



Transportation Network Companies (TNCs) and WMATA Considerations for New Services, Tools and Partnerships

Introduction

In recent years technology has revolutionized the transportation service industry. The ubiquity of mobile phones and tablets has driven the transportation marketplace to respond to public expectations for easy access to real-time transportation service information and fare payment. This can be via mobile apps, redundancy and flexibility in choices of service options to meet a user's individual needs, and a willingness by the traveler to invest in shared mobility including car sharing, bike sharing, and ride sharing in lieu of auto ownership and/or exclusive auto use.

A typical day might see an individual take a bus or train to get to and from work, rent a shared car to run errands, hop on a bike to visit a friend, and even combine different modes of transportation in a single trip. The operative concepts in this scenario are availability of options and ease of use.

– Bob Graves, *How Transportation Planning is Stuck in the Past*, Governing, November 23, 2015.

The private sector response to this market demand now includes a range of “on demand” transportation services that provide the flexibility and convenience that the public expects from their urban transportation systems. These providers, including Transportation Network Companies (TNC) like Uber and Lyft, are finding ways to “fill in the gaps” in the region’s public transportation infrastructure. Customers of ridesourcing tend to use the services when transit is less available, as well as to get to destinations not easily served by traditional transit. In the DC region especially, TNCs often function as informal “Metrorail shuttles” - almost two thirds of Uber trips in the District begin or end at a Metrorail station, and slightly more than a third of Uber trips follow that pattern when we zoom out to the entire region. Similar statistics prevail when examining the usage of car sharing companies such as Zipcar and Enterprise. Finally, the data indicates that 57% of frequent users of ridesourcing companies as well as car- and bike-sharing customers identified bus and rail transit as their *preferred* transportation mode. This tells us that these services have an important role in complementing the Metrorail system for many customers.

According to draft survey results conducted by the Office of Customer Research, of over 1,700 Metro SmartTrip users, over 60% have used TNCs in the Washington region and elsewhere, while almost 50% have used them in our region. Many report that the “last time” they had taken one of these services in our area, they took the service because Metro was not available



to them at all, while still others – especially late night travelers - indicate that they took these services *instead of taking Metro*. The top three reasons reported for taking a TNC instead of Metro (where Metro was an option) were because the trip was (thought to be) faster, require less waiting time, and was more reliable than Metro.

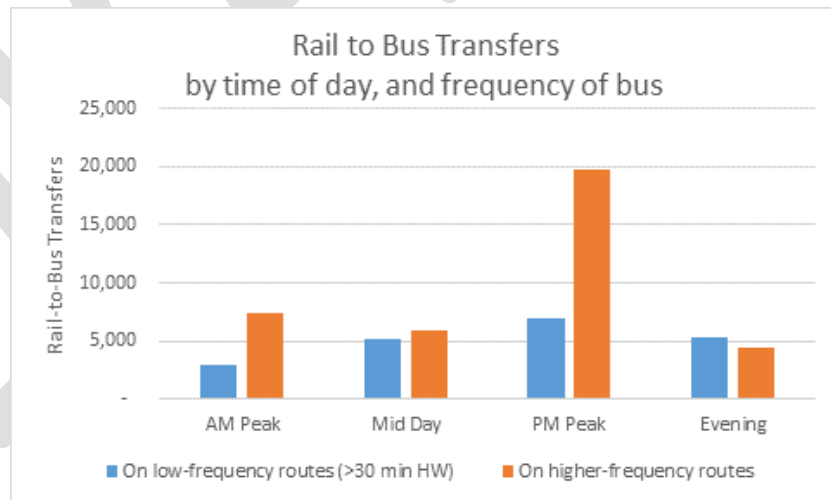
Opportunities for Metro

Metro could respond to these trends and industry data as we rebuild our system, regain the confidence of our customers, and create a more sustainable business model that contributes to regional goals to reduce auto use and dependency. Important to this discussion is the fact that Metro is a publicly-subsidized transportation service provider. We are responsible for providing a product that reaches the full reach of the public transportation marketplace, including low-income, minority, and disabled populations to the maximum extent practicable. As we explore methods of extending the reach of our service model to include potential partnerships with other service providers, we need to keep our core mission in mind.

The following identifies several potential business opportunities for Metro that build on the new mobility-on-demand service model that has developed¹. These could be developed independently, developed into a package offering or phased in over time.

1. Connect to Metro with first-mile, last-mile services

The need for reliable and abundant options to access public transit from the point of trip origin or to get to the user's end destination is an industry-wide dilemma. While Metro and several local jurisdictions operate bus services that feed the more robust rail network, bus services don't reach

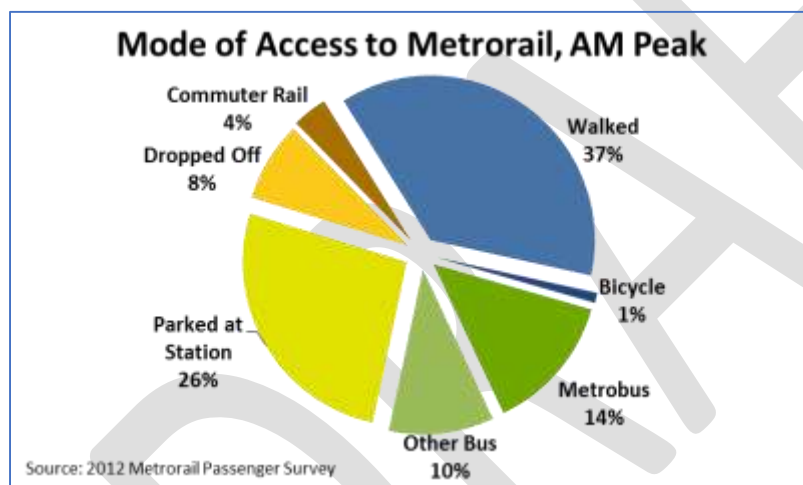


everyone within a mile or two of our network. Nor are these services available on demand, with several operating at fairly infrequent headways, particularly during the off-peak and late at

¹ This does not include opportunities to partner on paratransit, because that is already being considered through an RFI that is currently circulating. Paratransit is one area where substantial cost savings could be achieved in service provision through an appropriately negotiated agreement or agreements with private sector players.

night. An assessment of current rail-to-bus transfer activity indicates that about 20,000 customers a day transfer from rail to a low-frequency (over 30 minutes) bus routes during mid-day and night time hours. Many of these riders, however, likely take another parallel route since many cover the same area. A conservative estimate of the market is that about 10,000 customers have potentially long waits for a bus when transferring from rail. While we don't wish to replace our revenue generating services, it is similarly not cost-effective for Metro or local service providers to increase level of service.

Estimating the existing service market and revenue potential for first-mile, last-mile access to Metro stations is tricky given the competing modes including walking, biking, parking and existing feeder bus service by local providers and Metrobus. Additionally, riders access Metro through carpools, kiss-and-ride, and taxis. We don't know who among these riders would likely try a new mode, or if the lack of access to Metrorail is what keeps riders from using the system.



We know from our 2012 Metrorail Passenger Survey that of the 26% of customers who park at a Metro station, most of those (about 50%) are coming from less than three miles away. A survey answered by over 1,700 Metro SmartTrip users indicates that most people that use on-demand transportation services, including bike share, ride share

and car share, for trips of between beyond one but up to five miles. Trips under one mile tend to be served by walking, bus or bike share. While a Metro rider might typically walk to Metro each day, a rainy, cold or snowy day may trigger a different decision, including one that avoids taking Metro altogether.

What if these short-distance drive and park customers, or walkers who may be impacted by poor weather, could take a TNC to the Metro station instead? Would they free up parking spaces for other, longer-distance customers to park and ride?

Metro has embraced increasing access to our services as a strategy for improving ridership. Metro promotes bicycle and pedestrian access to rail stations through bike parking and working with jurisdictional partners to improve the pedestrian and bicycle environment around stations.

Given the market trends towards increased public desire for transportation service on-demand and the popularity of TNCs, Metro could look to TNCs to help fill the final gap in first-mile, last-mile access to our rail and bus networks. This could occur somewhat organically through marketing partnerships or could include formal partnerships that provide special offers and other products tailored to Metro customers, to the extent appropriate for achieving our objectives. For example, the TNC company Lyft has initiated its own efforts to capitalize on Metro's first-mile, last-mile market with advertisements placed within the WMATA network that show Metro maps with Lyft connections coming from them to nearby activity centers. Alternatively, Metro could engage in a more formal relationship with one or more TNCs to provide customers with access to our stations.



Some opportunities ripe for exploration include:

- Offering a more robust marketing and promotion of Lyft, Uber and other TNCs as a first-mile, last-mile option by providing a link to their services on our website, trip planner integration, and or co-marketing efforts. This could be combined with a data sharing agreement in which we provide information to the providers on our markets in exchange for information on customer usage, demographics and fees.
- Explore joint sales opportunities, such as those piloted by DART. The DART mobile ticketing app includes a wealth of negotiated consumer marketing under the “Events and Information” tab of their ticketing app, which is where customers can find links to Uber and Lyft. First time riders on Uber get a free trip. Lyft provides a cost reduction for the first 5 trips a customer takes.
- Negotiate specific rates for Metro riders within a specific 0-3 mile geographic range of specified stations. Prices would need to avoid cannibalizing Metro's current parking rates to avoid revenue loss to the authority. The providers could determine the best service model to provide, such as offering an on-demand bus-like service such as



currently offered by Bridj or Uber Pool. Or, they could offer single trips as they determine most economically feasible within the negotiated price agreement.

- Combine one or more of the above into a total package, as our system matures and the market is tested and matures.

2. Incident Management Support

Metro has experienced increased incidents of rail service interruptions and station closures that have negative consequences for trip reliability. Some of these are planned outages and some are unanticipated. Developing partnerships with TNCs to augment bus bridges or other service alternatives activated when our network experiences service disruptions could ease the anxiety our riders feel when their trips are disrupted and help us retain customers. Similar to the case for encouraging or providing TNC service alternatives to customers for first-mile, last-mile access to transit, providing alternatives for customers in a time of unanticipated service interruption or as an alternative during a planned service outage could help to retain those customers in the future.

Successful implementation would require a carefully executed plan to ensure adequate service coverage for Metro customers in an emergency type situation with a fully offloaded train or trains. It is *extremely* unlikely that any TNC would have the capacity to accommodate the number of customers that are affected by a service disruption on Metrorail. However, arranging for a service reinforcement in a time of need, particularly if customers have easy access to the links for the providers, might help retain displaced customers in the future. Because of their limited capacity, the TNCs might be better suited to reinforcing a defined shuttle bus route or bus bridge. This would allow them to schedule the needed capacity with their drivers. In an ideal situation, Metro could negotiate prices to guard against price surging, particularly in times of emergency.

Customer and public communications on service disruptions could include information on service alternatives, including Metro bus routes and bus bridges as well as provide information on TNCs. Links to participating providers could also be provided to our customers on trip planning apps via GTFS feeds or other means as determined appropriate. Both Lyft and Uber have relationships with widely available trip planning app companies, which they could use to leverage customers to their services at times when Metro is down. Or, as noted earlier and as discussed below, Metro could develop their own travel planning app.

3. Develop shared fare products, mobile ticketing, and trip planning



Smart fare cards and mobile ticketing apps could be developed that offer more than one service provider in a bundled product. Meanwhile, mobile ticketing is being sold by private vendors and being tested by several transit agencies including New Jersey Transit and New York MTA. In 2012 the MBTA in Boston launched mobile ticketing to supplement their Charlie Card. DART has the Go Pass app which includes trip planning and vending. The Go Pass has imbedded links to Lyft and Uber for customers to use to amplify their bus or rail trip and get them to their final destination. This is a model that Metro could apply as well. The benefits extend to reduced O&M costs of fare collection and vending equipment as well as the conveniences offered to customers.

As the region's public transportation leader, Metro could take the lead in developing a fare pass or fare card that allows patrons to use it to pay for multiple transportation services. This creates a seamless transportation system of alternative public transportation services with Metro as the lead sponsoring agency. One way to easily implement this uses a model under development for the Metro SelectPass in which a Metro monthly rail pass could include an option to buy a monthly subscription to Capital Bikeshare, a car sharing company and/or TNC. To successfully implement this service model, Metro's next generation fare program must be sufficiently technologically advanced and flexible to accommodate multiple service providers (e.g., local bus, Metrobus, Lyft/Uber, Bridj, Capital Bikeshare, Zipcar/Enterprise) under one account.

There are enormous barriers to the concepts above that are above and beyond the R&D and capital costs of deployment. Those using SmartBenefits would need to find a way to establish multiple "purses" of monies so that the transit portion of the trip was paid for with subsidized funds while the TNC portion of the trip was paid for with unsubsidized funds. Financial remuneration and transparent reconciliation would need to be established, as well as the administrative infrastructure for effectively managing the cashflow and repayment structures. Finally, the capital costs and potential return on investment of mobile ticketing technology is something that is as of yet unproven in this market and would require an infusion of capital in order to test, let alone execute.

4. Paratransit Services

Metro is aware that paratransit service costs are rising unsustainably, and that there may be opportunities to provide lower-cost trips that have greater utility and desirability for the customer by using non-paratransit vehicles. We have successfully piloted such programs in the District of Columbia in partnership with the taxi companies (TransportDC), and there are



reasons to believe that there may be opportunities to expand on the success of these pilots by seeking out opportunities with TNCs.

The legality of such an approach is right now best described as murky. Would TNCs be required to provide wheelchair accessible vehicles? Would they be subject to random drug and alcohol screenings? What about the Buy America provisions for their fleet? Would they provide door-to-door or curb-to-curb services?

These questions and more are under exploration today by WMATA staff and we would assume that in the near future we may be able to provide direction for any future partnership with TNCs on this front.

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Summary – Partnership Opportunities

Partnership Strategy	Near Term	Long Term	Possible Markets / Benefits	Possible Costs/Risks	Who Else is Doing it? Other comments	Go/No go? Next Steps?
Paratransit Service Reinforcement	x		<p>Markets:</p> <ul style="list-style-type: none"> - Non-Ambulatory Metro Access eligible riders - Wheelchair accessible Metro Access riders <p>Benefits:</p> <ul style="list-style-type: none"> - Provide riders with a choice that includes being able to hail a ride on demand, rather than wait and schedule 24 hours in advance. - Reduce operating costs. 	<ul style="list-style-type: none"> - Customer backlash/concern about unequal treatment of persons with disabilities. - Legal requirements as per FTA - Customer concerns about need to use mobile devices to access services – focused on low-income, elderly customers. 	<ul style="list-style-type: none"> - There were failed negotiations with San Francisco - MBTA is pilot testing a program with taxis and ride hailing companies now, which started late 2015. <p>McKinsey Report specifically identifies TNC partnerships as a strategy for reducing Metro Access operating costs.</p>	<ul style="list-style-type: none"> - Staff exploration
<p>First Mile, Last Mile - options</p> <ul style="list-style-type: none"> - Marketing Agreement - Provide link to providers on Metro’s online webstore - Provide link on our trip planning app - Metro gets: Data on ridership, stations served, time of day/day of week 	x		<p>Markets:</p> <ul style="list-style-type: none"> - Customers that regularly drive under 3 miles to park and ride lots at Metro Stations. - Stations with over 50% park and ride customers traveling under 3 miles and with high parking utilization (85% or more) could be targeted to open space for longer distance commuters. <ul style="list-style-type: none"> o Examples include Fort Totten, Van Dorn, Rockville, Forest Glen, Rhode Island Avenue. - Late night or early morning rail users when feeder bus services are lower frequency or riders might feel nervous taking the bus (security) <p>Benefits:</p> <ul style="list-style-type: none"> - Attract/retain customers who might not take transit because of gaps in access - Provide more parking access for longer distance riders 	<p>Shift customers from existing revenue services such as parking and bus</p> <p>Public perception related to high profile issues with labor, security of passengers, title VI, etc.</p>	<p>DART and MARTA – marketing Uber and Lyft as first mile/ last mile options</p> <p>Minneapolis Metro and LA Metro – marketing and paying for Uber and Lyft as part of their Guaranteed Ride Home programs. (Not a proposed strategy for Metro, but might be appropriate for MWCOC as part of Commuter Connections.)</p>	<ul style="list-style-type: none"> - Staff exploration
<p>Service Reinforcement / “Incident” Management</p> <ul style="list-style-type: none"> - Marketing Agreement for supplemental support during planned outages - Contract with firms that could provide supplemental services for a reduced / negotiated per customer rate, such as Bridj, Uber Pool, Via, Lyft Line. - Probably would require a procurement process with open competition 	x		<p>Provide customers a transportation choice when Metrorail service is limited (single tracked) or suspended due to track work or other rehabilitation work.</p> <p>Retain passengers that might otherwise forego transit – particularly useful during planned outages.</p> <p>Help control shuttle bus O&M costs</p>	<p>TNCs don’t have capacity to accommodate all customers.</p> <p>Market driven by what the firms accommodate. Could use and RFI/RFP process to acquire services for a Fast Track or similar scheduled maintenance calendar.</p>	<p>On March 16th both companies issued surge caps and provided discounts for new riders.</p> <p>Uber – 1 in 4 riders used Uber pool. They extended the service area of Uber Pool into Maryland and Virginia for trips into the District. Usually Uber pool only operates in DC.</p>	<ul style="list-style-type: none"> - TBD
<p>Shared Fare Passes (such as a Select Pass type product) with multiple providers on one fare product account.</p> <ul style="list-style-type: none"> - One monthly price provides access to multiple modes, such as rail, bus, Lyft/Uber, Cabi, etc. 		x	<p>Attract more and new riders with integrated fare products that allow people multiple options for completing their trips.</p>	<p>Uncertainty of fare technology requirements under current fare system.</p>	<p>Some have indicated they are interested in this concept. Will need to build this type of functionality into the next generation of Next Fare.</p>	<ul style="list-style-type: none"> -TBD



Partnership Strategy	Near Term	Long Term	Possible Markets / Benefits	Possible Costs/Risks	Who Else is Doing it? Other comments	Go/No go? Next Steps?
<ul style="list-style-type: none"> - Different purses on one card/account. - Long term future opportunity – mobile app with trip planning and payment functionality. 				<p>Potentially large administrative as well as capital costs required – who will pay for this infrastructure?</p> <p>Need methodology for revenue allocation among service providers.</p>		
<p>Trip Planning - Include links and information on TNCs and other shared mobility providers on online and eventually mobile trip planning applications</p> <ul style="list-style-type: none"> - Incorporate links and information on TNCs on Metro’s online trip planning tool - Develop a mobile app that allows riders to plan trips on their mobile devices. - Long term future opportunity – mobile app with trip planning and payment functionality. 		x	Attract more and new riders with easy methods to plan and pay for a trip.	App itself is the more powerful customer service tool. Uber/Lyft links an add-on benefit that hopefully brings more customers.	<p>DART – Go Pass app has links to Uber and Lyft.</p> <p>MARTA’s trip planner (online) has similar functionality for Uber only.</p> <p>Can use closed system infrastructure.</p>	

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Issues and Next Steps

As WMATA conducts more in-depth analysis of these and other opportunities to adapt to the changing public transportation service market, there are a few issues that will need to be addressed.

1. Title VI and Equity

The convenience and flexibility of mobile technology is not uniformly shared, particularly by the low-income community. Many people that live at or below the poverty line do not have bank accounts or credit cards which are required for paying for TNCs and even Metro fare products on line. It is important that Metro consider options for making services available to the entire transit community. Public transportation is a *public service*, designed to provide all persons with critical access to economic opportunities, goods and services. Therefore, it is our responsibility to devise strategies to provide our service options to all.

Lyft has recently partnered with health care providers to make their transportation services available to the unbanked patrons of health care facilities. The arrangements made give health care agencies the ability to book and pay for transportation on behalf of their customers and collect the payment separately from their clients as they prefer. This is a model that we could be applied to paratransit or other transit service replacement services to ensure equal access if a formal relationship with a TNC or similar provider is entered into.

2. Moving Towards an On-Demand Service Model

TNCs have shown us that on-demand, easy access to information, fare payment and service booking via mobile device and online booking is the way of the future. Metro's services are fixed route, fixed schedule and operations. We need to look for innovative ways to integrate a sense of freedom, convenience, and choice into the Metro business model. This could include launching our own mobile ticketing (as discussed earlier), but could also entail new services like a Brij or Lyftline that allow our patrons to create their own origin and destination pairs and combine their trips with other custom-designed trips in smaller buses that cross jurisdictional boundaries or otherwise service our rail network. This would have to be carefully planned with our jurisdictional partners to ensure we remain within the limits of a regional provider that does not compete with or conflict with local transit providers. However, it's a long term opportunity that should not be pushed aside if we want to demonstrate a commitment to our customers and a willingness to respond to trends in the industry.

Concluding Remarks – Federal Funding Opportunity

Implementation of any new service concepts using federal transportation funding will come with the typical array of federal requirements that may or may not fit within the business



models of TNCs and other mobility on-demand service providers. Federal requirements for equitable pay for labor (Davis Bacon Act) and safety (Drug and Alcohol testing) must be adhered to under current federal laws and guidelines by any contractors or subcontractors using federal transportation funding.

The Federal Transit Administration (FTA) announced a very limited \$2 million discretionary funding program to test On-Demand mobility partnerships with public transit providers with the intent of identifying and seeking remediation for just these types of limitations. This pilot initiative is being offered sometime this Spring with a rolling application. However, given the limited funding available, Metro should initiate relationships and plans now for testing under this program if participation is desired.

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