

Fundamentals of a Successful Transit System

What are the components of a well-designed transit system?

- 1. Appropriate Service Coverage:** Provide service to areas that need it most now and in the near future (due to growth)
- 2. Well-spaced Bus Stops:** Ensure enough bus stops to meet the greatest demand without long walks but not too many bus stops that slow the trip for everyone
- 3. Appropriate Service Span:** Operate daily and weekend hours to serve the greatest need, so customers can rely upon it for trips to and from their destination
- 4. Appropriate Headways:** Operate frequently enough (time between bus arrivals) so that buses are not crowded and wait times between buses is minimized
- 5. Consistency:** Have consistent headways and roadways for the most trips so variations are minimized.
- 6. Direct Service:** Provide shortest distance/fastest path between the most desired origins and destinations, diminishing the need to transfer for the majority of riders and avoiding travel to low-demand locations off the direct path.
- 7. Route Diversity:** Operate a balance of routes focused on meeting different travel needs, including:
 - Local Service:** multi-stop, local routes focused on coverage and accessibility
 - Limited-Stop Service:** local routes with fewer stops to balance less travel time with coverage
 - Express Service:** longer distance service with few stops connecting suburban/neighboring markets to downtown cores during peak commute times
 - Circulator and Shuttle Service:** Short, limited stop routes focused on local connectivity (“first and last mile”) between major hubs, markets and high demand locations (ie. feeder shuttle service to rail stations, downtown circulator, direct service to employers and institutions)
 - Priority Service:** Limited-stop, visible service focused on reduced travel times and supported by dedicated rights-of-way, signal priority, and time-reduction infrastructure/technologies. Also known as Bus Rapid Transit or Enhanced Transit.
- 8. Multi-modal Connectivity:** Connect with other travel modes such as rail transit, automobile park and rides, bicycle paths and bike share hubs or stations, pedestrian amenities, shuttles and other modes. Connections between popular bus routes and other transit modes are well-timed for quick and easy transfers.
- 9. Reliability:** Revise schedules to anticipate operating conditions such as congestion and accessibility for individuals with disabilities, so that the bus arrives when it is expected.
- 10. Flexibility/Redundancy:** Offer multiple locations/opportunities to make connections with routes and to accomplish travel throughout the region with a minimum number of transfers and to use fare media that is transferable to additional modes.
- 11. Ease of Use:** Routes are logically located and spaced and are well-defined with easy access to information about the system and real-time bus arrival information.
- 12. Fiscal-responsibility:** Capitalize on the best use of funding and fare revenue to meet the most needs by supporting productive routes with good ridership.
- 13. Appropriate Infrastructure:**
 - Clean buses in good repair;
 - Signed bus stops with benches/shelters where warranted;
 - Pedestrian accessibility to bus stops;
 - Park and rides to support express service; and
 - Curb space at bus stops so the bus can get as close as possible to customers but also merge into traffic effectively.
- 14. State-of-the-industry Technology:** Include advanced fare collection, real time information, real time bus performance and usage systems, signal priority compatibility, and advanced trip-planning tools.