

The Bethesda Trolley Trail Information Kiosk and Wayside Plan

Introduction

In 2007, the Bicycle Program of the Montgomery County Department of Public Works and Transportation (DPW&T) conducted a study to develop a plan for the location of wayfinding/orientation map kiosks along the Bethesda Trolley Trail (BTT). This study also evaluated sites for potential development of trail waysides, or rest stops, and locations for placement of historic information kiosks.

The study reviewed more than twenty five locations along the existing and future trail alignment and ten locations near the trail. Nearby locations included Metrorail stations not far from the trail and other locations in Bethesda that lie between the BTT and the Capital Crescent Trail, a popular origin of and destination for BTT users.

What is an Information Kiosk? A Wayside?

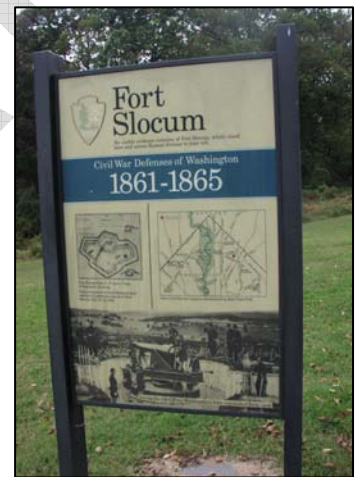
An information kiosk can provide a variety of information for trail users such as trail rules, emergency contact information, maps and/or historic interpretation. The kiosk panels planned for the BTT will be approximately 36" x 48," similar to those pictured below.

A wayside is a place along a trail where trail users can stop, and get access to amenities and services. Waysides often provide information, a place to sit, a place to put trash, and the opportunity to eat and drink, adjust equipment, or meet up with friends. During this study, wayside locations were evaluated and placed in two basic categories:

- a) those that should be limited to one or two information panels (map and/or history), and
- b) those that are appropriate for a more extensive wayside with amenities beyond just an information kiosk.



Map Kiosk
Gwynns Falls Trail
Baltimore, MD



Historic Information Kiosk
Ft. Circle Trail
Washington DC

Kiosks and Waysides for the BTT

As a part of this study, content was developed for a map panel showing the entire BTT and its environs. Content was also developed for a history panel that tells the story of the historic trolley line and its contributing role in community development. Graphic design for each of these panels has also been completed.

For successful development of waysides along the BTT, two potentially competing needs must be balanced: 1) the need for the Montgomery County DPW&T to minimize

maintenance costs by using uniform design features and materials where ever possible; and 2) the need for wayside designs to be tailored to their local setting and community.

Those waysides that are funded and maintained by DPW&T may use a significant amount of standard design features and materials. Those that are developed and maintained by local businesses, institutions or community groups may be more unique in scale, hard and softscape features and aesthetic design.

To the degree possible, design of each wayside will be done to complement the neighborhood or setting where it is located. If new urban design and public space aesthetic guidelines have been established by approved community master plans or sector plans, the waysides within the jurisdiction of these planning areas will seek to be compatible with the guidelines set forth.

Thirteen Potential Wayside Features

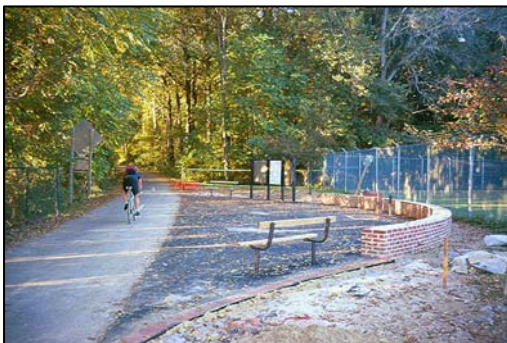
Potential features that were considered for incorporation into a wayside include the following:

- Hardscape (surface materials),
- Landscape,
- Fences & Walls,
- Lighting,
- Seating,
- Bike Parking,
- Trash Receptacles,
- Water Fountain,
- Picnic Table,
- Picnic Shelter,
- Public Art,
- Welcome or Neighborhood Identity Signs, and
- Motor Vehicle Parking

Scale and Scope of Waysides

To organize the recommendations of this plan, locations selected for some type of wayside amenity have been assigned to one of four categories. These categories describe the extent or scale of improvement that is proposed. Photos of examples are provided for illustrative purposes.

- *Kiosk(s) Only*—at these locations, one or two information panels are all that is proposed. The kiosk panels can be mounted singly, back-to-back on one support, or side-by-side on two supports. In some locations a bicycle parking rack may also be recommended.



Example *Feature Wayside*: seating, information, hardscape & landscaping, water fountain.



Example *Simple Wayside*: Bench, Landscaping, Sign

- *Simple Wayside*—at these locations, in addition to one or two kiosk panels, an additional feature or two such as seating, landscaping and/or lighting is recommended.
- *Feature Wayside*—at these locations a variety of features are recommended in addition to the

- information panels. These waysides shall be designed to provide both wayside services and neighborhood character to the trail users' experience.
- **Gateway Wayside**—at these locations, in addition to the information kiosk, wayside services and elements of neighborhood character, the design of the features shall be more pronounced. These locations shall be designed to announce the trail in the urban landscape, identify the trail at the Bethesda Trolley Trail and indicate that the location is a primary entry point to the BTT experience.



Example *Gateway Wayside*: gateway trail sign, picnic tables, trash receptacles, bicycle parking, ice cream shop.

Wayside Construction and Maintenance

The Montgomery County Department of Public Works and Transportation expects to be the lead agency for wayside development. However, the Department owns and operates only one trail like the BTT in the county, and has limited capacity for maintaining such a resource. As such, the Department expects to fund and construct a limited number of waysides. Moreover, the Department will be looking for neighborhood, business and community partners who can be responsible for wayside maintenance, especially landscaping. The Department will also look for business groups or local governments that can assist with the funding of kiosk production and installation and the capital investment that may be needed for certain waysides beyond those for which DPW&T can budget.

Related Wayside Elements

After a review of trail and user needs, three of the thirteen wayside elements evaluated (public art, special signs, & motor vehicle parking) were found to be complementary to the trail, but not of sufficient importance to be implemented as a core element of any wayside. In the future, these elements may be included or added to waysides along the trail, but would need to be initiated and funded through County programs other than the Bikeway Program, municipal governments, or community-based organizations.

Public Art

In general, public art is not seen as a central unifying element of the BTT. Rather, this plan identifies areas where public art might be located along the trail as part of a public art program planned or implemented by the local community, Business Improvement District, City or County agency. However, it would be appropriate for art located along the trail to address themes related to trail use or the historic trolley line. The sculptures at Randolph Road and Rockville Pike are a good example.

Welcome or Neighborhood Identity Signs

Special signs to welcome trail users to the trail or to neighborhoods are a feature that can add character to a trail. Use of such signs is an optional part of this plan, however if their use is desired, wayside locations where they might be most appropriate have been identified.

Motor Vehicle Parking

After review of existing parking opportunities along the trail corridor, it was determined that additional parking for trail access purposes was not needed anywhere along the corridor.

Amenities Not Considered in This Study

A number of other amenities found on some trails were not considered during this study. These include restroom facilities, compressed air for bicycle tires and food concessions. In this corridor, these types of facilities are already provided by the private sector or existing public institutions. To assist trail users in finding these types of facilities, the map kiosk includes the locations of public buildings with lavatory facilities and bicycle shops where tires may be repaired or inflated.

A complete Wayside Attribute Table is included in Appendix A, attached. It lists each proposed wayside location, and includes a wide range of attributes describing the conditions and proposed features for each.

Prioritization

This plan classifies each kiosk or wayside location in one of three prioritization categories—*recommended*, *optional* or *alternate*. The purpose of this classification is to clearly define the importance of providing wayside amenities at the location.

- *Recommended*—this set of kiosk and wayside locations will provide a minimal, but thorough set of amenities enabling the BTT to expand its user base and become better known among local residents, workers, shoppers and visitors.
- *Optional*—*optional* locations were classified as such because they are supplemental to the *recommended* locations. The wayside locations in this group were selected for one or more of the following reasons:
 - They may only be needed as trail use increases in the future.
 - They will ensure that BTT information is located at every Metrorail station in the corridor,
 - They include off trail locations potential trail users are likely to encounter them.
 - They may require approval from private landowners or County departments not included among the sites classified as *recommended*.

The extent to which *optional* locations are selected for implementation should be determined by the Montgomery County Bicycle Program Manager. Factors for this selection may include available amounts of funding, potential for resistance among adjacent property owners, potential vandalism,

neighborhood concerns, or discretion regarding the desired overall saturation of information kiosks.

- *Alternates (optional)*—two sites were classified as *alternates*, because further study is needed to determine which, if either, of these two locations might be most feasible and desirable to improve with wayside amenities.

Implementation

Each of the proposed wayside locations has been assigned to one of four implementation phases. The rationale for, and proposed elements of each implementation phase are described below.

Phase 1—Consists of only kiosk panels. Up to 17 *Map* panels and 9 *History* panels are proposed for fabrication and installation.

	<u>Map Panels</u>	<u>History Panels</u>
<i>Recommended</i>	8	4
<i>Optional</i>	9	5

The 8 *recommended* sites in the Phase 1 implementation list are designed to provide the entire trail an initial set of information kiosks that are well distributed from North to South, can be installed at a relatively low cost, and avoid site design challenges. However, siting approvals and installation permits will be required from a number of agencies, including WMATA, SHA, MC DPW&T, the National Institutes of Health and M-NCPPC.

Phase 1 list of *Recommended* and *Optional* locations:

	<u>Location</u>	<u>Scope</u>	<u>Panels</u>	<u>Priority</u>
1.	Twinbrook Metro-East side	Kiosk Only	Map & History	Recommended
2.	Twinbrook Metro-West side	Kiosk Only	Map & History	Recommended
3.	White Flint Metro-East side	Kiosk Only	Map	Recommended
4.	BTT at Tuckerman Lane -North side	Kiosk Only	Map & History	Recommended
5.	Cedar Lane Fire Station	Kiosk Only	Map	Recommended
6.	NIH South Pedestrian Gate	Kiosk Only	Map & History	Recommended
7.	Rugby & Norfolk Streets	Kiosk Only	Map & History	Recommended
8.	Capital Crescent Trailhead-Bethesda	Kiosk Only	Map-printed on paper to post in existing kiosk.	Recommended
9.	Hudson Trail Outfitters	Kiosk Only	Map	Optional
10.	355 & Old Georgetown Road	Kiosk Only	Map & History	Optional
11.	REI Store	Kiosk Only	Map	Optional
12.	Mo. Co. Aquatic Center	Kiosk Only	Map & History	Optional
13.	Medical Center Metro	Kiosk Only	Map & History	Optional
14.	Suburban Hospital	Kiosk Only	Map	Optional
15.	Veterans Memorial Park (Norfolk St.)	Kiosk Only	Map & History	Optional

16.	Mo. Co. Convention Center	Kiosk Only	Map & History	Optional
17.	Maple Ridge Road	Kiosk Only	Map	Optional

Phase 2—Consists of creating the first two of eight potential *Feature* and *Gateway* waysides--one at Edson Place, one at Beech Street. Phase 2 could also include simple additions to two kiosk sites included in Phase 1.

The focus of Phase 2 is to construct two attractive waysides to demonstrate to the public and trail partners the potential for enhancing the entire BTT corridor. The two *recommended* sites listed below were selected due to their high visibility, lack of ROW control issues and likely strong neighborhood support.

	Location	Scope	Panels	Priority
1.	Edson Place & Woodglen	Gateway Wayside	Map & History	Recommended
2.	Beech Street & Montgomery Ave.	Feature Wayside	Map & History	Recommended
3.	Mo. Co. Convention Center	Simple Wayside	Map & History	Optional
4.	Maple Ridge Road	Simple Wayside	Map	Optional

Phase 3—Consists of installation of an additional 7 *Map* panels and 5 *History* panels, and construction of 2 *Gateway*, 1 *Feature*, and 1 *Simple* wayside.

Phase 3 includes the addition of three waysides for which interagency coordination and site design are expected to be more involved than those undertaken in Phase 2. Coordination with the City of Rockville, Bethesda civic groups and M-NCPPC will be necessary.

Beginning with Phase 3, it will also be important to consider the proximity of existing and proposed history panels. For example, if a gateway wayside is created at Halpine Road, it might be prudent to relocate the history panel at Twinbrook Metro-East to the new Halpine Road Location. Moreover, if a history panel has been located at the NIH South Pedestrian Gate, it may not be desirable to have another one at the Lincoln Street Gate, which is nearby.

	Location	Scope	Panels	Priority
1.	Halpine Rd. & Lewis Ave.	Gateway Wayside	Map & History	Recommended
	Rugby & Norfolk Streets	Gateway Wayside (relocate panels and integrate into wayside design)	Map & History	Recommended
2.	BTT at Fleming Park	Feature Wayside	Map & History	Recommended
3.	NIH South of Lincoln St. Gate	Simple Wayside	Map & History	Recommended

4.	Chapman Avenue at Bou Ave.	Kiosk Only	Map	Recommended
5.	Grosvenor/Strathmore Metro	Kiosk Only	Map & History	Optional
6.	Bethesda Metro	Kiosk Only	Map & History	Optional
7.	Borders Books (CCT)	Kiosk Only	Map	Optional

Phase 4—Consists of installation of up to 5 *Map* panels and 3 *History* panels, including 1 *Simple* wayside, 2 *Feature* waysides and 1 *Gateway* wayside.

The first two waysides listed below were selected for Phase 4 because they should not be undertaken until road development in the area is completed and land redevelopment is imminent or underway. Additionally, each have ROW issues that will need to be resolved.

The Golf Lane wayside should only be pursued if the two adjacent residential communities desire such an enhancement at the location. The additional kiosk panel at the White Flint Metro is not likely to be needed until redevelopment of the area is further along and the west entrance/exit is more heavily used. Likewise, if a gateway wayside is created at the BTT and Marinelli Road, it may be desirable to relocate the map and history panel from the Convention Center across the street rather than installing an additional kiosk.

A wayside near the trolley bridge remnant (near Tuckerman Lane) is suggested because this is one of the only locations remaining where physical infrastructure of the trolley line is still in place. This includes bridge abutments, girders and extensive earth works. Two sites, in close proximity to each other, should be considered for such a wayside, however each has a number of constraints that suggest that this wayside should not be undertaken until other waysides have proven successful.

	<u>Location</u>	<u>Scope</u>	<u>Panels</u>	<u>Priority</u>
1.	BTT at Marinelli Road	Gateway Wayside	Map & History	Recommended
2.	Montrose Parkway (new) & 355	Feature Wayside	Map & History	Recommended
3.	BTT at Golf Lane	Feature Wayside	Map	Optional
4.	White Flint Metro- West	Kiosk		Optional
5.	Tuckerman Lane-South side a) Overlooking bridge remnant <u>or</u> b) Adjacent to the I-270 Spur. Either with a historic interpretation emphasis.	Simple Wayside	Map & History	Optional Alternates

Sustainable Wayside Design and Construction

Implementation of the waysides is an opportunity to use new and innovative “green” design and construction practices, intensifying the positive environmental impacts of the BTT. Following are a list of specific design options that can be integrated into construction plans and specifications and guide equipment/materials purchases.

Design Practices

- Specify plants and trees in the landscape plan that require little water and pesticides. Doing so will limit or eliminate the use of potable water needed for landscape irrigation. Reductions can be accomplished by choosing appropriate plant species, pursuing irrigation efficiency, use of captured rainwater, use of recycled wastewater, use of water treated and conveyed by a public agency specifically for non-potable uses. If possible, the landscape design should use only captured rainwater, recycled wastewater, recycled greywater, or water specifically for non-potable uses for irrigation.
- Limit disruption of natural water hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff and eliminating contaminants.
- Light areas as required for safety and comfort using fixture designs that minimize light escape to the sky, glare and impact on nocturnal environments. Use low energy luminaires or LEDs. Consider technologies that control lighting for use only when trail users are present. Also consider using full cutoff luminaires, low-reflectance surfaces and low-angle spotlights. Consider lighting systems that collect and use solar power.
- Facilitate the reduction of waste generated by trail users by providing for recycling of cans and bottles.

Sustainable Materials

- Specify the use of local and regional materials and manufacturers, or recycled materials for bricks, paving stones, bicycle racks, benches and other elements for hardscape designs. This will increase demand for building materials and products that are extracted and manufactured within the region and support the use of indigenous resources, while reducing the environmental impacts resulting from transportation.
- Use sustainably harvested wood for benches, picnic tables, shelters and appropriate signs. This will encourage environmentally responsible forest management. Trail standards should specify a percentage of wood-based materials and products that are certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria, for wood building components.
- Reuse building materials and products where possible in order to reduce demand for virgin materials and to reduce waste. This will reduce impacts associated with the extraction and processing of virgin resources. The trail should use salvaged, refurbished or reused materials where possible.

Sustainable Construction Practices

- Use best practices for erosion and sedimentation control for all construction activities associated with the project to reduce water and air pollution from construction activities by controlling soil erosion, waterway sedimentation and

- airborne dust generation. (Montgomery County standards in this area are already high.)
- Where possible, divert construction, demolition and land-clearing debris from disposal in landfills and to recycling centers. This applies to asphalt, concrete, steel and other materials found in the public streetscape. Recycle dirt and organic material on site.

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Wayside Attribute Table										Appendix A													
Site No.	Site Name	Priority	Map Panel	History Panel	Format	Wayside Scope	Phase	Property Owner	Site Name	HARDSHIP	LANDSCAPING	FENCE/WALL	LIGHTING	SEATING	BIKE PARKING	TRASHCAN	WATER	PICNIC TABLE	PICNIC SHELTER	ART	SF SIGNS	CARPING	COMMENT
			1-yes 0-No	1-yes 0-No		Kiosks Only Modest Feature Gateway				Hardscape	Landscaping	Fencing Needed	Lighting	Seating	Bike Parking	Trash Can	1-New, 2-Existing	1-New, 2-Existing	1-New, 2-Existing	Art Installation	Welcome/Identity Signs	1-New, 2-Existing	
1	Halpine Road & Lewis Ave.	Recommended	1	1	Side by Side	Gateway	3	WMATA or Rockville	Halpine Road & Lewis Ave.	1	1	0	1	1	0	1	1	0	0	1	1	0	Use Site if Rockville is interested
2	Twinbrook-East	Recommended	1	1	Side by Side	Kiosks Only	1	WMATA	Twinbrook-East	0	0	0	0	0	1	0	0	0	0	0	0	2	
3	Twinbrook-West	Recommended	1	1	Front to Back	Kiosks Only	1	WMATA	Twinbrook-West	0	0	0	0	0	1	0	0	0	0	0	0	2	
4	Montrose Crossing at Bou St.	Recommended	1	0	Single	Kiosks Only	3	DPWT/Developer	Montrose Crossing at Bou St.	0	0	0	0	0	1	0	0	0	0	0	0	2	Use site if trail is rerouted
5	Hudson Trail Outfitters	Optional	1	0	Front to Back	Kiosks Only	1	Private Property	Hudson Trail Outfitters	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	Randolph Road & MD 355	Recommended	1	1	Side by Side	Feature	4	SHA/DPWT	Randolph Road & MD 355	1	1	0	1	0	0	1	0	0	0	1	0	2	Develop in conjunction with Montrose Parkway project.
7	Old Georgetown Road	Optional	1	1	Side by Side	Kiosks Only	1	Montgomery Co. DPWT or Private Property	Old Georgetown Road	0	0	0	0	0	1	0	0	2	0	1	0	0	
8	White Flint Metro - East	Recommended	1	0	Single	Kiosks Only	1	SHA/WMATA	White Flint Metro - East	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	White Flint Metro-West	Optional	1	0	Single	Kiosks Only	4	Montgomery Co. DPWT or Private Property	White Flint Metro-West	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	MoCo Convention Center	Optional	1	1	Front to Back	Simple	1	Montgomery Co/DPWT	MoCo Convention Center	1	1	0	1	1	0	0	0	0	0	0	0	0	When Trail is built in this area Build rest stop in conjunction with trail.
11	Marinelli Road & Woodglen	Recommended	1	1	Side by Side	Gateway	4	Disputed Montgomery Co	Marinelli Road & Woodglen	1	1	1	1	1	1	1	1	0	1	1	1	0	
12	BTT & Edson Place	Recommended	1	1	Side by Side	Gateway	2	DPWT	BTT & Edson Place	1	1	1	1	1	1	1	0	0	0	0	1	2	On street parking
13	Btt & Golf Lane	Optional	1	0	Single	Feature	4	Montgomery Co DPWT & Private Property	Btt & Golf Lane	1	1	1	1	1	1	1	1	1	1	0	0	0	If Neighborhoods/Property Owners agree
14	Tuckerman Lane-North	Recommended	1	0	Single	Kiosks Only	1	Montgomery Co DPWT	Tuckerman Lane-North	0	0	0	0	0	0	0	0	0	0	0	0	0	May not be needed
15	Tuckerman Lane-South	Alternate	1	1	Front to Back	Simple	4	Private Property	Tuckerman Lane-South	1	1	1	1	1	1	0	0	0	0	0	0	0	Constrained area, but good for interpretation of history
16	Adjacent to the I-270 Spur	Alternate	0	1	Single	Simple	4	SHA	Adjacent to the I-270 Spur	0	0	0	1	0	0	0	0	0	0	0	0	0	Noisy area but good for interpretation
17	Fleming Park	Recommended	1	1	Side by Side	Feature	3	M-NCPPC	Fleming Park	1	1	0	1	1	1	1	2	2	2	0	0	2	
18	BTT & Beech Street	Recommended	1	1	Front to Back	Feature	2	Montgomery Co DPWT	BTT & Beech Street	1	1	0	1	1	1	1	1	1	0	1	1	2	Could be a larger Historic Trolley Park in the future
19	Cedar Lane Fire Station	Recommended	1	0	Front to Back	Kiosks Only	1	Montgomery County	Cedar Lane Fire Station	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	South of Lincoln St. Gate	Recommended	1	1	Front to Back	Simple	3	NIH	South of Lincoln St. Gate	1	0	0	0	1	0	0	0	0	0	1	1	0	
21	Maple Ridge Road	Optional	1	0	Single	Simple	1	NIH	Maple Ridge Road	0	0	0	0	1	0	0	0	0	0	0	0	0	
22	NIH South Pedestrian Gate	Recommended	1	1	Front to Back	Kiosks Only	1	NIH	NIH South Pedestrian Gate	0	0	0	0	0	0	0	0	0	0	0	1	0	
23	Rugby & Norfolk Streets	Recommended	0	0	Front To Back	Gateway	3	Montgomery Co DPWT	Rugby & Norfolk Streets	1	1	0	1	0	0	0	0	0	0	1	1	2	
23	Rugby & Norfolk Streets	Recommended	1	1	Front To Back	Kiosks Only	1	Montgomery Co DPWT	Rugby & Norfolk Streets														
A	REI	Optional	1	0	Single	Kiosks Only	1	Private Property	REI	0	0	0	0	0	0	0	0	0	0	0	0	0	
B	MoCo Aquatic Center	Optional	1	1	Front to Back	Kiosks Only	1	Montgomery Co. Dept. of Recreation	MoCo Aquatic Center	0	0	0	0	0	0	0	0	0	0	0	0	0	
C	Grosvenor Metro	Optional	1	1	Front to Back	Kiosks Only	3	WMATA	Grosvenor Metro	0	0	0	0	0	0	0	0	0	0	0	0	0	
D	Medical Center Metro	Optional	1	1	Front to Back	Kiosks Only	1	WMATA	Medical Center Metro	0	0	0	0	0	0	0	0	0	0	0	0	0	
E	Suburban Hospital	Optional	1	0	Single	Kiosks Only	1	Private Property	Suburban Hospital	0	0	0	0	0	0	0	0	0	0	0	0	0	Public Relations staff is very receptive
F	Veterans Memorial Park	Optional	1	1	Front to Back	Kiosks Only	1	???	Veterans Memorial Park	0	0	0	0	0	0	0	0	0	0	0	0	2	
G	Bethesda Metro	Optional	1	1	Front to Back	Kiosks Only	3	WMATA	Bethesda Metro	0	0	0	0	0	0	0	0	0	0	0	0	0	
H	Borders Books	Optional	1	1	Front to Back	Kiosks Only	3	DPWT	Borders Books	0	0	0	0	0	0	0	0	0	0	0	0	0	
I	Capital Crescent Trailhead-Bethesda	Recommended	1	0	On Paper for Existing Bulletin Board	Kiosks Only	1	M-NCPPC	Capital Crescent Trailhead-Bethesda	0	0	0	0	0	0	0	0	0	0	0	0	0	