

TRANSIT STRATEGIES

FAMILY OF SERVICES

Transit can be like a puzzle, in which the key to developing a great transit system is determining which types of services will work best in a multitude of different markets. At one end of the market spectrum, commuter rail is effective at carrying large volumes of passengers over long distances, and rapid transit and light rail are effective at carrying even larger volumes over shorter distances. At the other end, local circulators and flex bus services provide important first and last mile connections to far lower volumes of passengers. In between is a large array of service types that serve the markets in between.

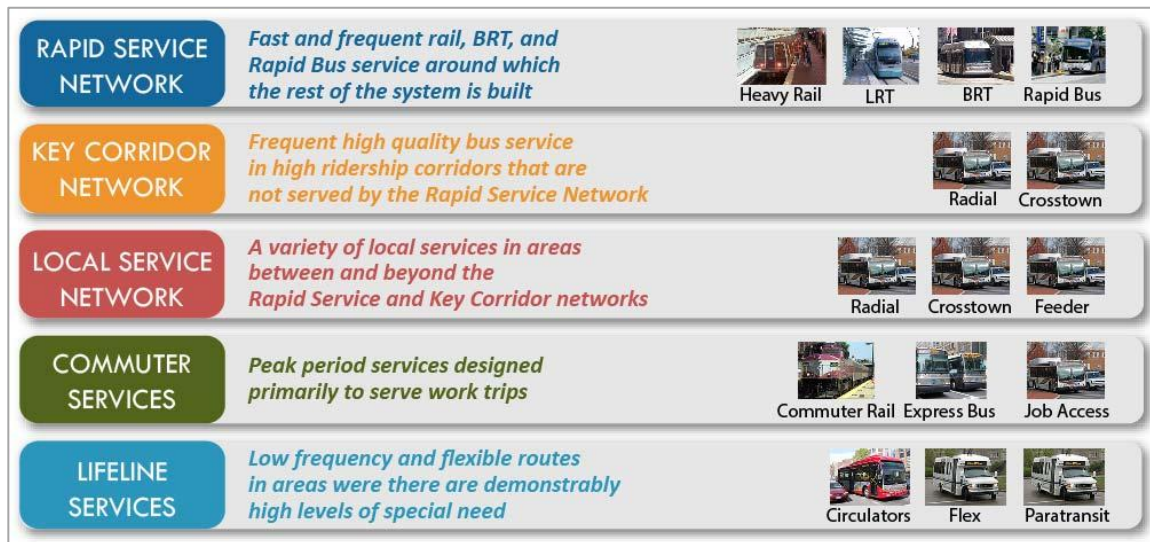


Many transit systems have a de-facto family of services, while others provide similar services to all markets. A more formal family of services approach can help transit agencies provide the most effective service to each of the different markets that it serves.

BENEFITS OF A FAMILY OF SERVICES APPROACH

The major benefits of a family of services approach are that the approach provides a structure around which service can be designed, and it provides the ability to better tailor services to the needs of different markets. In terms of structure, most large cities have rail services that form the backbone of their systems, and, to a large extent, other services are designed around the rail lines. In cities without a rail backbone, high quality bus services—for example, bus rapid transit (BRT), Rapid Bus, and “key corridor routes”—can be used to create a similar backbone. Then other services, such as local bus routes and lifeline services, can extend, provide connections with, and fill in gaps in the backbone network.

LARGE CITY FAMILY OF SERVICES EXAMPLE



In terms of market-tailored services, different types of transit service have different advantages and disadvantages. For example, express bus routes can provide great service for commuters, but they are not suited to provide local service. Local circulators can provide effective service to areas where there are special needs, but they are not typically attractive to riders who are time sensitive. In many cases, transit systems serve most markets with local bus routes that operate similarly regardless of demands, and these routes tend to revert to a “lowest common denominator” approach of slow circuitous routes that focus on coverage over quality. A family of services approach can help transit agencies more explicitly consider the types of services that should be provided in different markets, and the tools to provide those services.

- ➔ Provides a structure to build a transit system
- ➔ Makes services easier for passengers to understand and easier to market
- ➔ Helps ensure that services are best matched to markets

FAMILY OF SERVICES EXAMPLES

A significant number of transit systems have begun to develop formal families of service, either for their entire range of services or simply within their bus services.

PITTSBURGH

Before Pittsburgh’s Port Authority comprehensively redesigned its services in the late 2000s, it operated more than 185 bus routes, many of which duplicated one another more than they complemented each other. The system was redesigned around a family of services that consisted of:

- **Rapid Service Network:** Light rail transit (LRT), Busway BRT, and Arterial BRT (planned)
- **Key Corridor Network:** Other important arterial bus routes
- **Local Service Network:** Radial, Crosstown, and Feeder bus routes, plus inclines to fill gaps and extend the core network
- **Commuter Network:** Express Bus and Job Access/Reverse Commute (JARC) routes
- **Lifeline Network:** Local Circulator and Crosstown routes designed to serve areas with special needs



This new family of services consolidated 185 routes to 125 routes that had a well defined purpose and that provided more and better defined service.

PROVIDENCE

Providence’s RIPTA, although it aspires to develop streetcar service, is a bus-only system that recently redesigned its services around an all-bus family of services:

- **Rapid Bus:** New R-Line service
- **Key Corridor:** High ridership arterial routes
- **Urban Radial:** Radial routes to urban centers
- **Non-Urban/Crosstown:** Other local bus routes

- **Regional:** Major routes between regional centers
- **Express/Commuter:** Express routes and local routes that only operate during commute times
- **Flex:** Anchored flex routes that provide connections to fixed-route services

KANSAS CITY

Kansas City is in the midst of a transit renaissance that has the city developing streetcar service and KCATA, its transit system, expanding MAX BRT/Rapid Bus service. As part of KCATA's 2012 Comprehensive Service Analysis, it redesigned service around a family of services:

- **Key Corridor Network**, consisting of streetcar service (under construction), MAX BRT/Rapid Bus lines, Connex service (see boxed text), and frequent radial and crosstown routes
- **Local Bus Network**, which consists of lower frequency all-day local bus routes
- **Commuter Network**, which includes express routes and peak-only local routes
- **Lifeline Network**, which includes flex service and midday-only routes

MAX and connex
KCATA, Kansas City

KCATA currently operates two MAX BRT lines and is now working to implement a third. These lines provide frequent service with limited stops, a high level of passenger amenities, and dedicated bus lanes on one line.

KCATA recently began operating premium bus service between Kansas City, KS and Kansas City, MO, which is uniquely branded and provides a high level of amenities. However, it provides much less frequent service than the MAX lines. In order to avoid diluting the MAX brand but still differentiate the premium service from regular bus service, KCATA used a different name ("connex") with a similar logo that will link the two brands through similar design elements to denote that both provide premium service.



LOS ANGELES

Well-defined families of services can be developed entirely within the bus mode. In Los Angeles, LA Metro uses a bus family of services approach that is coupled with color-based branding. There are four types of bus service: Metro Liner BRT (Silver), Metro Express (Blue), Metro Rapid (Red), and Local (Orange).

LA METRO BUS SERVICE BRANDING



COMMON ELEMENTS

As illustrated in the examples above, families of services can be developed in different ways and tailored to the services provided by individual transit systems and the areas that they serve. However, typical elements of a family of services approach include the following:

- ➔ Categories of service types that reflect service quality, level of service, and markets served
- ➔ Services that comprise the “backbone” network, whether they be rail services, BRT services, other types of premium bus services, or high frequency regular bus routes
- ➔ Other services that fill gaps and provide connections to the backbone network and extend service coverage to lower demand areas

POTENTIAL NASHVILLE OPPORTUNITIES

At the present time, MTA provides a number of different types of services with different brands. These include:

- Very Frequent, Frequent, and Limited, which is how MTA classifies its services to the public.
- BRT Lite, which MTA presents to the public as both BRT Lite and Very Frequent service.
- Music City Circuit, which falls in the Very Frequent, Frequent, and Limited classifications.
- Express routes and one “Relax & Ride” route.

As is the case with most transit systems, these names have evolved over time, with new names and brands developed for new services but without explicit consideration of how they fit within the overall system context. For example, Very Frequent, Frequent, and Limited classifications often do not reflect common perceptions. Very Frequent routes can operate as infrequently as every 30 minutes, and Frequent routes can operate as infrequently as every 90 minutes.

Going forward, MTA could develop a family of services that combines service types with more commonly accepted frequency definitions, as depicted in the table below.

POSSIBLE MTA/RTA FAMILY OF SERVICES APPROACH

SERVICE CATEGORY	SERVICE TYPES	MINIMUM MIDDAY FREQUENCY
Rapid Service Network		10
Fast and frequent rapid transit, light rail, and arterial BRT service around which the rest of the system is built	BRT BRT Lite/Rapid Bus	
Frequent Corridor Network		15
Frequent high quality bus service in high ridership corridors that are not served by the Rapid Service Network	Key Corridor Routes Crosstown routes Music City Circulators Other high-frequency local routes	
Local Service Network		30
A variety of local services in areas between and beyond the Rapid Service and Frequent Corridor networks	Regular local Feeder Circulators	
Commuter Services		
Peak period services designed primarily to serve work trips	Commuter rail (RTA) Express bus (MTA and RTA) Peak only local routes Job Access/Reverse Commute	
Lifeline Services		60
Low volume services in areas where there are high levels of special need even though overall demand is low	Limited service local route Suburban circulators Flex routes	