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Appendix A:

Travel Monitoring Report

Chapter 1: Travel Trends

Table 1: Average Daily Traffic at MD SHA Permanent Counters

Location	2019	2020	2021	2022	2023	2024	2022-2024 Change	2019-2024 Change
I-270 South of MD 121	111,270	93,772	107,912	110,253	113,230	113,004	2.5%	2%
I-495 at Persimmon Tree Rd	231,287	175,735	205,107	206,953	213,162	212,736	2.8%	-8%
I-495 West of MD 650	215,614	178,006	191,392	190,914	195,956	195,564	2.4%	-9%
I-270 South of Middlebrook Rd	175,352	144,437	166,786	172,134	177,273	177,004	2.8%	1%
Total	733,523	591,950	671,197	680,254	699,621	698,308	2.7%	-5%

Table 2: Travel Time Index on Thrive Growth Corridors at AM/PM Peak, 2015-2024

Growth Corridor	Direction	Peak Hour	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Northbound	AM	1.21	1.15	1.14	1.15	1.21	1.20	1.16	1.10	1.14	1.13
Georgia Avenue	Northbound	PM	1.44	1.36	1.35	1.30	1.35	1.25	1.22	1.21	1.28	1.29
(MD 97) North	Southbound	AM	1.32	1.21	1.20	1.21	1.19	1.13	1.11	1.15	1.18	1.17
	Southbound	PM	1.26	1.19	1.17	1.18	1.21	1.24	1.20	1.22	1.23	1.20
	Northbound	AM	1.28	1.25	1.19	1.16	1.24	1.16	1.17	1.13	1.16	1.18
Georgia Avenue	Northbourid	PM	1.54	1.60	1.58	1.62	1.58	1.25	1.38	1.47	1.55	1.51
(MD 97) South	Southbound	AM	1.35	1.32	1.36	1.33	1.29	1.12	1.20	1.35	1.40	1.40
	Southbound	PM	1.43	1.40	1.43	1.37	1.39	1.27	1.31	1.35	1.39	1.35
	Northbound	AM	1.17	1.14	1.15	1.16	1.14	1.08	1.08	1.08	1.11	1.13
MD OFF North	Northbourid	PM	1.44	1.43	1.42	1.38	1.42	1.15	1.19	1.26	1.30	1.34
MD 355 North	Southbound	AM	1.25	1.24	1.23	1.20	1.20	1.10	1.11	1.13	1.18	1.18
	Southbound	PM	1.25	1.24	1.24	1.20	1.23	1.21	1.19	1.20	1.23	1.20
	N a while le a come al	AM	1.33	1.23	1.16	1.09	1.15	1.13	1.18	1.18	1.21	1.19
MD 355 South	Northbound	PM	1.57	1.46	1.42	1.37	1.46	1.20	1.35	1.42	1.48	1.47
MD 355 South	Southbound	AM	1.41	1.28	1.21	1.17	1.22	1.10	1.23	1.25	1.26	1.21
	Southbound	PM	1.58	1.47	1.37	1.28	1.35	1.23	1.32	1.37	1.38	1.29
	Northbound	AM	1.24	1.15	1.12	1.10	1.08	1.05	1.07	1.04	1.05	1.08
New Hampshire Avenue (MD 650)	INORTHDOUNG	PM	1.52	1.46	1.45	1.43	1.41	1.15	1.26	1.28	1.31	1.34
	Southbound	AM	1.34	1.31	1.21	1.22	1.18	1.10	1.10	1.14	1.23	1.25

Growth Corridor	Direction	Peak Hour	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
		PM	1.36	1.37	1.29	1.26	1.26	1.24	1.22	1.22	1.27	1.31
	Northbound	AM	1.32	1.33	1.27	1.16	1.22	1.17	1.14	1.10	1.18	1.16
Old Georgetown	Northbourid	PM	1.37	1.32	1.26	1.17	1.28	1.21	1.18	1.25	1.20	1.16
Rd (MD 187)	Southbound	AM	1.42	1.35	1.35	1.25	1.31	1.15	1.15	1.11	1.09	1.11
	Southbound	PM	1.41	1.30	1.28	1.19	1.35	1.27	1.21	1.19	1.24	1.29
	Eastbound	AM	1.18	1.15	1.13	1.09	1.13	1.09	1.08	1.06	1.12	1.11
Randolph Road	Lasibouriu	PM	1.32	1.28	1.30	1.23	1.33	1.19	1.20	1.21	1.29	1.27
Nandotpii Noad	Westbound	AM	1.30	1.21	1.22	1.21	1.28	1.10	1.09	1.13	1.20	1.22
	Westbound	PM	1.23	1.17	1.15	1.11	1.15	1.13	1.11	1.12	1.17	1.17
	Northbound	AM	1.30	1.26	1.25	1.23	1.18	1.09	1.10	1.11	1.14	1.12
University Blvd	Northboaria	PM	1.49	1.45	1.42	1.41	1.37	1.30	1.24	1.26	1.18	1.15
(MD 193)	Southbound	AM	1.34	1.27	1.29	1.31	1.25	1.08	1.11	1.07	1.12	1.16
	Southbound	PM	1.39	1.35	1.29	1.28	1.24	1.15	1.19	1.12	1.23	1.25
	Northbound	AM	1.21	1.21	1.17	1.16	1.12	1.04	1.07	1.06	1.10	1.11
US 29 (DC Boundary to MD	Northboaria	PM	1.61	1.48	1.48	1.45	1.38	1.13	1.27	1.33	1.40	1.41
198)	Southbound	AM	1.66	1.54	1.62	1.47	1.47	1.07	1.19	1.39	1.48	1.50
	Couribound	PM	1.43	1.34	1.34	1.28	1.27	1.18	1.21	1.22	1.25	1.25
	Northbound	AM	1.23	1.13	1.17	1.15	1.12	1.09	1.05	1.03	1.10	1.09
Veirs Mill Road	Northboaria	PM	1.39	1.28	1.32	1.30	1.33	1.21	1.16	1.19	1.27	1.27
(MD 586)	Southbound	AM	1.33	1.28	1.29	1.28	1.29	1.08	1.07	1.09	1.15	1.15
	Couribound	PM	1.29	1.23	1.22	1.20	1.20	1.17	1.16	1.16	1.22	1.23
	Eastbound	AM	1.49	1.36	1.30	1.24	1.31	1.11	1.23	1.30	1.10	1.09
River Road		PM	1.28	1.18	1.17	1.11	1.18	1.14	1.21	1.22	1.27	1.27
	Westbound	AM	1.29	1.18	1.16	1.10	1.16	1.10	1.19	1.22	1.15	1.15
	. rootsound	PM	1.48	1.38	1.36	1.34	1.40	1.14	1.29	1.32	1.22	1.23
	Northbound	AM	1.15	1.08	1.09	1.08	1.07	1.04	1.06	1.05	1.12	1.09
Connecticut	. to an bound	PM	1.59	1.51	1.53	1.50	1.46	1.20	1.33	1.35	1.44	1.40
Avenue (MD 185)	Southbound	AM	1.63	1.49	1.46	1.41	1.41	1.13	1.29	1.39	1.42	1.44
	Southbound	PM	1.29	1.22	1.22	1.18	1.21	1.18	1.20	1.18	1.22	1.20

Dark red: TTI greater or equal to 1.6 | Red: TTI between 1.4 and 1.59 | Yellow: TTI between 1.2 and 1.39 | Green: TTI between 1 and 1.19

Table 3: Level of Service for Intersections Counted Between December 2022 and December 2024

Intersection	AM Peak LOS	AM Delay	PM Peak LOS	PM Delay
Battery Lane/Wisconsin Ave	С	31.7	D	43.5
Bethesda Ave/Arlington Road	D	45.2	E	63.6
Bradley Boulevard/Wisconsin Ave	D	38.7	D	45.8
Bradley Lane/Connecticut Ave	С	30	D	52.6
Cedar Lane/Rockville Pike	Е	59	Е	64.8
Chapman Avenue/Bou Avenue (9)	В	13.9	В	17.4
East-West Highway/Connecticut Ave	Е	59.6	D	51.2
East-West Highway/Wisconsin Ave/Old Georgetown Road	С	29.8	D	39.1
Elm Street/Wisconsin Ave	В	15.4	Α	7.6
Forest Glen Road/Woodland Drive	С	34.5	С	33.3
Frederick Rd & Clarksburg Rd	С	32.3	D	45.8
Frederick Rd & Little Seneca Pkwy	С	35	С	29
Frederick Rd & Stringtown Rd	С	32	D	45.8
Frederick Rd & W Old Baltimore Rd	С	22.5	В	17.9
Gateway Center Dr & Clarksburg Rd/Stringtown Rd	D	35.6	С	32.8
Georgia Ave/Forest Glen Road	Α	1.5	Α	1.6
Georgia Ave/Tilton Drive/Bonnywood Lane	Α	0.6	Α	0.6
Georgia Avenue & Cameron Street	В	14.7	С	34
Georgia Avenue and Colesville Road	С	23	С	31.5
Huntington Parkway/Bradley Boulevard	В	18.6	С	26.2
Jones Bridge Road/Rockville Pike	D	42.4	E	70.5
Josiah Henson Parkway/Randolph Road/Chapman Avenue (16)	В	10	С	22.3
Leland Street/Wisconsin Ave	С	20.4	В	12.2
Little Falls Parkway/Arlington Road	В	16.9	В	19.7
Little Falls Parkway/Hillandale Road	Α	9.7	Α	9.6
MD 198 / Old Columbia Pike / Spencerville Rd (4)	В	16.4	С	24.4
MD 198 / US 29 NB On/Off Ramp (1)	С	24.6	С	32.3
MD 198 / US 29 SB On/Off Ramp (2)	D	35.1	С	35
MD 97 and Emory Church Road	В	19.8	N/A	N/A
MD 97 and Emory Lane	С	33.5	N/A	N/A
Montgomery Avenue/Wisconsin Ave	С	26.1	С	30.6

Intersection	AM Peak LOS	AM Delay	PM Peak LOS	PM Delay
Muncaster Mill Road / Redland Road	D	37.7	D	45.5
Nebel Street/Randolph Road (14)	С	22.8	D	39.9
New Hampshire Avenue/Northampton Drive (2)	С	20.8	В	17
Observation Dr & Ridge Rd	D	54.5	D	44.4
Old Columbia Pike / Greencastle Road (7)	В	10.8	А	9.6
Old Columbia Pike / National Drive/Shopping Center (3)	Α	8.5	В	12.8
River Road (MD-190) / Royal Dominion Drive	N/A	N/A	D	49.5
Rock Spring Drive/Fernwood Road/Marriott Drive (6)	В	14.5	E	71.8
Rock Spring Drive/Rockledge Drive (5)	D	43.2	С	24
Rockledge Boulevard/I-270 Ramp North (9)	D	42.3	С	32.9
Rockledge Boulevard/I-270 Ramp South (8)	В	18.3	С	26.1
Rockledge Drive/Rock Forest Drive/Rockledge Boulevard (2)	В	18.8	С	28
Rockville Pike/Bou Avenue (1)	С	28.4	С	29.6
Rockville Pike/Federal Plaza Driveway (2)	Α	4	А	9.4
Rockville Pike/Halpine Road (12)	В	11.9	В	16.1
Rockville Pike/Hubbard Drive/Montrose Crossing (15)	Α	8.5	С	23.1
Rockville Pike/Rollins Avenue/Twinbrook Avenue (4)	В	18.3	С	20.5
Sherwood Road/Woodland Drive	Α	2.1	А	1.2
Tilton Drive/Woodland Drive	Α	7.2	А	7.3
Twinbrook Avenue/Chapman Avenue (5)	D	35.5	E	57.5
Twinbrook Parkway/Parklawn Drive (13)	С	20.8	С	31.2
West Cedar Lane/Old Georgetown Road	D	38.7	С	29.7
Westlake Terrace/Fernwood Road/Rockledge Drive (1)	D	35.8	В	20
Westlake Terrace/I-270 Spur Ramp (7)	Α	7.3	А	6.6
Wilson Lane/Old Georgetown Road	D	49.5	E	56.1
Wisconsin Avenue/Cordell Avenue (3)	Α	6	А	8.5

Chapter 2: Thrive Montgomery 2050 Growth Corridors

Grid of Streets

Table 4: Ratios of Actual Blocks to Desired Blocks by Area

CSDG Area Name	Area Type	Actual Blocks	Desired Blocks	Ratio
16th Street Station Town Center	Town Center	5	11	45%
Ashton Town Center	Town Center	6	7	84%
Aspen Hill Town Center	Town Center	5	17	29%
Briggs Chaney Town Center	Town Center	5	47	11%
Burnt Mills Town Center	Town Center	4	3	141%
Burtonsville Town Center	Town Center	7	14	50%
Cabin Branch Town Center	Town Center	48	78	62%
Chevy Chase Lake Town Center	Town Center	7	12	56%
Clarksburg Town Center	Town Center	43	112	39%
Cloverly Town Center	Town Center	3	3	102%
Colesville Town Center	Town Center	5	4	116%
Damascus Town Center	Town Center	9	39	23%
Downtown Bethesda	Downtown	82	82	100%
Downtown Friendship Heights	Downtown	11	23	47%
Downtown Life Sciences / FDA Village	Downtown	5	199	3%
Downtown Life Sciences Center	Downtown	22	157	14%
Downtown Rock Spring	Downtown	20	111	18%
Downtown Silver Spring	Downtown	60	80	75%
Downtown Wheaton	Downtown	36	50	72%
Downtown White Flint	Downtown	43	158	27%
Downtown White Oak West	Downtown	5	9	55%
Ethan Allen Avenue Gateway Town Center	Town Center	3	1	220%
Fairland Town Center	Town Center	5	20	26%
Forest Glen Town Center	Town Center	10	9	105%
Four Corners Town Center	Town Center	6	3	230%
Foxchapel Town Center	Town Center	6	12	50%
Germantown Town Center	Town Center	47	127	37%
Glenmont Town Center	Town Center	9	29	31%
Grosvenor Town Center	Town Center	3	6	52%
Hillandale Town Center	Town Center	4	16	25%
Hyattstown Town Center	Town Center	7	6	116%
Kensington Town Center	Town Center	31	20	153%
Layhill Town Center	Town Center	8	14	59%

CSDG Area Name	Area Type	Actual Blocks	Desired Blocks	Ratio
Long Branch Town Center	Town Center	12	17	72%
Lower Village Town Center	Town Center	11	30	36%
Lyttonsville Town Center	Town Center	5	9	56%
Maryland Gateway Town Center	Town Center	2	2	122%
Milestone Town Center	Town Center	21	57	37%
Montgomery Hills Town Center	Town Center	14	3	464%
Montgomery Village Town Center	Town Center	15	9	169%
Olney Town Center	Town Center	18	19	96%
Park Potomac Town Center	Town Center	9	8	110%
Potomac Town Center	Town Center	5	4	118%
Randolph Hills Town Center	Town Center	9	19	48%
Redland Town Center	Town Center	6	7	82%
Rock Creek Village Town Center	Town Center	5	11	44%
Sandy Spring Town Center	Town Center	5	10	51%
Shady Grove Town Center	Town Center	27	71	38%
Takoma Junction Town Center	Town Center	3	1	462%
Takoma Langley Crossroads Town Center	Town Center	6	10	62%
Takoma Old Town Town Center	Town Center	5	2	236%
Traville / USG Town Center	Town Center	13	44	30%
Twinbrook Town Center	Town Center	15	33	45%
Veirs Mill - Randolph Town Center	Town Center	4	6	65%
Washingtonian Town Center	Town Center	3	9	34%
Westbard Town Center	Town Center	8	30	26%
White Oak Town Center	Town Center	14	46	30%

Pedestrian Network Comfort

Table 5: Summary of Pedestrian Network Comfort Levels

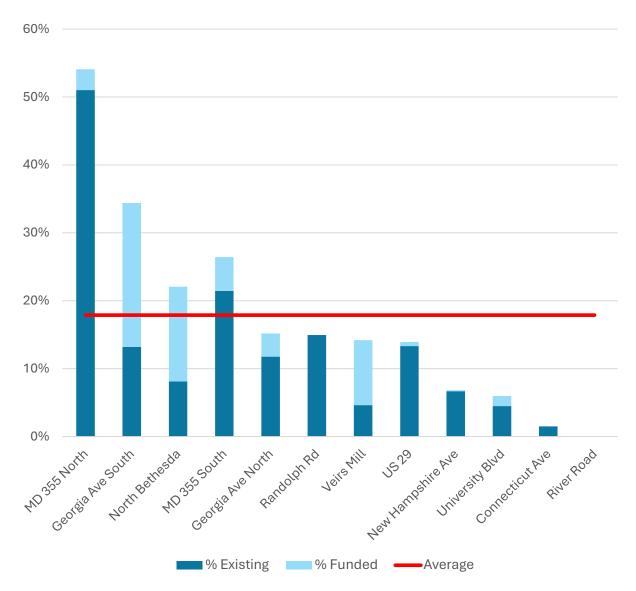
CSDG Area	% Acceptable	% Unacceptable	% Gap
Connecticut Ave	32%	68%	0%
Aspen Hill Town Center	0%	95%	5%
Suburban 3	43%	57%	0%
Kensington Town Center	16%	84%	0%
Suburban 2	5%	95%	0%
Chevy Chase Lake Town Center	26%	74%	0%
Suburban 1	65%	35%	0%
Georgia Ave North	21%	78%	1%
Olney Town Center	5%	95%	0%
Suburban 3	15%	84%	1%
Aspen Hill Town Center	3%	97%	0%
Suburban 2	6%	91%	3%
Glenmont Town Center	24%	76%	0%
Suburban 1	34%	66%	0%
Downtown Wheaton	69%	31%	0%
Georgia Ave South	40%	60%	0%
Downtown Wheaton	34%	66%	0%
Suburban 2	29%	71%	0%
Forest Glen Town Center	18%	82%	0%
Montgomery Hills Town Center	22%	78%	0%
Suburban 1	5%	95%	0%
Downtown Silver Spring	94%	6%	0%
MD 355 North	13%	74%	13%
Clarksburg Town Center	21%	52%	27%
Suburban 3	13%	59%	28%
Milestone Town Center	0%	100%	0%
Suburban 2	15%	85%	0%
Foxchapel Town Center	0%	100%	0%
Suburban 1	24%	76%	0%
Shady Grove Town Center	0%	100%	0%
Gude Drive Industrial Area	1%	99%	0%
MD 355 South	38%	60%	2%
Downtown North Bethesda	18%	82%	0%
Suburban 2	14%	82%	4%
Downtown Bethesda	80%	20%	0%
Suburban 1	53%	47%	0%
Downtown Friendship Heights	81%	19%	0%

CSDG Area	% Acceptable	% Unacceptable	% Gap
New Hampshire Ave	14%	82%	5%
Colesville Town Center	0%	100%	0%
Suburban 4	4%	92%	4%
White Oak Town Center	13%	87%	0%
Suburban 3	26%	74%	0%
Hillandale Town Center	0%	100%	0%
Suburban 2	22%	56%	22%
Takoma Langley Crossroads Town Center	2%	98%	0%
Suburban 1	47%	53%	0%
Ethan Allen Avenue Gateway Town Center	17%	83%	0%
Maryland Gateway Town Center	0%	100%	0%
Old Georgetown Rd	31%	69%	0%
Downtown North Bethesda	50%	50%	0%
Suburban 1	26%	74%	0%
Downtown Rock Spring	27%	73%	0%
Randolph Rd	17%	83%	0%
Downtown North Bethesda	34%	66%	0%
Randolph Hills Town Center	30%	70%	0%
Suburban 4	1%	99%	0%
Veirs Mill - Randolph Town Center	0%	100%	0%
Suburban 3	0%	100%	0%
Glenmont Town Center	19%	81%	0%
Suburban 2	48%	52%	0%
Colesville Town Center	3%	97%	0%
Suburban 1	31%	69%	0%
Downtown White Oak West	20%	80%	0%
River Rd	1%	38%	61%
Suburban 2	1%	10%	89%
Westbard Town Center	4%	96%	0%
Suburban 1	1%	99%	0%
University Blvd	37%	63%	0%
Kensington Town Center	8%	92%	0%
Downtown Wheaton	34%	66%	0%
Suburban 2	76%	24%	0%
Four Corners Town Center	0%	100%	0%
Suburban 1	18%	82%	0%
Long Branch Town Center	8%	92%	0%
Takoma Langley Crossroads Town Center	7%	93%	0%
US 29	25%	49%	27%
Burtonsville Town Center	52%	48%	0%

CSDG Area	% Acceptable	% Unacceptable	% Gap
Briggs Chaney Town Center	0%	76%	24%
Suburban 5	36%	12%	53%
Fairland Town Center	0%	6%	94%
Suburban 4	35%	6%	59%
Downtown Life Sciences / FDA Village	22%	69%	8%
Downtown White Oak West	8%	15%	77%
White Oak Town Center	45%	39%	16%
Suburban 3	13%	36%	51%
Burnt Mills Town Center	38%	62%	0%
Suburban 2	2%	75%	24%
Four Corners Town Center	10%	90%	0%
Suburban 1	15%	85%	0%
Downtown Silver Spring	78%	22%	0%
Veirs Mill	16%	58%	26%
Twinbrook Town Center	0%	83%	17%
Suburban 2	2%	52%	46%
Veirs Mill - Randolph Town Center	26%	74%	0%
Suburban 1	25%	58%	17%
Downtown Wheaton	36%	64%	0%
Total	24%	67%	9%

Bicycle Network Completeness

Figure 1: Forthcoming Network Completeness by Growth Corridor



Chapter 3: Bicycle Master Plan

Bicycling Rates

Bicycling Rates to Transportation Management Districts

Table 6: Objective 1.2: Percentage of people who commute by bicycle to a Transportation Management District

Transportation Management District	2018	2020	2022	2023
Downtown Bethesda	0.7%	0.8%	1.4%	1.4%
Downtown Silver Spring	1.4%	1.8%	1.6%	1.6%
Friendship Heights	1.4%	0.4%	0.6%	0.6%
Greater Shady Grove	1.5%	0.0%	0.1%	0.4%
North Bethesda	1.0%	0.3%	0.4%	0.4%
White Oak	N/A	N/A	0.4%	0.7%

Network Connectivity

Countywide Connectivity

Table 7: Objective 2.1: Percentage of potential bicycle trips that will be able to be made on a low-stress bicycling network by policy area

Policy Area	12/2018	12/2022	12/2024	Under Construction 12/2024	Programmed & Approved 12/2024	Planned
Aspen Hill	27%	21%	28%	29%	29%	29%
Bethesda CBD	3%	9%	4%	5%	6%	12%
Bethesda/Chevy Chase	24%	28%	30%	33%	35%	38%
Burtonsville Town Center	0%	2%	0%	0%	0%	0%
Chevy Chase Lake	0%	4%	4%	4%	34%	38%
Clarksburg East	16%	18%	23%	26%	26%	28%
Clarksburg Town Center	23%	24%	31%	52%	52%	64%
Clarksburg West	9%	0%	10%	10%	10%	10%
Cloverly	10%	9%	10%	10%	10%	11%
Colesville	13%	0%	13%	13%	13%	13%
Damascus	17%	19%	17%	17%	17%	17%
Derwood	5%	5%	5%	5%	5%	5%
Fairland/Briggs Chaney	18%	24%	18%	22%	22%	22%
Forest Glen	24%	15%	29%	30%	30%	39%
Friendship Heights	1%	14%	1%	1%	1%	1%
Germantown East	28%	4%	28%	30%	30%	31%
Germantown Town Center	7%	18%	9%	9%	9%	9%
Germantown West	22%	15%	23%	24%	24%	25%
Glenmont	12%	18%	13%	13%	13%	13%
Great Seneca Communities	13%	14%	14%	15%	15%	15%
Great Seneca Life Sciences Center	10%	0%	10%	11%	11%	45%
Grosvenor	5%	21%	6%	6%	6%	6%
Kensington/Wheaton	23%	3%	23%	24%	24%	26%

Policy Area	12/2018	12/2022	12/2024	Under Construction 12/2024	Programmed & Approved 12/2024	Planned
Lyttonsville	20%	22%	20%	20%	43%	52%
Medical Center	22%	29%	39%	42%	47%	48%
Montgomery Village/Airpark	4%	48%	4%	4%	4%	5%
North Bethesda	9%	4%	10%	10%	10%	10%
North Bethesda Metro Station	1%	7%	2%	2%	2%	2%
North Potomac	17%	4%	17%	20%	20%	20%
Olney	29%	22%	32%	32%	32%	34%
Olney Town Center	28%	21%	30%	30%	30%	32%
Potomac	11%	0%	11%	12%	12%	13%
Purple Line East	26%	11%	27%	27%	32%	37%
Rock Spring	0%	0%	0%	0%	0%	1%
Rural East	5%	0%	7%	7%	8%	10%
Rural West	15%	7%	15%	15%	15%	15%
Shady Grove	7%	22%	7%	7%	7%	7%
Silver Spring CBD	4%	12%	10%	9%	15%	29%
Silver Spring/Takoma Park	29%	7%	32%	33%	35%	43%
Takoma	41%	25%	41%	41%	41%	46%
Twinbrook	0%	33%	0%	0%	0%	0%
Wheaton CBD	6%	1%	7%	7%	7%	11%
White Oak	17%	11%	17%	17%	17%	17%
White Oak Downtown	0%	7%	0%	0%	0%	0%
Woodside	5%	0%	8%	16%	21%	24%
Total	16%	15%	17%	18%	19%	22%

Connectivity to Red Line Stations

Table 8: Objective 2.2: Percentage of dwelling units within two miles of each Red Line station that are connected to the transit station on a low-stress bicycling network

Red Line Station	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Bethesda	0%	2%	6%	6%	27%	87%
Forest Glen	11%	11%	15%	14%	14%	91%
Friendship Heights	0%	0%	0%	0%	0%	77%
Glenmont	32%	33%	37%	37%	37%	98%
Grosvenor- Strathmore	18%	18%	16%	16%	15%	74%
Medical Center	8%	23%	37%	44%	51%	92%
North Bethesda	0%	0%	0%	0%	0%	83%
Shady Grove	7%	8%	12%	12%	12%	86%
Silver Spring	1%	4%	14%	42%	63%	93%
Takoma	22%	22%	29%	29%	62%	90%
Wheaton	0%	0%	0%	0%	0%	99%
Total	8%	10%	15%	19%	28%	89%

Connectivity to Brunswick Line Stations

Table 9: Objective 2.2: Percentage of dwelling units within two miles of each Brunswick Line station that are connected to the transit station on a low-stress bicycling network

MARC Station	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Barnesville	0%	0%	0%	0%	0%	0%
Boyds	3%	3%	3%	3%	3%	20%
Dickerson	16%	16%	16%	16%	16%	16%
Garrett Park	40%	40%	40%	40%	40%	94%
Germantown	17%	16%	16%	16%	16%	82%
Kensington	31%	31%	31%	31%	34%	87%
Silver Spring	3%	2%	0%	35%	53%	91%
Washington Grove	6%	6%	6%	6%	6%	20%
Total	18%	18%	17%	27%	32%	77%

Connectivity to Purple Line Stations

Table 10: Objective 2.2: Percentage of dwelling units within two miles of each Purple Line station that are connected to the transit station on a low-stress bicycling network

Purple Line Station	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Bethesda	0%	0%	0%	0%	27%	83%
Connecticut Avenue	0%	0%	0%	28%	45%	88%
Dale Drive	0%	46%	47%	55%	63%	93%
Long Branch	0%	0%	0%	0%	0%	92%
Lyttonsville	0%	1%	1%	35%	43%	89%
Manchester Place	33%	34%	35%	39%	45%	93%
Piney Branch Road	0%	0%	0%	0%	0%	88%
Silver Spring Library	0%	0%	0%	0%	67%	94%
Silver Spring Transit Center	0%	12%	12%	38%	56%	88%
Takoma-Langley Transit Center	0%	0%	0%	0%	0%	90%
Woodside	0%	0%	0%	0%	0%	86%
Total	4%	11%	11%	19%	34%	90%

Connectivity to U.S. 29 FLASH Stations

Table 11: Objective 2.2: Percentage of dwelling units within two miles of each U.S. 29 FLASH station that are connected to the transit station on a low-stress bicycling network

U.S. 29 FLASH Stations	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
April Lane (NB)	0%	29%	29%	29%	30%	99%
April Lane (SB)	0%	29%	29%	29%	30%	99%
Briggs Chaney Park & Ride	37%	37%	60%	60%	60%	95%
Burnt Mills (NB)	0%	0%	0%	0%	0%	95%
Burnt Mills (SB)	0%	0%	0%	0%	0%	95%
Burtonsville Park & Ride	0%	0%	0%	0%	0%	94%
Castle Blvd	0%	6%	6%	6%	6%	96%
Fenton St (NB)	0%	0%	0%	0%	0%	0%
Fenton St (SB)	0%	0%	0%	0%	0%	0%
Four Corners (NB)	3%	37%	39%	39%	43%	93%
Four Corners (SB)	0%	0%	0%	0%	0%	0%
Oak Leaf (NB)	0%	0%	0%	0%	0%	91%
Oak Leaf (SB)	0%	19%	19%	19%	17%	90%
Silver Spring Transit Center	0%	12%	12%	38%	56%	88%
Tech Road (NB)	0%	0%	0%	0%	0%	96%
Tech Road (SB)	0%	0%	0%	0%	0%	96%
White Oak (NB)	0%	0%	0%	0%	0%	85%
White Oak (SB)	0%	0%	0%	0%	0%	0%
Total	2%	12%	13%	17%	21%	60%

Connectivity to Elementary Schools

Table 12: Objective 2.3: Percentage of dwelling units within one mile of elementary schools that are connected to the schools on a very low-stress bicycling network.

Elementary School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Arcola ES	77%	74%	77%	77%	49%	91%
Ashburton ES	52%	52%	52%	52%	52%	69%
Bannockburn ES	17%	17%	17%	17%	17%	17%
Barnsley ES	92%	92%	92%	92%	92%	84%
Bayard Rustin ES	37%	37%	37%	37%	37%	31%
Bel Pre ES	0%	0%	0%	0%	0%	83%
Bells Mill ES	95%	95%	95%	95%	95%	98%
Belmont ES	100%	100%	100%	100%	100%	100%
Bethesda ES	16%	12%	13%	13%	10%	13%
Beverly Farms ES	82%	82%	82%	82%	82%	99%
Bradley Hills ES	79%	79%	79%	79%	79%	86%
Brooke Grove ES	21%	21%	21%	21%	21%	78%
Brookhaven ES	0%	0%	0%	0%	0%	100%
Burning Tree ES	42%	42%	42%	42%	41%	43%
Burnt Mills ES	13%	13%	13%	13%	13%	12%
Burtonsville ES	0%	0%	0%	0%	0%	12%
Candlewood ES	35%	35%	35%	35%	35%	19%
Cannon Road ES	100%	100%	100%	100%	100%	87%
Carderock Springs ES	65%	65%	65%	65%	65%	87%
Cashell ES	58%	58%	58%	58%	58%	67%
Cedar Grove ES	0%	0%	0%	0%	0%	0%
Chevy Chase ES	37%	37%	37%	37%	38%	41%
Clarksburg ES	100%	35%	35%	35%	35%	99%
Clearspring ES	54%	54%	54%	54%	54%	45%
Clopper Mill ES	0%	0%	0%	0%	0%	71%
Cloverly ES	0%	0%	0%	0%	0%	78%
Cold Spring ES	92%	92%	92%	92%	92%	93%
Cresthaven ES	94%	94%	94%	94%	94%	50%

Elementary School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Daly ES	1%	1%	1%	1%	1%	3%
Damascus ES	0%	0%	0%	0%	0%	10%
Darnestown ES	100%	100%	100%	100%	100%	100%
Drew ES	95%	95%	95%	95%	95%	77%
Dufief ES	81%	81%	81%	81%	81%	78%
East Silver Spring ES	50%	71%	71%	71%	90%	65%
Fairland ES	100%	100%	100%	100%	100%	100%
Farmland ES	56%	58%	58%	58%	58%	52%
Fields Road ES	0%	0%	0%	0%	0%	0%
Flower Hill ES	100%	100%	100%	100%	100%	95%
Flower Valley ES	67%	67%	67%	67%	67%	87%
Forest Knolls ES	99%	99%	99%	99%	99%	100%
Fox Chapel ES	45%	45%	45%	45%	39%	40%
Galway ES	48%	48%	48%	48%	48%	63%
Garrett Park ES	67%	66%	66%	66%	66%	80%
Georgian Forest ES	53%	53%	53%	53%	53%	67%
Germantown ES	72%	72%	72%	72%	72%	71%
Glen Haven ES	99%	99%	99%	99%	99%	100%
Glenallan ES	25%	28%	28%	28%	28%	45%
Goshen ES	20%	20%	20%	20%	20%	44%
Great Seneca Creek ES	32%	32%	32%	32%	32%	42%
Greencastle ES	70%	70%	70%	70%	70%	94%
Greenwood ES	62%	62%	62%	62%	62%	94%
Harmony Hills ES	80%	80%	80%	80%	80%	88%
Harriett Tubman ES	4%	4%	4%	4%	4%	3%
Highland ES	91%	91%	91%	91%	91%	93%
Highland View ES	95%	95%	95%	95%	95%	98%
Jackson Road ES	100%	100%	100%	100%	100%	74%
JoAnn Leleck ES	70%	70%	70%	70%	70%	57%
Jones Lane ES	5%	5%	5%	5%	5%	19%

Elementary School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Kemp Mill ES	94%	94%	94%	94%	94%	94%
Kensington-Parkwood ES	96%	96%	96%	96%	96%	93%
Lake Seneca ES	94%	94%	94%	94%	94%	99%
Laytonsville ES	0%	0%	0%	0%	0%	0%
Little Bennett ES	92%	83%	87%	87%	88%	98%
Luxmanor ES	0%	28%	28%	28%	22%	20%
Marshall ES	97%	97%	97%	97%	97%	76%
McAuliffe ES	26%	26%	26%	26%	26%	21%
McNair ES	25%	25%	25%	25%	25%	37%
Mill Creek Towne ES	100%	100%	100%	100%	100%	67%
Monocacy ES	0%	0%	0%	0%	0%	0%
Montgomery Knolls ES	100%	89%	89%	89%	89%	77%
New Hampshire Estates ES	52%	52%	52%	52%	52%	74%
North Chevy Chase ES	0%	0%	9%	9%	4%	66%
Oak View ES	94%	94%	94%	94%	94%	87%
Oakland Terrace ES	97%	97%	97%	97%	97%	96%
Olney ES	81%	82%	82%	82%	82%	89%
Page ES	90%	76%	76%	76%	76%	79%
Pine Crest ES	91%	40%	39%	39%	39%	40%
Piney Branch ES	58%	61%	61%	61%	61%	92%
Poolesville ES	37%	37%	37%	37%	37%	37%
Potomac ES	100%	100%	100%	100%	100%	22%
Resnik ES	64%	64%	64%	64%	64%	64%
Ride ES	93%	93%	93%	93%	93%	93%
Rock Creek Forest ES	16%	16%	16%	16%	34%	16%
Rock Creek Valley ES	93%	93%	93%	93%	93%	93%
Rock View ES	99%	99%	99%	99%	99%	95%
Rockwell ES	26%	24%	24%	24%	24%	78%
Rolling Terrace ES	87%	87%	87%	87%	99%	100%
Roscoe R. Nix ES	46%	46%	46%	46%	46%	31%

Elementary School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Rosemary Hills ES	99%	98%	98%	98%	100%	100%
Sargent Shriver ES	59%	59%	59%	59%	59%	63%
Sequoyah ES	100%	100%	100%	100%	69%	45%
Seven Locks ES	100%	100%	100%	100%	100%	58%
Sherwood ES	100%	100%	100%	100%	100%	43%
Flora M. Singer ES	51%	51%	51%	51%	38%	89%
Sligo Creek ES	36%	40%	40%	40%	37%	66%
Snowden Farm ES	86%	86%	86%	86%	86%	86%
Somerset ES	58%	50%	50%	50%	47%	44%
South Lake ES	100%	100%	100%	100%	100%	74%
Stedwick ES	94%	94%	94%	94%	94%	100%
Stone Mill ES	72%	72%	72%	72%	69%	73%
Stonegate ES	100%	100%	100%	100%	99%	92%
Spark M. Matsunaga ES	48%	48%	48%	48%	48%	94%
Strathmore ES	44%	44%	44%	44%	44%	45%
Strawberry Knoll ES	54%	53%	53%	53%	53%	92%
Takoma Park ES	54%	54%	54%	54%	54%	74%
Travilah ES	4%	0%	0%	0%	0%	51%
Viers Mill ES	97%	97%	97%	97%	97%	98%
Washington Grove ES	96%	96%	96%	96%	96%	25%
Waters Landing ES	36%	38%	38%	38%	38%	70%
Watkins Mill ES	91%	91%	91%	91%	91%	40%
Wayside ES	60%	60%	60%	60%	60%	62%
Weller Road ES	70%	70%	70%	70%	70%	69%
Westbrook ES	69%	69%	99%	99%	99%	28%
Westover ES	98%	98%	98%	98%	98%	69%
Wheaton Woods ES	91%	91%	91%	91%	91%	85%
Whetstone ES	100%	100%	100%	100%	100%	85%
William B. Gibbs Jr. ES	3%	3%	3%	3%	3%	97%
Wilson Wims ES	62%	62%	62%	62%	62%	57%

Elementary School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Wood Acres ES	75%	75%	56%	56%	46%	45%
Woodfield ES	83%	83%	83%	83%	83%	73%
Woodlin ES	44%	44%	15%	15%	14%	82%
Wyngate ES	78%	77%	77%	77%	77%	79%
Total	59%	58%	58%	58%	57%	64%
Equity Focus Area	59%	58%	59%	59%	57%	64%
Non-Equity Focus Area	59%	58%	57%	57%	56%	64%

Connectivity to Middle Schools

Table 13: Objective 2.3: Percentage of dwelling units within 1.5 miles of middle schools that are connected to the schools on a very low-stress bicycling network

Middle School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Argyle	21%	19%	19%	19%	19%	47%
Baker	100%	4%	4%	4%	4%	12%
Banneker	4%	4%	4%	4%	4%	54%
Briggs Chaney	79%	79%	84%	84%	84%	80%
Cabin John	92%	92%	92%	92%	92%	85%
Clemente	11%	11%	11%	11%	11%	68%
Eastern	44%	32%	32%	32%	33%	74%
Farquhar	24%	26%	26%	26%	23%	15%
Hallie Wells	70%	70%	70%	70%	70%	70%
Hoover	56%	56%	56%	56%	56%	89%
Key	41%	41%	41%	41%	41%	18%
King	63%	64%	64%	64%	64%	79%
Kingsview	0%	0%	0%	0%	0%	13%
Loiederman	58%	58%	58%	58%	58%	70%
Montgomery Village	73%	73%	73%	73%	73%	66%
Neelsville	0%	0%	0%	0%	0%	0%
Newport Mill	95%	95%	95%	95%	95%	91%
North Bethesda	20%	20%	20%	20%	20%	56%
Parkland	81%	81%	81%	81%	81%	93%
Poole	59%	59%	59%	59%	59%	59%
Pyle	34%	37%	37%	37%	37%	58%
Redland	24%	24%	24%	24%	24%	9%
Ridgeview	86%	86%	86%	86%	86%	76%
Rocky Hill	64%	52%	52%	53%	50%	79%
Rosa Parks	63%	63%	63%	63%	63%	93%

Middle School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Shady Grove	0%	0%	0%	0%	0%	0%
Shannon	56%	54%	57%	57%	44%	49%
Silver Creek	41%	39%	39%	57%	57%	70%
Silver Spring International	2%	44%	49%	76%	67%	70%
Sligo	53%	62%	58%	58%	65%	93%
Takoma Park	63%	64%	64%	64%	74%	77%
Tilden	52%	44%	41%	39%	33%	19%
Westland	0%	0%	0%	0%	0%	30%
White Oak	93%	93%	93%	93%	93%	63%
Wood	78%	78%	77%	77%	77%	92%
Total	45%	46%	46%	48%	47%	58%
Equity Focus Area	43%	41%	43%	43%	37%	49%
Non-Equity Focus Area	45%	46%	47%	49%	49%	60%

Connectivity to High Schools

Table 14: Objective 2.3: Percentage of dwelling units within two miles of high schools that are connected to the schools on a very low-stress bicycling network

High School	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Bethesda-Chevy Chase	95%	29%	28%	59%	48%	41%
Blair	0%	0%	0%	0%	0%	59%
Blake	98%	98%	98%	98%	97%	58%
Churchill	65%	65%	65%	65%	65%	89%
Clarksburg	50%	48%	47%	47%	45%	87%
Damascus	100%	100%	100%	100%	100%	10%
Einstein	91%	93%	93%	93%	92%	88%
Kennedy	91%	90%	90%	90%	90%	45%
Magruder	6%	6%	6%	6%	6%	6%
Northwest	34%	34%	34%	34%	34%	30%
Northwood	82%	87%	91%	91%	91%	82%
Paint Branch	0%	0%	0%	0%	0%	72%
Poolesville	51%	51%	51%	51%	51%	51%
Quince Orchard	0%	0%	0%	0%	0%	24%
Seneca Valley	0%	22%	22%	22%	22%	74%
Sherwood	81%	81%	81%	81%	81%	16%
Springbrook	34%	34%	34%	34%	34%	2%
Walter Johnson	14%	9%	9%	9%	9%	35%
Watkins Mill	3%	3%	3%	3%	3%	65%
Wheaton	38%	38%	38%	38%	35%	69%
Whitman	25%	28%	29%	29%	29%	44%
Total	39%	35%	36%	39%	38%	54%
Equity Focus Area	43%	42%	43%	43%	43%	65%
Non-Equity Focus Area	32%	27%	27%	35%	32%	43%

Connectivity to Public Libraries

Table 15: Objective 2.4: Percentage of dwelling units within two miles of public libraries that are connected to the public library on a low-stress bicycling network

Public Library	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Aspen Hill	0%	0%	0%	0%	0%	90%
Bethesda (Connie Morella)	19%	20%	20%	20%	20%	85%
Chevy Chase	1%	1%	1%	1%	1%	82%
Damascus	2%	2%	2%	2%	2%	69%
Davis	9%	9%	9%	9%	9%	93%
Fairland (Marilyn J Praisner)	0%	0%	0%	0%	0%	85%
Germantown	3%	10%	10%	10%	10%	61%
Kensington Park	0%	0%	0%	0%	0%	91%
Little Falls	0%	0%	0%	0%	0%	78%
Long Branch	38%	37%	38%	39%	45%	92%
Noyes Children's	22%	22%	22%	22%	22%	78%
Olney	48%	54%	54%	54%	54%	93%
Poolesville (Maggie Nightingale)	12%	11%	11%	11%	11%	11%
Potomac	25%	25%	28%	28%	28%	89%
Quince Orchard	0%	0%	0%	0%	0%	0%
Silver Spring	0%	0%	0%	0%	65%	92%
Wheaton	0%	0%	0%	0%	0%	96%
White Oak	17%	17%	17%	17%	18%	99%
Total	10%	11%	11%	11%	19%	84%

Connectivity to Recreation Centers

Table 16: Objective 2.4: Percentage of dwelling units within two miles of recreation centers that are connected to the recreation centers on a low-stress bicycling network

Recreation Center	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Bauer Drive Recreation Center	0%	0%	0%	0%	0%	90%
Clara Barton Recreation Center	37%	48%	48%	48%	48%	96%
Damascus Community Recreation Center	0%	19%	19%	21%	21%	46%
East County Community Recreation Center	37%	37%	60%	60%	60%	95%
Fairland (Marilyn J Praisner Community) Recreation Center	1%	1%	1%	1%	1%	89%
Germantown Recreation Center	0%	0%	0%	0%	0%	84%
Good Hope Neighborhood Rec Center (RENOVATION)	0%	0%	0%	0%	0%	81%
Gwendolyn E Coffield Recreation Center	21%	16%	17%	55%	55%	91%
Heffner Park Community Center	42%	42%	41%	59%	59%	93%
Lake Marion Community Center	0%	0%	0%	0%	0%	46%
Leland (Jane E Lawton) Center	8%	8%	8%	33%	33%	86%
Long Branch Community Recreation Center	36%	36%	36%	41%	41%	91%
Longwood Community Recreation Center	50%	50%	50%	50%	50%	90%
Mid County Community Center	16%	17%	17%	17%	17%	80%
North Creek Community Center	14%	17%	17%	17%	17%	68%
North Potomac (Nancy H Dacek) Recreation Center	22%	22%	22%	24%	24%	53%
Plum Gar Neighborhood Recreation Center	30%	30%	29%	29%	29%	86%
Potomac Community Recreation Center	27%	27%	27%	27%	27%	91%

Recreation Center	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Scotland Neighborhood Recreation Center	2%	2%	2%	2%	2%	2%
Stedwick Community Center	7%	7%	7%	7%	7%	76%
Takoma Park Recreation Center	60%	60%	60%	60%	60%	96%
Upper County Neighborhood Recreation Center	0%	0%	0%	0%	0%	42%
Wheaton Community Recreation Center	21%	21%	21%	22%	22%	97%
Whetstone Community Center	3%	3%	3%	3%	3%	59%
White Oak Community Recreation Center	34%	34%	34%	36%	36%	99%
Total	23%	22%	22%	26%	31%	79%

Connectivity to Regional / Recreational Parks

Table 17: Objective 2.4: Percentage of dwelling units within two miles of regional/recreational parks that are connected to the parks on a low-stress bicycling network

Recreation Center	12/2018	12/2022	12/2024	Under Construction 12/2024	Funded & Approved 12/2024	Planned
Black Hill Regional Park	31%	26%	26%	26%	25%	94%
Cabin John Regional Park	0%	0%	0%	0%	0%	80%
Damascus Recreational Park	67%	69%	69%	69%	69%	83%
Fairland Recreational Park	31%	31%	61%	61%	61%	97%
Laytonia Recreational Park	0%	0%	0%	0%	0%	0%
Little Bennett Regional Park	3%	1%	1%	1%	1%	1%
MLK Jr. Recreational Park	29%	30%	30%	30%	31%	99%
Northwest Branch Recreational Park	13%	13%	13%	13%	13%	87%
Olney Manor Recreational Park	33%	34%	34%	34%	34%	84%
Ovid Hazen Wells Recreational Park	61%	64%	67%	66%	66%	71%
Ridge Road Recreational Park	32%	31%	33%	33%	32%	77%
Rock Creek Regional Park	36%	42%	43%	46%	48%	63%
South Germantown Recreational Park	47%	47%	47%	47%	47%	78%
Wheaton Regional Park	32%	32%	32%	32%	44%	95%
Total	29%	30%	32%	32%	35%	81%

Secure Bike Parking at Destinations

Bicycle Parking at Public Facilities

Table 18: Number of Existing Bicycle Parking Spaces in 2022 by Rack Type

Public Facility Type	Inverted-U (adequate)	Locker (adequate)	Other (adequate)	Wave (inadequate)	Wheel Bender (inadequate)	Other (inadequate)
Elementary Schools	233	0	2	873	919	4
Middle Schools	230	0	12	315	518	0
High Schools	48	2	0	509	254	24
Public Libraries	32	0	22	74	46	16
Recreation Centers	56	0	15	214	14	0
Total	599	2	51	1,985	1,751	44

Table 19: Bicycle Parking Space Change, 2016-2022

Public Facility Type	Bicycle Space Additions	Bicycle Space Loss¹	Increase in Adequate Spaces	Loss of Adequate Spaces ²	Inadequate Bicycle Spaces Added ³
Elementary Schools	543	-177	74	0	471
Middle Schools	311	-42	149	0	194
High Schools	112	-16	10	0	106
Public Libraries	32	-32	30	-32	2
Recreation Centers	25	0	15	0	14
Total	1,023	-267	278	-32	787

¹ Losses were generally wheel bender-type bicycle racks, which do not meet industry standards

 $^{^{2}}$ Due to Purple Line construction which is underway at Silver Spring Library during the writing of this report

³ Most inadequate spaces added were wave-type racks—which often replaced older wheel bender racks

Bicycle Parking at Elementary Schools

Table 20: Summary of Bicycle Parking at Elementary Schools

Elementary School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Arcola	656	32	0	4	4	32	\$17,000
Ashburton	789	40	0	10	10	40	\$19,000
Bannockburn	389	20	0	10	10	20	\$7,000
Bayard Rustin	790	40	24	0	24	16	\$10,000
Beall	663	34	0	52	52	34	\$4,000
Bel Pre	634	32	0	20	20	32	\$9,000
Bells Mill	626	32	0	16	16	32	\$11,000
Belmont	401	20	0	60	60	20	\$2,000
Bethesda	561	28	0	28	28	28	\$3,000
Beverly Farms	722	36	26	0	26	10	\$6,000
Bradley Hills	687	34	0	30	30	34	\$6,000
Brooke Grove	515	26	0	40	40	26	\$3,000
Brookhaven	508	26	0	10	10	26	\$11,000
Brown Station	754	38	0	14	14	38	\$16,000
Burning Tree	388	20	0	20	20	20	\$2,000
Burnt Mills	387	20	0	0	0	20	\$12,000
Burtonsville	498	24	0	0	0	24	\$14,000
Candlewood	521	26	0	38	38	26	\$3,000
Cannon Road	507	26	20	0	20	6	\$4,000
Captain James Daly	586	30	0	0	0	30	\$18,000
Carderock Springs	430	22	0	39	39	22	\$2,000
Cashell	341	18	0	16	16	18	\$3,000
Cedar Grove	425	22	0	0	0	22	\$13,000
Chevy Chase	473	24	0	40	40	24	\$3,000
Clarksburg	352	18	0	0	0	18	\$11,000
Clearspring	618	30	0	14	14	30	\$11,000
Clopper Mill	511	26	0	10	10	26	\$11,000
Cloverly	484	24	0	8	8	24	\$11,000

Elementary School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Cold Spring	481	24	0	33	33	24	\$3,000
College Gardens	718	36	0	58	58	36	\$4,000
Cresthaven	467	24	20	0	20	4	\$2,000
Damascus	324	16	0	0 0		16	\$10,000
Darnestown	403	20	0	0	0	20	\$12,000
Diamond	680	34	0	10	10	34	\$16,000
Dr. Charles R. Drew	512	26	0	20	20	26	\$6,000
Dr. Ronald A. McNair	650	32	0	40 40		32	\$3,000
Dr. Sally K. Ride	505	26	0	6	6	26	\$13,000
Dufief	437	22	0	0	0	22	\$13,000
East Silver Spring	602	30	0	4	4	30	\$16,000
Fairland	648	32	0	20	20	32	\$9,000
Fallsmead	561	28	0	8	8	28	\$13,000
Farmland	737	36	16	0	16	20	\$12,000
Fields Road	457	22	3	0	3	19	\$11,000
Flora M. Singer	598	30	0	17	17	30	\$10,000
Flower Hill	511	26	0	10	10	26	\$11,000
Flower Valley	463	24	0	8	8	24	\$11,000
Forest Knolls	581	30	0	10	10	30	\$13,000
Fox Chapel	665	34	0	0	0	34	\$20,000
Gaithersburg	783	40	0	0	0	40	\$24,000
Galway	759	38	0	4	4	38	\$21,000
Garrett Park	777	38	0	32	32	38	\$7,000
Georgian Forest	675	34	12	0	12	22	\$13,000
Germantown	292	14	0	10	10	14	\$4,000
Glen Haven	569	28	0	10	10	28	\$12,000
Glenallan	762	38	0	10	10	38	\$18,000
Goshen	594	30	0	20	20	30	\$8,000
Great Seneca Creek	556	28	0	38	38	28	\$3,000
Greencastle	582	30	0	0	0	30	\$18,000

Elementary School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Greenwood	562	28	0	10	10	28	\$12,000
Harmony Hills	775	38	0	0	0	38	\$23,000
Harriet R. Tubman	674	34	24	0	24	10	\$6,000
Highland	601	30	0	13	13	30	\$12,000
Highland View	326	16	0	0	0	16	\$10,000
Jackson Road	712	36	0	8	8	36	\$18,000
JoAnn Leleck	723	36	6	0	6	30	\$18,000
Jones Lane	513	26	0	16	16 16		\$8,000
Judith A. Resnik	526	26	0	36	36	26	\$3,000
Kemp Mill	470	24	0	20	20	24	\$5,000
Kensington Parkwood	786	40	0	25	25	40	\$12,000
Lake Seneca	425	22	0	40	40	22	\$2,000
Lakewood	566	28	0	20	20	28	\$7,000
Laytonsville	487	24	0	10	10	24	\$10,000
Little Bennett	620	32	0	10	10	32	\$14,000
Lois P. Rockwell	548	28	0	12	12	28	\$11,000
Lucy V. Barnsley	685	34	0	20	20	34	\$11,000
Luxmanor	746	38	0	20	20	38	\$13,000
Maryvale	655	32	0	32	32	32	\$3,000
Meadow Hall	356	18	24	0	24	0	\$0
Mill Creek Towne	354	18	0	10	10	18	\$6,000
Monocacy	218	10	0	0	0	10	\$6,000
Montgomery Knolls	703	36	0	20	20	36	\$12,000
New Hampshire Estates	511	26	0	0	0	26	\$16,000
North Chevy Chase	381	20	0	10	10	20	\$7,000
Oak View	335	16	0	10	10	16	\$5,000
Oakland Terrace	511	26	0	20	20	26	\$6,000
Olney	607	30	0	20	20	30	\$8,000
Pine Crest	667	34	0	10	10	34	\$16,000
Piney Branch	611	30	24	0	24	6	\$4,000

Elementary School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Poolesville	562	28	0	10	10	28	\$12,000
Potomac	479	24	16	0	16 8		\$5,000
Rachel Carson	716	36	0	0	0	36	\$22,000
Ritchie Park	411	20	10	0	10	10	\$6,000
Rock Creek Forest	676	34	0	18	18	34	\$12,000
Rock Creek Valley	451	22	0	15	15	22	\$6,000
Rock View	675	34	0	16	16	34	\$13,000
Rolling Terrace	729	36	0	12	12	36	\$16,000
Roscoe R. Nix	491	24	0	0	0	24	\$14,000
Rosemary Hills	641	32	0	0	0	32	\$19,000
Rosemont	602	30	0	10	10	30	\$13,000
S. Christa McAuliffe	732	36	0	14	14	36	\$15,000
Sargent Shriver	663	34	0	0	0	34	\$20,000
Sequoyah	450	22	0	16	16	22	\$5,000
Seven Locks	447	22	0	10	10	22	\$8,000
Sherwood	519	26	0	10	10	26	\$11,000
Sligo Creek	687	34	0	0	0	34	\$20,000
Snowden Farm	762	38	0	20	20	38	\$13,000
Somerset	540	28	0	24	24	28	\$5,000
South Lake	694	34	0	0	0	34	\$20,000
Spark M. Matsunaga	591	30	0	20	20	30	\$8,000
Stedwick	713	36	0	0	0	36	\$22,000
Stone Mill	713	36	0	15	15	36	\$14,000
Stonegate	385	20	0	0	0	20	\$12,000
Strathmore	462	24	0	8	8	24	\$11,000
Strawberry Knoll	501	26	0	15	15	26	\$8,000
Summit Hall	497	24	0	6	6	24	\$12,000
Takoma Park	611	30	0	20	20	30	\$8,000
Thurgood Marshall	552	28	0	20	20	28	\$7,000
Travilah	526	26	0	0	0	26	\$16,000

Elementary School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Twinbrook	629	32	0	10	10	32	\$14,000
Viers Mill	752	38	0	20	20	38	\$13,000
Washington Grove	629	32	0	6	6	32	\$16,000
Waters Landing	768	38	0	20	20	38	\$13,000
Watkins Mill	732	36	0	20	20	36	\$12,000
Wayside	631	32	0	16	16	32	\$11,000
Weller Road	792	40	0	50	50	40	\$4,000
Westbrook	638	32	0	20	20	32	\$9,000
Westover	266	14	0	10	10	14	\$4,000
Wheaton Woods	724	36	0	50	50	36	\$4,000
Whetstone	788	40	8	0	8	32	\$19,000
William B. Gibbs Jr.	748	38	0	16	16	38	\$15,000
William T. Page	377	18	0	10	10	18	\$6,000
Wilson Wims	739	36	0	20	20	36	\$12,000
Wood Acres	752	38	0	10	10	38	\$18,000
Woodfield	365	18	0	0	0	18	\$11,000
Woodlin	463	24	0	0	0	24	\$14,000
Wyngate	778	38	2	0	2	36	\$22,000
Total	78268	3928	235	1796	2031	3699	\$1,450,000

Bicycle Parking at Middle Schools

Table 21: Summary of Bicycle Parking at Middle Schools

Middle School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
A. Mario Loiederman	986	50	0	30	30	50	\$15,000
Argyle	897	44	0	40	40	44	\$7,000
Benjamin Banneker	799	40	0	40 40		40	\$4,000
Briggs Chaney	927	46	0	20	20	46	\$18,000
Cabin John	1125	56	0	30	30	56	\$19,000
Dr. Martin Luther King, Jr	914	46	0	20	20	46	\$18,000
Earle B. Wood	936	46	0	20	20	46	\$18,000
Eastern	1012	50	0	18	18	50	\$21,000
Forest Oak	955	48	0	12	12	48	\$23,000
Francis Scott Key	961	48	0	36	36	48	\$11,000
Gaithersburg	996	50	0	10	10	50	\$25,000
Hallie Wells	969	48	0	30	30	48	\$14,000
Herbert Hoover	1139	56	0	39	39	56	\$14,000
John Poole	478	24	0	63	63	24	\$3,000
John T. Baker	762	38	0	0	0	38	\$23,000
Julius West	1432	72	0	34	34	72	\$27,000
Kingsview	1041	52	16	0	16	36	\$22,000
Lakelands Park	1147	58	14	0	14	44	\$27,000
Montgomery Village	844	42	0	56	56	42	\$5,000
Neelsville	965	48	0	0	0	48	\$29,000
Newport Mill	837	42	0	20	20	42	\$15,000
North Bethesda	1233	62	0	30	30	62	\$23,000
Odessa Shannon	897	44	0	40	40	44	\$7,000
Parkland	982	50	0	0	0	50	\$30,000
Redland	757	38	0	4	4	38	\$21,000

Middle School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Ridgeview	988	50	0	16	16	50	\$22,000
Robert Frost	1051	52	16	0	16	36	\$22,000
Roberto W. Clemente	1218	60	0	20	20	60	\$26,000
Rocky Hill	1012	50	0	10	10	50	\$25,000
Rosa M. Parks	945	48	0	24	24	48	\$17,000
Shady Grove	846	42	0	9	9	42	\$21,000
Silver Creek	894	44	68	0	68	0	\$0
Silver Spring International	1082	54	0	10	10	54	\$28,000
Sligo	958	48	0	50	50	48	\$5,000
Takoma Park	1330	66	54	0	54	12	\$7,000
Thomas W. Pyle	1523	76	0	44	44	76	\$24,000
Tilden	1244	62	60	0	60	2	\$1,000
Westland	1073	54	0	40	40	54	\$13,000
White Oak	992	50	0	18	18	50	\$21,000
William H. Farquhar	816	40	14	0	14	26	\$16,000
Total	39963	1994	242	833	1075	1776	\$686,000

Bicycle Parking at High Schools

Table 22: Summary of Bicycle Parking at High Schools

High School Name	Student Capacity 2022- 2023	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Albert Einstein	1602	80	0	20	20	80	\$38,000
Bethesda-Chevy Chase	2475	124	0	41	41	124	\$55,000
Clarksburg	2034	102	0	26	26	102	\$49,000
Col. Zadok Magruder	1885	94	0	6	6	94	\$54,000
Damascus	1543	78	0	4	4	78	\$45,000
Gaithersburg	2474	124	0	30	30	124	\$60,000
James Hubert Blake	1743	88	0	20	20	88	\$43,000
John F. Kennedy	2159	108	0	16	16	108	\$57,000
Montgomery Blair	2867	144	40	0	40	104	\$63,000
Northwest	2291	114	6	38	44	108	\$46,000
Northwood	1526	76	0	20	20	76	\$36,000
Paint Branch	1985	100	0	160	160	100	\$11,000
Poolesville	1170	58	0	30	30	58	\$20,000
Quince Orchard	1800	90	0	10	10	90	\$49,000
Richard Montgomery	2250	112	0	44	44	112	\$46,000
Rockville	1525	76	2	10	12	74	\$40,000
Seneca Valley	2520	126	0	40	40	126	\$56,000
Sherwood	2152	108	0	0	0	108	\$65,000
Springbrook	2117	106	0	12	12	106	\$58,000
Thomas S. Wootton	2120	106	0	27	27	106	\$51,000
Walt Whitman	2231	112	0	84	84	112	\$26,000
Walter Johnson	2291	114	0	59	59	114	\$40,000
Watkins Mill	1742	88	0	16	16	88	\$45,000
Wheaton	2237	112	2	50	52	110	\$42,000
Winston Churchill	1991	100	0	24	24	100	\$48,000
Total	50,730	2,540	50	787	837	2,490	\$1,142,000

Bicycle Parking at Libraries

Table 23: Summary of Bicycle Parking at Libraries

Library Name	Calculated Ground Floor Area (ft²)	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Aspen Hill	16,131	4	0	12	12	4	\$400
Bethesda	24,402	4	0	10	10 4		\$400
Chevy Chase	16,306	4	0	10	10	10 4	
Damascus	15,725	2	0	10	10	2	\$200
Davis/Special Needs	19,542	4	0	6	6	4	\$400
Gaithersburg	49,495	8	20	0	20	0	\$0
Germantown	49,183	8	0	16	16	8	\$900
Kensington Park	14,858	2	0	6	6	2	\$200
Little Falls	13,214	2	0	10	10	2	\$200
Long Branch	20,615	4	0	10	10	4	\$400
Marilyn J. Praisner	16,930	4	0	6	6	4	\$400
Noyes Library for Young Children	1,085	2	0	0	0	2	\$1,200
Olney	21,085	4	0	16	16	4	\$400
Poolesville	7,000	2	0	6	6	2	\$200
Potomac	16,986	4	0	8	8	4	\$400
Quince Orchard	18,468	4	0	4	4	4	\$400
Silver Spring	79,678	10	12	0	12	0	\$0
Wheaton	78,572	10	22	0	22	0	\$0
White Oak	20,728	4	0	6	6	4	\$400
Total	N/A	86	54	136	190	58	\$7,300

Bicycle Parking at Recreation Centers

Table 24: Summary of Bicycle Parking at Recreation Centers

Community or Recreation Center Name	Calculated Ground Floor Area (ft²)	Industry- Established Need	Adequate Existing Spaces	Inadequate Existing Spaces	Total Existing Spaces	Shortage	Cost
Bauer Drive	20,364	4	4	0	4	0	\$0
Clara Barton	23,205	4	0	4	4	4	\$400
Damascus	33,624	6	4	12	16	2	\$200
East County	27,700	4	0	10	10	4	\$400
Germantown	24,463	4	40	0	40	0	\$0
Gwendolyn E. Coffield	28,394	4	0	10	10	4	\$400
Jane E. Lawton	18,533	4	0	10	10	4	\$400
Leonard D. Jackson	2,184	2	0	0	0	2	\$1,000
Long Branch	26,922	4	0	10	10	4	\$400
Longwood	20,420	4	0	6	6	4	\$400
Marilyn J. Praisner	31,294	4	0	8	8	4	\$400
Mid County	31,086	4	0	24	24	4	\$400
North Potomac	48,084	8	0	40	40	8	\$900
Plum Gar Neighborhood	19,583	4	0	8	8	4	\$400
Potomac	29,772	4	8	0	8	0	\$0
Scotland Neighborhood	13,039	2	0	4	4	2	\$200
Upper County Neighborhood	17,848	4	0	32	32	4	\$400
Wheaton	13,428	2	3	0	3	0	\$0
White Oak	54,022	8	0	50	50	8	\$900
Wisconsin Place	18,102	4	12	0	12	0	\$0
Total	N/A	84	71	228	299	62	\$8,000

Status of Bikeway Projects

Bikeway Projects Completed by Public Sector in 2023 and 2024

Table 25: Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Brookeville Bypass	Bikeable Shoulders	0.7	SHA	Olney, Rural East
Capital Crescent Trail	Off-Street Trail	0.1	МТА	Multiple
Clarksburg Road / Snowden Farm Pkwy	Sidepath and Conventional Bike Lanes	1.1	MCDOT	Clarksburg East
Clarksburg Road at MD 355	Sidepath and Conventional Bike Lanes	0.9	SHA	Clarksburg East
Emory Lane and Muncaster Mill Road Shared Use Path	Sidepath	0.1	MCDOT	Aspen Hill, Olney
Good Hope Road Shared Use Path	Sidepath	0.9	MCDOT	Cloverly
Hillandale Local Park Renovation	Sidepath	0.2	Parks	White Oak
MD 185 (Connecticut Ave) at Jones Bridge Road - Phase 3 BRAC	Sidepath	0.5	SHA	Chevy Chase Lake
Montgomery Ln/Ave Cycle Track Phase 1 & 2A	Separated Bike Lanes	0.1	MCDOT	Bethesda CBD
Upton Drive Neighborhood Greenway	Neighborhood Greenway	0.2	MCDOT	Kensington/Wheaton, Wheaton CBD
White Flint West Phase 2	Separated Bike Lanes and Sidepath	0.4	MCDOT	North Bethesda Metro Station
Woodlin Elementary School	Sidepath	0.2	MCPS	Silver Spring / Takoma Park
Woodward High School Reopening	Sidepath	0.2	MCPS	North Bethesda

Table 26: Non-Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Clarksburg Road at MD 355	Sidepath and Conventional Bike Lanes	0.3	SHA	Clarksburg East
White Flint West Phase 2	Various	0.8	MCDOT	North Bethesda Metro Station

Bikeway Projects Completed by Developers in 2023 and 2024

Table 27: Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
8787 Georgia Ave	Separated Bike Lanes, Off-Street Trail	0.1	Developer	Silver Spring CBD
Chevy Chase Lake - Block B	Sidepath	0.1	Developer	Chevy Chase Lake
Crescent at Chevy Chase	Sidepath	0.1	Developer	Chevy Chase Lake
Fieldcrest Community Solar	Bikeable Shoulders	<0.1	Developer	Rural East
Milestone Senior Germantown	Sidepath	0.1	Developer	Germantown East
New Hampshire Ave Restaurant Redevelopment	Sidepath	0.0	Developer	Cloverly
Traville Parcel N	Sidepath	0.2	Developer	Great Seneca Communities
Village at Cabin Branch Phase 2	Sidepath	0.4	Developer	Clarksburg East
Westwood Square	Separated Bike Lanes	0.3	Developer	Bethesda/Chevy Chase
White Oak Town Center	Sidepath	0.1	Developer	White Oak

Table 28: Non-Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
8015 Old Georgetown Road	Off-Street Trail	0.1	Developer	Bethesda CBD
Burtonsville Crossing Shopping Center	Sidepath	0.2	Developer	Burtonsville Town Center
Chevy Chase Section 4D	Sidepath	<0.1	Developer	Bethesda/Chevy Chase
King Souder Property	Sidepath, Off-Street Trail	0.3	Developer	Damascus
Montgomery College Germantown	Sidepath	0.2	Developer	Germantown East
The Residences at Knowles Station	Sidepath	<0.1	Developer	Kensington/Wheaton
White Oak Town Center	Sidepath	0.1	Developer	White Oak

Projects Under Construction by Public Sector on 12/31/2024

Table 29: Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Capital Crescent Trail	Off-Street Trail	4.6	MTA	Multiple
Marinelli Road Separated Bike Lanes	Separated Bike Lanes	0.7	MCDOT	North Bethesda Metro Station
Metropolitan Branch Trail Phase 2A	Off-Street Trail	0.2	MCDOT	Multiple
Silver Spring Green Trail	Sidepath	0.7	МТА	Purple Line East

Table 30: Non-Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
North Branch Trail	Off-Street Trail	0.4	Parks	Aspen Hill, Rural East
Purple Line	Conventional Bike Lanes	1.4	МТА	Purple Line East
Silver Spring Green Trail	Sidepath	0.1	МТА	Purple Line East, Silver Spring Green Trail

Projects Under Construction by Developers on 12/31/2024

Table 31: Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
ELP Bethesda at Rock Spring	Separated Bike Lanes	0.2	Developer	Rock Spring
Hillandale Gateway	Sidepath	0.1	Developer	White Oak
PSTA Site	Separated Bike Lanes, Sidepath	1.1	Developer	Great Seneca Communities
Westwood Square	Separated Bike Lanes	0.1	Developer	Bethesda/Chevy Chase
Wildwood Manor Shopping Center	Neighborhood Connector	0.1	Developer	Rock Spring

Table 32: Non-Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Crossroads of Kensington	Sidepath	0.1	Developer	Wheaton/Kensington
ELP Bethesda at Rock Spring	Separated Bike Lanes, Sidepath	0.7	Developer	Rock Spring
Guru Nanak Foundation of America	Sidepath	0.1	Developer	Fairland Briggs Chaney
PSTA Site	Sidepath	0.5	Developer	Great Seneca Communities

Table 33: Upgrades to Existing Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Northpark at Montrose Phase 1	Separated Bike Lanes, Sidepath	0.5	Developer	North Bethesda, North Bethesda Metro Station

Projects Funded in the Capital Improvement Program as of 12/31/2024

Table 34: Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Amherst Ave Cycle Track	Separated Bike Lanes	1.1	мсрот	Kensington/Wheaton, Wheaton CBD
Aspen Hill Neighborhood Greenway	Neighborhood Greenway	0.2	мсрот	Aspen Hill, Glenmont
Bowie Mill Road Bikeway	Sidepath	2.0	MCDOT	Olney, Rural East
Boyds Transit Center	Sidepath	0.1	MCDOT	Rural West
Capital Crescent Surface Trail (Phase 2)	Multiple	0.1	MCDOT	Bethesda CBD
Cheltenham Separated Bike Lanes	Separated Bike Lanes	0.3	MCDOT	Bethesda CBD
Dale Dr Shared Use Path and Safety Improvements	Sidepath	0.9	мсрот	Silver Spring/Takoma Park
Dennis Ave Bridge	Sidepath	<0.1	MCDOT	Kensington/Wheaton
Dixon Lane Separated Bike Lanes	Separated Bike Lanes	0.3	мсрот	Silver Spring CBD
Domer / Barron / Gilbert Neighborhood Greenway	Neighborhood Greenway	0.5	MCDOT	Purple Line East
East Silver Spring Neighborhood Greenway	Neighborhood Greenway	0.4	MCDOT	Purple Line East
Fenton St at MD 410	Separated Bike Lanes	0.1	MCDOT	Silver Spring CBD
Flower Ave Separated Bike Lanes	Separated Bike Lanes	0.4	MCDOT	Purple Line East
Garrett Park Road Bridge over Rock Creek	Sidepath	0.2	MCDOT	Kensington/Wheaton
Heritage Trail Triangle Phase 1 Shared Use Path	Sidepath	0.6	MCDOT	Rural East
Life Sciences Center Loop Trail	Sidepath	0.5	MCDOT	Great Seneca Life Sciences Center, Great Seneca Communities
McComas Ave Neighborhood Greenway	Neighborhood Greenway	1.2	MCDOT	Kensington/Wheaton, Wheaton CBD
MD 355 Clarksburg Shared Use Path	Sidepath	0.5	MCDOT	Clarksburg Town Center
MD 355 Shared Use Path and Sidewalk (Grosvenor)	Sidepath	0.2	MCDOT	Grosvenor, North Bethesda

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
MD 97 (Georgia Ave) Montgomery Hills Road Reconstruction	Separated Bike Lanes, Sidepath	0.7	SHA	Forest Glen, Woodside
Metropolitan Branch Trail Phase 2A - Silver Spring Transit Center to Selim Road	Off-Street Trail	0.2	MCDOT	Silver Spring CBD
Metropolitan Branch Trail Phase 2B - Selim Road to King Street	Off-Street Trail	0.1	MCDOT	Silver Spring CBD
Montgomery Ln/Ave Cycle Track Phase 2C	Separated Bike Lanes	0.1	MCDOT	Bethesda CBD
Northwood High School Additional / Facility Upgrades	Sidepath	0.1	MCPS	Kensington/Wheaton
Norwood Rd Shared Use Path (New Hampshire Ave - Cohassett Dr)	Sidepath	1.2	MCDOT	Cloverly
Veirs Mill Road BiPPA Project	Sidepath	1.1	MCDOT	Aspen Hill, Kensington/Wheaton
Woodmont Ave Cycle Track - Phase 2	Separated Bike Lanes	0.3	MCDOT	Bethesda CBD

Table 35: Non-Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Aspen Hill Neighborhood Greenway	Neighborhood Greenway	0.3	MCDOT	Aspen Hill, Glenmont
Bowie Mill Road Bikeway	Sidepath	1.5	MCDOT	Olney, Rural East
Dale Dr Shared Use Path and Safety Improvements	Sidepath	0.2	MCDOT	Silver Spring/Takoma Park
East Silver Spring Neighborhood Greenway	Contra-Flow Bike Lane	0.1	MCDOT	Purple Line East
Fenton St at MD 410	Separated Bike Lanes, Sidepath	0.1	MCDOT	Silver Spring CBD
Fenton Street Cycle Track	Separated Bike Lanes	0.3	MCDOT	Silver Spring CBD
Forest Glen Passageway	Off-Street Trail	0.1	MCDOT	Forest Glen
Life Sciences Center Loop Trail	Sidepath	0.8	MCDOT	Great Seneca Life Sciences Center, Great Seneca Communities
Sligo Creek Trail Realignment Project at Colt Terrace Neighborhood Park	Stream Valley Park Trail	0.1	Parks	Kensington/Wheaton
Veirs Mill Road BiPPA Project	Sidepath	0.2	MCDOT	Aspen Hill, Kensington/Wheaton

Table 36: Upgrades to Existing Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
Fenton Street Cycle Track	Separated Bike Lanes	0.7	MCDOT	Silver Spring CBD
MacArthur Blvd Shared Use Path Phase 3	Sidepath, Bikeable Shoulders	4.9	MCDOT	Bethesda/Chevy Chase
Spring Street SBL Upgrades	Separated Bike Lanes	0.3	MCDOT	Silver Spring CBD

Projects to be Constructed by Developers as of 12/31/2024

Table 37: Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
12700 Travilah Road	Sidepath	0.1	Developer	Rural West
8676 Georgia Ave	Separated Bike Lanes	0.3	Developer	Silver Spring CBD
Addition to Ray's Adventure	Sidepath	0.0	Developer	Damascus
Battery District - Site C	Separated Bike Lanes	0.1	Developer	Bethesda CBD
Bradley Hills - 5315 Goldsboro Rd	Sidepath	0.1	Developer	Bethesda/Chevy Chase
Century	Separated Bike Lanes, Sidepath	0.4	Developer	Germantown Town Center
Federal Plaza West	Separated Bike Lanes	0.2	Developer	North Bethesda, Twinbrook
Heritage Potomac	Sidepath	0.1	Developer	Potomac
Kingsview Station	Sidepath	0.0	Developer	Germantown West
North Bethesda Market II	Separated Bike Lanes	0.1	Developer	North Bethesda
Retail Shops - 15504 New Hampshire Avenue	Sidepath	0.1	Developer	Cloverly
Rock Spring Centre Phase 3	Separated Bike Lanes	0.3	Developer	Rock Spring
Sandy Spring Missing Middle Pilot Project	Sidepath	0.0	Developer	Rural East
The Diener School	Sidepath	<0.1	Developer	Bethesda/Chevy Chase
Waters Village	Sidepath	0.1	Developer	Germantown Town Center
White Oak Self Storage	Separated Bike Lanes	<0.1	Developer	White Oak

Table 38: Non-Master-Planned Bikeways

Project	Bikeway	Length (mi)	Lead Agency	Policy Area
9801 Georgia Avenue	Sidepath	0.1	Developer	Forest Glen
Addition to Ray's Adventure	dventure Sidepath		Developer	Damascus
Chevy Chase Lake Block A Sidepath		0.1	Developer	Chevy Chase Lake
Corso Chevy Chase Sidepath		0.1	Developer	Bethesda/Chevy Chase
Kings Crossing Off-Street Trail		0.1	Developer	Germantown West
Preston Place & Lake Apts Off-Street Trail		0.2	Developer	Chevy Chase Lake

Appendix B:

2024 Bicycle and Pedestrian Survey Report

This report summarizes the findings from the 2024 Montgomery County Bicycle and Pedestrian Survey, which included questions on the frequency, purpose, and length of time respondents spent walking and biking around the Montgomery County area in the month prior to taking the survey. All respondents, regardless of whether they had walked or biked in the prior month, were also asked two series of questions about their satisfaction with a variety of aspects of walking and biking around the county. Additionally, the survey sought to better understand the needs of residents who have physical or mobility disabilities. To that end, the survey also included a section of questions designed to understand the travel habits of participants who "rolled" (i.e., used mobility assistive devices) to get around Montgomery County.

A total of 1,244 respondents completed the survey. These respondents were dispersed across three distinct geographic areas: urban, comprising downtowns and city centers; suburban, mostly comprising neighborhoods holding the vast majority of Montgomery County's population; and country, including exurban and rural areas. The survey results were weighted at each of these geographic levels to allow analysis of the habits and needs of these distinct regions. Results were also weighted at the county level to allow a holistic view of the results.

This report highlights important distinctions that emerged in survey responses across geographic divisions and suggests areas for improvement. Overall, residents were neither particularly satisfied nor dissatisfied with their walking, rolling, and biking experiences. However, country residents were persistently less satisfied than their urban and suburban peers with the infrastructure to support their walking, rolling, and biking trips. Country residents were also more likely to cite worries about traffic safety as a reason they do not walk, bike, or roll, suggesting that improvements to country walking, biking, and rolling infrastructure and traffic calming measures are essential to increasing country-level satisfaction.

Chapter 1: Project Overview

In Fall 2024, RSG was contracted by Maryland-National Capital Parks and Planning Commission (M-NCPPC) to conduct the Montgomery County Bicycle and Pedestrian Survey to support both the Pedestrian and Bicycle Master Plans for the County. These plans are intended to improve the safety and comfort of both pedestrians and cyclists across Montgomery County. M-NCPPC conducted this survey to assess the behavior, satisfaction, and worries of residents across all of Montgomery County.

The survey was fielded between October and November of 2024. The survey was conducted digitally, with randomly selected Montgomery County residents invited to participate. The research team used address-based sampling, sending postcards to 56,954 homes across M-NCPPC's jurisdiction. While the survey had a goal of obtaining 2,000 completed surveys, only 1,244 were completed by the end of the survey period, for a response rate of 2.2%. This report details survey methodology, data collection, and data cleaning, as well as containing analysis of the significant findings of the 2024 survey.

Chapter 2: Sampling

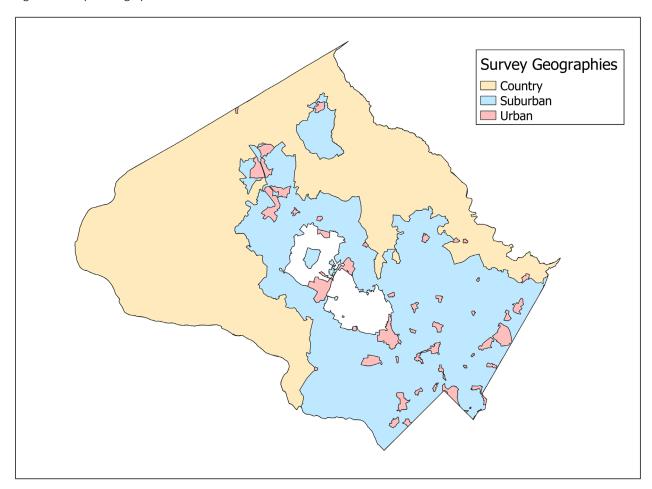
The Countywide Bike and Pedestrian Survey utilized address-based sampling (ABS) as its sole recruitment strategy. This approach involved mailing postcards to randomly selected addresses in Montgomery County to encourage survey participation. To ensure broad representation and sufficient data for analysis across different land use and pedestrian environments, the project team divided the county into three sub-areas for sampling.

As illustrated in Figure 2, M-NCPPC and RSG identified three distinct geographic regions within Montgomery County for sampling: Urban, Suburban, and Country. M-NCPPC provided RSG with a detailed map assigning areas throughout the county into these three categories, defined as follows:

- **Urban**: Downtowns and town centers, encompassing approximately 124,400 residents.
- **Suburban**: Predominantly suburban neighborhoods, encompassing approximately 722,400 residents.
- Country: Exurban and rural areas, encompassing approximately 75,600 residents.

The cities of Rockville and Gaithersburg were excluded from the sampling as those fall outside of M-NCPPC's planning jurisdiction.

Figure 2: Sample Geographies



RSG obtained an ABS frame from the U.S. Postal Service's Computerized Delivery Sequence (CDS) file, an electronic database continuously updated with all active mailing addresses. Partnering with Marketing Systems Group, RSG purchased a sample of household addresses from the CDS file, with addresses randomly drawn from each of the three regions: Urban, Suburban, and Country.

RSG initially planned to randomly select 20,000 mailing addresses from each of the three geographies, with the goal of obtaining 800 completed surveys per geography. However, the Country geography had only 16,954 eligible addresses available. To maximize response rates, RSG sent reminder postcards to all households and offered a raffle for ten \$100 e-gift cards to incentivize survey completion. Table 39 outlines the number of postcards and reminder postcards mailed in each geography.

Table 39: Number of Survey Invitations

Geography	Invitation Postcards	Reminder Postcards	Total Postcards		
Urban	20,000	20,000	40,000		
Suburban	20,000	20,000	40,000		
Country	16,954	16,954	33,908		
Total	56,954	56,954	113,908		

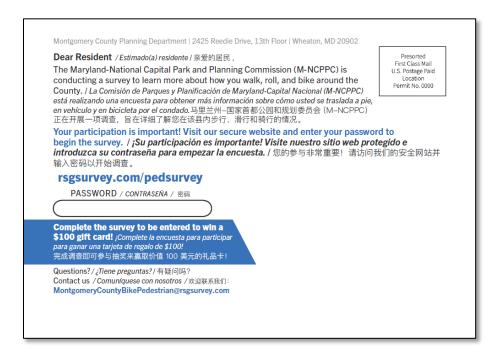
Chapter 3: Data Collection

Data collection took place between October 12, 2024, and November 13, 2024. Postcards inviting residents to complete the survey were mailed to residents within M-NCPPC's jurisdiction on October 9th and October 15th. Figure 3 and Figure 4 show the front and back of the postcards mailed to residents of Montgomery County.

Figure 3: Front of Postcard



Figure 4: Back of Postcard



A total of 1,244 surveys were completed, resulting in an overall response rate of 2.2%. Table 40 summarizes the response rates for each geography in M-NCPPC's jurisdiction.

Table 40: Response Rates by Region

Survey Region	Addresses Sampled	Responses Received	Response Rate		
Country	16, 954	371	2.2%		
Suburban	20,000	522	2.6%		
Urban	20,000	351	1.8%		
Total	56,954	1,244	2.2%		

Chapter 4: Data Cleaning and Weighting

As in all surveys, response data is subject to bias from respondent errors. RSG flagged potential errors for removal based on the following conditions:

- Survey speed: surveys that were completed suspiciously fast.
- Straight-lining: responses where all answers in a grid were in the same column, e.g., marking "Very satisfied" on all aspects of walking in Montgomery County.
- Work geography: responses that indicated a respondent worked primarily outside of Delaware, Maryland, and Virginia.
- Illogical text answers: where an answer box contained only random text.
- Number of bikes: respondents that reported they owned a high number of bikes.

RSG removed 84 responses from the initial sample of 1,244 responses resulting in a final dataset of 1,160 responses.

In addition to the removal of suspicious records, some records were kept but some of their responses were altered; inappropriate text was removed from comments and any remaining records with more than 12 bikes had their response to that question made a missing value.

The answers to open-ended responses (prompted when "other" was selected) were recategorized when appropriate. Examples of open-ended responses that were recategorized include:

- Walking purpose answers, e.g., "walking dogs" was shifted from Other to Exercise/outdoor recreation and "haircut" was changed to Errands;
- Biking purpose answers, e.g., "exercise" was shifted to Exercise/outdoor recreation;
- Reasons for not walking/rolling, a response concerning insect bites and pathogens was recoded to Personal safety concerns;
- Reasons for not biking, e.g., "medical" to A disability prevents me from biking and "No bike paths" to Lack of adequate or connected bikeways and crossings
- Respondent race, e.g., "Asian (Indian)" to Asian

Data Weighting

The survey records were weighted to better represent the actual population in the Montgomery County Planning Department's jurisdiction within Montgomery County. To weight the dataset, records were separated into the same three geographies used in sampling: Urban, Suburban and Country. The weighting procedure used an iterative proportional fitting (IPF), or "raking", algorithm. IPF is a procedure used to estimate survey weights so that the sample aligns with target population distributions across multiple variables. The process begins by estimating the weights to match the target distribution of the first variable. Next, the weights are adjusted to align with the target distribution of the second variable. This process is repeated for all variables in sequence. If adjusting for one of the variables causes misalignment with a previously adjusted variable, the procedure cycles back to re-adjust the weights for that variable. This iterative process continues until the weights converge, ensuring alignment with all target distributions simultaneously. The IPF procedure used here was based on race; Hispanic, Spanish, or Latino origin; and income. The

weights for the full dataset additionally took the balance between the survey geographies into account.

The weighting process used demographic targets drawn from the 2022 American Community Survey (ACS) five-year estimates. To account for survey respondents who preferred to not provide their 2019 household income, race or Hispanic, Spanish, or Latino origin, the category was treated separately and the ACS distributions were adjusted accordingly (in other words, the proportion of "prefer not to answer" responses were kept the same). Additionally, some race categories represent a small percentage of the Montgomery County population and had small sample sizes in the survey data; therefore, the survey data were weighted to the distribution of Black or African American alone, White alone, and of other or multiple races within the ACS data. Additionally, Several household income categories were combined to match ACS data ("\$200,000 to \$299,000" and "\$300,000 or more").

For the benefit of M-NCPPC's analysis, RSG included four weighting variables in the final dataset. Three weights, corresponding to the sampling areas provided by M-NCPPC, can be used to analyze the survey results within each specific sampling region:

- WEIGHT_RU: weights for respondents in the rural geography
- WEIGHT_SB: weights for respondents in the suburban geography
- WEIGHT_UR: weights for respondents in the urban geography

The fourth weight, WEIGHT_ALL, can be used to analyze the survey results across all M-NCPPC's planning jurisdiction.

Table 41, Table 42, and Table 43 show the unweighted, weighted and target distributions of race; Hispanic, Spanish, or Latino origin; and income in each sampling region. Black or African American and other races were underrepresented in the survey response and were weighted up to match ACS distributions. Respondents of Hispanic, Spanish, or Latino origin were underrepresented in the survey response and were weighted up to match ACS distributions. Lower income respondents were underrepresented in the survey response and were weighted up to match ACS distributions, whereas higher income respondents were overrepresented in the sample and weighted down.

Table 41: Distribution of Racial Categories

Category	Country	Country	Country	Suburban	Suburban	Suburban	Urban	Urban	Urban
	Unweighted	Weighted	Target	Unweighted	Weighted	Target	Unweighted	Weighted	Target
Black or African American alone	2.4%	8.3%	10.6%	5.9%	17.0%	16.4%	10.7%	23.7%	26.8%
White alone	75.6%	53.0%	53.9%	69.7%	42.3%	41.8%	62.5%	31.4%	35.3%
Other race	10.7%	24.4%	24.2%	13.5%	29.3%	31.0%	17.9%	37.1%	29.0%
Prefer not to answer	11.3%	14.3%	11.3%	10.9%	11.4%	10.9%	8.9%	7.7%	8.9%

Table 42: Distribution of Hispanic, Spanish, or Latino Categories

Category	Country	Country	Country	Suburban	Suburban	Suburban	Urban	Urban	Urban
	Unweighted	Weighted	Target	Unweighted	Weighted	Target	Unweighted	Weighted	Target
Hispanic/Latino	5.1%	11.7%	8.6%	8.2%	18.5%	19.9%	9.5%	22.8%	17.4%
Not Hispanic/ Latino	87.8%	79.3%	84.2%	86.5%	75.6%	74.8%	86.0%	72.9%	78.2%
Prefer not to answer	7.1%	9.0%	7.1%	5.3%	5.9%	5.3%	4.5%	4.2%	4.5%

Table 43: Distribution of Income Categories

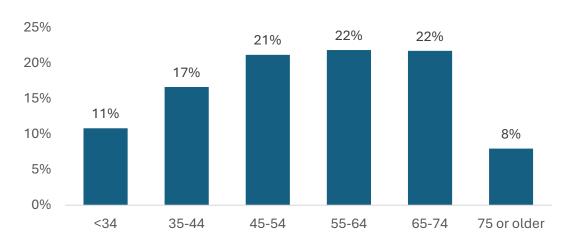
Category	Country	Country	Country	Suburban	Suburban	Suburban	Urban	Urban	Urban
	Unweighted	Weighted	Target	Unweighted	Weighted	Target	Unweighted	Weighted	Target
Less than \$15,000	0.6%	1.7%	2.0%	1.4%	3.1%	3.4%	2.1%	7.2%	5.4%
\$15,000-\$24,999	0.3%	0.4%	1.4%	1.4%	2.7%	2.6%	1.2%	3.2%	3.8%
\$25,000-\$34,999	0.9%	1.1%	1.7%	1.4%	2.8%	3.2%	3.0%	6.8%	4.8%
\$35,000-\$49,999	0.9%	1.6%	2.7%	2.3%	4.3%	4.3%	3.9%	7.2%	6.7%
\$50,000-\$74,999	3.6%	4.8%	5.1%	4.5%	8.1%	8.2%	8.9%	11.8%	12.0%
\$75,000-\$99,999	5.4%	5.1%	7.5%	7.2%	8.3%	8.0%	11.3%	10.3%	11.3%
\$100,000- \$149,999	15.2%	13.2%	13.9%	15.2%	13.7%	13.7%	21.1%	16.1%	17.0%
\$150,000- \$199,999	15.5%	8.0%	6.6%	13.1%	6.4%	6.5%	14.3%	6.8%	7.6%
\$200,000 or more	31.5%	33.1%	33.1%	28.1%	24.3%	24.8%	15.8%	13.4%	13.0%
Prefer not to answer	26.2%	30.9%	26.2%	25.4%	26.4%	25.4%	18.5%	17.2%	18.5%

Chapter 5: Results and Analysis

Demographics

Survey respondents tended to be middle-aged and older, with over half of respondents over age 55 and nearly two-thirds of respondents 45 or older (Figure 5).

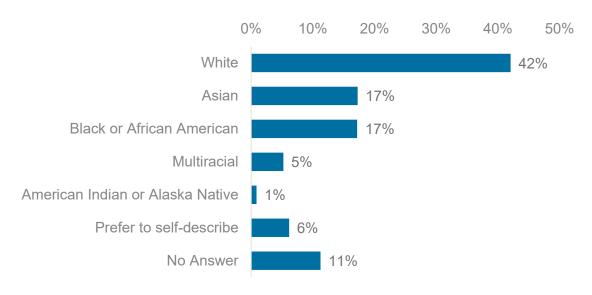
Figure 5: Age, Weighted at County Level



n = 1,160

While respondents White made up the largest share of respondents (42%). Asian and Black respondents each made up 17% of the pool of respondents. The survey allowed respondents to select multiple races; for the purposes of analysis, respondents who selected more than one race were collapsed into a "Multiracial" category. This category ended up including every person who had selected "Native Hawaiian" as one piece of their racial makeup (Figure 6).

Figure 6: Race, Weighted At County Level



Respondents with Hispanic or Latino origins made up a significant minority of respondents. (Figure 7).

Figure 7: Hispanic or Latino, Weighted At County Level

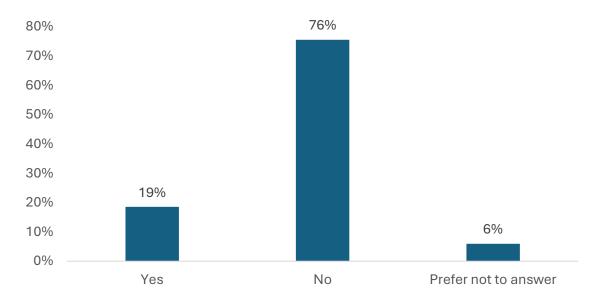


Figure 8 shows that neither men nor women made up a majority of the surveyed individuals, though men made up the plurality (49%).

60% 49% 50% 45% 40% 30% 20% 10% 6% 0% 0% Male Female Prefer to self-Prefer not to answer identify:

Figure 8: Gender Identity, Weighted at County Level

n = 1,160; "Prefer to self-identify" was selected by 3 respondents.

The plurality of respondents chose not to provide an estimate of their household income (25%). 30% of respondents reported being in a household that made \$150,000 a year or more, and 30% reported household incomes of less than \$100,000 a year (Figure 9).

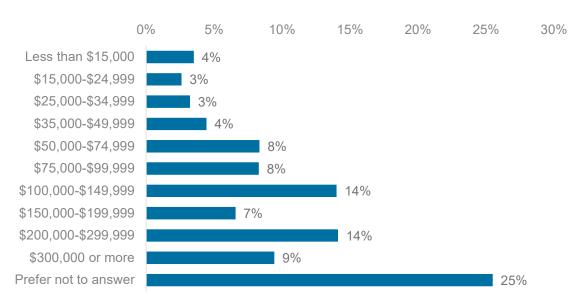
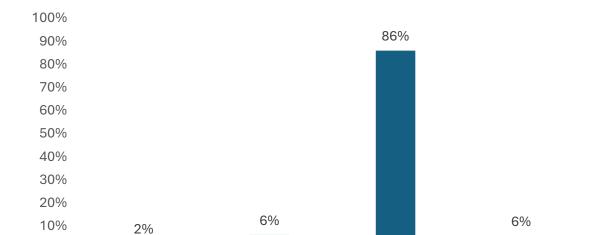


Figure 9: Household Income, Weighted At County Level

Most respondents did not have a mobility or physical disability. Among those who did have a mobility or physical disability, only 25% used an assistive device such as a wheelchair or cane (Figure 10).



Yes, and I do not

use an assistive

device

Figure 10: Disability Status, Weighted At County Level

Yes, and I use an

assistive device

such as a

wheelchair or cane

n = 1,160

0%

Half of survey respondents were employed full-time, while 36% were not currently employed for a variety of reasons (Figure 11).

No, I do not have a

mobility or physical

disability

Prefer not to

answer



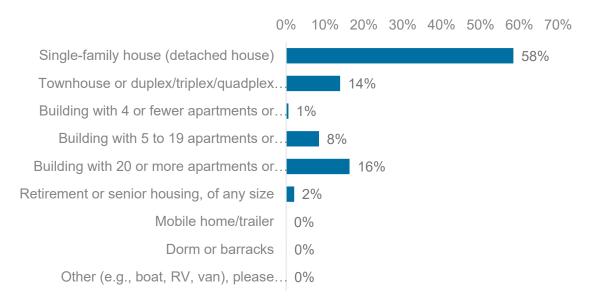
Employed full-time
Employed part-time
Self-employed
Student
1%
Student and employed
2%
Stay-at-home parent or spouse
Retired
Disabled
Unemployed and looking for work
Unemployed and not looking for work

Employed full-time
5%
7%
2%
2%
27%
1%
4%
Unemployed and not looking for work
1%

Ownership Statistics

Figure 12 shows that the majority of respondents across the entire county live in single-family housing, with large apartment buildings of 20 or more units in a distant second. However, as seen in Figure 13, most respondents in the urban sub-geography reside in densely populated residences. 67% of urban respondents live in large apartment buildings, 13% live in medium-sized apartment buildings, and 12% live in attached housing. Home type distribution in the suburban sub-geography closely resembles that of the county level (Figure 14). In the country sub-geography, single-family housing makes up an even larger share of the overall housing (95%), with small minorities in attached housing and dorms/barracks (Figure 15).



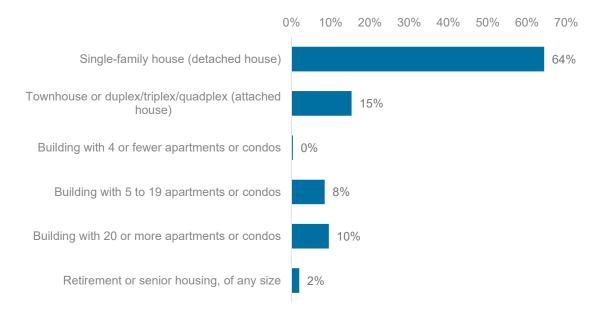


n = 1,160; two respondents selected "other", and one each selected "Mobile home" and "Dorm or barracks"

Figure 13: Home Type, Weighted At Urban Level

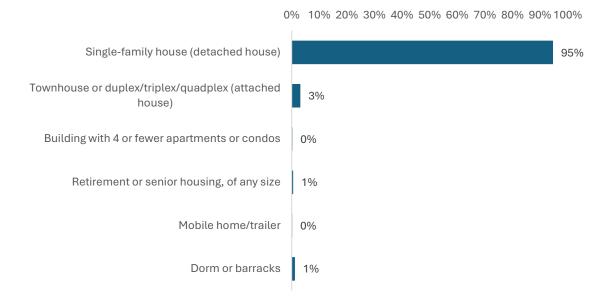
0% 10% 20% 30% 40% 50% 60% 70% 80% Single-family house (detached house) 2% Townhouse or duplex/triplex/quadplex 12% (attached house) Building with 4 or fewer apartments or condos Building with 5 to 19 apartments or 13% condos Building with 20 or more apartments or 67% condos 3% Retirement or senior housing, of any size Other (e.g., boat, RV, van), please specify:

n = 336Figure 14: Home Type, Weighted At Suburban Level



n = 488; 1 respondent selected "Building with 4 or fewer..."

Figure 15: Home Type, Weighted At Country Level

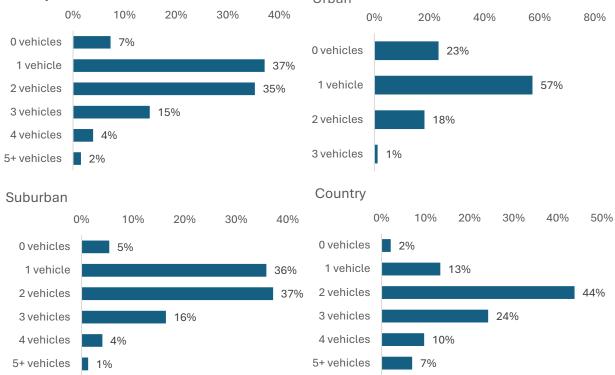


n = 336; 1 respondent each selected "Building with 4..." and "Mobile home/trailer"

Vehicle ownership varies across the geographic divisions of Montgomery County. The majority of respondents across all geographies have at least one vehicle; however, urban respondents are much more likely to live in households without a car (23%). Meanwhile, respondents from the country are much more likely to live in multi-car households (85%) than their urban or suburban peers (Figure 16).

County Urban 0% 10% 20% 30% 40% 0% 20% 40% 60%

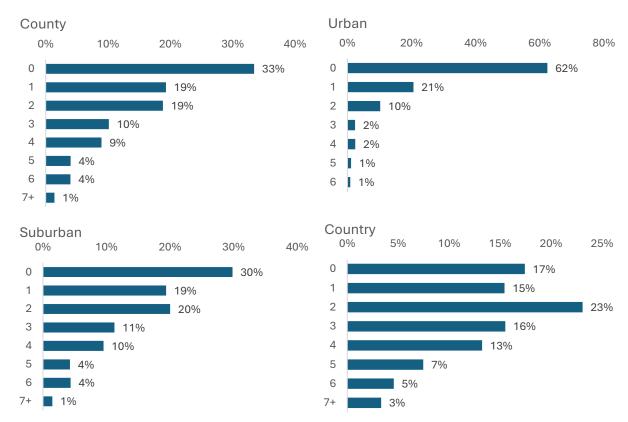
Figure 16: Vehicle Ownership, Weighted at County, Urban, Suburban, and Country Levels



Overall, n = 1,160; Urban, n = 336; Suburban, n = 448; Country, n = 336

Urban respondents were much less likely to own a bike than their suburban or country peers. Country respondents were the most likely to report owning a bike; they were also more likely to own several than their urban or suburban peers (Figure 17).

Figure 17: Bike Ownership, Weighted at County, Urban, Suburban, and Country Levels



County, n = 1,157; Urban, n = 336; Suburban, n = 488; Country, n = 333

Trip Characteristics

Figure 18 illustrates the reported walking, rolling, and biking of respondents in 30 days prior to taking the survey. Respondents from all geographies reported similar levels of walking. Urban respondents were two to three times more likely to report using mobility-assistance devices (rolling) in the last thirty days than their suburban and country peers. Country respondents were more likely to report biking (36%) in the last thirty days than their urban (21%) or suburban (32%) peers; this result aligns with the higher rate of bike ownership reported among country respondents in Figure 17.



Figure 18: Walked/Rolled/Biked in the Last month, Weighted at County, Urban, Suburban, and Country Levels

County, n = 1,160; Urban, n = 336; Suburban, n = 488; Country, n = 336

Note: percentages total more than 100 as respondents selected all options that applied.

The remainder of this section discusses walking frequency and purpose, rolling frequency and purpose, and finally biking frequency and purpose.

Walking Frequency & Purpose

We begin by discussing the frequency and purpose of walking trips across the entire county before moving to sub-geographies.

County Level

By far the most common purpose for walking across all geographies was exercise and outdoor recreation. Recreational walking was almost twice as common as grocery or food shopping, the next most popular purpose (Figure 19). Figure 20 shows the frequency of trips made in a month, broken down by the purpose of the trips (e.g., if someone reported walking for exercise, they were asked how many times in a month they walked for exercise). Recreational walking trips occurred with the most frequency, with 33% of respondents making 20 or more recreational walking trips a month. 28% of respondents who made walking trips for school reported making those trips 20 or more times a month, and 26% of respondents who walked for "other purposes" made 20 or more trips a month. While walking for medical appointments and walking to entertainment were common purposes at the county level (20% and 18%, respectively), those trips occurred with the least frequency (73% and 50% of respondents reported 1-2 trips per month for those purposes, respectively).

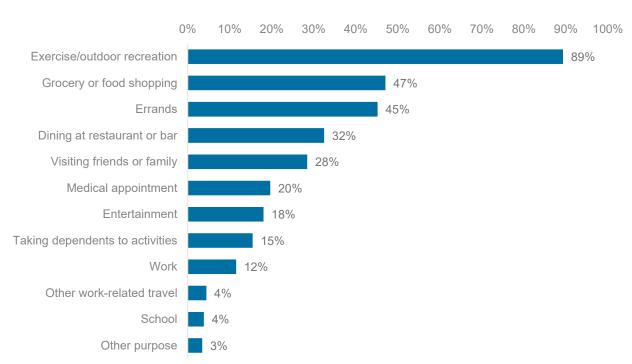
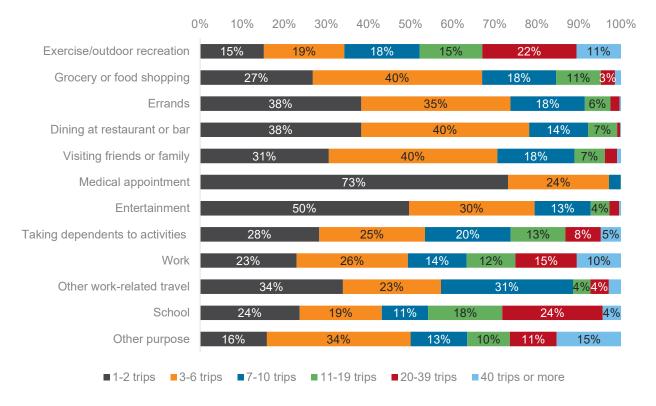


Figure 19: Walking Purpose, Weighted at County Level

n = 1,160

Figure 20: Walking Frequency by Purpose, Weighted At County Level



n = 39 to 1051

Urban Level

While "recreation and exercise" remained the most common walking purpose for urban respondents, utility trips (food shopping and errands) became much more common (Figure 21). Urban respondents also reported higher frequencies of these utility walking trips than respondents at the county level (Figure 22). Walking to take dependents to activities was the only category that experienced a significant drop in popularity from the county to the urban level; this might be attributable to the smaller household sizes reported among urban respondents.

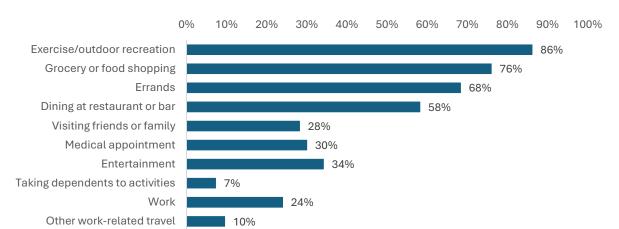


Figure 21: Walking Purpose, Weighted At Urban Level

n = 336

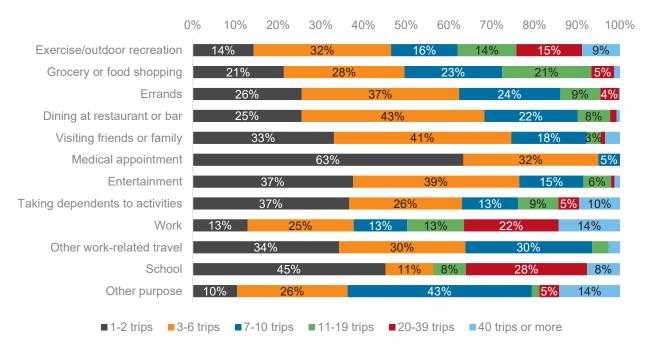
Note: Respondents could select all options that applied.

School

Other purpose

6%

Figure 22: Walking Frequency by Purpose, Weighted at Urban Level

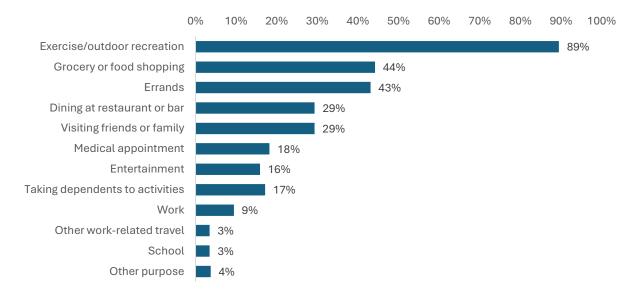


n = 15 to 294

Suburban Level

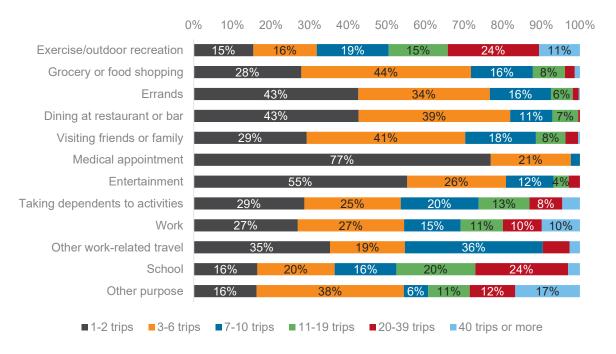
Figure 23 shows that the spread of walking purposes among suburban respondents largely mirrored that of respondents in the county at large, with these respondents reporting a slightly higher likelihood of walking to visit friends or family and to take dependents to activities. The reported frequency of these walks is also largely aligned with county-level frequencies (Figure 24).





n = 488

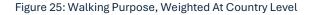
Figure 24: Walking Frequency by Purpose, Weighted At Suburban Level

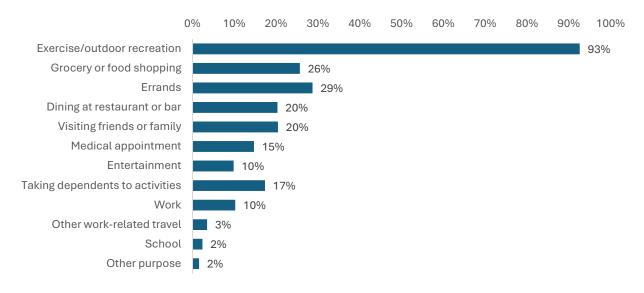


n = 18 to 447

Country Level

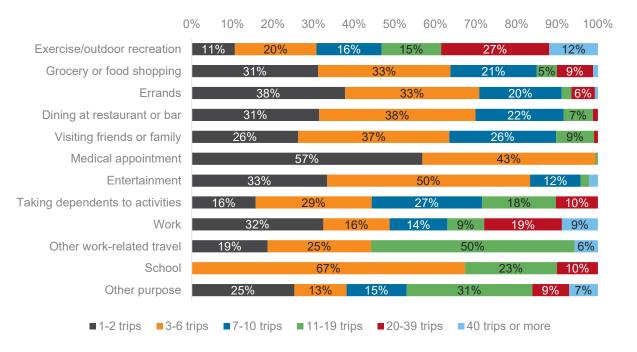
Recreational walks were most popular among country respondents, where 93% of respondents reported engaging in at least one in the last 30 days. Every other walking purpose, except for taking dependents to activities, was less popular at the country level than at the county level (Figure 25). Walk frequency by purpose tended to largely align with county-level frequencies, though at the country level respondents reported a greater frequency of walking trips for medical appointments and entertainment (Figure 26).





n = 336

Figure 26: Walking Frequency by Purpose, Weighted At Country Level



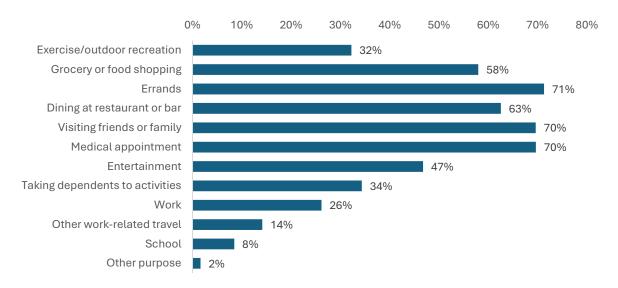
n = 5 to 310

Rolling Frequency & Purpose

County Level

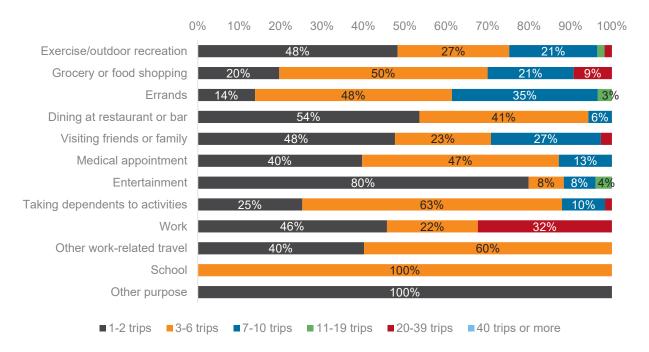
In contrast to the popularity of recreational walking, the most popular rolling trips had utile purposes. The most common purposes were errands, medical appointments, and visiting family and friends (Figure 27). Rolling trips were generally less frequent than walking trips, with the preponderance of respondents reporting 6 or fewer trips in each category. However, 32% of respondents who rolled to work reported making 20-39 trips in the last thirty days, making work trips some of the most frequent (Figure 28).





n = 28Note: Respondents could select all options that applied.

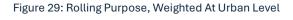
Figure 28: Rolling Frequency by Purpose, Weighted At County Level

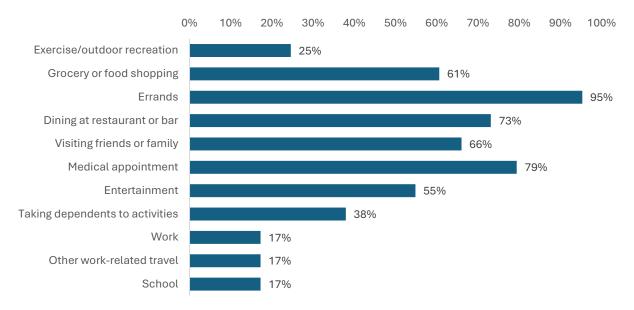


n = 1 to 15

Urban Level

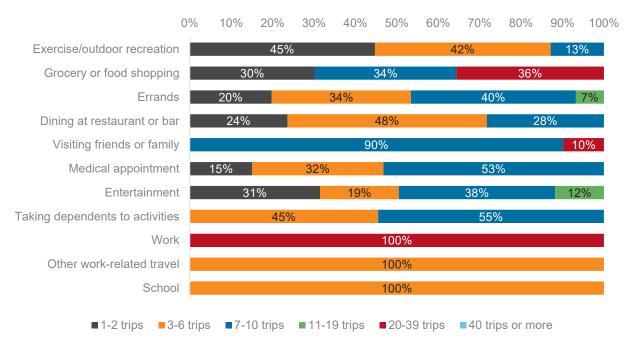
95% of urban respondents reported rolling for errands in the last thirty days, making it by far the most popular purpose. No urban rolling respondents cited "other purpose" as a reason for rolling in the last month (Figure 29). Urban respondents reported a somewhat higher frequency of trips than for the county at large; this is especially noticeable when examining the reported frequency of rolling to visit friends and family and rolling for work (Figure 30).





n = 9Note: Respondents could select all options that applied.

Figure 30: Rolling Frequency by Purpose, Weighted At Urban Level

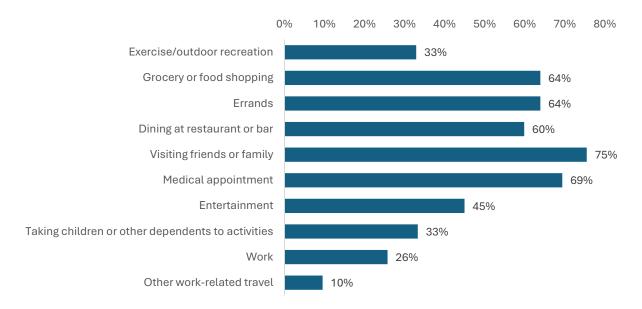


n = 1 to 7

Suburban Level

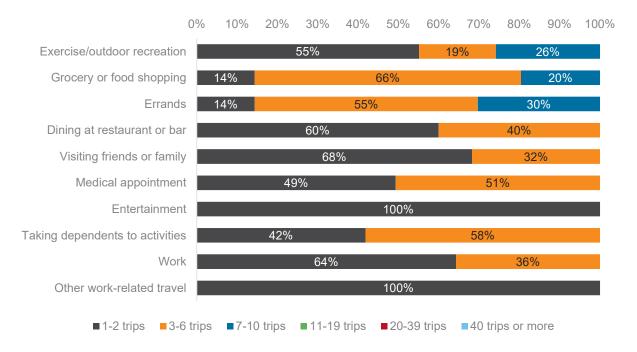
The purposes of suburban rollers typically aligned with those of respondents in the full sample; however, no suburban respondents reported rolling for school or for other purposes (Figure 31). Suburban respondents also reported a lower frequency of trips than their urban counterparts (Figure 32).

Figure 31: Rolling Purpose, Weighted At Suburban Level



n = 10Note: Respondents could select all options that applied.

Figure 32: Rolling Frequency by Purpose, Weighted At Suburban Level

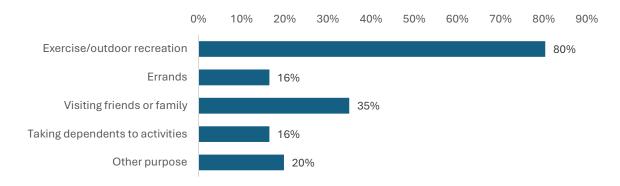


n = 1 to 7

Country Level

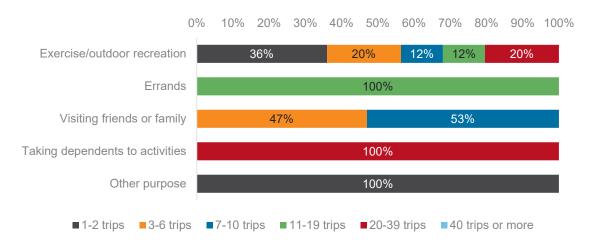
Rolling purposes among country respondents were markedly different than their urban and suburban peers. Country-based respondents only reported rolling for recreation, errands, visiting family or friends, taking children to activities, and other purposes; among these rollers, recreation was by far the most popular purpose (Figure 33). Country-based rollers also reported higher trip frequencies than their suburban counterparts (Figure 34).

Figure 33: Rolling Purpose, Weighted At Country Level



n = 9Note: Respondents could select all options that applied.

Figure 34: Rolling Frequency By Purpose, Weighted At Country Level

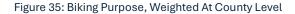


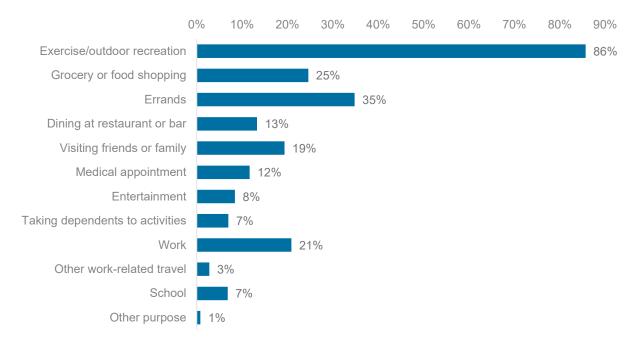
n = 1 to 7

Biking Frequency & Purpose

County Level

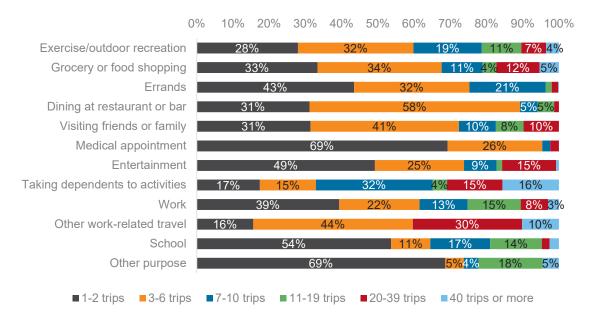
Biking was largely used as a mode of recreation; 86% of respondents reported using it for exercise/recreation, while only 35% of respondents reported biking for the next-closest purpose, errands (Figure 35). Most respondents made 6 or fewer biking trips for each purpose, except for "taking dependents to activities". Among respondents who biked to take dependents to activities, 32% made 6 or fewer trips, 32% made 7-10 trips, and 31% made 20 or more trips in the last thirty days (Figure 36).





n = 362

Figure 36: Biking Frequency by Purpose, Weighted At County Level

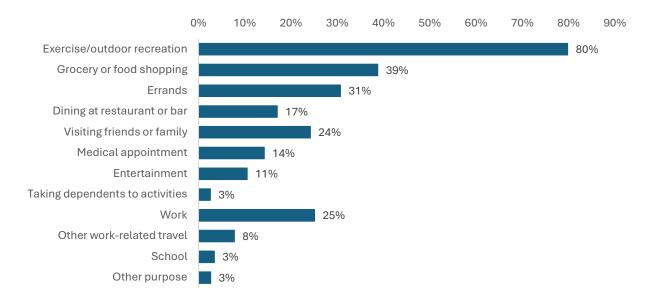


n = 9 to 332

Urban Level

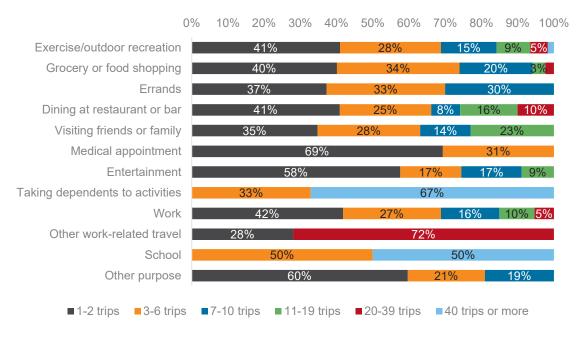
While recreation remains the main purpose of biking among urban respondents, 39% of urban respondents report biking for grocery or food shopping, making it the second most popular purpose (Figure 37). Most respondents still reported making 6 or fewer trips for each purpose; however, 67% made 40 or more trips to take dependents to activities and 72% took 20-39 biking trips for other work travel (Figure 38).





n = 78

Figure 38: Biking Frequency by Purpose, Weighted At Urban Level

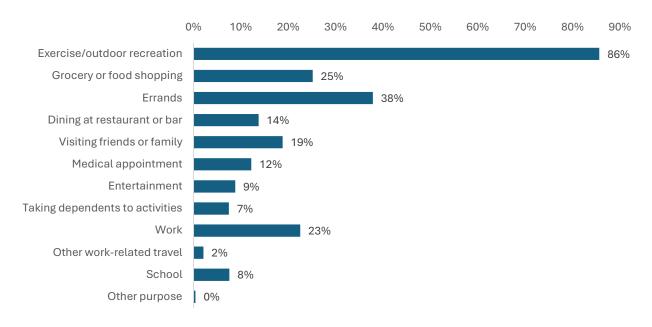


n = 2 to 67

Suburban Level

The purpose and frequency of suburban biking largely aligned with county-level results (Figure 39 and Figure 40).

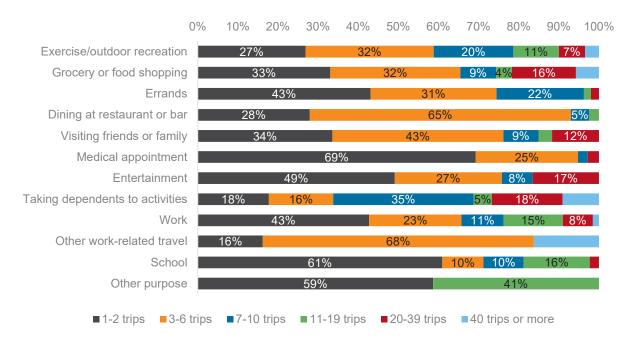
Figure 39: Biking Purpose, Weighted At Suburban Level



n = 163

Note: Respondents could select all options that applied.

Figure 40: Biking Frequency by Purpose, Weighted At Suburban Level



n = 2 to 150

Country Level

Recreation was an even more popular purpose for biking among respondents from the country area than at the urban or suburban, while almost every other purpose was less popular (Figure 41). This same general trend can be seen when comparing walking and rolling purpose for country respondents to their urban and suburban counterparts, suggesting that more country respondents are using motorized transportation for necessities than their urban and suburban counterparts. Country cyclists who biked to get to entertainment, to take dependents to activities, and to get to work or school reported higher frequencies of cycling than their county-level counterparts (Figure 42).

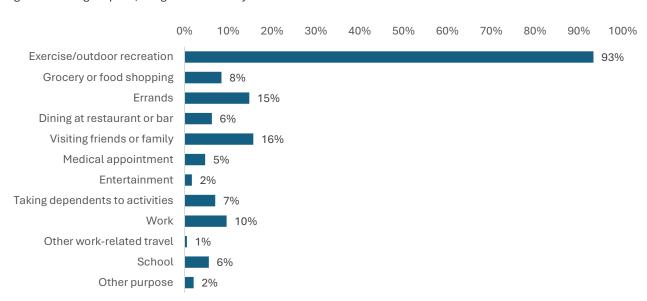
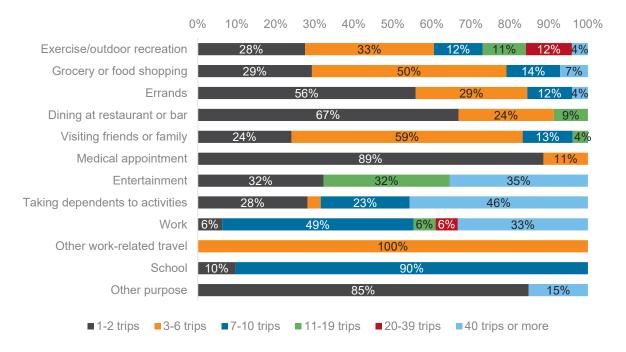


Figure 41: Biking Purpose, Weighted At Country Level

n = 121

Figure 42: Biking Frequency by Purpose, Weighted At Country Level



n = 1 to 115

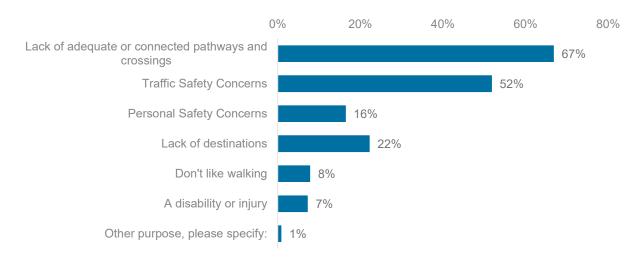
Respondents Who Did Not Walk or Roll

This subsection discusses respondents who reported that they had not taken a walking or rolling trip in the last 30 days. These respondents are discussed at the aggregate county level, then at the level of each sub-geography, and finally they are examined by race and gender.

County Level

At the county level, the most common reason respondents cited for why they had not taken a walking or rolling trip in the last 30 days was a lack of adequate or connected pathways and crossings, followed by traffic safety concerns (Figure 43). These concerns coincide with the dissatisfaction respondents expressed about the state of sidewalks in Montgomery County and the behavior of cars near pedestrian infrastructure, as seen in Figure 93 and noted later in this report.

Figure 43: Why Have You Not Taken a Walking/Rolling Trip in the last 30 Days, Weighted at County Level

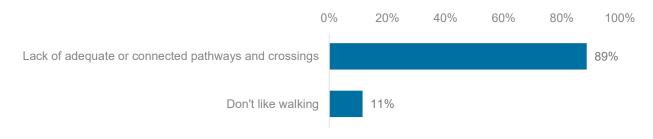


County, n = 19

Urban Level

Very few respondents at the urban level had not taken a walking or rolling trip in the last 30 days. Among these respondents, the lack of adequate or connected pathways and crossings was the most pressing concern (Figure 44).

Figure 44: Why Have You Not Taken a Walking/Rolling Trip in the last 30 Days, Weighted at Urban Level



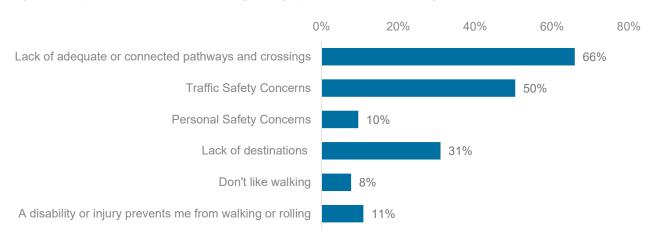
Urban, n = 2

Note: Respondents could select all options that apply

Suburban Level

Figure 45 shows that the reasons for not walking or rolling cited by suburban respondents largely matched county level results. However, suburban respondents were much more likely to cite a lack of destinations within walking/rolling distance as a reason they did not walk or roll (31% suburban vs 22% county-wide).

Figure 45: Why Have You Not Taken a Walking/Rolling Trip in the last 30 Days, Weighted at Suburban Level

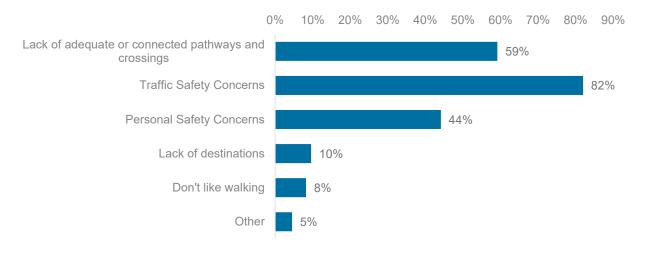


Suburban, n = 6

Country Level

The country level was the only level at which a lack of adequate or connected pathways and crossings was not the most cited reason for not making a walking/rolling trip. 82% of country-level respondents cited traffic safety concerns as a barrier to walking/rolling, significantly higher than the 50% of suburban respondents who cited traffic safety concerns. Country respondents were also more likely to cite personal safety concerns than their urban or suburban peers (Figure 46).

Figure 46: Why Have You Not Taken a Walking/Rolling Trip in the last 30 Days, Weighted at Country level

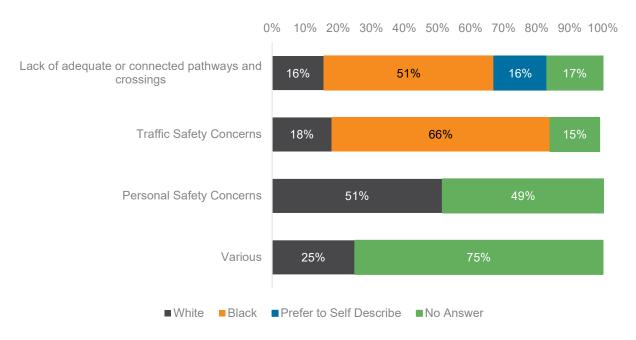


Country, n = 11

Racial Differences

Figure 47 shows the reasons respondents cited as preventing them from walking/rolling in the last month, broken down by race. For this and the other crosstabs included in this section, we focused on the two most cited responses, as well as personal safety concerns. All other concerns were collapsed into the catchall of "Various." At the county level, Black respondents were the group most likely to cite traffic safety concerns (61%) and the lack of adequate or connected pathways and crossings (51%) as drivers of their decision not to walk or roll. White respondents were the most likely to cite personal safety concerns (51%), and respondents who did not provide their race were the most likely to cite various other reasons.

Figure 47: Why Have You Not Taken a Walking/Rolling Trip in the last 30 Days by Race, Weighted at County Level

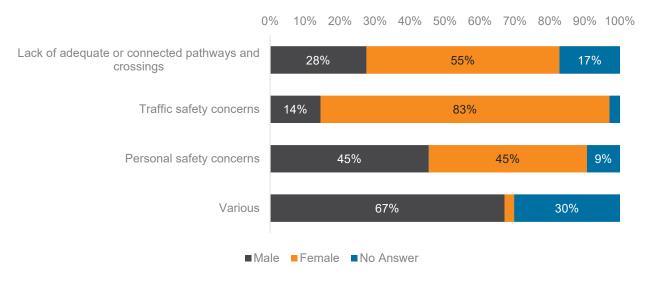


County, n: White = 11; Black = 2; Self-Describe = 1; No Answer = 19

Gender Differences

Female respondents who did not walk or roll in the last 30 days were far more likely to cite traffic safety concerns (83%) and the lack of adequate or connected pathways and crossings (55%) as reasons than their male counterparts. Women and men were equally likely to cite personal safety concerns (45% each), and men were more likely to cite reasons that fell under the umbrella of "Various" (67%) (Figure 48).

Figure 48: Why Have You Not Taken a Walking/Rolling Trip in the last 30 Days by Gender, Weighted at County Level



County, n: Male = 10; Female = 7; No Answer = 2

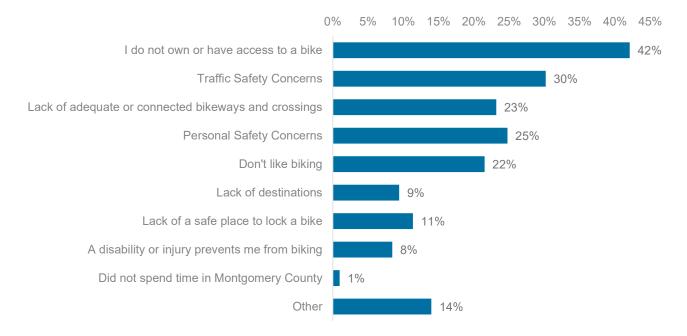
Respondents Who Did Not Bike

This subsection discusses respondents who reported that they had not taken a biking trip in the last 30 days. These respondents are discussed at the aggregate county level, then at the level of each sub-geography, and final they are examined by race and gender.

County Level

Lack of access to a bike was the most cited reason (42%) that respondents had not biked in the previous 30 days. Concerns about traffic safety (30%) and personal safety (25%) were the second and third most commonly cited reasons (Figure 49).

Figure 49: Why Have you Not Taken a Biking Trip in the Last 30 Days, Weighted at County Level

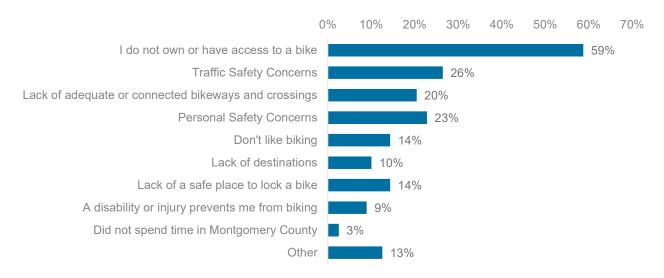


County, n = 798

Urban Level

Figure 50 shows that, among urban respondents, lack of access to a bike was an even larger impediment to biking than at the county level. This finding aligns with the results from the bike ownership question addressed in Figure 17, which found that urban respondents were much less likely to have a bike than their suburban or country peers. Urban respondents were less likely to cite most other concerns than the full sample of respondents, though urban respondents were slightly more concerned with a lack of destinations, a lack of safe places to lock their bikes, and previous injuries or disabilities.

Figure 50: Why Have You Not Taken a Biking Trips in the Last 30 Days, Weighted at Urban Level

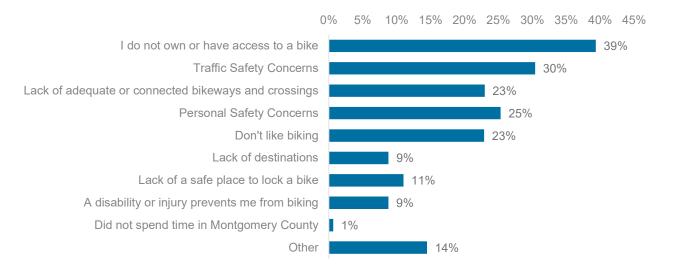


Urban, n = 258

Suburban Level

Suburban respondents were more likely to cite concerns over both personal and traffic safety than their urban peers. Despite higher levels of suburban bike ownership, they were also more likely to cite a simple dislike for biking as a reason for not biking in the prior 30 days (Figure 51).

Figure 51: Why Have You Not Taken a Biking Trips in the Last 30 Days, Weighted at Suburban Level



Suburban, n = 325

Country Level

Figure 52 shows that a lack of access to a bike was a much smaller impediment to country respondents; this finding aligns with the widespread bike ownership seen among country respondents in Figure 17. Country respondents were more likely to cite traffic safety concerns (30%) than their suburban (30%) or urban (26%) peers. Country respondents were also much more likely to cite a lack of access to connected bikeways and crossings (37%) than their suburban (23%) or urban (20%) peers. These two types of concerns might amplify each other, as a perceived lack of bikeways and crossings might make potential cyclists fear that they would be in competition with cars more often, thus making traffic safety seem like an even more pressing concern.

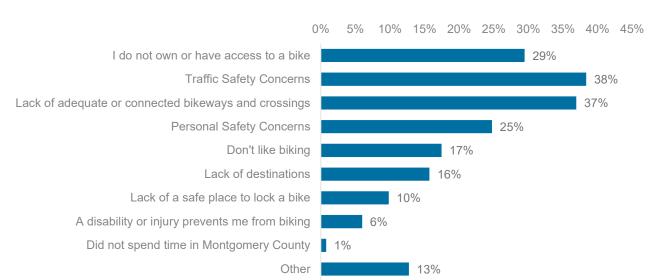


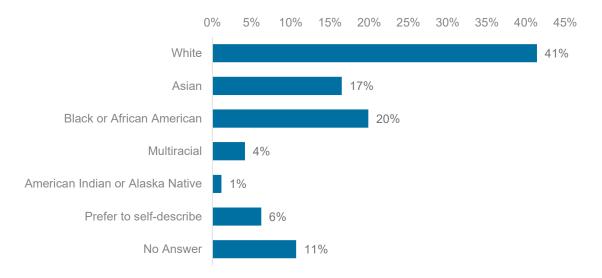
Figure 52: Why Have You Not Taken a Biking Trips in the Last 30 Days, Weighted at Country Level

Country, n = 215

Racial Differences

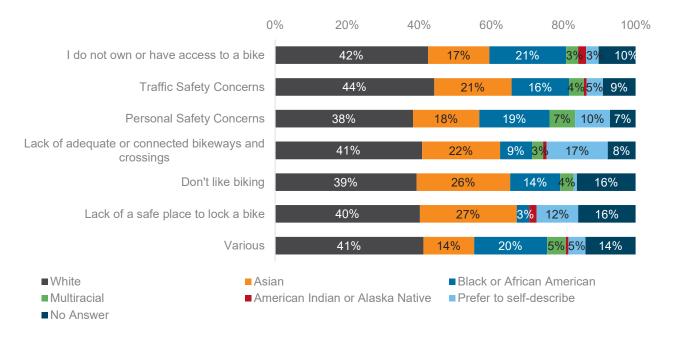
Figure 53 shows the racial makeup of respondents who reported not biking in the previous 30 days, while Figure 54 shows the reasons broken down by the race of the respondents who selected them. White respondents make up a disproportionately large proportion of those who cite traffic safety concerns as an impediment to biking (44%). Asian respondents are overrepresented in every category of concern except for the "Various" catchall (14%). Black respondents are underrepresented across many areas of concern and reported especially low concern with a lack of safe places to lock their bikes (3%). Those who preferred to self-describe their race were disproportionately concerned with a lack of adequately connected bikeways (17%) and places to lock their bikes (12%), while those who provided no answer as to their race were overrepresented among respondents who simply did not like biking (16%).

Figure 53: Racial Makeup of Respondents who had not Biked in the Previous 30 Days, Weighted at County Level



County, n = 798

Figure 54: Why Have you not Taken a Biking Trip in the Last 30 Days by Race, Weighted at County Level

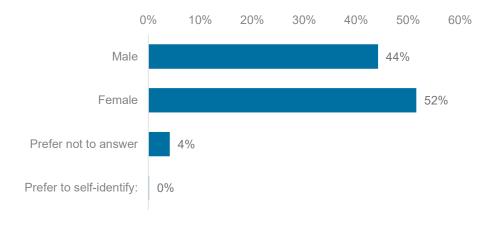


County, n = 3 to 556

Gender Differences

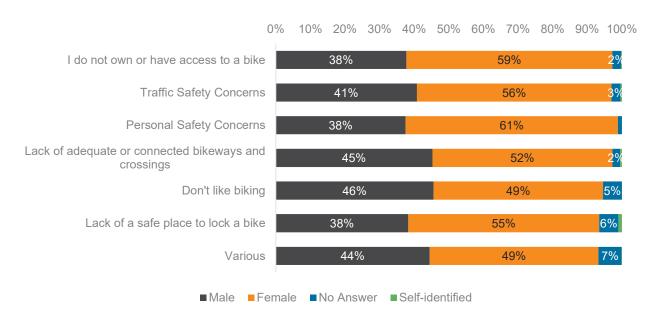
Figure 55 shows that a majority of respondents who had not biked in the 30 days prior to the survey identified as female. As seen in Figure 56, female respondents made up a particularly disproportionate share of those who cited personal safety (61%) and lack of bike ownership (59%) as barriers to making a bike trip. Male respondents were slightly overrepresented among those who didn't like biking (46%) but tended to be underrepresented across most categories. Respondents who did not provide their gender were overrepresented in the "Various" catchall category (7%).

Figure 55: Gender Makeup of Respondents who had not biked in the Previous 30 Days, Weighted at County Level



County, n = 798; 2 respondents selected "Prefer to self-identify"

Figure 56: Why Have You Not Taken A Biking Trip In the Last 30 Days by Gender, Weighted at County Level



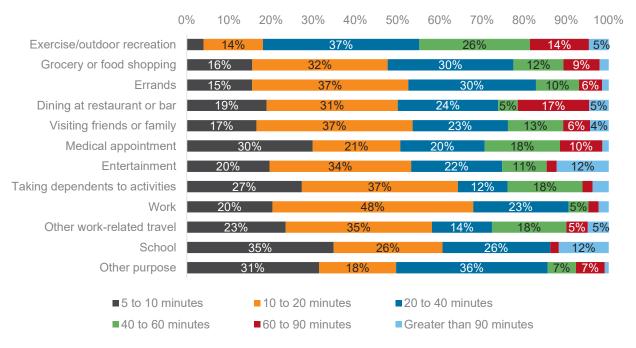
County, n: Men = 328; Female = 436; No Answer = 32; Self-identified = 2

Waking Trip Length

County Level

Across the county, the one-way walking trips of respondents tended to be 20 minutes or less in length. However, walking trips for recreation, for grocery or food shopping, and for other purposes tended to be longer than 20 minutes. 12% of respondents who walked to entertainment or to school reported remarkably long trips lasting more than 90 minutes (Figure 57).

Figure 57: Walk Length by Purpose, Weighted County

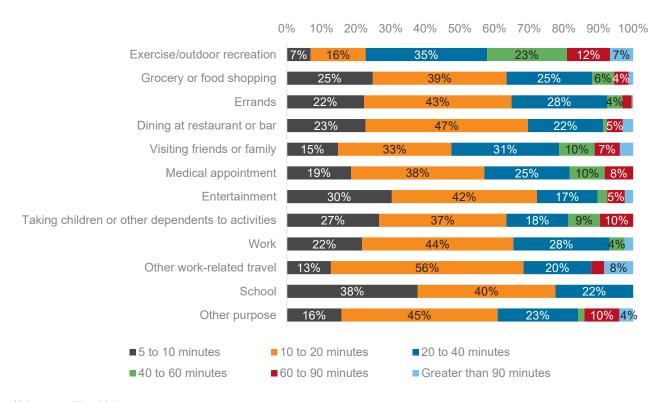


n = 39 to 1,051

Urban Level

Walking trips among urbans respondents tended to be shorter than those in the full sample. Urban walking trips were less likely to be 40 minutes or longer; this trend holds true across all trip types. Walks for recreation tended to be the longest, with 42% of trips taking 40 minutes or more. 38% of respondents reported their walking trips to school were less than ten minutes long while 30% reported the same for walking trips to entertainment venues. No respondents reported walks to school taking longer than 40 minutes (Figure 58).

Figure 58: Walk Length by Purpose, Weighted at Urban Level

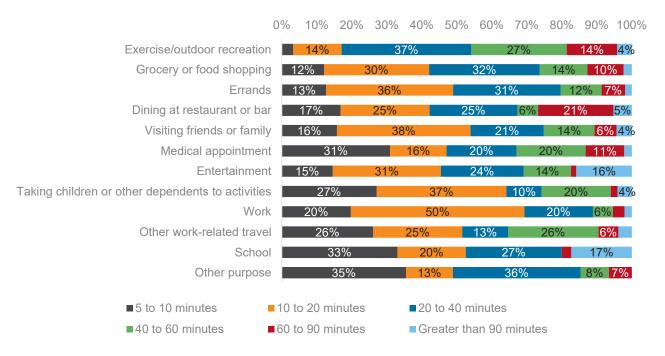


Urban, n = 15 to 294

Suburban Level

Among suburban respondents, recreational walking trips were the most likely to take 40 minutes or more. Walking trips for other purposes, for school, and for medical appointments were the most likely to be 10 minutes or less (35%, 33%, and 31% respectively). Reported trip lengths tended to be longer than those of urban respondents across all purposes, except trips for visiting friends and family, for work, for entertainment, and for medical appointments (Figure 59).

Figure 59: Walk Length by purpose, weighted at suburban level

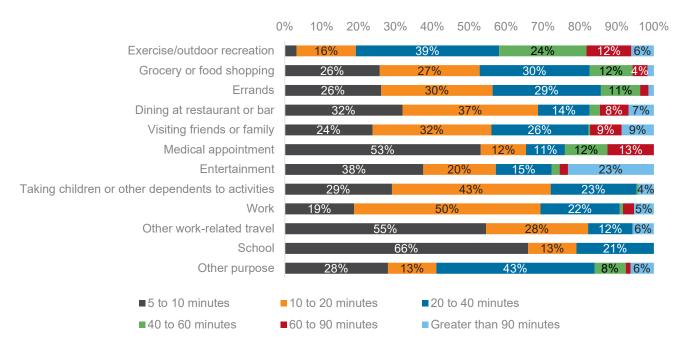


Suburban, n = 18 to 447

Country Level

As seen in Figure 60, recreational walking trips were the most likely to take 20 minutes or more for country respondents. Walking trips for entertainment had the largest share of the longest reported trip times, with 23% of walking trips for entertainment taking 90 minutes or longer. Walking trips for school were the shortest, with 79% taking 20 minutes or less.

Figure 60: Walk length by purpose, weighted at country level



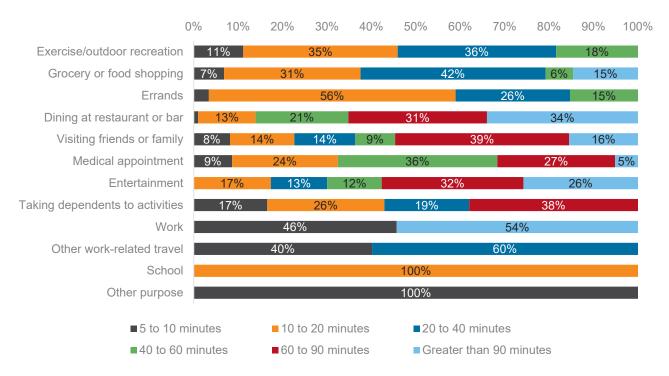
Country, n = 5 to 310

Rolling Trip Length

County Level

Figure 61 shows that rolling trips tended to take a greater length of time than walking trips, though rolling trips for recreation tended to be shorter than recreational walking trips. Notably, 54% of one-way rolling trips to work, 34% of rolling trips to eat out, and 26% of rolling trips to entertainment venues took more than 90 minutes; in comparison, only 2% of walking trips to work, 5% of walking trips to dine out, and 12% of walking trips to entertainment venues took longer than 90 minutes.

Figure 61: Rolling Trip Length By Purpose, Weighted At County

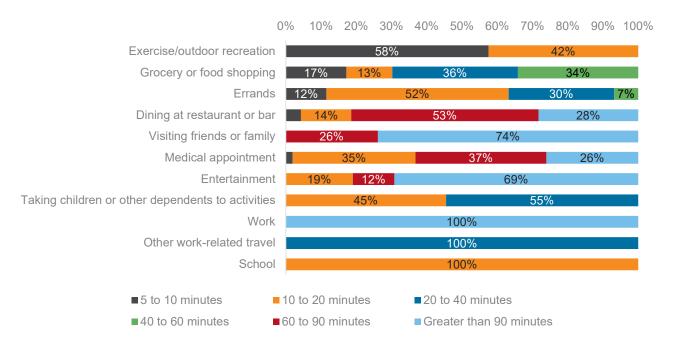


County, n = 1 to 15

Urban Level

Among urban respondents, all rolling trips for recreation were 20 minutes or less in length, making recreational rolling trips some of the shortest for this level, as well as making urban recreational rolling trips the shortest average recreational trip at every geographic level. Urban rolling trips for work were remarkably long, with all of them taking 90 minutes or more. 74% of rolling trips to visit family and friends and 69% of rolling trips to entertainment venues also took 90 minutes or longer, significantly longer than at the suburban level (Figure 62).

Figure 62: Rolling Trip Length By Purpose, Weighted at Urban Level

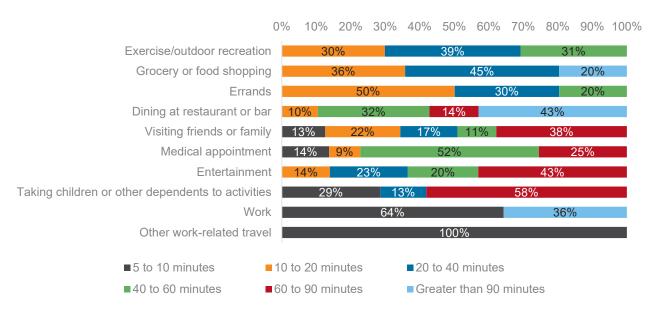


Urban, n = 0 to 7

Suburban Level

Among suburban respondents, recreational rolling trips were significantly longer than at the urban level, with 70% 20 minutes or longer. Rolling trips to work were bifurcated, with 64% in the shortest duration group (5 to 10 minutes) and 36% in the longest duration group (90 minutes or more). Suburban rolling trips were generally less time consuming than urban rolling trips (Figure 63).

Figure 63: Rolling Trip Length by Purpose, Weighted at Suburban Level

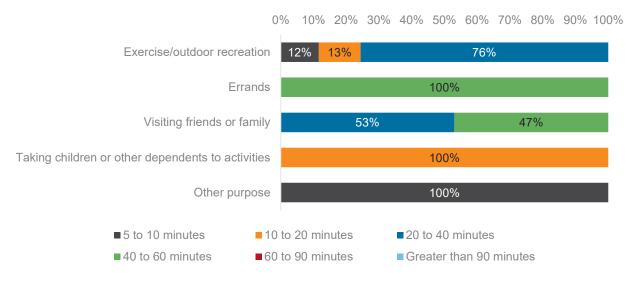


Suburban, n = 0 to 7

Country Level

Among respondents from the country area, no rolling trip took longer than 60 minutes. However, respondents reported fewer reasons for making rolling trips at the country level than at either the urban or suburban level (Figure 64).

Figure 64: Rolling Trip Length by Purpose, Weighted at Country Level



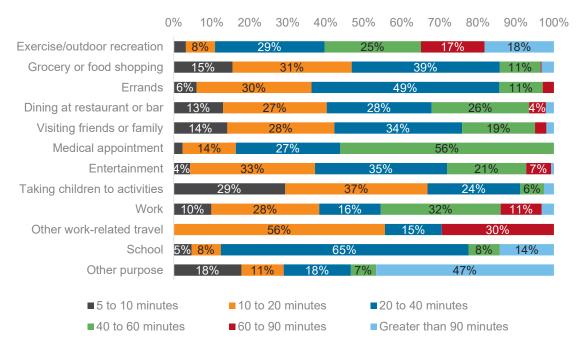
Country, n = 0 to 7

Biking Trip Length

County Level

Cycling trips also tended to be longer than walking trips, though generally not as long as rolling trips. 35% of recreational cycling trips were longer than 60 minutes, compared to 19% of walking trips and 0% of rolling trips. Over half of all cycling trips were longer than 20 minutes, with the exception of those for taking dependents to activities and those for other work-related activity (Figure 65).

Figure 65: Biking Trip Length By Purpose, Weighted At County Level

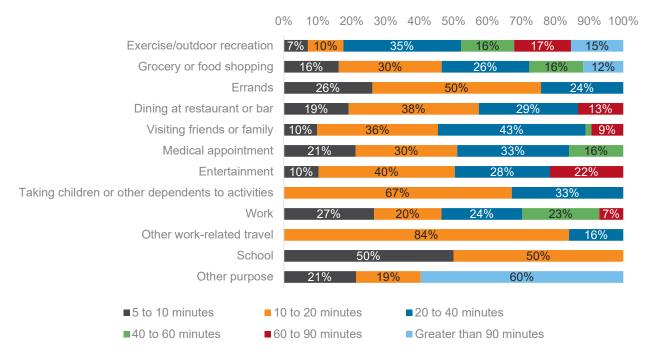


n = 9 to 332

Urban Level

Urban biking trips tended to be relatively short, with the majority of trips for errands, medical appointments, entertainment, taking dependents to activities, other work-related travel, and school taking 20 minutes or less. The plurality of recreational biking trips were 20 to 40 minutes long, with an even spread of longer trips. Urban biking trips for other purposes had the largest share of the longest duration, with 60% of them taking 90 minutes or more (Figure 66).

Figure 66: Biking Trip Length by Purpose, Weighted at Urban Level

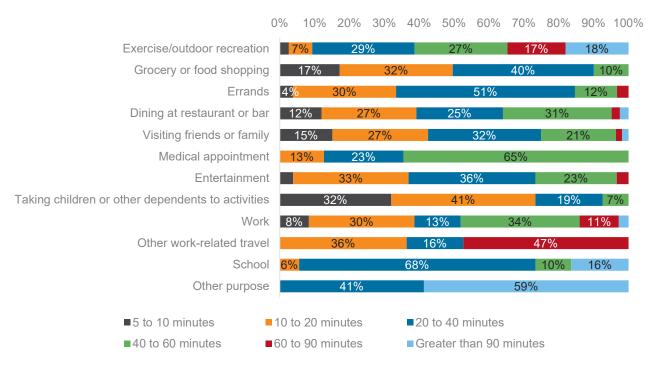


Urban, n = 2 to 67

Suburban Level

Suburban biking trips tended to be longer than their urban counterparts, with a larger share of trips across most categories taking 40 minutes or more. However, trips for grocery or food shopping were less likely to take 40 minutes or more at the suburban level than at the urban level (Figure 67).

Figure 67: Biking Trip Length by Purpose, Weighted at Suburban Level

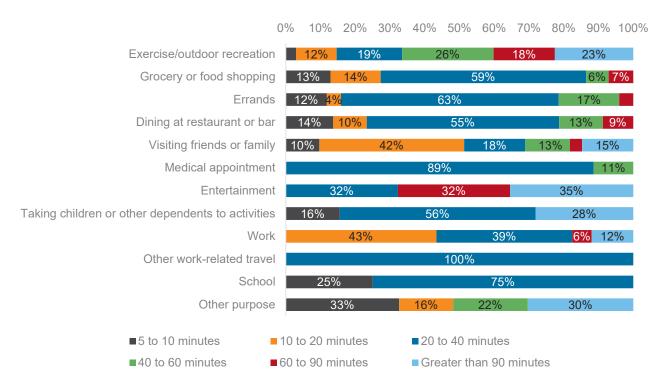


Suburban, n = 2 to 150

Country Level

The median trip length across most trip purposes for country respondents was 20 to 40 minutes. Biking trips for exercise were notably longer than this, with 67% taking 40 minutes or more; recreational biking at the country level was likely to be slightly longer in duration than at the suburban and urban level. Biking trips to work and biking trips to see family and friends tended to be the shortest among country biking trips, while trips for entertainment had the greatest share of trips that took 90 minutes or more (Figure 68).

Figure 68: Biking Trip Length by Purpose, Weighted at Country Level



Country, n = 1 to 115

Walking Weekday Trip Time

As shown in Figure 69, most weekday walking trips across all purposes occur from 7am to 7pm. At the urban and suburban level, walking trips to work and walking trips to take dependents to activities followed a "rush hour" pattern, with bimodal peaks in the 7-11am and 3-7pm slots (Figure 70 and Figure 71). Country respondents differed somewhat from their urban and suburban peers in several ways (Figure 72). 70% of country respondents reported that they walked for errands in the 11am-3pm times slot, compared to 49% and 50% of urban and suburban walkers. Country walkers also reported a strong "rush hour" trend in walking for school, while the times of walking for school was dispersed much more evenly among urban and suburban respondents.

Figure 69: Weekday Walking Times by Purpose, Weighted at County Level

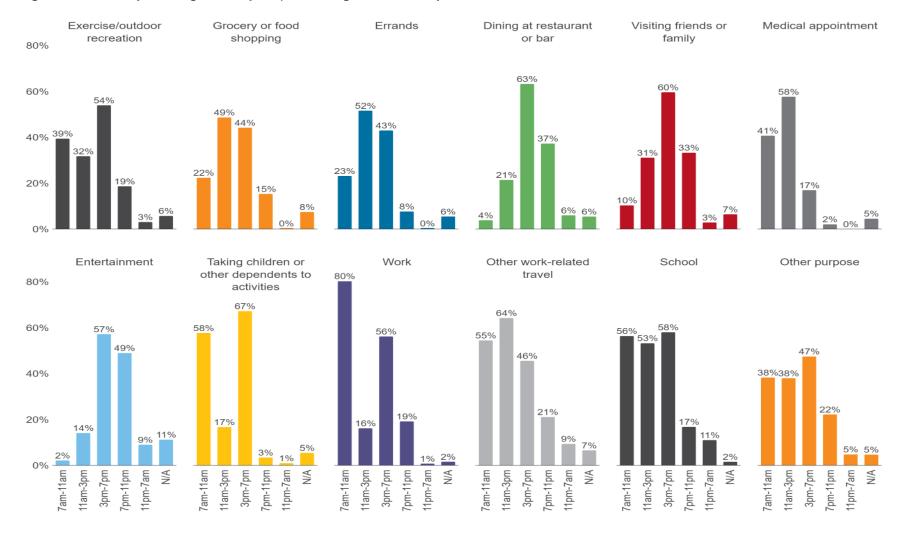
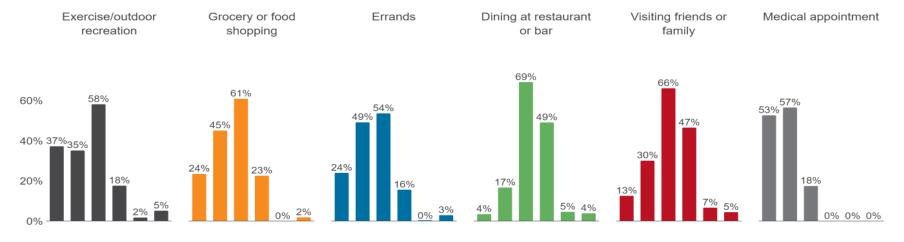


Figure 70: Weekday Walking Times by Purpose, Weighted at Urban Level



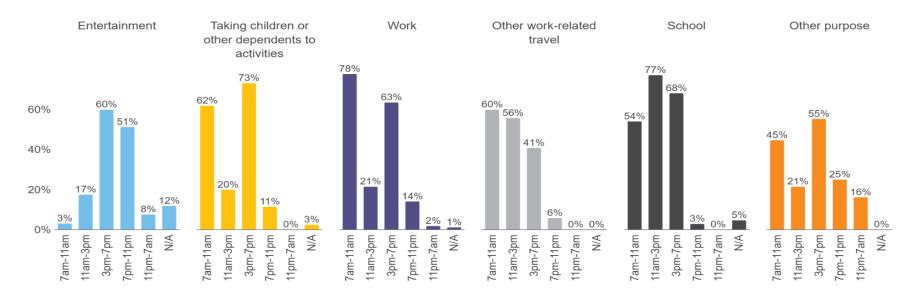


Figure 71: Weekday Walking Times by Purpose, Weighted at Suburban Level

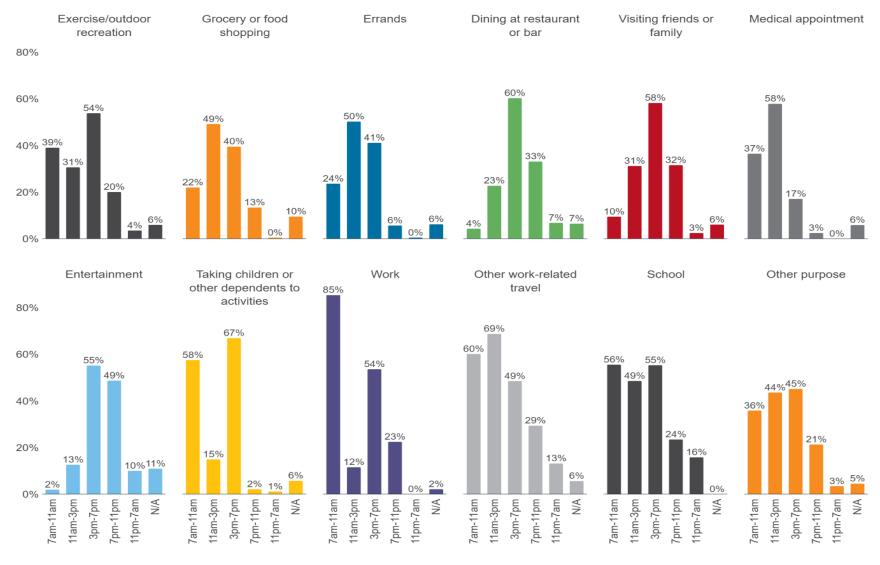
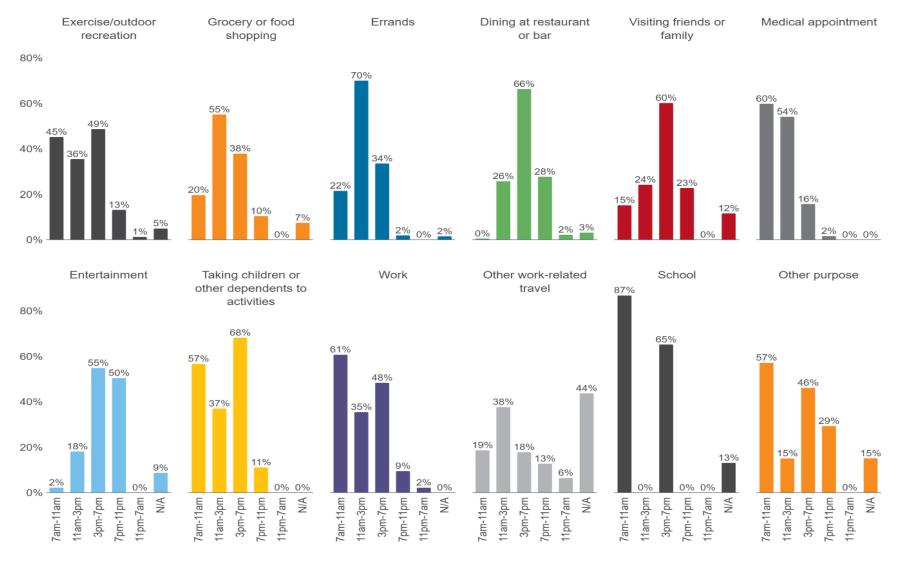


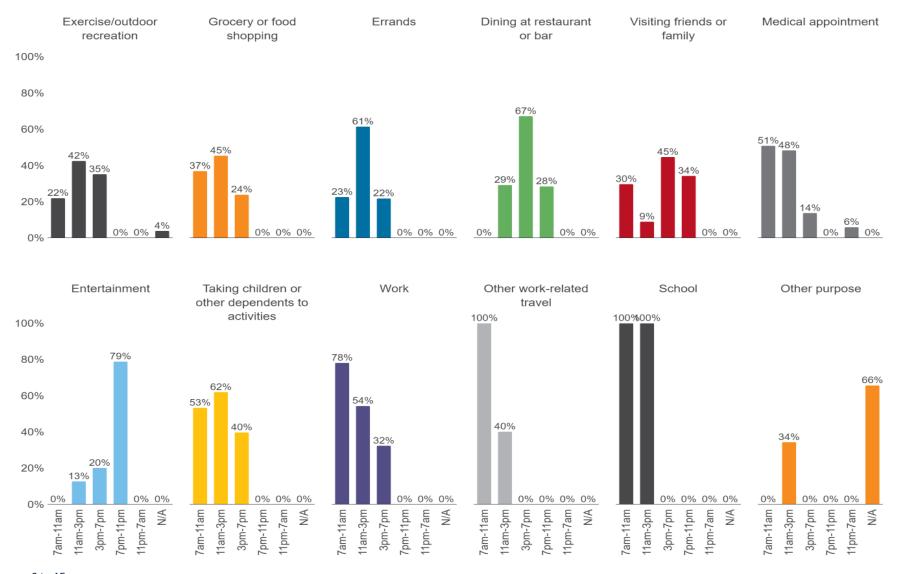
Figure 72: Weekday Walking Times by Purpose, Weighted at Country Level



Rolling Weekday Trip Time

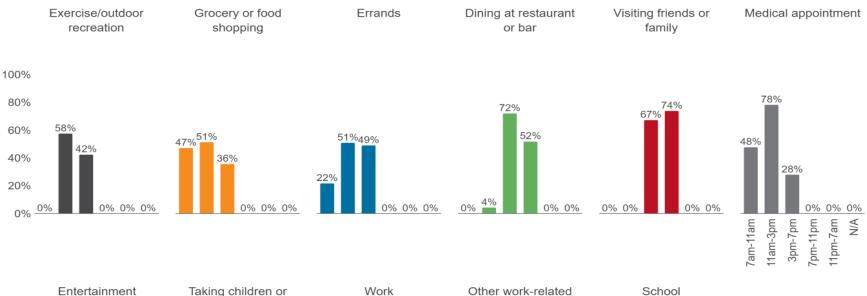
Weekday rolling trips across all geographies tended to occur during daylight hours; however, rolling respondents were more likely to report rolling to entertainment in the 7-11pm than walkers (79% vs 49% county-wide) (Figure 73). Rollers also did not follow the same bimodal rush hour pattern as walkers for either work, school, or taking dependents to activities (Figure 74, Figure 75, and Figure 76).

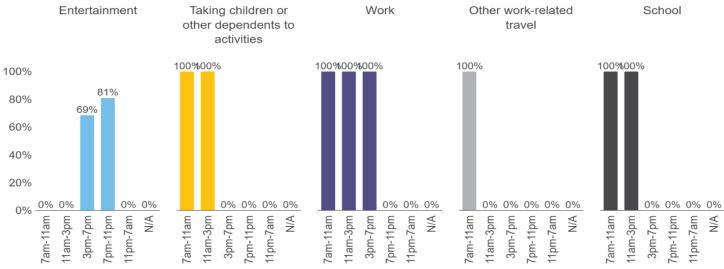
Figure 73: Weekday Rolling Times by Purpose, Weighted At County Level



n = 0 to 15

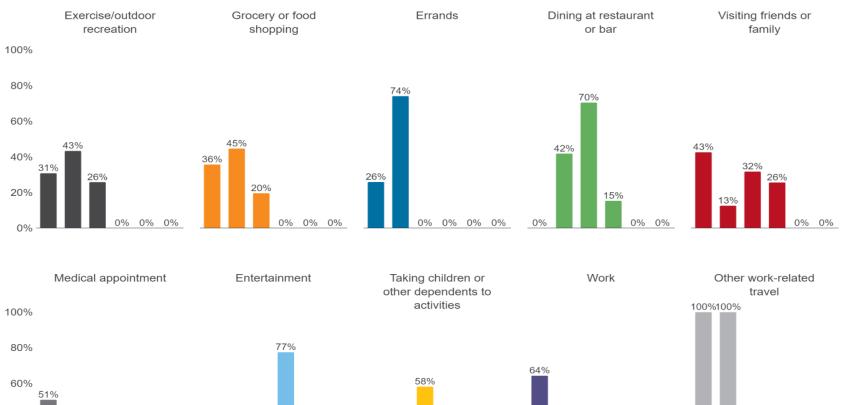
Figure 74: Weekday Rolling Trip Time by Purpose, Weighted at Urban Level

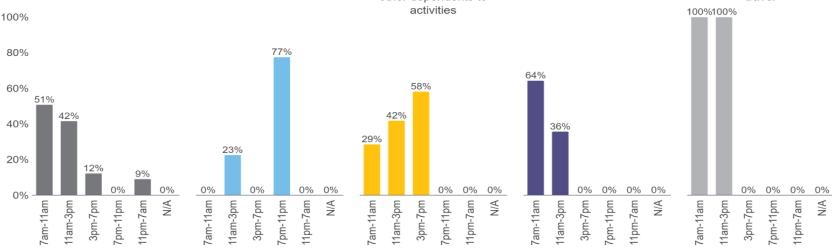




n = 0 to 7

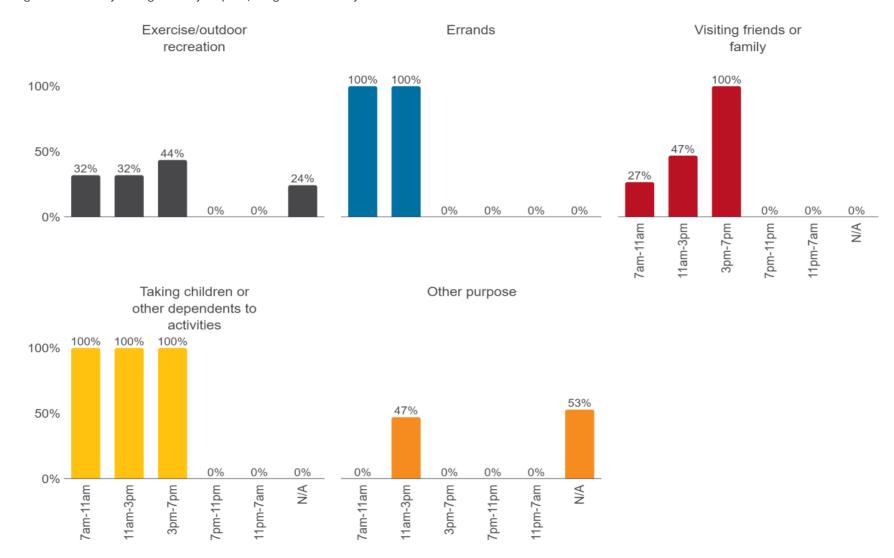
Figure 75: Weekday Rolling Trip Times by Purpose, Weighted at Suburban Level





n = 0 to 7Note: Respondents could pick all options that applied.

Figure 76: Weekday Rolling Times by Purpose, Weighted at Country Level



n = 0 to 7Note: Respondents picked all options that applied

Biking Weekday Trip Time

Figure 77 shows that weekday bikers reported almost no activity in the 11pm-7am timeslot. Weekday bikers also followed a bimodal rush hour pattern for work and taking dependents to activities, but not for school. As with walkers and rollers, biking for errands was most likely to occur in the 11am-3pm timeslot. Patterns tended to replicate across geographies with minor exceptions, such as the propensity of suburban bikers to grocery shop in the 3-7pm slot (Figure 78, Figure 79, and Figure 80).

Figure 77: Weekday Biking Times By Purpose, Weighted at County Level

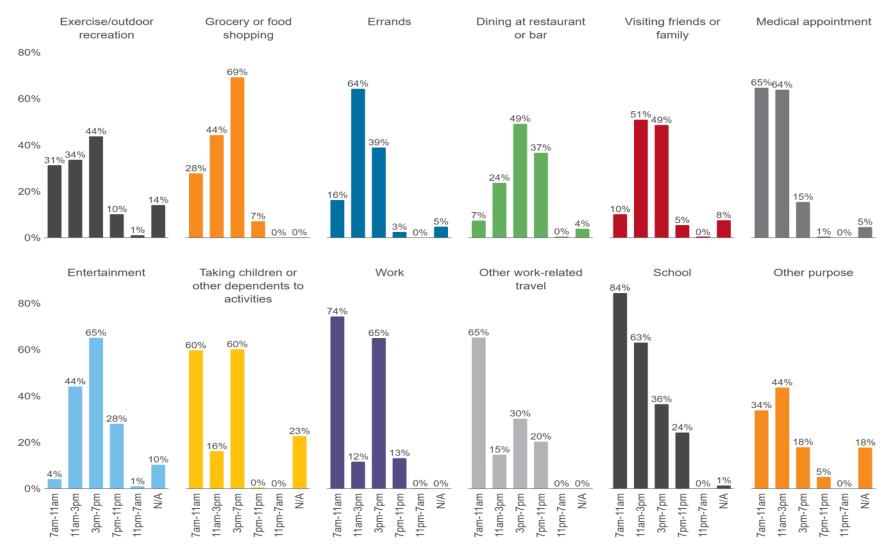
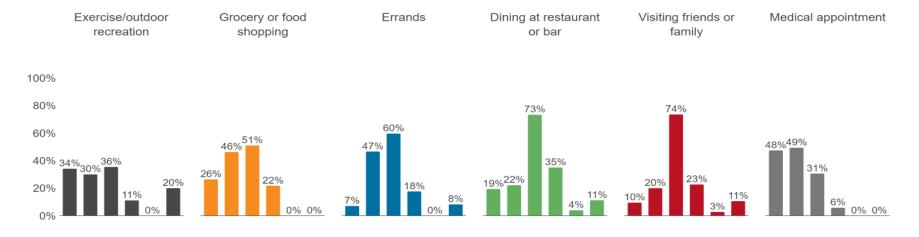
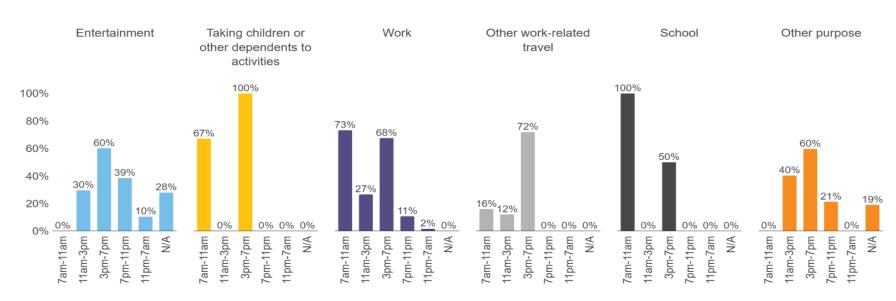


Figure 78: Weekday Biking Times by Purpose, Weighted at Urban Level





n = 0 to 67

Figure 79: Weekday Biking Times by Purpose, Weighted at Suburban Level

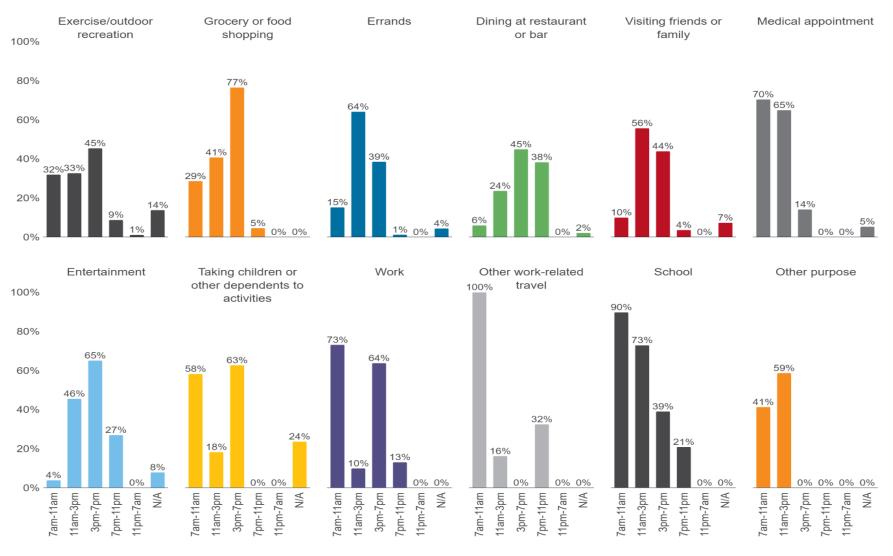
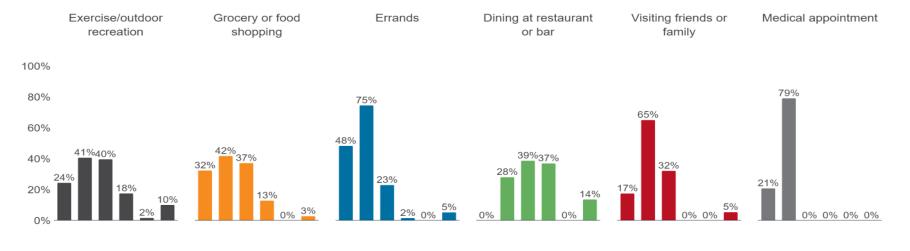
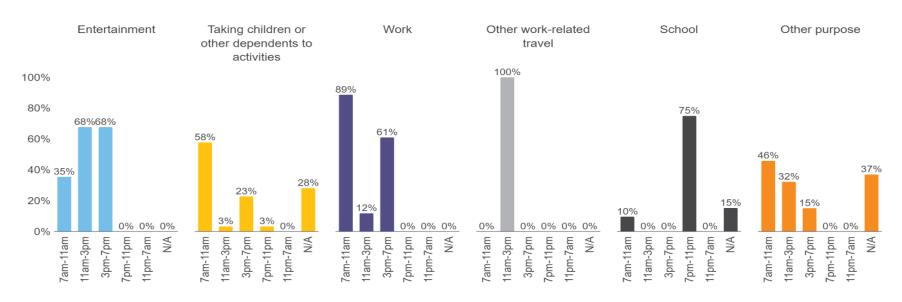


Figure 80: Weekday Biking Times by Purpose, Weighted at Country Level





Walking Weekend Trip Time

Very few respondents reported walking for work, medical appointments, school, or work-related travel on the weekends. While most activities experienced a peak in either the 11am-3pm or 3pm-7pm slot, the share of respondents walking for recreation, for work, and for medical appointments stayed fairly consistent from 7am to 7pm (Figure 81). While urban respondents reported similar patterns, there were notable differences. Walking for medical appointments was concentrated in the morning and early afternoon, and walking for other purposes showed a much more notable peak in the 3pm-7pm than in the county-level data (Figure 82). Patterns at the suburban level resembled those of the county as a whole (Figure 83). At the country level, no respondents reported walking to school on the weekend. Work-related travel was also more prevalent at the country level than at any other, with work-related travel peaking in the morning and at night (Figure 84).

Figure 81: Weekend Walking Trip Time by Purpose, Weighted At County Level

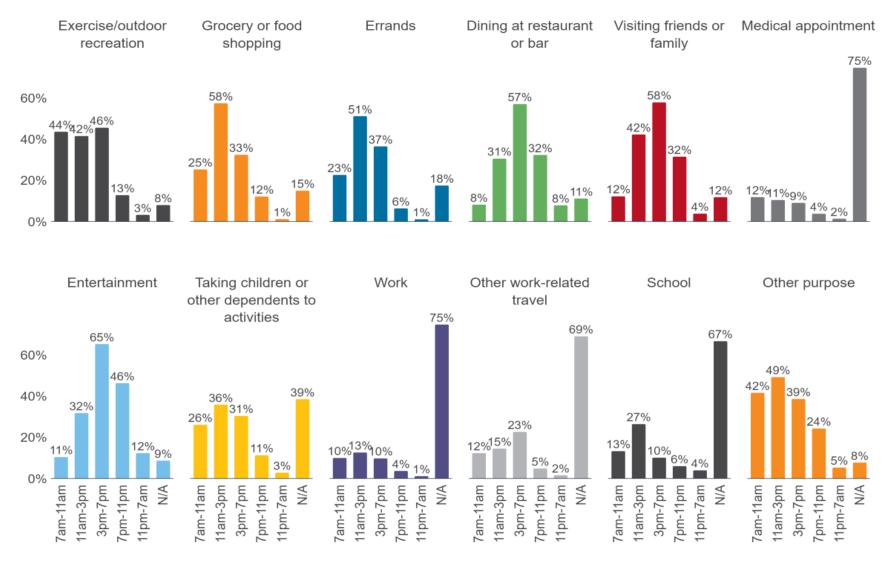


Figure 82: Weekend Walking Times by Purpose, Weighted at Urban Level

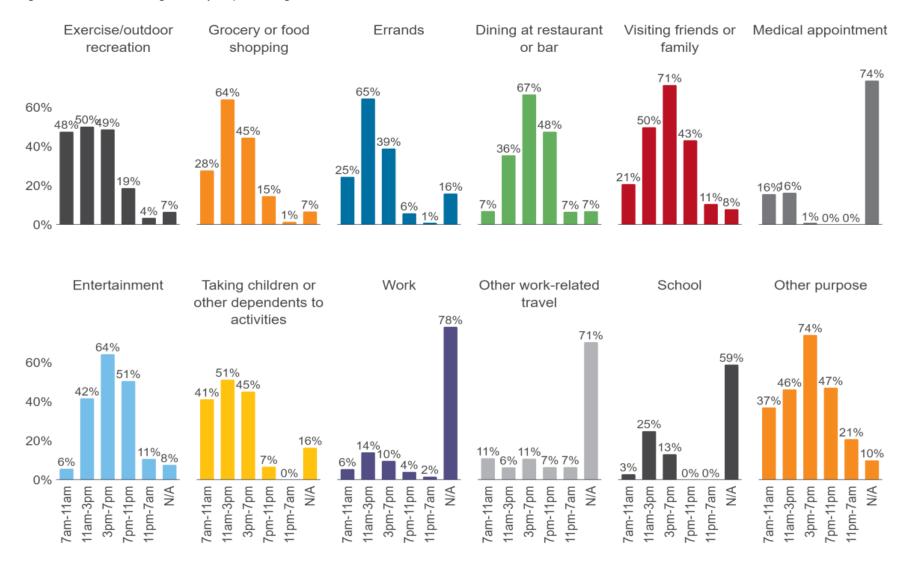


Figure 83: Weekend Walking Times by Purpose, Weighted at Suburban Level

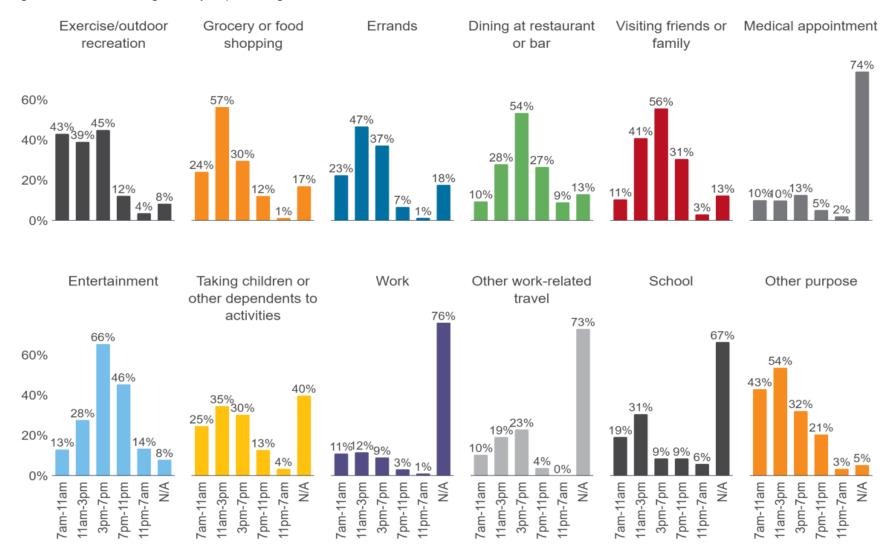
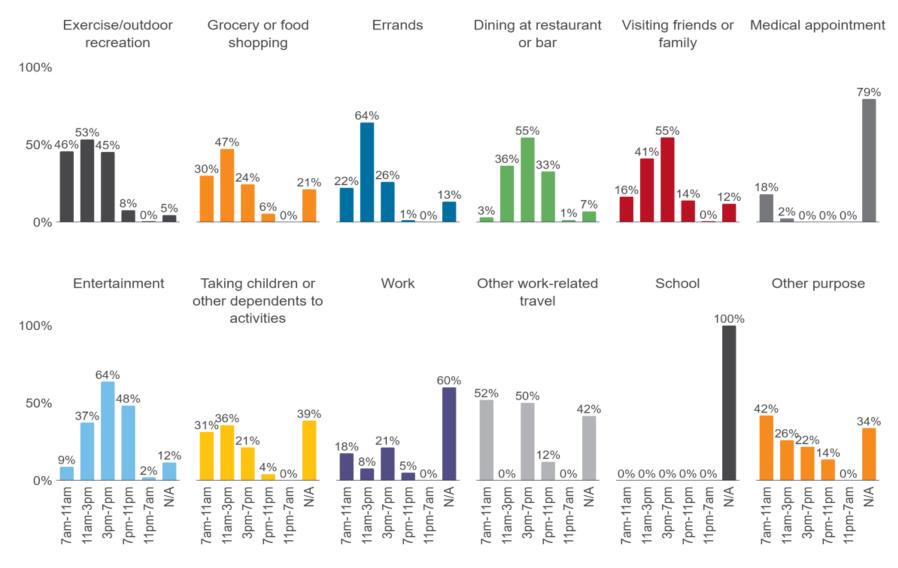


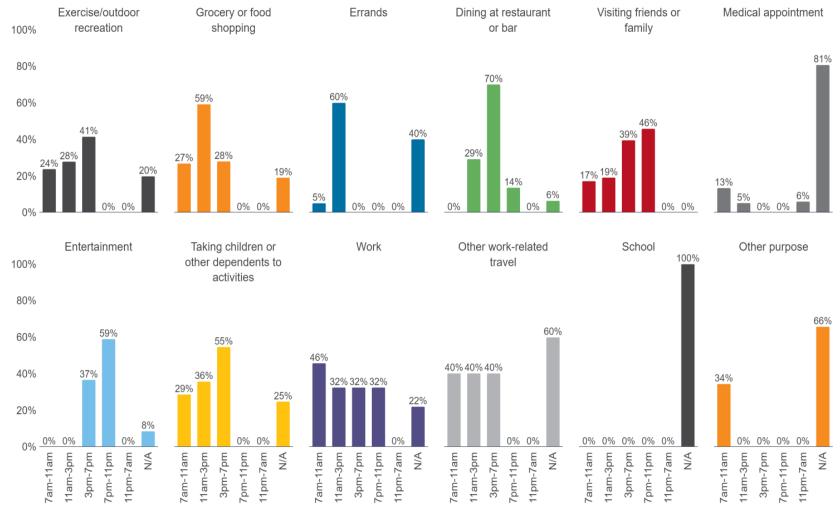
Figure 84: Weekend Walking Times by Purpose, Weighted at Country Level



Rolling Weekend Trip Time

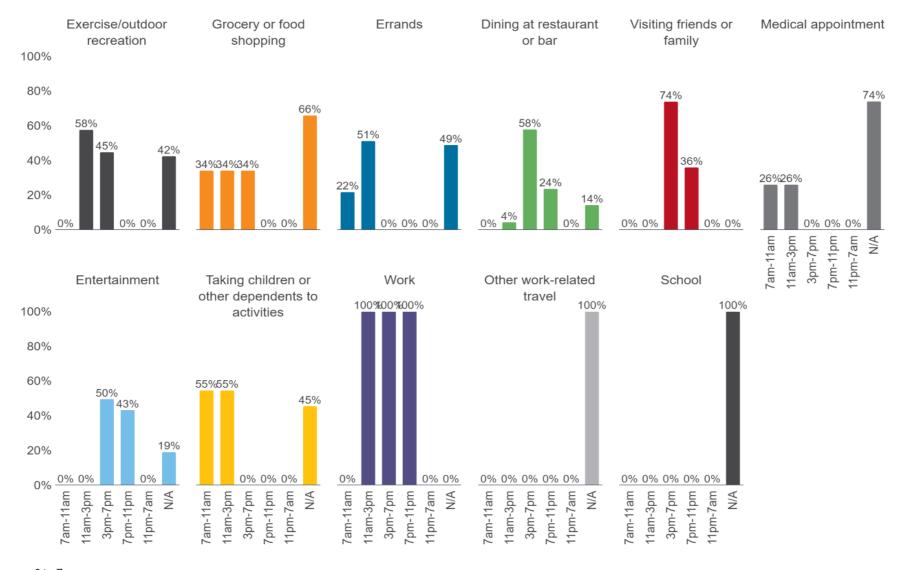
As seen in Figure 85, no respondents reported rolling for school on the weekends. The 7pm-11pm timeslot was the most popular for entertainment. Grocery or food shopping and errands were concentrated in the 11am-3pm slot; dining and taking dependents to activities both peaked in the 3pm-7pm timeslot. At the urban level, all respondents who rolled to work reported rolling equally from 7am to 7pm (Figure 86). At the suburban level, respondents who rolled to work did so in the 7am-11am timeslot (Figure 87). Purposes for weekend rolling at the country level were limited and tended to occur between 7am and 3pm. The notable exception to this trend is visiting family and friends; 74% of respondents who visited family and friends did so in the 3pm-7pm slot (Figure 88).

Figure 85: Weekend Rolling Times by Purpose, Weighted at County Level



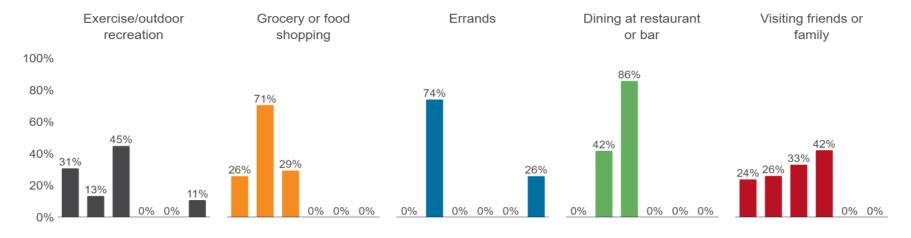
n = 0 to 15

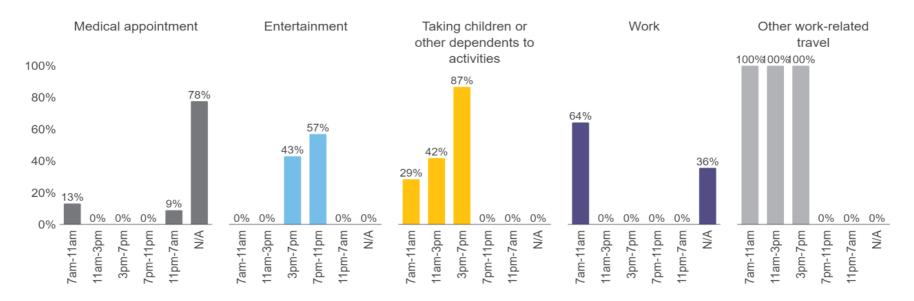
Figure 86: Weekend Rolling Times by Purpose, Weighted at Urban Level



n = 0 to 7Note: Respondents could select all options that applied.

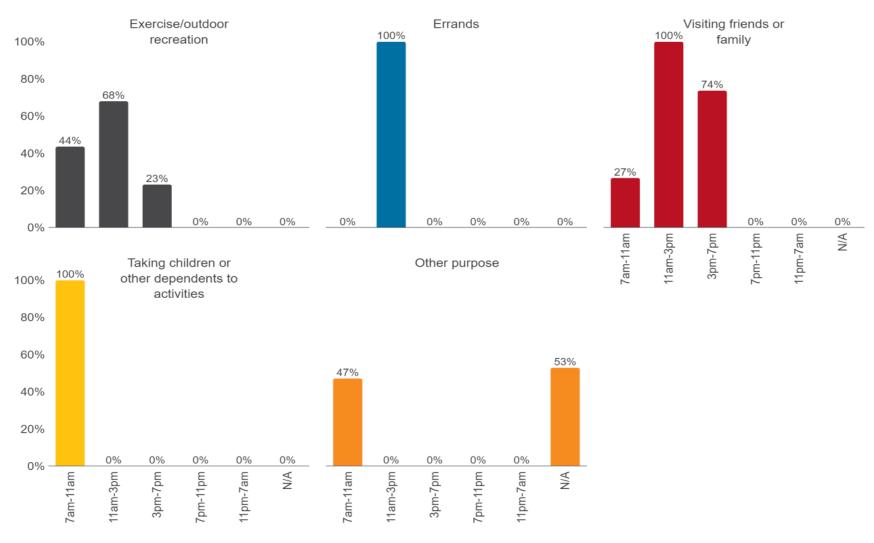
Figure 87: Weekend Rolling Times by Purpose, Weighted at Suburban Level





n = 0 to 7Note: Respondents could select all options that applied.

Figure 88: Weekend Rolling Times by Purpose, Weighted at Country Level

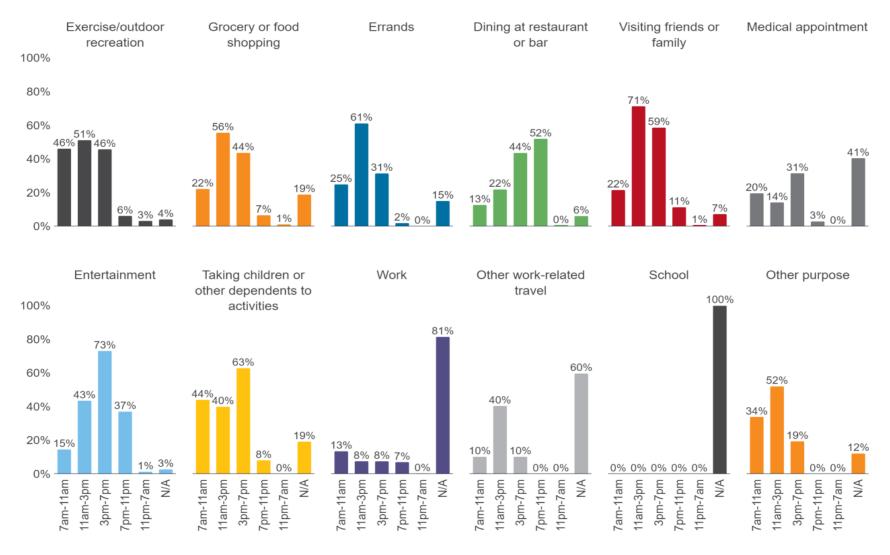


n = 0 to 7

Biking Weekend Trip Time

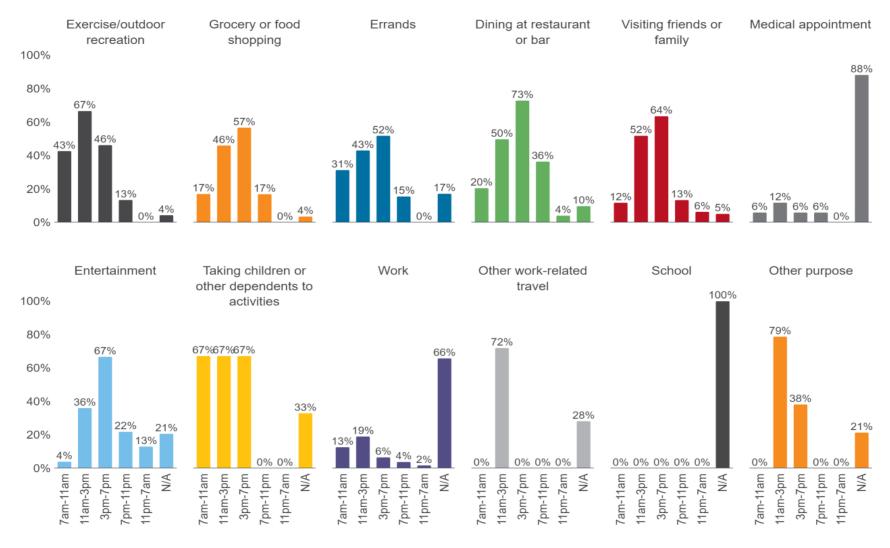
No respondents reported biking to school on the weekends. Roughly equivalent numbers of people reported biking for recreation from 7am to 7pm. Biking for errands, for grocery shopping, for visiting friends and family, for other work-related travel, and for other purposes peaked in the 11am-3pm slot. Majorities of cyclists who biked to entertainment and to take dependents to activities did so in the 3pm-7pm slot, while cycling to dinner peaked in popularity from 7pm-11pm (Figure 89). At the urban level, cyclists reported later biking times than their suburban and country peers, with the popularity of biking for a variety of purposes peaking in the 3pm-7pm slot. However, biking for recreation and for other work-related travel showed notable peaks in the earlier 11am-3pm slot (Figure 90). Biking trends at the suburban level largely mirrored those of the county level (Figure 91). Weekend biking at the county level tended to peak at earlier times than at the urban or suburban level. Notably, all biking for medical appointments occurred from 7am-11am. Most other activities peaked between 7am and 3pm, except dining, which peaked in the 3pm-7pm slot (Figure 92).

Figure 89: Weekend Biking Times by Purpose, Weighted at County Level



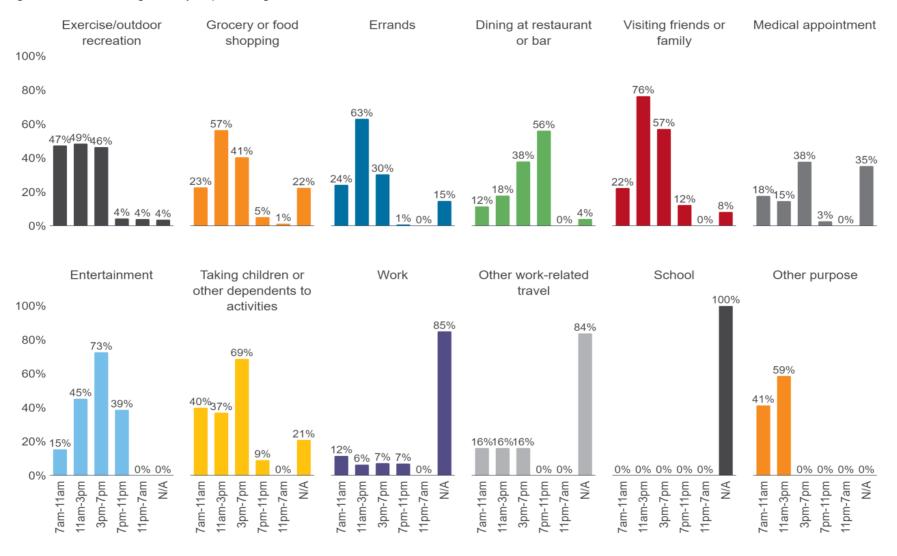
n = 0 to 332

Figure 90: Weekend Biking Times by Purpose, Weighted at Urban Level



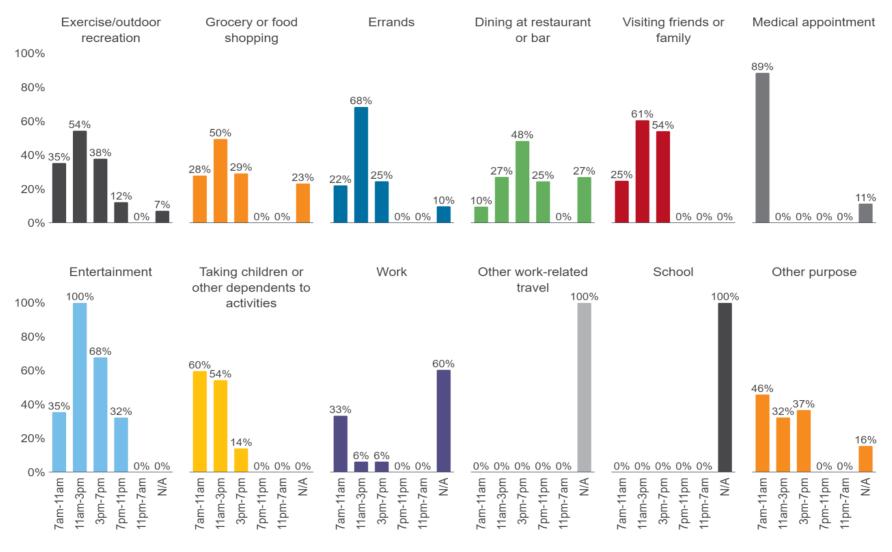
n = 0 to 67

Figure 91: Weekend Biking Times by Purpose, Weighted at Suburban Level



n = 0 to 150

Figure 92: Weekend Biking Times by Purpose, Weighted at Country Level



n = 0 to 115

Trip Satisfaction

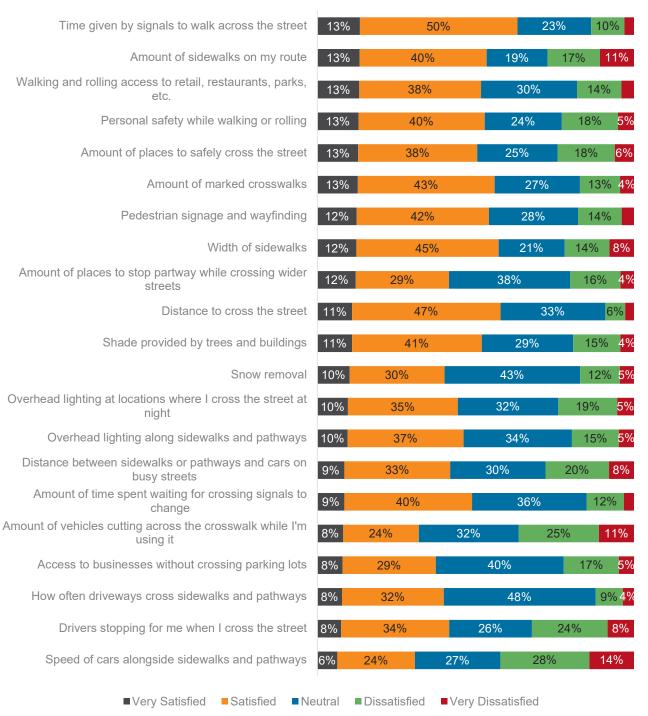
Walking/Rolling Trips

The survey asked all respondents a battery of questions regarding their satisfaction with various aspects of the walking/rolling experience and infrastructure. These questions were asked whether or not the respondent had reported walking or rolling in the previous 30 days. Figure 93 shows that respondents reported the greatest overall satisfaction with the amount of time given by signals to walk across the street (63% very satisfied or satisfied), the distance to cross the street (58%), the width of the sidewalks (57%), and the number of marked crosswalks (56%). Respondents were the most dissatisfied with the behavior of cars in the vicinity of their walks/rolls. 42% of respondents expressed a level of dissatisfaction with the speed of cars alongside sidewalks and pathways. 36% were either dissatisfied or very dissatisfied with the number of vehicles cutting across crosswalks while in use, and 32% were dissatisfied or very dissatisfied with the propensity of drivers to stop when crosswalks are in use.

Interestingly, respondents reported relatively high levels of intense satisfaction and dissatisfaction with the number of sidewalks along their route (13% very satisfied, 11% very dissatisfied). This might indicate discrepancies in sidewalk infrastructure across the surveyed region, with some communities very well-served even as some regions feel particularly neglected.

Figure 93: Walking/Rolling Satisfaction by Category, Weighted at County Level

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



n = 1.160

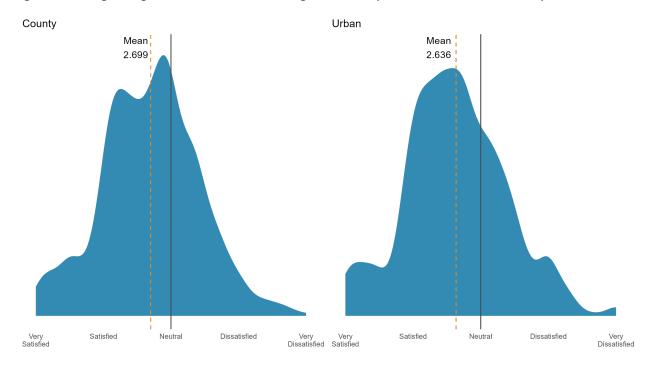
Geographic Differences

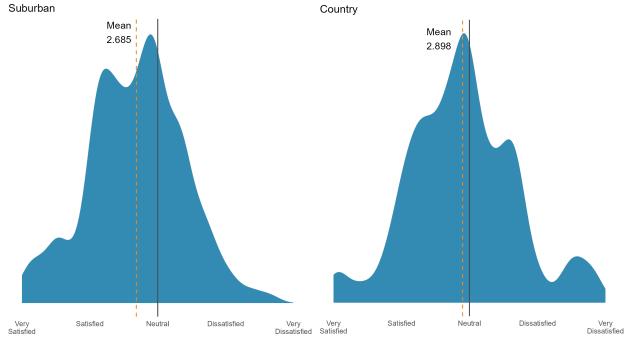
Based on responses to these questions, RSG constructed a satisfaction index to approximate individual levels of overall satisfaction. This index was constructed by averaging each respondent's responses across the battery of satisfaction questions; a score of 1 on any question indicated a response of "Very Satisfied", a score of 3 indicated a response of "Neutral", and a score of 5 indicated "Very Dissatisfied". Thus, a respondent who reported being "Very Satisfied" with every aspect of the walking/rolling experience would have been assigned a 1 in each category, which would average to an indexed score of 1, indicating that they were very satisfied with the overall walking/rolling experience in Montgomery County. Similarly, a respondent who was "Very Dissatisfied" in every category would have been assigned a 5 in each category, which would give an indexed score of 5, indicating that they were very dissatisfied with the overall state of the walking/rolling experience.

Scores on the overall satisfaction index are presented as a series of density plots. Each plot is marked with a black line at the neutral point in the distribution, as well as a dotted orange line indicating the mean level of overall satisfaction.

Figure 94 shows the distribution of indexed satisfaction scores at four levels of geographic weighting. Across all four geographies, respondents reported satisfaction with the walking/rolling experience in Montgomery County (i.e., the mean of each distribution was less than 3). Urban respondents had the lowest mean satisfaction score, indicating the greatest average level of satisfaction, while country-level respondents had the highest mean satisfaction score, indicating lower average levels of overall satisfaction. Country respondents also expressed the greatest levels of strong dissatisfaction, with a large hump appearing on the plot between "Dissatisfied" and "Very Dissatisfied". At the county and suburban level, two distinct peaks appear; the highest peak is just to the left of the neutral line, suggesting soft satisfaction, while the other peak occurs just shy of "Satisfied".

Figure 94: Walking/Rolling Satisfaction Distribution, Weighted at County, Urban, Suburban, and Country Level





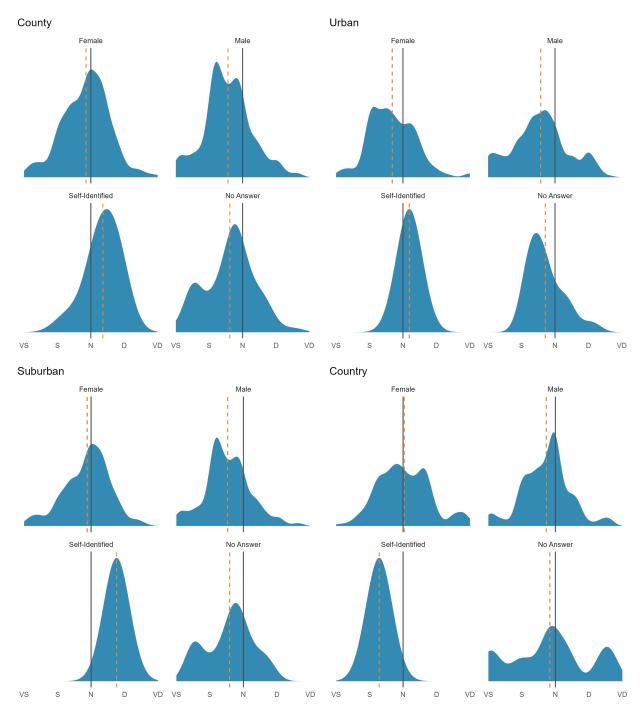
County, n = 1,160; Urban, n = 336; Suburban, n = 448; Country, n = 336

Gender Differences

Respondent satisfaction with their walking/rolling experience in Montgomery County varied significantly by gender. Across all four geographic divisions, men reported higher average levels of satisfaction than either women or respondents who did not provide their gender. Male respondents tended to have higher concentrations of scores at the "Very Satisfied" and "Dissatisfied" level than other respondents, except at the country level, where respondents who did not report their gender were highly concentrated around the "Very Satisfied" and "Dissatisfied" level. While the average score from female respondents remained on the positive side of neutrality, women's average score still tended to be lower than that of men or of respondents who did not provide their gender.

The pool of respondents with self-identified gender was relatively small; as such, their average scores and distributions varied remarkably across geographies while maintaining a normal distribution. Conclusions about this group should be made with caution (Figure 95).

Figure 95: Walking/Rolling Satisfaction Distribution by Gender, Weighted at County, Urban, Suburban, and Country Levels



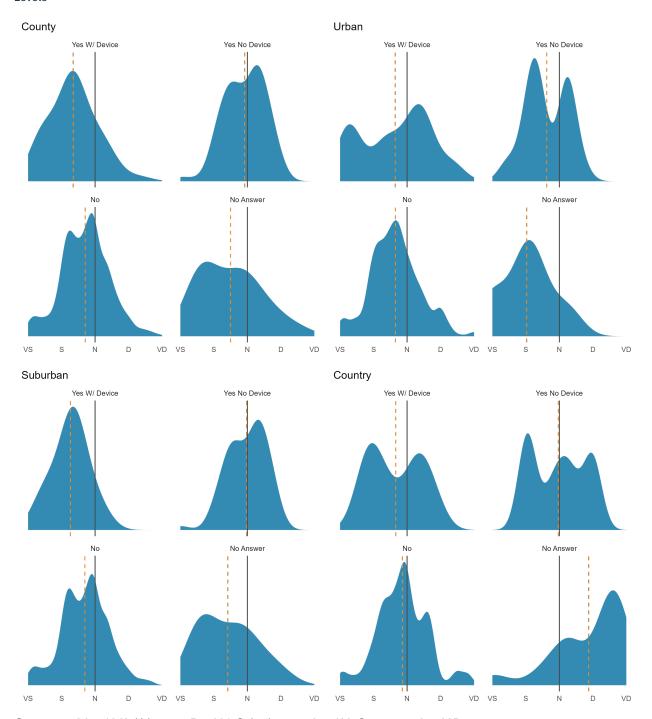
County, n = 3 to 566; Urban, n = 1 to 167; Suburban, n = 1 to 233; Country, n = 1 to 171

Disability Status Differences

Figure 96 shows that, at the county level, respondents who identified as having a mobility or physical disability and used assistive devices reported higher average levels of satisfaction with their walking/rolling experience than both their peers without assistive devices and respondents who reported having no physical or mobility disability. Respondents who used mobility assistive devices were also more likely to report being "Very Satisfied" across the entire battery of satisfaction questions than either peer group. Respondents who preferred not to provide an answer about their disability status also reported generally higher levels of satisfaction than other groups.

At the urban level, respondents who used mobility assistive devices reported both higher levels of intense satisfaction and higher levels of dissatisfaction than at the county level, while their peers with mobility or physical disabilities who did not use mobility assistive devices had higher average satisfaction at the urban level. However, at both the suburban and country levels, the satisfaction of respondents who have physical or mobility disabilities and do not use mobility assistive devices tends to lag that of their peers who do use assistive devices. This may suggest that urban areas are more friendly to disabled individuals who do not have assistive devices. It may also suggest that helping those with disabilities acquire and use assistive devices would go some way towards increasing their walking/rolling satisfaction.

Figure 96: Walking/Rolling Satisfaction Distribution by Disability Status, Weighted County, Urban, Suburban, and Country Levels



County, n = 24 to 1042; Urban, n = 5 to 301; Suburban, n = 6 to 436; County, n = 6 to 305

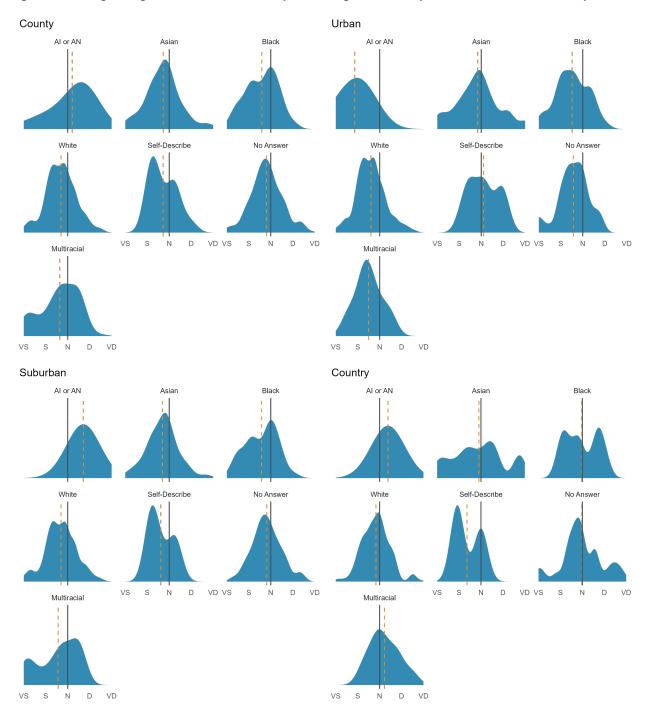
Racial Differences

At the county, urban, and suburban level, Black respondents reported higher average levels of satisfaction than their Asian or White counterparts. However, at the country level, Black respondents reported lower overall levels of satisfaction than their White and Asian counterparts, with their satisfaction distribution peaking at "Satisfied" and "Dissatisfied". The distribution of Asian satisfaction scores formed a monomodal peak at the county, urban, and suburban levels; at the country level, the distribution of Asian satisfaction varied wildly, with small peaks appearing across the entire spectrum of satisfaction levels. The satisfaction distribution of White respondents maintained a consistent shape across all four geographic levels, though a noticeable hump appears at "Very dissatisfied" at the country level.

The satisfaction of American Indian or Alaska Native respondents (AI or AN) varied significantly across geographies, with urban AI or AN respondents reporting the highest levels of satisfaction and suburban AI or AN respondents reporting the lowest levels of satisfaction of any racial group at any geographic level.

Only respondents who chose to self-describe their race reported higher overall levels of satisfaction at the country level than at the urban or suburban level.

Figure 97: Walking/Rolling Satisfaction Distribution by Race, Weighted at County, Urban, Suburban, and Country Levels



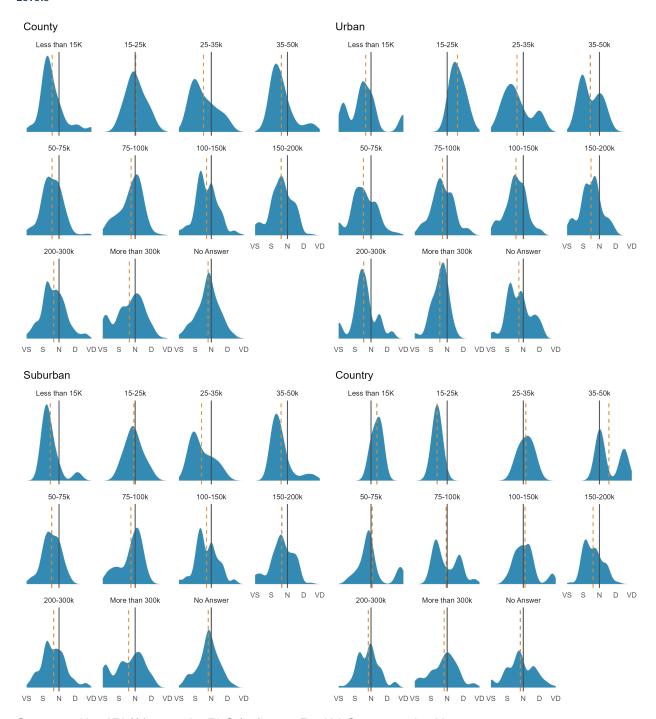
County, n = 4 to 807; Urban, n = 2 to 212; Suburban, n = 1 to 341; Country, n = 1 to 254

Income Differences

As show in Figure 98, income seems to have little effect on average walking/rolling satisfaction at the county, urban, and suburban level. However, the \$15,000-\$25,000 income bracket presents an interesting outlier, The average satisfaction of respondents in the \$15,000-\$25,000 range ran counter to that of every other income group at the urban and country level. At the urban level, while the mean satisfaction of each other income group rested between "Neutral" and "Satisfied", the average of the \$15,000-\$25,000 group sat near "Dissatisfied". While every income group reported lower overall satisfaction at the country than at the urban level, the satisfaction of the \$15,000-\$25,000 group increased sharply.

The average overall satisfaction of respondents in the \$150,000-\$200,000 showed little variation across geographies. Respondents in this household income bracket tended to be concentrated around the "Satisfied" portion of the density graphs.

Figure 98: Walking / Rolling Satisfaction Distribution by Income, Weighted At County, Urban, Suburban, and Country Levels



County, n=16 to 274; Urban, n=4 to 71; Suburban, n=7 to 124; Country, n=1 to 88

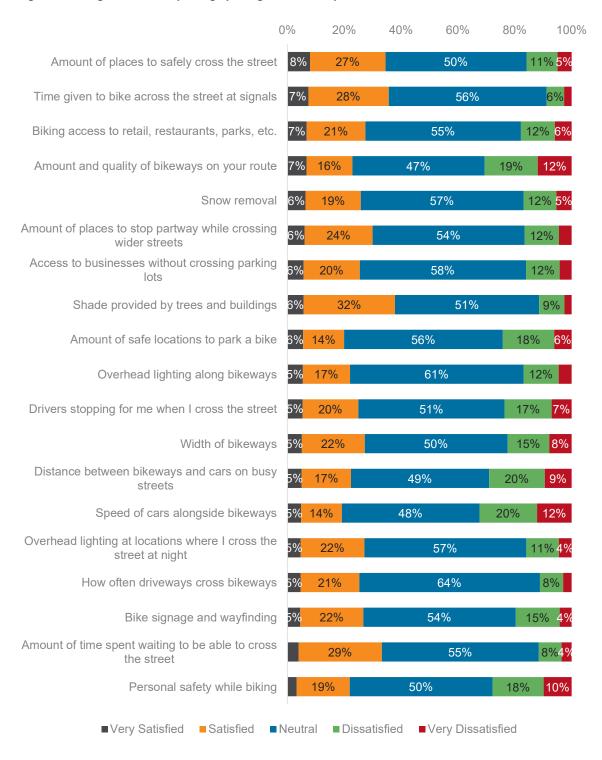
Biking Trips

The survey asked all respondents for their satisfaction with various aspects of biking in Montgomery County, even if the respondent had not biked in the prior 30 days. "Neutral" was by far the most common response across all the questions regarding satisfaction with the experience of biking in Montgomery County. As seen in Figure 99, respondents were the most neutral on "How often driveways cross bikeways" (64%) and on "Overhead lighting along bikeways" (61%).

Respondents felt the most intensely satisfied with the "Amount of places to safely cross the street" (8% Very satisfied), the "Time given to bike across the street at signals" (7%), "biking access to retail, restaurants, parks, etc." (7%), and the "Amount and quality of bikeways on your route" (7%). They expressed the greatest overall satisfaction with the "Shade provided by tress and buildings" (38% "Very satisfied" and "Satisfied"), followed by the "Amount of places to safely cross the street" and the "Time given to bike across the street at signals" (35% each).

Respondents expressed the most intense dissatisfaction with the speed of cars alongside bikeways (12% "Very dissatisfied") and the amount and quality of bikeways (12%). Respondents reported significant levels of dissatisfaction with the ways in which their biking infrastructure interacted with cars. 32% of respondents were dissatisfied or very dissatisfied with the speed of cars alongside bikeways, 31% were dissatisfied or very dissatisfied with the amount of bikeways, and 29% were dissatisfied or very dissatisfied with the distance between bikeways and cars on busy streets.

Figure 99: Biking Satisfaction by Category, Weighted at County Level



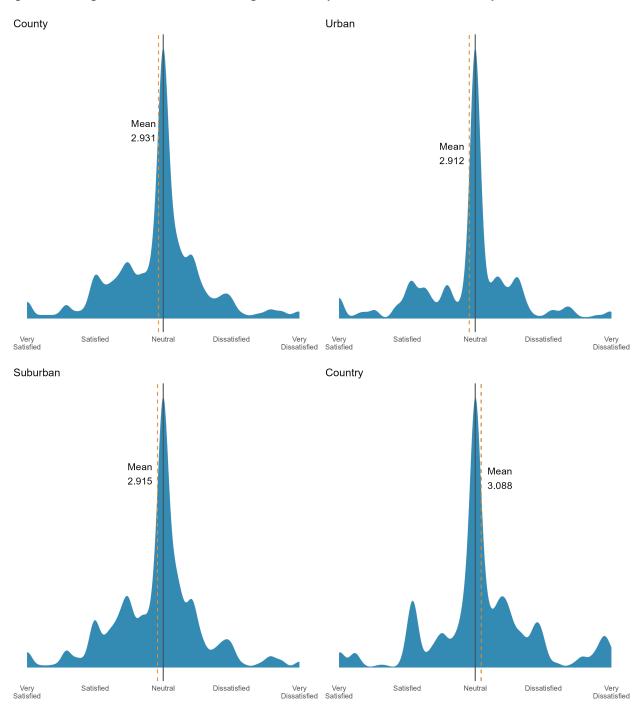
County, n = 1,160

Geographic Biking Differences

Figure 100 shows the distribution of biking satisfaction index scores across all four of the geographic regions. At the county, urban, and suburban level, the overall average of the satisfaction index rested just on the satisfied side of neutral; however, at the country level the mean level of satisfaction at on the dissatisfied side of neutral. Notable peaks occur across all four geographies near "Very satisfied", "Satisfied", "Neutral", and "Very dissatisfied". The greatest distribution of responses at or near "Very satisfied" and "Neutral" occurred at the urban level, indicating both some passionately positive respondents and some with a more apathetic overall view of biking in Montgomery County. The largest "Very dissatisfied" concentration occurred in the country-level graph. There was also a noticeable peak near "Dissatisfied" at the country level.

The shape of density distributions for the biking indexes are much less smooth than those of the walking indexes. This is due, in part, to the propensity of respondents to gravitate towards neutral responses. This created large peaks at or near the neutral point at every geographic level across most crosstabs. These large central peaks also served to make other spots of concentrated responses stand out even more starkly, contributing to the jagged look of the density plots.

Figure 100: Biking Satisfaction Distribution, Weighted at County, Urban, Suburban, and Country Levels



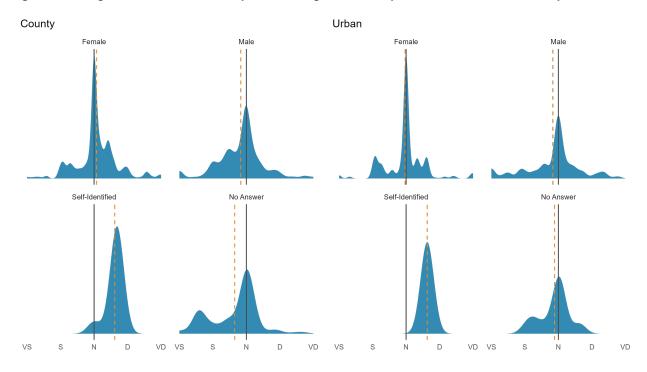
County, n = 1,160; Urban, n = 336; Suburban, n = 488; Country, n = 336

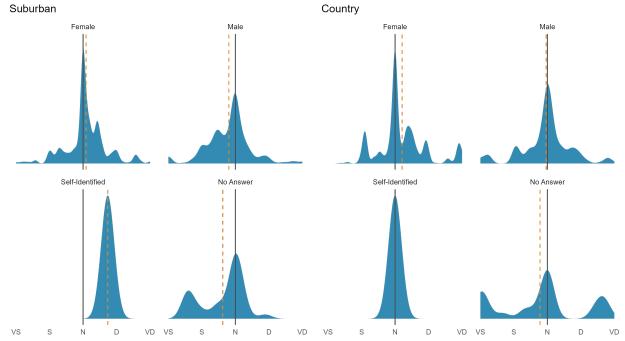
Gender Biking Differences

Figure 101 breaks the biking satisfaction index down by gender across all four geographic levels. As was seen when the walking satisfaction index was broken out by gender, men across all four geographies had a higher average satisfaction level with the biking experience in Montgomery County than women. At the county, suburban, and country level, women were, on average, dissatisfied, while female urban respondents reported slightly more satisfaction. Men at the country level reported the lowest average satisfaction of male respondents and had the greatest concentration of responses near the "Very dissatisfied" level.

Respondents who preferred to identify their own gender were dissatisfied except at the country level, where their average satisfaction score was exactly neutral. Respondents who did not provide their gender expressed higher average indexed satisfaction at every geographic level except urban, where average male satisfaction was slightly higher.

Figure 101: Biking Satisfaction Distribution By Gender, Weighted At County, Urban, Suburban, and Country Levels





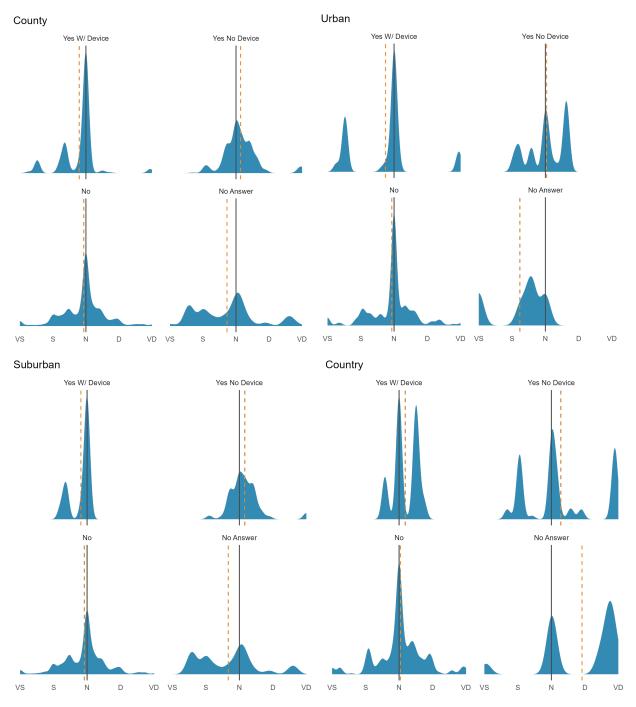
County, n = 3 to 566; Urban, n = 1 to 167; Suburban, n = 1 to 233; Country, n = 1 to 171

Disability Status Biking Differences

Across all geographies, respondents who had a mobility or physical disability and used mobility assistive devices reported higher average satisfaction than their peers with disabilities who did not use mobility assistive devices. Respondents who used mobility assistive devices showed notable peaks at or near "Satisfied" at the county, suburban, and country level, as well as peaking at or near "Very Satisfied" at the county and urban level. Those who did not use mobility assistive devices peaked at or near "Dissatisfied" and "Very dissatisfied" across all four geographies. These findings mirror those of the walking satisfaction index broken down by disability status.

The average overall satisfaction of respondents with no mobility or physical disability stayed near the neutral line across all four geographies. Respondents who refused to answer about their disability status reported higher average overall satisfaction at every geographic level except country, where they clustered between "Dissatisfied" and "Very dissatisfied" (Figure 102).

Figure 102: Biking Satisfaction Distribution by Disability Status, Weighted at County, Urban, Suburban, and Country Levels



County, n = 24 to 1042; Urban, n = 5 to 301; Suburban, n = 6 to 436; Country, n = 6 to 305

Racial Biking Differences

Figure 103 illustrates the distribution of overall bike satisfaction by race. Across all four geographies, Black respondents were, on average, satisfied with the Montgomery County biking experience. At the country level, the average satisfaction of Black respondents strongly clustered near "Satisfied".

The average satisfaction of White residents remained near neutral across all geographies.

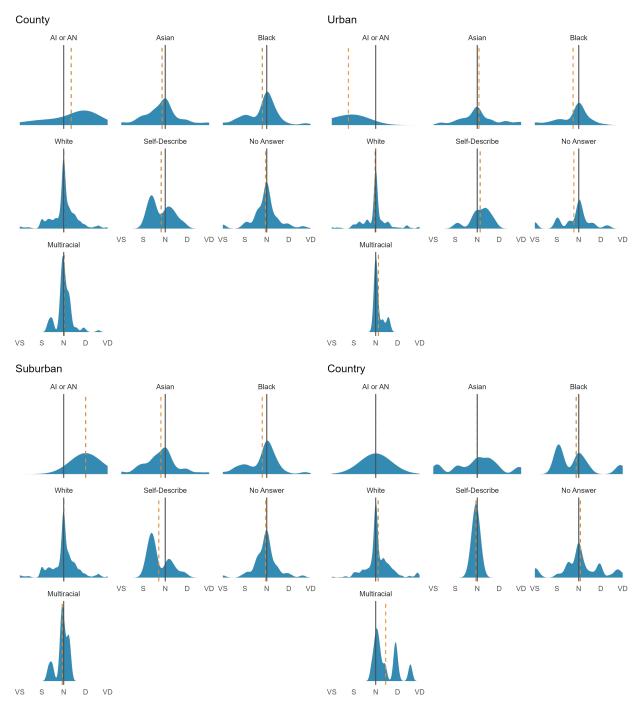
The average satisfaction of Asian respondents was more varied. At the suburban level, their average satisfaction rested between "Satisfied" and "Neutral"; at the urban level, it rested between "Neutral" and "Dissatisfied"; at the country level, it sat at "Neutral". At the country level, Asian Satisfaction was widely distributed, with small peaks at "Very satisfied", "Neutral", and "Very dissatisfied".

Satisfaction for American Indian or Native Alaskan (AI or AN) respondents varied wildly across geographies. This was a particularly small subset of respondents, and thus was affected strongly by small shifts in regional weighting. At the county level, AI or AN satisfaction peaked at "Dissatisfied".

The satisfaction of multiracial respondents stayed near neutral across county, urban, and suburban geographies. However, at the country level, multiracial respondent satisfaction had three distinct peaks at "Neutral", "Dissatisfied", and near "Very Dissatisfied".

Respondents who self-described their race showed comparatively high satisfaction at the suburban level, with their distribution clustering near "Satisfied".

Figure 103: Biking Satisfaction Distribution by Race, Weighted at County, Urban, Suburban, and Country Levels



County, n = 4 to 807; Urban, n = 2 to 212; Suburban, n = 1 to 341; Country, n = 1 to 254

Income Biking Differences

Figure 104 shows the distribution of biking satisfaction index scores broken down by estimated income. No immediate trend between increasing income and increasing or decreasing satisfaction is apparent, and thus income appears to have little direct bearing on respondent satisfaction with the Montgomery County biking experience. However, the \$15,000-\$25,000 income bracket presents an interesting outlier, much as it did in the walking satisfaction distribution by income. The average satisfaction of respondents in the \$15,000-\$25,000 range ran counter to that of every other income group by geography. At the urban level, while the mean satisfaction of each other income group rested between "Neutral" and "Satisfied", the average of the \$15,000-\$25,000 group sat near "Dissatisfied". The same pattern reversed can be observed at the country level, but is less noticeable at the suburban level, where the average satisfaction of most income groups hewed close to the "Neutral" line.

County Urban Less than 15K 15-25k 25-35k 35-50k Less than 15K 15-25k 25-35k 35-50k 100-150k 150-200k 50-75k 75-100k 100-150k 150-200k S D VD S N D VD 200-300k More than 300k No Answer 200-300k More than 300k No Answer D VDVS S N D VDVS S D VD D VDVS S N D VDVS S N D VD Ν Suburban Country Less than 15K 15-25k 25-35k 35-50k Less than 15K 15-25k 25-35k 35-50k 50-75k 75-100k 100-150k 150-200k 50-75k 75-100k 100-150k 150-200k N D VD N D VD VS S VS S 200-300k More than 300k No Answer 200-300k More than 300k No Answer N D VDVS S N D VDVS S N D VD N D VDVS S N D VDVS S N D VD

Figure 104: Biking Satisfaction Distribution by Income, Weighted at County, Urban, Suburban, and Country Levels

County, n = 16 to 274; Urban, n = 4 to 71; Suburban, n = 7 to 124; Country, n = 1 to 88

When biking satisfaction by category was filtered to only include responses from those who reported biking in the last month, the proportion of neutral responses sizably shrunk across all categories. The proportion of satisfied, dissatisfied, and very dissatisfied responses saw strong

growth across most categories, while the proportion of very satisfied responses saw mostly marginal growth (Figure 105).

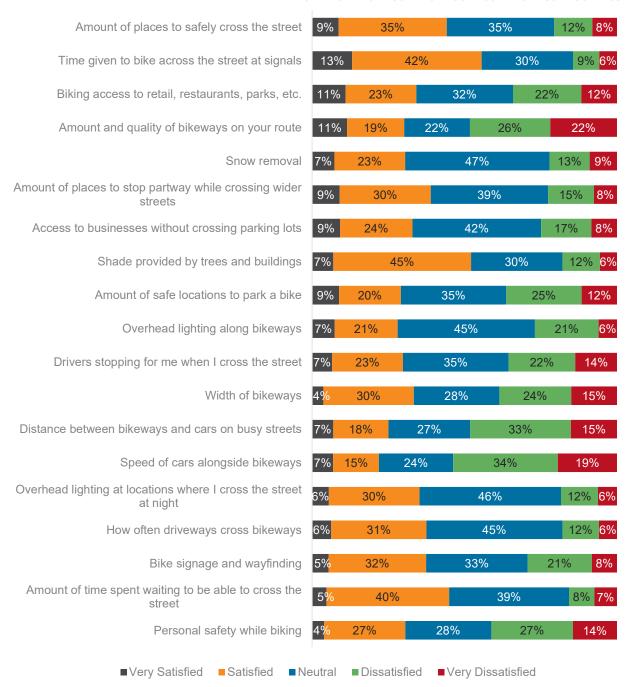
Among bikers, 13% expressed that they were very satisfied with the time given to bike across the street at signals, nearly double the 7% who were very satisfied among all respondents. Bikers also reported intense satisfaction with biking access to destinations and to the amount and quality of bikeways on their route (11% very satisfied for each). Cyclists expressed the greatest overall satisfaction with time given to bike across the street at signals (55% very satisfied and satisfied) and the shade provided by trees and buildings (52%).

Cyclists expressed their most intense dissatisfaction with the amount and quality of bikeways on their route. Despite that category's relatively high percentage of very satisfied responses, double the number of cyclists reported being very dissatisfied with it (22%). Cyclists also expressed high levels of intense dissatisfaction with the speed of cars alongside bikeways (19%). Bikers reported the highest levels of overall dissatisfaction with the speed of cars alongside bikeways (53% dissatisfied and very dissatisfied), the distance between bikeways and cars on busy streets (48%), and the amount and quality of bikeways on their routes (48%). These were also the three categories that had the highest levels of dissatisfaction in the unfiltered version of this question and saw some of the most precipitous declines in their proportion of neutral responses.

The only category that saw shrinkage among the number of respondents reporting they were satisfied with it was the width of bikeways. In the full sample, 5% of respondents reported they were very satisfied with this category; in the filtered results, only 4% were very satisfied. The percentage of respondents who were very dissatisfied with the width of bikeways nearly doubled, from 8% to 15%, while dissatisfaction with this category grew by 9 percentage points.

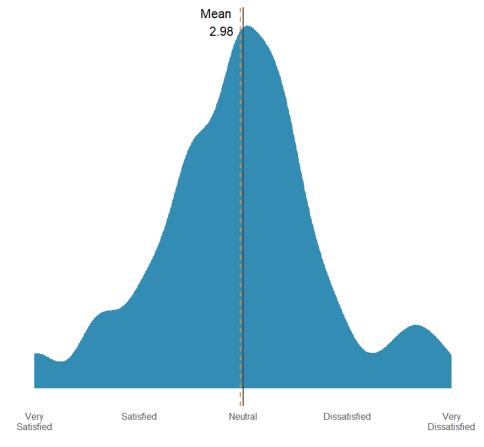
Figure 105: Biking Satisfaction by Category, Filtered for Bikers, Weighted at County Level

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



In Figure 106, the biking satisfaction index has been filtered to only include responses from people who had biked in the previous 30 days. Filtering for responses from only cyclists also serves to smooth the curve of the density graph and reduce the preponderance of neutral responses. Interestingly, the mean satisfaction level also moves closer to the neutral point.. This suggests that bikers are less satisfied with the biking experience and infrastructure in Montgomery County than the population overall.

Figure 106: Biking Satisfaction Index, Filtered for Bikers, Weighted at County Level



County, n = 362

Chapter 6: Considerations and Discussion

Regarding the administration of the 2024 Montgomery County Bicycle and Pedestrian Survey, response rate assumptions from previous surveys may need to be reconsidered; the 4% initially assumed based on our 2021 survey outpaced our 2.2% response rate this year by a sizable margin. Going forward, similar surveys should assume a response rate of around 2% when sampling. Additionally, because the rural geography did not include 20,000 households, only 16,954 surveys could be sent to residents in the rural geography. Expanding the boundaries of the rural geography could create more opportunities for acquiring a representative sample, as could sending additional invitations to the other geographies to boost the overall sample completes.

Montgomery County residents report that most of their walking and biking trips were for recreational purposes. Walking trips averaged about 20 minutes in length, and biking trips averaged about 60 minutes. Rolling trips, particularly among urban and suburban respondents, are extraordinarily long and often used for utility purposes. Finding ways to shorten these trips, such as by creating more accessible infrastructure or increasing paratransit access, might go some way towards increasing the satisfaction of Montgomery's rolling residents.

Respondents reported relatively high levels of satisfaction with the shade provided by trees and buildings and the timing of streetlights (both in having enough time to cross streets and in not being made to wait too long at a given crossing). This indicates that whatever measures M-NCPPC has been taking to improve shade coverage on walking and biking routes have been working and should continue to be pursued.

Urban residents tended to be more satisfied with their walking experience. When compared to their suburban and country peers, the share of "Satisfied" and "Very satisfied" responses increased across every category but two: the amount of vehicles cutting across the crosswalk while in use and how often driveways cross sidewalks and pathways. Both categories deal with the proximity of cars to pedestrians; the relative dissatisfaction with these categories at the urban level may reflect the tendency of urban spaces to force cars and pedestrians near each other.

Creating more extensive sidewalk infrastructure is likely key to improving the walking and rolling experience of country residents. A majority of country residents expressed dissatisfaction with the amount of sidewalks on their route. Additionally, among country residents who did not walk in the last 30 days, most cited concerns with traffic safety as a driver of their decision not to walk, followed by a lack of adequate, connected pathways. Creating better, more extensive pedestrian infrastructure that separates pedestrians from cars would likely serve to increase the satisfaction of residents who are already walking and rolling, as well as ameliorating the most pressing concerns of country residents who do not currently feel as though they can walk.

Black respondents made up the majority of those concerned with traffic safety as well as with the lack of adequate or connected pathways and crossings. When these responses were broken out by gender, women were overwhelmingly the most likely to cite concerns with traffic safety as preventing them from walking. These respondents were most likely to come from suburban and country areas of Montgomery County, again reflecting a potential need for additional investment in walking infrastructure in these areas.

Women were particularly concerned with personal safety and traffic safety. While women were also likely to cite a lack of access to a bike as a reason for not biking, it stands to reason that, for some segment of those women, not owning a bike was an outgrowth of their concerns over the relative safety of bicycling.

Residents, both in their responses to the survey questions and in the comment section of the survey, expressed dissatisfaction with the behavior of cars and with the enforcement of traffic laws, both for drivers and cyclists. Fostering a sense of safety and shared rules through enhanced enforcement mechanisms may serve to improve the walking, rolling, and biking experience across Montgomery County.

The comment section also revealed that survey respondents were thinking often and loudly about bicycles. "Bike", "biker", and "bikes" (and their synonyms) were three of the most common words, and they were often paired with pleas for more infrastructure, praise the works done by the Montgomery County Planning Commission, and worries that biking infrastructure was underutilized and constructed at the expense of the efficiency of driving.