

WATER TRANSIT

FOR THE CITY OF BALTIMORE, MARYLAND

STATUS REPORT



Existing Water Transit Services

- Water Taxi
- Harbor Connector
- Dockmaster



WATER TAXI

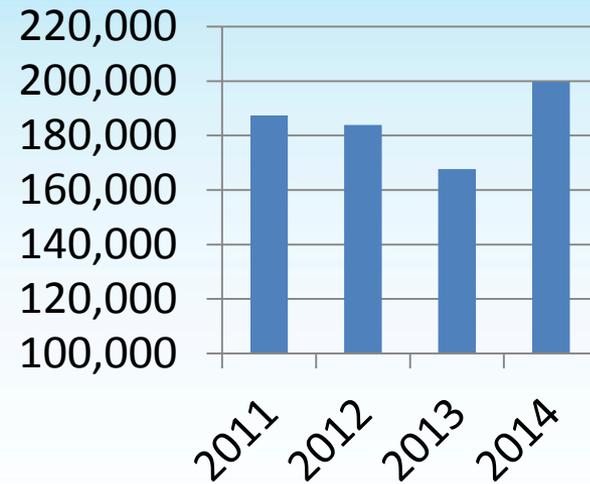


Water Taxi

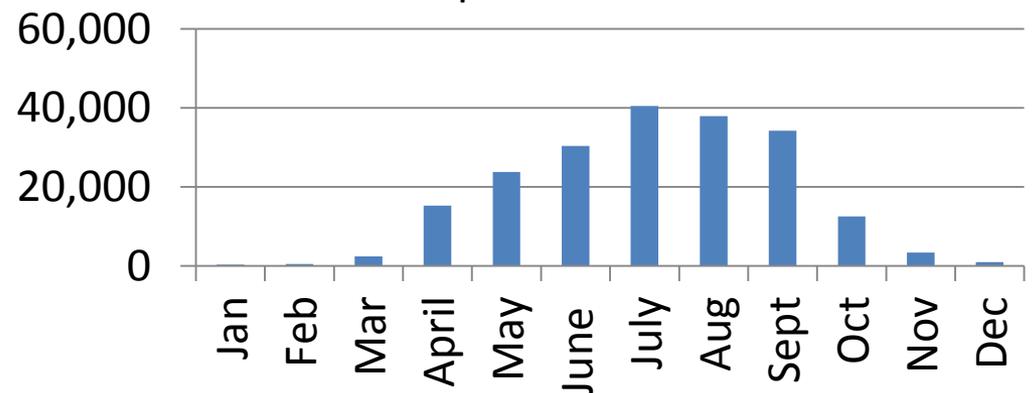
- City Responsibilities
 - Landings
- Operator Responsibilities
 - Financial risk
 - Marketing and sales
 - Website
- BWT pays City 7% of fares and charters - \$160,000 annually



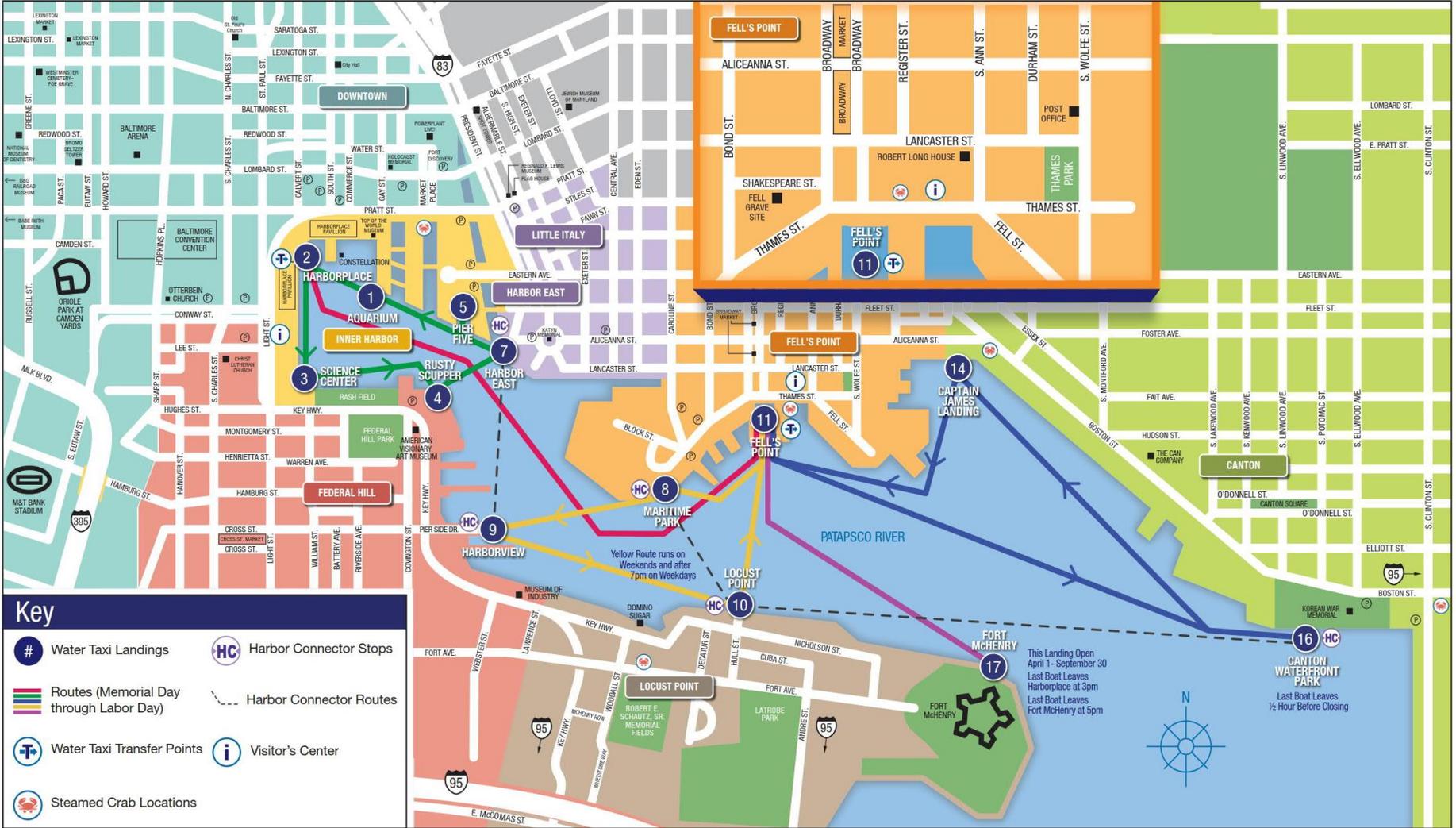
Water Taxi Ridership



Riders per Month - 2014



Water Taxi Routes



Water Taxi Observations and Recommendations

- **Observations:**

- Water Taxi operates as a peak season visitor attraction with very limited service during winter months.
- One in six waterfront visitors utilize the Water Taxi – there is additional visitor market for Water Taxi services, especially by Baltimore area Friends and Family visitors.
- Water Taxi offers limited utility for Inner Harbor residents. An estimated 375 frequent floater passes were sold during 2014.

- **Recommendations:**

- Continue Water Taxi / Harbor Connector business structure with private operator bearing financial risk and benefits of the Water Taxi while the City bears the cost of the Harbor Connector
- Rebrand the Water Taxi as an amenity – it is not a transportation service
- Through the RFP and contract negotiation:
 - For the rebranded Water Taxi, develop joint marketing and ticket sales products with other Inner Harbor venues.
 - Provide year round service that offers usable service for Inner Harbor residents
 - Develop lower cost monthly or seasonal pass products that encourage usage by Inner Harbor residents and Friends and Family visitors



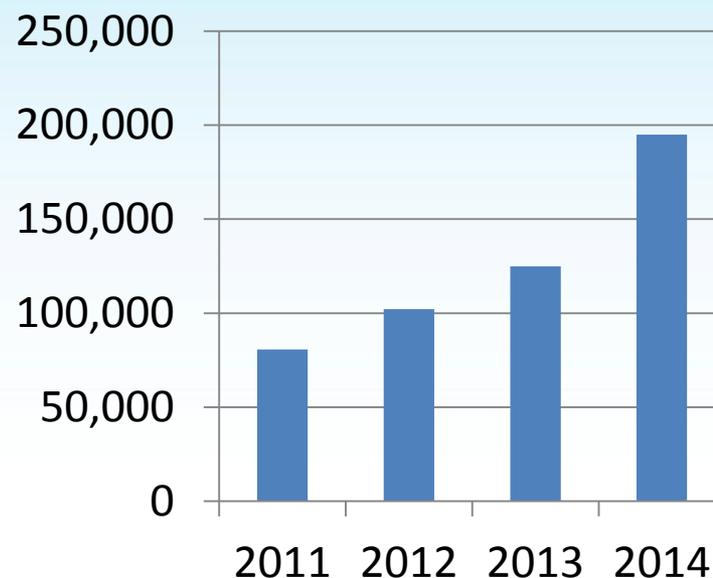
HARBOR CONNECTOR



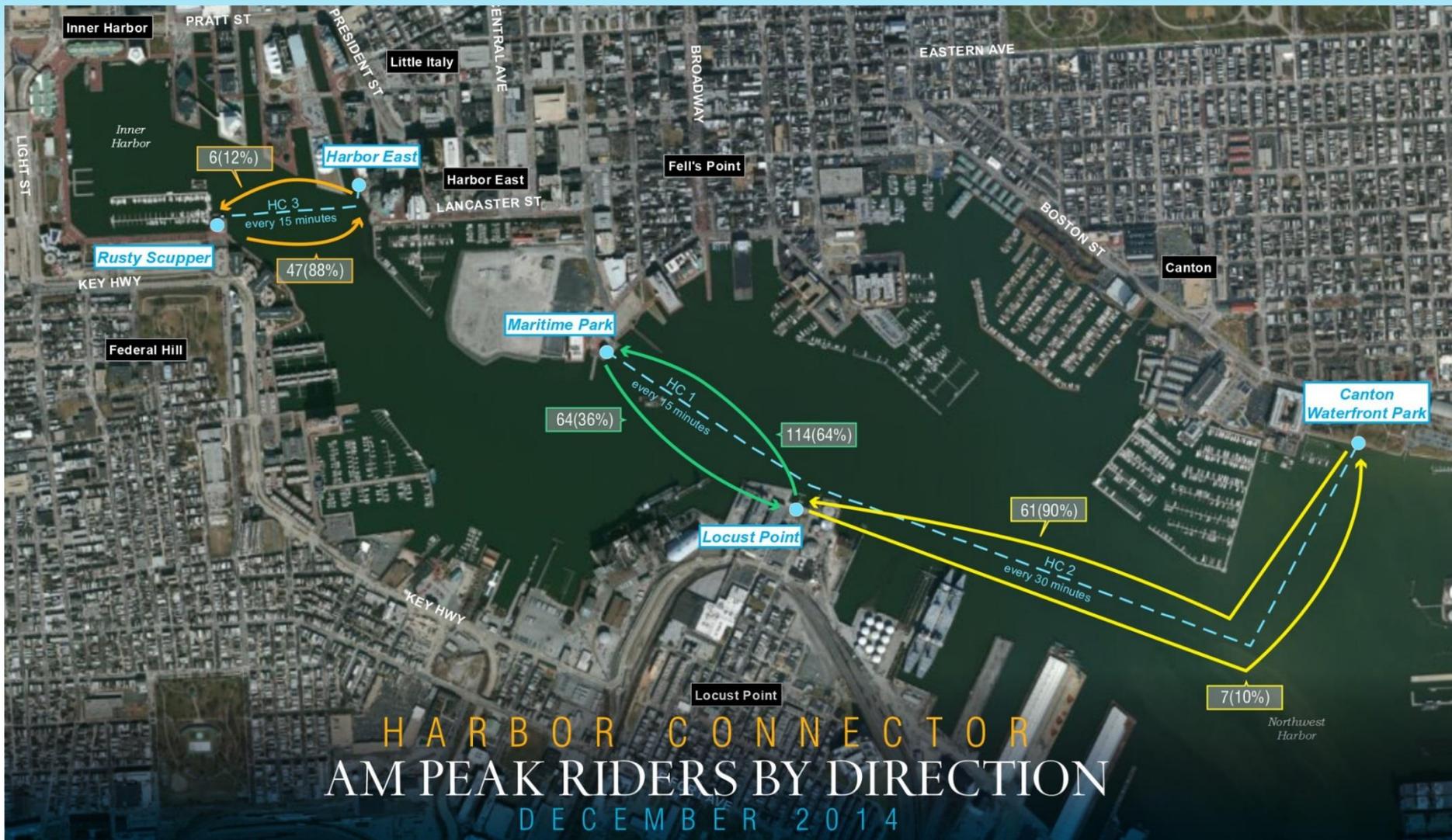
Harbor Connector

- City Responsibilities
 - Landings
 - Raven and Oriole
- Operator Responsibilities
 - Marketing and Sales
 - Website
 - Third vessel and back-up vessels
 - Maintenance
- City pays approximately \$644,000 annually with Under Armour contributing \$94,540 in FY 14.

Harbor Connector Ridership

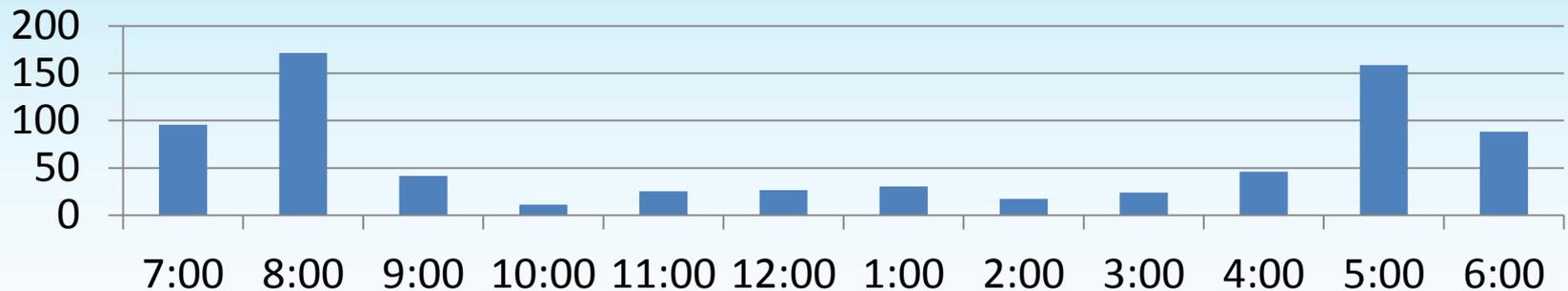


Harbor Connector AM Peak



Harbor Connector Analysis

Harbor Connector Riders per Hour



Average Weekday

Route	To / From	AM Peak		Mid Day		PM Peak		Weekday Total	
		Riders	Cost per Passenger Trip	Riders	Cost per Passenger Trip	Riders	Cost per Passenger Trip	Riders	Cost per Passenger Trip
HC1	Maritime Park to Locust Point	178.0	\$ 1.09	84.4	\$ 5.52	183.6	\$ 1.06	446.0	\$ 1.92
HC2	Canton Waterfront Park to Locust Point	67.6	\$ 2.87	20.0	\$ 23.31	62.0	\$ 3.13	149.6	\$ 5.71
HC3	Rusty Scupper to Harbor East	53.6	\$ 3.62	27.4	\$ 17.01	69.8	\$ 2.78	150.8	\$ 5.67



Harbor Connector Observations and Recommendations

- **Observations:**
 - Harbor Connector ridership has grown quickly with new routes
 - Harbor Connector ridership is related to work trips and peak hours
 - Except for Harbor Connector Route 1 – there is poor productivity during the mid-day period
 - It is difficult to differentiate the Harbor Connector from the Water Taxi
 - There is little coordinated wayfinding signage between the Harbor Connector and Charm City Circulator
 - The Oriole and Raven have higher deck heights than floating docks requiring portable stairs to be deployed.
- **Recommendations:**
 - Rebrand the Harbor Connector so that it is an extension of the Charm City Circulator.
 - Improve signage at the landings and wayfinding signs at the Charm City Circulator stops to clearly brand the Harbor Connector as a separate service from the Water Taxi.
 - Determine if the HC 3 route should be operated as a “bridge” route to provide the pedestrian connection between Rusty Scupper and Harbor East until the proposed bridge is constructed. The annual cost for 7 day per week / 18 hour per day “bridge” route service is estimated to be \$650,000.
 - Reduce mid-day service on HC routes 2 and 3. (Savings \$130,000 per year).
 - Initiate discussions with Under Armour and other Harbor East Employers to determine if they will financially support the Harbor Connector.
 - Improve the floating docks at Harbor Connector landings so that passengers may board the vessels without the portable stairs.



DOCKMASTER

Request Brochures

BALTIMORE^{CITY}
DOCKMASTER'S OFFICE AT THE INNER HARBOR

Call the Dockmaster's Office at
410-396-3174 Fran Knauff
Dockmaster



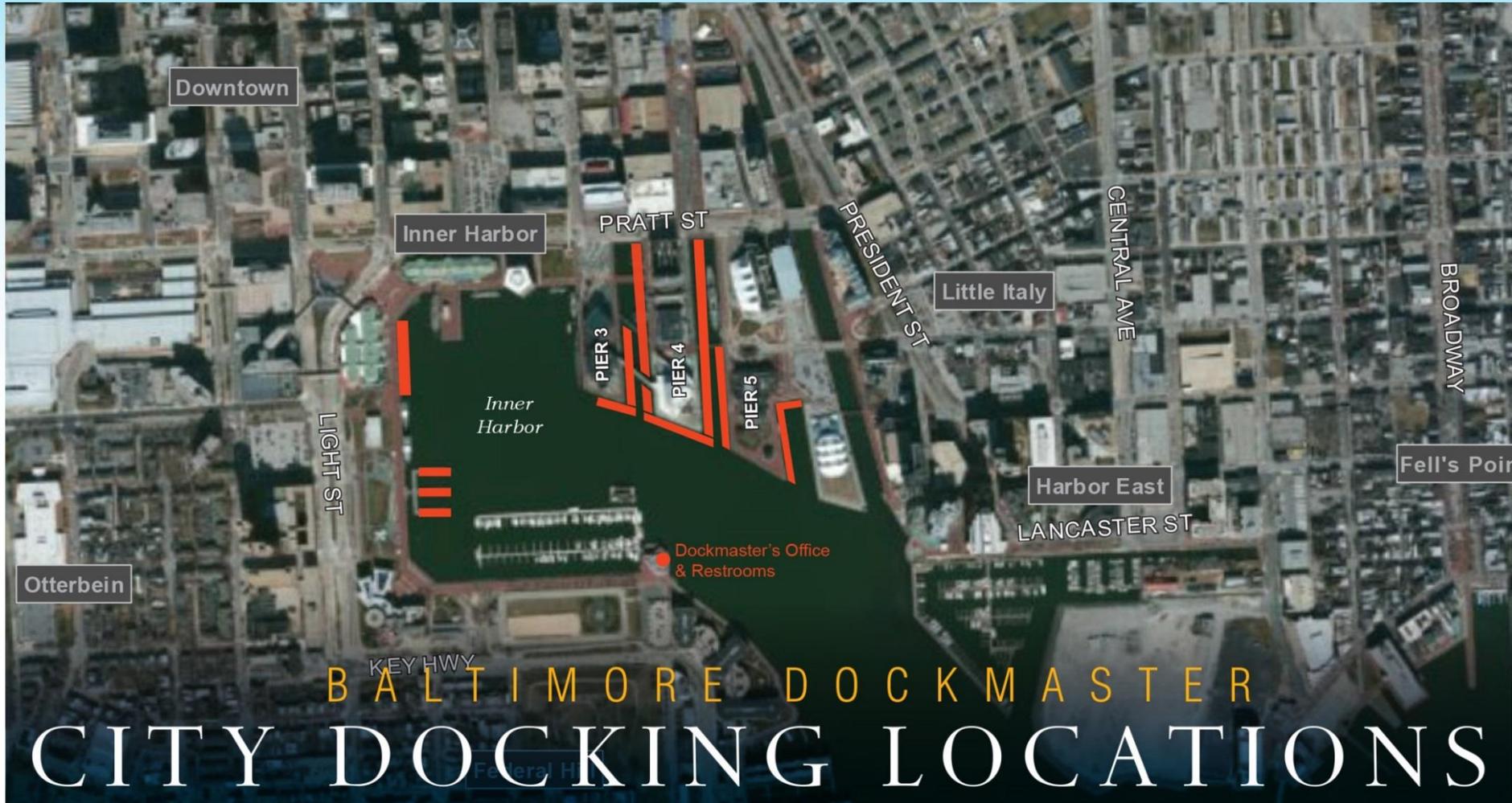
Dockmaster

Dockmaster Responsibilities

- Collection of transient boaters docking fees
- Coordinate scheduling of visiting ships to the Inner Harbor including tall ships and US Naval vessels
- Inner Harbor special events

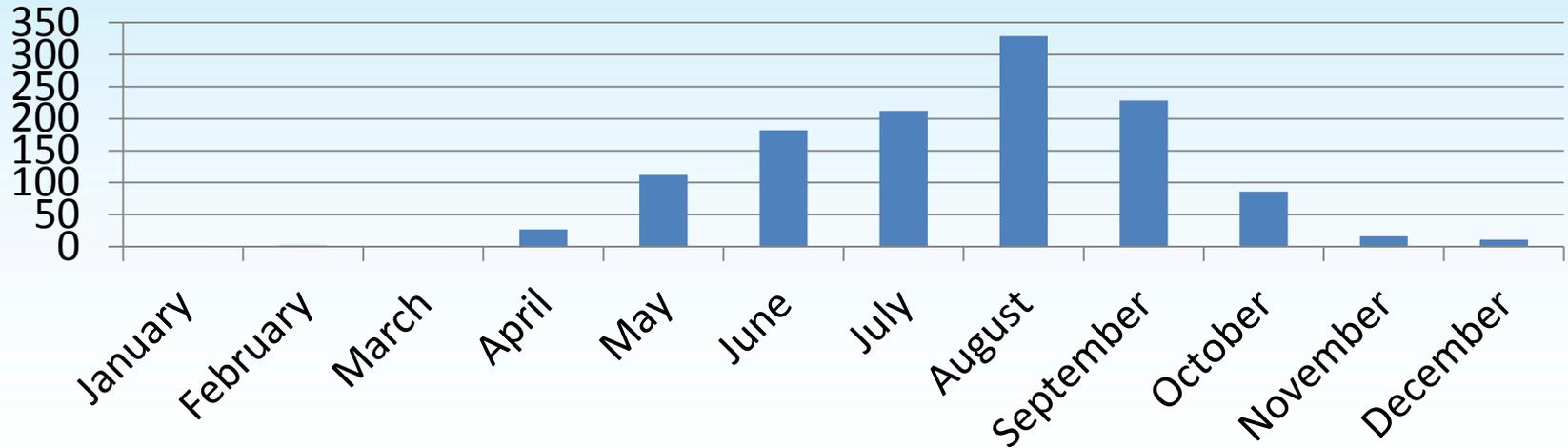


Dockmaster



Dockmaster – Transient Dockings

2014 Transient Dockings per Month



Year	Charter	Daily	Overnight	Electric	Total	Change
2011	Included in overnight	\$24,148	\$60,971	\$4,922	\$90,041	+3.2%
2012	\$17,842	\$23,060	\$36,953	\$4,324	\$82,179	-8.7%
2013	\$30,945	\$30,090	\$37,641	\$3,052	\$101,279	+23.2%
2014	\$23,894	\$25,993	\$31,897	\$2,790	\$84,664	-16.4%

Wharfage Agreements



Inner Harbor Property



Dockmaster Observations and Recommendations

- **Observations:**

- The Dockmaster's office has multiple functions.
- The Dockmaster's transient docking service competes with Inner Harbor private marinas.
- A significant amount of the Finger Piers and Westwall capacity is utilized by Baltimore Steamship, Seadog Ventures and Spirit Cruises leaving reduced inventory for the Dockmaster to sell to transient boaters.
- The Dockmaster's current technology does not permit on-line advance reservations or on-line payment of dockage fees as is possible at the private Inner Harbor marinas.
- The City's current transient boater facilities do not have the necessary amenities for accommodating pleasure craft.
- Due to a lack of a tender, the Dockmaster's staff utilizes a golf cart to attempt collection at piers across the harbor.

- **Recommendations:**

- The Dockmaster's office should focus on scheduling docking locations for visiting ships and should no longer provide transient docking services.
- The City should review the function of the Finger Piers and Westwall as berthing locations for the Baltimore Steamship, Seadog Ventures and Spirit Cruises. If improvements are needed to accommodate these operations, they should be paid for by each operator.
- To the extent that there is dock capacity remaining after the leases have utilized the Finger Piers and Westwall, the City should contract with private marina operators to provide the transient boating services.



Water Transit Markets

- **Visitors – Water Taxi**

- Overnight

- Friends and family

- **Inner Harbor Residents – Water Transit (both)**

Inner Harbor Residents	2000	2010	Change	% Change
Federal Hill / Locust Point	13,760	14,501	741	5%
Downtown / Inner Harbor	4,843	8,121	3,278	68%
Fells Point / Canton	20,215	22,244	2,029	10%
Total Inner Harbor	38,818	44,866	6,048	15.5%

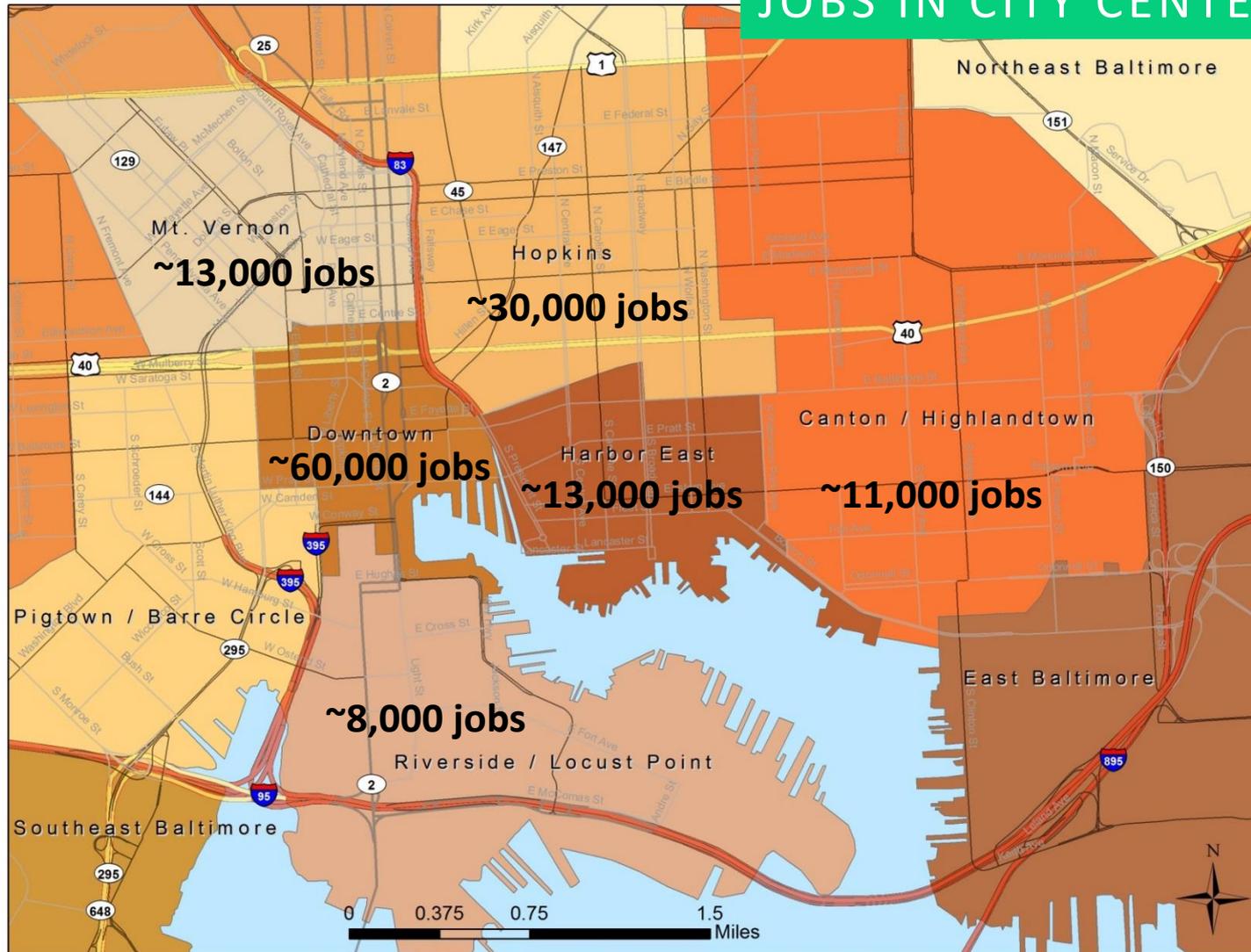
Middle Branch Residents	2000	2010	Change	% Change
Cherry Hill	7,772	8,367	595	8%
Fairfield	159	159	-	0%
Westport	2,184	1,593	(591)	-27%
Total Middle Branch	10,115	10,119	4	0%

- **Commuters – Harbor Connector**



Market Potential Analysis

JOBS IN CITY CENTER

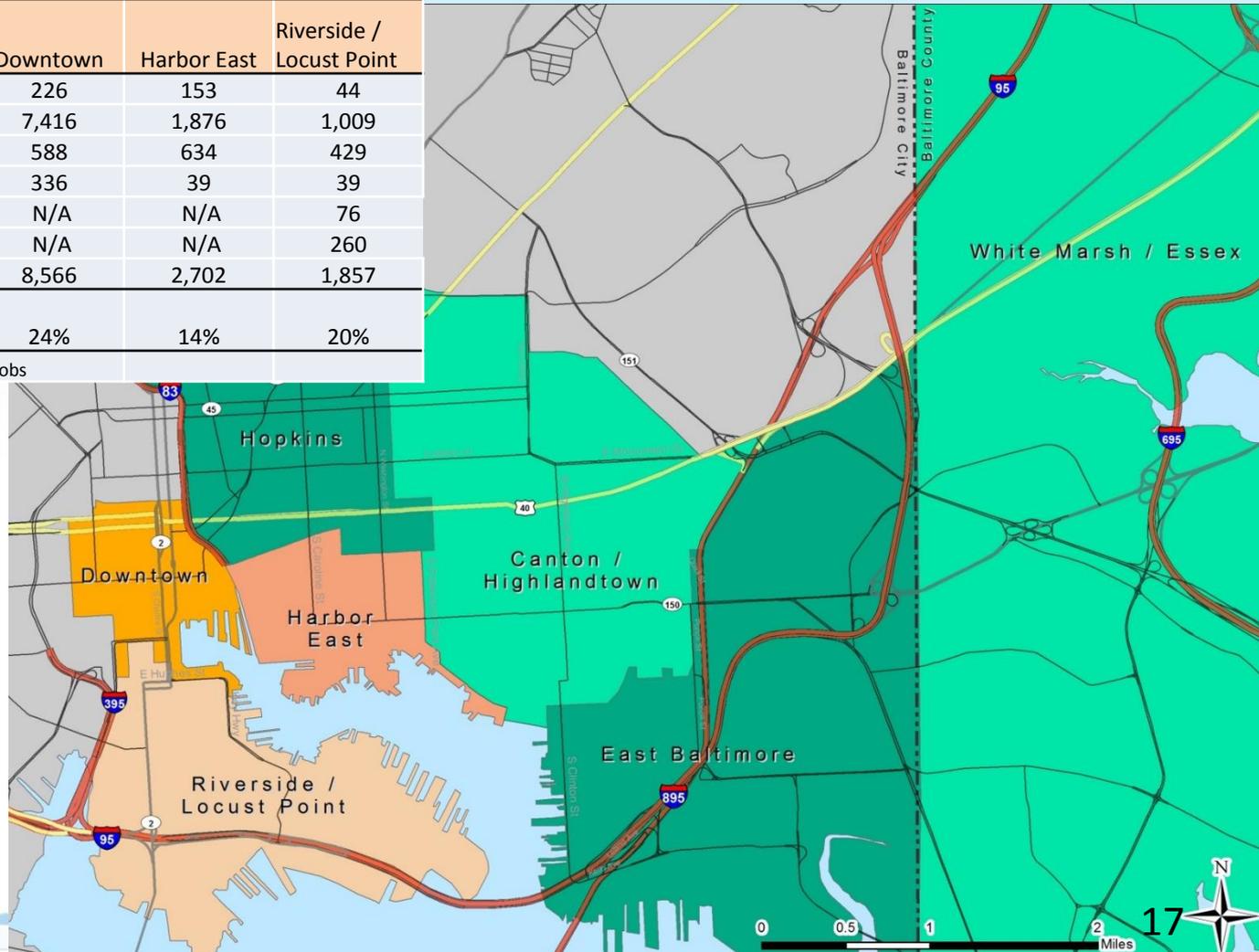


Market Potential Analysis

WORK TRIPS FROM NORTH I-95 CORRIDOR

Home to Work Trips*	Work Area (Destination)		
	Downtown	Harbor East	Riverside / Locust Point
Home Area (Origin)			
East Baltimore	226	153	44
White Marsh / Essex	7,416	1,876	1,009
Harford County	588	634	429
Cecil County	336	39	39
Hopkins	N/A	N/A	76
Canton / Highlandtown	N/A	N/A	260
Total	8,566	2,702	1,857
Percent of jobs that could use current or improved Harbor Connector	24%	14%	20%

*Data from US Census, LEHD On The Map: 2011 Primary Jobs

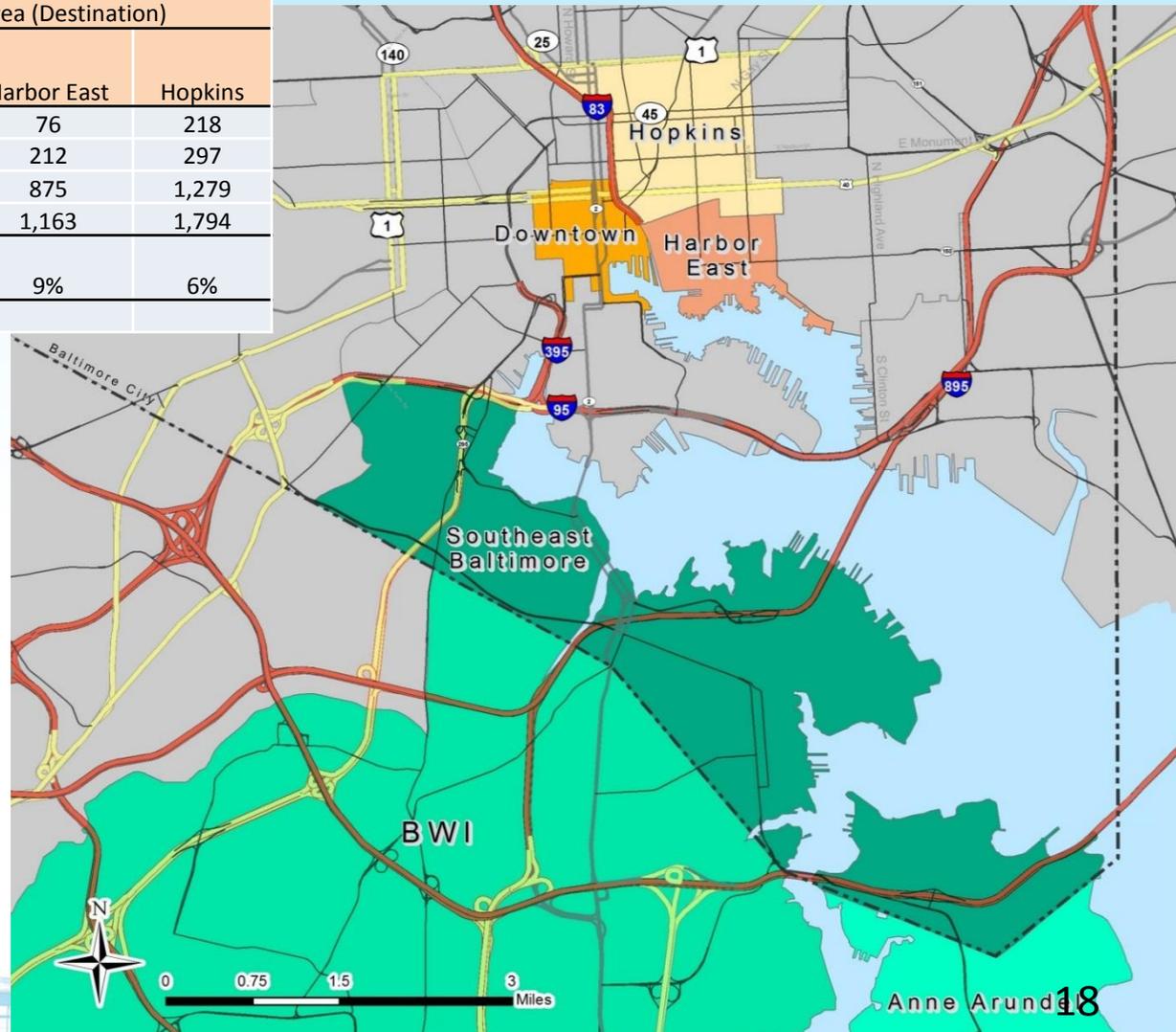


Market Potential Analysis

WORK TRIPS FROM SOUTH I-95 CORRIDOR

Home to Work Trips*	Work Area (Destination)		
	Downtown	Harbor East	Hopkins
Home Area (Origin)			
Southeast Baltimore	628	76	218
BWI	1,099	212	297
Anne Arundel	4,050	875	1,279
Total	5,777	1,163	1,794
Percent of jobs that could use current or improved Harbor Connector	10%	9%	6%

*Data from US Census, LEHD On The Map: 2011 Primary Jobs

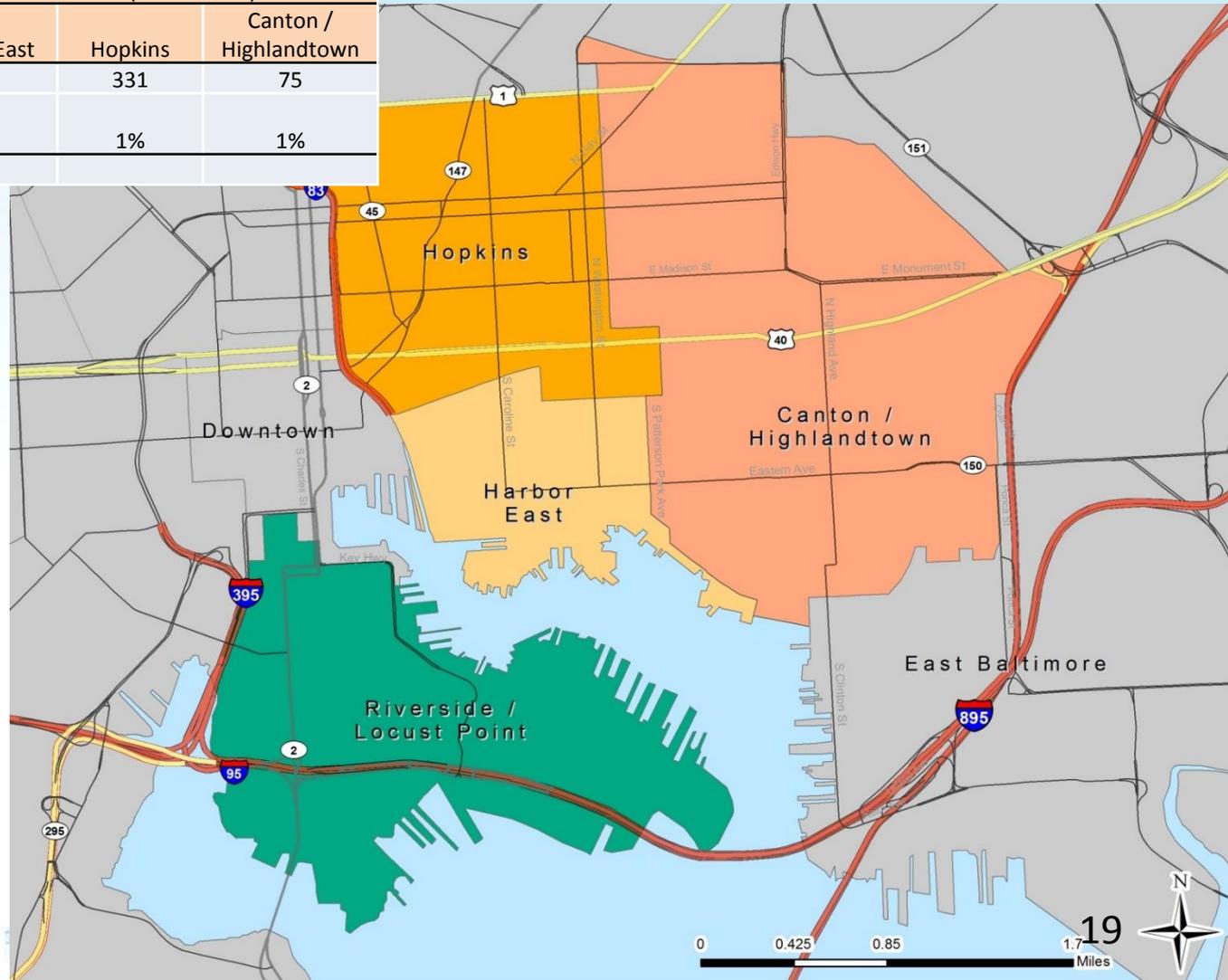


Market Potential Analysis

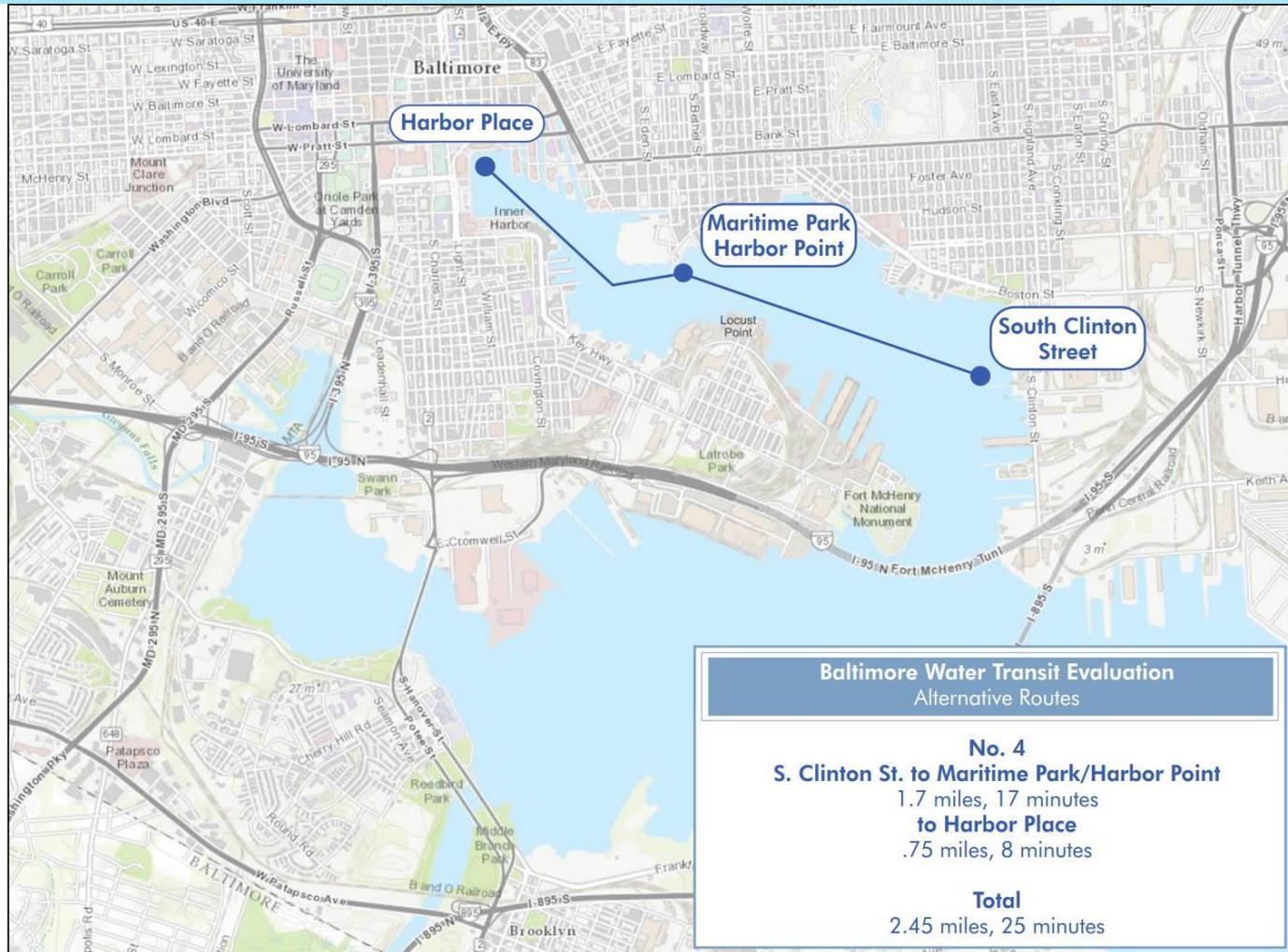
WORK TRIPS FROM LOCUST POINT

Home to Work Trips*	Work Area (Destination)		
	Harbor East	Hopkins	Canton / Highlandtown
Home Area Riverside / Locust Point	307	331	75
Percent of jobs that could use current or improved Harbor Connector	2%	1%	1%

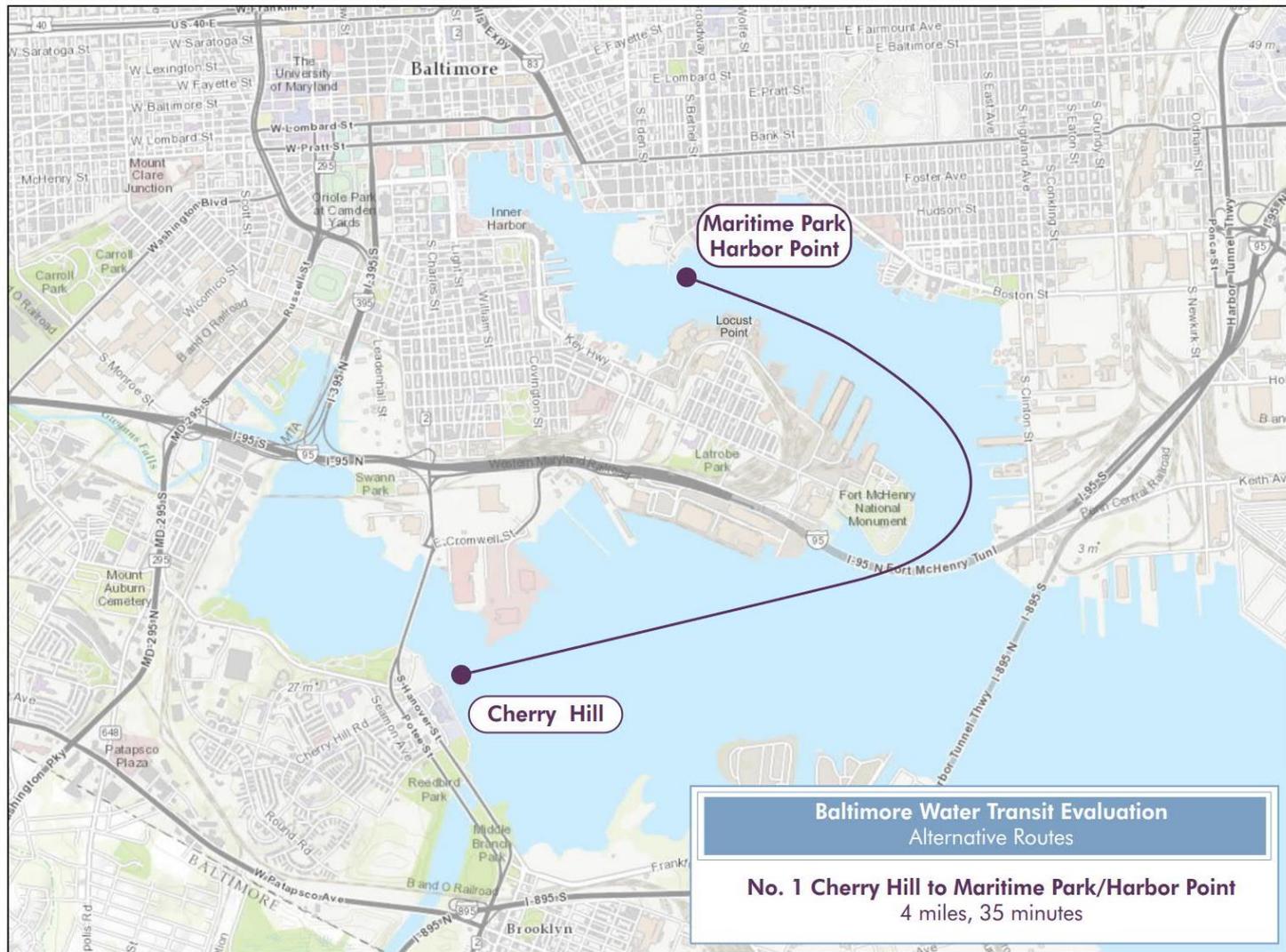
*Data from US Census, LEHD On The Map: 2011 Primary Jobs



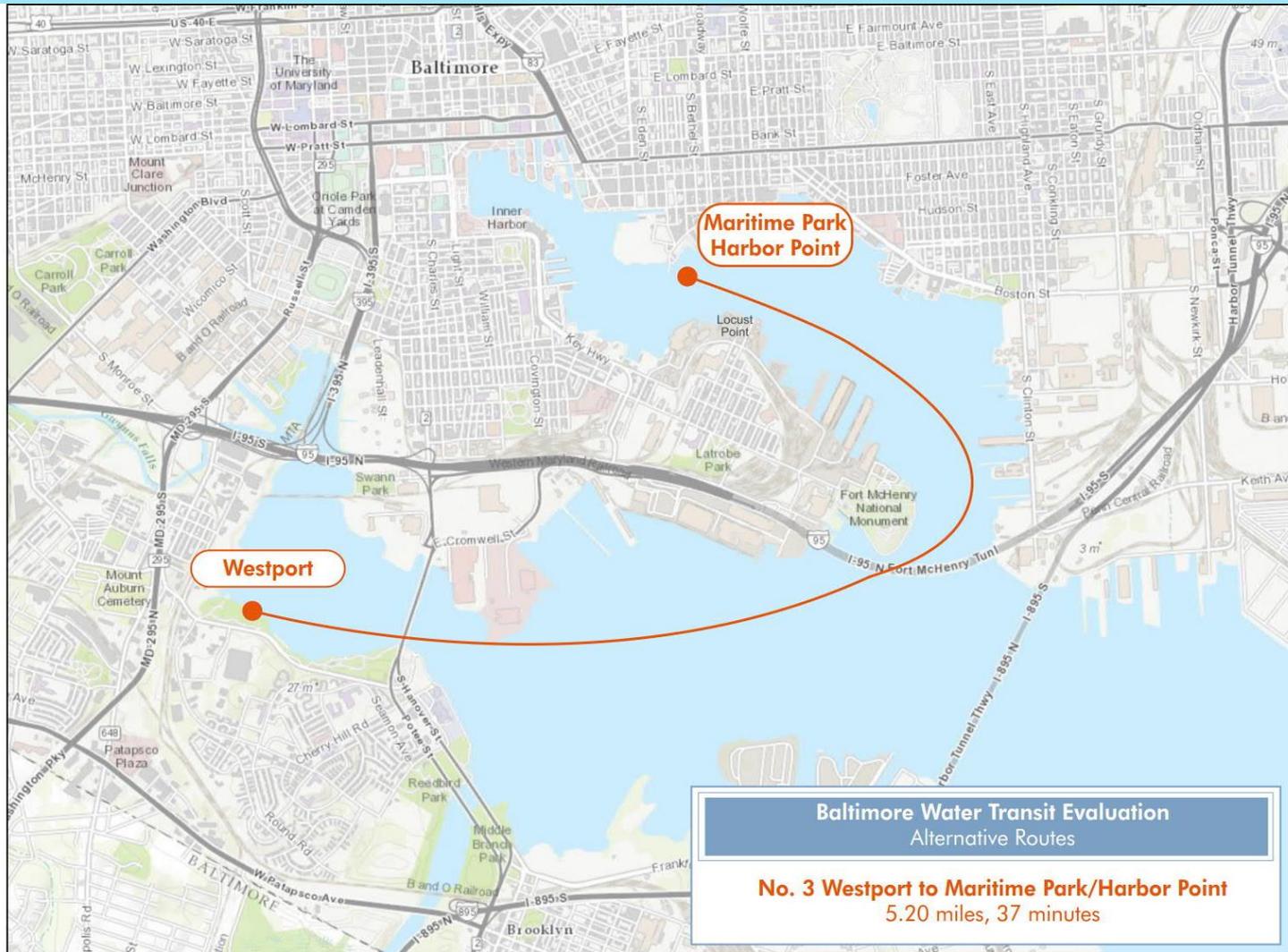
Potential Routes – S. Clinton



Potential Routes – Cherry Hill



Potential Routes - Westport



Potential Routes – Ft. Armistead



Travel Time Comparisons

Route	Google Travel Time Range	Estimated Water Transit Time	Preliminary Market Estimates	Future Daily Ridership Range
Locust Point to Maritime Park	14 to 26 minutes	7 minutes	300 to 1,000	125 to 400
S. Clinton to Maritime Park	8 to 18 minutes	18 minutes	2,700	150 to 300
S. Clinton to Downtown (Harbor Place)	12 to 28 minutes	25 minutes	8,500	200 to 500
Westport to Maritime Park	16 to 35 minutes	37 minutes	2,130	100 to 200
Cherry Hill to Maritime Park	18 to 35 minutes	35 minutes	725	40 to 80
Ft. Armistead to Maritime Park	28 to 50 minutes	43 minutes	500	50 to 100

The market estimates utilize LEHD data and are preliminary estimates subject to revision using the Harbor East employee survey. Future daily ridership are professional judgement and should be tested through the regional travel forecast model.

Passenger Ferry Alternatives



Water Taxi or Small Ferryboat (USCG Subchapter T)

- 49 passengers or less
- Operating in protected waters
- \$300,000 to \$600,000 capital costs
- \$100 to \$150 per hour operating cost
- Minimum of 2 crew members



Medium Sized Ferryboat (USCG Subchapter T)

- 99 to 149 passengers
- Operates in all weather conditions
- \$1,500,000 to \$2,500,000 capital costs
- \$150 to \$300 per hour operating cost
- Minimum 3 to 4 crew members



Large Passenger Ferryboat (USCG Subchapter K)

- 200 to 400 passengers
- Operates in all weather and coastwise
- \$4,000,000 to \$5,000,000 capital costs
- \$300 to \$350 per hour operating cost
- Minimum of 4 to 5 crew members

Future Services Observations and Recommendations

- **Observations:**

- New off-street parking is needed for Harbor Connector customers in the Locust Point / Riverside area.
- A new water transit route from the Boston Street / S. Clinton area
- A Westport water transit route is likely to attract a greater share of commuters from 295 and I-95 than the a Cherry Hill based route.

- **Recommendations:**

- Develop capital and operating cost estimates:
 - Future Routes
 - Landing and Parking
 - Appropriate boats for all weather conditions



Thank you

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