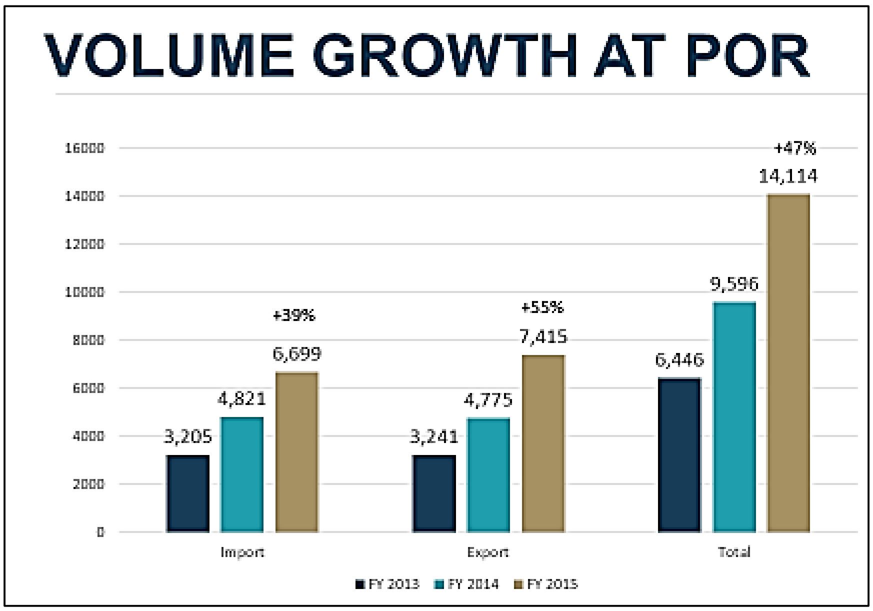
Annual Report

Date: November 1, 2015
Grant Name: Port of Virginia Green Operator Program
Grant Number: UPC 104892
Reporting Agency: Virginia Port Authority
Reporting Date: August 1, 2015 to September 30, 2015 (1st Report)

Historical Context:



Effective February 1, 2012, The Port of Virginia began operating a barge service between the marine terminals in Hampton Roads and the Port of Richmond. Growth of the Marine Highway Barge Service is critical as it removes trucks off the highway and significantly reduces harmful emissions. Since the inception of The Port of Virginia's Marine Highway Barge Service, the cargo volumes have grown year over year. In fiscal year 2013, the barge service transported 6,446 containers. In fiscal year 2014, the barge volumes increased 49% with a total of 9,596 containers transported. The barge volume increased another 47% in fiscal year 2015 with over 14,000 containers transported. Due to the consistent increase in volumes, the barge service increased from two trips a week to three trips a week in January of 2015 and is currently averaging approximately 200 containers transported per week.

On August 6, 2015, the Richmond MPO passed a Resolution to expand the Richmond Green Operator Program (UPC 104892) portfolio to include barge operations in addition to the drayage trucks. In furtherance of the Resolution, the name of the project was slightly modified to read, Port of Virginia Green Operator Program, and on September 1, 2015 the funds were formally obligated.

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Activities During the Reporting Period:

Cargo Volumes:

Month	Empty	Full	Total
Aug 2015	354	871	**1225**
Sep 2015	243	740	**983**

Barge Capacity: The current barge is presently reaching full capacity at three days a week service. The Port of Virginia recently completed a review of the barge operating model to evaluate whether a change in service or the purchase of an additional barge would be necessary. The recommendation is to pursue the acquisition of a larger barge that will increase capacity for each trip. In the future, as volumes continue to increase, the number of trips will also be adjusted to meet the demand. Pursuit of securing a larger barge is actively underway.

Emissions: In calendar year 2014, the average barge utilization rate was 98%. At an 85% utilization rate, the estimated emissions benefits are as follows:

Emissions (Tons)								
	Trips	**NOx**	**CO**	**HC**	**PM10**	**PM2.5**	**SO2**	**CO2**
Truck Service	85	0.1118	0.0312	0.0052	0.0051	0.0049	0.0002	17.8860
Barge Service	1	0.0956	0.0173	0.0056	0.0023	0.0022	0.0000	11.6460
Difference		0.0162	0.0139	-0.0004	0.0028	0.0027	0.0002	6.2400
%CHG		14%	45%	-8%	55%	55%	100%	35%

Financial Expenditures: The funds were formally obligated on September 1, 2015. To date, no funds have been expended.

Planned Activities for Next Reporting Period:

Continue the effort to attract additional cargo to utilize the barge service while seeking to balance the import and export ratios, while continuing marketing efforts to attract drayage trucks utilizing the Port of Richmond to replace older engine models with newer, clean EPA approved engine technologies.

SIGNATURES

Prepared by: Sarah McCoy — **Grant or Project Manager** | October 30, 2015 — **Date**

Approved by: ______________________ — **Grantee Official** | ____________ — **Date**