

Bikeshare Study Update

CITY COUNCIL WORK SESSION

FEBRUARY 26, 2019



Agenda

Study Background

Draft Recommendations

Next Steps



Study Background

Study initiation

- Multimodal Transportation Plan Goal
- Joint study with George Mason University, Fairfax County, and the Town of Vienna

Study process

- Evaluate existing conditions
- Evaluate technology options
- Gather public input
- Develop recommendations

Multimodal Transportation Goal 2

Provide viable and attractive mobility choices.

ACTION MM2.3.5 Complete a bikeshare feasibility study including definition of necessary station density, recommended “starter system,” operating and management structure, and funding program, preferably in partnership with George Mason University.

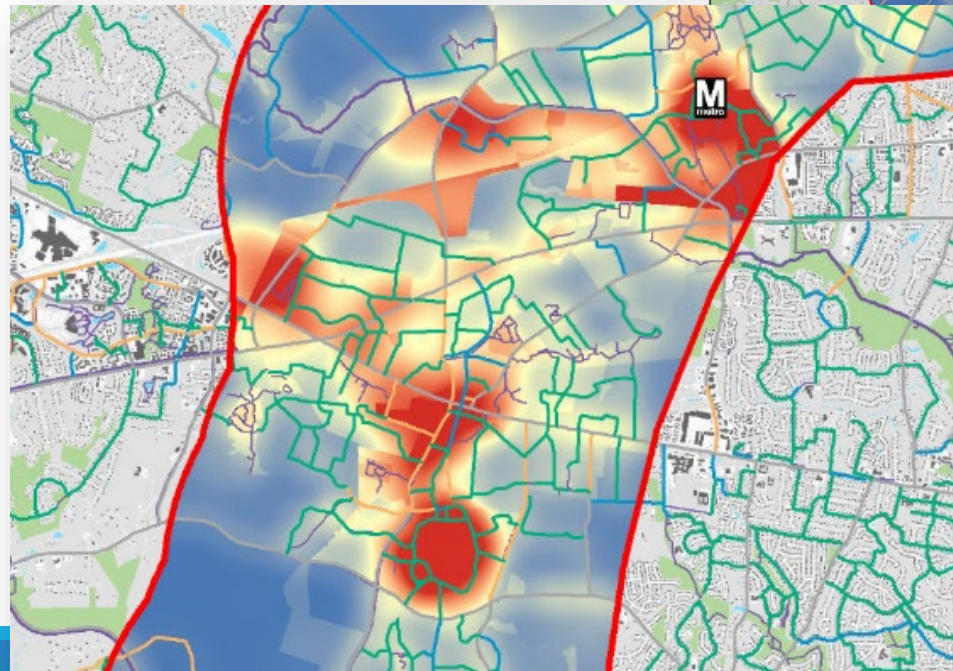
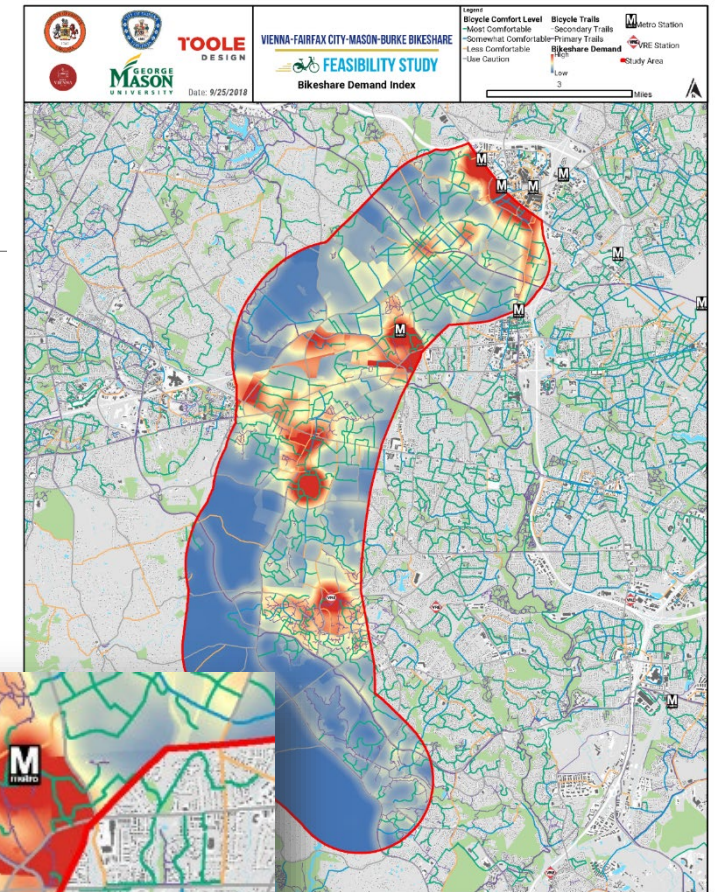
ACTION MM2.3.6 Provide initial support to establish bikeshare in the City.



Existing Conditions

High demand potential & priority areas based on:

- Population & employment density
- Zero-car, low-income, and minority households (equity goals)
- Transit service & biking infrastructure
- Nearby attractions (e.g. parks, shopping, schools, etc.)
- Topography
- Public input



Bikeshare Technology Options

Docked (Capital Bikeshare)



Dockless (multiple vendors)



Technology Options: Considerations

Technology	Pros	Cons
Docked Bikeshare (Capital Bikeshare)	<ul style="list-style-type: none">• Established operation and use in the region• Visible and iconic stations• Organized network• Reliability for users to find bikes	<ul style="list-style-type: none">• Requires larger public investment• Requires dedicated station space• Longer implementation timeline• Less flexibility to modify system quickly
Dockless Bikeshare (multiple vendors)	<ul style="list-style-type: none">• Potentially smaller public investment• Potentially less public space needed• More flexible and scalable• Ease of access for users	<ul style="list-style-type: none">• Evolving industry, regulatory, & policy environment• Less agency control• Less organization and oversight• Potentially less reliability for users



Public Input

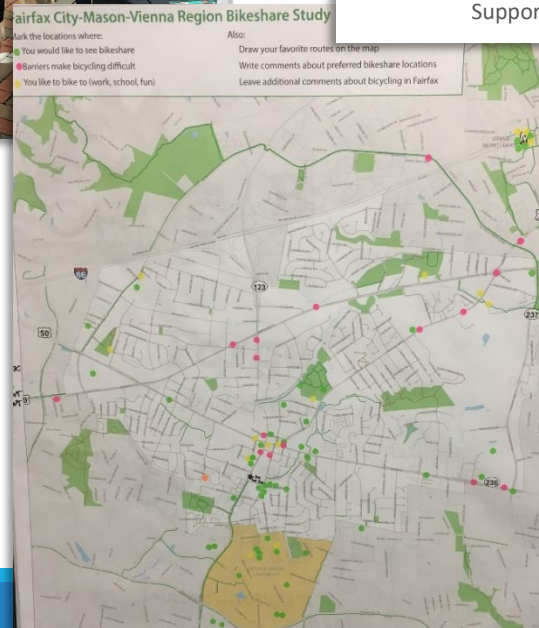
Online engagement

- 180 online survey responses
- 29 online location suggestions

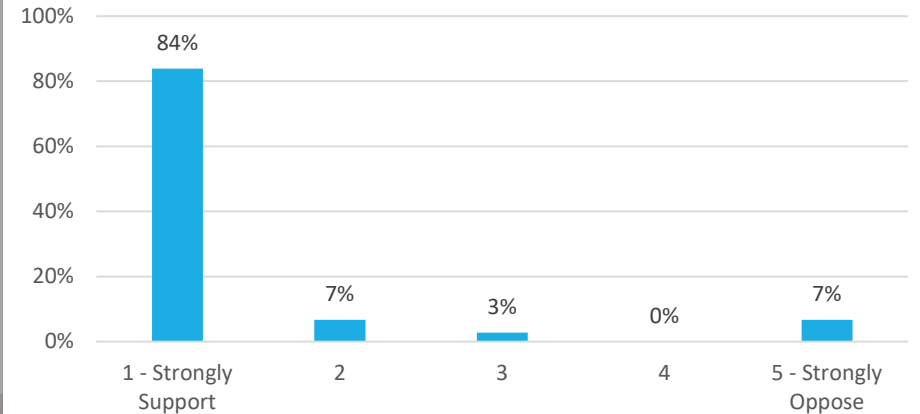
Outreach events

- Feedback from approximately 200 people

Overwhelming number of survey participants strongly support bikeshare in the study area



Online survey: Do you support bikeshare in the Vienna-Fairfax-Mason study area? (n=180)



Draft Recommendations: Overview

Establish Capital Bikeshare network first with connections to Mason and Metro

- Identify initial station locations in high-demand areas
- Identify funding to purchase and install equipment and support operations
- Continue coordinating with Fairfax County and George Mason University

Develop dockless bikeshare program in the future to serve lower-density areas and other travel markets

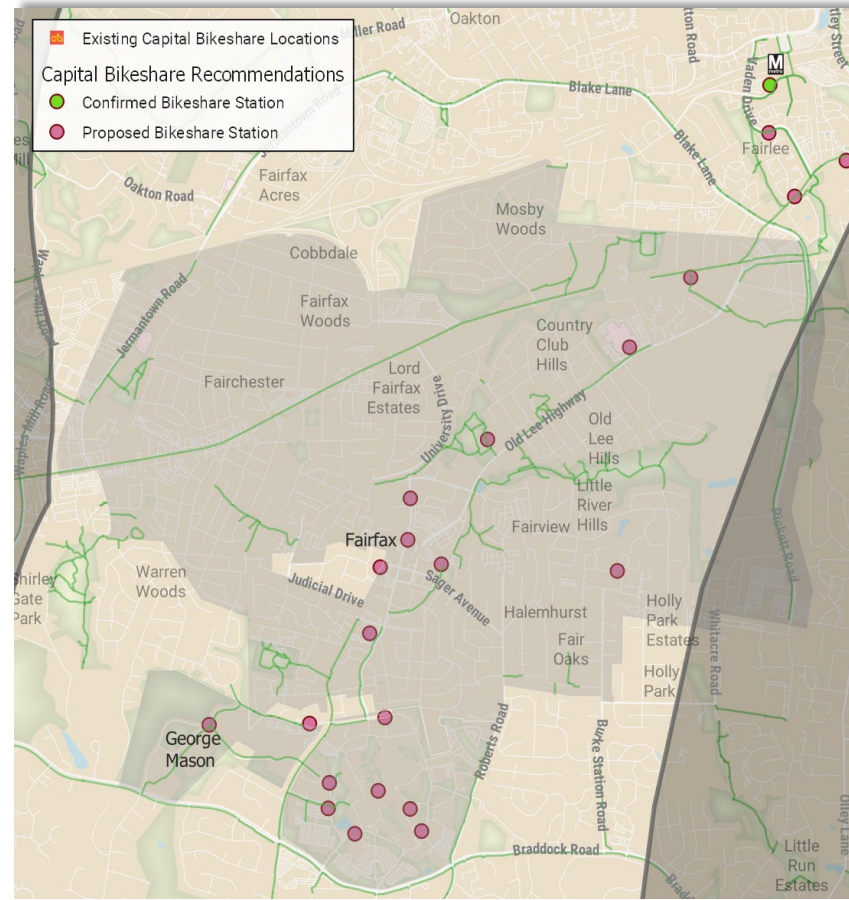
- Continue monitoring industry, policy and regulatory environment
- Begin developing guidance for desired policies and program attributes in coordination with City Attorney and other departments
- Continue coordinating with Mason on timeline and approach



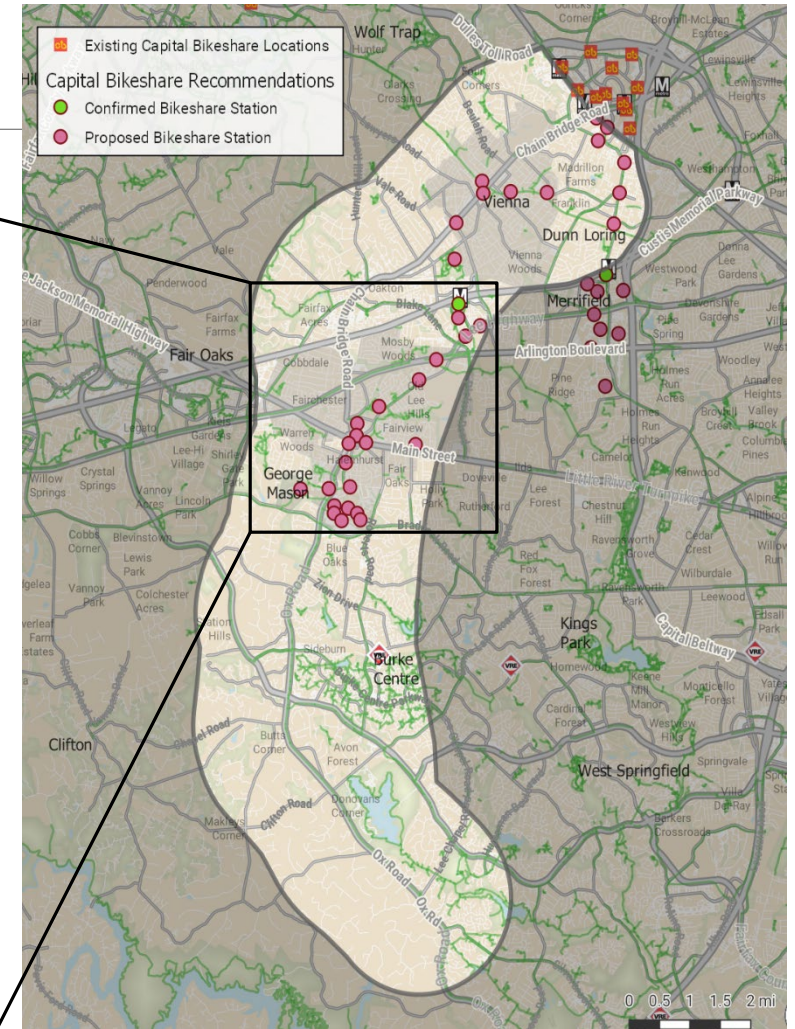
Draft Recommendations: Capital Bikeshare Locations

Recommended docked station locations along Old Lee Highway

Recommended locations establish a system “spine” and enhances Mason to Metro connection



Study Area



Draft Recommendations: Station Siting Criteria

Study does not specify exact sites for docks, just general locations (dots on location map)

Study recommends using a set of weighted criteria to prioritize current and future location recommendations

Priority given to locations close to transit, within or near a bikeshare network, near densely developed areas, adjacent to new development, or preferred by community

Criterion	Metric	Weight
Transit Proximity	Metrorail station within 2 miles	20
Destinations	Density of destinations near station location	10
Bicycle Network	Density of bicycle facilities near station location	10
Capital Bikeshare Network	Capital Bikeshare station within 1.5 miles (recalculate as station expands)	15
Development Opportunity	Station adjacent to new development	5
University	Station within university campus area	10
Local Priority	Station preferred by community feedback or available funding	10



Capital Bikeshare Costs and Funding

Phase	Unit Cost Estimate	Proposed Quantity	Year 1 Cost (est.)	Year 2 Cost (est.)	Notes
Capital (station design & installation)	\$65,000 per station	10 stations	\$650,000	\$0	Vendor quotes for typical 15-dock station with 8 bikes, plus design and construction costs; may start with fewer or smaller stations
Operating (contract with vendor)	\$110 per dock per month	15 docks per station	\$198,000	\$198,000	Based on operator quotes for rebalancing, administration and maintenance
Staff Time (0.5 FTE)			\$50,000	\$50,000	Assumes one half-time staff person or equivalent to manage project and oversee program
Estimated cost recovery (user fees)			(\$30,000)	(\$50,000)	Operating cost recovery conservatively estimated at 15% for Year 1, 25% for Year 2; use and cost recovery likely to increase over time, especially if City receives station sponsors.
Total			\$868,000	\$198,000	



Dockless Bikeshare Considerations



Lower cost system, but still requires oversight and supportive infrastructure

Prepare for future program development after docked bikeshare is established

Develop policies for permitting and regulating aligned with region and state

Bikeshare in the Region

Capital Bikeshare:

- Fairfax County continuing to expand system (including funded station at Vienna Metrorail)
- Town of Vienna seeking to join Fairfax County Capital Bikeshare network (County to operate)
- Mason seeking to install Capital Bikeshare stations in coordination with City timeline; City or County likely to operate on-campus stations

Dockless systems:

- Industry and policies continuing to evolve – monitoring state legislation and pilot programs in other jurisdictions
- Fairfax County expecting some dockless vendors to begin operations this spring
- Mason anticipates contracting with specific vendors



Dockless E-Scooters

Shared e-scooter options reviewed during study but no recommendations made at this time

Many similarities to dockless bikes, and many dockless vendors provide scooters as well as bikes

- May appeal to different demographic groups
- May serve different types of trips

Some concerns distinct from dockless bikes, such as:

- Where should they be ridden (street, bike lane, or sidewalk)?
- What operating speeds are safe?

Future policies guiding dockless bikeshare should also consider dockless shared scooters



Next steps

Incorporate Council feedback and finalize Bikeshare Feasibility Study

Request Council resolution supporting study recommendations

Continue exploring funding options for Capital Bikeshare implementation

Develop policy framework for future dockless program (bikes and/or e-scooters)





Questions and Discussion

