

Transit Strategies

FREQUENT TRANSIT NETWORKS



Frequent Transit Networks are designed to provide service in a convenient, connected, and memorable way in areas of high demand.

Transit service is most appealing when it is frequent enough that riders can arrive at a stop with the knowledge that a bus or train will be arriving shortly, instead of needing to consult a timetable. Frequent Transit Networks (also called Frequent Service Networks) are formed when a system has routes with the following characteristics:

- **Frequent service**, typically every 10 to 15 minutes or less from the beginning of morning peak to early evening or later
- A **sufficient number of direct routes** to create a network that serves all high-demand corridors
- Special **branding** and information to make the service visible and memorable

Most major transit systems operate networks of frequent services, usually comprising of rapid transit, light rail, bus rapid transit (BRT), and/or rapid bus. Over the last decade, the concept of Frequent Transit Networks is spreading to smaller systems as well, relying almost entirely on buses. Frequent Transit Networks allows people to use public transportation to traverse major corridors without needing to plan their schedules around timetables. Unique branding and clever marketing can help bring new users into the system, decreasing reliance on cars overall.



The High Frequency Promise

- Service every 15 minutes (or better)
- Weekdays: 6 a.m. to 7 p.m.
 - Saturdays: 9 a.m. to 6 p.m.

Metro Transit in the Minneapolis/St. Paul area promises service 15 minutes or better on 14 routes through most of weekdays and Saturdays.

Frequent Transit Network Elements

Key characteristics of Frequent Transit Networks are that they are convenient, connected, and memorable.

Convenient

Frequent Transit Networks are designed to make service convenient by providing service that operates at least every 15 minutes from early morning until at least mid-evening. Routes are designed to be as direct as possible.

Connected

Frequent Transit Networks are designed to serve **the locations that most people want to go to most often**—to downtowns, urban neighborhoods, mixed-use corridors, employment centers, and major institutions such as universities.

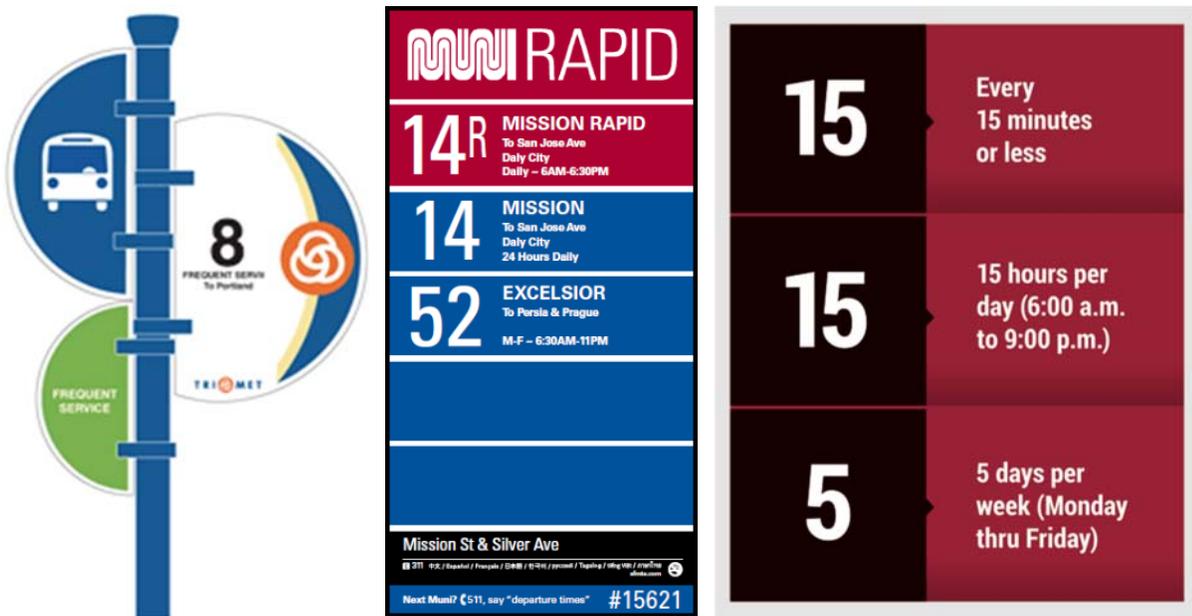
They can also create a de-facto **“system backbone”** that provides a structure for other services. In the same manner that large urban systems are built around the backbone that their rapid transit systems provide, Frequent Service Networks can provide a similar structure for smaller systems, with lower frequency routes and specialized services providing connections to the Frequent Transit Network.

Memorable

Frequent Transit Networks use four primary approaches to make service memorable: special branding, Frequent Transit Network maps, simple service structures, and simple schedules.

Branding: Many transit systems brand their Frequent Transit Networks to heighten awareness of the available services. Examples include Minneapolis/Saint Paul’s “Hi-Frequency Network,” Vancouver’s “Frequent Transit Network,” Providence’s “Key Corridor Network,” and San Francisco’s “Rapid Network.” Branding is used in many ways, including maps, in marketing materials, at bus stops, and on schedules.

The use of special branding heightens awareness of frequent services (Portland, OR bus stop; San Francisco, CA, schedule; Philadelphia “15-15-5” service”



Frequent service maps: Many systems produce special Frequent Transit Network maps that are designed to highlight frequent services and make them stand out from other service. Transit systems that do this include Minneapolis/Saint Paul’s Metro Transit, Portland’s Tri-Met, Washington DC’s WMATA, and Vancouver’s TransLink.

Simple service structure: Frequent Transit Networks have simple service structures that are designed to make service easier to remember. Typically, they operate as directly as possible within exclusive rights-of-way and/or along major arterials.

Simple schedules: Frequent Transit Networks also typically have simple schedules, with transit services scheduled to operate at even intervals (clockface headways) that passengers can easily remember.

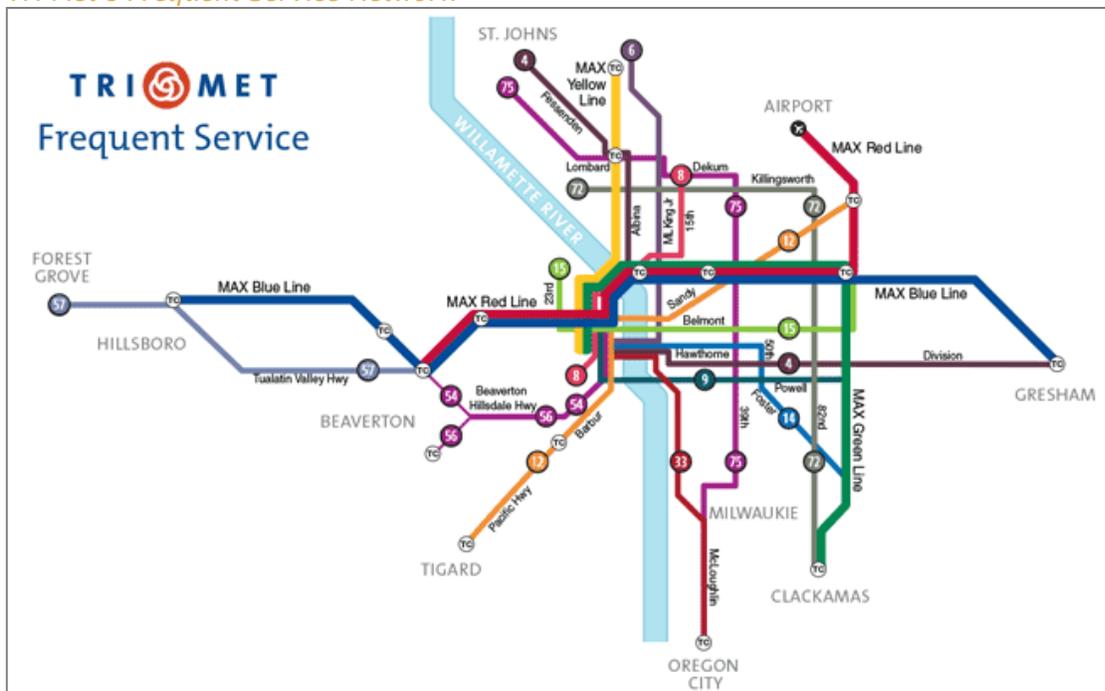
Frequent Transit Network Examples

Portland, OR

TriMet created its Frequent Service Network through frequency improvements combined with infrastructure improvements.

Portland's TriMet has designated a Frequent Service Network that consists of its five light rail lines and 15 frequent bus routes. Light rail services run every 15 minutes or better most of the day, every day, and frequent bus routes run every 15 minutes or better most of the day Monday through Saturday.

Tri-Met's Frequent Service Network



Frequent Service Network lines are intended to connect the regional hubs where many riders live and work. TriMet has also implemented a number of improvements on its frequent routes that include some or all of the following:

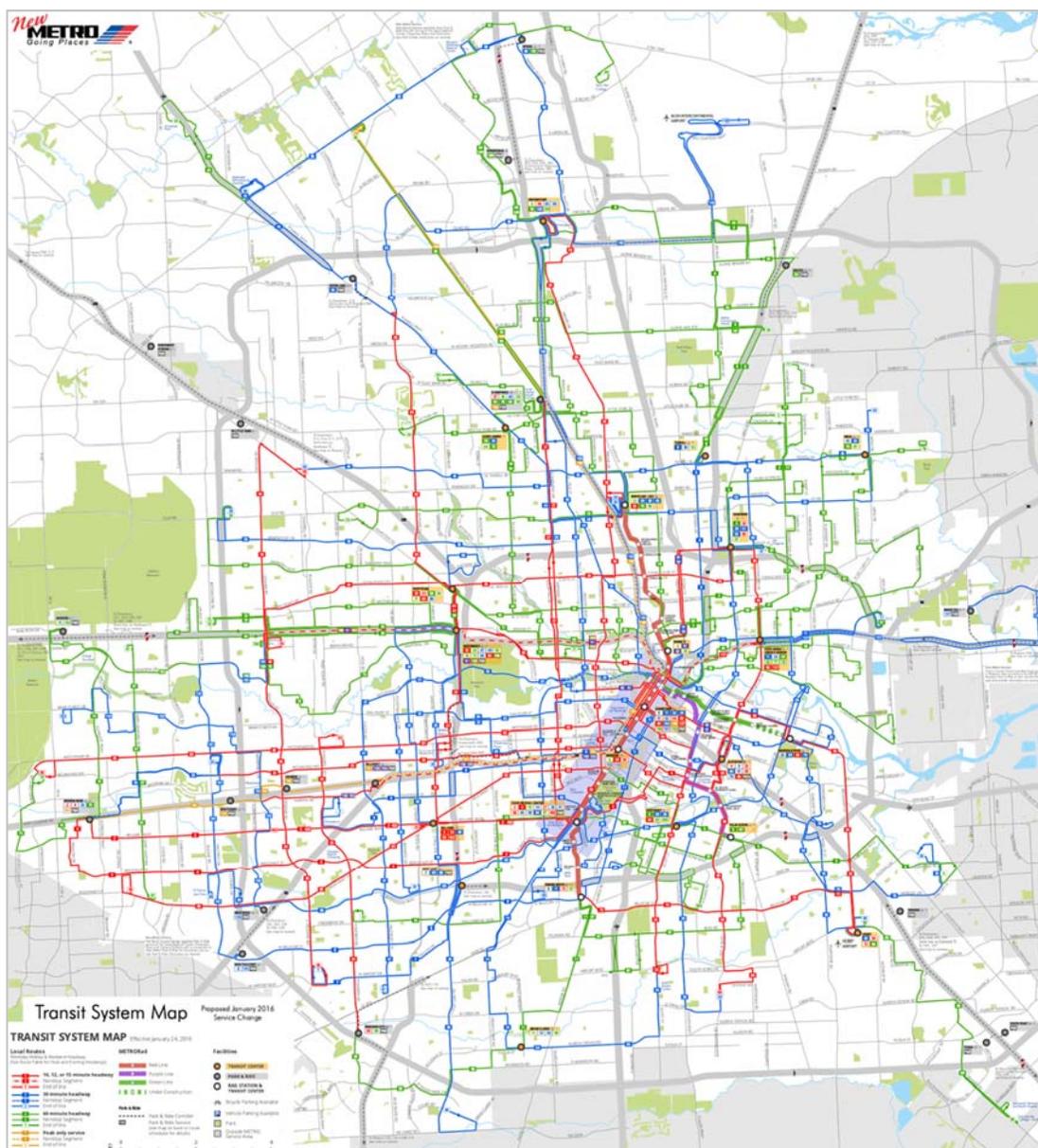
- New shelters and sign poles with service information and stop identification numbers
- Bus stop re-spacing and curb extensions
- Better pedestrian access
- Traffic signal priority
- Bus-only lanes

Houston, TX

Houston METRO redesigned its bus system to focus on frequent transit service.

In 2015, Houston METRO “re-imagined” its system to increase the number of routes with frequent service while reducing the number of routes that provide infrequent and/or duplicative service. These changes represented a major shift in service philosophy away from many infrequent routes focused on downtown to a simpler grid-based system with fewer routes that provide more frequent service and better service to non-downtown destinations. A centerpiece of the redesign was a new Frequent Transit Network of services that operate at least every 15 minutes. The Frequent Transit Network is largely comprised of frequent bus services plus Metro’s light rail lines.

Houston’s Metro presents its frequent routes in red on its system map



Austin, TX

Austin's Capital Metro has a brand new "High Frequency Transit Routes" network.

In 2018, Capital Metro rolled out its Cap Remap bus network redesign that focuses on frequent service. The new frequent transit network consists of 15 routes:

- Two MetroRapid BRT routes that operate every 10 minutes during peak hours on weekdays, plus late-night service until 2:30 AM on Thursdays, Fridays, and Saturdays
- Thirteen MetroBus routes that run every 15 minutes from 6:00 AM to 8:00 PM, seven days a week.

Capital Metro's new frequent transit network consists of 15 routes

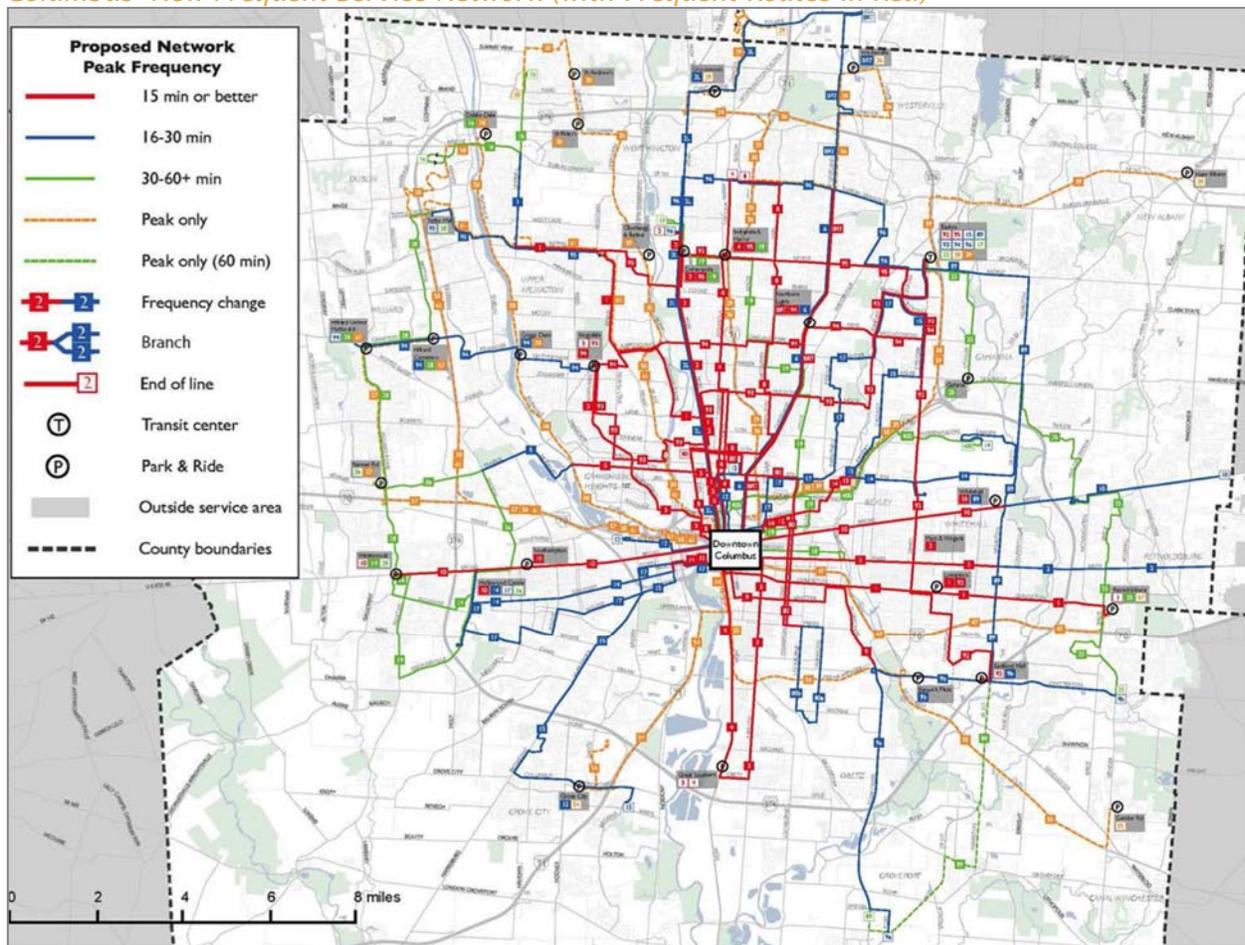


Columbus, OH

Columbus updated its network in 2017 to focus more on frequent service in key corridors.

Columbus' COTA recently implemented a Frequent Service Network that will double the number of residents who will have access to frequent service. However, somewhat differently from many other Frequent Transit Networks, Columbus is defining its Frequent Service Network in terms of routes that operate at least every 15 minutes during peak periods, as opposed to throughout the day. The service redesign is intended to improve service to non-downtown destinations, including the suburbs, provide more consistent service patterns, and reduce downtown bus congestion. Columbus' planned Frequent Service Network will be comprised entirely of bus services, although it hopes to add rail services in the future.

Columbus' New Frequent Service Network (with Frequent Routes in Red)

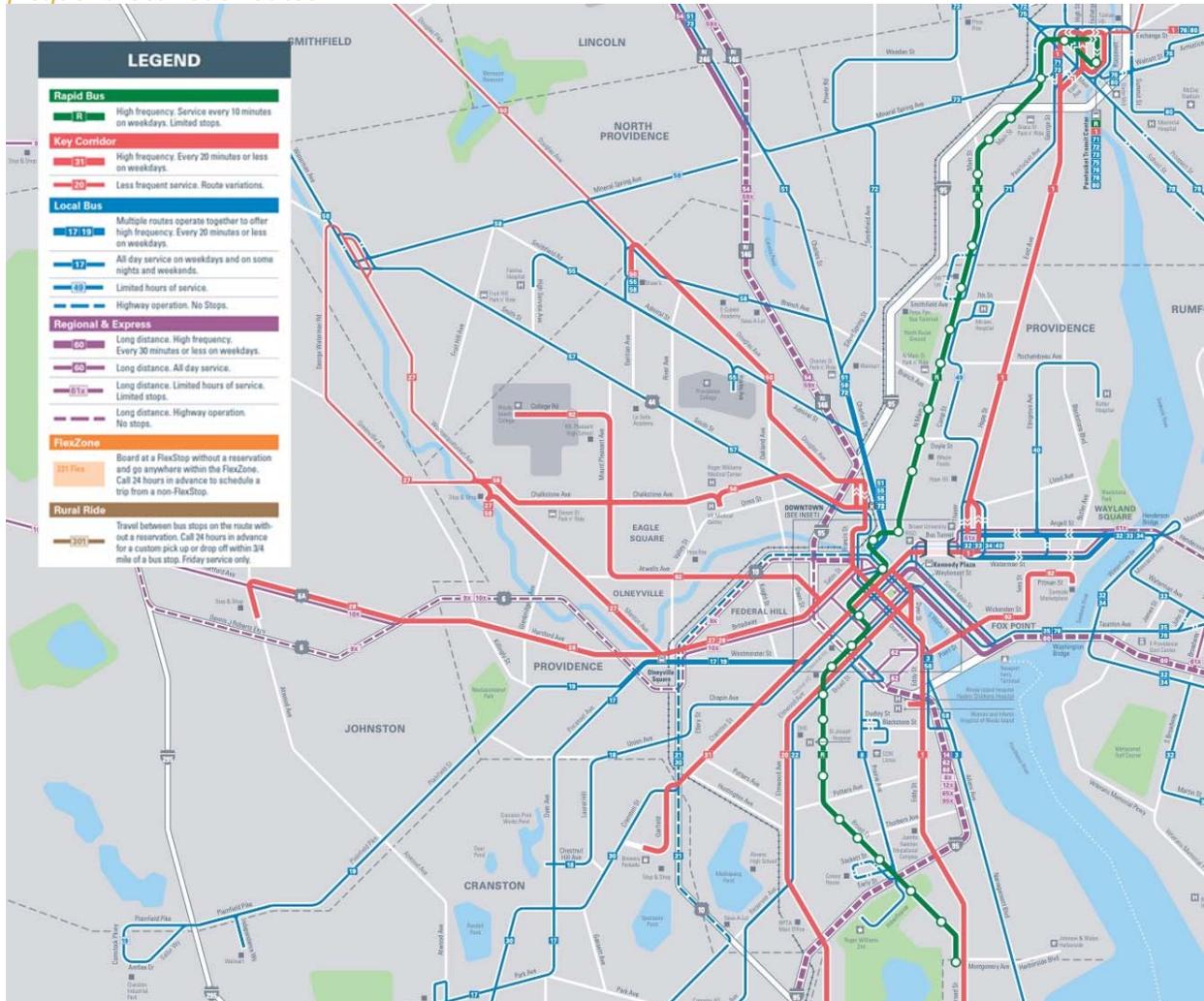


Potential Frequent Transit Network for Rhode Island

As part of its 2013 system redesign, RIPTA developed a "Key Corridor Network" for the Providence Metro area consisting of its Rapid Bus line (the R-Line), key corridor bus routes, and transit emphasis corridors in which combined services on multiple routes provide frequent

service. Due to budgetary constraints, it defined frequent service as every 20 minutes or less on weekdays, rather than the more common 15 minute standard.

RIPTA's Key Corridor service are shown in green and red and consist of Rapid Bus service and frequent local bus routes



RIPTA is now constructing its first transit emphasis corridor, the Downtown Transit Connector (DTC), which will be the main focal point for north-south service that operates between Providence and Rhode Island Hospital. The DTC will be served by multiple routes that, combined, will provide service every five minutes.

RIPTA's Key Corridor Network and the DTC provide the starting point for development of a Providence Metro Frequent Transit Network, with service increased to every 15 minutes. Other routes could also be added to this network to make it more comprehensive; for example:

- Crosstown routes that connect service outside of downtown Providence
- Additional radial routes to provide frequent service to additional areas. Candidate locations would include Central Falls, East Providence, Cranston, and Warwick, among others.

There could also be the potential for the development of frequent services in Woonsocket and Newport. A conceptual map of a potential Frequent Transit Network for the Providence Metro area is shown below.

Providence Metro Frequent Transit Network Concept

