Chapter 8. Identification of Strategies

Introduction

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

The collective knowledge and insights provided by the Stakeholder Advisory Committee (SAC), results from in-depth stakeholder interviews, geographical analysis of existing demographics and transit services, survey results, and numerous community meetings, workshops, and focus groups with the target populations were utilized to formulate these strategies and tailor them to the Lower Hudson Valley's needs. Additionally, at a meeting of the SAC on February 24, 2009, the committee added one additional strategy (documented in this chapter).

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 unmet needs and gaps in the Lower Hudson Valley is provided, followed by an overview of 11 strategies that address these needs.

Summary of Unmet Needs

While the three counties of Putnam, Rockland, and Westchester are grouped as a region for purposes of this study, outreach activities and analysis of data regarding the target populations in the respective counties suggest wide variation in unmet needs. Westchester County has an excellent network of existing public transportation services and a host of other human service and community transit programs that augment Bee-Line service, yet there remain specific geographic gaps in coverage at some hours of the day. In Putnam County, both geographic and temporal issues are paramount as the existing public transit system does not provide equal coverage throughout the County and service ends early in the evening. Rockland County may have high degrees of customer satisfaction in terms of service area coverage, but changing demographics, particularly among older adults, are putting increased pressure and creating service quality issues on existing paratransit services.

Fixed-Route Service Gaps

Fixed-route service coverage is generally countywide throughout Westchester and Rockland counties, with good fixed-route coverage in Census block groups with recognized concentrations of persons with low income, older adults, and persons with disabilities. In Putnam County, due to considerably lower population densities than found elsewhere in the Lower Hudson Valley, service is not as extensive, with no coverage in the western sections of the county. Even in well-served Westchester and Rockland counties, there are some service issues that limit greater use of fixed-route modes by the target populations. For example, there are unserved sections in the northern sections of Westchester County. Additionally, sometimes bus connections from the county's train stations make long reverse commutes very difficult, if not impossible.

Terrain Issues/Bus Stop Access

Terrain issues create driving challenges, thus creating demand for mobility alternatives to automobile travel. Many seniors, for example, were reported to have exercised self-regulating behavior over their driving habits, opting not to drive in poor weather conditions over hilly two-lane roads with limited sight-distances. Additionally, members of the target populations expressed concern about the proximity of bus stops to residential locations and the lack of an accessible pathway to get to the bus stop. The lack of accessible pathways, combined with a rolling terrain, create pedestrian access issues for seniors.

Stop Amenities

Throughout the study process, the need to develop strategies that would encourage the use of fixed-route services, over paratransit, was frequently cited. Due to sometimes harsh winter weather conditions, many participants expressed a desire to see benches and shelters (particularly enclosed and covered shelters that would protect consumers from the elements) at more locations.

Paratransit Service Gaps

Demand-response service policies vary greatly among the three public transit systems in the Lower Hudson Valley. In Westchester County, services are provided without regard to statutory limitations that only stipulate service be provided within ¾-mile around each fixed-route. During "core" service hours, the county's Office for the Disabled provides service anywhere in the County. In Rockland County, the paratransit system is operated in accordance with the ¾-mile standard; however, service is open to qualified individuals with disabilities as well as seniors. In Putnam County, service is operated in strict accordance with the ADA standards. Because of these varied service policies, there are different sets of issues present with demand-response services unique to each county.

In Westchester County, gaps in coverage relate to services in the "non-core" time periods. In Rockland County, increased demand for service, particularly among seniors, is creating pressure on the system to maintain quality and meet on-time performance standards. In Putnam County, service area gaps are comparable to those described for fixed-route service.

Advance scheduling requirements for ADA paratransit services was cited as a detriment among the target population as they cannot often predict their mobility needs one (or more) days in advance. Additionally, many stakeholders noted that program eligibility requirements worked to decrease mobility and access to essential services.

Transit Information

While some counties in the Lower Hudson Valley have done an excellent job getting information about the range of available transportation services published on the internet, many stakeholders indicated this information was not readily available to the target populations. Moreover, existing published material on transit service information can be confusing or difficult to understand by seniors, persons with disabilities, or persons with low income. Improvements in transit schedule information could enhance use of fixed-route mode.

Volunteerism

Volunteerism efforts are seen as an excellent way to meet some needs in the senior community, including transportation. In addition to providing drivers to take members of the target population to necessary medical appointments and other discretionary travel purposes, volunteers could also be used to address the needs of some members of the target population who require a level of passenger assistance that exceeds the statutory requirements of the Americans with Disabilities Act. Thus, volunteer escorts and drivers are seen as a potential solution to address one unmet need in the Lower Hudson Valley.

Supplemental Transportation Services

Despite the existence of an extensive network of existing public and human service agency transportation programs, stakeholders recognize the need to provide additional services in areas not well-served by these networks, at times when service is not available, or when such service is not conducive to client needs.

Some stakeholders have noted the lack of accessible taxicabs in the region. This limits the utility of this private sector resource in meeting the mobility needs of some members of the target populations who need accessible services.

Additionally, some stakeholders believe that greater utilization of privately-operated services could occur if affordability issues were addressed.

Passenger Assistance

In some instances, stakeholders noted that the level of passenger assistance required by some members of the target populations exceeds that typically provided by public transportation agencies. While most of the Lower Hudson Valley's paratransit programs provide a minimum of curb-to-curb level of assistance, many persons with disabilities or older adults may require door-to-door or even higher levels of passenger assistance.

Strategies for the Lower Hudson Valley

Figure 8-1 summarizes key characteristics of 14 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.

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 Strategies

The following summarizes potential strategies that will help improve mobility for older adults, persons with disabilities and persons with low income for the Lower Hudson Valley.

Figure 8-1   Summary of Potential Strategies for the Lower Hudson Valley

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Putnam County					
Centralized Resource Directory **MM**	County departments Non-profit organizations Public/private partnerships	4-8 months	Operating expense, but may be considered a mobility management expense, particularly if undertaken in combination with other strategies $25,000 initial cost; community support for maintenance/updates	JARC New Freedom	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 (persons with low income, older adults, and persons with disabilities).
Accessibility Improvements at Bus Stops	County departments Municipalities	2 years	Capital expense $400,000 - $500,000 (range can depend on number of shelters, benches and other amenities	New Freedom	Improving bus stop accessibility and installing passenger amenities can make transit more accessible by persons with disabilities and older adults.
Bus Buddy Program	Transit agency	6 months; local program based on best practice examples	Operating expense Little or no cost if implemented with volunteers	New Freedom	Bus buddy programs help reduce demand for paratransit services by increasing consumer knowledge in using and independently navigating the fixed-route system

* MM in this column refers to project or strategy that may be led by a Mobility Manager.

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

‡ Dollar figures reflect differences in subregional economies.

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Capital Equipment for Coordinated Agency/Program Services	Non-profit organizations Public agencies that serve older adults and persons with disabilities	Annual process corresponding to NYSDOT grant cycles	Capital expense $40,000 to $50,000 per vehicle, depending upon capacity	Section 5310	This longstanding FTA program provides capital assistance to non-profit organizations that perform a vital role in providing essential mobility to programs and services operated by a range of human services.
Coordination of Volunteer Driver/Escort Networks	County departments Non-profit organizations	6 months	Operating expense Federal participation: 80%	New Freedom Other human service agency funding	LHV SAC members believe this is an important strategy that could be used in combination with the mobility management strategy to address a range of mobility issues with the target populations.
Improved Transit Traveler Information	County departments Transit agency	Dependent upon generation of results in Westchester County that improve information for older adults, persons with low income, or persons with disabilities	Operating expense Re-design of all system materials would be expensive	JARC New Freedom	Improving the readability and comprehension of route and schedule brochures can improve the utilization of public transit services by the target populations.
Improved Coordination of Agency Services/Mobility Management **MM**	County department, with technical assistance and support from state agencies such as NYSDOT	6 -8 months	Annual salary $30,000 to $60,000 with additional costs of $50,000 and $100,000 to maintain a regional program of training and support Federal participation: 80%	JARC New Freedom	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.

* MM in this column refers to project or strategy that may be led by a Mobility Manager.

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

‡ Dollar figures reflect differences in subregional economies.

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Job Access Strategies	County departments Transit agency Non-profit organizations	Will vary depending on whether reverse commute service is new or expansion of existing services	Operating expense Cost based on variable cost per hour of Putnam County Transit service	JARC	This strategy is included in the event that Putnam County elects to operate a Job Access Reverse Commute (JARC) project in the future. While this strategy is not seen as an immediate need, Job Access needs may arise in the future and the county may wish to pursue this action
ITS Technologies	County department Transit agency	Typically 12 – 18 months to permit specification development, procurement, installation and testing	Capital expense Cost based on the particularly technology deployed	New Freedom JARC	"Intelligent Transportation Systems" or ITS strategies, can provide traveler information, help to lower operating costs, reduce customer travel times, and provide more convenient routes and schedules. The use of technology to improve services to the target populations can benefit both the transport provider and customer.
Rockland County					
Bus Buddy Program	Transit agency Non-profit organizations	6 months; local program based on best practice examples	Operating expense Little or no implementation cost if implemented with volunteers	New Freedom	Bus buddy programs help reduce demand for paratransit services by increasing consumer knowledge in using and independently navigating the fixed-route system
Centralized Resource Directory **MM**	Rockland County Department of Planning in partnership with community based non-profit organization	4-8 months	Operating expense, but may be considered a mobility management expense, particularly if undertaken in combination with other strategies $35,000 initial cost; community support for maintenance/updates	JARC New Freedom	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 (persons with low income, seniors, and persons with disabilities).

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

‡ Dollar figures reflect differences in subregional economies.

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Capital Equipment for Coordinated Agency/Program Services	Non-profit organizations	Annual process corresponding to NYSDOT grant cycles	Capital expense $40,000 to $50,000 per vehicle, depending upon capacity	Section 5310	This longstanding FTA program provides capital assistance to non-profit organizations that perform a vital role in providing essential mobility to programs and services operated by a range of human services.
Improved Transit Traveler Information	Rockland County Department of Planning	Dependent upon generation of results in Westchester County that improve information for older adults, persons with low income, or persons with disabilities	Operating expense Re-design of all system materials would be expensive	JARC New Freedom	Improving the readability and comprehension of route and schedule brochures can improve the utilization of public transit services by the target populations.
Improved Coordination of Agency Services/Mobility Management **MM**	Rockland County, with technical assistance and support from state agencies such as NYSDOT	6 -8 months	Operating expense $30,000 to $60,000 with additional costs of $50,000 and $100,000 to maintain a regional program of training and support Federal participation: 80%	JARC New Freedom	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.
Coordination of Volunteer Driver/Escort Networks	Non-profit organizations	6 months	Operating expense Federal participation: 80%	New Freedom Other human service agency funding	LHV SAC members believe this is an important strategy that could be used in combination with the mobility management strategy to address a range of mobility issues with the target populations.

* MM in this column refers to project or strategy that may be led by a Mobility Manager.

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

‡ Dollar figures reflect differences in subregional economies.

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Job Access Strategies	County department Transit agency	Will vary depending on whether reverse commute service is new or expansion of existing services	Operating expense Cost based on variable cost per hour of Rockland County Transit service	JARC	This strategy is included in the event that Rockland County elects to operate a Job Access Reverse Commute (JARC) project in the future. While this strategy is not seen as an immediate need, Job Access needs may arise in the future and the county may wish to pursue this action
ITS Technologies	County department Transit agency	Typically 12 – 18 months to permit specification development, procurement, installation and testing	Capital expense Cost based on the particularly technology deployed	JARC New Freedom	"Intelligent Transportation Systems" or ITS strategies, such programs can provide traveler information, can help to lower operating costs, reduce customer travel times, and provide more convenient routes and schedules. The use of technology to improve services to the target populations can benefit both the transport provider and customer.
Westchester County					
Bus Buddy Program	County departments Transit agencies Non-profit organizations	6 months; local program based on best practice examples	Operating expense Little or no implementation cost if implemented with volunteers	New Freedom	Bus buddy programs help reduce demand for paratransit services by increasing consumer knowledge in using and independently navigating the fixed-route system
Travel Training	Transit agencies Non-profit organizations County departments	3-9 months	Varies by program – with Mobility Manager in place simple programs as low as $5,000	JARC New Freedom	Design programs to train individuals to use public transit. Increasing use of public transit will increase mobility for individual and reduce reliance on higher cost transportation modes. Some travel training programs exist already – potential to build on these efforts.

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‡ Dollar figures reflect differences in subregional economies.

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Job Access Strategies	Transit agency County departments	Will vary depending on whether reverse commute service is new or expansion of existing services	Operating expense Cost based on variable cost per hour of Bee-Line service	JARC	With continued rates of high unemployment, there will be a continued need to link low income individuals with these employment centers. Adoption of this strategy in the plan will continue to afford public transit agencies with the flexibility to apply for JARC funding to create new reverse commute routes or expand existing routes to better meet commute needs.
Transit Service Expansion and Improvements	Transit agencies	12-24 months	Public transit – up to $100 per hour Community transportation services $55 and $65 per hour	JARC	Public transit affords the most mobility to the target populations when located in proximity to target population origins/destinations of travel. Following the example of Bee-Line, continue to create new services and/or expand existing services to provide service to new areas, expand service hours and/or expand options in area with limited service to meet employment transportation needs. Build on opportunities to coordinate existing services to maximize efficiency and ridesharing.
Reverse Commute Strategies – Shuttle Services to/from Rail Stations or Bus Stops; Vanpools and Other Alternatives **MM**	County departments Transit agencies Public efforts could be coordinated with appropriate other public entities and non-profit organizations	3-6 months	Shuttle services might cost $50-60/hour Vanpool costs could be covered by fares or subsidized for low income individuals by a sponsor organization	JARC New Freedom Employers (or agencies) County Medicaid agencies Organizations administering the Consumer Directed Assistance Program in each county	Reverse commute strategies could be used to address the difficulty that home care workers have with reaching clients' homes in part of Westchester County, among other workers who need this type of service.

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‡ Dollar figures reflect differences in subregional economies.

NEW YORK METROPOLITAN TRANSPORTATION COUNCIL

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Improved Transit Traveler Information	Westchester County Department of Transportation	Westchester DOT has already initiated an effort to improve route and schedule information	Operating expense To be determined pending outcome of consultant study	New Freedom	Improving the readability and comprehension of route and schedule brochures can improve the utilization of public transit services by the target populations.
Centralized Resource Directory **MM**	Westchester County agencies/departments Non-profit organizations	4-8 months	Operating expense, but may be considered a mobility management expense, particularly if undertaken in combination with other strategies $25,000 initial cost; community support for maintenance/updates	JARC New Freedom	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 (persons with low income, seniors, and persons with disabilities).
Improved Coordination of Agency Services/Mobility Management **MM**	Westchester County, with technical assistance and support from state agencies such as NYSDOT.	Should be implemented in conjunction with taxi voucher programs	Operating expense $30,000 to $60,000 with additional costs of $50,000 and $100,000 to maintain a regional program of training and support Federal participation: 80%	New Freedom JARC	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. This individual could focus on northern Westchester County, possibly including Putnam County in later phases of implementation.

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‡ Dollar figures reflect differences in subregional economies.

Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Capital Equipment for Coordinated Agency/Program Services	Non-profit organizations meeting the needs of older adults and/or persons with disabilities, such as Richmond Children's Center, Inc.; Family Services of Westchester, Inc.,	Annual process corresponding to NYSDOT grant cycles	Capital expense $40,000 to $50,000 per vehicle, depending upon capacity	Section 5310	This longstanding FTA program provides capital assistance to non-profit organizations that perform a vital role in providing essential mobility to programs and services operated by a range of human services.
Accessibility Improvements at Bus Stops	Westchester County, municipalities, other entities with right-of-way ownership	2 years	Capital expense $400,000 - $500,000 (range can depend on number of shelters, benches and other amenities	New Freedom	Improving bus stop accessibility and installing passenger amenities can make transit more accessible by persons with disabilities and older adults.
Coordination of Volunteer Driver/Escort Networks **MM**	Non-profit organizations	6 months	Operating expense Federal participation: 80%	New Freedom Other human service agency funding	LHV SAC members believe this is an important strategy that could be used in combination with the mobility management strategy to address a range of mobility issues with the target populations.
Travel Voucher Programs **MM**	Westchester County Department of Transportation ALOFT Municipal departments of senior citizen affairs and/or human services	4-8 months	Operating expense; costs can be controlled/contained by participating organization to fit budget parameters Best practice examples indicate that subsidies are in the $4.50 per trip range	JARC New Freedom	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.

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Strategy* (to address need/gap)	Potential Lead Agency/Champion	Implementation Timeframe †	Order of Magnitude Costs (Capital or Operating) ‡	Potential Funding Sources	Strategy Overview
Affordable & Accessible Taxi Services **MM**	Transit agencies County departments Non-profit corporations Private sector transportation companies				The strategy emulates the Accessible Dispatch system pilot program begun in 2008 in NYC. Under this strategy, efforts are made to link customers with accessible taxicab resources (currently in short supply in the Lower Hudson Valley). These types of programs work to encourage private sector investment in the acquisition of accessible vehicles. Combined with voucher or subsidy programs designed to reduce fares paid directly by the consumer, these strategies can improve mobility in areas where public transportation services are unavailable or insufficient.
ITS Technologies	Westchester County	Typically 12-18 months to permit specification development, procurement, installation and testing	Capital expense Cost based on the particularly technology deployed	JARC New Freedom	"Intelligent Transportation Systems" or ITS strategies, such programs can provide traveler information, can help to lower operating costs, reduce customer travel times, and provide more convenient routes and schedules. The use of technology to improve services to the target populations can benefit both the transport provider and customer.

* MM in this column refers to project or strategy that may be led by a Mobility Manager.

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

‡ Dollar figures reflect differences in subregional economies.

Accessibility Improvements at Bus Stops

For people with disabilities or seniors with mobility limitations, inaccessible bus stops or the lack of an accessible pathway to the bus stop represent a hindrance to the greater utilization of accessible fixed-route services. These individuals may opt to use more expensive paratransit services.

Outlying areas in the study area, particular in Putnam County, exhibit both rural and suburban characteristics. In many cases, bus stops exist at key locations for seniors and persons with disabilities, but a number of terrain and pathway issues preclude customer use of accessible fixed-route services.

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

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

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

Application to the Lower Hudson Valley

Throughout the Lower Hudson Valley, outreach efforts resulted in customer feedback regarding consumer preference to use paratransit services, even if accessible fixed-route services were available. One reason for this preference was the fact that existing bus stops lack passenger amenities (shelters or benches), the stop is not accessible, or there are no accessible pathways leading to/from the bus stop location. Importantly, these comments not only came from persons with disabilities, but from seniors as well.

Putnam County has expressed interest in improving the accessibility of bus stops placed to serve senior residential facilities. It was reported these stops sometimes do not have accessible pathways from the residences to the bus stop and that the stops lack passenger amenities. Improvements will encourage residents to use accessible fixed-route service instead of paratransit. Putnam County has identified a number of stops that could benefit from such improvements.

Although specifically requested by Putnam County, this strategy has also been identified as a high priority in the other counties in the Lower Hudson Valley.

Overview of National/Regional Best Practices

Bus Stop Accessibility Program, Capital Metro, Austin, TX. Capital Metro budgets approximately $750,000 to $1,000,000 per year to make accessibility improvements to key bus stops; these improvements can include anything from shelter installation to installation of bus stop pads. The program is part of the system's Great Customer Care initiative. Additionally, the system partners with the Public Works Department on the Build Greater Austin program. This program builds sidewalks and curb ramps and improves access to identified key bus stops.

Bus Stop Improvement Program, Montgomery County, MD. The goal of this project is to make the county's bus stops safer, more accessible, and more attractive to users, while improving pedestrian safety. The county has recognized that many of the stops have safety, security, or right-of-way deficiencies. Problems include drainage issues, sidewalk connections, lack of pads, lighting, or unsafe intersection location/crosswalk issues. The county has budgeted $2,000,000 per year over a multi-year period to make the enhancements.

Costs

Costs include engineering, construction, and/or acquisition of passenger amenities. Costs will vary by stop location depending upon existing conditions.

Costs incurred under this strategy would be considered capital costs; Federal participation would be 80 percent of eligible costs.

Potential Funding Sources

- New Freedom

Potential Lead Organizations

- Putnam County Planning Department

- Westchester County Department of Transportation

- Municipalities

- Other entities that have ownership over right-of-way where bus stops are located

Bus Buddy Program

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

Expected Benefits / Needs Addressed

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

Potential Obstacles and Challenges

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

Application for the Lower Hudson Valley

Community outreach efforts, stakeholder interviews, and public meetings have indicated that when consumers have a choice of modes between fixed-route and paratransit, consumers prefer using the paratransit system, even though it requires (at least) a next-day reservation. Consumers who utilize the paratransit systems have cited capacity constraints generated, in part, by users who could effectively use the fixed-route system. This problem was cited by actual paratransit consumers in Putnam and Rockland counties.

A system that could mitigate consumer concerns or lack of skill in using the fixed-route system could divert some paratransit users to the fixed-route mode, thereby creating additional capacity on the paratransit system.

Examples of Best Practices

Lane Transit District Bus Buddy Program, Eugene, OR. Lane Transit District (LTD) operates a one-on-one training initiative called the Bus Buddy Program. The Program teaches seniors how to ride the bus in a relaxed way by breaking down barriers and building confidence. LTD recruits regular bus riders to serve as volunteers, known as Bus Buddies, and partners with local senior centers to match individual seniors with these volunteers. Bus Buddies teach seniors about the LTD transit system, as well as how to plan trips and navigate routes. Each Bus Buddy and senior then ride the bus together. Afterward, the pair discusses the trip and the Bus Buddy answers any remaining questions about using public transportation in Eugene.

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

Costs

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

Potential Funding Sources

- If the program is designed specifically to benefit persons with disabilities, New Freedom funds could be used to pay for the improvement. Otherwise, this type of enhancement would be funded as a routine operating expense.

Potential Lead Organizations

- Westchester County Department of Transportation
- Rockland County Department of Public Transportation
- Putnam County Transit

Travel Training   MM

People who have never used public transportation often have real concerns and fears about using the public transportation network. This strategy has many of the same goals of a bus buddy program, but is more formalized. A training program that teaches consumers how to use public transportation and become confident transit riders can help encourage use of public transit. Travel training may be promoted as a marketing strategy to encourage key consumer groups (i.e., older adults) to use public transit; or it may be targeted towards frequent users of paratransit to encourage individuals to use lower-cost fixed route services, as appropriate to the individual's circumstances.

Expected Benefits / Needs Addressed

- Encourages and support use of local fixed-route services

- May reduce demand for paratransit services

- Increases awareness and use of a variety of community transportation services

- May support other regional priorities, such as workforce development

Potential Obstacles and Challenges

- Some audiences and individuals may require specialized training

- Requires multiple-agency cooperation to identify training opportunities

- Training may require support from agencies that perceive no, or minimal, long term gain

Application for Lower Hudson Valley

Community outreach efforts, stakeholder interviews, and public meetings have indicated that when consumers have a choice of modes between fixed-route and paratransit, consumers prefer using the paratransit system, even though it requires (at least) a next-day reservation. Consumers who utilize the paratransit systems have cited capacity constraints generated, in part, by users who could effectively use the fixed-route system. This problem was cited by actual paratransit consumers in Putnam and Rockland counties.

Like the Bus Buddy program, there are opportunities for travel training is to train frequent paratransit patrons to use fixed-route services as appropriate to their individual circumstances. While Bus Buddy programs tend to be one-on-one scenarios, travel training is often more focused on groups of consumers. Critical training issues for some populations, especially wheelchair users, may be using wheelchair lifts and safely securing wheelchairs inside transit vehicles. Encouraging use of lower-cost fixed-routes over higher cost paratransit services, however, may work to preserve transit agency resources and potentially lead to more services.

Developing and marketing training programs to key transit markets, such as older adults, may help encourage transit ridership. Transit agencies may also work with the Department of Motor Vehicles to reach individuals who have just lost their licenses. Travel training can cover basic transit skills such as reading a schedule, paying fares, and transferring between services.

A system that could mitigate consumer concerns or lack of skill in using the fixed-route system could divert some paratransit users to the fixed-route mode, thereby creating additional capacity on the paratransit system.

Examples of Best Practices

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

MTA – New York City Transit. The Metropolitan Transit Authority has travel training programs through several of its subsidiaries, including its commuter rail services and New York City Transit. NYCT's program is available only to Access-A-Ride eligible individuals and offers one-on-one training. The duration depends on the individual's ability to master trip planning, safety and other basic traveling skills.

Out and About Travel Training Program, Ann Arbor Transportation Authority (AATA) "The Ride", Ann Arbor, Michigan - AATA/The Ride offers free, personalized, one-on-one travel training instruction for seniors and/or people with physical or mental disabilities who want to learn to ride AATA buses. Group orientation sessions are also available. Topics in the training include requesting information, trip planning, reading schedules, boarding and exiting from buses, using the wheelchair lift and securement system, fare discounts, payment and stranger awareness

Road to Independence, CSTA, Frederick, Maryland – CSTA holds half-day training sessions that teach people with disabilities how to use public transportation. The program includes a short video and a personalized training session to review transit schedules and fares. Participants "graduate" from the class with an accompanied trip on the bus.

Potential Funding Sources

- New Freedom (if specifically oriented towards persons with disabilities)
- JARC (if designed to support employment)

Possible Lead Organizations

- Lower Hudson Valley transit systems
- Other county departments who serve the target populations
- Nonprofit organizations

Centralized Resource Directory

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

Expected Benefits / Needs Addressed

- Directories provide a "one-stop" resource for all public and private transit services and human service agency transportation

- Directories provide easy contact and eligibility information enabling consumers and advocates alike to identify potential service providers for specific members of the target populations

- Resource directories are readily embraced by most coordination committees as a non-threatening strategy that promotes enhanced mobility

- Directories can be particularly useful in larger communities with a large number of public and private sector transportation resources

Potential Obstacles and Challenges

- Requires a comprehensive data collection effort to create the directory

- Keeping the directory up-to-date has proven problematic in other areas

- Consumers must be aware that the directory exists in order to be useful

- Comprehensive directories may contain many listings, confusing consumers

- Directories only alert consumers to the availability of a service provider; consumers and/or advocates must still inquire about eligibility and arrange for services

Application for the Lower Hudson Valley

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 (persons with low income, older adults, and persons with disabilities). Outreach efforts conducted as part of this study indicate that consumers have indicated there is no centralized source to find information on the transportation services that are available in the greater New York metropolitan region.

This problem is present in the Lower Hudson Valley in Putnam and Rockland counties. Westchester County's government website was cited by several key stakeholders to be an excellent resource for programs and services available to persons with disabilities, providing a comprehensive listing of community resources. Similarly, the county's Department of Senior Programs and Services publishes a *Directory of Services, Rights & Benefits for Senior Citizens in*

Westchester County. However, no such centralized directories exist in the other two counties. Staff at individual agencies have informally compiled directory information for their own information and referral purposes, but this information is not available to the community-at-large.

Creation and publication of a centralized directory of transportation services would address this problem. A review of best practices indicates that, historically, such directories were published in book form. Creation of a centralized resource directory is often a first step in an incremental strategy to implement greater coordination in the future, such as brokerage, 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 10-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, another non-profit organization), 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. 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). SCNA 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.

Costs

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

Potential Funding Sources

Central resource directories that facilitate enhanced access to services by the general public, including older adults, persons with low income, and persons with disabilities, are 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 as an eligible funding activity. 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

The planning department in Putnam County and the Rockland County Department of Public Transportation are the logical lead organizations to undertake this strategy. The potential to forge a public/private partnership with a community-based non-profit organization would be a cost-effective solution to ongoing maintenance and update of the directory.

Improved Transit Traveler Information

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

Expected Benefits / Needs Addressed

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

Potential Obstacles and Challenges

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

Application for the Lower Hudson Valley

All public transit systems in the Lower Hudson Valley have printed route and schedule information. Moreover, all routes and schedules are readily available from the respective websites of all three counties. Nevertheless, consumer focus groups conducted as part of this study, and other comments received at various community meetings, indicate many consumers among the target populations still have difficulty understanding existing transit information.

Westchester County has recognized this problem and has hired a contractor to revise published route and schedule information. Making this material more user-friendly to the target populations is one of the goals in this initiative. This project is already underway and the results of this study could benefit other public transit systems throughout the Lower Hudson Valley and the greater NYMTC study area.

Subsequent implementation projects, either in Westchester County or other counties in the Lower Hudson Valley, should be done consistent with objectives in this plan, thus it is critical that this strategy be included as an identified need to support potential projects in later years of plan implementation.

Examples of Best Practices

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

Costs

All systems in the Lower Hudson Valley prepare route and schedule information in printed media as well as posting online versions of this schedule information on the individual county websites. Redesign and reprint of the information would constitute a major cost to any of the three existing public transportation systems.

Potential Funding Sources

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

Potential Lead Organizations

- Westchester County Department of Transportation
- Rockland County Department of Public Transportation
- Putnam County Transit

Improved Coordination of Agency Services/Mobility Management   MM

"Mobility management" is a relatively new and innovative approach for managing and delivering coordinated transportation services to customers, including older adults, people with disabilities, and individuals with low income. Mobility Management focuses on meeting individual customer needs through a wide range of transportation options and service providers. The concept focuses on coordinating these services and providers in order to achieve a more efficient transportation service delivery system for public policy makers and taxpayers who underwrite the cost of service delivery. Generally, these strategies are implemented through the creation of staff positions known as "Mobility Managers."

Mobility Managers serve as policy coordinators, operations service brokers, and customer travel navigators. They help communities develop transportation coordination plans, programs, and policies, and build local partnerships. 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.

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 the Mobility Managers in their region are properly trained and supported.

Expected Benefits / Needs Addressed

- Ensures staff resources are available to implement mobility and coordination strategies
- Creates community resource to promote existing and available resources
- 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 full range of required skills may be difficult to find
- Individual 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 Lower Hudson Valley

This strategy is most applicable to Putnam County, but has some viability in both Rockland and Westchester counties as well. Indeed, one area where a Putnam County Mobility Manager might have some impact is on arranging or finding transportation to transport seniors to medical facilities in Mt. Kisco and White Plains in Westchester County.

Some interest in this strategy was expressed at the Community Workshop held in Putnam County. Additionally, several agency representatives in the county have expressed a desire to coordinate existing agency services to a higher degree. Currently, beyond informal information

and referral, there is little coordination of human service agency transportation in either Rockland or Putnam counties. This strategy would aim to increase the level of coordination.

For customer-side functions, consideration should be given to perhaps setting up Mobility Managers at the county level, with individuals hired by the county. In this way, the functions that a Mobility Manager might tackle would be geared to the specific unmet needs in each County. NYSDOT or NYMTC could also develop a program for training and supporting Mobility Managers, perhaps using the Wisconsin model as template. (See below.).

One major function of a Mobility Manager would be to serve as a so-called "one-stop" source of information for all available transportation services. In more advanced versions of this concept, mobility management functions could extend beyond simple information and referral. In such systems, actual ride matching and trip reservations functions may occur.

It may also be possible to regionalize these functions after an initial period, consolidating individual county functions into a regional position. This may be important to those counties unable to sustain financial support for a county position beyond the initial grant/funding period.

Examples of Best Practices

Wisconsin DOT Mobility Management Program. The 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 organizations to sponsor Mobility Managers that best meet local challenges and opportunities. As a result, Mobility Managers are being sponsored by organizations and agencies ranging from county offices on aging, regional planning commissions, healthcare resource centers, and non-profit organizations. 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 Mobility Managers have access to technical skills and resources.

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 both 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

- Existing transit systems
- County human service agencies
- Non-profit human service agencies
- Community organizations, such as United Way, etc.

Job Access Strategies

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

Expected Benefits
- Opens job markets to persons with low income and other transit-dependent individuals
- Partnerships with employers may provide opportunities to reduce costs
- 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 in Lower Hudson Valley

This is an established strategy that has been employed in Westchester County. Under this strategy, Bee-Line has improved reverse peak service to Westchester Community College as well as to specific employment centers in White Plains, the Westchester County Airport, Grassland Reservation, and Valhalla (which includes the Westchester Medical Center). A combination of new and/or expanded services has been used to make or improve reverse commute trips, connecting subway stations in the Bronx and/or Metro-North stations with these employment centers.

Existing JARC-funded projects in the county include:

- Route 1X is a new reverse commute express route with week day service connecting the 242 St. subway station in the Bronx and downtown Yonkers. It will provide three north bound morning trips and three southbound evening trips.

- Route 43 is an existing service connecting the 241 St. subway station in the Bronx to downtown Mount Vernon. One additional evening southbound trip will be added.

- Route 79 is a new route to service commute trips to Westchester Airport. This will be weekday, Saturday and Sunday service connecting White Plains Transit Center to Westchester Airport with 14 daily round trips.

- Route 7, an existing route with expanded service from 7:00 PM to midnight service along the eastern segment between the cities of Mount Vernon and New Rochelle, will be continued. This existing late night service began in 2001.

With continued rates of high unemployment, Westchester County remains an important center for jobs and new jobs creation. There will be a continued need to link persons with low income with these employment centers. Adoption of this strategy in the plan will continue to afford Bee-Line

with the flexibility to apply for JARC funding to create new reverse commute routes or expand existing Bee-Line routes to better meet commute needs.

While not noted as an immediate need in Putnam County, Job Access and/or Reverse Commute projects may arise in the future. Job Access projects that would take commuters from Putnam County into high employment centers in Westchester County could be viable and/or sustainable JARC projects. In Rockland County, this need may be more pronounced, with county planning staff indicating there are unmet needs to transport passengers to destinations in New Jersey, Brooklyn, and Woodbury Commons, among other destinations.

Overview of Best Practices

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

These projects are operating projects wherein Bee-Line uses a variable hourly operating cost rate to compute estimated costs for individual routes that are enhanced under the reverse commute program. Actual costs vary by route distance and hours of operation.

Operating costs for potential JARC projects in Rockland and Putnam counties would be computed in similar fashion.

Potential Funding Sources

- JARC

Potential Lead Organizations

- Westchester County Department of Transportation
- Rockland County Department of Public Transportation
- Putnam Area Transportation

Reverse Commute Strategies   MM

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

One of the primary reasons for high inner-city unemployment is 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 the Lower Hudson Valley

One specific reverse commute issue that was identified in public and stakeholder workshops in the Lower Hudson Valley was the difficulty that home healthcare workers or personal care attendants who live in New York City have in reaching clients' homes in northern Westchester County where less public transportation service is available or service is not convenient at particular times of the day.

This strategy is aimed at improving connections and alternatives for this final leg of the commute. Based on stakeholder input, there is a need to create additional opportunities from train stations in northern Westchester County, enabling workers to complete their journey. Reverse commute strategies such as feeder shuttle service to and from rail stations and reverse commute vanpools may be effective solutions to this problem.

Partnerships could be formed between transportation providers, employers, 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.

Examples of Best Practices

New Reverse-Commute Fixed-Route, Los Angeles, CA. 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, Washington, DC. In the Washington DC area, Commuter Connections offers free services such as regional ride matching and Guaranteed Ride Home programs.

Child Transportation Services, Chattanooga, TN. 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. 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 train stations or bus stops would be similar to the normal cost per vehicle hour of the service operator and might be in the range of $50 - $150/hour.

Potential Funding Sources

- JARC
- New Freedom
- Employment agencies

Potential Lead Organizations

- Transit agencies
- Municipalities
- Human service agencies/home healthcare organizations
- Nonprofit organizations

Capital Equipment for Coordinated Agency/Program Services

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 persons with low income, older adults, 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 for the target populations.

Hence, two important strategies are: (1) to ensure the continuation of Section 5310 funding for vehicles replacing older 5310-funded vehicles that are being retired; and (2) to otherwise weight more heavily Section 5310 applications that demonstrate that new vehicles are to be used in a coordinated fashion (*e.g.,* vehicle-sharing) and/or will otherwise meet a specific unmet need identified in the Coordinated Plan.

Expected Benefits / Needs Addressed

- Human service organizations provide vital access to programs and services to members of the target populations who do not qualify for ADA complementary paratransit services

- Capital funding supports the maintenance of existing community transportation services

- Section 5310 creates opportunities for funding partnerships with health and human service (HHS) programs, with FTA supplying capital funding and HHS providing vehicle operations support

- Non-profit agencies can represent a cost effective option for meeting some transportation needs of the target populations

Potential Obstacles and Challenges

- NYSDOT requires that all applicants for Section 5310 document outreach efforts to participate in the Public Transit-Human Services Coordination Plan. This narrative should include how the project addresses one or more of the coordination strategies, activities, and/or efficiencies identified in the Plan. Some potential applicants have not conducted the requisite outreach or participated in the NYMTC planning process

- The Section 5310 program requires a 20 percent local match which may be difficult for some non-profit agencies to generate on high cost capital items such as vehicles

Application for the Lower Hudson Valley

This strategy is applicable to all three counties in the Lower Hudson Valley. Section 5310 is a longstanding FTA program that provided capital funding for various non-profit and public agencies throughout the NYMTC region. In Westchester County, the following organizations have received Section 5310 funding in the most recent round of funding:

- City of Mount Vernon Recreation Department;

- Richmond Children's Center, Inc.; and

- Family Services of Westchester, Inc.

In Rockland County, Meals on Wheels Program of Rockland County was the only recipient in FY 2009. There were no recipients in Putnam County, although organizations in Putnam County have been recipients in the past.

Federal transit law, as amended by SAFETEA–LU, requires that projects funded from the Section 5310 program be derived from a locally developed, coordinated public transit-human service transportation plan ("coordinated plan"). A coordinated plan should maximize the programs' collective coverage by minimizing duplication of services. The following strategies are recommended to meet the coordination plan participation requirements and will work to ensure that services are not duplicative:

- The organizations responded to the providers survey administered as part of this plan and/or any future updates to this plan (for example, Meals on Wheels Program of Rockland County and Family Services of Westchester, Inc. both responded to the survey); or

- The organization participated in community outreach meetings conducted as part of the plan and/or any future meetings associated with plan updates (for example, the Meals on Wheels of Rockland County participated in the Provider Workshop for Rockland County); or

- The organization has participated in local efforts to develop a centralized resource directory (for example, Family Services of Westchester, Inc. and Richmond Children's Center, Inc. are both listed in directories of services for older adults and/or disabled populations on the Westchester County's website or a published guide (*Directory of Services: Rights & Benefits for Senior Citizens in Westchester County*)); or

- The organization's Section 5310 application directly addresses one or more of the unmet needs addressed in listed Chapter 7 of this plan and any subsequent updates.

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 evaluating Section 5310 applications in the metropolitan area, will only fund those organizations that participate in the STC network and which 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 5311 funds to pay for 80 percent of the cost of the equipment; applicants must pay for the remaining 20 percent from local sources.

Potential Funding Sources

- Section 5310

Potential Lead Organizations

In Westchester County, the following organizations are potential lead organizations:

- Westchester County Department of Senior Programs and Services, town/community offices for the aging
- Westchester County Office for the Disabled; Richmond Children's Center, centers for independent living, sheltered workshops
- Family Services of Westchester, Inc.

In Rockland County, the following organizations are potential lead organizations:

- Meals on Wheels of Rockland County, Inc.
- Centers for independent living, sheltered workshops

In Putnam County, the following organizations are potential lead organizations:

- Putnam County Office for the Aging
- Putnam ARC, Inc.

Use of ITS Technologies to Improve Coordination

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

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

Expected Benefits / Needs Addressed

- Technology can improve operational efficiency without increases in operating costs

- Technology can improve all aspect of customer relations, improving the accuracy and timeliness of trip information providers to consumers

- Technology can reduce administrative burdens associated with tracking and verifying trips and improve efficiency when billing human service agencies when service is provided under contract

Potential Obstacles and Challenges

- Some technologies are expensive to implement and require ongoing vendor maintenance and upgrade contracts

- Integration of multiple technologies has proven difficult, even with general guidelines for an integrated architecture structure to ensure compatibility of technologies

- Some users in the target populations may be reluctant to use an interactive information kiosk, automated telephone systems, etc.

Application for the Lower Hudson Valley

This is an established strategy that has been employed in the Lower Hudson Valley. Both Westchester and Rockland counties utilize automated scheduling and dispatching software to perform reservations, scheduling, and dispatch functions. Additionally, Westchester County received a New Freedom grant to acquire mobile data computers in order to improve the on-time performances of paratransit services.

Although not cited as an immediate need in Rockland and Putnam counties, input received through various community outreach efforts suggests that on-time performance is an issue for several providers, and in all counties enhanced transit information was sought.

This strategy will permit any of the Lower Hudson Valley counties to seek appropriate technologies under the New Freedom and/or JARC programs as appropriate.

Examples of Best Practices

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

Cape Cod Regional Transit Authority (CCRTA), MA. This regional transportation authority in Massachusetts was one of the first systems in the United States to utilize computer assisted scheduling. Over the years, the CCRTA upgraded its hardware and software platforms, implementing additional ITS components, such as mobile data computers (MDCs), GPS-based automatic vehicle location (AVL), and a geographic information system (GIS).

Costs

Costs are dependent upon the particular technology deployed.

Potential Funding Sources

- Westchester County has already been successful in using New Freedom program funding to finance acquisition of mobile data computer technology. New Freedom program funding will pay for other technologies if the enhancement is designed to improve services to persons with disabilities. Such funds could be used to enhance paratransit operations in Rockland and Putnam counties.
- Similarly, JARC funds could be used for any technology that helps transit systems provide job access or reverse commute services.

Potential Lead Organizations

- Westchester County Department of Transportation
- Rockland County Department of Public Transportation
- Putnam County Transit

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 it operation

- Voucher programs offer an affordable option for long-distance trips that would otherwise be prohibitively expensive

- Users have their choice of transportation provider

- Low start-up costs

Potential Obstacles and Challenges

- Voucher programs require an agency to assume responsibility for day-to-day administration

- Measures must be implemented to prevent fraud

- Some potential areas of utilization may lack available or sufficient transportation services

Application for the Lower Hudson Valley

While existing public transit services provide extensive service throughout the Lower Hudson Valley, there are nevertheless gaps in some geographic areas (western Putnam County, northern sections of Westchester County, etc.). In particular, one identified unmet need for service is to improve services to commuters heading to northern sections of Westchester County. Outreach efforts identified low income home healthcare workers commuting by train to northern Westchester County, only to have difficulty making the last leg of the trip to client residential locations. These clients do not live on an existing Bee-Line route or transit schedules are not convenient to work schedules.

A voucher program could potentially solve this problem provided that sufficient taxicabs or other transportation providers are available to serve the respective train stations. Under this program,

low income workers would be eligible to purchase vouchers for use on the final leg of their trip, potentially using taxicabs where existing fixed-route services are not appropriate or conducive to work schedules.

Examples of Best Practices

APRIL Travel Voucher Program. 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 country, including Fall River, Massachusetts and Camp Hill, Pennsylvania. In each area, APRIL's Traveler's Cheque model program features a sponsoring agency to determine eligibility and establish other policies and assist with the provision of insurance coverage; a community transportation coordinator, who identifies a network of transportation providers and consumers and manages the operation of the program; and the development of an individual transportation plan for each program participant. With a focus on employment and independent living transportation for persons with disabilities, the ten Traveler's Cheque programs provided nearly 93,000 trips to just under 600 individuals during the first four years of program funding.

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

Costs

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

Potential Lead Organizations

- Westchester County Department of Transportation
- ALOFT
- Municipal departments of senior citizen affairs and/or human services

Volunteer Driver/Escort Program

Volunteer drivers are individuals who volunteer to drive people who lack other mobility options. A sponsoring organization, such as a transportation provider, human service agency or other entity often helps match volunteer drivers with individuals who need rides. Volunteer drivers will typically use their private vehicle but will be reimbursed, usually based on mileage driven, by the sponsoring agency. Sponsoring agencies may also arrange for insurance coverage. Volunteer driver programs have proven to be an effective and important resource to help supplement community transportation programs.

Expected Benefits / Needs Addressed

- Provides low cost transportation option
- Some programs will reimburse friends or family members for providing rides
- Volunteers can provide a flexible source of transportation that can be useful for longer distance, out of area trips
- Escorts can work to improve on-time performance when using existing public transit modes
- Escorts are able to provide a higher level of passenger assistance than can be provided by public transit

Potential Obstacles and Challenges

- Setting up a volunteer driver network requires time and effort to recruit, screen, train and reward volunteer drivers
- Riders need to introduced to and appreciate concept of volunteer drivers
- Real or perceived driver liability and insurance issues
- Retention of volunteers can be an issue

Application for the Lower Hudson Valley

Volunteer driver/escort networks could supplement existing publicly operated services, provide a level of passenger assistance that public transit providers are unable to render, or provide a cost effective alternative for individuals in the target populations who do not meet eligibility standards of existing public transit/human service agency programs.

Additionally, this strategy could be successfully employed on more difficult-to-serve trips. Trips that have extensive travel distances or involve cross-jurisdictional travel (*e.g.,* inter-county trips) would be potential candidates for this type of strategy.

Examples of Best Practices

Independent Transportation Network (ITN), Maine. ITN was first established in Portland, Maine as a means of providing seniors with rides in exchange for trading in the cars they rarely used. 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 members 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 or social visits or events. Maine has enacted legislation that enables ITN to sell its surplus vehicles and reinforces an earlier law prohibiting insurance companies from raising premiums for volunteer drivers.

Community Inclusion Driver (CID). The Community Inclusion Driver 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 be used for seniors and persons with disabilities in urban areas as well. The CID strategies involve a partnership between a transportation provider, a customer and individuals who are willing to act as volunteer drivers. The provider establishes program and eligibility guidelines, information materials, training, record-keeping, and reimbursement payments. The customer is responsible for identifying suitable volunteer drivers (although the transportation provider may assist or recruit drivers themselves). The volunteer driver is responsible for providing proof of a valid license and a properly registered and insured vehicle.

Costs

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

Potential Funding Sources

- If the program is designed specifically to benefit persons with disabilities, New Freedom funds could be used to pay for the improvement. Otherwise, this type of enhancement would be funded as a routine operating expense.

Potential Lead Organizations

- Any organization that could be a potential lead agency for a Mobility Management strategy could be effective as a lead agency if this strategy were implemented as a stand-alone option

- Existing transit systems or departments of transportation

- County human service agencies

- Non-profit human service agencies

- Community organizations, such as United Way, etc.

Transit Service Expansion and Improvements

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

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

Expected Benefits / Needs Addressed

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

Potential Obstacles and Challenges

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

Application for the Lower Hudson Valley

This strategy is similar to the job access strategy identified earlier. Throughout the Lower Hudson Valley, there are opportunities to expand both temporal and/or spatial elements of existing public transit services to meet employment travel needs.

Examples of Best Practices

Temporal expansion of service, Alameda-Contra Costa, CA. 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, NY. As part of the 2007-2008 JARC program, funds were awarded to operate a shuttle bus between the Staten Island Ferry and the College of Staten Island (CIS). Funds were approved to operate weekday service with 30 minute headways between the ferry terminal and the CIS campus. The service is scheduled to operate during the academic semesters only.

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

Costs

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 (Bee-Line, PART, or TOR, for example).

Potential Funding Sources

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

Possible Lead Organizations

- Bee-Line
- Rockland County Department of Transportation
- Putnam County

Affordable and Accessible Taxi Services   MM

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

Expected Benefits / Needs Addressed

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

Potential Obstacles and Challenges

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

Application for the Lower Hudson Valley

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.

Initiation of strategies to address the affordability of existing taxicab services will facilitate greater utilization of this private sector resource. This strategy could potentially expand on several smaller existing programs (with spatial limitations) operated by some municipalities that current manage a taxi subsidy program.

Examples of Best Practices

Accessible taxis, Washington, DC. Accessible taxi service was scheduled to be initiated in Washington DC in January 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.

King County accessible taxis, Seattle, WA. Another recent example of an accessible taxi program is the pilot project implemented in the Seattle area in late 2006. King County Metro Transit partnered with the King County Licensing Division, Seattle's Consumer Affairs Division, and Yellow Cab to acquire and license eight low-floor, ramp-equipped minivans for taxi service in

Seattle and most other parts of King County. The accessible service operates 24 hours a day, seven days a week for the same metered fare as service in non-accessible vehicles. Metro's taxi subsidy program offers tickets at half price to eligible individuals.

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 percent)

Potential Lead Organizations

- Existing LHV public transit programs
- Municipalities (or groups of municipalities operating under the coordination of a Mobility Manager)
- Non-profit organizations
- County departments/agencies