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**REDUCING COSTS OF
PURCHASED TRANSPORTATION FOR
STATE AGENCIES
Promising Practices Guide
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PROMISING PRACTICES GUIDE

The Reducing Costs of Purchased Transportation for State Agencies report completed for the NJ Department of Transportation focused on identifying ways to more efficiently provide transportation services to the consumers of New Jersey's human service divisions. Specifically it looked for better ways to meet the needs of human service division consumers, a group that collectively can be described as the transportation disadvantaged. One major means to achieve this goal is to explore the suitability of using existing public and community transportation services to meet the needs of these populations. Identifying the potential to use existing public and community transportation is a significant step toward understanding alternative ways to provide service to the transportation disadvantaged.

However, simply identifying the degree to which consumers might utilize existing transportation services only partially addresses the need. To this end, the research team examined a broad range of practices that can be used to promote more efficient ways to provide transportation to human service consumers. The research team identified more than a dozen promising practices that have the potential to enhance transportation services for human service consumers and/or to reduce the costs of providing these services. Many of the promising practices discussed below attempt to address issues of coordination and to streamline service delivery in the human services and transportation "systems". These "systems" are the ways that consumers receive transport and are typically cumbersome and are often organized in a confusing manner, with each suffering from many of the characteristics found in large, unwieldy organizations.

Promising Practices

The promising practices identified for this research act on one or more "levers" that affect how transportation is delivered to and acquired by consumers, and look toward making positive changes at a variety of levels and among different actors. Table 1 provides a better understanding of the promising practices reviewed and identifies the levers that might be employed to bring forth change in the provision of transportation services for human service consumers. Table 2 offers a description of each practice and provides a rationale for why it might be adopted, an example of where the practice has already been adopted, thoughts about where and how the practice might be employed in New Jersey, and reiterates which policy area(s) the practice affects.

It is the intention of the researchers that this promising practices guide be utilized by state human service divisions that provide transportation to their consumers as well as by public and private transportation working to serve these consumers.

Table 1. Promising Practices by Type

Promising practice	Operations & routes	Purchase of transportation	Consumer utilization of transportation	Relationships among stakeholders
Adjust or expand existing transit to accommodate unserved locations	X			
Collect and share transportation usage and needs data				X
Consider public and community transportation access in location decisions			X	X
Contract with community transportation providers		X		X
Coordinate transportation services operating within similar geographies	X			X
Coordinate vehicle maintenance programs	X			X
Develop cooperative arrangements between municipalities and between municipalities and counties providing transportation	X			X
Establish transfer hubs	X		X	
Establish/expand mobility management and/or trip brokerage	X	X	X	X
Expand area served by route deviation	X			
Explore e-hailing services for first/last mile to traditional transit	X		X	
Explore flex-route / e-hailing technology to coordinate group rides (smart paratransit)	X		X	
Incentivize coordination between human service providers and counties				X
Offer travel instruction / travel training			X	
Use demand response feeder service to connect to tradition transit	X		X	
Use demand responsive collector strategies	X		X	
Use vehicle leaseback	X	X		X

1. OPERATIONS AND ROUTES – These promising practices affect the processes used to provide and the location of transportation services delivered to consumers.

These promising practices are intended to change the ways that transportation services are operated, the routes that are available to serve consumers, and the means by which consumers can access traditional transit. The aim of several of the promising practices listed below is to address the difficulties of providing transit economically in low density locations or to bridge the distance between a consumer's origin/destination and where s/he can board a vehicle. These issues present particular challenges in locations that are not walkable due to distance, lack of infrastructure, or consumer inability.

2. PURCHASE OF TRANSPORTATION – These promising practices affect the contractual connections between human service providers and transportation providers or have an impact on how consumers identify and purchase transportation services.

The primary driver of this research effort was to explore ways to lower costs of providing transportation to human service consumers. Establishing new partnerships between human service providers and the transportation community through the purchase of transportation services is one essential way to achieving this goal. Contracts between the human service providers who need to figure out how to effectively get consumers to their facilities and the community transportation providers who have services available is a direct means toward accomplishing this goal. Other means to connect consumers with available transportation options include mobility management techniques and brokerage. In each, transportation decision making is done in light of individual needs and the overall transportation assets available. Still another form of contractual relationship that changes the nature of transportation provision and may affect the purchasing of these services is the concept of vehicle leaseback – the situation where vehicles are purchased by human service providers but operated by community transportation entities.

3. CONSUMER UTILIZATION OF TRANSPORTATION – These promising practices entail changing the ways that consumers travel including access, mode, and transfers.

Some promising practices documented below seek to affect the ways that consumers travel. These practices offer consumers alternative ways to identify transportation options, access traditional transit, or develop or refine the skills to utilize traditional transit.

Many of the promising practices cited as changes in operations also entail changes in behavior on the part of the consumer and may require pursuit of additional skills and/or the adoption of new travel patterns. Willingness to make these kinds of changes is often a prerequisite to implementing more efficient transportation modes and a reluctance to adopt new practices can adversely affect success. While mode changes, particularly those that might require consumers to travel on more than one mode, are often made only when other options are exhausted, these changes can also provide consumers with previously unrealized opportunities. Consumers who typically travel via door-to-door transportation from their residences to program locations may benefit from familiarity with and competency with other nearby transportation options.

4. RELATIONSHIPS AMONG STAKEHOLDERS – These promising practices involve coordinating information and services among a number of stakeholders including human service divisions and providers, community transportation providers, and public transportation agencies.

Among the most difficult to achieve but powerful promising practices identified are those that alter the relationships between stakeholders. These changes have the potential to create new ways of working together, permit new forms of collaboration, and establish meaningful interaction between partners. Successful collaboration may allow stakeholders to share services, improve transportation options for consumers, and lower costs.

Being able to effectively collaborate can also have an impact on the success of other forms of promising practices. This implies that while such a newly adopted promising practice may be designed to influence operations or access, the success of such a change is dependent upon an ongoing exchange of information and sustained coordination of effort between two or more stakeholders.

Significant barriers exist to improving coordination between stakeholders. Among these is a lack of communication between stakeholders, adherence to vested or competing interests, and unwillingness to try unfamiliar practices [fear of change factor].

Suggested Promising Practices

ADJUST OR EXPAND EXISTING TRANSIT ROUTES TO ACCOMMODATE UNSERVED LOCATIONS

<i>Description</i>	Identify locations (e.g., congregate housing, partial day programs, vocational rehabilitation centers, hospitals, medical clinics, institutions of higher learning, government offices) that are currently unserved or underserved and determine how locations might be served via minor changes in existing transit routes.
<i>Rationale</i>	A prudent means of expanding transportation options for disadvantaged persons is to assure that high frequency destinations, and to a lesser extent, origins are well served by public and community transit.
<i>Example</i>	In 2015, NJ TRANSIT established a bus stop near a Paramus senior housing facility with the prime intent of serving residents. The agency is also exploring pursuing similar opportunities to accommodate unserved locations for older adults in communities including Trenton, Metuchen, Salem and Old Bridge.
<i>Potential pilot</i>	Our data analysis identified the following locations for potential transit routes: CR608 in Cumberland County, US202 in Hunterdon and Somerset Counties, Suttons Lane/Metlars Lane in Middlesex County, and an extension of current service along NJ57 in Warren County.
<i>Policy area(s)</i>	Operations & routes

COLLECT AND SHARE DATA ABOUT TRANSPORTATION NEEDS AND UTILIZATION

<i>Description</i>	Detailed information about the locations of origins, destinations, mode of travel, and costs permits a better understanding of consumer transportation demand and is necessary to improve transportation delivery.
<i>Rationale</i>	Better data collection and information sharing allows for improved decision making and successful coordination. This investigation highlighted a need for detailed transportation data that was not universally available among the human services divisions.
<i>Example</i>	Data sharing is growing within the transportation sector. An example of this is Alert-a-Ride, proposed open-source access data of paratransit trips. Alert-a-Ride serves as an open-source prototype for local governments to open-up access to datasets about vulnerable populations in a way that protects personal identifiable information. See https://www.newschallenge.org/challenge/data/entries/alert-a-ride for additional information.
<i>Potential pilot</i>	Using the example from the most robust division data, divisions should consider requiring human services providers to supply the following information to enable coordination efforts: origin, destination, frequency of one-way trip, cost of trip, and mode traveled.
<i>Policy area(s)</i>	Relationships among stakeholders

CONSIDER PUBLIC AND COMMUNITY TRANSPORTATION ACCESS IN LOCATION DECISIONS

<i>Description</i>	Siting housing, programs, and facilities in locations that are not served by public and/or community transportation places a burden upon transportation disadvantaged populations. If decisions about the locations of these facilities consider access to these modes of travel, consumers will be better served.
<i>Rationale</i>	Transportation services are less prevalent in rural and sparsely settled areas where it is more costly and more difficult to serve consumers. While short term land costs associated with locating in transit-accessible locations might be greater, savings can be realized in transportation costs over time.
<i>Example</i>	Inclusion of public transportation accessibility has been utilized in the development of veteran housing facilities in Highland Park (All Saints Apartments) and Jersey City (Ocean Avenue)
<i>Potential pilot</i>	Not applicable
<i>Policy area(s)</i>	Consumer utilization of transportation; Relationships among stakeholders

CONTRACT WITH COMMUNITY TRANSPORTATION PROVIDERS

<i>Description</i>	Human service providers contract for consumer transportation with county and community transportation providers.
<i>Rationale</i>	County and community transportation providers can consolidate transportation services across many contracts, consumers groups, and locations, thus providing an opportunity to provide transportation more efficiently. This can benefit the human service providers and consumers through lower costs. Additionally this can benefit transportation providers that can make intensive use of already established routes, vehicles, and services.
<i>Example</i>	Camden ARC contracts with Camden SCUCS to transport DDD consumers using DDD funds. Easter Seals in Middlesex, Passaic, and Sussex contracts with MCAT to transport DVRS consumers using DVRS funds.
<i>Potential pilot</i>	In Monmouth County, DMHAS human service providers have recently contracted with Monmouth County Transportation to transport consumers. By placing consumers on vehicles with unused capacity, the county transportation provider is able to provide service within existing financial constraints. Expansion of this relationship and duplication in other locations presents an opportunity to expand this pilot effort.
<i>Policy area(s)</i>	Purchase of transportation, Relationships among stakeholders

COORDINATE TRANSPORTATION SERVICES OPERATING WITHIN SIMILAR GEOGRAPHIES

<i>Description</i>	When two or more entities provide transportation within a given area, coordination of routes can eliminate duplicative services and result in cost savings. Additionally, cooperation between two or more transportation service providers can allow consumers better access to a larger transit network when stops served by more than one provider are strategically located and schedules coordinated to allow transfer trips.
<i>Rationale</i>	Geographic coordination of services can reduce the use of resources and allow for more intensive use of vehicles.
<i>Example</i>	Skylands Transport and Easter Seals of Sussex County have coordinated

	transportation services to allow for more efficient routing of vehicles serving consumers. Similarly Mercer ARC and Mercer TRADE have coordinated the services they provide within the county.
<i>Potential pilot</i>	Potential pilot exists that would align services provided by Cumberland County OET and Easter Seals.
<i>Policy area(s)</i>	Operations and routes, Relationships among stakeholders

COORDINATE VEHICLE MAINTENANCE PROGRAMS

<i>Description</i>	A major transportation cost is vehicle maintenance. Savings can be achieved through economies of scale when maintenance is coordinated.
<i>Rationale</i>	Coordinated services can lead to efficiencies and lower costs. Maintenance often requires specialized equipment and skills that smaller transportation providers are not able to provide inexpensively. These kinds of collaborations can lead to other areas of cooperation.
<i>Example</i>	ARC Mercer offers maintenance services to other non-profit transportation operators.
<i>Potential pilot</i>	County transportation providers with capacity can make maintenance available to human service providers in their area.
<i>Policy area(s)</i>	Operations and routes, Relationships among stakeholders

DEVELOP COOPERATIVE ARRANGEMENTS BETWEEN MUNICIPALITIES AND BETWEEN MUNICIPALITIES AND COUNTIES PROVIDING TRANSPORTATION

<i>Description</i>	Adjacent and nearby municipalities can pool resources to provide better and more comprehensive transportation services.
<i>Rationale</i>	Cooperation between municipalities and between municipalities and counties can allow for economies of scale and establish larger geographic areas where trips can be provided.
<i>Example</i>	Shared services between Woodbridge and Sayreville.
<i>Potential pilot</i>	Potential to implement such practice exists wherever municipality-operated transportation services overlap with those offered by county and public transportation providers. Municipal senior transportation often duplicates county-operated routes. Known examples of this practice can be seen in East Brunswick and Fort Lee.
<i>Policy area(s)</i>	Operations and routes, Relationships among stakeholders

ESTABLISH TRANSFER HUBS

<i>Description</i>	A transfer hub is a safe established location where consumers can transfer between traditional transit routes and/or demand responsive modes to complete a trip.
<i>Rationale</i>	A transfer hub can expand or extend the area where consumers are served. A transfer hub can also allow transportation providers to operate in a more economical manner.
<i>Example</i>	Freehold SCAT Transfer Facility is a FTA funded bus transfer facility that allows consumers from western parts of county to transfer to routes servicing the eastern

	part of the county.
<i>Potential pilot</i>	Other county transportation systems that have the potential to establish transfer hubs include Middlesex County Area Transit (MCAT) and Ocean Ride (Ocean County Department of Transportation).
<i>Policy area(s)</i>	Operations & routes; Consumer utilization of transportation

ESTABLISH/EXPAND MOBILITY MANAGEMENT AND/OR TRIP BROKERAGE

<i>Description</i>	<p>Mobility management uses a coordinated community-wide transportation service network with access to multiple trip providers. A mobility manager identifies the transportation options available and schedules trips for individual users.</p> <p>Brokerage offers many of these same services as it acts as a liaison between individual users and transportation providers.</p>
<i>Rationale</i>	Mobility management and trip brokerage centralizes coordination and can enable better allocation of scarce resources. Having a single point of contact can streamline acquisition of transportation services and facilitate usage by consumers.
<i>Example</i>	Florida county-based mobility manager; also found in many Ohio counties
<i>Potential pilot</i>	Counties with substantial transportation service and capacity to coordinate services with consumer need offer an opportunity to implement mobility management programs, for example Skylands Ride in Sussex County.
<i>Policy area(s)</i>	Operations & routes; Purchase of transportation; Consumer utilization of transportation; Relationships among stakeholders

EXPAND AREA SERVED BY ROUTE DEVIATION

<i>Description</i>	Route deviation combines aspects of fixed route and demand response transportation services by establishing a service route (or service area) and a timetable. Extending the geographic area served via route deviation may allow additional human service consumers to use community transportation.
<i>Rationale</i>	Expanded deviation may allow consumers to access community transportation without a transfer. This may be particularly helpful in rural and sparsely settled areas.
<i>Example</i>	National examples include Tillamook County Transportation District in Oregon, where route deviation is 1.5 miles (TCRP SYN 53).
<i>Potential pilot</i>	Expanded area coverage by greater route deviation has the most potential in locations that are relatively sparsely populated and have established community transportation networks. These conditions exist in many counties throughout the state and should be considered by Burlington County (Burlink), Cumberland County (CCOET), Middlesex County (MCAT), and Warren County (Shuttle) as well as other locations.
<i>Policy area(s)</i>	Operations & routes

EXPLORE E-HAILING SERVICES FOR FIRST/LAST MILE TO TRADITIONAL TRANSIT

Description	The rise of ride matching services has created the opportunity to connect consumers living in unserved locations with traditional transit. While ride matching services such as Uber, Lyft, etc. is comparable to taxi and can be costly, using these services in conjunction with traditional and community transportation may be less expensive overall.
Rationale	E-hailing services can allow consumers to connect to traditional transit and thus can expand or extend service areas. Bridging the first-mile/last-mile can allow for greater use of traditional transit and more economical transportation operations.
Example	Uber pilot in Bergen County
Potential pilot	Consumers traveling to/from locations near well-established public and community transportation options, but who are otherwise unable to access those services, could benefit from e-hailing services. Uber pilot in Bergen County should provide additional information for future pilots.
Policy area(s)	Operations & routes; Consumer utilization of transportation

EXPLORE FLEX-ROUTE / E-HAILING TECHNOLOGY TO COORDINATE GROUP RIDES (SMART PARATRANSIT)

Description	Using ride-matching software (like that used by Uber and others) to more efficiently facilitate group rides. Limited number of "regular" stops can be incorporated into service route.
Rationale	Transportation providers can streamline operations by using real-time ride-matching software, which can be lower cost than taxi or underutilized traditional transit. E-hailing trips may be attractive to consumers not accustomed to advanced reservation group rides. Real time scheduling of trips has the potential to eliminate late cancellations and no-shows.
Example	Examples of ride-matching and ridesharing software designed to serve human service consumers is a burgeoning field. Available software includes FlexRide / TapRide and TripSpark.
Potential pilot	As a new technology, e-hailing is a burgeoning field and the team does not have adequate information to suggest a pilot location at this juncture. However, this option should be considered by stakeholders going forward as additional best practice examples nationwide become known.
Policy area(s)	Operations & routes; Consumer utilization of transportation

INCENTIVIZE COORDINATION BETWEEN HUMAN SERVICE PROVIDERS AND COUNTY TRANSPORTATION PROVIDERS

<i>Description</i>	Financial support to encourage coordination between human service providers and county
<i>Rationale</i>	Incentives can provide an additional inducement to stakeholders to move beyond conceptual cooperation and to implement active coordination of services
<i>Example</i>	Florida's Transportation Regional Incentive Program (TRIP) provides incentives for local governments and the private sector to help pay for critically needed projects that advance regional travel and commerce. TRIP projects advance concurrency management systems and support integrated transportation systems.
<i>Potential pilot</i>	Not applicable
<i>Policy area(s)</i>	Relationships among stakeholders

OFFER TRAVEL INSTRUCTION / TRAVEL TRAINING

<i>Description</i>	Through one-on-one and group training, teach persons with disabilities, seniors, and others to use public transit safely and independently.
<i>Rationale</i>	Providing safe travel skills to consumers allows them to utilize available public and community transportation modes successfully. Additionally, staff and others who make transportation decisions with consumers should be familiar with the traditional transit options available and could benefit from travel orientation instruction.
<i>Example</i>	NJTIP @ Rutgers offers travel instruction to persons with disabilities, older adults and low-income populations as well as to the professional and family supporting these populations.
<i>Potential pilot</i>	Each of the divisions should consider contracting with NJTIP @ Rutgers for transit orientation training for their frontline staff so that these persons can better serve consumers who are seeking to utilize public transit. In addition, the divisions should support travel instruction for interested consumers.
<i>Policy area(s)</i>	Consumer utilization of transportation

USE DEMAND RESPONSE FEEDER SERVICE TO CONNECT TO TRADITIONAL TRANSIT

<i>Description</i>	Use demand response services to transport consumers to locations where traditional or community transportation services can be accessed.
<i>Rationale</i>	Using demand response services can increase use of traditional transit, reduces trip length of demand response trips, and increase the viability of traditional transit in rural and sparsely settled areas.
<i>Example</i>	Pearl Transit provides demand response feeder to NJ TRANSIT buses and to the Pureland shuttles and Cumberland County Office of Employment & Training (CCOET) routes.
<i>Potential pilot</i>	All counties that operate demand response and where fixed route services are available could be eligible to pilot this best practice.
<i>Policy area(s)</i>	Operations & routes; Consumer utilization of transportation

USE DEMAND RESPONSIVE COLLECTOR STRATEGIES

<i>Description</i>	In this best practice, transportation providers enlist natural supports, such as family members or group home staff, to pick up and transport several consumers to coordinated pick up / drop off locations where consumers can board public or community transportation or a pre-arranged group ride.
<i>Rationale</i>	Low density locations are difficult and costly to serve. Bringing consumers to locations served by public and community transportation allows them to access these services. Using natural supports helps ameliorate difficulties experienced by some consumers when using multiple modes and transfers.
<i>Example</i>	Called a POD by ARC Mercer, the agency recruits family members to pick up 2-5 consumers and bring them to a regularly scheduled pick up point where they transfer to an ARC Mercer bus. Pickups and drop offs are coordinated with bus drivers. Family member drivers are trained and receive minor compensation. At some locations, family member drivers have been given access to vehicles to facilitate the group ride.
<i>Potential pilot</i>	Transportation providers that have identified consumer origins that are close but not within their service zone may wish to consider this practice to reduce reliance on group rides. Greater impact is likely in more sparsely populated counties with traditional fixed route transportation.
<i>Policy area(s)</i>	Operations and routes; Consumer utilization of transportation

USE VEHICLE LEASEBACKS

<i>Description</i>	Vehicle purchase by local jurisdiction and operated by county or other jurisdiction operating over a large area.
<i>Rationale</i>	Vehicle leaseback enhances economies of scale for operations and route coordination as well as for vehicle maintenance. Adoption of this best practice may also provide a transitional period while human services operators own vehicles but do not operate them.
<i>Example</i>	Jewish Family and Vocational Services of Middlesex lease a vehicle back to Middlesex County Area Transportation (MCAT). MCAT operates and maintains the vehicle. When the vehicle is not in service for Jewish Family and Vocational Services, MCAT can use the vehicle to serve other consumers.
<i>Potential pilot</i>	Most county transportation providers and many non-profit operators have the capacity to operate vehicles via lease. Human service providers that have vehicles that they do not wish to operate are potential partners.
<i>Policy area(s)</i>	Operations & routes; Purchase of transportation; Relationships among stakeholders

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