

Advisory Group Meeting #4

- Priorities are for AG comment at today's meeting
- Four time frames proposed for implementation



- Some editing of Principles to read as implementation versus "study", or "consider" or "evaluate"
- Proposal should be viewed as dynamic
- Ultimately, DTC and the City of Wilmington and other agencies will determine implementation
- Funding will need to be secured for many of the improvements

Summary Table of Priorities

| Short-term 1-2 Years (2015-2016) | Mid-term 3-5 Years (2017-2019) | Long-term 6-10 Years (2020-2024) | Future 10+ Years (2025+) |
|--|---|--|---|
| Principle 1 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 1 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 1 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 1 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 |
| Principle 2 <ul style="list-style-type: none"> o Opportunity 2 o Opportunity 3 | Principle 2 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 o Opportunity 4 | Principle 2 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 4 | |
| Principle 3 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 3 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 o Opportunity 4 o Opportunity 6 | Principle 3 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 4 | Principle 3 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 5 |
| | Principle 4 <ul style="list-style-type: none"> o Opportunity 2 | Principle 4 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 | Principle 4 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 |
| Principle 5 <ul style="list-style-type: none"> o Opportunity 3 | Principle 5 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 | Principle 5 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 | Principle 5 <ul style="list-style-type: none"> o Opportunity 3 |
| | Principle 6 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 o Opportunity 4 | Principle 6 <ul style="list-style-type: none"> o Opportunity 2 o Opportunity 3 o Opportunity 4 o Opportunity 5 | Principle 6 <ul style="list-style-type: none"> o Opportunity 2 o Opportunity 3 |
| Principle 7 <ul style="list-style-type: none"> o Opportunity 2 | Principle 7 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 7 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 7 <ul style="list-style-type: none"> o Opportunity 2 |
| Principle 8 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 o Opportunity 4 | Principle 8 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 | Principle 8 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 8 <ul style="list-style-type: none"> o Opportunity 1 |

Summary Table of Priorities

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|---|---|--|--|
| | Principle 9 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 4 | Principle 9 <ul style="list-style-type: none"> o Opportunity1 o Opportunity2 o Opportunity3 o Opportunity4 | Principle 9 <ul style="list-style-type: none"> o Opportunity1 o Opportunity2 o Opportunity3 |
| | Principle 10 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 | Principle 10 <ul style="list-style-type: none"> o Opportunity1 o Opportunity2 o Opportunity3 | Principle 10 <ul style="list-style-type: none"> o Opportunity1 o Opportunity2 o Opportunity3 |
| | Principle 11 <ul style="list-style-type: none"> o Opportunity 2 o Opportunity 3 o Opportunity 4 | Principle 11 <ul style="list-style-type: none"> o Opportunity1 o Opportunity2 o Opportunity3 o Opportunity4 | Principle 11 <ul style="list-style-type: none"> o Opportunity2 |
| Principle 12 <ul style="list-style-type: none"> o Opportunity 1 | Principle 12 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 12 <ul style="list-style-type: none"> o Opportunity1 | Principle 12 <ul style="list-style-type: none"> o Opportunity1 |
| Principle 13 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 3 | Principle 13 <ul style="list-style-type: none"> o Opportunity 2 o Opportunity 3 o Opportunity 4 | | |
| Principle 14 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 o Opportunity 4 | Principle 14 <ul style="list-style-type: none"> o Opportunity 3 | | |
| | Principle 15 <ul style="list-style-type: none"> o Opportunity 1-6 | Principle 15 <ul style="list-style-type: none"> o Opportunities 1-6 | |
| | Principle 16 <ul style="list-style-type: none"> o Opportunity 1 | Principle 16 <ul style="list-style-type: none"> o Opportunity1 | |
| | Principle 17 <ul style="list-style-type: none"> o Opportunities 1-4 | Principle 17 <ul style="list-style-type: none"> o Opportunities 1-4 | |
| | Principle 18 <ul style="list-style-type: none"> o Opportunity 1 o Opportunity 2 | Principle 18 <ul style="list-style-type: none"> o Opportunity1 o Opportunity2 | |
| | Principle 19 <ul style="list-style-type: none"> o Opportunities 1-3 | Principle 19 <ul style="list-style-type: none"> o Opportunities 1-3 | |

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.

Opportunities:

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.

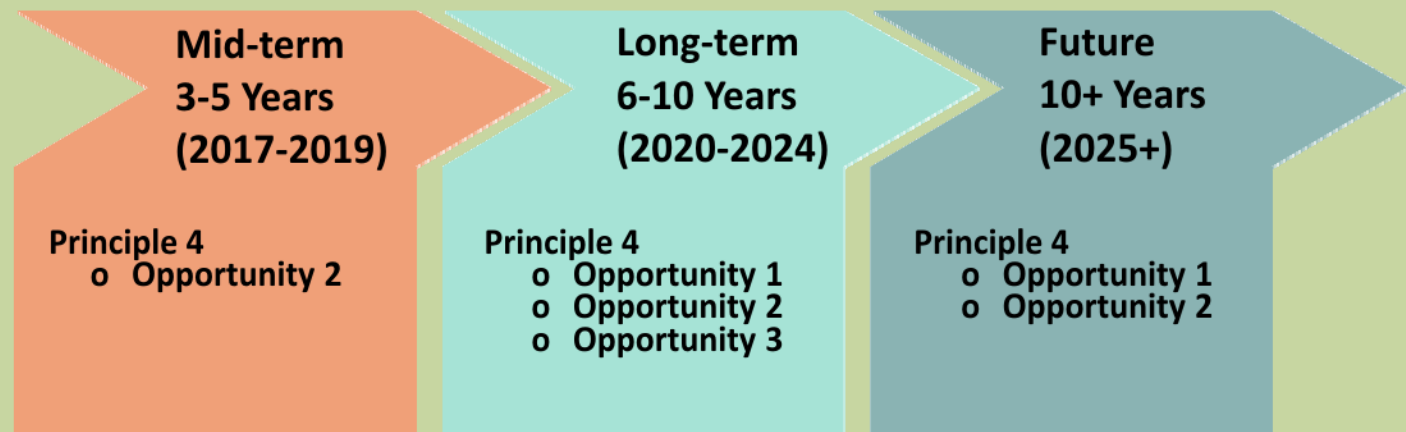


Principle #4:

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.

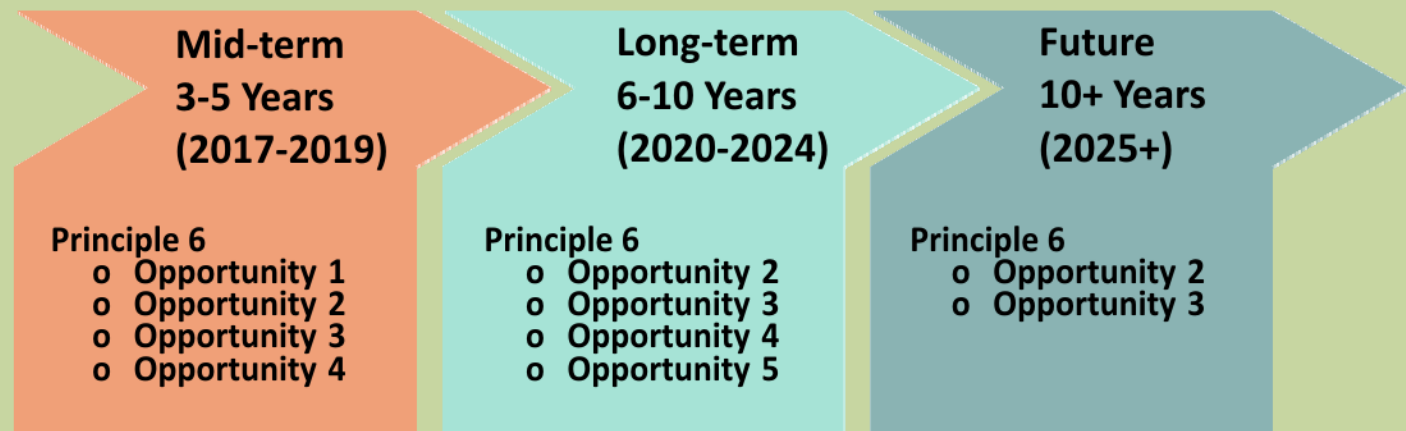


Principle #6:

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

Opportunities:

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.

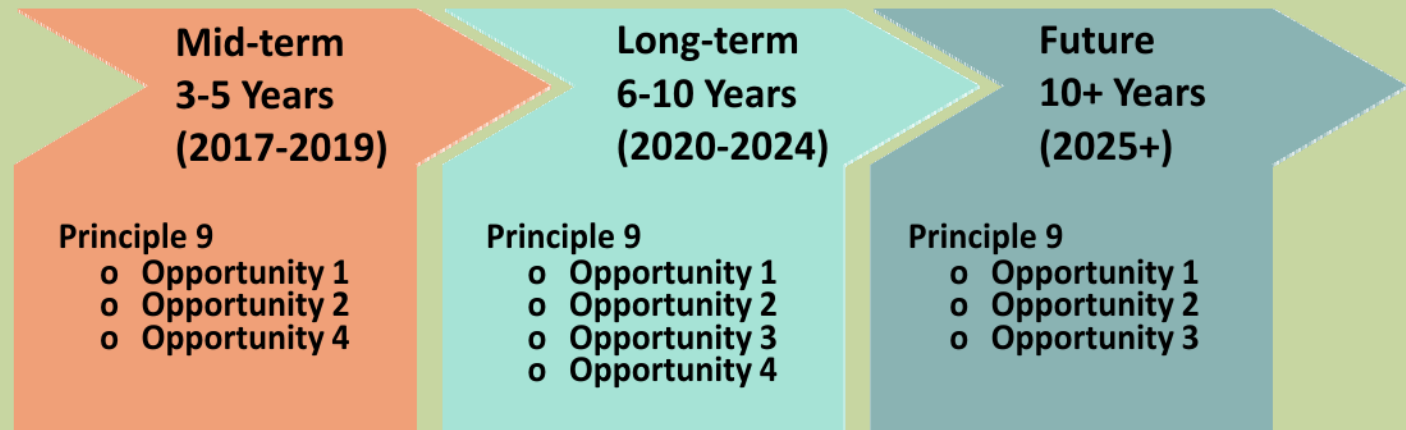


Principle #9:

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

Opportunities:

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.

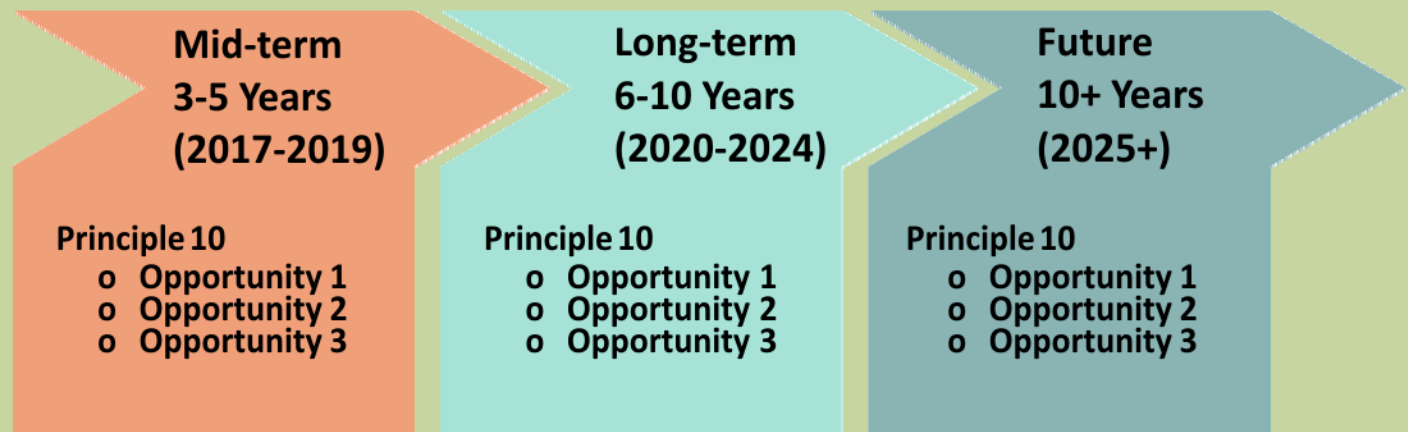


Principle #10:

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.

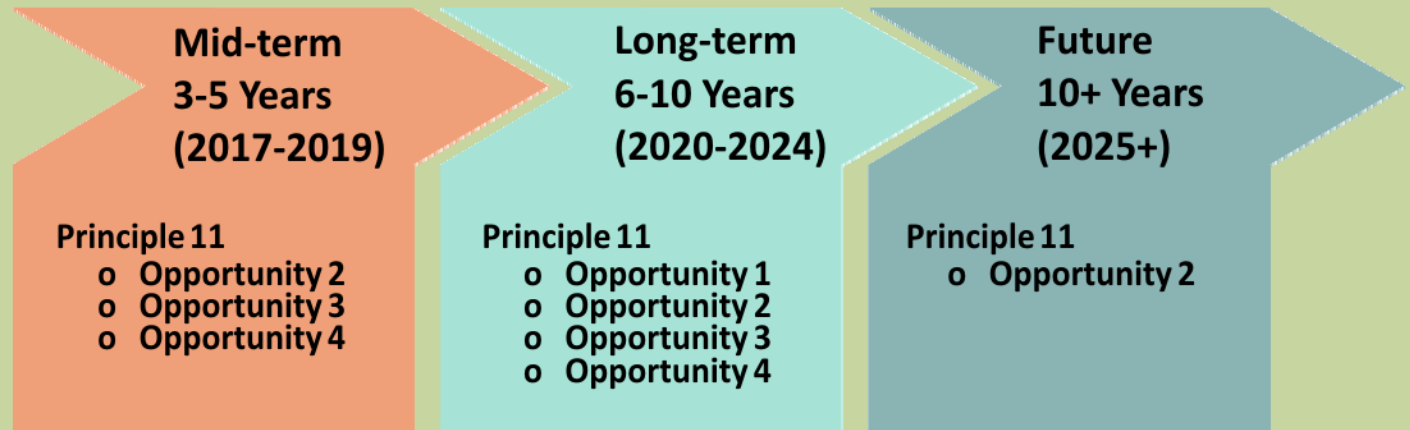


Principle #11:

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.

Opportunities:

1. Increase the percentage of hybrid or other alternative fuel buses in the fleet.
2. 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.

Opportunities:

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
2. Orange Street
3. 4th Street
4. Walnut Street
5. King Street
6. Martin Luther King, Jr. Boulevard/Front 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:

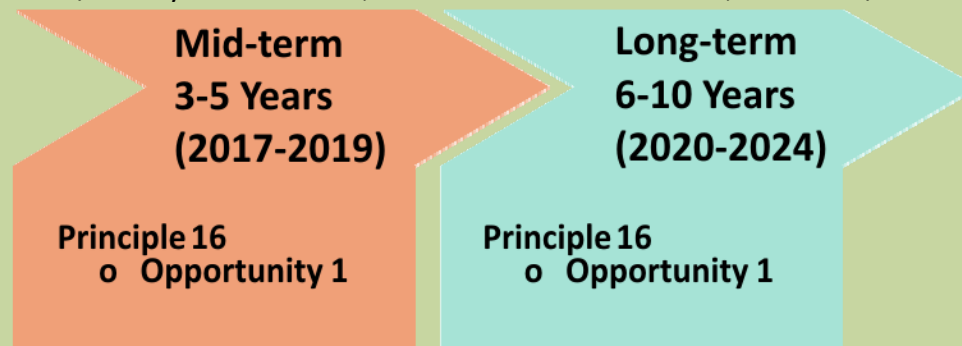
- 12th and Jefferson Streets, 8th and Orange Streets, 2nd and Front Streets/Front and Walnut Streets/Modified Amtrak Station

Examples – Hierarchy 2:

- Rodney Square, 9th and French Streets, 8th Street and 9th Street

Examples – Hierarchy 3:

- Union Street/Lincoln Street/Pennsylvania Avenue, Union Street and 4th Street, 2nd Street/Lancaster Avenue/Jackson Street



Principle #17:

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

Opportunities:

1. Concord Avenue
2. Washington Street
3. Adams Street
4. Jackson Street

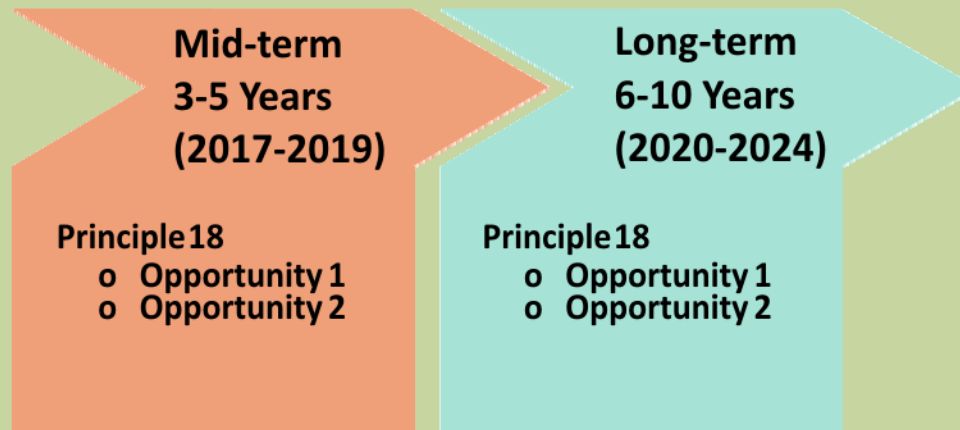


Principle #18:

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.

Opportunities:

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.



Short-term
1-2 Years
(2015-2016)

Principle 1

- o Opportunity 1 and 2

Principle 2

- o Opportunity 2 and 3

Principle 3

- o Opportunity 1 and 2

Principle 5

- o Opportunity 3

Principle 7

- o Opportunity 2

Principle 8

- o Opportunities 1-4

Principle 12

- o Opportunity 1

Principle 13

- o Opportunities 1-3

Principle 14

- o Opportunity 1
- o Opportunity 2
- o Opportunity 4

- DTC will be proposing service changes for January, 2015 based on O/D survey and consistent with Wilmington Transit Moving Forward Principles
- Some downtown route alignments may be shortened
- Real time information at bus stops
- Survey non-transit users to explore transit improvements
- Provide safe access to bus stops in inclement weather
- Increase percentage of hybrid and alternative fuel buses in DTC's fleet