Good afternoon. It’s interesting to think about where the federal government now stands. Jim’s comments right before lunch put a fine point on it. They’ve said we won’t raise the gas tax. They said we won’t move towards vehicle miles traveled (VMT) fees. But we want to spend more money. I don’t know. That’s an equation to me that says we are going to pay for transportation out of the general fund in this re-authorization. That is my prediction. I’m sticking with it so far and we’ll see. Maybe I’m wrong. But I think there is a strong chance of some big changes as we will be moving in the direction of VMT fees in the next re-authorization. Hopefully, the U.S. Department of Transportation (DOT) wants to get its political appointees on board and can actually engage in a draft bill and can work in some of these first steps. The nice thing about what needs to happen in this re-authorization, at least in terms of federal implementation, is it doesn’t require a commitment to go to VMT fees. So they are not necessarily incompatible. But what I also want to talk about here, over lunch, is kind of how well the commission has done and the conclusions we’ve reached and the thoughts we’ve haggled with. How do these correspond to the three question format that Ginger laid out?

I will assume that you’ll read the report. I am going to focus on the VMT parts of the report. Let me just say upfront that we had a very specific charge from Congress, and that was to draw up what, not how, we should be doing to fund the federal transportation program in the future. And frankly given the time we had we had to mostly rely on our own volunteer effort. We didn’t have money to commission a lot of research or hire a lot of staff. We had a hard enough time just figuring out a systematic process for looking at all the alternatives and coming up with conclusions about what we should be doing to fund the federal transportation program. We were not really able to get into how. Under the law, the commission continues to exist. We can continue to work as a commission until six months after this April. So we have another six months of officially sanctioned existence, and we are interested in continuing to engage in this issue. We would like to spend that time not only talking about our main report but perhaps working on something like this path forward concept. What is the state of thinking in the transportation world, essentially, about what needs to happen over the next 10 to 15 years, whatever it takes to transition?
There is sort of a need for a state of the knowledge on transition, which is really what this symposium is largely about.

The commission was an interesting experience. If you take a close look at the members of the commission, it was a pretty odd mix. There were 15 members. About half were pretty-well-established transportation experts of some kind, and half were folks that were appointed because they thought they would bring some perspective to the commission. We had this difference in people who really didn’t know a lot about transportation but were very interested in. We were fortunate that nobody was appointed who didn’t really want to play. Everybody really got involved, which is nice. Then we had a county official, a city official, a state legislator and a couple of folks who had served within a DOT and other federal positions. So we had a lot of experience from the different levels of transportation, and we also had pretty far opposite spectrums in perspective in transportation. But we agreed on at least 60 or 70 percent. We were able to reach all of our conclusions unanimously.

Context—everybody knows our conclusion. Our conclusion was, in the long run, the way to pay for transportation is the mileage-based user fee. We started off kind of wrestling with a lot of questions, but you can condense them, such as who pays now? What is the good, bad and ugly of the current system? What could be better in some alternative system? Who would pay? How would it be used? Many of the things that have already come up this morning were obviously bubbled to the top in our considerations. We thought in terms of both the defense of the status quo and good reasons we should be doing something else, whatever that something else might be. We were constantly reflecting on “OK, this is painful, this is technologically difficult, and this raises a lot of public opposition.” And yet, “as opposed to what” was a constant question that kept haunting us. So there is no “silver bullet.” Clearly, as you sit here today, just within the narrow confines of “how’s the federal government going to pay for the federal share of the transportation program going forward,” you have no desirable options whatsoever. They all stink, but we have to pick the less stinky option. We have to pick the least bad option. There is no really good way to do this. It’s all difficult and problematic.

You can criticize the gas tax for a lot of things, and you could defend the gas tax for a lot of reasons. If you look at it, these are the last few years of estimates of revenue going into the highway trust fund. And you can see it’s all over the map (referring to presentation). There is kind of a consistent downward trend, but the juiciest one is the actual revenues. Even the projection that got close, January 2009, was still not very close. So it is not a very predictable source of revenue. And because it’s fundamentally intended to be a source of revenue that drives a planning process, there is a real disconnect in there. You can’t have a planning process based on something when you don’t know what it is going to do. Things don’t mix.

David, did you ask the question that don’t all the problems with the gas tax map to the VMT?

Audience member responds: Not all the problems.
Adrian Moore continues: I would say, yes, actually the majority, maybe 80 percent of the problems of the gas tax, map over to the VMT. So what’s the deal? Well, a) I’ll take 20 percent of the reduction in problems at this point, and b) VMT charges have some advantages that the gas tax doesn’t have. So there is a real difference between the two, and I think that is important.

What we did was systematically identify all potential federal funding mechanisms, which, of course, do not cover the entire universe of possible funding mechanisms that you could implement at the state and local level, but it covers most of them. We end up including a lot of things that state and local levels use to fund programs. We established a series of evaluation criteria, and we went through in Chapter 3 of the report and systematically looked up the pros and cons of all of these mechanisms. What we discovered is that there are not many mechanisms that really could be part of a sensible federal transition funding program. And most of those in that strong category don’t raise enough money to be the core of the program. Once you’ve started thinking about the pros and cons of those in the long run, that’s when we got to the VMT fee. Condensing a lot of work that a lot of different people have done, and a lot of what reports have said, the most sensible long run way of funding transportation is some kind of mileage-based user fee.

We had to address the short run by congressional mandate and, in the short run, using that process we concluded that there are only two ways the federal government can have more money to spend than in the short run. One is to raise the gas tax. Two is to use general fund revenue. We didn’t recommend the use of general fund revenue, so the commission recommended raising the gas tax. I was not a fan of that recommendation. But that is essentially the two choices that Congress has if they want to increase spending, or even maintain current spending. In the long run, we should transition to a VMT fee for a lot of reasons. I’ve already mentioned that we are looking for the “least regrets” choice. In the 2020-2025 timeframe, if we have to make a choice today, 15 years from now, which of these choices are we going to look back on and pick ourselves the least over, because essentially it’s not going to be all good? There’s going to be a lot of cost and a lot of pain in the transition. We also thought, “Why settle for second best?” The gas tax is probably the classic example of a second-best pricing approach. We are at a point in history, technology and politics where we have the possibility to move from the second best to the first best.

There is an all-inclusive sustainability to VMT pricing systems, according to all of our evaluation criteria, that is just very compelling. And for some of the other commissioners, the fact that we are clearly on a technological development path in all kinds of sectors was important. This takes advantage of that, rather than saying, “Let’s continue to use a non-technological means to solve this problem,” which completely goes against history and progress. Technology is making almost every other transaction-based walk of life better off. Everybody essentially knows this. If you want to start the transition now, you need to take two re-authorization cycles to get there. You should start off basically trying to set a fee that is equivalent to the current federal gas tax on the federal aid highway system, and just basically make federal spending program funding whole with this fee at
the point where it is implemented. Worry about all the other stuff later. The more we thought about these additional charges for various kinds of externalities, we thought those may even make more sense if implemented at state and local level rather than federal anyway.

The chapter of our report that talks about VMT was essentially a fleshing out of our pros and cons analysis we did on all the mechanisms. We said there are a few things we want to devote the chapter to, digging in to those pros and cons. Financing was one because financing is such a hot issue, especially at the state and local level now, so as to discover what the federal government can do on that and that actually works with funding. It is not a substitute for funding. It is leverage for funding. And then the VMT charge.

So that chapter essentially walks through what we thought were the most important advantages and disadvantages. This is the list of potential advantages we discussed, and the disadvantages take two slides. And yet, we recommended it. So we are picking among the least bad options. I think most of these are pretty obvious and discussed already. When you start parsing things like the environmental benefits, it’s both very compelling and very challenging. You can see lots of potential positive and environmental effects if you use pricing to price for externalities in a way you could for this technology, in a way you can’t currently. It’s not necessarily easy to do that. It’s easy to think about. It’s easy to see the advantages, but again implementation is a little bit tricky.

Most people don’t really think about how pricing is going to interact with transit use. At least it’s usually not a primary subject. But we spent a fair amount of time thinking about that and working with folks in transit to talk about operations. And I think it was an advantage to have Lee Sander from New York because there is a transit system where they also manage all of the toll bridges and toll facilities in the area. Unlike a lot of other transit agencies, they really engage in road and automobile use. Working through what that means for transit, the tricky thing is it’s easy to say, “We flip a switch in 2020 and start road pricing.” You are going to have a decrease in VMT, and you are going to have an increase in transit use. It takes a lot of work to figure out exactly what that is going to mean. But there are a lot of transit systems that are in no position to absorb 2 percent of automobile traffic in their area, or even 1 percent. So if VMT goes down 10 percent and only 10 percent of that shifts to transit, that is still more than what they have the capacity to handle. So are we going to fund them upfront to ramp up, to meet that need? Are we going to fund them out of this VMT fee? There are a lot of issues there. How do you manage those transitions? It gets real tricky.

Disadvantages and concerns—somebody said that public opinion is not static this morning. And I think that the huge overlay on these concerns is the fact that changing anything always starts off with a lot of resistance. The fact that the public opposes something and is so cynically manipulated in our political system is unbelievable. If you are for something that the public is against, then you spend all your time talking about public education. And a lot of times you are right. Most of the time people oppose something they don’t really know about. And I’ll tell you, I can’t tell you how many
rooms I’ve been in, with how many people who stand up and jump up and down about the reasons they oppose VMT. And their reasons are legitimate, but their ignorance is amazing. People have strong opinions about it, and that is an issue.

A lot of the potential disadvantages and concerns are things that you have to deal with. These are things that unless we can find a solution to them, there is no going forward. When you get to the point where you are trying to implement this thing, you better have all of your ducks in a row, and that means you have to resolve these things. After two and a half years of talking about rural versus urban issues with VMT pricing, I heard a brilliant comment today, which was, “Let’s just admit that the rural folks want a subsidy.” That is exactly what it is. If you take just a few minutes and Google, and look at some numbers, you realize that rural folks already drive more, which means they already pay more in gas tax to live their lifestyle on a per-month basis compared to urban dwellers. They have much less fuel-efficient vehicles on average, so by at least two measures, they are already paying more. So there is a very good chance that a vast number of rural people would be better off under a VMT system and pay less. There will be winners and losers. We spent a lot of time talking about equity, social equity, rural equity, etc. And ultimately what it comes down to is none of them are really true in aggregate. But all of them are true for some folks. And a good part of the transition is going to have to be figuring out how to make that process not too outrageous and how to take care of the losers in some fashion, just like with route diversion.

Germany—they obviously talked about route diversion as they put their system in, and they went and thought about what are some of the most likely routes that they are going to divert to, and let’s make those “no big truck” routes, or local truck traffic only routes. And they didn’t have too much of a problem with route diversion. So I think you could probably solve route diversion. That is not something the federal government is going to solve; that is a state and local issue, and it can be tricky. You can’t solve it by just putting signs up. I end up being the guy in the commission saying, “Think about how the business model of the logistics industry works; it completely dis-aligns with this.” We would wrestle a lot with that. We need to examine to what extent we need to change the way we price in order to take into account the fact that the logistics industry is structured the way it is and to what extent the logistics industry would sort of adjust to this charging system. Again, it’s not trivial.

Double taxation argument—that is a huge response we get from people. And yet, almost the first step in every implementation that has happened so far is to see how people would react on this. Nobody is even thinking about doing this in a way that double taxes people, and yet that remains a huge concern. Convincing people that we are not going to double tax them is a challenge.

We put a lot of emphasis in our report on doing the studies, the technology development and the pilot programs in this next re-authorization. In terms of just the federal part of a transition to a federal VMT system, there’s got to be a lot of investment in those three things in the next re-authorization. Given that, there is already a lot of tolling in the US, and it is growing. It is a small total percentage for funding, and it is a percentage of new
limited access capacity in the United States. It’s about a third in the last 10 years. Tolling
is a lot bigger part of adding new capacity in this country than more than a tiny
percentage of people realize. So it’s actually a fairly big player in the marginal evolution
of our transportation system.

The lead from any state or local area on building a new freeway to building a new toll
road is so huge. I mean even in Texas where toll roads have been really a part of business
for some time. VMT is an orders-of-magnitude bigger deal than some new toll road and
tolling some new facility in the area.

We made a series of recommendations. This process is going to continue over however
long it takes to implement VMT fees. So at some point, when we do have a mileage-
based user fee system, it’s going to have to integrate whatever is happening meanwhile,
which is all these individual toll roads. Maybe state VMT charges rise up before the feds
got around to it. That is not trivial either, but is also a tool for transition, because to
whatever extent federal government can encourage state and local government to move
towards pricing, the more we resolve a whole bunch of these guys.

One of the most interesting things to me, as a researcher on road pricing over my career,
has been in any place you put in any kind of pricing, people’s opinions are radically
different before and after, on anything you ask them that has to do with the pricing. It’s a
transformative thing to experience pricing. It changes people’s opinions about all kinds of
aspects of transportation. Whatever extent pricing continues over the next 10 years to be
part of how we solve mostly state and local transportation funding problems, that’s
actually going to make a huge difference in resolving a lot of those attitude-based,
perception-based and sort of the “how you deal with that in a realistic transportation
system” problems that come up when you talk about VMT.

In a lot of ways, a big part of all of those concerns and those advantages is changing
pretty rapidly. So you have to keep re-calculating the cost benefit analysis in a lot of
ways. And you have to keep re-calculating what the problem really is. We have to solve
at the margin, to make the next step feasible. I have boiled down a lot of the fundamental
challenge with change we have, which has been stated in various ways already today.

Public resistance—people are not sure about the technology. And there are all these
manifestations of resistance. There is a fundamental basis for that. Right now, trust, the
taxpayer public’s trust in the current transportation system, is really low. Transportation
in the US is a “big fat waste.” The problem is not as severe when you get down to state
and local level. To me it is fascinating how people talk and poll on increasing the gas tax
versus how people talk and poll on a local option sales tax at the city or county level to
pay for transportation. Not that there is no overlap between those two sets of opinions,
but their differences are vast.

When people know how much they are going to pay, where the money is going to go, and
they can see what is being built and there is commitment and oversight, people vote yes.
People vote for very specific things. People vote for local option sales taxes just to pay
for transit projects that can’t be funded through the legislature because nobody thinks they are popular. But people vote for it when they say, “You are going to take this much money from me, and it is going to go to this thing and I can watch it being built.” And contrast that to the gas tax system. You don’t know how much you pay, you don’t know where it goes, the only thing you know is that it goes to lots of crazy stuff and you know that you don’t get as much as you pay. Nobody in their right mind is going to support putting more money into that system. Jim (Whitty) said “what’s in it for me?” is the big question for the user. What do they get? How do we make them see this the way they see a local option sales tax?

How do we map that certainty and that trust that people have in that process up to something like a VMT fee? That is what we need to do. I am not saying I know how to do that, but I am saying that when I think about transition, I am increasingly thinking that that is the central problem. The technology, the accounting, all this stuff has to be resolved. People like us are mostly the ones that will have to resolve it, so it is very appropriate for us to think about that. But the legislators in Congress—those guys are not going to resolve those problems. They are worried about this. How do we get people to accept it? And people are not going to accept it until they believe the system is not going to give them the dirty end of the stick. That is why the German story is so instructive.

The commission was asked to resolve what the federal government could do. So we focused on a very top-down approach because that’s what Congress called us to do. Our deal was all about how federal government could be the leader, to be the first one to implement it and make it happen. That is very worth thinking about, and very worth pushing. It needs to happen at the federal level at some point. It’s going to take a longer time than anywhere else, so we need to start working on that. Maybe you think it should be bottom-up with a bunch of these states and even regions/metropolitan planning organizations (MPOs) implementing this. Now that will introduce some problems too. Integrating all those systems is going to be somewhat challenging. But we might actually make faster progress that way. I think the answer in a lot of ways is both. We have to keep pushing at the national level for how we are going to solve this problem, unless we want to commit that “you know what—the federal government is going to be less and less a part of the transportation system.” And nobody seems to want to grab that bull by the horns. If they are going to continue to be 30 or 40 percent of the system, then they need to be 30 or 40 percent of the solution, and that means they will have to do this transition too. And because of the clumsiness of change at the federal level, driven by the re-authorization cycle, you can’t fool around and just say, “We are not going to worry about the federal level; we will just move ahead in the state level.” But you need to move in the state level meanwhile. You can’t wait for federal government either, I think.

Thank you.