### 6.6 Queens





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



Hour of Day - 2014 VMT ••••• 2040 VMT

### Performance Measures

County (Borough): Queens (Queens)

#### Scenario 2014

Facility Type	D/C	0.8<= D/C<=1	D/C>1	LMC	тті	ATS	VHD	PHD	VMT
AM Period (6 to	10 AM)								
Freeway	0.73	8%	24%	640.8	1.78	35.0	94,157	139,353	2,732,257
Arterial	0.45	6%	10%	676.5	2.02	15.3	351,868	520,765	2,181,634
Local	0.47	4%	13%	3.4	1.11	19.6	33,433	49,481	1,289,120
PM Period (4 to a	8 PM)								
Freeway	0.26	2%	5%	217.5	1.15	41.2	16,171	23,933	1,654,621
Arterial	0.12	1%	1%	101.9	1.13	20.2	31,636	46,821	1,056,487
Local	0.11	1%	0%	0.1	1.00	21.5	454	672	485,047
Daily Total									
Freeway	0.54	8%	16%	2388.8	1.44	37.8	237,948	352,164	11,248,583
Arterial	0.33	4%	6%	2377.4	1.57	17.0	930,727	1,377,476	9,298,150
Local	0.35	5%	8%	11.1	1.05	20.3	95,561	141,431	5,809,807
Total							1,264,237	1,871,070	26,356,540

#### Scenario 2040

D/C	0.8<= D/C<=1	D/C>1	LMC	тті	ATS	VHD	PHD	VMT
10 AM)								
0.75	8%	25%	683.5	1.82	34.1	102,230	151,301	2,863,377
0.50	6%	12%	811.3	2.29	14.6	473,259	700,423	2,349,079
0.51	4%	16%	3.6	1.12	19.1	37,118	54,934	1,353,760
3 PM)								
0.27	3%	6%	253.6	1.18	40.4	19,944	29,518	1,779,930
0.13	1%	1%	139.5	1.15	19.7	39,175	57,979	1,125,141
0.11	1%	0%	0.1	1.00	21.1	536	794	502,922
0.56	9%	17%	2633.1	1.48	36.9	269,418	398,739	11,843,305
0.37	5%	8%	2941.5	1.72	16.4	1,258,794	1,863,015	9,984,903
0.38	6%	10%	14.6	1.07	19.8	141,985	210,138	6,183,352
						1,670,197	2,471,892	28,011,559
	IO AM)   0.75   0.50   0.51   B PM)   0.27   0.13   0.11   0.56   0.37	D/C   D/C<=1     10 AM)   0.75   8%     0.50   6%   0.51     0.51   4%   3     0.27   3%   0.13     0.13   1%   0.51     0.55   9%   0.37	D/C   D/C<=1   D/C>1     10 AM)   0.75   8%   25%     0.50   6%   12%     0.51   4%   16%     3 PM)   0.27   3%   6%     0.13   1%   1%     0.56   9%   17%     0.37   5%   8%	D/C   D/C<=1   D/C>1   LMC     10 AM)	D/C   D/C<=1   D/C>1   LMC   TTI     10 AM)	D/C   D/C<=1   D/C>1   LMC   TTI   ATS     10 AM)	D/CD/C<=1D/C>1LMCTTIATSVHD10 AM)0.758%25%683.51.8234.1102,2300.506%12%811.32.2914.6473,2590.514%16%3.61.1219.137,1183 PM)0.273%6%253.61.1840.419,9440.131%1%139.51.1519.739,1750.111%0%0.11.0021.1536U0.569%17%2633.11.4836.9269,4180.375%8%2941.51.7216.41,258,7940.386%10%14.61.0719.8141,985	D/CD/C<=1D/C>1LMCTTIATSVHDPHD10 AM)0.758%25%683.51.8234.1102,230151,3010.506%12%811.32.2914.6473,259700,4230.514%16%3.61.1219.137,11854,934BPM)0.273%6%253.61.1840.419,94429,5180.131%1%139.51.1519.739,17557,9790.111%0%0.11.0021.1536794O.569%17%2633.11.4836.9269,418398,7390.375%8%2941.51.7216.41,258,7941,863,0150.386%10%14.61.0719.8141,985210,138

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
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AM Period (6 t	o 10 AM)								
Freeway	3%	-	-	7%	2%	-3%	9%	9%	5%
Arterial	11%	-	_	20%	13%	-5%	34%	34%	8%
Local	9%	-	_	7%	1%	-3%	11%	11%	5%
PM Period (4 t	o 8 PM)								
Freeway	4%	_	_	17%	3%	-2%	23%	23%	8%
Arterial	8%	_	_	37%	2%	-3%	24%	24%	6%
Local	0%	-	_	0%	0%	-2%	18%	18%	4%
Daily Total									
Freeway	4%	_	_	10%	3%	-2%	13%	13%	5%
Arterial	12%	_	_	24%	10%	-4%	35%	35%	7%
Local	9%	_	_	31%	2%	-3%	49%	49%	6%
Total							32%	32%	6%

#### **Queens – Congested Corridors**

- 27. I-495/Long Island Expressway from the Queens-Midtown Tunnel to the Nassau County Boundary The stretch of I-495 from Maurice Avenue/Exit 18 to the Nassau County Boundary is part of the 16<sup>th</sup> highest-ranked corridor in the United States in terms of Congestion Cost in the TTI Report. The entire length of I-495 in Queens County regularly experiences severe congestion mostly (but not exclusively) during peak commuting periods, due to insufficient mainline capacity, frequent merges and weaves, and heavy truck usage. The eastbound direction is heaviest in evening peaks. The westbound direction is heaviest in morning peaks. The heavy usage of this road by trucks (I-495 is the only eastwest limited access Queens highway on which trucks are permitted) causes the economic cost of the congestion on I-495 to be very high.
- 28. Grand Central Parkway (GCP) from the RFK Bridge to the Nassau County Boundary The entire length of the GCP regularly experiences severe congestion mostly (but not exclusively) during peak commuting periods, due to insufficient mainline capacity, and frequent merges and weaves. The eastbound direction is heaviest in evening peaks. The westbound direction is heaviest in morning peaks. Trucks are not permitted on this road.
- 29. I-678/Van Wyck Expressway from JFK Airport to the GCP In the northbound direction, this stretch of I-678 is the 4<sup>th</sup> highest-ranked corridor in the United States in terms of Delay per Mile in the TTI Report. In the southbound direction, it is the 19<sup>th</sup> highest-ranked corridor in the United States in terms of Delay per Mile. The only limited-access highway connecting JFK Airport (including its substantial air cargo facilities) and southern Queens/southwestern Nassau County with central Queens where it connects with I-495, the GCP, Queens Boulevard, Union Turnpike, and the Jackie Robinson Parkway (JRP) this portion of I-678 and its northbound Service Road experience severe congestion during many hours of the day due to insufficient mainline capacity, frequent merges and weaves, and heavy truck usage.

- 30. Belt Parkway from Brooklyn Boundary to the Bronx-Whitestone Bridge The only east-west limited-access highway in southern Queens (primarily serving traffic to/from JFK Airport as well as through trips between Brooklyn and southern Nassau County) and the only continuous north-south limited-access highway in eastern Queens, the entire length of the Belt Parkway in Queens experiences severe congestion mostly (but not exclusively) during peak commuting periods, due to insufficient mainline capacity, and frequent merges and weaves. The eastbound direction in southern Queens and southbound direction in eastern Queens are heaviest in evening peaks. The westbound direction in southern Queens and northbound direction in eastern Queens are heaviest in morning peaks. Trucks are not permitted on this road.
- 31. Jackie Robinson Parkway (JRP) from the Brooklyn Boundary to the GCP The only limited-access highway connecting eastern Brooklyn with central Queens where it connects with the GCP, Queens Boulevard, Union Turnpike, and I-678/Van Wyck Expressway the entire length of the JRP in Queens experiences severe congestion during peak commuting periods, due to insufficient mainline capacity, and frequent merges and weaves. The eastbound direction is heaviest in evening peaks. The westbound direction is heaviest in morning peaks. Trucks are not permitted on this road.
- 32. I-278/Brooklyn-Queens Expressway from the Brooklyn Boundary to the RFK Bridge The southern portion of this stretch of I-278 (from the Kosciuszko Bridge to NY-25A/Northern Boulevard) is part of the 13<sup>th</sup> highest-ranked corridor in the United States in terms of Delay per Mile in the TTI Report. The only north-south limited access highway in western Queens, I-278 experiences heavy congestion during peak commuting periods due to insufficient mainline capacity, heavy merges and weaves, and heavy truck usage, and spillbacks from congestion on the GCP/RFK Bridge approach. The eastbound/northbound direction is heaviest in evening peaks.
- 33. Ed Koch Queensboro Bridge The only toll-free East River crossing between Queens and Manhattan, this Bridge (also known as the 59<sup>th</sup> Street Bridge) experiences heavy congestion primarily (but not exclusively) during peak commuting periods due to insufficient mainline capacity, and interactions with the street systems on both ends (it has no direct connections with limited-access highways on either side). The eastbound (outbound) direction is heaviest in evening peaks. The westbound (inbound) direction is heaviest in morning peaks.
- 34. NY-25A/Northern Boulevard from the GCP to I-678/Van Wyck Expressway/Whitestone Expressway This section of Northern Boulevard provides connections between the GCP (providing access to LaGuardia Airport, I-278, and the RFK Bridge), Northern Boulevard, and Astoria Boulevard on the west and I-678 (providing access to the Bronx-Whitestone Bridge), Northern Boulevard, and downtown Flushing on the east. It experiences heavy congestion during peak commuting periods due to heavy merging and weaving. The eastbound direction is heaviest in evening peaks.

## Queens: Congested Corridors and Hot Spot Areas (AM Period)



## Queens: Congested Corridors and Hot Spot Areas (PM Period)

