

Wilmington Transit Moving Forward Transit System Principles June 11, 2014

Principle #1:

Transit locations and service should be consistent with the City of Wilmington's zoning, land use, and City-Wide comprehensive plan. Transit should continue to strengthen Wilmington's position as the economic center of the region.

Opportunities:

- 1. Give special consideration to activity centers where employment, education, recreation, visitor or residential use is focused.
- 2. The transit system should build upon emerging demographics that support urban communities.

Principle #2:

Continue to grow transit ridership through DTC's focus on service quality and with movement towards an optimal transit network.

Opportunities:

- 1. Combine routes to provide crosstown services.
- 2. Shorten the length of downtown route alignments.
- 3. Split service patterns where commuter routes use different downtown streets than core bus services.
- 4. Traffic patterns to develop an optimal transit system (City and DelDOT).

Principle #3:

Transit locations and service must be convenient for existing and emerging patterns of ridership, utilizing O/D data to inform decisions.

- 1. Optimize direct transit service to downtown and to suburban activity centers.
- 2. Operations should coincide with all hours of employment and minimize transfer wait times.
- 3. Trolley service.
- 4. Enhanced transit service to align with high schools and other activity centers.
- 5. Regional light rail, steel-wheel trolley or streetcar alternatives to support the transportation and economic development framework.
- 6. Small buses to support the transportation and economic development framework.





Principle #4:

Cost-effective transit service delivery and revenue generation are essential for DTC.

Opportunities:

- 1. If off-street hubs are developed, explore opportunities to generate revenue for DTC by working with a developer.
- 2. Public/Private partnerships (e.g., ownership of transit hubs and shelters).
- 3. Provide secondary level student transportation (DOE).

Principle #5:

Transit locations are necessary to accommodate convenient transfers needed throughout the system.

Opportunities:

- 1. A hierarchy of locations should be provided (adjacent transit stops, on-street hubs, and off-street hubs).
- 2. Multiple locations should be reasonably dispersed geographically.
- 3. Intermodal connections should be served.

Principle #6:

Explore the development of a group of internal transit loop patterns within Wilmington.

- 1. Downtown/Riverfront circulator bus routes.
- 2. Coordination with private shuttles.
- 3. Use of smaller buses.
- 4. Additional east-west routes.
- 5. Internal loops to enhance the overall transit network.





Principle #7:

Peripheral transit locations should be developed from the supporting O/D data to improve transit opportunities between suburbs in the greater Wilmington metropolitan area and reduce the number of unnecessary transfers in the City.

Opportunities:

- 1. Additional park and rides and use of existing underutilized parking areas.
- 2. Coordination between DTC, the County and municipalities to plan for future growth areas in New Castle County.

Principle #8:

Transit must be safe, secure, attractive, customer friendly, meet ADA accessibility standards, and serve the needs of multi-modal users in order to serve existing riders and increase new riders to the system.

Opportunities:

- 1. Partnerships with other government agencies and non-profit organizations, such as adopt-a-shelter and security patrols.
- 2. ADA accessibility by eliminating barriers impeding pedestrian access to all transit locations, services and activity centers.
- 3. Adequate crossing time for pedestrians at signalized intersections with audible crossing signals.
- 4. During inclement weather all bus stops be considered high priority in order to provide safe access.

Principle #9:

To efficiently operate service, DTC must have locations to layover buses.

- 1. Layover locations should be compatible with adjacent land use and traffic.
- 2. DTC and the City work together to determine appropriate locations.
- 3. DTC has guaranteed space for layover with off-street hubs.
- 4. DTC Operations Center may provide a location for a layover in the downtown.





Principle #10:

Transit locations must weigh the impact to on-street parking and parking revenue.

Opportunities:

- 1. Mitigate loss of parking through public/private partnerships to create nearby new parking areas.
- 2. Ensure "loading and unloading" locations do not conflict with transit locations
- 3. Incorporate elongated bulb-outs where feasible to improve the pedestrian/passenger experience while balancing impacts on parking spaces.

Principle #11:

Transit locations and corridors must consider traffic congestion and potential conflicts between buses and other modes of travel, including pedestrians, bikes, cars, and other types of vehicles.

Opportunities:

- 1. Development of dedicated transit lanes.
- 2. Sufficient curb side capacity to avoid buses stopping in travel lanes.
- 3. Linear corridors that minimize turning movements in congested areas.
- 4. Traffic signal prioritization and preemption.

Principle #12:

DTC should continue the purchasing of environmentally friendly buses to decrease emissions and noise.

- 1. Increase the percentage of hybrid or other alternative fuel buses in the fleet.
- Use of electric buses.





Principle #13:

Transit service should consider upgrades in the use of technology to improve customer information.

Opportunities:

- 1. Audible announcements at bus stops and internally on the bus.
- 2. Real time bus arrival information at bus stops.
- 3. Provision of GPS based phone applications to provide real time trip planning and customer information.
- 4. Pin location trip planning information (location/transfers/modes) to complete trip.

Principle #14:

Growing transit ridership requires knowledge of customer needs and programs to educate and market to the public on the benefits of using transit.

- 1. Develop new or expanded marketing/outreach strategies to attract new riders.
- 2. Partnerships with employers to expand Rideshare program.
- 3. Bus pass programs for students and municipal employees.
- 4. Survey people who do not use transit.





Principle #15:

Identify streets in Wilmington where transit service and amenities could be emphasized. These could be streets that already include a significant amount of bus service or additional bus service could be added.

Opportunities:

- 1. 11th Street and 12th Street
 - Major east-west corridor for bus routes to and from Downtown Wilmington.
 - 11th Street and 12th Street as major transit corridor between Jefferson Street and Walnut Street.
 - 11th and 12th Streets either as one-way or as two way streets.
 - Enhanced transit amenities along 11th Street and 12th Street at Washington Street,
 Orange Street, Market Street, King Street and Walnut Street.

2. Orange Street

- Major northbound corridor for buses to Downtown Wilmington.
- Orange Street as major transit corridor between 4th Street and 10th Street to support existing high volume of transit service.
- Enhanced transit amenities along Orange Street at 4th Street, 5th Street, 8th Street and 9th Street.

3. 4th Street

- Major east-west corridor for buses with service along 4th Street from Southbridge to Greenhill Ave.
- 4th Street as major transit corridor between Walnut Street and Union Street to support existing high volume of transit service.
- Enhanced transit amenities along 4th Street between Walnut Street and Union Street.

4. Walnut Street

- Major northbound corridor for buses with service from Front Street to 8th Street.
- Walnut Street as major transit corridor.
- Walnut Street as a two-way corridor with a dedicated transit lane.
- Enhanced transit amenities along Walnut Street between Front Street and 8th Street.

5. King Street

- Major southbound corridor for buses with service from 12th Street to Front Street.
- King Street as major transit corridor.
- Enhanced transit amenities along King Street between 12th Street and Front Street.

6. Martin Luther King, Jr. Boulevard/Front Street

- Major east-west corridor for buses with service along MLK Boulevard from Jackson Street to Walnut Street.
- MLK Boulevard as major transit corridor.
- Enhanced transit amenities along MLK Boulevard from Jackson Street to Walnut Street.













Principle #16:

Identify multiple transit locations within the City of Wilmington that build upon the existing O/D data.

Opportunities:

- 1. A hierarchy of transit locations:
 - Hierarchy 1 Location where numerous bus routes cross and continue in service, and some routes may also terminate and need to layover.
 - Hierarchy 2 Location where numerous bus routes cross and continue in service.
 - Hierarchy 3 Location where a few bus routes cross and continue in service.

Examples – Hierarchy 1:

- 1. 12th and Jefferson Streets
 - Good location to support the potential 11th and 12th Street transit corridors.
 - Existing employment density and potential employment growth in area makes site and/or general area a viable location.
- 2. 8th and Orange Streets
 - Good location and proximity to Downtown Wilmington.
 - Orange Street is served by numerous DTC bus routes.
 - 8th Street is served by a DTC bus route.
- 3. 2nd and Front Streets/Front and Walnut Streets/Modified Amtrak Station
 - MLK Boulevard/Front Street and Walnut Street should be the focus for enhancing and expanding transit locations.
 - Supports intermodal connections to commuter and intercity rail and intercity bus.

Examples – Hierarchy 2:

- 1. Rodney Square
 - Maintain as a bus stop location with enhanced transit amenities.
- 2. 9th and French Streets
 - Enhanced transit amenities along French Street to support high transit volumes.
 - 9th Street is served by a DTC bus route.
- 3. 8th Street and 9th Street
 - Investigate transfer locations along 8th and 9th Streets where major north-south bus routes cross.
 - Enhanced transit amenities on 8th and 9th Streets between Walnut Street and Orange Street to support transfer connections with north-south bus routes.
 - 8th Street and 9th Street are served by a DTC bus route.





Examples – Hierarchy 3:

- 1. Union Street/Lincoln Street/Pennsylvania Avenue
 - Western transfer location to support existing DTC Routes.
- 2. Union Street and 4th Street.
 - Transit location at western edge of the City near the Little Italy and the Bancroft Pkwy neighborhoods.
 - Enhanced transit amenities to support transfer connections with DTC Routes along the western edge of the 4th Street transit corridor.
- 3. 2nd Street/Lancaster Avenue/Jackson Street
 - Enhanced transit amenities to support transfer connections with DTC Routes along Lancaster Avenue and 2nd Street in the area of Jackson Street.

Principle #17:

Consider introduction of bus service onto streets with no existing bus service to better serve neighborhoods and activity centers.

- 1. Concord Avenue
 - Introduction of service along Concord Avenue between Broom Street and Market Street to address missing link in transit service.
 - Transit amenities at Broom Street, Monroe Street, Washington Street and Market Street for transfer connections to DTC Routes.
- 2. Washington Street
 - Introduction of service along Washington Street between 10th Street and 2nd Street.
 - Transit amenities at 10th Street and 2nd Street for transfer connections to DTC Routes.
- 3. Adams Street
 - Introduction of service along Adams Street between 4th Street and Delaware Avenue.
 - Transit amenities at Delaware Avenue and 4th Street for transfer connections to DTC Routes.
- 4. Jackson Street
 - Introduction of service along Jackson Street between Pennsylvania Avenue and 4th Street.
 - Transit amenities at Pennsylvania Avenue and 4th Street for transfer connections to DTC Routes.









Principle #18:

Serve emerging and future growth areas in Wilmington.

Opportunities:

- 1. Riverfront
 - The new Christina River Bridge will provide greater access to the Riverfront and increase the economic vitality of the area. This will provide opportunities for realignment and access of transit service within the south Wilmington/Amtrak Station/Riverfront area.
 - Transit locations near major activity centers.
- 2. Maryland Avenue/Monroe Street
 - Potential for connections of future development and transit.

Principle #19:

Consider circulator bus routes that would connect with DTC bus service at transit locations and activity centers.

- 1. Connections with Hierarchy 1, 2, and 3 transit locations as described in Principle 16.
- 2. Connections with major activity centers.
- 3. Connections at emerging and future growth areas.

