Hampton Roads Transit

December 8, 2011

Transit Development Plan
FY 2012 through FY 2017

EXECUTIVE SUMMARY

INTRODUCTION

The Transit Development Plan (TDP) for Hampton Roads Transit (HRT) was initiated based on the guidance of the Virginia Department of Rail and Public Transportation (DRPT) issued in November 2008. Transit Development Plans (TDPs) help transit agencies around the country improve their efficiency and effectiveness by identifying the need and required resources for modifying and enhancing services provided to the general public.

DRPT requires that a TDP is completed every six years and that an annual update letter also be submitted describing progress made towards implementing the TDP and any significant changes. The TDP that is completed every six years must be acted on by the HRT Commission, while the annual letter must be signed by the General Manager (or his/her designee) and does not require governing body action.

The plan is required to be fiscally constrained based on reasonably anticipated revenues and includes an operations, capital, and financial plan. In addition to the fiscally constrained plan, the TDP also contains other ideas for service expansion that would benefit the HRT customers and the municipalities in which it operates should additional funding become available.

While the TDP reflects fiscal realities and provides a solid foundation for HRT's funding requests to the state, it is not a budgeting document nor is it a programming document. Instead, it provides a blueprint and guidance for HRT to follow as it continues its current service and makes changes over the next six-years to provide the most comprehensive and cost-effective service for its customers and the region.

The TDP has presented a comprehensive evaluation of HRT service along with an assessment of the community's transit needs and a financially-constrained short-range plan designed to meet those needs. Key elements that have been addressed in this TDP include:

- An overview of HRT's history, governance, organizational structure, services, fleet, and facilities;
- A compilation of goals, objectives, and standards that guide operations and service delivery;
- A historical analysis and peer agency review of HRT service and financial characteristics;
- An on-board passenger survey detailing rider demographics, travel behavior, and opinions;
- Extensive staff and stakeholder outreach regarding current and future transit service;
- A detailed evaluation of existing service characteristics, with identification of system strengths and weaknesses;
- A summary of land use, population, and employment for the service area;
- An assessment of unconstrained service and facility projects to meet community transportation needs; and
- A fiscally-constrained six-year operating, capital, and financial plan that enhances the existing network and initiates new local, regional, and commuter services.

This TDP provides a framework and roadmap by which HRT can make future improvements to its services and operations. It is designed to be a living plan that can be updated as needed to reflect the evolving nature of HRT and the community.

BACKGROUND

History and Governance

HRT, incorporated on October 1, 1999, began through the voluntary merger of Pentran and Tidewater Regional Transit, the region's two public transit operators. HRT currently serves the Southside and Peninsula areas of Hampton Roads, consisting of the cities of Hampton, Norfolk, Newport News, Portsmouth, Suffolk, Chesapeake, and Virginia Beach. The purpose of HRT is to provide reliable and efficient transportation services and facilities to the Hampton Roads community.

Effective January 1, 2012, the City of Suffolk has chosen to withdraw from the Transportation District Commission of Hampton Roads and HRT will no longer provide transit services within Suffolk. As a result, the City of Suffolk is not included within this Transit Development Plan (TDP) beyond December 31, 2011.

HRT is governed by the Transportation District Commission of Hampton Roads (TDCHR). The TDCHR was established in accordance with Chapter 45 of Title 15.2 of the Code of Virginia, as amended, referred to as the Transportation District Act of 1964 and by ordinances adopted by the governing bodies of its components governments.

Transit Services Provided and Areas Served

HRT operates fixed local bus routes within and between its member cities; a regional express service called the MAX; paddlewheel ferry service between downtown Portsmouth and downtown Norfolk by way of the Elizabeth River; Handi-Ride (ADA service); and The Tide Light Rail Transit Service in Norfolk. These services are described below:

- Fixed Bus Local service: HRT currently operates over seventy fixed local bus routes that operate 15 minute and 30 minute peak frequency within the urban areas and 30 and 60 minute frequency in the suburban areas and during non-peak areas. In addition, the Norfolk Electric Trolley (NET) operates in downtown Norfolk and the Ghent area. The VB Wave is a seasonal service with four routes along the Virginia Beach Oceanfront.
- MAX Express Bus service: The MAX, introduced in 2008, offers limited stop express service on seven routes between major destinations in Hampton Roads. The routes operate on over the road coach style buses that provide Wi-Fi Internet connections.
- Handi-Ride: Through a contracted service provider, HRT provides paratransit, lift equipped van service commonly known as Handi-Ride to fulfill ADA requirements. Service is provided during the same hours of operation as the regularly scheduled HRT buses. The service is available within 3/4 of a mile of regularly scheduled bus routes and is available to certified passengers.
- Ferry Service: Through a contracted service provider, HRT provides ferry service on the Elizabeth River between downtown Norfolk and Olde Town Portsmouth. The ferry begins at Waterside in Norfolk, with two stops in Portsmouth at High Street and North Landing. Seasonal service is provided during the Norfolk Tides minor league baseball games.
- Light Rail Service: HRT operates the first light rail transit (LRT) system in Virginia. Called The Tide, the 7.4 mile LRT system runs from downtown Norfolk to the Norfolk/Virginia Beach border.

GOALS, OBJECTIVES AND STANDARDS

The agency has had several different iterations of goals and objectives, which were refined during the TDP process. In addition, the TDP recommends a series of performance measures and standards for HRT to use, both those that will be utilized in the analysis portions of the TDP and those that will be useful in ongoing monitoring of service delivery.

The goals for HRT have been identified as:

Goal 1: Make Hampton Roads Transit a transportation provider of choice in the region.

Goal 2: Support the coordination of transportation planning with land use to promote regional economic sustainability and livability.

Goal 3: Achieve financial stability and efficiency

Goal 4: Improve capital asset management and maintain state of good repair for all assets and facilities.

Goal 5: Develop and maintain a workforce that is highly qualified, efficient, and motivated by excellence.

Goal 6: Make Hampton Roads Transit safe and secure for customers and employees.

In addition to the goals and associated objectives, the TDP defines a series of performance measures upon which the agency can measure how well it is achieving given objectives and goals. The TDP Analysis Design Measures relate to service design and are used to measure how well the current HRT system matches service delivery objectives in terms of route coverage and route frequency. The TDP Analysis Performance Measures are used to evaluate the existing transit service that HRT operates (and proposed future service) and how each service offering performs. The measures and standards used in the TDP development are shown in Table ES-1.

Table ES-1 Performance Measures Used in the HRT Transit Development Plan

Performance Measure	Parameters	Standard
TDP ANALYSIS DESIGN MEASURES		
Percentages of service area population that have access to any service and to high frequency service	15-minute headway= high frequency	85% any service 25% high frequency service
Percentages of service area employment that have access to any service and to high frequency service	15-minute headway = high frequency	85% any service 50% high frequency service
TDP ANALYSIS PERFORMANCE MEASURES		
On-time performance as percent of total trips and by route	Current standard: on-time ≤ 5 minutes late.	85% system average 75% route level
Passengers per revenue hour or Passengers per trip (MAX routes) - Systemwide, by route, by time period (weekday peak/weekday off-peak/weekend)		50% of system average (by mode by time period)
Average total ridership by trip(weekday and weekend)	Calculated on a quarterly basis.	Minimum of 10 riders per trip
Farebox recovery for fixed-route services (Systemwide, by mode, by route)		50% of system average by mode

SERVICE AND SYSTEM EVALUATION

Regional Overview

The evaluation of HRT's service was performed in the context of two recent planning efforts: the *Comprehensive Operations Analysis* (August, 2009) and the *Service and Schedule Efficiency Study* (March, 2011). These two studies covered much of the analysis that comprises the required elements of the TDP. The following sections draw considerable background from these documents, as well as from the *FY10 Summary of Ridership and Revenue Annual Report* (March, 2011), produced by HRT staff.

The change in population and the density of each city in the HRT service area are shown in Table ES-2; the weighted average population density across HRT's service area is 1,660, indicating a generally suburban land use pattern. Chesapeake and Virginia Beach are characterized by lower density development, whereas Norfolk is the most densely populated city at over 4,500 people per square mile.

Table ES-2 HRT Service Area Cities Population and Population Density

	2000 Population	2010 Population	Change	% Change	Square Miles	Persons Per Square Mile, 2010
Virginia Beach	425,257	437,994	12,737	3.0	248	1,766
Norfolk	234,403	242,803	8,400	3.6	53	4,581
Chesapeake	199,184	222,209	23,025	11.6	340	654
Newport News	180,150	180,719	569	0.3	68	2,658
Hampton	146,437	137,436	(9,001)	(6.1)	51	2,695
Portsmouth	100,565	95,535	(5,030)	(5.0)	33	2,895
Total	1,285,996	1,316,696	30,700	2.4	793	1,660

Source: 2010 Census

Peer Review

HRT was compared to several peer agencies to see how it compares to similar transit agencies; the set of peers was chosen because of their similarity to HRT in terms of overall size, population density, and transit trips per capita.

Table ES-3 HRT Peer Agencies

	Urbanized Area Square Miles	Urbanized Area Pop. (millions)	Service Area Square Miles	Service Area Pop. (millions)	Pop. per Square Mile	Annual Unlinked Passenger Trips (millions)	Annual Unlinked Trips per Capita
Regional Transit (Sacramento, CA)	369	1.39	277	1.10	3,964	17.74	16
PSTA (Pinellas County, FL)	802	2.06	240	0.88	3,682	11.95	14
JTA (Jacksonville, FL)	411	0.88	242	0.83	3,419	10.25	12
HRT	527	1.39	369	1.21	3,281	15.19	13
COTA (Columbus, OH)	398	1.13	325	1.06	3,255	17.21	16
Community Transit (Snohomish County, WA)	954	2.71	279	0.73	2,618	10.29	14

Serving a sprawling metropolitan area divided by a major harbor crossing and without a major central city, HRT operates a large amount of service at a very low per-unit cost, compared to its peer agencies. However, the productivity of that service is relatively poor compared to the peers, mainly because the amount of service that HRT is able to operate with its finite financial resources is not sufficient to develop a sustainable market of choice riders and is not particularly desirable even to the transit-dependent customers. Combined with limited resources, the dispersed travel patterns in the HRT region present a major challenge for conventional transit.

Service Performance Analysis

Service Design

To quantify how accessible HRT services are to the service area population and jobs, a performance measure is used that reports the percentage of population and employment within ¼ mile of HRT service. Both access to any HRT service and to high frequency HRT service were measured, as shown in Table ES-4. The calculations were conducted by using Traffic Analysis Zone (TAZ) data from 2009 for the number of jobs, and 2010 Census data for the population.

Table ES-4 Access to HRT Service Within ¼ Mile

	Any HRT Service	Standard: Any Service	High Frequency Service*	Standard: High Frequency
Percentages of service area <u>population</u> that have access to service and to high frequency service	67%	85%	16%	25%
Percentages of service area <u>employment</u> that have access to service and to high frequency service	95%	85%	43%	50%

* High frequency is defined as 15-minute service or better (during peak hours and/or all-day).

Productivity

For fixed local bus routes, productivity is defined in terms of the number of boardings per vehicle revenue hour of service. Revenue time is defined as the time the bus is running its route plus scheduled layover time; it does not include the time the bus spends traveling to and from the garage at the beginning and end of a run. The productivity of all HRT routes are shown in Table ES-5.

Table ES-5 Weekday Productivity (boardings per vehicle revenue hour)

Route	Peak	Off Peak
1	36.0	38.9
2	24.0	20.2
3	29.4	28.0
4	8.0	8.5
5	22.4	23.6
6	21.9	19.1
8	32.1	28.7
9	19.7	17.8
11	15.0	13.1
12	21.3	18.8
13	34.7	26.1
14	27.0	29.9
15	31.4	34.9
18	14.6	13.5
20	33.1	34.7
23	31.1	27.4
25	17.3	15.8
26	15.2	15.5
27	30.2	22.6
29	19.8	15.5
33	18.5	17.8
36	33.6	24.7
37	2.9	6.0
41	15.3	17.0
44	17.3	16.7
45	33.0	26.5
47	20.5	21.4
50	24.4	23.2
57	17.1	14.0
58	20.1	17.0
101	39.0	33.1
102	16.4	14.9
103	23.3	22.3
104	22.1	17.1
105	31.0	24.9
106	34.5	31.1
107	33.3	28.6

Route	Peak	Off Peak
109	20.4	16.7
110	23.0	22.0
111	18.5	18.4
112	32.5	30.1
113	14.6	10.2
114	25.5	23.4
115	19.6	17.9
116	27.2	20.7
117	63.1	44.6
118	23.6	22.4
119	9.3	8.9
120	24.6	17.7
121	11.0	
System Average	**24.0**	**21.7**
66% of Average	**16.0**	**14.4**
50% of Average	**12.0**	**10.8**

Bus Service Recommendations

Using input from the previously conducted Service Efficiency Study (2011), the Comprehensive Operations Analysis (2009) and additional TDP review, a series of recommendations were made for changes to bus service. The recommendations include elimination of trips and of routes, cuts to route segments, restructuring to combine portions of certain routes with other routes, extensions of routes, and the implementation of a limited stop version of one route. The changes that are recommended for implementation in the budget constrained TDP are shown in the discussion of the operating plan as shown in Chapter 5.

SERVICE EXPANSION PROJECTS

While there are more service expansion projects recommended in the TDP than can be funded within reasonably anticipated revenues, the operating and capital plans reflect fiscal realities. For example, while Chapter 4 of the TDP lists all service recommendations, only those that are cost constrained by city are included in the operating plan in Chapter 5. There are no anticipated service increases on either of the other two fixed route modes, The Tide light rail and the Paddlewheel Ferry.

Table ES-6 shows the cost constrained service expansion over the six years of the TDP included in Chapter 5 following the service reductions recommended in the Service Efficiency Study. Please note that in order to stay cost constrained by city, no additional expansions in Portsmouth were feasible. Route 43 was added during FY 2012, but after the completion of the FY 2012 budget process.

Table ES-6 Fiscally Constrained Bus Service Improvements by City

Route	Route Description for TDP Recommendations
Norfolk	
1	Split route at Pleasure House/Shore Drive. Append outer portion to Route 36. Operate 30-minute headway from Granby at Ocean View to Pleasure House at Shore Drive.
8	Segment north and east of Evelyn T Butts becomes part of new Route 21.
12	Extend span of service to 10:45 p.m.
15	Shorten route and move northern segment to new Route 21. Operate at 15 minute headway during peak and midday as far as The Tide station at Military Highway; 60 minute service to Robert Hall and Greenbrier Mall
18	Extend route to Amphibious Base via Norview and Azalea Garden.
20	Operate short trips to Pembroke East through midday on weekdays.
21	Create new route from segments from Route 8 and Route 15 connecting Amphibious Base to Naval Station Norfolk
23	Fifteen minute service during the peak period
25	Extend span of service to 10:45 p.m.
Virginia Beach	
1	Split route at Pleasure House/Shore Drive. Append outer portion to Route 36. Operate 30-minute headway from Granby at Ocean View to Pleasure House at Shore Drive.
12	Increase span to 10:45pm
20	Eliminate service beyond 19th/Pacific. Improve Saturday headway to 30 minutes. Operate short trips to Pembroke East through midday on weekdays.
25	Extend span of service to 10:45 p.m.
27	Extend span of service to 10:45 p.m.
36	Extension of route to Pleasure House/ Shore Drive to cover former segment of Route 1, 30 minute peak period service
Chesapeake	
12	Extend span of service to 10:45 p.m.
14	Extend span of service to 10:45 p.m.
Hampton	
109	Route eliminated as part of restructuring to increase service headways on Route 117
115	Restructure service with Route 120 to create a bidirectional loop in eastern Hampton.
117	Improve daytime headway to 30 minutes
120	Restructure service with Route 115 to create a bidirectional loop in eastern Hampton
Newport News	
106	Restructure this route, and improve peak headway to 20 minutes.
107	Eliminated as part of restructuring of routes to provide improve service
108	New route takes over part of current 116
112	Shorten route as part of restructuring plan
116	Split route and operate Lee Hall and Fort Eustis leg on new route 108.
119	Extend route to north as part of restructuring plan and operate on weekends

CAPITAL ASSETS

Existing Capital Assets

Bus Fleet and Maintenance

The HRT fleet inventory as of August 1, 2011 consisted of 302 vehicles, including 255 diesel buses, 37 hybrid buses and 10 trolley-style buses. The active fleet of 264 buses (302 total less the 38 decommissioned buses) has an average age of approximately 6.75 years. HRT policy is to replace a bus after 12-14 years of service, thereby seeking to maintain an average fleet age of seven years. The bus fleet service requirements for the TDP timeframe are shown in Table ES-7, and the six-year plan for bus fleet replacement is shown in Table ES-8.

Table ES-7 HRT Bus Fleet Service Schedule Requirement

	August 2011	FY2012	FY2013-17
Peak Requirement	205	220	220
20% Spare Allowance	41	44	44
Total	246	264	264
Contingency Fleet	18	0	0
Decommissioned Bus fleet	38	38	0
Total Fleet	302	302	264

Table ES-8 HRT Six-Year Bus Fleet Replacement Plan

Year	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Total
29 - foot	0	0	4	0	12	13	29
35 - foot	9	5	0	0	0	0	14
40 - foot	0	0	20	23	12	7	62

The HRT bus fleet is serviced from three maintenance facilities as follows:

- Northside garage - located on Victory Boulevard in Hampton
- Southside garage - located on 18th Street in Norfolk
- Virginia Beach Operations Facility – located on Parks Street in Virginia Beach

As the total fleet size is expected to be reduced as vehicles are retired, overall the HRT facilities provide enough capacity to support growth in the fleet for service expansion in the years beyond the TDP six-year planning horizon.

Light Rail Vehicles and Maintenance

HRT has recently purchased a fleet of nine light rail low floor articulated vehicles from Siemens that are being used on the new The Tide light rail in Norfolk. The new service began revenue service in August 2011. The existing fleet, delivered in 2009, will meet the schedule requirements through the entire six-year TDP planning horizon. HRT owns the Norfolk The Tide Facility, or Vehicle Storage and Maintenance Facility (VSMF), which serves HRT's nine light rail vehicles (LRV).

Paratransit Vehicles and Maintenance
HRT owns 33 paratransit vans and leases an additional 54 paratransit vans from the contractor that operates its paratransit service, MV Transportation, to meet service requirements. All of the 33 paratransit vehicles owned by HRT are the 22.7-feet long, 12-passenger 2007 Ford/Startrans E-465 lift-equipped vans. HRT will continue to own 33 of the vehicles in their paratransit vehicle fleet, and the agency is currently establishing paratransit vehicle replacement and maintenance guidelines.

Ferryboats and Facilities
HRT owns three paddle ferry boats that are approaching 30 to 35 years of age. Two of these vessels will require major overhaul or alternatively replacement to maintain reliable service.

HRT serves four ferry docks for its Paddlewheel Ferry service: Waterside in Norfolk and High Street and North Landing in Portsmouth; a dock at Harbor Park in Norfolk is used only during Norfolk Tides baseball games, although it may become the primary dock in Norfolk when the future Harbor Park transit center opens. HRT owns the water-side portions of the docks, while the cities own the part of the docks that are on land. Regular ferry maintenance is performed at the docks, and all maintenance equipment and parts are owned and stored with the contractor who operates the service. Ferry service is operated under contract to a private provider, Norfolk by Boat.

Vanpool Vehicles
HRT owns 74 vanpool vehicles for its Traffix Vanpool Program. The fleet is a mix of 7-, 12-, and 15-passenger vans that it provides to participants in the regional vanpool program.

Passenger Facilities
HRT buses service approximately 3,500 stops, the majority of which consist of a just a bus stop sign. The current signs provide minimal information, however as part of a funded program, HRT will be replacing signs at all bus stops. The new signs will be on dedicated poles and will include information about routes and schedules that serve the stop. There are 199 shelters in the HRT system, most of them at the major transfer centers and other transfer locations.

Planned Capital Improvements

Passenger Facility Improvements
A summary of HRT's new transfer centers and improvements to existing transit and transfer centers that are expected to be completed within the TDP timeframe are shown in Table ES-9. In addition to the specific transfer center and passenger facility improvements, $3.5 million in RSTP funding has been allocated for general improvements to all HRT facilities. There is an initiative for bus shelter replacement and expansion throughout the system using a variety of funding sources. HRT refers to any bus stop that is served by more than one bus route a "transfer center," although these centers are not all the same. There are 43 of these "transfer centers" in HRT's service area. The TDP recommends categorizing the transfer centers by level of activity in order to make it easier for HRT staff to identify the types of passenger amenities that belong at each, and also to help the riding public know what type of facilities they can expect at the various transfer points. A more detailed nomenclature is suggested in the TDP, along with a list of which facilities fall into these different classes of transfer locations.

Table ES-9 HRT Funded Passenger Facility Improvements

	Funding Source	FY12	FY13	FY14	FY15	FY16	FY17
Military Circle Mall*	Federal Formula	$200,000	$600,000	-	-	-	-
NET Center	Federal Formula	$175,000	-	-	-	-	-
Patrick Henry Mall	CMAQ	$650,000	-	-	-	-	-
Hampton Transit Center and Newport News Transfer Centers	ARRA	$1,444,000	-	-	-	-	-
General Facility Upgrades	RSTP		$116,925	$3,383,075			
	Total Cost	$2,469,000	$716,925	$3,383,075	-	-	-

* This funding may be utilized for another transfer center, if mall management does not support the improvements.

Bus Shelter Program

HRT has prepared a passenger shelter program to add units to bus stops and to replace damaged and missing shelters as well as those judged to be in poor condition. HRT has proposed the following order to decide general placement of new shelters:

- Use CMAQ and RSTP funds to install approximately 138 shelters at high activity stops including new and replacement locations within the sponsoring cities.
- Identify high activity bus stops currently without shelters that meet JARC program criteria to serve work-related trips taken by low-income residents and install 42 shelters.
- Install 192 new or replacement shelters at other systemwide locations with high activity using enhancement funds.

Bus Stop Sign Program

HRT is in the process of having new bus stop signs manufactured and installed at all 3,500 bus stops in the system. The sign program will be funded mostly with $2,138,199 in RSTP funding that has been allocated across FY2011, FY2012, and FY2013; it is anticipated that those funds would be expended one year following each allocation, i.e., in FY2012 through FY 2014.

Vehicle Replacement and Expansion

Full Size Bus Replacement

Over the six year period the agency plans to purchase 105 new buses, 29 29-foot, 14 35-foot and 62 40-foot type heavy duty transit buses. In addition, over this period HRT intends to reduce the total fleet size from 302 to 264 vehicles. The average age of HRT's current bus fleet is 7.5 years and its current active bus fleet is 6.75 years; the average bus fleet age upon implementation of the fleet replacement plan over the six-year period will be 6.9, just under the agency's goal of 7.0.

Passenger Vans: Vanpool Replacement and Expansion Program
Over the six-year period from FY 2012 through FY 2017, HRT plans to purchase 68 passenger vans for its Traffix vanpool program, 16 for expansion and 52 to replace vans to be retired.

Ferry Replacement
$2 million is programmed in FY 2014 and $2.1 million in FY 2017 to replace two paddleboat ferries. These vessels exceed 30 years of age and extensive rehabilitation or replacement is overdue.

Paratransit Vehicle Replacement Program
HRT owns 33 Ford StarTrans 2007 model small buses which are provided to their paratransit service operating contractor who leases 54 additional vehicles to serve HRT. The agency is preparing a replacement program.

The Tide Light Rail Vehicle, Track, and Technology Upgrades
The new The Tide light rail service began service during FY 2012 (August 2011). HRT prepared a list of "LRT Capital Improvement Projects," specifically to: provide certain maintenance equipment (e.g., wheel truing machine); program vehicle, track, traction power, and signal maintenance; and maintain of components and systems to maintain service reliability.

Technology Systems and Equipment Upgrades/Acquisitions
Several legacy computer systems need upgrade to maintain reliability, acquire current features and to support new applications**.** HRT has also programmed capital funds to provide for the acquisition or upgrade of equipment and systems.

Transit Extension Studies

There is no light rail system expansion programmed to start-up in HRT's six-year plan. While some changes will be made to bus service, there will be no additional capital needs funded under the fiscally constrained operating scenario. Unconstrained transit expansion desires, both on the operating and capital cost sides, are described in detail in Chapter 4.

HRT has programmed funds for planning studies to investigate the feasibility of extending its fixed guideway service to the Norfolk Naval Station and to Virginia Beach.

FINANCIAL PLAN

While not a programming document, the TDP does contain a six-year plan for revenues and expenses. The plan is based on HRT's approved FY 2012 budget and internal working six-year budgeting document but has been modified to reflect TDP recommendations and other changes that have occurred since the budget was last updated.

The major items included in the TDP financial plan are:

- Operating Costs
    - Bus costs are anticipated to grow at 2% annually
    - Paratransit costs are anticipated to grow at 5% annually

  - Ferry costs are anticipated to grow at approximately 2.5% annually
  - Light rail costs are anticipated to grow at 2.6% annually

- Revenues
  - Bus and ferry fare revenues are anticipated to grow at 1.5% annually due to ridership growth.
  - As a result of the service efficiency changes, no fare increase has been included in the financial plan through FY 14. A fare increase of 33% (an increase to the base cash fare from $1.50 to $2.00 and a commensurate increase in pass prices) is recommended FY 15 due to the following:
    - HRT is using $14 million (FY12) of its preventive maintenance funds to pay for operating expenses; will likely increase to $15.6 million starting in FY14.
    - CMAQ funding for operations is reduced by $3 million annually in FY13 and is no longer available in FY14.
    - Bus cost per hour increases of 38.3% since FY2006.
  - New revenue sources:
    - Advertising at The Tide stations and on and in the LRT vehicles will bring in $92,000 in FY 2012, growing to $185,000 in FY 13 and more than $500,000 by FY 2017.
    - Bus advertising is anticipated to increase due to bringing the sales responsibility in-house and more aggressive sales efforts, from $261,700 in FY 2012 to $1.6 million in FY 17.
    - GoPass 365 sales are anticipated to generate $371,000 in FY 2012, growing to $900,000 by FY 2017.

- Ridership
  - Ridership is anticipated to grow by 1.5% annually for bus and ferry.
  - Ridership revenue for light rail is estimated at FY 2012 levels (increased to cover a full year) throughout the six years.
  - A decline of 7% in ridership in FY 2015 (on top of the organic 1.5% growth) has been included in the plan in response to the assumed fare increase.
- Capital Costs
  - Costs for capital investments in rolling stock are anticipated to increase at 2% per year.

The major changes and updates from the six-year budget projection are as follows:

- As a result of the City of Suffolk leaving HRT as of December 31, 2011, all Suffolk costs and revenues for FY 2012 were halved; costs and revenues for FY 2013 and later were removed.
- For the remaining six cities being served by HRT, the annual increase to local subsidy was kept at an average annual rate of 5.2%, as originally projected in HRT's six-year working budget. Please note this does not include costs from the Tide and modifications to buses serving The Tide.
- The additional revenue from The Tide advertising, Go-Pass sales, and the fare increase allow HRT to reduce reliance on the use of Preventive Maintenance (PM) funding spent on operations, particularly once the fare increase takes place. This results in a total of $17.8 million that would be reinvested into PM to keep the HRT system in good working order and abide by State of Good Repair (SOGR) guidelines.

- $10.6 million of the $17.8 million will go toward reducing reliance on state bonds for bus purchases, reducing state bond funding from $18.2 million to $7.6 million. Draws on future 5307 and 5309 were not assumed, so the additional funding from PM was applied to reduce the bonds on a cash flow basis.
- An additional $4.3 million of the $17.8 million will go toward reducing the draw on future 5307 and 5309 revenues that had been assumed in the six-year budget projections.
- The remaining $3.0 million from the PM funds will be held in reserve.
- Moving the federal formula funds back to the capital budget from operations will necessitate an additional local match of $4.5 million; however that, match was already needed to match the state bonds, so there is no net impact.

Tables ES-10 and ES-11 shows the financial plan summary.

Table ES-10 Financial Plan – Operations

Operating Expenses	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
TDM	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000
Fixed-route Bus	$65,247,884	$66,723,485	$68,057,955	$69,419,114	$70,807,496	$72,223,646
Ferry	$1,299,679	$1,334,715	$1,369,065	$1,398,674	$1,427,928	$1,458,095
Paratransit	$12,517,359	$12,979,692	$13,628,677	$14,310,111	$15,025,616	$15,776,897
Light Rail Transit	$12,251,467	$12,340,760	$12,671,473	$12,997,193	$13,330,046	$13,673,692
TOTAL Operating Expenses	**$92,499,522**	**$94,704,836**	**$97,111,338**	**$99,514,703**	**$101,986,250**	**$104,533,157**
Operating Revenues						
Total Pax Revenue	$17,582,945	$17,879,847	$18,130,359	$22,552,938	$22,869,357	$23,190,523
Advertising	$261,700	$412,300	$765,001	$1,179,001	$1,311,838	$1,611,236
Light Rail Advertising	$92,000	$185,000	$270,000	$360,000	$430,000	$505,000
Go Pass Revenues	$371,000	$476,000	$676,000	$750,000	$825,000	$900,000
Other Non-Transportation	$405,929	$405,929	$405,929	$405,929	$405,929	$405,929
Grant Rrevenue	$6,152,419	$6,129,689	$6,279,779	$6,351,302	$6,408,394	$6,467,716
Preventive Maintenance	$13,808,989	$13,886,304	$15,029,236	$10,275,242	$9,955,971	$9,711,908
Capital Cost of Contracting	$2,712,148	$2,692,802	$3,032,851	$3,028,875	$3,024,457	$3,068,864
Operating Assistance - State	$13,218,163	$12,046,481	$14,731,275	$15,312,029	$15,125,369	$15,415,303
CMAQ	$8,491,940	$5,608,060	$0	$0	$0	$0
TOTAL Operating Revenues	**$63,097,233**	**$59,722,412**	**$59,320,430**	**$60,215,315**	**$60,356,314**	**$61,276,478**
Local Subsidy Required (Incl. LRT and feeder bus)	$29,402,289	$34,982,425	$37,790,908	$39,299,387	$41,629,936	$43,256,679

Table ES-11 Financial Plan – Capital

Capital Expenses	Prior Years	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	Total
Capital Lease of Buses	$2,081,136	$2,086,657	$2,083,548	$2,080,530	$2,076,842	$2,078,943	$2,076,841	$14,564,497
Replacement Buses	$9,220,000	$3,488,400	$1,976,760	$10,060,252	$9,958,376	$10,201,707	$8,570,096	$53,475,590
Van Replacement and Expansion	$0	$153,000	$451,794	$291,832	$361,803	$247,038	$225,796	$1,731,262
LRT Maintenance	$0	$0	$2,143,620	$672,100	$1,289,900	$1,807,110	$820,760	$6,733,490
Capital Improvement Program	$0	$7,691,675	$10,424,800	$14,251,092	$12,917,168	$12,872,460	$3,229,252	$61,386,448
TOTAL Capital Expenses	**$11,301,136**	**$13,419,732**	**$17,080,521**	**$27,355,806**	**$26,604,089**	**$27,207,257**	**$14,922,745**	**$137,891,287**
Capital Funding	Prior Years	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	
Federal Formula Funds (5307)	$1,802,166	$4,968,688	$3,820,808	$5,078,266	$8,525,933	$9,272,200	$10,102,237	$43,570,300
Non-Federal Match Requirement	$450,542	$1,242,172	$955,202	$1,269,567	$2,131,483	$2,318,050	$2,525,559	$10,892,575
Federal Formula Funds (5309)	$4,597,203	$1,609,393	$153,783	-$997,388	$1,039,320	$2,404,598	$2,563,781	$11,370,689
Non-Federal Match Requirement	$1,149,301	$402,348	$38,446	-$249,347	$259,830	$601,149	$640,945	$2,842,672
TOTAL Local Funding Available for Capital Needs	$4,928,468	$1,399,487	$1,474,407	$1,551,352	$1,632,209	$1,717,175	$1,806,456	$14,509,554
TOTAL RSTP, CMAQ and Special Appropriations Fu	$6,091,968	$10,887,457	$11,557,317	$16,179,101	$16,175,815	$0	$0	$60,891,658
TOTAL Capital Revenues	**$19,019,647**	**$20,509,546**	**$17,999,963**	**$22,831,551**	**$29,764,591**	**$16,313,172**	**$17,638,979**	**$144,077,449**

ANNUAL TDP MONITORING AND SERVICE EVALUATION

DRPT will require submittal of an annual letter that provides updates to the contents of this TDP. Recommended contents of this "TDP Update" letter include:

- A summary of ridership trends for the past 12 months both by mode and by route. New routes should be evaluated after two years to provide adequate time for the new route to establish ridership and provide an accurate baseline to compare against.
- The Tide feeder bus changes proposed in Chapters 3 and 4 of the TDP should be evaluated one year after the TIDE opening.
- A description of TDP goals and objectives that have been advanced over the past 12 months.
- A list of improvements (service and facility) that have been implemented in the past 12 months, including identification of those that were noted in this TDP.
- An update to the TDP's list of recommended service and facility improvements (e.g., identify service improvements that are being shifted to a new year, being eliminated, and/or being added). This update of recommended improvements should be extended one more fiscal year to maintain a six-year planning period.
- A summary of current year costs and funding sources.
- Updates to the financial plan table presented in Chapter 7 of this TDP. This table should be extended one more fiscal year to maintain a six-year planning period.