

CHAPTER 6

Hampton Roads Regional Transit Program

FY 2022 - FY 2031



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Contents

6. Hampton Roads Regional Transit Program	6-1
6.1. Background	6-1
6.2. Purpose and Requirements	6-1
6.3. Framework and Justification	6-2
6.4. Program	6-2
6.4.1. Regional Backbone	6-5
6.4.2. Limited/Express	6-8
6.5. Benefits and Outcomes	6-11
6.5.1. Regional Connectivity and Level of Service	6-11
6.5.2. Program Factors, Objectives, and Metrics	6-14
6.5.3. Baseline Analyses	6-14
6.6. Route Profiles	6-21
6.7. RTS Implementation	6-109
6.7.1. Service Grouping	6-109
6.7.2. Additional Phasing Factors	6-112
6.7.3. Timing and Components for Start-Up and Ongoing Operation	6-112
6.8. RTS Resource Allocation	6-117
6.8.1. Capital	6-118
6.8.2. Operations and Maintenance	6-120
6.9. Measuring Performance	6-125

Tables

Table 6-1: Regional Backbone Route Characteristics	6-5
Table 6-2: Regional Backbone Service Design Standards	6-5
Table 6-3: Limited/Express Route Characteristics	6-8
Table 6-4: Regional Backbone Major Destinations and Service Hours	6-11
Table 6-5: Limited/Express Major Destinations and Service Hours	6-13
Table 6-6: Program Investment Factors, Objectives, and Metrics	6-14
Table 6-7: Employment Access to Regional Backbone Routes	6-15
Table 6-8: Employment Access to Limited/Express Routes	6-16
Table 6-9: Population Access to Regional Backbone Routes	6-17
Table 6-10: Employed Population Access to Limited/Express Routes	6-17
Table 6-11: Regional Backbone Routes - Population and Employment Access Within a Half-Mile	6-18
Table 6-12: Multi-Modal Transit Connections	6-19
Table 6-13: Regional Backbone Average Wait Time	6-20
Table 6-14: Phasing Groups	6-109
Table 6-15: Positions for RTS Implementation	6-114
Table 6-16: RTS Program Capital Expenses and Funding	6-119
Table 6-17: Planned RTS Program O&M Costs and Revenues	6-121
Table 6-18: RTS FY 2021 - FY 2022 Program O&M Items and Costs	6-122
Table 6-19: FY 2022 RTS Bus Operations	6-123
Table 6-20: Planned RTS O&M Costs (Above Cost/Hour)	6-124
Table 6-21: Planned HRRTF Revenues and Expenditures	6-124

Figures

Figure 6-1: Regional Transit Program Route Classifications - Peninsula	6-3
Figure 6-2: Regional Transit Program Route Classifications - Southside	6-4
Figure 6-3: Regional Transit Program Regional Backbone Routes - Peninsula	6-6
Figure 6-4: Regional Transit Program Regional Backbone Routes - Southside	6-7
Figure 6-5: Regional Transit Program Limited/Express Routes - Peninsula	6-9
Figure 6-6: Regional Transit Program Limited/Express Routes - Southside	6-10
Figure 6-7: Grouping - Peninsula	6-110
Figure 6-8: Grouping - Southside	6-111
Figure 6-9: Current 757 Express Logo	6-112
Figure 6-10: Mock-Up of RTS Livery	6-113
Figure 6-11: Transit Operators	6-114
Figure 6-12: On-Board Vehicle Display	6-115
Figure 6-13: Passenger Waiting Facility	6-115
Figure 6-14: Example of Potential 757 Express Bus Stop	6-116

6. Hampton Roads Regional Transit Program

6.1. Background

In 2020, the Virginia General Assembly passed legislation—Senate Bill 1038 and House Bill 1726—requiring the establishment of the Hampton Roads Regional Transit Program (the Program) and the related Hampton Roads Regional Transit Fund (the Fund). In doing so, the legislature emphasized the importance of having effective multimodal transportation, which is essential for the region’s economic growth, vitality, and competitiveness.

To this end, the Hampton Roads Regional Transit Program was established to define and supply resources for the development, operating, and capital needs for both expansion and state of good repair of reliable regional transit operations.

The Program must be documented in an approved Transit Strategic Plan of the Transportation District Commission of Hampton Roads (TDCHR).¹ The Hampton Roads Regional Transit Program encompasses regional transit capital and operating costs that are eligible to be funded by the Hampton Roads Regional Transit Fund, also established in 2020 by the General Assembly.²

6.2. Purpose and Requirements

Pursuant to law, the Program is explicitly for *“a core regional network of transit routes and related infrastructure, rolling stock, and support facilities.”* The express goal of the Program is *“to provide a modern, safe, and efficient core network of transit services across the Hampton Roads region.”* The Fund is administered through the Hampton Roads Transportation Accountability Commission (HRTAC). There is clear alignment between the purposes of the Hampton Roads Regional Transit Program and the Hampton Roads Regional Transit Fund.

Specifically, the Fund shall be used for *“the development, maintenance, improvement, and operation of a core and connected regional network of transit routes and related infrastructure, rolling stock, and support facilities, to include the operation of a regional system of inter-jurisdictional high-frequency bus service, in a transportation district in Hampton Roads.”*³ Additionally, per legislative guidance, expenditures of the Fund:

- Should be positively linked to factors related to *“economic development potential, employment opportunities, mobility, environmental sustainability, and quality of life.”*
- Must be used solely in the transportation district (i.e., the Transportation District of Hampton Roads, comprised of the cities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach), which is governed by the TDCHR and does business as Hampton Roads Transit.⁴
- Cannot be used *“to support the expansion of light rail”* beyond the boundaries of the City of Norfolk.
- Must be consistent with the regional transit planning process that is jointly developed by HRT, WATA, and Suffolk Transit and coordinated by the HRTPO, pursuant to subsection D of § 33.2-286.
- Should give priority, when possible, to the most cost-effective and sustainable investments *“to reduce or eliminate reliance upon diesel fuels.”*

¹ See Chapters 1241 and 1281 of the Acts of the Assembly, passed April 22, 2020, Code of Virginia § 33.2-2600.1 A. (pursuant to HB1726 and SB1038, respectively), accessible at <https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+CHAP1281>.

² Ibid.

³ Code of Virginia § 33.2-2600.1 C.

⁴ In correspondence date May 22, 2020, Senator Lucas (chief patron of SB1038) explained the intent of law establishing the Hampton Road Regional Transit Program and Fund; “Our intent is to provide funding for Hampton Roads Transit (HRT), through its governing body (Transportation District Commission of Hampton Road - TDCHR) to design, build and operate a regional high frequency bus network across the six TDCHR cities, independent of the need for individual local government approval or additional local government funding. This is intended to be a single regional fund for this single regional project within the TDCHR footprint with money flowing directly to the single regional transit operator, which is the TDCHR and subsequently, HRT”.





6.3. Framework and Justification

The Hampton Roads Regional Transit Program is documented herein consistent with the purposes and requirements outlined in the law related to the Program and use of the Hampton Roads Regional Transit Fund. Operating and capital costs (for expansion and for ongoing state of good repair) for two classifications of bus routes fit within the Program and will be funded using moneys from the Fund. These two classifications are Regional Backbone routes and Limited/Express routes, as described in **section 6.4**. Details about these routes can be found in **Section 6.6: Route Profiles**. The Program of improvements and their phased implementation are positively linked to factors cited in SB1038 and HB1726. These include:

- To improve **economic development potential**.
- To increase **employment opportunities**.
- To grow overall area **mobility**.
- To support **environmental sustainability**.
- To enhance **quality of life** within the region.

The Program is also aligned with the service planning principles and service design framework detailed in **Section 1.2.3** and **Section 1.2.4** of this TSP. This includes top regional priorities of providing more reliable inter-jurisdictional bus service, prioritizing additional service frequency during hours of the day that most commuters are traveling between work and home. Finally, within the network of Program routes themselves, specific service improvements are warranted based on different justifications and can be paid for by the Fund. These justifications are identified for each route and also described in **Section 6.6: Route Profiles**. They include:

- Key Performance Indicators which detail each route's performance, are discussed when relevant to a service change (full performance analysis data can be found in **Chapter 2, Section 2.3**).
- Justifications including reference to the assessment of transit demand and underserved area opportunities for improvement from **Chapter 2, Section 2.2.2**. Justifications include icons for quick reference:

-  **TD** Transit demand and underserved areas-based opportunities for improvement from **Section 2.2.2**
-  **PB** Performance-based opportunities for improvement (passengers per revenue hour, passengers per one-way trip, farebox recovery, subsidy per passenger boarding) as described in **Section 2.3.2**
-  **EB** Efficiency-based opportunities for improvement (on-time performance and maximum load) as described in **Section 2.4.2**
-  **SD** Improvements to meet the service design standards and goals as described in **Chapter 1**

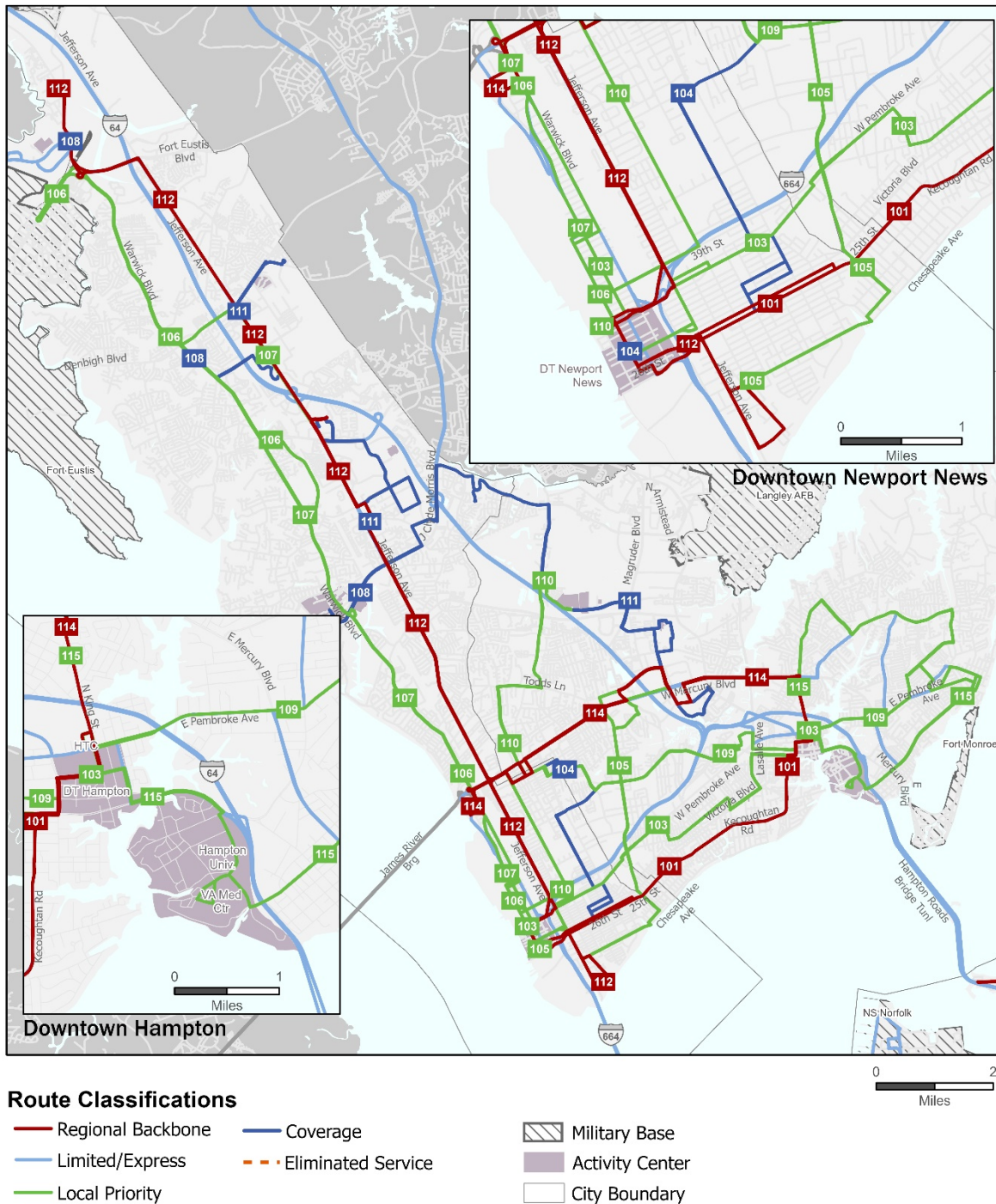
6.4. Program

This section documents the improvements that comprise the Hampton Roads Regional Transit Program within the six cities of the Transportation District of Hampton Roads. The Program is also referred to as the Regional Transit System (RTS) and HRT will implement the RTS with new branding and marketing as the "757 Express."

Figure 6-1 and **Figure 6-2** show route classifications and delineate the two route types within the Program on both the Peninsula and Southside. Specifically, routes shown in red provide high-frequency service on the "Regional Backbone" network and routes shown in light blue are "Limited/Express" routes. The rest of the HRT network, which consists of "Local Priority" and "Coverage" services, is shown on these maps to depict the supporting services that feed into the "core and connected regional network."⁵ Program routes are described in more detail in **Section 6.4.1** and **Section 6.4.2**.

⁵ Code of Virginia § 33.2-2600.1 C.

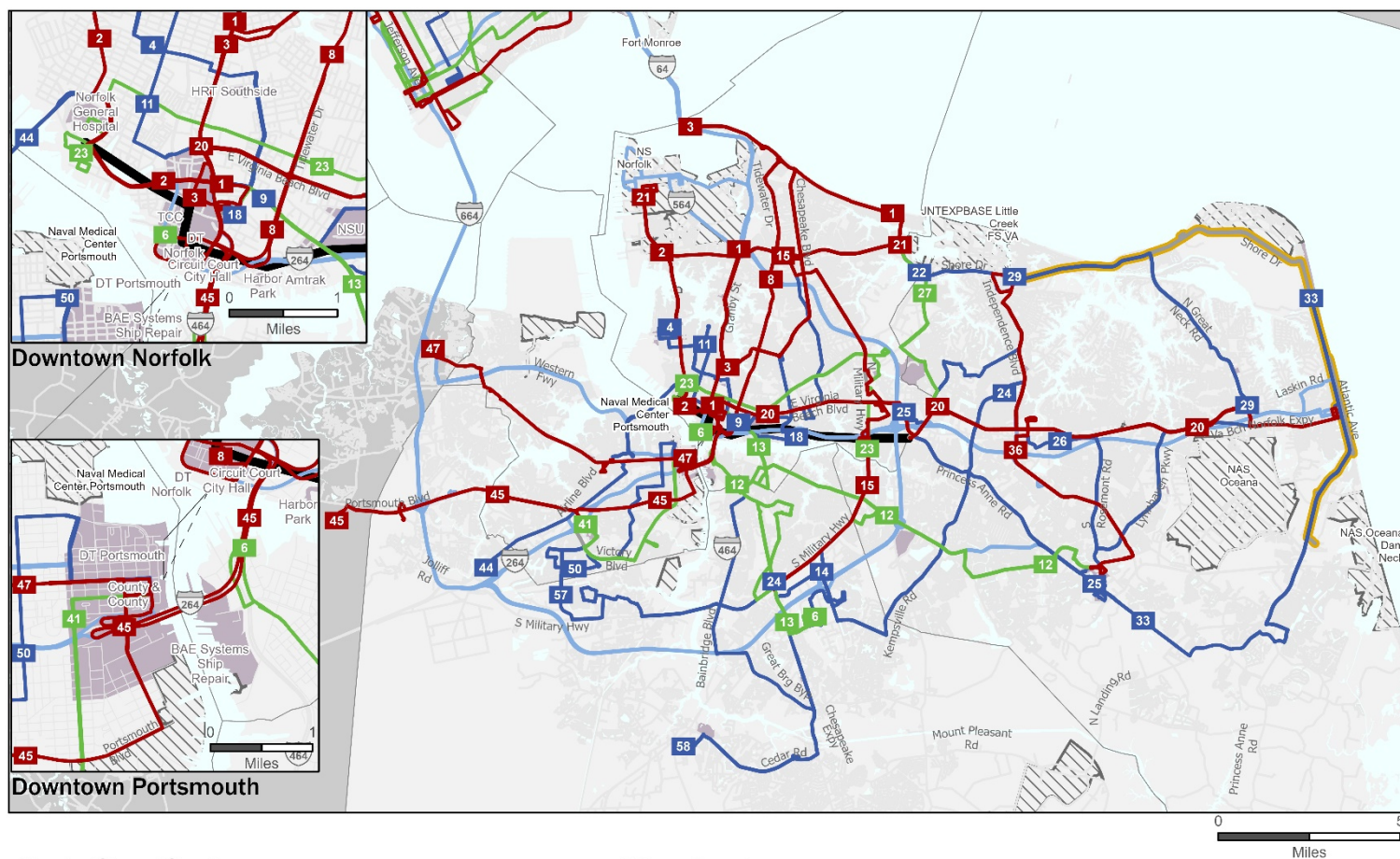
Figure 6-1: Regional Transit Program Route Classifications - Peninsula



PENINSULA: Regional Transit Program Route Classifications



Figure 6-2: Regional Transit Program Route Classifications - Southside



SOUTHSIDE: Regional Transit Program Route Classifications



6.4.1. Regional Backbone

The core of the Program or Regional Transit System (RTS) is the Regional Backbone (shown in **Figure 6-3** and **Figure 6-4**), which comprises 13 routes that traverse major commuting corridors that connect the highest densities of people and jobs in the region. They also feature more direct service (a ratio of 1.6 or better) than other route classifications, making these routes simple to understand and more efficient, saving travel time and operating costs compared to more circuitous routes (**Table 6-1**).

Table 6-1: Regional Backbone Route Characteristics

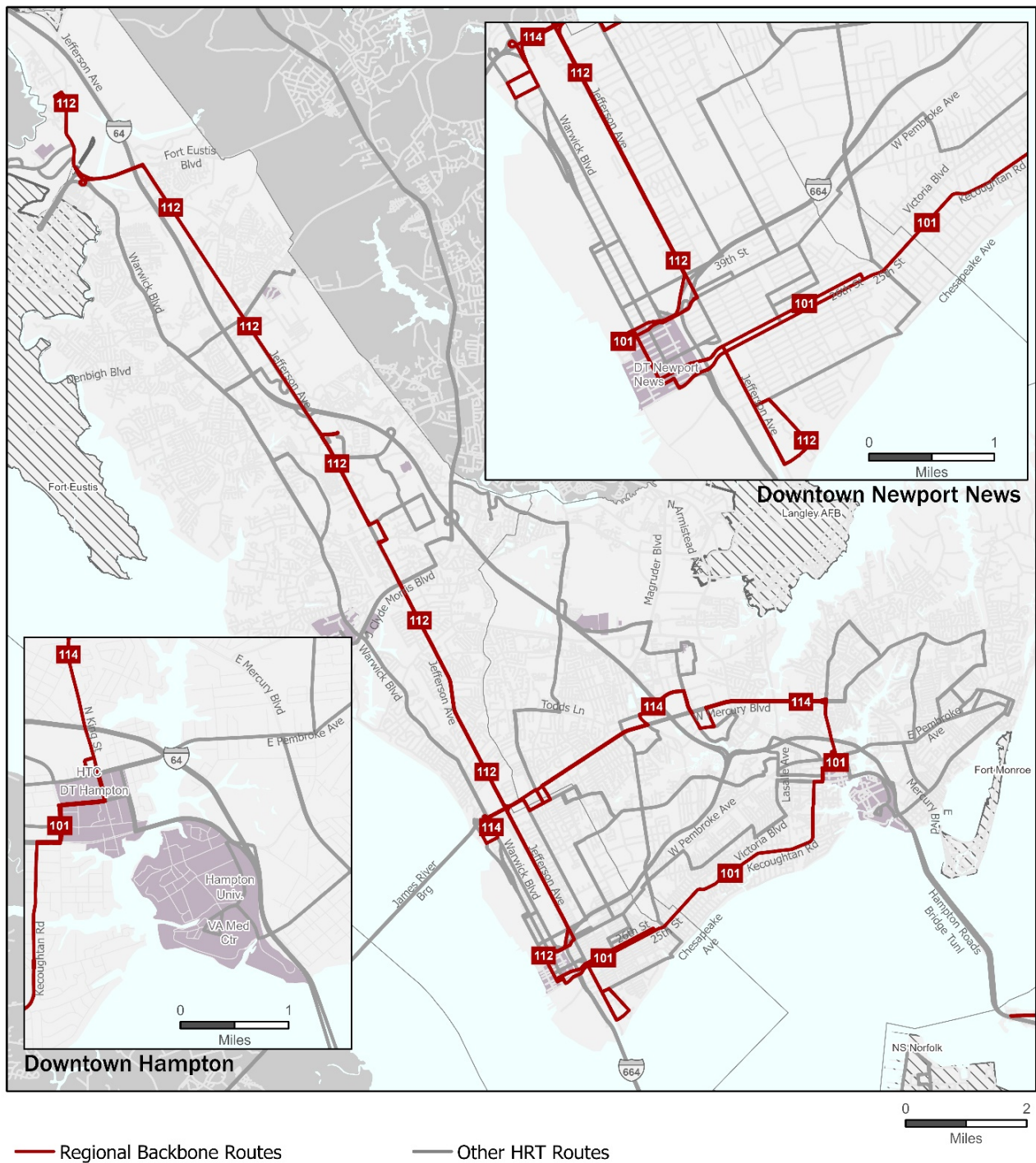
Description	Criteria		
	Interjurisdictional	Population / Job Density	Route Directness
The backbone of bus transit throughout the region, traveling on the highest-demand corridors connecting the most people to the most jobs.	Most will cross jurisdictional boundaries.	Greater than 6,500 people + jobs per square mile, averaged across whole route	1.6 or better

The Regional Backbone services will feature high-frequency, inter-jurisdictional connections with standardized levels of service across jurisdictional boundaries and operate for long hours, seven days a week (**Table 6-2**). These routes feature the highest overall levels of fixed-route bus service HRT will offer.

Table 6-2: Regional Backbone Service Design Standards

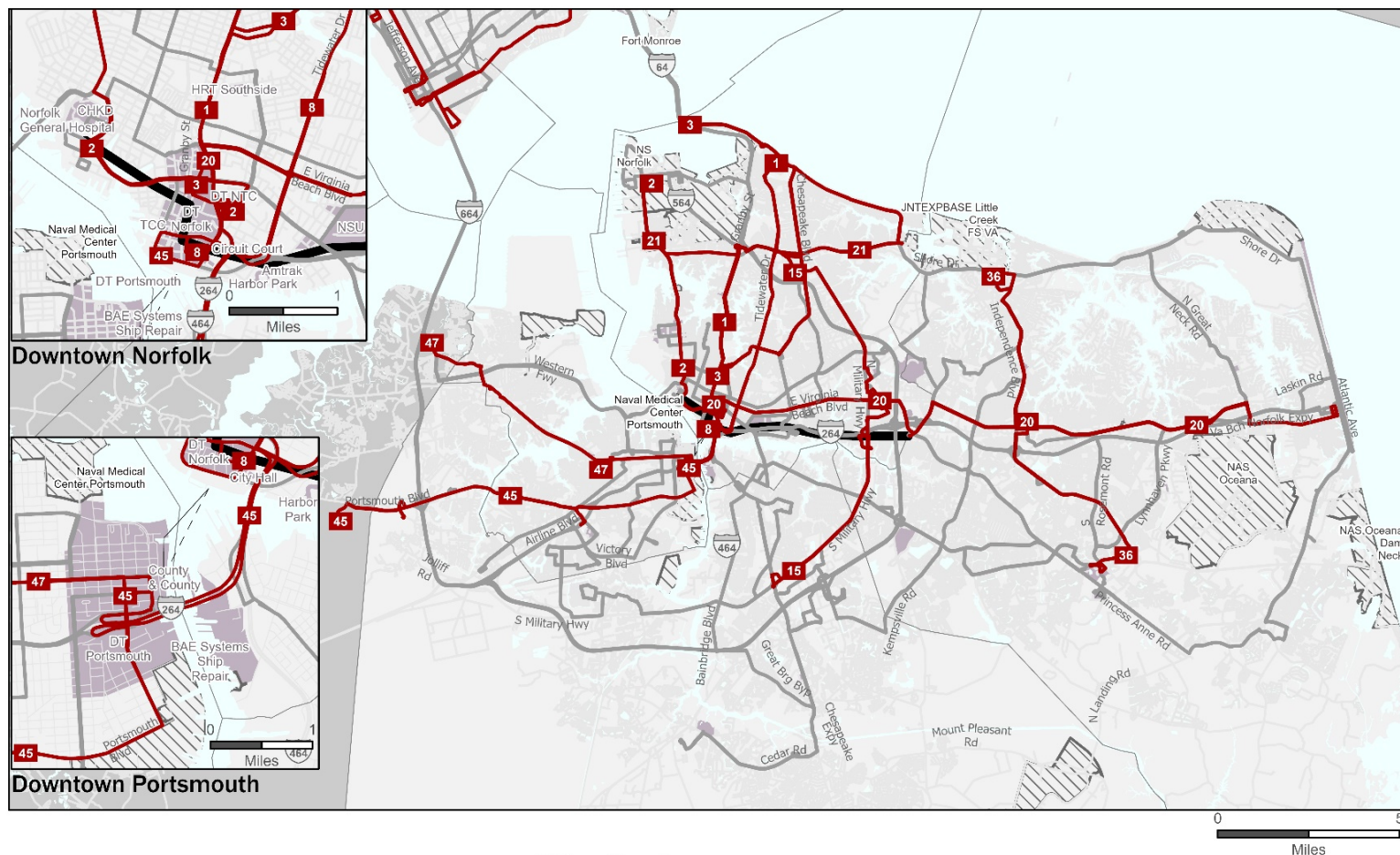
Service Headway				Span of Service
Weekday	Peak	6:00 a.m. – 9:00 a.m. 3:00 p.m. – 6:00 p.m.	15 min	5:00 a.m. – 1:00 a.m.
	Midday	9:00 a.m. – 3:00 p.m.	30 min	
	Evening	6:00 p.m. – 9:00 p.m.	30 min	
Weekend	Base	8:00 a.m. – 6:00 p.m.	30 min	6:00 a.m. – 12:00 a.m.
	Non-base	6:00 a.m. – 8:00 a.m. 6:00 p.m. – 9:00 p.m.	30 min	

Figure 6-3: Regional Transit Program Regional Backbone Routes - Peninsula



PENINSULA: Hampton Roads Regional Transit Program
Regional Backbone Routes

Figure 6-4: Regional Transit Program Regional Backbone Routes - Southside



Other Services

— Regional Backbone Routes

— Light Rail

— Other HRT Routes

- - - Ferry

SOUTHSIDE: Hampton Roads Regional Transit Program Regional Backbone Routes



6.4.2. Limited/Express

Regional Metro Area Express (MAX) routes and Peninsula Commuter Service (PCS) routes are also part of the Program, or RTS. These routes are shown in **Figure 6-5** and **Figure 6-6**. There are 13 existing PCS and MAX routes which fall within the Limited/Express route classification that provide interjurisdictional connections, offering limited stop and direct service to major employment centers (**Table 6-3**). Since these routes offer limited stop service designed to serve commuters traveling to and from work, the service design standards for service headway and span of service are based upon the demand and shift times of the employment centers.

There are several new MAX routes also being recommended for implementation over the next several years:

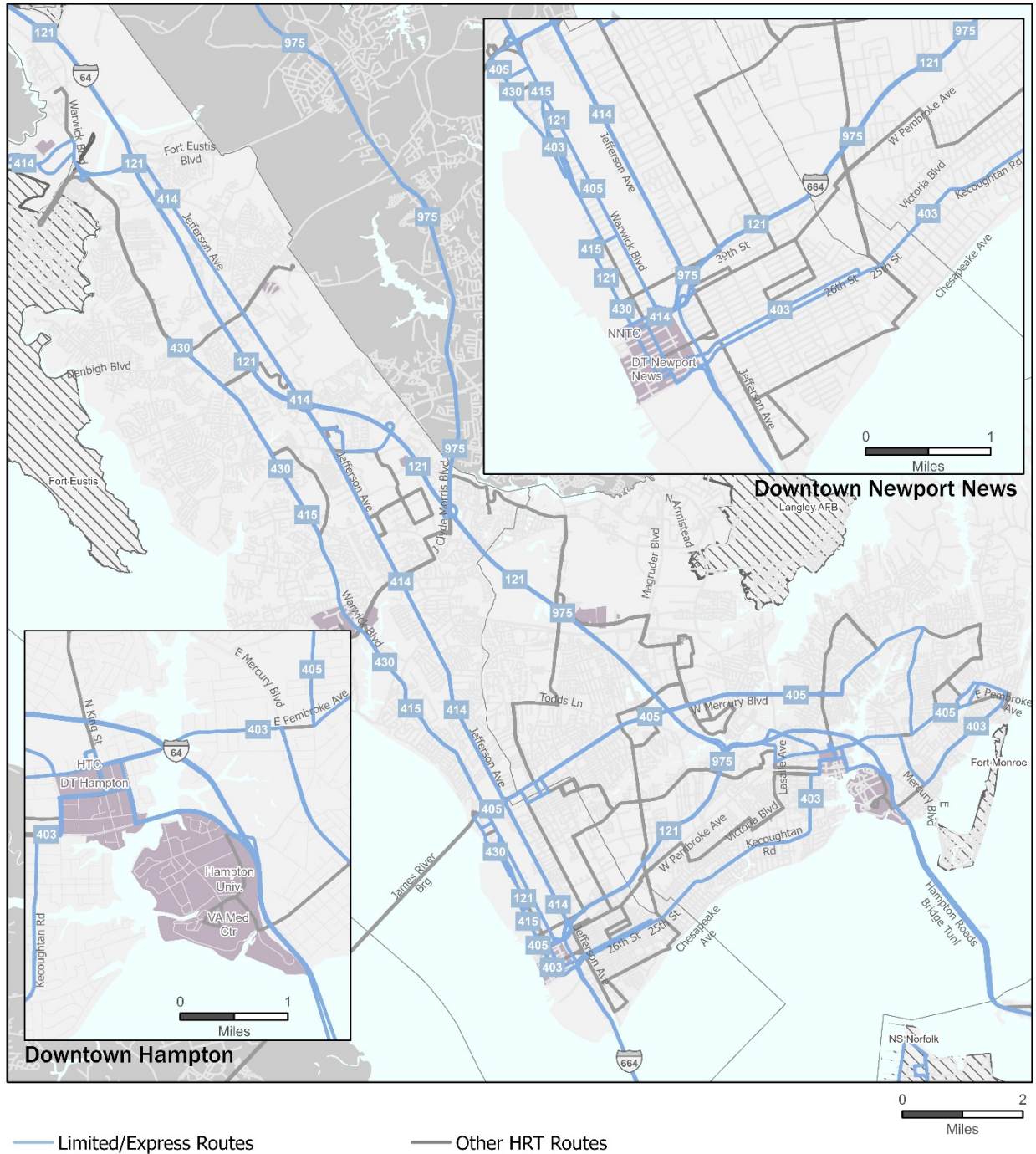
- **Route 970:** Commuter service between Newport News and Portsmouth will be implemented in FY 2023.
- **Route 975:** Commuter service between Newport News and Gloucester will be implemented in FY 2026.
- **Route 980:** Commuter service between Norfolk (DNTC) and new Amazon facilities in Chesapeake and Suffolk will be implemented in FY 2022.

This brings the total number of Limited/Express routes involved with the Program to 16. Additionally, other new potential MAX routes are still being considered. In the next annual TSP update, such potential new MAX routes will be explored, including service to Norfolk Naval Shipyard (Portsmouth).

Table 6-3: Limited/Express Route Characteristics

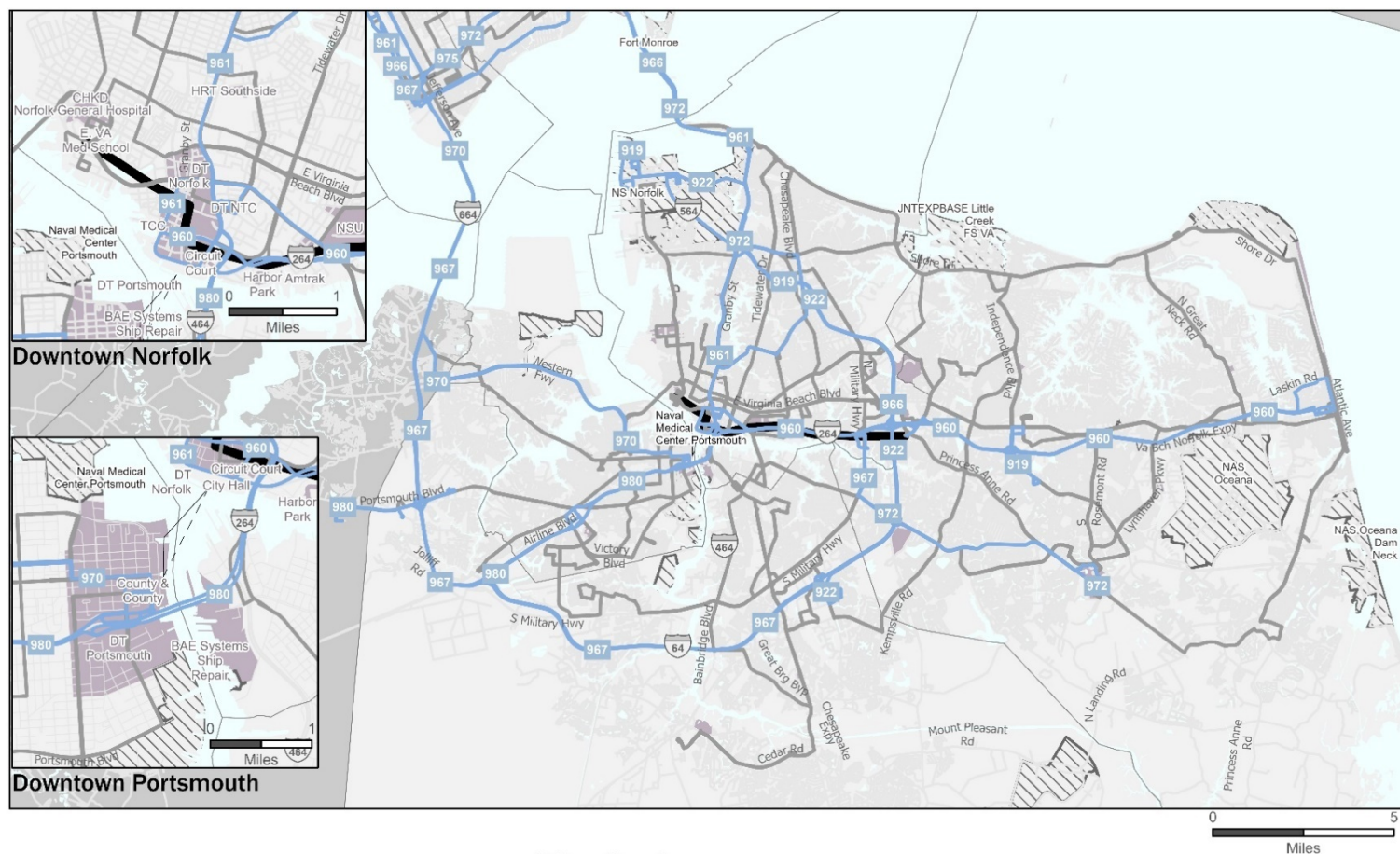
Description	Criteria		
	Interjurisdictional	Population / Job Density	Route Directness
Bus service with limited stops connecting surrounding communities with downtown areas and other major employment sites or regional destinations, often via interstates. Some routes will operate as peak-period commuter service only. Typically accessed via park-and-ride lots at the residential end.	Can operate within a jurisdiction or cross jurisdictional boundaries.	Route serves major trip generators and/or collection points.	N/A

Figure 6-5: Regional Transit Program Limited/Express Routes - Peninsula



PENINSULA: Hampton Roads Regional Transit Program Limited/Express Routes

Figure 6-6: Regional Transit Program Limited/Express Routes - Southside



Other Services

- Limited/Express Routes
- Other HRT Routes

- Light Rail
- - - Ferry

SOUTHSIDE: FY 2023 Weekday AM Peak



6.5. Benefits and Outcomes

As outlined in this section, the Hampton Roads Regional Transit Program of services will:

- Improve access to and from job sites and workforce development sites across the region, increasing employment opportunities and improving economic opportunity for residents.
- Improve mobility options for residents across the region.
- Provide frequent, consistent, and reliable transit options across the region; improve the rider experience by limiting time spent at bus stops, enabling faster transfers, shortening end-to-end trip time, and allowing riders to make trips without relying on schedules; and enhance connections and transfers throughout the entire HRT system through high-frequency service on the Regional Backbone network.

These outcomes are consistent with the recommendations of the Regional Advisory Panel of HRT's *Transit Transformation Project* and the guiding principles unanimously approved in December 2019 by the TDCHR for improving a regional transit system, including: following standards to achieve a more effective bus network, prioritizing high-frequency services on a regional backbone system, and prioritizing connections across jurisdictions.

6.5.1. Regional Connectivity and Level of Service

Table 6-4 shows the jurisdictional connections and major destinations for each of the Regional Backbone routes, accounting for planned realignments where applicable. More details about these routes can be found in **Section 6.6: Route Profiles**. The table displays the level of service in terms of service hours. It first shows the current service hours for these routes and then shows the estimated service hours under a full implementation according to the service design standards, wherein each route will meet or exceed those standards.

Table 6-5 illustrates the jurisdictional connections and major destinations for the MAX and PCS routes, with additional details about these routes also found in **Section 6.6: Route Profiles**. This table also shows the level of service in terms of service hours. The current service hours for these routes are shown in comparison with the estimated service hours under a full implementation according to the service design standards, wherein each route will meet or exceed those standards.

Table 6-4: Regional Backbone Major Destinations and Service Hours

Route	Planned Jurisdictional Connections and Major Destinations	FY 2020 Service Hours	Anticipated FY 2022 Service Hours	Service Hours for Program Implementation
Route 1	Norfolk and Virginia Beach <ul style="list-style-type: none"> ■ Downtown Norfolk Transit Center ■ Evelyn T. Butts Avenue ■ Joint Expeditionary Base Little Creek 	36,398	36,391	58,533
Route 2	Norfolk <ul style="list-style-type: none"> ■ Navy Exchange Mall ■ Downtown Norfolk Transit Center 	19,801	19,765	30,731
Route 3	Norfolk <ul style="list-style-type: none"> ■ Downtown Norfolk ■ Evelyn T. Butts Avenue ■ Ocean View Avenue 	28,315	27,490	31,422
Route 8	Norfolk <ul style="list-style-type: none"> ■ Downtown Norfolk ■ Evelyn T. Butts Avenue 	16,980	16,773	30,282
Route 15	Chesapeake, Norfolk, and Virginia Beach <ul style="list-style-type: none"> ■ Robert Hall ■ Evelyn T. Butts Avenue ■ Military Highway Light Rail Station 	32,467	32,359	45,442

Route	Planned Jurisdictional Connections and Major Destinations	FY 2020 Service Hours	Anticipated FY 2022 Service Hours	Service Hours for Program Implementation
Route 20	Norfolk and Virginia Beach <ul style="list-style-type: none"> Downtown Norfolk Newtown Road Light Rail Station Virginia Beach Oceanfront 	56,053	55,806	88,118
Route 21	Norfolk and Virginia Beach <ul style="list-style-type: none"> Navy Exchange Mall Joint Expeditionary Base Little Creek 	26,910	26,480	40,832
Route 36	Virginia Beach <ul style="list-style-type: none"> Shore Drive/Pleasure House Road Pembroke East TCC Virginia Beach 	8,664	8,718	33,388
Route 45	Chesapeake, Norfolk, Portsmouth, and Suffolk <ul style="list-style-type: none"> Downtown Norfolk Transit Center Midtown Portsmouth Victory Crossing TCC Portsmouth Amazon facility in Chesapeake Amazon facility in Suffolk 	27,472	27,341	44,603
Route 47	Portsmouth and Suffolk <ul style="list-style-type: none"> Downtown Portsmouth Churchland 	16,050	15,802	24,792
Route 101	Hampton and Newport News <ul style="list-style-type: none"> Downtown Newport News Downtown Hampton 	11,313	11,329	16,433
Route 112	Hampton and Newport News <ul style="list-style-type: none"> Ivy Avenue & 6th Street Downtown Newport News Patrick Henry Mall Lee Hall 	22,286	34,235	57,930
Route 114	Hampton and Newport News <ul style="list-style-type: none"> Newmarket Peninsula Town Center 	19,614	19,641	41,676

Table 6-5: Limited/Express Major Destinations and Service Hours

Route	Planned Jurisdictional Connections and Major Destinations	FY 2020 Service Hours	Anticipated FY 2022 Service Hours	Service Hours for Program Implementation
Route 121	Newport News ■ Newport News Transit Center ■ Williamsburg Transportation Center	973	973	973
Route 403	Hampton and Newport News ■ Buckroe Shopping Center ■ Newport News Shipbuilding	211	211	461
Route 405	Hampton and Newport News ■ Newport News Transit Center ■ Newport News Shipbuilding ■ Buckroe Shopping Center	470	470	893
Route 414	Hampton and Newport News ■ Newport News Transit Center ■ Newport News Shipbuilding ■ Jefferson/Oakland	1,704	1,397	1,397
Route 415	Hampton and Newport News ■ Newport News Transit Center ■ Newport News Shipbuilding ■ Denbigh	178	178	380
Route 430	Hampton and Newport News ■ Denbigh Fringe ■ Newport News Transit Center ■ Newport News Shipbuilding	493	493	874
Route 919	Norfolk and Virginia Beach ■ Silverleaf Part & Ride ■ Naval Station Norfolk	1,532	1,532	1,445
Route 922	Chesapeake, Norfolk, and Virginia Beach ■ Greenbrier Mall Park & Ride ■ Indian River Park & Ride ■ Naval Station Norfolk	1,773	1,773	1,375
Route 960	Norfolk and Virginia Beach ■ Downtown Norfolk ■ Virginia Beach Town Center ■ Virginia Beach Oceanfront	10,408	10,413	11,680
Route 961	Hampton, Newport News and Norfolk ■ Downtown Norfolk ■ Downtown Hampton ■ Downtown Newport News	20,483	20,329	20,329
Route 966	Newport News and Virginia Beach ■ Silverleaf Park and Ride ■ Newport News Transit Center ■ Newport News Shipbuilding	1,067	1,049	1,485
Route 967	Chesapeake, Newport News, Norfolk, and Virginia Beach ■ Downtown Newport News ■ Greenbrier Mall ■ Military Highway Light Rail Station ■ Newport News Shipbuilding	3,607	3,696	3,696
Route 970 (new route)	Newport News and Portsmouth ■ Newport News Shipbuilding ■ Downtown Portsmouth	-	-	1,730

Route	Planned Jurisdictional Connections and Major Destinations	FY 2020 Service Hours	Anticipated FY 2022 Service Hours	Service Hours for Program Implementation
Route 972	Virginia Beach and Newport News <ul style="list-style-type: none"> ■ Downtown Newport News ■ Newport News Shipbuilding ■ TCC Virginia Beach 	594	593	1,060
Route 975 (new route)	Newport News and Gloucester <ul style="list-style-type: none"> ■ Newport News Shipbuilding ■ Gloucester 	-	-	604
Route 980 (new route)	Norfolk, Chesapeake, Portsmouth, Suffolk <ul style="list-style-type: none"> ■ Downtown Norfolk ■ Downtown Portsmouth ■ Amazon facility in Chesapeake ■ Amazon facility in Suffolk 	-	1,682	1,736

6.5.2. Program Factors, Objectives, and Metrics

This section further documents positive linkages of Program investments to factors prescribed by SB1038 and HB1726: economic development potential, employment opportunities, mobility, environmental sustainability, and quality of life metrics. **Table 6-6** links the five factors specified in the law, with each factor associated with related objectives and metrics. The objectives represent the outcome that can be anticipated upon full Program implementation.

Table 6-6: Program Investment Factors, Objectives, and Metrics

Factor	Objective	Metrics
Economic Development Potential	Support businesses and support future economic development at local level.	<ul style="list-style-type: none"> ■ Integration with and support for local comprehensive plans, transportation plans, and local or regional economic development strategies. ■ Number of economically distressed areas served.
Employment Opportunities	Provide access to and from jobs and workforce development sites.	<ul style="list-style-type: none"> ■ Number of jobs with access to transit.
Mobility	Provide consistent and reliable transit options across the region.	<ul style="list-style-type: none"> ■ Number of residents with access to transit. ■ Number of jobs and residents with access to high-frequency service with 15-minute headways in the peak period. ■ Access to multi-modal transit options.
Environmental Sustainability	Contribute to improved air quality and reduction of energy use.	<ul style="list-style-type: none"> ■ Equivalent VMT reduction (based on avg. trip length) to Fleet Capacity (multiplied by existing system efficiency of passengers per revenue hour)
Quality of Life	Improve transit travel time and average wait for transit; Provide increased access to transit for disadvantaged populations (low-income, minority, or limited English proficiency).	<ul style="list-style-type: none"> ■ Transit travel time. ■ Average wait for transit. ■ Access to transit for disadvantaged populations (low-income, minority, or limited English proficiency).

6.5.3. Baseline Analyses

The Regional Backbone and Limited/Express routes are measured against a subset of the metrics in **Table 6-6** to determine how best to prioritize the use of Hampton Roads Regional Transit Fund moneys in the phased implementation of the Program. The results of these analyses are discussed below.

Employment Access to Transit

Access to **Employment Opportunities** is a primary consideration for HRT when considering where to place transit service. The Regional Backbone and Limited/Express route improvements will improve access to and from job sites and workforce development sites across the region, increasing employment opportunities and improving economic opportunity for residents. Employment access to transit measures the number of jobs located within walking distance of the Regional Backbone routes and within two miles of the Limited/Express routes' stops.

Employment data used in this analysis is from the Census Longitudinal Employer-Household Dynamics dataset (LEHD).

For Regional Backbone routes (**Table 6-7**), employment was measured within one-half mile of segments with high-frequency service (15-minute headways in the peak periods).⁶ For the routes that operate with a short turn during the peak periods (Routes 3, 45, 47, and 112), 15-minute service is offered on the short turn and 30-minute service is offered along the rest of the route. The segments that have 30-minute service were analyzed with a one-quarter mile buffer along that segment, with the short turn measured at one-half mile as customers are more willing to walk slightly further for higher frequency service. The Regional Backbone routes which provide access to the highest number of jobs are, in order, Route 20, Route 2, and Route 45.

Table 6-7: Employment Access to Regional Backbone Routes

Route	Employment Within 1/4 Mile (for segments that have 30-minute service)	Employment Within 1/2 Mile	Total Employment Access to Regional Backbone Routes
Route 1	-	46,159	46,159
Route 2	-	64,919	64,919
Route 3	577	39,974	40,551
Route 8	-	41,962	41,962
Route 15	-	39,227	39,227
Route 20	-	98,734	98,734
Route 21	-	10,938	10,938
Route 36	-	28,768	28,768
Route 45	2,260	52,440	54,700
Route 47	913	20,023	20,936
Route 101	-	26,102	26,102
Route 112	5,311	44,297	49,608
Route 114	-	28,636	29,636

For Limited/Express routes (**Table 6-8**), the analysis was conducted at the stops rather than along the full alignment as these routes make few stops but travel great distances. A two-mile buffer was used to capture the average distance a commuter would be willing to travel to their workplace via other modes once disembarking from the Limited/Express route. Due to the unique nature of the two largest employment areas in the region, Naval Station Norfolk and Newport News Shipbuilding, Limited/Express routes which serve either of those locations were allotted the full count of employment of these facilities based on the assumption that even if the stop buffer did not encompass the full facility, a commuter would still have access to all of those jobs via other transit options. The PCS/MAX routes which provide access to the highest number of jobs are, in order, Route 961, Route 967, and the new Route 970.

⁶ As with other metrics in Table 6-6, this methodology is consistent with Virginia's MERIT (Making Efficient and Responsible Investments in Transit) program, the statewide transit capital program, in evaluating capital projects for funding; HRT is adapting MERIT metrics where applicable for use with Hampton Roads Regional Transit Program.

Table 6-8: Employment Access to Limited/Express Routes

Route	Employment Within Two Miles of Stops	Employment at Naval Station Norfolk	Employment at Newport News Shipbuilding	Total Employment Access to Limited/Express Routes
Route 121	131,184	-	15,380	146,564
Route 403	131,084	-	15,380	146,464
Route 405	147,291	-	15,380	162,671
Route 414	161,010	-	15,380	176,390
Route 415	147,291	-	15,380	162,671
Route 430	151,291	-	15,380	166,671
Route 919	42,061	60,000	-	102,061
Route 922	73,400	60,000	-	133,400
Route 960	173,277	-	-	173,277
Route 961	233,276	-	15,380	248,656
Route 966	124,946	-	15,380	140,326
Route 967	187,950	-	15,380	203,330
Route 970	167,271	-	15,380	182,651
Route 972	132,387	-	15,380	147,767
Route 975	61,064	-	15,380	76,444
Route 980	108,407	-	-	108,407

Residential Access to Transit

Mobility is another primary consideration for increased and improved transit service. The objective here is to provide consistent and reliable transit options to many people across the region. The measure of this factor is the number of residents with access to transit.

The Regional Backbone and Limited/Express route improvements will improve mobility options for residents across the region. Residential access to transit measures the number of people living within walking distance of the Regional Backbone routes and within two miles of the Limited/Express routes' stops. Population data for this analysis is from the American Community Survey (ACS) 2019 Five-Year estimates.

Following a similar method to the analysis for employment, for Regional Backbone routes (**Table 6-9**), population was measured within one-half mile of segments with high-frequency service (15-minute headways in the peak periods). For the routes that operate with a short turn during the peak periods (Routes 3, 45, 47, and 112), 15-minute service is offered on the short turn and 30-minute service is offered along the rest of the route. The segments that have 30-minute service were analyzed with a one-quarter mile buffer along that segment, with the short turn measured at one-half mile as customers are more willing to walk slightly further for higher frequency service. Regional Backbone routes which provide access to the highest number of residents are, in order, Route 20, Route 1, and Route 36.

Table 6-9: Population Access to Regional Backbone Routes

Route	Population Within 1/4 Mile	Population Within 1/2 Mile	Total Population Access to Regional Backbone Routes
Route 1	-	80,448	80,448
Route 2	--	52,614	52,614
Route 3	7,739	51,638	59,377
Route 8	-	46,029	46,029
Route 15	-	48,872	48,872
Route 20	-	93,019	93,019
Route 21	-	48,270	48,270
Route 36	-	64,246	64,246
Route 45	6,747	34,400	41,148
Route 47	4,025	25,761	29,785
Route 101	-	32,593	32,593
Route 112	9,732	50,326	60,059
Route 114	-	33,960	33,960

For Limited/Express routes (**Table 6-10**), the analysis was conducted around the stops rather than along the full alignment as these routes make few stops but travel great distances. A two-mile buffer was used to capture the average distance a commuter would be willing to travel from their home to board a commuter bus, usually at a park-and-ride lot. The results of these analyses are shown in **Table 6-10**. The Limited/Express routes which provide access to the highest number of employed residents are, in order, Route 961, Route 960, and Route 414.

For Regional Backbone routes, total population was utilized, while for Limited/Express routes, employed population was utilized. The market for commuter trips on Limited/Express routes is a subset of the whole population (e.g., commuters who are traveling to and from work), whereas trips on the Regional Backbone network serve all kinds of destinations throughout the day and week.

Table 6-10: Employed Population Access to Limited/Express Routes

Route	Employed Population Within Two Miles of Limited/Express Routes
Route 121	49,441
Route 403	76,202
Route 405	76,546
Route 414	109,098
Route 415	76,546
Route 430	84,495
Route 919	89,571
Route 922	98,694
Route 960	118,308
Route 961	152,806
Route 966	64,252
Route 967	95,720
Route 970	45,388
Route 972	86,952
Route 975	26,611
Route 980	66,599

Access to High-Frequency Transit

With **Mobility** as a primary consideration with the objective of providing consistent and reliable transit options across the region, another important metric is the combined number of jobs and residents with access to high-frequency services. High-frequency service is defined as service having 15-minute headways in the peak period. This was another area targeted for improved regional transit service as part of HRT's *Transit Transformation Project* and the Transit Strategic Plan.

The high-frequency service offered by the Regional Backbone routes will provide consistent and reliable transit options across the region and improve mobility. Access to high-frequency transit was determined based on the residents and jobs within a half-mile of Regional Backbone routes as described in the **Employment Access to Transit** section and the **Residential Access to Transit** section. The results of this analysis are shown in **Table 6-11**. The routes with the with the highest combined population and employment access to high-frequency transit are Route 1, Route 2, and Route 20, which all serve over 117,000 people and jobs. Route 1 and Route 20 serve a larger population than the other Regional Backbone routes with high-frequency service, while Route 2 and Route 20 serve the greatest number of jobs with high-frequency service.

Table 6-11: Regional Backbone Routes - Population and Employment Access Within a Half-Mile

Route	Population	Employment	Combined Population & Employment
Route 1	80,448	46,159	126,607
Route 2	52,614	64,919	117,533
Route 3	59,377	40,551	99,928
Route 8	46,029	41,962	87,990
Route 15	48,872	39,227	88,099
Route 20	93,019	98,734	191,754
Route 21	48,270	10,938	59,208
Route 36	64,246	28,768	93,015
Route 45	41,148	54,700	95,848
Route 47	29,785	20,936	95,848
Route 101	32,593	26,102	50,721
Route 112	60,059	49,608	58,695
Route 114	33,960	28,636	109,666

Multi-Modal Transit Connections

Access to multi-modal transit options is another primary consideration for the implementation of improved and increased transit services. Implementing the high-frequency network will not only increase levels of service, but will enhance connections throughout the entire HRT system. The increased frequency plus the standardization of spans across the region will result in more consistent and reliable transfer opportunities for all.

Table 6-12 shows the transit connections each Regional Backbone route provides. The results are broken down into different types of HRT service classifications, as well as other non-HRT services. Route 20, Route 101, and Route 112 have the highest number of connections to all types of HRT routes. Routes 2, 8, 15, 20, and 45 connect to The Tide light rail system. Routes 45, 47, and 112 connect to neighboring transit systems.

Table 6-12: Multi-Modal Transit Connections

Route	Number of Connections to Limited/Express Routes	Number of Connections to Other Regional Backbone Routes	Number of Connections to Local Priority and Coverage Routes	Total Number of Connections to Other HRT Routes	Connection to Light Rail	Connection to Other Systems
Route 1	3	7	10	20	-	-
Route 2	3	6	8	17	Yes	-
Route 3	3	7	8	18	-	-
Route 8	3	7	8	18	Yes	-
Route 15	3	5	9	17	Yes	-
Route 20	3	7	16	26	Yes	-
Route 21	1	5	3	9	-	-
Route 36	3	1	8	12	-	-
Route 45	5	6	10	21	Yes	Suffolk
Route 47	1	1	3	5	-	Suffolk
Route 101	13	2	9	24	-	-
Route 112	12	2	9	23	-	WATA
Route 114	8	2	10	20	-	-

Average Wait for Transit

Time is a valuable commodity for Hampton Roads commuters. The stated objective for the **Quality of Life** factor is to improve transit travel time and average wait times for transit, and to provide increased access to transit for disadvantaged populations (low-income, minority, or limited English proficiency). Average wait for transit is a useful metric for this factor.

Reducing wait time on the Regional Backbone routes will improve quality of life for HRT riders by limiting time spent at outdoor bus stops, enabling faster transfers, shortening end-to-end trip time, and allowing riders to make trips without relying on schedules. The average wait time for transit is measured as half the time in between bus arrivals, or half the headway, for each route. **Table 6-13** shows the current and planned average wait time for the peak, midday, and evening weekday periods. For routes with short turn service where effective headways are shorter, the average wait time for the short turn segment is shown. Under the planned service in the Program, many routes would have wait times cut in half, with all Regional Backbone average wait times at 7.5 minutes during peak periods, either 7.5 or 15 minutes during the midday, and 15 minutes during the evening.

Table 6-13: Regional Backbone Average Wait Time

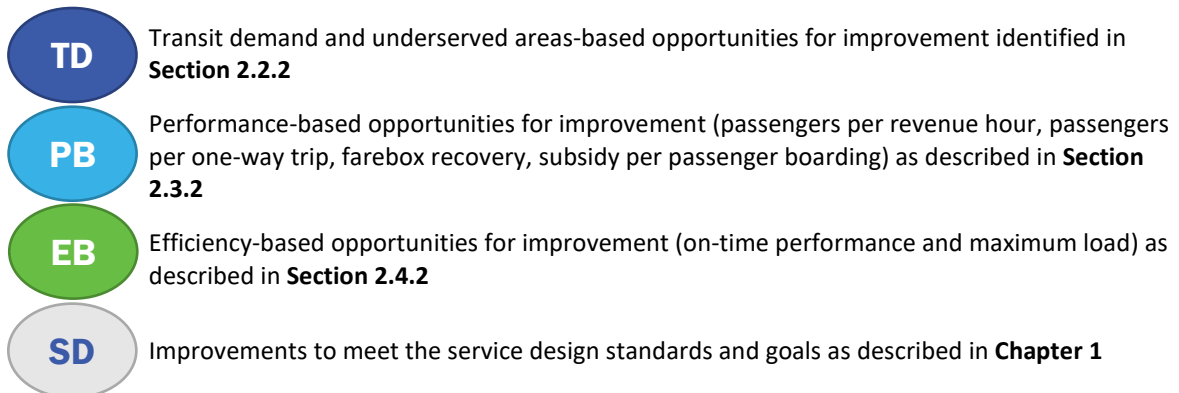
Route	Weekday Peak		Weekday Midday		Weekday Evening	
	Current average wait (mins)	New average wait (mins)	Current average wait (mins)	New average wait (mins)	Current average wait (mins)	New average wait (mins)
Route 1	7.5	7.5	15.0	7.5	15.0	15.0
Route 2	15.0	7.5	15.0	7.5	15.0	15.0
Route 3	7.5	7.5	15.0	7.5	15.0	15.0
Route 8	15.0	7.5	15.0	7.5	15.0	15.0
Route 15	7.5	7.5	15.0	7.5	15.0	15.0
Route 20	7.5	7.5	15.0	7.5	15.0	15.0
Route 21	15.0	7.5	15.0	7.5	15.0	15.0
Route 36	15.0	7.5	30.0	15.0	30.0	15.0
Route 45	7.5	7.5	15.0	15.0	15.0	15.0
Route 47	7.5	7.5	15.0	15.0	15.0	15.0
Route 101	17.5	7.5	17.5	15.0	30.0	15.0
Route 112	15.0	7.5	15.0	7.5	15.0	15.0
Route 114	15.0	7.5	15.0	7.5	30.0	15.0

HRT will carefully track performance and build upon this baseline assessment of program factors, objectives, and metrics used for the Hampton Roads Regional Transit Program as it is implemented.

6.6. Route Profiles

This section contains route profiles that describe the planned service improvements under the Program. There are 13 Regional Backbone routes and 16 Limited/Express routes in the Program. Each route profile contains:

- A description of the service changes.
- The justifications for the service changes:
 - Key Performance Indicators which detail each route’s performance, are discussed when relevant to a service change (full performance analysis data can be found in **Chapter 2, Section 2.3**).
 - Justifications including reference to the assessment of transit demand and underserved area opportunities for improvement from **Chapter 2, Section 2.2.2**.
 - Icons which provide quick reference to the opportunities present for each route:

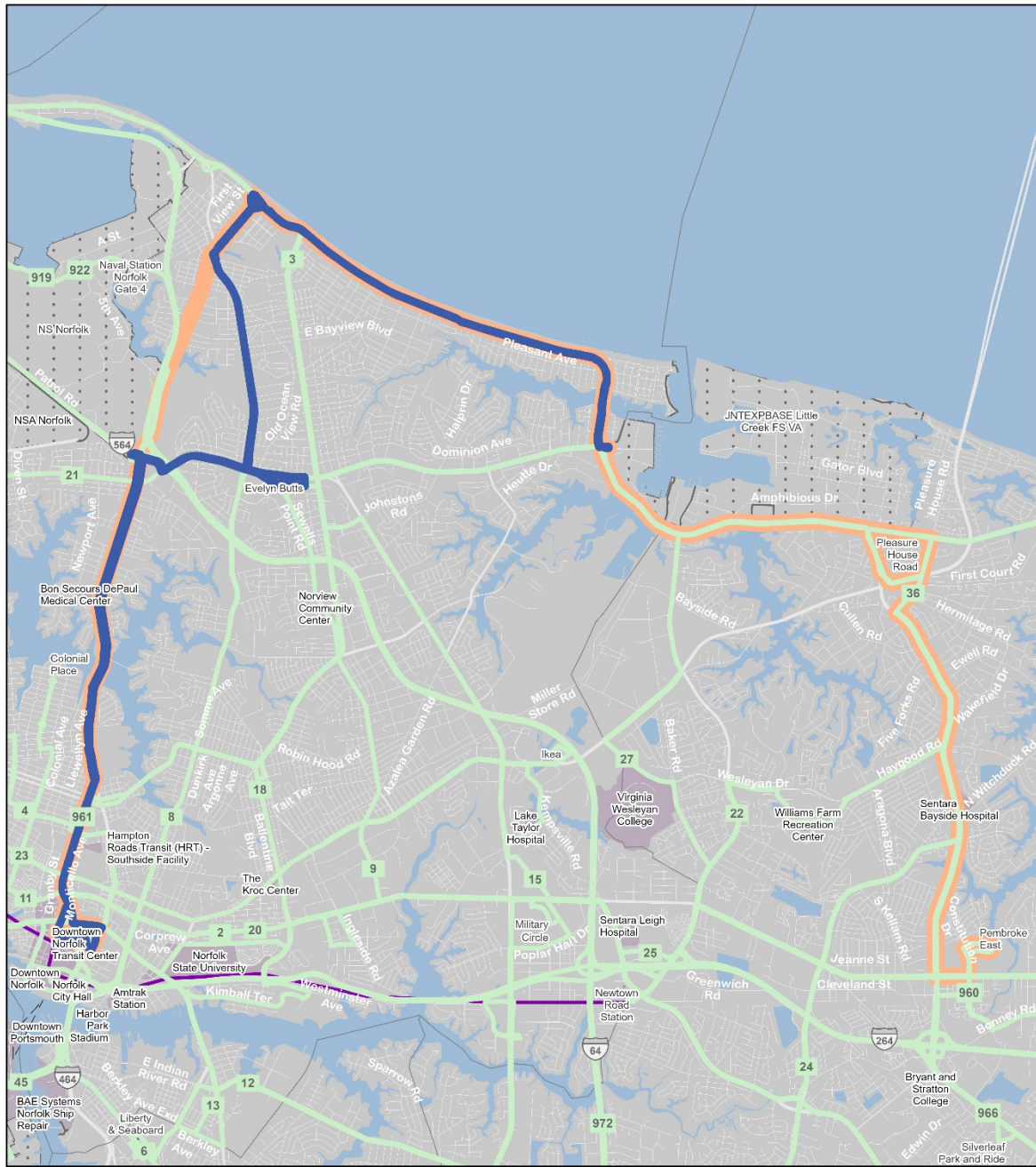


- A table showing the route’s service classification.
- A table showing the origins and destinations as well as the jurisdictions served, comparing existing service to the planned service.
- A table comparing level of service—span and headway—between the existing service and the service targets⁷ for the route:
 - On weekdays the periods shown are approximately associated with the following times, but would vary based on demand:
 - **Early:** Before 6:00 AM
 - **AM Peak:** 6:00 AM to 9:00 AM
 - **Midday:** 9:00 AM to 3:00 PM
 - **PM Peak:** 3:00 PM to 6:00 PM
 - **Evening:** 6:00 PM to 11:00 PM
 - **Late Night:** After 11:00 PM
 - On weekends the periods shown are approximately associated with the following times:
 - **Base:** 8:00 AM – 6:00 PM
 - **Non-Base:** 6:00 AM. – 8:00 AM and 6:00 PM – 9:00 PM
 - **Early/Late:** before 6:00 AM and after 9:00 PM
- A place for any special notes that apply to the route.
- A map showing the route, other related routes, and other relevant transportation information.

⁷ The service targets describe the span and frequency a route would need to achieve in order to fulfill the service design standards for its service classification. Not all routes’ service targets are met due to individual cost constraints of each of the jurisdictions.



Route 1



Route 1

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary

0 2
Miles



Route 1

Service Classification
Regional Backbone

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Downtown Norfolk Transit Center / Pembroke East	Downtown Norfolk Transit Center / Joint Expeditionary Base Little Creek
Jurisdictions	Norfolk, Virginia	Norfolk

Level of Service			
Span			
		Existing	Planned
Weekday		4:44 AM - 1:30 AM	4:44 AM - 1:30 AM
Saturday		4:40 AM - 1:31 AM	4:40 AM - 1:31 AM
Sunday		5:37 AM - 1:30 AM	4:40 AM - 1:30 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	15	15
	Midday	30	15
	PM Peak	15	15
	Evening	40	30
	Late Night	60	60
Saturday	Base	30	15
	Non-Base	30	30
	Early / Late	60	60
Sunday	Base	60	15
	Non-Base	60	30
	Early / Late	60	60

Note
This route's existing service operates with regular short turns. The existing headways that are listed in this table may not necessarily apply to the full length of the existing route.

Service Changes

- Route 1 will operate along its current alignment between the Downtown Norfolk Transit Center (DNTC) and Wards Corner. It will be realigned at Wards Corner and turn onto Little Creek Boulevard to service Evelyn T. Butts. Route 1 will travel on Tidewater Drive between Little Creek Boulevard and Lenox Avenue, replacing existing service on Granby Street. Between Lennox Avenue and Joint Expeditionary Base (JEB) Little Creek Route 1 will operate along its existing alignment on Ocean View Avenue. Service east of the JEB Little Creek will be discontinued on Route 1; however, much of the service along the discontinued segments will be covered by the realigned Routes 27 and 36.
- Existing short turns on Route 1 will be eliminated so that all trips operate the full length of the route.
- Weekday span of service remains the same as current Route 1 service. Route 1 will operate with 15-minute service between the AM and PM peak periods. In the early and evening periods on weekdays service will be provided at half hour headways. The route will operate hourly after 11:00 PM on weekdays.
- Saturday service span will not change and 15-minute service will be provided from 8:00 AM to 6:00 PM. Sunday span of service and headways will be improved to match the increase of service on Saturdays.



Justification

- Simplifying the route by shortening it and eliminating short turns will standardize service levels across the entire route and will create a simpler schedule and map for customers to understand.
- This corridor warrants 15-minute service on weekdays in the peak periods and midday due to the transit market demand and activity centers served along the alignment (Granby Street is a key north-south corridor in Norfolk south of Little Creek Rd). This corridor has a high concentration of areas with opportunities for improvement of service according to the multimodal service index analysis from **Chapter 2, Section 2.2.2**.
- The service levels for Route 1 meet the service standards defined for Regional Backbone routes.

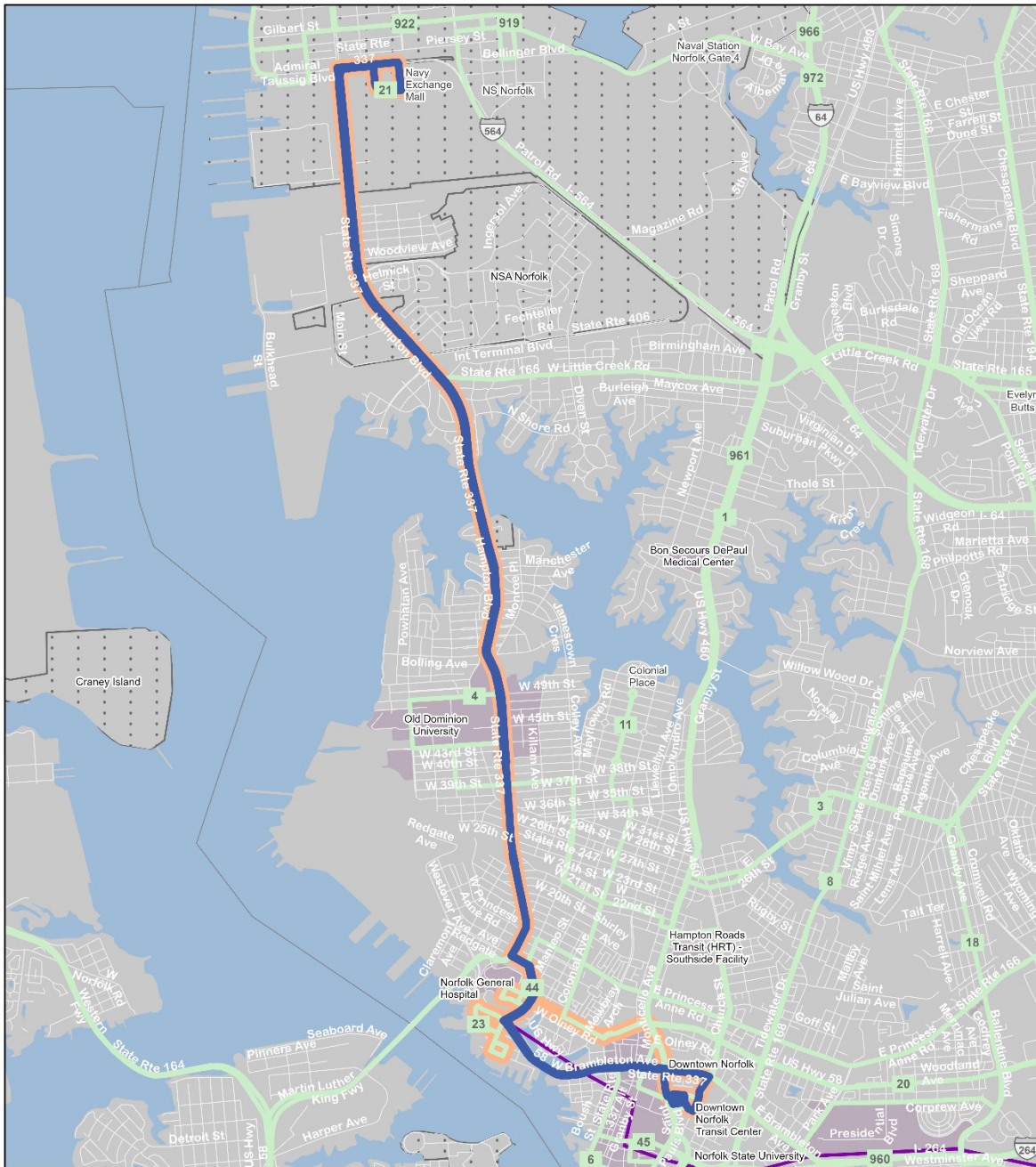
Route 1

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	No changes.			
FY 2024	<p>Route 1 will operate along its current alignment between the Downtown Norfolk Transit Center (DNTC) and Wards Corner. It will be realigned at Wards Corner and turn onto Little Creek Boulevard to service Evelyn T. Butts. Route 1 will travel on Tidewater Drive between Little Creek Boulevard and Lenox Avenue, replacing existing service on Granby Street. Between Lennox Avenue and Joint Expeditionary Base (JEB) Little Creek Route 1 will operate along its existing alignment on Ocean View Avenue. Service east of the JEB Little Creek will be discontinued on Route 1; however, much of the service along the discontinued segments will be covered by the realigned Routes 27 and 36.</p> <p>Existing short turns on Route 1 will be eliminated so that all trips operate the full length of the route.</p> <p>Sunday span will be increased to 4:40 AM - 1:30 AM.</p> <p>Headway changes: weekday evening headways to 30 minutes, weekday midday headways to 15 minutes, Saturday and Sunday base headways to 15 minutes, and Sunday non-base headways to 30 minutes.</p>	✓	✓	✓
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 2



Route 2

Focus Route

- Planned Alignment
- Existing Alignment

Planned System

Light Rail

Ferry

Military Base

Activity Center

City Boundary

0 1
Miles



Route 2

Service Classification
Regional Backbone

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Navy Exchange Mall / Downtown Norfolk Transit Center	Navy Exchange Mall / Downtown Norfolk Transit Center
Jurisdictions	Norfolk	Norfolk

Level of Service			
Span			
		Existing	Planned
Weekday		4:51 AM - 11:42 PM	4:51 AM - 1:00 AM
Saturday		5:11 AM - 1:04 AM	5:11 AM - 1:00 AM
Sunday		5:28 AM - 12:10 AM	5:11 AM - 1:00 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	30	15
	Midday	30	15
	PM Peak	30	15
	Evening	49	30
	Late Night	60	60
Saturday	Base	60	30
	Non-Base	60	30
	Early / Late	60	60
Sunday	Base	60	30
	Non-Base	60	30
	Early / Late	60	60

Note

The planned 15-min midday service is not funded by HRRTF; this midday level of service is higher than what was included in the regional funding plan.

Service Changes

- Route 2 will be realigned to travel on Hampton Boulevard, Redgate Avenue, Colley Avenue, and Brambleton Avenue in order to streamline the service through Downtown Norfolk. The realigned Route 2 will be more direct compared to its existing alignment. Route 2 will still operate within a short walking distance of Norfolk General Hospital via Colley Avenue. Route 23 will continue to serve the Fort Norfolk area where Route 2 will no longer serve. Route 2 will no longer service Virginia Beach Boulevard (covered by Route 11) or Olney Road (two low-performing stops will lose service, each serving approximately two riders per day).
- Headways will be improved to 15 minutes during the weekday peak periods and midday and to 30 minutes during weekday evening, Saturday base and non-base, and Sunday base and non-base periods.
- Weekend service will be provided between 5:11 AM and 1:00 AM and will be offered at half hour intervals through much of the service day.



Justification

- The multimodal service index analysis from **Chapter 2, Section 2.2.2**, reveals areas served by Route 2 as major activity generators. Providing more direct service and shorter headways will improve this route and could attract more riders.
- The service levels for Route 2 meet the service standards defined for Regional Backbone routes.

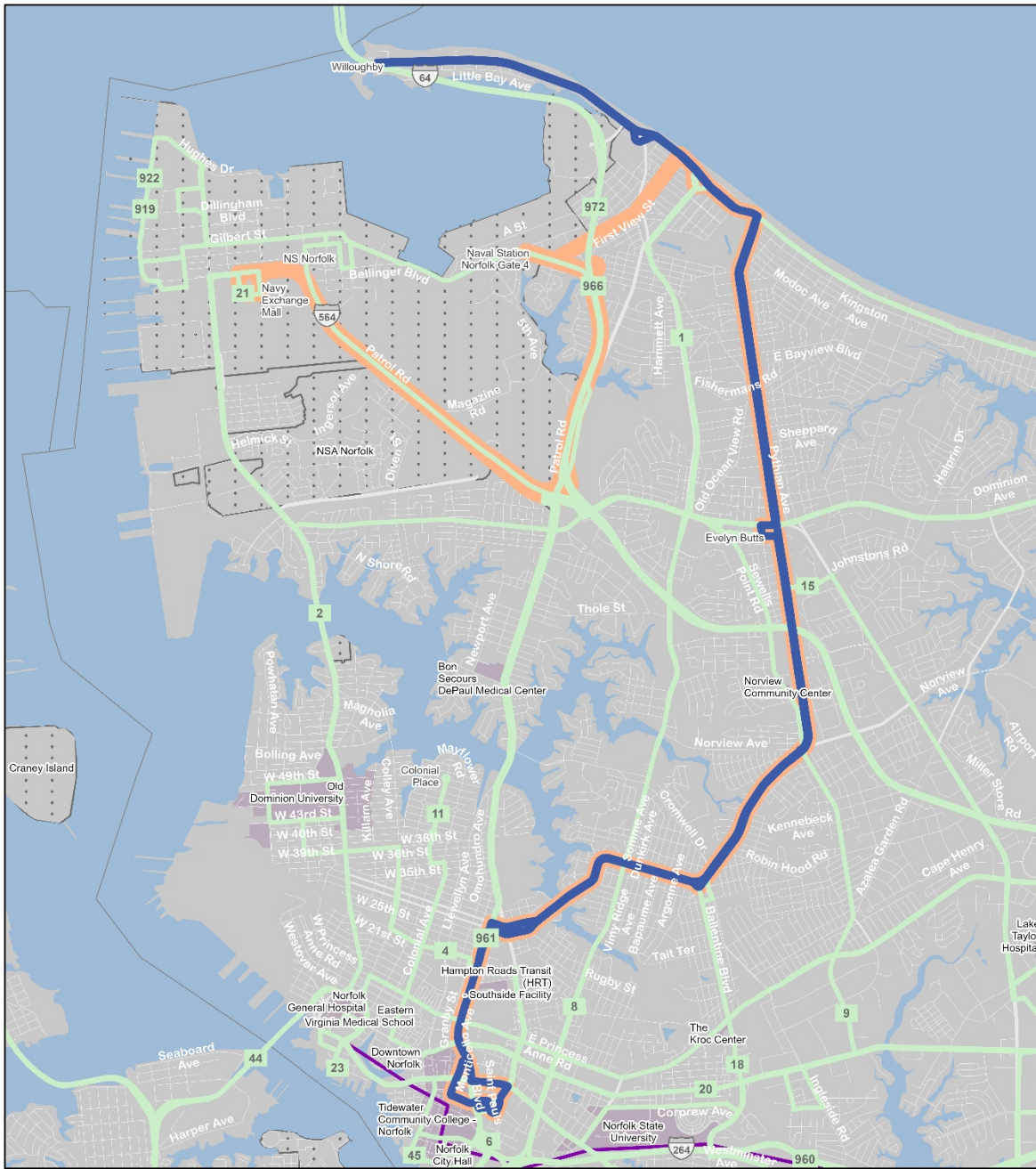
Route 2

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	<p>Route 2 will be realigned to travel on Hampton Boulevard, Redgate Avenue, Colley Avenue, and Brambleton Avenue in order to streamline the service through Downtown Norfolk. The realigned Route 2 will be more direct compared to its existing alignment. Route 2 will still operate within a short walking distance of Norfolk General Hospital via Colley Avenue. Route 23 will continue to serve the Fort Norfolk area where Route 2 will no longer serve. Route 2 will no longer service Virginia Beach Boulevard (covered by Route 11) or Olney Road (two low-performing stops will lose service, each serving approximately two riders per day).</p> <p>Spans will be improved: weekday span to 4:51 AM - 1:00 AM and Saturday and Sunday span to 5:11 AM - 1:00 AM.</p> <p>Headways will be improved: 15 minutes during weekday peak period; 30 minutes during weekday evening, Saturday base and non-base, and Sunday base and non-base periods.</p>	✓	✓	
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	Improve weekday midday headway to 15 minutes.			✓
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 3



Route 3

Focus Route

- Planned Alignment
- Existing Alignment

Planned System

Light Rail

Ferry

Military Base

Activity Center

City Boundary

0 2
Miles



Route 3

Service Classification		
Regional Backbone		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Downtown Norfolk / Naval Station Norfolk	Downtown Norfolk / Evelyn T. Butts Avenue / Ocean View Avenue
Jurisdictions	Norfolk	Norfolk

Level of Service			
Span			
		Existing	Planned
Weekday		4:51 AM - 1:27 AM	4:51 AM - 1:27 AM
Saturday		5:21 AM - 1:27 AM	5:21 AM - 1:34 AM
Sunday		5:59 AM - 12:31 PM	5:21 AM - 1:34 AM
Headway			
		Existing	Planned
Weekday	Early	30	30 / 60
	AM Peak	15	15 / 30
	Midday	30	15 / 30
	PM Peak	15	15 / 30
	Evening	49	30 / 60
	Late Night	60	60
Saturday	Base	30	30
	Non-Base	30	30 / 60
	Early / Late	60	60
Sunday	Base	60	30
	Non-Base	60	30 / 60
	Early / Late	60	60

Note

This route's existing service operates with regular short turns. The existing headways that are listed in this table may not necessarily apply to the full length of the existing route. This route's planned service also operates with short turns. The two numbers listed in the table show the headways for the portions of the route with and without the short turn. To see where the short turn operates, please refer to the Service Changes bullets.

Service Changes

- The northern end of Route 3 will be realigned to serve Ocean View Avenue to Willoughby (covering a portion of the eliminated Route 5), providing a one-seat ride between Willoughby and Downtown Norfolk. Navy Exchange Mall will no longer be served via Route 3. To reach the Navy Exchange Mall passengers may transfer at Evelyn T. Butts to Route 21.
- On weekdays during the peak periods and midday period service will operate on a short turn between DNTC and Evelyn T. Butts every 15 minutes. During the early and evening time periods the short turn service will operate every half hour. Hourly service will be offered the full length of the route from Willoughby to DNTC during the late night period. Service to Willoughby will be hourly in the early and evening periods, and during the peak periods and midday it will increase to half hour headways. Route 3 will maintain its existing weekday span.
- Weekend service will operate every half hour between 6:00 AM and 9:00 PM from Willoughby to DNTC. In the non-base weekend period, service will operate every half hour on the short turn between Evelyn T. Butts and DNTC, and hourly along the full length of the route. In the early/late period hourly service will be offered on the full length of the route. Span of service on Sunday will be expanded to match Saturday.



Justification

- Route 3's underperformance on on-time performance warrants a change in service in an effort to make the route operate more efficiently: its on-time performance is 59 percent, well short of the benchmark of 85 percent.
- Shortening headways on the weekend should encourage additional service usage.
- Service to Willoughby, which is currently offered every hour during weekday periods, will now be offered every half hour during the peak periods, which should help encourage additional service usage.
- The service levels for Route 3 meet the service standards defined for Regional Backbone routes.

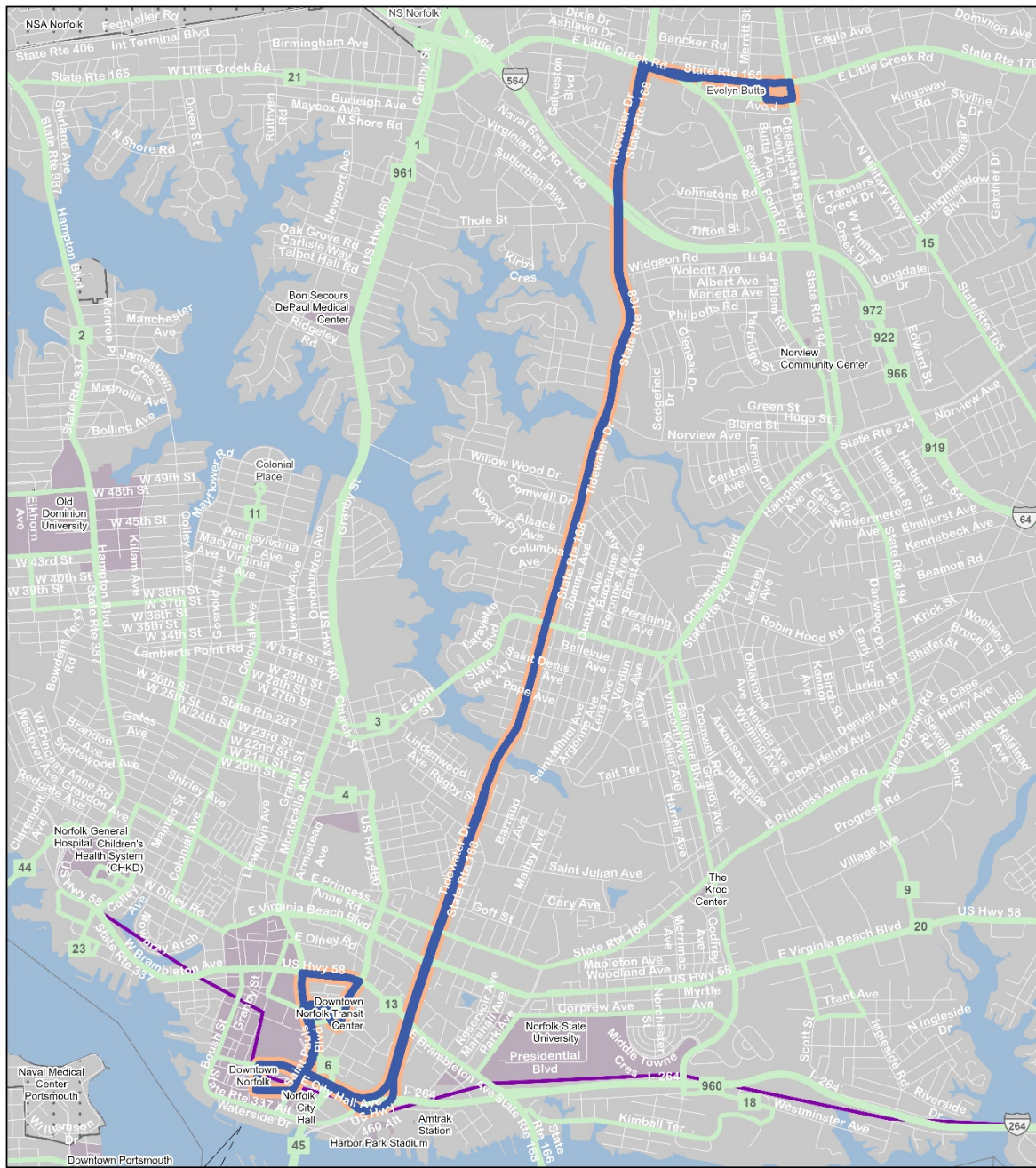
Route 3

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	<p>The northern end of Route 3 will be realigned to serve Ocean View Avenue to Willoughby (covering a portion of the eliminated Route 5), providing a one-seat ride between Willoughby and Downtown Norfolk. Navy Exchange Mall will no longer be served via Route 3. To reach the Navy Exchange Mall passengers may transfer at Evelyn T. Butts to Route 21.</p> <p>Sunday span is improved to 5:21 AM - 1:34 AM, to match Saturday span. Headways are improved to 15 minutes on the short turn during the weekday midday period. Weekday evening headways are improved to 30 minutes on the short turn during the entire period. On Sunday, base headways are improved to 30 minutes on the full route and non-base headways are improved to 30 minutes on the short turn.</p>	✓	✓	✓
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 8



Route 8

Focus Route

- Planned Alignment
- Existing Alignment

Planned System

Light Rail

Ferry

Military Base

Activity Center

City Boundary

0 1
Miles



Route 8

Service Classification
Regional Backbone

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Downtown Norfolk / Evelyn T. Butts Avenue	Downtown Norfolk / Evelyn T. Butts Avenue
Jurisdictions	Norfolk	Norfolk

Level of Service			
Span			
		Existing	Planned
Weekday		5:18 AM - 12:15 AM	5:00 AM – 1:00 AM
Saturday		5:42 AM - 12:45 AM	5:40 AM – 12:00 AM
Sunday		6:40 AM - 8:58 PM	5:40 AM – 12:00 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	30	15
	Midday	30	15
	PM Peak	30	15
	Evening	42	30
	Late Night	60	60
Saturday	Base	30	30
	Non-Base	30	30
	Early / Late	60	60
Sunday	Base	60	30
	Non-Base	-	30
	Early / Late	-	60

Note

The planned 15-min midday service is not funded by HRRTF; this midday level of service is higher than what was included in the regional funding plan.

Service Changes

- No changes from existing service alignment.
- As a Regional Backbone route, on weekdays Route 8 will provide service between 5:00 AM and 1:00 AM and will operate with 15-minute service in the AM and PM peak periods and midday; half hour service in the early and evening periods; and hourly service in the late-night period.
- On weekends Route 8 will operate between 5:40 AM and 12:00 AM, which is a slight decrease in hours on Saturday but a longer day of service on Sunday. Half hour service will be offered through much of the day, with hourly service being offered during the early and late-night periods.



Justification

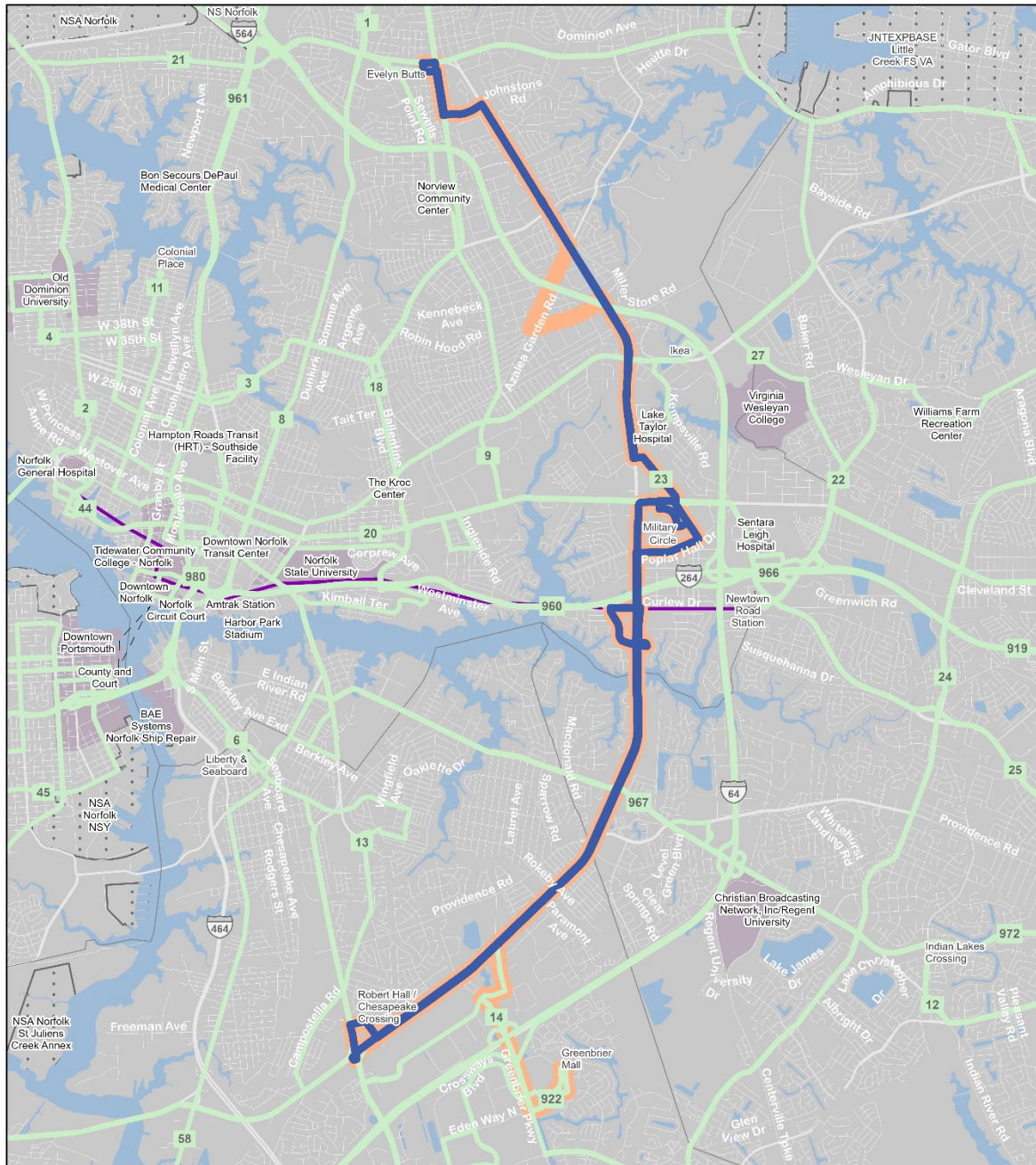
- Overall, Route 8 performs very well based on the six Key Performance Indicators (KPI). Its farebox recovery ratio is over 25 percent and passengers per revenue mile is 22.
- Increasing weekday peak period and midday service to 15-minute headways along the existing alignment should help increase service utilization and will also act as an important connecting service to several other routes.
- The service levels for Route 8 meet the service standards defined for Regional Backbone routes.

Route 8

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	Improve weekday span to 5:00 AM - 1:00 AM; change Saturday span to 5:40 AM - 12:00 AM; improve Sunday span to 5:40 AM - 12:00 AM. Improve weekday peak headway to 15 minutes. Improve headways to 30 minutes during weekday evening, and on Sundays in the base and non-base periods.	✓	✓	
FY 2026	Improve weekday midday headway to 15 minutes.			✓
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			

Route 15



Route 15

Focus Route

- Planned Alignment
- Existing Alignment

— Planned System

— Light Rail

--- Ferry

Military Base

Activity Center

City Boundary



Route 15

Service Classification		
Regional Backbone		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Robert Hall Boulevard / Evelyn T. Butts Avenue	Robert Hall Boulevard / Evelyn T. Butts Avenue
Jurisdictions	Chesapeake, Norfolk, Virginia Beach	Chesapeake, Norfolk, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		4:48 AM - 1:17 AM	5:00 AM - 1:15 AM
Saturday		5:18 AM - 12:45 AM	5:18 AM - 12:00 AM
Sunday		6:46 AM - 12:45 AM	5:18 AM - 12:00 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	15	15
	Midday	30	15 / 30
	PM Peak	15	15
	Evening	30	30
	Late Night	60	60
Saturday	Base	30	30
	Non-Base	60	30
	Early / Late	60	60
Sunday	Base	60	30
	Non-Base	60	30
	Early / Late	60	60

Note

This route's existing service operates with regular short turns. The existing headways that are listed in this table may not necessarily apply to the full length of the existing route. This route's planned service also operates with short turns. The two numbers listed in the table show the headways for the portions of the route with and without the short turn. To see where the short turn operates, please refer to the route description in the Service Changes bullets. The planned 15-min midday service is not funded by HRTF; this midday level of service is higher than what was included in the regional funding plan.

Service Changes

- Route 15 will be streamlined along Military Highway by eliminating the diversion onto Azalea Garden Road and Robin Hood Road.
- Route 15 will no longer serve Greenbrier Mall; all trips to Chesapeake will terminate at Robert Hall, allowing for a higher number of connections for passengers on this Regional Backbone route, where there is a higher concentration of other HRT routes.
- Short turn service will be eliminated on Route 15 so that the target headways can be provided across the whole length of the route (a short turn will be in effect during the weekday midday period in order to provide new 15-minute midday service within the city of Norfolk between Evelyn T. Butts and the Military Highway light rail station).
- Weekend span will be shortened to end at 12:00 AM. Sunday service will begin earlier, at 5:18 AM, to match Saturday service. On the weekends half hour headways will be offered from 6:00 AM to 9:00 PM both days, which is an improvement over hourly service during most of those times.



Justification

- Route 15 performs well on the six Key Performance Indicators (results of this analysis are in **Chapter 2, Section 2.3**), especially the passengers per hour measures—19, well above the Southside average of 14. Farebox recovery ratio and subsidy per passenger are within the top quarter of all routes. Route 15's performance indicates a demand for this service and warrants increases in service.
- The changes to Route 15 will help to decrease overall route travel time, improve route directness, and enhance frequent connections between Norfolk and Chesapeake, all factors that will help to increase the attractiveness of this service.
- The service levels for Route 15 meet the service standards defined for Regional Backbone routes.

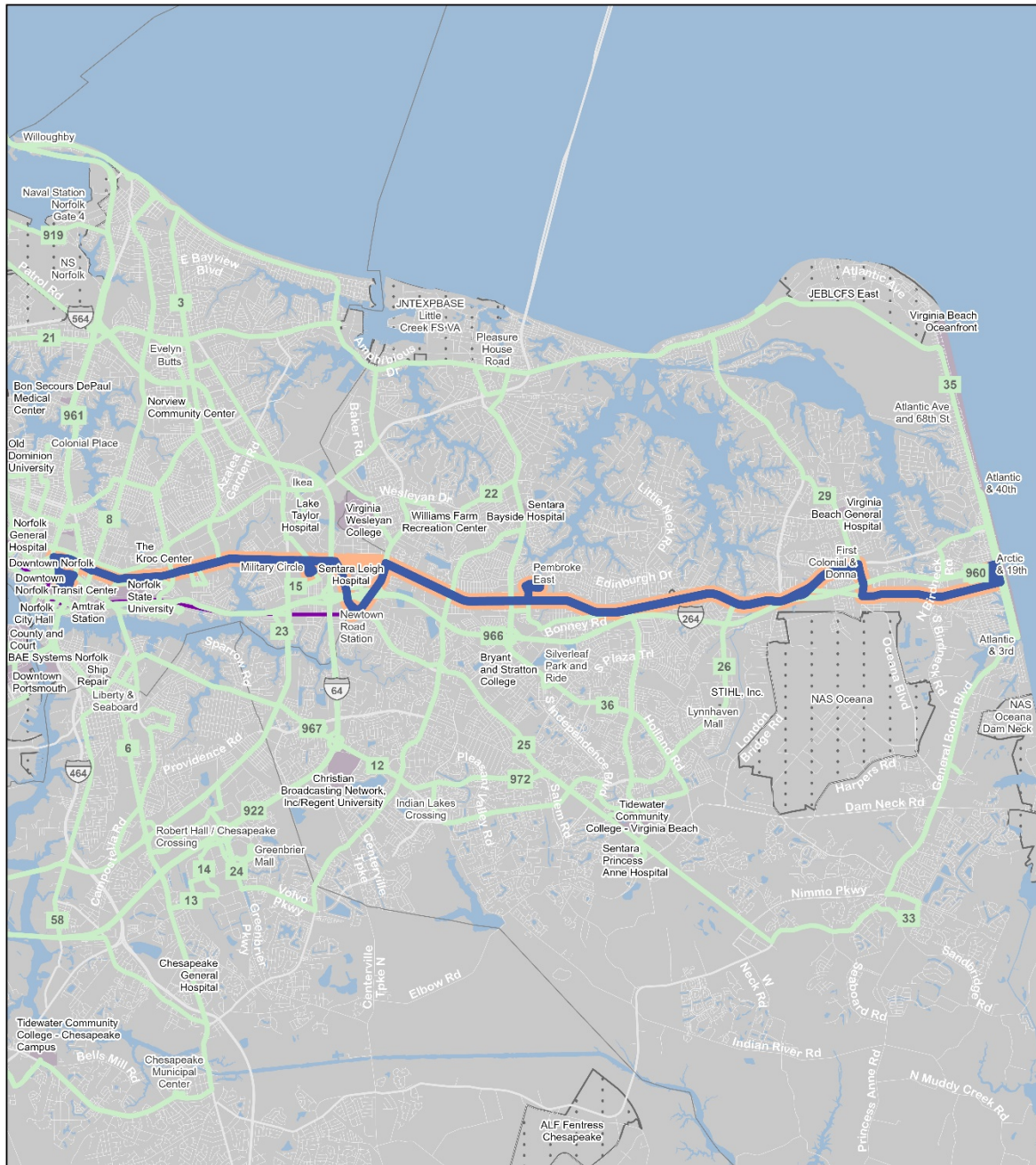
Route 15

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	Route 15 operates with the same level of service as today. All trips to Chesapeake now serve Robert Hall only; Route 15 will no longer serve Greenbrier Mall. In Norfolk Route 15 will be streamlined along Military Highway by eliminating the diversion onto Azalea Garden Road and Robin Hood Road.			
FY 2023	No changes.			
FY 2024	The short turn is eliminated, with full span and headways along the entire route. Weekday service levels will remain the same as what is currently offered on the existing short turn. Saturday and Sunday service operate from 5:18 AM - 12:00 AM with 30 minute headways in the base and non-base periods.	✓	✓	
FY 2025	Improve weekday midday headway to 15 minutes on the short turn within the city of Norfolk.			✓
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 20



Route 20

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 20

Service Classification		
Regional Backbone		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Downtown Norfolk / Virginia Beach Oceanfront	Downtown Norfolk / Virginia Beach Oceanfront
Jurisdictions	Norfolk, Virginia Beach	Norfolk, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		4:52 AM - 1:15 AM	4:52 AM - 1:15 AM
Saturday		5:22 AM - 1:14 AM	5:00 AM - 1:14 AM
Sunday		6:23 AM - 1:13 AM	5:00 AM - 1:14 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	15	15
	Midday	30	15
	PM Peak	15	15
	Evening	46	30 until 7:00 PM, 60 after
	Late Night	60	60
Saturday	Base	30	15
	Non-Base	30	30
	Early / Late	60	60
Sunday	Base	30	15
	Non-Base	60	30
	Early / Late	60	60

Note

This route's existing service operates with regular short turns. The existing headways that are listed in this table may not necessarily apply to the full length of the existing route.

Service Changes

- Route 20 will be realigned to serve the Newtown Road light rail station via Kempsville Road and Newtown Road instead of going up and down Kempsville Road in both directions. Short turns on this route will be eliminated, which will help to provide consistent frequency of service across the entire route's alignment.
- The current weekday span will be maintained, operating between 4:52 AM and 1:15 AM, with service provided every 15 minutes between the AM and PM peak periods across the whole length of the route.
- Saturday service will be offered between 5:00 AM and 1:14 AM with 15-minute service being offered from 8:00 AM to 6:00 PM. Sunday service will be increased to match Saturday levels.



Justification

- Route 20 performs well on the six Key Performance Indicators (KPI) and is one of the highest performing routes in the system. Planned improvements will eliminate short turns on this route, providing continuous high-frequency service between Virginia Beach and Norfolk during the peak periods and providing consistent service across the whole length of the route in the other periods.
- This high-frequency Regional Backbone service will provide an enhanced regional connection between Downtown Norfolk and Virginia Beach, addressing a peak coverage demand gap in Virginia Beach.
- The service levels for Route 20 meet the service standards defined for Regional Backbone routes.

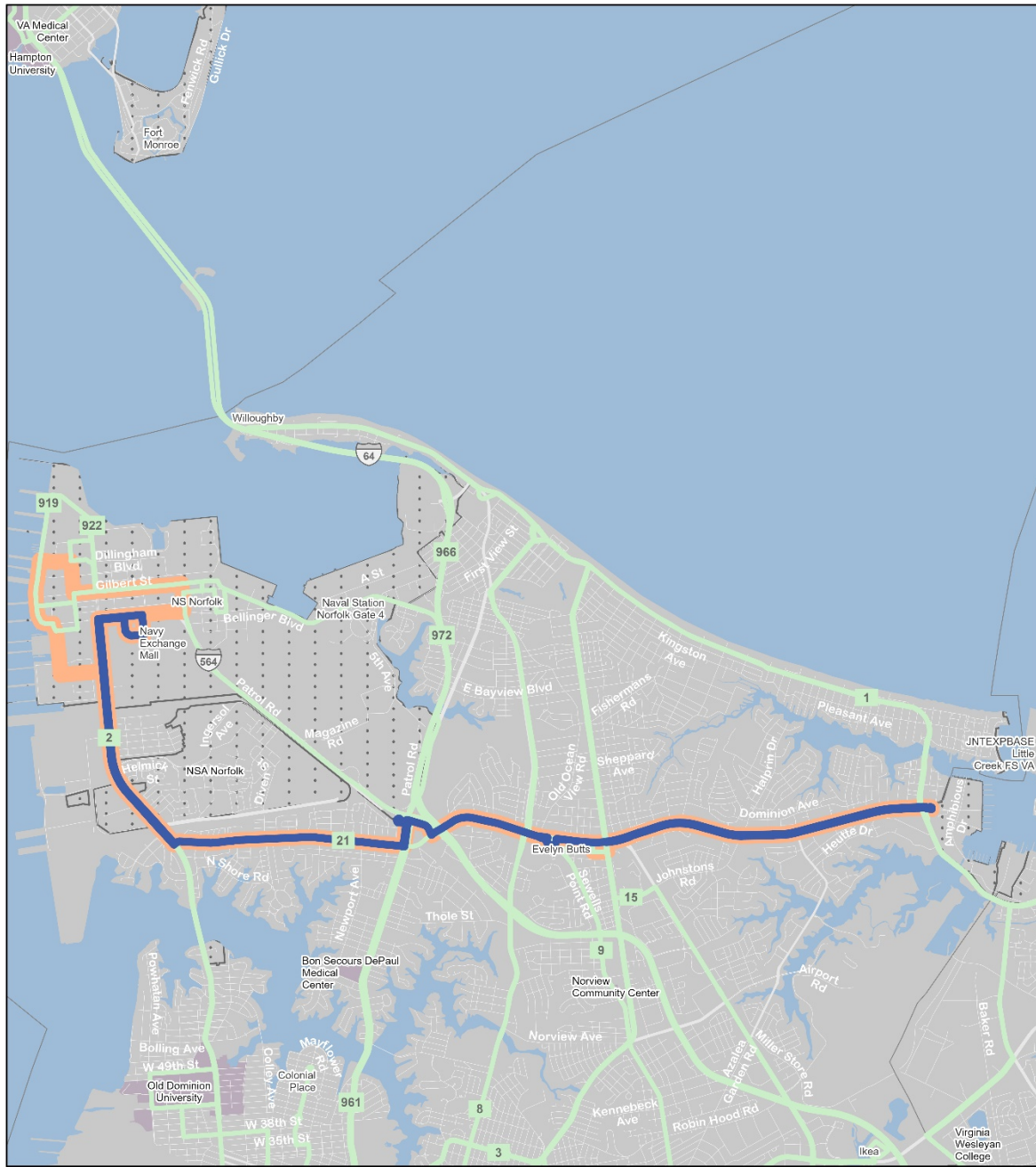


Route 20

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	Route 20 will be realigned to serve Newtown Road light rail station via Kempsville Road and Newtown Road instead of going up and down Kempsville Road in both directions. No level of service changes.			
FY 2023	No changes.			
FY 2024	Saturday and Sunday span improved to begin at 5:00 AM. Headways improved to 15 minutes during weekday midday and Saturday and Sunday base periods; headways improved to 30 minutes during the Sunday non-base period. Short turns on Route 20 are eliminated, offering full service along the entire length of the route.	✓	✓	✓
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			

Route 21



Route 21

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary

0 2
Miles



Route 21

Service Classification
Regional Backbone

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Naval Station Norfolk / Navy Exchange Mall / Joint Expeditionary Base Little Creek	Navy Exchange Mall / Joint Expeditionary Base Little Creek
Jurisdictions	Norfolk	Norfolk

Level of Service			
Span			
		Existing	Planned
Weekday		5:11 AM - 1:17 AM	5:00 AM - 1:00 AM
Saturday		5:12 AM - 1:38 AM	5:00 AM - 1:00 AM
Sunday		6:43 AM - 1:38 AM	5:00 AM - 1:00 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	30	15
	Midday	30	15
	PM Peak	30	15
	Evening	43	30
	Late Night	60	60
Saturday	Base	30	30
	Non-Base	30	30
	Early / Late	60	60
Sunday	Base	60	30
	Non-Base	60	30
	Early / Late	60	60

Note

The planned 15-min midday service is not funded by HRRTF; this midday level of service is higher than what was included in the regional funding plan.

Service Changes

- All trips will go directly to Navy Exchange Mall and not deviate through the naval base, no longer serving the B Avenue and Virginia Avenue stop.
- On weekdays service will be increased to every 15 minutes in the peak periods and during the midday and evening service will be improved to every half hour.
- Weekday and weekend service will be offered between 5:00 AM and 1:00 AM. On Saturdays there will be half hour service through much of the day. Sunday service will be increased to match Saturday levels.



Justification

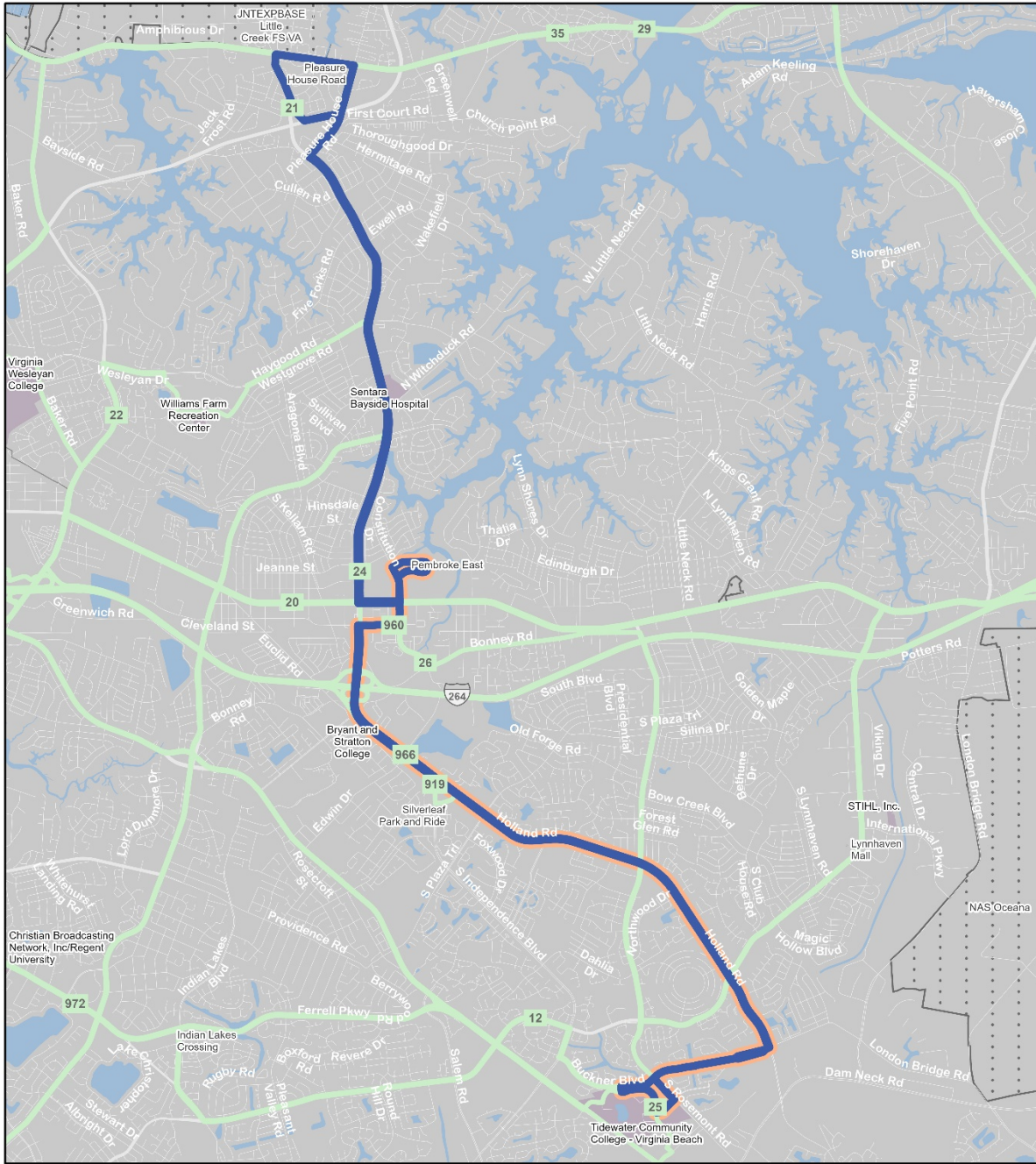
- Route 21 performs well on the six KPIs and will continue providing east-west connections in Norfolk in a similar fashion as currently operated.
- As a Regional Backbone route, Route 21 provides important crosstown connections between Route 1, Route 2, Route 3, Route 8, and Route 15, the high-frequency services providing north-south trips in Norfolk. Shortening peak period headways on Route 21 addresses a peak coverage demand gap between JEB Little Creek and Naval Station Norfolk.
- The service levels for Route 21 meet the service standards defined for Regional Backbone routes.

Route 21

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	All trips along Route 21 will go directly to Navy Exchange Mall and not deviate through Norfolk Naval Base. No changes in level of service.	✓		
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	Change weekday, Saturday, and Sunday span to 5:00 AM - 1:00 AM. Improve headways to 15 minutes during weekday peak and 30 minutes during weekday evening. Improve Sunday headways during base and non-base periods to 30 minutes.		✓	
FY 2026	No changes.			
FY 2027	Improve weekday midday headway to 15 minutes.			✓
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			

Route 36



Route 36

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary

0 2
Miles



Route 36

Service Classification		
Regional Backbone		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Pembroke East / TCC Virginia Beach	Pleasure House Road / Pembroke East / TCC Virginia Beach
Jurisdictions	Virginia Beach	Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		5:48 AM - 10:41 PM	5:00 AM – 1:00 AM
Saturday		6:10 AM - 10:43 PM	5:00 AM – 12:00 AM
Sunday		-	5:00 AM – 12:00 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	30	15
	Midday	60	30
	PM Peak	30	15
	Evening	60	30
	Late Night	-	60
Saturday	Base	60	30
	Non-Base	60	30
	Early / Late	60	60
Sunday	Base	-	30
	Non-Base	-	30
	Early / Late	-	60

Service Changes

- Route 36 will be extended to Pleasure House Road and Shore Drive north of Pembroke East. Route 36 will cover the Independence Boulevard corridor currently served by Route 1.
- On weekdays Route 36 will provide 15-minute service during the peak periods and 30-minute service during the early, midday, and evening periods. Hourly service will be provided from 9:00 PM to 12:00 AM. Weekday span of service will be extended to operate between 5:00 AM and 1:00 AM.
- On weekends, Sunday service will be added and the span of service for both weekend days will be from 5:00 AM to midnight. Route 36 will operate with 30-minute headways throughout much of the weekend service day.



Justification

- Route 36 performs above average on most of the six Key Performance Indicators (KPI). The new extension of service on Route 36 connecting high-production areas will further improve the performance of the route.
- The extension of the service to Pleasure House Road will help to allow for the truncating of the current Route 1 to JEB Little Creek by providing the north-south connection between Virginia Beach Avenue and Pleasure House Road in this area. This new connection via the extended Route 36 addresses a gap in all-day transit demand and provides a higher level of service to the area. Route 36 will provide a cross-regional connection between Shore Drive and TCC Virginia Beach, which previously required a transfer.
- The service levels for Route 36 meet the service standards defined for Regional Backbone routes.

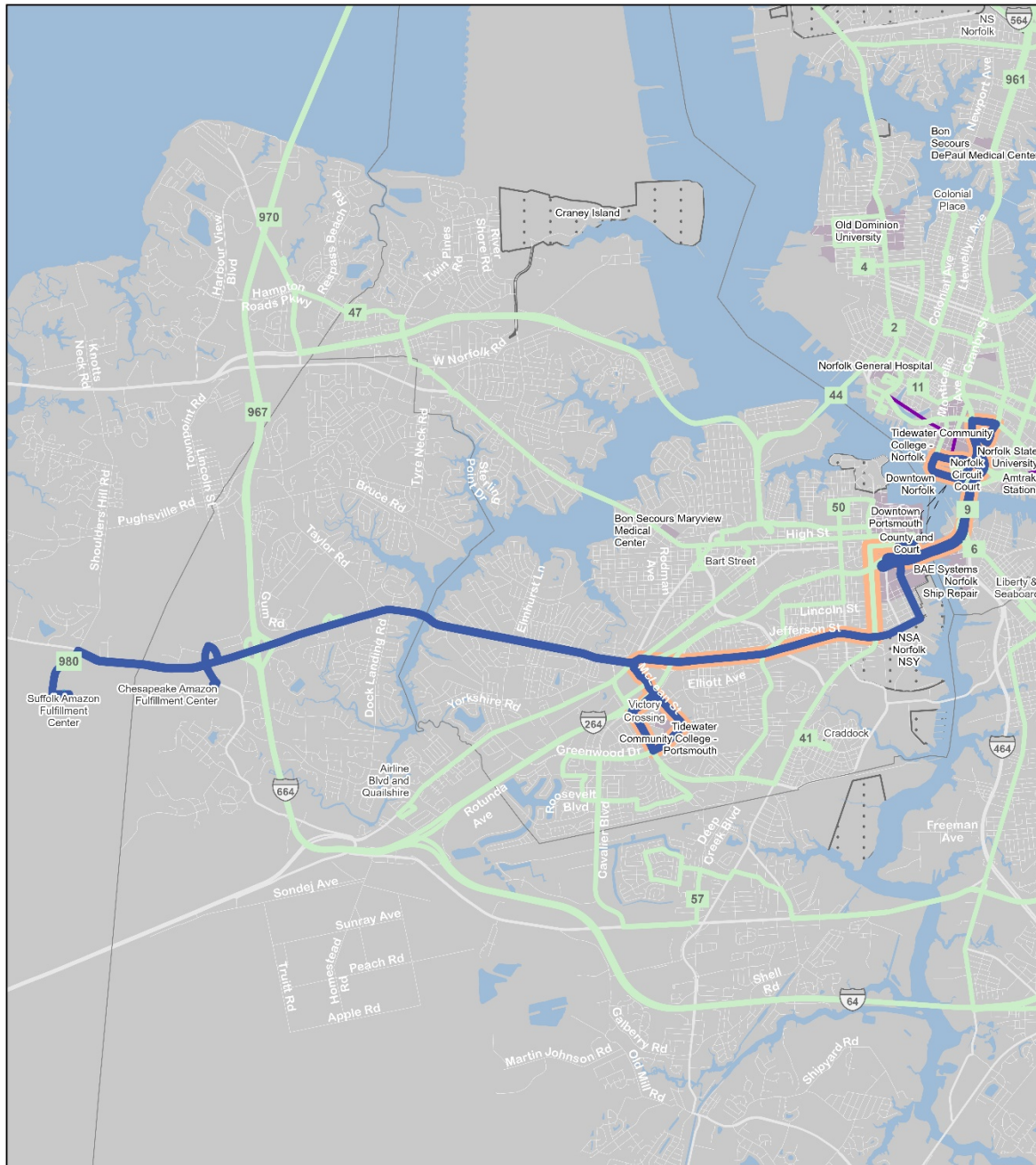
Route 36

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	No changes.			
FY 2024	<p>Route 36 will be extended to Pleasure House Road and Shore Drive north of Pembroke East. Route 36 will cover the Independence Boulevard corridor currently served by Route 1.</p> <p>Weekday span improved to 5:00 AM - 1:00 AM; Saturday and Sunday span improved to 5:00 AM - 12:00 AM. Headways are improved to 15 minutes during weekday peak periods and 30 minutes during weekday midday, weekday evening, and Saturday and Sunday base and non-base periods.</p>	✓	✓	✓
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 45



Route 45

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 45

Service Classification	
Regional Backbone	

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Downtown Norfolk Transit Center / Victory Crossing	Downtown Norfolk Transit Center / Midtown Portsmouth
Jurisdictions	Norfolk, Portsmouth	Chesapeake, Norfolk, Portsmouth

Level of Service			
Span			
		Existing	Planned
Weekday		4:39 AM - 11:54 PM	4:39 AM - 1:00 AM
Saturday		5:10 AM - 12:51 AM	5:10 AM - 12:51 AM
Sunday		6:06 AM - 10:51 PM	5:10 AM - 12:51 AM
Headway			
		Existing	Planned
Weekday	Early	30	30 / 60
	AM Peak	15	15 / 30
	Midday	30	30
	PM Peak	15	15 / 30
	Evening	30	30 / 60
	Late Night	60	60
Saturday	Base	30	30
	Non-Base	30	30 / 60
	Early / Late	60	60
Sunday	Base	60	30
	Non-Base	60	30 / 60
	Early / Late	60	60

Note
This route's existing service operates with regular short turns. The existing headways that are listed in this table may not necessarily apply to the full length of the existing route. This route's planned service also operates with short turns. The two numbers listed in the table show the headways for the portions of the route with and without the short turn. To see where the short turn operates, please refer to the route description in the Service Changes bullets.

Service Changes

- Route 45 will be extended to Starmount Parkway and Joliff Road to cover the eliminated segment of Portsmouth Boulevard currently served by Route 44. Seven days a week, select trips (three in the morning, three in the evening) will continue to the Amazon facilities in the Western Branch and Suffolk, along Portsmouth Blvd/Nansemond Parkway.
- In Downtown Portsmouth, Route 45 will operate via Port Centre Parkway and Portsmouth Boulevard instead of via Effingham Street and Court Street (service along these corridors will be replaced with the realigned Route 41). Transferring the service onto Port Centre Parkway will improve route directness and decrease travel time.
- Route 45 is a Regional Backbone service that will operate on weekdays between 4:39 AM and 1:00 AM between Victory Crossing, Downtown Portsmouth, and Norfolk. Route 45 will provide 15-minute service between Victory Crossing and Downtown Norfolk during AM and PM peak periods, with non-peak period (except late night) service being offered at half hour intervals within Portsmouth and to Norfolk. After 7:00 PM service will be provided to TCC Portsmouth (College/McLean).
- The existing Saturday span of service will be maintained and service will be offered every half hour between Norfolk and Victory Crossing between 6:00 AM and 9:00 PM. Service will be offered every half hour across the whole route from 8:00 AM to 6:00 PM—before and after that it will be hourly. No Saturday service will be provided to College/McLean.
- Sunday span will be extended to match Saturday and headways will be improved to match Saturday. No Sunday service will be provided to College/McLean.



Justification

- The service changes for Routes 41, 44, and 45 work in tandem to help improve route directness for each of the routes by providing efficient services that operate along single corridors for longer distances with fewer turns. These changes will help to improve on-time performance for each of these routes and will simplify service patterns; these are characteristics which will help to improve service utilization.
- Serving the new Amazon facilities with Route 45 will connect workers from across the region to hundreds of new jobs via transit.
- The service levels for Route 45 meet the service standards defined for Regional Backbone routes.

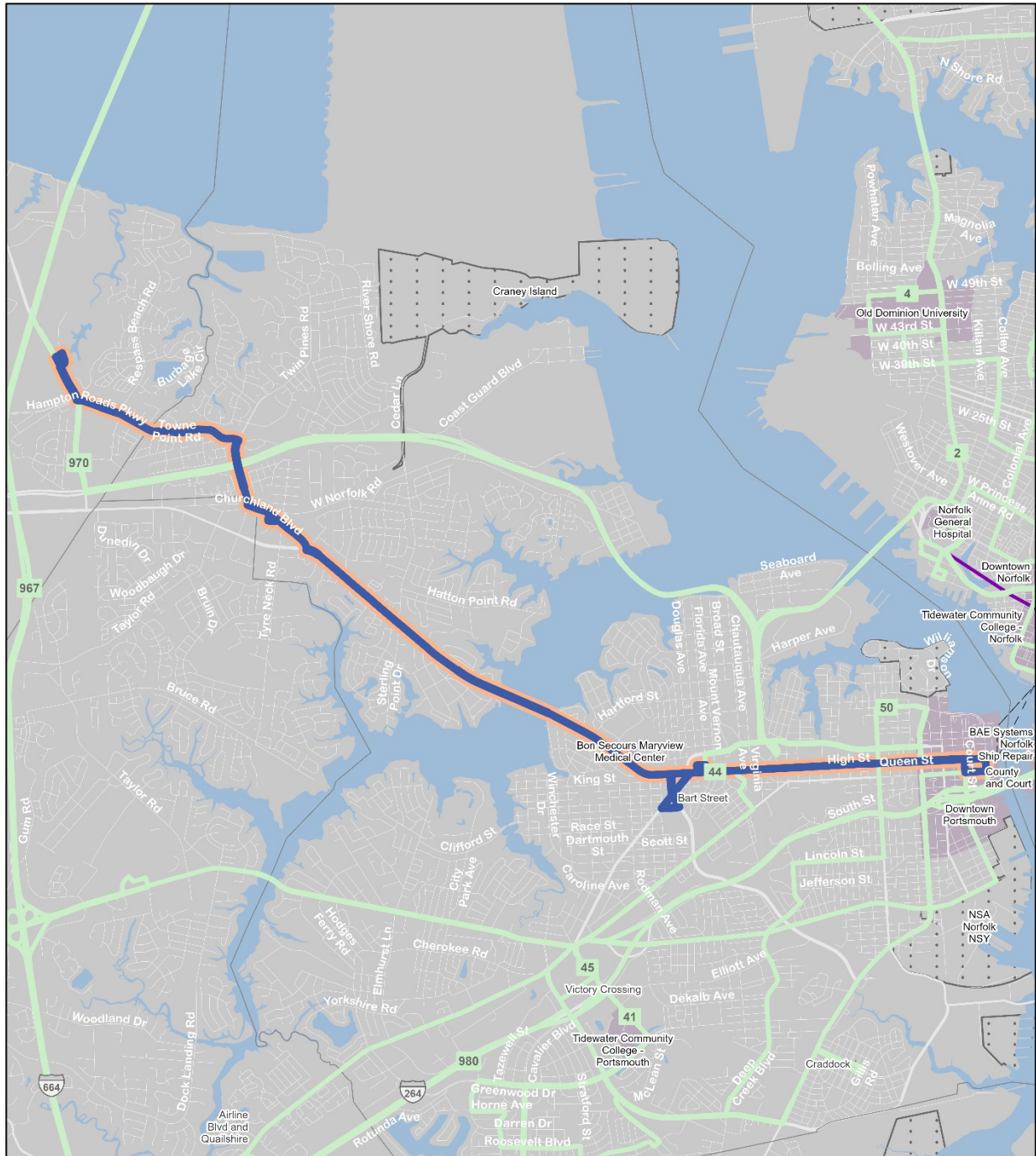
Route 45

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	No changes.			
FY 2024	<p>Route 45 will be extended to Starmount Parkway and Joliff Road to cover the eliminated segment of Portsmouth Boulevard currently served by Route 44. Seven days a week, select trips (three in the morning, three in the evening) will continue to the Amazon facilities in the Western Branch and Suffolk, along Portsmouth Blvd/Nansemond Parkway. In Downtown Portsmouth, Route 45 will operate via Port Centre Parkway and Portsmouth Boulevard instead of via Effingham Street and Court Street (service along these corridors will be replaced with the realigned Route 41).</p> <p>Weekday span is improved to end at 1:00am. Sunday span is improved to begin at 5:10am and end at 12:51am (matching Saturday span). Existing headways are maintained including more frequent service on the short turn between County & Court and Victory Crossing, except service on Sunday will be improved to 30-minute service on the short turn between 6:00am-9:00pm.</p>	✓	✓	✓
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 47



Route 47

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary

0 2
Miles



Route 47

Service Classification		
Regional Backbone		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Downtown Portsmouth / Churchland	Downtown Portsmouth / Churchland
Jurisdictions	Suffolk, Portsmouth	Suffolk, Portsmouth

Level of Service			
Span			
		Existing	Planned
Weekday		5:49 AM - 10:30 PM	5:00 AM - 1:00 AM
Saturday		6:03 AM - 10:30 PM	5:00 AM - 12:00 AM
Sunday		6:33 AM - 7:30 PM	5:00 AM - 12:00 AM
Headway			
		Existing	Planned
Weekday	Early	30	30 / 60
	AM Peak	15	15 / 30
	Midday	30	30
	PM Peak	15	15 / 30
	Evening	30	30 / 60
	Late Night	-	60
Saturday	Base	30	30
	Non-Base	60	30 / 60
	Early / Late	-	60
Sunday	Base	60	30
	Non-Base	60	30 / 60
	Early / Late	-	60

Note

This route's existing service operates with regular short turns. The existing headways that are listed in this table may not necessarily apply to the full length of the existing route. This route's planned service also operates with short turns. The two numbers listed in the table show the headways for the portions of the route with and without the short turn. To see where the short turn operates, please refer to the route description in the Service Changes bullets.

Service Changes

- The alignment for Route 47 will remain predominantly the same as existing, with the addition of providing hourly service between downtown Portsmouth and the Walmart/Frederick Boulevard commercial area; with the elimination of Route 43, Route 47 will continue to provide this connection at an hourly interval and will provide a longer span of service between Downtown Portsmouth and the commercial area.
- Weekday peak period service and midday service is to remain the same as existing: during weekday peak periods there will be 15-minute high-frequency service between Village Street and Churchland Boulevard and County Street and Court Street (the short turn) and 30-minute service from College Drive and Lake View Parkway to County Street and Court Street (the full length of the route). During the weekday midday period there will be 30-minute service along the full length of the route. Early and evening service will operate every 30 minutes between Village Street and Churchland Boulevard and County Street and Court Street and every 60 minutes along the full length of the route. Late night service will operate hourly along the full length of the route.
- The weekday span of service will be extended, starting at 5:00 AM and ending at 1:00 AM.
- Weekend service will begin earlier at 5:00 AM and end later at midnight. On weekends there will be 30-minute service along the full length of the route during the base period, 30-minute service along the short turn and 60-minute service along the full length of the route in the non-base period, and hourly service in the early/late period.



Justification

- The current Route 47 service offers an important connection between Downtown Portsmouth and the neighboring City of Suffolk, enabling a direct connection to the Suffolk Transit bus system.
- The service levels for Route 47 meet the service standards defined for Regional Backbone routes.

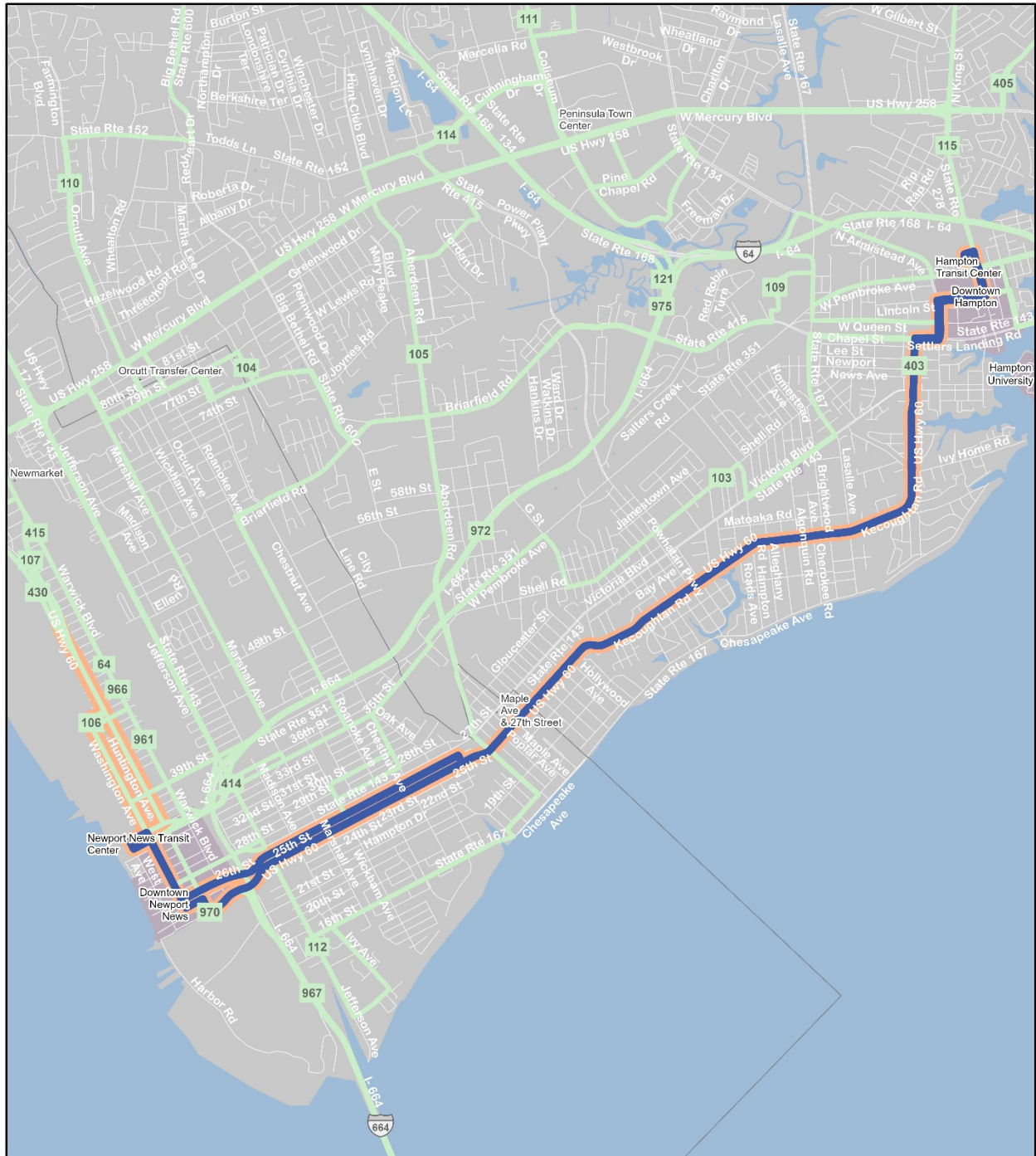
Route 47

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	Saturday service extended to College and Lakeview every 60 minutes from 7:00 AM - 7:00 PM.			
FY 2024	<p>Change alignment to provide hourly service between downtown Portsmouth and the Walmart/Frederick Boulevard commercial area; with the elimination of Route 43, Route 47 will continue to provide this connection hourly.</p> <p>Weekday span is improved to begin at 5:00am and end at 1:00am. Weekday midday headways are improved to 30 minutes along the full length of the route.</p> <p>Weekend span is improved to begin at 5:00am and end at 12:00am. Service on Sunday is now provided to College and Lakeview, and Saturday service to College and Lakeview is expanded. On both weekend days Route 47 will serve College and Lakeview (the full length of the route) every 30 minutes from 8:00 AM to 6:00 PM and hourly for the rest of the span of service (5:00 AM - 8:00 AM and 6:00 PM - 12:00 AM).</p>	✓	✓	✓
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 101



Route 101

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 101

Service Classification		
Regional Backbone		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	(Kecoughtan) Downtown Newport News / Downtown Hampton	(Kecoughtan) Downtown Newport News / Downtown Hampton
Jurisdictions	Hampton, Newport News	Hampton, Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		5:15 AM - 12:10 AM	5:00 AM - 1:00 AM
Saturday		5:15 AM - 12:10 AM	5:15 AM - 12:10 AM
Sunday		5:45 AM - 7:38 PM	5:15 AM - 12:10 AM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	35	15
	Midday	35	30
	PM Peak	35	15
	Evening	60	30
	Late Night	60	60
Saturday	Base	35	30
	Non-Base	60	30
	Early / Late	60	60
Sunday	Base	60	30
	Non-Base	60	30
	Early / Late	-	60

Service Changes

- Route 101 will operate between the Newport News Transfer Center (NNTC) and Hampton Transfer Center (HTC), no longer serving Northgate (the current 3:40 PM trip will be provided by an additional trip on Route 403).
- Weekday service will be offered between 5:00 AM and 1:00 AM, which is a slightly later end time than currently offered on the Route 101.
- Service during the weekday peak periods will be offered every 15 minutes. During the weekday early, midday, and evening periods, service will be offered every 30 minutes, and hourly service in the late night period.
- On weekends, Sunday service is expanded to match current Saturday levels of service from 5:15 AM to 12:10 AM, with 30-minute headways from 6:00 AM to 9:00 PM and 60-minute headways during other times.



Justification

- Route 101 performs well on the six Key Performance Indicators (KPI) and warrants an increase in service.
- The service levels for Route 101 meet the service standards defined for Regional Backbone routes.

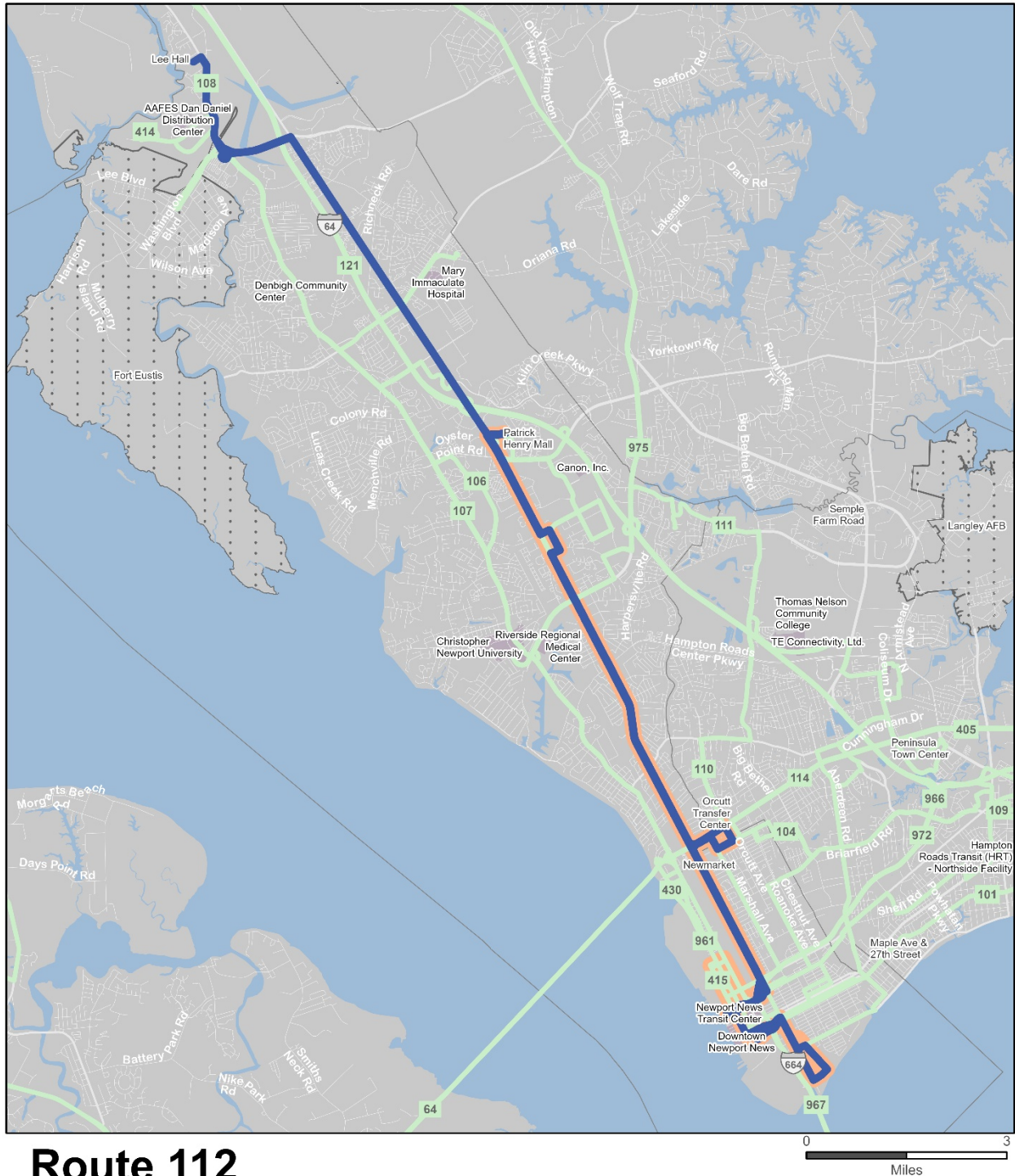
Route 101

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.			
FY 2023	<p>Route 101 will operate between the Newport News Transfer Center (NNTC) and Hampton Transfer Center (HTC), no longer serving Northgate (the current 3:40 PM trip will be provided by an additional trip on Route 403).</p> <p>Weekday service will be offered between 5:00 AM and 1:00 AM. Sunday span will be improved to 5:15 AM - 12:10 AM.</p> <p>Weekday peak headways improved to 15 minutes and midday and evening headways improved to 30 minutes. Saturday and Sunday base and non-base headways improved to 30 minutes.</p>	✓	✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 112



Route 112

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 112

Service Classification		
Regional Backbone		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Ivy Avenue & 6th Street / Downtown Newport News / Patrick Henry Mall	Ivy Avenue & 6th Street / Downtown Newport News / Patrick Henry Mall / Lee Hall
Jurisdictions	Hampton, Newport News	Hampton, Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		4:55 AM - 12:35 AM	5:00 AM - 1:00 AM
Saturday		5:15 AM - 12:35 AM	5:15 AM - 12:35 AM
Sunday		6:15 AM - 8:01 PM	5:15 AM - 12:35 AM
Headway			
		Existing	Planned
Weekday	Early	30	30 / 60
	AM Peak	30	15 / 30
	Midday	30	15 / 30
	PM Peak	30	15 / 30
	Evening	30	30 / 60
	Late Night	30	60
Saturday	Base	30	15 / 30
	Non-Base	30	30 / 60
	Early / Late	60	60
Sunday	Base	60	15 / 30
	Non-Base	60	30 / 60
	Early / Late	-	60

Note
This route's planned service operates with short turns. The two numbers listed in the table show the headways for the portions of the route with and without the short turn. To see where the short turn operates, please refer to the route description in the Service Changes bullets.

Service Changes

- Route 112 will operate high-frequency service between NNTC and Patrick Henry Mall. Route 112 will be extended north to Lee Hall to cover a portion of the eliminated Route 116, with stops at Newport News Transit Center, NET Center, Fishing Point and Patrick Henry Mall.
- On weekdays, Route 112 will begin service at 5:00 AM and operate until 1:00 AM, which represents a small increase in service during the early morning period and an additional half hour of service in the late-night period. Service will operate every 15 minutes between 6th and Ivy and Patrick Henry Mall from 6:00 AM to 6:00 PM and every 30 minutes to Lee Hall. Before 6:00 AM and between 6:00 PM and 11:00 PM service will operate every 30 minutes between 6th and Ivy and Patrick Henry Mall and hourly on the extension to Lee Hall. After 11:00 PM, service will operate hourly along the whole length of the route.
- The existing Saturday span of service will be maintained, starting at 5:15 AM and ending service at 12:35 AM; the Sunday span of service will be increased to match Saturday. During the weekend base period service will operate every 15 minutes between 6th and Ivy and Patrick Henry Mall and every 30 minutes to Lee Hall. During the weekend non-base period, service will operate every 30 minutes between 6th and Ivy and Patrick Henry Mall and hourly to Lee Hall. During the weekend early/late period service will operate hourly along the whole length of the route.



Justification

- Route 112 is performing well based on the six Key Performance Indicators (KPI). Route 112 is one of the alignments identified in the Peninsula BRT corridor study plan. The alignment will be streamlined to make service more direct and improve on-time performance. Route 112 service will be increased, in line with the travel demand along the route and the BRT study plan.
- These service changes address an all-day service gap in Newport News.

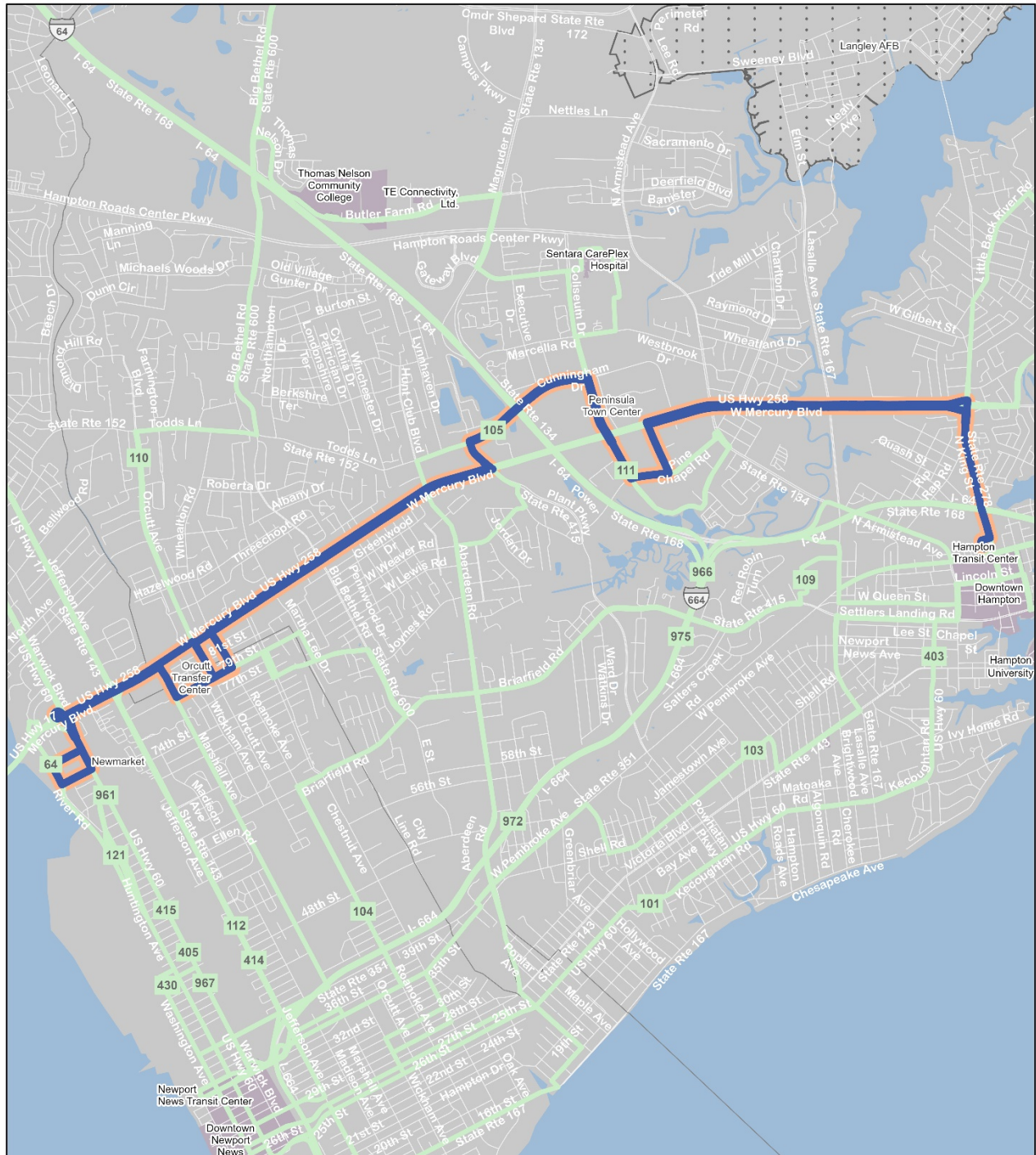
Route 112

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	Route 112 will be extended north to Lee Hall to cover a portion of the eliminated Route 116.	✓		
FY 2023	Weekday span improved to 5:00am-1:00am and Sunday span improved to 5:15am-12:35am. Implement 30-minute headways on the full route on weekdays from 6:00am-6:00pm and during Saturday and Sunday base periods. On the short turn between 6th & Ivy and Patrick Henry, implement 15-minute headways on weekdays from 6:00am-6:00pm and 30 minute headways during the early and evening periods. During Saturday and Sunday base periods, implement 15-minute headways on the short turn. During Saturday and Sunday non-base periods, implement 30-minute headways on the short turn.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 114



Route 114

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 114

Service Classification	
Regional Backbone	

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Newmarket / Downtown Hampton	Newmarket / Downtown Hampton
Jurisdictions	Hampton, Newport News	Hampton, Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		6:20 AM - 11:38 PM	5:00 AM - 1:00 AM
Saturday		6:45 AM - 11:32 PM	6:00 AM - 12:00 AM
Sunday		6:45 AM - 7:30 PM	6:00 AM - 12:00 AM
Headway			
		Existing	Planned
Weekday	Early	-	30
	AM Peak	30	15
	Midday	30	15
	PM Peak	30	15
	Evening	60	30
	Late Night	60	60
Saturday	Base	30	15
	Non-Base	60	30
	Early / Late	60	60
Sunday	Base	60	15
	Non-Base	60	30
	Early / Late	-	60

Service Changes

- No change to existing alignment.
- On weekdays, expand the span of service to match the service design guidelines for Regional Backbone, starting at 5:00 AM and ending at 1:00 AM.
- From 6:00 AM to 6:00 PM, the service will operate every 15-minutes. Before 6:00 AM and between 6:00 PM and 11:00 PM, service will operate at half hour intervals. After 11:00 PM, service will be offered hourly.
- On weekends, the span of service will be expanded to match the service design standards for Regional Backbone routes, starting at 6:00 AM and ending at 12:00 AM, with 15-minute service being provided through much of the day.



Justification

- Route 114 is performing well on the six Key Performance Indicators (KPI). Route 114 is one of the alignments identified in the Peninsula BRT corridor study plan—the planned and existing alignment match that from the corridor plan. Route 114 service will improve in line with the travel demand along the route and the BRT study plan.
- These service changes address an all-day service gap between Newport News and Hampton by increasing midday service in this area.
- The levels of service for Route 114 meet the service standards defined for Regional Backbone routes.

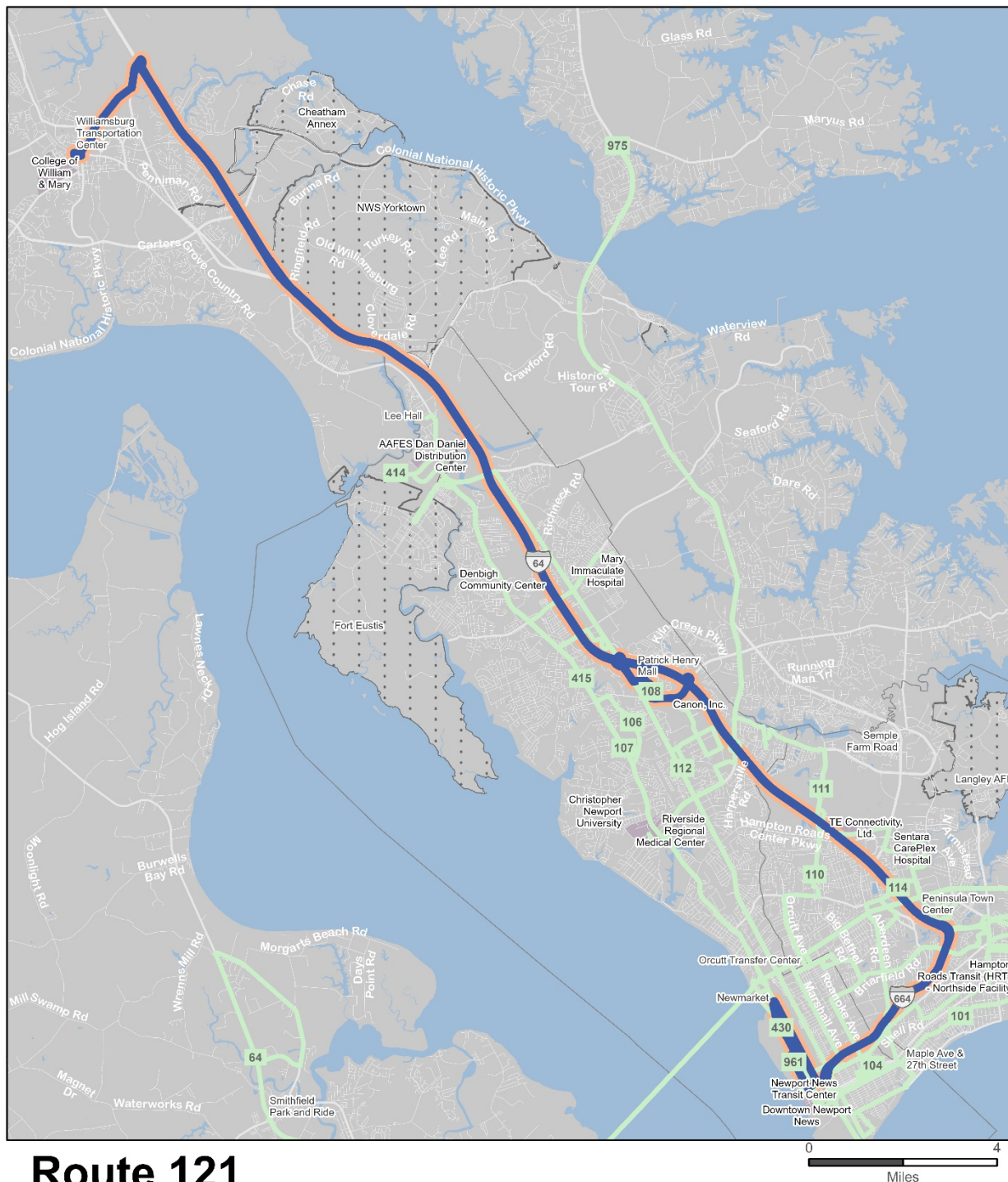
Route 114

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	Weekday span improved to 5:00am-1:00am and weekend span improved to 6:00am-12:00am. On weekdays, implement 15-minute headways from 6:00am-6:00pm and 30-minute headways in the early and evening periods. On weekends, implement 15-minute headways in the base period and 30-minute periods in the non-base period.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 121



Route 121

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary





Route 121

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Newport News Transit Center / Williamsburg Transportation Center	Newport News Transit Center / Williamsburg Transportation Center
Jurisdictions	Newport News	Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		5:30 AM - 7:00 AM; 3:40 PM - 5:50 PM	5:30 AM - 7:00 AM; 3:40 PM - 5:50 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	1 Trip	1 Trip
	AM Peak	1 Trip	1 Trip
	Midday	-	-
	PM Peak	2 Trips	2 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- Route 121 will be re-classified as a MAX route (a limited/express service), as it only has four trips a day.
- No schedule or alignment changes.

SD

Justification

- Route 121 service will remain unchanged from what is currently offered; however, the route will now be classified as a MAX route.

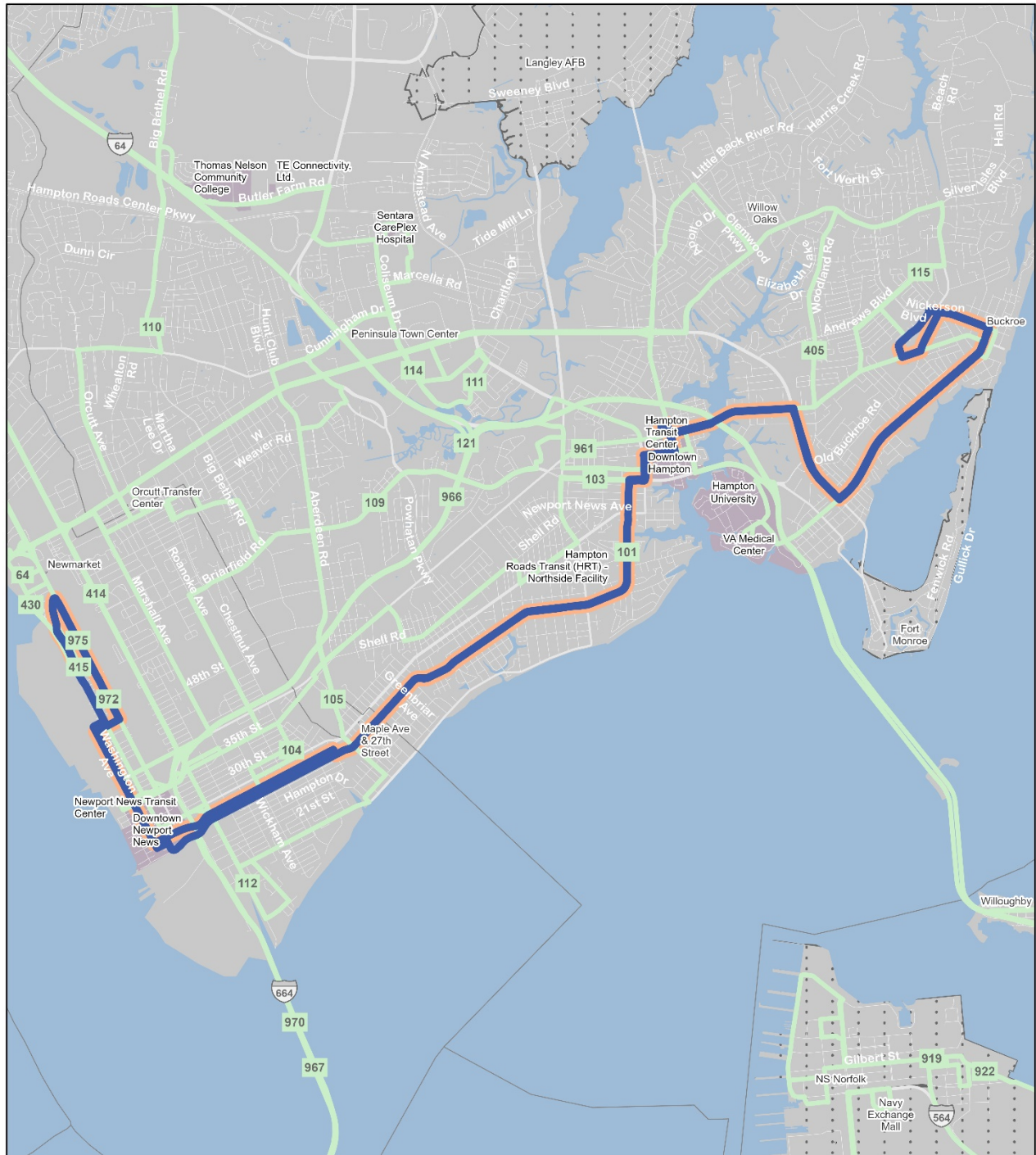
Route 121

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓	✓	✓
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 403



Route 403

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 403

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Buckroe Shopping Center	Buckroe Shopping Center
Jurisdictions	Hampton, Newport News	Hampton, Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		5:28 AM - 6:18 AM	5:28 AM - 6:18 AM; 3:40 PM - 4:15PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	1 Trip	1 Trip
	AM Peak	-	-
	Midday	-	-
	PM Peak	-	1 Trip
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- One trip will be added to Route 403 in the PM peak period at 3:40 PM. The 3:40 PM trip is being transferred from Route 101.



Justification

- An additional trip will be added to Route 403 which will replace service removed from Northgate currently being provided by Route 101.

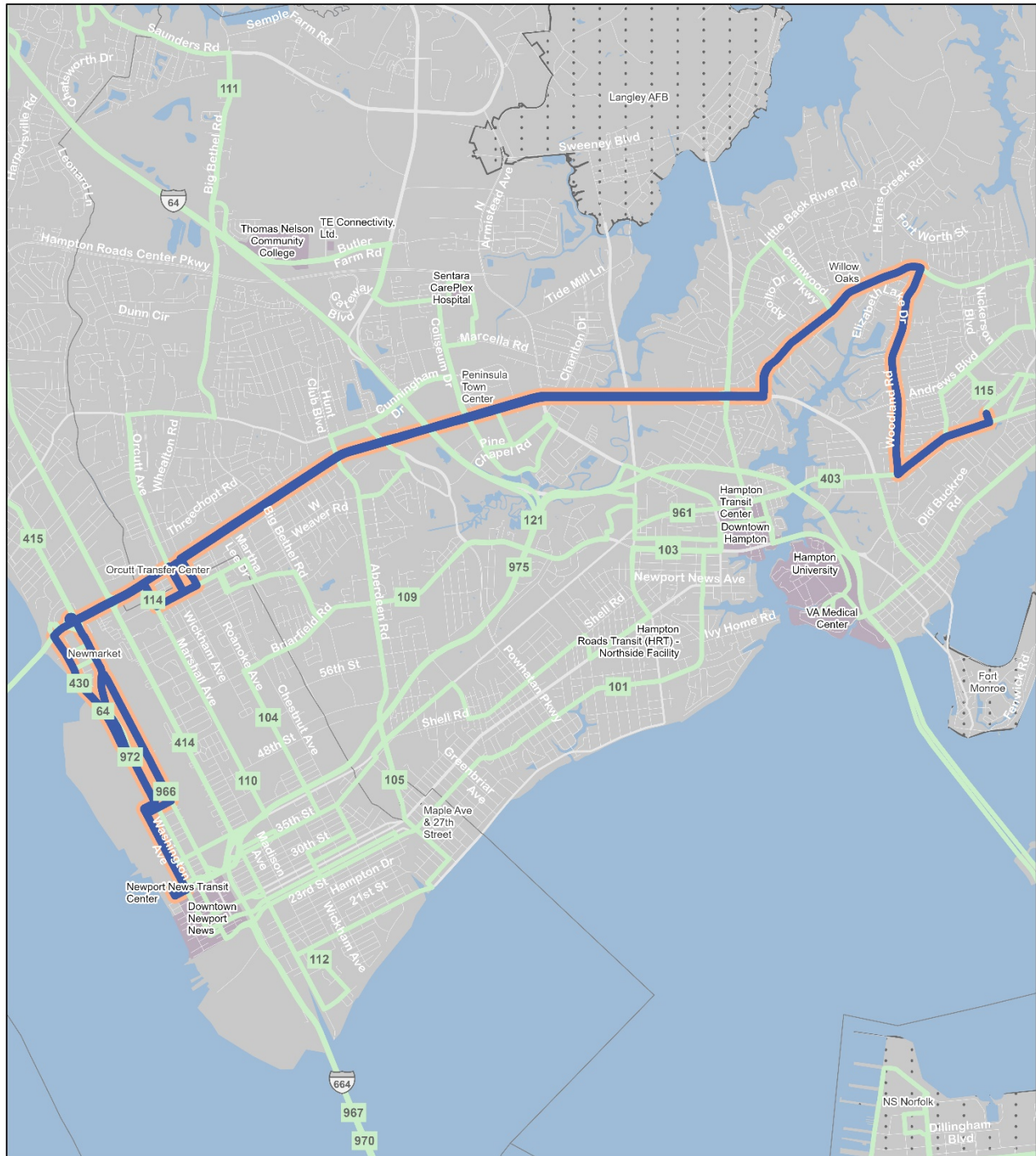
Route 403

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One PM peak trip is added.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 405



Route 405

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary





Route 405

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Newport News Transit Center / Buckroe	Newport News Transit Center / Buckroe
Jurisdictions	Hampton, Newport News	Hampton, Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		5:50 AM - 6:31 AM; 2:40 PM - 3:38 PM	4:50 AM - 5:50 AM; 2:40 PM - 4:38 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	1 Trip	2 Trips
	AM Peak	-	-
	Midday	-	-
	PM Peak	1 Trip	2 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- Two trips will be added to Route 405, one in the early period at 4:50 AM, and one in the PM peak period at 3:40 PM.

TD

Justification

- Additional trips will be added to Route 405 to meet shift-specific demand.

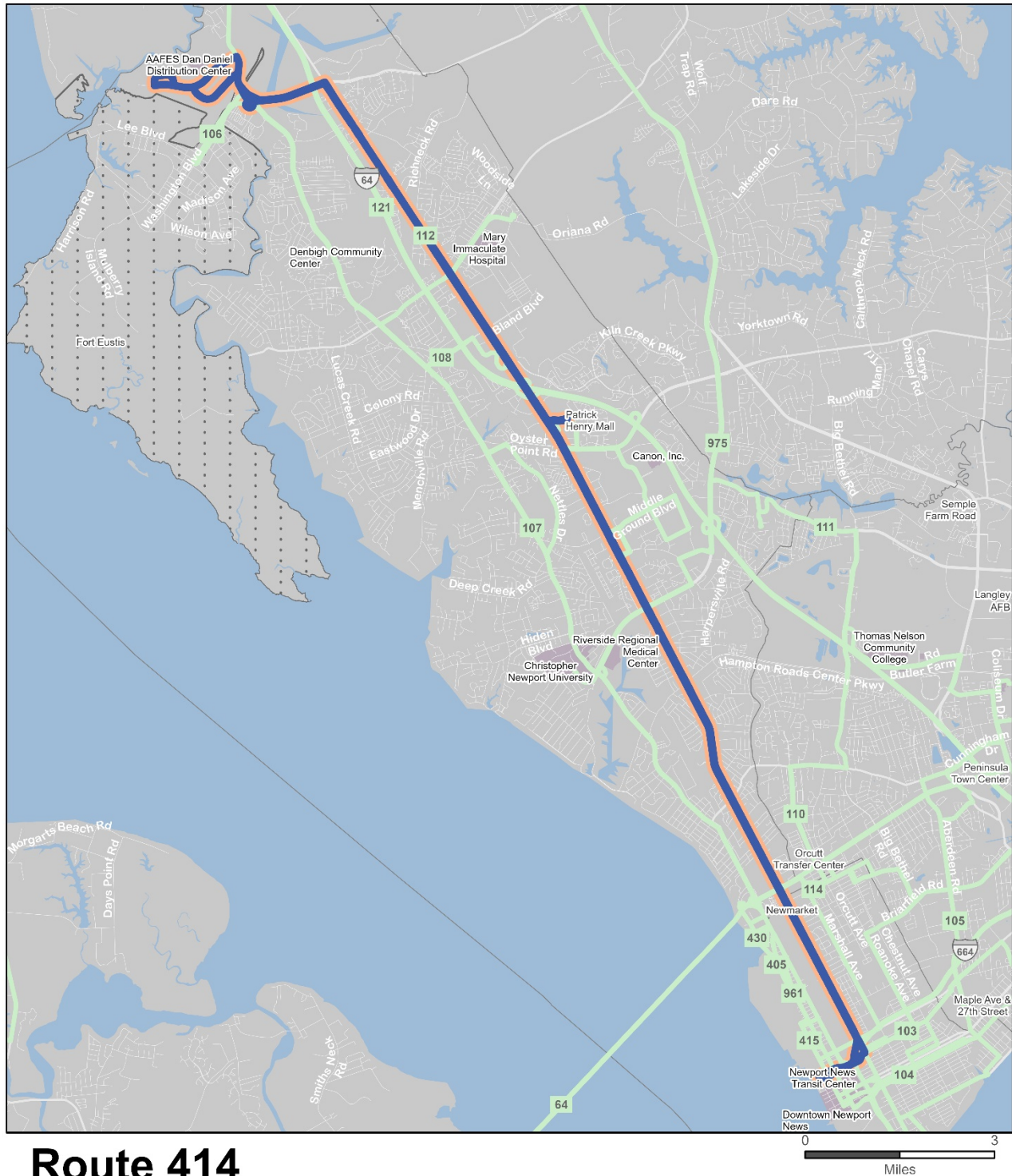
Route 405

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One trip is added in the early period. One PM peak trip is added.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 414



Route 414

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Newport News Transit Center / Jefferson / Oakland	Newport News Transit Center / Jefferson / Oakland
Jurisdictions	Newport News	Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		5:20 AM - 7:49 AM; 4:04 PM - 6:33 PM	5:20 AM - 7:49 AM; 4:04 PM - 6:33 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	1 Trip	1 Trip
	AM Peak	1 Trip	1 Trip
	Midday	-	-
	PM Peak	3 Trips	3 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- No alignment or level of service changes are proposed.

Justification

- Route 414 fulfills a need in terms of getting employees to work at specific shift times and will remain unchanged.



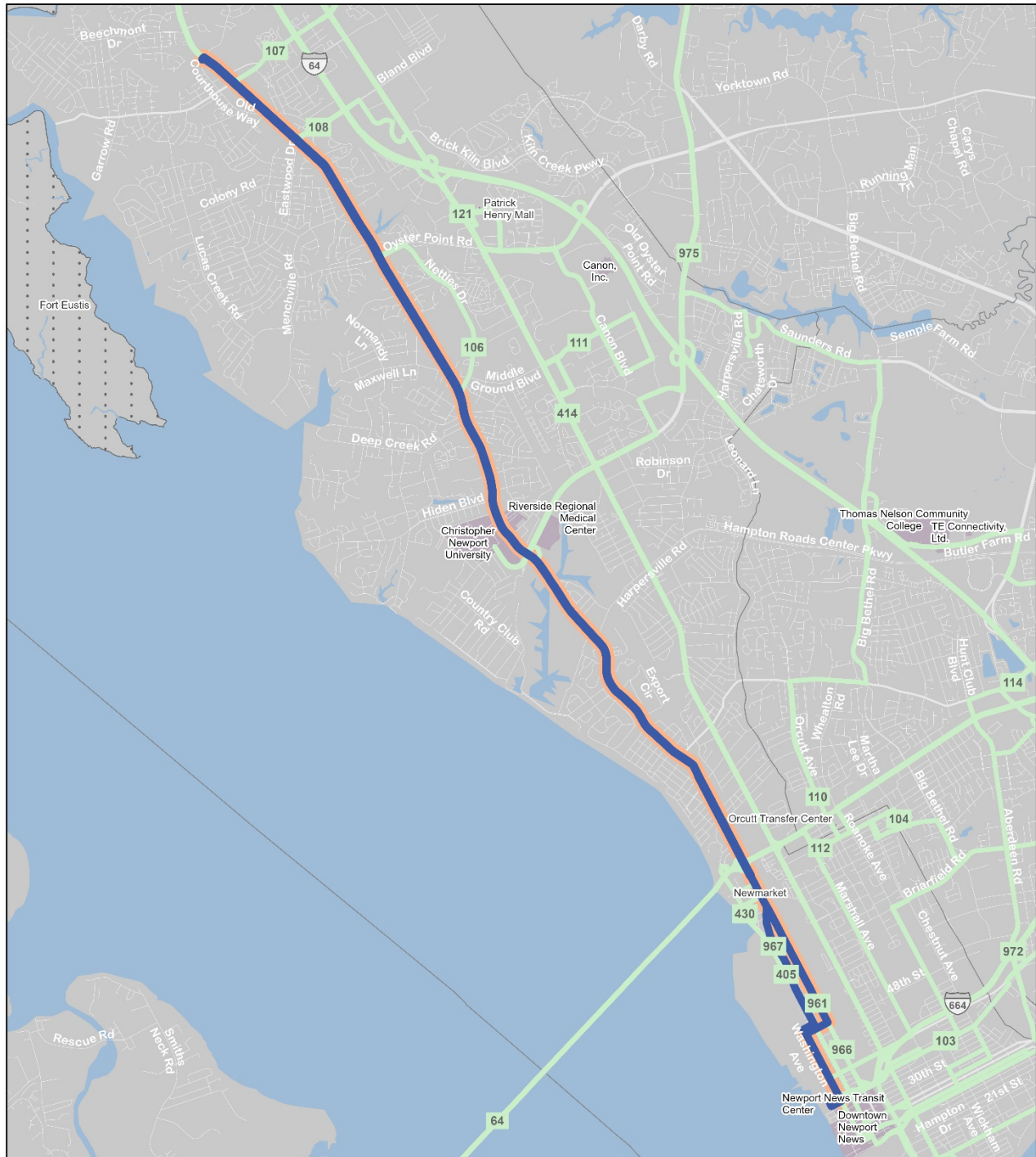
Route 414

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓	✓	✓
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 415



Route 415

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary





Route 415

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Newport News Transit Center / Denbigh	Newport News Transit Center / Denbigh
Jurisdictions	Newport News	Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		3:45 PM - 4:27 PM	6:00 AM - 6:42 AM; 3:45 PM - 4:27 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	-	-
	AM Peak	-	1 Trip
	Midday	-	-
	PM Peak	1 Trip	1 Trip
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	
	Non-Base	-	
	Early / Late	-	
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- One trip will be added to Route 415 at 6:00 AM.



Justification

- The additional trip will be added to meet shift-specific demand.

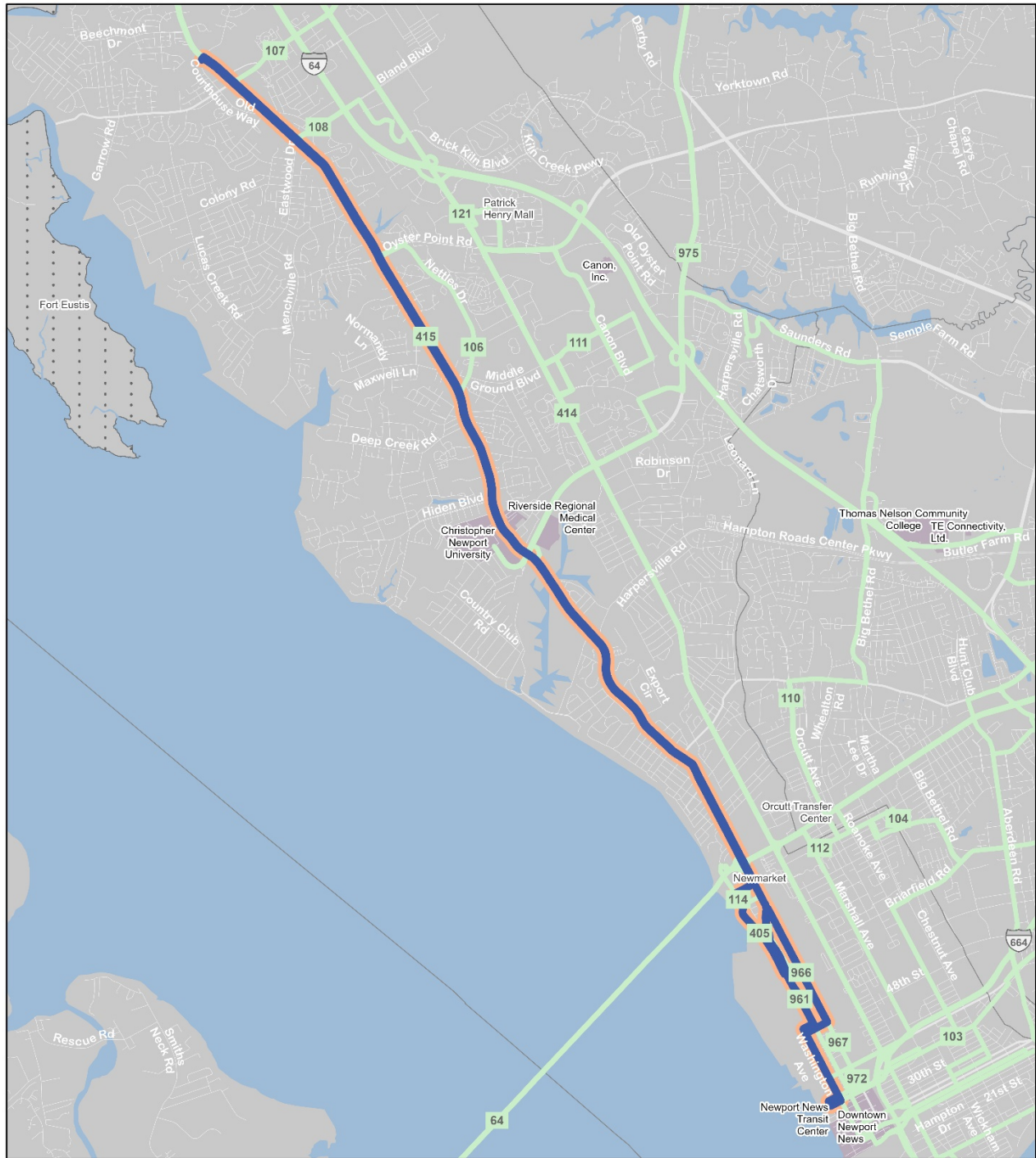
Route 415

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One AM peak period trip is added.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 430



Route 430

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary





Route 430

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Denbigh Fringe	Denbigh Fringe
Jurisdictions	Newport News	Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		5:35 AM - 6:30 AM; 3:45 PM - 4:29 PM	5:00 AM – 5:55 AM; 3:40 PM - 4:29 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	2 Trips	3 Trips
	AM Peak	-	-
	Midday	-	-
	PM Peak	1 Trip	2 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- One trip will be added to Route 430 at 5:00 AM. Another will be added at 3:40 PM.

TD

Justification

- The additional trips will be added to meet shift-specific demand.

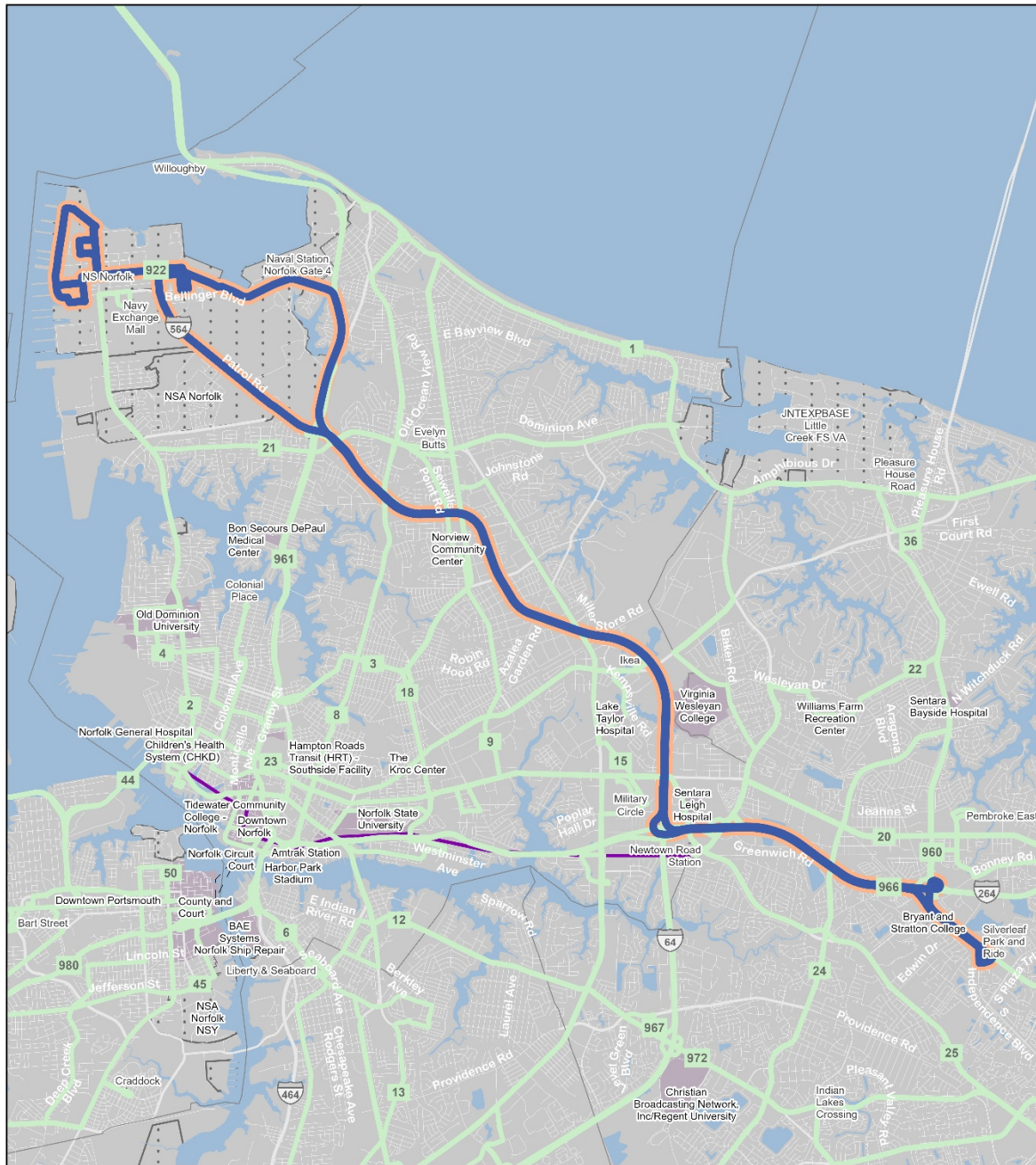
Route 430

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One trip is added in the early period; One PM peak trip is added.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 919



Route 919

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary

0 3
Miles





Route 919

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Silverleaf Park & Ride / Naval Station Norfolk Gate 4	Silverleaf Park & Ride / Naval Station Norfolk Gate 4
Jurisdictions	Norfolk, Virginia Beach	Norfolk, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		5:10 AM - 7:26 AM; 2:54 PM - 5:03 PM	5:10 AM - 7:26 AM; 2:54 PM - 4:13 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	1 Trip	1 Trip
	AM Peak	2 Trips	2 Trips
	Midday	-	-
	PM Peak	4 Trips	3 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Note

Service on this route is currently suspended due to low ridership during the Covid-19 pandemic (as of March 2021).

Service Changes

- The 3:18 PM trip on Route 919 will be eliminated.

PB

Justification

- Few passengers utilize the 3:18 PM trip on the current Route 919 service. The resources from this trip will be used more effectively elsewhere in the system.

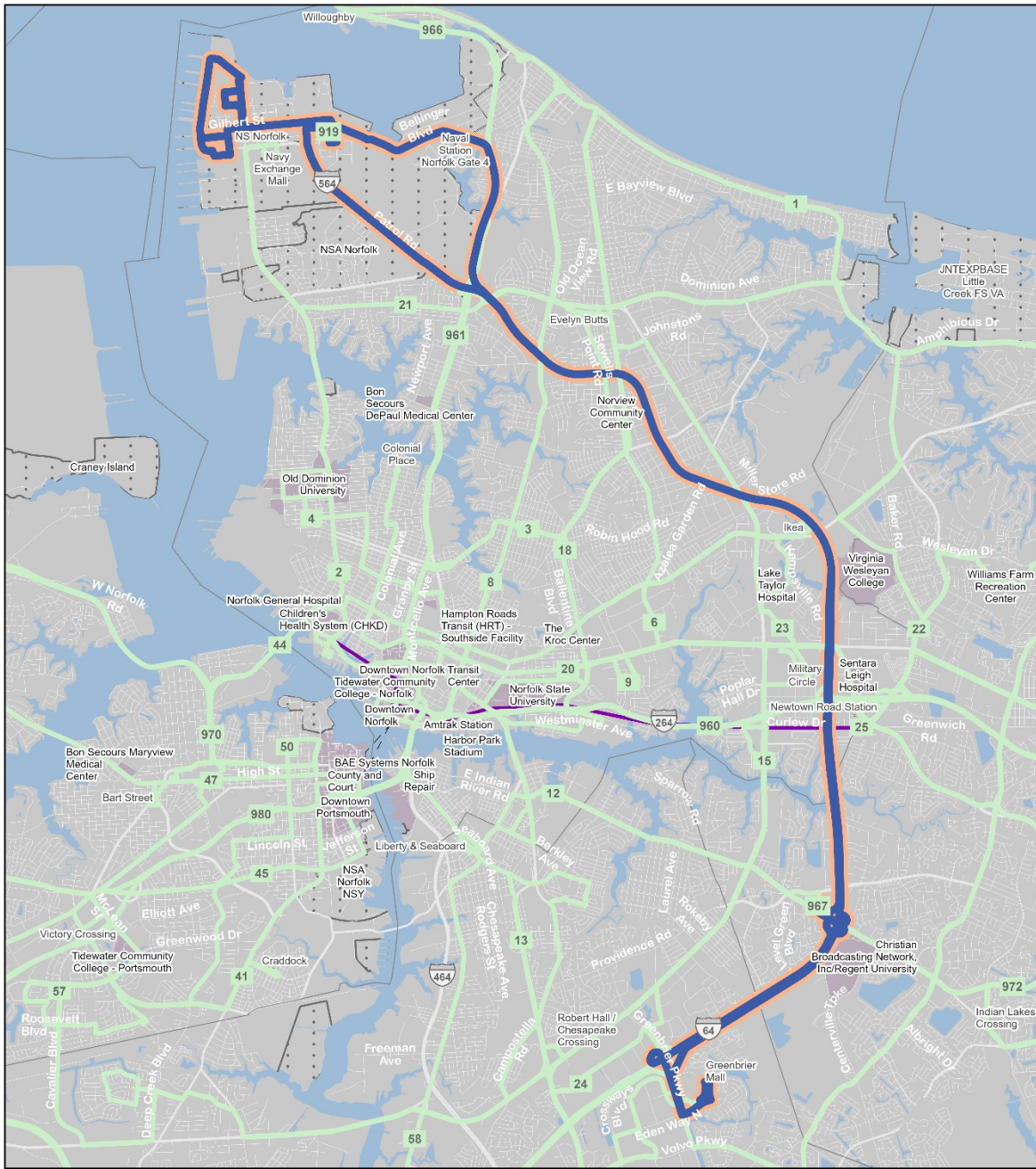
Route 919

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One PM peak period trip is removed.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 922



Route 922

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary





Route 922

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Greenbrier Mall Park & Ride / Naval Station Norfolk Gate 4	Greenbrier Mall Park & Ride / Naval Station Norfolk Gate 4
Jurisdictions	Chesapeake, Norfolk, Virginia Beach	Chesapeake, Norfolk, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		5:00 AM - 7:13 AM; 2:55 PM - 4:42 PM	5:00 AM - 6:10 AM; 2:55 PM - 3:45 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	3 Trips	3 Trips
	AM Peak	1 Trip	-
	Midday	-	-
	PM Peak	3 Trips	2 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	
	Non-Base	-	
	Early / Late	-	
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Note

Service on this route is currently suspended due to low ridership during the Covid-19 pandemic (as of March 2021).

Service Changes

- The 6:10 AM and 3:44 PM trips on Route 922 will be eliminated.

PB

Justification

- Few passengers utilize the 6:10 AM and 3:44 PM trips on the current service. The resources from these trips will be used more effectively elsewhere in the system.

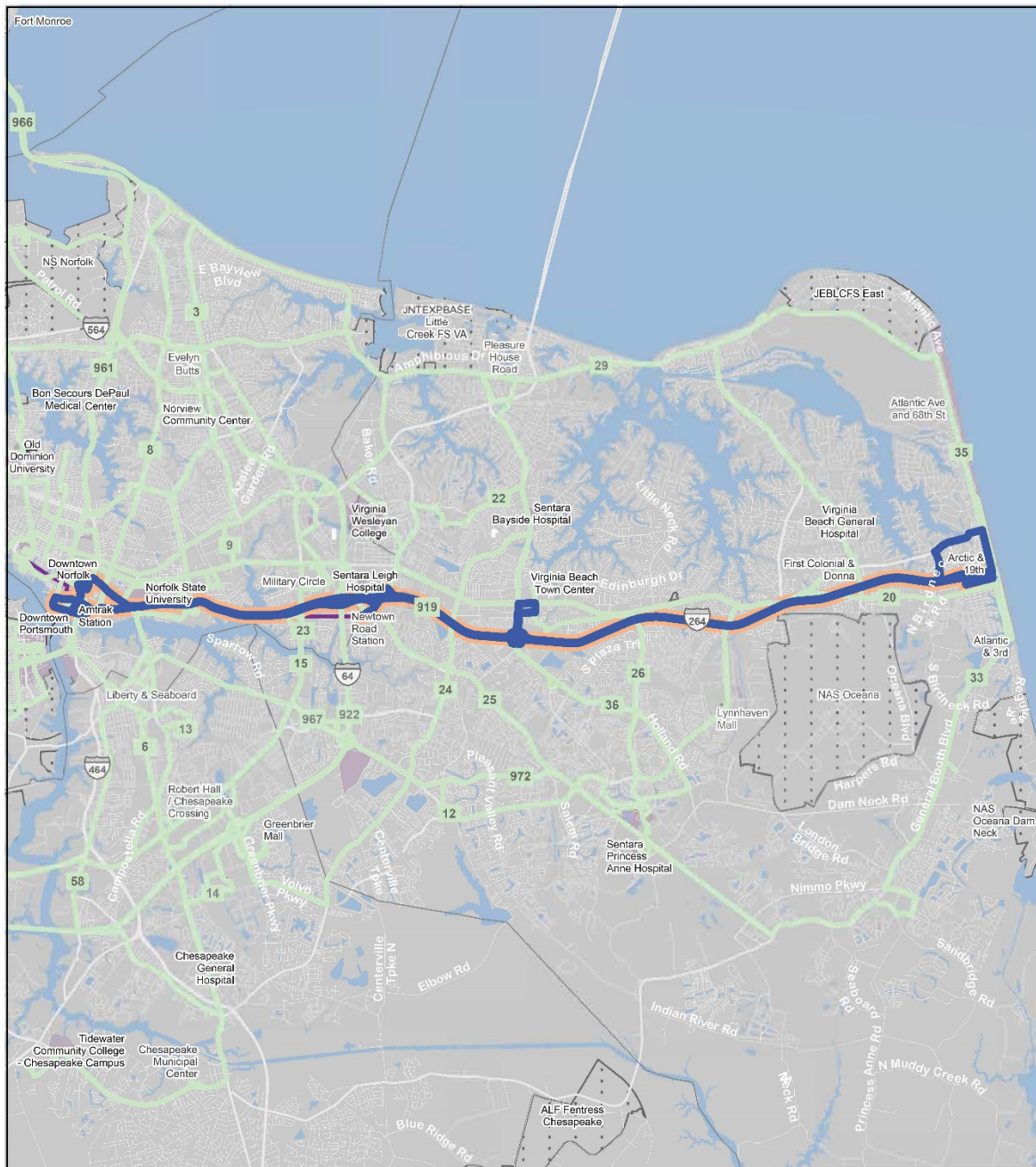
Route 922

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One AM peak period trip is removed. One PM peak period trip is removed.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 960



Route 960

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary

0 4
Miles



Route 960

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Norfolk to Virginia Beach	Norfolk to Virginia Beach
Jurisdictions	Norfolk, Virginia Beach	Norfolk, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		5:35 AM - 8:27 PM	5:00 AM - 9:00 PM
Saturday		6:30 AM - 8:19 PM	5:00 AM - 9:00 PM
Sunday		7:50 AM - 8:44 PM	5:00 AM - 9:00 PM
Headway			
		Existing	Planned
Weekday	Early	60	60
	AM Peak	60	60
	Midday	60	60
	PM Peak	60	60
	Evening	60	60
	Late Night	-	-
Saturday	Base	60	60
	Non-Base	60	60
	Early / Late	-	60
Sunday	Base	60	60
	Non-Base	60	60
	Early / Late	-	60

Service Changes

- Route 960 will be realigned to serve Virginia Beach Town Center and provide service along Pacific Ave to 32nd St. Service will operate hourly from 5:00 AM to 9:00 PM seven days a week.
- Route 960 fares will be lowered to that of regular fixed-route service.



Justification

- Route 960 provides express service to the oceanfront for riders from across the region. Reducing the fare to that of regular fixed-route service will enable riders to use Route 960 for faster express trips, compared to Route 20 which makes many more stops along the way.
- Adding a stop at the Town Center and extending service along the oceanfront will provide more direct access to these trip generators.
- Route 960 (along with Route 961) has operating characteristics that are unlike any of the other MAX routes. Route 960 offers service to Virginia Beach Oceanfront hotels and restaurants and makes several stops at key passenger stops while in-route to its final terminal point. While Route 960 has been traditionally grouped into the same classification of MAX Express routes—routes that typically start at a park-and-ride lots and have few, if any, intermittent stops—it functions more like a limited stop service. Therefore, given that HRT has previously employed a local bus fare for other limited stop services, HRT has created a new fare class of Limited Stop MAX services that will charge the same fare as a local bus. Concurrent with this new fare structure for a Limited Stop MAX service, HRT will update its Fare Policy to reflect this change.

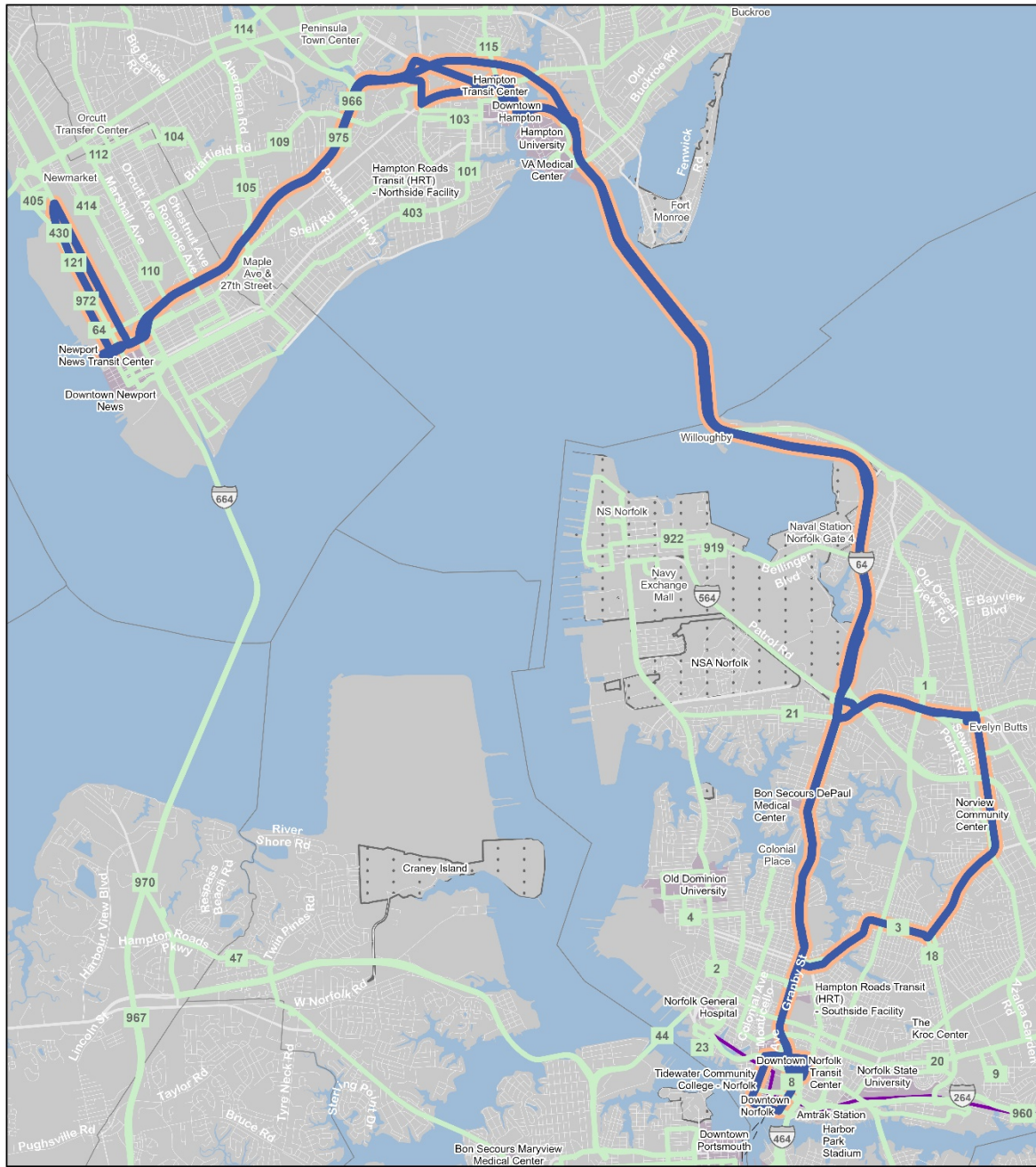
Route 960

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	Route 960 will be realigned to serve Virginia Beach Town Center and provide service along Pacific Ave to 32nd St. Service will operate hourly from 5:00 AM to 9:00 PM seven days a week.	✓	✓	✓
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 961



Route 961

Focus Route

- Planned Alignment
- Existing Alignment

Planned System

Light Rail

Ferry

Military Base

Activity Center

City Boundary



Route 961

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Newport News / Hampton / Norfolk	Newport News / Hampton / Norfolk
Jurisdictions	Norfolk, Hampton, Newport News	Norfolk, Hampton, Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		4:55 AM - 11:12 PM	4:55 AM - 11:12 PM
Saturday		4:58 AM - 10:57 PM	4:58 AM - 10:57 PM
Sunday		7:00 AM - 8:58 PM	7:00 AM - 8:58 PM
Headway			
		Existing	Planned
Weekday	Early	30	30
	AM Peak	30	30
	Midday	30	30
	PM Peak	30	30
	Evening	60	60
	Late Night	60	60
Saturday	Base	40	40
	Non-Base	60	60
	Early / Late	-	-
Sunday	Base	60	60
	Non-Base	60	60
	Early / Late	-	-

Service Changes

- No alignment or level of service changes are proposed.
- Route 961 fares will be lowered to that of regular fixed-route service.

Justification

- Route 961 fulfills a need in terms of getting employees to work throughout the day and will remain unchanged.
- Route 961 (along with Route 960) has operating characteristics that are unlike any of the other MAX routes. Route 961 operates between the downtown Norfolk government center and the Huntington Ingalls Shipyard (Newport News Shipbuilding) and makes several stops at key passenger stops along its alignment. While Route 961 has been traditionally grouped into the same classification of MAX Express routes—routes that typically start at a park-and-ride lots and have few, if any, intermittent stops—it functions more like a limited stop service. Therefore, given that HRT has previously employed a local bus fare for other limited stop services, HRT has created a new fare class of Limited Stop MAX services that will charge the same fare as a local bus. Concurrent with this new fare structure for a Limited Stop MAX service, HRT will update its Fare Policy to reflect this change.

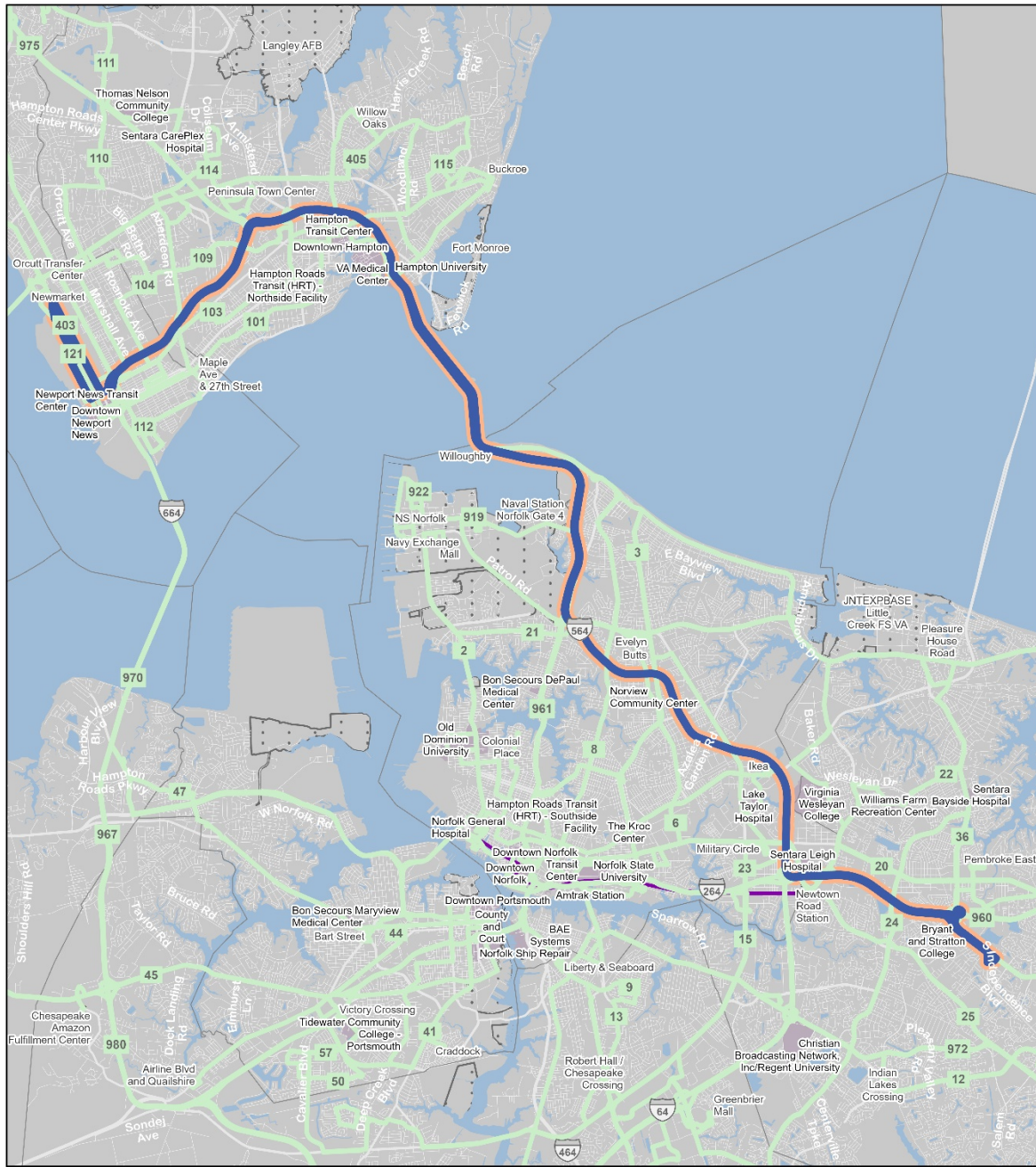
Route 961

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓	✓	✓
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 966



Route 966

Focus Route

- Planned Alignment
- Existing Alignment

Planned System

Light Rail

Ferry

Military Base

Activity Center

City Boundary

0 4
Miles





Route 966

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Silverleaf Park & Ride / Newport News Transit Center	Silverleaf Park & Ride / Newport News Transit Center
Jurisdictions	Newport News, Virginia Beach	Newport News, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		5:20 AM - 6:31 AM; 3:40 PM - 5:03 PM	5:20 AM - 7:00 AM; 3:40 PM - 5:45 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	2 Trips	2 Trips
	AM Peak	-	1 Trip
	Midday	-	-
	PM Peak	2 Trips	3 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- One AM peak trip and one PM peak trip will be added to Route 966.

TD

Justification

- The additional trips will be added to meet shift-specific demand.



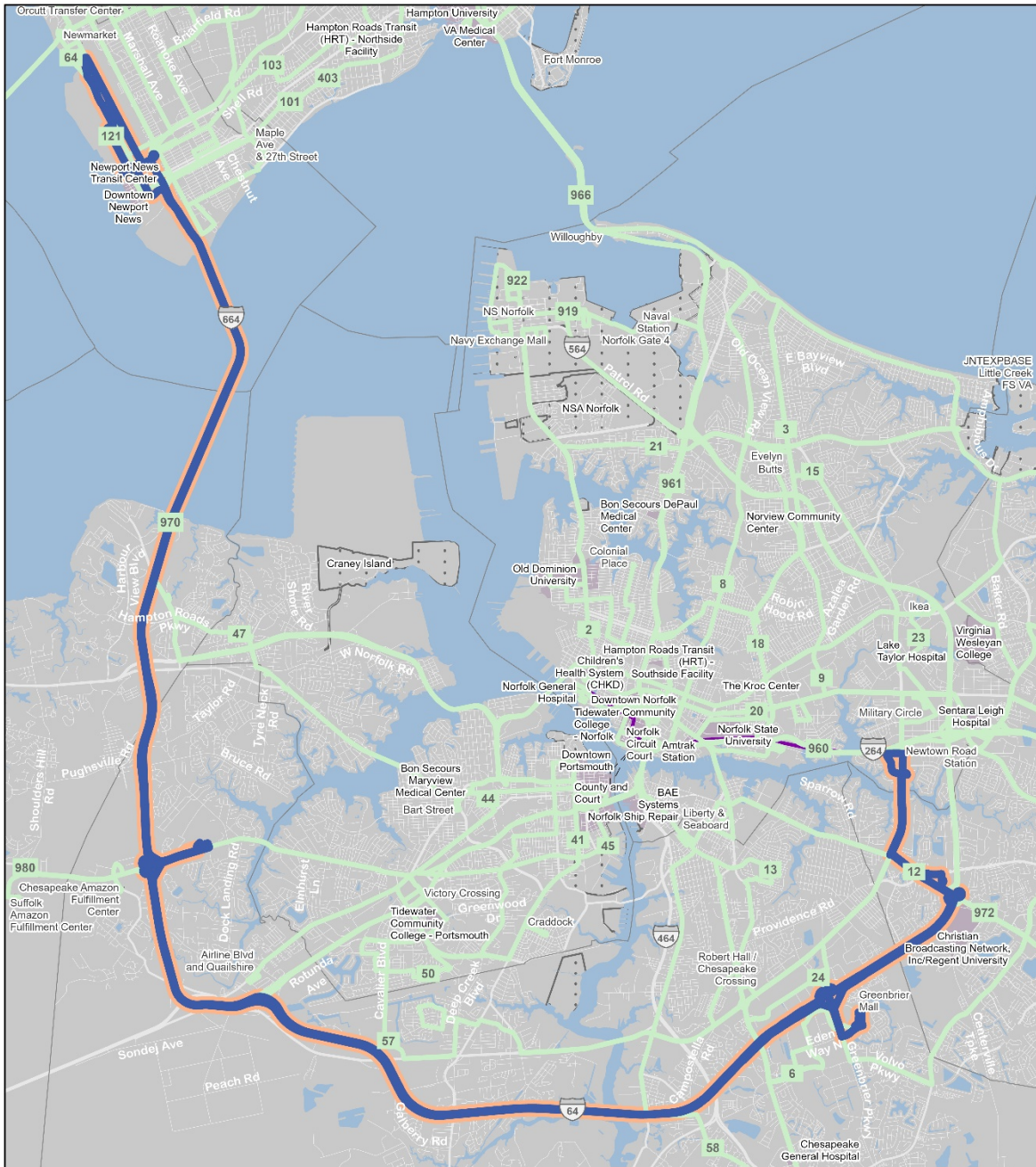
Route 966

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One AM peak period trip is added. One PM peak period trip is added.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 967



Route 967

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary

0 3
Miles





Route 967

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Virginia Beach / Chesapeake / Newport News	Virginia Beach / Chesapeake / Newport News
Jurisdictions	Chesapeake, Newport News, Norfolk, Virginia Beach	Chesapeake, Newport News, Norfolk, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		4:25 AM - 7:14 AM; 3:00 PM - 6:24 PM	4:25 AM - 7:14 AM; 3:00 PM - 6:24 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	5 Trips	5 Trips
	AM Peak	1 Trip	1 Trip
	Midday	-	-
	PM Peak	6 Trips	6 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- No alignment or level of service changes are proposed.

Justification

- Route 967 fulfills a need in terms of getting employees to work at specific shift times and will remain unchanged.

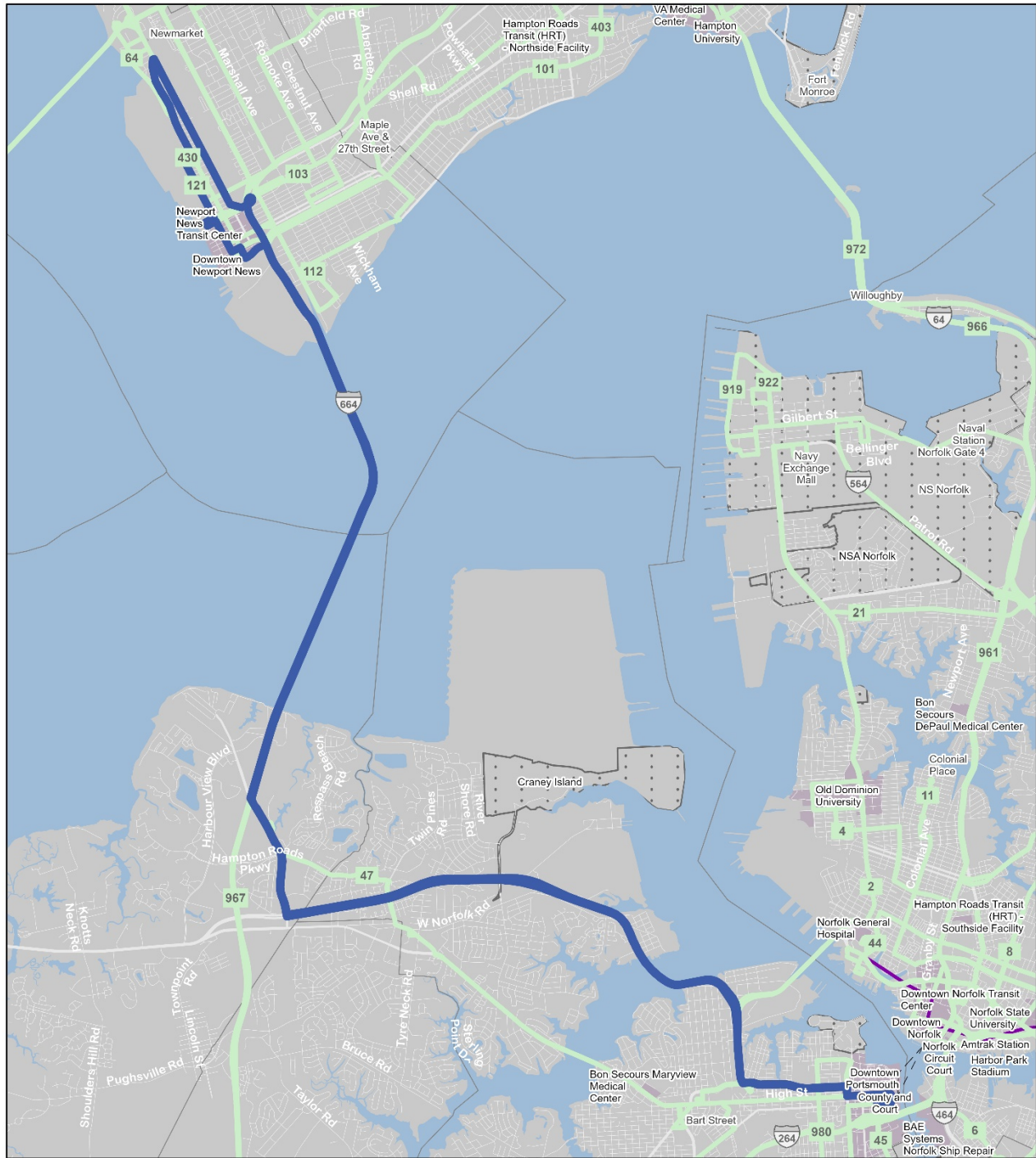
Route 967

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓	✓	✓
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 970



Route 970

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary





Route 970

Service Classification		
Limited/Express		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	-	Portsmouth / Newport News
Jurisdictions	-	Portsmouth, Newport News

Level of Service			
Span			
		Existing	Planned
Weekday		-	6:00 AM - 6:00 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	-	-
	AM Peak	-	4 Trips
	Midday	-	-
	PM Peak	-	4 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- New MAX Route 970 will be implemented in FY 2023 providing express service between Downtown Portsmouth and Downtown Newport News with a stop at the Park & Sail lot at the intersection of Court Street and Bart Street.
- Route 970 will operate Monday through Friday, with four trips operating during the morning and afternoon peak periods. Two trips will be provided in each direction.
- Route 970 is one option for future expansion of MAX service. In the next annual update, this route plus others will be explored, including service connecting Chesapeake to Norfolk Naval Shipyard (Portsmouth). HRT will evaluate the route pattern for the new Route 970 which may include serving the Park and Sail lot at Court and Bart Streets and connecting to Newport News via I-264 to I-664.



Justification

- Route 970 will serve a need for a new peak hour service between Downtown Portsmouth and Newport News Transit Center and Shipyard.

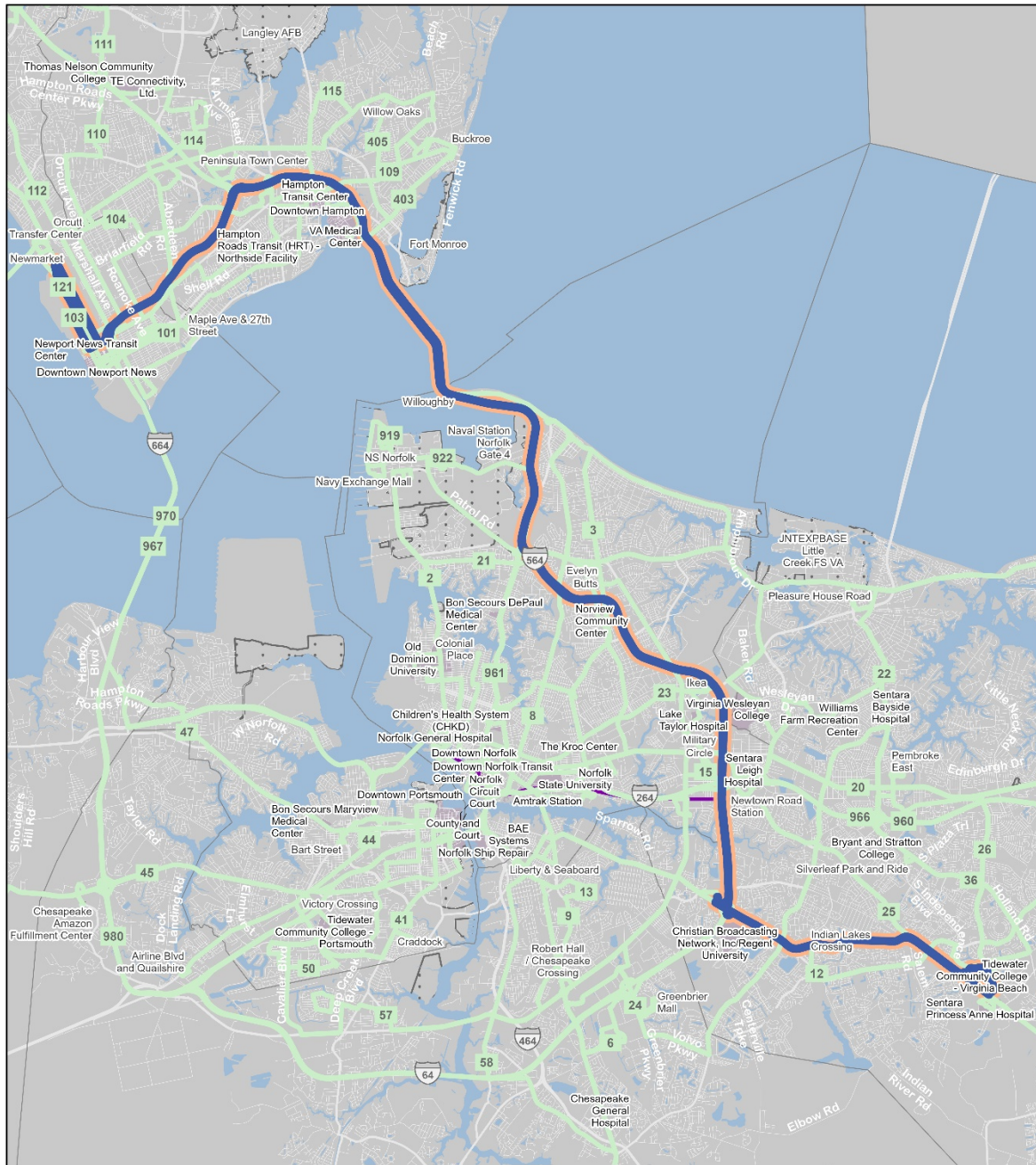
Route 970

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	Service not yet implemented.			
FY 2023	Service on MAX Route 970 begins, operating between downtown Portsmouth and Newport News shipbuilding. Two AM peak trips and two PM peak trips in each direction.	✓	✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 972



Route 972

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 972

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	Virginia Beach / Newport News	Virginia Beach / Newport News
Jurisdictions	Newport News, Virginia Beach	Newport News, Virginia Beach

Level of Service			
Span			
		Existing	Planned
Weekday		5:15 AM - 6:17 AM; 3:40 PM - 4:58 PM	5:15 AM - 7:30 AM; 3:40 PM - 5:30 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	1 Trip	1 Trip
	AM Peak	-	1 Trip
	Midday	-	-
	PM Peak	1 Trip	2 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- One AM peak period trip and one PM peak period trip will be added to Route 972.



Justification

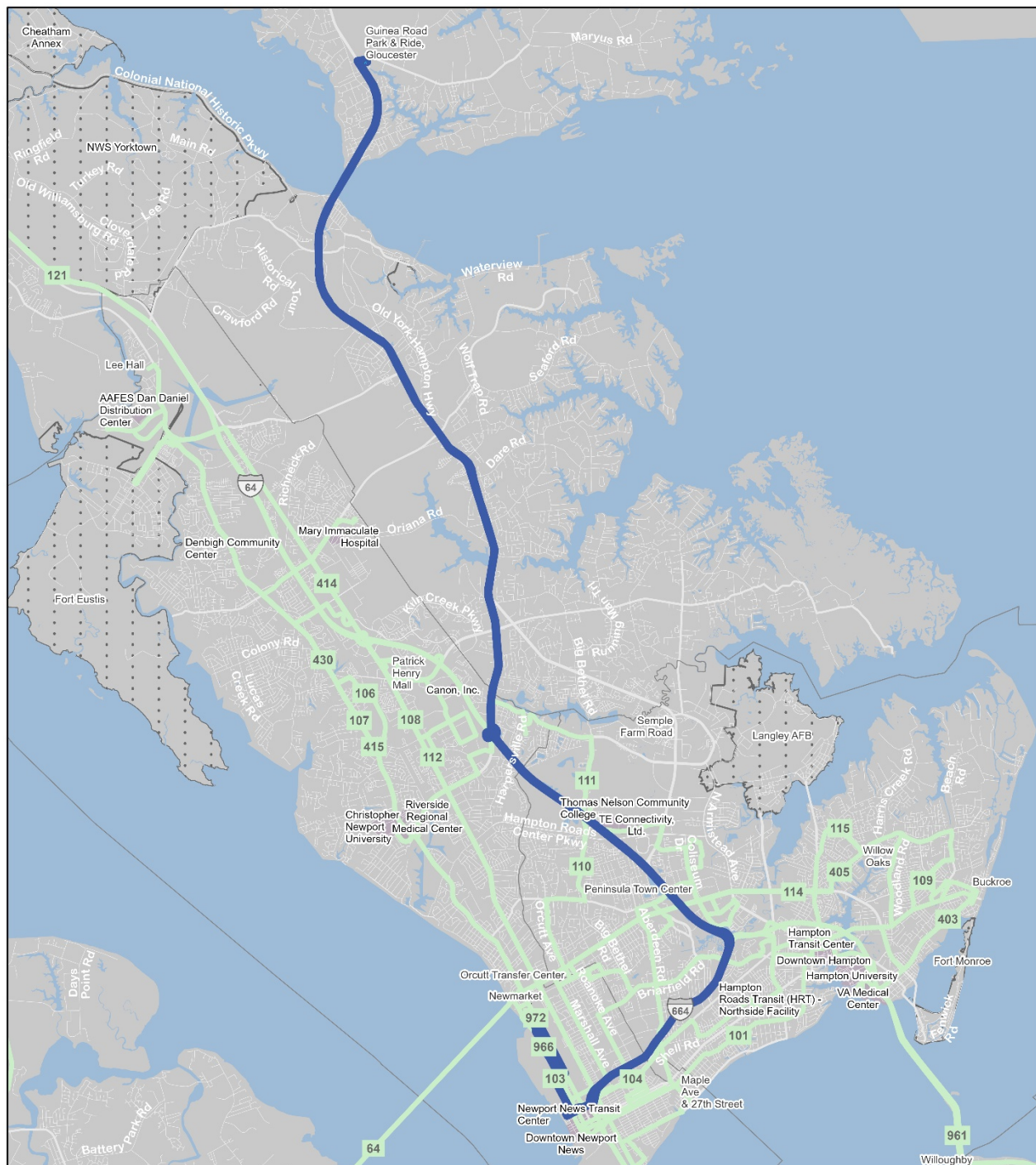
- The additional trips will be added to meet shift-specific demand.

Route 972

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	No changes from existing alignment or level of service.	✓		
FY 2023	One AM peak period trip is added. One PM peak period trip is added.		✓	✓
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			

Route 975



Route 975

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary



Route 975

Service Classification		
Limited/Express		

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	-	Gloucester / Newport News
Jurisdictions	-	Newport News, Gloucester

Level of Service			
Span			
		Existing	Planned
Weekday		-	7:00 AM - 8:00 AM; 3:00 PM - 4:00 PM
Saturday		-	-
Sunday		-	-
Headway			
		Existing	Planned
Weekday	Early	-	-
	AM Peak	-	1 Trip
	Midday	-	-
	PM Peak	-	1 Trip
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	-
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- Route 975 will provide new peak period directional commuter express service between Gloucester (VDOT Park & Ride at the intersection of Route 216-Guinea Rd and York Crossing) and the Newport News Shipyard via US-17 and I-64. The route will operate one trip in the AM peak and one trip in the PM peak.
- HRT and the City of Newport News are exploring other options for where the route may stop within the city en-route to the Shipyard.

TD

Justification

- The efficient movement of personnel to the Shipyard is critical to support national military readiness as well as for achieving the economic development goals of greater Hampton Roads. MAX commuter bus service via this new bus route can provide an alternative to automobile travel and a way for employees to avoid daily congestion and the Coleman Bridge toll.
- HRT was awarded a SMART SCALE grant from VDOT to support the purchase of two new buses for this route.

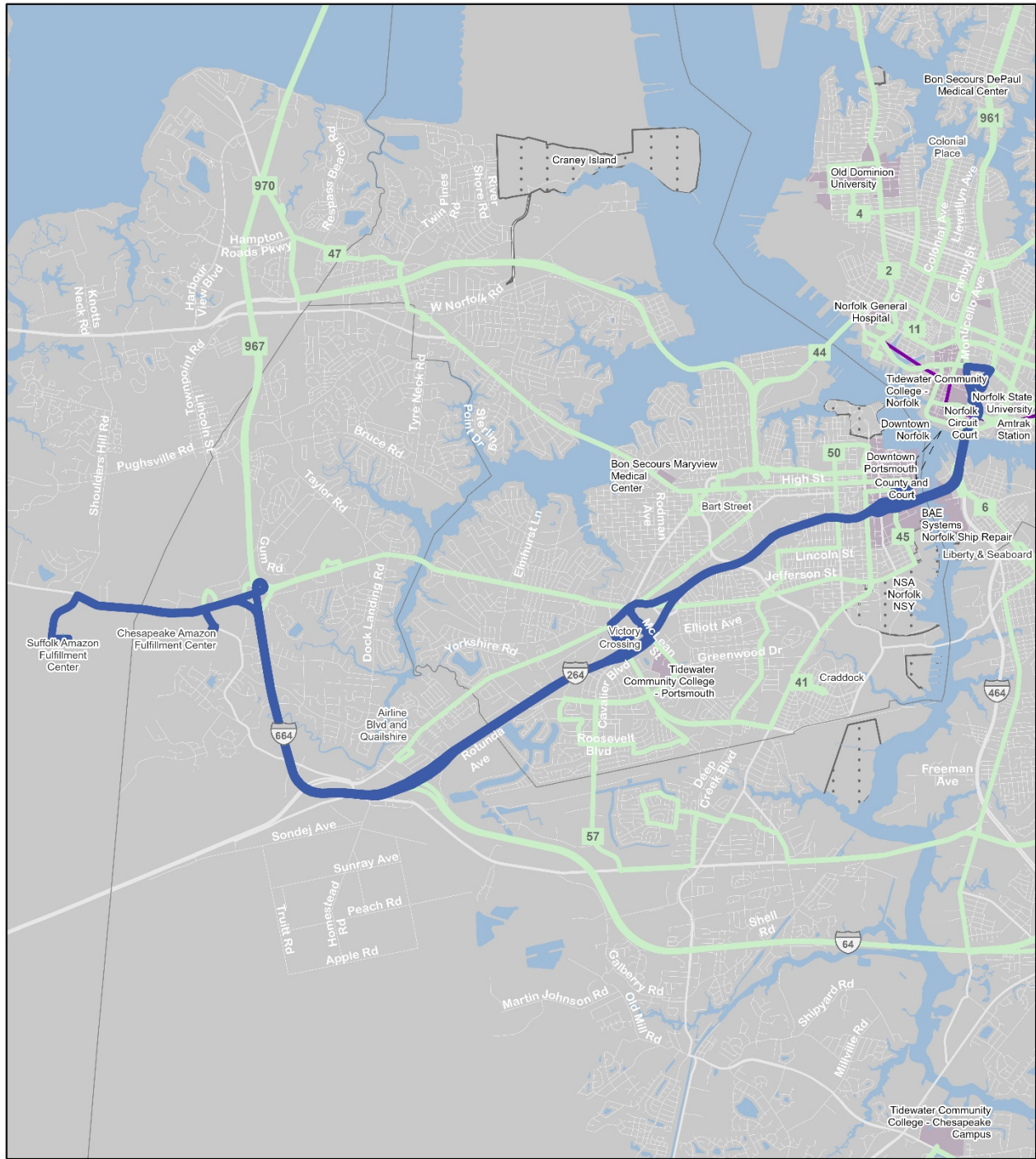
Route 975

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	Service not yet implemented.			
FY 2023	Service not yet implemented.			
FY 2024	Service not yet implemented.			
FY 2025	Service not yet implemented.			
FY 2026	MAX service from Gloucester begins operation. One AM peak trip and one PM peak trip in peak direction.	✓	✓	✓
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			



Route 980



Route 980

Focus Route

- Planned Alignment
- Existing Alignment

- Planned System
- Light Rail
- Ferry

- Military Base
- Activity Center
- City Boundary





Route 980

Service Classification
Limited/Express

Origin and Destinations & Jurisdictions Served		
	Existing	Planned
To / From	-	Norfolk / Portsmouth / Chesapeake/ Suffolk
Jurisdictions	-	Norfolk, Portsmouth, Chesapeake, Suffolk

Level of Service			
Span			
		Existing	Planned
Weekday		-	6:00 AM - 9:00 AM; 3:00 PM - 6:00 PM
Saturday		-	6:00 AM - 9:00 AM; 3:00 PM - 6:00 PM
Sunday		-	6:00 AM - 9:00 AM; 3:00 PM - 6:00 PM
Headway			
		Existing	Planned
Weekday	Early	-	-
	AM Peak	-	3 Trips
	Midday	-	-
	PM Peak	-	3 Trips
	Evening	-	-
	Late Night	-	-
Saturday	Base	-	6 Trips
	Non-Base	-	-
	Early / Late	-	-
Sunday	Base	-	6 Trips
	Non-Base	-	-
	Early / Late	-	-

Service Changes

- Two Amazon facilities are scheduled to open in the Fall of 2021. Transit service via new MAX Route 980 will be implemented providing service from DNTC to the Western Branch and Suffolk Amazon sites with stops at the Park & Sail lot and Victory Crossing in Portsmouth.
- Route 980 will operate seven days a week, with three directional trips in the morning and three directional trips in the evening.

TD

Justification

- Amazon is bringing hundreds of new jobs to Hampton Roads. The new route will help connect workers to jobs from across the region via the express Route 980 and eventually via the extended Route 45 as well. This will provide economic benefit to the region.



Route 980

Improvements by Year

Fiscal Year	Improvement Description	Service Target Reached		
		Alignment	Span	Headway
FY 2022	Introduction of MAX service to Amazon facilities in the Western Branch and Suffolk, along Portsmouth Blvd/Nansemond Parkway. This service will operate seven days a week, with three peak direction trips in the morning and three peak direction trips in the evening.	✓	✓	✓
FY 2023	No changes.			
FY 2024	No changes.			
FY 2025	No changes.			
FY 2026	No changes.			
FY 2027	No changes.			
FY 2028	No changes.			
FY 2029	No changes.			
FY 2030	No changes.			
FY 2031	No changes.			
Out Years	No changes.			

6.7. RTS Implementation

Regional Backbone and Limited/Express routes will provide access to high-quality transit throughout the region as discussed above. This section outlines phasing of the RTS Program implementation and its component parts. HRT will implement the RTS with new branding and marketing as the “757 Express.” There are many component parts and several factors that influence the phasing and implementation of the RTS.

6.7.1. Service Grouping

The implementation of the RTS is primarily designed around three groups of regional transit service improvements labeled as Group A (Peninsula), Group B (select Southside), and Group C (select Southside). Grouping is the dominant factor that influences phasing of the overall Program, as the improvements within a group are dependent upon one another and should be implemented concurrently.⁸ Each group consists of Regional Backbone and/or Limited/Express routes which also have associated Local Priority and Coverage routes.

The three groups of service improvements are shown in **Figure 6-7** and **Figure 6-8**. The routes included in each group are listed in **Table 6-14**.

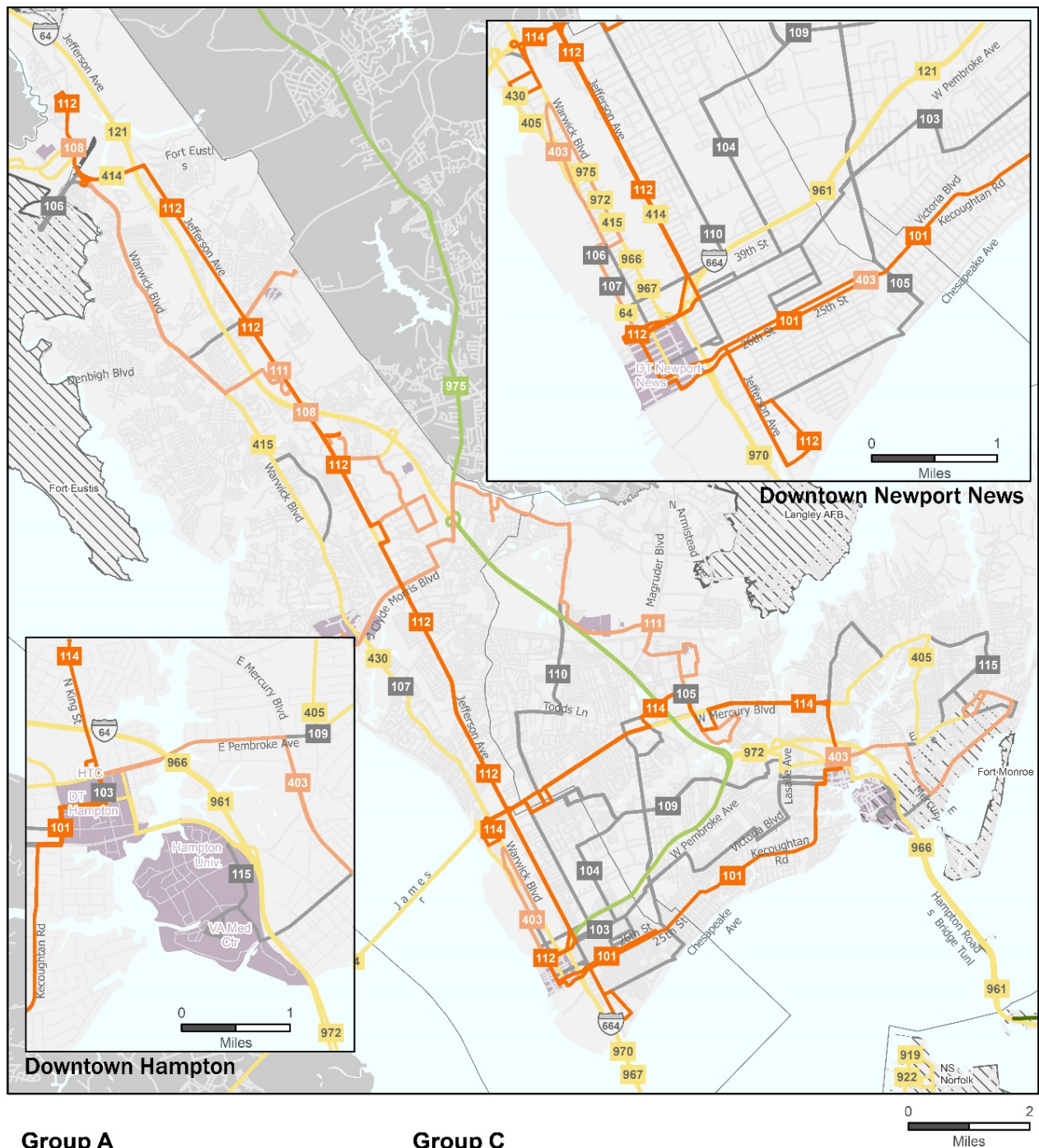
Table 6-14: Phasing Groups

Group A (FY 2023)		Group B (FY 2024)		Group C (FY 2025)	
Program Funded	Related Routes	Program Funded	Related Routes	Program Funded	Related Routes
Route 101		Route 1 Route 36	Route 27	Route 2	
Route 112	Route 108 Route 111 Route 116 (eliminated) Route 118 (eliminated)	Route 45 Route 47	Route 41 Route 43 (eliminated) Route 44 Route 50 Route 57	Route 3	Route 5 (eliminated)
Route 114		Route 15		Route 8	
Route 121		Route 20		Route 21	
Route 403				Route 975 ⁹	
Route 405					
Route 414					
Route 415					
Route 430					
Route 919					
Route 922					
Route 960					
Route 961					
Route 966					
Route 967					
Route 970					
Route 972					
Route 980					

⁸ There are several routes which are being realigned and segments of routes are being taken over by other routes. Because of this, the phasing of the route changes needs to consider how some route changes are interdependent with other services. This is one justification for bundling routes into “buckets” that group together routes whose alignment changes should happen simultaneously to maintain coverage and mobility in the system.

⁹ Route 975 will not start service until FY 2026.

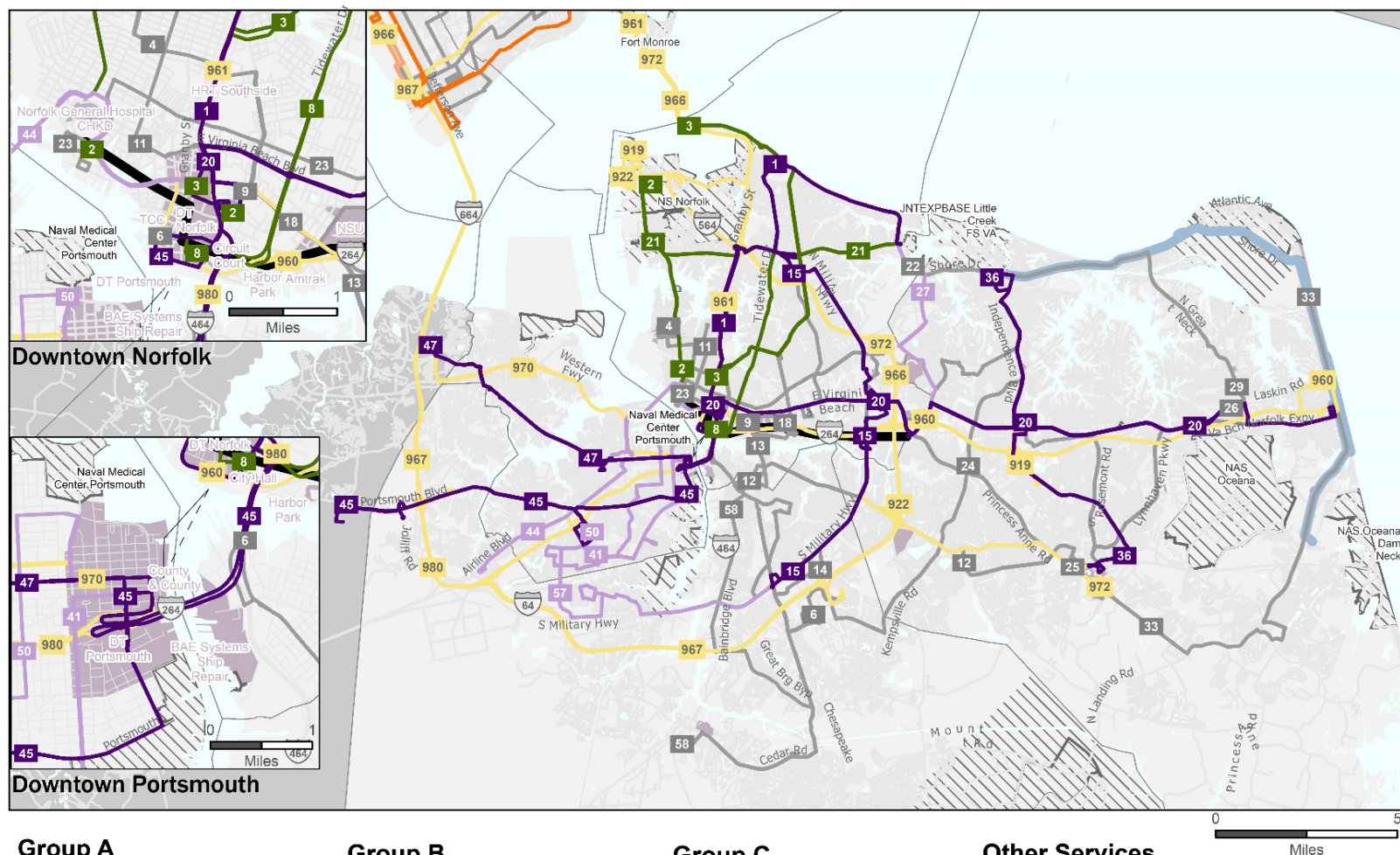
Figure 6-7: Grouping - Peninsula



PENINSULA: Hampton Roads Regional Transit Program Grouping



Figure 6-8: Grouping - Southside



SOUTHSIDE: Hampton Roads Transit Regional Transit Program Grouping



6.7.2. Additional Phasing Factors

In addition to grouping RTS services, other factors that influence phasing and implementation of the Program include:

- Schedule of availability of Hampton Roads Regional Transit Fund moneys and other requisite funding.
- Implementation feasibility based on vehicle procurement schedules, staffing, and other operational action plans, policies, and investments for successful marketing and roll-out of service improvements.
- Environmental or market conditions that are outside HRT's control, for example impacts on supply chains that could impact the delivery of bus orders on time or contract services due to on the COVID-19 public health emergency.

6.7.3. Timing and Components for Start-Up and Ongoing Operation

The timeframe for the start-up of revenue service is distinct for each group as noted in **Section 6.7.1**. Group A is targeted to begin revenue service in October 2022, Group B in October 2023, and Group C in October 2024.

This means the RTS Program will be implemented across the next several years of the Transit Strategic Plan. This also requires that different activities will take place concurrently in order to support the phased start-up and ongoing operation of each of the three groups.

Implementing the entire RTS Program is a major undertaking with many component parts. HRT will initiate and complete activities in several categories that are discussed in more detail below, with the goal being to successfully support the phased (grouped) implementation of the RTS. These activities include (but are not limited to):

- New bus purchases
- Manufacturing and installation of bus shelters
- Upgrades to technology infrastructure
- Installation of new signage
- Real-time passenger information displays at transit centers
- Completing the replacement of facilities, each with distinct planning, engineering and construction needs.

As mentioned in **Section 6.4**, the Program will be referred to as the "757 Express" (**Figure 6-9**). RTS implementation includes both capital projects and operating and maintenance. Capital projects are made up of investments in physical assets. This includes items like acquisition of rolling stock, the purchase and installation of passenger amenities (e.g., shelters, benches, trash receptacles, etc.), construction of new bus operating facilities, and investments in technology infrastructure so that passengers have the ability to access real time information and enhanced fare systems. In addition to being documented in this Transit Strategic Plan, all RTS capital projects are reflected in HRT's FY 2021-2031 Capital Improvement Plan (CIP).

Figure 6-9: Current 757 Express Logo



Operating and maintenance (O&M) expenses are investments that support day-to-day operations, including bus operators, mechanics, fuel, and cleaning. Below is a representative list of the types of O&M costs involved with RTS implementation:

- Facility landscaping, janitorial services, HVAC maintenance, and ongoing utility costs.
- Bus stop and bus shelter cleaning and trash pick-up.

- Bus stop signage maintenance and replacement.
- On-board technology equipment maintenance, yearly software upgrades, farebox maintenance.
- Safety and Security certifications.
- Threat and vulnerability assessments per state and federal regulations.
- Fire & Life Safety and Security code and regulation compliance assessments.
- Safety and Security Management Plan (SSMP).
- Conducting hazard analyses for new bus routes and changes in existing routes, including the placement of new bus shelters.
- Website rebranding and update.
- Integrating Info Web (GTFS Real Time) into GoHRT.com.
- Printing of customer schedules and system maps.
- Market research and outreach.
- Rebranding of buses for Regional Backbone routes.
- Maintenance of Ticket Vending Machine (TVMs) at new passenger facilities.
- Maintenance of real time passenger information displays at Transit Centers.
- Pavement maintenance at all bus loops and park-and-rides at transit centers.
- Maintaining bus infrastructure such as security cameras, WiFi, Automatic Passenger Counters, Automated Vehicle Location, etc.
- IT software and hardware upgrades.

The components necessary for successful RTS start-up and ongoing operations generally fall into one of five main categories: **Rolling Stock, Human Resources, Technology, Facilities, and Communications and Marketing.**



Rolling Stock

Purchasing **new buses** to support the 757 Express is essential for success. The Program requires a total of 48 additional buses. Group A requires 24 buses (20 for operation, 4 spares); Group B requires 12 buses (10 for operation, 2 spares); and Group C requires 12 buses (10 for operation, 2 spares). As reflected in HRT's Capital Improvement Plan (FY21-FY31), a combination of funding from federal, state, and Hampton Roads Regional Transit Fund sources is planned to support these new bus purchases. Six additional paratransit vehicles, with a five-year replacement cycle, are also part of the RTS.

The typical time span from the placement of a new bus order to delivery and getting the bus ready to deploy is approximately 18 months. There will be three rounds of bus procurement (one for each group) to support the phased start-up of the RTS to ensure that new buses are on-site and ready to roll into revenue service when needed. The estimated useful life for a new 40' diesel bus is 12 years or 500,000 miles, whichever comes first.

Non-revenue support vehicles are also part of the RTS. These are service trucks, vans, and sedans (23 in total) that will be utilized by bus supervisors, security personnel, mechanics, and facility maintenance personnel serving out in the field to support operations.

Figure 6-10: Mock-Up of RTS Livery





Human Resources

Hiring, training and retention of a viable workforce is paramount to the success of the 757 Express. Indeed, this is perhaps the most mission-critical RTS component and **Workforce Success** is an agency core value: *HRT is committed to the effective hiring, training, and ongoing success of every team member.*

Similar to the phased approach for new bus purchases to ensure they are on-site and ready to go when needed, a phased approach is also part of meeting the **Human Resources** needs of the RTS Program. Only positions directly related and essential to RTS implementation are part of the Program. Program positions are listed in **Table 6-15**.

The biggest need is for Bus Operators, approximately 122 in total. As with other positions, these will be filled incrementally to match operating needs as Group A (approx. 37 operators); Group B (approx. 69 operators); and Group C (approx. 16 operators) come online. Positions that support start-up hiring, promotion, or specific projects (i.e., a Talent Acquisition Specialist, RTS Technology Project Manager, Outreach Coordinators and Facility Mechanics) will be temporary. **Ancillary components** within the Human Resources category include additional recruitment costs such as job fairs, job board postings, background checks, DOT physicals, and drug tests.

Figure 6-11: Transit Operators



Table 6-15: Positions for RTS Implementation

Department	Position	# of Staff			
		FY 2022	FY 2023	FY 2024	TOTAL
Operations Staff					
Operations	Bus Operators	37	69	16	122
	Mechanics/Serviceirs/Cleaners	6	6	9	21
	Operations Supervisors - Bus/Maintenance	3	5	4	12
	Asst. Manager of Bus Operations	1	0	1	2
	Operations Admin/Payroll Technician	0	1	1	2
	Operations Facilities Technician	0	0	1	1
Total Operations Staff		47	81	32	160
Administrative Support Staff					
Customer Relations	Customer Service - Reps/Leads/Liaison	0	5	0	5
Engineering & Facilities	Facility Mechanics	0	3	1	4
Finance	Staff Accountant	0	0	1	1
Human Resources	HR Assistant/Specialists	3	0	0	3
OPPE	Grants Program Analyst	1	0	0	1
Planning & Scheduling	Scheduler	0	1	0	1
Security	Security - Asst. Manager/Specialist	0	2	1	3
Technology	Client Technology Engineer	1	0	0	1
	Technology Helpdesk	1	0	0	1
Total Administrative Support Staff		6	11	3	20
Temporary Staff					
Engineering & Facilities	Facility Mechanics - Temp	0	0	2	2
Human Resources	Talent Acquisition Specialist - Temp	2	0	0	2
Marketing & Communications	Outreach Coordinators - Temp	2	0	0	2
Operations	Bus Training Instructor - Temp	1	0	0	1
Technology	RTS Technology Project Manager - Temp	1	0	0	1
Total Temporary Staff		6	0	2	8
TOTAL STAFF		59	92	37	188



Technology

Technology is another important category of the RTS Program. This includes tools that directly impact customers, like purchasing, installing and maintaining digital displays for bus arrival information and system alerts; Wi-Fi; and enhanced fare systems.

It also includes components that are typically behind-the-scenes and less visible, but just as important for operational success of the RTS Program. This includes items like cabling, firewalls, switches, cameras, access controls, phones, computers, printers, network security, cloud services, and licensing. Among the earliest RTS technology projects is deploying new digital passenger information displays at Hampton Transit Center, Newport News Transit Center, and Downtown Norfolk Transit Center.

Figure 6-12: On-Board Vehicle Display



Figure 6-13: Passenger Waiting Facility



Facilities

Facilities is a category of the RTS Program, like Technology, that includes both customer-facing and behind-the-scenes components. A new **Bus Stop Amenity Program** is one of the most significant RTS

Program elements. Customer experience on the regional system will be significantly improved with approximately 623 new shelters, benches, trash receptacles, and solar lighting. Passenger facilities will also benefit from improved cleaning and maintenance through expanded coverage and service levels by both contracted services and HRT staff support.

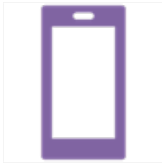


Transfer hubs will be greatly improved as on-street operations at Evelyn T. Butts Transfer Center (Norfolk); Net Center (Hampton); and Robert Hall Transfer Center (Chesapeake) are replaced with new facilities in order to effectively support the RTS. In addition, the City of Portsmouth will be closing the on-street bus transfer operation at County and Court Street within the next few years due to redevelopment of the County Street Municipal Garage. The City has submitted a SMART Scale application to relocate the bus transfer operation to the Park and Sail lot at Court and Bart Streets. This transfer facility will be an improvement over the current on-street operation and will also have park-and-ride accommodations. HRT will evaluate how this future facility can be accommodated within the RTS Program in the next annual update if the project has progressed by then. Additionally, the City of Virginia Beach has informed HRT that the on-street transfer facility located at Arctic and 19th Street will no longer be available at the end of 2021, due to nearby redevelopment activity. As a result, the City has requested this bus transfer facility be located at the site of the current Convention and Visitors Bureau. In support of the next annual TSP update, HRT will evaluate how this future facility may be accommodated in the RTS Program.

The RTS Program also includes a new Southside Bus Operating Division to **relocate and replace the Parks Avenue Facility** in Virginia Beach that currently houses trolley operations. This is a hybrid project that addresses both state of good repair issues and expansion needs that support the RTS Group B and Group C. The new facility will accommodate year-round operations and be large enough to support the storage, maintenance, and operation of

the RTS in addition to trolley operations. Similar to new bus purchases, these facilities projects will utilize a combination federal, state, and Hampton Roads Regional Transit Fund resources.

Ancillary components include safety and risk assessments, incremental insurance costs, and an alternative fuels study which will be completed to support due diligence related to provisions of Code of Virginia § 33.2-2600.1 C. This calls for giving priority, when possible, to cost-effective and sustainable investments that reduce or eliminate reliance upon diesel fuels. Additionally, in support of the agency goal of “safe and secure transportation for all customers” as it relates to the RTS, HRT will enhance **Security** operations using contracted and staff resources.



Communications and Marketing

Communications and Marketing components of the RTS Program extend from supporting early start-up activities all the way through to full implementation and ongoing operational support.

A recruitment advertising campaign will be targeted to help hire the workforce needed to operate the RTS. This will be a sustained effort to allow time to attract, hire and train new

operators on a continual basis as the start-up of each RTS group unfolds.

Figure 6-14: Example of Potential 757 Express Bus Stop



Also concurrent with the start-up of each group of services, new branding and marketing of the 757 Express will include all forms of media in addition to bus wraps and new signage at bus stops and transit centers. The Program includes development, printing, and multi-media to disseminate schedules, system maps, and other information for customers and the public-at-large. Promotional campaigns and outreach teams will engage businesses and target markets in communities across Hampton Roads to promote utilization of the enhanced regional transit system. HRT will use both contracted and in-house services to complete RTS communications and marketing tasks.

6.8. RTS Resource Allocation

The allocation of funding (both capital and operating) and overall implementation of the RTS will be continuously guided by the following principles:

- Demonstrated fit of Program investments to the key factors and administrative requirements outlined in the legislation.
- Delivering results on-time and on-budget.
- Adherence to strategic bundling of services to support phased implementation.
- Adapting to feasibility of procurement schedules, staffing, and other operational action plans for successful marketing and roll-out of service improvements.
- Ensuring upkeep and the maintenance of a state of good repair over time.
- Using project delivery methods that most efficiently connect communities across the region with transit infrastructure and services.
- Protecting and enhancing the statutory flexibility and diversity of funding sources, financing, and procurement options to leverage resources and maximize the value of each available dollar.
- Ensuring balanced and equitable investments, including Title VI compliance, across the HRT service area.
- Fostering innovation and adhering to data-driven decision making, incorporating new technologies, and using robust methods to evaluate performance and ongoing service changes.
- Close collaboration with city partners for integration of Program investment strategies and related projects with local land-use policies, plans, and projects that expand access to safe and reliable transit for more segments of the Hampton Roads region and can support auxiliary private investments and economic activity.
- Connecting more workers to jobs, customers to businesses, and access to educational, retail, medical, recreational, and other opportunities that support quality of life and thriving local and regional economies.
- Support the 757 Recovery and Resilience Plan designed to reinvigorate the regional economy after the impacts of the COVID-19 pandemic.

Additionally, in authorizing the Hampton Roads Regional Transit Program and Fund, the Code of Virginia requires that Hampton Roads Regional Transit Fund disbursements shall be approved by HRTAC “*consistent with the regional transit planning process developed pursuant to subsection D of § 33.2-286.*” This is a planning process that is required to be jointly defined by HRT, WATA, and Suffolk Transit and includes the development and implementation of a regional subsidy allocation model and the distribution of funds for transit administered through HRTAC (though the use of the Fund applies only to Hampton Roads Transit).

In keeping with this regional transit planning process as it pertains to the development and implementation of a regional subsidy allocation model:

- Regional subsidy allocations will only apply to projects and services located in a transportation district in Hampton Roads created pursuant to § 33.2-1903.
- Regional subsidy allocations may not be used toward any projects or services not contained in the Hampton Roads Regional Transit Program as incorporated in this Transit Strategic Plan (TSP).
- For eligible projects and services, the maximum regional subsidy funding available and necessary to implement the Program may be utilized.
- Regional subsidy funding may be used toward eligible capital and operating expenses. A capital project is an investment in a physical asset like a bus, facility, bus shelters or benches. Operating expenses are investments to support day-to-day operations, such as bus operators and mechanics, or fuel and cleaning.
- Regional subsidy funding may be used for state of good repair and for expansion of services and related capital projects. SGR projects typically deal with rehabilitating or replacing existing assets, for example purchasing a new bus to replace an old bus that is beyond its useful life. Expansion projects, on the other hand, add new capacity to the transit system, for example, increasing the number of bus shelters or building a new facility to operate and maintain expanded services.

- Regional subsidy funding may be used at 100 percent share of costs or may be used to match and leverage other funding. If used to match state funding, regional subsidy funding shall be counted toward meeting local match requirements. A mix of funding is not required.
- Allocations of regional subsidy funding are meant to enhance not reduce other funding used to support transit infrastructure and services across the transportation district. As regional subsidy funding is applied, it is prohibited for local funding for public transportation purposes to be reduced to an amount less than what was appropriated on July 1, 2019.
- The regional subsidy model was implemented beginning Fiscal Year 2021.

In keeping with the regional transit planning process as it pertains to the distribution of funds for transit administered through HRTAC:

- Distribution of funds shall be consistent with the regional transit planning policy and shall only be for core and connected regional services contained in the Program approved by the governing board of the transportation district.
- Such funds may not be used for other public transportation services (for example, local bus routes).
- Disbursement of regional funds shall not diminish the right of the eligible applicant to determine and utilize the most beneficial type of funding for each type of eligible project or service.
- Distributions of regional funding will not be used to reduce or replace total Local funding that has been utilized for public transportation as of July 1, 2019.
- Distributions of regional funding shall not impinge upon the right of the eligible applicant to use regional funding to participate in competitive state and federal grant programs, when appropriate, to effectively deliver projects and draw additional dollars into the region that would not otherwise be accessible.

6.8.1. Capital

RTS capital projects will utilize the Hampton Roads Regional Transit Fund and match this funding with federal and state sources, when feasible, to optimize the use of all available funding. These projects are reflected in the HRT FY 2021-2031 Capital Improvement Plan (CIP), as amended January 28, 2021, and are also listed in **Table 6-16**.

It is important to emphasize this is a *plan* for investing in RTS capital projects and not a budget; as needs emerge and real-world conditions influence projects, HRT will adapt RTS capital investment strategies. This TSP, including the regional Program, undergoes an update annually and a major update every five years. Of special note, the capital schedule for the New Bus Operating Division (Parks Avenue Relocation and Replacement) maintains the same total project funding as planned for in HRT's current CIP (\$47.4M), however in **Table 6-16** the majority of total project funding (\$29.7M) has been shifted forward to FY 2023. This update has been made to better align with potential state matching funds. Another difference between the RTS Program and the CIP is that planned funding for preventive maintenance (mid-life overhauls) on RTS buses beginning in FY 2028 is included in **Table 6-16**. These updates in the RTS Program will be reflected in the next annual update to the CIP in December 2021.

Table 6-16: RTS Program Capital Expenses and Funding

Item	Expenses (YOE\$ Millions)										
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
New Bus Operating Division - Southside	5.5	12.2	29.7	-	-	-	-	-	-	-	-
Transit Bus Expansion	13.2	6.4	6.5	-	-	-	-	-	-	-	-
Robert Hall Transfer Center Replacement	2.0	2.0	-	-	-	-	-	-	-	-	-
Paratransit Fleet Expansion	-	0.5	-	-	-	-	0.5	-	-	-	-
Net Center Replacement	0.1	0.6	-	-	-	-	-	-	-	-	-
RTS Technology	0.1	0.5	-	0.1	-	-	-	0.1	-	-	-
Non-Revenue Fleet Expansion	-	1.0	-	-	-	-	-	-	-	1.1	-
Evelyn T Butts Transfer Center Replacement	1.0	5.1	-	-	-	-	-	-	-	-	-
Bus Stop Amenity Program	3.3	5.3	5.5	7.0	3.6	-	-	-	-	-	-
RTS Bus Mid-Life Overhaul	-	-	-	-	-	-	-	0.3	3.1	1.7	1.8
Total Planned Capital Expenditures	25.2	33.6	41.7	7.1	3.6	-	0.5	0.3	3.1	2.8	1.8

Item	Funding (YOE\$ Millions)										
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Federal 5307	4.8	5.1	9.1	-	-	-	0.3	0.2	2.4	1.9	1.4
Federal 5339	-	1.7	-	-	-	-	-	-	-	-	-
State	0.1	6.8	15.3	-	-	-	-	-	-	-	-
HRRTF	20.2	20.0	17.3	7.1	3.6	-	0.3	0.1	0.6	0.9	0.4
Total Planned Capital Funding	25.2	33.6	41.7	7.1	3.6	-	0.5	0.3	3.1	2.8	1.8

Note: Due to rounding, summing the individual elements may result in a slightly different figure than the total displayed. The rounded totals are the accurate source for totals.

6.8.2. Operations and Maintenance

Table 6-17 reflects preliminary costs and revenues for RTS Program Operations and Maintenance (O&M) over the current 10-year planning horizon. This includes costs based on hours of service, as the RTS operations are phased in over time for Groups A, B, and C, as well as additional costs each year for specific O&M categories as discussed in **Section 6.7.3**.

Table 6-17: Planned RTS Program O&M Costs and Revenues

Item	Expenses (YOE\$ Millions)										
	A			B		C					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Bus Fixed Guideway Operating Expenses (MAX)	-	4.1	5.2	5.5	5.7	5.9	6.2	6.4	6.6	6.9	7.1
Regional Backbone Operating Expenses (15-min service and PCS)	-	2.2	6.5	17.6	24.8	26.7	27.6	28.6	29.6	30.7	31.7
Total RTS Bus O&M Costs	-	6.4	11.7	23.1	30.4	32.6	33.8	35.0	36.2	37.5	38.8
Additional RTS O&M Costs (above cost/hour)	0.6	4.8	7.6	7.0	5.8	4.1	4.2	4.3	4.4	5.3	4.7
Total RTS O&M Expenses	0.6	11.2	19.4	30.1	36.3	36.7	38.0	39.3	40.6	42.8	43.5

Item	Funding (YOE\$ Millions)										
	A			B		C					
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Fare Revenues	-	0.6	0.8	1.9	2.7	2.9	2.9	3.4	3.6	3.8	3.9
HRRTF	0.6	10.6	18.5	28.2	33.5	33.8	35.0	35.9	37.0	39.1	39.5
Total Funding Support RTS O&M	0.6	11.2	19.4	30.1	36.3	36.7	38.0	39.3	40.6	42.8	43.5

Note: Due to rounding, summing the individual elements may result in a slightly different figure than the total displayed. The rounded totals are the accurate source for totals.

A summary for FY 2021 – FY 2022 RTS Program items and costs is shown in **Table 6-18**. This depicts Program items for which HRT plans to utilize Fund moneys, in the estimated amounts shown, to support O&M expenses over this period up to June 30, 2022.

Table 6-18: RTS FY 2021 - FY 2022 Program O&M Items and Costs

FY 2021 - FY 2022 Regional Transit System (RTS) Program (Operations & Maintenance)		Program for HRRTF Funding
Item	Description	Expenses (YOES Millions)
RTS Bus Operations	MAX / PCS / 15-min frequency incremental costs (Routes 1, 3, 15, 20, 47) (see Table 6-19).	5.7
Planning	Alternative Fuels Study; RTS Program annual update (Transit Strategic Plan); 10-year RTS Capital Program update.	0.8
Human Resources	Direct RTS Program staffing (see positions listed in Table 6-15).	1.8
Marketing and Communications	Targeted Recruitment advertising; Bus Wraps production; Promotional media; System map development/printing; Marketing contract services.	0.7
Technology	Real-time displays O&M; Transit Wi-Fi; Networking; Datacenter hardware and software; Microsoft server/client/ cloud services expansion and licensing; website re-branding (one-time); staff equipment costs; Mobile and communication services/WAN/Internet/ telephony; Endpoint protection expansion (one-time).	0.3
Safety and Security	Safety/risk assessments; insurance; enhanced security.	0.2
Facilities	Contracted cleaning; Shelter maintenance and material; Professional fees for shelter replacements / transfer center replacements Evelyn T. Butts; Robert Hall.	1.1
HRTAC Administrative Fee	Fees that HRTAC will occur in monitoring the HRRTF program.	0.5
TOTAL		11.1

Note: Due to rounding, summing the individual elements may result in a slightly different figure than the total displayed. The rounded totals are the accurate source for totals.

Table 6-19 provides a further breakdown related to bus operations, for which a total of \$5,744,011 from the Fund is required in FY 2022. The operating costs displayed in this table represents only the incremental cost of providing 15-minute service frequencies above a base service level of 30-minute frequency for the Regional Backbone routes and the total hours for the Limited/Express services. This is based on approximately \$6.4 million in total operating costs offset by an assumed \$611,135 in farebox revenue. HRT will apply to HRTAC for additional funding to cover any negative end-of-year variance(s), should they occur, due to expenses or farebox revenues being different than shown in **Table 6-19**. In the case of any positive end-of-year variance, HRT will apply to HRTAC for remaining funds to be credited toward the following year's RTS bus operations expenses.

Table 6-19: FY 2022 RTS Bus Operations

Regional Program Routes	Service Hours	Total Expense	Farebox Revenue	Fund Support
MAX/PCS Routes				
121 MAX	973	\$95,662	\$5,175	\$90,487
919 MAX	1,532	\$150,612	\$12,800	\$137,812
922 MAX	1,773	\$174,340	\$9,675	\$164,665
960 MAX	10,413	\$1,023,963	\$92,466	\$931,497
961 MAX	20,329	\$1,999,096	\$154,092	\$1,845,004
966 MAX	1,049	\$103,155	\$11,438	\$91,717
967 MAX	3,696	\$363,417	\$34,199	\$329,218
972 MAX	592	\$58,197	\$13,060	\$45,137
980 MAX	1,682	\$165,400	\$16,540	\$148,860
400 PCS	2,748	\$270,252	\$40,409	\$229,843
Total MAX/PCS Routes:	44,786	\$4,404,094	\$389,854	\$4,014,240
15-Min. Increment				
1 Downtown Norfolk/Pembroke East	3,675	\$361,382	\$38,677	\$322,705
3 Downtown Norfolk/Naval Station	3,627	\$365,661	\$39,330	\$317,331
15 Naval Station Norfolk/Robert Hall Blvd.	5,560	\$546,744	\$61,431	\$485,313
20 Downtown Norfolk/VA Beach Oceanfront	4,963	\$488,038	\$64,789	\$423,249
47 Downtown Portsmouth/Churchland	2,016	\$198,227	\$17,054	\$181,173
Total 15-min. Increment:	19,841	\$1,951,052	\$221,281	\$1,729,771
Total FY 2022 Regional Program Routes:	64,627	\$6,355,146	\$611,135	\$5,744,011

A further breakdown of the additional RTS Program O&M costs (above cost per hour), shown in **Table 6-17**, is provided in **Table 6-20**. This includes estimated HRTAC administrative expenses associated with managing the Hampton Roads Regional Transit Fund (HRRTF).

Table 6-21 provides an overall view of planned uses of the Hampton Roads Regional Transit Fund (HRRTF) to implement the RTS Program documented in this chapter. **Table 6-21** reflects a plan, not a budget. HRRTF revenue forecasts are based on Virginia Department of Taxation estimates. As with **Chapter 5** in this TSP update, **Table 6-21** does not include any funding assumptions associated with additional discretionary or relief funding HRT will receive, for example, as a result of the American Rescue Plan Act of 2021. In developing this information, HRT has utilized conservative assumptions related to RTS staffing, system ridership, and farebox revenues. HRT will proactively manage and update the Hampton Roads Regional Transit Program and this Transit Strategic Plan (TSP) in a manner that ensures ongoing fiscal responsibility and sustainable regional transit operations.

Table 6-20: Planned RTS O&M Costs (Above Cost/Hour)

Item	Expenses (YOE\$ Millions)										
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Planning	0.3	0.5	0.2	0.2	0.9	0.2	0.2	0.2	0.2	0.9	0.2
Human Resources	-	1.8	4.3	3.0	1.0	0.1	0.1	0.1	0.1	0.1	0.1
Marketing and Communications	-	0.7	0.4	0.4	0.2	-	-	-	-	0.2	-
Technology	-	0.3	0.8	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3
Facilities	-	1.1	1.5	1.6	1.9	2.0	2.1	2.1	2.2	2.2	2.3
Safety & Security	0.0	0.2	0.2	0.4	0.5	0.3	0.3	0.4	0.4	0.4	0.4
HRTAC Administrative Fee	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Additional RTS O&M Costs (above cost/hour)	0.6	4.8	7.6	7.0	5.8	4.1	4.2	4.3	4.4	5.3	4.7

Note: Due to rounding, summing the individual elements may result in a slightly different figure than the total displayed. The rounded totals are the accurate source for totals

Table 6-21: Planned HRRTF Revenues and Expenditures

HRRTF Balance (YOE\$ Millions)	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031
Beginning Balance	-	5.4	7.2	4.1	1.9	(1.6)	(1.6)	(3.0)	(5.1)	(8.8)	(14.8)
HRRTF Projected Revenues	26.2	32.3	32.7	33.2	33.6	33.8	33.9	33.9	33.9	34.0	34.1
HRRTF Planned Capital Spending	20.2	20.0	17.3	7.1	3.6	-	0.3	0.1	0.6	0.9	0.4
HRRTF Planned O&M Spending	0.6	10.6	18.5	28.2	33.5	33.8	35.0	35.9	37.0	39.1	39.5
Cumulative Balance	5.4	7.2	4.1	1.9	(1.6)	(1.6)	(3.0)	(5.1)	(8.8)	(14.8)	(20.5)

Note: Due to rounding, summing the individual elements may result in a slightly different figure than the total displayed. The rounded totals are the accurate source for totals

6.9. Measuring Performance

Once RTS Program services have been implemented, the performance of these routes will be evaluated on a rolling basis in accordance with DRPT guidance as outlined in the Transit Strategic Plan Guidelines.¹⁰ These guidelines indicate that the performance of a bus service should be measured against several metrics, such as:

- **Ridership:** passengers per mile, passengers per hour, total passenger miles, etc.
- **Cost efficiency:** cost per mile, cost per hour, cost per trip, farebox recovery, etc.
- **Safety:** accidents, injuries, etc.
- **System accessibility:** residential access to the system, jobs accessible to the system, etc.

All of these measures will be important to assess on an annual basis in order to best understand the usage and performance of each Regional Backbone and Limited/Express service and to identify where adjustments could be made to improve operations (e.g., route alignment, scheduling, blocking, run-cutting, etc.). Additionally, the TSP Guidelines call for an efficiency evaluation assessing reliability and on-time performance, two qualities that are essential for understanding and maintaining 15-minute headways as reflected in the Program. These measures should also be assessed annually.

Additional measures may be included that address other agency goals and objectives. HRT will measure the performance of Program services based on factors cited by the relevant legislation which indicates that investments should be positively linked to factors of “*economic development potential, employment opportunities, mobility, environmental sustainability, and quality of life.*” The metrics outlined in **Section 6.5.2: Program Factors, Objectives, and Metrics** will be evaluated and improved upon annually in an effort to understand the impact of the Program on the community.

Routes that perform as well as or better than expected should be considered for additional resource investment, while routes that perform below expectations should be put under performance review with remedial service change actions. After allowing for a period of growth along any new or adjusted route is important, with most services afforded a period of at least 18 to 24 months to normalize. After this period, the performance of the Regional Backbone and Limited/Express services supported by the Fund will be monitored and adjusted as necessary to ensure the on-going success of the Program. Any remedial actions toward Regional Backbone routes will also follow existing HRT Service Standards policy. While it is important to measure the performance of each Regional Backbone service annually, at least 18 months should be given to routes that have received alignment adjustments in order for those routes to build a market and awareness of recent upgrades before additional changes are recommended.

¹⁰ See http://www.drpt.virginia.gov/media/2526/transit-strategic-plan-guidelines-draft_clean_082918.pdf.