fee, but I just can't imagine that even in 10 years that would be all states or most of them."

UCLA's Wachs thinks the transition is imminent either.

"The public at large is very uncomfortable (with) the privacy question," Wachs said. "That somebody will know—if they subpoena records or whatever—where I've been driving and they shouldn't have that right."

But, he said, people use smartphone navigation apps like Waze or Google Maps, both of which have that information.

"We're sort of inconsistent in our attitudes," he said. "But it's still a big hurdle. We're not going to get there unless we directly address the privacy question and resolve it."

Oregon's latest experiments with mileage fees attempt to get around some of the privacy concerns by allowing those in the program to select the provider and the level of technology they're comfortable with for tracking mileage. Oregon officials also made provisions for protecting personally identifiable information collected under the system, which assuaged initial concerns voiced by the American Civil Liberties Union.8 Despite those efforts, many still have concerns about how such a system would work. Wachs expects a transition period of decades and a lot of bumps in the road in getting there.

"Ultimately, though, I think people will voluntarily adopt these systems because of the other benefits that they will get from them—the so-called value added services like doing auto insurance by the mile and adding it to your smartphone application that gives you directions and other things like that that make it easier to incorporate," he said.

But Wachs and others point out that even as the gas tax was being installed as the preferred revenue mechanism in the last century, many knew it was an inadequate surrogate for trying to capture actual use of the nation's roads; the inevitability of mileage fees was preordained.

"There were a number of people who said 'We shouldn't be using gasoline taxes. What we should be doing is charging people more directly for the use of a road,'" he said. "And the only way they had to do it in 1920 and 1930 would have been to build toll booths and put people in the toll booths. The cost of building and operating the toll booths would have taken up about a third of the revenue."

Wachs said while the gas tax has a major advantage in its low cost to administer, it is flawed because it's an indirect way of charging the road user.

"You don't pay at the time and place that you use the road," he said. "Obviously you do use gas in proportion to how much you drive. But with the gas tax, the cost of administering the tax was like 2 percent or 3 percent of the revenue, not 25 or 30 percent and you didn't have to put people in toll booths in the middle of the countryside on lightly travelled roads."

In researching the California legislature of the 1920s, Wachs found the mileage fee concept held an elusive appeal for some at the time.

"There was actually testimony (where) people said, 'If at some future date we can find a way of charging for the miles that people drive automatically instead of having a person in a toll booth, then we should adopt that system because it's better. It does what the gas tax does but it does it better,'" he said. "And we now have that capacity … to charge people by time of day, by the road that they're using, even by the class of vehicle that they're driving. … It would be completely consistent with what policymakers were talking about as far back as 1920."

Penn State's Pietrucha said mileage-based fees would be a much more direct and more accurate road usage fee than what we have now with the gas tax.

"It's vehicles rolling over the roads and bridges that cause the damage, not really having much to do with how much gasoline or diesel we're expending to do it," he said. "(VMT is) probably the best measure in terms of
a car with the damage to the infrastructure and we’ve only been using the gasoline tax as a surrogate for that anyway.”

**Taxing Alternative Fuel Vehicles**

The transportation legislation approved in Virginia this year includes a provision that requires drivers of alternative fuel vehicles to pay a $64 annual fee. The limited number of such vehicles on the road means the fee won’t make much of a dent in increasing revenues for transportation anytime soon. But it’s part of an effort to ensure drivers of those vehicles begin to pay their fair share for wear and tear on the nation’s roads. At least 10 states have considered or passed legislation to collect fees from owners of electric or hybrid cars.9

But some worry such fees provide a disincentive for greater adoption of these vehicles, something that government is trying to encourage in other ways because of the potential for a positive environmental impact. Transportation experts say it will be important for state governments to tread lightly as they move to implement such fees.

“Where we do have to make the case that as the alternative fuel fleet grows in proportion to the whole fleet and conventional vehicles, that they have to kick in and pay into the revenue sources that maintain the system. We also have to be sure that we’re not making it appear that they’re being singled out or that it’s a punitive measure or anything that would discourage the adoption of those new vehicles and technologies,” said Scialia of UC Davis. “That’s certainly not what we want. That is at cross-purposes.”

She said educating the public on why such fees are appropriate and what they will be replacing that drivers of those vehicles don’t pay now is crucial.

“That’s not an easy task, but I think it’s important,” she said.

Pietrucha of Penn State said history provides plenty of examples of government propping up an industry for a time as it gets its footing—be it the air transport industry in the 20th century or the railroads in the 19th century. He believes it will be important for state governments and the federal government to know when to shift away from the subsidies and tax breaks now helping to encourage the proliferation of alternative fuel vehicles.

“There will be a tipping point,” he said. “I think you want to do whatever you can to incentivize the manufacturers to manufacture vehicles of this type and then the public to buy vehicles of this type. But then at some point—and you’ve got to time it right—it’s time to get out of the market of subsidizing those activities and say ‘OK, it’s on its own. It’s gonna be fine and now we need to do the right thing in terms of getting the revenues out of these folks, in terms of the damage that they’re doing to the pavements and bridges.”

**Factors in Successful Transportation Revenue Campaigns**

The 2013 legislative sessions saw some transportation packages that passed with relative ease and others that required more heavy lifting. Political leadership, stakeholder coalitions, effective communication, advanced planning and even serendipity all figured into successful revenue campaigns.

But for states that weren’t successful in 2013, now is the time to be laying the groundwork for future success. Transportation experts say a variety of strategies can help them realize success.

AASHTO’s Lee said the governor must be on board before moving forward.

“Whenever you get some solid executive leadership and commitment involved, you see certainly a much greater chance of success,” he said. “You really need the governor because … he or she is weighing different issues and doesn’t have a particular bias for transportation. If he or she could make transportation a priority, that really moves it up the overall political and legislative agenda.”

Beyond enlisting champions, though, policymakers must spend a good deal of time communicating the value proposition of transportation investment.

“I think you can make that case more compellingly at the state level,” Lee said. “It’s been really difficult at the federal level to be able to say, ‘Here’s the 18.4 cents per gallon gas tax that we take from you …’ and then
Here are the benefits of that federal program.”

He said state leaders must lay the groundwork for the next session in a way that explains the value of transportation projects to the public.

“I think that’s the key to any transportation revenue increase discussion,” he said.

Penn State’s Pietrucha said it’s important to communicate the urgency of taking action as a value proposition too.

“The whole idea with infrastructure repair is like repairing anything,” he said. “The repair you go for today is going to be a lot cheaper than if you defer it and wait five years.”

The experts said states should take their cues from localities around the country that have had success with ballot referenda to raise sales taxes to fund transportation in part by being specific on what is promised.

“I think that state (departments of transportation) probably need to do a similar thing and say, ‘Here’s a package of things that we can do or that we will do if we get an increase’ and be able to communicate that to the public and convince them that, in fact, these things are going to occur,” said the University of Minnesota’s Munnich. “Because they’ll resist it if they feel that the money’s not going to be spent in a proper way.”

County sales tax ballot measures in California, for example, have seen a high rate of passage since first being tried in the 1980s, noted UCLA’s Wachs.

“I would have thought the Georgia thing was in that same mode (as the California ballot measures),” said Pietrucha. “If we can drive home the idea that the money you’re spending is going to be spent on stuff you use every day, then it’s got a much better chance of being successful irrespective of how it’s pitched in terms of how it’s going to be collected. … If somebody comes to you and says, ‘Just give me some more money; I’m going to do good things with it,’ it’s a little harder sell. I want to kick the tires. I want to know what I’m paying for.”

Besides just touting a list of projects, it’s important to communicate how infrastructure investment can impact quality of life, Munnich said. That can take a variety of forms.

“Certainly in urban areas, congestion is a major issue,” he said. “In rural areas, it’s going to be the access to jobs and businesses and things like that. So I think you’ve got to convert it into terms that people can see what the public investments are going to be.”

Wachs believes all the benefits and, indeed, all aspects of transportation investment can be used to make the push for new revenues, even things like the need to address maintenance backlogs, if the message is communicated effectively.

“We need to maintain roads that we have,” he said. “We need to expand … in certain corridors. There is a wish, in urban areas particularly, to provide alternatives to automobiles, so there’s an interest in funding bicycle programs and transit programs and all of those have costs. In some places, the people seem quite willing to bear those costs if they see the results. It’s important for the legislators and governors to make the connection with people and I think too large a proportion of the American people don’t know what they’re paying and what their payments are bringing them.”

The Mineta Transportation Institute at San Jose State University has conducted survey research that shows support for a federal gas tax hike increases substantially if respondents are told it will go toward a specific purpose. Mineta’s Asha Weinstein Agrawal said what has stymied policymakers at the federal level is the lack of...
consensus on an overarching vision of what the federal program is trying to achieve that can be easily communicated, something akin to the vision for the completion of the National Highway System in the last century. “The closest we have come to that are these sort of negative visions of either preventing more bridge collapses and disasters or reducing the problem of congestion,” she said. “But it doesn’t really seem to resonate with people.

“I do think that we as a transportation community need to put more effort into coming up with a positive vision of what we can achieve if we had a more stable and ample source of transportation revenues. That’s a good exercise that we really should go through to make sure that we do spend our money in an appropriate way, as well as the fact that I think it will make tax increases much more appealing to the public.”

But many say transportation advocates must not only define and communicate a vision for transportation, they also must educate users of the transportation system, many of whom may have a limited understanding about how it all works.

“The public doesn’t know how much they’re paying in gas taxes,” said Munnich. “They know they’re paying a high price for gas. They probably don’t realize how little they’re paying (in gas taxes). If you compare what they’re paying in gas taxes, it might be a couple hundred dollars a year depending on how fuel-efficient their vehicle is. They’re paying a lot more for their cell phone, for their cell phone, for just about every other utility that they buy and they’re really getting a bargain on what they’re getting for their transportation system. But on the other hand, the public doesn’t necessarily see directly how they benefit. So they don’t know how much they’re paying and they don’t know what they’re getting out of the system.”

For those reasons, it also does little good for policymakers to ask constituents the same questions about higher taxes each year and expect different answers.

“I think one of the important things is not just to do focus groups and ask people what they think, but it’s also for the state to inform their voters what the current situation is and what the alternatives are,” said UCLA’s Wachs. “I think this is an area of public policy in which the public is relatively ignorant and the fact that the public is relatively ignorant is an issue that creates a responsibility for state legislatures and state departments of transportation because the public will not support increased funding if they don’t even have an idea of how the funding is levied and how it’s used.”

Transportation advocates and policymakers clearly have their work cut out for them. Fortunately, they will have plenty of case studies and lessons learned from 2013 to draw upon, plenty of diverse policy options to consider and plenty of other courageous policymakers to emulate as they seek their own solutions in the years ahead.

References


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