

# Executive Summary

## Project Summary

The New York Metropolitan Transportation Council (NYMTC) area, encompassing the five boroughs of New York City (Bronx, Brooklyn, Manhattan, Queens, and Staten Island), Nassau and Suffolk Counties on Long Island, and Putnam, Rockland, and Westchester Counties in the Lower Hudson Valley, has a diverse, multi-modal transportation environment that includes several layers of public transit, paratransit services, and human service transportation programs. The objective of this Coordinated Public Transit-Human Services Transportation Plan (“Coordinated Plan”) is to identify and prioritize coordination strategies that will improve the efficiencies of these varied and complex services. Ultimately, the goal is to enhance the capabilities of funding that currently supports these community transportation services in the region, enabling the funders to expand service or introduce new mobility options for persons who depend on the services. In this Coordinated Plan, “community transportation” refers to public transit and paratransit services, other public transportation services, human services transportation, and non-emergency medical transportation services that focus on older adults, persons with disabilities, and persons below the poverty line.

This Coordinated Plan represents an update of NYMTC’s previous plan developed in 2009. The 2009 Coordinated Public Transit-Human Services Transportation Plan (CPT-HST) was guided by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the federal transportation act guiding transportation funding at that time. SAFETEA-LU required that regions develop a coordination plan as a condition to access programs offered by the Federal Transit Administration (FTA), which funded transportation services focused on particularly low-income workers, older adults, and persons with disabilities.

At the time of this update to the Coordinated Plan (2013), surface transportation planning and programming is guided by new federal legislation, Moving Ahead for Progress in the 21st Century (MAP-21). The legislation took effect on October 1, 2012, and will guide surface transportation funding for 27 months until January 1, 2015. MAP-21 includes several strategic changes from SAFETEA-LU, including the way human service transportation programs are funded and the associated requirements for coordinated planning<sup>1</sup>.

One of MAP-21’s central goals was to reverse the proliferation of smaller and more specialized programs and consolidate them into larger programs that give funders more flexibility. The challenge is to create the appropriate balance within a single funding source to meet the diverse needs of these key groups.

Given its role as the metropolitan planning organization (MPO) for the region, NYMTC is responsible for overseeing the development of a plan to address coordination of local community transportation services, ensuring that the region will continue to receive specific FTA funding. The coordinated planning process seeks to improve and provide mobility and accessibility to older adults, persons with low income and persons with disabilities. Accordingly, this plan focuses on identifying (1) demographic changes that occurred since the 2009 plan was issued, (2) the changes in unmet needs of the population groups largely dependent on these services, and (3) coordination strategies to address those unmet needs.

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<sup>1</sup> Sources include: MAP-21 Transit Programs Summary and MAP-21 Program Overview on the FTA website, <http://www.fta.gov/map21>

The update consists of six separate documents: an Executive Summary, a comparison of the new with the former federal transportation legislation, update to the demographic chapters for New York City, for Long Island, and for the Lower Hudson Valley, plus a sixth document that focuses on Regional Needs and Strategies. This Executive Summary summarizes key findings from the three subregional demographic chapters and the Regional Needs and Strategies document.

## Federal Planning Requirements and Policies

The 2013 Coordinated Plan Update was developed in accordance with MAP-21. Some of the most salient examples of the MAP-21 policy direction are apparent in the way transit funds—and in particular programs directed towards older adults, persons with disabilities, and persons with low income—are funded and distributed. Highlights of coordinated planning changes are listed below, noting that at the time of this plan, final guidance on MAP-21 had not yet been issued by the FTA.

MAP-21 eliminates the Job Access and Reverse Commute (JARC Section 5316) program.

Program funds aimed at providing services to low-income individuals to access jobs or support reverse commute are now eligible for funding under either the Urban Area Formula Grants (Section 5307) or the Rural Area Formula Grants (Section 5311).

- λ Projects funded as JARC projects do not have to be selected from a coordinated planning process. However, FTA encourages MPOs and Section 5307 recipients to continue the coordinated planning process and consider the funding needs of existing JARC projects and services.
- λ The New Freedom Program (Section 5317) is eliminated. Instead, funding for persons with disabilities is absorbed into the renamed Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310).
- λ Projects selected for funding under Section 5310 must be derived from a locally developed, coordinated public transit-human services transportation plan. However, the competitive selection process, which was required under SAFTEA-LU, is now optional.

## Work Plan, Methodology and Products

The update to the Coordinated Plan includes a comparison of SAFETEA-LU to MAP-21, and updates to the demographic chapters using data from the 2010 census, 2007-2011 American Community Survey 5-year estimates, and 2009-2011 American Community Survey 3-year estimates. The Regional Needs and Strategies document as well as this document reflect those updates combined with the work done in the 2009 plan.

## Previous Coordinated Planning Efforts

With SAFETEA-LU requirements in mind, NYMTC submitted to FTA an Interim Coordinated Public Transit – Human Services Transportation Plan in 2006. The objectives of the Interim Plan were to ensure a continuous flow of FTA funding to the region and to lay the groundwork for the 2009 plan.

The 2009 project work plan and research methodology was established to follow the federal requirements. At the project's outset, a regional Steering Committee as well as three subregional Stakeholder Advisory Committees, representing New York City, Long Island, and the Lower

Hudson Valley, were formed. The former guided the plan, while the latter committees offered additional direction, facilitated access to stakeholders, and validated subregional findings.

Initial efforts involved primary and secondary research tasks: reviewing existing coordination efforts and plans, interviewing stakeholders, surveying community transportation providers, evaluating existing public transportation services, and mapping community socio-economic and demographic characteristics. Data was then analyzed to determine where redundancies and gaps in services exist. With this analytic process complete, the study team began developing preliminary recommendations for coordination policies and strategies.

Once an initial assessment of redundancies, gaps, and needs was prepared, the study team held a series of community workshops (with service providers, stakeholders, and members of the public) in each of the ten counties in the NYMTC planning area, including the five boroughs of New York City. The purpose of the workshops was to verify findings on services and needs and to seek input on preliminary sets of strategies based on the shortcomings identified. In addition, one focus group for each of the three target populations in each of the ten counties (30 focus groups total) was conducted. Each group focused on themes identified by the preceding outreach efforts and analysis. They were also used to determine which solutions and obstacles were most applicable in the NYMTC planning area in general and individual subregions in particular.

The public was also invited to participate in the planning process. In addition to offering this opportunity at the combined stakeholder workshops and public meetings, NYMTC established a Web page to inform the public about the combined workshops and meetings, disseminate information, and elicit feedback. Press releases advertising the workshops were provided to the local media, and newsletter articles were published to publicize the project.

## Coordination Efforts in the NYMTC Planning Area

NYMTC members have long supported and encouraged the coordination of human service programs.

### **New York City**

There are several examples of successful coordination in the New York City region, including informal efforts where agencies work together on a small scale as well as larger, more formalized programs. For example, the New York City Department for the Aging funds a network of community transportation services that is designed to complement the Metropolitan Transportation Authority New York City Transit's Access-A-Ride, whose Americans with Disabilities Act (ADA) paratransit-eligible customers include many who are also seniors. Services are organized geographically so that seniors in all parts of the city have access to at least one provider. Small-scale coordination occurs within this network of services; individual operators in nearby neighborhoods support each others' services by sharing information, rides, and in some cases, back-up drivers.

New York City Department of Transportation (NYCDOT) funds a Mobility Manager program that works with other Mobility Managers in the region—as well as human service agencies, not-for-profit organizations from the NYMTC Steering committees, and advisory groups—that serve the target populations to coordinate new approaches for implementing accessibility improvements

and strategies to mitigating mobility impairments in the region. NYCDOT recently held a Regional Mobility Management conference titled: Coordinate, Communicate, Connect: A New Era for Mobility Management, through which over 50 people representing 27 non-profit organizations were able to learn about the future of mobility management, funding strategies and coordination efforts in the region.

Another major coordination success story in New York City is available from the Inter-Agency Transportation Services (IATS), which is a consolidated transportation service for individuals with developmental disabilities traveling to and from day programs. IATS manages a transportation program that coordinates service for 120 member agencies and organizations helping 90,000 individuals and their families. Since consolidating services, IATS has achieved significant service quality improvements and reduced the administrative burden for individual agencies.

NYCDOT also has made infrastructure improvements to facilitate access to the transit system as well as to neighborhood destinations and attraction for those with mobility impairments. This includes installing neckdowns, medians, and refuge islands as well as instigating signal-timing changes.

## **Long Island**

One type of ongoing successful coordination efforts include community transportation service providers that transport clients of several different agencies or coordinate functions with other providers. In Suffolk County, Maryhaven Transportation Services transports clients of other agencies under contract. The Community Programs Center of Long Island, also in Suffolk County, participates in joint procurement and training, shared vehicle use, and vehicle maintenance with other agencies.

## **Lower Hudson Valley**

In all three counties of the Lower Hudson Valley, human-service agencies depend on existing public transportation services. In areas where the existing public transit networks are extensive, these agencies heavily rely on the public systems to meet client mobility needs. However, in other areas, where public transit services are not as readily available, human-service agencies have had to develop their own network of resources to ensure mobility for the target populations. In some areas, the system is highly coordinated; in other areas, agencies operate client services in an independent, uncoordinated fashion. This wide range of existing conditions was found despite the fact that publicly provided paratransit services in at least two of the counties (Westchester County and Rockland County) exceed the requirements imposed by federal law, offering longer service hours, broader geographic coverage, and imposing fewer restrictions about who can use the service.

Examples of the how the coordinated service network operates can be drawn from each county. In Westchester County, the Office for the Disabled manages the county's complementary ADA paratransit service. The county makes decommissioned paratransit vehicles available to the municipalities for local use. In Rockland County, the Department of Public Transportation's paratransit program serves not only ADA paratransit-eligible customers but is open to seniors as well. In Putnam County, there are informal information networks and referral services that are used to direct individuals in the target population groups to other provider organizations in the public and non-profit sectors.

## Barriers to Coordination

While each region can cite significant ongoing success stories, there are opportunities to increase coordination and remove existing barriers. Despite the unique characteristics of the ten-county region, many of the obstacles were found to be common regionwide.

The most pervasive obstacle to coordination is a general lack of awareness or understanding of available services. In many cases, operators are not aware of other services being provided; therefore, they are simply not able to identify what organizations they could coordinate with or potentially share services or costs. Stakeholder meetings conducted throughout the 2009 plan marked the first occasion that many community transportation stakeholders met each other, and the sessions proved to be fruitful for basic information sharing, such as where to find the best gas stations and mechanics. Without a formal structure of communication or support, operators must take coordination and associated regulatory and funding challenges upon themselves.

Other specific barriers to coordination that were pervasive throughout the region include:

- **Regulatory restrictions and client needs.** Many agencies feel their clients have specialized needs and circumstances that make sharing rides or services challenging. Likewise, agencies perceive that funding restrictions governing use of their vehicles limit their ability to coordinate.
- **Concern over insurance, accounting, and billing.** Agencies expressed concern about insurance, billing, and accounting issues imposed by funding sources as a barrier to coordination. Many agencies do not fully break down the costs of their services and thus are not sure how much transportation is really costing them or where they might look to save costs.
- **Interest in protecting existing resources.** Although expressed outright by only a handful of agencies, many existing providers likely share a protective instinct about their resources and facilities. There is a sense that transportation resources are not easily acquired and are essential to agency success, and thus need to be protected.
- **Staff at smaller agencies can be isolated.** Many small transportation providers have limited opportunities to work with and learn from other providers. This is especially true for agencies where transportation is an ancillary, rather than primary, function.
- **Lack of technical expertise and knowledge of coordination strategies.** Along with several of the barriers mentioned, agency staff do not consistently know how to go about coordinating services. In nearly all cases, they recognize problems and suspect that working together could help them, but they are uncertain about how to get started. This is true for agencies seeking to both purchase and sell services.

For all three subregions, barriers to coordination are both overlapping and compounding. Funding restrictions on vehicle use limit the extent to which agencies can coordinate existing services (although some of these limitations are not as restrictive as perceived). Operationally, high levels of demand, non-accessible vehicles, and an inability or lack of interest in mixing client populations in vehicles have prevented additional or coordinated ridership. While possible, overcoming such barriers requires leadership and determination to find answers, solutions, resources, and regulatory clarification. Since the 2009 plan, there has been an increase of coordination throughout the region.



## Existing Services, Unmet Needs and Service Gaps

To understand unmet needs, service gaps, and service redundancies, the study team examined existing community transportation services and how well available services met the needs of the target populations. This analysis was conducted for the region as a whole, individually for each subregion, and within each subregion for the ten individual boroughs and counties. Through this process, the unmet needs, service gaps, and redundancies within each network were identified. Findings for each subregion and for inter-regional services are presented below.

### New York City

#### Existing Transportation Services

The subregional and regional network of public transportation services is well documented in the main report. It is widely known that New York City is unique in the United States because nearly all geographic areas in the city are served by at least one transportation provider, with many services available 24 hours a day, seven days a week. However, the accessibility and availability of these services varies by community and neighborhood. An individual's abilities also factor into their access to and use of these services. Members of the target populations do not always enjoy the same access to transportation as other groups and thus are frequently challenged to travel to specific locations for different trip purposes and at certain times of the day. The project analysis begins by examining unmet needs, gaps, and redundancies in the existing services, and then works towards identifying the most appropriate and effective strategies needed to improve community transportation services.

New York City effectively has five layers of transportation services:

- 1) Public Transportation** – New York City's public transit network consists of rail, subway, bus, and ferry services. The Metropolitan Transportation Authority (MTA) operates extensive subway and bus routes in all five boroughs, most of which operate 24 hours a day, seven days a week. New York City Department of Transportation (NYCDOT) operates a free ferry service between Lower Manhattan and Staten Island. MTA Metro-North Railroad (Metro-North) and MTA Long Island Rail Road (LIRR) operations include more limited rail service within the city, as does the Port Authority of NY & NJ (PATH service). These three rail services as well as public transit services, including Nassau Inter-County Express (NICE), Westchester Bee-Line, and New Jersey Transit (NJ TRANSIT), and private bus operators, provide transportation between New York City and suburban communities.
- 2) Privately Owned Public Transportation** – New York City has a fleet of more than 13,000 taxis and approximately 35,000 for-hire vehicles, regulated by the city's Taxi and Limousine Commission (TLC). These cars are available to anyone who is able to pay the fare, although only a very small portion (less than 2%) of the fleet is wheelchair-accessible. NYC 311 is currently offering accessible taxi dispatch service through a pilot program. Private bus companies provide commuter bus services between New York City and surrounding suburban communities and private ferries provide service within the city and between the city and suburban counties. In 2012, the New York City Department for the Aging (DFTA) implemented a voucher program that provides persons with disabilities, in two community districts, a debit card to pay for taxi rides.

- 3) **ADA Complementary Paratransit Services** – In compliance with the ADA, MTA New York City Transit (NYC Transit) offers complementary paratransit to individuals who because of their disabilities are unable to access or use fixed-route service. Called Access-A-Ride, this service is available in all five boroughs for travel anywhere in the city, 24 hours a day, seven days a week. Access-A-Ride also provides service within a ¼-mile corridor of NYC Transit bus routes that extend to nearby Nassau and Westchester Counties.
- 4) **Medicaid Non-Emergency Medical Transportation** – For individuals who qualify for the program, Medicaid will pay non-emergency transportation costs for individuals traveling to covered medical appointments. Ambulettes are one of the largest providers of Medicaid-funded transportation in New York City, with 173 providers licensed by the TLC.
- 5) **Other Human Service Transportation** – Human-service agencies provide specialized transportation typically targeted to meet specific client needs and to bring program participants to and from agency programming or services. Conservative estimates suggest there are at least 175 agencies citywide providing some sort of specialized transportation.

Each layer of service contributes to meeting the needs of the target populations; however, mobility challenges persist. For example, while some members of the target populations successfully use the public transportation network, access for others is challenged by physical abilities, emotional and mental limitations, language and cultural barriers, and financial circumstances. To understand how the services work together to meet the range of needs, each of the transportation services was compared against mobility criteria associated with 1) eligibility to use the service; 2) geographic coverage; 3) reservation requirements; 4) temporal coverage; 5) allowed trip purpose; and 6) cost. This analysis is shown in Figure ES-1, which also identifies the major challenges and gaps associated with individual service options.

**Figure ES-1 Transportation Services – New York City**

	Public Transportation			Community Transportation	
	Public Transit	Taxis, Car Services, and Jitneys	Access-A-Ride	Medicaid Non-emergency Medical Transportation	Human Service Transportation
Eligibility	All	All	ADA Paratransit eligible	Medicaid recipients (low income)	Age and disability based
Geographic Coverage	Available; Buses with 100% accessibility; Rail with limited accessible infrastructure	Mostly available	Available	Available	Mostly available

	Public Transportation			Community Transportation	
	Public Transit	Taxis, Car Services, and Jitneys	Access-A-Ride	Medicaid Non-emergency Medical Transportation	Human Service Transportation
Reservation Requirements	None	Advance and same day (car services, jitneys) Street hails (taxis)	Next day advance request	Next day advance request	Next day to one week or more advance request
Temporal Coverage	24/7	On demand	24/7	On demand	Weekdays, typically 8 AM to 5 PM
Allowed Trip Purpose	Any	Any	Any	Medical only	Agency programs; medical appointments; some quality of life
Cost	Low	High	Low	Low	Low
Service Challenges and Gaps	Availability, condition and maintenance of accessible infrastructure	Price; Accessibility; Availability	Eligibility; Service Quality	Limited trip purpose; Eligibility	Eligibility; Quantity of service available

### Changes to the Plan Since 2009

The process of updating the 2009 Coordinated Plan primarily involved updating the statistical analysis of the region’s demographics and broadly evaluating major changes in the size and distribution of the target populations. The update also broadly reviews existing transit services to determine if significant changes in the underlying service networks occurred. Projects funded under the previous plan were also inventoried.

### Demographic Analysis

- **Bronx:** The older adult population lives primarily in the northern and eastern sections of the Bronx while the persons below poverty occupy the southern and western sections. The below poverty population is more concentrated than the older adult population, which is more evenly spread through the borough. The Bronx has the highest percentage of persons with disabilities in the city at 14 percent.
- **Kings:** Brooklyn’s older adult population is less prevalent than people living below poverty, with 22 percent of the population living below poverty. The density of the older adult population is spread more evenly through the borough than the persons below poverty populations. Brooklyn has 235,372 persons with disabilities.
- **New York:** Manhattan contains about 58,000 more persons below the poverty line than older adults. The older adult population is heaviest in mid-Manhattan, around Central Park, while the persons below poverty reside in Upper Manhattan and the Lower East Side area. There are an estimated 154,370 persons with disabilities in the borough.



- **Queens:** The older adult population and persons below the poverty level in Queens are nearly the same in number – the older adult population represents 13 percent of the population and persons below poverty, 14 percent. The persons below poverty level are concentrated in the areas west and east of Flushing Meadows Corona Park, near the border of Brooklyn, and south of JFK International Airport. Queens has an estimated 214,530 persons with disabilities.
- **Richmond:** In Staten Island, the older adult population is less dense than the persons below the poverty line. The older adult population is spread throughout the borough while the persons below the poverty line are concentrated in the north. The borough has the lowest total of persons with disabilities at 44,666.

### High Level Trend Analysis

Manhattan and Staten Island had double digit percentage growth in the older adult population between 2000 and 2010. That contrasts with Brooklyn and Queens, which each had less than 2 percent growth in older adults. The neighborhoods in which the target populations reside in have remained relatively unchanged since the previous plan.

The one significant change to the transit system since the 2009 plan in New York City has been that the MTA has faced severe budget cuts and has raised the fare in 2010 and 2013. In 2010, the single-ride fare was raised 11.1 percent, and the unlimited monthly was raised 16.9 percent. In 2013, the base fare rose to \$2.50, the single ticket increased to \$2.75, and the monthly increased a further \$8. The base fare affects the buses, subways, and paratransit users.

### Projects Funded by 5310, 5316 and 5317

Since the previous plan was released, several projects in the region have been funded by FTA Sections 5310, New Freedom, and JARC. The projects listed are from NYMTC’s Annual Listing of Federal Aid Project Obligation for Federal Fiscal Year 2009, 2010, 2011, and 2012.

**Figure ES-2 Projects Funded by 5310, 5316, 5317 – New York City**

Funded Project	Recipient	Funding Source	Funding Amount
Area wide Intermodal Analysis and Transit Access Improvement will assess mobility and transit access challenges in East New York and Port Richmond	NYC	5316	\$715,000 (5316)
		5317	\$1,039,000 (5317)
Reduced fare transportation voucher program for seniors.	NYC	5317	\$306,000
Pedestrian wayfinding (Manhattan, Brooklyn and Queens)	NYC	5317	\$1,236,000

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Mobility manager (City wide)	NYC	5316	\$160,000 (2009)
		5317	\$160,000 (2009)
		5317	\$292,000 (2010)
NYC Department of Aging Senior Transportation Investment Program	NYC	5317	\$750,000
Association of Travel Instruction Mobility Management	NYC	5317	\$118,000
NYC Job Access Screening Tool Project	NYC	5316	\$1,540,000
NYC Safe Routes to Transit	NYC	5317	\$915,000
NYC Streets and Roadway Improvements	NYC	5317	\$526,000
Fordham Station Improvements – Design	MTA Metro-North	5316	\$960,000
Fordham Station Improvements – Construction		5316	\$1,040,000
Fordham Station Platform Improvements	MTA Metro-North	5316	\$2,000,000
Bronx Overall Economic Development Corp. Hunts Point Clean – provide free shuttle to low income worker in the industrial quarter	Bronx	5316	\$363,000
Bus stops under the EI, Phase 2 - improving safety at intermodal transit stations/bus stops	Bronx	5317	\$1,197,000
Fordham Plaza Reconstruction – the reconstruction of the plaza as part of the subway sidewalk interface	Bronx	5317	\$960,000
Section 5310 program for transporting elderly and persons with disabilities – HELP/PSI	Bronx	5310	\$84,000
		5310	\$21,000
Brooklyn Army Terminal and Bush Terminal shuttle service between public transportation and two large industrial campuses	Kings	5316	\$288,000
Section 5310 program for transporting elderly	Kings	5310	\$37,000
		5310	\$4,000
North Manhattan community based-coordinated transportation services – expand transportation availability by creating two new routes in Harlem	New York	5317	\$346,000
Section 5310 program for transporting elderly and persons	New York	5310	\$129,000

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with disabilities – United Cerebral Palsy of NYC, inc.		5310	\$32,000
Section 5310 program for transporting elderly and persons with disabilities – Jewish Home & Hospital for Age	New York	5310	\$173,000
		5310	\$43,000
Section 5310 program for transporting elderly and persons with disabilities – Bowery Residents’ Committee Services, Archdiocese	New York	5310	\$32,000
		5310	\$8,000
Design and construction of Times & Duffy Squares to improve pedestrian safety	New York	5316	\$9,884,000
Platforms : 45 <sup>th</sup> Rd - Court House Sq station on the Flushing Line	Queens	5316	\$5,948,000
Section 5310 program for transporting elderly and persons with disabilities – St. Albans Baptist Church of Albans, inc.	Queens	5310	\$33,000
		5310	\$8,000
Section 5310 program for transporting elderly and persons with disabilities – Cerebral Palsy Transport, inc.	Queens	5310	\$167,000
		5310	\$42,000
Section 5310 program for transporting elderly and persons with disabilities – Promoting Specialized Care & Health, inc. DBA F.S.C.H., inc.	Queens	5310	\$65,000
		5310	\$16,000
Section 5310 program for transporting elderly and persons with disabilities – Catholic Charities Community Services, Archdiocese of NY	Richmond	5310	\$40,000
		5310	\$10,000
Section 5310 program for transporting elderly and persons with disabilities – Jewish Community center of Staten Island	Richmond	5310	\$38,000
		5310	\$9,000
Section 5310 program for transporting elderly and persons with disabilities – Community Agency for Senior Citizens	Richmond	5310	\$92,000
		5310	\$23,000
CSI Ferry Shuttle Project	Richmond	5316	\$187,000

With these services in mind and in consideration of where members of the target populations live and travel, a series of unmet needs and gaps across New York City were identified. While the report details specific needs, gaps, and redundancies by population and by individual borough, these are reported here in aggregate, highlighting the most prominent needs.

- The physical infrastructure does not always adequately support the needs of the target populations, especially for people who take longer to cross streets, need a place to sit, or can travel only short distances at a time.
- Only a portion of the subway and rail systems have accessible infrastructure. In addition, some consumers participating in the plan’s outreach efforts reported that the infrastructure

and services are not reliable and are frequently unavailable (i.e., elevators and escalators).

- Taxis and car services are largely inaccessible to many persons with disabilities, particularly persons using wheelchairs, with less than 2 percent of the taxi fleet accessible to persons using wheelchairs. Affordability is also a major barrier to use of these modes.
- Some community transportation services are available only during weekdays between 8:00 AM and 5:00 PM.
- Demand for community transportation services is increasing, many programs are oversubscribed, and funding is an issue, and hence services are being out-stripped by the demand.
- Travel services for the highest need segments of the target populations are limited since physical assistance or door-through-door programs are very limited.
- Unaffiliated, unsponsored individuals with disabilities who are not ADA paratransit-eligible and who are not formally associated with a specific agency program have very few travel options.
- While Access-A-Ride provides broad coverage for its customers, some members of consumer groups feel the service is less effective at meeting needs for flexible, reliable, and timely transportation.
- Advance scheduling requirements for non-ADA paratransit services is a detriment for many members of the target populations; they cannot always predict their mobility needs in advance.

## Long Island

### Existing Transportation Services

Long Island's Nassau and Suffolk Counties have varying levels of community transportation services. An overview of community transportation services by type shown together with key characteristics is provided in Figure ES-3.

**Public Transportation** – Long Island is served by regional rail service, which operates east/west along the island through both counties through the Long Island Rail Road. In addition there are six public transportation bus operators in Long Island. Nassau County is also served by three bus transit operators: NICE (operated by the Nassau-Veolia Partnership), Long Beach Transit (operated by the City of Long Beach), and a bus service operated by the City of Glen Cove. In Suffolk County, countywide public transportation bus service is operated by Suffolk County Transit (SCT). Huntington Area Rapid Transit (HART) provides additional service within the Town of Huntington. Express and commuter buses are also available.

**ADA Complementary Paratransit** – In Nassau County, ADA complementary paratransit service is available from two operators: NICE (Able-Ride) and Long Beach Transit. In Suffolk County, ADA paratransit services are available from Suffolk County Transit (Suffolk County Accessible Transportation – SCAT) and HART.

**Human Service Transportation** – Many human and social-service agencies and cities and towns on Long Island operate demand-response transportation or regularly scheduled subscription service. Some of these are primarily available to clients or individuals who participate in their programs and activities, while others are open to all older adults and/or

persons with disabilities. Examples of providers include the Town of Smithtown, Town of Brookhaven, Town of Islip, the Jewish Community Center of Greater Five Towns, St. Charles Hospital, Long Beach Medical Center, and Community and Family Residences.

**Medicaid Non-Emergency Medical Transportation** – For individuals who qualify for the program, Medicaid will pay non-emergency transportation costs for individuals traveling to covered medical appointments. On Long Island, Suffolk County contracts with Servisair, and Nassau County uses Logisticare. Note also that the county-based programs all make use of public transit services for Medicaid non-emergency medical transportation (NEMT), reimbursing recipients for the travel costs of a bus or subway fare.

**Privately Owned Public Transportation** – Taxi service is available in Nassau and Suffolk counties, although not in all communities. Few accessible vehicles are in operation.

**Figure ES-3 Transportation Services – Long Island**

	Public Transportation			Community Transportation	
	Public Transit	Taxi Service	ADA Paratransit	Medicaid Non-emergency Medical Transportation	Human Service Transportation
Eligibility	All	All – limited accessible vehicles	ADA Paratransit eligible	Medicaid recipients (low income)	Limited to program participants or residents of particular community who meet age and/or disability requirements
Geographic Coverage	Limited coverage - Rail service on LIRR is primarily oriented to and from NYC Local and express buses are available in both Nassau and Suffolk counties	Limited communities	Available in areas served by fixed-route bus; Extends beyond fixed-route corridors in some areas	Available	Typically limited to sponsoring community or to specific program locations; little inter-community travel possible
Reservation Requirements	None	Advance, same day, or immediate	Advance	Next day advance request	Next day to one week or more advance request
Temporal Coverage	Varies by community and operator; less service in smaller communities No Sunday service in Suffolk County	On demand as available	Varies by community; mirrors fixed-route bus	On demand	Typically weekdays and 'normal' business hours
Allowed Trip Purpose	Any	Any	Any	Covered medical trips only	Agency programs; medical appointments; some quality of life
Cost	Low	High	Low	Low	Low

	Public Transportation			Community Transportation	
	Public Transit	Taxi Service	ADA Paratransit	Medicaid Non-emergency Medical Transportation	Human Service Transportation
Service Challenges and Gaps	Some rail stations are not fully accessible; Distances to/from stops and stations; Most service oriented east/west to New York City, with limited north/south service Some areas with few services	Price; Accessibility; Availability	Not available in all areas Affordability	Limited trip purpose; Eligibility	Eligibility; limited days and hours of service; Restrictions on trip purpose; Few services support employment

## Changes to the Plan Since 2009

### Demographic Analysis

In Nassau County, the older adult population and persons living below poverty are concentrated near the Queens border and the southern portion of the county, while the target populations are concentrated in the western portion of Suffolk County.

- Nassau County: Hempstead, Long Beach, and New Cassel have high numbers and densities of populations living below poverty. In terms of the older adult population, Great Neck Plaza has the highest density and Levittown has the highest overall population.
- Suffolk: North Amityville had high densities of both older adult populations and people living below poverty, while Brentwood had high population numbers for both target populations but lower densities than North Amityville. The county has an estimated 130,131 persons with disabilities; the Town of Babylon has the highest number and density in the county.

### High Level Trend Analysis

Suffolk County had the highest number of older adult growth from 2000 to 2010 with a more than 34,000 increase, while only the third-highest percentage increase in the NYMTC planning area behind Putnam and Rockland Counties. The growth of older adult population during that period was more than triple the growth of the population of the whole county.

Projects Funded by 5310, 5316 and 5317



The projects listed are from NYMTC’s Annual Listing of Federal Aid Project Obligation for Federal Fiscal Year 2009, 2010, 2011, and 2012.

**Figure ES-4 Projects funded by 5310, 5316, 5317 – Long Island**

Funded Project	Recipient	Funding Source	Funding Amount
Elevator for ADA access– at Grand Central Terminal for the LIRR concourse	MTA LIRR	5317	\$2,240,000
LIRR Station Accessibility Improvements	MTA LIRR	5317	\$744,000
Section 5310 block for non-profit agencies	Nassau/Suffolk	5310	\$1,030,000
Project Independence – Town of North Hempstead - provides free taxi transportation for shopping for residents age 60 and over, and discounted NEMT	Nassau	5317	\$854,000
Suffolk County United Veterans	Suffolk	5317	\$286,000

The study team examined the travel patterns of older adults, persons with disabilities, and persons with low-income living and working on Long Island, as compared to available transportation services. This analysis, together with input from stakeholders, Stakeholder Advisory Committee members, surveys, workshops, and focus groups, identified a series of unmet service needs in Long Island. The main report details specific needs, gaps, and redundancies by population and by county. The most prominent needs in common are summarized below:

- Demand-response services are available only to segments of the population and typically have limited service hours, allowable trip purposes and geographic coverage. This is true for municipal providers, human service agencies, and ADA paratransit services.
- Outside of public transportation, there are few transportation services for individuals with low income. Most specialized services support specific agency programs and few services support employment-related activities.
- The rail network is a critical transportation resource on Long Island. However for some members of the target populations, high fares (even with discounts for older adults and persons with disabilities), distance to and from stations, and the limited accessible infrastructure in some locations may affect the usefulness of the services. Some portions of Long Island are served by public transportation services with limited geographic coverage, making distances to stops and stations lengthy, and/or with limited service frequency.

- Travel between communities is challenging, especially for older adults and persons with disabilities, but also for people making reverse-commute trips for employment.
- According to comments made by participants in focus group meetings and public workshops, some services are not affordable for members of the target populations. This is especially true for longer-distance trips on LIRR and some of the paratransit services, including Able-Ride.
- Although there are a number of human service transportation providers on Long Island, our research suggests that many members of the target populations and agency staff are unaware of the types of transportation options that are available to them.
- Advance scheduling requirements for non-ADA paratransit services is a detriment for many members of the target populations; they cannot always predict their mobility needs in advance.

## Lower Hudson Valley

### Existing Transportation Services

There are existing public transportation networks in all three counties in the Lower Hudson Valley. In Westchester and Rockland Counties, these networks are extensive and generally provide countywide services. Additionally, extensive paratransit services are provided in their respective regions and, in each case, the paratransit services exceed the statutory requirements imposed on local governments by the ADA. An overview of the main community transportation services available to older adults, persons with disabilities, and persons below poverty in the Lower Hudson Valley is summarized below. Figure ES-3 highlights the general characteristics of the services and their service to members of the target populations.

- **Public Transportation Services** – The Lower Hudson Valley is served by regional rail service provided by Metro-North and NJ TRANSIT. The region also has several fixed-route bus services available, including commuter and express services to New York City. Westchester County is served by the county's fixed-route public transportation system: the Bee-Line System. Service is provided seven days a week, with weekend and some late evening service available. In Rockland County, Transport of Rockland provides fixed-route service throughout the county seven days a week and late evenings. Rockland also operates the TAPPAN ZEEexpress bus service Monday–Saturday to Tarrytown Metro-North Station and White Plains. Metro-North contracts with NY Waterway to operate the Haverstraw/Ossining Ferry Monday-Friday to provide ferry service to the Metro-North Hudson Line. Putnam County Transportation also offers fixed-route bus service, with most service in the eastern section of the county and focused on the Brewster area. Several small municipal bus services and shuttles are also available in certain towns, such as the Spring Valley Jitney and Clarkstown Mini Trans in Rockland County.
- **ADA Complementary Paratransit** – ADA complementary paratransit service in Westchester is provided by the Westchester County Office for the Disabled. Rockland County provides TRIPS (Transportation Resources Intra-County for Physically Handicapped and Senior Citizens) paratransit service. Putnam County Transit operates its own ADA service, called PART Paratransit.

Both the Westchester County Office for the Disabled and Rockland County's TRIPS service offer service that exceeds ADA statutory requirements in one or more ways. Westchester County Office for the Disabled provides service countywide during core

service hours (6:00 AM to 7:00 PM weekdays and on Saturdays from 8:00 AM to 7:00 PM); outside the core service times, service is limited to an area encompassing  $\frac{3}{4}$ -mile around the fixed-route service coverage. TRIPS offers two types of service within Rockland County: Regular TRIPS Service and ADA Trips. Regular TRIPS Service is for residents with physical or mental disabilities or who are 60 years old or over. In each of these cases, Regular TRIPS Service is reserved for individuals who find it difficult or impossible to use municipal, fixed-route bus service. Regular TRIPS Service provides rides on a space-available basis Monday through Friday between 7:00 AM and 7:00 PM, with limited service on Saturdays between 8 AM and 5 PM. ADA TRIPS Service is offered to residents who, because of a disability, are prevented from using the municipal, fixed-route bus services. Both the origin and destination of a requested ADA TRIPS ride must be within  $\frac{3}{4}$  mile of a municipal, fixed-route bus route. ADA TRIPS Service is provided during the same hours that the municipal, fixed route bus services operate. Putnam County Transit also provides ADA paratransit services within  $\frac{3}{4}$ mile of its fixed-route service and during the same days and hours.

- **Human Service Transportation** – As noted earlier, the development of human-service transportation providers is most pronounced in areas with more limited public transportation availability. In areas where public transit services are widely available, there is great reliance on these existing networks by the human-service agency community; in other areas, agencies have had to develop their own resources to meet clients' needs.

The most developed network of human services transportation is aimed specifically at seniors. No fewer than 25 separate (generally municipally operated) programs support shopping and trips to community senior centers.

- **Medicaid Transportation** – Under Title XIX, Medicaid recipients are covered for certain medical services, including travel to and from medical appointments and services, with prior authorization. Eligibility for Medicaid is income based; thus the services span the target populations of persons with low income as well as older adults and persons with disabilities who also have low incomes. Without question, Medicaid is the single largest federal funding source for human service transportation.
  - Medicaid transportation services in New York State are administered by the New York State Department of Health and, in the Lower Hudson Valley, by the respective county Departments of Social Services (DSS).
  - Depending on their abilities and needs, Medicaid clients may be reimbursed for travel on one of three modes of Medicaid-sponsored transportation used for NEMT. These include:
    - (1) Public transportation for persons who are ambulatory, able to use public transportation, and traveling to destinations served by public transit.
    - (2) Taxi and car services for persons who are ambulatory and otherwise do not require an accessible vehicle.
    - (3) Ambulette service for persons who require an accessible vehicle and assistance from the driver getting into and out of the vehicle.
  - Trips on public transportation are paid at the established fare rate. Rates for taxicab and ambulette services are established by county.

**Figure ES-5 Transportation Services – Lower Hudson Valley**

	Public Transportation			Community Transportation	
	Public Transit	Taxi Services	ADA Paratransit	Medicaid Non-emergency Medical Transportation	Human Service Transportation
Eligibility	All	All	ADA Paratransit eligible; One ADA service also available to older adults	Medicaid recipients (low income)	Limited to program participants or residents of particular community
Geographic Coverage	Limited coverage – rail service oriented to NYC; Significant bus service; local service limited	Limited communities	Available	Available	Limited overall; where available, very local
Reservation Requirements	None	Advance, same day, or immediate	Next day advance request	Next day advance request	Next day to one week or more advance request
Temporal Coverage	Varies by community and operator; Less service in smaller communities	On demand as available	Varies by community	On demand	Typically weekdays and 'normal' business hours
Allowed Trip Purpose	Any	Any	Any	Covered medical trips only	Agency programs; medical appointments; some quality of life
Cost	Low; some rail modes cost-prohibitive for low income individuals	High	Low	Low	Low
Service Challenges and Gaps	Many rail stations are not accessible; Rail service oriented to and from New York City; Some areas with few transit services	Price; Accessibility; Availability	Not available in all areas; Affordability	Limited trip purpose; Eligibility	Eligibility; Restrictions on trip purpose; Few services support employment; limited cross-jurisdictional services

**Changes to the Plan Since 2009**

**Demographic Analysis**

In most cases, the Lower Hudson Valley towns and villages that have high concentrations of older adults (65+), also have high concentrations of people below the poverty level.

- **Putnam County:** Carmel, which is also the county seat, has numerous seniors spread throughout the town, while the high density of older adults occurs in isolated census tracts scattered throughout the county. The highest densities of people below the poverty level occur in Southeast and in the southern part of Carmel. In Southeast, the census tract with the high density is generally coterminous with the village of Brewster. The American Community Survey provides data only for people with disabilities for one county subdivision in Putnam County. The total number of persons with disabilities for Carmel is 3,131.
- **Rockland County:** The older adult population is spread throughout the county, with higher densities living in Spring Valley and eastern Haverstraw, as well as a small cluster in Suffern. The highest density of people living below the poverty line can be found in eastern Ramapo in the Spring Valley area. Eastern Haverstraw also contains many people below the poverty line. The American Community Survey provides disability data for only three county subdivisions in Rockland County. Of the three county subdivisions, Ramapo has the highest number of persons with disabilities.
- **Westchester County:** There is a high concentration of older adults along the Bronx border and south of I-287. Older adults are also prevalent throughout Yonkers and Mount Vernon, as well as in White Plains, New Rochelle, and the town of Rye. Yonkers and Mount Vernon show the highest densities of people below the poverty line. The American Community Survey provides data for 15 of the 25 county subdivisions in Westchester County. The total number of persons with disabilities within these 15 subdivisions is 72,547. The county subdivision of Yonkers has the highest number of people with disabilities, but Mount Vernon has the highest density of people with disabilities.

### **High Level Trend Analysis**

Concentrated groups of the two target populations, older adults and people with low income, have remained relatively consistent since the 2009 Coordinated Plan.

### **Projects Funded by 5310, 5316 and 5317**

Since the previous plan was released, several projects in the region have been funded by FTA Sections 5310, New Freedom, and JARC. The majority of these projects are located in Westchester County, including expanding Bee-Line service, developing a van service, and other services for people with disabilities and/or low income. The projects listed are from NYMTC's Annual Listing of Federal Aid Project Obligation for Federal Fiscal Year 2009, 2010, 2011, and 2012.

**Figure ES-6 Projects funded by 5310, 5316, 5317 – Lower Hudson Valley**

Funded Project	Recipient	Funding Source	Funding Amount
Section 5310 Program vehicles to provide transportation for elderly and persons with disabilities by private not for profit agencies.	NYSDOT	5310	\$25,000 (FY2011) \$1,225,000 (FY2012)
New Haven Line Stations – PH II – this project will rehabilitate identified station elements at Mount Vernon East, Pelham, New Rochelle, Larchmont, Mamaroneck, and Harrison in order to bring these facilities to a state of good repair.	Metro-North	5316	\$8,390,000 (5316)
		5317	\$9,850,000 (5317)
NYSDOT administrative contract (regionwide) to provide administrative support for the oversight and development of the NYSDOT JARC and New Freedom Program in the NYMTC area.	NYMTC area	5316	\$280,000
Bee-Line Route 4 Weekday service increase – increase weekday service by 50% on Bee-Line Route 4 between 2pm and 9pm to accommodate the ridership growth.	Westchester	5316	\$1,039,666
Bee-Line Bus Routes 8, 13, 45, 55 & 78	Westchester	5316	\$1,489,888
Bee-Line Bus Routes 2 & 20	Westchester	5316	\$1,541,000
Family Services of Westchester - Mobility management implementation in Northern Westchester – to address the mobility challenges faced by older adults, persons with disabilities and individuals with low income in the Northeastern section of the County.	Westchester	5316	\$306,000 (5316)
		5317	\$306,000 (5317)
Van purchase for Family Services of Westchester – provide transportation services to connect urban home health aides with the elderly and disabled suburban population.	Westchester	5316	\$40,000
Family Services of Westchester – provide transportation services to connect urban home health aides with the elderly and disabled suburban population.	Westchester	5316	\$1,792,000
Transporting low income employees who support individuals with developmental disabilities to support low-income and minority workers from NYC by helping fund work in and get transport to one of the Institutes of Applied Human Dynamics in Westchester County.	Westchester	5316	\$61,000
Westchester Bee-Line 78 continuation and expansion. This project is the continuation of RTE 78 Core Service as well as expansion of RTE 78 to provide service to Ridge Hill Village development. Service connects residents to job opportunities	Westchester	5316	\$6,604,101



in the area.			
ADA Transit Accessibility II & MM. Provide ADA accessibility to transit in areas that do not now have access by making improvements to sidewalk areas in multiple locations. Hiring of Mobility Manager to coordinate with Transportation Providers in Putnam County.	Putnam	5317	\$582,000

By comparing existing transportation services with the travel needs of the target population, a series of unmet needs and gaps across the Lower Hudson Valley were identified. The following summarizes the key needs and gaps in transportation services within the subregion:

- Medical facilities and service providers are consolidating into large regional operations. As a result, there is more demand for travel, and many members of the target population must travel longer distances to access care. This is straining existing service providers.
- The Lower Hudson Valley spans a large geographic area, much of which is sparsely populated. Long driving distances between destinations and rural road networks stress the comfort levels of some older drivers. As a result, there is a demand for transportation alternatives.
- There is demand to get home healthcare workers to client locations within Rockland, Putnam and Westchester Counties; many of these workers are transit dependent. Since the previous Coordinated Plan was released, a limited van service in Westchester County has been implemented to provide transportation services to connect urban home health aides with the elderly and disabled suburban and rural population operated by Family Services of Westchester.
- There is a need for more paratransit services in the Lower Hudson Valley. Although the demand and need varies by community, in general most felt the region would benefit from increased service.
- Installation of passenger amenities (shelters, benches, information systems, etc.) at existing bus stops may induce members of the target populations to make greater use of fixed-route services.
- Advance scheduling requirements for community transportation services can be a detriment for many members of the target populations; they cannot always predict their mobility needs one week in advance.

## Regional Needs

Mobility options are extensive in the NYMTC planning area, yet specific gaps in service and the divisions between individual service networks remain significant for some older adults, persons with disabilities, and persons below poverty. Two issues in particular—the jurisdictional boundaries that restrict transit operators from providing regional service and the need for local connections to facilitate regional travel—are seen as primary challenges for travel between NYMTC’s three subregions. To a lesser extent, even travel between some municipal boundaries can be a challenge for older adults. For example, municipal services operated on behalf of older adults are often limited geographically by municipal boundaries.

The broader regional issues apply to fixed-route and paratransit services as they relate to employment travel, medical and human services trips, as well as social and recreational trips. Summarized unmet needs for regional services include:

- Transit providers' funding and administrative structure often leads to distinct service breaks at municipal borders. The Westchester Bee-Line, MTA New York City Transit, and NICE have limitations on providing service in neighboring counties.
- While rail and express bus connections between New York City and surrounding counties are generally extensive, limited feeder bus services at outlying rail stations and/or park and ride lots effectively limit travel options.
- The most commonly identified transportation gap or unmet need emerging from public outreach within the region pertained to healthcare employment—specifically home healthcare workers—and the difficulty in traveling to private residences for work without access to a private automobile.
- The frequency of service and number of transfers required to complete a trip may render longer-distance travel difficult, particularly for customers with mobility limitations.
- Transferring between jurisdictions on paratransit is challenging. While paratransit operators such as Access-A-Ride will provide connections to neighboring systems through coordinated transfer locations, customers must schedule trips with each of the two systems independently. As a result, connections are not guaranteed, making such a transfer risky.

## Opportunities to Address Unmet Needs

### Identifying and Prioritizing Strategies

Building on the analysis of unmet transportation needs for the three target populations — older adults, persons with disabilities, and persons with low income — the 2009 project team identified strategies that could address service gaps, fulfill unmet needs, and reduce service duplication. These strategies drew heavily from input and suggestions gathered during the outreach meetings and interviews conducted in the summer and fall of 2008. Working in conjunction with the Stakeholder Advisory Committees, a long list of possible strategies was crafted into a series of strategies that meet local and regional needs.

In February 2009, Stakeholder Advisory Committees met to prioritize the proposed strategies based on criteria associated with meeting documented needs, implementation feasibility, and the extent to which the strategy promoted coordination. Meeting participants were given a limited number of “votes” (approximately half the number of strategies under consideration) and asked to distribute them among their preferred strategies. The only caveat placed on the process was limiting the number of votes a member could place on a single strategy to three. At the end of the process, each of the subregional committees identified a short list of strategies determined to have both a high implementation feasibility and ability to address a pressing need.

### Figure ES-7 Prioritized Strategies

Strategies
Mobility Manager and Mobility Manager Training
Transit Service Expansion and Improvements

<b>Strategies</b>
Improved Access to Fixed-Route Bus Stops
Expand/Enhance Vehicle Purchase Program through increased coordination and funding
Centralized Resource Directory
Job Access Strategies
Accessible/Real-Time Transit Information Systems
Volunteer Driver Programs – Expand and Coordinate
Improve Coordination of Existing Services
Taxi/Community Car Subsidy and Expand Accessible Taxi Fleet
Accessibility Improvements at Non-Key Rail Stations
Develop Travel Voucher Program
Create Bus Buddy Program
Expand Travel Training Program
Other Technologies to Improve Efficiency/Customer Experience
Better Publicity for Existing Online Trip-Planning Sites
Implement Paratransit Feeder/Distributor Services
Reverse Commute Strategies from Rail Stations
“Zip Bike” and Improve Bike Amenities at Stations
Roadway Accessibility Improvements
Develop Accessible Wayfinding Systems

**Figure ES-8 Prioritized Human Service Transportation Plan Strategies**

Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
<b>Priority Strategies – New York City</b>					
Taxi/Community Car Subsidy Programs <b>MM</b>	Medicaid Hospitals Non-profit organizations Community Transportation Providers NYC DFTA	3-6 months	Administrative costs between \$50,000 and \$125,000; Subsidy costs vary	Section 5310 Section 5307	Provide reduced fare vouchers to older adults, persons with disabilities and persons with low incomes to increase trip flexibility and coverage; may also be used to support employment. Encourages use of lower-cost travel modes and supports expansion of accessible and community car fleet.
Mobility Managers – Information Outreach, and Trip Planning <b>MM</b>	NYC – Various departments Community Boards Offices of the Borough Presidents Non-profit organizations NYCDOT	6-12 months	Annual full-time salary between \$60,000 and \$75,000	Section 5310 Section 5307 Municipal, state or percent agency funding Foundation funding	A Mobility Manager could be an individual, a group of individuals or an organization that provides a wide variety of mobility management functions for consumers, human service agency staffs, and/or for community transportation providers.
Mobility Managers – Operational Support <b>MM</b>	NYC – Various Departments Community Boards Offices of the Borough Presidents Non-profit organizations	12-24 months	Annual full-time salary between \$75,000 and \$85,000	Section 5310 Section 5307 Municipal, state or percent agency funding	Build on mobility management system to support existing operators with a physical resource center that offers support services for smaller operators. Potential support services may include trip scheduling; driver training; vehicle storage; maintenance; etc.
Mobility Manager Training and Support <b>MM</b>	NYSDOT NYCDOT Offices of the Borough Presidents Non-profit organizations	3-9 months	Annual costs between \$50,000 and \$100,000	Section 5310	Obtain technical training for Mobility Manager, especially relevant if mobility management system is implemented in several areas and/or different agency types.

\* MM in this column refers to project or strategy that may be led by a Mobility Manager.  
 \*\* Timelines are indicative and based on time required once funding is secured.  
 \*\*\* Dollar figures reflect differences in subregional economies.

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Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
Travel Training <b>MM</b>	NYC – Various Departments Non-profit organizations Workforce One Centers NYCDOT NYC DOE	3-9 months	Varies by program – if Mobility Manager in place simple program may be \$5,000	Section 5310 Section 5307	Design programs to train individuals to use public transit and roadway facilities. Increasing use of public transit will increase mobility for individual and reduce reliance on higher cost transportation modes. Some travel training programs exist already – potential to build on these efforts.
Vehicle Purchase	Community Transportation Providers	0-6 months	Small vehicles up to \$60,000; Buses between \$100,000 & \$500,000	Section 5310 Section 5307	Supplement Section 5310 funding to accommodate more applicants and provide more accessible vehicles. Develop strategies to reward agencies actively working to coordinate services.
Transit service expansion and improvements		12-24 months	Public transit – up to \$100 per hour Community transportation services \$55 and \$65 per hour	Section 5310	Create new services and/or expand existing services to provide service to new areas, expand service hours and/or expand options in area with limited service. Build on opportunities to coordinate existing services to maximize efficiency and ridesharing.
<b>Priority Strategies – Long Island</b>					
Mobility Manager and Mobility Manager Training/Support	Various county or municipality agencies and departments	3-6 months	Annual salary \$30,000 - \$60,000  Annual training and admin costs \$50,000 - \$100,000	Section 5310 Section 5307	A Mobility Manager could be an individual, a group of individuals or an organization that provides a wide variety of mobility management functions for consumers, human service agency staffs, and/or for community transportation providers.

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\*\* Timelines are indicative and based on time required once funding is secured.

\*\*\* Dollar figures reflect differences in subregional economies.

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Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
Centralized Transportation Resource Directory MM	LITM Nassau County Planning Department Suffolk County Dept. of Planning Non-profit human service agencies	6-12 months	Development costs for basic directory – up to \$50-75,000  Printing and distribution costs vary	Section 5310 Section 5307	A hard copy and/or electronic transportation resource directory. The transportation information in a directory covering each or both counties could be used by the Nassau County Department of Senior Citizen Affairs and the Suffolk County Office for the Aging in their directories of services for older adults along with service providers to increase coordination.
Improve Access to Fixed-Route Bus Stops	Suffolk County Dept. of Public Works (SCT)  Nassau County Planning Department  Municipalities – especially traffic safety departments	8-12 months	Costs per: Accessible Pedestrian Signals -- \$8,000 to \$12,000 Bus shelter with bench -- \$3,000 – \$12,000; Curb cuts -- \$1,000 or less; Sidewalks - \$500,000 to \$1M per mile	Section 5310 Section 5307	Improvements to the accessibility of bus stops and added amenities benefit all riders and encourage use of the existing transit system; bus stop improvements were mentioned as a need during public and stakeholder workshops
Vehicle Acquisition	Community Transportation Providers	NA	\$40,000 - \$100,000 per vehicle, depending on type; federal share no more than 80%	Section 5310 Section 5307	Continued use of Section 5310 funds to support capital purchases, with priority given to applicants who are using 5310 vehicles in a coordinated manner.
Improvements at Non-Key Rail Stations	MTA LIRR	>24 months	Station accessibility improvements are expensive	Section 5310	New Freedom was used by MTA LIRR to make improvements to the elevators at two stations. Additional improvements would facilitate greater use of rail service and improve mobility.

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Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
Job Access Strategies <b>MM</b>	Nassau Inter-County Express (NICE) Suffolk County Dept. of Public Works  HART  LITM	3-6 months	Operating costs for shuttle services typically range between \$55 and \$65 per hour  Vanpool and ridesharing options are less expensive	Section 5310 Section 5307	JARC funding was used by MTA Long Island Bus (now NICE) in the past to extend routes and service hours and expand capacity, especially on weekends, to better serve employment locations. Section 5307 could be used for strategies for improving access to jobs could including additional fixed-route or service hour extensions, or new shuttle services to employment sites, ridesharing or vanpool services, or support services such as a guaranteed ride home program or child care transportation.
Transit Service Expansion and Improvements	NICE  Suffolk County Department of Public Works (SCT)  HART	12-24 months	Public Transit – up to \$150 per hour  Van/shuttle services – between \$55 and \$65 per hour	Section 5310 Section 5307	Create new services and/or expand existing services to provide service to new areas, expand service hours and/or expand options in areas with limited service. New/expanded services may include new options for late night or weekend service. Build on opportunities to coordinate existing services to maximize efficiency and ridesharing. (See other strategies for specific service expansion/improvement ideas.)

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 \*\*\* Dollar figures reflect differences in subregional economies.

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Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
<b>Priority Strategies – Lower Hudson Valley</b>					
<p>Improved Coordination of Agency Services/Mobility Management <b>MM</b></p> <p>Could be implemented in all three counties in the Lower Hudson Valley (LHV)</p>	<p>County departments</p> <p>Transit agencies</p> <p>Non-profit organizations</p>	6-8 months after funding is secured	<p>Annual salary: \$30,000 to \$60,000</p> <p>Training and admin costs of \$50,000 and \$100,000</p> <p>Federal participation: 80%</p>	Section 5310 Sections 5307 or 5311	A Mobility Manager could be an individual, a group of individuals or an organization that provides a wide variety of mobility management functions for consumers, human service agency staffs, and/or for community transportation providers.
Transit Service Expansion and Improvements	Transit agencies	12-24 months	Public transit – up to \$100 per hour Community transportation services \$55 and \$65 per hour	Sections 5307 or 5311	Public transit affords the most mobility to the target populations when located in proximity to target population origins/destinations of travel. Following the example of Bee-Line, continue to create new services and/or expand existing services to provide service to new areas, expand service hours and/or expand options in area with limited service to meet employment transportation needs. Build on opportunities to coordinate existing services to maximize efficiency and ridesharing.
<p>Accessibility Improvements at Bus Stops</p> <p>Could be implemented in all three counties in the LHV with high priority for Putnam County</p>	<p>County/municipal departments</p> <p>Transit agencies</p>	2 years once funding is secured	<p>Capital expense</p> <p>\$400,000 - \$500,000 (range can depend on number of shelters, benches and other amenities)</p>	Section 5310	Improving bus stop accessibility and installing passenger amenities can make transit more accessible by persons with disabilities and the elderly.

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 \*\* Timelines are indicative and based on time required once funding is secured.  
 \*\*\* Dollar figures reflect differences in subregional economies.

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Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
Centralized Resource Directory <b>MM</b>	Putnam County Planning Department in partnership with community-based non-profit organization  Various county agencies and departments  Non-profit organizations	4-8 months once funding is secured	Operating expense, but may be considered a mobility management expense, particularly if undertaken in combination with other strategies  \$25,000 initial cost; community support for maintenance/updates	Section 5310 Sections 5307 or 5311	Centralized resource directories are very helpful to consumers, human service agency staff, and advocates who need to find and/or arrange transportation for members of the target populations (low income, seniors, and persons with disabilities).
Job Access Strategies	Westchester County Department of Transportation  Rockland County Department of Public Transportation  Putnam County Planning Department  Public efforts could be coordinated with appropriate other public entities and non-profit corporations	Will vary depending on whether reverse commute service is new or expansion of existing services	Operating expense  Cost based on variable cost per hour of Bee-Line service	Section 5307 or 5311	With continued rates of high unemployment, there will be a continued need to link low-income individuals with these employment centers. Adoption of this strategy in the plan will continue to afford public transit agencies with the flexibility to apply for Section 5307 and 5311 funding to create new reverse-commute routes or expand existing routes to better meet commute needs.

\* MM in this column refers to project or strategy that may be led by a Mobility Manager.  
 \*\* Timelines are indicative and based on time required once funding is secured.  
 \*\*\* Dollar figures reflect differences in subregional economies.

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Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
Affordable and Accessible Taxi Service <b>MM</b>	Various county or municipality agencies and departments  Other community transportation programs	3-6 months	Administrative costs between \$50,000 and \$125,000; Subsidy costs vary	Section 5310 Section 5307 or 5311	Provide reduced fare vouchers to older adults, persons with disabilities and persons with low incomes to increase trip flexibility and coverage; may also be used to support employment. Encourages use of lower-cost travel modes and supports expansion of accessible and community car fleet. Similar to Travel Voucher program below, but aimed specifically at taxi services in the LHV.
Travel Voucher Program <b>MM</b>  Could be implemented in all three counties in the LHV with high priority for Westchester County	Municipal departments  Non-profit organizations  County agencies/departments	4-8 months once funding is secured	Operating expense; costs can be controlled/contained by participating organization to fit budget parameters	Section 5310 Section 5307 or 5311	Transportation voucher programs are consumer-driven, and allow participants to control resources directly and to make their own decisions about service providers. Other advantages include low start-up and administrative costs, support for existing transportation providers and services, and the flexibility to adapt to a variety of local conditions.
Travel Training	Transit agencies  Non-profit organizations  County departments	3-9 months	Varies by program – with Mobility Manager in place simple programs as low as \$5,000	Section 5310 Section 5307 or 5311	Design programs to train individuals to use public transit. Increasing use of public transit will increase mobility for individual and reduce reliance on higher cost transportation modes. Some travel training programs exist already – potential to build on these efforts.

\* MM in this column refers to project or strategy that may be led by a Mobility Manager.  
 \*\* Timelines are indicative and based on time required once funding is secured.  
 \*\*\* Dollar figures reflect differences in subregional economies.

Coordinated Public Transit – Human Services Transportation Plan Update  
 New York Metropolitan Planning Organization – Executive Summary

Strategy (to address need/gap)*	Possible Lead Agency/Champion	Implementation Timeframe**	Estimated Costs (Capital or Operating)***	Potential Funding Sources	Strategy Overview
Reverse-Commute Strategies – Shuttle Services to/from Rail Stations or Bus Stops; Vanpools MM	Westchester County Department of Transportation  Rockland County Department of Public Transportation  Putnam County Planning Department  Public efforts could be coordinated with appropriate other public entities and non-profit corporations  Transportation Management Associations	3-6 months	Shuttle services might cost \$50-60/hour  Vanpool costs could be covered by fares or subsidized for low income individuals by a sponsor organization	Section 5310 Section 5307 or 5311 Employers (or agencies) County Medicaid agencies Organizations administering the Consumer Directed Assistance Program in each county	Reverse-commute strategies could be used to address the difficulty that home care workers have with reaching clients' homes

\* MM in this column refers to project or strategy that may be led by a Mobility Manager.  
 \*\* Timelines are indicative and based on time required once funding is secured.  
 \*\*\* Dollar figures reflect differences in subregional economies.

## Figure ES-9 Updated Plan Strategies

### Mobility Manager and Mobility Manager Training/Support

A Mobility Manager can be an individual, a group of individuals or an organization that provides mobility management functions for consumers (or agencies that assist with or help meet consumers' mobility needs) and/or for community transportation providers. For example, a Mobility Manager might be responsible for developing, maintaining, and disseminating a centralized directory of community transportation resources. The Mobility Manager who takes on such a function might also staff a help line, much like a "local travel agent" and perhaps provide trip-planning and/or ombudsman/evaluation services. A Mobility Manager could also become responsible for providing ride-matching functions or other services more commonly associated with ridesharing agencies or Transportation Management Associations. On the supply side, a Mobility Manager might help coordinate support functions for community transportation services, perhaps eventually taking on the call center function for multiple community transportation providers and/or becoming the broker of a coordinated system. A Mobility Manager might also serve to organize and manage a taxi subsidy program on behalf of sponsoring organizations.

As illustrated above, a Mobility Manager can take on a variety of different functions that are best suited for the area and that range from very simple to very complex functions. A Mobility Manager might also be the driving force behind coordination planning efforts, including organizing or chairing a coordination council for a specific catchment area. Mobility Managers are typically found at the county or regional level; however, there is nothing to preclude Mobility Managers from serving sub-county areas (that may or may not straddle county or municipal boundaries) or non-profit organizations. In addition, consideration could be given to establishing Mobility Managers at large agencies that have a de-centralized and uncoordinated approach to transportation. For reference, coordination and mobility strategies included in this report that may be supported or led by a Mobility Manager are denoted with a Mobility Manager icon (MM).

Individuals or organizations hired to provide mobility management functions often require training and ongoing technical support. Therefore, it behooves a responsible organization such as a State DOT, an MPO/RPA, or a transit agency to make sure that Mobility Managers in their region are properly trained and supported.

#### Expected Benefits / Needs Addressed

- Ensures that staff resources are available to implement mobility and coordination strategies
- Creates a community resource to promote existing and available transportation programs and services
- Highlights mobility challenges and opportunities and raise awareness
- Implements programs and creates awareness that lead to improved effectiveness and efficiency

#### Potential Obstacles and Challenges

- Mobility Managers with the full range of required skills may be difficult to find.
- Mobility Managers will need to adopt an entrepreneurial approach and be well supported by key institutions and organizations to be effective.
- Individuals will likely need training and support.
- Requires matching funding from sponsoring agency.

#### Examples of Best Practices

**InterAgency Council (IAC) of Developmental Disabilities Agencies, Inc.** acts as a Mobility Manager for the New York City region for the JARC/New Freedom demographic, although they do not receive funding from the JARC/New Freedom programs. They have a program called the InterAgency Transportation Solutions (IATS), which was created at the request of IAC member agencies that joined forces to improve daily transportation to adult day services for individuals with developmental disabilities. IATS contracts for bus service, provides centralized scheduling, routing and quality control, and manages a field operation of qualified inspectors to ensure both quality and safety. IATS utilizes



over 350 vehicles and serves up to 6,000 riders per day. The Director of the IATS program attended NYCDOT's Regional Mobility Management Conference and is interested in becoming more involved in coordinating with other services in the region.

**NYCDOT Mobility Management Program, NY.** Under JARC/NF funding, NYCDOT functions as the Mobility Manager for the NYMTC planning area. NYCDOT disseminates information on the recent legislative changes to Mobility Managers across the region, and most recently held a one-day Regional Mobility Management Conference, where over 50 participants from 27 government agencies and non-profits participated and learned more about coordination efforts and funding strategies in the region.

**Mobility Management in Putnam County, NY.** Putnam County recently won a New Freedom grant to plan and develop a consolidated transportation program for persons who are disabled, older adults and low-income residents of Putnam County. Although the county has not made a final decision on how to implement the grant, it is likely that the Putnam Independent Living Services will run the mobility management program and will hire a full-time Mobility Manager to provide transportation education services, administration, and referrals.

**Bergen County Mobility Management, New Jersey.** Bergen County was awarded \$200,000 in FY10-FY11 New Freedom grant including \$160,000 in federal funds and \$40,000 in local match. The project will fund a Mobility Manager to enhance transportation access for people with disabilities and build coordination among existing transportation providers.

**Salem County Mobility Management, New Jersey.** \$20,000 project (of which \$16,000 is federal New Freedom FY 07 and 08, the rest local match) to partially support the implementation of Salem County's plan with regard to Mobility Management. The funds will partially fund the salary of an individual to manage scheduling and dispatching among various transportation services funded by JARC, Office on Aging, and Office of the Disabled within Salem County. An additional \$10,000 in federal matched funding with \$2,000 local funding was awarded in FY 09 New Freedom funds.

**The State of Wisconsin Department of Transportation (WisDot)** is using New Freedom funds to sponsor several Mobility Managers around the state and is supporting them with ongoing technical training and networking sessions. Wisconsin has created a flexible program that allows a variety of entities to sponsor Mobility Managers who best meet local challenges and opportunities. As a result, Mobility Managers are being sponsored by organizations and agencies that include county offices on aging, regional planning commissions, healthcare resource centers, and non-profit organizations. As a result, their role in local mobility and coordination efforts also varies; some Mobility Managers are focused on local trip coordination efforts while others are setting up coordinated service networks and structures. WisDot has also set up a year-long series of training sessions to ensure that Mobility Managers have access to technical assistance and resources.

## Costs

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The annual salary cost of a (single) Mobility Manager (overhead and program function cost additional) might range between \$30,000 and \$60,000, depending on whether the Mobility Manager is part- or full-time. The cost to train and support Mobility Managers is estimated to be between \$50,000 and \$100,000 per year, and might best be accomplished through a consulting contract unless in-house expertise in this area is developed.

## Potential Funding Sources

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The cost of funding a Mobility Manager is allowed under Section 5310 Enhanced Mobility for Seniors and People with Disabilities and Section 5307 Urban Area Formula Grants under the presumption that the Mobility Manager provides functions pertinent to each program. In each case, this is considered to be a capital cost, and hence, federal funds from these programs are available at an 80/20 match. WisDot was able to use New Freedom (now Section 5310) funding to help establish, train, and support its network of Mobility Managers.



## Transit Service Expansion and Improvements

The benefits of service expansion are quite clear. Members of the three target populations would be able to access more services, more programs, and more job opportunities and be able to take more trips for medical, shopping, recreation, social services and attend faith-based activities.

The most common types of service expansions include: (1) temporal expansion of service – expanding the days and/or hours of service; and (2) spatial expansion of service – expanding the service area for pick-ups and drop-offs, and/or adding destinations beyond the established pick-up area.

### Expected Benefits / Needs Addressed

- Enhanced customer accessibility, mobility and convenience
- Opportunity to provide access to jobs that require work during non-traditional hours
- Increased use of fixed-route services by the target populations and the general public

### Potential Obstacles and Challenges

- Expanding service requires additional financial resources.
- Requires educating and training staff and customers to maximize benefits associated with cost.
- To be eligible for Section 5310 funding, transit service expansion must serve seniors and persons with disabilities only.

### Examples of Best Practices

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**College of Staten Island JARC Route, NY.** As part of the 2007-2008 JARC program, funds were awarded to operate a shuttle bus between the Staten Island Ferry and the College of Staten Island (CIS). Funds were approved to operate weekday service with 30 minute headways between the ferry terminal and the CIS campus. The service is scheduled to operate during the academic semesters only. The shuttle is no longer funded by the JARC program and is sponsored by the college. Shuttle services operate with 20 minute headways during the fall and spring semesters, and in the winter and summer sessions, bus schedules are slightly less frequent with 30-minute headways.

**MTA Long Island Bus / NICE Route Enhancements to Increase Access to Jobs, NY.** Extended Saturday service on Routes N16 (Rockville Centre/Nassau Community College/Roosevelt Field) and N35 (Hempstead/Roosevelt Field/Far Rockaway), extension of Route N23 service (Mineola/Manorhaven) to Harbor Road; increased span of service on Route N31/32 (Hempstead/Lynbrook/Far Rockaway), and increased Sunday service on Route N72 (Hempstead/Route 110).

### Costs

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The costs associated with additional hours of fixed-route bus service would be similar to the normal cost per vehicle hour of the service operator.

### Potential Funding Sources

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Section 5307 Urban Area Formula Funding (if used to support employment)

Section 5310 Enhanced Mobility for Seniors and People with Disabilities (if designed to meet the needs of persons with disabilities)

## Accessibility Improvements at Bus Stops

For people with disabilities or seniors with mobility limitations, inaccessible bus stops or the lack of an accessible pathway to the bus stop represent a hindrance to the greater utilization of accessible fixed-route services. These individuals may opt to use more expensive paratransit services. Outlying areas in the study area, particularly in the Lower Hudson Valley, exhibit both rural and suburban characteristics. In many cases, bus stops exist at key locations for seniors and persons with disabilities, but a number of terrain and pathway issues preclude customer use of accessible fixed-route services.

Potential infrastructure improvements may include removing barriers on sidewalks, improving or adding sidewalks, adding curb cuts, adding or improving pedestrian crossing and signals (including accessible signals and countdown signals), and adding signage, lighting, benches, shelters, and other pedestrian enhancements, especially in the vicinity of bus stops. In addition, technological solutions akin to way finding devices might help persons with visual impairments locate bus stops.

### Expected Benefits

- Increases mobility and travel options for persons with disabilities
- Reduces demand for ADA paratransit service and improves system-wide costs

### Potential Obstacles

- Improvements are typically expensive.
- Transit system may not control rights-of-way and may lack authority to make improvements.
- Long lead time with potential for disruptions to existing service and travelers.

## Examples of Best Practices

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**Safe Routes to Transit, NYC.** Safe and accessible transit requires safe and accessible pedestrian connections. While New York City's transit network is extensive, street-level conditions at stops often create barriers for customers, especially those with mobility challenges. To identify and remedy problem locations, NYCDOT created the Safe Routes to Transit (SRT) program. A focus of SRT is Bus Stops under the EI (BSE), which seeks to improve pedestrian access at bus stops located beneath elevated rail lines. In many of these locations, the ei structure's support columns are located in the roadway. In addition to other issues, this configuration prevents buses from pulling over to the curb. Passengers must therefore board from the roadbed while cars may continue to drive between them and the curb. To correct this situation, NYCDOT is working to design and construct curb extensions that extend the sidewalk to where the bus can stop.

NYCDOT is prioritizing locations with high concentrations of senior citizens and people with physical disabilities. As of now, Bus Bulb and Neckdown style bus bulbs were installed in the neighborhoods of Bensonhurst in Brooklyn, Astoria in Queens, Kingsbridge in the Bronx, and West Bronx.

**Bee-Line Bus in Westchester County** recently received funding for bus stop improvements throughout the county. Improvements will include painting, signage, lighting, sidewalk paving, connections to sidewalks, seating, accessibility and bike racks. It is expected that the cost to the county will be reduced through the application of federal stimulus money and other federal and state aid.

**Easter Seals Project ACTION** project developed a Bus Stop Accessibility and Safety Toolkit that is designed to help transit agencies develop an inventory of bus stops, assess the accessibility and safety of each bus stop and access to that bus stop, and create an action plan to address shortcomings. Hillsborough Area Regional Transit (HART) in the

Tampa area has recently used this toolkit to put together such an inventory. Dallas Area Rapid Transit (DART) recently completed a survey of all of its bus stops, including taking a photograph of each stop location.

**Bus Stop Improvement Program, Montgomery County, MD.** The goal of this project is to make the county's bus stops safer, more accessible, and more attractive to users, while improving pedestrian safety. The county has recognized that many of the stops have safety, security, or right-of-way deficiencies. Problems include drainage issues, sidewalk connections, lack of pads, lighting, or unsafe intersection location/crosswalk issues. In 2009, close to seven million dollars in infrastructure enhancements were made. Transit Services' Bus Stop Improvement Program is in its seventh year of operation, having completed upgrades to two-thirds of approximately 5,000 bus stops.

### Costs

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Costs include engineering, construction, and/or acquisition of passenger amenities. Costs will vary by stop location depending upon existing conditions. Costs incurred under this strategy would be considered capital costs; federal participation would be 80 percent of eligible costs.

### Potential Funding Sources

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Section 5310 Enhanced Mobility for Seniors and People with Disabilities

## Expand/Enhance Vehicle Purchase Program

Human service agency programs provide an important complement to publicly provided demand-response and complementary paratransit services. Often providing critical access to programs and services, these organizations play a key role in ensuring mobility for low income persons, seniors, and persons with disabilities. When coordinated with publicly provided transportation, human service agency transportation can reduce the overall demand for ADA complementary paratransit services. As capital acquisition is often undertaken from operating funding, the purchase of new or replacement vehicles is problematic for organizations facing fiscal constraints.

The FTA's Section 5310 Program can provide a source of capital funding for these organizations and will remain an important component in regional efforts to improve transportation services to the target populations. Vehicle purchases, under certain circumstances, are also an eligible use of Section 5307 funds. The number of agencies that apply for Section 5310 funding greatly exceeds the funds that are apportioned to New York State annually. Moreover, public entities are eligible to receive 5310 grants in certain circumstances, but the bulk of available funding is typically awarded to private non-profit organizations. This strategy would support the use of Section 5307 and 5310 funds to expand existing capital funding programs. It would also include the development of incentives for applicants who are actively working to coordinate services, especially existing service providers working within coordinated networks.

### Expected Benefits / Needs Addressed

- Capital funding supports the maintenance of existing community transportation services.
- Section 5310 creates opportunities for funding partnerships with Health and Human Services programs, with FTA supplying capital funding and HHS providing vehicle operations support.
- Capital assistance for transportation providers creates or maintains travel options and choices for individuals.

### Potential Obstacles and Challenges

- Ensuring that the Section 5310 program supports other coordination efforts and activities.
- Establishing a grant award process that supports both existing and new service providers.
- Using 5307, 5310 and/or 5311 funding for capital purchases would reduce the resources available for other types of activities, such as operations or planning.

### Examples of Best Practices

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**The Senior Transportation Investment Program (TIP), NYC Department of Aging.** Through a New Freedom Grant award from the FTA, the Department for the Aging developed the New York City Senior Transportation Investment Program (TIP). The grant allows five community organizations (one in each borough) to purchase vehicles to provide additional transportation to people with disabilities. An important aspect of the grant involves mobility management and a mobility coordinator, who assists individuals in choosing the most efficient and safe means of public transportation to a particular destination, as well as educating service providers about the special needs of the elderly. The program improves accessibility and availability of transportation services; improves effectiveness and efficiency through operational and process changes; increases utilization and customer satisfaction; and establishes greater coordination and communication between community and transportation providers and the wider health and human services network.

**Jewish Community Center (JCC) of Greater Coney Island, New York.** The JCC runs a vehicle-sharing program with four vehicles for the borough of Brooklyn. They have four vehicles in total and subcontract with car rental and bus service providers. More than 20 senior centers and other organizations participate in the program. The service is free

for these participating agencies and is paid for through a number of small grants from the city, state, and FTA. The Department of the Aging also provides some funding for the program. An organization will call or email to reserve a van and the JCC will send the van with a JCC-employed driver who will pick up passengers and drop them off. The program is very popular; over 50,000 one-way trips were provided last year. They are planning to create an online reservation system in the near future.

**Senior Transportation Connection (STC), Cuyahoga County, OH** is a community-based organization that is responsible for coordinating senior transportation services in the Greater Cleveland area. The organization—working cooperatively with the Greater Cleveland Regional Transit Authority and a network of municipal and non-profit service providers—coordinates the centralized functions of paratransit reservations and scheduling for eight county subregions. The MPO, which has responsibility for soliciting and evaluation Section 5310 applications in the metropolitan area, will fund only those organizations that participate in the STC network and are deemed to be coordinating services to a sufficient degree to warrant funding. In this manner, capital requirements for persons with disabilities are primarily financed from the urban formula program while capital for seniors is funded under Section 5310.

### **Costs**

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Costs are determined by state contract price and available options specified by the successful applicant. NYSDOT uses federal Section 5310 funds to pay for 80 percent of the cost of the equipment; applicants must pay for the remaining 20 percent from local sources.

Outside of the NYSDOT purchase order, accessible vans and small passenger vehicles range between \$40,000 and \$60,000, while buses may cost between \$100,000 and \$500,000, depending on vehicle size, engine technology, and other components.

### **Potential Funding Sources**

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Section 5310 Enhanced Mobility for Seniors and People with Disabilities

Section 5307 Urban Area Formula Grants



## Centralized Resource Directory

Centralized resource directory programs are designed to assemble information about available public, non-profit, and private-sector transportation resources in a single location, source, or directory. In many communities, there are many available services for persons with low incomes, seniors, and persons with disabilities, but it is up to the consumer to find out hours and days of operation, availability, eligibility, and how to access such services. In a centralized resource directory, information regarding all available providers is assembled in a single place. The directory can be in written, published form or in a searchable online database format. Centralized directories serve as a tremendous resource for consumers, human service staff and case workers, and advocates.

Centralized resource directories are helpful to consumers, human service agency staff, and advocates who need to find and/or arrange transportation for members of the target populations (persons with low income, older adults, and persons with disabilities). Outreach efforts conducted as part of this study indicate that consumers have indicated there is no centralized source to find information on the transportation services that are available in the greater New York metropolitan region.

Creation and publication of a centralized directory of transportation services would address this problem. A review of best practices indicates that, historically, such directories were published in book form. Creation of a centralized resource directory is often a first step in an incremental strategy to implement greater coordination in the future, such as brokerage or purchase of service.

### Expected Benefits / Needs Addressed

- Directories provide a “one-stop” resource for all public and private transit services and human service agency transportation.
- Directories provide easy contact and eligibility information enabling consumers and advocates alike to identify potential service providers for specific members of the target populations.
- Resource directories are readily embraced by most coordination committees as a non-threatening strategy that promotes enhanced mobility.
- Directories can be particularly useful in larger communities with a large number of public and private sector transportation resources.

### Potential Obstacles and Challenges

- Requires a comprehensive data collection effort to create the directory.
- Keeping the directory up-to-date has proven problematic in other areas.
- Consumers must be aware that the directory exists in order to be useful.
- Comprehensive directories may contain many listings, confusing consumers.
- Directories alert consumers only to the availability of a service provider; consumers and/or advocates must still inquire about eligibility and arrange for services.

### Examples of Best Practices

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**The NYCDOT Mobility Management Program, NY.** Using JARC/NF funding, NYCDOT was able to create a centralized resource database that has over 500 organizations arranged by location and type: service providers, major destination centers, government agencies providing services or projects, and organizations and agencies advocating specifically for the targeted Coordinated Plan groups throughout the NYMTC planning area. Future planning is underway that will allow this database to be accessible to government agencies, non-profits, and the public.

**Moving Forward in Suffolk County, NY.** The JARC funded Moving Forward program will provide hundreds of low-income, domestic violence, individuals in Suffolk County, NY, with a higher level of awareness about and access to currently available transportation options and services that these individuals desperately need to enable sustained employment, personal self-sufficiency, and safety/security. The Moving Forward project, operated by Retreat,

addresses the twin gaps identified in the NYMTC coordinated plan, namely the lack of access to transportation related information and the lack of coordination among transportation service providers, including transfers and connections.

**NJFindARide Database, New Jersey.** In 2006, \$150,000 New Freedom funds were approved for improvement to the existing New Jersey Department of Human Services (DHS) NJFindARide database to include agencies that provide transportation services to transportation-disadvantaged residents in the Delaware Valley Regional Planning Commission and South Jersey Transportation Organization regions. The project, completed in 2011, started as an operational DHS website that had a limited database of transportation providers. The New Freedom project built upon survey information and data that Cross County Connection Transportation Management Association collected for each of the county coordination plans. Cross County Connection conducted outreach to all providers in the seven county region and populates the NJ DHS database, which functions as a true “one-stop” website for the transportation dependent in New Jersey. The website and database is available to all NJ residents.

### Costs

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The costs of creating and maintaining a centralized resource directory in any county is likely to be in the \$25,000 – \$35,000 range, depending upon methods used to disseminate the directory (online vs. printed distribution). In the best practice communities, third party community non-profit groups have assumed responsibility for maintenance and update of the directories, with no cost to existing program and services.

### Potential Funding Sources

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Central resource directories that facilitate enhanced access to services by the public, including older adults, persons with low incomes, and persons with disabilities, are expressly permitted Section 5310 Enhanced Mobility for Seniors and People with Disabilities funding as a mobility management strategy. Additionally, the program circular specifically lists the development and operation of one-stop transportation traveler call centers to coordinate transportation information on all travel modes and to manage eligibility requirements and arrangements for customers as an eligible funding activity.

## Job Access Strategies

This strategy focuses on linking people, especially those with low income, with job opportunities. These strategies include establishing shuttle services that link transit hubs to employment sites/areas; and ridesharing and vanpool services, along with supporting strategies such as guaranteed ride home services and child transportation services. These strategies can also include extended hours and days of service or improved frequency of existing scheduled fixed-route services to permit second- and third-shift employment.

### Expected Benefits

- Opens job markets to persons with low income and other transit-dependent individuals.
- Partnerships with employers may provide opportunities to reduce costs.

### Potential Obstacles

- Most strategies can be relatively easily implemented but require financing.
- Certain strategies may require partnerships with employers.

## Examples of Best Practices

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**Reverse Commute Job Access Program in Westchester County, NY.** Westchester County recently received JARC funding to assist with transporting low income employees who support individuals with developmental disabilities. The program supports low-income and minority workers from NYC (mostly the Bronx) by helping fund work in and get transport to one of the Institutes of Applied Human Dynamics in Westchester County.

**New Haven Line Station Improvements, Larchmont and Mamaroneck, NY.** Using JARC funding, this project has improved and enhanced the customer service areas of the Metro-North Larchmont and Mamaroneck Stations on the New Haven Line – the platforms, stairs and overpasses – and maintained the public access areas of these stations, and provided greater access to job access and reverse commute.

**Pace's Vanpool Services, Pace, IL.** - Pace's vanpool program comprises three different programs: the Advantage Program, the Vanpool Incentive program, and a traditional ride share program. The Advantage Program provides a transit alternative to persons with disabilities that commute on a regular basis to work sites or rehabilitative workshops. This program not only provides service to persons who might otherwise request ADA paratransit service from Pace, it also is an alternative for those people living outside the ¾-mile ADA paratransit service area. The Vanpool Incentive program provides a group of commuters with a van and pays for fuel, maintenance, insurance, and tolls for a flat, monthly fare.

**Feeder/Distributor Shuttles at Suburban Chicago Rail Stations.** Metra operates the P-8 free shuttle from an origin within ½ mile of a non-accessible station to the next accessible station, enabling persons with disabilities access to the rail services.

**Reverse-Commute Vanpools in Philadelphia.** The Philadelphia Unemployment Project (PUP) operates a reverse-commute vanpool program. PUP pays for gas and insurance; vans are driven by vanpool members.

## Costs

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Costs vary by route distance and hours of operation.

**Potential Funding Sources**

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Section 5307 Urban Area Formula Grants

## Improved Transit Traveler Information

A recent Transit Cooperative Research Program report indicates that public transportation could improve travel options, particularly for older adults, by improving transit route and schedule information. Suggestions such as improving the readability and comprehension of route and schedule brochures were recommended, by publishing such documents using large, bold fonts and use of color-coded maps with contrasting primary colors indicating the different routes. Outreach efforts throughout the Lower Hudson Valley indicate that consumers in the target groups, particularly elderly and persons with disabilities have cited the need to improve the usability of existing transit information.

### Expected Benefits / Needs Addressed

- Improvements in consumer comprehension of available services will increase transit utilization by seniors and persons with disabilities.
- Enhanced schedules and route information will generally aid usability by the general public as well.

### Potential Obstacles and Challenges

- Wholesale revisions to all system route and schedule information is expensive.
- There is no industry standard or consensus regarding the style and presentation of more comprehensible route and schedule information.

## Examples of Best Practices

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**511NY.org, NY.** 511NY is a free service of NYSDOT. The information in the 511 NY system comes from many transportation and police agencies in New York and surrounding states, including ConnDOT, MTA, NJDOT, the Port Authorities of New York and New Jersey, and many others. The MY511NY service is free and personalized service by phone and web that allows customers to create a personalized profile which saves frequent trips allowing them to quickly access real-time highway and transit condition information for those trips.

**Charlotte Area Transit System Trip Planning for Seniors, Charlotte, NC.** As part of a larger, comprehensive effort to attract seniors to utilize Charlotte Area Transit System, the system developed a database of bus stops and installed a new trip-planning system that enabled seniors to see photographs of origin/destination bus stops as part of the trip-planning process.

## Costs

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Redesign and reprint of printed information and website redesign would constitute a major cost to any of the region's public transportation systems.

## Potential Funding Sources

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If the redesign of transit timetables, route maps, and other information is designed specifically to benefit persons with disabilities, Section 5310 Enhanced Mobility for Seniors and People with Disabilities funds could be used to pay for the improvement. Otherwise, this type of enhancement would be funded as a routine operating expense.

## Volunteer Driver/Escort Program

Volunteer driver programs typically provide mileage reimbursement to individuals that operate their own vehicles when they take individuals to medical appointments or other services, thereby negating the need for additional labor and capital costs. These programs can also utilize agency vehicles with volunteer drivers. Volunteer driver programs are a key strategy used by human service programs to provide much-needed trips in a cost-effective manner and aid in filling transportation gaps in the community, often providing services where no others exist. Centrally managing existing volunteer driver programs enables providers to make the best use of their resources, to coordinate with each other, and ultimately to improve the services provided.

Many volunteer driver programs supplement transportation for seniors and often operate in conjunction with meal delivery services, or other support services geared to providing companionship, social interaction, or assistance in shopping, putting away groceries, or paying bills. These programs have a number of universal elements, including: standardized training, safety, and service standards, ability to maintain service if the regular volunteer is not available, and a marketing effort to maintain the pool of volunteer drivers.

### Expected Benefits / Needs Addressed

- Providing joint training can reduce the burden on individual programs.
- Coordination may enable programs to better serve passengers needing to travel across jurisdictional boundaries, living in rural areas, or requiring an accessible vehicle.
- Joint marketing has the potential to increase the number of volunteers.

### Potential Obstacles and Challenges

- Coordination due to the variety in populations served.
- Using volunteers for multiple activities, in addition to driving.
- Reaching agreement on standards and process for joint recruitment and screening of volunteer drivers.

### Examples of Best Practices

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**Disabled American Veterans (DAV) in Binghamton, NY** runs a volunteer driver program to take veterans to medical appointments and the Syracuse VA Medical Center. The organization recently ordered 13 new vans to replace aging vehicles and add to existing service. DAV recruits drivers for the program on their website. Volunteers must pass a physical and undergo a background check.

**Road to Recovery, American Cancer Society, NY.** The Road to Recovery program (funded through the American Cancer Society) is a national volunteer driver program for cancer patients to get to medical appointments. The Hauppauge location provides volunteer drivers for residents of Suffolk County looking for transportation within the county to chemotherapy or radiation treatments. The program is available Monday through Friday from 9 AM to 5 PM.

**Ride Connection, Portland, OR,** is an exceptional example of a well-coordinated regional support program for volunteer drivers. Ride Connection was created by Tri-Met, the public transit system serving the Portland Metropolitan area, to meet the needs of seniors and people with disabilities by coordinating transportation services provided by local social service agencies and volunteer programs. Ride Connection supports and utilizes volunteers through a variety of programs and services, including:

**Ride Together,** a program developed to allow riders to recruit their own volunteer drivers. After drivers complete the Ride Connection driver approval process and training, they are eligible for mileage reimbursement.

**Road to Recovery:** The American Cancer Society and Ride Connection are working together to provide the Road to Recovery program in the Portland Metro Area.

**Trained Ride Ambassador:** Volunteers support the program by advocating, co-presenting, and leading group Riders' Club trips using public transit.

**Veterans helping Veterans Volunteer Transportation Program:** This program helps buffer the loss of independence by providing no-charge, personalized transportation to veterans who can no longer drive or use public transportation.

**Independent Transportation Network (ITN), Maine.** ITN is a national private non-profit that was first established in Portland, Maine, as a means of providing seniors with rides in exchange for a membership fee, trading in the cars they rarely used, and/or prior donated volunteer driving time. The value of the donated car is credited to the senior's debit account, which is drawn on each time a ride is requested (averaging \$8 per ride). The rides may be used for medical appointments, shopping trips or social visits or events. Maine has enacted legislation that enables ITN to sell its surplus vehicles and reinforces an earlier law prohibiting insurance companies from raising premiums for volunteer drivers. ITN networks are growing more popular across the country, especially the East Coast, as a way for private individuals to receive transportation services. Often, public entities are not involved in the development of ITN networks.

## Costs

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Primary costs associated with this program relate to mileage payments to volunteers and the costs associated with program management. In some cases, this strategy can be combined with other Mobility Management strategies and be coordinated with other actions.

## Potential Funding Sources

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If the program is designed specifically to benefit persons with disabilities, Section 5310 Enhanced Mobility for Seniors and People with Disabilities funds could be used to pay for the improvement. Otherwise, this type of enhancement would be funded as a routine operating expense.



## Taxi Subsidy Programs

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Municipalities and human service organizations have used taxi subsidy programs since the 1970's to provide transportation to (1) residents in general or specific target populations (e.g., seniors or persons with disabilities) and (2) clients or customers of a specific agency.

With the advent of ADA paratransit, several transit agencies have utilized user-side taxi subsidy programs both as a way to provide another mobility option to customers as well as a cost reducing control strategy for their ADA paratransit service. The latter can be accomplished if the subsidy associated with "newly created" subsidized trips taken on taxis is less than the difference between the paratransit and taxi trip subsidies for trips "diverted" from paratransit to taxis.

In addition to using these subsidies for taxis, sponsoring agencies might allow livery and other private providers (such as private medical transportation providers) to also participate in the program, which can give customers a greater range of transportation options including access to accessible vehicles. The subsidy programs generally do not usually include volunteer drivers, such as friends and family of the customer, because the subsidies usually supersede the maximum per mileage reimbursement amount dictated by the IRS to maintain volunteer status.

### Expected Benefits

- Provide same-day if not immediate service
- Effective for unanticipated travel and evening and weekend hours
- Effective for trips outside of service area or "underserved" areas
- Effective way to "divert" more expensive paratransit trips to a less expensive mode
- Can set/control subsidy per trip and/or overall budget
- Opportunity to infuse accessible vehicles into the market

### Potential Obstacles and Challenges

- Requires well-managed / controlled taxi and black car companies
- Few accessible taxicabs and black cars
- Participation of non-employee drivers is dependent on their not losing revenue by participating (vs. general public patrons)
- Requires good communication among all parties
- Need to establish fraud-protection mechanisms

### Examples of Best Practices

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**DFTA Taxi Smart Card Program.** The Taxi Smart Card Program is funded through a partnership between NYC Department for the Aging (DFTA) and the Mayor's Office for People with Disabilities that offers disabled residents of Canarsie/Flatlands (Brooklyn CD 18) and Astoria (Queens CD 1) an alternative to Access-A-Ride. Enrollees contribute \$12.50, towards the Taxi Smart Card and the program contributes \$87.50 for a total of \$100.00 Taxi Smart Card. The Taxi Smart Card is limited to transportation in taxi cabs and livery cars only. After the initial reload each participant can reload the card 4 more times with an out-of-pocket expense of \$12.50 for each reload for a maximum benefit to the participant of \$437.50.

**Access-a-Cab in Denver.** The Regional Transportation District (RTD) in Denver established the Access-a-Cab service in response to a high denial rate on paratransit services and to reduce the per trip cost of its ADA paratransit service. Customers call RTD's ADA paratransit call center to request a trip. Requests are then forwarded to the taxi company of choice. Passengers pay the flag drop of \$2.00, which was equivalent to the Access-a-Cab fare. (This base fare has since been increased to \$2.50 to match the increase in the flag drop.) The RTD would then cover up to the next \$12.00 of the fare (which at the taxi meter rate of \$1.60 per mile could get a customer a trip of up to 4.4 miles in

length), with passengers paying the portion of the fare over \$9.00 (for longer trips). Hence, the maximum subsidy ceiling for the RTD was \$12.00. In 2010, Access-a-Cab provided 118,968 trips with a total cost of \$1,427,616 for the year. If these trips had been taken on Access-a-Ride it would have cost RTD \$2,791,782, which is a \$1,364,166 cost saving. Almost half of the trips taken by Access-a-Cab in 2010 were for trips less than two miles in length, costing \$4.50 to \$6.50. In addition, the Access-a-Ride denial rate fell from 10 percent to less than 1 percent, partially as a result of the taxi program.

**METROLift Subsidy Program (MSP) in Houston.** METROLift contracts with five taxi companies and supplies them monthly with a limited number of blank vouchers, which in turn are supplied to the drivers. Customers are free to call any of the companies for service with one-hour advance notice. If a voucher is available (see below), and the customer is qualified, the trip is dispatched. The customer then pays the first \$1.00 of the fare, METRO pays the next \$8.00, and the customer pays the balance of the fare in excess of \$9.00. To address fraud, METROLift issues each of the five taxi companies a specific number of randomly generated voucher numbers per day that may be used during specific times of the day. Once the vouchers for a specific time slot are used, customers are refused service and must call for the next time slot. However, each rider is guaranteed a ride home at any time if they receive a voucher on their origin trip. METROLift is given a 4 percent discount on their meter fare portion. METRO also provides a \$2.00 premium to the companies for trips requiring wheelchair-accessible cabs to help cover the additional capital/operating costs of these vehicles.

**The DuPage County (IL) Pilot II Subsidized Taxi Service** is a nearly countywide, user-side taxi subsidy program. Each sponsor (municipalities and human service agencies) defines its eligibility criteria and decides how much to charge for a voucher/coupon. Participants purchase \$5 coupons from their sponsoring agency at a reduced rate (rates vary by sponsoring municipality). The customer must provide cash for tips and for paying any additional cab fare over the amount the coupon will cover. Multiple coupons may be used; for example, if a taxi ride costs \$12 the customer can use two \$5 coupons, and is personally responsible for paying the additional \$2 owed and the tip for the driver. Service is available countywide 24 hours per day, 365 days per year.

### Costs

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The cost to administer such a program might be between \$75,000 to \$125,000 for a larger program and between \$50,000 and \$75,000 to administer a smaller program. The subsidy cost depends on the detail of the subsidy per trip, which ranged between \$5.00 and \$8.00 among the three examples above. The total available budget for taxi or car service subsidies can be controlled with a daily ceiling, allowing trips on a “first-come, first serve” basis, as per the policy in Denver.

### Potential Funding Sources

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Perhaps the most obvious sources of funding to implement such a program are Section 5310 Enhanced Mobility for Seniors and People with Disabilities as such a program is a new program and does go beyond the minimum requirements of the ADA, in offering same-day service and service beyond the ADA service area. There is also funding available for a Mobility Manager, noting that the federal share of mobility management costs may not exceed 80 percent of the net cost of the activity.

Section 5307 funding may also come into play if this service offers access to/from employment services or training (e.g., guaranteed ride home or as a feeder service to a train station).

A potential sponsor might also look at this as a way to reduce the current cost of paratransit if it believes that it can divert trips to such a service.

## Affordable and Accessible Taxi Services

MM

Purchase of accessible vehicles (ramp-equipped low-floor minivans or similar equipment, for example) for taxi operators, with operators paying non-federal share. This strategy could also include development/expansion of taxi subsidy programs designed to augment existing community and human service transportation networks.

### Expected Benefits / Needs Addressed

- Source of service that could be used when fixed-route or demand-response services are not in operation
- Source of service for trip types that are not eligible under other transportation programs
- Could be used to complement taxi subsidy programs

### Potential Obstacles and Challenges

- Taxi service is limited or not available in some areas of the Lower Hudson Valley.

### Examples of Best Practices

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**Accessible taxis, Washington, DC.** Accessible taxi service was initiated in Washington, DC, in February 2010, as a joint effort of the National Capitol Region Transportation Planning Board (TPB) and the District of Columbia Taxicab Commission. The TPB used federal New Freedom and JARC funding to acquire 21 accessible vehicles for operation by three taxi companies, which supplied the non-federal share of the grants. Customers are able to call one number and have the closest accessible vehicle dispatched to their location to provide their trip, thanks to a centralized dispatching system. Partners modeled the Washington program, named rollDC, on the accessible taxi program in operation in the city of Chicago.

**King County accessible taxis, Seattle, WA.** Another recent example of an accessible taxi program is the pilot project implemented in the Seattle area in late 2006. King County Metro Transit partnered with the King County Licensing Division, Seattle's Consumer Affairs Division, and Yellow Cab to acquire and license eight low-floor, ramp-equipped minivans for taxi service in Seattle and most other parts of King County. The accessible service operates 24 hours a day, seven days a week for the same metered fare as service in non-accessible vehicles. Metro's taxi subsidy program offers tickets at half price to eligible individuals.

**Metro Taxi Accessible Service, Connecticut.** Metro Taxi is the largest full-service taxi company in Connecticut and has provided the first wheelchair-accessible taxicabs in the state. Their fleet of vehicles includes 70 of the first U.S. manufactured taxicabs to meet the ADA's specifications, the MV-1. In 2012, through a partnership with the Greater New Haven Transit District (GNHTD) and funding from the New Freedom Fund program, Metro Taxi began the New Freedom Fund Taxi Voucher Program that offers passengers with disabilities a 50 percent discount in Metro Taxi fares. Eligible customers receive a no-cash voucher debit card to use for travel.

### Costs

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The contribution of the sponsoring agency would likely be 80 percent of the cost of an accessible minivan or similar vehicle, with the taxi operator paying the 20 percent non-federal share. An accessible minivan might cost in the neighborhood of \$35,000, which would mean a contribution (in grant funds) of approximately \$28,000 per vehicle.

### Potential Funding Sources

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Section 5310 Enhanced Mobility for Seniors and People with Disabilities

## Accessibility Improvements at Non-Key Rail Stations

In many situations, improving the accessibility of non-key rail stations in a service area may play a significant role in easing the travel burden for people with disabilities. Non-key stations are much more likely to be inaccessible due to their location and traffic volume as compared to key stations. However, often it is the non-key station that is most critical to the travel pattern of these transportation-disadvantaged individuals.

Making accessibility improvements to transit and intermodal stations not designated as key stations is considered to meet the eligibility for Section 5310 Enhanced Mobility for Seniors and People with Disabilities funds, so long as the projects are clearly intended to remove barriers that would otherwise have remained.

### Expected Benefits

- Increases mobility and travel options for persons with disabilities
- Reduces demand for ADA paratransit service and improves systemwide costs

### Potential Obstacles

- Improvements are typically expensive
- Long lead time with potential for disruptions to existing service and travelers

### Examples of Best Practices

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**Times Square Area-Wide Accessibility Improvements, NYC.** Using JARC funding, this project is working to improve the safety and convenience of Times Square (Broadway & Seventh Avenue from 47th to 42nd Streets—the “bowtie”) for pedestrians with disabilities beyond ADA requirements, including, but not limited to, wider crosswalks, pedestrian signal poles, and ramps.

**45<sup>th</sup> Cross Passageways Elevators, New York County, NY.** New Freedom funding is being used to fund the expansion of two existing Metro-North elevators within the 45th Street cross passageway down to the new LIRR mezzanine level at Grand Central Terminal. This will help to enhance the experience and accessibility of limited mobility/elderly passengers.

**ADA Access to LIRR’s Mets- Willets Point Station.** New Freedom funding is being used to construct a new ADA compliant elevator at the LIRR’s Mets-Willets Point Station to make the station accessible for all LIRR customers. The project also includes the installation of tactile warning strips on the platform edges, to assist customers with visual impairments.

**45<sup>th</sup> Road- Court House Square in Long Island City, NY.** Using JARC funding, the station improvements at the 45<sup>th</sup> Road Station in Long Island City addressed three significant components at the station platform level. The project addressed structural deficiencies on the station platforms, replicated the historic windscreens and station lighting on the platforms, and provided ADA amenities that have made the station fully accessible.

**CityBench Program, NYC.** Funded through FTA grants, the CityBench program is an initiative to increase the amount of public seating on New York City’s streets. NYCDOT is installing attractive and durable benches around the city, particularly at bus stops, retail corridors, and in areas with high concentrations of senior citizens. These benches make streets more comfortable for transit riders and pedestrians, especially for those who are older and disabled. Anyone can request a bench

## Costs

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Improving accessibility of non-key stations is expensive. Station improvements may also disrupt regularly scheduled service. Improvements at at-grade rail stations are also expensive, but costs and disruptions are less as compared with subway stations.

## Potential Funding Sources

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Section 5310 Enhanced Mobility for Seniors and People with Disabilities

## Travel Voucher Programs

Flex travel vouchers can be issued or sold to eligible individuals and used by those individuals to purchase trips from public or private transportation providers, or to reimburse volunteer drivers. Typically, sponsoring agencies subsidize the cost of the trips, so that riders are able to receive service at a reduced cost; that is, they can access transportation options that were not previously available or affordable to them. Eligibility can be based on age, disability, income criteria, or the need for a specific type of trip, such as employment transportation. As with any subsidy program, sponsorship is really up to the sponsoring organization which sets its own ground rules.

Flexible transportation vouchers (or flex vouchers) are typically in the form of checks that eligible riders can use to “purchase” a ride. Funded by one or more sponsoring agency, flexible vouchers give the customer control over what kind of transportation they want to use. Usually the customer will use flexible vouchers to either:

- Subsidize the cost of a ride on any mode of public transportation that has a fare or requested donation (e.g., transit, paratransit, taxi, senior van)

- Pay volunteer drivers, friends, family members, or neighbors for rides

The “checkbook” model is the most common operating structure for flexible voucher programs. Customers receive a pre-printed checkbook with an allocation of miles from a support agency. The customer trades the check for a ride with a volunteer, taxi driver, or transit or human-services agency driver. The support agency helps locate rides, offers planning support, allocates vouchers and reimburses drivers. Support agencies are funded through existing programs, special grants, and/or additional sponsoring agencies. Volunteers are reimbursed the standard IRS reimbursement amount and other transportation providers, such as taxis, negotiate a per mile rate.

### Expected Benefits / Needs Addressed

- Voucher programs maximize use of existing transportation services.
- Programs that allow volunteers and/or family members to be reimbursed expand the options that are open to individuals needing transportation, particularly during times or in areas where other services are not in operation.
- Voucher programs offer an affordable option for long-distance trips that would otherwise be prohibitively expensive.
- Users have their choice of transportation provider.
- Low start-up costs.

### Potential Obstacles and Challenges

- Voucher programs require an agency to assume responsibility for day-to-day administration.
- Measures must be implemented to prevent fraud.
- Some potential areas of utilization may lack available or sufficient transportation services.

### Examples of Best Practices

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**Wyoming Independent Living Rehabilitation (WILR) Transportation Check Program.** Administered by the WILR organization, the Transportation Check Program provides an affordable way for people with disabilities to meet their transportation needs. Using FTA formula funds, Wyoming established a statewide flexible transportation voucher program that reimburses senior center transit providers and volunteers for mileage when transporting eligible

passengers. Mileage reimbursement is provided at \$0.36 per mile. To be eligible for mileage reimbursement, drivers must be a licensed driver with appropriate insurance in compliance with state law, they cannot be a spouse of the rider, and they must drive a licensed vehicle. Senior-center transit providers are reimbursed at the rate that they charge any rider: \$1 per one-way trip. The participant fills out the check to indicate the origin and destination of the trip, the trip mileage, the name and address of the driver, and the purpose of the trip. Each check has a check number to discourage fraud. After receiving the check from the customer at the end of a provided ride, the transportation provider submits the check to WILR for cash reimbursement. Participants in the program are responsible for organizing and securing the trips that they need.

**Weber County Human Services** operates an innovative voucher system in Weber County, Utah. Low-income and isolated seniors can use coupons to pay family members, friends, neighbors, and taxi operators for the trips that they provide to the seniors. Taxis are paid the meter rate; trips provided by friends or neighbors are reimbursed at \$10 each.

**APRIL Travel Voucher Program.** The Rehabilitation Services Administration of the U.S. Department of Education, the Association of Programs for Rural Independent Living (APRIL), and the University of Montana's Rural Institute have developed a model program and provided technical and financial assistance for the creation of voucher programs in ten areas across the country, including Fall River, Massachusetts, and Camp Hill, Pennsylvania. In each area, APRIL's Traveler's Cheque model program features a sponsoring agency to determine eligibility and establish other policies and assist with the provision of insurance coverage; a community transportation coordinator, who identifies a network of transportation providers and consumers and manages the operation of the program; and the development of an individual transportation plan for each program participant. With a focus on employment and independent living transportation for persons with disabilities, the ten Traveler's Cheque programs provided nearly 93,000 trips to just under 600 individuals during the first four years of program funding.

Other voucher programs based on the APRIL model are in operation by Western Community Action and the Southwestern Center of Independent Living in Marshall, Minnesota, and the American Council of the Blind of Nebraska.

### **Costs**

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One of the flexible aspects of a transportation voucher program is that levels of subsidy per user and total annual subsidy amount can be set by each participating agency. In the ten APRIL demonstration programs, which typically relied on volunteer drivers for longer trips and public transportation and taxi services for shorter trips, subsidies averaged \$4.34 per trip and \$0.39 per mile during the first four years of operation.

### **Potential Funding Sources**

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Section 5307 Urban Area Formula Grants



## Bus Buddy Program

In some cases individuals rely on paratransit because they lack confidence or experience to use the fixed-route system. To support individuals transitioning away from paratransit to fixed-route systems, some transit systems have instituted a highly personalized travel training program, frequently referred to as “bus buddy.” A “bus buddy” program involves not only training individuals to use fixed-route but also pairing individuals with a “bus buddy” who will travel along on the bus or subway until the individual gains sufficient confidence to travel independently.

### Expected Benefits / Needs Addressed

- Bus buddy programs reduce demand for paratransit services by increasing consumer knowledge in using and independently navigating the fixed-route system.
- Bus buddy programs build good community will by establishing a corps of volunteers who act as advocates for the transit system.

### Potential Obstacles and Challenges

- The individualized nature of these programs makes it difficult to assess overall impact on paratransit usage.
- There is a need to provide administrative support and create the initial training regimen to be followed by the bus buddy volunteers.
- Volunteer retention can be an issue, creating an ongoing need to train new volunteers.

## Examples of Best Practices

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**Lane Transit District (LTD) Bus Buddy Program, Eugene, OR.** This program teaches seniors and people with disabilities how to ride the bus in a relaxed way by breaking down barriers and building confidence. LTD has contracted with Alternative Work Concepts to provide one-on-one assistance. The Bus Buddies program teaches seniors about the LTD transit system, as well as how to plan trips and navigate routes. Each bus buddy and senior then ride the bus together. Afterward, the pair discusses the trip and the bus buddy answers any remaining questions about using public transportation in Eugene.

**Paratransit, Inc. Mobility Training Program, Sacramento, CA.** Paratransit, Inc. operates a Mobility Training Program that offers specialized training for seniors and people with disabilities who may have difficulty traveling on Sacramento Regional Transit (RT) buses and light-rail vehicles. Training is usually provided in a one-on-one setting, but is also done in small groups for facilities such as senior housing complexes. Training includes familiarization with the Sacramento RT system, route planning, use of wheelchair lifts and securement devices, landmark identification, bus rules, and safety issues. The agency has three full-time trainers who teach hundreds of individuals each year how to ride the bus and use light rail.

## Costs

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If the LTD approach is followed, there are relatively little ongoing operating costs associated with this program. There will be some initial training curriculum development costs; these costs can be offset, in part, by adopting the techniques used by other transit systems that have implemented a bus buddy program.

## Potential Funding Sources

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If the program is designed specifically to benefit persons with disabilities, Section 5310 Enhanced Mobility for Seniors and People with Disabilities funds could be used to pay for the improvement. Otherwise, this type of enhancement would be funded as a routine operating expense.

## Travel Training

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People who have never used public transportation often have real concerns and fears about using the public transportation network. Travel training has many of the same goals as a bus buddy program, but is more formalized. A training program that teaches consumers how to use public transportation and become confident transit riders can help encourage use of public transit. Travel training may be promoted as a marketing strategy to encourage key consumer groups (i.e., older adults) to use public transit, or it may be targeted towards frequent users of paratransit to encourage individuals to use lower-cost fixed route services, as appropriate to the individual's circumstances. As systems and infrastructure changes occur (e.g., Select Bus Service payment prior to boarding, public plaza and other roadway changes) travel trainers need to work with target populations to train and familiarize users with these changes/improvements. Agencies need to coordinate these changes and have outreach information to explain these changes to targeted populations.

### Expected Benefits / Needs Addressed

- Encourages and support use of local fixed-route services
- May reduce demand for paratransit services
- Increases awareness and use of a variety of community transportation services
- May support other regional priorities, such as workforce development

### Potential Obstacles and Challenges

- Some audiences and individuals may require specialized training.
- Requires multiple-agency cooperation to identify training opportunities
- Training may require support from agencies that perceive no, or minimal, long term gain.

### Examples of Best Practices

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**New York City Department of Education District 75 (Citywide) Travel Training Program**, The Department of Education provides one-on-one travel training throughout the city for eligible high school students with severe mental or physical disabilities. Members of the staff accompany the students on their specific commuting route (up to a 2-hour trip each way) for up to two weeks. The program generally serves 30 students per month, including those with severe mental disabilities, learning disabilities, cerebral palsy, autism, emotional distress, other physical disabilities, and hearing impairments. Up to ten years afterward, approximately 87 percent are still traveling on public transit alone. Since 1970, the program has served 11,000-12,000 people with severe disabilities.

**Metropolitan Transit Authority – New York City Transit (MTA NYCT)**. The MTA has travel-training programs through several of its subsidiaries, including its commuter rail services and NYCT. The Cerebral Palsy Associations of New York State is conducting the training under contract with the NYCT. NYCT's program is available only to Access-A-Ride—eligible individuals and offers one-on-one training. Trainings include familiarity with NYCT schedules, routes, signs, identifying landmarks, requesting information/help from appropriate sources, and travel safety. The duration depends on the individual's ability to master trip planning, safety and other basic traveling skills.

**Westchester County Travel Training Programs**. Westchester County offers three travel training “B.E.A.T.” (Be Educated About Transit) programs to educate and instill confidence in riding Bee-Line System buses:

- The B.E.A.T program is a classroom-based transit education and safety program offered to students in grades four, five and six.
- The B.E.A.T. Plus program is a one-on-one program to train individuals with disabilities in transit use in order to promote their independence and reduce their dependence on Bee-Line ParaTransit.

- The Senior B.E.A.T. program offers presentations to senior citizen organizations and groups to assist older adults in learning about how to ride the Bee-Line System.

**New Jersey Travel Training Program, Hudson and Union Counties, New Jersey.** Hudson and Union Counties were awarded \$311,000 to provide travel training for individuals with disabilities as well as Train-the-Trainer travel training classes for teachers, vocational rehabilitation professional and advocates in Hudson County or other local agencies.

**Dallas Area Rapid Transit (DART) Travel Training Program, Dallas, TX.** DART offers a Traveling Training program to people with disabilities and is particularly helpful to persons not eligible for paratransit curb-to-curb service or those eligible to use curb-to-curb service only for specific trips. This one-on-one training provides practical skills to use the DART system and includes skills such as landmark identification, purchasing tickets, emergency procedures, and familiarity of bus routes and boarding and departing procedures. A trained and qualified instructor works to tailor the training to meet the needs of the individual and personalized instruction until the individual is comfortable and confident in his/her ability to use public transit.

### Costs

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Travel Training costs include salaries of travel trainings and administrators, equipment, and training materials. The cost of inaction (increasing the number of paratransit customers who could use the fixed route system) far outweighs these costs.

### Potential Funding Sources

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Section 5310 Enhanced Mobility for Seniors and People with Disabilities (if specifically oriented towards persons with disabilities)

Section 5307 Urban Area Formula Grants (if designed to support employment)

## Use of Intelligent Transportation Systems(ITS) Technologies to Improve Coordination

The provision of transit, paratransit, and human service agency transportation has long benefitted from use of technology. Generally referred to as Intelligent Transportation Systems (or ITS strategies), such programs can provide traveler information, can help to lower operating costs, reduce customer travel times, and provide more convenient routes and schedules. The use of technology to improve services to the target populations can benefit both the transport provider and customer.

Technologies can include those that benefit customers (real-time traveler information, electronic fare payment, interactive voice recognition telephone systems, or surveillance/security systems) or transit provider organizations (automatic vehicle location, computer dispatch and scheduling, mobile data computers, and coordination/mobility management software).

### Expected Benefits / Needs Addressed

- Technology can improve operational efficiency without increases in operating costs.
- Technology can improve all aspect of customer relations, improving the accuracy and timeliness of trip information providers to consumers.
- Technology can reduce administrative burdens associated with tracking and verifying trips and improve efficiency when billing human service agencies when service is provided under contract.

### Potential Obstacles and Challenges

- Some technologies are expensive to implement and require ongoing vendor maintenance and upgrade contracts.
- Integration of multiple technologies has proven difficult, even with general guidelines for an integrated architecture structure to ensure compatibility.
- Some users in the target populations may be reluctant to use an interactive information kiosk, automated telephone systems, etc.

### Examples of Best Practices

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**Cape Cod Regional Transit Authority (CCRTA), MA.** This regional transportation authority in Massachusetts was one of the first systems in the U. S. to use computer-assisted scheduling. Over the years, the CCRTA upgraded its hardware and software platforms, implementing additional ITS components, such as mobile data computers, using cellphones and tables to track vehicle location, and using geographic information systems (GIS).

**Winston-Salem Transit Authority (WSTA), Winston-Salem, NC.** This countywide authority provides fixed-route transit, complementary paratransit, and rideshare matching services to an urbanized area in the piedmont area of North Carolina. The organization coordinates ADA paratransit, senior transportation, and Medicaid transportation needs. The WSTA has long embraced technology to schedule and manage its fixed-route and paratransit operations, including automated scheduling/dispatching, automatic vehicle location, and trip itinerary planning. The WSTA is expanding its efforts by hosting the regional customer database; this regional customer database is designed to facilitate regional travel among different transit providers by persons with disabilities.

### Costs

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Costs depend on the particular technology deployed.

### Potential Funding Sources

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Westchester County has already been successful in using New Freedom program funding to finance acquisition of mobile data computer technology. Section 5310 Enhanced Mobility for Seniors and People with Disabilities funding (now combined with New Freedom) will pay for future technologies if the enhancement is designed to improve services to persons with disabilities.

Section 5307 Urban Area Formula Grants funds could be used for any technology that helps transit systems provide job access or reverse-commute services.

## Online Trip Planner

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Online transit trip planners enable customers to plan a transit itinerary over the Internet; in much the same manner as one can obtain driving directions between a particular origin and destination. Trip planners typically identify the bus or rail routes and schedules that apply to a trip on a specific day and time, the location of stops and stations, estimates of travel time, fares, and sometimes walking directions to stops and estimates of walk time. Online trip planners are provided by many transit systems, especially those in large metropolitan areas. Google Transit services (described below) have increased online transit trip planning in recent years.

### Expected Benefits / Needs Addressed

- Enhanced customer service due to more widely available information about transit itineraries, and availability of electronic means of accessing information.
- Using an online trip planner is easier for a customer than using maps and schedules to identify an itinerary, and may be quicker than calling a customer information center.
- Some systems integrate with online driving maps so that users seeking driving information are also shown transit information for their trip, which offers a chance to attract new riders to the system.

### Potential Obstacles and Challenges

- Customized trip planners that are purchased or developed by a transit system can be costly.
- Some online services offer a less expensive alternative, but features of the trip planner cannot be customized to meet the needs of the transit system.

### Examples of Best Practices

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**Trip Planning with Online Services.** Online transit trip planners operate in a number of cities and regions. Several services exist in the New York region, including HopStop, Trips 123, and Google Transit. Google Transit, for instance, has 92 transit systems in 28 states (as well as transit systems in other countries) sharing their transit data so that customers can develop their own transit itineraries.

### Other Online Trip Planners in New York

New York 511 Service. 511 NY is a statewide phone number for traveler information. 511 service in New York State can be accessed by phone (511 or 888-465-1169) or Internet ([www.511ny.org](http://www.511ny.org)). Information about traffic conditions, construction projects and other events or incidents, weather, and public transportation for the entire state is provided. The public transportation section of the 511 website includes links to information about the services of a number of public, private, and non-profit transit and paratransit providers (and private intercity bus services), as well as a fixed-route trip planner. 511 NY is a new service that is continuing to be upgraded and updated with more transit information. For Nassau and Suffolk Counties, the following public transit and paratransit providers are included in 511:

#### *Nassau County*

City of Glen Cove

City of Long Beach transit and paratransit service

Nassau Inter County Express (NICE)

Able-Ride

Long Island Center for Independent Living  
Rides Unlimited

*Suffolk County*

HART fixed-route and paratransit service  
SCT  
SCAT  
Town of Brookhaven  
Town of East Hampton  
Town of Riverhead  
Rides Unlimited  
Maryhaven Transportation Services

Another trip planning tool is available as part of **Trips123**. Trips123 is an online travel information and trip planning service that covers trips within the states of Connecticut, New York, and New Jersey and is made up of five primary service components:

- Real-time traffic conditions
- Real-time transit conditions
- Planned construction activities and special events
- Related transit and transportation websites
- Online transit trip planning tool (Transit Advisor) that provides step-by-step instructions to get from one destination point to another

Access to Trips123 information by telephone is a planned enhancement to the system.

**Costs**

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The cost of commercial trip-planning software that is customized to meet the needs of a particular transit system can be significant. Online trip-planning services can be a cost-effective alternative that requires no financial contribution from the transit system other than the time needed to produce transit information in the format specified by the online service. However, the ability to customize the features of the trip-planning services to meet specific needs of the transit agency is lost.

**Potential Funding Sources**

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- Section 5310 Enhanced Mobility for Seniors and People with Disabilities (if specifically oriented towards persons with disabilities)
- Section 5307 Urban Area Formula Grants (if designed to support employment)



## Paratransit Feeder Services to Rail Stations and Bus Stops

In paratransit feeder service (also known as demand-response feeder or demand-response connector service), a customer is provided with a paratransit trip from home to a bus stop, transit center or hub, or rail station; from there, the customer uses the bus or rail service for the rest of his/her trip. Paratransit feeder service is generally used in two circumstances. Some ADA paratransit providers use voluntary or mandatory feeder service as a way to manage the cost of meeting their ADA obligations. Outside of the ADA context, paratransit feeder service offers a means of making transit available in areas where low density, terrain, or street layouts limit the feasibility of traditional fixed-route service. Service may be provided either from an individual's home to the nearest bus stop or rail station, or from a bus stop or train station to a home or a final destination such as a workplace or medical facility.

Paratransit feeder service is most effective when the feeder portion of the trip is relatively short (less than 5-7 miles, for instance), the fixed-route service does not operate infrequently, and the bus stop or rail station offers a safe indoor or sheltered waiting area.

### Expected Benefits / Needs Addressed

- Provides access to the fixed-route network to those who would not otherwise be able to use it.
- Encourages use of existing fixed-route services.
- By making fixed-route service available to those who do not live close to it, feeder service can offer an option for out-of-area trips that an individual may not otherwise be able to make.
- Can provide a means of serving an area until the conditions conducive to traditional fixed-route service develop.
- If used as an alternative to direct paratransit service for some ADA-eligible individuals, feeder service may help lower the cost of providing ADA paratransit service.

### Potential Obstacles and Challenges

- Paratransit riders may prefer direct paratransit service over feeder service to a fixed-route stop.
- In areas where fixed-route service is very infrequent, or where appropriate transfer locations do not exist, feeder service will be less effective.

### Examples of Best Practices

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**Capital Area Transit in Raleigh, NC** has used paratransit feeder service in new developments in suburban areas that are difficult to serve with traditional fixed bus routes. Feeder service in those areas was replaced by fixed bus routes.

**Tri-Met in Portland, OR** provides feeder service in neighborhoods where development is not dense enough to support fixed-route service, but which are located near transit centers that offer bus and rail service. Feeder service connections to the transit centers are frequent during peak periods.

**Winnipeg Transit System in Winnipeg, Manitoba** operates Dial-A-Ride Transit (DART) to supplement its fixed-route bus services. During off-peak hours in four areas, DART provides connections between homes or DART neighborhood stops and locations that serve as transfer points to bus routes, such as shopping centers. Riders are picked up at home by DART and taken to the transfer point in time to meet arriving buses; passengers from the buses are then taken to their homes or to the DART stops located in their neighborhoods. Riders schedule trips from home by calling the driver's cellphone up to 30 minutes in advance; riders boarding the DART vehicle from a bus inform the driver at that time of their drop-off location. Service in three areas operates during weekday evening hours, on

Saturday mornings, and on Sundays and holidays. In the fourth area, in which older adults are concentrated, service is provided during mid-day hours on weekdays and all day Saturday.

### **Costs**

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The planning and implementation costs associated with feeder services are generally minimal. Ongoing operating costs will be the same on an hourly or per-trip basis as other services provided by the paratransit operator. If feeder service is implemented as a substitute for some direct paratransit trips for ADA-eligible individuals, costs for the feeder portion of the trips are likely to be lower than the cost of providing the entire trip via paratransit service.

### **Potential Funding Sources**

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Section 5310 Enhanced Mobility for Seniors and People with Disabilities (if specifically oriented towards persons with disabilities)

Section 5307 Urban Area Formula Grants (if designed to support employment)

## Reverse-Commute Strategies

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Reverse commuting is a strategy to link people with job opportunities in the suburbs. Like other job access strategies, this concept is designed to link potential or existing employees with employment opportunities located in suburban or ex-urban fringe areas that may not be as conveniently served by existing public transportation.

One of the primary reasons for high inner-city unemployment is that many lower-wage or entry-level jobs are increasingly being created in the suburbs. This spatial mismatch between where workers live and where/when jobs are located calls for innovative transit solutions. Some possible strategies include creating new reverse fixed routes or new shuttle services linking stations or hubs to employment sites/areas and reverse-commute vanpools, plus complementary strategies such as guaranteed ride home services and child transportation services.

### Expected Benefits / Needs Addressed

- Opens suburban job markets to urban residents, especially transit-dependent individuals.
- Partnerships with employers may provide opportunities to reduce costs.

### Potential Obstacles and Challenges

- Most strategies can be relatively easily implemented but require financing.
- Reverse-commute strategies may require partnerships with employers.

## Examples of Best Practices

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**Westchester County, New York.** JARC funding was recently given to the county to assist with transporting low-income employees who support individuals with developmental disabilities. The program supports low-income and minority workers from New York City by helping fund work in (and get transport to) one of the Institutes of Applied Human Dynamics in Westchester County.

**Pace's Vanpool Services, Pace, IL.** Pace's Vanpool program comprises three programs: the Advantage Program, the Vanpool Incentive program, and a traditional ride-share program. The Advantage Program provides a transit alternative to persons with disabilities who commute on a regular basis to work sites or rehabilitative workshops. This program provides service to persons who might otherwise request ADA paratransit service not only from Pace, it also is an alternative for those people living outside the  $\frac{3}{4}$ -mile ADA paratransit service area. The Vanpool Incentive program provides a group of commuters with a van and pays for fuel, maintenance, insurance, and tolls for a flat, monthly fare.

**New Reverse-Commute Fixed-Route, Los Angeles, CA.** In 2001, the Los Angeles Metropolitan Transportation Authority initiated a successful express bus service that starts in downtown in the mornings and travels to the San Fernando Valley suburbs.

**Feeder/Distributor Shuttles at Suburban Chicago Rail Stations.** Metra operates the P-8 free shuttle from an origin within  $\frac{1}{2}$ -mile of a non-accessible station to the next accessible station, enabling persons with disabilities access to the rail services. The P-8 shuttle guarantees a ride to the rider's destination station if the shuttle arrives late and the next scheduled train is not available soon thereafter. Reservations can be made up a day before the reservation or as little time as three hours notice.

**Reverse-Commute Vanpools in Philadelphia.** The Philadelphia Unemployment Project operates a reverse-commute vanpool program that provides transportation to people working in the suburbs of Philadelphia. The program pays for gas and insurance; vans are driven by vanpool members. In 2012, there were eight registered partner organizations that provided one to seven vanpools, with an average of 10 workers to each location, throughout the Philadelphia region.

## Costs

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Vanpool expenses (fuel, insurance, maintenance, and repairs) are typically covered by the fares paid by vanpool members; drivers often commute free of charge. Costs are usually covered by a separate entity or a subsidy is provided by a sponsoring agency to eligible low income vanpool members to help cover the fare.

The costs associated with shuttle services to and from train stations or bus stops would be similar to the normal cost per vehicle hour of the service operator and might be \$50–\$150/hour.

## Potential Funding Sources

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Section 5307 Urban Area Formula Grants

Section 5310 Enhanced Mobility for Seniors and People with Disabilities Employment agencies

## Bicycle Amenities at Transit Facilities and on Transit Vehicles

Many, if not most, transit systems facilitate the use of bicycles to reach transit stops and stations by equipping vehicles with bike racks for riders who want to use their bikes at the other end of their transit trip and providing parking racks, lockers, or cages at stops or stations for those who wish to leave their bikes behind.

### Expected Benefits / Needs Addressed

- Increases options for traveling to and from transit stops, which is especially helpful when stops are located at some distance from origins and destinations
- Using bicycles to access transit service is less expensive and healthier for the individual and friendlier to the environment than driving.
- Biking to a transit stop or station may be a work trip option for some.

### Potential Obstacles and Challenges

- Most vehicle bike racks accommodate a limited number of bikes.
- Taking a bike along on a transit trip (i.e., on the vehicle) is most convenient for longer bus/rail trips; for short, local trips, riding the bike from origin to destination is likely to be quicker and easier.
- NYCT vehicles are not equipped with bike racks

### Examples of Best Practices

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**NYCDOT CityRacks program, NYC.** While not JARC/NF funded, NYCDOT's CityRacks program provides free sidewalk bicycle parking racks throughout the five boroughs. The availability of CityRacks parking discourages cyclists from parking at mailboxes, parking meters, trees, and other sidewalk structures. Bike corrals are rows of CityRacks installed in the curbside lane of the street instead of on the sidewalk. This design is a great solution for places where demand for bicycle parking outstrips the available sidewalk space. Anyone can request a bike corral but every bike corral needs a maintenance partner to keep the bike corral clear of snow and debris.

**King County Metro (KCMetro), Seattle** first installed racks on its buses in the 1970s. Today, all KCMetro buses (and some vanpool vehicles) are equipped with racks, and folding bikes are allowed onboard. Bike lockers are installed at park-and-ride lots, transit centers and hubs; most transit facilities have bike racks, as well. KCMetro is conducting a year-long demonstration program of a Ride Free Area, in which riders may load their bikes on buses during all non-peak hours, including weekends and holidays, and ride the bus fare-free. KCMetro is also one of the sponsors of Bikestation Seattle, at which secure indoor parking, bicycle repair services, transit and bike maps, and trip-planning assistance are available.

**OCTranspo, Ottawa – Rack & Roll.** OCTranspo provides bike racks on some bus routes. Bike racks are installed not only at Transitway stations, but also at Ottawa client service centers and community and recreation centers, making it easier for customers traveling to those locations to use their bikes at both ends of their trip. OCTranspo has developed a separate route map that shows only those routes on which buses equipped with racks operate, and its Travel Planner will produce itineraries using only those bus routes that use vehicles on which bikes can be loaded.

**Bike Cages in Boston.** Prompted by an increasing number of bikes chained at various locations around the station as ridership grew in response to rising fuel prices, the Massachusetts Bay Transportation Authority (MBTA) installed two bike cages at the Alewife Station in September 2008. The cages were so well used that the MBTA installed a cage at the Forest Hills Station in the autumn 2009. Each cage holds 150 bikes and is monitored by security cameras. Although use of the cages is free, a special fare card (which can also be used to pay the transit fare) is needed for access.

## Costs

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Approximate costs for selected bicycle amenities are:

Bike racks — vehicle bike racks may cost up to \$1,000 each; parking racks are \$500 or less apiece

Bike cages —with the capacity to hold 150 bikes each, cost \$115,000 each

## Potential Funding Sources

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Section 5307 Urban Area Formula Grants

## Accessibility Improvements on Streets and Roadways

For people with disabilities or seniors with mobility limitations, streets and roadways are the beginning and end of mobility in regards to access to transit, paratransit, and other coordinated initiatives needed for the target populations to travel to services, appointments and other coveted destinations. Departments of transportation and other implementing agencies must comply with ADA's Standards for Accessible Design.

According to the 2010 ADA Standards for Accessible Design, "Each facility or part of a facility constructed by, on behalf of, or for the use of a public entity shall be designed and constructed in such manner that the facility or part of the facility is readily accessible to and usable by individuals with disabilities, if the construction was commenced after January 26, 1992." Going "above and beyond" the ADA Standards for Accessible Design on roadways can help meet the consumers' needs for accessibility to transit and other mobility initiatives. Examples of such practices are countdown signals at pedestrian crossings, improving or adding sidewalks, raising roadbeds, improving crossing distances, implementing pedestrian enhancements such as islands and other technical solutions that may facilitate those who are visually impaired or blind.

### Expected Benefits / Needs Addressed

- Increases mobility and travel options for persons with disabilities and seniors
- Provides the ability to have a greater level of service on the roadways
- Supports other regional funding priorities to provide access to transit and other coordinated initiatives

### Potential Obstacles and Challenges

- Improvements are typically expensive

### Examples of Best Practices

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**NYC Safe Streets for Seniors Program, NYC.** NYCDOT identified 25 neighborhoods in the five boroughs that have a concentration of seniors (age 65+), persons with disabilities, and pedestrian accidents and injuries. Utilizing New Freedom funds, NYCDOT evaluated pedestrian conditions in these neighborhoods from a senior and person with disabilities perspective and have extended pedestrian crossing times at crosswalks to accommodate slower walking speeds, constructed pedestrian safety islands, widened curbs and medians, narrowed roadways, and installed new stop controls and signals.

**NYS SafeSeniors Pilot Program, Nassau and Suffolk Counties, NY.** NYSDOT initiated a pilot program that targets locations with a high number of senior pedestrian accidents. The program used pavement markings with higher visibility, increased the time at intersection crossings, installed countdown signals and improved street lighting. NYSDOT has completed two corridors, Hempstead Turnpike (Route 24) in Nassau County and Main Street (Route 25/25A) in Suffolk County.

**ADA Management Plan, NY.** NYSDOT has an ADA management plan in collaboration with FHWA which includes a sidewalk/curb ramp inventory, identifies deficiencies and prioritizes improvements.

## **Costs**

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Costs will vary considerable depending on extent of the improvements and complexity of facilities.

## **Potential Funding Sources**

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Section 5307 Urban Area Formula Grants

Section 5310 Enhanced Mobility for Seniors and People with Disabilities Employment agencies



## Pedestrian Wayfinding

A pedestrian wayfinding system treats pedestrians as part of the transportation network by providing detailed maps and directional information on-street and at transit facilities that encourage walking and transit usage. The critical functions of wayfinding are to connect pedestrians to transit services and to aid with general on-street navigation. In addition to these general uses, wayfinding is especially useful to seniors and the disabled. Pedestrian wayfinding maps highlight bus routes and ADA-accessible entrances to transit services and major destinations, as well as public seating and open spaces, aiding individuals who are generally less comfortable traveling for long periods of time, who may require resting areas, or who are less likely to take trips if there is a possibility of getting lost.

The figures on short transit trips suggest that the lack of street-level pedestrian information causes many people to rely on taxis, for-hire-vehicles, and private vehicles for trips that may be faster or easily managed on foot. This can cause people to spend more personal income on transportation than is necessary.

### Expected Benefits / Needs Addressed

- Improvements in consumer comprehension of available services will increase transit utilization.
- The program will benefit the general public, including first time visitors, tourists, low income persons, seniors and the disabled.

### Potential Obstacles and Challenges

- There is no industry standard or consensus regarding the style and presentation of information

### Examples of Best Practices

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NYCDOT's WalkNYC Pedestrian Wayfinding Program is New York City's standard for pedestrian wayfinding. WalkNYC provides clear visual language and graphic standards that can be universally understood and that encourage walking and transit usage by providing multi-modal information across a broad range of environments in the city. The first WalkNYC signs were installed in 2013.

### Costs

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Costs will vary considerably depending on extent of the improvements and complexity of facilities.

### Potential Funding Sources

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Section 5310 Enhanced Mobility for Seniors and People with Disabilities Employment agencies