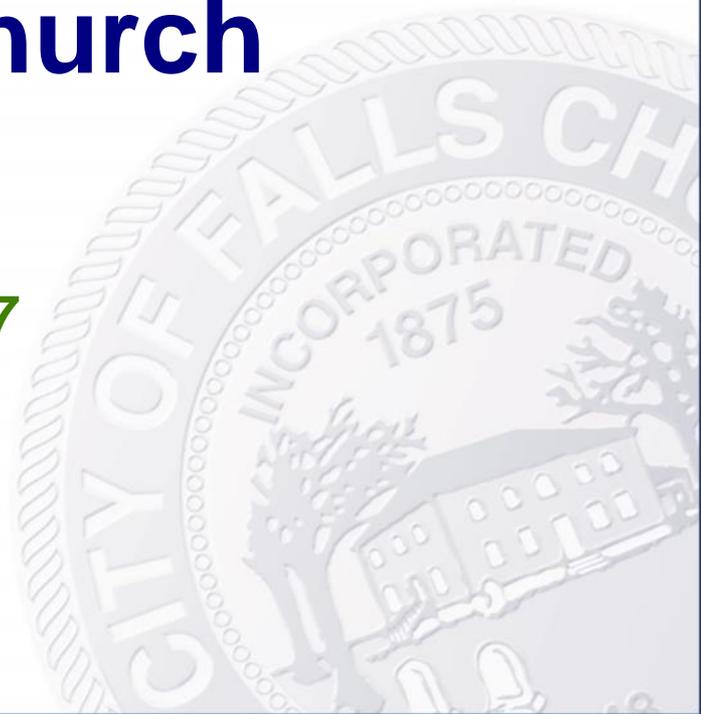


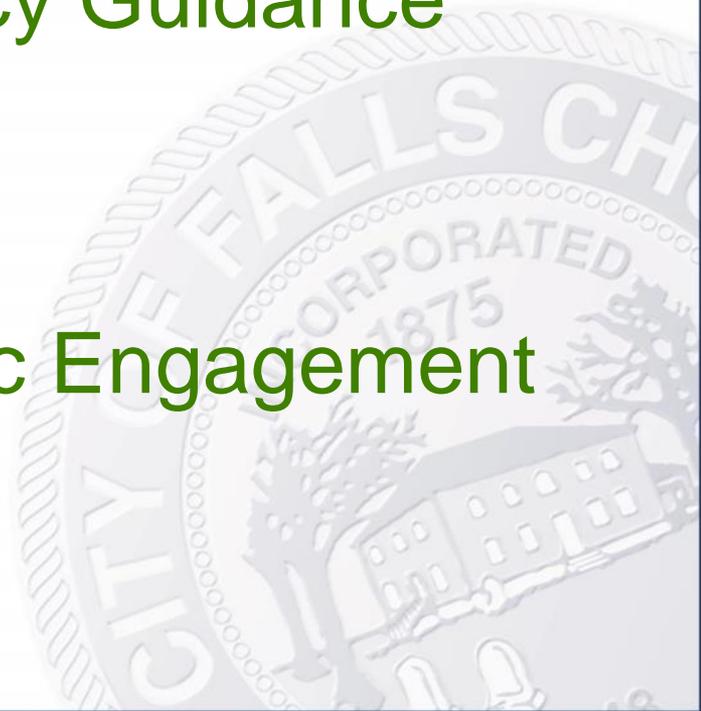
Capital Bikeshare in the City of Falls Church

City Council
August 9, 2017



Agenda

1. **What is Bike-share?**
2. Project Motivation and Policy Guidance
3. Station Planning
4. Cost
5. Project Schedule and Public Engagement



What is Bike-share?

- Network of stations throughout a geographic area
- Allows individuals to borrow shared bicycles
- Focus on short-term rentals, 30 minutes or less
- One-way trips – Borrow from and return to any station in network



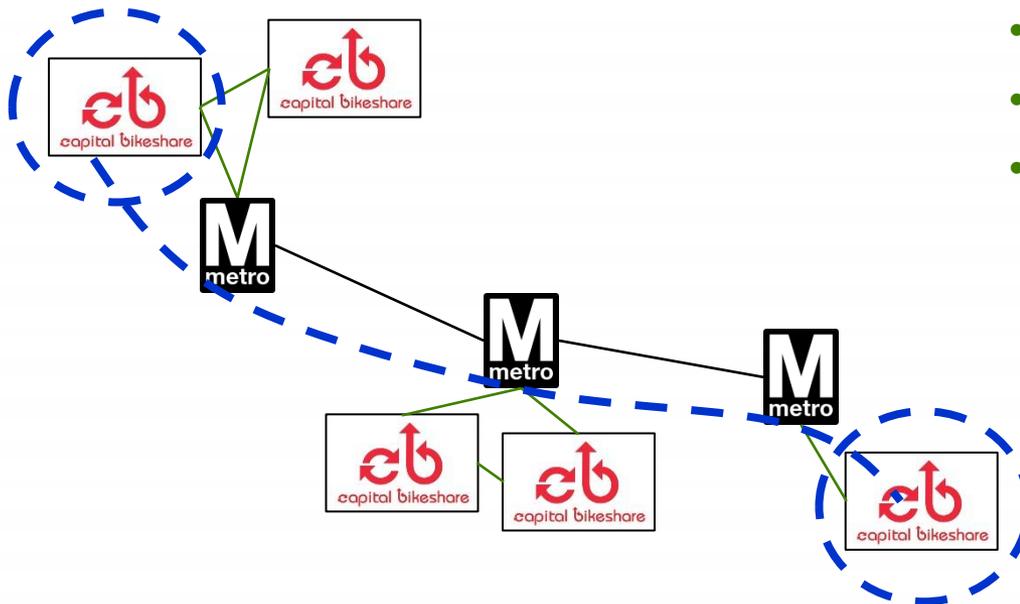
How is Bike-share Used?

Transit Extension

- First-mile, last-mile
- In-town

Membership Options

- Annual – \$85
- Month – \$28
- 3-day – \$17
- 1-day – \$8
- 1-trip – \$2
- Unlimited 30 minute trips
- Increasing fee for each additional 30 minutes



Age Requirement

- Must be 16 years or older to check out a bicycle

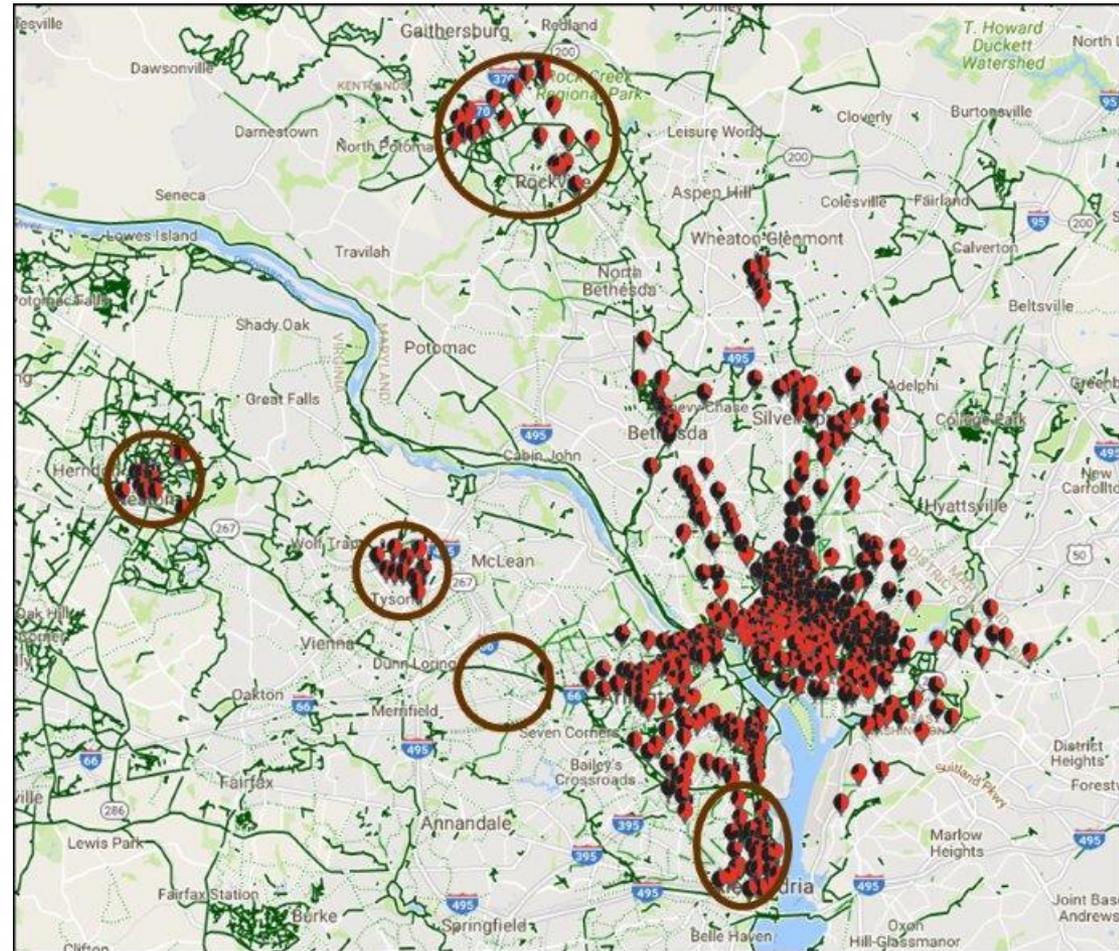
Who Operates Bike-share?

- Third Party Operation
 - Station Maintenance
 - Equipment Repair and Replacement
 - Station Cleaning
 - Bicycle Maintenance
 - Updates to Maps and Stations
 - Call Center and Website



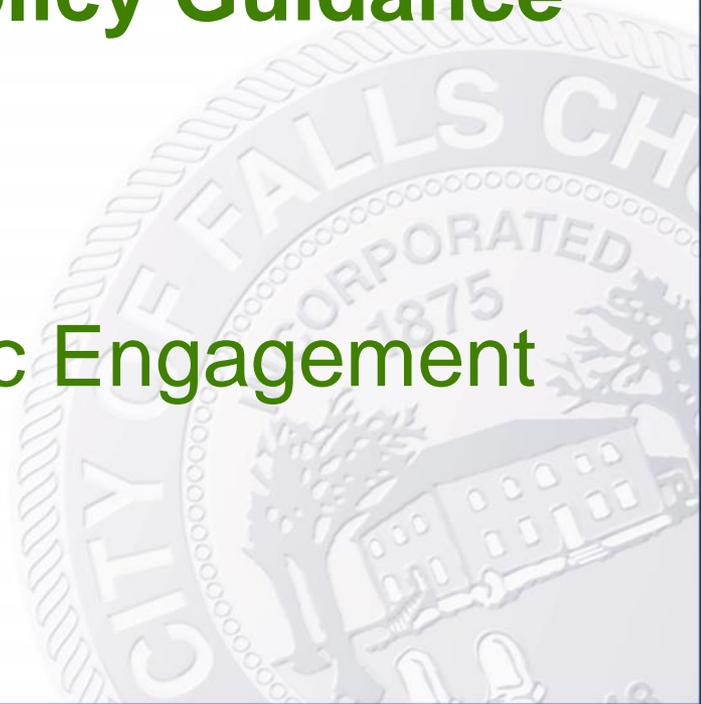
Existing Bike-share Network

- 440 stations
- 3,700 bikes
- Ongoing expansion
 - District of Columbia, 2008
 - Arlington County, 2010
 - City of Alexandria, 2012
 - Montgomery County, 2013
 - Fairfax County, 2016
 - City of Falls Church, 2018*



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Why the City of Falls Church?

- Connect to and expand transit options
- Expand transportation options for City residents, workers, and visitors
- Provide alternatives to single occupancy vehicles



Policy Guidance

- Mobility for all Modes (2014)
 - Vision for safe transportation network that provides mode choice
- Bicycle Master Plan (2015)
 - Vision for bicycle facilities to connect to transit, residential and commercial areas, schools, and designated bike routes
 - Network of bicycle routes and facilities
 - Map of potential bike-share corridors

Small Area Plans

North Washington Street Small Area Plan (2012)

“Given the North Washington Street POA’s location near the Metro Station, the W&OD Trail, and the City Center POA, there is an opportunity to establish a Bike Share program in the City of Falls Church.” (p.7-9).

South Washington Street Small Area Plan (2013)

“Bike share facilities may be included with the Intermodal Transit Plaza...This would allow bus riders or other users to travel to any area within the City or into Arlington County, where there is also a bike-share program, on rented bicycles.” (p. 8-12).

Downtown Planning Opportunity Area Small Area Plan (2014)

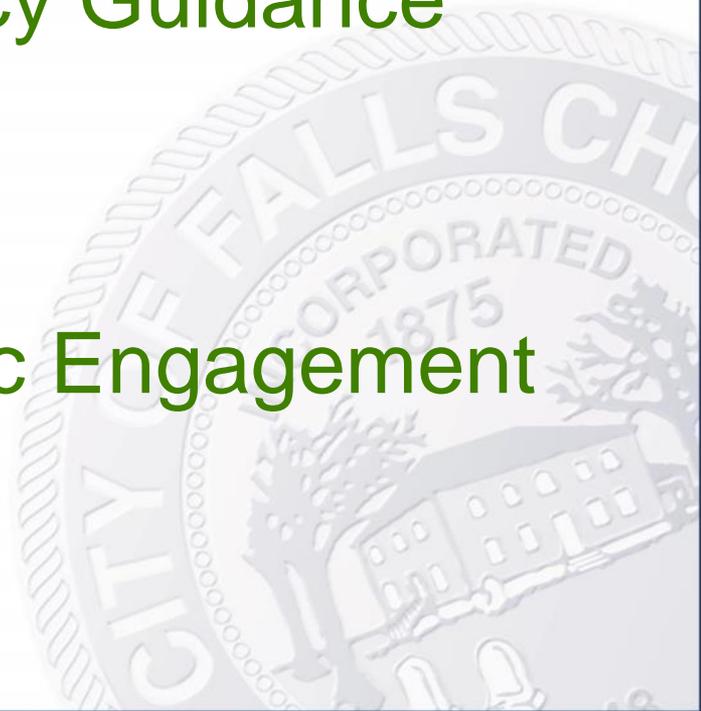
“Visitors around the region should also be able to arrive...by bicycle via connections along Park Avenue and Maple Avenue directly from the W&OD Trail.” (p.3-4).

West Broad Street Small Area Plan (2016)

“Bike-share is a good tool for increasing bike accessibility...Bike share systems are becoming more and more common in both urban and suburban areas throughout the country.” (p.6-9).

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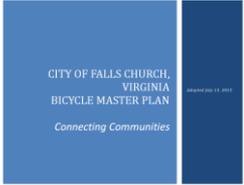
Planning Criteria to Guide Station Locations

- Key Destinations
 - Metro stations, cultural attractions, higher density commercial, retail and residential
- Station Density
 - No further than $\frac{1}{2}$ mile apart, ideally $\frac{1}{4}$ mile
- Accessible to Bicycle Routes
 - Provide comfortable biking options

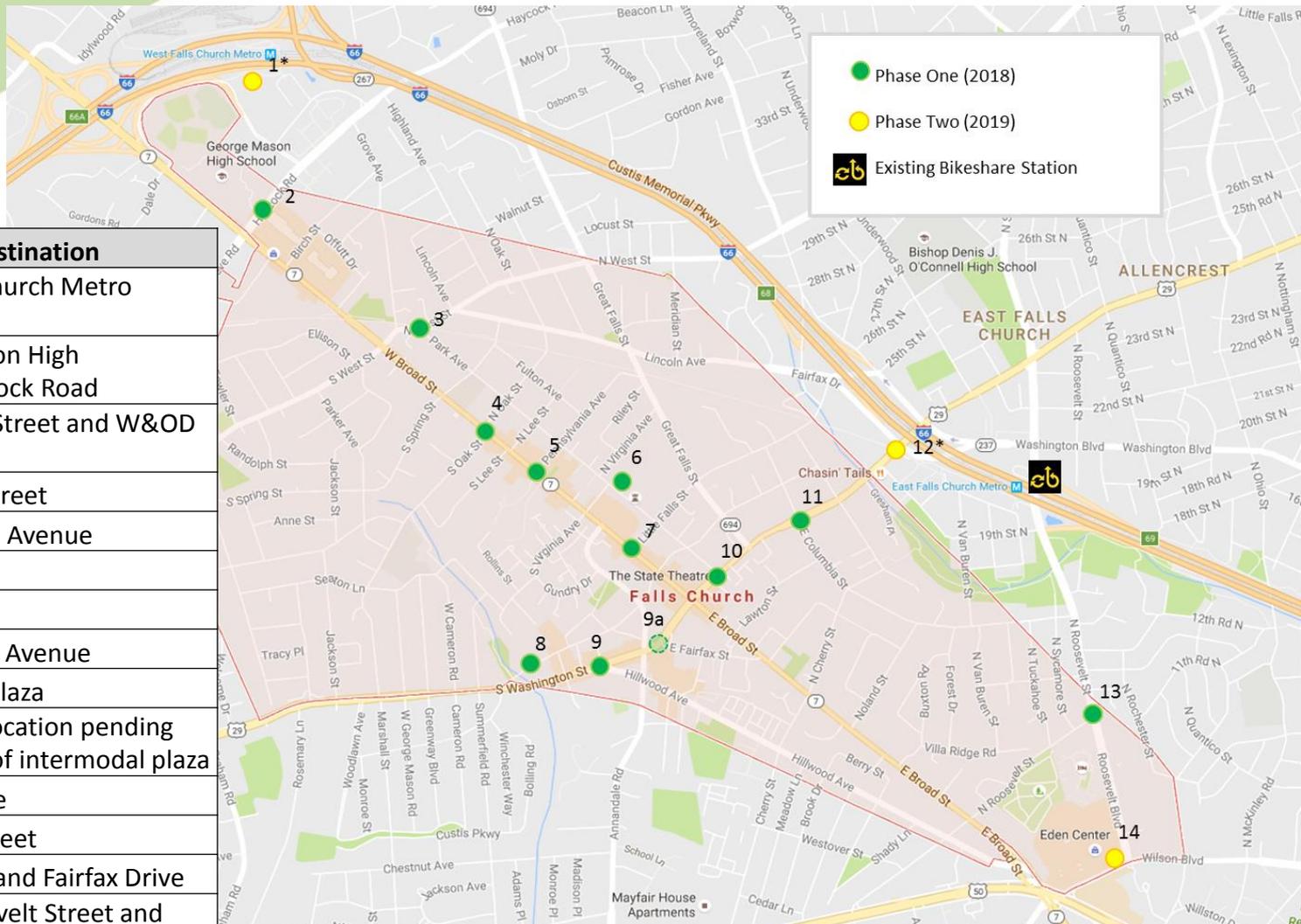


Takeaways

- General agreement on corridors and destinations
- Some differences across inputs

Corridors and Locations	Policy 	Consultant 	Public 
Broad Street	X	X	X
Washington Street	X	X	X
Roosevelt Boulevard & Eden Center	X	X	X
Metro Station Connections	X	X	X
W&OD Trail	X		X
Hillwood Avenue		X	X
City Parks			X
Residential Neighborhoods			X

Latest Draft Locations: Combining Inputs



Station	Location/Destination
1*	West Falls Church Metro Station
2	George Mason High School/Haycock Road
3	North West Street and W&OD Trail
4	North Oak Street
5	Pennsylvania Avenue
6	City Hall
7	Harris Teeter
8	South Maple Avenue
9	Intermodal Plaza
9a	Temporary location pending completion of intermodal plaza
10	State Theatre
11	Columbia Street
12*	W&OD Trail and Fairfax Drive
13	North Roosevelt Street and Roosevelt Boulevard
14	Eden Center

* Partnership with neighboring jurisdictions and agencies.

Station Siting Criteria

Sunlight

- At least four hours of direct sunlight each day

Safety

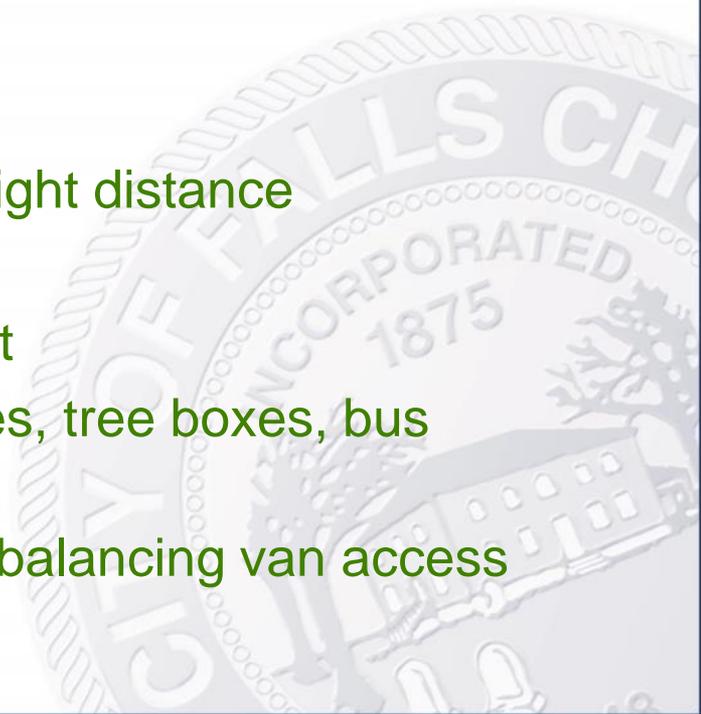
- Safety for cyclists, pedestrians, motorists, and service staff

Visibility

- Visible and easily accessible
- Low impact on pedestrian and motorist sight distance

Clearance

- Adequate clearance on sidewalk or street
- Free of obstruction of underground utilities, tree boxes, bus stops, ADA ramps, overhead utilities
- Boom truck access for installation and rebalancing van access for service



Station Dimensions and Clearances

Station Sizes

Station Dimensions		
Docks	Width	Station Depth
12	35'	6'
15	41'7"	6'
19	51'5"	6'

Station Clearances

Street Element	Typical Clearance
Fire Hydrant	5'-15'
Parked Vehicle	Station at least 18" from curb (for sidewalk siting)
Crosswalk or Curb Cut	2'-3'
Drainage	6"-8" of space behind curbside stations (for street siting)
Wheelstops	3' from the end of the station

User Access

Station Location	Access Depth
Street	1-3'
Sidewalk	6'
Park/Plaza	6'

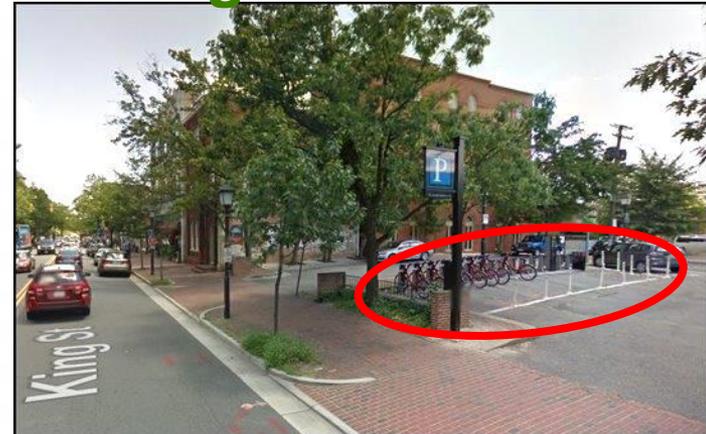
Fitting Stations Into Existing Places

On Street



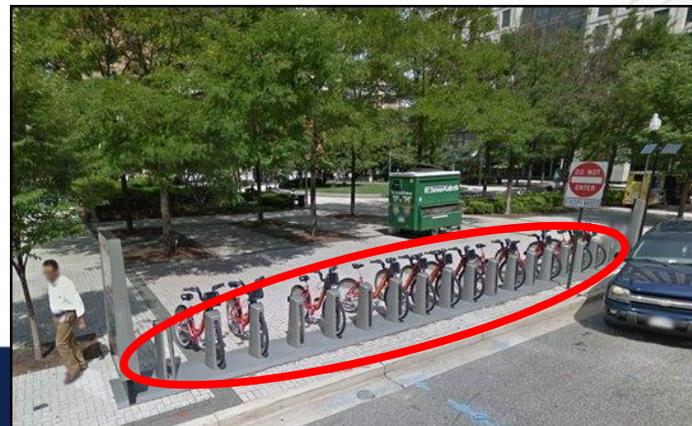
Old Town Alexandria

Parking Lot



Old Town Alexandria

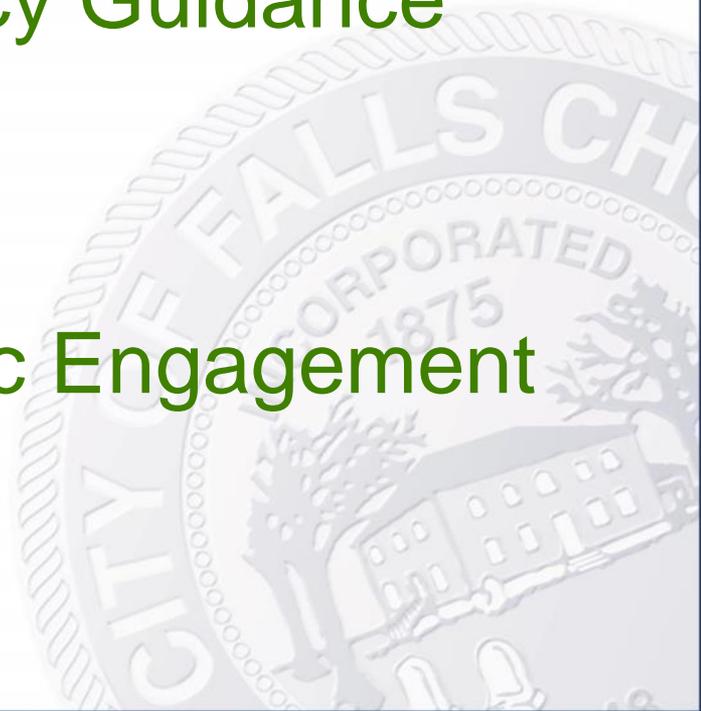
Sidewalk



Ballston

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Project Costs

	One-time Capital*	Annual Operating		
Costs	Cost per 12 dock station (including bikes)	\$42,212	Cost per station	\$13,848.48
	Cost of installation (per station)	\$3,200	Number of Stations	10-16
	Number of stations	10-16	Total Cost for 10-16 stations	\$138,485-\$221,576
	Total cost of equipment	\$454,120-\$726,592		
Funding	Capital grant funding	\$2 million	Cost recovery from user fees	30-60%
			Cost recovery from station sponsorships	10%
			Potential advertising revenue (annual)	\$15,000
			Operating grant funding	\$500,000
	*Includes soft costs (engineering, project administration, public engagement) not shown			

Cost Recovery: Project Revenues

Comparative Cost Recovery

Jurisdiction	Cost Recovery (User Fees) %
Washington, D.C.	70%
Arlington	63%
Alexandria	63%
Falls Church (10 stations)	30% 62% (including other revenues)

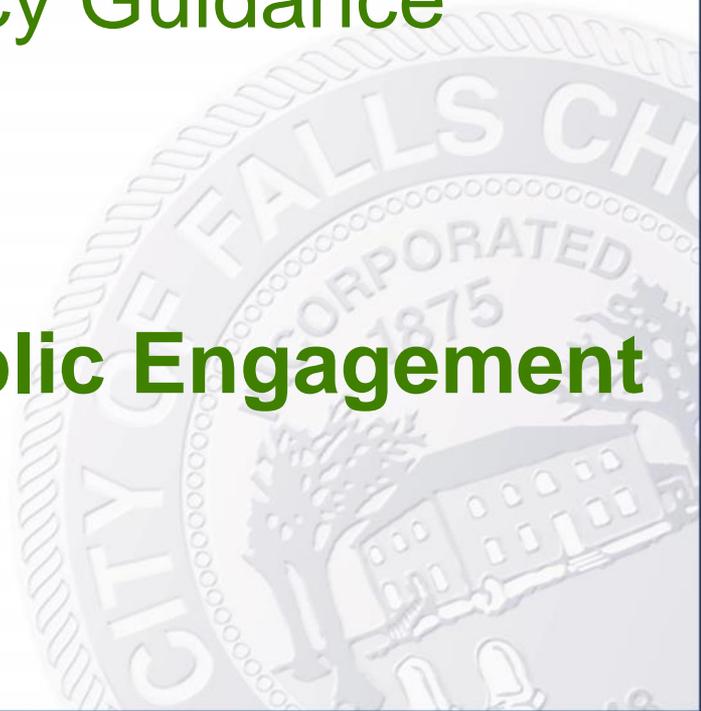
Annual Funding Support

Number of Stations	5-Year Operating Support (including advertising and sponsorships)	5-Year Operating Support (user fees only)
10	\$311,000	\$491,000
11	\$346,000	\$555,000
12	\$380,000	\$618,000
13	\$434,000	\$718,000
*14	\$449,000	\$745,000
15	\$484,000	\$810,000
16	\$519,000	\$874,000

*14 Station expansion "breaks even" with available grant funding, accounting for advertising revenues, sponsorships, and \$43,400 in startup costs

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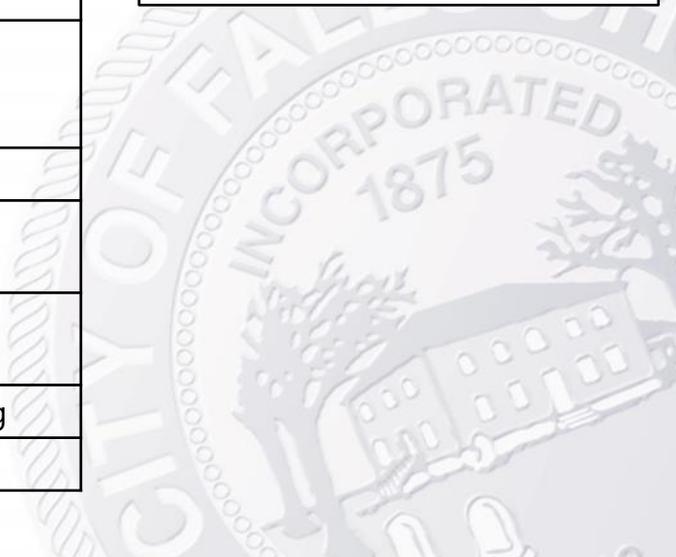
Project Schedule: From Planning to Delivery



Calendar Year	2013	2014	2015	2016	2017	2018	2019
Public Engagement		Mobility for all Modes	Bicycle Master Plan		See Next Slide		
Funding				Funding Awarded			
Station Planning							
Procurement							
Right of Way							
Installation						Phase 1	Phase 2

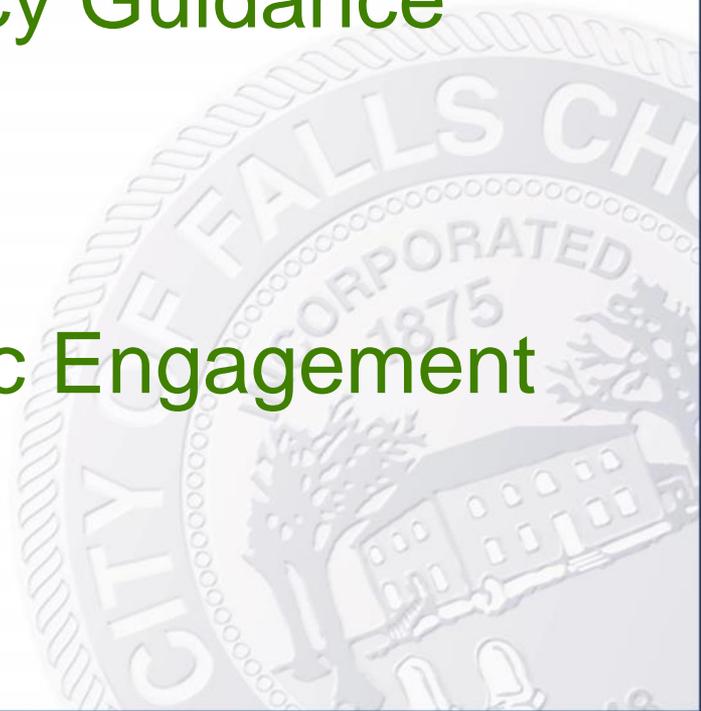
Public Engagement, Recent Events

Date	Group	Type of Event
April 3, 2017	Planning Commission	Work Session
April 3, 2017	Citizens Advisory Committee on Transportation (CACT)	Work Session
April 4, 2017	Economic Development Authority (EDA)	Work Session
April 19, 2017	Fairfax Alliance for Better Bicycling (FABB)	Public Meeting
April 20, 2017	Environmental Sustainability Council (ESC)	Work Session
May 8, 2017	City Council	Update Briefing
July 1, 2017	Community	Pop-Up Meeting at Farmer's Market
July 8, 2017	Community	Pop-Up Meeting at Farmer's Market
July 20, 2017	Community	Community Meeting
August 14, 2017	City Council	Public Hearing

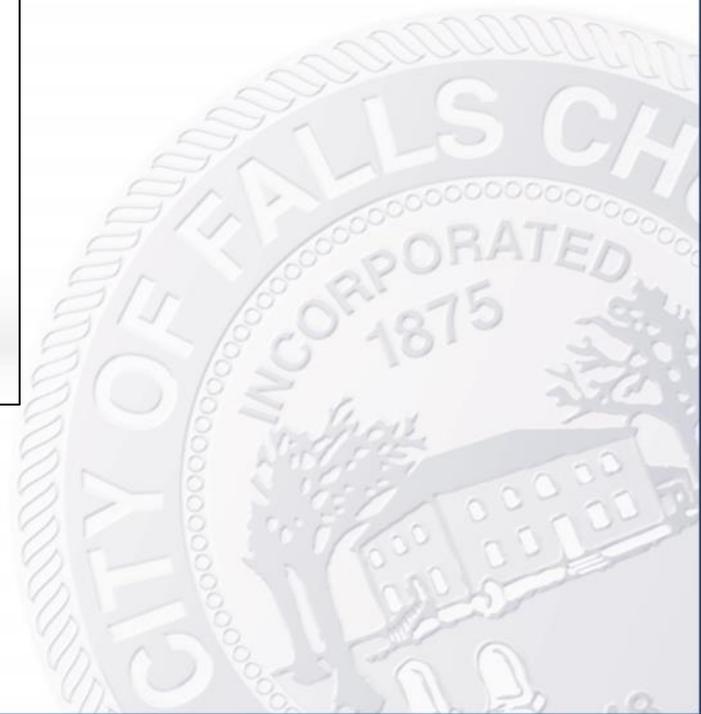


Recap

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Questions and Discussion



Backup Slides

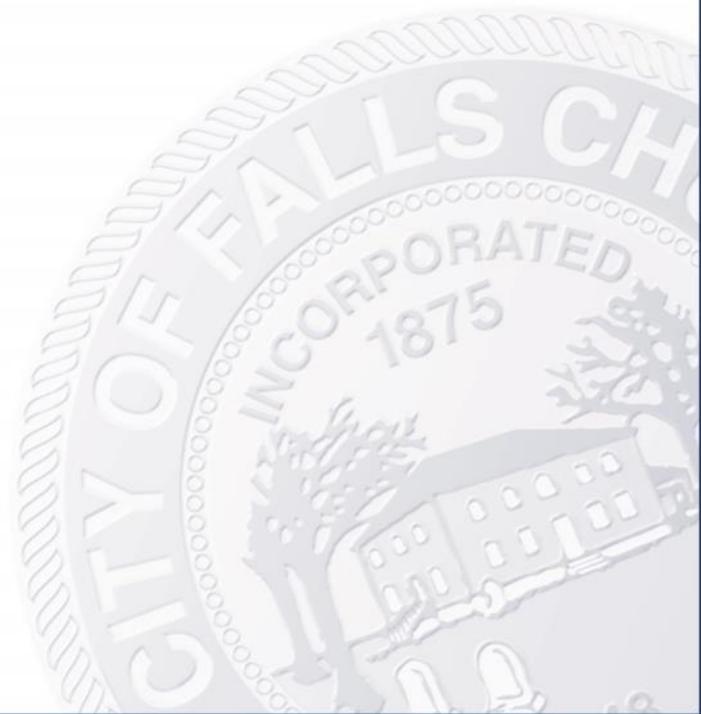
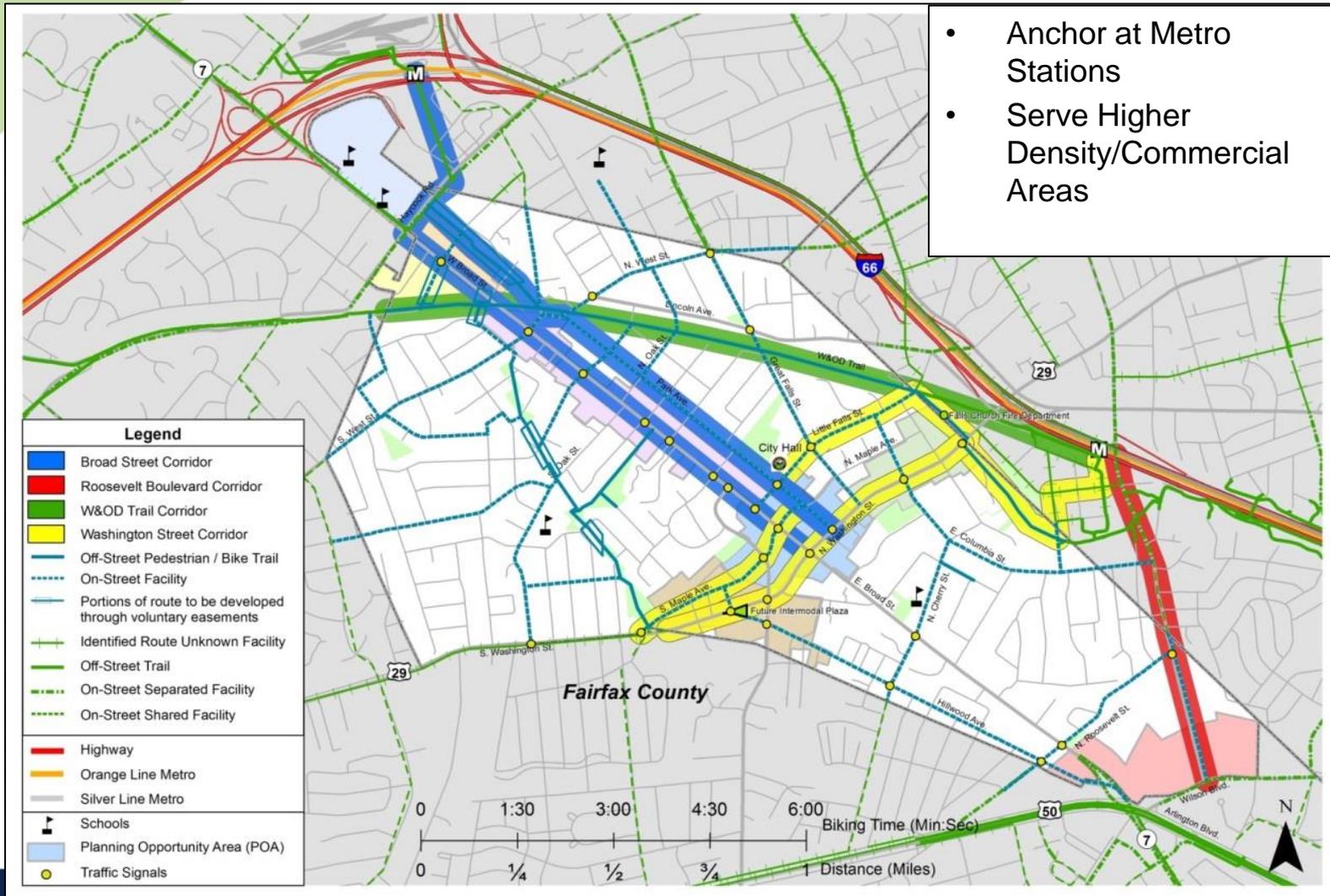


Image Credits

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Policy Guidance: Bicycle Master Plan



Public Input: Crowdsourcing Map



Bike Arlington Capital Bikeshare "Suggest a Station" Crowdsourcing Map

You are using a browser that is not supported by the Google Maps JavaScript API. Consider changing your browser. [Learn more](#) [Dismiss](#)

Map Satellite Tysons View

Legend

- County Suggested
- Community Suggested
- Existing Bikeshare Locations

Location Instructions

1. Zoom to the location on the map.
2. Click on the map to submit a public input.
3. Repeat. You can submit as many as you like!

Your Input (Click here to add a comment)

Web address



<http://cabistations.com>

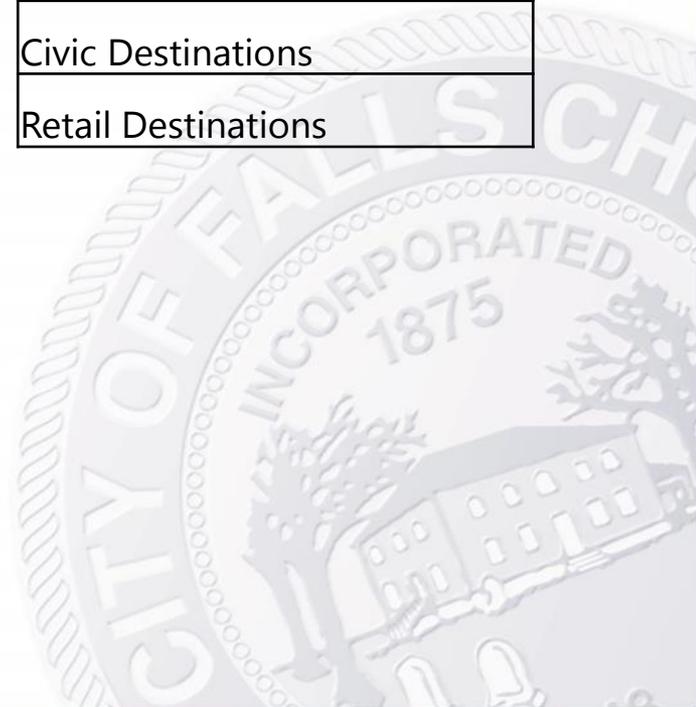
Launched in 2011

Consultant Model

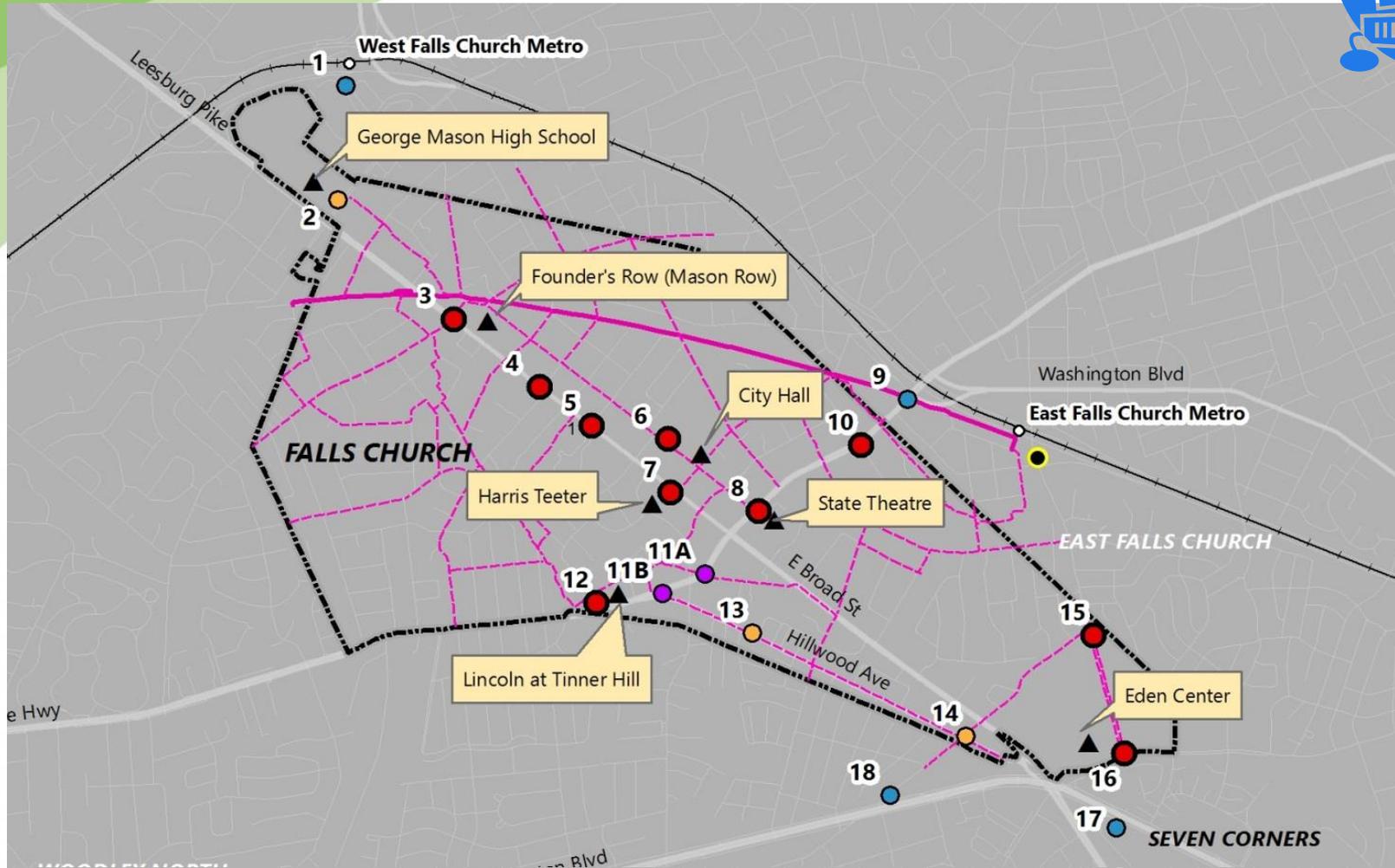


Measures
Population density
Distribution of population under 150 percent of the federal poverty line (definition for low-income)
Employment density
Density of retail and hospitality employment (proxy for retail activity)
Density of bicycle commuters
Density of bicycle, walk, and transit commuters
Density of bicycle infrastructure
Density of points of interest
Density of parks
Change in elevation (average slope)

Additional Factors
Public Transportation
Mixed-Use Development
Civic Destinations
Retail Destinations



Consultant Recommendation



Legend

Type of Proposed Location

- Primary Location
- Alternative Location

● Secondary Location

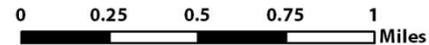
● External Locations

● Existing Bikeshare Station

Bicycle Network

--- Bicycle Route

--- W&OD Trail



March 2017