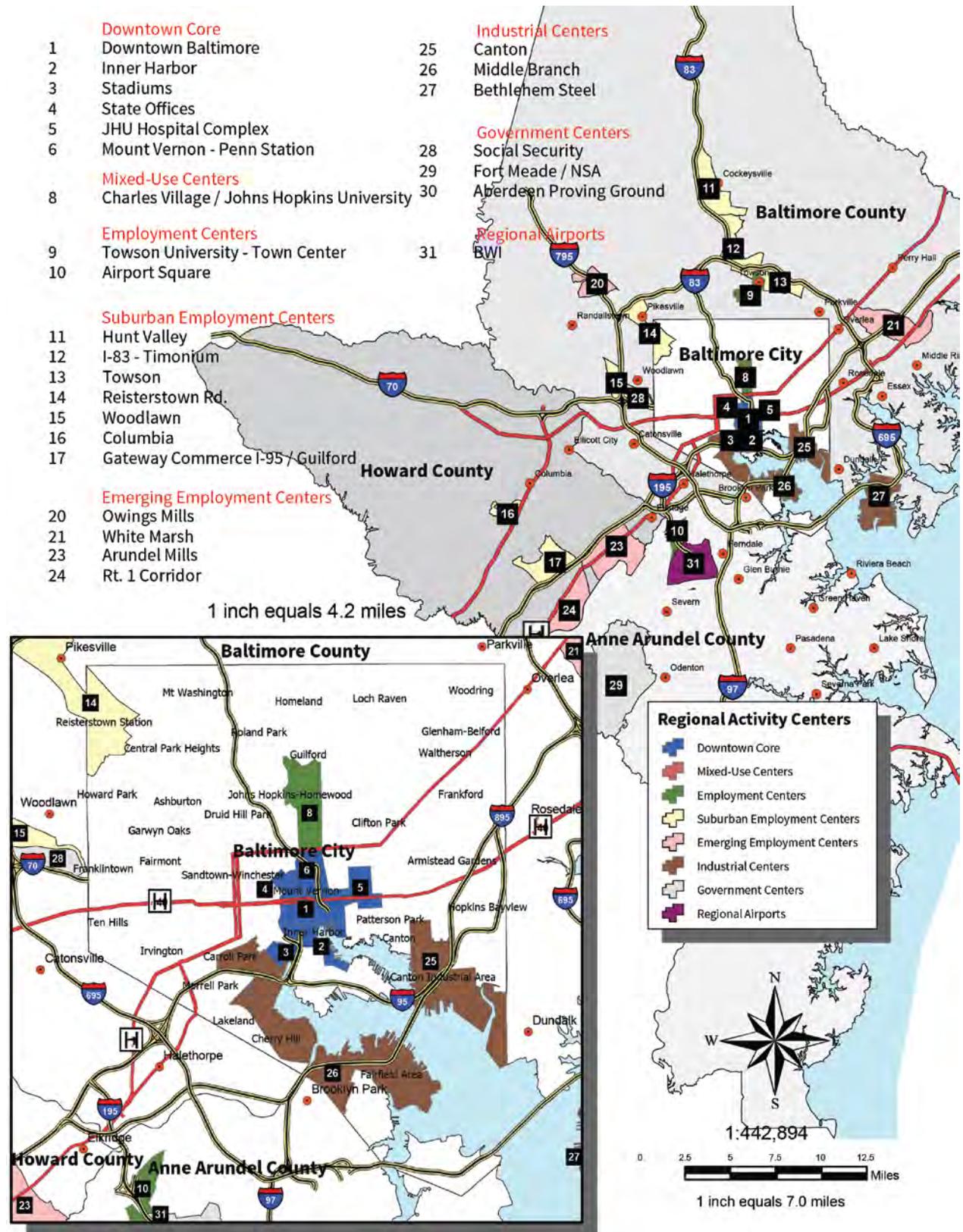


3 TRAVEL PATTERNS

3.1 Key Locations within Service Area

Outside of the Maryland suburbs of DC, the Baltimore region forms Maryland's economic and population center. Central Baltimore is home to many of the most important destinations in the region, including the Inner Harbor, Downtown Business District, Johns Hopkins Hospital and the University of Maryland Medical Center. Stretching north of downtown is a significant corridor that includes Penn Station, Johns Hopkins University and Loyola University Maryland. A number of important commercial centers are located outside the city in surrounding suburbs. White Marsh to the northeast is a major regional retail center. To the north, Towson is home to a major university, shopping center and commercial center, while Hunt Valley, which is further north, features a large business park and shopping center. Owings Mills, to the northwest of Baltimore, is another important retail and commercial destination. To the west the area along Security Boulevard is home to Security Square Mall, a major regional retail center, and the headquarters of the Social Security Administration, one of the largest employment sites in the region. Finally to the south of Baltimore is the BWI Thurgood Marshall Airport, a major commercial center and the region's gateway to the rest of the country and the world.

Figure 3.1: Map of Regional Activity Centers (BMC, 2004)



3.2 Origin and Destination Patterns

Trip generation data from Version 4.2 of the Baltimore Region Travel Demand Model was used to better understand regional transportation patterns. BMC develops and maintains a regional transportation model that projects existing travel patterns, along with projected travel patterns for future years. These forecasts are based on a number of inputs, including a large regional travel survey and projected changes to land use and population (see section 2.2). For this study, projections for 2020 were used, showing the origin and destinations for all of the following trip types:

- Auto trips during the AM peak;
- Transit trips during peak periods;
- Auto trips during off-peak periods; and
- Transit trips during off-peak periods.

The following section maps out each of the four data sets and illustrates the number of trips that end in a particular TAZ, along with trip origin and destination patterns. Note that origin–destination (OD) links with low traffic volume are screened out for visual clarity; in some instances a particular TAZ may have a high volume of trips ending there but no apparent links due to trips to that TAZ being widely distributed from across the region.

3.2.1 Auto Trips during the AM Peak

While transit has a significant modal share across the region, the majority of AM peak trips still occur by automobile and this is expected to continue into 2020. During the AM Peak, clear travel patterns emerge with trips concentrated around a number of important regional nodes. The City of Baltimore stands out as the largest destination during the AM peak; auto trips here are concentrated in Downtown Baltimore and at the city's major hospitals and universities – the largest single destination is Johns Hopkins Hospital just east of Downtown. Outside Baltimore a number of major suburban travel nodes appear. Major destinations include Towson, White Marsh, Hunt Valley, Owings Mills, Security Square Malls, the Social Security Headquarters and BWI Thurgood Marshall Airport.

Strong travel by auto also appears between these major nodes, with the highest auto trip volumes occurring between major suburban destinations and between Downtown Baltimore and nodes in East Baltimore / Bayview, BWI Thurgood Marshall Airport and Towson. Generally, the busiest travel links are relatively short and connect major nodes to nearby TAZs. The major exception is between BWI Thurgood Marshall Airport and Downtown Baltimore, which stands out as a large trip pair with few major destinations in between. Figure 3.2 illustrates projected automobile trip origins and destinations during the 2020 AM peak period, while Figure 3.3 illustrates the 500 highest volume automobile origin-destination pairs for the 2020 AM peak period.

Figure 3.2: AM Auto Trips Projected for 2020 – Destinations by Number of Trips / Trip Pairs by Volume

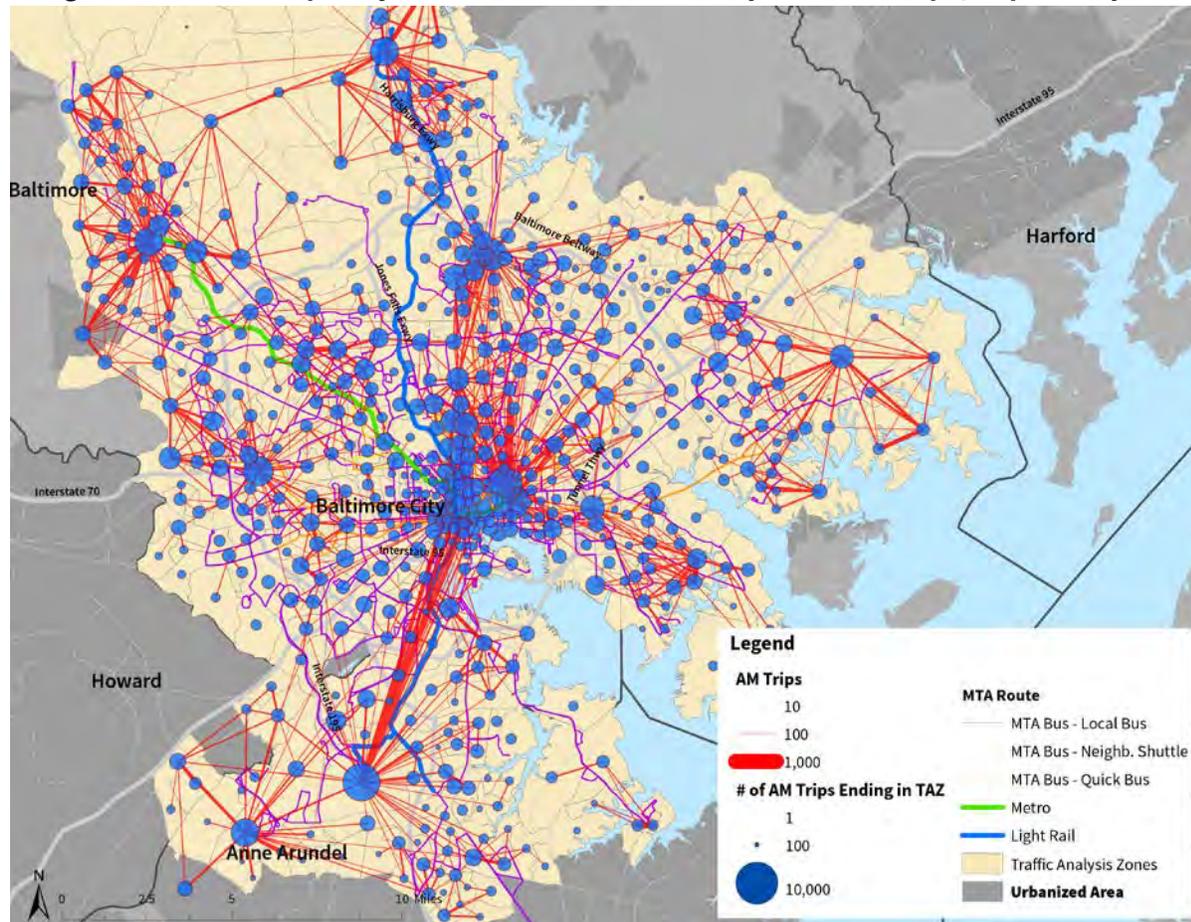
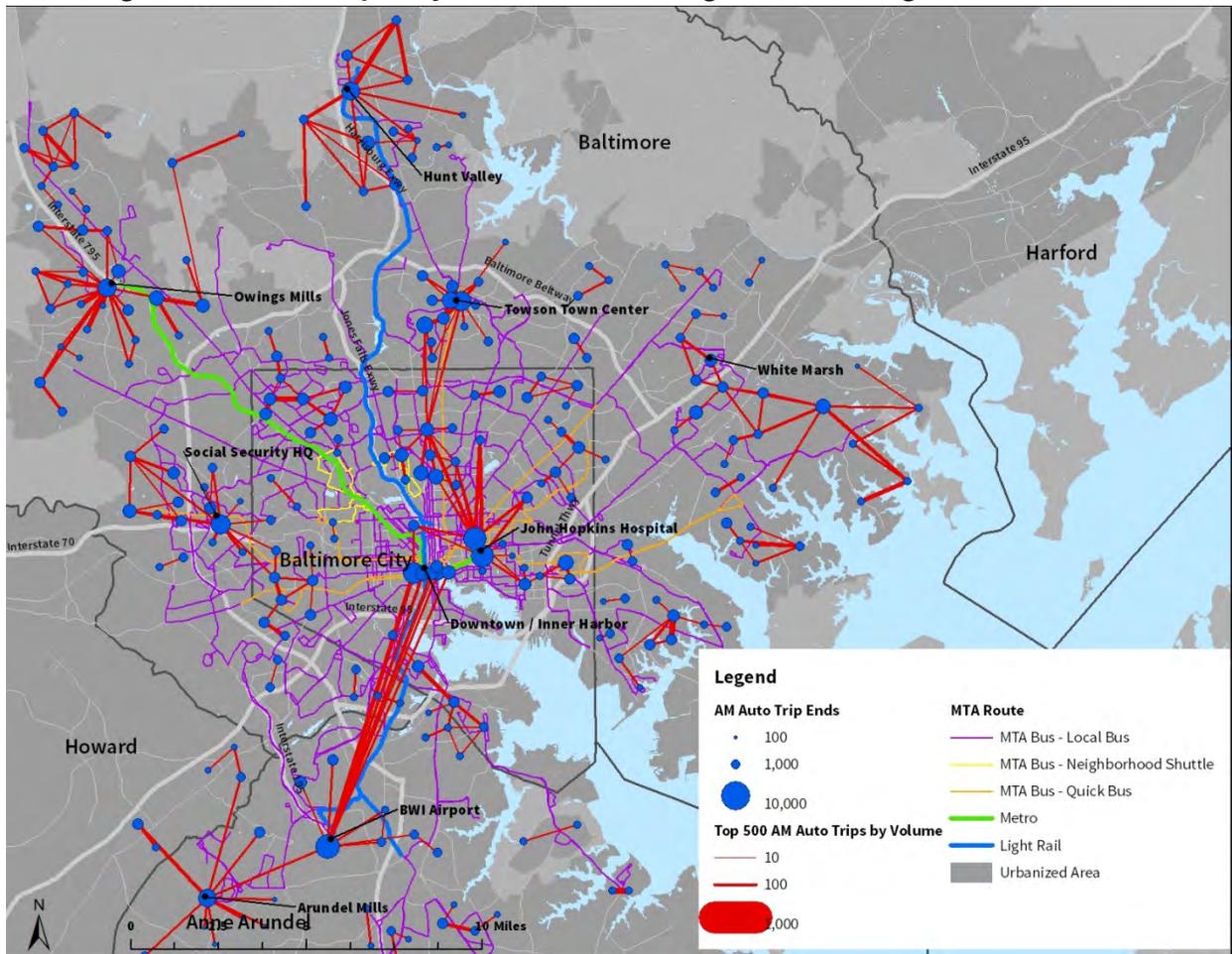


Figure 3.3: AM Auto Trips Projected for 2020 – 500 Highest Volume Origin Destination Pairs



3.2.2 Auto Trips during the Off-Peak Period

Outside the peak commute periods, automobile travel patterns are much more evenly distributed across the region, a pattern expected to continue into 2020. Distinct trip patterns are difficult to discern because trips destinations are not concentrated in a few areas as with the peak period. Generally the highest density of trips end in Downtown Baltimore and the Inner Harbor, with major suburban commercial centers also attracting a high volume of off-peak auto trips. Nodes that stand out as significant off-peak destinations include: Central Towson, Owings Mills, Arundel Mills and BWI Thurgood Marshall Airport. Figures 3.4 illustrates off-peak automobile trips projected for 2020 while Figure 3.5 illustrates the top 500 highest volume off-peak automobile trip pairs projected for 2020.

Figure 3.4: Off-Peak Auto Trips Projected for 2020 – Destinations by Number of Trips / Trip Pairs by Volume

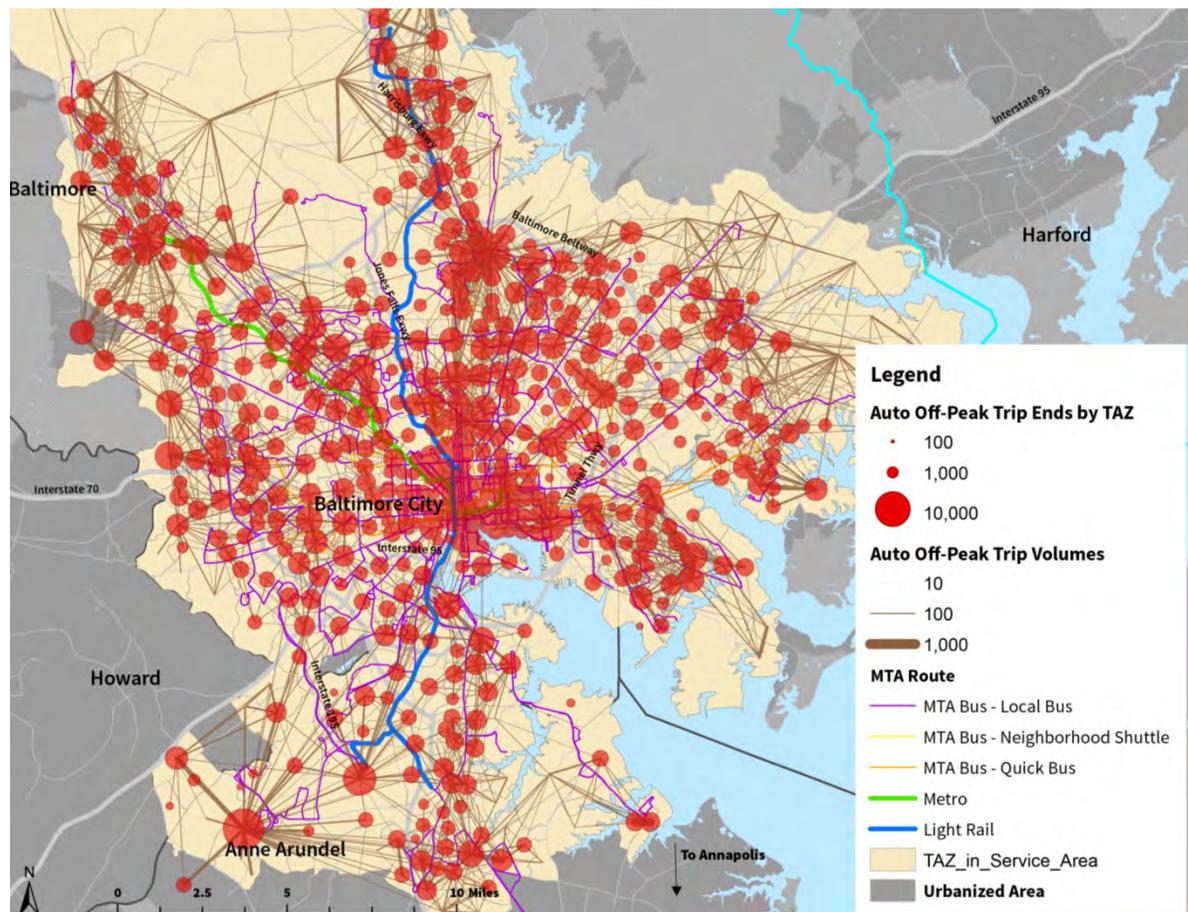
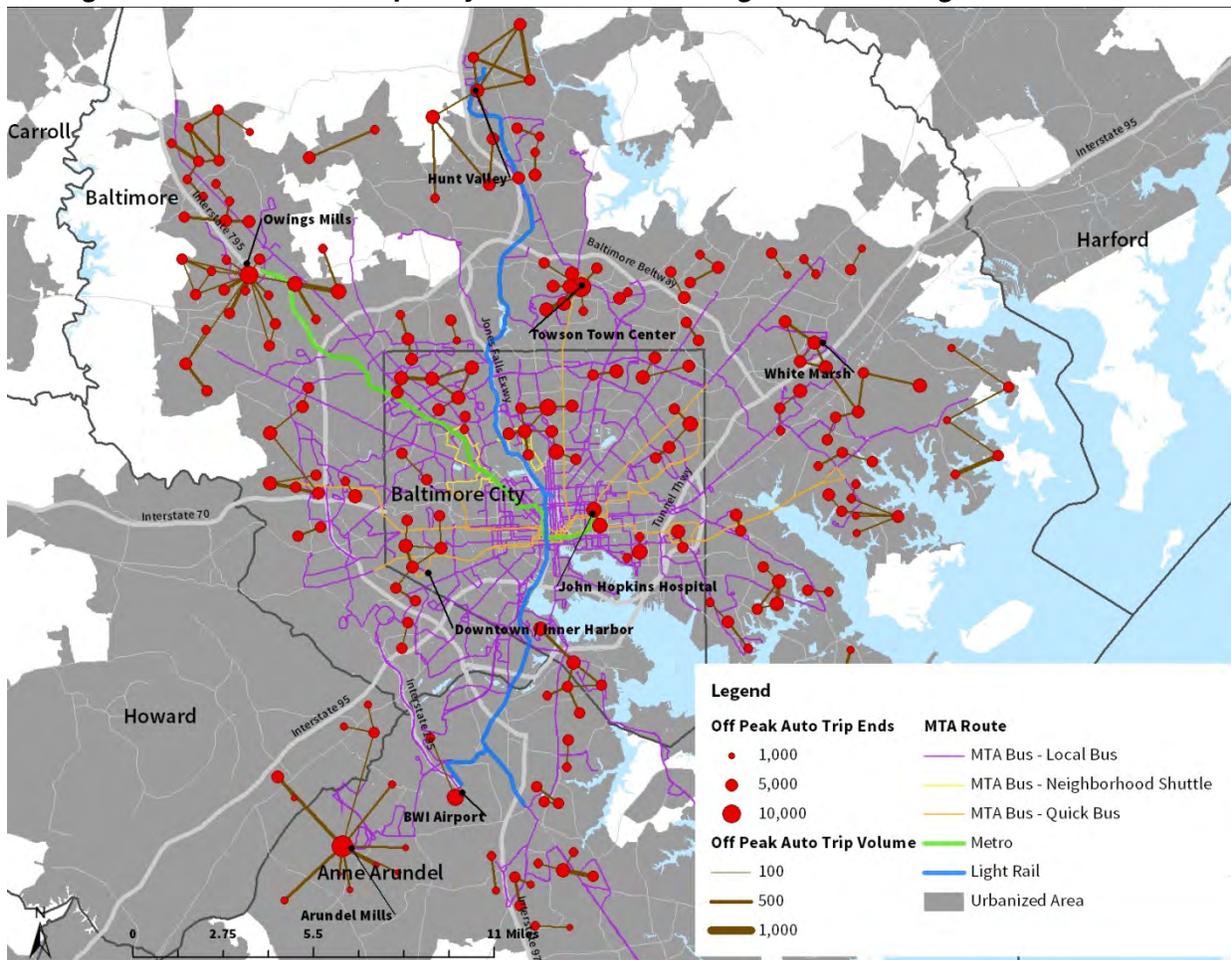


Figure 3.5: Off-Peak Auto Trips Projected for 2020 – 500 Highest Volume Origin Destination Pairs



3.2.3 Peak Period Transit Trips

Compared to auto trips, transit trips during the peak period are much more highly concentrated on central Baltimore. This trend is expected to continue into 2020, although the projections from the travel demand model are a bit misleading, as the transit network that is assumed to be in place in 2020 is essentially the same as in 2010, with the exception of large transit projects contained in Baltimore Regional Transportation Board’s constrained long range plan, *Plan It 2035*.³ Nearly all the highest volume transit destinations are located in Downtown Baltimore, the major medical centers of Johns Hopkins and University of Maryland, and campuses of Johns Hopkins and Loyola University. Outlying destinations with high peak transit flow include Towson, the Security Square Mall, and Bayview Hospital. Generally there are almost no strong origin and destination pairs in the outlying parts of Baltimore City or the suburbs. Even at major suburban transit hubs, there are few clear origin-destination links, suggesting that transit trips to these destinations are widely distributed across TAZs

³ Plan It 2035 includes four major transit projects, only the first of which is assumed to be operational in 2020: the Red Line light rail; an extension of Metro Subway north from Johns Hopkins Hospital to North Avenue; extensions of the current light rail from BWI Airport to Dorsey MARC station and from the Anne Arundel County line to MD-32; and a proposed new MARC station at Bayview Medical Center.

(possibly through auto access to transit). The high concentration of transit trips in the core reflect the design of the transit network as the highest level of service are on transit lines radiating from the core. Figure 3.6 illustrates peak period transit trips projected for 2020, while Figure 3.7 highlights the top 500 highest volume peak period transit trip pairs projected for 2020.

Figure 3.6: Peak Transit Trips Projected for 2020 – Destinations by Number of Trips / Trip Pairs by Volume

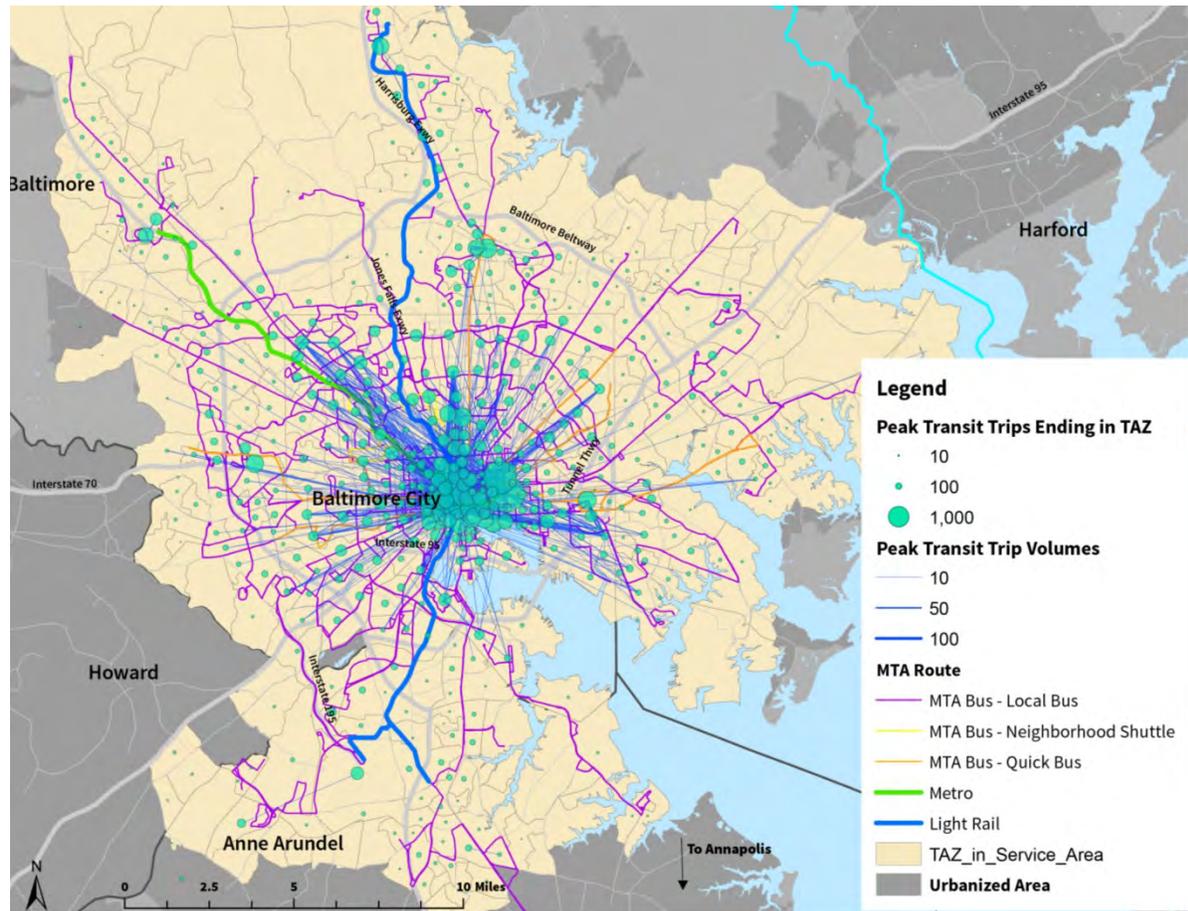
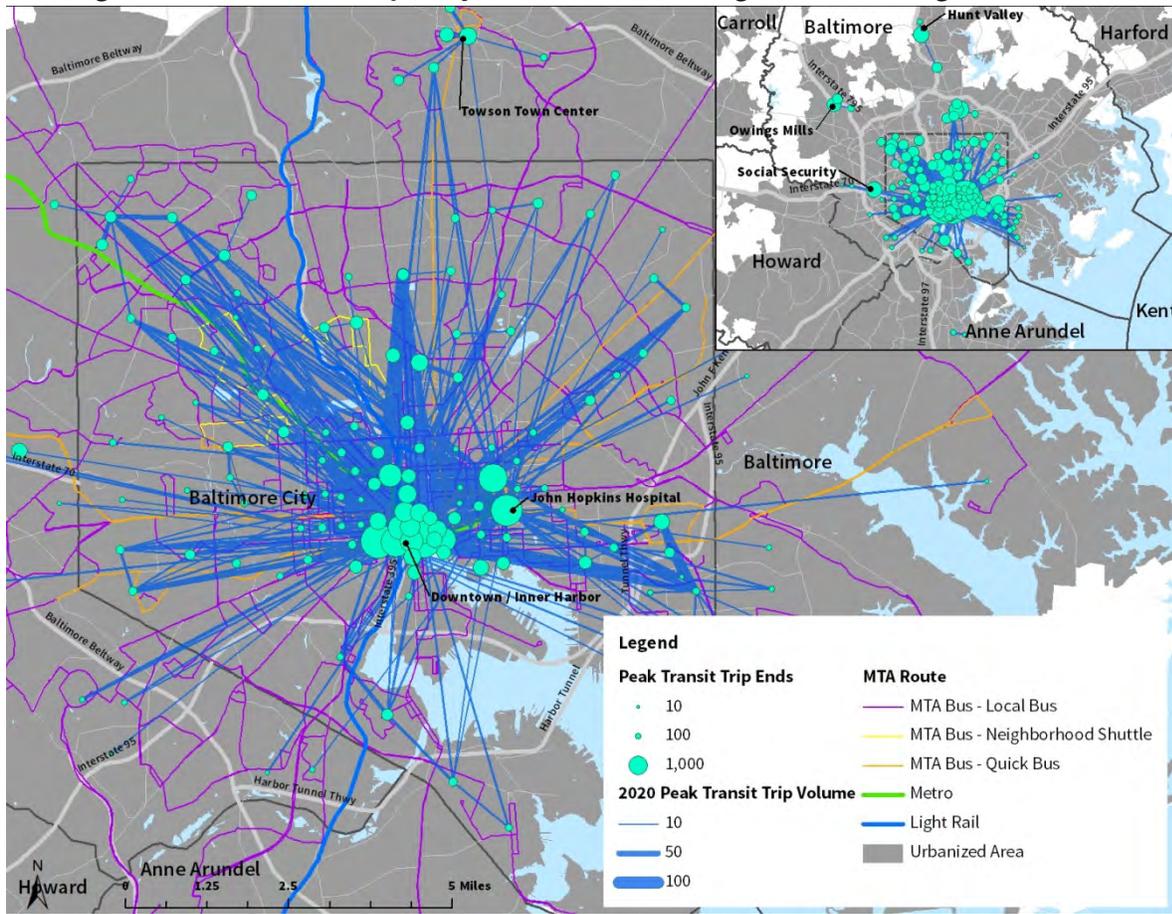


Figure 3.7: Peak Transit Trips Projected for 2020 – 500 Highest Volume Origin Destination Pairs



3.2.4 Off-Peak Period Transit Trips

Off-peak transit trip patterns closely mirror travel patterns during the peak period and this trend is expected to continue into 2020. As with peak-transit trips, during the off-peak most trips are focused on central Baltimore, with few suburb to suburb trips. Figure 3.8 illustrates off-peak transit trips projected for 2020, while Figure 3.9 illustrates the top 500 highest volume off-peak transit trip pairs projected for 2020.

Figure 3.8: Off-Peak Transit Trips Projected for 2020 – Destinations by Number of Trips / Trip Pairs by Volume

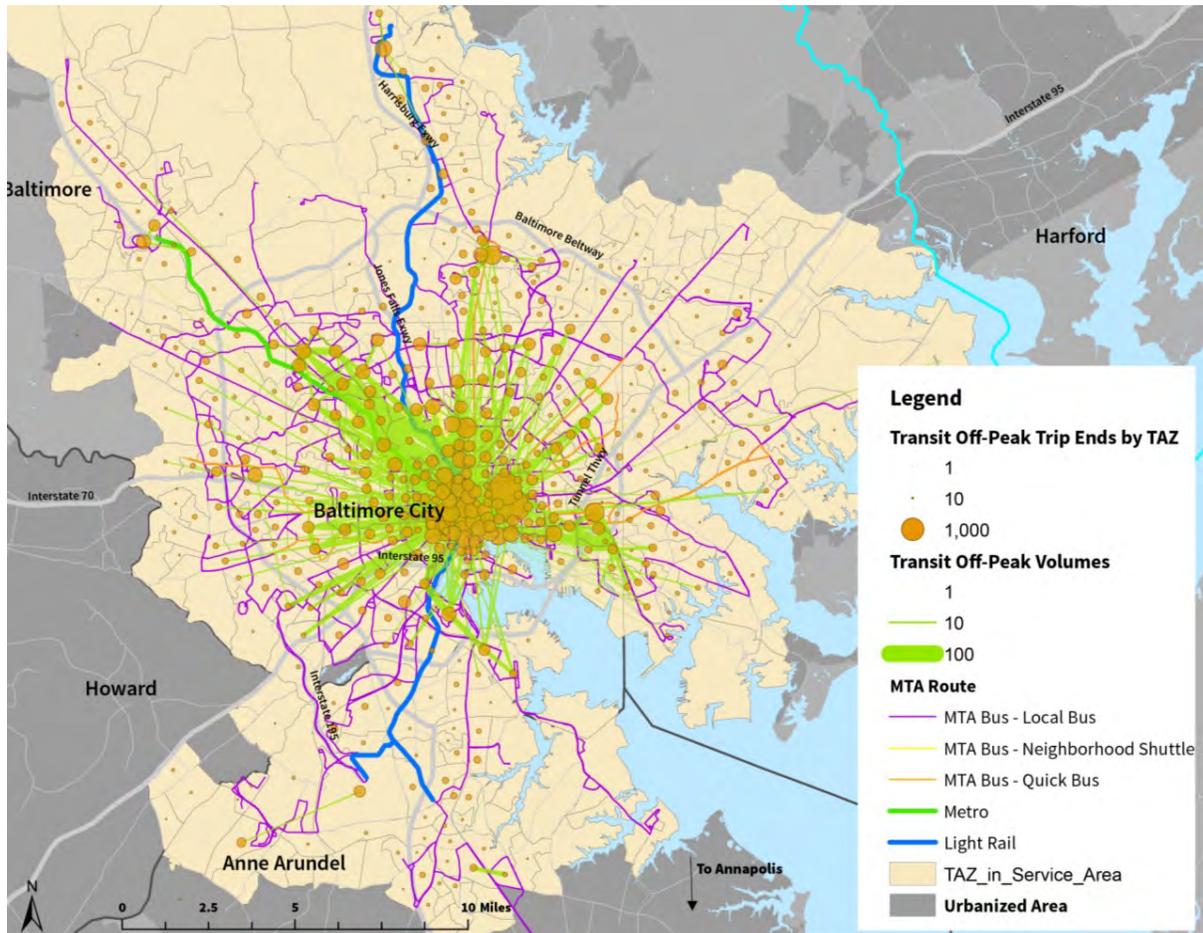
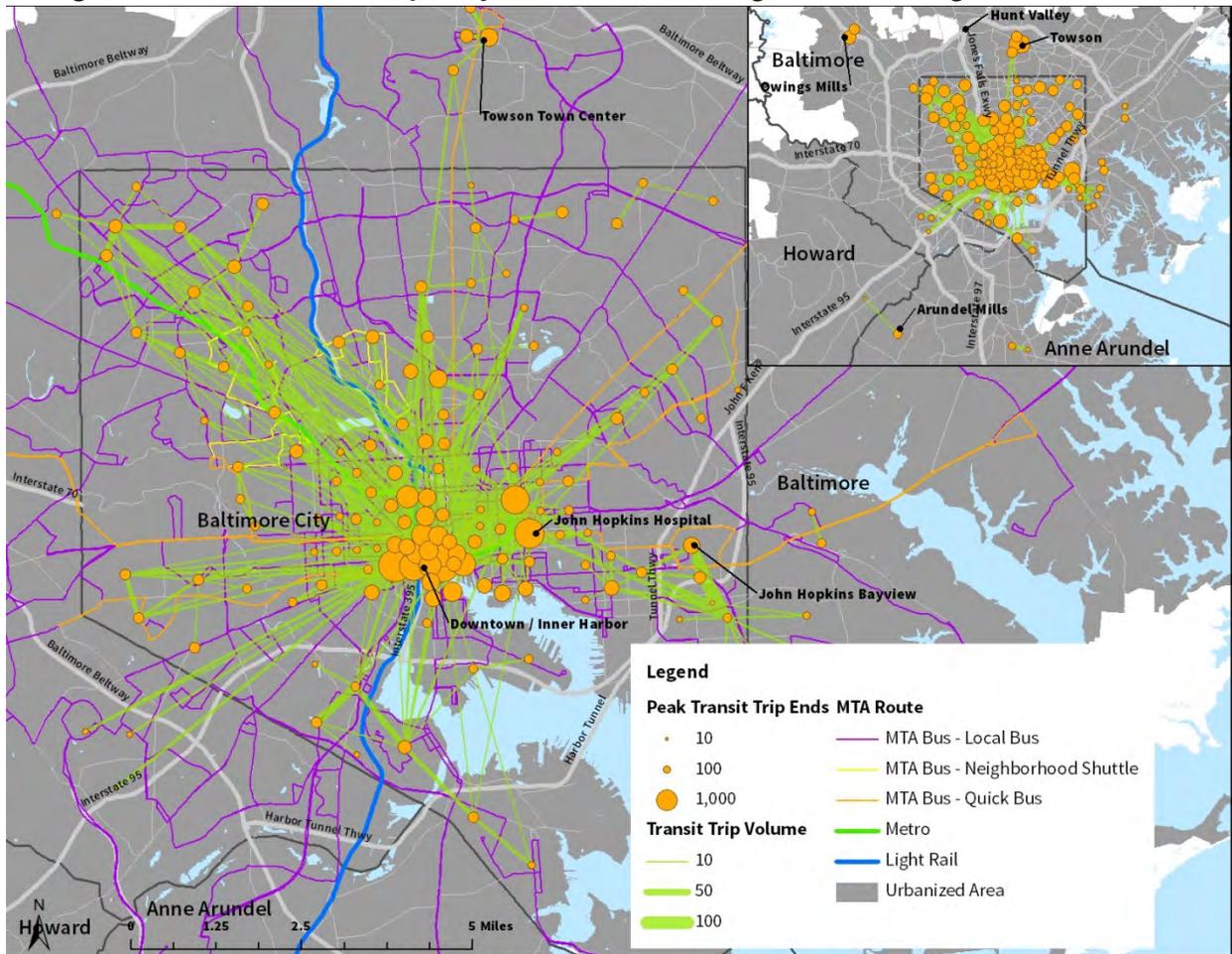


Figure 3.9: Off-Peak Transit Trips Projected for 2020 – 500 Highest Volume Origin Destination Pairs



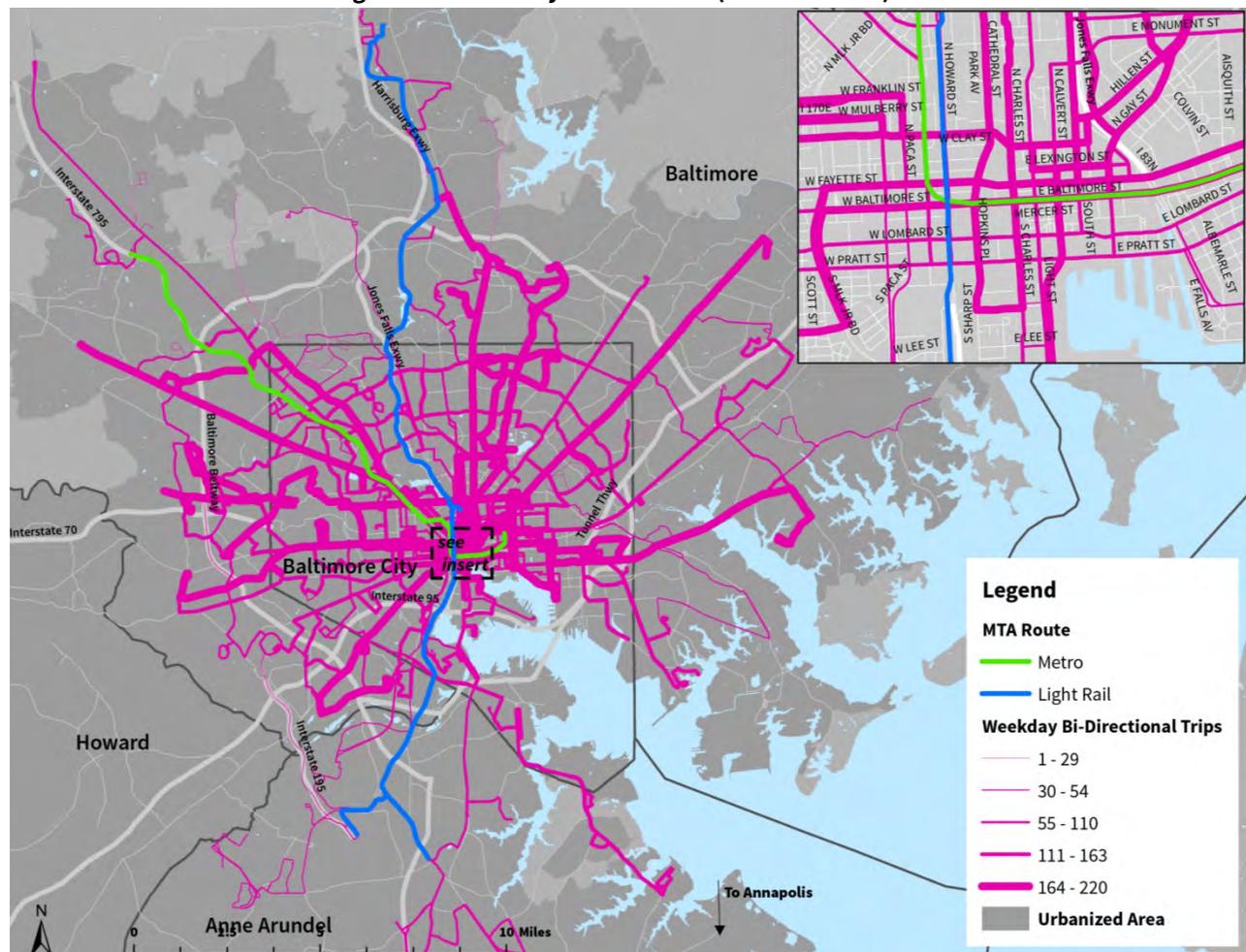
4 BUS: OPERATING CHARACTERISTICS AND PERFORMANCE

4.1 Basic Line Characteristics

4.1.1 Service Coverage

Baltimore has an extensive bus network that reaches nearly every corner of the city and into a significant portion of the surrounding Baltimore County. A number of lines provide 24 hour service, while most lines operate on both the weekday and weekend. Few lines run at headways of less than 10 minutes; however in the core area many routes overlap, providing high-frequency effective headways. As Figure 4.1 illustrates, bus service is fairly extensive on the typical weekday, with some key corridors featuring service of 150 buses/day or greater. High frequency bus routes radiate from Downtown Baltimore in nearly every direction. However, compared to radial routes, crosstown service operates less frequently.

Figure 4.1: Weekday Bus Volumes (Bi-Directional)



There is a significant decrease in service on Saturday, especially on routes operating from Downtown toward the southwest of Baltimore. The north-south corridor along York Road stands out as the only corridor to maintain weekday levels of service on the weekends. In Downtown, service frequencies remain relatively high. Sunday service is more infrequent when compared to Saturday service. No bus route in the system features

more than 148 trips per day. Generally, service on Sundays, as on Saturdays, is best in the core of the city. Figures 4.2 and 4.3 illustrate Saturday and Sunday bi-directional bus volumes respectively.

Figure 4.2 Saturday Bus Volumes (Bi-Directional)

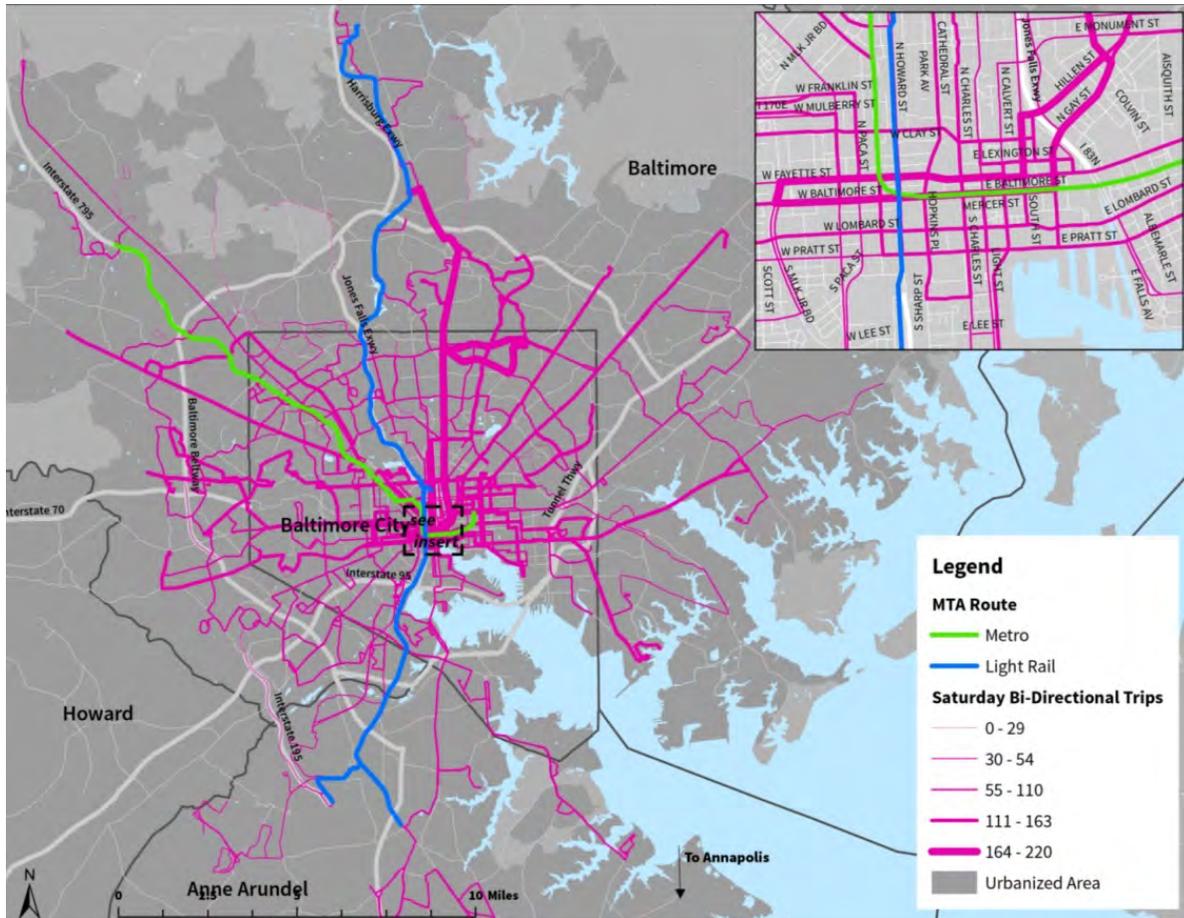
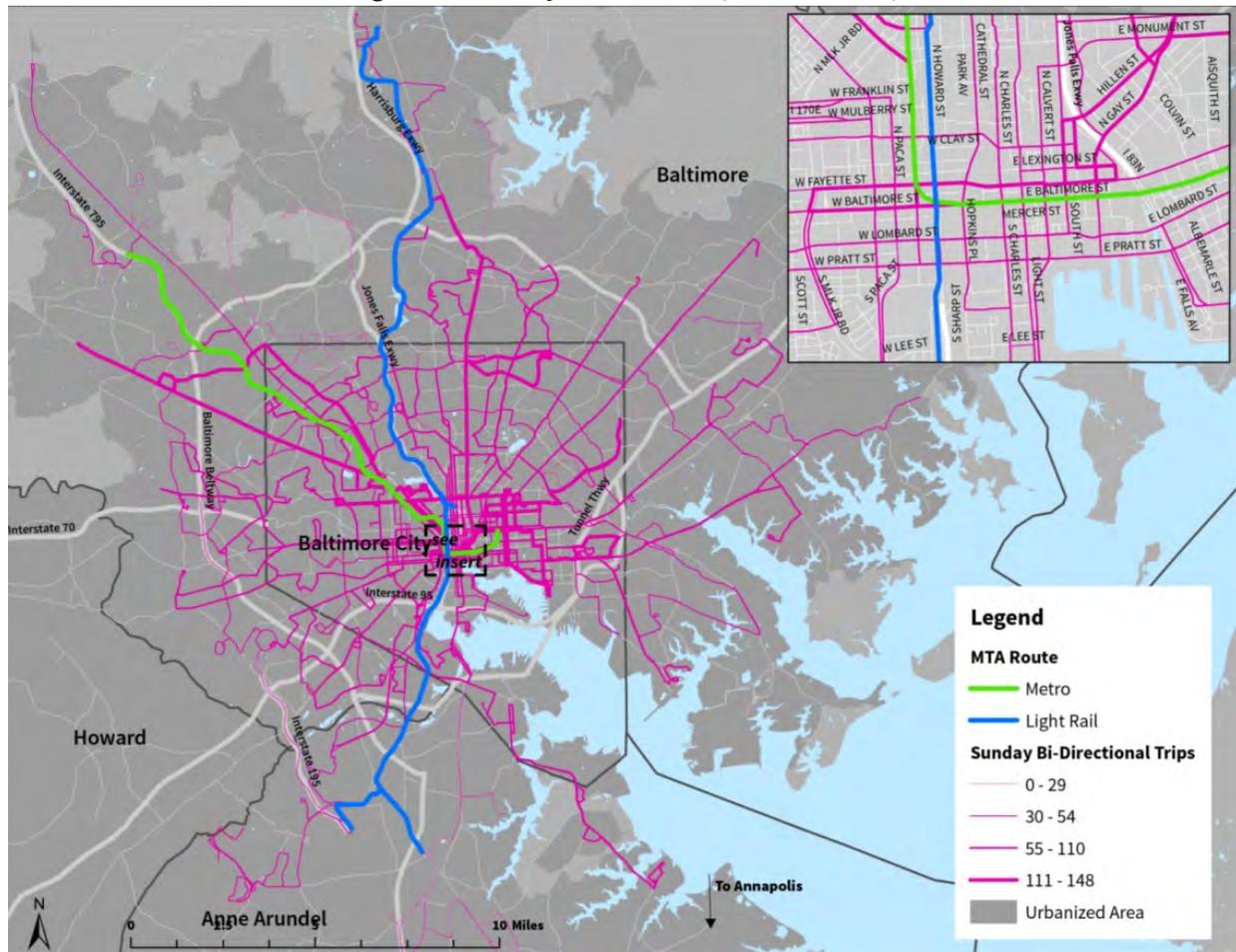


Figure 4.3 Sunday Bus Volumes (Bi-Directional)



4.1.2 Peak Headway and Span

While the maps in Section 4.1.1 quickly illustrate the quality of transit coverage, they do not provide the full picture of how well Core Bus routes service the market. Core Bus service provides a good span of coverage but generally does not provide a high frequency of service. Ten routes operate at a peak headway of 10 minutes or better, the qualification for a headway level of service (LOS) rating of A.⁴ The majority of routes operate at headways between 10 and 30 minutes (LOS for B,C, and D ratings). Long and inconsistent headways require riders to consult a schedule, make transferring more difficult, and often deter choice riders. Figure 4.4 summarizes the distribution of peak period headways.

The MTA’s Core Bus services provide a relatively good service span for riders. A number of routes achieve a span LOS of A (19 to 24 hour service span). The majority of routes provide both daytime, late night and weekend service, and 13 routes operate 24 hours a day, seven days a week. Figure 4.5 summarizes the number of routes operating by time period.

Figure 4.4 Routes by Peak Period Headway

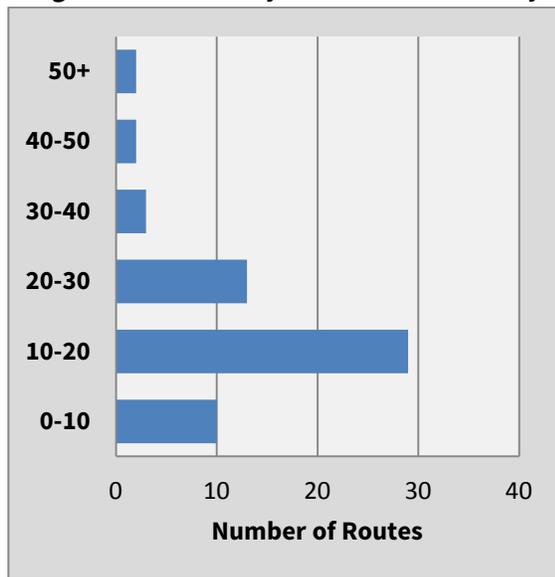


Figure 4.5 Number of Routes Operating Per Period⁵

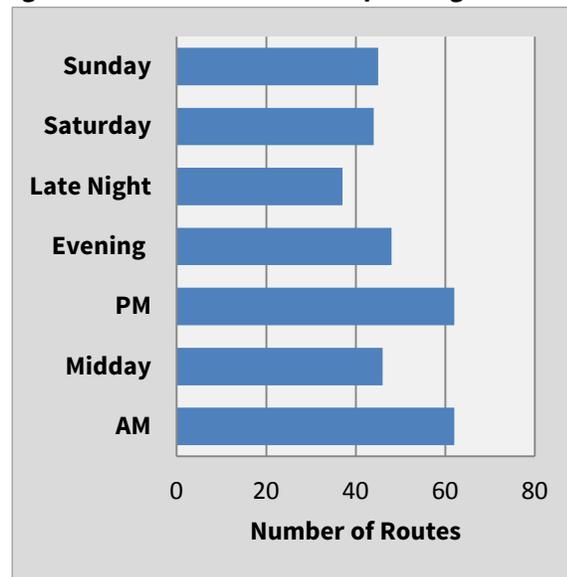


Table 4.1 details the basic line characteristics of each Local Bus route, including starting and ending locations, span of service and average headways by time period.

⁴ Definitions from Transit Capacity and Quality of Service Manual, 2nd Edition, 2003.

⁵ Service time period definitions for PM peak, evening and late night used here differ from standard time definitions used in the rest of the report. Peak: 3pm – 7pm, Evening: 7pm – 12am, Late Night: 12am – 6am. In instances where a route only provided one or two runs in a given time period, the route was not counted toward providing service in that period. Multiple categories can apply to any given route.

Table 4.1: Basic Route Characteristic – Level of Service

Route	Start Location	End Location	Span of Service*			Average Headway**							
			Weekday	Saturday	Sunday	AM Peak	Midday	PM Peak	Evening	Late Night	Sat	Sun	Garage
Radial Routes													
1	Sinai Hospital	Fort McHenry	4:34 AM - 1:46 AM	5:17 AM - 1:24 AM	5:24 AM - 1:27 AM	17	35	29	30	60	40	60	Bush
3	Sheppard Pratt	Inner Harbor	24 hours	24 hour	24 hour	10	15	14	26	26	15	30	Kirk / Bush
5	Mondawmin Metro	Cedonia	24 hours	24 hours	24 hours	15	15	16	15	24	20	20	Northwest / Eastern
7	Mondawmin Metro	Canton	5:00 AM - 3:03 AM	4:47 AM - 2:33 AM	4:34 AM - 2:13 AM	30	35	30	48	47	35	27	Northwest / Eastern
8	Lutherville Light Rail	University of Maryland TC	24 hours	24 hours	24 hours	9	15	15	15	30	15	20	Kirk / Bush
10	Rolling Road/Paradise	Dundalk / Bull Neck Road	24 hours	24 hours	24 hours	15	15	12	20	40	17	31	Bush / Eastern
11	Towson Town Center	Canton Crossing	5:04AM - 1:18 AM	5:10AM - 3:04 AM	5:10 AM - 1:30 AM	20	30	23	30	60	30	33	Kirk / Bush
15	Security Square Mall	Overlea / Perryhall	24 hours	24 hours	24 hours	10	14	12	14	33	15	30	Bush / Kirk
18	Glen/Key Avenue	Velvet Valley / Copper Ridge/ Scotts Hill	6:48 AM - 8:59 AM / 3:33 PM - 8:54 PM	-	6:57 AM - 7:23 AM / 12:10 PM - 1:49 PM	7	-	7	1 trip	-	-	3 trips	Northwest
19	State Center	Carney / Goucher and Taylor	3:57 AM - 2:22 AM	4:36 AM - 2:17 AM	4:26 AM - 2:06 AM	13	15	11	27	40	15	33	Kirk
20	Security Square Mall	CCBC Dundalk / Marine Terminal	24 hours	24 hours	24 hours	15	21	15	20	35	33	61	Bush / Eastern
23	Route 40 / Rolling Rd	Fox Ridge	24 hours	24 hours	24 hours	11	15	9	19	45	11	11	Bush / Eastern
27	Reistertown Plaza Metro	Port Convington	4:29 AM - 2:48 AM	5:17 AM - 3:05 AM	4:55 AM - 3:08 AM	15	40	35	47	60	40	24	Northwest / Bush
30	Edmondson Village	City Hall / Johns Hopkins Bayview	5:18 AM - 6:40 PM	-	-	16	21	15	-	-	-	-	Eastern / Bush
35	White Marsh Mall	UMBC / Blind Industries	4:00 AM - 1:40 AM	4:15 AM - 1:31 AM	5:30 AM - 1:27 AM	17	19	14	25	33	30	30	Bush / Eastern
36	Northern Parkway & York Road	Riverview / Monroe Street	24 hours	24 hours	24 hours	10	15	10	20	29	24	24	Kirk / Bush
53	Old Court Metro	Mondawmin Metro	4:21 AM - 3:17 AM	4:30 AM - 2:11 AM	4:54 AM - 2:11 AM	13	30	13	22	33	24	26	Northwest
54	Randallstown	Penn-North Metro	24 hours	24 hours	24 hours	11	17	10	20	38	19	19	Northwest

Route	Start Location	End Location	Span of Service*			Average Headway**							Garage
			Weekday	Saturday	Sunday	AM Peak	Midday	PM Peak	Evening	Late Night	Sat	Sun	
61	Lake Avenue	Inner Harbor	5:00 AM - 9:52 AM / 2:07 PM - 8:46 PM	-	-	27	-	30	47	-	-	-	Bush
64	Curtis Bay / Energy Parkway	North Avenue	4:29 AM - 2:20 AM	5:01 AM - 2:29 AM	5:02 AM - 2:26 AM	12	30	13	21	41	40	50	Bush
91	Sinai Hospital	City Hall	24 hours	24 hours	24 hours	15	20	14	26	42	23	45	Northwest
Crosstown Routes													
4	Turners Metro	C.C.B.C Essex	4:26 AM - 12:28 AM	6:00 AM - 11:39 PM	7:05 AM - 11:35 PM	49	60	48	60	60	60	60	Eastern
13	Walbrook Juntion	Canton / Fell's Point	24 hours	24 hours	24 hours	8	10	8	15	40	12	18	Eastern / Northwest
16	Mondawmin Metro	Brooklyn Homes	3:38 AM - 1:34 AM	3:50 AM - 12:56 AM	5:48 AM - 11:56 AM	20	30	20	30	60	30	60	Bush / Northwest
21	Mondawmin Metro	Fell's Point	4:30 AM - 1:39 AM	5:00 AM - 12:32 AM	6:55 AM - 11:31 PM	26	40	26	34	60	60	60	Eastern
22	Mondawmin Metro	Johns Hopkins Bayview Medical Center	3:56 AM - 3:29 AM	4:15 AM - 2:34 AM	4:50 AM - 2:36 AM	10	20	9	20	37	30	30	Eastern / Northwest
33	Rogers Ave Metro	Moravia	5:18 AM - 1:11 AM	5:45 AM - 12:50 AM	7:30 AM - 10:52 PM	9	20	16	28	42	30	60	Northwest / Bush
38	North Bend Loop	Cold Spring Lane / Grandview	6:49 AM - 7:47 AM / 3:04 PM - 3:58 PM	-	-	2 trips	2 trips	-	-	-	-	-	Bush
44	Security Square Mall	Rosedale Industrial Park	3:45 AM - 2:50 AM	5:03 AM - 1:21 AM	4:40 AM - 12:54 AM	15	20	22	40	60	26	44	Kirk / Northwest
51	Rogers Ave Metro	Patapsco Light Rail	4:16 AM - 2:24 AM	4:35 AM - 1:53 AM	5:08 AM - 1:07 AM	17	20	15	20	48	41	35	Bush / Northwest
55	Fox Ridge	Towson Court House	4:42 AM - 12:24 AM	5:31 AM - 12:19 AM	6:25 AM - 10:18 PM	20	30	25	60	60	39	60	Kirk / Eastern
77	Old Court Metro	Patapsco Light Rail	4:54 AM - 2:03 AM	5:49 AM - 1:39 AM	5:45 AM - 1:03 AM	30	30	29	60	62	30	60	Northwest / Bush
99	Old Court Metro	BWI Thurgood Marshall Airport	6:05 AM - 10:11 PM / 2:03 PM - 6:12 PM	-	-	30	-	30	-	-	-	-	Northwest / Bush
Feeder Routes													
9	International Circle	Lutherville Light Rail	3:28 AM - 1:12 AM	5:52 AM - 12:51 AM	5:32 AM - 11:57 PM	20	30	20	40	60	30	51	Kirk / Bush
12	Stella Maris	Kirk / Bartlett	5:20 AM - 11:48 PM	6:12 AM - 11:50 PM	6:12 AM - 11:47 PM	180	360	-	240	-	180	360	Kirk / Bush

Route	Start Location	End Location	Span of Service*			Average Headway**							Garage
			Weekday	Saturday	Sunday	AM Peak	Midday	PM Peak	Evening	Late Night	Sat	Sun	
14	Patapsco Light Rail	Annapolis	4:39 AM - 1:14 AM	5:58 AM - 12:17 AM	6:30 AM - 10:37 PM	20	30	20	32	35	31	84	Bush
17	Patapsco Light Rail	BWI/Arundel Mills/ Parkway Center	24 hours	6:00 AM - 4:50 AM	5:50 AM - 4:27 AM	30	62	36	34	60	60	60	Bush
24	Whispering Woods	Moravia Loop	4:41 AM - 1:10 AM	5:00 AM - 12:44 AM	7:00 AM - 10:44 PM	60	60	60	57	122	60	60	Eastern
52	Milford Mill	Mondawmin Metro	24 hours	24 hours	24 hours	8	13	8	18	24	18	22	Northwest
56	Glyndon	Owings Mills Town Center	4:45 AM - 1:35 AM	5:49 AM - 1:46 AM	5:49 AM - 1:45 AM	23	35	23	35	45	40	44	Northwest
57	Security Square Mall	Rogers Avenue Metro	5:04 AM - 12:40 AM	6:30 AM - 9:40 PM	6:30 AM - 9:40 PM	30	40	30	30	60	54	60	Northwest
58	White Marsh Mall	Reisterstown Plaza Metro	4:40 AM - 12:30 AM	4:35 AM - 12:30 AM	7:35 AM - 8:30 PM	30	30	30	48	60	60	60	Northwest
59	Owings Mills Town Center	Reisterstown Plaza Metro	4:18 AM - 2:03 AM	5:27 AM - 2:19 AM	5:27 AM - 2:16 AM	30	35	30	40	40	35	36	Northwest
60	Stevenson University	Reisterstown Plaza Metro	5:40 AM - 8:02 PM	-	-	43	58	45	49	-	-	-	Northwest
Circulator													
29	Cherry Hill Light Rail	Cherry Hill	4:43 AM - 12:19 AM	4:45 AM - 12:19 AM	-	30	30	30	20	20	20	-	Bush
50	Erdman and Belair	Erdman and Belair	6:00 AM - 7:13 PM	8:00 AM - 7:15 PM	9:20 AM - 6:33 PM	20	40	20	-	-	40	40	Kirk
97	Mondawmin Metro	Mondawmin Metro	5:35 AM - 10:36 PM	7:30 AM - 7:24 PM	7:30 AM - 7:24 PM	30	30	30	27	-	30	30	Northwest
98	Woodberry Light Rail	Woodberry Light Rail	5:40 AM - 10:05 PM	7:40 AM - 7:26 PM	7:40 AM - 7:26 PM	40	40	40	40	-	40	40	Northwest
QuickBus													
40	Security Boulevard at CMS	Middle River	4:35 AM - 11:00 PM	7:00 AM - 11:46 PM	7:00 AM - 9:47 PM	12	15	12	17	-	16	15	Bush / Eastern
46	Cedonia	Paradise Loop	5:00 AM - 9:36 AM / 2:30 PM - 6:09 PM	-	-	15	-	15	-	-	-	-	Eastern / Bush
47	Walbrook Junction	Overlea Loop	6:17 AM - 9:11 AM / 3:05 PM - 5:58 PM	-	-	15	-	15	-	-	-	-	Bush / Kirk
48	Towson Town Center	University of Maryland TC	4:32 AM - 7:29 PM	8:51 AM - 6:15 PM	-	15	15	15	-	-	15	-	Kirk / Bush

Route	Start Location	End Location	Span of Service*			Average Headway**								
			Weekday	Saturday	Sunday	AM Peak	Midday	PM Peak	Evening	Late Night	Sat	Sun	Garage	
Express Bus														
03X	Cromwell Bridge	Inner Harbor	6:25 AM - 9:00 PM / 4:02 PM - 6:05 PM	-	-	13	-	12	-	-	-	-	-	Kirk / Bush
05X	Cedonia	Mondawmin Metro	6:55 AM - 8:37 AM / 4:25 PM - 5:54 PM	-	-	20	-	20	-	-	-	-	-	Northwest / Eastern
104	Cromwell Bridge Road	Johns Hopkins Hospital	7:41 AM - 8:18 AM / 5:16 PM - 5:45 PM	-	-	1 Trip	-	1 Trip	-	-	-	-	-	Kirk
10X	Rolling Road/Paradise Avenue	Downtown Baltimore	7:05 AM - 8:27 AM / 4:45 PM - 5:57 PM	-	-	35	-	23	-	-	-	-	-	Bush
120	White Marsh Park & Ride	Downtown Baltimore	6:15 AM - 9:18 AM / 3:23 PM - 6:32 PM	-	-	13	-	13	-	-	-	-	-	Kirk / Eastern
150	Columbia	Downtown Baltimore	5:45 AM - 8:30 AM / 4:40 PM - 7:50 PM	-	-	30	-	28	-	-	-	-	-	Bush
15X	Perry Hall	Security Square Mall	6:10 AM - 8:35 AM / 4:14 PM - 5:54 PM	-	-	32	-	20	-	-	-	-	-	Kirk
160	Whispering Woods/Fox Ridge	Johns Hopkins Hospital	6:21 AM - 8:15 AM / 4:21 PM - 6:10 PM	-	-	18	-	15	-	-	-	-	-	Eastern
19X	State Center	Carney / Goucher and Taylor	6:40 AM - 8:53 AM / 4:14 PM - 6:08 PM	-	-	9	-	10	-	-	-	-	-	Kirk
64X	North Avenue	Riviera Beach	5:04PM-6:12PM	-	-	-	-	1 Trip	-	-	-	-	-	Bush

* Span is from first departure to last arrival.

** Time periods defined as AM Peak: 6am-9am; Midday: 9am-3pm; PM Peak: 3pm-6pm; Evening: 6pm – 10pm; Late Night: 10pm – 6am.

5 MTA LIGHT RAIL AND METRO SUBWAY

5.1 Operating Characteristics

The Light Rail and Metro Subway provide an overall high level of service, with frequent headways during the weekday and an extensive span of service. The Light Rail operates as one line with numerous run patterns and branches. Some trains during the peak period in the direction of Hunt Valley turn back early at the Timonium Fairgrounds station. When trains are taken out of service they typically terminate at North Avenue Station adjacent to the Light Rail Maintenance Facility. Headways on the 1.7 mile central portion of the Light Rail (between Camden Yards and North Avenue Station) operate at headways of 10 minutes or better, providing customers frequent enough service that a schedule is not needed. Service on the branches of the Light Rail is not as frequent, with some branches operating at up to 30 minute headways, more typical of a commuter rail than Light Rail service.

The Metro Subway operates as one line with no run pattern variations. During the weekday, headways average 10 minutes or less, while during the weekend trains operate every 16 minutes. Table 5.1 summarizes service span and headways by time period for the Light Rail and Metro Subway.

Table 5.1: Span of Service and Headway – Light Rail and Metro Subway

	Span of Service			Headway						
	Weekday	Saturday	Sunday	AM	Midday	PM	Evening	Late Night	Sat.	Sun.
Light Rail (All)				8	10	8	10	10	10	10
<i>To BWI Thurgood Marshall Airport</i>				20	30	20	30	30	30	30
<i>To Camden Yards</i>				8	10	8	10	10	10	10
<i>To Glen Burnie</i>	3:56 AM - 1:30 AM	4:21 AM - 1:23 AM	9:44 AM - 10:06 PM	20	30	18	30	30	30	30
<i>To Fairgrounds</i>				10	15	10	15	15	15	15
<i>To Hunt Valley</i>				20	15	17	15	15	15	15
<i>To North Avenue Station.</i>				10	15	10	13	13	15	15
<i>To Penn Station</i>				30	30	30	30	30	30	30
Metro Subway	4:54 AM - 12:31 AM	6:01 AM - 12:31 AM	6:10 AM - 12:31 AM	8	10	8	11	11	15	15

Operationally, both services have very few non-revenue hours and lose little time to deadheading. Despite running on an exclusive guideway, average recovery times as a percentage of service hours is comparable to bus service during most periods; the Metro Subway on weekends operates with a high scheduled recovery time of 35% of total service hours. Table 5.2 summarizes the major operating characteristics of the Light Rail and Metro Subway.

Table 5.2: Weekday Operating Characteristics - Light Rail and Metro Subway

Day	Route	Revenue Hours	Layover Hours (% of total)	Non-Revenue Hours (% of total)	Revenue Miles	Deadhead Miles (% total)	Peak Trains	Trips
Weekday	Light Rail	272	59 (18%)	3 (1%)	5,106	10 (0%)	19	304
	Metro Subway	117	24 (17%)	2 (2%)	3,524	57 (2%)	9	249
Saturday	Light Rail	226	45 (17%)	2 (1%)	4,208	6 (0%)	14	246
	Metro Subway	74	51 (35%)	21 (28%)	2,195	16 (1%)	5	154
Sunday	Light Rail	129	26 (17%)	2 (2%)	2,408	6 (0%)	14	149
	Metro Subway	74	51 (35%)	21 (28%)	2,195	16 (1%)	5	154