Integrating Services Across Transportation Modes

Introduction

This brief, profiling the integration of transportation modes through a mobility management approach, is part of the "Promising Practices in Mobility Management" series. The series has been created for mobility management practitioners to help advance the adoption of transportation coordination and other strategies that lead to responsive, customer-centered transportation services. All briefs in the series—covering the topics of coordinated transportation planning, technology in coordination, one-call/one-click services, mobility management, and performance measurement— are available at http://nationalcenterformobilitymanagement.org/.

The collaboration, coordination, and integration of transportation services across modes are fundamental strategies of mobility management that make it easier for people to move around their community, leading to improved quality of life. Collaborative arrangements across transportation providers may evolve into a deeper integration of transportation services, assets, functions, skills, and business processes, thus further enhancing the available suite of customer-responsive transportation options delivered as efficiently as possible.

Six Dimensions of Fundamental Change
Prior research on mobility management done for the Transit Cooperative Research Program (*TCRP Report 97*) of the Transportation Research Board (TRB) suggested that fundamental, transformative change in business and service organizations commonly involves changes across the six key dimensions below, which together provide an operational definition of "mobility management." These six dimensions formed the basis by which information of promising practices in integrated mobility were collected.

- o Core mission shift from simply providing a form of capacity with assets you own to a broader responsibility for managing mobility, managing a wide range of assets
- o Collaboration across modes, organizations, and jurisdictions has become a fundamental strategy
- o Deployment of state-of-the-art information technologies like universal fare systems; real-time, on-street customer information; and unified scheduling and dispatching systems
- o Integration of assets, services, and business functions is a common feature of emerging business models
- o New business units, functions, skills, and business processes
- o Measures of success and performance are increasingly focused on the quality of the customer experience

In developing this brief, information on mobility management practices were gathered through an online survey tool hosted on the NCMM website, emails to all members of the Mobility Management Committee of the American Public Transportation Association (APTA), and multiple mobility management discussions which took place at several professional conferences. These practices were reviewed by NCMM staff and a member of the APTA Mobility Management Committee who selected five communities/programs for this profile according to a protocol developed by the NCMM. Follow up interviews were then conducted to fill in any missing information gaps. The five programs profiled below were selected on the basis of satisfying the protocol's criteria, while also being representative of integrating a diversity of transportation modes and services into each community's approach to mobility management.

The programs profiled below are listed below (hyperlinked to their place in the document for quick reference):

- o The Société de Transport de Montréal (STM): Integrating Taxis into Public Transit Service
- o Connection to Care Program: Making Health Care Trips More Affordable for Customers
- o Valley Regional Transit: Integrating Bikesharing into Transit Options
- o King County Metro: Measuring Changes in Non-Motorized Connectivity and Impact on Transit Ridership
- o San Francisco Municipal Transportation Agency: Coordinating Private Shuttle Use of Public Transportation Infrastructure

The Société de transport de Montréal (STM)

Integrating Taxis into Public Transit Service

The Société de transport de Montréal (STM) operates bus, heavy rail, and paratransit service in the Montreal region, with an average of 1.3 million boardings per weekday, making it the third most utilized transit system in North America (after New York and Toronto). STM aims to "become a trusted integrator" through its various mobility management initiatives, which include fare and information integration, creation of partnerships, incorporation of active transportation, and providing "transit by taxi" with shared taxis in low-density-population areas. While centered around the dense urban core of Montreal, STM has used its mobility management program and partnerships to enhance connectivity and job access in the region's more rural areas in more cost-effective ways than could be done with traditional fixed-route operations.

Collaboration and Integration of Taxi Service

STM has undertaken significant work to integrate and even enhance taxi service in the Montreal region to better complement its existing transit service. STM contracts with taxis to deliver paratransit services and to cover geographic gaps in its fixed-route transit network. Taxis provide 88% of the 3.2 million annual paratransit trips in the Montreal region.

In addition, STM contracts with taxi companies to provide "taxibus" service through shared taxis that operate both fixed-route and demand-response types of services available to the general public without eligibility restrictions. STM's development of the taxibus program first began in the 1990s in close partnership with local authorities, businesses, and community leaders.

Taxibus has provided a cost-effective means to expand STM's service coverage to 99.5% of the Montreal area, serving areas of low population and employment densities. A route may see as few as 10 passengers per day. Such low ridership necessitates that the decisions regarding stop locations, schedules, and type of service (fixed-route or demand-response) are made in discussion with local elected officials and rider representatives. STM also consults with local business owners to gather information on workers' schedules and transit needs prior to developing the taxibus route and schedule.

Taxibus routes have been implemented to serve industrial zones that provide job opportunities but may not have enough ridership to implement regular bus service. One hour of taxibus service can cost approximately CAD$45 (approximately CAD$10 per trip) compared with CAD$100/hour for STM's standard bus. Taxibus programs can also serve as an intermediary step until ridership growth justifies the use of larger vehicles.

Innovative Features

STM has made extensive efforts to integrate taxibus serve with the rest of STM's system. Taxibus routes provide feeder service to regional commuter rail stations and other transfer points to conventional fixed-route service. Fares for the taxibus are identical to STM's regular transit fares, and payment is only accepted via the standard STM fare card. Full fare integration across all of STMs modes enables passengers to make complete trips regardless of modes used or the number of transfers made.

Recognizing the role taxis play in complementing STM's transit service, STM allows all taxis to use its extensive network of dedicated bus lanes, often enabling faster trip times during certain congested periods than can be made by a private automobile. STM is investigating additional means of coordinating with taxi companies when its regular transit service is disrupted to increase the availability of taxis in the affected area.

STM has also worked to integrate its services with those of shared use transportation providers by offering discounted, bundled transportation services across both modes. Branded as a "transportation cocktail," these partnerships include preferential rates for purchasing bikeshare and carshare memberships in conjunction with transit passes. By pioneering these partnerships, STM aims to "promote a smart combination of individual means of transportation" in combination with its transit service to better provide alternatives to the automobile.

STM has expressed a willingness to extend the collaborative relationships it has developed with these shared use operators into new ventures, including service planning.

Monitoring and Evaluation

STM monitors the performance of the taxibus system on a monthly basis, collecting quantitative and qualitative data. Every month, participating taxi companies submit ridership reports for each taxibus route to STM. In addition, STM conducts its own monitoring on the road. Finally, STM compiles customer comments itself and in collaboration with local municipalities.

STM believes the "transportation cocktail" has contributed to the growth of carsharing, bikesharing, and transit ridership in Montreal, where presently there are more than 40,000 regular bikeshare subscribers and 30,000 subscribers for Communauto, a conventional carsharing operator in Montreal. Car2Go, a recent one-way carsharing addition to Montreal, is also experiencing strong growth. So far, STM has found that most carsharing and bikesharing users also use public transit for some of their trips. By the end of 2014, STM anticipates having origin and destination data that will help provide a clearer understanding of how people are utilizing the three modes and in what combinations.

Looking Ahead

STM and the carsharing operator, Communauto, are currently engaged in a pilot program to improve the ease by which people can access and pay for both agencies' services by testing the use of STM's contactless fare card as an identifier when accessing carsharing services. STM reports that thus far, the "pilot is going well and we expect a full deployment on all Communauto cars over the next year or so."

For more information on this project, contact Marc Bélanger, director of planning and development at marc.belanger@stm.info or Pierre Bourbonnière, director of marketing at pierre.bourbonniere@stm.info.

Connection to Care Program

Making Health Care Trips More Affordable for Customers

Mobility Management of South Central New York (MMSCNY) is a diverse partnership of transportation professionals, health and human service agencies, medical providers, and community organizations in Broome and Tioga Counties seeking to improve transportation access and coordination in South Central New York. The challenge that MMSCNY has sought to address is to find workable transportation solutions amid the region's relatively limited options, with a particular focus on the region's rural communities.

MMSCNY's principal program has been a call center that provides free trip planning, transportation education and information, and connections to travel training services. As the call center received more calls, staff found that often individuals would inquire about healthcare-related transportation options that were more affordable than the existing options. This was especially the case for individuals requiring sustained treatment over an extended period of time. To better address the needs of rural individuals without the financial means to seek transportation to health services, MMSNCY, in partnership with other organizations, developed the Connection to Care program to provide a more comprehensive menu of travel options and financial assistance when appropriate. While consistent with MMSCNY's mission, the development of the Connection to Care program has meant an operational shift from solely providing information/referral/mobility management services to also offering trip-based financial assistance.

Connection to Care Program

The Connection to Care (CTC) program is designed to serve rural individuals with significant medical needs and who are financially constrained but do not qualify for Medicaid. By default, the program has been utilized primarily by the region's older adult population.

Individuals within the region served by MMSCNY access the CTC program initially via the call center, where MMSCNY's mobility managers learn about the caller's trip purpose and needs. If an individual requests financial assistance to make the trip, MMSCNY uses an established protocol to ensure that all other options have been exhausted, the most cost-effective transportation option is used, and the individual's ability to partially cover the cost of the trip is explored. The latter has been an important part of MMSCNY's strategy to promote shared responsibility rather than charity.

The CTC program helps the target population with accessing multiple transportation modes, including volunteer drivers, taxis, medivans, intercity bus, public transportation, and fuel cards for private automobile use. Financial assistance is then provided via one or a combination of the following options: enhanced mileage reimbursement to certified volunteer transportation providers, pre-paid fuel cards, bus passes, and private fare payment (e.g., taxi, motor coaches).

The planning and first year operation of the CTC program was made possible through a $25,000 grant from Ascension Health, a large healthcare system in the area. The original grant application was facilitated by a local hospital that was already an MMSCNY partner organization and a member of Ascension Health. The final program was developed in conjunction with stakeholders from

transportation (local, state, and national), health and human service, medical, and volunteer communities.

MMSCNY partner organizations have been the primary means of raising awareness about the CTC program. The program has received referrals principally from rural primary medical care sites. Additional sources of referrals include human service agencies such as Catholic Charities and various transportation groups.

Innovative elements

The Connection to Care program exhibits a number of innovative partnerships. Primarily, the program has benefited from its strong partnerships with and buy-in from medical providers. The original grant application was made possible through the partnership with Our Lady of Lourdes Hospital. In addition, the program has relied on partnerships with clinics and other medical providers to market the program. Finally, MMSNCY partnered with AmeriCorps, an initiative of the Corporation for National and Community Service, to place volunteers as call-takers. The latter has allowed MMSCNY to increase the number of call takers supporting the program in a cost-effective manner.

Monitoring and Evaluation

MMSNCY tracks a range of metrics to measure the effectiveness of the program, including the number of one-way and round trips, total trip mileage, list of unique individuals served, cost per mile, transportation mode, and payment method utilized. The latter allows MMSCNY to compare fuel card disbursement with volunteer reimbursement or taxi vouchers, making it "easy for [MMSCNY] to draw conclusions about which are the most efficient options and which are the most valuable options to support," says project coordinator Nick Cecconi.

Lessons and Advice

MMSNCY stressed the need to have good call takers who have a full understanding of the program and ability to identify appropriate use of CTC funds. In addition, good data plus tools to both evaluate that data and generate reports are valuable to the outcomes of the project. MMSCNY has effectively used Microsoft Access for these purposes. "Being able to discuss the individuals helped and the difficulty of their situation provides good anecdotal support, but showing that the CTC funding was used by 111 unique individuals to travel over 41,000 miles provides a much stronger picture of how important the funding was," says Cecconi.

In addition, MMSNCY recommends partnering with a wide-ranging group of stakeholders and securing their interest in a successful project. This requires that one "continuously develop and maintain strong relationships with those partners and find ways to add value to their operations."

Finally, while working with AmeriCorps members to carryout certain aspects of the project has been deemed a success by MMSNCY. Other organizations looking to form a similar partnership with AmeriCorps should be mindful that the program's regulations are stringent, that members' service time is limited, and that significant organizational effort is required to recruit and train new members on a yearly basis.

Looking Ahead

The need for medical care in South Central New York, as is the case with most places, is only increasing as its population ages. Providing affordable access to medical care is a priority for MMSCNY and it will look to strengthen its CTC program in the near and mid-term.

For more information on this project, contact Nick Cecconi at ncecconi@uwbroome.org.

Valley Regional Transit

Integrating Bikesharing into Transit Options

Valley Regional Transit (VRT) is the regional public transportation authority in the Boise, Idaho area. It provides fixed-route bus and demand-response services over a service area of 66 square miles with around 350,000 people. VRT was formed out of the merger of Ada and Canyon County public transportation authorities, and was conceived from the outset with mobility management at its core mission.

VRT's mission is "to develop and manage transportation resources and to coordinate the effective and efficient delivery of safe transportation options to the region's citizens." In addition, the strategic plan includes a number of guiding principles that help define VRT's broader responsibility for managing mobility across a wide range of modes and assets. These include the principal of connectivity "between different providers and different modes" in "truly easy to understand" ways. VRT continues to be guided by this mission and principals as seen in the recent development of VRT's newest mode, bikeshare.

One of VRT's challenges since its founding has been how to achieve this mission without dedicated sources for state and local funding. Instead, VRT has been funded through a combination of federal transit funds, local general funds, and farebox and advertising revenues. While not having access to dedicated sources of funding at the state or local levels, VRT's partnerships have allowed it to continually improve the coordination of mobility options in the Boise area, allowing VRT to develop an overall coordination plan for the Boise region, as well as more targeted plans for refugees, veterans, and older adults. VRT's coordination efforts have generated positive results in areas such as joint marketing, technology enhancements, the development of a centralized customer information system, travel training, and a volunteer transportation service for seniors, veterans, those with disabilities, and others.

Development of Boise Bikeshare

One recent initiative for VRT is its leadership in developing a bikeshare system to increase the availability of alternative transportation options in downtown Boise and around the Boise State University campus. VRT these areas as having the greatest potential for reductions in the number of unnecessary short-distance car trips. VRT views the development of bikeshare as not only beneficial to these short trips, but also encouraging carpooling and vanpooling to the downtown as the system may help with concerns about a lack of mobility options at the workplace. When completed, Boise Bikeshare will have 140 bikes and 14 stations in the service area. The program is expected to be launched in spring of 2015.

The VRT bikesharing program features innovative partnerships in the planning, implementation, and planned operation of the system. VRT partnered with Boise State University's Department of Regional and Community Planning to complete the bikeshare station feasibility study. BSU faculty and students helped VRT identify areas with the greatest potential to support bikeshare usage. Consideration was given to access to transit, employment, and residential density and attractions, like Boise State University, museums, parks and the Greenbelt. VRT stressed the importance of doing feasibility studies early in the process. In addition, VRT's efforts have benefited from a large number of additional stakeholders, which have been engaged in all aspects of the process.

The initial capital costs of the system have been supported by a grant from the U.S. Department of Transportation's Transportation Alternatives Program, which requires a 7.34 percent state or local match. VRT was able to partner with the local health district, which provided the local match, as it was interested in increasing active transportation options. In addition, the City of Boise has provided start-up funds to cover the project's implementation.

VRT has also formed a partnership with a nonprofit organization that is assisting in creating social enterprise job development opportunities around the bikeshare system. The goal of the partnership is to connect low wage or unemployed workers with new jobs created by bikeshare system's operations, including positions in repair, maintenance and balancing of the system.

Boise Bikeshare will be operated by VRT staff, placing it among a handful of bikeshare systems that are directly operated by public transit providers rather than by a third party. Operating funds are expected from private sources, while VRT will provide administrative support and resources through its customer information center. The private operating funding sources are expected to be membership sales, sponsorships, and advertising on the bikes and stations. VRT is developing plans to facilitate and encourage downtown employers to purchase corporate bikeshare memberships for their employees. By utilizing VRT's existing customer information center and other staff, VRT expects it will be able to realize greater cost efficiencies and economies of scale.

Innovative Features

VRT's implementation of its bikeshare system offers opportunities for integration with VRT's other services. First, the bikeshare system is exploring options for using the same integrated fare payment card used aboard VRT's existing fixed route buses, providing a simple and seamless experience for accessing services from multiple modes. While integrated payment systems are increasingly common across transit providers in a region, few systems have as yet implemented common payment system across transit and bikeshare system. In addition, VRT is cross-training its customer service representatives to offer a "one-stop shopping" experience for customers looking to navigate the Boise area whether by bus, bike, other services, or some combination.

For more information on this project, contact Kelli Fairless at kfairless@valleyregionaltransit.org.

King County Metro, Seattle, WA

Measuring Changes in Non-Motorized Connectivity and Impact on Transit Ridership

King County Department of Transportation, Metro Transit Division (King County Metro) operates bus, trolleybus, vanpool, streetcar, and dial-a-ride services in a service area of 2,000 square miles with 2 million people. In addition, Metro provides scheduling and technical support to the University of Washington's Dial-a-Ride program.

The Central Puget Sound region is home to seven transit providers operating a system that incorporates one of the widest ranges of modes in the country, including both surface and waterborne public transportation. With this physical and institutional geography in mind, awareness of mobility management concepts and putting them into practice have long been evidenced in the Puget Sound region through many initiatives of coordination and integration. King County Metro, Sound Transit, Community Transit, Everett Transit, Pierce Transit, Kitsap Transit, and Washington State Ferries participated in transit fare coordination dating to the early 1990s and culminating in the ORCA ("One Regional Card for All") smartcard that works on all seven systems. King County Metro also developed the largest publicly owned vanpool program in the U.S., with a fleet of nearly 1,400 customer-operated vans. In addition, King County Metro, Community Transit, and Pierce Transit jointly use facilities to plan, schedule, and operate regional express bus service on behalf of the regional transit authority, Sound Transit.

Regional Coordination of Non-Motorized Access Improvements

King County Metro and Sound Transit collaborated on the *Non-Motorized Connectivity Study*, which looked at potential and priority locations where right-of-way improvements can increase pedestrian and cyclist access to major King County routes with frequent bus service and other regional transit centers. The study provided a data-driven understanding of gaps in non-motorized connectivity, and a way to prioritize which gaps should be addressed first based on their potential to positively impact ridership. The study also identified priority areas for high-capacity bike parking at key station areas, further maximizing the potential benefit to transit by non-motorized modes.

Innovative Features

King County Metro is the first public transportation provider to quantitatively measure the change in transit ridership from changes in non-motorized connectivity. King County Metro developed a statistical model and analysis tool that supports a cost-benefit analysis and provides the agency with a decision-making framework that is transparent to the public. In addition, the tool can be shared with local and regional partners to improve station area planning and supporting grant proposals.

Stakeholders

The Non-Motorized Connectivity Study was developed in close collaboration among King County Metro, Sound Transit, local municipalities, and the region's metropolitan planning organization. Staff from the various jurisdictions provided input on the project's methodology. At the end of the study, the local jurisdictions received conclusions and a toolkit.

Monitoring and Evaluation

The study provides King County Metro with additional tools to evaluate the distance that people can safely and comfortably walk and bike to access public transportation. In addition, it measures different types of non-motorized investments and their benefits to the transit system. Not only does this tool help Metro provide first and last-mile investments to maximize ridership, but it also helps Metro's jurisdiction partners by supplying objective data to measure and communicate project benefits to decision makers.

Lessons and Advice

King County Metro noted that acquiring regional data can be a challenge and that even when data is available, it may not be consistently maintained. Therefore maintaining good relationships with those who manage the data is important so that any questions about data differences can be addressed and future research can be done more efficiently.

For more information on these projects, contact Daniel Rowe at Daniel.Rowe@kingcounty.gov.

San Francisco Municipal Transportation Agency

Coordinating Private Shuttle Use of Public Transportation Infrastructure

The San Francisco area has a multitude of transportation services available, almost all of which are regulated by the San Francisco Municipal Transportation Agency (SFMTA). The agency also has authority over bicycle and pedestrian modes, parking and curb management, commercial delivery, traffic control and enforcement. Its regulatory jurisdiction was extended to the taxi industry and other for-hire services in 2009.

Recognizing that mobility needs exceed what SFMTA can deliver through its services, and with a long-standing commitment to encompassing alternatives to the private automobile, whether a SFMTA service or another nonprofit, private, or other public service, the agency has embraced the "integration of car, carsharing, bicycle use, bicycle-sharing, walk, public and private transit and paratransit" modes. In 2013, the agency committed to working through partnerships and pilot programs to expand transportation options such as ridesharing, private shuttles, and taxi service. In fact, that year the agency formally adopted a new mission statement: "We work together to plan, build, operate, regulate, and maintain the transportation network, with our partners, to connect communities."

Challenges and Opportunities Arising from Private Shuttle Usage Growth

SFMTA's working relationship with private shuttle operators is still evolving. San Francisco and the surrounding Bay Area region have witnessed a rapid growth of privately operated commuter shuttles that provide both intracity and intercity service. As of January 2014, private shuttles provided more than 35,000 individual boardings on an average weekday in San Francisco. The majority of these commuter shuttles are closed systems restricted to a company, university, or other institution's employees and/or students.

Since 2008, SFMTA and the San Francisco County Transportation Authority (SFCTA) have studied the challenges and opportunities arising from the growth of private shuttles. The shuttles' use of public on-street bus stops has caused challenges including delays to publicly operated buses, localized congestion, and safety hazards for cyclists. At the same time, the city recognizes that there have been significant public benefits from the shuttles such as reduction of single occupancy auto trips and private auto ownership, and an overall increased usage of transit and active transportation modes. Moreover, private shuttles have been identified as an important means to addressing the city's ambitious greenhouse gas reduction targets, supplementing the long standing Transit First Policy.

SFMTA is currently engaged in a pilot program to provide some regulation of private shuttles and increase coordination with public transit. Before adopting the current pilot policy program, SFMTA considered alternatives such as a complete ban on the use of public bus stops by private shuttles, which posed questions about the need to remove on-street parking to accommodate shuttles at separate zones.

Prior evaluations by the San Francisco County Transportation Authority found that for private shuttle services to be successful they should 1) have secure start-up and ongoing funding arrangements, 2) be integrated and coordinated with fixed-route transit, and 3) create a partnership between transit operator(s), local agencies, businesses and/or nonprofit groups.

The pilot approach approved by the SFMTA Board in January 2014 includes allowing permitted shuttles to use a network of up to 200 designated stops in exchange for paying a fee. As of July 2014, the fee was set at $3.55 per stop event in a designated network of shared Muni-permitted commuter shuttle stops. A stop event is an individual instance of loading or unloading at one of the designated zones. The pilot program requires commuter shuttle service providers to apply for permits and includes permit conditions that call for compliance with operational guidelines that include giving priority to public buses at shared stops, and driver training requirements. Private shuttle operators must also provide data feeds per SFMTA specifications, including real-time shuttle location data to allow SFMTA to integrate data from other modes, manage conflicts with other providers, and evaluate the program's performance. This robust data-collection component could provide service-planning and market demand info to help the SFMTA and greater Bay Area transit agencies with their own service planning and deepen the level of coordination between public transit and private shuttle networks.

In developing the pilot program, SFMTA solicited public input both online and in person. Suggestions for shuttle stop locations were solicited through an interactive map and an accessible online comment tool. Two public meetings were also held to collect in-person feedback and suggestions.

Monitoring and Evaluation

To measure the effectiveness of managing and regulating commuter shuttle loading activities, the SFMTA will conduct before and during pilot observations of select Muni zones, audit GPS data of shuttle operations, conduct a survey of shuttle and Muni operators, and develop a cost report to answer these questions:

- *Does managing commuter shuttles by allowing sharing at certain Muni stops reduce conflicts for Muni and other users?* Of particular interest for mobility managers, the pilot will examine the effects of shuttle use at Muni stops on curb denials for people in wheelchairs as well as with strollers. In addition, other conflicts to be evaluated include delays to public transit because of shuttle use and the blocking of bike lanes by shuttles.
- *What enforcement is needed to effectively regulate shuttles, given a permit program framework?* SFMTA will audit GPS data feeds from on-board shuttle devices to evaluate compliance with the terms of the permit. At present, this includes an assessment of private shuttle usage of stops within the network, usage of stops outside of the network, and dwell time.
- *What are the actual labor and capital needs to accommodate commuter shuttles within San Francisco?* SFMTA will address this question by tracking the actual administrative costs associated with the program, identifying capital improvements needed to accommodate shuttle buses (e.g., , signal timing, stop improvements), and identifying costs for effective enforcement strategy.

Looking Ahead

If the pilot evaluation demonstrates that sharing designated public transportation zones with commuter shuttles successfully supports commuter shuttle operations while reducing conflicts with the public transportation operations, the SFMTA may consider making the pilot network permanent or proposing a revised permanent network. If the project does not demonstrate the intended benefits, the SFMTA may consider whether any refinements in the approach would address remaining problems. If the

conclusion is that commuter shuttles and Muni are not compatible at any shared stops, the SFMTA may then consider requiring commuter shuttles to pursue creation of white zones, curb areas designated for passenger loading and unloading with certain time restrictions, for shuttle stops or other alternatives not yet identified.

In addition, SFMTA is participating in an effort led by the San Francisco County Transportation Authority to pilot the consolidation of private shuttle services for companies in the Showplace Square neighborhood of San Francisco. The coordination of the shuttles is expected to improve job accessibility and cost-efficiencies while retaining at least the same level of service. Although shuttles are privately operated, the public agencies involved in the program have helped facilitate the conversation between area employers that may lead to institutional arrangements for contract management and service planning.

Implications for Other Communities

The discussion about private shuttles and the use of public infrastructure is still evolving in San Francisco. With the continued emergence of transportation network companies and private transportation services such as Bridj in the Boston area and Shift in Las Vegas, more communities across the country will have to consider how to integrate these services within the public transportation umbrella. SFMTA's experience as it identifies how best to integrate these services into the cadre of transportation options will be valuable for many communities. The mission that SFMTA has adopted, to work together to plan, build, operate, regulate, and maintain the transportation network, with our partners, to connect communities" is a good starting point for that integration.

For more information on this project, contact Carli Paine at Carli.Paine@sfmta.com.

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