



Potomac River Crossing Data Development Study

February 14, 2014
Technical Working Group Meeting #3

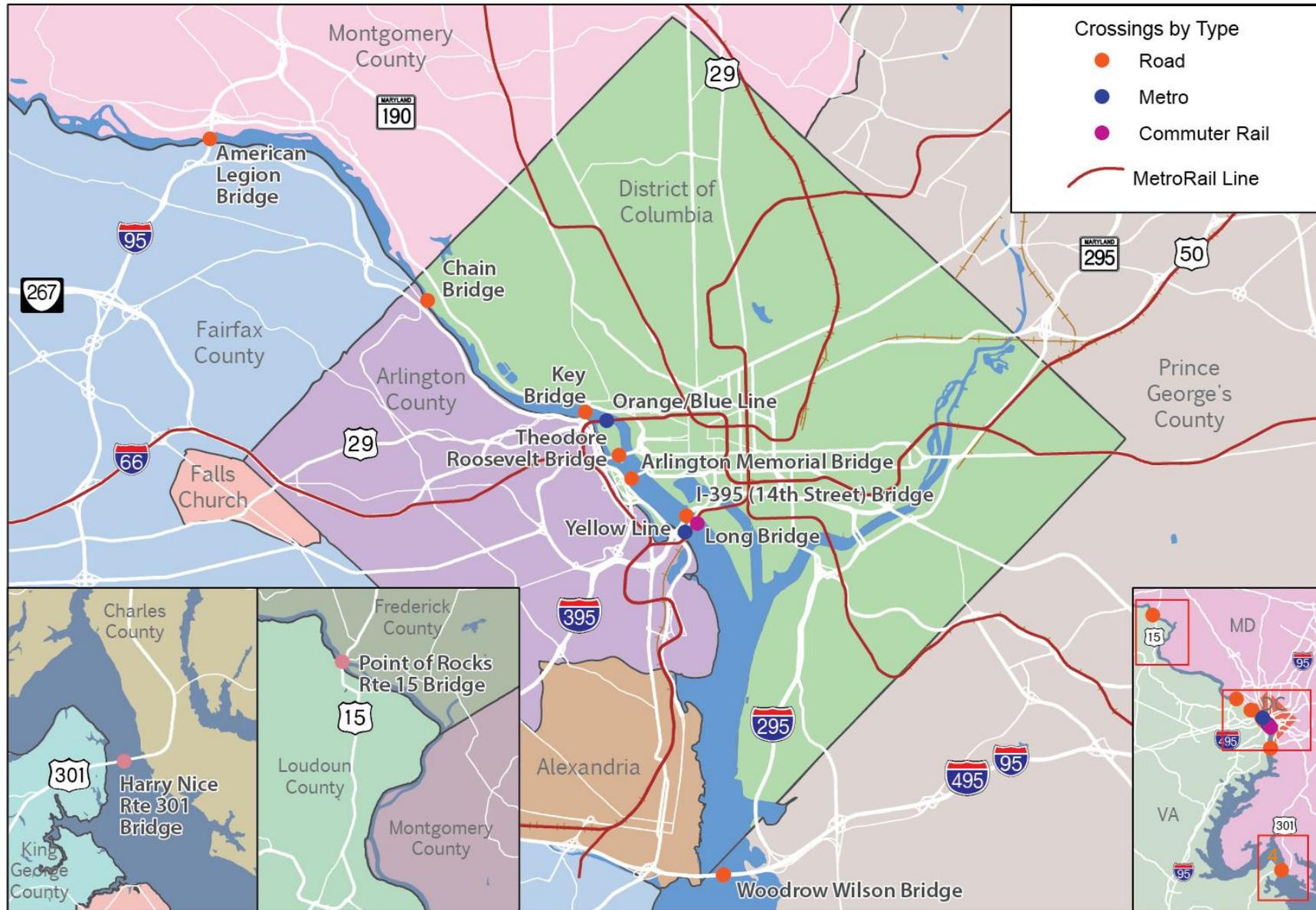
Presentation Outline

- **Review of Prior Data**
- **Updates on Prior Data**
- **Travel Forecasting Results**
- **Update on Website**
- **Next Steps**

Study Background and Objectives

- Examine cross-river traffic and movement demand at existing crossings from Point of Rocks in Virginia to Route 301 in Maryland
- Develop a common set of data
- **DEFINE THE PROBLEM, NOT RECOMMEND THE SOLUTION**

Study Area and Crossings



Highway Count Inventory

Highway Bridge	Most Recent Count Date	Source	Weekday Hourly	Weekend Hourly	New Count	Weekday Average VPD
Point of Rocks – US 15	Nov 2013	Baker/PMA	Yes	Yes	Completed	21,600
American Legion Memorial Bridge – I-495	Nov 2013	MDOT	Yes	Yes	Completed	231,935
Chain Bridge – Rte 120	Aug 2013	DDOT	Yes	Yes		18,237
Key Bridge – US 29	Aug 2013	DDOT	Yes	Yes		54,900
Theodore Roosevelt Memorial Bridge – I-66	Nov 2013	Baker/PMA	Yes	Yes	Completed	105,600
Arlington Memorial Bridge	Nov 2013	Baker/PMA	Yes	Yes	Completed	56,200
14th Street Bridge Complex – I-395	Aug 2013	DDOT	Yes	Yes		241,800
Woodrow Wilson Bridge – I-95/I-495	March 2012 & Nov 2013	MDOT & Baker/PMA	Yes Mar 2012	Yes Nov 2013	Completed	202,300
Harry Nice Memorial Bridge – US 301	Apr 2011	MDOT	Yes	Yes	Not Completed - Construction Activity	16,800

Status of Travel Forecasting HIGHWAY

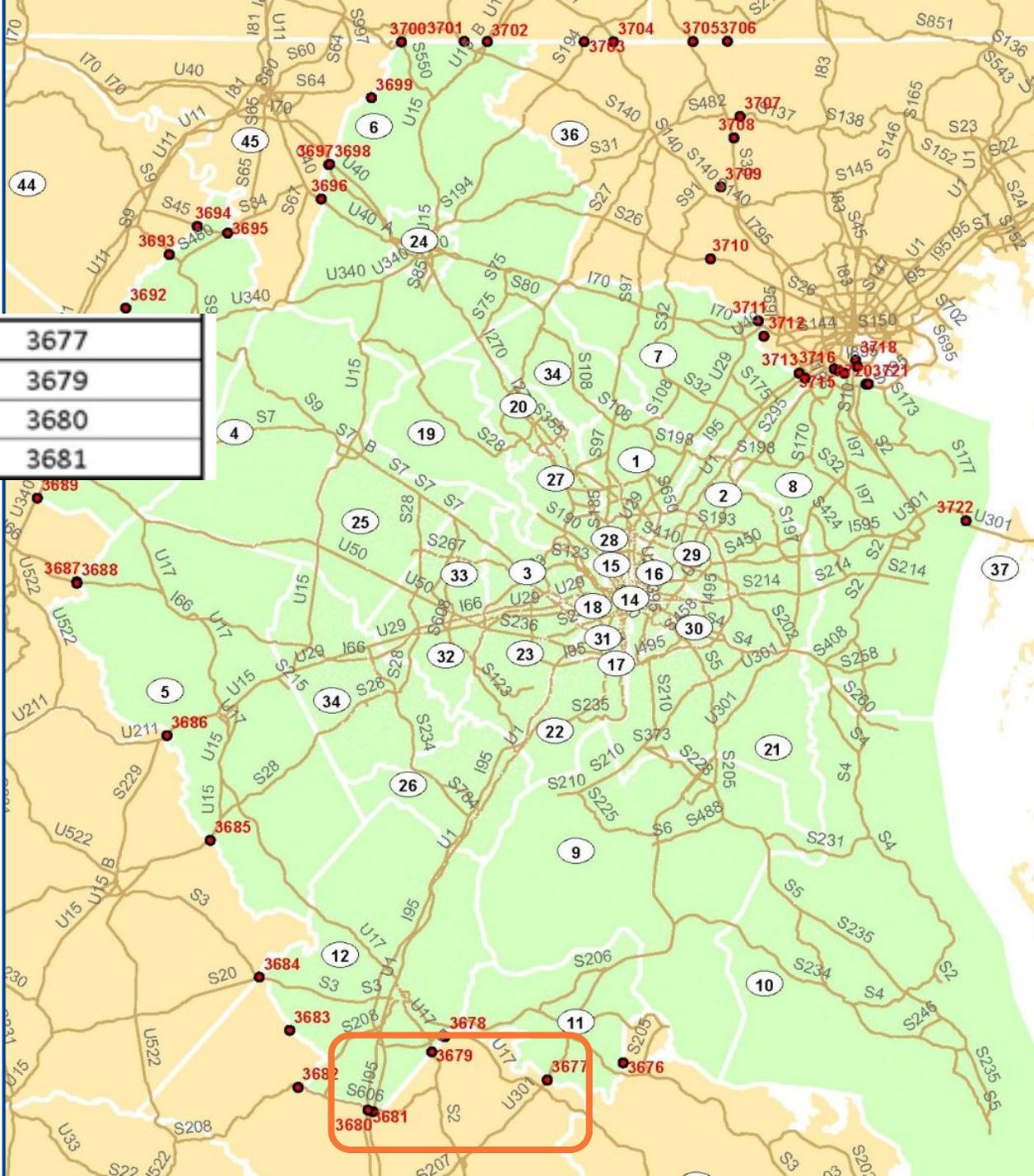
- 2040 forecasts complete
- Posted to website
- O/D patterns based on TPB Model v2.3
 - Round 8.2 Cooperative Land Use Forecasts
 - FY 2013 CLRP & 2013-2018 TIP
- Bridge traffic volumes
 - Forecasted growth 2010 to 2040
 - Growth applied to observed traffic volumes

External Station Locations and Key

Corridor	Route Name	TPB Model	External Station
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195S	US 301	3677
	SR 2	3679
	I-95	3680
	US 1	3681

U15S	US 15 / US 29	3685
	US 211	3686
I66	I-66	3687
	SR 55	3688
U340	US 340	3689
U17W	US 17 / US 50	3690
	SR 7	3691
S9	SR 51	3692
	SR 9	3693
	SR 45	3694
I70W	SR 34	3695
	Alt US 40	3696
	I-70	3697
	US 40	3698
	SR 17 / SR 77	3699
U15N	SR 550	3700
	SR 140	3701
	US 15	3702
S30	SR 194	3703
	SR 97	3704
	SR 30	3705
	SR 86	3706
S140	SR 137	3707
	SR 30	3708
	SR 140	3709
	SR 26	3710
I70E	I-70	3711
	US 40	3712
I95N	I-95	3713
	US 1 / I-195	3714
	SR 295	3715
	I-895	3718
S170	SR 648	3716
	SR 170	3717
S2	SR 2	3719
	I-695	3720
U50	SR 710	3721
	US 50 / US 301	3722



Example Origin-Destination Table

Nice Bridge, Northbound (to MD) Weekday				
Trip Percentages		Destinations		
Origins			9	10 I95N
11			14.8%	5.8% 0.5%
12			1.9%	1.5% 0.2%
I95S			9.6%	17.2% 8.1%
U17E			3.0%	7.8% 0.8%

Highway 2040 Forecasted Volumes

Highway Bridge	2040 Forecasted Weekday 24-Hour	2040 Forecasted AM Peak Period	2040 Forecasted PM Peak Period
Point of Rocks – US 15	29,400	6,400	9,600
American Legion Memorial Bridge – I-495	280,500	55,700	64,700
Chain Bridge – Rte 120	27,700	5,200	4,000
Key Bridge – US 29	59,100	11,000	16,400
Theodore Roosevelt Memorial Bridge – I-66	116,200	22,100	34,100
Arlington Memorial Bridge	65,100	13,300	18,400
14th Street Bridge Complex – I-395	265,400	49,500	69,700
Woodrow Wilson Bridge – I-95/I-495	253,900	51,400	68,800
Harry Nice Memorial Bridge – US 301	32,800	6,500	10,600

Potomac River Crossing Data Development Study

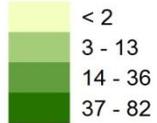
Key Bridge: AM Peak Period Northbound (to DC)

2040 Forecast

-  Bridge
-  Counties

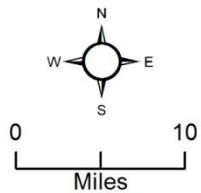
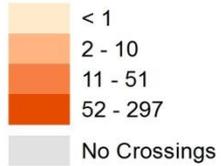
Origins

Crossings per Square Mile

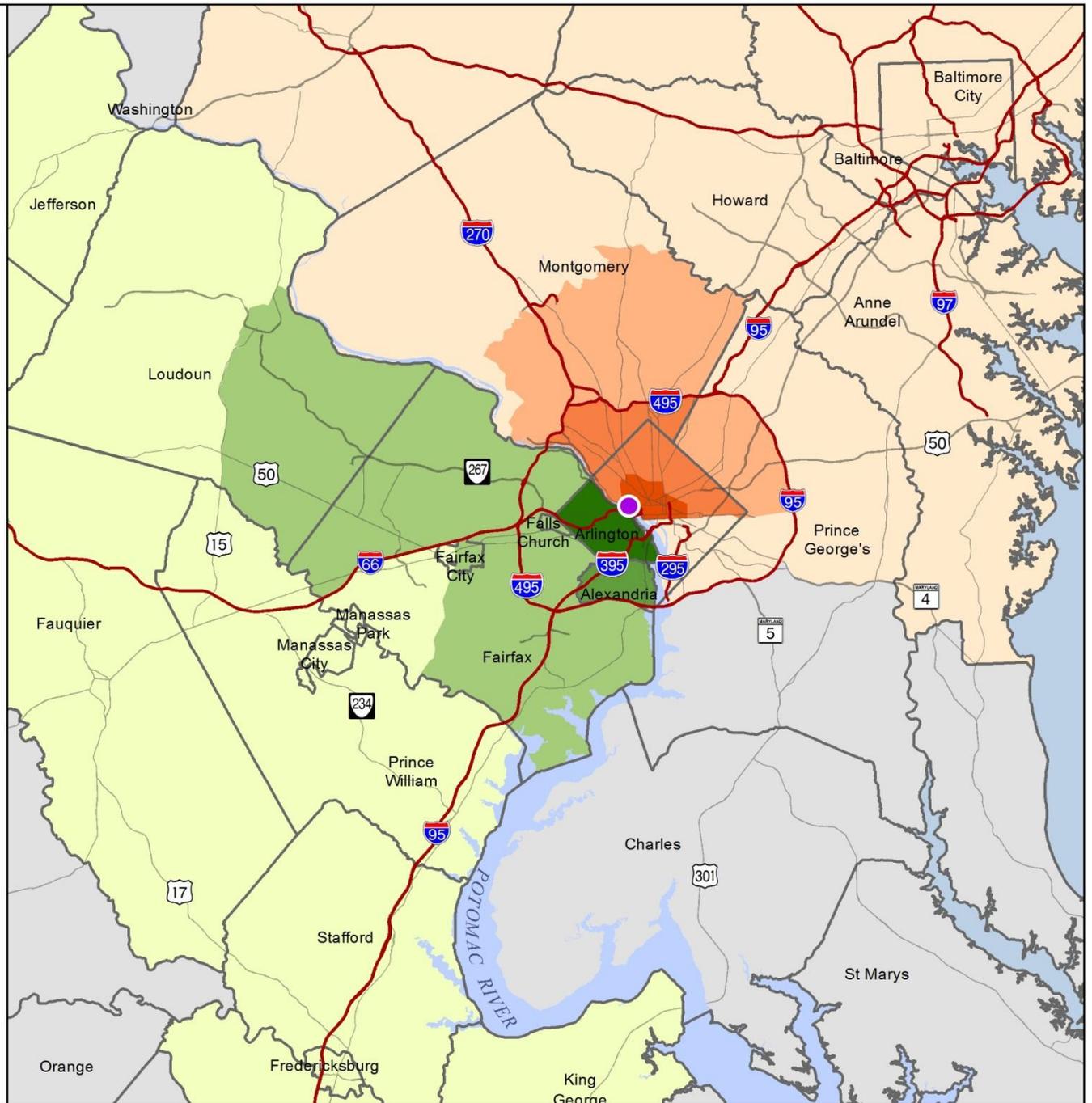


Destinations

Crossings per Square Mile



Baker



Potomac River Crossing Data
Development Study

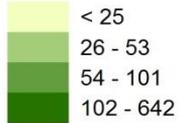
Woodrow Wilson Bridge:
Weekday Westbound
(to VA)

2040 Forecast

- Bridge
- Counties

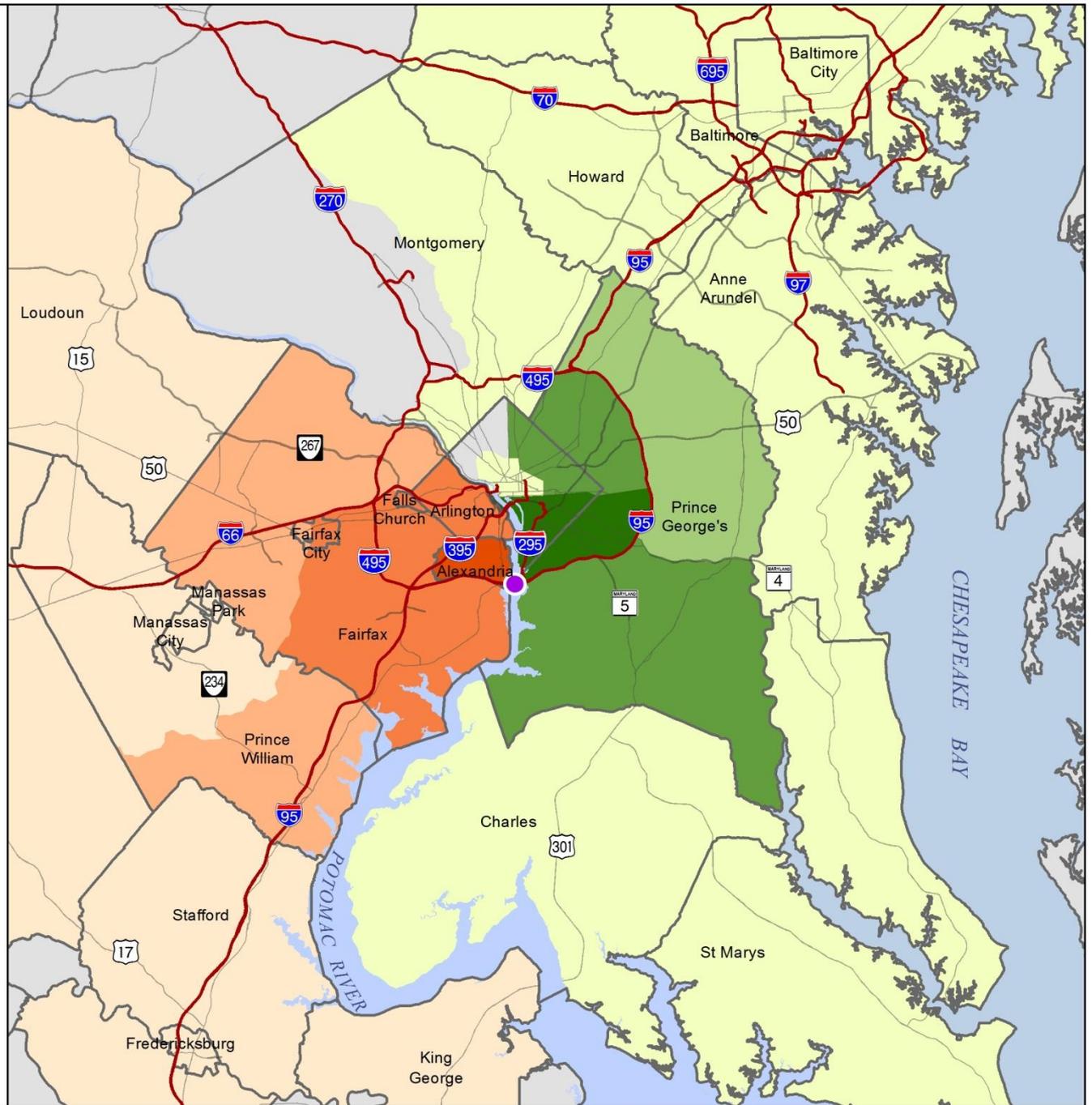
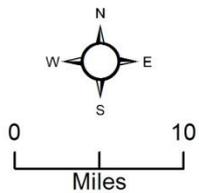
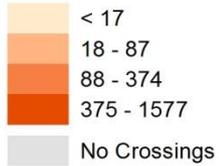
Origins

Crossings per Square Mile



Destinations

Crossings per Square Mile



Potomac River Crossing Data Development Study

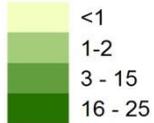
Nice Bridge: Weekday Northbound (to MD)

2040 Forecast

-  Bridge
-  Counties

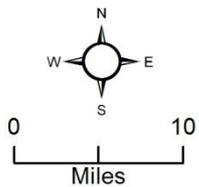
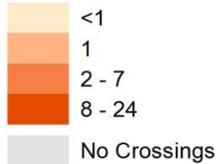
Origins

Crossings per Square Mile

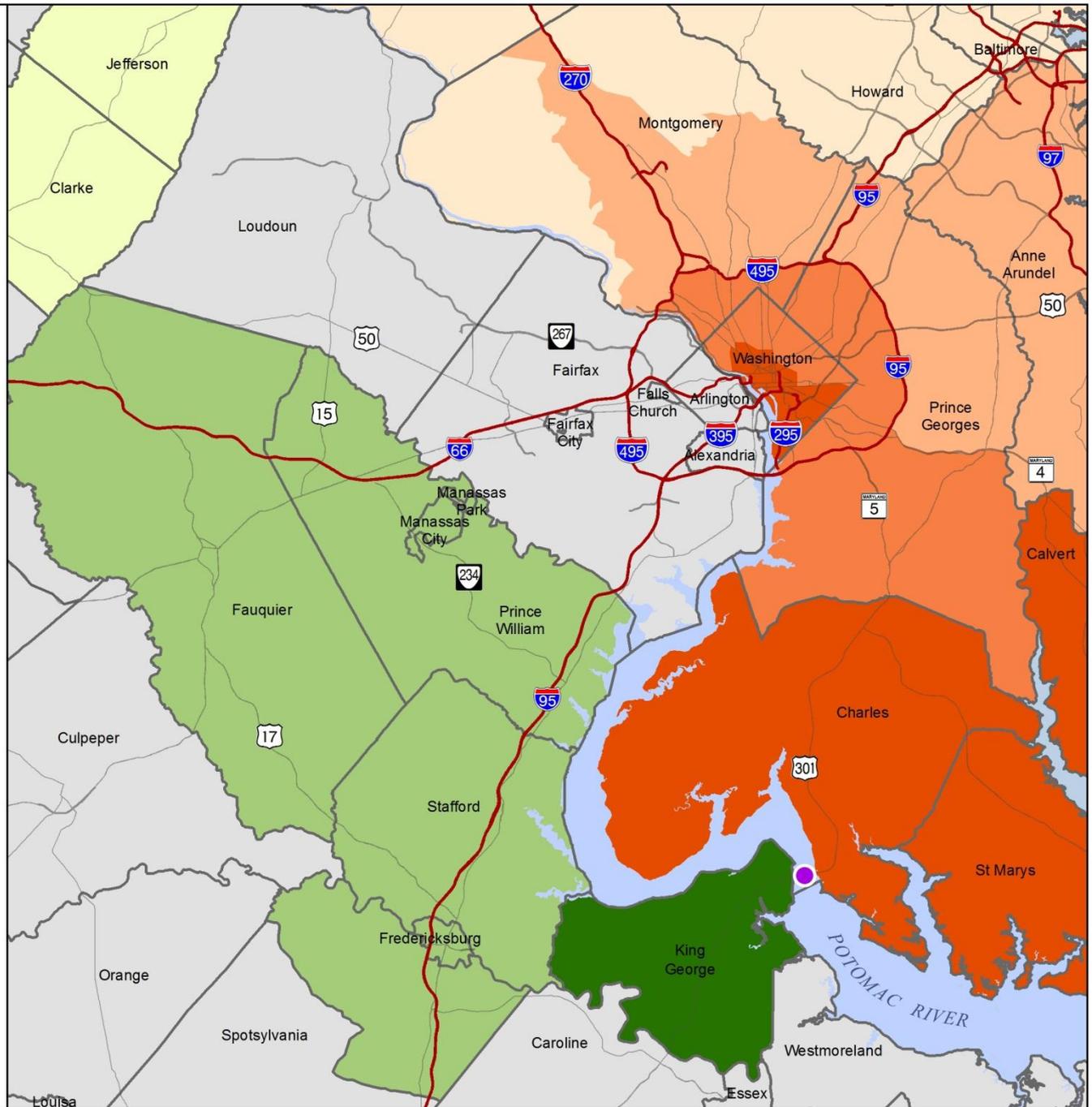


Destinations

Crossings per Square Mile



Baker



Transit Data and Forecasts Inventory

Transit Data	Data Type	Date of Source Data	Existing River Crossings Estimated	2040 Forecasted Data/Status
WMATA Metrorail	Ridership and Origin/Destination	May 2012	Orange/Blue Line: 171,043 Daily Yellow Line: 52,836 Daily	Orange/Blue/Silver Line: 186,000 Daily Yellow Line: 80,400 Daily
WMATA Metrobus	Ridership and Limited On/Off Counts by Route	March 2013	Cannot estimate crossings from existing data	Cannot forecast due to data limitations.
VRE	Ridership by Train and Survey of O/D	Ridership: 2013 Survey: 2012	Mid-Week Daily Average Crossings: 11,499	VRE Forecasts are coming soon.
Loudoun County Transit	Ridership by Route	July 2013	Cannot estimate crossings from existing data	Cannot forecast due to data limitations.
PRTC	Ridership by Route Boarding Counts	April 2012	Cannot estimate crossings from existing data	Cannot forecast due to data limitations.

Status of Travel Forecasting TRANSIT - Metrorail

- 2012 Observed and 2040 Forecast patterns and volumes complete and posted to website
- 2012 Observed
 - WMATA May 2012 MetroRail station-to-station OD summary
 - 2012 MetroRail Passenger Survey
 - Inferred crossing volumes based on shortest station-to-station pairs
 - Patterns reported by direction for peak periods and weekday

Status of Travel Forecasting TRANSIT - Metrorail

- 2040 Forecasts
 - O/D Patterns based on TPB Model
 - Volumes based on growth 2010 to 2040 and inferred crossing volumes in 2012
 - Patterns reported by weekday for the “home-end” or “origin-end” of travel

Example Origin-Destination Table 2040 Forecasted Metrorail Trips Rosslyn Tunnel (Orange/Blue/Silver Lines)

Fraction of Forecasted Observations								
Trip Percentages		Destinations						
Origins		Farragut West	Federal Triangle	Foggy Bottom-GWU	Judiciary Square	L'Enfant Plaza	McPherson Square	Metro Center
3		1.36%	0.28%	1.06%	0.48%	0.50%	1.18%	0.47%
18		2.86%	0.55%	2.52%	0.90%	0.93%	2.44%	0.92%
23		1.81%	0.27%	1.41%	0.45%	0.45%	1.55%	0.54%
33		1.23%	0.24%	0.92%	0.45%	0.44%	1.05%	0.43%

Data is Available on the Project Website

Potomac River Crossing Data Development Study

Internal Data Contact

Project Information

This internal site will serve as a data portal for sharing documents and other information between the Regional Partnership Committee members, the Technical Working Group members, the study team staff and consulting team staff. As the study progresses, new information, documents and other data will be added to this internal site for review by various members of the study team.

Data posted here should be considered confidential and should only be discussed with individuals listed as having access to this "Internal" portion of the study website.

Project Study Team Contacts

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Next Steps

- TWG Review Forecasted Data
- Consultant to Complete Technical Memos and Draft Report
- Hold RPC meeting in March or April



Questions / Comments

THANKS!