connecting purple line communities

Purple Line TOD Study

Part 4: Appendices

May 2013

The Maryland-
National Capital
Park and Planning
Commission

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A.1 M Square Survey Outcome

Introduction

The purpose of the Purple Line TOD Study survey was to understand workers' daytime habits, their use of nearby Riverdale Park and College Park retail establishments, and their ideas for future uses to benefit the M Square area. The survey was for workers in the M Square area only. Invitation to participate letters, which provided a link to the online survey, were e-mailed to staff contacts of M Square area businesses and institutions. These contacts agreed to be liaisons who would disseminate the letters to fellow employees. The survey was open for participation between January 31, 2012 and February 15, 2012.

The following businesses and institutions agreed to participate in the survey:

Business/Institution Name and Address

1. UMD Earth System Science Interdisciplinary Center
   5825 University Research Court, Ste 4001, College Park, MD 20740
2. Joint Global Change Research Center
   5825 University Research Court, Ste 3500, College Park , MD 20740
3. Optimal Solutions Group
   5825 University Research Court, Ste 2800, College Park, MD 20740
4. UMD Maryland Transportation Technology Transfer Center
   5000 College Avenue, College Park, MD 20740
5. Enterprise Sciences Inc.
   5000 College Avenue, College Park, MD 20740
6. USDA Animal and Plant Health Inspection Service
   4700 River Road, # 147, Riverdale, MD 20737
7. UMD/FDA Joint Institute for Food Safety and Applied Nutrition
   2134 Patapsco Building, College Park, MD 20742
8. Center for Advanced Study of Language (CASL)
   7005 52nd Avenue, College Park, MD 20742
9. National Foreign Language Center
   Mail Services Building, #343 P.O. Box 93
   College Park, MD 20742
10. Raytheon
    5700 Rivertech Court, Riverdale, MD 20737
11. American Center of Physics
    One Physics Ellipse, College Park, MD 20740

Data Collection Process

The Purple Line TOD Study survey was conducted using the web-based tool, SurveyMonkey.org. Through this tool we designed the survey, created an on-line link, collected and analyzed the data.

On-line survey link: https://www.surveymonkey.com/s/purpleline

- 195 people started the survey
- 183 people completed the Purple Line survey

Explanation of "started" and "completed" the survey from SurveyMonkey.org:

> "Those that have clicked the [Done] button AND answered at least one question will be included in the Total Completed Survey number.
>
> However, it does not mean that ALL questions have been answered on every page. It means that the respondent moved through all pages using the navigation buttons, clicked the [Next] button on every page, and answered at least one question to finally click the [Done] button. Keep in mind that the respondent may have only answered a few questions on each page."

Data from the participants' responses were downloaded into Excel spreadsheets. Open-ended questions were organized into categories, which are themes that emerged from the range of responses.

Findings

Geographical Data

Do You Work in the M Square Area?

	Response (%)	Response Count
No	8.5	17
Yes	91.3	178

For participants who answered "No," they were thanked for their participation and directed to the project web site. The survey was for workers in the M Square area only.

Typically, How Do You Get to Work?

Transportation Method	Response (%)	Response Count
Drive alone	69.5	123
Metrorail	23.7	42
TheBus or Metrobus	14.1	25
Walk	11.3	20
Carpool	11.3	20
Shuttle-UM	10.7	19
Bike	9.6	17
MARC	2.3	4
Other	3.4	6

Other includes:

- Fairfax Connector Bus
- Taxi
- MTA Bus
- Ride On Bus
- Telecommute; Amtrak then public transit
- Montgomery County Ride On

While the majority of participants drive to M Square, many of their comments suggest a willingness to use public transportation, including the Purple Line, with transit connections near their homes.

In What Zip Code Is Your Home Located?

Zip Code Locator					
Zip Code	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**	**Zip Code Location**
Valid	20	10.3	10.3	10.3	
10007	1	.5	.5	10.8	New York, NY
19713	1	.5	.5	11.3	Newark, DE
20002	1	.5	.5	11.8	Washington, D.C.
20003	1	.5	.5	12.3	Washington, D.C.
20005	1	.5	.5	12.8	Washington, D.C.
20007	2	1.0	1.0	13.8	Washington, D.C.
20008	3	1.5	1.5	15.4	Washington, D.C.
20009	1	.5	.5	15.9	Washington, D.C.
20010	6	3.1	3.1	19.0	Washington, D.C.
20011	2	1.0	1.0	20.0	Washington, D.C.
20012	1	.5	.5	20.5	Washington, D.C.
20020	1	.5	.5	21.0	Washington, D.C.
20024	1	.5	.5	21.5	Washington, D.C.
20036	1	.5	.5	22.1	Washington, D.C.
20037	1	.5	.5	22.6	Washington, D.C.
20148	1	.5	.5	23.1	Ashburn, VA
20191	1	.5	.5	23.6	Reston , VA
20601-5417	1	.5	.5	24.1	Waldorf, MD
20601	1	.5	.5	24.6	Waldorf, MD
20607	1	.5	.5	25.1	Accokeek, MD
20623	1	.5	.5	25.6	Cheltenham, MD
20637	1	.5	.5	26.2	Hughesville, MD
20659	1	.5	.5	26.7	Mechanicsville, MD
20705	2	1.0	1.0	27.7	Beltsville, MD
20706	1	.5	.5	28.2	Lanham, MD
20707	3	1.5	1.5	29.7	Laurel, MD
20708	5	2.6	2.6	32.3	Laurel, MD
20712	1	.5	.5	32.8	Mt. Rainier, MD
20715	2	1.0	1.0	33.8	Bowie, MD
20716	4	2.1	2.1	35.9	Bowie, MD
20721	1	.5	.5	36.4	Bowie, MD
20723	3	1.5	1.5	37.9	Laurel, MD
20724	2	1.0	1.0	39.0	Laurel, MD

Zip Code Locator					
Zip Code	Frequency	Percent	Valid Percent	Cumulative Percent	Zip Code Location
20732	1	.5	.5	39.5	Chesapeake Beach, MD
20736	1	.5	.5	40.0	Owings, MD
20737	8	4.1	4.1	44.1	Riverdale, MD
20740	8	4.1	4.1	48.2	College Park, MD
20744	1	.5	.5	48.7	Ft. Washington, MD
20748	1	.5	.5	49.2	Temple Hills, MD
20759	1	.5	.5	49.7	Fulton, MD
20770	7	3.6	3.6	53.3	Greenbelt, MD
20772	2	1.0	1.0	54.4	Upper Marlboro, MD
20774	5	2.6	2.6	56.9	Upper Marlboro, MD
20781	6	3.1	3.1	60.0	Hyattsville, MD
20782	3	1.5	1.5	61.5	Hyattsville, MD
20784	3	1.5	1.5	63.1	Hyattsville, MD
20785	1	.5	.5	63.6	Hyattsville, MD
20816	1	.5	.5	64.1	Bethesda, MD
20817	2	1.0	1.0	65.1	Bethesda, MD
20832	1	.5	.5	65.6	Olney, MD
20850	1	.5	.5	66.2	Rockville, MD
20851	1	.5	.5	66.7	Rockville, MD
20855	1	.5	.5	67.2	Derwood, MD
20866	1	.5	.5	67.7	Burtonsville, MD
20874	1	.5	.5	68.2	Germantown, MD
20878	3	1.5	1.5	69.7	Gaithersburg, MD
20879	1	.5	.5	70.3	Gaithersburg, MD
20886	1	.5	.5	70.8	Montgomery Village, MD
20901	3	1.5	1.5	72.3	Silver Spring, MD
20902	3	1.5	1.5	73.8	Silver Spring, MD
20904	2	1.0	1.0	74.9	Silver Spring, MD
20906	1	.5	.5	75.4	Silver Spring, MD
20910	9	4.6	4.6	80.0	Silver Spring, MD
20912	6	3.1	3.1	83.1	Takoma Park, MD
21012	1	.5	.5	83.6	Arnold, MD
21014	1	.5	.5	84.1	Bel Air, MD
21029	1	.5	.5	84.6	Clarksville, MD
21043	1	.5	.5	85.1	Ellicott City, MD
21044	1	.5	.5	85.6	Columbia, MD

Zip Code Locator					
Zip Code	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**	**Zip Code Location**
21045	1	.5	.5	86.2	Columbia, MD
21046	3	1.5	1.5	87.7	Columbia, MD
21054	1	.5	.5	88.2	Gambrills, MD
21104	1	.5	.5	88.7	Marriottsville, MD
21108	1	.5	.5	89.2	Millersville, MD
21113	3	1.5	1.5	90.8	Odenton, MD
21144	1	.5	.5	91.3	Severn, MD
21146	1	.5	.5	91.8	Severna Park, MD
21228	1	.5	.5	92.3	Catonsville, MD
21230	1	.5	.5	92.8	Baltimore, MD
21401	1	.5	.5	93.3	Annapolis, MD
21403	2	1.0	1.0	94.4	Annapolis, MD
21666	2	1.0	1.0	95.4	Sherwood, MD
21701	3	1.5	1.5	96.9	Frederick, MD
21777	1	.5	.5	97.4	Point of Rocks, MD
22101	1	.5	.5	97.9	McLean, VA
22150	1	.5	.5	98.5	Springfield, VA
22191	1	.5	.5	99.0	Woodbridge, VA
22207	1	.5	.5	99.5	Arlington, VA
22301	1	.5	.5	100.0	Alexandria, VA
Total*	**195**	**100.0**	**100.0**		

*These totals were rounded off.

Ninety-nine percent of the survey participants live in Maryland. Sixty-two (31.7 percent) of the 195 who answered commute five miles or less to M Square. These locations include Washington, D.C.; Lanham, Mt. Ranier, Riverdale, College Park, Greenbelt, Hyattsville, Silver Spring, and Takoma Park, MD.

Zip Code Locations with the Highest Number of Commuters to M Square		
Location	**Percent**	**Number of Commuters**
Washington, D.C.	11.3	22
Silver Spring, MD	9.2	18
Hyattsville, MD	6.6	13
Laurel, MD	6.6	13
College Park, MD	4.1	8
Riverdale, MD	4.1	8
Bowie, MD	3.6	7
Greenbelt, MD	3.6	7
Takoma Park, MD	3.7	6

Characteristic Data

Sixty-two males (37.8 percent) and 102 females (62.2 percent) took the survey.

Which category below includes your age?

Age Categories		
Age	**Response Percent**	**Response Count**
17 or younger	0.0	0
18-20	0.0	0
21-29	12.2	20
30-39	22	36
40-49	25	41
50-59	31.7	52
60-65	7.9	13
66 or older	1.2	2
	answered question	164
	skipped question	31

The majority of participants at 31 percent were within the 50–59 age range, followed by 40–49-year-olds at 25 percent and 30–39-year-olds at 22 percent.

Income Categories		
Income Range	**Response Percent**	**Response Count**
Under $30,000	3.9	6
$30,000-$39,999	0.6	1
$40,000-$49,999	3.9	6
$50,000-$59,999	7.8	12
$60,000-$69,999	5.8	9
$70,000-$79,999	9.7	15
$80,000-$89,999	4.5	7
$90,000-$99,999	8.4	13
$100,000-$149,999	26.6	41
$150,000- $174,999	11	17
$175,000 - $199,999	5.2	8
$200,000- $249,999	7.1	11
$250,000 or more	5.2	8
	answered question	154
	skipped question	41

How long is your lunch break?

Length of Lunch Break Categories		
Age	**Response Percent**	**Response Count**
Less than 30 minutes	40.3	71
31 to 45 minutes	37.5	66
46 to 60 minutes	21	37
More than 60 minutes	1.1	2
	answered question	176
	skipped question	19

In a cross-tab analysis between gender and lunch break length, a higher percentage of females (87 percent) reported a lunch break of 45 minutes or less than males (41 percent).

Note: Data for questions six through nine were run through a Microsoft program, SPSS, and cleaned of zeros (for example, someone who enters $0 dollars for a meal means they did not eat out.)

Average Meal Time						
Q	**Descriptive Statistics**	**No.**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
6	Average times per week eat breakfast at M Square	39	1	5	2.2821	1.55511
6	Average times per week eat lunch at M Square	49	1	5	2.3469	1.33153
6	Average times per week eat dinner at M Square	2		2	1.5	0.70711

Workers at M Square eat breakfast and lunch in the office building an average of two times per week. Only two workers answered that they eat dinner at M Square. When it comes to purchasing dinner, workers are most likely to leave the office building.

Average Cost per Meal						
Q	**Descriptive Statistics**	**No.**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
7	Average spent per meal for breakfast at M Square	40	$2	$300	19.375	65.29958
	Note: Only two out of 40 responders spent $300 for breakfast. Below is the recalculated mean minus the two $300 responses and the maximum spent changes to $25.					
7	Average spent per meal for breakfast at M Square	38	$2	$25	4.605	3.702004378
7	Average spent per meal for lunch at M Square	48	$1	$500	16.7708	71.26792
	Note: Only one out of 48 responders spent $500 for lunch. This person also was one of the two who spent $300 for breakfast. Below is the recalculated mean minus the one $500 response and the maximum spent changes to $12.					
7	Average spent per meal for lunch at M Square	47	$1	$12	6.489	2.28294566
7	Average spent per meal for dinner at M Square	2	$5	$10	7.5	3.53553

Workers spend more for dinner. On average a person will spend $4.61 for breakfast, $6.50 for lunch, and $7.50 for dinner when they purchase food at M Square. When workers leave M Square to eat, they tend to spend more per meal.

Average Meals Times per Week Outside of M Square						
Q	**Descriptive Statistics**	**No.**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
8	How many times per week you eat/carry-out breakfast within easy walking distance from your work	9	1	5	2.1111	1.2693
8	How many times per week you eat/carry-out lunch within easy walking distance from your work	43	1	6	2.3256	1.47553
8	How many times per week you eat/carry-out dinner within easy walking distance from your work	12	1	3	1.75	0.75378
8	How many times per week you eat/carry-out social eating/ drinking within easy walking distance from your work	23	1	4	1.3478	0.77511

Lunch is the primary meal that workers will leave M Square to eat.

Average Price Paid for Meals Outside of M Square						
Q	**Descriptive Statistics**	**No.**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
9	How much do you spend when you eat/carry-out breakfast within easy walking distance from your work	8	$4	$15	7	3.77964
9	How much do you spend when you eat/carry-out lunch within easy walking distance from your work	49	$5	$700	25.8367	98.73077
	Note: Only one out of 49 responders spent $700 for eat/carry-out lunch. Below is the recalculated Mean minus the one $700 response; the Maximum spent changes to $50.					
9	How much do you spend when you eat/carry-out lunch within easy walking distance from your work	48	$5	$50	11.791	9.141810271
9	How much do you spend when you eat/carry-out dinner within easy walking distance from your work	14	$10	$30	16.2143	5.80687
9	How much do you spend when you eat/carry-out for social eating/drinking within easy walking distance from your work	22	$3	$50	18.3182	9.48375

The average spent for breakfast is $7. Workers tend to spend close to $12 for lunch, $16 for dinner, and $18 for socializing.

Purple Line Potential Commuters		
Reasons to Use the Purple Line	**Response Percent**	**Response Count**
Commute to work	60.3	91
Socialize after work	54.3	82
Take lunch breaks	49	74
Run errands	45.7	69
Go shopping	41.1	62
Take weekend trips	28.5	43
Other	16.6	25
	answered question	151
	skipped question	44

Other includes business travel, travel to UMD, connections to the airport and to Metro stations, and a few who would not use it.

What Are the Top Three Types of Businesses that You Think Would Benefit People Who Work in the M Square Area?									
First Choice			Second Choice			Third Choice			
Category	%	Count	Category	%	Count	Category	%	Count	
Restaurants	74	111	Restaurants	40	60	Restaurants	24	37	
Grocery Store	4	7	Convenience Stores	7	11	Drugstores	8	12	
Others	4	7	Drugstores	6	10	Others	6	10	
Drugstores	2	4	Others	6	10	Grocery Store	5	8	
Dry Cleaners	2	3	Grocery Store	4	7	Banking	4	7	
Fitness Center	2	3	Dry Cleaners	4	6	Convenience Stores	4	7	
Hotel	2	3	Retail	4	6	Dry Cleaners	4	6	
Office Buildings	2	3	Banking	3	5	Retail	4	6	
Retail	2	3	Fitness Center	3	5	Fitness Center	2	4	
Convenience Stores	1	2	Office Supply Store	2	4	Entertainment	1	2	
I Do Not Know	1	2	Entertainment	2	3	Garage	1	2	
Garage	0	1	Hotel	2	3	Gas Station	0	1	
Gas Station	0	1	Gas Station	1	2	Hotel	0	1	
Banking	0	0	I Do Not Know	0	1	I Do Not Know	0	1	
Entertainment	0	0	Garage	0	0	Office Buildings	0	0	
Office Supply Store	0	0	Office Buildings	0	0	Office Supply Store	0	0	
Uncategorized	0	0	Uncategorized	0	0	Uncategorized	0	0	
Response Count Total		**150**	**Response Count Total**		**133**	**Response Count Total**		**104**	
							answered question	150	
							skipped question	45	

Restaurants are a broad business category for places to eat. Subcategories for restaurants include coffee shops and cafes, delicatessens and sandwich shops, fast food places, bars, and choices for healthy foods. Participants listed coffee shops and cafes most often as a choice of place to eat. Starbucks was listed as a choice six times.

Convenience store is defined as a small store near a residential area that stocks food and general goods and is open long hours. Twice 7-Eleven was listed and is categorized as a type of convenience store. Whole Foods, a type of grocery store, was listed four times. Drug stores and pharmacies are treated as one category. CVS, a pharmacy, was listed four times.

Others includes specific types of retail stores such as hardware, computer, sporting goods, auto service, and more. Each type of store was a one-time reference. Others also include hair and nail salons. The USDA and FDA were also specifically listed as well as the presence of high-tech companies.

What Are the Top Three Streetscape, Open Space, or Safety Improvements that You Think Would Benefit the M Square Area?									
First Choice			Second Choice			Third Choice			
Category	%	Count	Category	%	Count	Category	%	Count	
Pedestrian Improvements	18	22	Pedestrian Improvements	15	18	Pedestrian Improvements	8	10	
Traffic Calming	17	21	Traffic Calming	9	11	Outdoor Amenities	5	7	
Lighting	14	17	Parks & Green Space	8	10	Public Safety	5	6	
Public Safety	10	13	Public Safety	7	9	Lighting	5	6	
Bicycle Accommodations	9	11	Bicycle Accommodations	6	8	Metro Improvements	5	6	
Other	7	9	Lighting	6	8	Other	4	5	
Parks & Green Space	5	7	Outdoor Amenities	5	7	Bicycle Accommodations	3	4	
Street Improvements	4	5	Metro Improvements	5	6	Street Improvements	2	3	
Outdoor Amenities	3	4	Parking	3	4	Traffic Calming	2	3	
Parking	3	4	Trees	3	4	I Don't Know	1	2	
Trees	3	4	Other	2	3	Parking	1	2	
I Don't Know	1	2	Street Improvements	1	2	Parks & Green Space	1	2	
Metro Improvements	0	1	I Don't Know	0	0	Trees	0	1	
Uncategorized	0	0	Uncategorized	0	0	Uncategorized	0	0	
Response Count Total		**120**	Response Count Total		**90**	Response Count Total		**57**	
							answered question	120	
							skipped question	75	

Survey participants listed four concerns for pedestrian improvements: accessible and well-maintained walkways and trails, pedestrian bridges, safe crosswalks, and more sidewalks in good condition. Eleven percent of responders walk to work. It was noted that walking trails are popular and widely used by employees. Walking routes are also used to access the MARC trains and the Riverdale Farmers' Market. Of concern is the safe crossing of the train tracks, River Road, and Paint Branch Road. Pedestrian bridges and visible crosswalks are cited as a safety solution. Better sidewalks are especially needed along Kenilworth Avenue and River Road. Better lighting is important along streets, at stations, in parking lots, and in front of office buildings. Fourteen percent of responders listed lighting as a first choice.

Traffic calming features are needed to manage pedestrians and vehicles at the intersection of River Road at Rivertech Court. Many cars are turning "from all directions" during morning and evening rush hours. At this intersection a traffic light is the preferred solution. To slow down traffic on River Road, suggestions include speed cameras and traffic circles.

Pedestrians and public transit users would like to see more benches. While workers want more choices in places to purchase food, they would like the option of eating outside at covered picnic tables. Joggers and walkers would like to have designated paths or tracks and exercising areas within seeing distance of each other. Other outdoor amenities include trash containers, water features such as a pond, an amphitheater for concerts, and an adult swing set.

A.2 Area Traffic and Transportation Conditions Analysis

Table A-2.1 Transit—Riverdale Road (Beacon Heights) Study Area		
Roadway	**Bus Route**	**Peak Hour Headway[1]**
MD 410 (Riverdale Road)	WMATA 84	20 Mins
	WMATA F4	15 Mins
	WMATA F6	30 Mins
Auburn Ave.	WMATA 84	20 Mins
	WMATA F4/F6	30 Mins
[1] Peak Hour Headways from WMATA's posted bus schedules		

Table A-2.2 Attribute & Efficiency Table—Riverdale Road (Beacon Heights) Study Area								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
MD 410 (Riverdale Road)	Resid./ Comm.	38,111[1]	Y	No Parking Permitted	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Bike Lanes
MD 410 (Veterans Pkwy)	Commercial	21,410[1]	Y	No Parking Permitted	No Sidewalks		None	Bike Lanes
Patterson Street	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
Powhattan Street	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
63rd Avenue	Residential	Not Available		Open Parking	5' Sidewalks North of Riverdale	N/A	None	N/A
64th Avenue	Residential	Not Available		Private Complex - Permit Only	5' Sidewalks	N/A	None	N/A
Oliver Street	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
Ingraham Street	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
Furman Parkway	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
Beacon Place	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
Beacon Light Road	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
69th Avenue	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
67th Avenue	Residential	3,341[1]	Y	Open Parking	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A

Table A-2.2 Attribute & Efficiency Table—Riverdale Road (Beacon Heights) Study Area								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
67th Street	Residential	Not Available		Open Parking	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
67th Place	Residential	Not Available	Y	Open Parking	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
67th Court	Residential	Not Available	Y	Private Complex - Permit Only	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
Fernwood Terrace	Residential	Not Available	Y	Private Complex - Permit Only	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
66th Avenue	Residential	Not Available	Y	Open Parking	5' Sidewalk North of Patterson St Only	Sidewalk Gaps/ Reconstruct	None	N/A
Roanoke Ave.	Residential	Not Available		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
Eastpine Dr.	Residential	Not Available		Open Parking	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
62nd Place	Residential	Not Available		Open Parking	5' Sidewalks	Sidewalk Gaps	None	N/A
Auburn Ave.	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	Shared Use Roadway
[1] From SHA Internet TMS								

Table A-2.3 Transit—Riverdale Park		
Roadway	**Bus Route**	**Peak Hour Headway[1]**
MD 201	WMATA R12	30 Mins
MD 410 (Riverdale Rd.)	WMATA 84	20 Mins
	WMATA F6	30 Mins
[1] Peak Hour Headways from WMATA's posted bus schedules		

Table A-2.4 Attribute & Efficiency—Riverdale Park								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
MD 201	Resid./ Comm.	33,531[1]		North of MD 410: No Parking West Side, Open Parking East Side South of MD 410: No Parking Permitted	5' Sidewalks South of MD 410 only	N/A	None	N/A
MD 410 (East West Hwy)	Resid./ Comm.	41,930[1]		No Parking Permitted	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
MD 410 (Riverdale Rd.)	Resid./ Comm.	39,690[1]	Y	No Parking Permitted	5' Sidewalks East of MD 201 only	Sidewalk Gaps/ Reconstruct	None	N/A
Riverdale Rd.	Resid./ Comm.	Not Available	Y	No Parking Permitted	5' Sidewalks	N/A	None	Bike Lane Shared Use Roadway Sidepath
54th Ave.	Residential	Not Available		Open Parking	5' Sidewalks South of MD 410 only	N/A	None	Shared Use Roadway
Quintana Street	Residential	Not Available		Open Parking	5' Sidewalks East of Roanoke Ave only	N/A	None	N/A
Patterson Road	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
Tuckerman Street	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
Somerset Road	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A

Table A-2.4 Attribute & Efficiency—Riverdale Park								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
57th Avenue	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
60th Place	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
62nd Avenue	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
62nd Place	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
60th Avenue	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
61st Avenue	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
Ravenswood Road	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
Madison Street	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
Longfellow Street	Residential	1,226[1]		Open Parking	5' Sidewalks	N/A	None	N/A
Powhattan Road	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
Jefferson Street	Residential	Not Available		No Parking Permitted	5' Sidewalks	N/A	None	N/A
58th Ave.	Residential	Not Available	Y	Open Parking	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
59th Ave.	Residential	Not Available		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
61st Place	Residential	Not Available		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway

Table A-2.4 Attribute & Efficiency—Riverdale Park								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
62nd Pl.	Residential	Not Available		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Rittenhouse St.	Residential	Not Available		Open Parking	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Sheridan St.	Residential	Not Available		Open Parking	No Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Roanoke Ave.	Residential	1,584[1]		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Quesada Rd.	Resid./ Comm.	Not Available		Open Parking	5' Sidewalks	Shared Use Path	None	New Roadway Shared Use Path
Mustang Dr.	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	Shared Use Roadway New Roadway
Greenvale Pkwy	Residential	Not Available		Open Parking	5' Sidewalks	Shared Use Path	None	Shared Use Roadway Shared Use Path New Roadway

Table A-2.4 Attribute & Efficiency—Riverdale Park								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
Nicholson Rd.	Resid./ Comm.	Not Available		No Parking Permitted	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
56th Ave.	Residential	4,599[1]		Open Parking	5' Sidewalks	N/A	None	Shared Use Roadway
57th Ave.	Residential	Not Available		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
Kennedy St.	Resid./ Comm.	560[1]		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
Carters La.	Resid./ Comm.	3,018[1]		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
[1] From SHA Internet TMS								

Table A-2.5 Transit—M Square (River Road)		
Roadway	**Bus Route**	**Peak Hour Headway[1]**
River Road	UM Shuttle	15 Mins
	WMATA R12	30 Mins
	WMATA F6	30 Mins
Rivertech Court	UM Shuttle	15 Mins
[1] Peak Hour Headways from WMATA's posted bus schedules		

Table A-2.6 Attributes & Efficiency—M Square (River Road)								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
River Road	Commercial	8,892[1]	Y	No Parking Permitted	10' Sidewalks & Northeast Branch Ped/Bike Trail	N/A	Northeast Branch Ped/Bike Trail	N/A
Rivertech Court	Commercial	Not Available		No Parking Permitted	10' Sidewalks	N/A	None	N/A
University Research Court	Commercial	Not Available		No Parking Permitted	5' Sidewalks	N/A	None	N/A
Lafayette Avenue	Resid./Comm.	Not Available		No Parking Permitted	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Somerset Road	Residential	Not Available		Open Parking West of Taylor Rd, Permit Parking Only East of Taylor Rd	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Taylor Road	Residential	Not Available		Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Tuckerman Street	Residential	Not Available		No Parking Permitted North Side, Open Parking South Side	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	Shared Use Roadway
Sheridan St.	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
Ravenswood St.	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
48th Avenue	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A
49th Avenue	Residential	Not Available		Open Parking	5' Sidewalks	N/A	None	N/A

Table A-2.6 Attributes & Efficiency—M Square (River Road)								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
51st Avenue	Residential	Not Available		Open Parking South of Sheridan Street, Permit Only North of Sheridan Street	5' Sidewalks Sheridan to Rittenhouse St. Only	Sidewalk Gaps/ Reconstruct	None	N/A
[1] From SHA Internet TMS								

Table A-2.7 Transit—College Park		
Roadway	**Bus Route**	**Peak Hour Headway[1]**
River Road	UM Shuttle	15 Mins
	WMATA R12	30 Mins
	WMATA C8	30 Mins
	WMATA J4	20 Mins
	WMATA F4	30 Mins
[1] Peak Hour Headways from WMATA's posted bus schedules		

Table A-2.8 Attributes & Efficiency—College Park								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
Paint Branch Pkwy	Commercial	17,532[1]	Y	No Parking Permitted	10' Sidewalks, & Paint Branch Ped/ Bike Trail	N/A	Paint Branch Ped/ Bike Trail	N/A
River Rd	Commercial	Not Available		No Parking Permitted, Except for within Metro Parking Lot	10' Sidewalks	N/A	None	N/A
College Ave	Resid./ Comm.	Not Available		West of MARC: Permit Parking Only on North Side, No Parking Permitted on South Side, East of MARC: Open Parking	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
						N/A	None	Shared Use Roadway
Columbia Ave	Resid./ Comm.	Not Available	Y	Permit Parking Only	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
						N/A	None	Shared Use Roadway
Knox Rd	Resid./ Comm.	Not Available		No Parking Permitted on North Side, Permit Parking Only on South side	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
Calvert Rd	Resid./ Comm.	Not Available		No Parking Permitted	10' Sidewalks	N/A	Shoulder	N/A

Table A-2.8 Attributes & Efficiency—College Park								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
Rhode Island Ave	Resid./ Comm.	Not Available		No Parking Permitted North of Harvard Rd, Permit Parking Only Harvard Rd to Drexel Rd, Open Parking South of Drexel Rd	5' Sidewalks & Rhode Island Trolley Ped/Bike Trail	N/A	Rhode Island Trolley Ped/Bike Trail	N/A
Norwich Rd	Residential	Not Available		Permit Parking Only on North Side, No Parking Permitted on South Side	5' Sidewalks Princeton Ave to Rhode Island Ave only	N/A	None	N/A
Guilford Rd	Resid./ Comm.	Not Available	Y	Permit Parking Only	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
						N/A	None	Shared Use Roadway
Princeton Ave	Residential	Not Available		No Parking Permitted on West Side, Permit Parking Only on East Side	5' Sidewalks	Sidewalk Gaps/ Reconstruct	None	N/A
Dickinson Ave	Residential	Not Available		No Parking Permitted on West Side, Permit Parking Only on East Side	5' Sidewalks	N/A	None	N/A
Hopkins Ave	Residential	Not Available		No Parking Permitted on West Side, Permit Parking Only on East Side	5' Sidewalks	N/A	None	N/A

Table A-2.8 Attributes & Efficiency—College Park								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/ Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
Dartmouth Ave	Residential	Not Available		No Parking Permitted on East Side, Permit Parking Only on West Side	5' Sidewalks	N/A	None	N/A
Harvard Ave	Residential	Not Available		Permit Parking Only	5' Sidewalks	N/A	None	N/A
Fordham Rd	Residential	Not Available		Permit Parking Only	5' Sidewalks Rhode Island Ave to Dartmouth Ave only	N/A	None	N/A
Drexel Rd	Residential	Not Available		Permit Parking Only	5' Sidewalks Rhode Island Ave to Dartmouth Ave only	N/A	None	N/A
Wake Forest Dr.	Residential	Not Available		Permit Parking Only	No Sidewalks	N/A	None	N/A
Clemson Rd	Residential	Not Available		Permit Parking Only	No Sidewalks	N/A	None	N/A
51st Avenue	Residential	Not Available		No Parking Permitted	No Sidewalks	N/A	None	N/A
52nd Avenue	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
Frank S. Scott Drive	Residential	Not Available		No Parking Permitted	No Sidewalks	N/A	None	N/A
Lehigh Road	Residential	Not Available		Open Parking	No Sidewalks	N/A	None	N/A
Bowdoin Ave	Resid./ Comm.	Not Available	Y	Permit Parking Only	5' Sidewalks Calvert Rd to Harvard Rd only	Sidewalk Gaps/ Reconstruct	None	N/A

[1] From SHA Internet TMS

Table A-2.9 Attribute and Efficiency Table—West Campus								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
Adelphi Road	Residential	12,743	No	Prohibited	5' Sidewalks	Sidewalks or Sidepath west/south side/Sidewalk Reconstruct	Yes – North of MD 193 No- South of MD 193	Shared Use Path south of MD 193
Campus Drive	Institutional	5,997	Yes	Yes – UMD	5' Sidewalks	Sidewalk Widen/Reconstruct	None	TBD - Bicycle Lanes, Cycle Track or Sidepath
University Boulevard	Residential	30,182	No	Prohibited	5' Sidewalks	Sidewalk Widen/Reconstruct/ Sidewalk Gaps at Tulane Drive to Adelphi Road	None	TBD – Bicycle Lanes and/or Sidepath
Cool Spring Road	Residential	Not Available	No	Prohibited	No Sidewalks	Sidewalks or Sidepath	None	Sidepath
*Tulane Drive	Residential	Not Available	No	Yes - UMD	5' Sidewalks	N/A	None	Shared Use Roadway
*Stanford Street	Residential	Not Available	No	No	No	Sidewalks along both sides street. Curb Extensions	None	N/A
*Rutgers Street	Residential	Not Available	No	No	No	Sidewalks on the southeast side of Rutgers Street because there is room to construct the sidewalk behind the curb, whereas existing constraints on the north/west side would necessitate the sidewalk to be located within the existing paving, reducing on-street parking availability.	None	N/A
Perdue Street	Residential	Not Available	No	No	No	Sidewalks along both sides street	None	N/A

Table A-2.9 Attribute and Efficiency Table—West Campus								
Roadways	**Type Parcels**	**Average Daily Traffic**	**Direct Purple Line Station Access**	**Parking Regulations**	**Existing Pedestrian Accommodations**	**Pedestrian Deficiencies/Needs**	**Existing Bicycle Accommodations**	**Bicycle Deficiencies/ Needs**
Adelphi Court	Residential	Not Available	No	No	No	Sidewalks	None	N/A
Cool Springs Road	Residential	Not Available	No	No	No	Sidewalks or Sidepath	None	Sidewalks or Sidepath
Chatham Road	Residential	Not Available	No	No	No	Sidewalks	None	N/A

*Note: The City of Hyattsville annexed the University Hills neighborhood in 2006. The majority of the streets in the neighborhood do not have sidewalks that would provide a safe and simple connection to Adelphi Road and the future Purple Line station on Campus Drive. As a part of a pavement management program, the city is interested in installing sidewalks throughout the University Hills neighborhood. There are three roads where a portion of the road is within a half-mile of walking distance from the future Purple Line station. These roads are Sanford Street, Rutgers Street and Perdue Street. New sidewalks on these roads would go a long way toward creating a pedestrian-friendly, transit-accessible, and sustainable environment within the University Hills neighborhood. Tulane Drive is not located within the City of Hyattsville.

Additional Source Material - University Hills Green Street Project, 2010

Appendix B

Overview

Table B-1 Population and Age Distribution and Households by Type, 2010

	Riverdale Road (Beacon Heights) Station Area		Riverdale Park Station Area		M Square (River Road) Station Area		College Park-UMD Station Area		West Campus Station Area		Prince George's County		Suburban Maryland	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Population Trends														
2000	5,187		9,109		802		1,249		1,493		801,473		1,674,856	
2010	6,169		9,017		888		1,962		2,035		863,420		1,793,857	
2000-2010 Change	982	18.9	(92)	-1.0	86	10.7	713	57.1	542	36.3	61,947	7.7	119,001	7.1
Household Trends														
2000	1,209		2,401		353		633		579		286,599		611,175	
2010	1,749		2,395		284		620		596		304,042		652,230	
2000-2010 Change	540	44.7	(6)	-0.2	(69)	-19.5	(13)	-2.1	17	2.9	17,443	6.1	41,055	6.7
Population by Age (2010)														
Under 20 Years	2,054	33	1,990	32	1,542	25	1,351	22	417	20.5	236,408	27.4	488,965	26.6
20 to 24 Years	469	7.6	662	10.7	716	11.6	3,010	48.8	567	27.9	70,644	8.2	124,675	6.8
25 to 34 Years	1,104	17.9	1,297	21.0	1,018	16.5	543	8.8	481	23.7	125,740	14.6	258,133	14.1
35 to 44 Years	944	15.3	928	15.0	814	13.2	278	4.5	158	7.8	123,932	14.4	264,497	14.4
45 to 54 Years	753	12.2	629	10.2	907	14.7	339	5.5	124	6.1	128,053	14.8	281,534	15.3
55 to 64 Years	487	7.9	379	6.1	635	10.3	345	5.6	156	7.7	97,130	11.2	216,111	11.8
65 to 74 Years	247	4.0	194	3.1	352	5.7	185	3.0	65	3.2	50,100	5.8	112,641	6.1
75 to 84 Years	99	1.6	68	1.1	197	3.2	86	1.4	48	2.4	23,125	2.7	60,922	3.3
85 Years and Over	25	0.4	23	0.4	43	0.7	37	0.6	17	0.8	8,288	1.0	27,719	1.5
Total Population	6,182	99.9	6,170	99.6	6,224	100.9	6,174	100.2	2,033	100.1	863,420	100.1	1,835,197	99.9
Median Age	**29.8**		**28.0**		**33.1**		**22.9**		**25.5**		**35.0**		**37.3**	

Note: Each station area covers a half-mile radius around each station and suburban Maryland includes both Prince George's and Montgomery Counties.

Source: ESRI, 2012; Partners for Economic Solutions, 2012.

Table B-2 Household Size and Vehicle Ownership														
	Riverdale Road (Beacon Heights) Station Area		Riverdale Park Station Area		M Square (River Road) Station Area		College Park-UMD Station Area		West Campus Station Area		Prince George's County		Suburban Maryland	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Tenure, 2010														
Owner	855	48.9	956	39.9	208	73.2	207	33.4	259	43.5	190,993	62.8	432,458	65.4
Renter	894	51.1	1,439	60.1	76	26.8	413	66.6	337	56.5	113,049	37.2	228,670	34.6
Total	**1,749**		**2,395**		**284**		**620**		**596**		**304,042**		**661,128**	
Households by Size, 2010														
1 Person Household	326	18.6	385	16.1	64	22.5	155	25.0	137	23.0	73,274	24.1	168,639	25.5
2 Person Household	362	20.7	418	17.5	80	28.2	187	30.2	235	39.4	88,172	29.0	193,814	29.3
3-4 Person Household	587	33.6	823	34.4	79	27.8	140	22.6	156	26.2	102,766	33.8	209,606	31.7
5+ Person Household	474	27.1	770	32.2	61	21.5	138	22.3	68	11.4	39,830	13.1	89,069	13.5
Households, 2010														
Average Household Size	3.52		3.76		3.13		2.20		2.90		2.78		2.73	
Vehicle Ownership	1,068		1,969		338		607		545		256,229		556,170	
None	144	13.5	421	21.4	18	5.3	42	6.9	52	9.5	30,266	11.8	55,006	9.9
Owns 1 vehicle	428	40.1	1,116	56.7	145	42.9	290	47.8	240	44.0	110,631	43.2	221,857	39.9
Owns 2 or more vehicles	640	59.9	853	43.3	193	57.1	317	52.2	305	56.0	145,598	56.8	334,313	60.1
Average Vehicles	**1.60**		**1.30**		**1.80**		**1.90**		**1.70**		**1.60**		**1.70**	

Note: Each Station Area covers a half-mile radius around each station and Suburban Maryland includes both Prince George's and Montgomery Counties.

Source: ESRI, 2012: Partners for Economic Solutions, 2012.

Table B-3 Tenure by Age of Householder, 2000																
	Riverdale Road (Beacon Heights) Station Area				Riverdale Park Station Area				M Square (River Road) Station Area				College Park-UMD Station Area			
	Owner		Renter		Owner		Renter		Owner		Renter		Owner		Renter	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Age of Householder																
Householder 15 to 24 years	7	0.9	28	6.2	14	1.5	167	11.5	3	1.1	15	18.1	10	4.0	184	48.3
Householder 25 to 34 years	88	11.6	133	29.4	109	11.5	501	34.4	33	12.2	22	26.5	29	11.5	106	27.8
Householder 35 to 44 years	205	27.1	132	29.2	249	26.3	440	30.2	82	30.3	21	25.3	52	20.6	41	10.8
Householder 45 to 54 years	198	26.2	98	21.7	232	24.6	208	14.3	61	22.5	15	18.1	62	24.6	22	5.8
Householder 55 to 64 years	112	14.8	36	8.0	160	16.9	92	6.3	45	16.6	4	4.8	37	14.7	16	4.2
Householder 65 to 74 years	87	11.5	17	3.8	102	10.8	32	2.2	21	7.7	3	3.6	23	9.1	6	1.6
Householder 75 to 84 years	48	6.3	7	1.5	63	6.7	14	1.0	21	7.7	2	2.4	32	12.7	6	1.6
Householder 85 years and over	11	1.5	1	0.2	16	1.7	1	0.1	5	1.8	1	1.2	7	2.8	-	0.0
Total	**756**		**452**		**945**		**1,455**		**271**		**83**		**252**		**381**	

Table B-3 Tenure by Age of Householder, 2000																
	West Campus Station Area				Prince George's County				Suburban Maryland				Washington Metro Area			
	Owner		Renter		Owner		Renter		Owner		Renter		Owner		Renter	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Age of Householder																
Householder 15 to 24 years	3	1.4	51	14.1	1,455	0.8	12,210	11.2	2,775	0.7	19,719	9.3	17,632	0.9	103,913	10.3
Householder 25 to 34 years	18	8.3	149	41.3	20,532	11.6	35,718	32.6	43,869	11.0	66,799	31.7	231,448	12.4	305,019	30.3
Householder 35 to 44 years	42	19.3	86	23.8	46,113	26.0	28,749	26.3	101,561	25.4	55,209	26.2	471,225	25.2	242,775	24.1
Householder 45 to 54 years	57	26.1	45	12.5	47,448	26.8	17,086	15.6	106,328	26.6	33,413	15.8	472,340	25.3	153,173	15.2
Householder 55 to 64 years	32	14.7	16	4.4	32,227	18.2	8,011	7.3	70,239	17.6	15,378	7.3	311,694	16.7	80,561	8.0
Householder 65 to 74 years	31	14.2	9	2.5	18,364	10.4	4,330	4.0	43,146	10.8	9,129	4.3	204,080	10.9	55,805	5.6
Householder 75 to 84 years	26	11.9	3	0.8	9,194	5.2	2,560	2.3	26,331	6.6	7,542	3.6	128,896	6.9	45,831	4.6
Householder 85 years and over	9	4.1	2	0.6	1,844	1.0	769	0.7	5,945	1.5	3,792	1.8	29,109	1.6	18,360	1.8
Total	**218**		**361**		**177,177**		**109,433**		**400,194**		**210,981**		**1,866,424**		**1,005,437**	

Note: Each Station Area covers a half-mile radius around each station and Suburban Maryland includes both Prince George's and Montgomery Counties.

Source: 2000 U.S. Census; Partners for Economic Solutions, 2012.

Table B-4 Households by Income, 2010														
	Riverdale Road (Beacon Heights) Station Area		Riverdale Park Station Area		M Square (River Road) Station Area		College Park-UMD Station Area		West Campus Station Area		Prince George's County		Suburban Maryland	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Household Incomes														
Less than $10,000	46	3.9	125	5.6	8	2.5	111	17.8	*		12,687	4.3	24,110	3.7
$10,000 to $14,999	22	1.9	95	4.2	4	1.2	25	4.0	82	13.8	5,690	1.9	10,528	1.6
$15,000 to $24,999	61	5.2	216	9.7	22	6.8	67	10.8	99	16.6	15,828	5.3	30,292	4.6
$25,000 to $34,999	97	8.2	311	13.9	36	11.1	33	5.3	56	9.4	21,704	7.3	37,752	5.8
$35,000 to $49,999	192	16.3	373	16.7	56	17.3	77	12.4	66	11.1	40,732	13.6	75,070	11.5
$50,000 to $74,999	342	29.0	508	22.7	91	28.1	123	19.7	73	12.2	66,390	22.2	116,869	17.9
$75,000 to $99,999	219	18.5	373	16.7	46	14.2	93	14.9	76	12.8	64,135	21.5	131,416	20.1
$100,000 to $149,999	168	14.2	183	8.2	46	14.2	60	9.6	64	10.7	48,653	16.3	127,140	19.5
$150,000 to $199,999	17	1.4	24	1.1	8	2.5	17	2.7	40	6.7	14,824	5.0	52,238	8.0
$200,000 or More	17	1.4	28	1.3	7	2.2	17	2.7	40	6.7	7,771	2.6	46,815	7.2
Total Households	**1,181**		**2,236**		**324**		**623**		**596**		**298,414**		**652,230**	
Median Household Income	$60,100		$49,891		$60,921		$49,276		$48,536		$68,575		$79,471	
Mean Household Income	$69,383		$58,090		$69,506		$58,068		$75,704		$78,286		$99,021	
Note: Each Station Area covers a half-mile radius around each station and Suburban Maryland includes both Prince George's and Montgomery Counties.														
Source: ESRI, 2011; Partners for Economic Solutions, 2012. *Note Less than $10,000 combined with $10,000 to $14,999.														

Table B-5 Housing Units by Number of Units in Structure, 2000														
	Riverdale Road (Beacon Heights) Station Area		Riverdale Park Station Area		M Square (River Road) Station Area		College Park-UMD Station Area		West Campus Station Area		Prince George's County		Suburban Maryland	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Units in Structure														
1, Detached	774	60.8	815	31.8	326	84.9	358	53.4	339	60.4	151,888	50.2	323,165	50.7
1, Attached	125	9.8	219	8.5	-	0.0	-	0.0	4	0.7	45,366	15.0	105,317	16.5
2	7	0.5	28	1.1	2	0.5	9	1.3	6	1.1	1,634	0.5	2,888	0.5
3 to 4	25	2.0	173	6.7	20	5.2	53	7.9	12	2.1	6,755	2.2	11,884	1.9
5 to 9	194	15.2	683	26.6	3	0.8	94	14.0	63	11.2	27,820	9.2	45,882	7.2
10 to 19	100	7.8	126	4.9	17	4.4	109	16.2	86	15.3	43,276	14.3	73,156	11.5
20 to 49	44	3.5	121	4.7	12	3.1	48	7.2	51	9.1	6,593	2.2	16,071	2.5
50 or More	4	0.3	389	15.2	4	1.0	-	0.0	-	0.0	17,473	5.8	56,449	8.9
Mobile Home	1	0.1	4	0.2	-	0.0	-	0.0	-	0.0	1,504	0.5	2,122	0.3
Other	-	0.0	6	0.2	-	0.0	-	0.0	-	0.0	69	0.0	76	0.0
Total	**1,274**		**2,564**		**384**		**671**		**561**		**302,378**		**637,010**	

Note: Each station area covers a half-mile radius around each station and suburban Maryland includes both Prince George's and Montgomery Counties.

Source: ESRI, 2012; Partners for Economic Solutions, 2012.

Table B-6 Housing Units by Year Built, 2000														
	Riverdale Road (Beacon Heights) Station Area		Riverdale Park Station Area		M Square (River Road) Station Area		College Park-UMD Station Area		West Campus Station Area		Prince George's County		Suburban Maryland	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Year Built														
1999 to March 2000	6	0.5	15	0.6	1	0.3	5	0.7	4	0.7	5,140	1.7	12,103	1.9
1995 to 1998	52	4.1	28	1.1	1	0.3	12	1.8	21	3.7	17,840	5.9	35,036	5.5
1990 to 1994	46	3.6	21	0.8	18	4.7	9	1.3	6	1.1	24,190	8.0	49,050	7.7
1980 to 1989	47	3.7	121	4.7	4	1.1	17	2.5	36	6.4	43,845	14.5	121,669	19.1
1970 to 1979	183	14.3	367	14.3	18	4.7	77	11.5	78	13.9	59,266	19.6	121,669	19.1
1969 or Earlier	942	73.8	2,017	78.5	338	88.9	549	82.1	417	74.2	152,096	50.3	298,121	46.8
TOTAL	1,276		2,569		380		669		562		302,377		637,648	
Median Year Built	1961		1961		1950		1949		1965		1970		1972	

Note: Each Station Area covers a half-mile radius around each station and Suburban Maryland includes both Prince George's and Montgomery Counties.

Source: ESRI, 2012; Partners for Economic Solutions, 2012.

Table B-7 Owner-Occupied Housing Units by Value, 2010														
	Riverdale Road (Beacon Heights) Station Area		Riverdale Park Station Area		M Square (River Road) Station Area		College Park-UMD Station Area		West Campus Station Area		Prince George's County		Suburban Maryland	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Housing Units by Value														
Under $20,000	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	298	0.2	633	0.2
$20,000 to $39,999	-	0.0	1	0.1	-	0.0	-	0.0	-	0.0	590	0.3	1,222	0.3
$40,000 to $49,999	1	0.1	2	0.2	-	0.0	-	0.0	-	0.0	409	0.2	712	0.2
$50,000 to $69,999	5	0.7	-	0.0	-	0.0	-	0.0	-	0.0	861	0.5	1,483	0.4
$70,000 to $99,999	14	2.0	-	0.0	2	0.8	-	0.0	-	0.0	2,948	1.6	5,630	1.3
$100,000 to $149,999	32	4.6	23	2.8	3	1.3	-	0.0	22	8.5	7,987	4.4	16,589	3.9
$150,000 to $199,999	224	32.2	351	42.0	39	16.5	6	2.5	46	17.8	23,450	12.9	40,977	9.7
$200,000 to $299,999	329	47.3	397	47.5	132	55.7	47	19.7	48	18.5	76,159	42.0	126,712	30.1
$300,000 to $499,999	80	11.5	58	6.9	57	24.1	155	64.9	104	40.2	55,138	30.4	128,140	30.5
$500,000 and Over	10	1.4	3	0.4	4	1.7	31	13.0	39	15.1	13,332	7.4	98,531	23.4
Total	**695**		**835**		**237**		**239**		**259**		**181,172**		**420,629**	
Median Value	$217,439		$207,472		$245,427		$368,557		$307,900		$270,668		$318,301	
Note: Each Station Area covers a half-mile radius around each station and Suburban Maryland includes both Prince George's and Montgomery Counties.														
Source: ESRI, 2010; Partners for Economic Solutions, 2012.														

Table B-8 Annual Number of Units Authorized by Building Permits

	Single-Family		Multifamily		Total Units
Year	Number	Percent	Number	Percent	
2002	2,485	97.0	78	3.0	2,563
2003	2,808	95.6	130	4.4	2,938
2004	1,875	96.3	73	3.7	1,948
2005	3,255	95.0	170	5.0	3,425
2006	2,918	96.2	115	3.8	3,033
2007	1,462	67.0	721	33.0	2,183
2008	1,264	96.8	42	3.2	1,306
2009	811	64.4	448	35.6	1,259
2010	702	99.3	5	0.7	707

Source: U.S. Bureau of the Census; Partners for Economic Solutions, 2012.

Table B-9 Employed Population Aged 16 and Over by Industry and Occupation, 2010

	Riverdale Road (Beacon Heights) Station Area		Riverdale Park Station Area		M Square (River Road) Station Area		College Park-UMD Station Area		West Campus Station Area		Prince George's County		Suburban Maryland	
Industry	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Agriculture, Mining	2	0.1	7	0.2	2	0.4	10	1.1	-	0.0	412	0.1	891	0.1
Construction	129	8.2	540	16.4	51	9.5	43	4.6	12	0.7	23,479	5.7	47,236	5.3
Manufacturing	43	2.7	86	2.6	5	0.9	13	1.4	1	0.1	9,474	2.3	23,172	2.6
Wholesale Trade	6	0.4	72	2.2	14	2.6	13	1.4	1	0.1	7,415	1.8	13,369	1.5
Retail Trade	114	7.3	250	7.6	56	10.4	85	9.0	26	1.4	35,425	8.6	74,864	8.4
Transportation, Utilities	118	7.5	175	5.3	12	2.2	10	1.1	20	1.1	25,539	6.2	36,541	4.1
Information	58	3.7	82	2.5	18	3.3	44	4.7	280	15.3	14,417	3.5	32,976	3.7
Finance, Insurance, Real Estate	96	6.1	194	5.9	29	5.4	63	6.7	150	8.2	24,715	6.0	62,387	7.0
Services	806	51.3	1,654	50.3	293	54.5	593	62.8	774	42.2	205,137	49.8	484,836	54.5
Public Administration	200	12.7	231	7.0	58	10.8	71	7.5	571	31.1	65,907	16.0	114,079	12.8
Total	**1,578**		**3,291**		**538**		**945**		**1,835**		**411,920**		**890,351**	
Occupation	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
White Collar	933	32.4	1,522	26.6	399	39.3	789	44.2	n/a	n/a	289,169	37.9	675,562	40.5
Management, Business, Financial	202	7.0	290	5.1	70	6.9	141	7.9	n/a	n/a	67,555	8.9	172,010	10.3
Professional	317	11.0	537	9.4	196	19.3	442	24.8	n/a	n/a	108,335	14.2	293,219	17.6
Sales	120	4.2	194	3.4	41	4.0	76	4.3	n/a	n/a	35,013	4.6	79,321	4.8
Administrative Support	292	10.1	501	8.7	91	9.0	131	7.3	n/a	n/a	78,265	10.3	131,904	7.9
Services	275	9.5	860	15.0	61	6.0	107	6.0	n/a	n/a	61,376	8.0	114,079	6.8
Blue Collar	371	12.9	913	15.9	79	7.8	49	2.7	n/a	n/a	61,376	8.0	100,710	6.0
Farming, Forestry, Fishing	5	0.2	7	0.1	-	0.0	-	0.0	n/a	n/a	412	0.1	891	0.1
Construction, Extraction	125	4.3	484	8.4	43	4.2	22	1.2	n/a	n/a	18,536	2.4	32,976	2.0
Installation, Maintenance, Repair	50	1.7	115	2.0	24	2.4	11	0.6	n/a	n/a	13,593	1.8	21,390	1.3
Production	58	2.0	138	2.4	3	0.3	6	0.3	n/a	n/a	8,650	1.1	16,042	1.0
Transportation, Material Moving	133	4.6	171	3.0	9	0.9	10	0.6	n/a	n/a	20,184	2.6	29,411	1.8
Total	**2,881**		**5,732**		**1,016**		**1,784**		**-**	**-**	**762,464**		**1,667,515**	**100**

Note: Each Station Area covers a half-mile radius around each station and Suburban Maryland includes both Prince George's and Montgomery Counties.

Source: ESRI, 2010; Partners for Economic Solutions, 2012.

Table B-10 2008 Geographic Mobility in the Past Year by Tenure								
	Prince George's County				Suburban Maryland			
	Owner		Renter		Owner		Renter	
	Number	%	Number	%	Number	%	Number	%
Geographic Mobility								
Same house 1 year ago	496,594	92.7	209,598	70.8	1,112,013	92.4	404,209	69.0
Moved within same county	18,724	3.5	55,260	18.7	47,677	4.0	108,080	18.4
Moved from different county within same state	5,440	1.0	7,208	2.4	8,488	0.7	17,256	2.9
Moved from different state	12,536	2.3	19,221	6.5	23,930	2.0	43,452	7.4
Moved from abroad	2,297	0.4	4,830	1.6	11,289	0.9	12,843	2.2
Total	535,591		296,117		1,203,397		585,840	
Source: American Community Survey, 2009; Partners for Economic Solutions, 2011.								

Appendix C

C.1 TOD Design Standards

C.1a Transit Connectivity

Since all modes of access cannot be given equal priority, a hierarchy needs to be established to provide a rationale for station design. In its Station Site and Access Planning Manual, the Washington Metropolitan Area Transit Authority has defined a hierarchy of access priority where pedestrians are assigned the highest priority, followed by bicycle access and local bus transit as illustrated in Figure A-2.1.

For the safety of all transit customers, pedestrians should be provided the highest priority in station site and access planning. Providing a safe and convenient walking environment that includes clear, unfragmented, and integrated pedestrian paths to the station can encourage transit riders to walk to the station, thus eliminating the need for parking facilities or increased bus service. To encourage cycling, an efficient and environmentally friendly mode of access, bicycles are given priority over motorized vehicles. Since buses and connecting rail generate a higher share of concentrated pedestrian activity on station sites, buses should be given priority over all private vehicular modes of access. Personal automobile access provides a low share of transit riders per vehicle and can detract from other more efficient modes of access.

MTA and Prince George's County have adopted a policy of no dedicated parking at Purple Line stations within the county. This policy assumes that Purple Line riders will arrive at each station by bus, bicycle, or foot. However, based on feedback received at M-NCPPC's community planning workshops, the issue of Kiss & Ride access at Purple Line stations is an important one for many community residents. At the same time, accommodating Kiss & Ride drop-offs will complicate planning and design of transit bus connections at the Purple Line stations. MTA and Prince George's County have agreed to consider the inclusion of Kiss & Ride features at one or more selected Purple Line stations on a case-by-case basis as MTA completes preliminary engineering and preparation of the final environmental impact statement for the Purple Line.

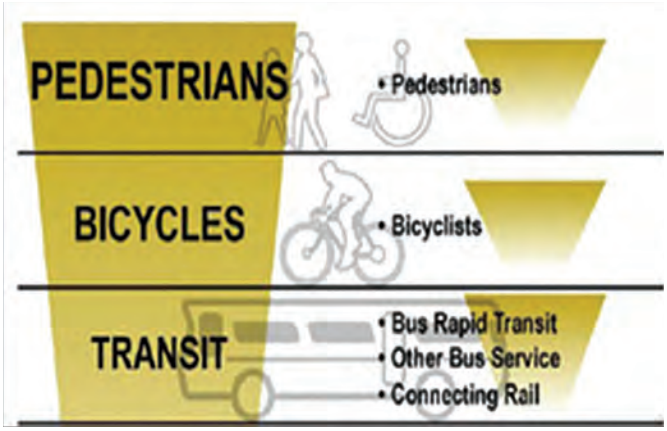

Fig. C.1: Transit Station Mode of Hierarchy

credit: WMATA Station Site and Access Planning Manual

C.1b Complete Streets

Complete streets are designed to enable safe access for all users, including pedestrians, bicyclists, transit vehicles, and motorists. Additionally, complete streets should be designed to address local context and needs. Complete streets standards aim to create a comprehensive, integrated, and connected network with flexibility to account for the unique needs of each street. Prince George's County adopted a complete streets policy in 2009 under its Master Plan of Transportation to ensure that "all users are safely, comfortably, and adequately accommodated along area roads." More recently, the County Council enacted the Adequate Public Pedestrian and Bikeway Facilities in Centers and Corridors Act that requires the Planning Board to ensure that complete streets principles are applied when new developments are proposed and constructed.

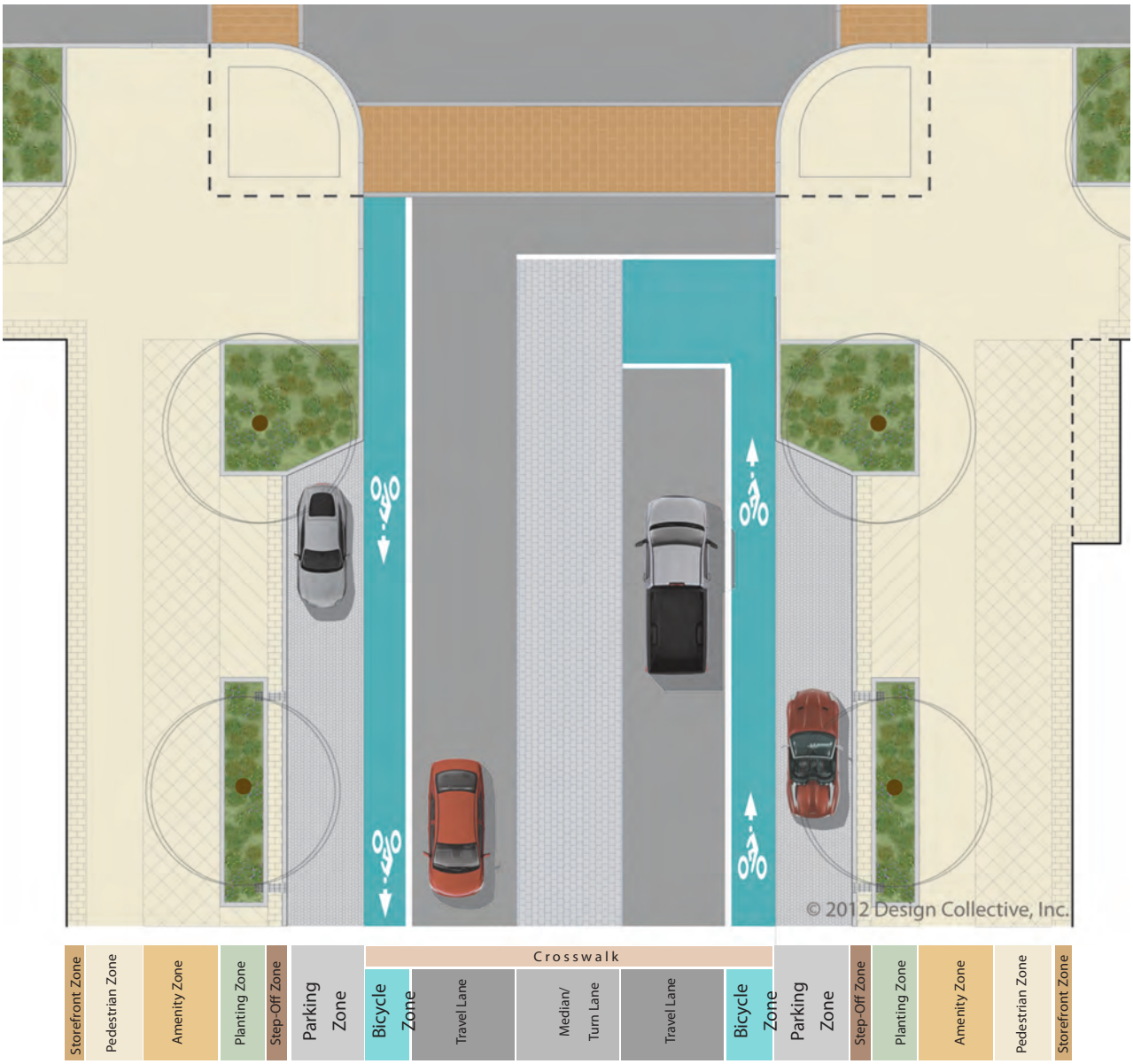

Fig. C.2: Complete Street Diagram

On-Street Facilities—Crosswalks

A crosswalk is the portion of a roadway designated for pedestrians to use in crossing the street and may be either marked or unmarked.

Crosswalk markings advise motorists of the potential presence of pedestrians and help guide pedestrians to locations for safe crossing.

Though usually found at intersections, crosswalks can be found at other points on roads that would otherwise be too unsafe to cross without assistance or where large numbers of pedestrians are attempting to cross.

Crosswalks of a different paving material, texture, or color from the street paving material are encouraged for all crosswalks, particularly in areas of retail concentration or near transit stations.

Crosswalk paving materials and textures should be chosen for ease of pedestrian movement, safety, and maintenance. Crosswalks should be a minimum of eight feet wide but typically 10 feet wide.

Crosswalk dimensions, materials, and configurations shall conform to Prince George's County Design Manual and the State Highway Administration (SHA) requirements, as applicable.

Crosswalk—Victoria Gardens, Los Angeles, CA

Clarendon Crosswalk—Radial Pattern Painted

Types of crosswalk markings

Bike lanes on roadway

Bike Box, Portland, OR

On-Street Facilities—Dedicated Bicycle Lanes

Dedicated bike lanes designate an exclusive space for cyclists through the use of pavement markings and signage.

Dedicated bike lanes afford bicyclists greater comfort and confidence when traveling on busy streets.

The separation between bicyclists and automobiles allows cyclists to travel at their preferred speed without interfering with automobile traffic, increasing the total capacity of a street carrying mixed traffic.

Dedicated bicycle lane delineation should be marked with a six-inch, solid white line. Solid colors may be used to fill in bicycle lanes to make drivers more aware of bicycle traffic. Bicycle lane width shall be a five-foot minimum from edge of curb to furthest edge of bicycle lane stripe. This solid color painted area should be four feet wide to allow one foot of unpainted concrete lip.

All bicycle lane markings should be white and retroreflective.

On-Street Facilities—Shared Use Roadways

To varying extent, bicycles will be used on all roadways where they are permitted. Design features that can make streets more compatible to bicycle travel include bicycle-safe drainage grates and bridge expansion joints, improved railroad crossings, smooth pavements, adequate sight distances, and signal timing and detector systems that respond to bicycles.

In addition, more costly shoulder improvements and wide curb lanes can be considered.

Shared lane markings, or "shared use roadways", indicate a shared lane environment for bicycles and vehicles. They reinforce the legitimacy of bicycle traffic on the street and recommend proper cyclist positioning.

Shared use roadways are appropriate for local streets and lower design speed streets (35 miles/hour or lower).

Shared use roadway bicycle symbols should be placed on roadway with 200 feet between each symbol.

For road conditions with curb/shoulder parking, shared use roadway bicycle symbols should be 11 feet from edge of curb to centerline of symbol, comprised of a 7-foot minimum for a parked passenger vehicle width from curb, a 2.5-foot open door width, and 1.5-foot gap from centerline of symbol to open door swing area.

For road conditions with only a curb edge, and no shoulder parking, shared use roadway bicycle symbols should be 4 feet from edge of curb to centerline of symbol.

Precedent of shared use roadway lanes

Shared use roadway indicating shared use lane

Designated shared bicycle route

Bike route signage

On-Street Facilities—Signed Shared Bicycle Routes

Signed shared routes are designated by bike route signs and serve to either provide continuity to other bicycle facilities or designate preferred routes through high-demand corridors to and from the proposed Purple Line transit stations.

These designations indicate to cyclists that particular advantages exist to using these routes compared to alternatives. Therefore, the routes need to be suitable for cyclists and maintained in a manner consistent with the needs of cyclists.

The signage also serves to alert vehicle drivers that bicycles are present.

Off-Street Facilities—Sidewalks with Tree Pits and/or Planting Strips

As a general practice, sidewalks should be constructed in areas of high pedestrian concentration and along any street or highway in suburban and urban areas. Within a half-mile of transit stations, sidewalks should be mandatory along any new streets with anticipated building frontage.

Where sidewalks are built along high-speed thoroughfares, they should be buffered from the vehicular travel lanes with trees in planting strips or pits. Trees planted along the street edge can increase comfort for pedestrians by creating a more well-defined separation from traffic and providing shade.

Rainwater Tree Pits

Rainwater tree pits can provide two advantages over the typical tree pit: longevity and stormwater infiltration. Rainwater tree pits capture and infiltrate stormwater along a street. When combined with a structural grid (such as Silva Cells or structural soil) the capacity to capture rainwater is increased, creating a cavity to store additional water while allowing tree root growth. The structural grid supports the hardscape and pedestrian or vehicular loads above while keeping the soil around tree roots from compacting and stunting the growth of the tree.

Recommended Rainwater Tree Pits Details:

Rainwater tree pits can be detailed in three ways: with tree grates, permeable pavers, or plant materials at the surface (see images on the facing page). The method should be chosen appropriate to the volume of pedestrian traffic, the surrounding materials, and soil conditions.

Sidewalk with Tree Cover

Sidewalk with Planting Strip

Tree Pit—Larimer Square 206, Denver, CO

Rain Garden, Brisban City Hall

Rainwater planter—Portland, OR

Rainwater planter—Portland, OR

Off-Street Facilities—Rainwater Planters

Rainwater Planters

Rainwater planters should be used along streets as a means of capturing, treating, and returning rainwater to the ground or allowing for evaporation. Along streets, rainwater planters should be incorporated to increase the permeability of the ground plane and capture stormwater runoff from paved areas. These planters should be integrated into the overall design of the streetscape.

Recommended Rainwater Planter details follow:

- Rainwater planters shall be a minimum of 30 square feet and a minimum of 4 feet wide; 5 feet by 8 feet is recommended. Along residential streets or where limited pedestrian activity is anticipated, planters may be elongated.
- Rainwater planters shall be recessed to accommodate stormwater collection with a 4–6 inch curb or border or a low, 8–12 inch fence.
- The design should be consistent along both sides of the street and for the entire block. However, the design of rainwater planters may vary from block to block as long as the placement and rhythm is logical.
- Narrow, street edge rainwater planters should have a more formal planting arrangement.
- Transition zones close to natural or restoration areas or amenity spaces should have a more informal planting plan arrangement.
- Select plant species native to Maryland and the Piedmont physiographic province.
- Choose plants that are tolerant of well-drained conditions, periods of drought, and periodic inundation, depending on the hydrologic design of the stormwater practice, per the Maryland Department of the Environment regulations.
- Select shade-tolerant, partial-shade, or full sun-tolerant species based on site location, orientation, and proximity to tree cover and buildings.
- Consider maintenance and management (weeding) when designing, and allow for access needs.
- Consider plant height at maturity, and include consideration for sight lines (e.g., vehicular and pedestrian), safety and security, access to sidewalks, and overhead height restrictions.
- Along the street edge, trees shall be limbed to eight feet clear for visibility and safety.
- Design for complementary mixtures of foliage to provide interest and contrast in form, texture, and color; select plants that provide diverse seasonal color and texture as well as fragrance.

Off-Street Facilities—Sidepath

Sidepaths are facilities for nonmotorized users on exclusive rights-of-way and with minimal crossings by motor vehicles.

These types of paths are located adjacent to roadways. Sidepaths can provide pedestrian and bicycle access to areas that are only served by highways on which bike lanes are not appropriate due to high vehicular volumes and speeds.

Bicyclist on sidepath

Sidepath on MD 175

Bus stop

Transit Shelter

Off-Street Facilities—Bus Stop

Bus stops require curb space for transit services pick up and drop off of passengers.

Bus stops should be located adjacent to travel lanes where riders waiting to board can see approaching buses.

Bus stop amenities should minimally include shelter, lighting, seating, and rider information.

C.1c Open Space

Overview

The public open spaces within the Purple Line Corridor TOD station areas are important components of the overall vision. Open spaces provide relief from the urban environment; are ideal locations for public art, fountains, and landscape; and will contribute to the overall character and success of the Purple Line Corridor. Open spaces should be designed as a coherent system; with similarities from one place to the other so the Purple Line Corridor TOD areas are perceived as a single connected transit line; although slight variations should occur from station to station to express the individual identity of the community.

The primary types of open spaces will include plazas, squares, greens, pocket parks, greenways, and parks. Plazas, squares, and pocket parks are placed in the more urbanized areas where spontaneous activity is generated by people entering and exiting buildings and shops and where restaurants will have outdoor dining. These spaces may also have planned activities. Greens, by contrast, are typically found in more quiet, residential areas. Greenways and parks are typically on the periphery of developed areas or used to link to naturalized areas.

The zoning template in Section 2 on page 251 of the Recommendations report identifies the types of open spaces suitable for the Purple Line Corridor TOD study areas, recommends locations, and illustrates examples of how they may be designed and activated. Criteria for each type of open space follows.

Reston Fountain Plaza—Reston, VA

Rockville Town Center—Rockville, MD

Legacy Village—Lyndhurst, OH

Plazas

Plazas are public amenity spaces at the intersection of important streets between buildings along a street or sidewalk and/or at the junction of important commercial and civic buildings set aside for civic purpose and intense human activity.

Typically, plazas are circumscribed on all sides by building frontages and/or streets. Plazas may contain large areas of durable pavement as well as furniture, public art, fountains, and trees, all formally arranged. Located at the core of the neighborhood and intended for large gatherings and events, provisions within plazas for lighting, sound, and similar infrastructure needs should be considered.

Size: 1/8–1 acre

Character: Mostly hardscape; activated by both planned and spontaneous activities; attached minimally on one side.

Adjacent Ground Floor Uses: Retail (restaurants, cafes, and other), office, hotel, civic.

Squares

Squares are placed in the more urban areas where spontaneous activity is generated by people entering and exiting lobbies and shops and where restaurants have outdoor dining. These spaces may also have planned activities.

Typically, squares are circumscribed on all sides by building frontages and/or streets and consist of more planted landscape areas rather than paved hardscape areas. Squares may contain furniture, public art, fountains, and trees, all formally arranged. Located at the core of the neighborhood and intended for large gatherings and events, provisions within plazas for lighting, sound, and similar infrastructure needs should be considered.

Size: 1/4–2 acre; minimally 100' width

Character: Mix of landscape (greater than 50 percent) and hardscape (less than 50 percent)' activated by both planned and spontaneous activities; may be fully detached (surrounded by streets) or attached on one side.

Adjacent Ground Floor Uses: Retail (restaurants, cafes, and other), office, residential lobby, hotel, civic.

Easton Town Center Commons—Columbus, OH

Town Square—Pittsburgh, PA

Post Office Square—Boston, MA

Post Office Square—Boston, MA

Center Park—Baltimore, MD

Greens

Greens are small spaces available for public use and enjoyment and are typically, but not required to be, defined by building frontages and/or streets. Greens typically consist of more planted landscape areas rather than paved hardscape areas but include paths or sidewalks for pedestrian crossings. Greens are typically informal in their design and help create an identity for areas of the neighborhood outside the core.

Size: A small to moderate publicly accessible but privately owned and maintained tract of land (minimally 2,400 square feet but not more than 1 acre).

Character: The design consists primarily of trees and lawn areas, informally or formally disposed, and should not include excessive amounts of hardscape that will generally appear unoccupied and uninviting.

Greens are available for unstructured recreation and passive and reflective open space.

Surrounding Ground Floor Uses: Often circumscribed on all sides by both building frontages and thoroughfares.

Pocket Park

Pocket parks are small spaces available for public use and enjoyment and are typically located on vacant building lots or on small, irregular pieces of land. Pocket parks typically consist of a mix of planted landscape and paved hardscape areas and include outdoor seating and occasionally playground equipment. Pocket parks are typically informal in their design and provide usable open space in areas where land is limited for establishing larger greens and squares.

Size: A small publicly accessible tract of land (minimally 22 foot width, 1/16–1/8 acre)

Character: The design consists of a mix of landscape and hardscape, providing areas for passive activities. Pocket parks generally are attached on two to three sides with one side open to street and may include blank walls lining park.

Adjacent Ground Floor Uses: retail (restaurants, cafes, and other) at street edge/corner; residential.

Paley Park—New York City

Paley Park—New York City

FDR Memorial, Washington, D.C.

Tanner Springs Park—Portland, OR

Post Office Square—Boston, MA

Park

A park is a large public tract available for active and passive recreation. The landscape generally consists of lawn and trees, informally and naturalistically disposed, and requiring limited maintenance. Parks often accommodate active recreation, including tennis, multipurpose courts, ballfields, garden plots, playgrounds and tot lots, picnic areas, pools and pool houses, community buildings, and similar uses, including parking.

Size: 1 acre minimum, (could range anywhere from 2 to 3 acres to as large as 10 to 20 acres).

Character: Parks should remain mostly natural in character with informal and naturalistic plantings, largely lawn and trees. Limited areas may be more intensely landscaped as appropriate to the intended function of the specific area. Parks should not include excessive amounts of hardscape that will generally appear unoccupied and uninviting.

Surrounding Ground Floor Uses: Typically located at the edge of the neighborhood, connected to the natural areas and with immediate and adjacent access from a public thoroughfare.

Greenway

Greenways are vegetated, linear, and multipurpose parks that incorporate trails and sidepaths. Greenways typically consist of mostly natural landscape. Greenways are designed to connect two or more locations and are generally located near natural corridors such as rivers and streams or man-made corridors such as railroads beds or utility corridors.

Size: A publicly accessible tract of land that varies in size based on location.

Character: The design consists of a natural landscape that acts as a vegetated buffer protecting natural habitats. Trails or sidepaths within the greenway can be paved or unpaved and accommodate a variety of users including bicyclists, walkers, hikers, and joggers.

Adjacent Ground Floor Uses: Varies

Central Park Pond, NY

Park Edge, Dennis Scivally Park

Open Space—Greenway

C.1d Pedestrian Access

The removal of a pedestrian route, even for a short time, may severely limit or totally preclude pedestrian access to employment centers, schools, commercial establishments, etc. Consequently, it is imperative that impacts to existing pedestrian routes be minimized. If an existing pedestrian route is blocked by construction, alteration, maintenance, or other temporary conditions, an alternate route should be provided to maintain the continuity of movement. The existing facility should be replaced with a reasonably safe, convenient, and accessible pathway that replicates, as much as possible, the desirable characteristics of the existing pedestrian facility or route. (An existing pedestrian route may be a sidewalk, a roadway shoulder, or another facility that is recognized as being used by pedestrians.) Completely closing a sidewalk for construction and rerouting pedestrians to the other side of the street should only be done as a last resort. To the maximum extent feasible, the alternate pedestrian route should be provided on the same side of the street as the disrupted route. The alternate route shall be appropriately delineated with directional signs, markings, channelization devices, and barricades. The alternate route shall provide access to existing or temporary transit stops. The alternate route shall comply with SHA's Accessibility Policy & Guidelines for Pedestrian Facilities along state highways.

Acknowledgments

The Maryland-National Capital Park and Planning Commission

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PRINCE GEORGE'S COUNTY MARYLAND

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