# Bus Priority and Beyond in the Washington Metropolitan Region

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*On February 17, 2010, the National Capital Region Transportation Planning Board received a $58.8 million TIGER competitive grant for its planned regional priority bus network. This proposed network encompasses fourteen priority corridors and includes dedicated lanes, transit signal priority, queue-jump lanes, and a major regional transit center. This article describes the federal TIGER program, its application in the Washington metropolitan area, and the broader impacts of USDOT's new mode-neutral approach to transportation funding. The TIGER grant program not only enabled implementation of a project that otherwise would have been difficult to fund via traditional channels, but it also empowered regional-level transportation planning that has had numerous benefits beyond the priority bus network grant.*

**Introduction**

The National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the Washington region, represents the District of Columbia, Northern Virginia, and suburban Maryland. TPB is charged with long-range transportation planning and air quality conformity assessments necessary for the region to receive federal transportation aid. Housed within the Metropolitan Council of Governments (COG), TPB is able to benefit from collaboration with the COG's other regional priority issues such as the environment and housing.

In September 2009, the TPB applied for federal stimulus funds through the U.S. Department of Transportation's (USDOT) Transportation Investments Generating Economic Recovery (TIGER) Discretionary Grants Program. The grant application was submitted to fund a network of priority bus corridors throughout the Washington region and a major transit center in Maryland. The TIGER program was a unique opportunity for the MPO to apply for major capital funds. The application was a regional effort with ten project owners: the Virginia, Maryland, and District of Columbia Departments of Transportation; the Washington Metropolitan Area Transit Authority (WMATA); Montgomery and Prince George's counties in Maryland; Arlington County and the City of Alexandria in Virginia; the Potomac and Rappahannock Transportation Commission; and the Virginia Department of Rail and Public Transportation.

Given the competitiveness of the program,[1] TPB did not receive its full funding request but was awarded a substantial grant of $58.8 million. Of this total award, $26.6 million is dedicated to priority bus treatments in the District of Columbia, Maryland, and Virginia. These treatments involve dedicated bus lanes, transit signal priority (TSP), improved pedestrian access, real-time passenger information, and enhanced bus stops to increase ridership and reliability on key transit corridors. Another $19.9 million is allocated to multimodal improvements on priority bus corridors that connect northern Virginia

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to the District of Columbia to improve commuter service and relieve pressure on the congested Metrorail system. The remaining $12.3 million will be used to construct a new multimodal transit center in Prince George's County (pictured to the right) to improve safety and intermodal access in the region's largest bus transfer area. The station will eventually connect priority bus corridors and the Purple Line, a planned 16-mile intra-suburban light rail line providing circumferential transit service between radial Metrorail lines and through major development nodes in suburban Maryland.

**What Makes TIGER Unique?**

The TIGER program is a competitive, discretionary grant program administered out of the USDOT Office of the Secretary. The first round of funding, known as TIGER I, provided 100% federal capital funding for a wide array of eligible transportation projects, from ports to bicycle infrastructure.[2] The stated objective of TIGER I stemmed from the program's inclusion in the federal government's economic stimulus bill: "The objectives of the American Recovery and Reinvestment Act of 2009 [the Recovery Act] include preserving and creating jobs and promoting economic recovery, investing in transportation infrastructure that will provide long-term economic benefits, and assisting those most affected by the current economic downturn" (USDOT Tiger Grants FAQs). While the Recovery Act emphasized job creation, the criteria for the TIGER program illustrated a broader set of goals, including three major foci: multimodalism, projects of national and regional significance, and rapid implementation. Many of these goals are not reflected in existing federal funding sources, making the TIGER program unique amongst USDOT grant programs.

First, *multimodalism* was a clear focus of the TIGER program. In keeping with this emphasis, TIGER is administered out of the USDOT Office of the Secretary, rather than a specific modal administration. Moreover, projects from any mode were eligible and those that strengthened intermodalism via increased movement of passengers and/or goods between modes were favored. Among the most interesting elements of the TIGER program was the requirement of a comprehensive cost-benefit analysis (CBA), which made possible the comparison of projects of different scales and modes. TIGER essentially forced applicants to become familiar with this approach and pushed the issue of quantifying nontraditional benefits, such as improved livability and environmental sustainability. This innovative strategy has possibly set the foundation for future national-level infrastructure banks or similar funding mechanisms.

Second, the TIGER program clearly focused on *large projects of national or regional significance*. In order to compete with proposals from around the country for a relatively small amount of funding, successful projects had to offer substantial, wide-reaching benefits that far outweighed project costs. In addition, TIGER was unique in its extension of eligibility to all levels of government including MPOs, which generally do not directly control major capital funding. These program elements gave TIGER a metropolitan focus and made TPB uniquely qualified to lead the region's application.

Lastly, like other Recovery Act funding, TIGER prioritized proposals according to *how quickly they could be completed*. A two-year implementation period was specified in the TIGER Final Notice of Funding Availability. This requirement was a facet of the economic stimulus objective, but it also limited the type and planning status of projects that could be considered. Projects requiring complex and lengthy public consultation or environmental documentation were not eligible. Major highway and transit projects typically take, at best, nine years, but more often 15 to 20 years for design, funding, and construction (Transportation Research Board 2011).

With all of these objectives in mind, the TIGER program provided a unique channel for projects that would not otherwise fit into the currently available federal funding categories, or would not otherwise be prioritized under existing formula programs.

**A New Capital Project Planning Process Influenced by TIGER**

Given the unique opportunity TIGER provided, the Washington region created a new planning process to simultaneously address both regional needs and the objectives of TIGER. The result was that, regardless of the ultimate award, the TIGER planning process positively impacted broader regional transportation planning by forcing geographic and modal collaboration at the project development stage. Specifically, the TIGER grant catalyzed three important changes to the traditional transportation process:

- The accelerated timeline and focus on capital expenditures led to an *unusual focus on bus improvements*, which are often overlooked in long-range planning. TIGER has certainly elevated the importance of bus planning within the regional transportation planning discourse.
- The multimodal objective of TIGER *forced the elimination of barriers between transit and highway planners* who are not accustomed to working with one another, thus enabling them to plan together for improvements critical for more efficient bus service. With the implementation of TIGER, these partnerships are continuing and strengthening.
- The focus on regional significance and eligibility of MPOs *allowed for truly regional planning*, which in the Washington area spans across two state lines and District of Columbia. It allowed for a systems planning approach with multiple corridors and locations across the region forming one combined regional network.

**The Takoma/Langley Park Transit Center** will serve the busiest non-Metrorail transit area in the Washington Metro Region (approximately 30,000 riders per day). The project will consolidate bus stops for about a dozen routes that serve the area, facilitating bus-to-bus transfers and significantly enhancing pedestrian safety. *Image courtesy of Eric Randall.*

***Elevating Priority Bus Transit in Regional Transportation Planning***

First, the TIGER program set forth unique parameters that to some degree could be met only by a project type as a flexible and quick-to-implement as bus transit. Prior to TIGER, there was already a general understanding amongst planners and politicians that improving bus transit could have far-reaching benefits for Washington area residents. These benefits would extend beyond just bus riders, which represent 39% of the total regional transit ridership (unlinked trips), or over 650,000 average weekday boardings (MWCOG 2008). While currently some may consider buses to be inherently slow or unreliable beyond redemption, the rise of bus rapid transit (BRT) internationally is changing perceptions of what bus transit can look like. That said, many regional bus priorities still remain unfunded.

After the TIGER funding announcement in 2009 but prior to the submission deadline, TPB hosted a conference on "Opportunities for Priority Bus Transit in the Washington Region" in partnership with the Federal Transit Administration (FTA). The intent of the conference was to bring together key stakeholders to develop alternatives and build consensus for prioritizing bus transit. While the impetus for the conference developed from TIGER, conference proceedings shed light on the growing consensus around the issue and the fact that regional partnerships were critical to a successful grant application. Indeed, past efforts (including a 2006 bus summit and WMATA's regional bus plans), as well as the regional bus priorities outlined by TPB, pointed to a growing understanding and interest in improving bus transit to make it a premier service.

Much of this consensus stemmed from the limits of available funding and an understanding that bus transit improvements are an economically sustainable means of improving service. With limited transit funds increasingly directed towards maintenance or reconstruction, the reality for most agencies is that even if capital money were available for capacity expansion, finding funds for operating new transit services would still be a significant hurdle. Given that TIGER only provided capital funding and that local jurisdictions did not have excess operations funding, it was immediately evident that the focus needed to be placed on improving existing service and perhaps even reducing current operations budgets if possible.

In the Washington region, expenditures for operations and maintenance outweigh system expansion by a ratio of seven to three (MWCOG 2010). Regardless, increasing transit capacity is still necessary. Increased congestion is forecast almost everywhere on both transit and highways. According to WMATA, some sections of the Metrorail system are expected to exceed capacity by 2020, while the entire system will approach capacity by 2030. Similarly, highway traffic congestion is expected to intensify across the region by 2030 (NTPB Constrained Long-Range Plan 2010).

The need for increased transit capacity combined with growing funding limitations led the region to consider priority bus treatments, which provide the critical benefit of increasing the capacity of existing service without incurring additional and perhaps reducing operational expenses.

Currently, the lack of operational efficiency caused largely by road congestion has a significant negative impact on bus transit. Runningway improvements such as dedicated lanes, transit signal priority, and/or queue jump lanes, for example, would allow buses to travel faster and increase frequency and reliability of service without increasing the number of buses operating. Of course, the benefits of bus transit priority extend beyond relieving traffic congestion; as climate change awareness and household transportation costs increase, so too does the support for affordable, sustainable transportation options like high quality bus transit.

Priority bus improvements were already being studied and moved forward to a certain degree via the WMATA Priority Corridor Network (PCN). The PCN seeks to: 1) improve competitiveness of bus transit; 2) support existing and planned land use and economic development; and 3) improve efficiency of the transportation system by focusing improvements on bus operating conditions and service on the most heavily used routes (VHB, Inc. 2010). WMATA's PCN strategy is twofold, focusing on both service and runningway improvements. First, improvements can create different layers of bus service that cater to the various market segments within each corridor, such as limited-stop, express service on top of local feeder/circulator service, or point-to-point commuter service. Second, improvements along the bus runningway can reduce time spent at traffic signals and in congestion, such as exclusive bus lanes, TSP, or queue jump lanes. By the time of the TIGER application, WMATA had already


**The Washington Metropolitan Area Regional Bus Priority Corridor Network (PCN)** will enhance regional transit circulation through a series of cost-effective improvements to major bus routes designed to integrate with the Metrorail system. *Image courtesy of Eric Randall.*

begun making service improvements along some of the priority corridors but had not yet begun implementing needed capital improvements to bus runningways (VHB, Inc. 2010).

***Extending TIGER's Focus on Multimodalism into Project Planning and Development***

As a result of TIGER's emphasis on multimodalism as an overall programmatic objective, the merging of highway and transit interests became an important characteristic of the Washington region's TIGER planning process. Possibly the strongest impact of TIGER was that it forced partnerships between transit and highway planners, in many cases for the first time. Runningway improvements are difficult to implement and require physical changes to property owned by a variety of local governments or agencies in the region. In turn, the process requires aligning the interests of many players, such as WMATA, local transportation staff from more than ten jurisdictions, and in many cases state DOT staff.

This type of collective planning effort is not a frequent occurrence largely because of the structure of federal transportation funding, where capital funding is split into distinct transit and highway pools. A project that requires complementary and combined investments across multiple modes is not easily funded through traditional funding sources; TIGER provided the necessary intermodal funding mechanism for regional bus priority network improvements. The ongoing implementation of the awarded TIGER project has kept these innovative partnerships moving forward despite often-disparate interests and planning methods. These types of partnerships are critical to identifying smart solutions to persistent problems, such as bus reliability and speed. For example, they have extended into the collaborative development of guidelines for priority bus transit measures, which were developed through the review bus priority measures nationwide and are used to provide a regionally consistent set of standards for implementation.

***An Opportunity to Plan Regionally***

Third, the TIGER program was a clear opportunity for the Washington area to plan a network of projects at the regional level. In fact, the Washington metropolitan region has not come together to plan and fund a network since the beginning of the building of Metrorail over thirty years ago. This lack of coordination is largely because project planning occurs at the state and local levels, with projects coming together at the regional level only at much later stages in the planning process. By stressing regional significance and partnership between jurisdictions, the TIGER program provided the impetus to see how individual projects could be planned to work together in a regional network across the metropolitan area before progressing with project development.

Planning in this manner required regional and deliberate coordination, which the TIGER program catalyzed. TIGER was unique in allowing MPOs to apply, making it an experiment for what a directly-funded metropolitan transportation program could resemble in the future. The TPB is among the largest MPOs in the country, but before TIGER had never received substantial capital funding.[3] While the provision of federal capital funding to MPOs is not in itself a major accomplishment of TIGER, the program stimulated regional applications in line with its purpose by allowing MPOs to compete. This was particularly the case with well-established MPOs like the TPB, which over decades has become an important forum for transportation planners from multiple jurisdictions and multiple modes to cooperate and coordinate.

The importance, and in this case necessity, of systems-level planning is illustrated clearly with the bus network. Urban bus travel does not conform to political boundaries, with almost 20% of bus passengers traveling between at least two different local jurisdictions (MWCOG 2009). With inter-jurisdictional bus travel, improving service on one segment without improving critical links to that segment has limited effectiveness. The bus is either already late by the time it gets to the improved segment, or it will lose the enhancement benefits by sitting in traffic. In order to substantially improve bus reliability and efficiency, improvements need to be made according to how people travel—across political boundaries and via connections to other lines or modes.

Ultimately, it was the unique structure and goals of the TIGER program that catalyzed the development of a much needed network of priority bus improvements in the Washington region. Without the TIGER program, individual bus priority projects may have been funded, but it is likely an entire network would not be as far along in the implementation stage. Rather, traditional development trajectories would have dictated that each corridor be pursued as a separate project, with its advancement into a regional or state plan and eventual implementation subject to the priorities of the local jurisdiction and/or state.

**Looking Forward**

The TIGER program inspired the Washington metropolitan region to think creatively about transportation at a time when budgets and projects were being cut everywhere. Instead of submitting a list of unrelated and unfunded proposals, the region partnered together to develop a unique application for a regional bus priority network that could create jobs and help achieve environmental and financial sustainability in a very uncertain climate. Previous planning efforts had laid the groundwork and vision for a regional bus network in Washington's key travel corridors in the core and inner jurisdictions. The TIGER program was an opportunity to systematically plan and fund that vision in a way not previously possible under traditional funding structures. Furthermore, the development of the grant application highlighted gaps in the existing regional planning process that, if filled, could streamline regional project development for future opportunities. It whetted

the region's appetite for future TIGER or other competitive grant opportunities in the future.

Traditionally, long-range transportation planning culminates in the development of a *financially constrained* long-range transportation plan (CLRP). This requirement of financial constraint means that projects in the CLRP must have funding already identified. New grant opportunities could be used to accelerate those projects that have already been deemed a priority at the state and local level, but without a regional unconstrained long-range transportation plan there is no repository for *unfunded* priorities that could be ideal candidates for subsequent TIGER or similar mode-neutral transportation funding opportunities. This type of unconstrained priorities planning is done at the TPB separately for some modes, such as for bicycle and pedestrian, bus, and freight planning, and is also done by other agencies and organizations, such as the Northern Virginia Transportation Authority and WMATA. The TPB has recently begun examining how unconstrained multimodal regional priorities planning could be undertaken. Among the strongest arguments for developing broad, unfunded regional priorities is to position the region for subsequent TIGER or TIGER-like funding in the future.

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**Endnotes**

[1] USDOT received 1,400 applications totaling nearly $60 billion in requested funds, but only 51 awards were made totaling $1.5 billion.

[2] TIGER I (known as TIGER throughout this article) emerged from the Recovery Act in 2009. Its later iteration, known as TIGER II, is a matching grants program that is not discussed in this article. This is an innovative model and more funding rounds are expected in the future, albeit in altered forms.

[3] The TPB does receive Federal Transit Administration (FTA) Job Access Reverse Commute (JARC) and New Freedom funding, which provides matched federal funding for either capital or operating expenses. The total annual funding for this program is relatively modest, at nearly $3.8 million.