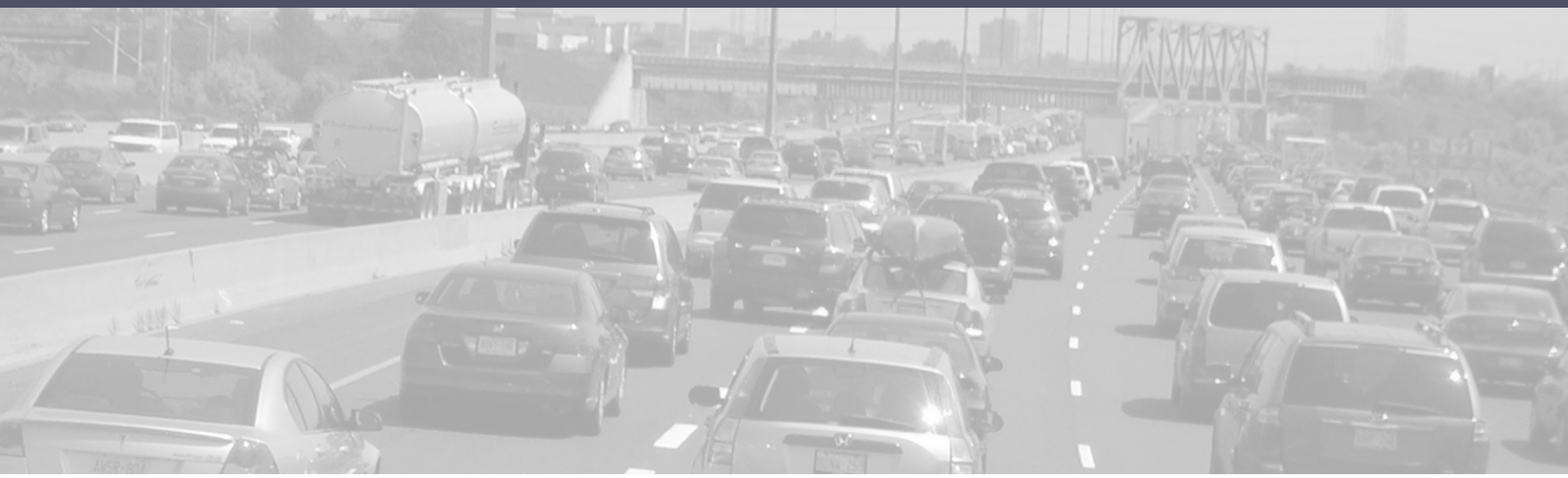
WHAT DO PEOPLE THINK ABOUT
CONGESTION PRICING?

A Study of the Public Acceptability of Congestion Pricing Through a Deliberative Dialogue with Residents of Metropolitan Washington



National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments

In Partnership with the **Brookings Institution**

Funded through the Federal Highway Administration (FHWA) Value Pricing Pilot Program

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METROPOLITAN WASHINGTON
Council of Governments

TPB
National Capital Region
Transportation Planning Board

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A draft report of this study was released in January 2013. A final version, containing editorial changes, was released in September 2013.

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Executive Summary

RESEARCH CHALLENGE: Understanding Public Attitudes Toward Congestion Pricing

Too much congestion. Not enough funding. These two problems increasingly have come to define transportation policy woes in our nation's metropolitan areas, and the Washington, D.C., region is no exception. Many experts agree that congestion pricing—charging tolls or fees that are higher when and where congestion is worse—could at least partially solve both of these challenges.

But what does the public think? Despite the increased use of road pricing in our region and across the country, decision-makers and opinion leaders in metropolitan Washington often assume that citizens will oppose congestion pricing proposals, particularly those projects that would put tolls or fees on roads that are currently free of charge. Such perceived public opposition is frequently cited as an obstacle to implementation. A 2010 article in the *Journal of the Transportation Research Board* noted: "Although the implementation of road pricing has come a long way in the United States over the past two decades, political wariness of the idea holds strong."[1]

1- Taylor, Brian D, and Rebecca Kalauskas, "Addressing Equity in Political Debates over Road Pricing: Lessons from Recent Projects," *Journal of the Transportation Research Board*, No. 2187, p. 44, 2010.

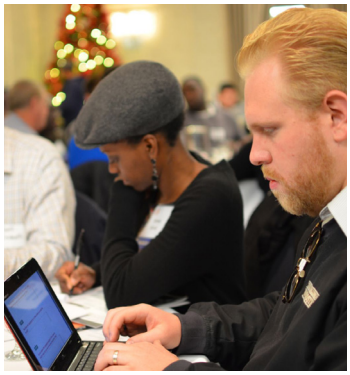
Deliberative forums make it possible to solicit more informed feedback from the general public on concepts or ideas that are unfamiliar or especially complex.

However, common assumptions about public opposition are not necessarily grounded in public opinion research. In our region, we do not know the extent to which perceived opposition to congestion pricing concepts really exists, and, if it does, whether it is based upon inadequate or inaccurate information. Even more important, we do not know which factors people care about most—or worry about most—when they are presented with specific pricing proposals.

As a research challenge, this study explored the baseline opinions of regular citizens toward congestion pricing and whether more information and education about pricing could influence their attitudes. The study also sought to unravel key factors—issues like fairness, effectiveness, or privacy—that make a pivotal difference in determining opinions. The study's ultimate purpose was to help decision-makers better understand how they might attract public support for congestion pricing, if they were to decide to pursue such a policy solution.

The National Capital Region Transportation Planning Board (TPB) carried out the research in partnership with the Brookings Institution. The Federal Highway Administration (FHWA) provided grant funding for the research through its Value Pricing Pilot Program (VPPP). The TPB also engaged the non-profit organization America*Speaks* to guide the design and implementation of the five deliberative forums—essentially "mega focus groups" with keypad voting—that were the primary research vehicle for this study. Preliminary research, including the TPB's 2010 *State of the Commute* Survey, a review of public opinion research around the country, and a series of listening sessions with stakeholders, informed the structure and content of the study's research approach.

(Left) Participants engaged in small-group discussions led by trained facilitators. (Right) "Scribes" at each table used laptop computers to record the key points of the small-group discussions.



(Left) Scenario 1: Priced Lanes on All Major Highways. Drivers would have the option to pay a toll to travel in free-flowing lanes or drive in general purpose lanes free of charge. (Center) Scenario 2: Pricing on All Roads and Streets. A fee would be applied based on distance traveled, time of day, and road type. (Right) Scenario 3: Priced Zones. Drivers would have to pay a fee to enter major activity centers.

RESEARCH DESIGN: Using Deliberative Forums to Explore Public Opinion

A deliberative forum is a public engagement event in which people come together to learn and talk about a problem and to explore potential solutions. Through a process of group deliberation, participants have the opportunity to discuss benefits and costs, hear the opinions of their peers, and potentially modify or solidify their opinions. This process makes it possible to solicit more informed feedback from the general public on concepts or ideas that are unfamiliar or especially complex. The extended exchange of ideas and opinions that takes place during a deliberative forum also mirrors the wider process of public deliberation about policy issues and can thus help identify the challenges and opportunities that decision-makers might face if they were to advance congestion pricing proposals publicly.

More than 300 participants who were broadly representative of the region came together in five forums—two in Virginia, two in Maryland, and one in the District of Columbia—that each lasted four-and-a-half hours. Presentations provided information on the current and projected state of transportation funding and congestion and three hypothetical congestion pricing scenarios that could be applied in the Washington region:

- **Scenario 1:** Priced Lanes on All Major Highways – variably-priced lanes on all interstates, as well as some other major roadways
- **Scenario 2:** Pricing on All Roads and Streets – variable, per-mile pricing using vehicle-based GPS systems
- **Scenario 3:** Priced Zones – drivers pay a fee to enter or drive within a designated area

Participants engaged in facilitated small-table discussions, which were documented on laptop computers. They also recorded their individual opinions through keypad voting and paper surveys. Discussion topics included an opening opportunity for participants to define the region's transportation problems, separate discussions about each congestion pricing scenario, and a final discussion in which participants suggested their alternatives for dealing with the region's transportation problems.

Congestion resonates as a critical problem more than funding shortfalls do.

FINDINGS: What Did the Public Tell Us?

The study provided insight on the following key questions:

1. **How do people see the region's transportation problems?**

   A vast majority of participants agreed that congestion is a critical problem facing the region and emphasized its personal impacts, describing the ways it limits opportunities and lifestyle choices. The burdens of congestion seem to rob people of a sense of control over their lives, furthered by the feeling that driving is the only transportation option for most people in the region.

   Congestion resonates as a critical problem more than funding shortfalls do. Participants who said they wanted more transportation alternatives rarely connected the lack of those options to the lack of funding. Some participants expressed doubts about the reality or extent of funding problems. Many said they lack confidence in the government's ability to solve transportation problems even if enough funding were available.

   Participants were generally unaware of the details of how transportation is currently funded, including the fact that the federal gas tax has not been raised in nearly two decades and is not indexed to inflation.

Of the three scenarios, Scenario 1 (Priced Lanes on All Major Highways) garnered the most support.

2. **How do people react to different congestion pricing scenarios?**

   Of the three scenarios, Scenario 1 (Priced Lanes on All Major Highways) garnered the most support. People liked it because it is optional (toll-free options would generally be maintained) and offers added predictability. But they were concerned about fairness and congestion displacement.

   People had strong negative reactions to the GPS-based Scenario 2 (Pricing on All Streets and Roads). They saw it as an invasion of privacy, too complicated, and impossible to implement. Scenario 3 (Priced Zones) seemed logical and straightforward, but many participants were less interested in it because they felt it would not do enough to solve regional problems.

Figure 1: Comparison of End-of-Day Support for the Three Scenarios

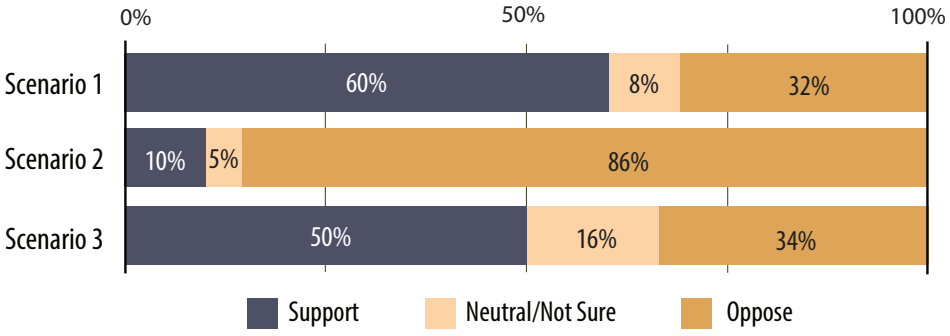
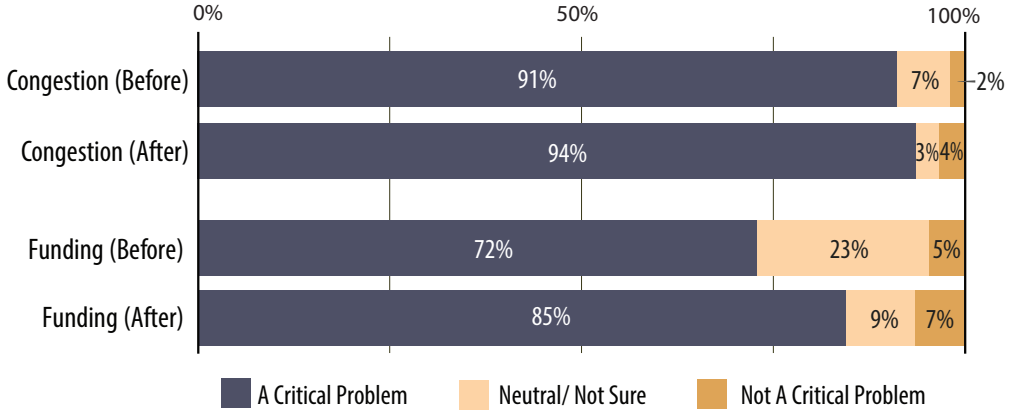


Figure 2: Perceptions of Congestion and Funding Shortfalls as Critical Problems



People were skeptical about the effectiveness of the scenarios, particularly in reducing congestion. They did not believe that pricing could actually reduce demand because, they said, driving for most people is a necessity not a choice. Participants emphasized that people in this region drive because they have to, not because they want to.

3. What's the basis for people's opinions? Which specific factors influence attitudes about congestion pricing and how?

"Privacy" and "choice" were the most important factors in determining support for the scenarios. Comments about privacy were often related to wider apprehensions about losing personal control in an increasingly complicated world.

A sense of choice seems vital to cultivating public support for congestion pricing. Many participants said that because driving is not a choice for most people, pricing should be. The availability of other options besides driving—such as transit, walking, and biking—increased receptivity to pricing. Participants also spoke favorably of proposals that would maintain non-tolled lanes or routes for those who cannot or do not want to pay.

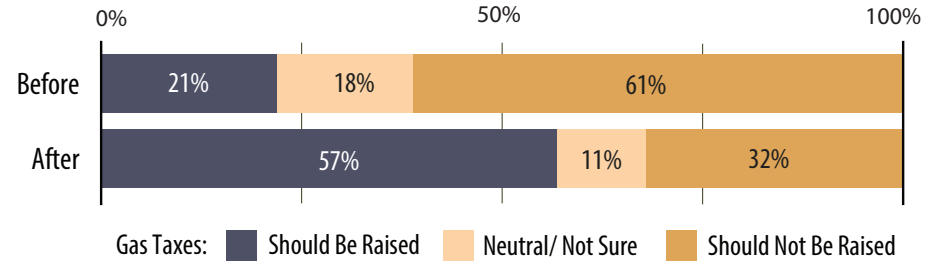
Participants seemed to doubt inherently that congestion pricing would be effective in improving the region's transportation system. Therefore, framing pricing as an effective tool for addressing congestion problems and funding shortfalls does not seem to resonate with the public. However, if congestion pricing can effectively create specific and useful transportation alternatives, people showed more interest. Participants indicated they would be more likely to support the scenarios if transparency and accountability with the funds was guaranteed.

Participants were asked their opinions about how fairly congestion pricing would treat two groups: low-income people, and people who are dependent on driving. Participants said that fairness mattered, but it does not appear these concerns were pivotal in determining levels of support for different congestion pricing scenarios. However, many people did express concerns about whether pricing would be fair to them personally, relative to the assumptions they had built their lives upon.

Participants suggested that congestion pricing could play a role in the future, but would need to be tailored to the region's needs and integrated into existing systems.

Support for raising gas taxes nearly tripled between the beginning and end of the forums, once people learned more about it and considered congestion pricing alternatives.

Figure 3: Change in Support for Raising Gas Taxes



4. **After learning and talking about congestion pricing, what do people think?**

   As the dialogue progressed, opinions regarding specific scenarios shifted in telling ways, revealing comparative preferences: support increased for Scenario 1 (Priced Lanes on All Major Highways), whereas opposition to Scenario 2 (Pricing on All Roads and Streets) increased, and people became less interested in Scenario 3 (Priced Zones). Support for raising gas taxes nearly tripled between the beginning and end of the forums, once people learned more about it and considered congestion pricing alternatives.

   Participants suggested that congestion pricing could play a role in the future, but would need to be tailored to the region's needs and integrated into existing systems. Participants expressed a desire for more integrated problem-solving that includes strategies such as land-use changes to reduce trip lengths (e.g. more affordable housing near Metrorail or more jobs closer to where people live, espcially in the suburbs) and enhanced transit alternatives to serve the region's growth and increasing densities. Many people emphasized that, before anything else, they want to see commonsense improvements, such as better coordination of construction schedules or improvements in the Metro system.

CONCLUSIONS AND RECOMMENDATIONS: What Do the Findings Mean?

Based on the findings outlined above, this study offers several conclusions and recommendations for policy makers:

1. **People are skeptical of pricing as a comprehensive solution to regional transportation problems, but may support specific proposals if they see direct benefits in their daily lives.**

   - » Congestion pricing proposals should explicitly state a compelling value proposition for individuals, emphasizing benefits such as increased choice and individual control. The costs of the congestion pricing policy must be, at least implicitly, acknowledged, and the benefits must be shown in a clear and compelling manner to outweigh those costs.
   - » Pilots or trials may reduce skepticism regarding the effectiveness of congestion pricing. For example, the introduction of a congestion priced zone

in Stockholm, Sweden, was preceded by a trial phase that demonstrated to a doubtful public that the program would actually reduce congestion.

- Incremental implementation of congestion pricing, such as the new 495 Express Lanes on the Capital Beltway in Virginia, may also help ease the transition to more comprehensive programs or more controversial projects.
- Education campaigns may also help reduce skepticism, particularly regarding the region's transportation funding shortfall and the need for creative solutions.

2. **People are much more concerned about losing options than they are about "Lexus Lanes."**

   - Congestion pricing proposals should avoid imposing mandates that do not provide individuals with a reasonable array of options. In some cases, this may mean maintaining toll-free lanes. In others cases this may mean improving transit service or other alternatives before implementing road pricing.

3. **People lack confidence in government and they fear government overreach.**

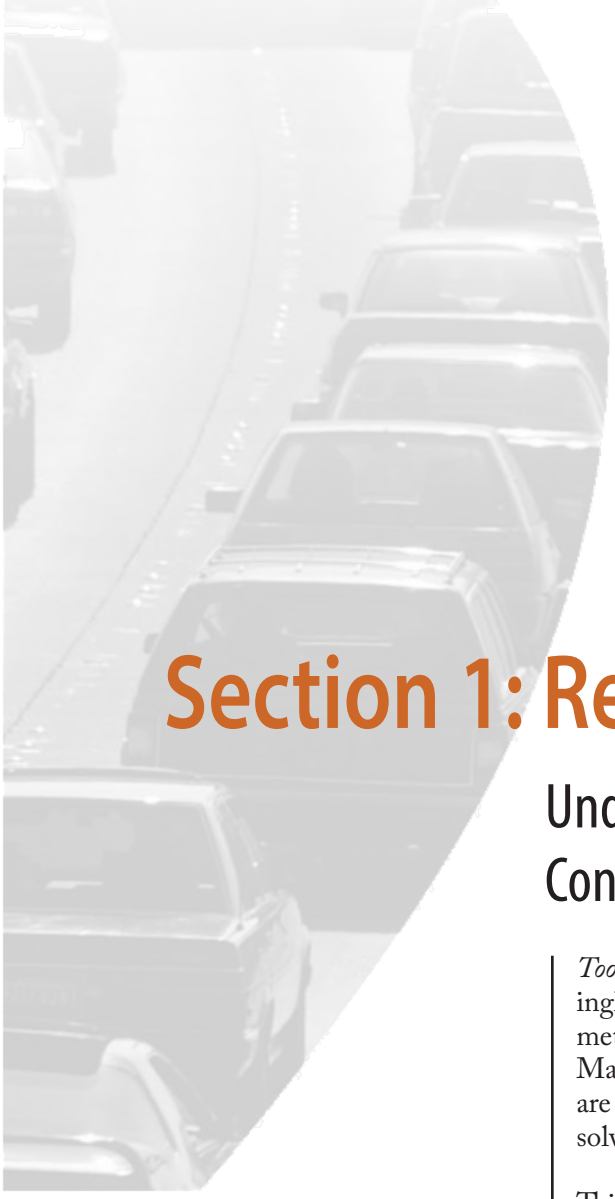
   - Proposals should clearly indicate how revenues raised through congestion pricing will be used, and ensure transparency and accountability in the allocation of these funds.
   - Commonsense improvements, such as better coordination of construction schedules or visible improvements in the Metro system, should be implemented in an effort to rebuild the public's confidence. Such a demonstration could be a key component in implementing any major congestion pricing system in the region, or any other attempt to raise significant additional revenues.

4. **People are more likely to support more obvious solutions—such as increasing gas taxes—than more radical approaches like congestion pricing.**

   - State or federal leaders should consider conducting a public information campaign on the inadequacies of current transportation funding mechanisms and the need to increase gas tax revenues, at least as a short-term strategy.

5. **People want to know that congestion pricing is part of a wider strategic vision.**

   - Develop a wider strategic plan and implement various elements before or concurrent with the implementation of congestion pricing. While the public cannot be expected to articulate (or even know about) the details of such a plan, they do need to see and feel that the pieces of this strategy fit together and that they will produce a more dynamic and vibrant region that will enhance their own personal lives.



Section 1: Research Challenge

Understanding Public Attitudes Toward Congestion Pricing

Too much congestion. Not enough funding. These two problems increasingly have come to define transportation policy woes in our nation's metropolitan areas, and the Washington, D.C., region is no exception. Many experts agree that congestion pricing—charging tolls or fees that are higher when and where congestion is worse—could at least partially solve both of these challenges.

This research project explored the issues that influence opinions about congestion pricing. The study sought to identify which features of congestion pricing proposals actually matter to people, how strongly they feel about those factors, and what, if anything, might cause people to change their minds.

Congestion and Funding Challenges in the Washington Region

The metropolitan Washington region provides sobering evidence of the twin challenges of increasing congestion and decreasing revenues. In our region, travel forecasts reveal a disturbing mismatch between demand and capacity. Between 2013 and 2040, driving on the region's roads (measured in "vehicle-miles of travel," or VMT) is anticipated to increase 25%, while the number of freeway and arterial lane-miles will only increase 7%. That is forecast to result in the number of lane-miles of congested roadway during the morning peak-hour growing by 78%.[1]

1 - National Capital Region Transportation Planning Board, *2012 Financially Constrained Long-Range Transportation Plan (CLRP)*, 2012, p. 25.

The 495 Express Lanes on the Capital Beltway in Virginia provide drivers with the option to pay a toll in order to avoid congestion in the toll-free lanes.
PHOTO CREDIT: beyonddc.com

In the metropolitan Washington region, three out of the five most expensive projects recently completed or planned for the next six years are toll projects.

At the same time, transportation funding is tight and forecasts for future funding are bleak. Revenue sources have simply not kept up with needs, in large part because fuel taxes have not been increased with inflation, nor have they taken into account improvements in vehicle fuel-efficiency. Costs associated with building, operating, and maintaining transportation infrastructure have also increased faster than inflation.

As congestion grows and funding shrinks, decision-makers are increasingly considering road pricing mechanisms. Across the United States, more than 20 managed lane projects are currently in operation. A steady number of new projects are opening every year and dozens are planned for the future.

In the metropolitan Washington region, three out of the five most expensive projects recently completed or planned for the next six years are toll projects—Virginia's two HOT lanes projects (on the Beltway, and on I-95 south of the Beltway) and Maryland's Intercounty Connector (ICC). Toll revenues also constitute a major portion of the funding for the region's most expensive transit project: the extension of Metrorail to Dulles Airport and Loudoun County. Many planners anticipate a substantial increase in the use of toll revenues over the coming decades to finance the region's roads and transit systems.

But what does the public think? Despite the increased use of road pricing in our region and across the country, decision-makers and opinion leaders in metropolitan Washington often assume that citizens will oppose congestion pricing proposals, particularly those projects that would put tolls or fees on roads that are currently free of charge. Such perceived public opposition is frequently cited as an obstacle to implementation. A 2010 article in the *Journal of the Transportation Research Board* noted: "Although the implementation of road pricing has come a long way in the United States over the past two decades, political wariness of the idea holds strong."[2]

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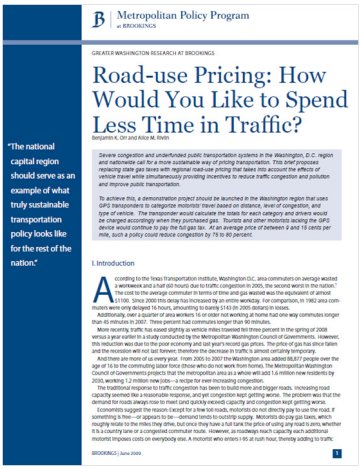

Metropolitan Policy Program at BROOKINGS

GREATER WASHINGTON RESEARCH AT BROOKINGS

Road-use Pricing: How Would You Like to Spend Less Time in Traffic?

"The national capital region should serve as an example of what truly sustainable transportation policy looks like for the rest of the nation."

I. Introduction

Background to this Study

This study builds upon a decade of technical analysis and policy discussions conducted by the National Capital Region Transportation Planning Board (TPB). In 2003, the TPB convened more than 200 elected officials, community leaders, planners, and academics for a conference to galvanize regional interest in pricing as part of the solution to the region's perpetual transportation funding shortfalls. Later that year, the TPB formed a Value Pricing Task Force to develop regional goals for variably-priced projects in the region and to oversee an analysis of a proposed regional network of variably-priced lanes. This analysis was funded through the Federal Highway Administration (FHWA) Value Pricing Pilot Program.

This technical analysis of priced lanes, documented in a 2008 report,[3] evaluated the demand, potential revenue, transit viability, and land-use impacts of a regional network of variably-priced lanes. A more recent study, called the CLRP Aspirations Scenario,[4] looked at concentrated land-use patterns along with a network of priced lanes similar to the 2008 analysis. The scenario also featured a 500-mile network of high-quality bus service designed to take advantage of the free-flowing road capacity created through pricing.

These studies demonstrated the technical viability and potential benefits of road pricing, but did not address the political implications. Therefore, in 2009, the TPB applied for a grant from the FHWA's Value Pricing Pilot Program to study the public acceptability of congestion pricing. The TPB submitted the proposal in partnership with the Brookings Institution, which made news in 2009 with the release of a paper titled, "Road-use Pricing: How Would You Like to Spend Less Time in Traffic?" Written by Alice Rivlin and Benjamin Orr, the paper called for a pilot project in the Washington region to use a GPS-based pricing system to

FHWA awarded the study grant to the TPB in January 2011. The project was initiated in the spring of that year and concluded in the fall of 2012.

3 - Eichler, Michael D., Gerald K. Miller, and Jinchul Park, *Evaluating Alternative Scenarios for a Network of Variably-Priced Highway Lanes in the Metropolitan Washington Region*, National Capital Region Transportation Planning Board (MWCOG), 2008.
4 - Bansal, Monica, and Darren Smith, *CLRP Aspirations Scenario Final Report*, National Capital Region Transportation Planning Board (MWCOG), 2010.

collect mileage-based user fees that would vary based upon levels of congestion. This system would replace the gas tax and raise new revenues from vehicle travel. The proposal was billed as a way of "simultaneously reducing traffic congestion and pollution and improving public transportation."

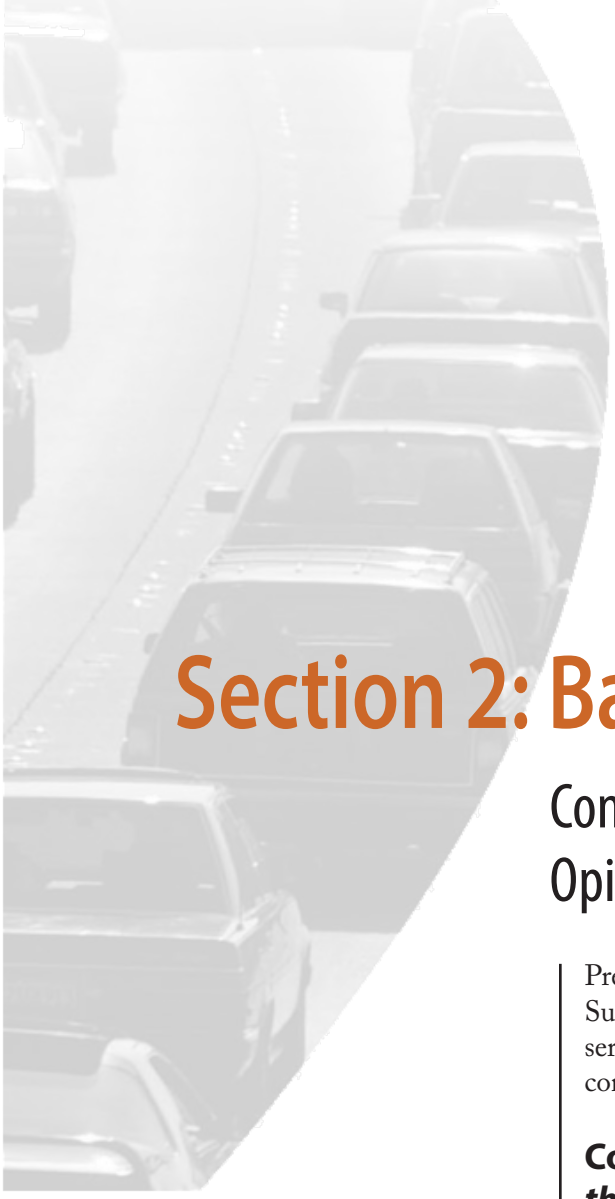
FHWA awarded the study grant to the TPB in January 2011. The project was initiated in the spring of that year and concluded in the fall of 2012. The Brookings Institution acted as the TPB's research partner throughout the process. The TPB also engaged the non-profit organization America*Speaks* to guide the design and implementation of the five deliberative forums that were the primary research vehicle for the study. America*Speaks* has a reputation for designing and facilitating innovative approaches to public engagement.

Developments Since the Completion of Research

Public opinion data was gathered for this project between October 2011 and January 2012. Analysis of this data was conducted in the spring and summer of 2012.

Since the completion of the study's research, several changes occurred that could affect the study's baseline assumptions:

- In November 2012, the region's first high-occupancy/toll (HOT) lanes opened on the Capital Beltway (I-495) in Virginia. The 14-mile facility is one of two tolled facilities in the region on which tolls vary based upon levels of congestion. The other, Maryland's Intercounty Connector (ICC), opened in 2011.
- In June 2012, Congress enacted a two-year surface transportation reauthorization bill—Moving Ahead for Progress in the 21st Century, or MAP-21—which changed federal rules regarding tolling on Federal-aid roads. MAP-21 expanded the authority for public agencies, without obtaining specific federal agreements, to allow tolling on newly constructed lanes or for conversions of existing high-occupancy vehicle (HOV) lanes to HOT lanes. However, it placed specific restrictions on tolling existing road capacity, making it significantly more difficult for toll projects to reduce the number of lanes that were previously toll-free.
- In the spring of 2013, the state legislatures in Virginia and Maryland approved measures to each raise upwards of $800 million a year in new revenue for transportation projects statewide. These were the first statutory increases in transportation funding in more than two decades in the two states.



Section 2: Background Reseach

Community Survey Data, Stakeholder Opinions, and National Surveys

Preliminary research, including the TPB's 2010 *State of the Commute* Survey, a review of public opinion research around the country, and a series of listening sessions with stakeholders, informed the structure and content of the study's research approach.

Commuter Survey Data: The Region's 2010 *State of the Commute* Survey

The TPB's 2010 *State of the Commute* Survey polled 6,629 randomly-selected employed residents of the Washington, D.C., region. The survey, which has been conducted every three years since 2001, documents trends in commuting behavior, such as commute mode shares and distance traveled, and prevalent attitudes about specific transportation services, such as public transit, that are available to commuters in the region.

Anticipating future research on the public acceptability of congestion pricing (the proposal for the study that is the subject of this report had already been submitted to FHWA), TPB staff decided to include questions regarding transportation satisfaction and investment in the 2010 *State of the Commute* Survey. These questions are listed in the box on page 19. Some of these questions measured the public acceptability of various revenue options, including replacing the gas tax with a mileage charge, instituting tolls on existing roads. and instituting tolls on new road capacity. Other questions probed opinions about the state of the

region's transportation system and attitudes regarding the performance of public officials in responding to the region's transportation needs. This was the first time such questions were included in the survey.

Some broad findings of the 2010 *State of the Commute* Survey include:

People feel much worse about the region's transportation system than about the region's overall quality of life. Only 40% of respondents were satisfied with the transportation system in the region, whereas two-thirds (66%) were generally satisfied with the region's quality of life. People with longer commutes were less satisfied with the system (29%), while people who live near a rail station were more satisfied (58%). More than a third (37%) of respondents rated the system as poorly managed, compared with only 23% that rated the system as well managed. Respondents were also generally dissatisfied with elected officials' level of attention to transportation issues. Respondents were slightly more satisfied with the attention paid by local governments (33% satisfied) than with the attention of state (25% satisfied) and federal (23% satisfied) officials to transportation problems.

People feel much worse about the region's transportation system than about the region's overall quality of life.

Commuters want more public transit. Three out of four (76%) respondents said more transportation funding should be allocated to expanding transit. In contrast, approximately half of respondents (53%) supported more funding for road expansion, while 58% supported more funding for pedestrian and bicycle facilities. This pattern was similar even for people who are more car-oriented (i.e., those who drive alone to work or live in the outer suburbs). In response to an open-ended question seeking suggestions for improving transportation, the most common answers focused on public transit, including expanding Metrorail to more destinations (19% of respondents) and more general comments about wanting more bus and train service (17%).

When asked simple survey questions about transportation funding options, people are not very supportive of any types of revenue increases. None of the 11 funding mechanisms tested in the survey garnered support from more than 30% of the respondents. "Increasing gas taxes" was the funding mechanism that got the most support (30%). People who are less car-oriented (i.e., those who do not drive to work or who commute shorter distances) and those with higher incomes were more likely to support increasing gas taxes.

Replacing the gas tax with a mileage-based fee is not popular on face value. Fifteen percent of respondents in this telephone survey supported "replacing the gas tax with a per-mile charge on vehicle-miles driven." People who do not drive to work and higher-income respondents were more supportive of such a fee.

People are much more likely to support tolls for new roads than tolls on existing roads. Respondents were approximately twice as likely to support instituting tolls to build new roads (28%) as they were to support instituting tolls on existing roads (15%). People who drive alone to work were slightly less likely to support tolls for either new or existing roads, whereas those who were less car-oriented were much more likely to support tolls for both existing and new roads.

2010 State of the Commute Survey

Questions Regarding Transportation Satisfaction & Investment

1. Overall, how would you rate the quality of life in the Washington region? (Use a scale of 1 to 5 where 1 means "poor" and 5 means "excellent.")
2. How satisfied are you with the transportation system in the Washington metropolitan region? (Scale of 1 to 5)
3. How satisfied are you with the level of attention being paid to transportation needs by elected officials? (Scale of 1 to 5)
   a. Federal level
   b. State level
   c. County / city level
4. How well do you think the operation of the regional transportation system is managed? (Scale of 1 to 5)
5. Do you have any recommendations for how the transportation system in the region needs to be improved? (open question)
6. I'm going to read you several possible ways the Washington region could spend its current transportation dollars. For each, tell me if you think the region should allocate more, less, or about the same amount of money on this item as it does now? (Options: allocate more, allocate less, about right, don't know)
   a. Road maintenance
   b. Maintenance for public transit, including Metro
   c. Road expansion
   d. Expansion of public transit
   e. Expansion of pedestrian and bicycle facilities
   f. Programs to support use of carpools, vanpools, and public transit
7. Finally, I'll read several possible ways to increase transportation funding for the region. Rate your support for each using a scale of 1 to 5, where 1 means you "strongly oppose" it and 5 means you "strongly support" it as a way to increase transportation funding. How much do you support:
   a. Increasing gas taxes
   b. Automatically adjusting gas taxes based on inflation
   c. Increasing transit fares
   d. Instituting tolls to build new roads
   e. Instituting tolls on existing roads
   f. Increasing vehicle registration fees
   g. Increasing vehicle sales taxes
   h. Replacing the gas tax with a per-mile charge on vehicle-miles driven
   i. Increasing income taxes
   j. Increasing property taxes
   k. Increasing sales taxes

Stakeholder Opinions: Listening Sessions with Key Voices

The study team conducted four listening sessions in the summer of 2011 to solicit input on the design of a series of deliberative forums to be used as the main research vehicle for the study. Each of the four listening sessions focused on a different set of stakeholders:

- Veterans of other pricing projects in the United States and abroad
- Regional Stakeholders
  - The TPB Citizens Advisory Committee (CAC)
  - Advocates separately representing the business community, road users, and free-market principles
  - Smart growth and social equity advocates

Stakeholders discussed three basic pricing scenarios and provided feedback on how to present the scenarios to the participants of the pricing forums. In every session, stakeholders emphasized that the specific details of actual projects would modify their responses in important ways, but they were able to provide suggestions on ways to develop the scenarios to be presented to study participants.

In every session, stakeholders emphasized that the specific details of actual projects would modify their responses in important ways.

People have direct experience of congestion, so they believe it is a problem. They do not have direct experience with the funding shortfalls and often view pricing projects as money-grabs.

Veterans of Road-Use Pricing

Brookings Senior Fellow Robert Puentes moderated a telephone conference call in June 2011 with a group of noted transportation professionals from the United States and abroad, including:

- Ken Buckeye, Minnesota Department of Transportation
- Tilly Chang, San Francisco Department of Planning
- Rob Fellowes, Washington State Department of Transportation
- Martin Richards, MVA Consulting, London (retired)
- Bruce Schaller, New York City Department of Transportation
- Gunnar Soderholm, City of Stockholm

Multiple themes emerged from this discussion, which influenced the study design:

- ***Empower the public to define the problem.*** If the public defines the problem they take ownership of it and will be more willing to make hard choices about how to solve it. Do not presume you know how to frame the issue or proposal. Listen to how the public frames it. The public has to retain the option of saying "do nothing" if they are to truly take ownership of the problem.
- ***Educate the public on funding.*** People have direct experience of congestion, so they believe it is a problem. They do not have direct experience with the funding shortfalls and often view pricing projects as money-grabs.
- ***Acknowledge skepticism.*** The general public understands that congestion is a complex problem and looks askance at any policy that claims to be able to solve it. The public also has to believe that your data and modeling are accurate.
- ***Show the public that you have exhausted all other options.*** An awareness of all the things that have been tried and failed increases their willingness to look at new ideas.
- ***Focus on the benefits.*** In the end, people want to know how a policy is going to affect them. What are the tradeoffs they are being asked to make? What do they get in exchange? They need to see that the benefit is greater than the cost to them personally before they are willing to support the policy.
- ***Simpler projects are better.*** They are easier to explain, implement, and understand.
- ***Retaining choice is very important to the public.*** As noted above, citizens need the option to say no, even if they don't exercise it. They need choices about how they get around, some of which are less expensive. The public will also push back against projects that appear designed to force behavior modifications.
- ***Two types of equity are important***:
  - Geographic equity: not favoring or penalizing one area or jurisdiction over another.
  - Income equity: not favoring or penalizing high- or low-income drivers.

- ***Actual pricing projects need a political champion.*** The London congestion zone succeeded because it had a very strong advocate in the newly-elected mayor, Ken Livingstone, who moved quickly and decisively once in office. Other projects suffered for lack of a champion.

Regional Stakeholders

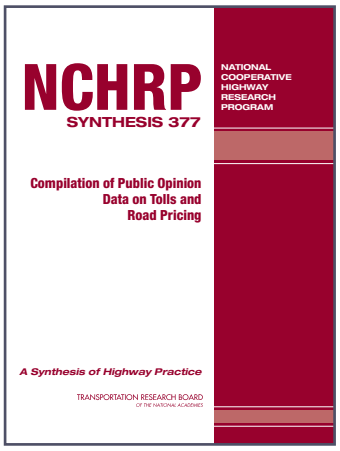
The study team conducted three listening sessions in July 2011 with groups representing key voices and interests within the Washington region. These groups included the TPB's Citizens Advisory Committee (CAC); leaders who advocate for drivers, roads, business interests, and market-oriented solutions to policy problems; and leaders representing smart growth, environmental, and social equity perspectives.

Several key recommendations emerged from these listening sessions:

- ***Be specific.*** Specific pricing proposals offer unique advantages and disadvantages and therefore exploring public attitudes toward pricing as a generic concept is not very useful. A particularly important detail is how the money raised will be used.
- ***Education on funding issues is critical.*** The public does not understand how the transportation system is currently funded. Furthermore, many people think they already pay too much for not enough mobility. Study participants need to receive information on the current transportation funding system, why it is inadequate and what might replace it.
- ***More politically feasible options may be less effective or desirable***. Measures that are easier to implement may be less likely to substantially reduce travel demand or change behavior. For example, new toll lanes might be politically more palatable, but may be less effective at congestion reduction than other options. The forums should seek to balance achievability with boldness.
- ***Emphasize benefits; acknowledge costs.*** Congestion pricing proposals should include clear performance goals related to reductions in congestion, pollution and driving, fleet fuel efficiency, and health impacts. Proposals should also honestly acknowledge negative impacts. For example, proposals should directly and specifically address concerns about privacy and other sensitivities. The study should evaluate how important these factors are in determining support for specific proposals.
- ***Frame congestion pricing as part of a regional package of solutions***. Stakeholders argued that congestion pricing programs need to enhance and complement initiatives throughout the region, including efforts to enhance transit, support the urban core and activity centers, and provide reasonable transportation options for low- and moderate-income households.

The study team conducted three listening sessions in July of 2011 with groups representing key voices and interests within the Washington region.

National Studies: Lessons from Nationwide Research



Academic analyses and public opinion researchers have looked at pricing from many different angles. In conducting background research for this study, the study team reviewed a variety of reports and studies.[1]

A report prepared for the National Cooperative Highway Research Program (NCHRP) in 2008 provides a particularly useful summary of a wide range of public opinion research.[2] The report distilled public opinion data from more than a hundred surveys, polls, and focus groups on a variety of road-use pricing policies, including traditional tolling, express toll lanes, high-occupancy toll lanes, cordon tolling, public-private partnerships, tax-related initiatives for transportation infrastructure funding, and surveys on a range of road-pricing and funding issues.

Eight common themes cut across the public opinion data, regardless of the nature of the pricing project or the segment of the public polled:

*"1. The public wants to **see the value** of the proposal. When a concrete benefit is linked to the idea of tolling or charging for road usage (e.g., reducing congestion on a specific highly-congested facility) as opposed to tolling in the abstract, public support is higher. It is important to articulate benefits as they pertain to individuals, to communities and to society as a whole.*

*2. The public wants to react to **tangible and specific examples**. When public opinion is measured in the context of a specific project as opposed to a general principle, the level of support is higher. In the former context, road pricing is perceived of as a "choice" rather than as punishment. This is likely the reason that low-income individuals generally support tolling and road pricing. Regardless of their economic circumstances, they appreciate having the choice of paying to use uncongested lanes or roadways.*

*3. The public cares about **the use of revenues**. Use of tolling revenues is a key determinant to the acceptance or rejection of tolling and road pricing. Revenues should be linked to specific uses not to specific agencies. Support tends to be higher when revenues are used for highway infrastructure, public transit improvements, or more rapidly completing necessary construction.*

*4. The public learns from **experience**. Support from a majority of citizens often cannot be expected from the outset. When the opportunity to use a tolled facility already exists, public support is higher than when it is simply a possibility for the future. Building support is a long-term, continuous process that should not stop after implementation.*

*5. The public uses knowledge and **available information.** When opinion is informed by objective explanation of the conditions and mechanics of tolling and its pros and cons, public support is higher than when there is no context for how tolling works. This*

1 - Previous research on public acceptability was summarized in a report that can be found on this study's website: "Literature Review: Public Acceptability of Road-Use Pricing," Prepared for the Brookings Institution by Rick Rybeck, Just Economics, LLC, April 28, 2012.
2 - Zmud, Johanna and Carlos Arce (NuStats, LLC), *NCHRP Synthesis 377: Compilation of Public Opinion Data on Tolls and Road Pricing*, National Cooperative Highway Research Program (NCHRP), 2008.

factor may explain why members of the public may express negative opinions about tolling or road pricing as theoretical constructs but will use a priced facility when it opens.

*6. The public believes in equity but **wants fairness**. Public opposition of tolling is higher where there is perceived unfairness. This aspect relates to why having an alternative cost-free route is so important or why support is generally higher for tolling new facilities than for tolling existing facilities. The public needs to be reassured that the government is not treating them unfairly. In terms of equity, there is general agreement that decisions to use or not use a priced facility revolve around people's needs and preferences.*

*7. The public wants **simplicity**. When the mechanics of tolling or other user fee programs are simple and clear and therefore easy to understand, public support is higher than in situations where there is a high level of complexity in how pricing should be applied. Opposition is generally lower for the simplest proposals and increases as proposals become more complex.*

*8. The public **favors tolls over taxes**. Although there are isolated instances of groups preferring tax increases over tolling, most individuals prefer tolling over taxes. With toll revenues, the public is more assured of getting their fair share, because revenues are generated and applied locally. Also, tolling represents freedom of choice; only users pay."*[3]

Applying the Background Research to the Study

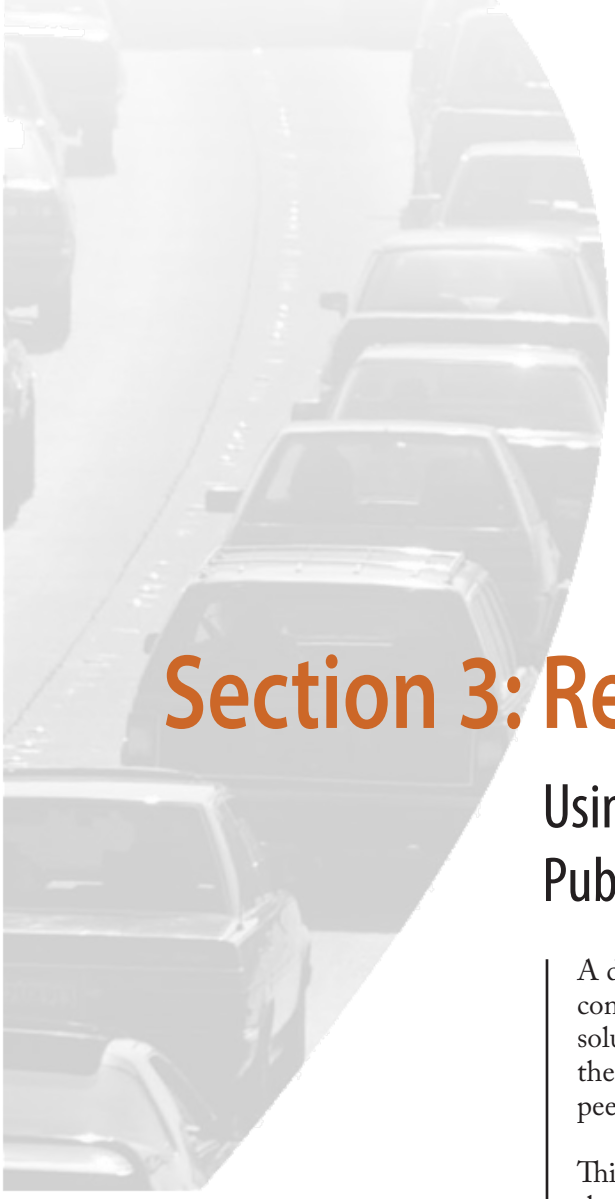
The background research described above provided a baseline understanding of public opinions about congestion pricing and confirmed the study team's decision to use deliberative forums as the primary research tool. The *State of the Commute* Survey showed that when asked for their quick opinions, people generally are not supportive of new revenues or tolling. But such surveys do little to explain the various factors that underlie those opinions. Deliberative forums, described in the next chapter, are a useful tool for exploring opinions in greater depth to identify underlying motivations and influences.

The background research informed the study team's decisions regarding the content of the deliberative forums.

The background research also informed the study team's decisions regarding the content of the deliberative forums. The team decided that introductory presentations would provide educational background on transportation funding and the wider context of regional planning. Following this introduction, an open discussion of the region's transportation problems would provide an opportunity for participants to describe the sources of their personal dissatisfaction with the transportation system.

The bulk of each forum focused on three separate pricing scenarios with detailed features that were suggested by the preparatory research. Discussion questions sought to explore the relationship between support for the scenarios and various factors, including how the revenues would be used. Several key polling questions were asked both during the forum and again at the end, so the study team could evaluate what, if anything, might cause people to change their opinions.

3 - *NCHRP Synthesis 377*, pp 2-3.



Section 3: Research Design

Using Deliberative Forums to Explore Public Opinion

A deliberative forum is a public engagement event in which people come together to learn and talk about a problem and to explore potential solutions. Through a process of group deliberation, participants have the opportunity to discuss benefits and costs, hear the opinions of their peers, and potentially modify or solidify their opinions.

This process makes it possible to solicit more informed feedback from the general public on concepts or ideas that are unfamiliar or especially complex. The extended exchange of ideas and opinions that takes place during a deliberative forum also mirrors the wider process of public deliberation about policy issues and can thus help identify the challenges and opportunities that decision-makers might face if they were to advance congestion pricing proposals publicly.

Although deliberative forums are often used to build consensus and foster voluntary public input, this study used deliberative forums as a public opinion research tool. In a broad sense, the forums served as "mega-focus groups." More than 300 participants came together in five forums that each lasted four-and-a-half hours. Presentations provided information on the current and projected state of transportation funding and congestion and three hypothetical congestion pricing scenarios that could be applied in the Washington region. Participants engaged in facilitated small-table discussions, which were documented on laptop computers. They also recorded their individual opinions through keypad voting and paper surveys.

Applying the America*Speaks* Model to This Study

Subject matter experts made presentations aimed at giving participants the foundation of knowledge necessary to engage in constructive conversation.

In designing the deliberative forums for this study, the TPB enlisted the help of America*Speaks*, a national non-profit organization with a reputation for designing and facilitating innovative approaches to public engagement. The agenda for a typical America*Speaks* deliberative forum combines:

- Short Educational Presentations
- Small-Group Discussions (led by trained facilitators)
- Discussion Notes Recorded on Laptop Computers
- Real-Time Synthesis of Discussion Themes
- Electronic Keypad Polling

The study team worked closely with America*Speaks* to apply these five key elements of the America*Speaks* model to the congestion pricing forums in the following ways.

Short Educational Presentations

Two subject matter experts made presentations on the following topics, aimed at giving participants the foundation of knowledge necessary to engage in constructive conversation about the possibility of applying congestion pricing in the Washington region:

- Overview of the Washington region and its transportation system
- Introduction to the twin problems of roadway congestion and transportation funding shortfalls
- Explanation of congestion pricing as a concept and how it might be applied to driving
- Overview of each of three specific scenarios that could be applied in the region (see pages 32-34 for detailed descriptions of the scenarios):
  - Scenario 1: Priced Lanes on All Major Highways
  - Scenario 2: Pricing on All Roads and Streets
  - Scenario 3: Priced Zones

In addition to the educational presentations, forum participants also received a printed discussion guide they could use to follow along with the presentations and as a reference during the small-group discussions. The discussion guide included most of the same information that was in the presentations.[1]

Small-Group Discussions

Participants sat at tables of five to eight people, plus a facilitator and a scribe—few enough people to allow everyone in the group to speak, but enough people to have a diversity of opinion to keep conversation flowing. Each table included a mix of people with diverse backgrounds and experiences.

Trained facilitators seated at each table used specific discussion questions to help guide conversation in the most constructive and efficient way possible. The small-group discussions were organized into five modules throughout the course of each forum:

- ***Module 1:*** **Participant Perceptions of the Region's Transportation Problems.** The first small-group discussion provided an opportunity for participants to identify challenges other than congestion and funding shortfalls that they see as troubling the region.
  - » *"In light of the presentations and your own experience, what do you think are the primary transportation problems in the region?"*

- ***Module 2 through Module 4:*** **Reactions to the Three Scenarios.** These questions formed the backbone of the study, soliciting from participants the richest information about their attitudes and opinions of congestion pricing, as embodied in the three specific scenarios that could be applied in the Washington region.
  - » *"Which **'arguments for'** this scenario are most important, and why? Are there any others you would like to add?"*
  - » *"Which **'arguments against'** this scenario are most important, and why? Are there any others you would like to add?"*
  - » *"What **changes or guarantees** to this scenario would make it more acceptable?"*

Trained facilitators seated at each table used specific discussion questions to help guide conversation in the most constructive and efficient way possible.

1 - The Discussion Guide for the deliberative forums can be found on the study's website at www.mwcog.org/CongestionPricing/PublicAcceptability.

As scribes recorded discussion notes at each table, those notes were fed to a central computer where a team of subject matter experts synthesized the notes in real time.

- ***Module 5:*** **Participants' Suggested Alternative Solutions to the Region's Transportation Problems.** This final discussion module afforded participants the opportunity to offer their own solutions to the region's transportation problems.
  - » *"Given your own experience traveling around the region and everything you've learned today, how would you propose to significantly fix the most important transportation problems in our region?"*
  - » Optional follow-up: *"How would you pay for your solution?"*

Discussion Notes Recorded on Laptop Computers

"Scribes" familiar with the issues being discussed sat at each table and used a laptop computer to record the key points of the small-group discussions. The scribes also noted non-verbal communication among participants, the overall tone of conversation, or specific points that seemed to cause widespread confusion or shared agreement or disagreement. The goal of the note-taking was to capture not only *what* people talked about but *how* they talked about it as a way to shed light on what issues matter most for people in determining whether or not they support each of the scenarios.

Real-Time Synthesis of Discussion Themes

As scribes recorded discussion notes at each table, those notes were fed to a central computer where a team of subject matter experts synthesized the notes in real time and identified key themes. The key themes were shared with the entire participant group via PowerPoint following each discussion module so as to maximize the exchange of diverse ideas and opinions throughout the room.

(Left) "Scribes" at each table used laptop computer to record the key points of the small-group discussions. Typed notes were then submitted electronically to the "theme team." (Right) A group of subject matter experts—the "theme team"—synthesized discussion notes in real time and identified key themes.

Electronic Keypad Polling

Each forum included several rounds of electronic keypad polling. Participants used keypads with unique identifying numbers so that the research team could later cross-tabulate individual responses. Some of the questions—noted with an asterisk ("*") below—served to capture baseline opinions against which responses to the same questions at the end of the forum could be compared to evaluate how opinions changed over time.

- **Demographic Information and Initial Perceptions of the Status Quo.** An initial round of keypad polling gathered demographic information and gauged participants' perceptions of the current state of the transportation system and the challenges it faces.
  - Demographic Information
    - Gender, age, race/ethnicity, annual household income
    - Geographic location of home and work
    - Travel mode and travel time to and from work
    - Existing familiarity with congestion pricing
  - Initial Perceptions of the Status Quo
    - Perception of congestion as a critical problem facing the region*
    - Perception of transportation funding shortfalls as a critical problem facing the region*
    - Knowledge that the federal gas tax has not been raised since 1993
    - Support for raising gas taxes to pay for transportation improvements*
    - Confidence in the public sector to solve transportation problems

- **Initial Reactions to the Concept of Congestion Pricing.** Following the presentation describing the twin problems of congestion and funding shortfalls, and the introduction to congestion pricing as a possible solution, a round of keypad polling gauged participants' initial reactions to congestion pricing as a reasonable way to deal with:
  - The region's transportation problems generally*
  - Congestion*
  - Transportation funding shortfalls*

- **Perceptions of Effectiveness and Levels of Support for Individual Scenarios.** Next, participants were polled on their opinions of each of the individual scenarios.
  - Perceptions of Effectiveness of Individual Scenarios
    - In reducing congestion on the region's roadways
    - In solving the region's transportation funding shortfalls
  - Level of Support for Individual Scenarios*

**Baseline questions that were asked again at the end of the forum.*

Participants used electronic keypads to record their individual opinions and responses to poll questions throughout the forum.

Participants used keypads with unique identifying numbers so that the research team could later cross-tabulate individual responses.

- **Impact of "Key Factors."** The study team sought to gather information about certain "key factors" related to various approaches to congestion pricing and the importance of those factors in determining their level of support for specific scenarios.
  - » Asked during Scenario 1:
    - Support for **use of revenues:**
      - › To fund new high-quality public transit
      - › To build new roads or to add lanes
  - » Asked during Scenario 2:
    - Perception of **fairness:**
      - › To people of different economic groups
      - › To people who have no choice but to drive, or have to drive long distances
    - Concerns about **privacy**
    - Importance of having the **choice** to pay a toll or participate in a tolling scheme
    - Importance of new tolls **replacing existing gas taxes**
      - › *"This scenario would entirely replace gas taxes. Does this make you more or less likely to support it?"*
      - › Follow-up plenary discussion: In a short discussion with all participants, the lead facilitator asked participants to explain why they might be less likely to support the scenario if it replaced gas taxes.[2]

The study team sought to gather information about certain "key factors" related to various approaches to congestion pricing.

The research team also distributed paper surveys following the electronic keypad polling for each of the individual scenarios. The surveys asked participants to rate the importance of each of the "arguments for" and "arguments against" for each of the scenarios in determining their level of support for that scenario.

2 - The study team added this plenary discussion to the agenda after the first forum because the results of the preceding polling question were somewhat surprising—51% of participants said they were less likely to support the scenario if it replaced gas taxes. The study team wanted further explanation of this result and therefore asked the lead facilitator of the forums to conduct a brief discussion. This was the only plenary discussion at the forums.

The Intercounty Connector (ICC) in Maryland, which connects I-270 in Montgomery County with I-95 in Prince George's County, opened in 2011. The ICC is an example of a variably-priced toll road in the Washington region.

Forum Content: Background Presentations and Three Congestion Pricing Scenarios

The background research presented in the previous chapter suggested that members of the general public would provide more useful reactions to specific proposals than broad concepts or theories. The study team therefore presented three distinct potential pricing scenarios to forum participants. The scenarios represented three very different approaches to addressing the twin problems of roadway congestion and transportation funding shortfalls in the region. They also reflected proposals that have been studied by the TPB (Scenario 1) or the Brookings Institution (Scenario 2), or that have been proposed or implemented elsewhere in the United States or overseas (Scenario 3).

In addition to the short educational presentations on each scenario, participants also received a discussion guide that included more detailed information about the scenario and "day-in-the-life" vignettes of fictional characters to show how different individuals might be affected by or benefit from the scenario. The discussion guide also spelled out "arguments for" and "arguments against" the scenario as a reference for participants to use during small-group discussions.

The scenarios represented three very different approaches to addressing the twin problems of roadway congestion and transportation funding shortfalls in the region.

Background Presentations

To provide a baseline for discussion, participants received an overview of the Washington region and its transportation system, and an introduction to the causes of congestion, its economic and social costs, and evidence that it is getting worse. They also learned how the region's transportation system is funded and the reasons why revenues, particularly gas taxes, are failing to meet funding needs.

Participants also learned about the basic concepts underlying congestion pricing—including examples of how it is applied elsewhere in people's lives, like in utility and airline ticket pricing—and how it might be used both to reduce congestion and to raise additional revenue for transportation.

Scenario 1: Priced Lanes on All Major Highways. Drivers would have the option to pay a toll to travel in free-flowing lanes or drive in general purpose lanes free of charge.

Scenario 1: Priced Lanes on All Major Highways

Under this scenario, tolls would be charged on at least one lane in each direction on all major highways in the region. The toll rates for lanes would increase during the most congested times of day to maintain free-flowing traffic for drivers. Some existing lanes, which are currently free of charge, would be converted to toll lanes. In other cases, new toll lanes would be built. Nearly all roads would maintain non-tolled options for drivers. This scenario would use an open-road tolling system in which drivers would not have to stop or slow down to pay the toll. Most drivers would pay using the EZPass system, or they would be billed based upon photographs of their license plates, captured by overhead cameras.[3]

Under Scenario 1, tolls would be charged on at least one lane in each direction on all major highways in the region.

Revenues from the tolls would be used to operate an extensive regional network of high-quality bus service—bus rapid transit, or BRT—on the priced lanes. Operating in free-flowing traffic would ensure reliable bus service and a convenient alternative to paying the toll.

- "Arguments for":
  - » Provides congestion reduction on highways
  - » Provides funds for transportation, especially bus rapid transit (BRT)
  - » Relatively easy to implement; people are familiar with paying tolls
- "Arguments against":
  - » Congestion could be displaced onto non-tolled roads, including local roads
  - » Could be unfair to people with limited incomes and those who are dependent on driving

3 - Maryland's Intercounty Connector (ICC) and the newly added HOT lanes on the Capital Beltway in Virginia are examples of projects that both use the managed lane approach and tolling system described in Scenario 1. However, unlike much of the toll network described in this scenario, the ICC and Virginia's HOT lanes projects did not convert existing general purpose lanes to toll lanes; they constructed new road capacity, which is tolled.

Scenario 2: Pricing on All Roads and Streets

Scenario 2: Pricing on All Roads and Streets. A fee would be applied based on distance traveled, time of day, and road type.

Instead of paying gas taxes at the pump, drivers under this scenario would pay per-mile fees calculated by GPS systems in their cars. Driving on all roads and streets would be subject to this charge, but the prices would vary depending on where and when one was driving, with higher rates on more heavily-traveled routes. In some cases, drivers would pay far less per mile than they do under the gas tax. Discounts would be provided for low-income drivers. Data collected from the GPS unit would be sent to a third-party, non-government provider. Drivers would be charged at the end of the month or they could use anonymous prepaid accounts.

The system would reduce congestion on roads that are frequently backed up and would raise funds for road repairs and a wide variety of transportation improvements, including local bicycle and pedestrian improvements and new regional transit options.

- "Arguments for":
  - » Provides congestion reduction on all roads throughout the region
  - » Provides a sustainable source of funding for transportation
- "Arguments against":
  - » Could be unfair to people with limited incomes and those who are dependent on driving
  - » Could be an invasion of privacy or too much government intrusion

Instead of paying gas taxes at the pump, drivers under Scenario 2 would pay per-mile fees calculated by GPS systems in their cars.

Scenario 3: Priced Zones. Drivers would have to pay a fee to enter major activity centers.

Scenario 3: Priced Zones

Drivers would have to pay to enter one of the Washington region's major activity centers, such as the central business district in the District of Columbia, Silver Spring in Maryland, or Tysons Corner in Virginia on weekdays during rush hours. Electronic transponders or license plate readers would charge drivers a flat fee to enter the zone.

Drivers would have to pay to enter one of the Washington region's major activity centers under Scenario 3.

Under this scenario, congestion in the priced zones would be reduced significantly. Funds raised through the congestion charge would be used to improve local roads, provide better transit within the zones and on routes leading into the zones, and make it safer and easier to walk and bike. Such systems have been implemented in London, proposed in San Francisco, and proposed and rejected in New York City.

- "Arguments for":
  - » Provides congestion reduction in priced zones and on routes leading into the zones
  - » Provides a source of funding for transportation improvements that make it easier to travel without a car within priced zones and on routes leading into priced zones
  - » There is already a good supply of transportation alternatives that allow people to avoid paying the congestion charge
- "Arguments against":
  - » Could encourage businesses to locate outside the priced zone
  - » Ignores the region's main congestion problems, which occur primarily on highways outside priced zones

Forum Participants: Capturing Diverse Perspectives and Opinions

The study engaged a group of people who were broadly representative of the region's population so as to provide the best glimpse into the attitudes and opinions of the general public regarding congestion pricing. A total of 310 people participated in the five forums, selected from a pool of more than 1,000 applicants.

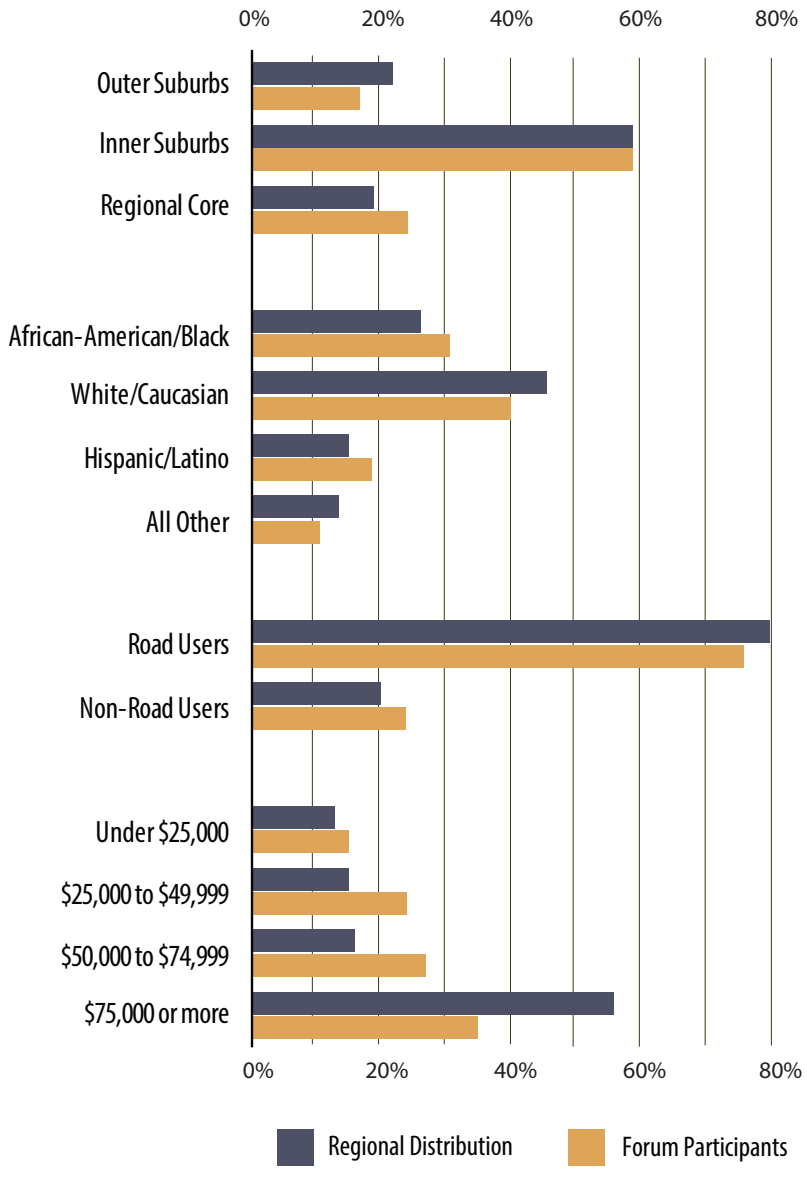
Recruitment Methods

America*Speaks* used three primary methods to solicit applicants:

- **Online advertisements/ announcements.** Advertisements and announcements were published on Craigslist and other websites inviting people to apply to participate.
- **Invitations to groups and individuals.** Emails were sent to key organizations, such as homeowners associations, ethnic organizations, and local chambers of commerce inviting their members to apply to participate. Emails were also sent to several hundred individuals with whom America*Speaks* had worked in previous meetings.
- **Canvassing in public places.** America*Speaks* staff canvassed for applicants in geographic locations where applicant turnout from earlier recruitment efforts was low. Staff canvassed in public places like shopping malls, libraries, government buildings, and universities.

Participants received a stipend of $100 to participate in the forums, which helped attract members of the general public instead of advocates, activists, or others already especially knowledgeable about transportation or congestion pricing.

Figure 4: Comparison of Regional Demographics and Forum Attendees



Demographic Recruitment Targets

The study team established recruitment targets based on the latest Census data for the region and used demographic information collected from the pool of applicants to select participants. Geography, race, and travel mode were the primary recruitment criteria, while income, age, and gender were of secondary importance.

The study team established recruitment targets based on the latest Census data for the region.

Figure 4 compares the demographic characteristics of forum participants to the distribution within the region's population.

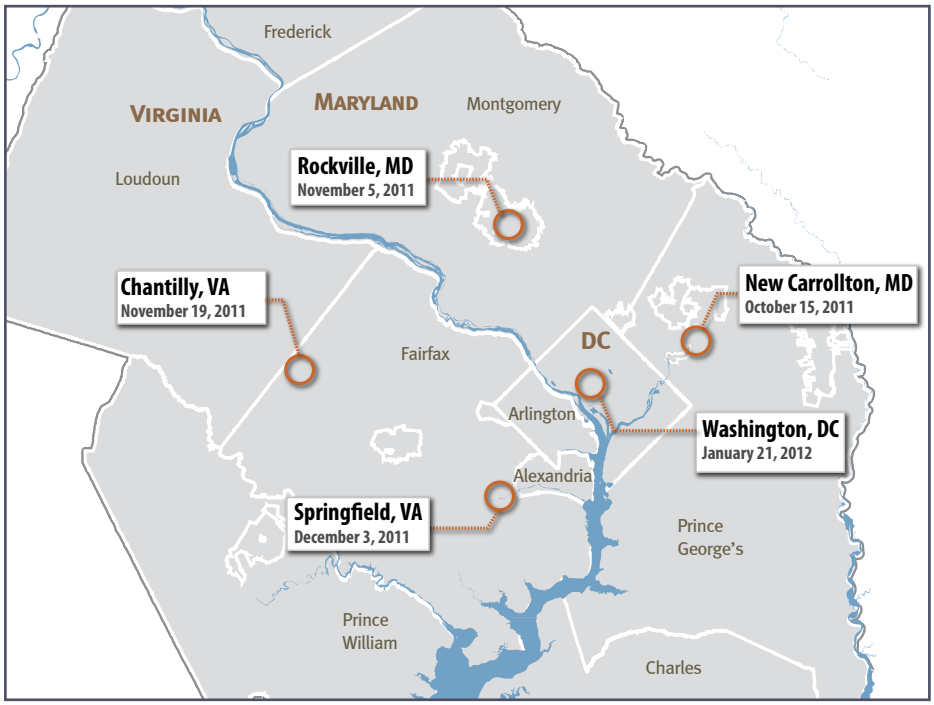
Forum Locations and Length

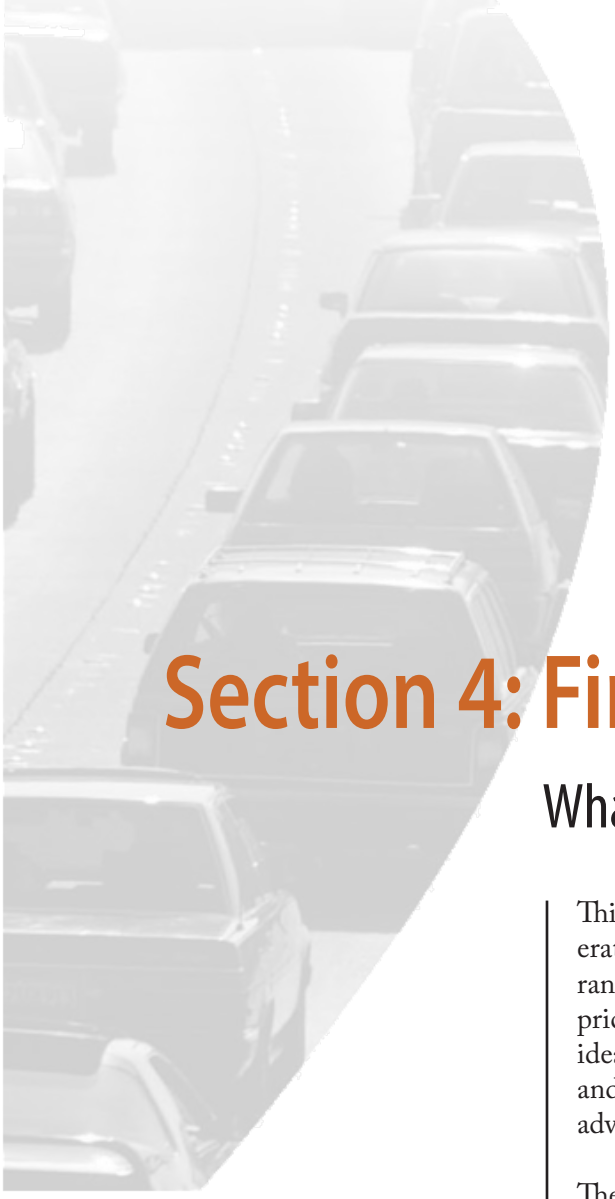
The study team chose five forum location—two in Maryland, two in Virginia, and one in the District of Columbia—based on their proximity to different geographic parts of the region and to areas where key demographic groups were located to help recruit representative participants.

Each forum lasted four and a half hours. This provided enough time for the research team to impart the necessary information to participants and for participants to engage in conversation and share their opinions while still being "worth" the $100 stipend. The forums began at 10:00 a.m. and lasted until 2:30 p.m., with no scheduled breaks other than a short "working lunch" approximately halfway through the program.

America*Speaks* provided musical entertainment, a lively forum host, and several rounds of a team-based trivia competition to help sustain the attention of participants and to keep them energized and willing to engage in discussion.

Figure 5: Forum Locations and Dates





Section 4: Findings

What Did the Public Tell Us?

This study on the public acceptability of congestion pricing used deliberative forums to explore attitudes toward a variety of pricing options, ranging from variably-priced toll roads to area-wide mileage-based pricing systems. By engaging the public in an extended exchange of ideas, opinions, and reactions, the project sought to identify challenges and opportunities that decision-makers would face if they were to advance congestion pricing proposals publicly.

The findings in this chapter are grouped around key questions the study attempted to address:

- **How do people see the region's transportation problems?**
- **How do people react to different congestion pricing scenarios?**
- **What's the basis for people's opinions?**
- **After learning and talking about congestion pricing, what do people think?**

How do people see the region's transportation problems?

In the opening discussion, participants had the chance to define the region's transportation problems, drawing from their own knowledge and experiences. In addition to engaging in table discussions, participants answered a number of polling questions designed to measure attitudes about the status quo, including opinions about the severity of the funding shortfall and congestion, trust in government, gas taxes, and general receptivity to congestion pricing.

Key findings:

- **A vast majority of people agree that congestion is a critical problem.**

  People don't need to be convinced that congestion is bad. In a poll at the beginning of the forums, 91% of participants "agreed" or "strongly agreed" that congestion is a critical problem facing our region. In group discussions, they spoke about it with passion and deep concern.

- **People tend overwhelmingly to focus on the personal impacts of congestion.**

  People spoke about congestion in very personal ways, conveying deep frustrations. They described how congestion affects their lifestyle choices and limits opportunities. Some spoke about jobs they had turned down because the commute would be too difficult. Others bemoaned lost time with their families.

  Many said congestion made their day-to-day lives more difficult and unpredictable. "It's hard to plan in the morning," one participant said. "Every day is difficult to schedule," said another. The burdens of congestion seemed to rob people of a sense of control over their lives. In part, the lack of control seemed to result from a feeling that driving is the only option for most people in the region.

The burdens of congestion seemed to rob people of a sense of control over their lives. In part, the lack of control seemed to result from a feeling that driving is the only option for most people in the region.

- **People are quick to blame other causes besides their own travel behavior for congestion.**

  As a starting point, many participants expressed a belief that the amount of driving on the region's roads was largely fixed. Most people have no choice of whether or not to drive, they argued. Therefore, while the effects of congestion are felt personally, people are unlikely to identify themselves individually as a source of the problem. They are quick to point to other causes besides their own travel behavior that contribute to congestion.

  Without necessarily using the term "demand," participants talked frequently about pressures on the road system, saying they feel crowded by too many people and too much development, and that too many people are trying to use the roads. They also talked about "supply" problems, including a lack of good transit options or alternative routes for driving. In a few cases, participants said that the region's infrastructure wasn't located near job opportunities.

Many participants blamed construction, including bad coordination and poor timing of construction, as a major cause of the region's transportation problems. In fact, construction was one of the topics mentioned most often during the opening conversation. Others spoke about poorly timed traffic signals. Many people also were quick to blame bad drivers and drivers from other jurisdictions for the region's traffic woes.

Participants questioned the government's ability to manage and spend money efficiently and ethically, citing wasteful spending as a cause of the region's transportation problems.

❖ **People lack confidence in the government's ability to solve transportation problems.**

At the beginning of the forums, 39% of participants "disagreed" or "strongly disagreed" with the statement, "If the government had more money to spend on transportation, I am confident we would have a better transportation system." Only 35% of participants "agreed" or "strongly agreed" with the statement.[1]

Some participants voiced a general sense that the public sector is incompetent. Poorly-coordinated construction schedules and a lack of safe and reliable transit options were cited as examples of the government's inability to meet the region's transportation needs. Participants also questioned the government's ability to manage and spend money efficiently and ethically, citing wasteful spending as a cause of the region's transportation problems.

More broadly, participants suggested that a lack of leadership is a source of the region's transportation problems. They seem to believe that other regions—including New York, Seattle, or Chicago—are doing a better job of planning for the future and meeting current demands. They cited factionalism among our local and state governments as one reason for this lack of leadership.

❖ **While acknowledging that the transportation funding shortfall is a critical problem, people don't connect it to their personal lives.**

At the beginning of the forums, 72% of participants "agreed" or "strongly agreed" that the transportation funding shortfall is a critical problem facing our region, compared to 91% who "agreed" or "strongly agreed" that congestion is a critical problem. In their conversations, they rarely raised funding as a key issue. When it was raised, usually toward the end of the opening conversations, it was discussed in a perfunctory and non-personal manner. Participants who said they wanted more transportation alternatives rarely connected the insufficiency of those options to the general lack of funding. Some participants expressed doubts about the reality or extent of funding problems.

1 - This lack of confidence is roughly consistent with the TPB's 2010 *State of the Commute* Survey described on pages 17-19. In that survey, only 23% of respondents gave a rating of 4 or 5 when asked if the region's transportation system was well managed. Respondents also expressed fairly low satisfaction with the level of attention being paid by officials to transportation problems.

Comments and answers to poll questions suggest that many were unaware that the federal gas tax is not indexed to inflation and that it has not been raised in nearly two decades.

❖ **People are generally uninformed about gas taxes.**

Participants were generally uninformed about basic facts related to transportation funding, including gas taxes. Comments and answers to poll questions suggest that many were unaware that the federal gas tax is not indexed to inflation and that it has not been raised in nearly two decades. Only 27% knew or correctly guessed that the federal gas tax is currently 18.4 cents per gallon; 65% thought it had gone up since 1993.

At the beginning of the forums, a large majority (61%) "disagreed" or "strongly disagreed" with the statement, "Gas taxes should be raised to pay for transportation improvements." Only 21% agreed with that statement.[2] People from higher-income households were slightly more likely to support raising gas taxes.

❖ **The general concept of congestion pricing has limited appeal, although people are more receptive to it as a strategy for addressing funding shortfalls.**

At the beginning of the forums, only 39% of participants thought that congestion pricing seemed like "a reasonable way to deal with the region's transportation problems generally." Participants were more likely to agree that pricing was reasonable as a strategy for dealing specifically with congestion (45%), and slightly more than half (53%) agreed that pricing was reasonable for dealing specifically with transportation funding shortfalls.

Receptivity to congestion pricing, as measured by responses to the "reasonableness" question, did not differ significantly across people of different incomes. People who typically commute by transit, walking or biking, or who work at home, however, were more likely to agree that pricing was reasonable.

2 - For the purposes of baseline comparison, the TPB's 2010 *State of the Commute* Survey found somewhat higher support for raising gas taxes. When presented with a range of revenue-raising mechanisms, "increasing gas taxes" received the most support (30% with a rating of 4 or 5, with 5 meaning "very supportive").

How do people react to different congestion pricing scenarios?

While grounded in common principles, congestion pricing is best understood as a range of different approaches with different goals, benefits, and costs. To gauge public acceptability, the study asked citizens to separately consider three scenarios: 1) a regional network of variably-priced lanes on all freeways, as well as some other major roadways (Priced Lanes on All Major Highways); 2) variable pricing on all streets and roads using vehicle-based GPS systems (Pricing on All Roads and Streets); and 3) zone-based charges in which drivers pay a fee to enter or drive within a designated area or zone (Priced Zones).

After receiving a brief presentation on each scenario (described in the previous chapter), participants discussed its benefits and disadvantages. After each discussion, participants were polled on various questions related to the scenario, including their level of support for the scenario. At the conclusion of the forums, participants were again polled on all of the scenarios.

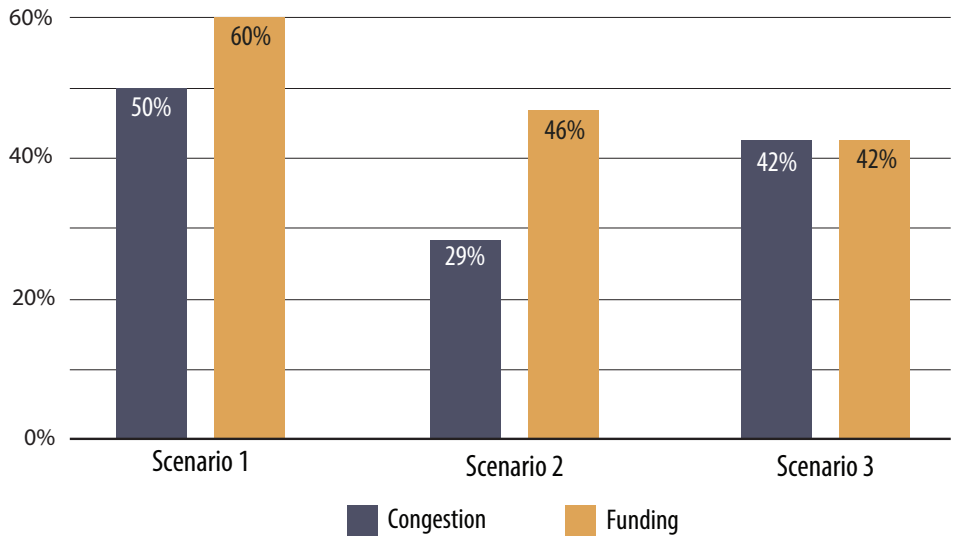
Key findings:

- **People were skeptical about the effectiveness of the scenarios, particularly in reducing congestion.**

  Sixty percent of participants thought that Scenario 1 (Priced Lanes on All Major Highways) would be effective in solving the region's transportation funding shortfall, whereas only 50% thought the scenario would be effective in reducing congestion on the region's roadways. The difference was even more dramatic for Scenario 2 (Pricing on All Roads and Streets): 46% thought the Scenario would be effective at solving the funding shortfall, compared with only 29% who agreed it would be effective at addressing congestion. Participants thought Scenario 3 (Priced Zones) would be equally effective (42%) in dealing with both problems (see Figure 6).

People were skeptical about the effectiveness of the scenarios, particularly in reducing congestion.

Figure 6: Perceptions of Effectiveness in Addressing Congestion and Funding Shortfalls



Pricing will not reduce demand, they argued, because most people don't drive because they want to; they drive because they have to.

This finding is striking, given that participants were told during an earlier presentation that Scenario 2 would be the most effective congestion reduction measure among the options discussed. Many comments again reflected a general belief that the amount of driving on the region's roads is largely fixed. Pricing will not reduce demand, they argued, because most people do not drive because they want to; they drive because they have to. Making them pay for it will not change their need to drive.

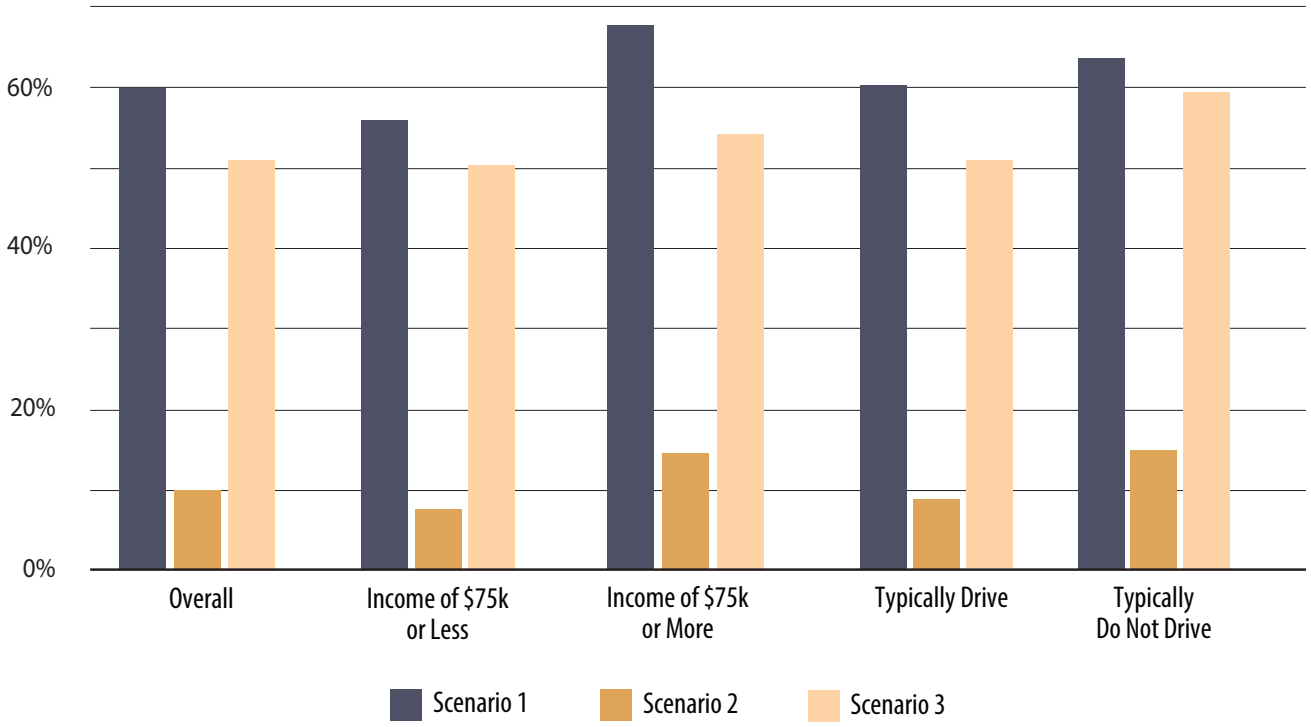
❖ **Participants clearly preferred Scenarios 1 and 3 over Scenario 2, although support for the scenarios varied across income group and commute mode.**

All demographic groups clearly preferred Scenarios 1 (Priced Lanes on All Major Highways) and 3 (Priced Zones) over Scenario 2 (Pricing on All Roads and Streets).

As Figure 7 illustrates, people from higher-income households were more likely to support the scenarios, as were people who typically take transit, walk or bike to work, or who work at home.

Not surprisingly, people who agreed that pricing was reasonable and effective were more likely to support the scenarios. People who were more confident in the government were more likely to support Scenario 1, but not the other scenarios.

Figure 7: Comparison of Support for Each Scenario by Income Group and Commute Mode



Scenario 1: Priced Lanes on All Major Highways. Drivers would have the option to pay a toll to travel in free-flowing lanes or drive in general purpose lanes free of charge.

❖ **Scenario 1 (Priced Lanes on All Major Highways) generated cautious interest.**

Many participants seemed to find the first scenario to be a reasonable approach that could be useful to them in their daily lives, although many were initially surprised at the idea of such a comprehensive network of tolled roads.

» **A significant number of people said they supported Scenario 1.**

After first hearing about the scenario, 51% of participants said they would "strongly support" or "somewhat support" Scenario 1, which would implement at least one priced lane on all of the region's major highways. By the end of the forums, that number had increased to 60%. In comparison to the other scenarios, participants were most supportive of this one.

» **They expressed interest in the choice and predictability offered by Scenario 1.**

Through group discussions, participants came to appreciate the choice and predictability that this scenario might provide in their lives. Some said they might benefit from being able to pay a little extra to get to work on time when running late, while others said it would make it easier for them to factor in the cost of commuting in their daily lives. They also appreciated the fact that the scenario would offer a choice of whether or not to use the tolled lanes—they would not be required to pay if they did not want to.

The addition of a bus rapid transit (BRT) system or other high-quality transit alternative was also an attractive feature of the scenario. Of all the transportation improvements discussed at the forums, BRT seemed to represent something truly new to many participants and they were interested in it.

» **But they had doubts about the scenario, especially regarding fairness and the displacement of congestion onto local roads and alternate routes.**

Participants were concerned that this scenario was unfair. They spoke about class divisions, often placing themselves on the disadvantaged side of this split. "Our country is already too divided," said one participant.

Many comments reflected a belief that this scenario would be particularly unfair to middle-class, suburban-oriented commuters who are auto-dependent. Participants emphasized that such people often cannot afford to live closer to their jobs—or may not want to. They stressed that putting

Participants appreciated the fact that the scenario would offer a choice of whether or not to use the tolled lanes—they would not be required to pay if they did not want to.

tolls on existing lanes (as opposed to just adding new tolled lanes) seemed particularly unfair.

Others expressed concerns about displacement of congestion onto local streets. Some argued that such displacement would be particularly egregious because they did not believe the scenario would actually reduce traffic volumes—consistent with the skepticism regarding the effectiveness of the scenarios in addressing congestion revealed in the keypad polling data reported above.

Participants agreed that high-quality transit alternatives would have to be in place before the toll lanes were opened to ensure that people had other options from the very beginning.

Participants agreed that high-quality transit alternatives would have to be in place before the toll lanes were opened to ensure that people had other options from the very beginning.

Scenario 2: Pricing on All Roads and Streets. A fee would be applied based on distance traveled, time of day, and road type.

- **Scenario 2 (Pricing on All Roads and Streets) triggered strong negative reactions.**

  The objections toward this scenario were visceral. Participants found the proposal overwhelming and unfamiliar, they thought it would be impossible to implement, and they were concerned about where the money that was raised would go.

  - **Only one in 10 people said they support this scenario.**

    By the end of the forums, 86% of participants said they were "somewhat opposed" or "strongly opposed" to Scenario 2. The intensity of opposition was sharp: 76% said they "strongly opposed" it.

  - **"You might as well strap on an ankle bracelet"**

    The scenario provoked a sense of outrage regarding issues of privacy and government overreach. The phrase "big brother" was repeated frequently. Many comments reflected a general sense of disbelief: "You're going to charge me just to go to the grocery store?" Some people said that the scenario would restrict movement in a way that was "un-American." Some participants expressed a sense of being gouged: they felt the proposal would be taking advantage of the fact that many people have no choice but to drive.

  - **The details seemed confusing and unpredictable for consumers and impossible to implement.**

    Visualizing the scenario seemed to make some participants feel weary and overwhelmed. Personal trip planning would be difficult ("You can't

research the price of every road before you drive it") and they were concerned about the burden of "another unknown bill at the end of the month." It seemed to be one more hassle in lives that are already difficult.

Many felt that implementation would be costly and bureaucratic—a "nightmare," according to one participant. And many felt that enforcement would be impossible. "What happens to people who don't pay?" they asked. "What about out-of-town drivers?" For many, the scenario seemed to be fraught with opportunities for evasion, fraud, and poor implementation.

Most of the changes or guarantees that participants said would make them more likely to support the scenario were focused on solutions that would be more likely to protect their privacy and/or reduce the hassle of paying attention to additional costs. A number of people wondered why new fees couldn't just be based on mileage driven measured by a car's odometer and reported during the periodic vehicle inspections that many states already require.

Most of the changes or guarantees that participants said would make them more likely to support Scenario 2 were focused on solutions that would be more likely to protect their privacy and/or reduce the hassle of paying attention to additional costs.

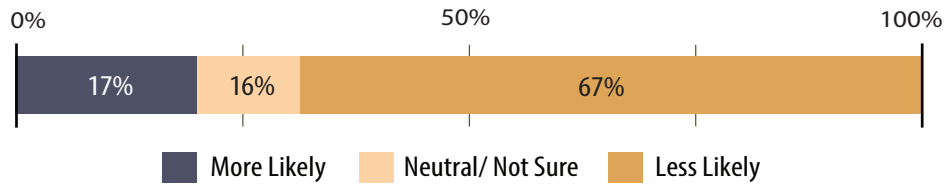
» **People were suspicious about the funding aspects of the scenario, particularly the elimination of the gas tax.**

The scenario was presented as a way to eliminate gas taxes, but most people did not find that to be a selling point. In fact, poll results from the forums suggest that many people may actually be disinclined to support congestion pricing if such a system replaces gas taxes. The fact that Scenario 2 would entirely replace gas taxes made 51% of participants say they were "somewhat less likely" or "much less likely" to support it.

For the study team, this poll result initially seemed counter-intuitive and seemed to suggest that participants had somehow misunderstood the scenario. However, in plenary comments and during table discussions, many participants confirmed their preference for maintaining gas taxes in the face of this scenario. They explained that even if gas taxes were removed, they did not believe that gas prices would go down. Some further noted that they preferred gas taxes because they were familiar and predictable. Others said they liked the fact that gas taxes encouraged fuel-efficiency while mileage-based fees would not.

Overall, participants largely viewed this scenario less as a congestion-reduction method and more as a means to raise money—which was not viewed positively for the most part. Ultimately, many seemed to consider revenue increases to be a benefit to government but not to them.

Figure 8: "Scenario 2 Would Entirely Replace Gas Taxes. Does This Make You More or Less Likely to Support it?"



Scenario 3: Priced Zones. Drivers would have to pay a fee to enter major activity centers.

❖ **Scenario 3 (Priced Zones) spurred less intense reactions.**

For many participants, priced zones seemed simple and logical, but because they would affect fewer people they generated less interest—positive or negative.

» **Support for Scenario 3 was greater than opposition.**

At the end of the forums, 50% of participants said they would "strongly support" or "somewhat support" Scenario 3, which would establish priced zones in central business districts. About one-third (34%) said they would "somewhat oppose" or "strongly oppose" the scenario, whereas 16% were neutral or unsure.

» **For some it seemed logical and straightforward.**

People saw the priced zone scenario as targeted and logical—something they could envision and understand. They understood how it might reduce congestion, at least in the limited locations where it would be applied. And some thought it made sense—or that it would be fair—because transportation alternatives were already available in central business districts or were more likely to become available in the near future.

While Scenario 3 (Priced Zones) seemed intriguing and sensible to some, others felt this approach was actually too local and would not solve the region's larger transportation problems, particularly highway congestion.

» **People were concerned about negative impacts just outside zones.**

Specific concerns about implementing the scenario focused on the immediate impacts it might have on the locations just outside the zones. Would it increase congestion in those places? Wouldn't those locations need to increase parking? Participants also worried about negative effects on businesses both inside and outside the zones.

» **A level of disinterest.**

The strength of opinions often depended on whether this would affect people directly. Many suburbanites indicated they did not really care about this scenario because they never go into central business districts.

» **Not seen as regional.**

While this scenario seemed intriguing and sensible to some, others felt this was actually too local and would not solve the region's larger transportation problems, particularly highway congestion. They asked why the region would go to all the trouble of implementing a priced zone system for limited impact. Some asked: "Why not just raise the gas tax?"

What's the basis for people's opinions? Which specific factors influence attitudes about congestion pricing and how?

A variety of factors—including questions of effectiveness, privacy, fairness, and choice—are at play in determining opinions about congestion pricing. The study sought to untangle information about these different concerns. Through small-group discussions and poll questions, participants revealed the factors that mattered to them and how strongly they mattered. They also indicated whether and how these factors influenced their support for different pricing scenarios and how new information about key factors might cause them to change their minds.

"Privacy" and "choice" were the most important factors in determining support for scenarios.

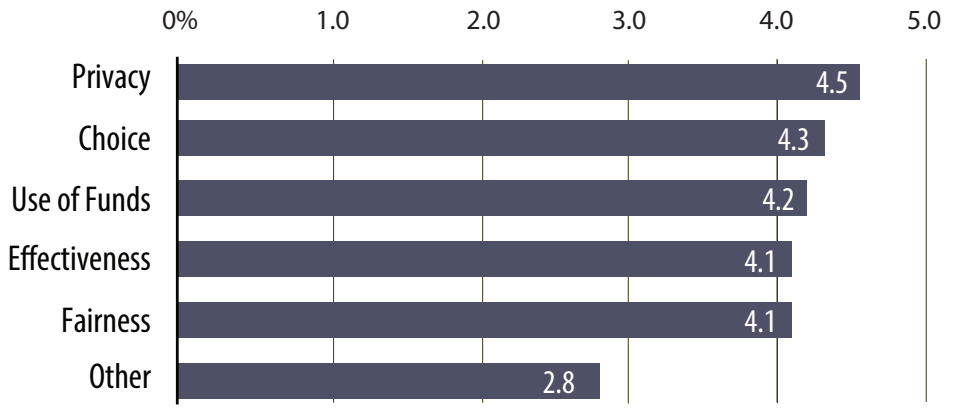
Key findings:

- **"Privacy" and "choice" were the most important factors in determining support for scenarios.**

  On a scale from 1 to 5, where 1 indicated "not important" and 5 indicated "very important" in determining one's level of support for the pricing scenarios, participants gave the highest average ratings to factors relating to "privacy" (4.5) and "choice" (4.3).

  Participants also rated the effectiveness of the scenarios in addressing regional problems and concerns about fairness as important, but to a lesser degree (average rating of 4.1 for both). Other factors, such as the familiarity of toll lanes and the opportunity to replace the gas tax with a whole new system, were rated as relatively unimportant (see Figure 8).

Figure 9: Ranking of the Importance of Key Factors



- **Privacy**

Participants were outraged by the loss of privacy that Scenario 2 seemed to represent. Comments about privacy were often related to wider apprehensions about losing personal control in an increasingly complicated world.

» **For Scenario 2, privacy seemed to be the most pressing concern.**

In discussions about Scenario 2, apprehensions about privacy were mentioned early and frequently. Eighty-four percent of participants indicated they were "very concerned" or "somewhat concerned" about privacy in this scenario.

Many participants seemed to feel the scenario represented an invasion of personal space and private property. Participants expressed concerns about data security or fears about surveillance through GPS systems. A number of attendees sarcastically commented on the constraints the scenario would place on cheating spouses.

» **Comments about privacy often invoked related, but deeper, anxieties.**

Comments about privacy sometimes seemed to be a shorthand way of expressing deeper misgivings that were more difficult to pinpoint and articulate. People spoke about principled objections to the encroaching powers of government or private companies that keep track of people's movements. More broadly, the comprehensiveness of Scenario 2 represented a surrender of control and an increased burden that some participants found unsettling.

Comments about privacy were often related to wider apprehensions about losing personal control in an increasingly complicated world.

» **Loss of privacy was deemed a high cost without clear benefits.**

In the opening discussions at the forums, participants articulated feelings of powerlessness and loss of control in their personal lives due to congestion. For most participants, Scenario 2 appeared to exacerbate those anxieties, not allay them. The potential loss of privacy was deemed to be a high cost that was not worth it.

❖ **Choice**

In the opening discussion many people said their major complaint about the current system was the lack of transportation options in the region. Throughout the ensuing discussions, participants tried to assess whether congestion pricing scenarios would increase their choices or reduce them.

» **The lack of transportation options is considered a major existing problem.**

As a starting point, increased transportation choice was deemed a worthy goal. Participants bemoaned the lack of different options for getting around. They said available options are not reliable or convenient—roads are clogged, transit is not dependable.

» **There is a wide belief that driving isn't a choice, therefore congestion pricing should be a choice.**

Explicitly and implicitly, participants said that people in this region have no choice but to drive to get to work, school, and shopping. Therefore, to charge people to get to essential activities, without giving them a choice to pay or not, would be unfair and burdensome. Such a mandate would amount to an act of gouging helpless consumers.

The perceived pricing mandate in Scenario 2 triggered strong objections. Sixty-seven percent of participants indicated they were "much less likely" or "somewhat less likely" to support the scenario in light of the fact that drivers would not have the option to choose a free (but slower) lane or route.

Participants said that people in this region have no choice but to drive, so to charge people to get to essential activities, without giving them a choice to pay or not, would be unfair and burdensome.

» **Availability of options such as transit, walking and biking increase receptiveness to pricing.**

Non-road users (people who typically take transit, walk, or bike to work, or who work at home) were more likely to agree that congestion pricing seemed like "a reasonable way to deal with the region's transportation problems." They were also more likely to support the scenarios.

Changes or guarantees that participants said would make them more likely to support the scenarios included improving transit service before implementing any pricing mechanisms and ensuring that the revenues raised go to transit.

» **A sense of choice seems vital to cultivating public support for congestion pricing.**

Participants seemed to reach a consensus that having the choice to participate in congestion pricing is better than not having a choice. This was reflected in the contrast between Scenarios 1 and 2. The choice of non-tolled lanes in Scenario 1 made it more palatable than Scenario 2, which would price everyone.

But perhaps more importantly, this interest in choice was reflected in the different attitudes between Scenario 1 and the status quo. The availability of tolled and non-tolled options in Scenario 1 made it more appealing to many people than the status quo, which largely offers only toll-free lanes that are often congested.

❖ **Use of funds**

Participants often questioned where the additional money raised through congestion pricing would go, who would have control over it, and how transparent the process for deciding how to spend the money would be. For Scenario 2, which was seen primarily as a way to raise funds, many people seemed to view it as a government money-grab. Revenue increases were seen as a benefit to government, but not to them.

» **Transparency and accountability is essential.**

Each of the scenarios differed in exactly how the revenues generated would be used, yet participants rated "how the funds will be used" as an important factor in determining their support for all three of the scenarios. Changes and guarantees that participants said would increase their support for the scenarios included ensuring transparency and accountability with the funds.

This finding relates to the lack of confidence in the public sector that was revealed at the beginning of the forums: 39% of participants "disagreed" or "strongly disagreed" with the statement, "If the government had more money to spend on transportation, I am confident we would have a better transportation system." Clarity about how the funds will be used could help increase confidence, and may be just as important as the specific use (e.g., highways versus transit improvements). Participants who expressed confidence in the public sector were more likely to support Scenario 1, in particular.

Changes and guarantees that participants said would increase their support for the scenarios included ensuring transparency and accountability with the funds.

❖ **Effectiveness**

Participants who believed pricing could be effective in reducing congestion or solving funding problems were more likely to support the scenarios. Overall, however, many participants doubted congestion pricing would be effective in providing benefits they cared about, therefore they rated this factor as less important than other considerations, especially privacy and choice.

» **Framing pricing as an effective tool for addressing congestion problems and funding shortfalls does not resonate with the public.**

On the question of reducing driving on the region's roads, concerns about effectiveness were not particularly influential because many participants doubted congestion pricing would be effective. While they said they cared about congestion, they simply did not believe that congestion pricing would work.

On the question of raising revenue, concerns about effectiveness were not particularly influential. Participants saw that congestion pricing may be effective in raising revenue, and perhaps even a reasonable way to deal with funding shortfalls. But the funding problem, broadly defined, is not something people seemed to personally care about.

» **If congestion pricing can effectively create specific and useful transportation alternatives, people are interested.**

On a more personal level, concerns about effectiveness did potentially seem to have an effect. If congestion pricing could be shown to be effective at providing transportation alternatives and alleviating the sense of powerlessness caused by congestion, it could be influential. For example, by effectively providing bus rapid transit and uncongested lanes, Scenario 1 was attractive to some participants because it could increase options and the sense of personal control in their lives.

❖ **Fairness**

Issues about fairness were repeatedly raised. Participants said that fairness mattered, but it does not appear that concerns about fairness were pivotal in determining levels of support for different congestion pricing scenarios.

Concerns about effectiveness were not particularly influential because many participants doubted congestion pricing would be effective.

» **Interpretations of the term "fairness" varied.**

The discussion guide for the forums described questions of fairness related to two groups: low-income people, and people who are dependent on driving. Many participants discussed both of these aspects as questions of equity: Are different groups of people being treated equally? Are they receiving roughly equivalent outcomes?

When discussing fairness, however, participants also spoke about whether pricing would be fair to them personally—not in comparison to others, but in comparison to the assumptions they had built their own lives upon. Would it impose unfair costs without providing alternatives? Would it remove options instead of providing more?

Concerns about fairness were similar across income levels, and for both road-users (people who typically drive to work) and non-road users (people who typically take transit, walk or bike to work, or who work at home).

» **Many participants articulated a sense of class division.**

For some, congestion pricing on face value seemed unjust: those who can pay can get around congestion; those who can't are stuck with it. "There is already enough division in this country," said one participant.

» **Scenario 1 (Priced Lanes on All Major Highways) seemed to highlight key concerns about "haves" and "have-nots."**

Fairness was the major complaint about Scenario 1. Many participants referred to a picture in the PowerPoint presentation that illustrated a stark difference between uncongested priced lanes and clogged non-tolled lanes.

This visual depiction of the "haves" and "have-nots" (as one participant put it) seemed to invoke class anxieties that underlie much of the discussion. Many participants apparently viewed themselves as "stuck in the slow lane" generally in life, and the scenario seemed to reaffirm that self-image. The physical proximity of an express toll lane to a slow-moving non-tolled lane exacerbates that anxiety, as drivers stuck in traffic watch "fat cats" speeding by.

» **The unfairness of government mandates that limit choice trumped concerns about class divisions.**

Although Scenario 1 provoked the most anxiety about class divisions, it also preserved the option of "free" lanes, and was the most popular scenario. In contrast, some participants thought Scenario 2 was more fair than Scenario 1 in the sense that it would treat everyone equally and would not give special services to the wealthy. Scenario 2 was much less popular than Scenario 1, however, due to concerns that pricing all streets and roads would unfairly limit the options available to people.

After learning and talking about congestion pricing, what do people think?

Each forum lasted more than four hours, giving participants a chance to learn about congestion pricing in different forms and from different perspectives. The research design used this intensive level of interaction to get beyond people's quick impressions and see how opinions change through education and an exchange of ideas. For decision-makers who might be considering congestion pricing, this format helps illuminate issues and opportunities that could shape public opinion over the course of a public education campaign or other public engagement activities.

Key findings:

- **Opinions regarding specific scenarios shifted in telling ways, revealing comparative preferences and interest in key attributes.**

  Participants were asked identical poll question at the end of the day regarding support for each of the three scenarios. Although they were not asked to explicitly compare the scenarios to each other, some degree of comparison inevitably occurred.

  - **Support increased for Scenario 1 (Priced Lanes on All Major Highways).**

    Immediately following the initial discussion of Scenario 1, 51% of participants said they "strongly supported" or "somewhat supported" implementing at least one priced lane in each direction on all of the region's major highways. When participants were asked again at the end of the day about their level of support for Scenario 1, that number had increased nine percentage points to 60% (see Figure 11).

    Based upon the final small-group discussion module, it appears that participants increased their support for this option because its positive features—particularly the lack of a mandate to participate and the option to choose the predictability of the priced lane—had been reaffirmed over the course of the forum, while major concerns, such as fairness, seemed less pressing. Of course, increased support for this scenario was probably also based upon a favorable comparison with the deeply unpopular Scenario 2.

Participants increased their support for Scenario 1 because its positive features had been reaffirmed over the course of the forum, while major concerns, such as fairness, seemed less pressing.

Figure 10: Change in Support for Scenario 1

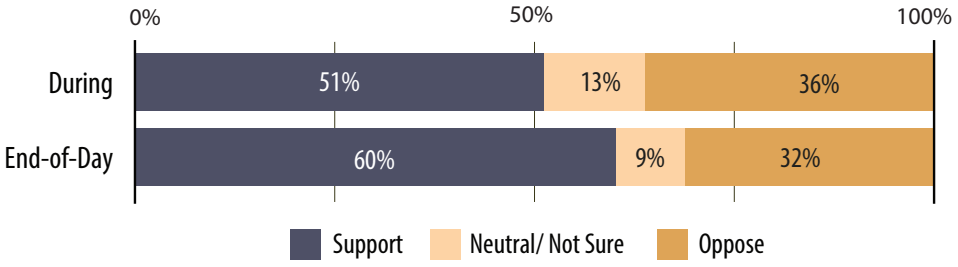
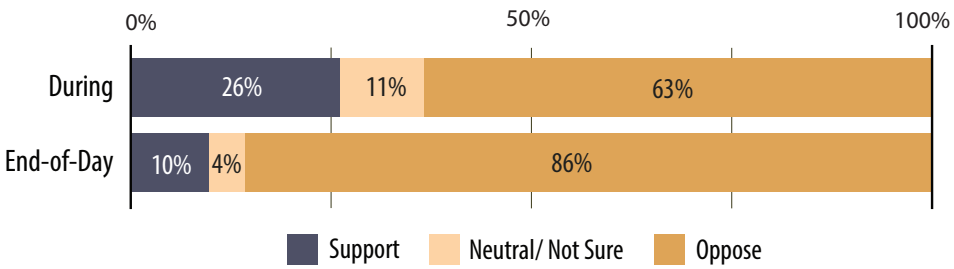


Figure 11: Change in Support for Scenario 2



The more people heard about how much other people disliked Scenario 2, the more they seemed to dislike it, too.

» **Opposition to Scenario 2 (Pricing on All Roads and Streets) increased significantly.**

By the end of the forums, 86% of participants said they were "somewhat opposed" or "strongly opposed" to the mileage-based fee (76% said they "strongly opposed" it), compared with 63% who opposed the scenario earlier. This change reflected not only people forming opinions who were previously neutral or unsure, but also people changing their opinion from "support" to "oppose" (See Figure 12).

It seems clear that the increased opposition to this scenario was based on a comparison with the other two scenarios. It was identified as the least preferred option, with a number of features that troubled participants.

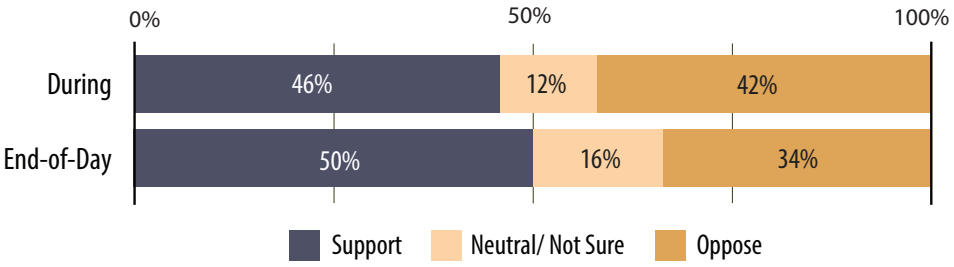
The notes from the small-group discussions show a snowballing effect in attitudes about this scenario. The more people heard about how much other people disliked the scenario, the more they seemed to dislike it, too. By the end of the forums, these negative feelings seem to have solidified.

» **Disinterest in Scenario 3 (Priced Zones) increased.**

By the end of the forums, 50% of participants said they "somewhat" or "strongly" supported pricing zones in central business districts, and 34% "somewhat" or "strongly" opposed the scenario. Sixteen percent said they were neutral or unsure, an increase from 12% earlier in the forums, primarily resulting from people initially opposed to the scenario who subsequently dropped their opposition (see Figure 13).

This change seems to reflect the twin sentiments that, because Scenario 3 is focused on such limited areas, it may not adequately address regional transportation problems, but also will not directly affect many people. Therefore, people were less interested in this scenario.

Figure 12: Change in Support for Scenario 3



❖ **Dialogue about congestion pricing increases both support and opposition.**

A presentation at the beginning of the forums provided participants with a broad explanation of the general concepts underlying all types of congestion pricing. In an attempt to gauge general receptivity to these concepts, participants were asked whether congestion pricing (as a general approach, but not broken down by scenario) seemed "reasonable" as a way to deal with the region's transportation problems. The same question was asked at the end of the forum as well.

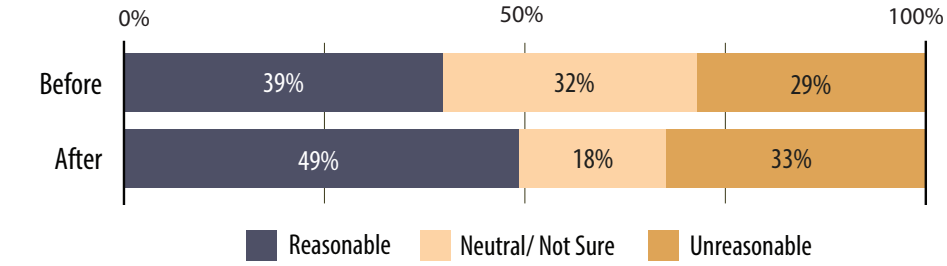
This measure did show an increase in receptivity to congestion pricing overall: by the end of the forums, 45% of participants agreed or strongly agreed that congestion pricing is a reasonable way to deal with the region's transportation problems. At the beginning of the forums, 39% believed it is reasonable.

But skepticism was significant from the beginning, and it also increased over the course of the day. At the end of the forums, 36% "disagreed" or "strongly disagreed" that congestion pricing is a reasonable way to deal with the region's transportation problems. At the beginning, 29% "disagreed" or "strongly disagreed" that it was reasonable.

Rather than changing the opinions of people who initially supported or opposed congestion pricing, the dialogue mainly served to help people who were initially unsure or neutral to form an opinion. Only 18% of participants were neutral or undecided by the end of the forums, compared with 32% at the beginning of the forums (see Figure 10).

Rather than changing the opinions of people who initially supported or opposed congestion pricing, the dialogue mainly served to help people who were initially unsure or neutral to form an opinion.

Figure 13: Change in Overall Receptivity to Congestion Pricing

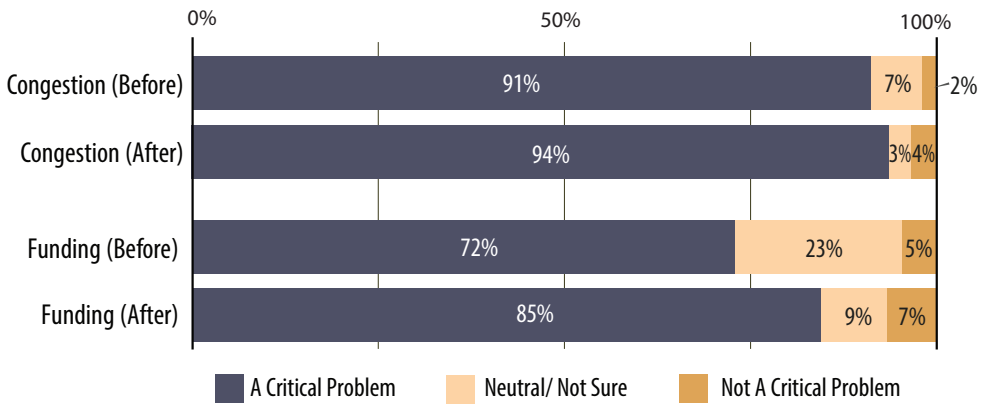


❖ **Recognition of funding as a critical problem increased, and support for gas tax increases nearly tripled.**

At the end of the forums, participants who agreed that the transportation funding shortfall is a critical problem increased from 72% to 85%.

People also became much more supportive of gas tax increases after a lengthy discussion about current funding problems and options for road pricing. At the beginning of the forums, 21% of participants thought gas taxes should be raised to pay for transportation improvements. By the end, 57% thought they should be raised (See Figure 15). This was the largest shift over the course of the forums—an increase of 36 percentage points.

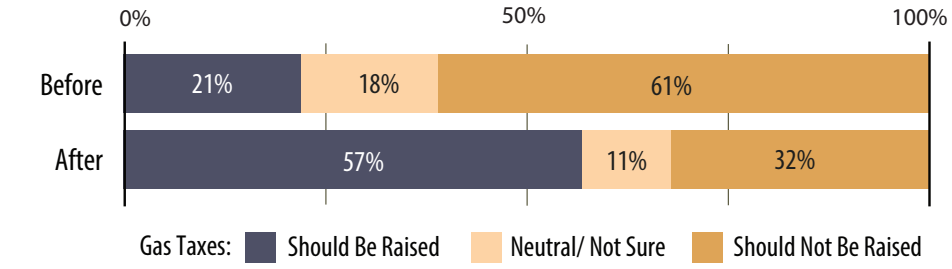
Figure 14: Changes in Attitudes Toward Congestion and Funding Shortfalls



Many participants were more than ready to support a gas tax increase by the end of the session—it seemed like an obvious step.

In discussions, participants readily admitted their ignorance about current gas tax levels, which was demonstrated in polling questions about gas taxes that only a small minority answered correctly. Armed with new knowledge about the actual rate of gas taxes and a sense that the other options on the table (i.e., congestion pricing) were less than compelling, many participants were more than ready to support a gas tax increase by the end of the session—it seemed like an obvious step.

Figure 15: Change in Support for Raising Gas Taxes



❖ **Heightened awareness about the importance of curbing demand.**

The final discussions indicated that people were more focused on the effects of personal behavior on the region's congestion problems. They called for more opportunities for teleworking and flexible work schedules. After four hours of learning, talking, and thinking about the root causes of congestion, they seemed to better appreciate the importance of curbing demand.

- **Desire for multi-faceted, integrated planning.**

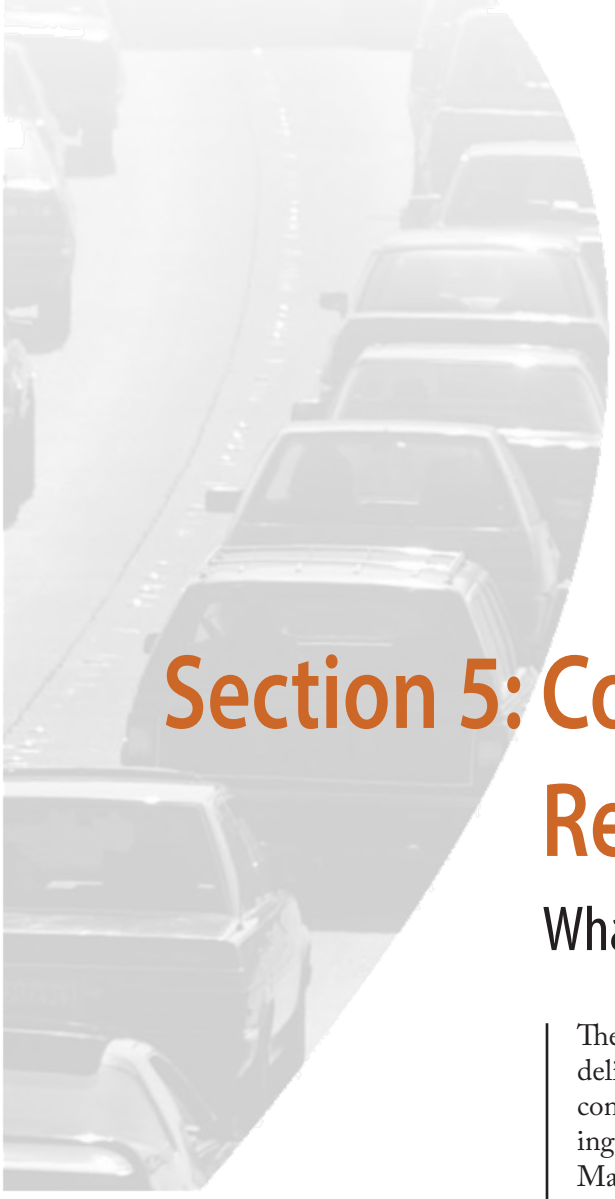
  At the end of the day, many participants expressed a desire for more integrated planning and problem-solving. A surprising number spoke about land-use changes to reduce trip lengths, such as increasing jobs in suburban commercial locations. Others spoke about increasing the supply of transit alternatives to serve the region's growth and increasing densities.

  Many comments suggested that congestion pricing could play a role in the future, but approaches would need to be tailored to the region's needs and integrated into existing systems. Many participants suggested that useful aspects of the scenarios that had been discussed in the forums could be effectively combined, particularly those of Scenarios 1 and 3.

- **First things first.**

  Before anything else, many participants emphasized that they want to see commonsense improvements, such as better coordination of construction schedules or improvements in the Metro system. These comments suggest that basic improvements would help increase the public's confidence in the government's basic competence. Such a demonstration could be a key factor in implementing any major congestion pricing system in the region, or any other attempt to raise significant additional revenues.

Many participants suggested that useful aspects of the scenarios that had been discussed in the forums could be effectively combined, particularly those of Scenarios 1 and 3.



Section 5: Conclusions and Recommendations

What Do the Findings Mean?

The previous chapter identified key findings from the series of five deliberative forums in the Washington, D.C., region on various forms of congestion pricing. Some of these findings are fairly dramatic, including the significant level of support for Scenario 1 (Priced Lanes on All Major Highways), strong opposition to Scenario 2 (Pricing on All Roads and Streets), and a major increase in support for raising gas taxes. Other findings may be less striking, but nonetheless can contribute to a better understanding of public attitudes. So, based upon the study's findings, what is our understanding? What do these findings mean?

People are skeptical of pricing as a solution to regional transportation problems, but may support specific proposals if they see direct benefits in their daily lives.

Although people in metropolitan Washington agree that congestion is a critical problem, they are not convinced that pricing will actually reduce the number of automobiles on the road. And while people may believe that congestion pricing is a reasonable way to raise transportation revenues, the transportation funding shortfall is not a problem in which they take much of a personal interest. Therefore, presenting congestion pricing as a solution to the twin problems of congestion and funding shortfalls is not compelling to the public.

Congestion pricing proposals should explicitly state a compelling value proposition for individuals, emphasizing benefits such as increased choice and individual control.

People are looking to see how their own personal lives will be improved by bold policy proposals. When they hear about various forms of congestion pricing, they quickly begin to assess personal costs and benefits. If they perceive that the benefits outweigh the costs, they are more likely to support a new policy.

The most obvious benefit for most people will be an increase in transportation choices. More public transit—in various forms—is broadly appealing, although people want guarantees that it will be convenient and available in the "right" places and at the "right" times. Free-flowing toll lanes are also a potentially attractive option for many people, but they want to know that such lanes will not increase congestion on non-tolled lanes.

The public is also interested in more indirect, quality-of-life improvements. For example, many participants at the forums said they felt a loss of control and a sense of uncertainty in their daily lives. In this environment, increased consumer choice can feel like a double-edged sword that offers benefits only to those who can spend time and energy "figuring out the system." People want to see that policies like congestion pricing will give them a sense of more control, not less.

Recommendations:

- Congestion pricing proposals should explicitly state a compelling value proposition for individuals, emphasizing benefits such as increased choice and individual control. The costs of the congestion pricing policy must be, at least implicitly, acknowledged, and the benefits must be shown in a clear and compelling manner to outweigh those costs.
- Pilots or trials may reduce skepticism regarding the effectiveness of congestion pricing. For example, the introduction of a congestion priced zone in Stockholm, Sweden, was preceded by a trial phase that demonstrated to a doubtful public that the program would actually reduce congestion.
- Incremental implementation of congestion pricing, such as the new 495 Express Lanes on the Capital Beltway in Virginia, may also help ease the transition to more comprehensive programs or more controversial projects.
- Education campaigns may also help reduce skepticism, particularly regarding the region's transportation funding shortfall and the need for creative solutions.

People are much more concerned about losing options than they are about "Lexus Lanes."

The issue of fairness invariably comes up in any discussion of congestion pricing, often expressed as concerns about "haves" and "have-nots." According to a common argument, congestion-free "Lexus Lanes" will mainly benefit wealthy people, while everyone else will be stuck in stop-and-go traffic.

Paradoxically, however, the scenario in this study that is most susceptible to the "Lexus Lane" criticism was the most popular among participants. One of the main reasons that people preferred Scenario 1, which would put at least one priced lane on all major highways, was because it maintained toll-free lanes in most cases—it provided them the option to participate or not.

This finding suggests that concerns about socio-economic inequities may not be as deep as sometimes assumed. People seem to be willing to accept that money buys advantages in life—and they may even see themselves paying for the luxury of congestion-free lanes at some future time. Such a system may be unfair, but many people will grudgingly accept such inequities.

Concerns about fairness become acute, however, when people start to ask whether congestion pricing will be unfair to them personally—not in comparison to others, but in comparison to the assumptions they have built their lives around. If congestion pricing is perceived to remove options and not provide meaningful alternatives, that sort of "change in the rules" will be deeply offensive to many.

Proposals should avoid imposing mandates that do not provide individuals with a reasonable array of options.

Recommendation:

- Congestion pricing proposals should avoid imposing mandates that do not provide individuals with a reasonable array of options. In some cases, this may mean maintaining toll-free lanes. In others cases this may mean improving transit service or other alternatives before implementing road pricing.

People lack confidence in government and they fear government overreach.

Proposals should clearly indicate how revenues raised through congestion pricing will be used, and ensure transparency and accountability in the allocation of these funds.

The majority of people in the Washington area perceive more comprehensive forms of congestion pricing (e.g., Scenario 2 in the study) as government overreach. Not only do they perceive this form of pricing to be a burdensome mandate, they are outraged at the violation of privacy they believe such a scheme would require.

More generally, the public seems increasingly distrustful of government's competence and disdainful of the lack of leadership among public officials. They express these opinions openly. This level of distrust is particularly striking in a region with an economy so dependent upon the public sector. At the forums, 39% of participants "disagreed" or "strongly disagreed" with the statement, "If the government had more money to spend on transportation, I am confident we would have a better transportation system." Only 35% of participants "agreed" or "strongly agreed" with the statement. Overall, participants were very concerned about how any revenues generated through congestion pricing would be used.

Recommendations:

- Proposals should clearly indicate how revenues raised through congestion pricing will be used, and ensure transparency and accountability in the allocation of these funds.
- Commonsense improvements, such as better coordination of construction schedules or visible improvements in the Metro system, should be implemented in an effort to rebuild the public's confidence. Such a demonstration could be a key component in implementing any major congestion pricing system in the region, or any other attempt to raise significant additional revenues.

People are more likely to support more obvious solutions —such as increasing gas taxes—than more radical approaches like congestion pricing.

Washington area residents want to see immediate and obvious solutions before they will support radical changes like congestion pricing. Such changes include more telecommuting options and better traffic management.

Most strikingly, many people can be persuaded that gas tax increases are an obvious solution. The forums demonstrated that the vast majority of people know very little about gas taxes. Most do not know how much they pay in gas taxes, or when they were last increased. After receiving information about the reality of gas tax funding, and discussing various bold pricing options, many people decided that gas tax increases made sense. Over the course of the forums, support for a gas tax increase rose from 21% to 57%.

Many people can be persuaded that gas tax increases are an obvious solution. Most do not know how much they pay in gas taxes, or when they were last increased.

Recommendation:

- State or federal leaders should consider conducting a public information campaign on the inadequacies of current transportation funding mechanisms and the need to increase gas tax revenues, at least as a short-term strategy.

People want to know that congestion pricing is part of a wider strategic vision.

People in metropolitan Washingtonwant to be confident that congestion pricing policies will be integrated into a wider package of improvements that adds up to a long-term strategy for the future. These improvements should include land-use changes that bring more destinations closer to where people live and housing closer to where they work and shop. They also include an increase in the number of transportation options for people in all parts of the region, including a wide variety of public transit choices, and more opportunities to get around on foot or by bicycle.

Recommendation:

- Develop a wider strategic plan and implement various elements before or concurrent with the implementation of congestion pricing. While the public cannot be expected to articulate (or even know about) the details of such a plan, they do need to see and feel that the pieces of this strategy fit together and that they will produce a more dynamic and vibrant region that will enhance their own personal lives.

CONCLUSION: Addressing the region's problems as people see them

People must believe that the benefits of congestion pricing outweigh the costs. It's that simple. And that complicated.

Opinion research shows that Washington area residents value our region's strong economy and high quality of life. A legacy of progressive planning and decision-making has contributed to the successes we have achieved. Our Metrorail and bus systems, extensive road network, and increasingly walkable and bikeable communities are evidence of our success.

Yet, opinion research, including this study, have identified a mismatch between positive attitudes about the region and growing dissatisfaction with our transportation system. People increasingly believe the transportation system cannot be relied upon and is getting worse. Rather than controlling daily decisions in their own lives, many people seem to feel that the transportation system is controlling them.

This study shows that the real challenge—and opportunity—for congestion pricing is to determine how such policies can be effective at increasing the sense of control that individuals feel in their lives. In order to be acceptable to the public, congestion pricing will need to provide increased choice and opportunity. It will need to be designed so that it does not increase confusion about costs and anxieties about surveillance. And it will need to contribute to a compelling vision for the future that offers a variety of convenient transportation options.

Most important, this study shows that bold policies like congestion pricing must demonstrably address the regional problems that people encounter in their daily lives and worry about when they consider their futures. People must believe that the benefits of congestion pricing outweigh the costs. It's that simple. And that complicated.

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Links to the following documents can be found on the study's website: www.mwcog.org/CongestionPricing/PublicAcceptability. Appendices represent activities and research that were conducted under this study. Key Documents are references cited in the report.

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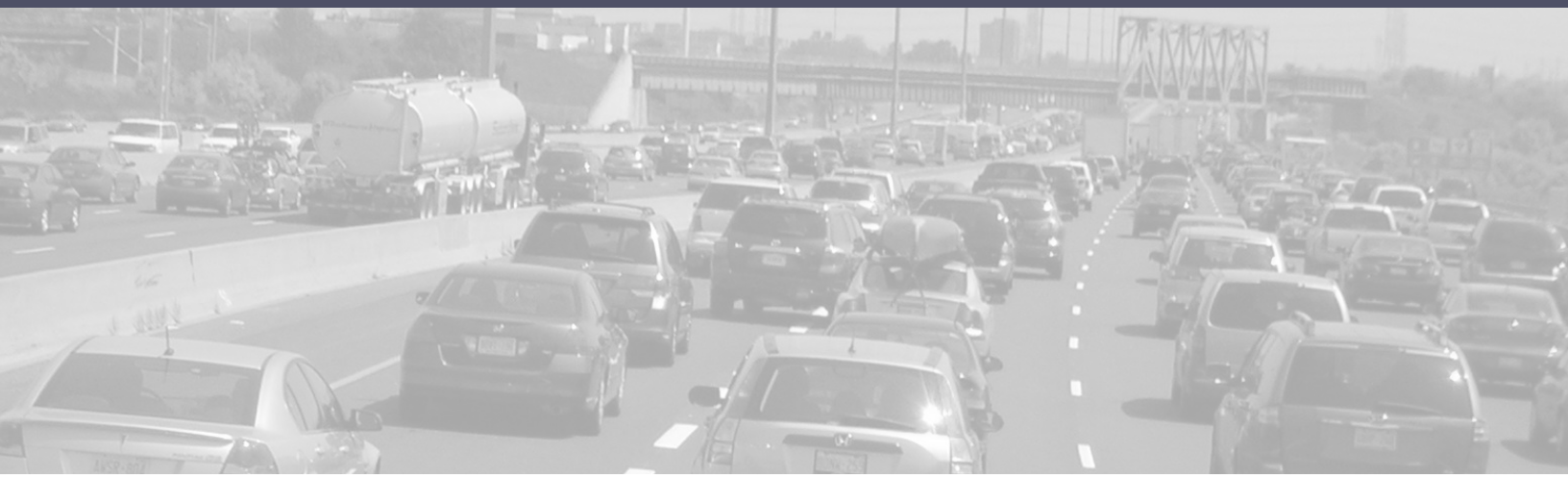

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