



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 daily schedules, and fewer people may use transit due to the risk of getting stranded if they miss the last trip. Longer service hours also establish transit as a viable choice for trips outside of typical business hours.

Recent TransitCenter Article on Impacts of More Frequent Service

TransitCenter

Feb 27, 2019

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 use and understand**



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, only four Trinity Metro bus routes operate every 15 minutes between 6:00 AM and 6:00 PM.) 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 bus service. 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 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:** Workschedules 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

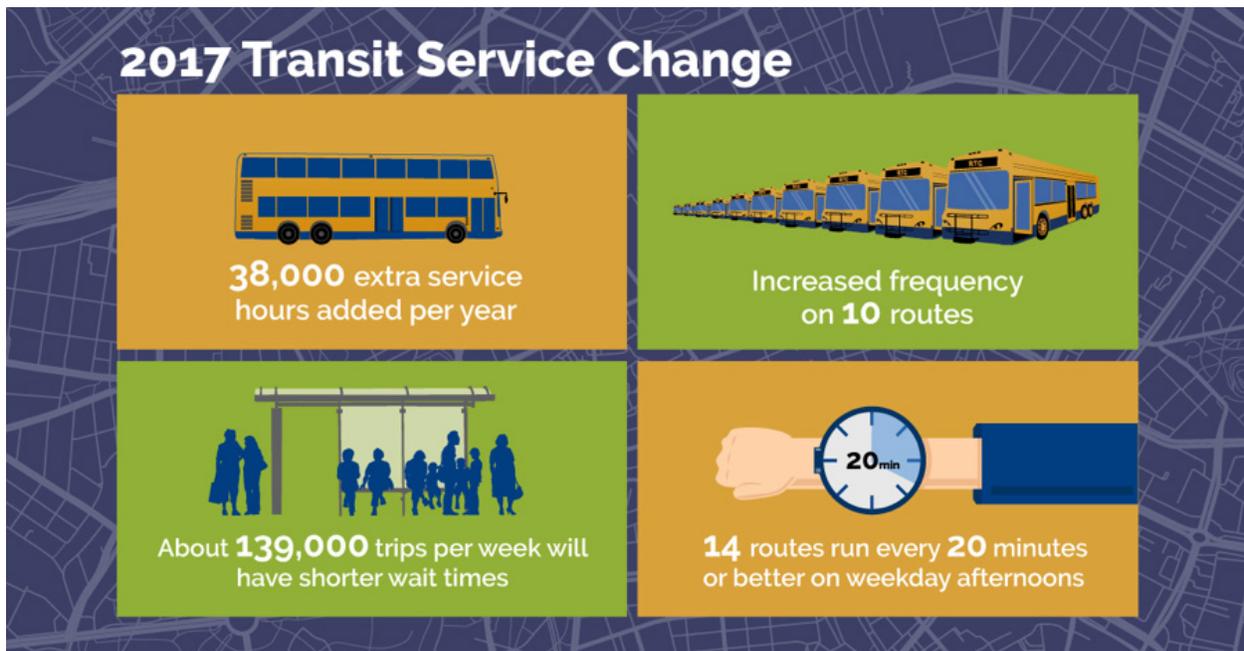
The Regional Transportation Commission of Southern Nevada (RTC) has improved transit service yearly by adding frequency and lengthening service hours

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



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.

AllNighter Service, San Francisco Bay Area, CA

The Bay Area AllNighter 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. AllNighter Routes operate seven days a week between midnight and 5:00 AM. 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.

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.

Map of Bay Area AllNighter Service

AllNighter
Serving San Francisco, the East Bay and Peninsula
12:00AM-5:00AM
20+ BUS ROUTES

Downtown San Francisco

Downtown Oakland

AllNighter Bus Routes
Rutas de autobuses que funcionan toda la noche

Bus Service Frequencies
Frecuencia del servicio de autobuses

Agency	Route	Frequency	Frequency
Weekdays	Weekends	Weekdays	Weekends
Muni	800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000	15-30 min	15-30 min
AC Transit	800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000	15-30 min	15-30 min
Muni	5, 24, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100	15-30 min	15-30 min
SanTrans	297, 397	15-30 min	15-30 min
VTA	22	30-60 min	45-60 min

Accessibility
All buses used on AllNighter routes are equipped with lifts or ramps to facilitate the boarding of wheelchair and people with difficulty climbing steps. Service animals are allowed on the bus.

Bicycles
Most AllNighter buses have front racks for bicycles. Please let the bus operator know that you will be removing your bike from the rack before you get off the bus. After removing your bicycle, please return the rack to its proper upright position. Bicycles may be allowed inside some AllNighter buses at the bus operator's discretion.

Details
Visit allnighter.511.org and click on "AllNighter Service" under the "Regional Info" tab for more information.

PLAN YOUR TRIP
ALLNIGHTER.511.ORG

Frequent Service for Longer Hours in Fort Worth

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

- Most routes provide weekday service only every 30 to 60 minutes
- Only five routes provide frequent weekday service (every 15 minutes or better) between 6:00 AM and 6:00 PM
- Only four routes provide frequent weekday service between 6:00 PM and 8:00 PM
- Only TRE, TEXRail, and 12 bus routes provide weekday service after 10:00 PM
- Only 22 routes operate on Sundays



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 in which this can be done, which include improvements on selected routes or on categories of routes.

Internally, Trinity Metro categorizes its routes into seven types and has developed service standards for each type that include minimum service spans and service frequencies. The seven route types are:

- **Radial** routes that operates to and from Central Station in downtown Fort Worth
- **Crosstown** routes that are oriented toward providing direct connections between communities and employment centers outside of downtown.
- **Feeder** routes that are focused on transit centers and rail stations to facilitate transfers and to feed and distribute riders to/from other routes.
- **Circulator** routes that provide circulating service on a fixed weekday schedule. These routes usually provide access to niche/specific markets such as universities, shopping, entertainment, business parks, CBD population centers or other attractions and typically contain variable and flexible service based on demand.
- **“Lifeline”** services that are defined as a fixed route that is the only service within 1/4 of a mile of one or more of the following: public housing, public social service facilities, public medical facilities or public post-secondary school for low income residents. These routes also provide the only access from transit dependent neighborhoods to essential shopping or medical facilities.
- **Express** services that typically attracts riders who prefer the modal transit option to a daily commute by automobile. It provides service with a limited number of stops and generally operates to and from downtown Fort Worth.
- **Commuter Rail** that includes TRE and TEXRail.

Trinity Metro’s minimum service span standards are short and its minimum service frequencies are long. Taken together, they are set a much lower levels than nearly all other major transit systems and more reflect Trinity Metro’s financial constraints rather than the underlying demand for service.

Minimum Spans of Service

	Radial	Crosstown	Feeder	Circulator	Express	Commuter Rail
Weekdays						
Begin	5:40 AM	4:35 AM	7:00 AM	No	No	5:00 AM
End	10:15 PM	8:00 PM	8:00 PM	Minimum	Minimum	11:06 PM
Saturdays						
Begin	7:15 AM	5:35 AM	7:00 AM	No	No	8:50 AM
End	7:15 PM	7:00 PM	7:00 PM	Minimum	Minimum	11:05 PM
Sundays						
Begin	8:15 AM	6:31 AM	8:00 AM	No	No	5:00
End	6:15 PM	6:00 PM	6:00 PM	Minimum	Minimum	11:06 PM



Service Frequencies (Minutes)

	Radial	Crosstown	Feeder	Circulator	Express	Commuter Rail
Weekdays						
Peak	15-60	30-60	30-60	No Min	No Min	60
Base	15-60	30-60	30-60	No Min	No Min	90
Night	60	60	60	No Min	No Min	60
Saturdays						
All Day	15-90	30-60	30-60	No Min	No Min	120
Sundays						
All Day	90	60	60	No Min	No Min	No Min

One approach to improving service would be to revise the service categories that are used to classify routes and service guidelines to reflect more desirable service levels. For example, the route classifications for local services could be revised to:

- **Rapid Bus:** Every 10 minutes from the start of the AM peak until mid-evening and every 15 to 30 minutes early and late.
- **Frequent Local:** Every 15 minutes from the start of the AM peak until mid-evening and every 30 minutes early and late.
- **20 All Day:** Every 20 minutes from the start of the AM peak until mid-evening and every 30 minutes early and late.
- **30 All Day:** Every 30 minutes from the start of the AM peak until mid-evening and every 60 minutes early and late.
- **30 Peak:** Every 30 minutes during peak periods and every 60 minutes during off-peak periods
- **60 All Day:** Every 60 minutes from the start of service to the end of service

Routes could then be reclassified using these new categories, with services upgraded to match the new classifications and associated service spans and frequencies. One example of how this could be done is shown in the table on the next page. As shown, nearly all routes would provide more frequent service for longer hours.



Example Local Services with Route Reclassification and Minimum Span and Frequencies Changes

Route Type	Routes	Service Frequencies (mins)			Span of Service	
		Peak Periods	Midday	Early/Late	Weekdays	Weekends
Rapid Bus	1 South Hemphill 2 Camp Bowie 3 South Riverside 15 Stockyards/N Main 89 SPUR	10	10	10-30	5AM-11PM	6AM-10PM
Frequent Local	4 East Rosedale 7 University 12 Samuels/Mercantile 24 Berry Street 25 Crosstown 46 Jacksboro Hwy 91 Ridgmar/Stockyards Molly the Trolley	15	15	15-30	5AM-11PM	6AM-10PM
20 All Day	32 Bryant Irvin	20	20	20-30	5AM-11PM	6AM-10PM
30 All Day	21 Boca Raton	30	30	30-60	5AM-10PM	6AM-9PM
30 Peak	5 Evans/Glen Garden 10 Bailey 11 North Beach/Heritage 20 Handley 22 Meadowbrook 26 Ridgmar Mall 27 Como 44 Central/Azle 45 TCC NW/Angle 90 Long Ave	30	60	60	5AM-10PM	6AM-9PM
60 All Day	23 TCC NE/TRE 67X TCC SE	60	60	60	6AM-8PM	7AM-7PM