6.1 Bronx



Population and Travel Characteristics





Bronx 24-hour VMT

1 3 5 7 9 11 13 15 17 19 21 23

Hour of Day = 2014 VMT ••••• 2040 VMT

VMT Daily Totals



Two-Way Trips between The Bronx and Other Counties in the New York Metro Area



1,500,000

0

F^{1,000,000} 500.000

Performance Measures

County (Borough): Bronx (Bronx)

Scenario 2014

Facility Type	D/C	0.8<= D/C<=1	D/C>1	LMC	тті	ATS	VHD	PHD	∨мт
AM Period (6 to 1	0 AM)								
Freeway	0.60	9%	16%	254.1	1.44	41.4	24,206	35,824	1,330,448
Arterial	0.33	3%	4%	93.1	1.55	16.6	48,361	71,575	594,398
Local	0.20	1%	2%	7.9	1.03	21.2	9,721	14,388	583,424
PM Period (4 to 8 PM)									
Freeway	0.22	2%	3%	46.9	1.06	46.4	1,237	1,831	857,104
Arterial	0.10	0%	0%	10.8	1.11	20.5	6,645	9,835	321,832
Local	0.06	0%	0%	1.7	1.00	21.5	548	811	337,974
Daily Total									
Freeway	0.45	7%	10%	843.5	1.23	43.8	56,120	83,057	5,436,084
Arterial	0.25	2%	3%	318.6	1.35	17.9	145,507	215,350	2,560,066
Local	0.16	1%	1%	25.6	1.01	21.3	17,432	25,800	2,640,103
Total							219,059	324,207	10,636,253

Scenario 2040

Facility Type	D/C	0.8<= D/C<=1	D/C>1	LMC	тті	ATS	VHD	PHD	∨мт
AM Period (6 to 7	10 AM)								
Freeway	0.63	8%	18%	280.0	1.50	40.1	28,826	42,663	1,402,989
Arterial	0.36	4%	6%	124.9	1.65	15.8	64,525	95,496	651,659
Local	0.22	0.02	2%	9.1	1.05	20.8	14,840	21,963	631,011
PM Period (4 to 8	3 PM)								
Freeway	0.24	2%	3%	68.3	1.07	45.7	2,070	3,063	964,616
Arterial	0.11	0%	0%	14.1	1.12	19.9	7,756	11,479	340,606
Local	0.07	0%	0%	1.8	1.00	21.3	1,163	1,721	358,938
Daily Total									
Freeway	0.48	8%	11%	980.6	1.27	42.9	69,189	102,400	5,822,740
Arterial	0.27	3%	3%	411.1	1.41	17.3	186,477	275,985	2,758,590
Local	0.17	1%	1%	28.7	1.02	21.1	25,553	37,818	2,816,457
Total							281,219	416,204	11,397,786

D/C = Demand to Capacity; LMC = Lane Miles of Congestion; TTI = Travel Time Index; ATS = Average Travel Speed; VHD = Vehicle Hours of Delay; PHD = Person Hours of Delay; VMT = Vehicle Miles Traveled

Note: D/C = average Demand to Capacity for the particular facility type and period. The "0.8<=DC<=1" and "D/C>1" are the percent of travel that occurs in various conditions (somewhat congested and very congested). Percentage Difference Between 2040 and 2014 Performance Measures

		0.8<=							
Facility Type	D/C	D/C<=1	D/C>1	LMC	TTI	ATS	VHD	PHD	VMT

AM Period (6 to 10 AM)										
Freeway	5%	_	_	10%	4%	-3%	19%	19%	5%	
Arterial	9%	_	-	34%	6%	-5%	33%	33%	10%	
Local	10%	-	-	14%	2%	-1%	53%	53%	8%	
PM Period (4 to 8 PM)										
Freeway	9%	-	-	46%	1%	-1%	67%	67%	13%	
Arterial	10%	_	-	30%	1%	-3%	17%	17%	6%	
Local	17%	-	-	11%	0%	-1%	112%	112%	6%	
Daily Total										
Freeway	7%	-	-	16%	3%	-2%	23%	23%	7%	
Arterial	8%	_	-	29%	4%	-4%	28%	28%	8%	
Local	6%	_	_	12%	1%	-1%	47%	47%	7%	
Total							28%	28%	7%	

Bronx – Congested Corridors

- I-95/Cross Bronx Expressway from Harlem River/Alexander Hamilton Bridge to Hutchinson River 1. Parkway/Bruckner Interchange - This is the "heart" of the 7th highest-ranked corridor in the United States for Congestion Cost in the TTI Report. Congestion is most significant in the westbound direction during both peaks due to sheer volume heading toward Manhattan in the AM and trucks headed toward the George Washington Bridge (GWB) in the PM (exacerbated since 9/11 by the need for trucks entering from I-87/Major Deegan Expressway to immediately weave to the left side for the Upper Level of the GWB, and further since December, 2012 by the rehabilitation work on the Alexander Hamilton Bridge). In addition, there are various choke points in both directions of this highway at various times due to heavy merges and weaves and steep grades. The heavy usage of this road by trucks makes its congestion especially detrimental to the region's economy in terms of both time loss and fuel consumption.
- 2. I-278/Bruckner Expressway from the RFK Bridge to the Bruckner Interchange This is a major commuter route between Manhattan and Bronx/Westchester/Connecticut. It has several choke points due to heavy merging and weaving at various times, as well as substandard design in sections, including a sharp curve on a section with no shoulders at the I-895/Sheridan Expressway interchange. It also carries high truck volumes as it provides access to/from the Hunts Point Market complex. Congestion occurs mostly southbound in the evening peak and northbound in the morning peak.
- 3. I-87/Major Deegan Expressway from the RFK Bridge to I-95/Highbridge Interchange In the northbound direction, this is the 32nd highest-ranked corridor in the United States in terms of delay per mile in the TTI Report. It is one of the three main approaches from Manhattan to the GWB. The main problem is the ramp to southbound I-95 (GWB approach), which backs up onto the I-87 mainline every evening. See 1 above for exacerbating factors. Congestion also occurs on southbound I-87 on the approach to the I-95 interchange in the morning peak. This highway section also abuts Yankee Stadium, which produces heavy congestion in both directions, particularly approaching the Stadium for weeknight Yankee home games (roughly 55 per year, plus postseason games).
- 4. Bronx River Parkway from I-95/Cross Bronx Expressway to Westchester County Boundary -Problems occur at entry and exit points, particularly at I-95, where direct ramp connections are not provided and traffic must mix with local traffic on the service roads. Congestion occurs mostly southbound in the evening peak and northbound in the morning peak.

Bronx: Congested Corridors and Hot Spot Areas (AM Period)





Bronx: Congested Corridors and Hot Spot Areas (PM Period)



0 3 6 Miles