

Transit Strategies

MORE FREQUENT SERVICE FOR LONGER HOURS



More frequent service for longer spans leads to more convenient transit for a greater number of people.

Transit service consists of two fundamental elements: frequency (how often the service operates) and service span (how long service runs during the day). Combined, these two factors measure the availability of service, which determines how convenient and attractive transit service is to current and potential riders.

- **Service Frequency:** When services run frequently, riders can better travel when they need to. Conversely, infrequent service provides riders with little flexibility, especially for those who have to transfer to another line. Though most transit systems consider routes that operate at least every 15 minutes as frequent, improving service frequencies from any level improves conveniences and increases ridership.
- **Hours of Service:** Services that run for longer hours each day allow for people to travel when they want. This added flexibility makes transit a feasible option even when personal schedules change. When service hours are limited, transit may be incompatible with people's schedules, and fewer people may use transit due to the risk of getting stranded if they miss the last trip. Longer service also establishes transit as a viable choice for trips outside of typical business hours.

[Recent TransitCenter Article on Impacts of More Frequent Service](#)

TransitCenter

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There's a Reason Transit Ridership is Rising in These 7 Cities

There's a clear link between growing ridership and overhauling bus service. In almost every American city, bus service carries the majority of trips, so it should be no surprise that cities have to improve bus service to grow ridership. Three of the seven cities with growing transit ridership have recently re-oriented their bus networks to meet changing demand: Seattle, Houston, and Austin restructured service to provide more frequency. Another three — San Antonio, Las Vegas, and Pittsburgh — have substantially increased service since 2013.

Transit that operates for more frequently and for longer hours accommodates a broader cross-section of the population. By attracting a more diverse ridership, transit can better sustain higher levels of service throughout the day and generate a virtuous cycle where better service

encourages riders to use transit for more trips. More frequent service and longer hours of service can:

- **Make transit service more convenient**
- **Give riders more flexibility with their own schedule**
- **Establish transit as a viable travel choice for more than just work trips**
- **Make transit easier to understand and use**

More Frequent Service

Frequent service is one of the most important factors in making transit a convenient choice for riders, since increased frequencies improve the flexibility and predictability of transit and the viability of transit as a travel option for more people. Frequent service is:

- **Convenient:** When service runs often enough, riders understand that they can rely on transit service to get them where they need to go. More frequent service means a higher chance that riding transit can get a person to their destination on time, and not too early or late. It also means that when a person leaves that destination to return home, they do not need to wait a long time for the bus or train.
- **Flexible:** Frequent service provides riders with more flexibility. When services run infrequently, riders must adjust their schedules to accommodate the transit schedule. Limited service combined with the risk of time-consuming waits after missing a bus can discourage potential riders from trying transit if they have other travel options.

Nearly all major transit systems operate a core network of frequent services, usually running every 15 minutes or less. (At present, all of RIPTA's frequent routes except the R-Line operate every 20 minutes.) For very large systems, these are often comprised of rapid transit lines that are supplemented with frequent bus service. For smaller systems, these may be comprised of just buses, including some designated rapid routes. In recent years, there has been a very strong focus on the development of Frequent Transit Networks, and as described in the Frequent Transit Networks strategy paper, nearly all recent transit system redesign projects have included the development of a Frequent Transit Network.

However, frequency increases on other routes are also important – for example, increasing frequencies from every 60 minutes to every 30 minutes or from every 30 minutes to every 20 minutes. In many cases, the ridership increases produced by frequency improvement on less frequent routes, in percentage terms, will be higher than frequency improvements on more frequent routes.

Longer Hours of Service

Services that operate for limited hours can also negatively impact the convenience of transit. A lack of evening and weekend service makes travelling to work, school, shopping, and other activities more challenging, and deters those with other options from using transit. Longer hours of service:

- **Accommodate Changing Work Schedules:** Work schedules are changing at all socioeconomic levels. Flexible schedules, off-peak shifts for retail and service

employment, and telecommuting are among the major factors shifting work travel away from traditional peak commute hours. Especially for service industry workers, many shifts begin before transit service starts or end after transit service concludes, ruling out transit as a viable transportation option. Expanding service later in the evenings makes it easier for many people to reach these second- and third-shift jobs.

- **Attract Choice Riders:** Longer hours of service also benefit those with more traditional work schedules. When service is reduced during the midday or as soon as the afternoon peak is over, riders risk being stranded if they need to leave work early or late for any reason. The flexibility provided by stronger evening and midday service is akin to a “guaranteed ride home” for peak commuters, lessening fears about the reliability of transit.
- **Serve Non-Work Trips:** Expanded service hours can make transit more attractive for non-work trips as well. Later service also makes transit a viable option for late night social and entertainment trips – often by the people who are patronizing the places where the people who work late shifts work.

Bay Area (CA) All Nighter Service Banner



Massachusetts Bay Transportation Authority Late-night Service Poster



Weekend Service

In addition to increased hours of service, expanded weekend service is crucial to making transit a viable option for more people. Many service and retail jobs require work on weekends; inadequate Saturday and Sunday service limits the ability of potential employees to reach these jobs. Shopping and recreation trips also increase on weekends. If transit is to be a convenient travel option for a region, then it must be accessible beyond the typical workday weekday peak hours.

Examples of Initiatives to Provide More Service for Longer Hours

Frequency Improvements, Las Vegas, Nevada

The Regional Transportation Commission of Southern Nevada (RTC) has improved transit service yearly by adding frequency and lengthening service hours

Over the last decade, Las Vegas' RTC has been continuously adding service, with the service increases mostly on "non-frequent" routes. For example, in 2018, RTC:

- Extended Route 115 trips into Henderson and doubled service frequencies to every 20 minute frequency
- Increased the frequency on Routes 101 and 106 to every 30 minutes on weekday and Saturday evenings

As a result of the ongoing service improvements, RTC is one of seven transit systems in the United States where transit ridership has been increasing over the last five years.

RTC 2017 Service Change Notice Advertising More Frequent Service

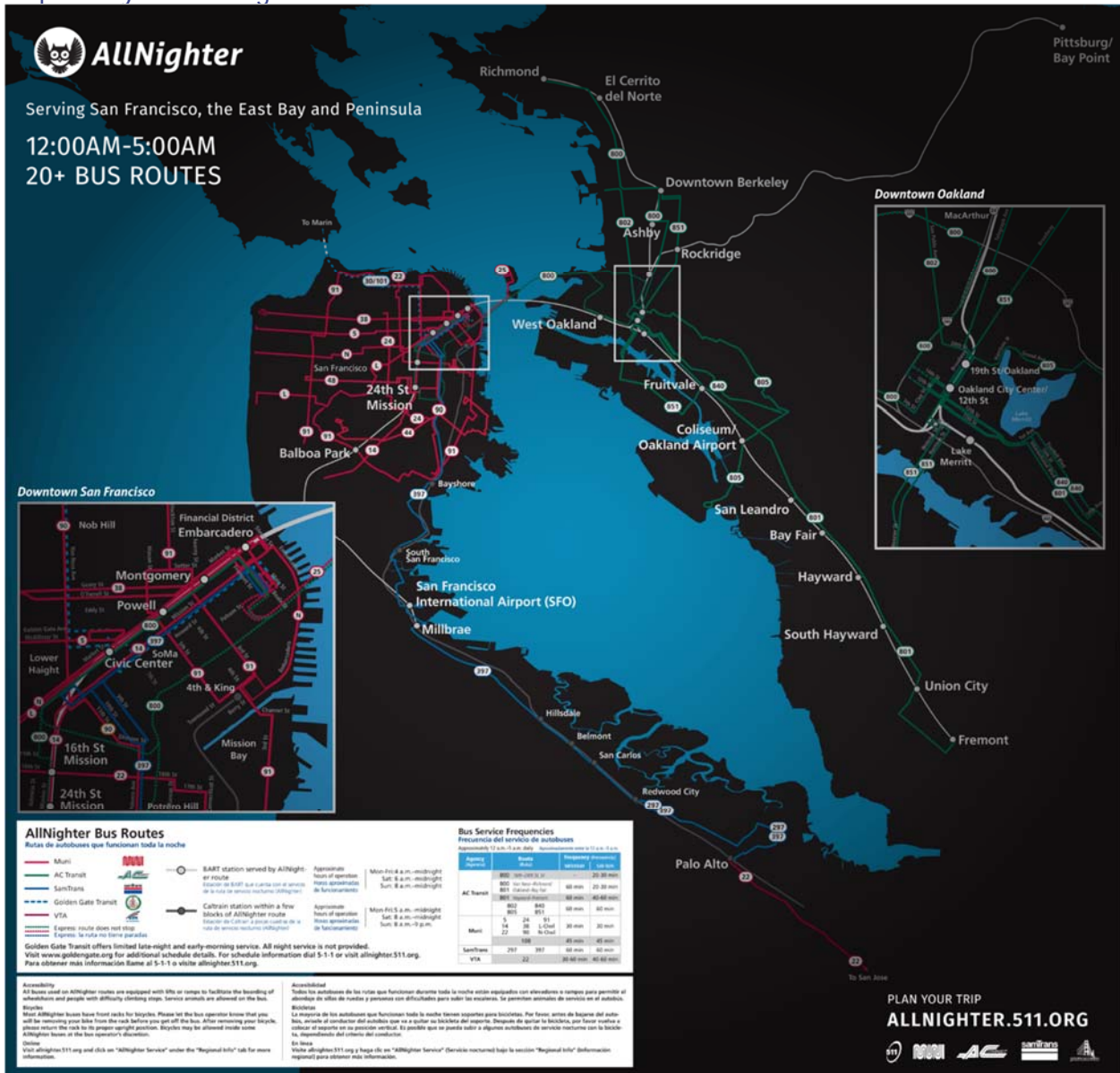


AllNighter Service, San Francisco Bay Area, CA

The Bay Area All Nighter Service provides transit after train stations close until early morning.

The Bay Area's "AllNighter" Service provides late night and early morning regional bus service through Alameda, Contra Costa, San Francisco, and San Mateo counties in the Bay Area. All Nighter Routes operate seven days a week between midnight and 5AM. Routes are operated and coordinated by five transit agencies: SFMTA, AC Transit, SamTrans, Golden Gate Transit, and VTA. These bus routes also serve BART and Caltrain stations through the region.

Map of Bay Area AllNighter Service



AllNighter bus service was developed to balance the demand for late night transit service with the need to mitigate operating costs of the BART rail network and preserve overnight hours for maintenance and repairs. To meet demand and provide late night service when BART does not

operate, the agency worked with other transit agencies in the region to coordinate late night bus service.

Enhanced Bus and Rail Routes, Utah

Service improvements in 2015 increased weekday ridership by 12% and weekend ridership by 20% on select routes.

The Utah Transit Authority (UTA) focused service improvements a number of routes in 2015, primarily by extending hours of service and increasing frequency. Since these changes, all routes experienced increased ridership, particularly those where Saturday and Sunday service was improved. For example, the Webster County route saw a 29% increase in Saturday boardings after frequency was improved from 30 minutes to 15 minutes and service hours were extended earlier and later.

Opportunities for Rhode Island

As described in the State of the System report, few of RIPTA's existing routes operate frequently or for long hours. For example, on weekdays:

- Only a single route provides frequent service (the R-Line which operates as frequently as every 10 minutes)
- Only six routes provide service every 20 minutes or better during the midday
- Only 22 routes run from at least 6:00 AM to 10:00 PM
- Only four routes start service before 5:00 AM
- Only five routes run until midnight or beyond

The combination of infrequent service and short hours is one of the major challenges that residents and workers face when using transit, and frequency and service hour improvements represent one of the most important opportunities for improving service. There are a number of ways this can be done, including improvements on selected routes or on categories of routes.

At present, RIPTA categorizes its routes into seven types:

- Rapid Bus (the R-Line)
- Key Corridor, which are its other major routes
- Urban Radial, which mostly provide service to and from downtown Providence
- Non-Urban/Suburban/Crosstown routes, which tend to be lower ridership local routes
- Regional Routes, which are long routes that connect cities, for example, Woonsocket – Providence
- Express/Commuter routes, which only operate during peak periods
- Flex, which provides customized curb-to-curb service in lower demand areas

RIPTA developed service guidelines as part of a 2013 Comprehensive Operational Analysis that set minimum levels of service. Those guidelines were developed to reflect RIPTA's desired service levels within the limits of the agency's financial capacity. The guidelines for service hours and service frequencies are shown below.

Minimum Span of Service

	Rapid Bus	Key Corridor	Urban Radial	Non-Urban/ Suburban/ Crosstown	Regional	Express/ Commuter	Flex
Weekdays							
Begin	6:00 AM	6:00 AM	6:00 AM	6:00 AM	6:00 AM	n/a	8:30 AM
End	12:00 AM	11:00 PM	7:00 PM	7:00 PM	9:00 PM	n/a	4:30 PM
Saturdays			<i>Saturday service may be provided, if warranted, but is not required.</i>				
Begin	6:00 AM	7:00 AM					
End	11:00 PM	11:00 PM					
Sundays			<i>Sunday service may be provided, if warranted, but is not required.</i>				
Begin	7:00 AM	7:00 AM					
End	11:00 PM	9:00 PM					

Minimum Service Frequency

	Rapid Bus	Key Corridor	Urban Radial	Non-Urban/ Suburban/ Crosstown	Regional	Express/ Commuter	Flex
Weekdays							
Early AM	30 min	30 min	60 min	60 min	60 min	-	n/a
AM Peak	10 min	20 min	30 min	60 min	60 min	3 trips	n/a
Midday	10 min	20 min	60 min	60 min	60 min	-	n/a
PM Peak	10 min	20 min	30 min	60 min	60 min	3 trips	n/a
Night	30 min	30 min	60 min	60 min	120 min	-	n/a
Saturdays							
All Day	15 min	30 min	60 min	60 min	-	-	n/a
Sundays							
All Day	15 min	30 min	60 min	60 min	-	-	n/a

Meeting Service Guidelines

At present, most of RIPTA's current routes do not meet the minimum service guidelines due to frequencies too low and/or spans too short. The first step in improving Rhode Island's transit network would be to increase the level of service on existing routes in order to meet the minimum service guidelines. The table below shows the specific routes that would need to be improved.

Routes that Fail to Meet Service Span and Frequency Guidelines

Type of Improvement	Routes
Weekdays	
Start service earlier	40, 49, 63, 64, 67, 73, 76
End service later	11, 14, 28, 49, 64, 71, 76, 92
Increase peak frequency	6, 10, 13, 27, 29, 30, 32, 34, 35, 40, 49, 58, 64, 71, 73, 75, 76, 78, 80, QX
Increase off-peak frequency	13, 29, 30, 49, 64, 71, 75, 76, 80
Increase night frequency	27, 28, 50, 56, 71
Saturdays	
End service later	1, 20, 28, 71
Increase Saturday frequency	1, 20, 27, 28, 71
Sundays	
Start service earlier	28, 92
End service later	28, 56, 71, 92
Increase Sunday frequency	1, 20, 27, 28, 50, 56, 71

Improving Service Beyond the Service Guidelines

As described above, RIPTA's current service guidelines were developed reflecting the reality of the agency's financial constraints. A second approach to improving service would be to revise the service guidelines to reflect more aspirational service levels. An example of how this could be done is shown in the following two tables, with revisions in yellow. These could be the minimum amount of service provided, and even more service could be provided as appropriate.

Example Revised Span of Service Guidelines to Extend Service Spans

	Rapid Bus	Key Corridor	Urban Radial	Non-Urban/ Suburban/ Crosstown	Regional	Express/ Commuter	Flex
Weekdays							
Begin	5:00 AM	5:00 AM	6:00 AM	6:00 AM	5:00 AM	n/a	7:00 AM
End	1:00 AM	1:00 AM	9:00 PM	7:00 PM	10:00 PM	n/a	6:00 PM
Saturdays			<i>Saturday service may be provided, if warranted, but is not required.</i>				
Begin	6:00 AM	6:00 AM					
End	1:00 AM	1:00 AM					
Sundays			<i>Sunday service may be provided, if warranted, but is not required.</i>				
Begin	7:00 AM	7:00 AM					
End	11:00 PM	11:00 PM					

Minimum Service Frequency

	Rapid Bus	Key Corridor	Urban Radial	Non-Urban/ Suburban/ Crosstown	Regional	Express/ Commuter	Flex
Weekdays							
Early AM	30 min	30 min	60 min	60 min	60 min	-	n/a
AM Peak	10 min	15 min	30 min	60 min	30 min	4 trips	n/a
Midday	10 min	15 min	30 min	60 min	60 min	-	n/a
PM Peak	10 min	15 min	30 min	60 min	30 min	4 trips	n/a
Night	30 min	30 min	60 min	60 min	60 min	-	n/a
Saturdays							
All Day	15 min	15 min	60 min	60 min	-	-	n/a
Sundays							
All Day	15 min	15 min	60 min	60 min	-	-	n/a

Finally, the classification of individual routes could be revised. For example, routes that are now classified as Urban Radial could be moved up in classification to Key Corridor, with service levels adjusted to reflect the span of service and frequencies guidelines consistent with the new categorization.