

Transit Strategies

EXPRESS BUS SERVICE



Express buses provide fast service over long distances and are typically designed to transport suburban workers to downtown jobs. Most transit systems serving major urban areas – including RIPTA – provide express buses as a complement to their local services.

RIPTA Route 12X, Express Service to Arctic Center



Features of Express Bus Service

Common features of express bus service include:

- **Moderate to long-distance service**
- **Very limited stops**
- **Rush hour oriented service**
- **A primary focus on suburb-to-downtown service**
- **Service with “commuter,” or “over-the-road,” coaches**
- **Primary access via automobile**

Moderate to Long-Distance Service with Fast Travel Times

For short- to medium-length trips, most transit agencies serve bus stops that are spaced every few blocks because total travel times are reasonably short, even with many stops. However, for longer transit routes, going to many stops can dramatically extend travel times. Providing express service is one way to ensure acceptable travel times over moderate to long distances.

Very Limited Stops

Express routes usually serve markets where there is very little demand for travel between intermediate locations. Buses may pick riders up from suburban town center or park-and-rides, then drive through rural stretches of highway before stopping again downtown. However, in cases where there is demand for travel to intermediate locations, complementary local services that serve intermediate stops may be provided.

Rush Hour-Oriented Service

Because relatively high volumes of commuters are needed to support express service, and because the highest volumes of commutes take place during traditional rush hours (approximately 6:00 to 9:00 a.m. and 3:00 to 6:00 p.m.), most express services are provided during those hours. However, in some markets, and especially in larger urban areas, there is sufficient demand for longer spans of service.

Few people’s schedules remain constant from day to day. Even those who work fixed hours still need to arrive and leave early or late for various reasons. As a result, express routes that provide only one or two trips in the morning and afternoon do not provide the flexibility that many need, which then discourages ridership. In general, express routes should provide a minimum of three inbound and three outbound trips, and more where possible. Service spans should also be long enough to serve different work schedules.

RIPTA Route 61X Serves 3 Inbound Trips Each Weekday

park&ride (fish road - tiverton)	park&ride (east main - portsmouth)	roger williams university (bristol)	metacom & franklin	park&ride (franklin st. - warren)	main & joyce (warren)	park&ride (white church - barrington)	tunnel & thayer	exchange terrace (stop X)	rhode island convention center
6:19	6:24	6:28	6:38	6:40	6:42	6:49	7:11	7:15	7:16
6:49	6:54	6:58	7:08	7:10	7:12	7:21	7:43	7:47	7:48
7:19	7:24	7:28	7:38	7:40	7:42	7:51	8:13	8:17	8:18

Suburb-to-Downtown Service

Most express services are designed to transport workers from where they live to where they work. Since relatively high volumes of commuters are needed to support express bus service, the largest markets are typically from large suburbs to downtown areas. However, there can also be non-downtown markets that support express bus services; large employers, in particular, can attract non-downtown express buses.

Express bus routes should be as direct as possible. This means that routes should avoid meandering and backtracking, which is done too often to maximize service coverage. The longer travel times of indirect routes often discourage more passengers from using the bus than the greater service coverage attracts.

Commuter Coaches

Because express trips are relatively long trips, a greater focus is placed on passenger comfort than is typical with local transit. While many transit systems provide express service with standard transit buses, others provide service with coaches, the same type of vehicle used by intercity bus companies. These vehicles have more comfortable seats and a better ride quality.

The buses typically seat up to 55 passengers and feature:

- Comfortable seats that may include a folding table, armrests, and footrests
- Passenger service units with personal reading lights and air conditioning ducts that can be controlled and used by individual passengers with little disturbance to other passengers
- Onboard video and Wi-Fi
- Luggage racks

Whereas local transit services often have standing riders, due to an emphasis on comfort and for safety reasons, express bus services are almost always designed to provide all passengers with a seat for their entire journey

Access by Automobile via Park-and-Rides

Express bus services typically focus on passengers who are spread out across suburban areas, and so rely on passengers getting themselves to one of the limited stops. For most, this means by private automobile, and for this reason, park-and-ride lots are provided at most express bus stops.

Frequently, park-and-ride lots are located at places where a local business, church, or another organization has agreed to share use of their lots. These lots are often not conveniently located and require riders to travel out of direction to reach them. To maximize ridership, park-and-ride lots should be located at places that reduce overall travel times for passengers, which means a location that is between their origin and destination. This often requires the development of purpose-built park-and-ride lots rather than shared locations. Park-and-ride lots can ultimately serve multiple modes of transportation and play a significant impact in lowering the number of single occupant vehicles on the roadway.

Other Features

Additional, but less common, features of express bus service include reverse-commuter service, guaranteed ride home programs, and the use of transit priority.

Reverse Commute Service

Most express services operate only during peak periods and only in the peak direction—inbound in the morning and outbound in the evening. In most markets, demand in the opposite direction is too low to warrant service. In some areas, however, there are sufficient volumes of workers commuting from downtown and the urban core areas to jobs in the suburbs to warrant service in both directions. Two markets for this type of service are younger adults who desire to live urban lifestyles but whose jobs are in the suburbs and lower income workers for whom the costs of car ownership are burdensome. Depending upon where the suburban jobs are located, some express routes operate in the same manner in both directions, while others follow different inbound and outbound alignments.

Guaranteed Ride Home

Most express bus services only operate during peak periods, and emergencies occasionally arise that require people to get home earlier. To accommodate these situations, and to ensure that these concerns do not become a reason for people to forego using express bus services, many

agencies partner with large employers and Transportation Management Associations (TMAs) to give people taxi or ride-hail vouchers to get home during an emergency.

Transit Priority

Express bus riders are time sensitive, and faster service will attract more riders than slower service. There are a number of ways to provide travel time advantages to express bus service, which include:

1. Operating service in highway shoulders (“Bus on Shoulder” operations).
2. Constructing stations within the highway right-of-way to minimize or eliminate the local circulation that is required to serve stops or stations located outside of the highway right-of-way.

Bus on Shoulder Operations (Minneapolis and Chicago Metropolitan Areas)



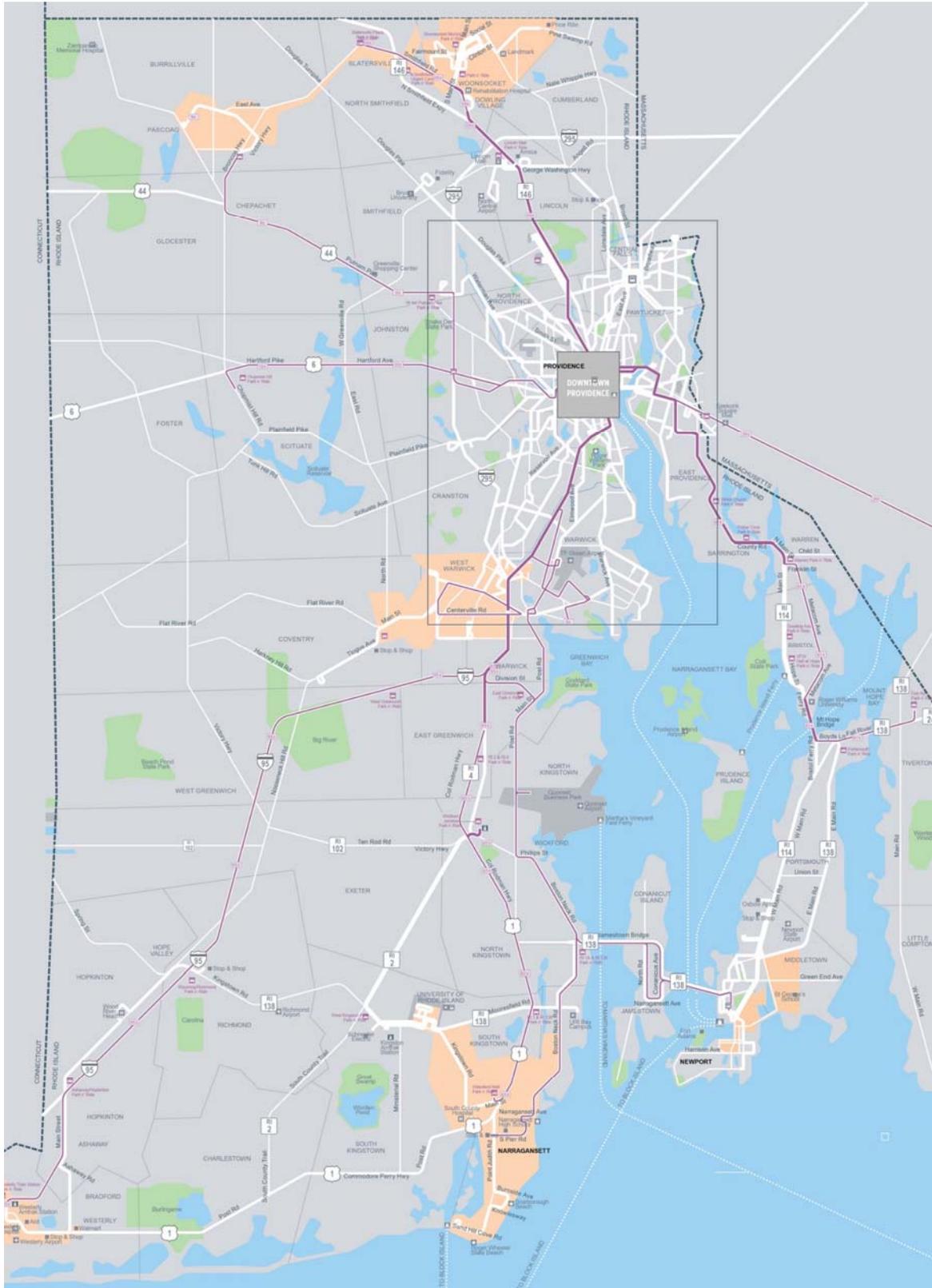
These types of measures are described in the Regional Rapid Bus and Bus on Shoulder transit strategy documents. Transit priority strategies once buses get into more urban areas are described in the Transit Priority document.

Examples of Express Bus Service

Rhode Island

RIPTA operates nine Express routes, which run the length of Rhode Island and are designed primarily to provide commuter service to and from downtown Providence. These routes generally operate on weekdays only, and many operate only a small number of trips during peak periods. Express routes include:

RIPTA Express Bus Service



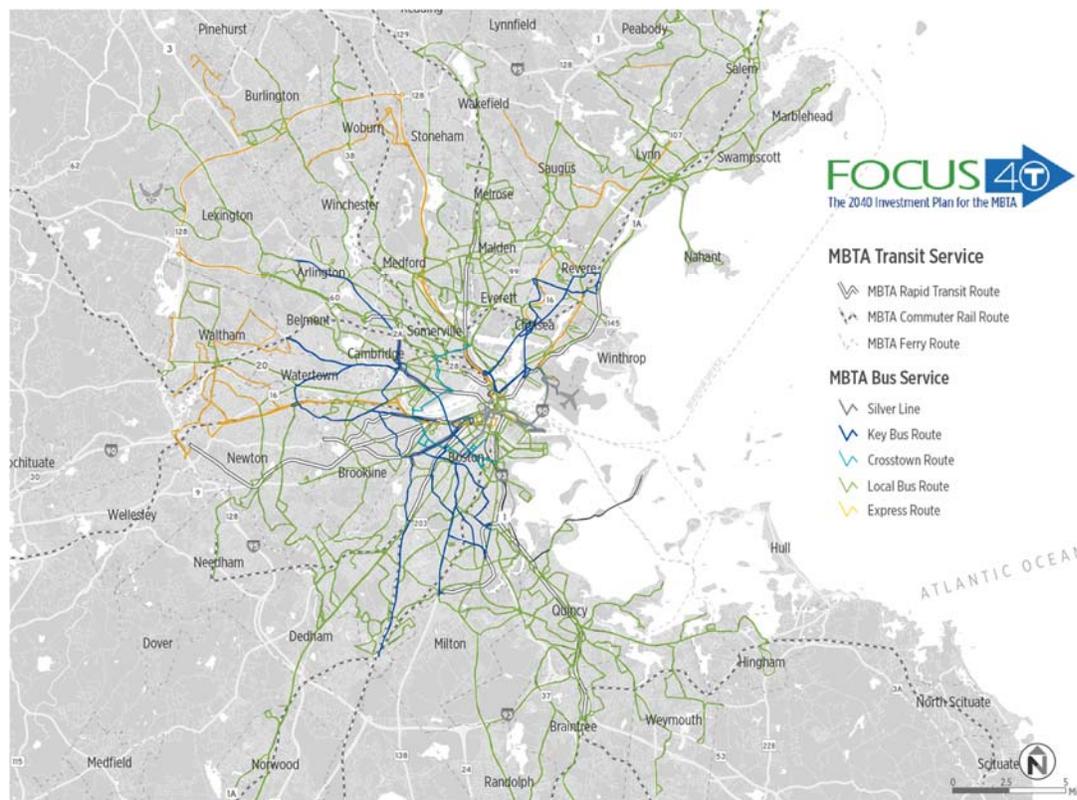
- 8X Jefferson Boulevard Park-n-Ride
- 9X Pascoag Park-n-Ride
- 10X North Scituate
- 12X Arctic / 117 Express Park-n-Ride
- 24X Newport - Fall River - Providence
- 59X North Smithfield - Lincoln Mall
- 61X Tiverton - East Bay Park-n-Ride
- 65X Wakefield Park-n-Ride
- 95X Westerly Park-n-Ride

Most of these routes provide three AM inbound trips and three PM outbound trips, but one provides only two. Service is provided with standard transit buses.

Boston, MA

Boston’s Massachusetts Bay Transportation Authority (MBTA) provides service on 23 express bus routes. The large majority – 20 of 23 – operate from the vicinity of Route 128, which is Greater Boston’s inner circumferential highway, with commuter rail used to serve longer trips. Most of the routes also serve areas to the west and north, which largely reflects the historic design of private bus services.

MBTA Transit Network, with Express Routes Shown in Orange

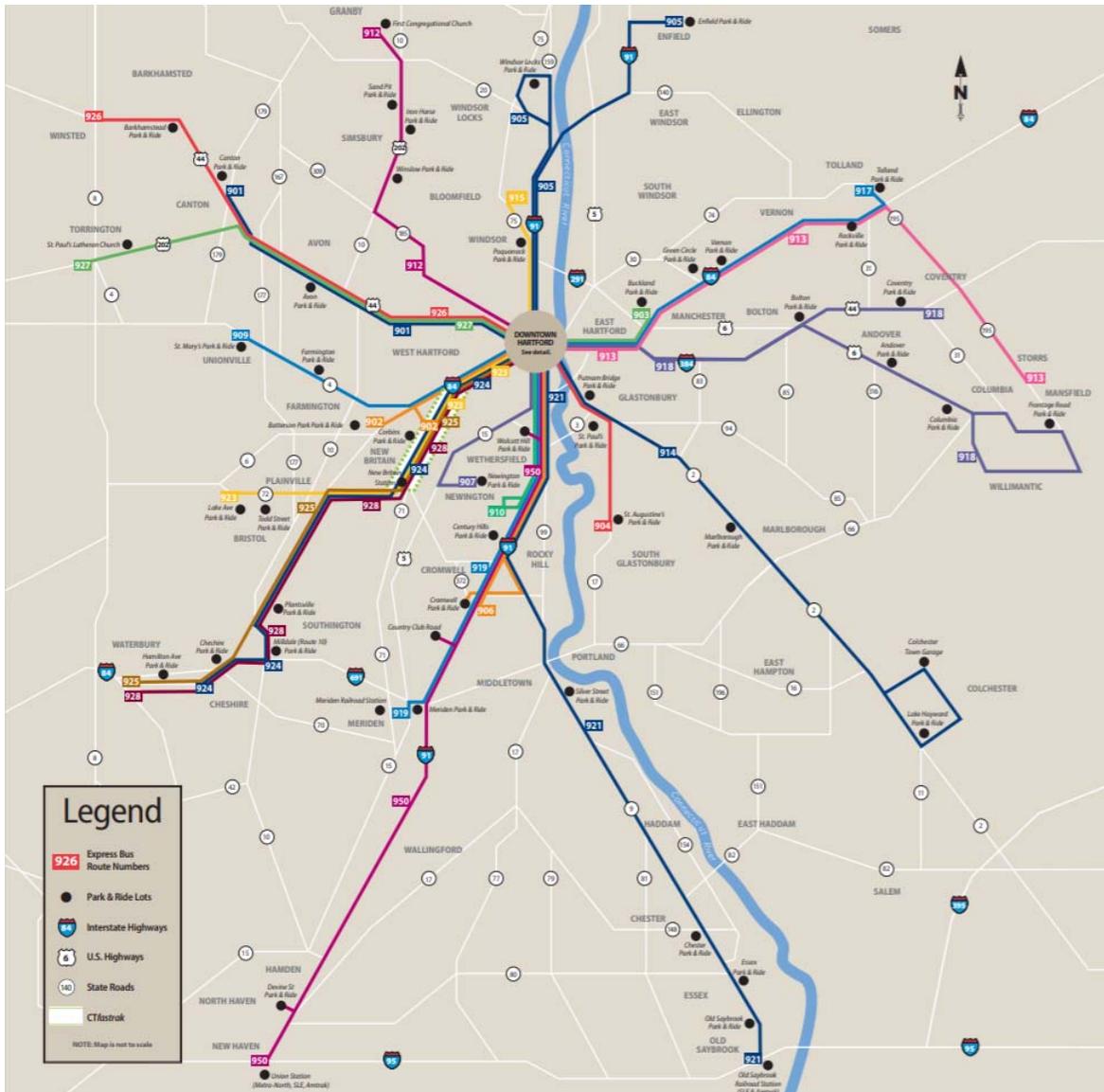


Most express buses generally operate only on weekdays with spans of service that range from peak only to all day. Frequencies range from every 15 minutes at peak times to every hour or more at non-peak times. Many higher ridership routes run on weekends as well.

Hartford, CT

CTTransit, which is part of the Connecticut Department of Transportation, operates an express bus network around Hartford. The network has over 25 routes, including a free commuter shuttle on Asylum Hill to connect commuters arriving to the city on express buses with local buses. Route 971, also called I-Bus Express, provide interstate connections between Stamford, CT and White Plains, NY (and is the only route to extend beyond Connecticut).

CT Transit Greater Hartford Commuter Express Bus Map



Some routes operate seven days a week, but most operate only on weekdays during peak periods between suburban park-and-rides and downtown Hartford. Most route schedules contain several trips in the peak direction (inbound in the morning, outbound in the evening), plus one or two trips in the reverse commute direction.

Seattle, WA

The greater Seattle area has an extensive commuter network run by Sound Transit in partnership with three transit agencies in the region: King County Metro, Community Transit, and Pierce Transit. In total, there are 28 express routes. The routes vary in service, some run only on weekdays at peak times, while others run all week frequently.

Mountlake Terrace (WA) Transit Center and Park-and-Ride



The express routes are anchored by a strong network of park-and-rides and transit centers, so express services easily connect to local buses. Outside of downtown Seattle, many of these stations are along the freeway, allowing for speedy pick up and drop offs by buses that do not to leave the freeway. As Sound Transit build out its light rail network, high ridership express bus routes will be converted to and complement light rail routes.

Improvements to Express Bus Service in Rhode Island

There are a number of potential improvements that can be made to express bus service in Rhode Island:

- More frequent service
- The use of commuter coaches
- More conveniently located park and ride lots
- New routes to expand service

Provide More Frequent Service

RIPTA's service guidelines specify that express routes should provide at least three AM peak inbound trips and three PM peak outbound trips. This is considered the minimum number required to provide minimum levels of flexibility and convenience. However, more frequent

service, including additional peak period trips and midday service, would provide passengers with more flexibility.

Provide Service with More Comfortable Vehicles

RIPTA currently provides express service with standard transit buses, while many transit providers use “commuter” or “over the road” coaches similar to those used by most private carriers. These coaches provide a significantly smoother ride quality and more comfortable seating.

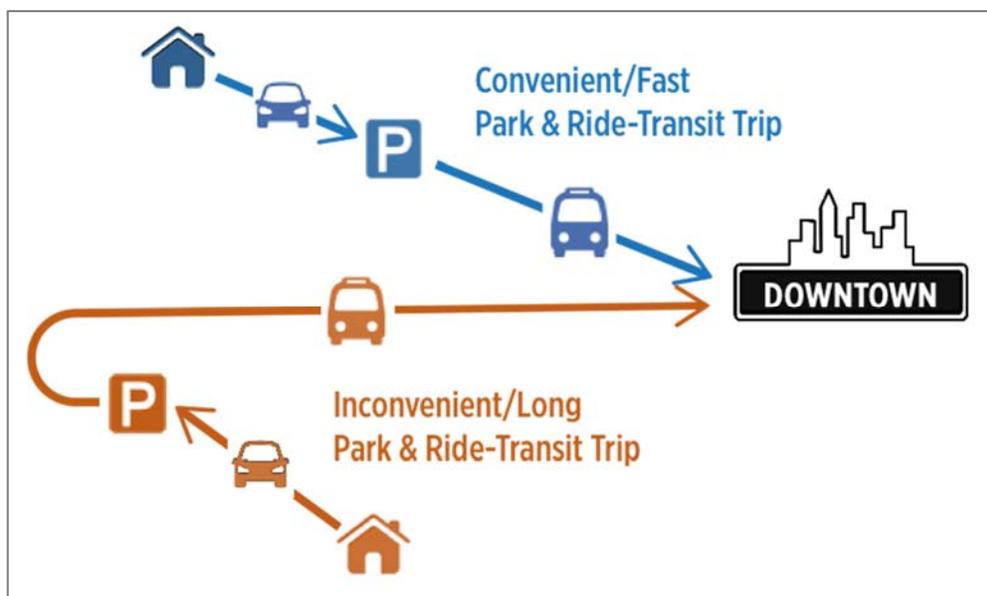
GRTA Commuter Coach (Atlanta, GA)



Provide More Conveniently Located Park and Ride Lots

The majority of express bus passengers access service by driving to a park and ride lot. The development of new and more conveniently located park and ride lots could make service faster by reducing drive times to the bus.

Convenient and Inconvenient Park and Ride Lots/Express Bus Trips



Develop New Express Bus Services

Several Rhode Island communities currently outside of RIPTA's express/regional network appear to have sufficient demand for this type of service. These include Burrillville, Coventry, North Kingstown, East Greenwich, and Bristol. Some of these markets could be served with new express bus service or improvements to regional bus services.

Commuter Travel Flows to Providence

