Chapter 8. Identification of Strategies

Introduction

Chapter 7 outlined unmet needs and service gaps in the transportation network in Nassau and Suffolk counties for the three target populations of older adults, persons with disabilities, and persons with low income. The strategies proposed in this chapter address those needs and gaps.

Information about successful transportation programs and coordination efforts in other areas was combined with input from numerous stakeholder interviews, community meetings, workshops and focus groups with the target populations to formulate these strategies and tailor them to the subregion’s specific needs. Additional strategies were proposed by members of the Stakeholder Advisory Committee. Priorities among this group of strategies, discussed in Chapter 9, will be used to guide future funding decisions for the JARC, New Freedom, and Section 5310 programs.

A brief overview of needs and gaps on Long Island is presented below, followed by an overview of all 16 strategies and individual descriptions of each.

Summary of Unmet Needs

Outreach activities and analysis of data regarding target populations, key destinations, and existing transportation services revealed that older adults, persons with disabilities, and persons with low income face similar transportation challenges on Long Island. While the unmet needs summarized below generally apply to both Nassau and Suffolk counties, some needs are more pronounced in one county or the other.

Fixed-Route Service Gaps

While many bus routes and rail lines serve Long Island, several characteristics of those services may limit their usefulness to members of the target populations. Distance to/from stops and stations may be problematic for older adults and persons with disabilities, and pathways and intersections in both counties make travel to some bus stops dangerous and/or difficult. Not all bus stops are accessible to persons who use wheelchairs, and while many of the LIRR stations are fully accessible, some stations on the Babylon branch are not. Improved amenities at stops and stations would also make waiting for buses and trains easier for members of the target populations, particularly in areas where service is infrequent.

The northeastern portion of Nassau County and the eastern end of Suffolk County are served by fewer bus routes and rail stations than the rest of Long Island. Services in both counties are oriented in a mostly east-west direction, which makes north-south travel difficult.

LIRR service does not run frequently to all stations in outside of peak commuting hours. This is especially true of service to the North and South Forks of Suffolk County. In the less densely developed portions of Suffolk County, weekday and evening bus services are limited, and no service is provided on Sundays. Frequency on some bus routes is one or two hours between trips.
Accessibility is also an issue with fixed-route services. While many LIRR stations are accessible for individuals who use wheelchairs, some stations on the Babylon Branch are not. Bus stops throughout both counties may also benefit from accessibility improvements.

**Demand-response Service Gaps**

Members of the target populations may be able to take advantage of the many demand-response transportation services that are in operation on Long Island. However, those services pose restrictions. Options for persons with low income who do not meet eligibility requirements related to age or disability are particularly limited.

ADA paratransit services are widely available in terms of geographic coverage and days/hours of service, and may be used for any trip purpose, but individuals must be ADA-eligible in order to use them. Municipal services provide an option for older adults (and in a few cases, persons with disabilities), but days and hours of service are limited, and trips stay within town boundaries, or within the immediately surrounding communities. Other demand-response services in both counties are provided only for human service agency clients or program participants, and most limit eligible trip purposes.

**Taxi Service Limitations**

Taxi service might be an option in areas or during times when fixed-route service is not in operation or does not meet an individual’s travel needs. However, taxi providers do not serve all Long Island communities, and accessible taxi service in particular is scarce. The level of typical taxi fares in both counties limits the usefulness of this private transportation option, as well.

**More Affordable Transportation Services**

The affordability of transportation services is a concern to members of the three target populations. In Nassau County, for example, fares for LIRR service (which range from $3.25 for a one-way trip within one zone to $23 one-way from the eastern end of Suffolk County to Manhattan) and Able-Ride trips ($3.75 for a one-way trip), in particular, can be difficult to fit into limited budgets.

**Assistance for Riders**

The level of assistance available to passengers varies among the community transportation providers that serve Nassau and Suffolk counties. In some cases, door-to-door service is available while in others, service is limited to curb-to-curb transportation. Many people need a significant level of assistance in order to be able to access transit, with some people needing help from within their home to their destination. The level of assistance that is provided is of special concern to older adults.

**Information about Transportation Services**

Numerous public transit and community transportation providers serve Nassau and Suffolk counties. The Nassau County Department of Senior Citizen Affairs and the Suffolk County Office for Aging both publish directory of services available to older adults in their respective counties, but in general, individuals, family members, or human service agency staffs must consult a number of sources to identify available transportation options for a given trip. Even if information
can be located, varying eligibility requirements, days and hours of service, service areas, and service policies can make trip planning a difficult task.

**Strategies for Long Island**

Figure 8-1 summarizes key characteristics of all 16 transportation strategies proposed to address service gaps and unmet transportation needs for older adults, persons with disabilities, and persons with low income. Following the table are individual strategy descriptions that contain more detail, including examples of areas where similar programs have been implemented.

One strategy that appears to be especially promising for Nassau County and/or Suffolk County is that of mobility management. The term mobility management can mean a number of different things, but is used in this plan to mean an individual (or staff of individuals) in an organization who helps consumers (or agencies) to find available resources to meet their transportation needs, and/or implements coordination strategies and programs to address more general transportation issues and improve access to services. A Mobility Manager can also implement and oversee a variety of transportation programs and services designed to increase coordination and improve mobility in an area. In Table 8-1, strategies that could be led or supported by a Mobility Manager are identified by “MM.”

For each strategy a lead agency or “champion” has been suggested to initiate action. The entities listed represent possible lead agencies and should in no way preclude other agencies or organizations from leading an effort to address this strategy. The implementation timeframe estimates the time required to implement the strategy, after funding has been secured. Where possible, rough cost estimates are provided to give organizations that may contemplate developing a project of a particular type an idea of the potential financial commitment that will be needed. In other cases, the types of expenses that may be incurred are identified. Potential funding sources refer to the funding programs for which projects are likely to be eligible.
### Summary of Potential Human Service Transportation Plan Strategies

The following summarizes potential strategies that will help improve mobility for older adults, persons with disabilities and persons with low incomes on Long Island.

#### Figure 8-1 Summary of Potential Human Service Transportation Plan Strategies for Long Island

<table>
<thead>
<tr>
<th>Strategy (to address need/gap)*</th>
<th>Possible Lead Agency/Champion</th>
<th>Implementation Timeframe†</th>
<th>Estimated Costs (Capital and/or Operating) ‡</th>
<th>Potential Funding Sources</th>
<th>Strategy Overview</th>
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<tr>
<td>Mobility Manager and Mobility Manager Training/Support MM*</td>
<td>Various county or municipal agencies and departments</td>
<td>3-6 months</td>
<td>Annual salary $30,000 - $60,000&lt;br&gt;Annual training and administrative costs $50,000 - $100,000</td>
<td>- JARC  &lt;br&gt;- New Freedom</td>
<td>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.</td>
</tr>
<tr>
<td>Centralized Transportation Resource Directory MM</td>
<td>LITM  &lt;br&gt;Nassau County Planning Department  &lt;br&gt;Suffolk County Dept. of Public Works, Transportation Division  &lt;br&gt;Other county or municipal departments  &lt;br&gt;Non-profit human service agencies</td>
<td>6-12 months</td>
<td>Development costs for basic directory – up to $50-75,000&lt;br&gt;Printing and distribution costs vary</td>
<td>- JARC  &lt;br&gt;- New Freedom</td>
<td>A hard copy transportation resource directory could be printed annually or bi-annually; an online version could also be made available. 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, as well as by service providers to increase coordination.</td>
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<tr>
<td>Improve Access to Fixed-Route Bus Stops</td>
<td>Suffolk County Dept. of Public Works, Transportation Division (SCT) Nassau County Planning Department Municipalities – especially traffic safety departments</td>
<td>8-12 months</td>
<td>Costs per: Accessible Pedestrian Signals – $8,000 to $12,000 Bus shelter with bench – $3,000 – $5,000 Curb cuts – $1,000 or less each Sidewalks - $500,000 to $1M per mile</td>
<td>• New Freedom • Section 5307, 5311 capital programs</td>
<td>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</td>
</tr>
<tr>
<td>Vehicle Acquisition</td>
<td>Community transportation providers</td>
<td>NA</td>
<td>$40,000 - $100,000 per vehicle, depending on type; Federal share no more than 80%</td>
<td>• JARC • Section 5310 • New Freedom</td>
<td>Continued use of Section 5310 funds to support capital purchases, with priority given to applicants who are using 5310 vehicles in a coordinated manner. Addition of JARC and New Freedom funds to purchase vehicles and continue/expand services.</td>
</tr>
<tr>
<td>Improvements at Non-Key Rail Stations</td>
<td>MTA LIRR</td>
<td>&gt;24 months</td>
<td>Station accessibility improvements are expensive</td>
<td>• New Freedom</td>
<td>New Freedom funding is currently being used by MTA LIRR to make improvements at a number of stations. Additional improvements would facilitate greater use of rail service and improve mobility.</td>
</tr>
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<tr>
<td><strong>Job Access Strategies MM</strong></td>
<td>MTA Long Island Bus&lt;br&gt;Suffolk County Dept. of Public Works, Transportation Division&lt;br&gt;HART&lt;br&gt;LITM&lt;br&gt;Community transportation providers</td>
<td>3-6 months</td>
<td>Operating costs for shuttle services typically range between $55 and $65 per hour&lt;br&gt;Vanpool and ridesharing options are less expensive</td>
<td>• JARC&lt;br&gt;• New Freedom (if specifically for persons with disabilities)</td>
<td>JARC funding has been used by MTA Long Island Bus and Suffolk County Transit in the past to extend routes and service hours and expand capacity, especially on weekends, to better serve employment locations. Strategies for improving access to jobs could include 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.</td>
</tr>
<tr>
<td><strong>Transit Service Expansion and Improvements</strong></td>
<td>MTA Long Island Bus&lt;br&gt;Suffolk County Department of Public Works, Transportation Division (SCT)&lt;br&gt;HART</td>
<td>12-24 months</td>
<td>Public Transit – up to $150 per hour&lt;br&gt;Van/shuttle services – between $55 and $65 per hour</td>
<td>• JARC (if used to support employment)&lt;br&gt;• New Freedom (if specifically for persons with disabilities)</td>
<td>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.)</td>
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<tr>
<td><strong>Paratransit Feeder Service to Fixed-Route Stop and Stations</strong></td>
<td>MTA Long Island Bus, Able-Ride Suffolk County Dept. of Public Works, Transportation Division (SCAT) Municipal operators of demand-response service</td>
<td>6-12 months</td>
<td>Minimal planning and implementation costs Operating costs at same hourly or per-trip rate as other services provided by service operator</td>
<td>• JARC • New Freedom</td>
<td>Feeder service would provide access to the fixed-route network for those who are currently unable to use it because origins and/or destinations are not close enough to stops. Such service encourages use of existing transit services, and can offer an option for out-of-area trips that an individual could not otherwise make.</td>
</tr>
<tr>
<td><strong>Accessible Taxi Program MM</strong></td>
<td>MTA Long Island Bus Suffolk County Department of Public Works, Transportation Division Nassau County Planning Department Municipal departments of senior citizen affairs</td>
<td>6-12 months</td>
<td>Roughly $28,000 per vehicle – 80% of an accessible minivan costing approximately $35,000</td>
<td>• JARC • New Freedom • Section 5310</td>
<td>Accessible taxis could provide service when fixed-route or demand-response services are not in operation, and for types of trips that are not eligible under other transportation programs. Assistance to taxi operators to encourage them to acquire accessible vehicles could be used to complement a taxi subsidy program.</td>
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<tr>
<td>Publicize Existing Online Trip Planners MM</td>
<td>MTA Long Island Bus County departments of senior citizen affairs, aging, social services Town departments of senior citizen affairs</td>
<td>3 months</td>
<td>Minimal</td>
<td>• JARC  • New Freedom</td>
<td>Online trip planning for Long Island residents is currently available through several sources: Google Transit (MTA LIRR and LI Bus), New York State 511 service (transit and paratransit services in both counties), and Trips123 (MTA LIRR and MTA LI Bus)</td>
</tr>
<tr>
<td>Coordinated Municipal Demand-Response Services MM</td>
<td>Suffolk County – Long-distance medical service shared by Southold, Riverhead and Brookhaven; multi-community service covering five non-East End towns Nassau County – Multi-community service covering all three towns</td>
<td>Joint long-distance medical service – 6 months to one year Multi-community service – 1-2 years</td>
<td>Start-up costs for planning and implementation and public information/market ing Operating costs negotiated with service operator by the vehicle hour or passenger trip</td>
<td>• JARC  • New Freedom  • Section 5310 (capital expenses)</td>
<td>Operating municipal demand-response services in multi-community areas rather than a single city or town would facilitate inter-community travel and increase operating efficiency. A less comprehensive approach would be the joint operation of specific services, such as out-of-town medical trips, between municipal demand-response programs.</td>
</tr>
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</table>
| Bicycle Amenities at Transit Facilities and on Transit Vehicles | MTA LIRR  
MTA Long Island Bus  
Suffolk County Dept. of Public Works, Transportation Division | 6-12 months | Bike racks for vehicles – $1,000 or less each  
Bike parking racks – $500 or less each  
Bike cages (up to 150 bikes) – $115,000 | • JARC | Facilitating and encouraging the use of bicycles for access to and from bus stops and rail stations would increase the usefulness of transit service for work trips |
| Travel Voucher Program MM | County departments of social services  
Nassau County Department of Senior Citizen Affairs  
Suffolk County Office for the Aging  
Municipal departments of senior citizen affairs and/or human services | 3-6 months | Level of subsidy per user and total annual subsidy can be set by participating sponsor agencies | • JARC  
• New Freedom | A travel voucher program would make maximum use of existing transportation providers, as well as volunteers and family members, thus increasing mobility for eligible users. |

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‡ Dollar figures reflect differences in subregional economies.
## Strategy Overview

A taxi subsidy program can offer a flexible, cost-effective means of meeting a variety of trip needs, and can be used to replace or supplement existing agency transportation services. Acquisition of accessible taxis in partnership with taxi operators is a useful complementary strategy.

### Taxi Subsidy Program

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<tr>
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</table>
| MM Taxi Subsidy Program        | Nassau County Department of Senior Citizen Affairs  
Nassau County Office for the Physically Challenged  
Suffolk County Office for the Aging  
Suffolk County Office for Handicapped Services  
County or municipal departments of human services  
Municipalities  
Long Island Center for Independent Living  
Suffolk County Independent Living Organization  
Healthcare facilities | 6-8 months | Start-up and administrative costs may range from $50,000 - $75,000  
Agency sponsors control subsidy per trip and overall annual subsidy amount | • JARC  
• New Freedom | A taxi subsidy program can offer a flexible, cost-effective means of meeting a variety of trip needs, and can be used to replace or supplement existing agency transportation services. Acquisition of accessible taxis in partnership with taxi operators is a useful complementary strategy. |

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### Strategy Overview

#### Reverse Commute Strategies – Shuttle Services to/from Rail Stations or Bus Stops; Vanpools

**MM**

<table>
<thead>
<tr>
<th>Strategy (to address need/gap)*</th>
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<tr>
<td>Reverse Commute Strategies</td>
<td>LITM</td>
<td>3-6 months</td>
<td>Shuttle services might cost $50-60/hour</td>
<td>- JARC</td>
<td>Reverse commute strategies could be used to address the difficulty that home healthcare workers have with reaching clients’ homes in part of Nassau County, among other workers traveling at off-peak hours or outside of New York City for employment opportunities.</td>
</tr>
<tr>
<td></td>
<td>Nassau County Dept. of Senior Citizen Affairs</td>
<td></td>
<td>Vanpool costs could be covered by fares or subsidized for low income individuals by a sponsor organization</td>
<td>- New Freedom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nassau County Dept. of Social Services (Medicaid)</td>
<td></td>
<td></td>
<td>- Employers (or agencies)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long Island CIL</td>
<td></td>
<td></td>
<td>- County Medicaid agencies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Suffolk County Dept. of Social Services, Medical Services Bureau</td>
<td></td>
<td></td>
<td>- Organizations administering the Consumer Directed Assistance Program in each county</td>
<td></td>
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<tr>
<td></td>
<td>MTA Li Bus</td>
<td></td>
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<tr>
<td></td>
<td>Home healthcare worker employment agencies</td>
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#### Real-time Transit Information

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<tr>
<td>Real-time Transit Information</td>
<td>MTA Long Island Bus</td>
<td>1-2 years</td>
<td>Costs include hardware, software, and ongoing operating and maintenance costs; can range from tens of thousands for small systems to tens of millions for large ones</td>
<td>- JARC</td>
<td>Providing real-time information about transit vehicle location or arrival times has been shown to improve customer service and customer satisfaction. The availability of accurate arrival information can help to reduce the inconvenience of infrequent bus service, and may attract new transit riders.</td>
</tr>
<tr>
<td></td>
<td>Suffolk County Dept. of Public Works, Transportation Division--SCT</td>
<td></td>
<td></td>
<td>- New Freedom</td>
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</table>
| Expanded Volunteer Driver/Escort Services MM | Nassau County Dept. of Senior Citizen Affairs | 6-12 months | Costs include efforts to recruit, train, and recognize volunteers | • New Freedom (new programs)  
• Older Americans Act Title III (b) | Volunteers can provide a flexible source of transportation that can be called upon as needed; volunteer escorts can provide additional assistance to customers who need it. Insurance and liability issues may be a concern, but can usually be addressed. Independent volunteer matching organizations may be able to coordinate requests for service with available drivers. |

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Mobility Manager and Mobility Manager Training/Support

A Mobility Manager could 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 as well. 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 (TMAs). 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 serve to be the driving force behind coordination planning efforts, perhaps 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 very 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 that are 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
- Can highlight mobility challenges and opportunities and raise awareness
- Implementing programs and creating awareness can result in improved effectiveness and efficiency

Potential Obstacles and Challenges
- Mobility Managers with the full range of range of required skills may be difficult to find
- Individuals who are 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
Application for the NYMTC Region

It appears that the need for several of the possible functions that a Mobility Manager undertake permeate throughout the region. For customer-side functions, consideration should be given to perhaps setting up Mobility Managers at the borough, county, or municipal level, with individuals hired by the borough, county, or municipality. In this way, the functions that a Mobility Manager might tackle would be geared to the specific unmet needs in each jurisdiction. The one exception might be a centralized resource of transportation information which might be expanded to the subregional or regional level, and hence might become a function of NYMTC. On the supply side (in other words, to support transportation providers), Mobility Managers should be considered at the Borough/County level, if not the sub-borough or sub-county level, especially where the coordination of support services and/or the development of a voucher or subsidy program is being considered. NYSDOT or NYMTC could also develop a program for training and supporting Mobility Managers, perhaps using the Wisconsin model as template. (See below.)

Examples of Best Practices

The State of Wisconsin Department of Transportation 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 that 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. The Department of Transportation has also set up a year-long series of training sessions to ensure that Mobility Managers have access to technical assistance and resources.

The Town of Brookhaven in Suffolk County has received a New Freedom grant for the establishment of a Mobility Manager.

Costs

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

The cost of funding a Mobility Manager is allowed under Section 5316 (JARC) and Section 5317 (New Freedom) 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. Wisconsin DOT was able to use New Freedom funding to help establish, train, and support its network of Mobility Managers.

Potential Lead Organizations

County departments (or partnership between Nassau and Suffolk County departments) should take the lead in (1) setting up subregional or county-based Mobility Managers for centralizing information and referrals; (2) helping local governments or agencies set up Mobility Managers for coordinating other customer-side and supply-side services (as well as the bodies to help plan the
development of these services); and (3) providing training and support to the Mobility Managers. Local One-Stop Employment Centers, such as the center operated by the Suffolk County Department of Labor in Riverhead and the Massapequa Employment Center in Nassau County, would make ideal locations for a Mobility Manager.
Centralized Transportation Resource Directory

Centralized transportation resource directories 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 low income individuals, older adults, and persons with disabilities, but it is up to the consumer to find out hours and days of operation, availability, eligibility, fares, 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.

<table>
<thead>
<tr>
<th>Expected Benefits / Needs Addressed</th>
<th>Potential Obstacles and Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provides a &quot;one-stop&quot; resource for all public and private transit services and human service agency transportation</td>
<td>• Requires a comprehensive data collection effort to create the directory</td>
</tr>
<tr>
<td>• Directories provide easy contact and eligibility information enabling consumers and advocates alike to identify potential service providers for specific members of the target populations.</td>
<td>• Keeping the directory up-to-date has proven problematic in other areas</td>
</tr>
<tr>
<td>• Resource directories are readily embraced by most coordination committees as a non-threatening strategy that promotes enhanced mobility.</td>
<td>• Consumers must be aware that the directory exists in order to be useful</td>
</tr>
<tr>
<td>• Particularly useful in larger communities with a large number of public and private sector transportation resources.</td>
<td>• Comprehensive directories may contain many listings, confusing consumers</td>
</tr>
<tr>
<td></td>
<td>• Directories only alert consumers to the availability of a service provider; consumers and/or advocates must still inquire about eligibility and arrange for services.</td>
</tr>
</tbody>
</table>

Application for Long Island

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). 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 resolve this dilemma. A review of best practices indicates that, historically, such directories were published in book form. More recently, centralized directories have increasingly become web-based. In the NYMTC region, creation of directories for the region, subregion (New York City, Long Island, Lower Hudson Valley), or even at the county/borough level would be practical if standardized data collection were employed. 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, purchase of service, etc.
Examples of Best Practices

Community Information & Referral, Maricopa County, AZ. Community Information & Referral (CIR) is a 501(c) (3) non-profit corporation established in 1964 to help residents in the Greater Phoenix area by gathering and making available information about vital community resources. CIR operates a 24-hour “hotline” in a ten county region of Arizona. CIR annually publishes its Maricopa County Directory of Human Services and Self-Help Support Groups. While this directory is comprehensive in its coverage, transportation resources are included. Additionally, LIFE (formerly Easter Seals Arizona), recognizing the value of CIR’s comprehensive published and online directory, developed a Directory of Transportation Services in 2006. This directory provides information on voluntary, public, non-profit and private for-hire transportation services. In 2007, the Maricopa Association of Governments (MAG), as part of their SAFETEA-LU public transportation/human services coordination Plan, adopted a recommendation that would bridge the data contained in these existing directories with existing public transit services information. The resulting directory would be published online. In a 2008 update to this plan, the directory is being integrated in the 211 information system for the area.

The Seattle Crisis Resource Directory, WA. The Seattle Community Network (SCN) is a free public-access computer network. The organization began in 1994 as a partnership with the Seattle Public Library. SCN was originally a project of the Seattle Chapter of Computer Professionals for Social Responsibility (CPSR) and was later incorporated in 1995 as the Seattle Community Network Association (SCNA). SCN is an all-volunteer non-profit organization funded wholly by donations. While the resource directory references a number of community services, transportation resources are one of the main services listed on the organization’s web-based directory. The directory includes references and links to all existing public transportation services in the Seattle area, as well as information of various human service agencies that also provide transportation.

Orange County, NY. Transit Orange Brochure and Website. The Orange County Department of Planning has developed a transit guide to the many different public and private transit and paratransit services available in the county that have recently been branded as “Transit Orange”. A printed version of the guide is available at various locations throughout the county; a website provides the same information in English and Spanish.

Cost

Development of a basic directory might range from $50,000 to $75,000. Working with planning organizations or college/university students for development of maps or a design format is likely to reduce the cost.

Printing costs will vary depending on the number of copies to be printed, the method of distribution, and possible contributions from partners. In earlier versions of the Orange County transit guide described above, the publisher of the local newspaper printed 90,000 copies of the guide at a cost of approximately $21,000 and inserted them into an edition of the paper. In the MetroWest section of the Boston metropolitan area, a local developer contributed $100,000 for the creation of a map illustrating all the transportation services available in the area. The local planning organization provided the GIS services needed to develop the map at a cost of $2,000. The local newspaper printed 10,000 copies at no charge and included them as inserts in the Sunday edition.
Potential Funding Sources

Central resource directories facilitate enhanced access to services by the general public, including older adults, persons with low income, and persons with disabilities. This activity is expressly permitted under FTA Section 5317 “New Freedom” Program 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 among supporting programs. Identical language appears in the program guidance for the FTA Section 5316 (JARC) program. Importantly, as a mobility management strategy, this activity could be funded with 80 percent Federal participation.

Potential Lead Organizations

- Long Island Transportation Management (LITM)
- Nassau County Planning Department
- Suffolk County Department of Public Works, Transportation Division
- Non-profit human service agencies, advocacy groups, or other organizations that have contact with the target populations
Improved Access to Fixed-Route Bus Stops

Improving the accessibility of and access to fixed-route bus stops involves first examining bus stops (and especially those used or potentially used by significant numbers of older adults and/or persons with disabilities) and determining whether improvements could help make stops more accessible. Potential infrastructure improvements may include removing barriers on sidewalks, improving or adding sidewalks, adding curb cuts, adding or improving pedestrian crossing and signals (including audible 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 wayfinding devices might help individuals with vision impairments locate bus stops.

Expected Benefits / Needs Addressed
- Increases the ease of use of bus service for riders, particularly older adults and persons with disabilities
- Reduces reliance on paratransit service
- Improvements benefit all current and potential bus riders
- Secondary impacts associated with community development and enhanced safety

Potential Obstacles and Challenges
- Physical improvements require financing and typically have a long lead time
- Placement of shelters and benches is dependent on the approval of property owners
- Bus stop improvements require ongoing maintenance, which would be an additional expense (although maintenance costs could be covered through advertising revenue, agreements with local organizations, or an Adopt-a-Stop program)
- Many improvements require prioritization, funding and commitment from local authorities

Application for Long Island

Actions in this category would address the widely expressed need in public workshops and focus groups for more user-friendly and accessible bus stops. Enhancements that make travel easier for pedestrians, such as accessible pedestrian signals and improved sidewalks, could also be installed along paths between bus stops and major destinations (such as the Nassau Mall on Hempstead Turnpike, for example), to address another concern that was raised numerous times.

Examples of Best Practices

**Easter Seals Project ACTION**’s Bus Stop Accessibility and Safety Toolkit has helped 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.

**Tampa, FL.** HART in the Tampa area has recently used this toolkit to put together such an inventory.

**Dallas, TX.** DART in Dallas is in the process of surveying all of its bus stops, including taking a photograph of each stop location.
Costs

Accessible Pedestrian Signals (APS): The cost of retrofitting an intersection with APS on four crosswalks can range from $8,000 to $12,000; improving multiple intersections at one time or including APS when a signalized intersection is originally created may lower the cost.

Bus shelter: The cost of a bus shelter can vary greatly depending on size, type, and features. The average cost of a standard, pre-manufactured shelter with a bench might be in the range of $3,000-5,000; customer-designed shelters might cost $15,000 and up apiece.

Curb cuts: The cost of adding a new curb cut might be $1,000 or less

Bus stop accessibility: An accessible bus stop is one which is designed to allow a person with a disability to travel to the sidewalk or building served by the stop without encountering a barrier, includes wayfinding principles and aids, is safe, and provides warning of hazards to users. Conducting a thorough inventory of the conditions at and around a bus stop can identify improvements that are needed to ensure accessibility; costs of adding accessibility are dependent on the specific changes that need to be made.

Potential Funding Sources

- New Freedom
- Section 5307, 5311 capital programs

Potential Lead Organizations

- Suffolk County Department of Public Works
- Municipalities
- Nassau County Planning Department
Vehicle Acquisition

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 Federal Transit Administration’s Section 5310 Program is specifically designed to 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 JARC and New Freedom funds. To be eligible for JARC funding, vehicles must be used in services that transport individuals with low income to work and work-related activities. To be eligible for New Freedom funds, vehicles must be used to provide new service for persons with disabilities that goes beyond the requirements of the ADA. For example, vehicles used in new accessible taxi service or vanpool programs, or vehicles designed to transport mobility aids that are larger or heavier than the “common wheelchair” defined in the ADA regulations, could be purchased or modified with New Freedom funds.

The number of agencies that apply for 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 JARC and New Freedom 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 HHS 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 JARC and New Freedom funding for capital purchases would reduce the resources available for other types of activities, such as operations or planning.
Application for Long Island

A number of non-profit organizations and several towns have received Section 5310 grant awards in the past; many rely on 5310 vehicles to enable them to provide program-related or more general transportation for older adults and/or persons with disabilities. Organizations that apply for Section 5310 funding in the future must show that they operate transportation for older adults, persons with disabilities, and/or individuals with low incomes and address one or more of the unmet needs presented in Chapter 7 of this coordinated Plan (in addition to meeting other NYSDOT requirements). This strategy also proposes that a higher priority be awarded to applications from organizations that propose to use Section 5310 vehicles in a coordinated manner. For example, two organizations on Long Island that have received Section 5310 vehicles in the past provide transportation services under contract to multiple human service agencies: Community and Family Residences, Inc. and Maryhaven Transportation Services.

Using JARC and New Freedom funds to support vehicle acquisitions would enable more organizations to take advantage of Federal capital assistance to replace vehicles or obtain new vehicles for expansions of service.

Examples of Best Practices

**Senior Transportation Connection (STC), Cuyahoga County, OH** is a community based organization that is responsible for coordination of community based 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 only fund 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**

Successful applicants for capital assistance are eligible to buy vehicles procured by NYSDOT under a statewide contract. For FY 2009, four types of accessible, body-on-chassis type vehicles were available. 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**

- Section 5310
- JARC
- New Freedom
Potential Lead Organizations

- Non-profit, community, or faith-based organizations that serve older adults and/or persons with disabilities
- Non-profit, community, or faith-based organizations that provide transportation services for older adults and/or persons with disabilities
- Town departments of senior citizen affairs or disabled services
- Medical facilities
- Centers for independent living
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 inter-modal stations not designated as key stations is considered to meet the eligibility for New Freedom funds, so long as the projects are clearly intended to remove barriers that would otherwise have remained.

<table>
<thead>
<tr>
<th>Expected Benefits</th>
<th>Potential Obstacles</th>
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<tbody>
<tr>
<td>• Increases mobility and travel options for persons with disabilities</td>
<td>• Improvements are typically expensive</td>
</tr>
<tr>
<td>• Reduces demand for ADA paratransit service and improves system-wide costs</td>
<td>• Long lead time with potential for disruptions to existing service and travelers</td>
</tr>
</tbody>
</table>

Application to Long Island

Sixteen LIRR stations on the eleven LIRR branches that serve Long Island have been designated as “key stations” and meet all ADA requirements for full accessibility, with elevator access to platforms from the street. Eight other stations also provide access to platforms via elevator, even though they are not key stations. At a number of non-key stations (81), ramps and/or elevators provide accessibility for individuals who use wheelchairs.

In the 2008 round of New Freedom program funding administered by NYMTC, MTA LIRR was recommended for an award of funds to implement new accessibility features compliant with the ADA Accessibility Guidelines for Buildings and Facilities (ADAAG) at a number of stations, including Merrick, Bellmore, Farmingdale, Bethpage, Freeport, Westbury, Valley Stream, Queens Village and Wyandanch stations in Nassau and Suffolk counties.

Several stations on the Babylon Branch are equipped with escalators only, and are therefore not wheelchair-accessible:

- Amityville
- Copiague
- Lindenhurst
- Massapequa Park
- Seaford
- Wantagh

Accessibility improvements at those stations would be eligible New Freedom projects, if MTA LIRR does not currently have plans to make such improvements. Limited accessibility of some LIRR stations was raised as a concern at stakeholder and public workshops.
Overview of National/Regional Best Practices

Boston has the oldest subway system in North America, thus a prime candidate for accessibility upgrades. The Massachusetts Bay Transportation Authority (MBTA) started working toward achieving station accessibility in 1990. To date, MBTA has made 73 of its 80 key stations accessible, allocated the construction funds for the remaining seven, and has begun making dozens of non-key stations accessible as part of station modernization projects. In 2006 the MBTA entered an agreement with the Boston Center for Independent Living that called for increased funding for elevator improvements, accelerated purchases of low-floor buses and buses with lifts, management and training initiatives, and new public address systems.

Costs

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

- New Freedom

Potential Lead Organizations

- MTA LIRR
Job Access Strategies

This strategy focuses on linking people, and especially those with low income, with job opportunities. Some possible strategies include increased capacity, frequency, or hours of service on bus routes that serve employment sites; 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. (Note that these strategies are similar to those described as “Reverse Commute Strategies,” but are focused more on providing connections to employers for individuals who need to commute to work in the peak direction.)

Expected Benefits
- Opens job markets to low income and other transit-dependent individuals
- Partnerships with employers may provide opportunities to reduce costs
- Eligibility for Job Access Reverse Commute (JARC) funding

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

Application for Long Island

JARC funding has been used by MTA Long Island Bus in the past to increase or extend the hours of operation of service on key bus routes that serve major employment areas, such as the Nassau Hub area, the Route 110 corridor, and to provide connections to employment for individuals living in communities such as Hempstead, Freeport, Westbury, Long Beach, Uniondale, Elmont, Glen Cove, Inwood, and Valley Stream.

Focus group meetings conducted in Nassau County identified the following Nassau County communities in which desirable job opportunities are located, but that may be difficult to reach: Manhasset, Syosset, Farmingdale, Jericho, and Hicksville.

A Mobility Manager could not only address the mobility challenges of individuals but could also work with employers (on behalf of their employees and prospective employees) to offer a wide range of ridesharing and vanpool services. A Mobility Manager could also establish and manage supporting services such as a guaranteed ride home program for those who are stranded at the workplace and a child transportation program for those workers who rely on child care services.

Overview of Best Practices

MTA Long Island Bus Route Enhancements to Increase Access to Jobs: 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).
Feeder/Distributor Shuttles at Suburban Chicago Rail Stations. Metra operates the P-8 free shuttle from an origin within ¾-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.

Guaranteed Ride Home. In the Washington DC area, Commuter Connections offers free services such as regional ride matching and Guaranteed Ride Home programs.

Child Transportation Services. The Chattanooga Area Regional Transportation Authority (CARTA) provides demand-response transit service to day care facilities and to schools. Vans are equipped with on-board monitors to protect young children traveling to and from day care without parents.

Costs

Costs for shuttle services vary greatly, depending on service characteristics. Hourly operating costs for shuttle services typically range between $55 and $65 per hour. Operating costs include driver wages, dispatcher wages, fuel, maintenance and repairs, and management/supervision.

Potential Funding Sources

- JARC

Potential Lead Organizations

- MTA Long Island Bus
- Suffolk County Department of Public Works
- HART
- LITM (for employer-based support services and options such as ridesharing or vanpooling)
Transit Service Expansion and Improvements

Expanding fixed-route transit service coverage can have a profound impact on customer mobility. Spatial expansion can include the introduction of service into new areas, the implementation of additional routes in areas with limited service, or the extension of existing routes. Temporal service expansion could be either the extension of days and/or hours of service or increases in the frequency of service.

<table>
<thead>
<tr>
<th>Expected Benefits / Needs Addressed</th>
<th>Potential Obstacles and Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enhanced customer accessibility, mobility and convenience</td>
<td>• Expanding service requires additional financial resources</td>
</tr>
<tr>
<td>• Opportunity to provide access to jobs that require work during non-traditional hours</td>
<td>• Requires educating and training staff and customers to maximize benefits associated with cost</td>
</tr>
<tr>
<td>• Increased use of fixed-route services by the target populations and the general public</td>
<td>• To be eligible for New Freedom funding, transit service expansion must serve persons with disabilities only</td>
</tr>
</tbody>
</table>

Application for Long Island

A common theme raised during public workshops and focus group meetings in Nassau and Suffolk counties was the limited bus service available during non-peak hours, particularly in the evenings and on weekends. Participants noted that many jobs in the service, healthcare, and retail sectors require working beyond the traditional hours of 9:00 AM to 5:00 PM; bus service is generally not a viable commuting option for such jobs. Individuals in Suffolk County also indicated that a higher level of bus service is needed during spring and summer months when jobs are more available. Geographic service gaps that were identified during the development of this plan included northeastern Nassau County, the eastern end of Suffolk County, and north-south corridors in both counties. Extension of bus service areas or hours would enhance mobility for residents of Long Island in general, but especially for individuals seeking or trying to maintain jobs with non-traditional hours.

Examples of Best Practices

Temporal expansion of service. The Alameda-Contra Costa Transit Authority (AC Transit) extended the hours and days-of-week operations for five bus routes connecting low income areas of Oakland with employment centers near the Oakland International Airport and downtown.

College of Staten Island JARC route 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.

MTA Long Island Bus and Suffolk County Transit Route Enhancements to Increase Access to Jobs: 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). SCT used JARC funding to expand service on Routes S27 and S33 to provide access to employment sites.

**Costs**

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 (MTA Long Island Bus or SCT, for example), and might be in the range of $100-150/hour.

**Potential Funding Sources**

- JARC (if used to support employment)
- New Freedom (if designed to meet the needs of persons with disabilities)

**Possible Lead Organizations**

- MTA Long Island Bus
- HART
- City of Long Beach Transit
- Suffolk County Department of Public Works/Suffolk County Transit
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

Application for Long Island

Older adults and persons with disabilities in both counties would benefit from paratransit feeder service, but such connections would be especially useful for those living on the East End of Suffolk County, where population densities and fixed-route bus service coverage and rail service frequencies are lower than elsewhere on Long Island. Logical providers of local paratransit feeder service would be the municipal demand-response operators; MTA Long Island Bus and SCAT would also be potential providers of such service.
Patratransit feeder service might also help to address specific job access service gaps on Long Island. For example, home healthcare workers arriving at an LIRR station on the Hempstead or Oyster Bay branches from Queens or western Nassau County and needing a way to travel the rest of the way to clients’ homes in northern Nassau County, particularly the northern portion of the Town of Oyster Bay, could benefit from paratransit feeder service.

**Examples of Best Practices**

**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. Over time, 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 cell phone 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**

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**

- New Freedom
- JARC

**Potential Lead Organizations**

- Municipal operators of demand-response service for older adults and/or persons with disabilities
- MTA Long Island Bus, Able-Ride
- Suffolk County Department of Transportation, SCAT
Accessible Taxi Services

Purchase of accessible vehicles (ramp-equipped minivans, for example) for taxi operators, with operators paying non-Federal share.

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<tbody>
<tr>
<td>• Expansion of accessible taxi fleet</td>
<td>• Taxi service is not widely available in some portions of Long Island</td>
</tr>
<tr>
<td>• Source of service that could be used when fixed-route or demand-response services are not in operation</td>
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</tr>
<tr>
<td>• Source of service for trip types that are not eligible under other transportation programs</td>
<td></td>
</tr>
<tr>
<td>• Could be used to complement taxi subsidy programs</td>
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</table>

Application for Long Island

Assistance to taxi operators to encourage or facilitate their acquisition of accessible vehicles would address the need for accessible taxi service that was identified by participants in workshops and focus groups. Such service, if more widely available, could help to fill gaps in fixed-route and demand-response service hours (especially in the evenings and on weekends). Accessible taxi service would offer a flexible option for persons with disabilities, particularly individuals who use wheelchairs – in addition to longer hours of service than many bus routes, taxi service operates on a same-day or real-time schedule, and could be used for any trip purpose.

Examples of Best Practices

Accessible taxi service is scheduled to be initiated in Washington, DC, in 2009, as a joint effort of the National Capitol Region Transportation Planning Board (TPB) and the District of Columbia Taxicab Commission. The TPB is using 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 will be 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 on the accessible taxi program in operation in the City of Chicago.

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.

Costs

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**

- New Freedom (non-Federal share would be 20%)

**Potential Lead Organizations**

- MTA Long Island Bus
- Suffolk County Department of Public Works
- Nassau County Planning Department
- Municipal departments of senior citizen affairs
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. The availability of Google Transit services (described below) has increased the prevalence of 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, 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

### Costs
The cost of commercial trip planning software that is customized to meet the needs of a particular transit system can be significant. Utilizing online trip-planning services can be a very cost-effective alternative, which 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.

### Examples of Best Practices

**Trip Planning with Online Services**

Online transit trip planners are in operation 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). 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 public transit and paratransit providers included in 511 are:

Nassau County
- City of Glen Cove
- City of Long Beach transit and paratransit service
- MTA Long Island Bus
- 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 on how to get from one point to another
Access to Trips123 information by telephone is a planned enhancement to the system.

At present, the only services for Long Island that are included in Transit Advisor are those provided by MTA Long Island Rail Road and MTA Long Island Bus. Itineraries involving the services of other fixed-route transit providers on Long Island cannot be constructed, although links to their websites are provided. Information about demand-response services is not available through Trips 123, although information about the ADA paratransit services operated by MTA Long Island Bus and Suffolk County Transit may be obtained through the links to their websites. No information about municipal or private demand-response services is currently available.

**Application for Long Island**

The usefulness of tools for planning transit trips was raised in several public meetings. Long Island residents are currently able to plan itineraries using several transit services online: MTA LIRR and MTA Long Island Bus. In addition, New York State’s 511 service offers online trip planning capabilities that include all fixed-route providers in both counties, and more limited trip planning is available through Trips 123. There is an opportunity to increase the trip planning options by including SCT service, but the primary activity for entities on Long Island regarding online trip planning would appear to be increasing awareness among transit users of the services and tools that are currently available.

**Potential Funding Sources**

- JARC
- New Freedom

**Potential Lead Organizations**

- Suffolk County Department of Public Works
- MTA Long Island Bus
- County departments of aging or senior citizen affairs, social services
- Town departments of senior citizen affairs
Coordinated Municipal Demand-Response Services

Where separate but similar demand-response services are provided by individual municipalities, increased service efficiencies and improved mobility can be achieved through integration of those individual services into larger operations that would cover more than one community. Coordination between municipalities may be implemented in a number of ways, including: joint operation of a shared service for a particular purpose, such as the East Hampton/Southampton out-of-town medical service described below; participation by one or more towns in a contract with a service provider that operates service to residents of all participating communities; or consolidation of transportation programs of two or more towns into one system, operated by one of the participating communities on behalf of the others. The shared element among these approaches is the centralization of operations and/or administrative functions that each municipality performs separately prior to the coordination of services.

<table>
<thead>
<tr>
<th>Expected Benefits / Needs Addressed</th>
<th>Potential Obstacles and Challenges</th>
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<tbody>
<tr>
<td>• Increased efficiency due to the centralization of transportation functions such as reservations/scheduling, dispatching, vehicle operation, and vehicle maintenance, or contracting with a service provider</td>
<td>• Coordination and consolidation of long-standing transportation programs typically requires time and effort to achieve</td>
</tr>
<tr>
<td>• May expand the geographic service area or days/hours during which service is available</td>
<td>• Municipalities may have concerns about sharing or relinquishing the direct responsibility for providing transportation service to their customer groups</td>
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<tr>
<td>• Offers new option for inter-community travel for older adults and persons with disabilities who may not be eligible for ADA paratransit service</td>
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<tr>
<td>• Service quality may increase due to development and use of consistent standards for safety, training, and vehicle maintenance</td>
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Application for Long Island

In both Nassau and Suffolk counties, overlap between municipal demand-response programs and other transportation services has been identified. For example, multiple service providers – public agencies and human service providers – transport similar rider groups in most communities. Similarly, fixed-route bus operators provide paratransit service to ADA-eligible individuals in the same communities in which municipal demand-response programs serve seniors and persons with disabilities.

In addition, most municipal demand-response programs operate within the boundaries of a single community. Transfers between services, if possible, are usually up to the customer to arrange.
and are time-consuming. Coordination between municipal services would facilitate travel between communities.

Integration of the local demand-response operations into larger multi-community systems would increase the effectiveness of demand-response service by combining vehicle fleets and centralizing scheduling, and also address the need for inter-community travel.

Alternative actions would provide many of the advantages of multi-community integration, as well as the opportunity for providers to develop cooperative relationships, without the need for structural changes. These strategies are: 1) the adoption of uniform, or more consistent, operating and service policies among demand-response providers and 2) the joint operation of certain services, such as out-of-town medical trips, between municipalities, and 3) the provision of local trips for ADA-eligible customers by municipal demand-response providers as contractors to the fixed-route bus operators.

Examples of Best Practices

The Suffolk County towns of Southampton and East Hampton jointly operate a shuttle to Stony Brook University Medical Center in Stony Brook two days a week. The Departments of Human Services for both towns act as transportation brokers and schedule trips. Each town provides service to residents of both towns on a specific day and covers the cost of that service. On service days, customers are picked up at both the Southampton Senior Center and the East Hampton Senior Center, and transported to Stony Brook. Residents from either town can utilize the service on both days. As a result of this joint venture, Southampton is now able to offer non-emergency out-of-town medical transportation services to its residents, and East Hampton improved the efficiency of its service and freed up a vehicle that would have otherwise been used to provide a second day of service to Stony Brook, and which is now used to provide additional trips within East Hampton.

Costs

Start-up costs for a coordinated municipal demand-response service would include staff time to plan and implement the new service and public information and marketing expenses associated with spreading the word about the service. Marketing expenses are likely to total several thousand dollars at most.

Costs and reimbursement for operating a coordinated system would be negotiated between the participating municipalities. For example, if one city or town were to provide service to residents of another, service could be purchased by the vehicle hour or passenger trip by the municipality whose residents are transported. Per-hour or per-trip rates would be no higher than those incurred by the operating city or town prior to the implementation of the coordinated service; in fact, per-trip rates might even decrease due to the use of more vehicle seats.

Coordinated services could also be implemented without reimbursement between municipalities. Arrangements between Southampton and East Hampton for the shared medical service described above are somewhat informal; each town covers the cost of the service on the days on which it operates the service, even though residents of the other town also ride on those days.

Potential Funding Sources

- Section 5310 (capital expenses)
Potential Lead Organizations

Potential participants in other shared out-of-town medical services include the Suffolk County towns of Southold, Riverhead, and Brookhaven, which could share service to destinations in Brookhaven and/or Smithtown. Service for Shelter Island residents could be coordinated with either Southampton/East Hampton or Southold/Riverhead/Brookhaven.

In Nassau County, where travel patterns are less linear and there is an expressed need for north-south travel, there is more potential for a combined, multi-community service encompassing all three towns than for a shared out-of-town demand-response service. Vehicles would be dedicated to providing local trips in each community, but supplemented with a number of vehicles that provide inter-community trips throughout the county. One of the three towns could take the lead in the coordination effort, or perhaps the Nassau County Planning Department could act as a facilitator.

The same multi-community approach might also be an option for the Towns of Huntington, Babylon, Islip, Smithtown, and Brookhaven in Suffolk County.
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.

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<thead>
<tr>
<th>Expected Benefits / Needs Addressed</th>
<th>Potential Obstacles and Challenges</th>
</tr>
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<tbody>
<tr>
<td>Increases options for traveling to and from transit stops, which is especially helpful when stops are located at some distance from origins and destinations</td>
<td>Most vehicle bike racks accommodate a limited number of bikes</td>
</tr>
<tr>
<td>Use of bicycles for access to transit service is less expensive and healthier for the individual and friendlier to the environment than driving</td>
<td>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</td>
</tr>
<tr>
<td>Biking to a transit stop or station may be a work trip option for some</td>
<td>MTA vehicles are not equipped with bike racks</td>
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Application for Long Island

Currently, bicycle programs are in place at MTA Long Island Bus, MTA LIRR, and Suffolk County Transit (as well as MTA Bus, NYC Transit Bus and Subway, and other commuter railroads). MTA LIRR allows folding bikes on trains at all times, and regular bikes during non-peak hours. A $5.00 lifetime bike permit is needed for regular bikes. Bike racks are available at some LIRR stations. Folding bikes are allowed on MTA Long Island Bus, MTA Bus, and NYC Transit Bus on local and limited routes at all times; no bikes are allowed on express buses, and no regular bikes are allowed on any vehicles. Suffolk County Transit buses equipped with bike racks operate on 37 routes (as of November 2008).

Increasing the number of bike racks on vehicles and parking facilities at stops and stations would enable a greater number of transit riders to use bikes to access the fixed-route system. Increased access to transit via bike would be particularly useful for 1) individuals who do not live close to a bus stop or train station, in the northeastern section of Nassau County and on the East End of Suffolk County, for example, and 2) those who are not within walking distance of a stop or station, are unable to drive, and who could use transit for work trips if they were able to get to a stop/station.

Examples of Best Practices

King County Metro, Seattle first installed racks on its buses in the 1970’s. 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 City of 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 MBTA installed two bike cages at the Alewife rapid transit station in September 2008. The cages have been so well utilized that the MBTA plans to install a cage at the Forest Hills station in the spring or summer of 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**

Approximate costs for selected bicycle amenities are:

- Bike racks — vehicle bike racks may cost up to $1,000 each; parking racks are in the range of $500 or less apiece
- Bike cages — models like those installed by the MBTA, with the capacity to hold 150 bikes each, cost $115,000 each

**Potential Funding Sources**

- JARC

**Potential Lead Organizations**

- MTA Long Island Bus
- MTA LIRR
- HART
- Suffolk County Department of Public Works
Travel Voucher Programs

Transportation vouchers can be issued or sold to eligible individuals and used 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. Eligibility can be based on age, disability, income criteria, or the need for a specific type of trip, such as employment transportation.

Similar to other types of programs that provide subsidies to individuals rather than transportation providers, 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.

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

Application for Long Island

Voucher programs, particularly those that recognize family members as eligible providers of service, could fill temporal and geographic gaps in fixed-route and demand-response service, particularly in Suffolk County, for older adults and persons with disabilities. Voucher programs could also offer a means of employment transportation for individuals requiring access to jobs in areas not served by public transportation or during hours when those services are not in operation.

Examples of Best Practices

The Rehabilitation Services Administration of the US 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 county, 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

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 $.39 per mile during the first four years of operation.

Potential Funding Sources

- JARC
- New Freedom

Potential Lead Organizations

- County departments of social services
- Nassau County Department of Senior Citizen Affairs
- Suffolk County Office for the Aging
- Municipal departments of senior citizen affairs and/or human services
Taxi subsidy programs typically involve an arrangement between a sponsoring organization (or its agent) and participating taxi companies or other private-for-hire vehicle services. These programs accept and accommodate requests from sponsored customers, clients, or residents and/or accept vouchers provided by the sponsoring organization to riders as partial payment for the trip. Most such subsidy programs focus on seniors and/or persons with disabilities residing within the sponsoring municipality (or agency service area), but some are available to general public residents as well. Human service agencies that employ this strategy generally limit taxi subsidies to agency clientele or program participants.

### Expected Benefits / Needs Addressed
- Provides same-day if not immediate service
- Convenient for unanticipated travel and evening and weekend hours
- Expands to trips outside of service area or "under-served" areas
- Effective way to “divert” more expensive paratransit trips to a less expensive mode
- Agency sponsors can control eligibility and service policies, subsidy per trip and/or overall budget
- Can be used to replace or supplement existing agency transportation services
- Provides opportunities to infuse accessible vehicles into the market—can complement acquisition of accessible taxis in partnership with taxi operators

### Potential Obstacles and Challenges
- Subsidy programs require administration and management
- Requires well-managed / controlled taxi and companies
- Oversight of taxi operators is critical for service quality
- Difficult to implement in areas without sufficient taxi capacity
- Few accessible taxicabs
- 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

### Application for Long Island
Taxi subsidy programs, as part of municipal dial-a-ride services, are a staple in urban settings in several states. While not as prevalent, there are a growing number of human service agencies tapping into such programs as well. On Long Island (and particularly in Nassau County, where more taxi companies are in operation), taxi subsidy programs would provide a way for older adults and persons with disabilities to: 1) make trips when fixed-route and demand-response services are usually not in operation, such as evening and weekend hours; 2) travel between communities, which is difficult or not possible using municipal demand-response services; and 3) make specific types of trips, such as shopping or medical trips.

### Examples of Best Practices
**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 $2.50, which was equivalent to the a-a-R fare. The Regional Transit District (RTD) would then cover up to the next $7.00 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 $7.00. This has since been changed with the RTD paying $7.00 for all trips. With centralized call intake, RTD has been able to decrease the administrative labor required to oversee this program. And, while it has set a daily budget in terms of number of trips allowed, the number of requests has never approached this ceiling.

**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 can 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 up, 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 that is worth $5.00 towards a taxi fare. Service is available countywide 24 hours per day, 365 days per year.

**Baltimore County (MD) Department of Aging: CountyRide TAXI 2** is a subsidized taxi program managed by CountyRide as a supplement to its demand-response service. Eligible riders include older adults age 60 and over, and persons with disabilities age 21-59. Eligible individuals purchase books of vouchers that may be used to pay for trips from any one of five participating taxi companies. Books of vouchers with a value of $10 are sold for $5; individuals meeting income eligibility requirements are able to purchase books for $2.50 each. TAXI 2 service is available 24 hours a day, seven days a week, within Baltimore County, and from the county to Baltimore City or other counties.

**Costs**

The cost to administer such a program as part of a county- or Long Island-based mobility management effort might cost between $50,000 and $75,000. Administrative expenses would include: salaries for program staff; office supplies and equipment; printing of tickets/coupons/vouchers, registration forms, and marketing materials; and possibly office rent and utilities (if space is not currently available in the office of the entity that will act as program administrator). 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 from this can be controlled by setting a daily ceiling and allowing trips on a first-come, first served basis, as per the policy in Denver.
Potential Funding Sources

Perhaps the most obvious source of funding to implement such a program is Section 5317 (New Freedom) 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. Section 5317 funding is also 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 5316 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.

Potential Lead Organizations

- Nassau County Department of Senior Citizen Affairs
- Nassau County Office for the Physically Challenged
- Suffolk County Office for the Aging
- Suffolk County Office for Handicapped Services
- County or municipal departments of human services
- Municipalities
- Long Island Center for Independent Living, Suffolk County Independent Living Organization
- Healthcare facilities
Reverse Commute Strategies

Reverse commuting is a strategy to link people with job opportunities in the suburbs. One of the primary reasons for high inner-city unemployment is the fact that many lower wage scale 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
- Eligibility for Job Access and Reverse Commute (JARC) funding

Potential Obstacles and Challenges

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

Application for Long Island

One specific reverse commute issue that was identified in public and stakeholder workshops in Nassau County was the difficulty that home care workers or personal care attendants who live in Queens or western Nassau County have in reaching clients’ homes in northern Nassau County where less public transportation service is available, particularly the homes of older adults and persons with disabilities. Services are needed to provide connections between rail stations or bus stops and final destinations, and to provide a travel option during early morning hours when transit services may not be in operation. Reverse commute strategies such as feeder shuttle service to/from rail stations and reverse commute vanpools may be effective solutions to this problem.

Partnerships could be formed between transportation providers, employers or home care agencies, and human service agencies with clients who need home care services to plan shuttle services and seek JARC funding for their operation. Reverse commute vanpools could be established by Long Island Transportation Management (LITM), which administers the Easy Street vanpool program in Nassau and Suffolk counties, in partnership with employers or home care agencies, and human service agencies.

Examples of Best Practices

New Reverse-Commute Fixed-Route. In 2001 the Los Angeles Metropolitan Transportation Authority (MTA) 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 ¾-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.

**Guaranteed Ride Home.** In the Washington DC area, Commuter Connections offers free services such as regional ride matching and Guaranteed Ride Home programs.

**Child Transportation Services.** The Chattanooga Area Regional Transportation Authority (CARTA) provides demand-response transit service to day care facilities and to schools. Vans are equipped with on-board monitors to protect young children traveling to and from day care without parents.

**Costs**

Vanpool expenses (fuel, insurance, maintenance and repairs) are typically covered by the fares paid by vanpool members; drivers often commute free of charge. The Easy Street NY program operates in that manner. In the Philadelphia program noted above and in other vanpool programs, costs are 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 trail stations or bus stops would be similar to the normal cost per vehicle hour of the service operator (MTA Long Island Bus or a contract service provider, for example), and might be in the range of $50-150/hour.

**Potential Funding Sources**

- JARC
- New Freedom
- Employment agencies

**Potential Lead Organizations**

- LITM
- Nassau County Department of Senior Citizen Affairs
- Nassau County Department of Social Services (Medicaid program)
- Long Island Center for Independent Living (administers Consumer Directed Assistance Program in Nassau County)
- Suffolk County Department of Social Services, Medical Services Bureau (administers Consumer Directed Assistance Program in Suffolk County)
- MTA Long Island Bus
- Home health worker employment agencies
Real-Time Transit Information Systems

Automatic Vehicle Location (AVL) technology uses Global Positioning System (GPS) capabilities to identify the location of fixed-route or demand-response vehicles in real time, which can help to improve dispatching and communication with drivers. AVL is also used to provide real-time transit information to individuals who are planning, contemplating, or making a transit trip. The AVL system provides real-time location data, which is used by a real-time traveler information system to estimate the arrival time or amount of time until the next arrival of a transit vehicle. Travelers may access the real-time arrival information through one of a variety of means, including websites, electronic dynamic message signs (DMS) at stops or stations, interactive kiosks, wireless personal communications devices, and landline or mobile phones. The provision of real-time transit service status information to customers has been shown to improve customer satisfaction and contribute to increased ridership.

Expected Benefits / Needs Addressed

- Customer service and customer satisfaction have been shown to improve as a result of real-time transit information
- Accurate information about wait times or vehicle arrival times can reduce the reluctance some riders may feel about relying on bus schedules or waiting at bus stops, particularly when traveling at night or when service is infrequent
- Riders have been reported to perceive improvements to transit service reliability because of real-time information
- Riders who use real-time information about a vehicle’s expected arrival time when planning their departure for a bus stop may save time
- The availability of real-time information at a stop may attract new riders to the service

Potential Obstacles and Challenges

- Careful planning is critical to the selection and deployment of a suitable and effective real-time transit information system
- Real-time transit information systems may be relatively costly to procure, implement, operate, and maintain
- Estimation of costs and identification of sufficient funding sources is a crucial step in system planning
- Technical expertise is necessary to manage the new technology and the data it relies on
- The service area must have adequate communications coverage in order for real-time information systems to function properly
- Older AVL systems and existing bus stop inventories may not generate data that is accurate enough for a traveler information system

Application for Long Island

Use of real-time arrival information at MTA LI Bus or SCT bus stops would address a need that was expressed widely during public workshops and focus groups for improved information about transit service. Information about bus arrival times would also help to lessen the inconvenience of infrequent transit service in off-peak periods and lower-density areas.

Examples of Best Practices

Transit systems that have implemented real-time bus transit information systems, and the medium they use for communicating information to customers, are listed below:
Dynamic Message Signs (DMS) (the most commonly used method of transmitting real-time information)

- Acadia National Park Island Explorer Bus System (Mt. Desert Isle, ME)
- Cape Cod Regional Transit Authority (Cape Cod, MA)
- River Valley Transit (Williamsport, PA)
- Delaware Transit Corporation
- Fairfax City-University Energysaver (Fairfax, VA)
- Glendale Beeline (Glendale, CA)
- King County Metro (Seattle, WA)
- Los Angeles County Metropolitan Transportation Authority, MetroRapid Bus Rapid Transit
- Regional Transportation District (Denver, CO)
- San Francisco Municipal Railway
- Tri-Met (Portland, OR)

Kiosks

- Central Ohio Transportation Authority (Columbus, OH)

Personal Digital Assistants (PDAs)

- Regional Transportation District (Denver, CO)
- Tri-Met (Portland, OR)

Wireless Application Protocol (WAP)-Enabled Mobile Phones

- Regional Transportation District (Denver, CO)
- Tri-Met (Portland, OR)

Costs

The capital costs associated with real-time transit information systems include the underlying AVL system, DMSs and/or other media through which the real-time information will be disseminated to customers, and the communication system (typically a cellular system or conventional telephone lines). Software costs include the algorithm used to predict real-time information from AVL data and applications that enable distribution of information to DMSs, the Internet, and wireless media (PDAs, mobile phones, and kiosks, for example).

Operating and maintenance costs also need to be estimated before decision to deploy a real-time system is made. These costs may include ongoing communications costs, power to DMSs, data maintenance expenses, equipment maintenance, the cost of additional staff to manage the system, and staff training.

Total costs will depend on the number of vehicles included in the real-time system and the system’s features, and may range from tens of thousands of dollars for small systems to tens of millions of dollars for very large, sophisticated systems.
Potential Funding Sources

- New Freedom
- JARC
- Mobility Services for All Americans (MSAA) initiative provides funding for ITS projects at times

Potential Lead Organizations

- MTA Long Island Bus
- Suffolk County Department of Public Works
Volunteer Driver Networks; Rider Aide/Escort Services

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<thead>
<tr>
<th>Expected Benefits / Needs Addressed</th>
<th>Potential Obstacles and Challenges</th>
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<tr>
<td>Operating costs can be kept low when volunteers are used as drivers, call-takers, schedulers, and/or dispatchers by a transportation provider.</td>
<td>The time and effort needed to recruit, screen, train, and reward volunteers.</td>
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<td>Programs that reimburse family members and friends for providing rides take advantage of existing, low-cost transportation resources.</td>
<td>Acceptance of volunteer drivers by riders.</td>
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<tr>
<td>Volunteers can provide a flexible source of transportation that can be called upon as needed for long-distance, out-of-area trips.</td>
<td>Real or perceived driver liability and insurance issues.</td>
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Application for Long Island

Currently FISH of Wantagh and FISH of New Hyde Park manage volunteer driver programs to provide primarily medical trips for older adults in parts of Nassau County. While the number of volunteer drivers is still high, the organizations have experienced a decrease in available drivers and call-takers in recent years, and are unable to keep up with the number of requests for service they receive. Expanding these volunteer programs or establishing new ones in other areas would help to meet some of these additional needs.

Another need expressed during stakeholder and public workshops was a higher level of assistance for some riders than is generally available through public paratransit services. Volunteer programs could be used to provide assistance for individuals who need more than curb-to-curb assistance when traveling, either by authorizing drivers to provide door-to-door or door-through-door service, or by providing volunteer escorts for frail individuals.

Examples of Best Practices

**Maine’s Independent Transportation Network (ITN).** ITN was first established in Portland, Maine as a means of providing seniors with rides in exchange for trading in the cars they rarely or never use. 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 account can be contributed to by family member or friends through cash donations, volunteering their time or donating their own cars. Seniors who are still able to drive may volunteer and receive credit for future rides when
they are no longer able to drive themselves, a sort of “transportation social security.” The rides may be used for medical appointments, shopping trips and 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 has been very successful in the Portland area and is spreading to other parts of the country. In 2005, a nationwide organization, ITNAmerica, was created to replicate the program in other areas, and efforts are underway to establish programs in South Carolina, New Jersey, Florida, and California.

The “Community Inclusion Driver” approach for rural areas. The Community Inclusion Driver (CID) strategy was developed for Easter Seals Project ACTION as a way to make use of volunteer drivers in a rural setting. While the CID strategy focuses on increasing mobility for persons with disabilities in rural areas, the approach could also be used for seniors and members of the general public.

The CID strategy involves a partnership between a transportation provider, a customer, and individuals who are willing to act as volunteer drivers for the customer. The transportation provider is responsible for establishing program and eligibility guidelines, developing informational materials and promoting the program, screening drivers and vehicles, training customers and drivers, program recordkeeping, and payment of mileage reimbursement to volunteers. The customer is responsible for identifying suitable volunteer drivers (although the transportation provider may provide assistance, or recruit drivers itself). The volunteer driver is responsible for providing proof of a valid license and a properly registered and insured vehicle, meeting any other requirements established by the transportation provider, and completing forms to document basic information and the trips that are provided.

Other transportation programs that make use of volunteer drivers include:

- Transportation Reimbursement and Information Project (TRIP) in Riverside County, CA
- OATS, Inc., which serves 87 counties in Missouri, relies on volunteers to perform call-taking and scheduling functions, as well as to participate in local fund-raising efforts.
- Lane Transit District in Eugene, Oregon
- Ride Connection in the Portland, Oregon

Volunteer Escort Programs

The Baltimore County Department of Aging operates CountyRide, which provides transportation service for older adults, persons with disabilities, and the general public in the rural parts of Baltimore County, MD. In addition to its curb-to-curb van service, CountyRide offers two types of rides with volunteer drivers for older adults. Drivers in both programs are recruited through the Baltimore County Volunteers volunteer matching program, undergo checks of background and driving records, and receive the same training that CountyRide’s professional van drivers receive. Volunteers operate their own vehicles to provide trips within Baltimore County and to medical facilities located in Baltimore City, and receive mileage reimbursement if they request it. Some volunteer drivers provide curb-to-curb service. Other volunteer drivers are assigned to frail individuals who need additional assistance, and serve as escorts so that riders are able to travel to medical appointments, go shopping, and take care of other personal business. Drivers providing this type of service are in constant contact with CountyRide personnel by cell phone in case of emergencies. Drivers are recruited from a volunteer program
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managed by the Baltimore County Department of Aging that is designed to enable frail older adults to remain in their homes. Customers who qualify for this more personalized level of service are identified and referred to CountyRide by social workers in various county departments.

City of Huntington Beach, CA Volunteer Escort Program

The City of Huntington Beach Department of Senior Services manages a volunteer escort program for older adults who need assistance when going to medical appointments, shopping, or doing errands. Under the direction of the department’s transportation program, volunteers ride the vehicle with the clients and provide them with assistance during their trips. Volunteers receive training and undergo background and fingerprint checks prior to providing service.

Costs

Costs of managing a volunteer driver or escort program include efforts to recruit, train, screen, and regularly recognize the contributions of volunteers. Matching riders and drivers requires staff time (if this function is not also performed by volunteers). Volunteers who operate their own vehicles to provide transportation service may also receive reimbursement for expenses on a mileage basis. The organization managing the volunteer program may also extend coverage under its insurance policy for the service provided by volunteer drivers.

Potential Funding Sources

- New Freedom (if programs are new)
- Older Americans Act Title III (b) funds

Potential Lead Organizations

- Nassau County Department of Senior Citizen Affairs
- Suffolk County Office for the Aging
- Municipal departments of senior citizen affairs or human services
- Non-profit or human service agency transportation providers