# VOLUME 52 2013

Annual Review of Transportation Issues in the Washington Metropolitan Region

### Finding Ways to Pay for the Transportation System We Need

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NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

#### What is the TPB?

Transportation planning at the regional level is coordinated in the Washington area by the National Capital Region Transportation Planning Board (TPB). The TPB is staffed by the Department of Transportation Planning of the Metropolitan Washington Council of Governments (COG).

Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia, and the District of Columbia, local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies.

The TPB was created in 1965 by local and state governments in the Washington region to respond to a requirement of 1962 highway legislation for establishment of official Metropolitan Planning Organizations (MPOs). The TPB became associated with the Metropolitan Washington Council of Governments in 1966, serving as COG's transportation policy committee. In consultation with its technical committee, the TPB is responsible for directing the continuing transportation planning process carried out cooperatively by the states and local communities in the region.

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### The TPB's biggest accomplishment in 2012 and early 2013 was its work to develop a Regional Transportation Priorities Plan.

"Our voice joined numerous others in pushing state leaders in Virginia and Maryland to pass new revenue-raising measures to support greater investment in our transportation system."



HON. TODD M. TURNER, CITY OF BOWIE, 2012 TPB CHAIR

e hear it constantly: there simply isn't enough money to pay for the improvements we need to keep our transportation system safe and reliable and meeting our everyday needs. Maintenance and preservation alone consume most of our

transportation budgets, so the prospect of expanding roads and transit systems to accommodate future growth remains dim without more money to pay for it.

But what if we had more money for transportation? What would we spend it on? One of the TPB's biggest accomplishments in 2012 and early 2013 was its work to develop a Regional Transportation Priorities Plan—to identify, through extensive public input and outreach, the key transportation strategies that are recognized throughout the region as offering the greatest potential contributions to addressing continuing regional challenges.

To aid in that process, we conducted an extensive analysis of the ability of the future transportation system—as it's currently planned—to keep up with rising demand from population and employment growth in coming decades. We used the results to inform development of the Priorities Plan, and to make the case to state officials for increasing funding for transportation in our region. Our voice joined numerous others in pushing state leaders in Virginia and Maryland to pass historic new revenue-raising measures that lay a strong foundation for funding and maintaining our regional transportation network in the near future.

In 2012, we also completed a major study of the public acceptability of road-use pricing, an approach to managing congestion and raising new revenue that a number of other metropolitan areas have begun to use successfully. The 495 Express Lanes on the Capital Beltway in Virginia and the Intercounty Connector in Maryland are examples of road-use pricing being used in our region. Such alternative funding approaches will become more important as taxes on the consumption of motor fuels become less effective with the slow but inevitable transition away from fossil-based fuel sources.

As we look toward the future, we know that we have to do a lot more to keep our transportation system in good working order and to expand it in strategic ways to meet our future needs. The work the TPB and its staff have done in the last year to figure out how to pay for it and the work we'll be doing in coming years to identify the next generation of major improvements will, I believe, have a significant and lasting impact on our region.

### Developing a Regional Transportation Priorities Plan

To advance regional goals for economic opportunity, environmental stewardship, and quality of life

> The agencies that own and operate the different roadways and public transit systems in the region should prioritize the upkeep of existing facilities when deciding how to spend limited funding.

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The scope for the Priorities Plan specified that public participation would be sought at every stage of the two-year process.

hroughout 2012 and into 2013, the TPB and its staff worked intensively on the development of a Regional Transportation Priorities Plan designed to identify key transportation strategies that are recognized throughout the region as offering the greatest potential contributions to addressing continuing regional challenges.

The Priorities Plan is designed to advance regional goals for economic opportunity, environmental stewardship, and quality of life. Building upon the region's successes and learning from its shortcomings, the Plan is intended to generate consensus around key actions that people from all corners of the region can get behind. The concept of a priorities plan has its roots in more than a decade of TPB planning, including the establishment of regional goals through the TPB Vision and Region Forward, analysis of transportation and land-use scenarios using the adopted Constrained Long-Range Transportation Plan, or CLRP, as a baseline, and various studies of the region's transportation funding challenges.

The ultimate purpose of the Regional Transportation Priorities Plan is to highlight priorities that should be funded and included in the CLRP. Because projects cannot be part of the CLRP if funding is not anticipated, and because the TPB has little direct control over funding, the actual implementation of priorities, in most cases, will occur at the state and local levels.

#### **Getting Started**

The TPB approved a work scope for developing a Priorities Plan in the summer of 2011. The work scope specified that the Plan would focus on identifying a limited number of regional priorities, perhaps 10 to 15 in total, in order to encourage concentrated regional

efforts on addressing the most pressing regional challenges at the time. The scope specified that public participation would be sought at every stage of the two-year process.

Effective communication

of the Priorities Plan is essential for gathering public input on and public support for regional priorities. Accordingly, the major planning activities undertaken in the first half of 2012 focused on how best to communicate the concepts and materials slated to be part of the Plan. These activities included a series of listening sessions and a citizens forum to test several approaches to communicating the Priorities Plan material. These outreach events helped TPB staff determine which formats were readily understood and meaningful to the general public, and which ones were not.





#### **Listening Sessions**

Early in 2012, TPB staff conducted a series of listening sessions with regional stakeholders and citizen representatives to solicit feedback on an initial set of regional challenges that would serve as the basis for identifying the region's top transportation strategies. The listening sessions were also intended to provide guidance and input on framing identified challenges for the public during subsequent outreach phases.

Based upon these sessions, TPB staff determined that greater emphasis should be placed on the use of narrative text, simple charts, and pictures to describe challenges and, later, potential strategies to address them. In general, listening session participants found the use of performance measures in the draft material to be too technical and they did not understand their significance for identifying regional challenges. Responding to this feedback, staff determined that a technically oriented planning approach for deriving priorities, based upon performance measurement, did not resonate with the public and should not provide the primary basis for development of the Plan.

#### Citizens Forum

TPB staff conducted a citizens forum in June 2012 to assess whether draft challenges and strategies developed by staff were meaningful to the general public, and if there were any additional challenges or strategies that participants could suggest. Additionally, the forum sought to assess how best to communicate goals, challenges, and strategies to the general public.

The format of the forum utilized a public outreach model called a deliberative forum, which allows citizens to learn about issues, share their thoughts via small group discussions and real-time polling, and hear from their peers. TPB staff contracted with America*Speaks*, a non-profit public outreach organization that specializes in the deliberative forum format, to help design and facilitate the June forum.

Participants were given the opportunity to discuss draft challenges and strategies and vote on their significance. They also had a chance to generate and offer their own ideas about regional priorities. A combination of evaluation forms, keypad polling questions, and debrief meetings with discussion facilitators was used to gather input.

Regarding the draft challenges and strategies in the Plan, participants at the forum identified some important new themes that were incorporated into the draft materials, including the importance of agency transparency and accountability to ensure that existing and any possible additional future funds are spent effectively. Participants also called attention to the importance of funding, noting that project costs and potential revenue mechanisms should be suggested for each strategy. Participants said they had difficulty in evaluating strategies without some information on how much they would cost and where funding might come from. Overall, the feedback suggested that the Plan materials should use more simplified language, use examples whenever possible,

and provide explanations that are thorough but at an appropriate level of specificity.

Based upon feedback from the forum, staff refined its approach to developing the Priorities Plan, which was reflected in the Interim Report that was presented to the TPB in July 2012.

#### **Online Survey**

In a continuing effort to get input from a representative sample of the region's population, TPB staff conducted an online survey on regional transportation priorities in the spring of 2013. This survey, which used MetroQuest public engagement software, was designed to be visually engaging and educational. The survey tool was used to solicit citizen input on potential components of the Priorities Plan, and provide an apparatus for collecting and processing opinion data from a large segment of the region's residents.

More than 600 randomly selected individuals took the survey between April and July of 2013. Findings from the survey were used to inform development of recommendations to include in the draft Priorities Plan report to be released in July. In August 2013, the survey was opened to the general public.

#### **Draft Plan Released**

A draft of the Regional Transportation Priorities Plan was presented to the TPB in July 2013 and released for public comment. The draft Plan outlines six broad transportation goals for the region, the most significant challenges standing in the way of achieving those goals, and 15 near-term, ongoing, and long-term strategies that, in the view of transportation planners at the TPB and respondents to the controlled representative survey of the region's population, offer the greatest potential contributions to addressing those challenges.

In the draft Plan, maintenance of the region's highways and transit emerged as the

top priority. The draft document emphasized that the agencies that own and operate the different roadways and public transit systems in the region should prioritize the upkeep of existing facilities when deciding how to spend limited funding. In some cases, the draft Plan says, transportation agencies should seek to secure new, dedicated funding sources to address the backlog of deferred maintenance that has developed in recent years and to ensure that they are able to address future maintenance needs as they arise.



The other main priority in the plan is a package of strategies aimed at addressing congestion on the region's roadways and crowding of its transit systems—both by increasing capacity of the existing system and by alleviating demand on it.

Targeted roadway improvements that address key bottlenecks, and other ways to smooth traffic flow—like providing travelers with more real-time traffic information and responding to and clearing traffic accidents more quickly—can squeeze more capacity out of the existing road network in the shortterm, the Plan says.

Longer-term efforts to implement a network of express toll lanes would give drivers ways to avoid congestion and provide In a continuing effort to get input from a representative sample of the region's population, TPB staff conducted an online survey on regional transportation priorities in the spring of 2013. for the operation of high-quality bus rapid transit in congestion-free travel lanes. Running more trains and buses on the existing Metro system would provide breathing room to accommodate forecast ridership growth.

To alleviate demand, the draft Plan calls for more efforts in the short-term to encourage travelers, especially commuters at peak hours, to take alternative travel modes like carpooling, transit, bicycling, walking, or teleworking. Long-term steps to concentrate more housing and job development in mixeduse activity centers, especially near transit, would make it possible for more people to walk, bike, and take transit—rather than drive—to meet their daily needs.

The Regional Transportation Priorities Plan is scheduled for additional discussion and TPB review in the fall of 2013.

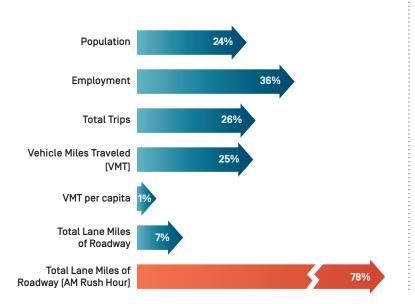
Running more trains and buses on the existing Metro system would provide breathing room to accommodate forecast ridership growth.

### Predicting Future Travel Patterns

Forecasts show worsening roadway and transit congestion, but less solo commuting.

dentifying our region's top transportation needs starts with having a good handle on the challenges we face today. It also requires anticipating the challenges we're likely to face in the future given forecast population and job growth and the demands that will place on the transportation system.

Every year, the TPB uses advanced computer models to predict future travel patterns based on where planners expect growth to occur and on the system of roads, transit, and bicycle and pedestrian infrastructure that are expected to be in place decades into the future.



Change in Land Use and Travel Forecast

The 2012 analysis, which used a new, more fine-grained model, found significantly worsening roadway and transit congestion and reduced access to jobs by car by 2040 compared to today. It also found a slightly lower share of commute trips by solo drivers, a good sign for planners interested in making more efficient use of the existing system.

#### Worsening Roadway and Transit Congestion

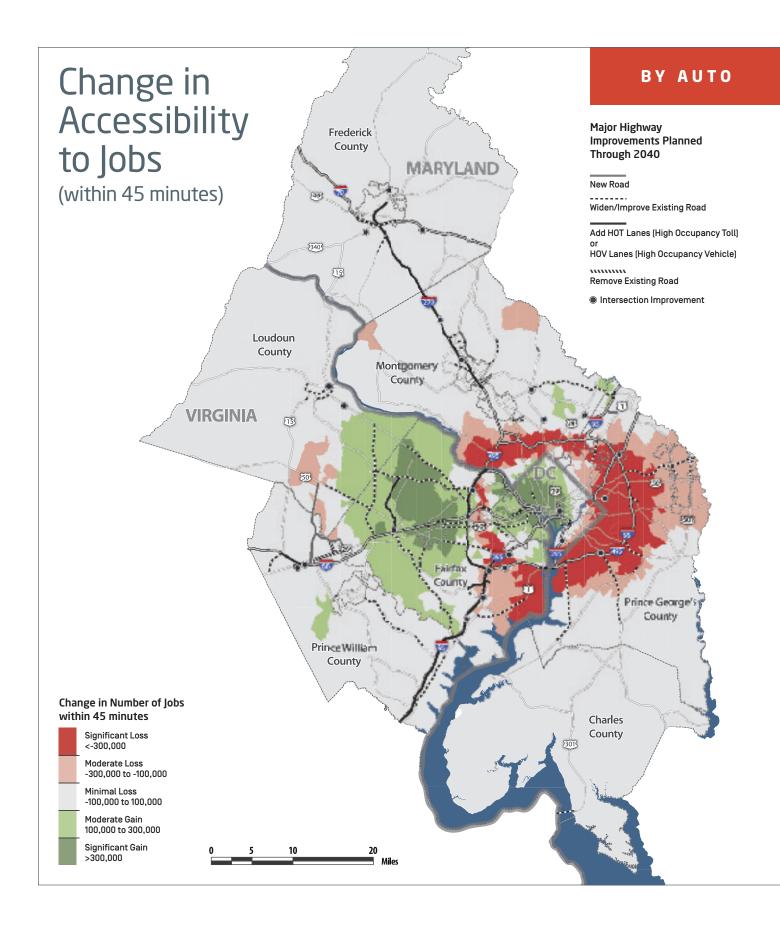
The 2012 analysis found that travelers in the Washington region would face considerably more roadway and transit congestion in coming decades if current planning and funding trajectories continue.

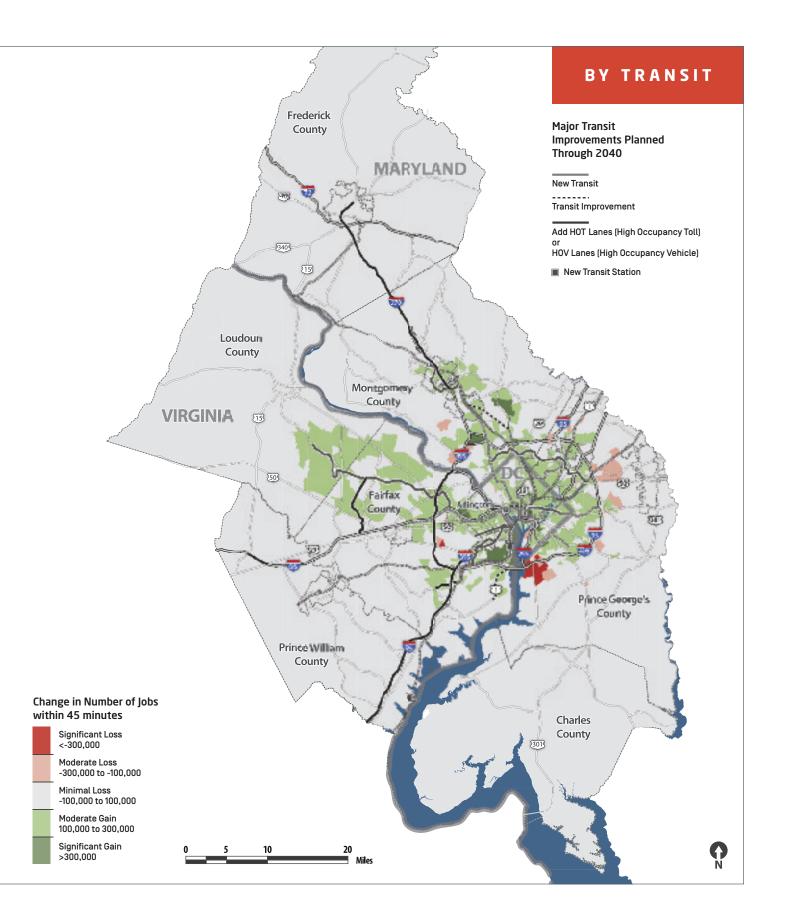
By 2040, the region's population is expected to increase 24 percent—adding 1.3 million people—while the number of jobs is forecast to swell by 37 percent. The TPB's travel models predict that such growth will lead to increases in total driving—measured in vehicle-miles of travel, or VMT—of 25 percent.

Meanwhile, the region's Constrained Long-Range Transportation Plan, or CLRP, only includes a 7 percent increase in new lanemiles of roadway and shows that the Washington Metropolitan Area Transit Authority (WMATA) lacks the funding needed to run all eight-car trains on Metrorail during peak hours, a key to increasing the capacity of the 35-year-old system.

Together these pressures will result in a 78 percent increase in the number of lanemiles of congested roadway during the

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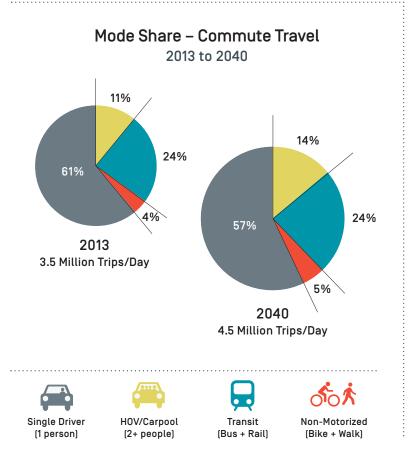


morning peak hour, and four of Metrorail's five lines to and through the regional core will be "congested" or "severely congested," compared to just one today.

#### Reduced Access to Jobs for Some, Not Others

Increases in roadway congestion will lead to an overall decline in the average number of jobs accessible by car within a 45-minute drive for the region's population, even as more than 1.1 million new jobs are forecast to be added to the region's economy during the same time.

The TPB's 2012 analysis found that the number of jobs accessible by car within a 45-minute drive for the average resident of the region will decline by 72,000 between now and 2040—from around 1.3 million today. Meanwhile, the average number of jobs accessible within a 45-minute trip by transit



is expected to grow—by about 80,000, to nearly 500,000.

Drivers in the eastern part of the region will be hardest hit. About half of the population of Prince George's County today lives in areas that will lose access to 300,000 or more jobs by car over the next thirty years. In Montgomery and Fairfax Counties, about 15 percent of the population lives in such areas. Residents in large swaths of the District of Columbia and Fairfax and Arlington Counties, however, are expected to be able to access at least 100,000 more jobs in 2040 compared to today.

#### Less Solo Commuting, More Carpooling, Bicycling, and Walking

These worsening conditions come even though the share of people who drive alone to and from work each day is expected to fall, while the share who choose to carpool, bicycle, or walk to work will increase. The share of people who take transit is expected to remain roughly the same.

In all, the TPB's travel models predict more than a million more daily commute trips by 2040 based on anticipated growth between now and then. The share of trips made by solo drivers is expected to fall from 61 percent to 57 percent, while the share of trips by carpool will increase from 11 percent to 14 percent. The share of trips by bicycle or on foot will increase from 4 percent to 5 percent, while the share of trips by transit will stay steady at about 28 percent.

These shifts, although they appear to be slight, are an important reflection of emerging trends in how people are likely to choose how to get around the region in the future. And the trends vary from one part of the region to another.

In the regional core, which includes the District of Columbia, Arlington County, and the City of Alexandria, the share of people taking transit to and from work is expected to decrease slightly, while the share of people bicycling or walking to work is forecast to rise slightly.



In the region's inner suburban jurisdictions —Fairfax, Montgomery, and Prince George's counties—the share of trips by solo drivers will fall, while small increases in the share of trips by transit, bicycling, and walking are expected.

Farther out, in Frederick, Charles, Prince William, and Loudoun counties, the share of commute trips made by solo drivers is forecast to fall almost ten percentage points in these areas over the next 28 years, while the share of trips by carpool will increase from 15 percent to 20 percent and the share of trips by transit will increase from 5 percent to 9 percent.

#### Looking to the Future

The findings of this analysis of future travel patterns help illustrate the impacts that current planning and funding decisions will have on the future transportation system and its ability to meet the region's needs.

Forecasts of worsening congestion on highways and transit underscore the need for

strategic increases in roadway and transit capacity and more travel options for area residents. In particular, it calls for significant increases in capacity for the Metrorail system in the downtown core.

Forecast declines in job accessibility in some parts of the region highlight the need for more balanced growth, especially bringing more jobs to the region's eastern side. Declines in accessibility by car although driven in part by worsening congestion—result mostly from imbalanced job growth. In Loudoun, Fairfax, and Prince William Counties, job growth is expected to outpace growth in Prince George's and Charles Counties by more than 300,000 jobs through 2040.

Finally, forecast changes in the modes people will choose to use to travel around the region show that changes in the transportation system and the way we grow can have significant impacts on how people choose to get around. The analysis showed that more housing planned within walking distance of job centers and improvements to bicycle and pedestrian infrastructure can lead to the kinds of increases in bicycling and walking anticipated in the regional core, while major new transit investments—like the Silver Line in Virginia and the Purple Line in Maryland—along with the new mixed-use development they are likely to spur, can lead to decreases in solo driving and increases in transit, bicycling, and walking. Planners and decision-makers can encourage further shifts by taking steps to make desired modes more available and more attractive to potential travelers.

Together, these findings are helping planners and decision-makers evaluate the effectiveness of current plans and gauge the relative impacts of alternative growth or transportation-investment scenarios.

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Improvements to bicycle and pedestrian infrastructure can drive the kinds of increases in bicycling and walking anticipated in the regional core.

### All Eyes on Funding

Virginia and Maryland pass new revenue-raising measures.

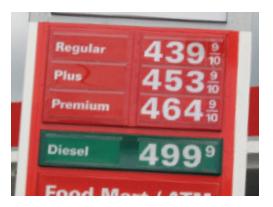
n early 2013, the state legislatures in Virginia and Maryland each approved measures to raise upwards of \$800 million a year in new revenue for transportation projects statewide, the first statutory increases in funding in two decades or more.

The measures answered a years-long call from planners, business leaders, and local elected officials, including many of those who sit on the Transportation Planning Board, to increase funding for needed transportation investments in the Washington metropolitan area.

Virginia's revenue-raising measure— Road to the Future—made several changes to existing funding mechanisms in the state. The act eliminated the state's 17.5-cent-pergallon tax on motor fuels—last raised in 1986—and replaced it with a 3.5 percent tax on fuel wholesalers, a new 6 percent tax on diesel fuel, and an increase in the statewide sales tax from 5 percent to 5.3 percent. In Northern Virginia, the act increased the sales tax from 5 percent to 6 percent.

In Maryland, the Transportation Infrastructure Investment Act of 2013 reduced the state's 23.5-cent-per-gallon tax on motor fuels—last raised in 1992—by five cents, but indexed the tax to inflation so that the revenues generated by the tax will rise at the same rate as the costs of constructing and maintaining transportation facilities. The Act also imposed a new 3 percent tax on fuel wholesalers to further supplement revenue.

A significant portion of the money raised



in both states is expected to flow to muchneeded highway and transit projects in the Washington region. Shortly after Maryland started collecting its new revenues on July 1, 2013, Governor Martin O'Malley announced nearly \$1 billion in new projects in Montgomery, Prince George's, and Frederick counties, including funding for the Purple Line light rail connection between Bethesda and New Carrollton. Similar announcements from Virginia officials are expected later in 2013.

Lawmakers and the governors in both states finally achieved agreement on how best to raise new revenue after pressure mounted from numerous groups and constituencies leading up to and during the legislative sessions held in spring 2013.

Among the voices pressing lawmakers to reach a deal was that of the Transportation Planning Board, which in December 2012 sent a letter to legislators and the governors in both states calling for immediate action to increase funding for transportation.



Lawmakers and the governors in both states finally achieved agreement on how best to raise new revenue after pressure mounted from numerous groups and constituencies leading up to and during the legislative sessions held in the spring of 2013.

In its letters, the TPB cited extensive analysis of the region's transportation system and area travel patterns showing that the transportation improvements currently planned through 2040, given the revenue streams that existed at the time, wouldn't be enough to support anticipated population and job growth in the region in coming decades. The analysis found that, despite \$223 billion in planned spending over the next three decades, congestion on area roadways would increase by 78 percent and four out of five Metrorail lines to and through the regional core would be congested, compared to just one today. As a result of the worsening travel conditions, the analysis found, hundreds of thousands of the region's residents would lose reasonable access to major job centers by 2040.

The TPB called on state leaders to consider a range of potential revenue-raising measures and provided a comprehensive list of approaches that other states and localities have successfully taken to raise additional money.

Chief among the measures identified in the letters was raising fees that drivers already pay to use the region's roads, especially gas taxes. In the 20 years since Maryland and Virginia last raised their gas taxes, TPB noted that inflation alone had eaten away nearly a third of the purchasing power of the revenues the taxes raise. Growth in construction and maintenance costs, which have outpaced inflation, and the rising fuel efficiency of vehicles also eroded the ability of existing revenue streams to meet the states' and the region's transportation needs.

The letter also recommended using other kinds of funding mechanisms, like local option sales taxes, and user fees not tied to the consumption of fossil fuels, like mileagebased fees, to ensure sustainable funding well into the future.

A push for greater investment in transportation was echoed in September 2012 by the Metropolitan Washington Council of Governments, which is home to the TPB.



A high performing transportation system is essential to attracting new businesses to the region, especially those that are less dependent on federal spending.

In a report called Economy Forward, the COG Board called for greater investment in transportation to help make the Washington region's economy stronger and more competitive. The report came in response to the concerns of local officials and economic experts in the region who have said that reduced spending by the federal government in coming years, which is seen as more and more likely, could cause a severe ripple effect throughout an economy that has for decades relied heavily on the presence of the federal government.

The report identified transportation as a top priority because business leaders and economic development experts across the region agree that a high performing transportation system is essential to attracting new businesses to the region, especially those that are less dependent on federal spending.



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## Gauging the Public's Appetite for Road-Use Pricing

The year-long study found cautious receptivity to the idea of charging drivers new fees to use the region's roads as a way to manage worsening congestion and to pay for much-needed transportation improvements.



n 2012, the TPB completed a study of the public acceptability of road-use pricing in the Washington region using a grant from the Federal Highway Administration.

The year-long study found cautious receptivity to the idea of charging drivers new fees to use the region's roads as a way to manage worsening congestion and to pay for much-needed transportation improvements. The more than 300 members of the general public who participated in the study insisted on more and better alternatives to driving and greater accountability in how the government spends transportation dollars before they said they could support such initiatives.

The team that conducted the study, which included researchers from the TPB, the Brookings Institution, and the non-profit public engagement organization America*Speaks*, used "deliberative forums" lasting more than four hours each to explore in greater depth the perspectives and opinions that underlie public attitudes toward road-use pricing. America*Speaks* has pioneered the use of deliberative forums as a way to bring ordinary people together to learn and talk with one another about complex problems and to explore potential solutions.

In the study, participants discussed two of the region's most pressing transportation challenges: worsening roadway congestion and growing funding shortfalls.

Researchers armed participants with details about current and forecast levels of congestion in the region and why funding for transportation is so tight—mainly that the costs of maintaining an aging system are going up while inflation is eroding the purchasing power of flat, per-gallon fuel taxes that, until early in 2013, had not been raised in more than 20 years.

Participants considered three different potential pricing scenarios that the researchers said could address both major challenges at the same time.

The first scenario involved charging tolls on at least one lane in each direction on all major highways in the region. The tolls would vary based on congestion levels, reaching their highest during the peak of the morning and afternoon commutes. Much of this hypothetical system would convert existing general purpose lanes to tolled facilities, although in some cases, new lanes would be built. In most cases, highways would continue to offer nontolled, but probably congested, lanes.

A second scenario would charge drivers a per-mile fee for using any road or street in the region, with higher fees on more heavily traveled routes. GPS units in vehicles would tally the number of miles driven and the total fee drivers owed. In theory, this scenario would do the most to alleviate congestion by encouraging the greatest redistribution of travel to more efficient routes, modes, and times.

The final scenario would charge drivers a flat fee for entering highly-congested zones like downtown Washington, Tysons Corner, or Silver Spring in an effort to encourage travelers



Scenario L Charging tolls on at least one lane in each direction on all major highways in the region. The tolls would vary based on congestion levels.

Participants consistently favored the first scenario a network of variably-priced lanes—because it would give drivers the option to use the system, rather than requiring them to do so.

to carpool or take transit to reach those destinations. London and Stockholm currently have such systems.

At each of the five forums, which the TPB held throughout the region, participants consistently favored the first scenario—a network of variably-priced lanes—because it would give drivers the option to use the system, rather than requiring them to do so. Participants also valued the new options for avoiding traffic back-ups that the scenario would provide. Approximately 60 percent of participants said they would "support" or "strongly support" the scenario.

The second scenario, the GPS-based mileage fee, received the least support from participants—only about 10 percent.

Participants cited major concerns about privacy and government overreach, as well as a level of complication that they felt would add new burdens to people's daily lives and make such a system impossible to implement and enforce.

The third scenario saw more support than opposition, but many participants felt that charging fees in just a few central business districts wouldn't do enough to alleviate congestion on a regionwide basis. They also felt that the scenario was fairer than the mileage-based fee because a number of transit alternatives and good bicycle and pedestrian infrastructure would make it easy for people to avoid paying the new charges.

Overall, participants said their chief concern with road-use pricing was that most people in the region have no choice but to drive—whether to work or to other important destinations—so any effort to charge drivers more to drive would only amount to unfair gouging.

They consistently said that maintaining non-tolled routes or providing high-quality

The second scenario, the GPS-based mileage fee, received the least support from participants.



Scenario Charging drivers a per-mile fee for using any road or street in the region, with higher fees on more heavily traveled routes. GPS units in vehicles would tally the number of miles driven and fees owed. Participants emphasized the need for other strategies—like teleworking, more transit, and locating housing and jobs closer to one another—in building a better future for the region.



Scenario Charging drivers a flat fee for entering highly-congested

zones. The goal is to

encourage the use

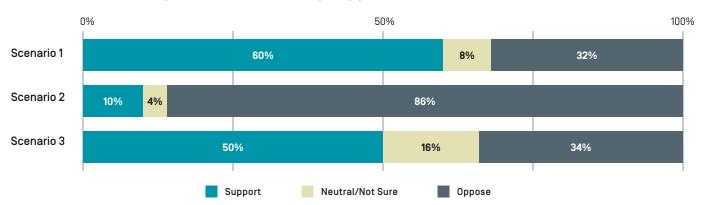
of carpools or

transit.

The third scenario saw more support than opposition, but doubts remain about its effectiveness in alleviating congestion on a regionwide basis.

transit alternatives, like an expanded Metro system or new bus-rapid transit lines, would allow those unwilling or unable to pay the new fees a way to avoid the new charge. They said that such alternatives would have to be in place before any road-use pricing scheme was implemented.

Participants also repeatedly questioned who would oversee the collection and use of any new revenues raised by the three proposals. Close to 40 percent of participants said they weren't confident that the government could or would improve the transportation system if it had more money to do so. Participants wanted greater accountability in how transportation dollars are used before supporting any new revenue-raising measure, and more people said they would prefer to see new revenue spent on improving transit than on building more roads.



#### Comparison of End-of-Day Support for the Three Scenarios

Finally, participants doubted the ability of road-use pricing to alleviate congestion or to raise enough revenue to solve the region's biggest transportation problems. They emphasized the need for other strategies like teleworking, more transit, and locating housing and jobs closer to one another—in building a better future for the region. They also became much more open to increases in



federal and state gas taxes as an easier alternative to more complicated congestion pricing schemes, especially after learning that gas taxes in most places haven't been raised in more than 20 years and aren't indexed to inflation.

The findings of the study build on nearly a decade of TPB work on road-use pricing, including extensive technical analysis of a regional network of variably priced lanes and high-quality bus transit like the one presented in the first scenario of the study. The findings shed important light on the opinions and perspectives that underlie public attitudes toward road-use pricing, which should help planners and decision-makers develop innovative proposals that the public would find worthy of their support.

### 495 Express Lanes in Virginia

The Latest Major Addition to the Region's Transportation Network

At the end of 2012, the region's first express toll lanes opened on the Capital Beltway in Virginia. The new lanes—known as the 495 Express Lanes—offer drivers new options for bypassing traffic back-ups and provide new opportunities for transit vehicles to operate in congestion-free travel lanes, making current and future bus travel more dependable and convenient.

The new toll lanes are just the second roadway facility in the region to charge tolls that vary based on congestion levels, following the opening of the Intercounty Connector in Maryland in 2011. With tolls reaching their highest during the peak of the morning and afternoon commutes, such dynamic pricing schemes ensure that the lanes remain free-flowing, offering drivers and transit vehicles more reliable travel times.

The 495 Express Lanes are the latest major addition to the region's transportation network. The next major facilities due to open are the 11th Street Bridge in the District of Columbia, the first phase of the Silver Line Metrorail extension through Tysons Corner, and new express toll lanes on I-95 in Virginia.

### in brief

New Federal Transportation Law Brings Changes, Opportunities for Region hree years and eleven short-term extensions after the previous funding act expired, Congress in June 2012 passed a new law authorizing the expenditure of federal funds for transportation through September 2014.

The new Congressional authorization — Moving Ahead for Progress in the 21st Century, or MAP-21—authorized \$54.6 billion in spending on transportation at the federal level in each of the two years during which the law will be in effect, starting October 1, 2012. That amount is equal to existing funding levels under the previous authorization plus a small increase to account for inflation.

Congressional authorization is required before the U.S. Department of Transportation can provide funds to assist in the construction, maintenance, or operation of transportation facilities like roads, transit systems, and bicycle and pedestrian infrastructure.

Along with the funding in the new law come changes to the national programs and policies that guide transportation investment at the regional, state, and local level. Several of the changes will affect the Transportation Planning Board and the Washington region.

One of MAP-21's most significant changes was the consolidation of nearly 90 different funding programs into fewer than 30, a change that will impact two programs that the TPB has been responsible for administering for the last six years: Job Access Reverse Commute, or JARC, and New Freedom.

### in brief

The new law eliminated the JARC program, transferring to the transit agencies in the region the responsibility for implementing projects and programs that assist lowincome commuters. Funding for New Freedom continues to flow to the Washington region, but was combined with funds from a previous program that also supports transportation projects and programs that aid individuals who have disabilities or age-related mobility limitations.

MAP-21 also created a new program known as Transportation Alternatives by consolidating the previous Recreation Trails, Safe Routes to School, and Transportation Enhancement programs. Transportation Enhancements supported such things as bicycle and pedestrian improvements, scenic overlooks, and historic preservation efforts. One of the key differences between Transportation Alternatives and the previous programs is that large MPOs, like the TPB, will play a new role in project selection for a portion of program funds that will be suballocated to large metropolitan regions. For each fiscal year, the TPB will be responsible for selecting projects for more than \$5 million in Transportation Alternatives funds.

MAP-21 also expanded the scope of the Congestion Mitigation and Air Quality program, or CMAQ, which supports measures that are likely to reduce congestion and help metropolitan areas reduce vehicle-related emissions.

Under the law, new provisions regarding emissions of fine particle pollution, or PM2.5, were added to the CMAQ program. The law requires that states with areas that are in "nonattainment" or "maintenance" for federal standards for PM2.5 emissions spend 25 percent of their CMAQ funding for those areas on efforts to reduce such emissions. MAP-21 also authorized use of CMAQ funds for building or installing electric and natural gas vehicle recharging and refueling stations, something not included in the previous authorization.

Transportation projects of regional or national significance were continued under MAP-21. In the first year of the law, up to \$500 million in funding will go to the kinds of projects previously supported under the Transportation Investment Generating Economic Recovery program, or TIGER.

Finally, the new legislation called for a nearly ten-fold expansion of the federal Transportation Infrastructure Finance Innovation Act program, or TIFIA, which provides loans to attract investment in major transportation projects that will generate revenue over time. TIFIA in 2012 provided \$122 million a year in loans, but that amount was expected to grow to \$1 billion by 2014. Although the TIFIA expansion provided new financing opportunities, it did not address the need to secure new sources of funding for transportation in the long-term.

The federal gas tax, which is the main source of current transportation funding, has not been raised since 1993, and inflation alone has eroded more than a third of its purchasing power over the last twenty years. Rather than addressing the need for long-term funding sources, the new law relied on short-term fixes using transfers from the general fund that will be offset by obscure revenue sources like pension insurance premiums and taxes on "roll-it-yourself" cigarette machines.

#### In-Depth Surveys Highlight Travel Patterns in Areas With Different Household Characteristics and Transportation Options

he results of a series of in-depth travel surveys carried out by the Transportation Planning Board in 2012 highlighted key differences in how people live and travel in higher-density areas with greater proximity to transit compared to those with lower densities and fewer travel options.

Among the seven areas surveyed this year, the three with the highest population densities had the highest shares of one-person households and the lowest shares of households with children. They also had the highest share of commute trips by transit. The areas included the Beauregard Street corridor near the Mark Center in



#### The survey highlighted key differences in how people live and travel in higher-density areas with greater proximity to transit compared to those with lower densities and fewer travel options.

Alexandria, the New York Avenue and Rhode Island Avenue corridor in Northeast Washington, and the Friendship Heights area in Northwest Washington and parts of Montgomery County.

The three study areas with the lowest population densities were all home to larger households, often with children, which typically find car travel much easier than other options like transit, bicycling, or walking. They also had significantly lower shares of commute trips by transit, all falling well short of the regional average. Those three areas were the National Harbor/Oxon Hill area in Prince George's County, the St. Charles/Waldorf area in Charles County, and the area just north of Dulles Airport in Loudoun County.

The seventh of the study areas — the area around the East Falls Church and West Falls Church Metrorail stations — showed more of a blend of household characteristics and travel patterns. The area tended to have shares of single-person households and households with children more reflective of lower-density areas, but shares of commute trips by transit more similar to higher-density areas. This study area's proximity to two Metrorail stations and its mix of housing options make such a blend more possible, and it demonstrates the possibility of providing family-friendly housing options in areas close to transit, thereby making options other than driving more convenient for more people.

The in-depth surveys carried out in 2012 bring to 17 the total number of areas the TPB has surveyed since 2010. The results supplement the findings of the regional Household Travel Survey carried out in 2007 and 2008.

The surveys asked all the members of selected households to complete travel diaries detailing the origin and destination, travel mode, travel time, and purpose of every trip they made in a given day. The TPB uses the findings to refine its travel forecasting models, and local planners have been using the data as they conduct studies and develop plans for future transportation projects or new development.

Later in 2013, the TPB will survey an additional 10 areas, adding to the library of detailed information on household characteristics and travel patterns in parts of the region with different densities, physical characteristics, and transportation options.

### in brief

#### Survey Finds "Complete Streets" Policies Expanding Throughout the Region

ess than a year after the Transportation Planning Board adopted a regional policy endorsing "Complete Streets," a 2012 survey of the TPB's member jurisdictions found that most major counties, municipalities, and transportation agencies in the region had their own Complete Streets policies in place, aimed at providing adequate and safe access for all street users.

The survey that found that ten of the surveyed counties, municipalities, and transportation agencies had Complete Streets policies in place as of the end of 2012. Three of those jurisdictions said they had adopted new Complete Streets implementation policies or updated existing policies within the last year. Five others that had not yet put policies in place said they were working on doing so. A number of



Complete Streets are safe, comfortable, and convenient for travel for everyone, regardless of age or ability— motorists, pedestrians, bicyclists, and public transportation riders.

the surveyed agencies said that the TPB's regional policy prompted them to develop a policy or influenced the details of policies already under development.

The regional policy, adopted in May 2012, encourages jurisdictions and agencies to adopt Complete Streets policies or to revise existing policies to include the core elements and best practices associated with the approach. It also provides guidance and a checklist of key elements to include in a policy, such as establishing specific design standards while still permitting reasonable flexibility, and detailing the cases in which a specific project or roadway could be exempt from the requirements of the policy.

The TPB's policy formally defines a Complete Street as one that "safely and adequately accommodates motorized and non-motorized users, including pedestrians, bicyclists, motorists, freight vehicles, emergency vehicles, and transit riders of all ages and abilities, in a manner appropriate to the function and context of the facility."

In January 2013, the TPB hosted a workshop for staff of local jurisdictions and transportation agencies to discuss their experiences with developing and implementing Complete Streets policies. More than 50 stakeholders attended the event, including officials from the Virginia Department of Transportation, who noted that Virginia adopted a statewide policy in 2004, making it the first state in the region to do so.

Officials from the District of Columbia also presented at the workshop, explaining to attendees that the District's policy, adopted in 2010, gathered and formalized many of the design standards already in place under existing The regional policy, adopted in May 2012, encourages jurisdictions and agencies to adopt Complete Streets policies or to revise existing policies to include the core elements and best practices associated with the approach.

master plans and design manuals. The officials pointed out that the District's policy calls for a Complete Streets approach to apply to the transportation network as a whole, rather than to each and every street individually, recognizing that some corridors are meant to serve one primary travel mode over others.

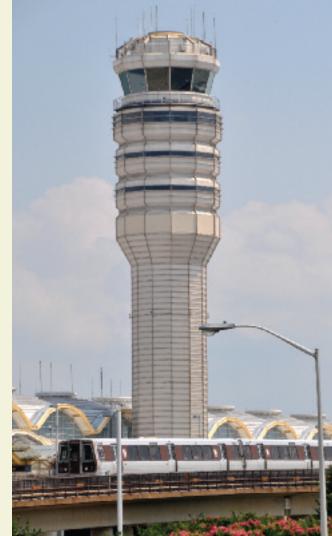
Since it was adopted, the TPB's regional policy has caught the attention of environmental leaders concerned with the impacts of transportation facilities on water quality. In December 2012, the Anacostia Watershed Restoration Partnership asked the TPB to adopt a regional "Green Streets" policy that would promote design standards that seek to minimize negative impacts on water quality by better managing runoff from heavy rains. The TPB held a workshop on Green Streets in April 2013 to discuss the possibility of developing and adopting a regional policy.

As the TPB considers weighing in on Green Streets, the recent experience with Complete Streets provides a potential model for promoting local action through regional policy. The 2012 TPB survey of its member jurisdictions and the January 2013 workshop both provide evidence that Complete Streets policies throughout the region are expanding and that regional information-sharing is making them more effective.

#### Studies Examine Access to Region's Airports and the Factors Influencing Travelers' Choices of Airport

S ince 1978, the TPB's Continuous Airport Systems Planning (CASP) program has brought together the numerous agencies and organizations responsible for overseeing the planning, development, and operations of the region's three commercial service airports. The purpose is to help identify improvements needed to keep the airports functioning efficiently and to maximize the benefit they bring to the people who live and do business here.

In 2012, the TPB released the results of two key studies carried out under the CASP program that shed light on how long it takes travelers to get to the region's three airports by car and the factors influencing travelers' decisions about which airport to use.



### in brief



According to the survey, nearly 60 percent of survey respondents ranked "closest airport" highest among all the factors influencing their decision.

The Ground Access Travel Time study found that from most major residential or commercial centers in the region, one-way travel times to the airport by highway during the evening rush hour went up between 2003 and 2011, in one case nearly doubling.

From Greenbelt, Maryland, for example, travel time to Baltimore-Washington International Airport increased from 26.6 minutes to 31.2 minutes. From Tysons Corner, travel time to Reagan National Airport rose from 24.8 minutes to 44.3 minutes.

The observed increases over the eight-year period are the result of increasing congestion on the region's network of highways. On some routes, however, travel times decreased or did not rise as significantly as on other routes thanks to major roadway improvements, like the new Woodrow Wilson Bridge across the Potomac on the southern side of the Capital Beltway and the Intercounty Connector (ICC) between I-270 and I-95 in Maryland. The survey showed that the trip time between Rockville, Maryland, and BWI decreased by 13 minutes during midday periods—a 23 percent reduction—and by 35 minutes during the evening peak travel period—a 41 percent reduction—thanks to the opening in 2011 of the ICC.

The results of the other airports study, a survey of air passengers at each of the three airports, found that the

proximity of an airport to a traveler's hotel, place of business, or home mattered most in choosing which airport to use.

According to the survey, nearly 60 percent of survey respondents ranked "closest airport" highest among all the factors influencing their decision. Sixteen percent cited better flight options — more convenient flight times, availability of direct flights, or service to cities not provided by other airports — and 14 percent said less expensive airfare was the most important factor.

Survey responses also revealed the comparative strengths of each of the airports.

More travelers flying out of Dulles, for example, ranked "better flight options" as their top consideration than did those flying out of the region's other two airports. At BWI, "less expensive airfare" was ranked by more respondents as the most important factor. And at Reagan National, proximity and public transit options both ranked much higher than at BWI or Dulles.

The surveys are important to planners and decisionmakers interested in maximizing the benefit the airports bring to the people who live and do business here. Monitoring and improving the operations of the airports will only become more important as air travel continues to grow significantly over coming decades.

#### TLC Studies Focus on Making Areas Near Transit Safer, Easier to Use, and More Affordable

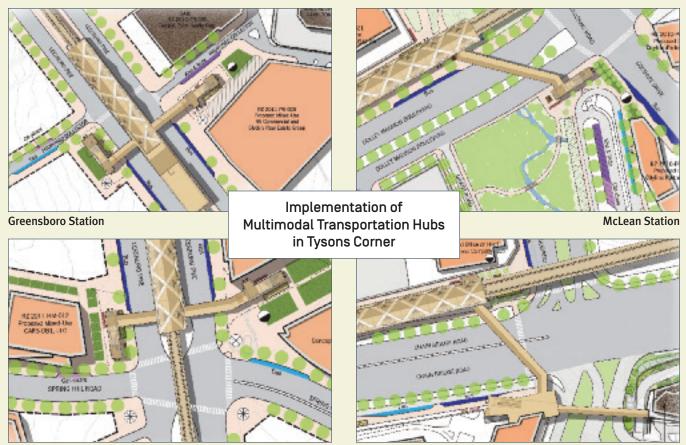
Since it began in 2007, the Transportation Planning Board's Transportation/Land-Use Connections (TLC) Program has funded more than 65 planning studies around the region to help local jurisdictions identify key improvements that can make the local transportation system and development patterns support one another more effectively.

In 2012, the program funded three studies to look at ways to make commercial and residential areas near transit stations in the Washington region safer and easier to use, or to make those areas more affordable places to live.

One of the three projects identified ways to ease resident and commuter reliance on automobiles in Tysons

Corner by designing transportation hubs where people could transfer easily from one mode of transportation to another, including transit, walking, biking, and car-sharing. The study focused on the areas around the four Silver Line Metrorail stations currently under construction in Tysons, aiming to design hubs that could be used by all age groups, while also improving safety, and creating public space.

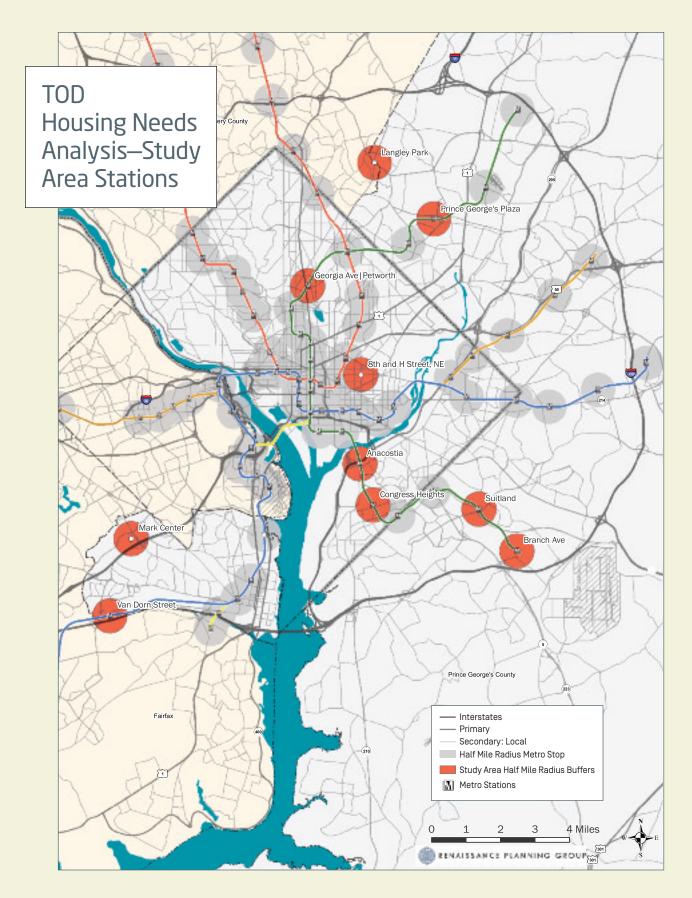
The second project took place in Montgomery County, where a team of consultants helped develop a public involvement strategy to create a vision for redevelopment near the Glenmont Metrorail station. The visioning process helped the County gather feedback from local businesses and residents through a series of public workshops, each



**Spring Hill Station** 

**Tysons Corner Station** 

### in brief



The TLC Program also serves as a forum through which counties and municipalities can develop new ways to approach planning and to share "lessons learned" with other jurisdictions working to solve similar problems.

of which built on the previous session to further refine the vision. The project showed how public involvement and an iterative process can yield a shared vision for what a community can become.

The third project focused on the availability of affordable housing near transit, which has been at risk of declining as the region has grown and housing prices near many transit stations have increased. The TLC study, which was carried out in Prince George's County, the District of Columbia, and the City of Alexandria, identified transit areas that are at greatest risk of becoming unaffordable. Staff from the three jurisdictions collaborated with a team of consultants to develop a common set of strategies to ensure that affordable housing remains available even as transit areas become more popular.

In addition to providing technical assistance to

jurisdictions, the TLC Program also serves as a forum through which counties and municipalities can develop new ways to approach planning and to share "lessons learned" with other jurisdictions working to solve similar problems. The study in Tysons, for example, provides other jurisdictions looking to become less car-focused with design guidelines for making multi-modal transportation hubs safer and easier to use.

The five other projects funded under the TLC Program in 2012 included: a bicycle master plan update in Montgomery County; an assessment of pedestrian safety near Farragut Square in the District; an inventory of transit options within Prince George's County; an evaluation of right-of-way compliance with the Americans with Disabilities Act in Arlington County; and the development of new streetscape design standards for the City of Takoma Park.

#### With New Funding, Wheelchair-Accessible Taxicab Pilot Program in the District to Continue

n early 2013, officials in the District of Columbia committed new funding to support "rollDC," a pilot program launched by the Transportation Planning Board in 2010 to provide wheelchair-accessible taxicab service to District residents and visitors.

The \$375,000 in new funding from the District will allow the TPB to secure an additional \$1 million in funding under the Federal Transit Administration's "New Freedom" program, which supports state and local initiatives to expand transportation options for persons with disabilities. New Freedom was the main source of funding for rollDC when the TPB launched it three years ago.

The nearly \$1.4 million in total new funding will go to purchasing new vehicles, training drivers, and providing

the two private taxicab companies that run the service— Yellow Cab of DC and Royal Cab—the financial assistance they need to cover some of the added costs of maintaining and operating the specially-equipped vehicles.

Long before the TPB launched rollDC, disability advocates and local planners had identified accessible taxi service as a missing link in the District's transportation network, not only for local residents, but also for the many people who come to visit the nation's capital. Prior to the launch of rollDC, the District was one of only a few jurisdictions in the region without any taxi vehicles equipped with ramps to accommodate mobility devices like scooters or motorized wheelchairs.

Today, 20 wheelchair-accessible taxi vehicles serve the

### in brief

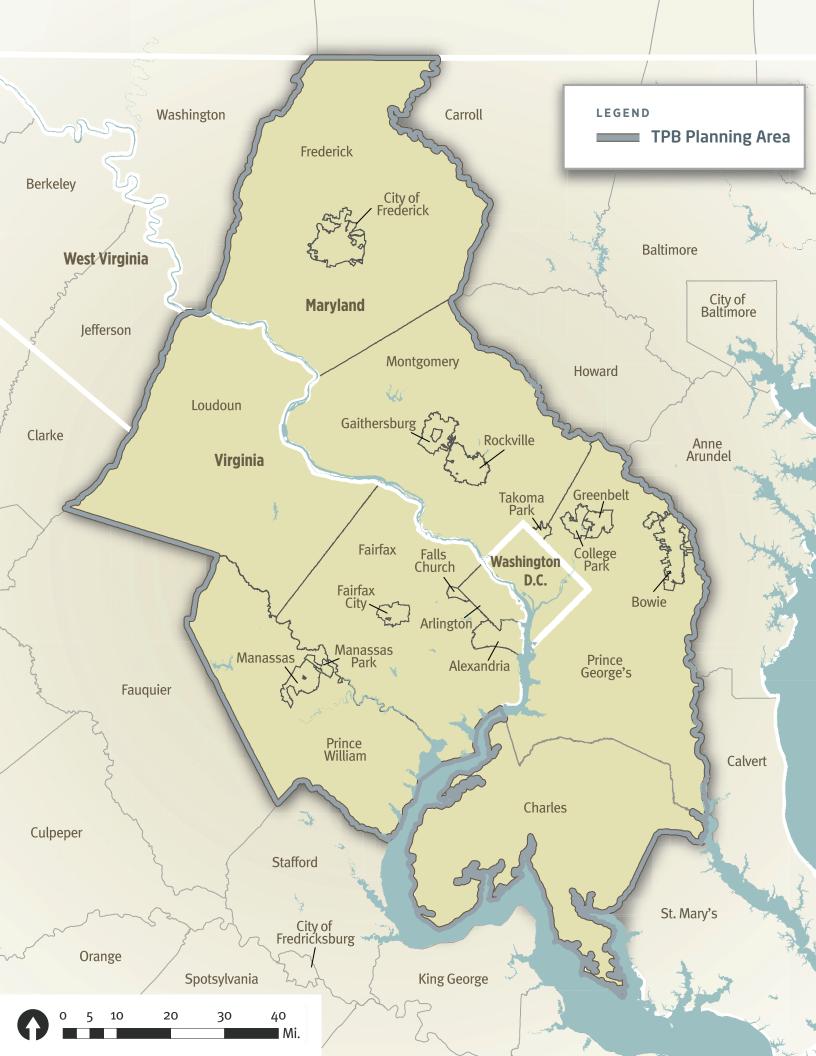
Today, 20 wheelchair-accessible taxi vehicles serve the District of Columbia on a 24-hour-a-day, seven-day-a-week basis, providing on-demand, door-to-door taxi service for mobility device users.

District of Columbia on a 24-hour-a-day, seven-day-a-week basis, providing on-demand, door-to-door taxi service for mobility device users. In 2012, the service provided an average of 450 trips per month to District residents and visitors who use mobility devices.

In addition to providing a service that didn't exist before, rollDC also provides a needed alternative to MetroAccess, the paratransit service offered by the Washington Metropolitan Area Transit Authority for persons who are unable to access the Metrorail or Metrobus system due to a disability. Unlike MetroAccess, rollDC does not require a lengthy pre-registration process or one-day advance booking. Several other jurisdictions in the region have been working to add, expand, or improve accessible taxi services. In December 2012, Arlington County added 10 new licenses for taxis equipped with ramps or lifts, and in early 2013, the first wheelchair-accessible taxis in Prince William County went into service.

The District of Columbia's commitment of additional funding for rollDC will ensure that the service will continue to operate into 2014. However, additional funding or new rules and incentives to encourage taxi companies to add more wheelchair-accessible vehicles will be needed to ensure the long-term operation of the service.





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