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Welcome:

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The Brookings Institution

Opening Remarks:

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Fellow
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Presentation:

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Senior Vice President
HDR Decision Economics, Inc.

Roundtable Participants:

Moderator:

JASON BORDOFF
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Panelists:

DAVID HEYMSFELD
Staff Director
House Committee on Transportation and Infrastructure

RONALD F. KIRBY
Director of Transportation Planning
Metropolitan Washington Council of Governments

CLIFF WINSTON
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P R O C E E D I N G S

MR. FURMAN: So I'm Jason Furman, and I'm the Director of The Hamilton Project at Brookings and wanted to welcome you to today's discussion of congestion pricing, which the Hamilton Project is cohosting with the Metropolitan Policy Program at Brookings.

With New York City City Council's approval of Mayor Bloomberg's plan for congestion pricing, this is a very timely topic today, and it's the first installment in the Hamilton Project's ongoing work on infrastructure. So you should mark your calendars because on July 17th, we will be releasing a range of specific policy proposals in the infrastructure area here in Washington, D.C.

In July, we'll also be releasing a strategy paper which sets out the project strategy on infrastructure, and it's going to emphasize not only some of the traditional ideas about making more investments and making smart investments but really that a lot of what matters in infrastructure is how you use your existing infrastructure and, in particular, the role that pricing and market mechanisms, like the congestion pricing that we're focusing on today, can play a role in better using our infrastructure. The Metro Program is also doing a lot of work in this area, and you'll hear about that in a moment.

So let me just describe the program, and then we'll get started. We'll start with brief opening remarks by Rob Puentes who's a Fellow in the Brookings Metro Program, who focuses on urban planning and transportation issues.

Then David Lewis, who's the Senior Vice President of HDR Decision Economics, will present his proposal, a discussion paper that the Hamilton Project is releasing today that focuses on a coordinated federal-state policy to move congestion pricing forward throughout the country.

Then the Hamilton Project's Policy Director, Jason Bordoff, will moderate a roundtable discussion of this proposal with David Heymsfeld, the Staff

Director for the House Committee on transportation and Infrastructure, Ronald Kirby, the Director of Transportation Planning for the Metropolitan Washington Council of Governments, and Cliff Winston, a Senior Fellow in Economic Studies.

So, first, we'll hear from Rob.

MR. PUENTES: Thank you very much, Jason and good morning, everybody, or afternoon. Good afternoon, everybody, and thank you for coming on this day.

Thank you to Jason and the Hamilton Project for letting the Metro Program cosponsor or co-host this event, really co-hosting in name only. They've done all the hard work. So this is really actually the kind of partnership that we like very much, when they do all the hard work and we get half the credit.

What I've been asked to do in just 10 minutes or so is to provide a broad overview of the national transportation landscape, the conversations that are out there today, to the extent that anyone can provide an overview with just 10 minutes. This is definitely a very interesting, very volatile time for the transportation conversation in this country, not just infrastructure at large, but the transportation conversation in particular.

As Jason mentioned, at the Metropolitan Policy Program, we have been doing work on transportation and infrastructure for a number of years now, but most of that work that we have done at the Metro Program has been in states and metropolitan areas all across the country, places like Pennsylvania and Atlanta, Louisville, now some work in the intermountain West, work with folks like Ron Sims who's here today, the Executive of King County, Washington.

The reasons for that, I think, are obvious. When we started looking around the country and looking about where we were going to do some of this work, we went to the places where a lot of the innovation is happening, where a lot of the entrepreneurialism, a lot of the new best practices. A lot of the best ideas were being generated in states capitals and metropolitan areas all across the country.

Here in Washington, frankly, trying to use my words carefully, there wasn’t a whole lot of innovation. There weren’t a whole lot of great ideas. There wasn’t a whole lot of very rich conversation around transportation and infrastructure. I think that given some of the things that have happened in this country in recent years, given the conversations in Washington, that the words, transportation and infrastructure, on the federal level anyway, are more associated with words like pork and politics than they are with things like economic growth and competitiveness. There seems to b something very broken here on the national level.

Three years ago, the Congress reauthorized the Federal Surface Transportation Law, the Safe and Accountable, Flexible, Efficient -- I always forget. The acronym is SAFETEA-LU, anyway, named after the former Committee Chairman’s wife, the LU part, not the SAFETEA part. The bill was a $286 billion bill for five years. No matter how you slice it, it's a lot of money.

Almost $300 billion to pay for federal transportation investments is a lot of money. Yet, despite the problems the nation was facing, despite the breadth and just the size of this bill, there really was no policy conversation around transportation here in Washington at least a couple of years ago. The conversation really was all about money, how much the bill was going to be, who was going to get it, how they were going to pay for it. There really wasn't a very substantive conversation about major challenges that were facing the U.S. and its major metros in this country today.

Part of the reason was because, I think, at the time, we had money. There really wasn't a concern about funding like there is today. I'm not naive enough to think there wasn't a concern, but the concerns about funding weren't like they are today.

Now, things have changed fundamentally. The SAFETEA-LU bill is due to be reauthorized or is due to expire in August of 2009. Between now and then, we expect that the Surface Transportation Trust Fund, the Federal Transportation Trust Fund, is going to expend its balance and the funds that are authorized in SAFETEA-LU are not going to be there in the trust fund to pay for the bill that Congress and the President signed into law back in 2005.

There are not a lot of options here right now. I mean the things that are on the table, either to slash the program back or to raise additional revenues from a whole variety of sources, raise a lot of contention, a lot of concern, a lot of challenges all across the country about what we’re going to do with the future surface transportation program in this country, given the funding challenges that are out there right now. So there really is a tremendous opportunity for some very, very real reform here in Washington, some opportunities that we just haven’t had in such a long time. It makes ideas like congestion pricing extremely viable, responsible and appropriate policy solutions, I think, for America's 21st Century transportation challenges today.

So let me just quickly set the stage with where we are now. Today, the national transportation program really is at a crossroads, and it stands in stark contrast to the other eras of federal transportation policy at least beginning in the 1950s with the beginning of the modern surface transportation program, the interstate era signed in by President Eisenhower back in 1956, a bold new vision for what the government should be doing on transportation.

It really wasn't that contentious. Everybody was behind it. It had a revenue stream. Eisenhower wanted tolls, but they had a revenue stream. They got the thing done. Fifty years later, the interstates are finished, and it represents the largest public works project we've ever seen in this country.

Nineteen ninety-one represented the second era or the next major era in the modern program which was on the ISTEA laws, where folks like Senator Moynihan, Senator Chafee, congressman Mineta, and I'd cycle the other representatives out there. That's Bud Shuster, but you can cycle a bunch of other folks through there. They tried to move the system away from the interstate program that it was in the 1950s into a new era connecting the modes, talked about issues like air quality, citizen participation, taking transportation out of the interstate era into something more modern.

Today, it's not clear what the vision is. It's not clear what the nation's surface transportation priorities are. It's not clear what the role of the federal government should be in transportation today. Given that the program is still focused on money -- it's still a money bill -- it's not clear how the federal program is going to address a lot of the challenges and concerns that the nation is facing today, and this is a difficult situation.

We know that because of the massive demographic, social and economic changes that are taking place today, that we are a full-fledged metropolitan nation. Just the top 100 metropolitan areas have about two-thirds of the national population, about three-quarters of the most educated citizens, three-quarters of the nation’s economic output and, as you can see from the slide, they handle the bulk of our nation’s transportation assets.

The key indicator here is that one highlighted in yellow for congestion costs. You can see the top 50 metropolitan areas represent about 81 percent of the entire congestion costs for the nation and just two places, Los Angeles and New York, represent about one-fifth, I believe. One-fifth of all the congestion costs in this country are concentrated in these largest metropolitan areas.

I would be remiss if I didn’t mention that folks like the venerable Brookings scholar, Anthony Downs, have some problems with the methodology behind how they calculate the congestion costs. Whether you can get to free-flowing conditions is debatable, but the point is that the bigger the place is, the bigger the problem, and this is where the nation’s congestion problems really are concentrated.

The lens for the metropolitan areas is a good way to look at some of the other national transportation challenges we’re facing today. A couple of things here I’ll just talk to you about quickly:

First is that there is this infrastructure epiphany that has arisen in this country ever since that bridge fell down in Minneapolis last August. As soon as that bridge fell down, the conversation on infrastructure and transportation really did change in this country.

We know that roads and bridges are in poor condition. The term, structurally deficient, became a buzz word for how broken the infrastructure is, literally.

We know that transit systems are aging, not just here in the Northeast and the Midwest but all across the country. The need to reinvest in the existing infrastructure is profound.

The development of new technologies, new telecommunications technologies, to improve the system has really been sluggish in this country.

The second thing is that there’s real question about whether or not we have the right kind of infrastructure in this nation to position ourselves to compete in the 21st Century. As folks fly back from China and Pudong Airport and London and some other places, they look at the infrastructure in place today and they wonder whether the U.S. is actually strategically positioned because of the infrastructure we have.

We know that truck traffic from containers is increasing at very rapid rates. Freight rail trackage is declining at the same time. Most Americans do not even have transit available to them. Whether or not they take it or not, the options just aren’t there in many places, and intermetropolitan area rail in the form of Amtrak is woefully inadequate.

The third thing, America's major metros still are stuck in traffic. As I mentioned, congestion is hyperconcentrated just in these larger places. Landside access to ports, both air and water, is jammed up as major congestion problems in and out of these major U.S. ports.

All of this is happening while vehicle miles traveled, measurements for how much and how far people are driving, was actually leveling off or declining. For a long time as people drove more and more cars, people driving much more, you can understand why we were getting more congestion in this country. As those trends start to level off and change, we need to think differently about the policy responses for dealing with congestion.

The fourth thing is that climate change and energy independence have emerged as major national problems. There are few issues in this country, or at least in Washington, that have gone from zero to sixty as fast as the issues of climate change. Transportation accounts for about a third of all CO2 emissions, and we are still almost entirely dependent in this country on petroleum-based fuels.

The fifth challenge is that there's rising concern about the growing gap between wages and the cost of daily living for a large portion of the American workforce. Issues around the subprime prices and all this are just making this worse, but transportation and housing are the largest shares of household budgets and the tradeoff between those two has profound effects on how metropolitan areas grow and develop and makes issues like raising the gas tax, which is on the table right now, politically challenging. We could talk a little bit about that later, or a lot about that.

But the last challenge, the one that gets all the attention, I think, is this issue about transportation finance. Again, I'm not naive enough to think that this doesn't matter, but we're not really talking about a lot of other challenges right now. We're still talking about this issue of transportation finance. Any finance presentation you go to, you see charts like the one up there on the left, and it really focuses on this gap between the funds that are authorized in the federal bill, the revenues coming into the trust fund and then that gap between there, the money that's not there to pay for those authorized funds. The last thing there is the balance in the trust fund which is going to bottom out sometime this year.

So we know the federal government does not even have the revenues to cover its existing obligations and that states are unwilling or unable or just don't really feel like talking about the gas tax right now. Transportation finance is a major, major transportation concern.

So, as it relates to the conversation today, I do think that things seem to be changing. There's a lot of emphasis right now being placed on tolls and congestion charges, not just to address the transportation finance problem which I think intuitively is where people make the first leap, but to use congestion charges and to use tolling as a way to get the most out of the existing system, to use the existing system better by pricing it right. Folks like Cliff Winston have talked about this for a long time.

So the finance conversation is still going strong. Now we have folks like David Lewis who can add their paper and their voice to the growing list of people who are calling, not just for congestion pricing but for real fundamental reform in the federal transportation program. Pricing it right is just one step. We need whole-scale reform in this system.

I’m looking forward to David’s comments, and I’m looking forward to having that paper be just another one of these calls to real reform in the future.

I want to thank you very much for having me here today. I hope these comments were constructive, and I’m looking very much forward to David and his comments.

(Applause)

MR. LEWIS: Thank you, Rob.

The PowerPoint pause. Okay.

One always wants to open one's remarks with something which ties a bit of humor into the theme of the day, and I'm reminded of, well, I'm reminded because I'm a student of history, not because I was there, but this is a story that goes back to Queen Victoria, although you might wonder.

Many of you will be quite familiar with London, and there's a huge botanical garden which Queen Victoria commissioned during her reign in the 19th Century, called Kew Gardens, a magnificent botanical park. She insisted upon commissioning of the park, that there be a price for entry, not to finance it but to ensure that those who used it valued it and that it didn't become too crowded for the enjoyment of its principal purpose which was to present to the public as much foliage and plant species from all over the world, and it's still there today.

I guess the punchline is that she imposed a charge of a penny which was meaningful in those days and, as you might imagine, the charge today hasn't changed very much. Well, actually, it's still a penny.

I think the story is quite apropos of where we are today. Roads and bridges began as turnpikes and toll bridges in the United States in the early days, and the culture of free roads and mobility for all as a paired policy framework and cultural framework took root in particular with the advent, as Rob points out, of President Eisenhower's initiative with regard to the Interstate Highway System.

When we talk about fundamental reform today, in my mind, it goes to fundamental reform in the way we think about the dichotomy between the real, the true cost of the roads we use and the appropriateness of continuing with a cultural of free roads or roads free of point of use.

Congestion is a national economic burden. Delay, diminished reliability and predictability, these things create losses in productivity, losses in economic performance, competitiveness, loss in family costs. People who leave work an hour early, not because that's how long the trip is going to take but because they have to anticipate the possibility of unexpected events, lose time they would much rather spend with family. People who leave meetings early or add a cushion into their travel time at their meetings, not because of the time itself but because of the probability of being late due to unexpected congestion, lose enormous amounts of productivity and profitability and competitiveness in so doing.

Congestion is causing higher operating costs, as Rob points out, higher environmental emissions and accident costs which cost lives, injuries and property.

Congestion is indeed a local and regional phenomenon, but it's a phenomenon of national strategic interest, and that's our starting point for contemplating a federal role or a continuation or an expansion of the federal role in the reform process.

We have some statistics from 2005 developed by the Texas Transportation Institute, and this is the framework that Rob Puentes pointed out Anthony Downs and others take some issue with, but these statistics are telling: The peak period traveler was spending an extra 38 hours stuck in traffic in 2005, consuming an additional 26 gallons of fuel or $710 per traveler.

Delay and fuel costs taken together across all travelers in peak periods were, according to this study, cost the nation $78 in 2005.

The number of urban areas where a peak traveler experiences more than 40 hours of annual delay, that was only one place in 1982. It had grown to 28, fully 28, in 2005. If current trends continue under these assumptions and methods in this particular study, 11 additional urban areas could reach the conditions being experienced by the nation's most severely congested city, Los Angeles, that by 2030.

Just a quick word about the statistics I just mentioned as a segue into discussing the role of congestion pricing: The $78 billion that we've lost in economic costs, at least from time delays and fuel costs in 2005, is not something we would want to eliminate entirely as a result of congestion management or, indeed, congestion pricing. In the economics world of congestion pricing that is quite rich in terms of the literature, we read and we know that under the optimal toll, the optimal price, we wouldn't eliminate congestion. There would still be crowding. There would still be the hustle and bustle that we associate with a vibrant urbanized area or commuting corridor.

What we're seeking to do is find the right balance between good congestion, which I sometimes like to liken to good cholesterol and bad congestion, that which exists over and above that which we would expect if we were levying optimal tolls, and it's that difference. So what we're talking about when we bring congestion pricing to the table is not eliminating all $78 billion, all 38 hours of time stuck in traffic, and perhaps that will help frame some of the remarks I'll make now.

Congestion results, in a large part, from underpricing. We know that, as travelers, we take our private costs fully into account. When we decide to make a trip, we consider the gas and the gas taxes and the oil and the tire wear and even the depreciation and fixed costs that we have to bear.

But we don't consider what we call in the economics world the external costs of congestion. There are costs which are external to our own decision calculus which are nonetheless real economic burdens when we decide to enter a crowded traffic stream, and that's the time costs we impose on each other and the imposition of that time on the national economy and the functioning of most all industrious sectors and, indeed, the consumer sector.

The magnitude of such costs, such external costs, can be anywhere from 25 to 55 percent of private costs. Congestion tolls in simple terms, are tolls that are set and designed to mirror, to signal back to us as consumers, as travelers, as consumers of road space, to signal back to us what the real economic value of these other costs, these external costs, are when we decide whether to make our trip during busy periods or whether to make it during some other time, whether to make it all or, indeed, whether to make it by some other mode: transit, or in some cases, bicycle, walking or motorcycle. So congestion tolls are prices that vary by time of day to reflect external costs.

With the imposition of congestion tolls, we can expect -- and the studies indicate and I summarize some of these studies in my draft -- we can expect to see roadway efficiency and performance improve. I've shown that even on very conservative assumptions, the value of the time saved and other benefits associated with those time savings, associated with those who remain on the road exceeds the losses, the economic losses, from those who would be priced out of the busy period of the day, either priced off, either making fewer trips or using other routes or transit.

In economic jargon, we say the roadway network has improved in its economic efficiency. Or, if there are propeller heads like me in the room, we’ve eliminated or helped eliminated what we call a dead weight loss in the economy.

We also know that congestion pricing, by virtue of the fact that it reduces pressure on the system and demand on the system, reduces transportation investment requirements. One study by the U.S. Department of Transportation, published in 2006, estimates, though it stresses that it’s a preliminary estimate, that the cost to maintain current highway performance could be reduced by as much as 27 percent with nationwide applicability or nationwide application of congestion pricing on the nation’s most congested roads.

Congestion pricing can also, as prices do in the real economy at large, help direct resources to sound investments including roads and transit. We should get from widespread application of congestion pricing a better balance of investment, better from the economic perspective or the social welfare perspective, between the amount of roadway investment we make and the amount of transit investment we make.

Why? Because prices help send signals as they do in relation to most any good and service, to suppliers as to where the demand is greatest and where investment makes the most sense. This presumes far fewer earmarks which is another issue on the table in Washington, and it presumes that we listen to those signals. But we are talking about fundamental reform, so I'll think big.

It creates revenues. The tolls naturally create revenues which I believe can and will be very significant, and those revenues will help finance investment and help finance the means by which to diminish the burden that congestion pricing can impose on those who have come to rely on a system of roads that are free at the point of use, particularly low income individuals.

So what about a framework for nationwide reform? We certainly have a great deal of momentum. There's been a great deal of, especially, federal leadership in this field. There's the value pricing program which has created, I think, over 40 at least demonstrations, experiments and such like with different kinds of congestion pricing around the country. We have the Urban Partnerships Program which I think can be given some credit for nudging along the progress that was manifest in New York yesterday, something I take a little bit of pride in, having worked through that process along with many others to get to the point where we are today. So cross your fingers if you're in the congestion pricing court for a good vote in Albany when it comes.

But what we still face are cultural barriers to the widespread or ubiquitous application of congestion pricing. New York is a good case in point. Even though City Council did vote to bring it in, there was a huge amount of resistance. We all know that the idea of free roads for some is close to a civil right in this country and has been marketed almost as such from the days of the early planning of the Interstate Highway System. There is a great deal of political resistance at the local level, although there is some, as I write about in the paper, latent political support.

But the question is what can be done to overcome the cultural free roads issue and the political barriers to institutionalize congestion pricing in the way we think about roads, fundamentally, not just congestion pricing as another choice along with parking management and transportation systems management.

Some of the thinking I've done goes to, number one, redesigning the way the federal highway program works to institute a differential matching system for particular types of projects. At present, states get matching money from the federal government. Let's say 80 percent for a particular plan or a particular project. One can imagine a differential match by going back to the statistic that I cited earlier, that preliminary estimates suggest that there would be a 27 percent reduction in the resource burden on highway investment if there was widespread congestion pricing.

So, for states that come in without a congestion pricing plan in search of federal matching money, the federal government can say: All right, if you did have congestion pricing on this road, we would save the federal taxpayer 27 percent over the long run with regard to the resource burden. So we'll give you 73 percent of 80 percent, about a 58 percent match, and you could create a differential match accordingly –- another way to incent.

That would do two things. It would help make the case locally compelling and, in making it compelling from a financial perspective, help overcome some political resistance. But more than, that it would represent a sea change in the way the federal government looked at the way the supply and demand for roads should develop in this country. It would recognize and institutionalize the role of prices.

A 27 percent discount on the match is probably a bit too draconian, given the equity considerations and regional balance that we also try to achieve within the highway system. Moreover, that

27 percent, not only is it very preliminary, a lot more work is needed to noodle away at that number, but it doesn't include the cost, the investment in setting up and running the investment planning scheme. But it is, in principle, a way in which to institutionalize and embed the concept of congestion pricing.

An alternative would be to leave the base match alone and provide a premium. We know that states, by the same logic, for their 20 percent, if they have congestion pricing over the long term, that would go down. Their costs would go down by 27 percent of 20 percent by 5.5 percent. Congress could match that. So, instead of an 80 percent match, if you come in with congestion pricing, you'd get 85 percent.

I don't make a meal of the exact formula, but I do suggest that that is one way in which to begin to institutionalize pricing into the very heart of the federal program.

I also see, as does the federal commission that reported at the end of last year, the need to remove federal restrictions on tolling. Apart from certain pilot programs, states are not allowed to toll the existing interstate system. From the point of view of states themselves, this proposal would call for states to remove. There are some states, about 20-25 states, that don’t permit tolling at all.

Very briefly -- I’ve just been waived a very briefly – Congress, enacting this kind of program, would also ask the federal Department of Transportation to provide implementing regulations and guidelines. Perhaps an NPRM could be available by 2013 for implementation in 2015. The incentive formula would be refined. Its relationship to statewide transportation investment plans would be refined.

I’ve somewhat simplified the situation because states don’t apply project by project for federal match money. They have their statewide transportation plans themselves approved, and I don’t contemplate the match being incentivized in relation to the entire plan. That would be a bit of tail wagging dog. So work is needed there.

The DOT would also describe the kind of projects that would qualify for the incentive program. It would provide advice or guidelines on setting tolls. There’s a whole slew of issues here. Optimal tolls are tolls that would ideally reflect external costs. Second best tolls are sometimes better because they are lower and reduce the amount of diversion onto city streets which can have its own second round costs and destroy the overall benefits of the plan.

I see the need for a framework for interoperability and common platforms. I understand that automobile companies are already talking about providing transponders and other common elements in cars. I think the federal government could help nudge along the automobile industry to provide a basis for the use of common platforms, so that these systems are interoperable across the country, and mitigation requirements and guidelines.

To wrap up, we know that studies indicate that the economic benefits would exceed the economic costs, but we also know that poorer households and other disadvantaged groups are likely to bear a highly disproportionate burden. One study by Herbert Mooring showed that for the poor in the Twin Cities the cost of the toll itself plus the economic costs of diverting to more circuitous routes or reducing the amount of travel altogether would leave them in a worse off position. Not everybody is a net gainer from congestion pricing.

But I also find that toll revenues are potentially sufficient to compensate losses for at least those who would be the largest to be disadvantaged through monetary compensation and through infrastructure investment including transit, and I see the need for nationwide reform for some systematic guidance on how to build compensation programs and mitigation programs being brought into the mix.

So that closes my remarks. I appreciate your comments. I look forward, I think, to my discussants' comments following me, and I'll yield the floor to you, Jason.

(Applause)

MR. BORDOFF: So thank you again, everyone, for coming today.

Let me just take a minute to briefly introduce everyone that's up here. David Lewis, you've already heard from. He's the Senior Vice President with HDR Decision Economics. He serves as the firm's Chief Economist and Director for Economics and Financial Services.

David Heymsfeld, the Staff Director of the House Committee on Transportation and Infrastructure, where he's served for more than three decades, I believe. So we have quite an extraordinarily talented group of people up here with deep expertise in this topic.

My name is Jason Bordoff. I'm the Policy Director of the Hamilton Project here at Brookings.

Cliff Winston is a nationally recognized expert on the economics of transportation. He’s a Senior Fellow here at Brookings where he’s been for more than two decades, I believe.

And, Ron Kirby, on the end, is Director of Transportation Planning for the National Capital Region Transportation Planning Board at the Metropolitan Washington Council of Governments where he’s worked for two decades after directing the transportation program at the Urban Institute.

So we really have quite a bit of expertise on both the theory and the economics of congestion pricing and then real world experience trying to put this into practice, and I hope we’ll be able to draw on both of those areas of expertise.

So what I want to first do is give each of the panelists a chance to very briefly respond to the proposal that David presented, give David a few minutes to respond to some of those comments, and then we’ll try to dig in a bit deeper to a few of those, and then open it up to questions from all of you because I see around the room we have extraordinary expertise in the audience as well.

Not to cover everything because we'll come to some of these issues but to start with sort of the highlights in three or four minutes, David, if we could start with you.

MR. HEYMSFELD: Well, thank you very much.

I'm a near lawyer, so I can't get into some of these economic theories, but I also have the virtue of working in the political environment where any legislation that would accomplish these projects would have to be done.

Let me start with the overview because I think how you state the overview of the problem influences how much you're going to rely on congestion pricing and what kinds of tradeoffs you're going to feel impelled to make or not make.

I think the worst case scenario of the overview from our standpoint, the House Committee on Public Works, the House Committee on Transportation and Infrastructure, comes from the administration where their believe seems to be that the gas tax of 21 cents a gallon is all the gas tax can ever be and it doesn’t matter what happens with inflation and how much costs go up. The tax hasn’t been adjusted for inflation since 1993. In their view, it’s politically impossible to do so. Part of the way they accomplish that is by insisting that it’s a tax, it’s not a user fee. We like to think of it as a user fee because it all goes into funding the infrastructure.

So if you assume that that tax is fixed forever, you’re going to get a smaller and smaller traditional federal program and therefore the need for massive reliance on such elements as congestion pricing.

From the standpoint of our committee, we realize that there’s currently substantial opposition to paying higher taxes in any form of the tax system. In the highway program, it’s a challenge because the highway program has been discredited a good bit by the earmarks, even though they’re only 10 percent of the program and hundreds of millions of dollars go out each year to projects selected by state highway departments of transportation, presumably on the merits. But the whole program is treated as though it's nothing but worthless pork barrel projects.

So, in the Congress, we've got a job to do of redesigning the program and convincing the public that there are these massive needs out there and that the traditional ways of funding can be done with a merit-based system. I think once we do that, we'll have an opportunity to try to persuade the public that more revenue needs to come in. The gas tax ultimately may not be the best way of doing that, but there are other ways -- mileage charges, et cetera -- where you could have much more of a traditional program, and that would reduce the need to rely on congestion pricing.

On our committee, people have some major concerns about congestion pricing, and I was happy to see that this study is recognizing some of those concerns and addressing them. Some main concerns are the unfairness to low income people who have purchased houses and have to get to work over a certain route, and suddenly you're going to tell them it's going to cost you 10 or 20 dollars a day to get to work. In many cities, you don't have good alternative transportation. So a part of any congestion pricing program should be taking account of that and using the revenues to develop other forms of alternative transportation.

I think, as was mentioned, it's politically challenging to get the gas tax raised, which it is. But another way of looking at is as Jack Schenendorf, the vice chair of the recent national commission, pointed out, is that you could double the gas tax and it would cost people 60 cents a day. Don't you have a shot at persuading them that that's better than paying five or ten dollars a day in tolls?

One of the things that really should strike terror into the hearts of proponents of congestion pricing was a story that appeared in the *Washington Post*. I think it's 395 from Prince William to Washington was going to cost $23 a trip if there was full-fledge congestion pricing. I think, in congestion pricing, you're going to reach a tipping point where people are not going to stand for the people who can afford to pay $40 a day, speeding along at 50 miles an hour while the rest of the people are stuck in traffic.

I know you want me to be brief. I think it would be premature at this stage to adopt a program where we're going to sort of press the states, the locals, to do congestion pricing on a national basis such as a major change in federal shares. I think there's a lot more work that needs to be done on how congestion pricing would work, whether it's practical to take account of the low income drivers, what the costs are going to be, how acceptable the public finds it.

But I think on the plus side for proponents, I think many in our committee recognize that it can be part of a solution. We have massive needs and probably almost certainly all can't be met by the traditional system. So there is a role for congestion pricing, but we think it has to be developed carefully and not gone into with an automatic basis, ignoring other elements of the program.

MR. BORDOFF: Okay.

MR. HEYMSFELD: Did I give you enough time?

MR. BORDOFF: Yes, that's great. Thank you, David. We'll come back to several of those topics, I suspect.

Cliff.

MR. WINSTON: I'll try to achieve dense communication. If I go over, I won't say another word the rest of the conference.

The idea of road pricing has been around 200 years at least. The actual application we have in mind, congestion pricing has been around about 100 years. During all that, almost all that time, it's been thought of as an academic, ivory tower idea with little practical application. Only in the last few years, really, has it gotten a lot of attention or a fair amount of attention at least in the public arena. So it's actually quite a positive thing to have an event like this where participants aren't really academics but policy practitioners and policymakers and the like. So that's a positive step.

Now before the idea gets hijacked by Washington and the policy community and debated in the way it will be debated with good things and bad things, let me mention two things just to broaden the idea and have that then eventually get back into the debate and lengthen our time in how we think about it.

The first thing is that our objective really is not implement congestion pricing as to improve the performance of the highway system. So congestion pricing only deals with one aspect. That's pricing cars. Cars do not account for congestion, and so that's the need for putting in congestion pricing. The gas tax does not vary by time of day, and that's the problem on peak capacity.

But there are several other things that are on the table: Trucks, pricing trucks, trucks tear up the road, and they're the ones that crush the bridges and cause the accidents. There was a big one in the eighties that probably preceded the one, well, it did precede the one in Minneapolis and got a lot of attention for a year or so about improving infrastructure. So we need to have improvements on how we price trucks, both for the damage they do and what goes on with the bridges.

After pricing, there's the design of the roads and design of the bridges. The roads are not properly designed. They've been underbuilt. They had to finish the highway system, and so they sacrificed the capital costs to do that, to improve the capacity, but the roads are wearing out sooner than they were predicted to wear out. Bridges, too, are claimed to have poor design problems.

Allocation of funds, where does the money go? The money is allocated not on cost-benefit grounds, but there are various formulas so that everybody gets in on some of it. So we get bridges to somewhere, bridges to nowhere, bridges to underground, bridges this and that, and that's basically what the system looks like. Reallocation could go a long way.

Even if we have pricing right, design right, allocation right, there’s still a fundamental problem of the cost of doing all of this is way too high. Labor costs are inflated because of Davis-Bacon. Capital costs are inflated for a variety of reasons. It’s estimated that just a simple cost of doing anything with roads is about 20 percent higher than it ought to be. Then on top of that, the current level of technology, the innovation that could be taking place and using a lot of things in terms of routing and driver-less cars and all that sort of stuff isn’t in effect.

What does this have to do with congestion pricing? Well, congestion pricing only works for one critical reason. It saves time but generates a lot of revenues, and those revenues are really important. If that revenue is not used efficiently -- that is inflating wages, putting money on projects that don’t do any good -- you could argue that congestion pricing actually is not beneficial because we’ve wasted the key part of the revenues.

So all of this really works together. You're going to have policies either move together to improve the highway system collectively or, in a sense, the piecemeal approaches. If we still keep the bad things that we're doing, we're going to undermine what road pricing is trying to do.

Okay. That leads to one final point: Who should be doing this? Now, contrary to popular belief, our transportation system did not begin in the 1950s. It began when the country was born, so to speak, and there's been an ongoing experiment on how best to implement transportation policy.

The first hundred years could basically be characterized one of privatization. Roads were initially private. It wasn't a public road system. We initially had private roads as well as private everything else, private rail, private airports. Even transit in the fifties initially was private. Okay.

But that hundred years had its experiment, and we went into a cycle. We saw problems with privatization. We moved into then public ownership, much stricter regulation of railroads, airlines and trucks, public ownership of airports, highways and the like, and public taking over of transit and buses.

What are we doing now? The cycle is changing. We're deregulating inner city transportation systems. There are discussions of public-private partnerships. There are concerns about management of public systems in transit, rail and the like. Now back on the drawing board is should we be rethinking about privatization of the system?

Okay. Well, in another hundred years, let's hope we can sort of work that out.

I don't have yet a position whether privatization would definitely be an improvement over what we have now. It is absolutely clear that there are very serious inefficiencies with the current system. Privatization merits consideration as it has over the hundreds of years, and I think if we take a longer view of this including the institutional mechanism to doing this, I think it will ultimately help us generate better policy.

Thank you.

MR. BORDOFF: Thanks, Cliff. A lot there, a much broader topic that a lot of people view as related to congestion pricing, and so I hope we'll come back and address the issue of privatization.

Ron.

MR. KIRBY: Thank you.

I'll speak primarily from the perspective of trying to get pricing implemented in this region, specifically. Prior to becoming an NPO Director, I was working at the Urban Institute and doing research, working for the demonstration program actually in DOT at that time. We tried to do some pricing projects around the country, and we had very limited success, I would say, but I've always felt that this was a very important concept and that we'll never get on top of our transportation problems unless we start to price things properly.

So, from a theoretical and conceptual point of view, I'm totally on board. The question is the practice of this.

A key point I want to make here today is there was a question, I think, in David's paper about why don't we have more of this implemented? What's the problem? Why is there opposition to it, public opposition, political opposition and so forth?

What I want to argue today is that I think views about pricing are changing very significantly as we speak. Just looking at the Washington region over the past 10 years, there's been a dramatic change in the attitude toward pricing. We're not all the way where a lot of us would like to be, but we're a long way from where we were 10 years ago. I just want to give you a couple of points in that timeline to try to demonstrate this point.

The first point, I'll deal with very briefly. When I first got to COG in 1988, I was foolish enough to mention that putting tolls on the Capital Beltway might be a good idea. I was hauled in front of the TV cameras and roasted royally, and after that I didn't mention it. I didn't realize you didn't say things like that in my job, at least if you wanted to stay around for a while.

So, years went by, and then we had SR 91. I came across a very nice paper that Ken Oskew, sitting three rows back there, wrote for ITE, describing the SR 91 project. So I invited him in to give a brief to our staff committee, technical committee. We did a couple of rounds through them, polished up the presentation and brought it to my board which is made up of elected officials from local government state DOTs, metro, state legislators.

Ken had a very polished, I think it was a slide presentation. I don’t think we had PowerPoint at that time. It was a slide presentation which we’d really worked on. It was very, very well done and went through it all. At the end, again recalling from David’s paper, Ken’s comments were to the board: This is a win-win proposition, SR 91.

There were a few moments of just silence, basically. Nobody quite knew what to make of it. They could see the logic of it, but there was a lack of familiarity with the idea which made people, I think, very cautious. Then one elected official was brave enough to say, this is an idea we should definitely consider. That was the end of the conversation, and we went on to other things, but at least we got that far.

We had one attempt to put pricing on Route 50 in Maryland which got pulled at the last moment by the governor because of opposition, political opposition. So that sort of set us back a little bit.

Then, in 2002 or 2003, Patrick DeCarlo Sousa came along from DOT's value pricing program and said, why don't you guys put on a conference about pricing?

I, frankly, didn't think the political situation was ripe for it, but he was very insistent, and so we did. In 2003, we had a conference in a hotel which, to my amazement, brought out a lot of interest from elected officials and interest groups of all kinds in this process. A lot of it had to do with the experience in California, that here were some real live projects operating, and people took it very seriously.

We had one broad line of consensus that came out of a panel which was very memorable at that conference. We had four members on this panel: a representative from the Board of Trade, the business community, AAA, Environmental Defense and the Coalition for Smarter Growth.

The two representatives from the Board of Trade and the AAA said, this is a very good idea as long as it’s only used for new capacity. The representatives from the Coalition for Smarter Growth and Environmental Defense said, this is a very good idea as long as it’s only used for existing capacity. But there was a common agreement there that it was a good idea. So that was progress, and we’ve been able to talk about this concept ever since.

Then along came some real projects and driven -- Rob mentioned, I think, earlier -- really by the lack of funding. There had been an attempt by VDOT to widen the Capital Beltway for a number of years. They didn’t have the money to do it, and the private sector came in much like happened in California and said, we’ll do this as a toll facility if you give us a long enough lease.

So that project has moved forward and is going to construction in the next year or so, four brand new lanes with pricing that varies by time of day, variable pricing, variably priced lanes. About the same time, a major highway in Montgomery County, the Intercounty Connector, moved through the planning process and is also no ready to implemented, again pricing by time of day.

In both cases, the revenues were very critical to actually constructing those projects. For the Intercounty Connector, however, the toll revenues account for only about 25 percent of the total cost. There is an awful lot of other money, federal bonds and all kinds of other things. On the Capital Beltway, the toll revenues pretty much cover the costs of construction and operation but no surplus.

The third project was alluded to a few months ago, 395 HOV lanes which will be widened from 2 to 3 lanes and turned into high occupancy toll lanes. This one is interesting because it generates a surplus over the costs of building and operating it. Some $200 million are available to be put into transit, and that money is committed to transit, and we're discussing exactly what transit will be done with it.

The next stage in this, which is pretty much where we are right now, is finish the study, again from Patrick DeCarlo Sousa's shop sponsored by DOT. I do support the idea, at least the demonstration projects from DOT. I think it does help us do things that are a little bit difficult with our current funding.

We looked at a regional network of toll lanes. What if we did this idea regionwide?

We started out with a line of at least political resistance which was let's build all new lanes. We won't toll any existing lanes. How would that work?

Then we trimmed it back to areas where we couldn’t put new lanes, and we have several scenarios, some of which involve tolling existing lanes in the District of Columbia and on the parkway system in the region. That study just came out and went before our board just a month ago. In general, it didn’t get shot down. I think people are open to the idea.

My final point, to get back to the original question, is why haven’t we done this yet? I think the reaction to our study by our board really indicates what the issue is. It’s all about who’s impacted and how.

If you go back to the three projects I described: The Intercounty Connector, it’s a new road. Nobody’s disadvantaged. Everyone gets a new option.

The Beltway, new lanes, everyone gets a new option, no problem at all with that. I mean there are environmental issues with it but no problem in terms of people being negatively impacted by the tolls.

Three ninety-five HOVs, three are free. They'll continue to be free. The only concern there was some suspicion that there's an agenda to eliminate that even though it's hardwired into the project.

So all three of these projects, nobody is tolled off a facility. Now we start to talk about putting tolls on existing roads, and we open up all the complexity of how are people going to be affected.

In my report, I put a heavy dose of quotations from a paper I'm sure many of you are familiar with from 1964, Zettl and Kyle, which talked about the theory of efficiency tolls, and their subtitle was: The Tolled, the Untolled and the Tolled Off. The whole article was devoted to tracing through the impacts on different groups. Their conclusion is if this is going to be done, it has to be done with a full recognition of all these and other community impacts.

I think it's going to be very complex, just like environmental studies we do on major corridors. You're going to have to track through all the impacts.

Who’s affected and, most importantly, where do the revenues go, do they provide alternatives to people that are going to be tolled off, what are the impacts on other roads? These are the questions that my board members raised.

I mean they didn’t question the theory of this or the desirability of it from the efficiency point of view. It’s all about how are my constituents going to be impacted here and how are we going to mitigate any negative effects?

I think that’s pretty much where we are, but I’m very optimistic. I think what’s happening in Manhattan, what has happened in London. I think the notion of putting tolls on existing roadways in this region is a real live option, and I think in the next few years we may very well get there.

MR. BORDOFF: Thank you.

(Applause)

MR. BORDOFF: So, David, we heard a lot of different points there. We heard some skepticism, a suggestion that congestion pricing may be inferior to some frequently proposed alternatives like raising the gas tax. We heard concerns about potential issues of distributional and equity issues on fairness to low income people. Cliff put it in sort of a broader context about how we fund our highway system and privatization. Then we heard, for example, about the benefits of increased revenues which raises the question about sort of how this revenue would be optimally used and other questions as well.

But start by responding to a couple of the many points that were raised, and we'll come back and speak more about some of them.

MR. LEWIS: Okay. Thank you, Jason.

To begin with David's remarks, I don't view the option of congestion pricing as an either-or or as a substitute for gas taxes. I think it's something of a distraction to couch the debate in terms of congestion pricing or gas taxes as the basis for roadway finance, certainly in the current climate.

In the proposal I put forward or the option that I put forward, in point of fact, there wouldn't implementing regulations until 2015, and they wouldn't go into effect until 2020. The reason that I put such a long fuse on the idea was precisely in deference to a point that David made in his remarks, that it's premature to enter into a program overnight.

There are a lot of issues about revenue recycling, tracing through impacts on different groups, how best to employ the revenues as signals with regard to the best uses of those revenues, a point that Cliff Winston emphasizes. All of that work remains to be done, and there are a number of individuals in this room today who are hard at work on those technical issues as we speak.

The requirement for an increase in the gas tax, although it's not something I address in the paper, is probably very real. I don't see the prospect for a sudden emergence of congestion pricing as a basis for generating substitute dollars for gas taxes, especially not over the next 10 years.

On to Cliff's points, I think you put it, Cliff, right on the money. Everything depends on how you use the revenues as to whether you get not only a socially equitable outcome but, as fundamentally important, an economically efficient outcome. We know the immediate effect of pricing is fundamentally to make everybody worse off apart from a very few or a handful of people who have such huge values of time that they are ready, willing, able to shell out and obtain the benefits.

There's a distinction to be drawn between the highway network which becomes more efficient in the very first instance. SR 91 is a good example of that which was raised in my paper and in Ron's remarks. You get an instance improvement in the efficiency or in elimination of inefficiency, dead weight loss with the absence of congestion pricing right away, but that's not the same thing as saying everyone is also better off at the same time.

The property owner is better off. The owner of the road, of the asset is better off. But it does come with this bundle of revenues with which one can and should do good works, both from an economic efficiency investment point of view and, I would submit to you, very deliberately from the perspective of making whole, to some extent, those most egregiously disaffected by the imposition of important new costs in relation to their daily budgetary requirements.

A point about privatization which Cliff Winston raised: I see in the debate about congestion pricing a confluence, almost an overlap, in many ways an unfortunate overlap, between the issue of privatization and the issue of congestion pricing. Congestion pricing, in my view is not an convenient means by which to create a revenue stream so that you can privatize roadways. The merits of privatization or public-private partnership have to be dealt with on their merits, and they have a host of issues that need to be dealt with in their own right.

From a public policy perspective, I think we’ve got to keep our eye on the ball which is those revenues. Are we going to use those revenues for good public projects, public investment projects, highways, transit and mitigation to disadvantaged groups, first, and then the residual revenues available as revenue streams for private equity and debt to enter into and take risk or not?

If we’re just going to say here’s the congestion pricing, here’s the revenue stream, very nice, let’s go out and sell roads to Australian banks, I don’t know if we’re throwing the baby out with the bathwater, but we’re certainly missing a big point which is that there’s an intermediate or collateral use of those revenues for other than insulating risk-taking, private risk-taking and rent-seeking, which goes to the very heart of why you’re imposing congestion pricing.

So I would urge that we separate the debates about public-private partnerships from congestion pricing and keep them on not totally unrelated but certainly independent tracks.

One final comment to Ron Kirby’s comments, I would characterize Ron’s comments in a phrase and say that congestion pricing is an old idea whose time has come. Whether that means there's no need for the federal government, in terms of the option I'm noodling within this paper, does that mean it can be all bottom-up and therefore there's no role for the federal program to design itself around the use of congestion pricing at some level by 2020? You could argue that.

I take a different view. I take the view that the federal government would not be doing this differential match notion just to provide political cover for the states or to make it politically compelling at the state level. It would be doing so because the federal taxpayer. The burden on the federal taxpayer would be eased by virtue of the fact that congestion pricing would diminish the burden of infrastructure investment requirements. It's that in my mind, which from a public policy point of view, calls for the rationale, if you will, for some federal embracing of a role, some legislative embracing.

When I say this, it's with due regard to the immensely significant work that the value pricing and the urban partnerships. The federal government is doing a lot already. I'm talking about legislative progress here.

MR. BORDOFF: Great. Thanks, David.

So I just want to drill down into one or two of those issues and then open it up for questions. We may run a couple of minutes over if that's okay for our panelists.

The one issue I just want to come back to first is you can look in the paper today. Mayor Bloomberg's proposal passed. I think it was 30 to 20 in the City Council. There are a whole lot of quotes in the paper from those 20, saying things like this is an unfair tax and there are a whole lot of low income people who are disadvantaged by that, and this issue has come up in bits in pieces here. But I just want to ask how big an issue you all think that is and, if it is an issue, how do we address it, because we've heard a few different things?

Ron said when you build new roads, everyone is better off. Do approaches like that sort of help to address this concern?

Does investing in mass transit, particularly in underserved areas like Mayor Bloomberg plans to do with bus service in the outer boroughs, does that get at this or do you need something more direct?

In your presentation, David, you used the phrase, monetary compensation, and the question is what does that look like? If it’s a direct rebate or an exemption from this, that would undermine sort of the effectiveness of the program. Alternatively, you could reduce other sort of distortionary taxes, although that may be a poorly targeted way of addressing that problem in the case of congestion charges, say in New York, for example, where the majority of low income people in the outer boroughs probably never drive into New York City.

You sort of raised that issue first and foremost. Maybe you can start.

MR. HEYMSFELD: I don't know how to solve it.

MR. BORDOFF: But I'd be interested to hear what people think about it.

MR. HEYMSFELD: Well, I think the point about New York and London is they have very mature transit systems. So kind of cordoning off there may not have the same adverse effects as it would in, say, Washington where a lot of people don't have transit access.

I, personally, I don't know. Our committee really hasn't thought through exactly how you would structure a program of alleviating the effects on low income drivers. I mean I think there's a definite feeling that that should be done, but there are a lot of complexities about our differences. If you give them a total rebate, that means the low income drivers have an easier time using it than the middle income drivers, and maybe that's not fair. So that would be a difficult question, but I think it's one that our members would like to see some steps taken.

MR. BORDOFF: Does anyone else want to weigh in on that?

MR. WINSTON: I think, historically, there’s stuff that we can draw on from the other experience with really what amounts to as radical transportation reform. We wanted to deregulate the airlines and, like every public policy, I said once it gets hijacked by Washington, it now has to turn into what we call a pure pareto improvement. Everybody is better off, and no one is worse off. That’s why academics run once it gets to that. You can’t have that, right? If we did, then somebody would be really, really stupid that hasn’t implemented anything like that.

So, with airlines, the concern was, among others, low density communities whose fares initially were subsidized under the existing CAB fare structure and the fares were raised on the long haul routes. So concern was what about them, and so we had an essential air services program to subsidize service there to keep the fares low. It turns out we didn’t need the program. It was a waste, but we needed politically.

Rail deregulation, a similar story, there the concern was captive shippers and the concern was that railroads will have market power. In certain markets, they'll raise rates to monopoly rates. We needed to cap them, and we had the STB and maximum rate regulation. Again, it's worthless, but we needed it politically.

Pragmatically, that's how I look at it. I mean if congestion pricing needs to do something to get through politically, let the political process do what it needs to do. My expectation is it will either be worthless or probably inefficient, but compared with the overall gain of moving forward in a direction of rational pricing, that's what we've got to do.

I'll let the political process work that out and be happy about what they do. If they're going to actually get congestion pricing, fine, I'll write the checks to the poor people. Let them do it.

MR. BORDOFF: Ron, you were quoted in the *Post* last week as saying one of the key advantages of congestion pricing is the revenue that it raises to increase transit alternatives. Is that the key rationale? Do you think that accomplishes addressing some of these concerns?

MR. KIRBY: Well, first of all, let me just start. It's not just the low incomes that are being impacted here. The tolled could be anybody, high, low, whatever.

MR. BORDOFF: High income people.

MR. KIRBY: Yes. The political concerns are not just going to be income-related. In fact, the data from California suggesting that the income distribution of users of SR 91 is not that much different from the regular lanes, that people of all income levels are using these facilities. They're not using them every day, but there are times when it's extremely valuable to persons of any level of income to use these facilities. Politically, it's been very successful in that regard.

But to move to your question, I think the issue of what happens to the revenue is absolutely critical, and you can't finish the sentence about congestion pricing without touching on that. The reason we put that in our study and put transit there as a kind of at least a placeholder for where the revenue might go is I think that's the best chance we have is to put that revenue back into providing alternatives to those who are going to be impacted, and it's transit. It can be other things, carpooling, other kinds of things but, by and large, transit.

I think if you look also at the London experience and all of the writings and commitments about Manhattan, there's lots of heavy language in there about that money has to go to transit and nowhere else. The success in London, it seems to me, has been that they've moved people from driving along into the Tube and buses. There's been no net reduction in total travel into the area. There's just been a mode shift, and that's been affected by investment in the public transportation capacity.

I think if you can pull that off, you've got a really good chance of making one of these things work.

MR. BORDOFF: David, do you want to say anything before I move to questions?

MR. LEWIS: No. It's good to go ahead.

MR. BORDOFF: Okay. As I said, there's a lot of expertise in this room. So let's give everyone a chance to ask a couple of questions.

Right on the aisle here, we'll come around with the microphone. I'm sorry.

QUESTIONER: I have a question about selling this to the public. It seems that --

MR. BORDOFF: Can you identify yourself? I'm sorry.

JOHN BRUNER: Oh, I'm sorry. I'm John Bruner from *Forbes Magazine*.

Maybe Mr. Kirby has some thoughts on this. It seems like the most compelling argument is actually sort of the theoretical one, internalizing externalities and so forth, but the typical angry driver from Long Island hasn't bought this. I wonder if you think the best way to sell it is along the lines of the environmental argument or the clear roads argument or the revenue argument or some combination of these.

MR. KIRBY: Well, I mean I think you start with the basic rationale which is efficiency of operation of the transportation system, but then you have to move very quickly to who's going to be impacted by this and how, and you have to chase all of those impacts down because what the public and the elected officials who represent the public are thinking is: How will this impact me? Okay, I buy your theoretical argument.

I had a good friend who asked me about this study, and he said, will that affect my commute from A to B on so and so?

I said, probably not.

He said, good, it's a good idea. Go ahead.

You know that's where everybody is going to be, and you have to work through that. Now we have public outreach processes. We've done environmental studies. We have a lot of ways of involving people.

I think it comes back to the point about the political process has to craft this package to make the thing acceptable. It's not going to be pareto optimal. Not everyone is going to be happy or better off, but you can put a package together that will get the vast majority of people feeling that it's positive, and that's all you need. You don't need 100 percent.

So I think it is a matter of how you use the revenue and how you put the package together.

MR. WINSTON: May I comment?

MR. BORDOFF: Yes, please.

MR. WINSTON: Hence, we are selling the policy now through the demonstration project. Your point about SR 91 is good. It's gotten out that even low income users like that option, but we don't know this all throughout the country. There's going to be a similar type of enticing experiment that goes on in this area, and there are other pricing experiments, ratio TEs, throughout the country. So we're slowly getting there.

The only thing I would add, and I'm not sure if it's relevant on this point. Demonstration projects are critical in sort of getting the word out, but usually the big ticket selling point on these things is generally lumped into a bigger issue that's related to a crisis. That is rail and air dereg were sold on the basis of or truck and air dereg were certainly sold on the basis of inflation. That really was the selling point when it was taken on at the national level.

Again, I would even say it's slowly moving in that way as the big ticket issue in this country in terms of the budgetary issues in combination with the reality of delays. That's becoming a tipping point on the air situation, and it's certainly getting there on the highway situation. Then coupling that with, yes, and we just don't have the money to pay for it in terms of the budgetary crunches at the state level and, obviously, the federal level.

The combination of something like that, I’m not sure exactly what it’s going to be on, the big ticket end, is I think generally how these things can get through. But these are major changes, and you have very few of these. So I think you’ve got to be patient.

MR. LEWIS: David, just a quick remark. I think it bears recalling that in Stockholm, for example, and to some extent in London, there was no general consensus among the public, no political zone of comfort that was achieved prior to the introduction of congestion pricing.

There was a certain, although this is a little bit simplistic, particularly in the case of London, there was a certain dare to be great approach at the political level.

In Stockholm, however, the public was promised a consensus after six months -- I’m sorry -- a vote. Someone got the right word.

QUESTIONER: Referendum?

MR. LEWIS: A plebiscite after six months in which it could vote and then again after two years. In both cases, those two votes were positive. In other words, the politicians were saying, we think you're going to like this, even though it doesn't smell too good as we put it in the oven. Let's see what happens when we take it out and you taste it, and we promise to give you a plebiscite as a basis for making it disappear.

London wasn't as formal as that, but in both cases there was some political nerve and, to some extent, that's what we've got going. That's what we have in New York as well.

MR. BORDOFF: With a three-year-old, I'll be thinking of that as I read *Green Eggs and Ham* tonight.

MR. WINSTON: Tonight's the first night of Hell's Kitchen with Gordon Ramsey.

MR. BORDOFF: Okay. Yes, you had your right up before. Right by you, Paige, yes.

MICHAEL REFOGEL: Hi. I'm Michael Refogel with Environmental Defense Fund.

Just a quick correction, Environmental defense Fund actually has all along said we would support congestion pricing on new lanes as long as it is also bringing with it some better pricing and management of existing capacity, which is a difference that we hold with some of the other groups in the environmental community.

In terms of a contextual question for the panel, one thing that hasn't come up here is climate change as a frame-setting driver of agenda that may, in fact, influence the political salability and utility of trying to adopt some of these new strategies, to get better operational control of the existing transportation network and how well it performs.

I wonder if you might address how you see potential for climate legislation and the mandates that may come out of that and the funding flows that come out that which might, in fact, provide some new incentives to help get state and local governments thinking about some of these new market incentive strategies to get better performance, using price signals.

MR. WINSTON: I have one, but it’s a stretch. Here’s the argument: Over the last 20-25 years, there have been dramatic improvements in engine technology in automobiles. So motorists could take those improvements as either greater horsepower for a given level of fuel economy, right, or the opposite extreme for a given level of horsepower, better fuel economy or a combination thereof.

What we have found in this county is that almost all of it has been taken in greater horsepower and, if anything, a slight reduction in fuel economy.

Now we don’t really know exactly why that is yet. I mean there are various hypotheses, but one thing might be at work here is that it’s been sort of a race, armed race on the highways. As highways are getting more congested, you don’t want to be out there with a little car while you’re around big cars. So you’re buying your SUV or Hummer or whatever. That’s obviously pushing things up.

But one of the things that road pricing does is it smoothes out the traffic flow. To the extent that that is true and that link is powerful and you can make the selling point that road pricing could actually have an impact on vehicle choice, you could sell it. Now, if pigs could fly, but I'm saying that's a possible way of which you could actually link the importance of road pricing.

The climate change is you'd have a dramatic improvement in gasoline consumption and emissions and the like. You could sell it that way.

MR. BORDOFF: I would just add one point which comes to David's point about the federal gas tax, to the extent people are trying to address oil security concerns and carbon emissions through increases in the gas tax or carbon tax or something like that, the estimates I've seen are that about 60 percent of the reduction in gas usage that comes from increasing the price of gasoline comes from improvements in fuel efficiency, not in a reduction in vehicle miles traveled. So that's sort of a disconnect in some sense, that you're addressing one problem, but you're not getting at the congestion issues.

So I'm just curious to see if people have thoughts around not just congestion pricing but sort of full scale in terms of how we think about our infrastructure, moving toward a vehicle miles traveled charge or something like that.

MR. WINSTON: VMT does hit anything. I don't know what externality that VMT is truly hitting. It doesn't hit congestion. It doesn't vary by time of day. Okay. Right? So it's not getting that.

It really doesn't do emissions because emission varies by vehicle, location and time of year. It's a bad tax for that.

It's not good with safety. Safety is risk-adjusted. Okay. It's not just VMT. Matter of fact, the people with the lowest VMT are the big risk people out there.

The only thing it's doing is possibly, yes, reducing consumption in some broad sense. But, on the margin, who cares? We're still importing oil. So I can't get behind that thing at all. I don't get it, actually.

MR. BORDOFF: Well, we'll talk later about another paper that we're releasing in July that a colleague, he and I are writing on shifting toward per mile auto insurance pricing which brings an incentive to reduce vehicle mileage problems --

MR. WINSTON: Whew!

MR. BORDOFF: -- and both addresses the problem with the way insurance is priced but also has a range of social benefits we estimate at around $50 billion a year. But we'll talk about that after, and you should all come on July 17th to hear about that too.

MR. WINSTON: I'll be your discussant.

MR. BORDOFF: I don't think I want you as a discussant now.

MR. KIRBY: I just have one comment on the CO2, what greenhouse gases. I think there's a lot of low-hanging fruit out there in reducing CO2 emissions now that we've begun to look at it. The first thing is going to be efficiency, light bulbs, all kinds of things, and there's a whole raft of things that will actually save you money if you do them and also reduce CO2.

I think transportation efficiency can be brought into the picture as part of the larger push toward efficiency, and there's your efficiency argument. I think you can use that as one factor, definitely.

MR. BORDOFF: More questions, if there a couple of hands, maybe we'll get two or three at once and give everyone a chance to respond to all of them. Up here in the front, is there one?

We'll take the two questions right here in the front and then give everyone a chance to respond to them. We'll sort of do one question, then the other.

MORT DOWNEY: Mort Downey, PV Consult.

More of a comment, but the discussion got away from David's point which is not whether we should have congestion pricing or not but how do we integrate it into the national transportation program. I think we'll need to spend more time on how that program is designed, how money goes out, what the conditions are on the use of that money.

It's my suspicion -- I'd love to talk to you about further -- that the level of match is not a relevant issue. It's much more the amount of money that goes in. Does that meet your basic transportation needs and then is there an incentive to add on to that with the revenue suggestion pricing that would help the system run better?

MR. BORDOFF: There's question just behind you. We'll take that one too and then give everyone a chance to respond.

RICK RYBECK: My name is Rick Rybeck. I'm with the District of Columbia Department of Transportation. I just want to thank all the panelists for the remarks they made today. I found it very informative.

I also want to inform them and others in the audience that we've taken a baby step in this direction. On a pilot basis, we've introduced congestion pricing as it relates to curbside parking prices around our new ballpark. If anybody is interested in how that's working or how we set it up, feel free to talk to me afterward.

Thank you very much.

MR. WINSTON: What are you charging?

MR. RYBECK: Well, as much as $18 an hour during ballpark events for the third hour of parking. The first two hours are just $2 an hour. We want to encourage people to go to a store, go to a restaurant, but most ball games last three hours or longer. So it's $2 for the first hour and $2 for the second, $18 for the third hour, $18 for the fourth hour.

MR. HEYMSFELD: You'll see the last five innings.

MR. BORDOFF: We'll hope the games are close.

QUESTIONER: The question about how do you sell this to people and that sort of thing, we say pricing is not as much about getting into your pocket as it is about getting into your head.

For years, governments have told people that it costs nothing to drive or to park in congested places at congested times, and we're shocked that so many are driving and parking in these congested places at congested times.

If you tell people that it costs money to do that, you'll find less of that. Basically, if you give people good information, people make good decisions. I think the key to selling this is to let people know that prices are more than money; they're information. With good information, people make good decisions.

MR. BORDOFF: Thank you.

Well, I think we've gone a little bit over our time, and I'm mindful of everyone's parking fee. So I want to thank you all for participating. Thank you for joining us.

There’s probably a little bit of food left on your way out.

Please join us again on July 17th when we’ll hear a range of proposals including this one. Thank you.

(Applause)

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