CENTRAL BUSINESS DISTRICT (CBD) TOLLING PROGRAM

Appendix 12, Noise

August 2022

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Appendix 12. Noise

12.1 LOCAL STREET NOISE ASSESSMENT

Table 12-1. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Long Island City Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
1a	Pulaski Bridge/11th Street and Jackson Avenue	NB	LT	L	0.0	-0.1	0.0
			T	T	-0.1	-0.1	-0.3
			R	R	0.1	0.4	0.0
		SB	T	T	0.0	0.0	-0.1
			TR	R	0.1	0.5	0.2
		EB	LT	L	-0.5	1.2	2.4
			T	T	-0.4	1.1	2.1
		WB	L	L	-0.1	-0.6	-0.3
			T	T	0.0	0.0	0.0
1b	11th Street and 48th Avenue	NB	L	L	0.0	0.0	0.0
			T	T	-0.1	0.0	0.1
		SB	T	L	0.0	0.1	-0.1
			TR	T	0.0	0.0	0.0
		WB	LTR	T	0.0	0.0	0.0
2	50th Avenue @ Vernon Boulevard	NB	T	T	-0.1	0.3	0.8
			R	R	0.2	1.6	1.5
		SB	LT	T	0.6	1.1	0.4
				L	0.0	-0.1	0.0
		EB	LTR	L	0.0	0.0	0.0
				T	0.4	1.6	0.8
				R	0.0	0.0	0.0
3	Greene Street and McGuinness Boulevard	NB	T	T	-0.1	0.0	-0.3
			TR	R	0.0	-0.1	0.0
		SB	L	L	0.0	-0.5	-0.1
			T	T	-0.1	-0.5	-0.2
		EB	LTR	L	0.0	0.1	-0.1
				T	0.0	0.0	0.0
				R	0.0	0.0	-0.1
4	McGuinness Boulevard and Freeman Street	NB	T	T	-0.1	0.0	-0.3
		SB	T	T	0.0	-0.4	-0.2
			TR	R	0.0	0.0	0.0
		WB	R	R	-0.5	-1.7	-1.3

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
5	21st Street and 49th Avenue	NB	LTR	L	0.0	0.0	0.0
				T	0.0	0.0	0.0
				R	0.0	0.0	0.0
		SB	LTR	L	0.0	-0.4	-0.1
				T	-0.1	-0.4	-0.1
				R	0.0	-0.5	-0.1
		EB	LTR	L	-0.1	0.6	1.0
				T	-0.1	0.6	1.0
				R	0.0	0.7	1.1
		WB	LT	L	0.0	0.0	0.0
				T	0.0	0.0	0.0
			R	R	0.0	0.0	0.0
7	11th Street and Borden Avenue	NB	LTR	L	0.0	-1.0	-0.9
				T	0.0	-0.6	-0.3
				R	-1.3	-1.1	-4.3
		SB	LTR	L	-0.4	1.5	2.3
				T	0.0	1.8	2.2
				R	-0.4	1.6	2.3
		EB	LTR	L	0.1	0.2	0.2
				T	0.0	-0.1	-0.3
				R	-1.2	-0.1	-3.0
		WB	LTR	L	0.0	0.0	0.0
				T	0.0	-0.1	-0.3
				R	-1.1	0.1	-2.4
8a	Vandam Street and Queens–Midtown Tunnel Expressway	NB	LT	L	-0.1	-0.1	-1.2
			T	T	0.0	-0.2	-0.4
		SB	T	T	-0.5	-1.2	-1.0
			TR	R	-0.1	-0.4	-1.1
		WB	T	T	-0.2	0.0	-0.2
			TR	R	0.0	0.3	-0.4
8b	Vandam Street and Borden Avenue	NB	T	T	-0.1	-0.2	-0.4
			TR	R	0.0	0.0	0.0
		SB	LT	L	-0.3	-1.4	-0.8
			T	L	-0.5	-0.7	-1.0
		EB	LTR	L	-0.2	0.0	-0.1
				T	0.0	0.0	0.0
				R	0.0	0.0	0.0

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
9	Jackson Avenue/Northern Boulevard and Queens Plaza	NB	T	T	0.0	0.0	0.0
			TR	R	0.7	0.4	0.9
		SB	LT	L	0.0	0.1	0.0
			R	T	0.1	0.1	0.0
		EB	T	L	-0.6	-3.7	-3.0
			R	T	-0.6	-3.7	-3.0
		WB	LT	L	0.0	-0.1	0.0
			T	T	-0.1	-0.1	-0.1
			TR	R	0.0	0.0	0.0
10	Thomson Avenue and Vandam Street	NB	L	L	1.0	0.8	0.8
			T	T	0.0	0.0	0.0
			TR	R	0.0	0.0	0.0
		SB	T	L	0.5	0.0	0.0
			R	T	0.5	0.0	0.0
		EB	T	T	-0.1	0.0	0.0
			R	R	-0.1	0.0	0.0
		WB	T	T	0.0	0.0	0.0
11a	Thomson Avenue and Dutch Kills Street	SB	L	L	0.0	-0.1	0.0
			LR	R	0.0	-0.2	0.0
		EB	T	T	-0.2	-0.4	0.2
		WB	T	T	0.0	0.0	0.0
			R	R	0.0	0.0	0.0
11b	Thomson Avenue and Dutch Kills Street	WB	T	T	0.0	0.0	0.0
			TR	R	-0.8	0.0	0.0
		EB	EBT	T	-0.2	-0.2	0.0
12	21st Street and Queens Plaza N	NB	LT	T	0.0	0.0	0.0
			T	R	0.5	-0.1	-0.1
		SB	T	L	0.0	0.0	0.0
			RT	T	-0.7	0.3	-0.8
		WB	LTR	L	-0.1	-0.6	-0.2
				T	-0.9	-0.3	-1.1
				R	0.0	-0.6	-0.3

Table 12-2. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Lower Manhattan Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
1	Trinity Place and Edgar Street	NB	LT	L	0.0	-10.4	0.0
			T	T	-1.1	-10.0	0.0
		EB	L	L	0.0	2.5	0.1
2	Trinity Place and Rector Street	NB	T	T	-0.7	1.1	-0.2
			R2	R2	0.0	0.0	0.0
		EB	LT	L	-0.2	-1.3	-1.1
				T	-0.1	0.0	0.0
3a	Hugh L. Carey Tunnel Entrance/Exit and West Street	NB	T	T	-0.1	-0.3	-0.2
			R2	R2	0.2	1.0	0.7
		SB	T	T	-0.1	-0.4	-0.3
		WB	L	L	0.1	0.6	-0.1
3b	Hugh L. Carey Tunnel Exit and West Street and West Thames Street	NB	T	T	-0.1	-0.3	-0.2
		SB	T	T	-0.1	-0.4	-0.3
			R	R	0.0	0.0	0.0
		EB	R	R	0.0	0.0	0.0
		WB	R	R	0.2	0.7	0.0
4	Chambers Street and Centre Street	NB	L	L	-0.2	-1.1	-0.5
			T	T	-0.2	-1.1	-0.5
		SB	TR	T	-0.6	-3.2	-2.1
				R	-0.6	-1.1	-1.3
		EB	R	R	-0.1	-1.6	-0.7
5a	Canal Street and Hudson Street/Holland Tunnel On-Ramp	NB	LTR	L	0.0	0.0	0.0
				T	0.0	0.0	0.0
				R	-1.2	-1.6	-0.1
			R2	R2	0.0	-1.6	-3.0
		EB	L2L	L2	0.0	0.0	0.0
				L	-1.2	-1.6	-0.2
			T	T	-0.1	-0.4	-0.4
		WB	T	T	-0.7	-4.0	0.0
			R	R	-1.1	-4.3	0.0
5b	Canal Street and Holland Tunnel On-Ramp	EB	T	T	-0.3	-0.7	-0.4
		WB	T	T	-0.8	-4.0	0.0
			R	R	0.0	0.0	0.0
7a	Canal Street and West Street	NB	T	T	0.0	0.1	-0.1
			R	R	-0.2	-1.2	0.0
		SB	L	L	-0.3	-1.7	-0.6
			T	T	-0.1	0.3	-0.1

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
9	West Street and Albany Street	NB	T	T	-0.1	0.1	-0.2
			TR	R	0.0	0.5	-0.2
		SB	T	T	0.1	0.3	0.1
			R	R	-0.1	-0.1	-0.1
		EB	T	T	0.0	0.0	0.0
10	West Street and Vesey Street	NB	T	T	0.0	0.2	0.0
		SB	T	T	0.0	0.3	0.1
			R	R	-0.1	-0.1	-0.1
		EB	L	L	0.0	-0.1	0.0
			R	R	0.0	0.3	0.3
		WB	LT	L	0.0	0.0	0.0
				T	0.0	0.0	0.0
			R	R	0.0	0.0	0.0
11	West Street and Chambers Street	NB	T	T	-0.1	-0.1	-0.2
			TR	T	0.0	-0.1	-0.1
		SB	L	L	-0.1	-0.2	-0.4
			T	T	0.0	0.1	0.0
			R	R	0.0	-0.1	-0.2
		EB	LTR	L	-0.1	-0.1	0.0
				T	0.0	0.0	0.0
				R	0.0	0.2	0.0
		WB	LT	L	0.0	0.3	0.2
				T	0.0	0.0	0.0
			R	R	0.0	-0.1	0.0
14	Canal Street/Manhattan Bridge and Bowery	EB	T	T	-0.5	-2.3	-1.5
			R	R	0.0	-0.2	-0.3
		WB	T	T	-0.7	-2.2	-2.2
		NB	T	T	0.0	-0.2	-0.2
			R	R	-0.4	-2.4	-1.4
		SB	L	L	-0.8	-3.4	-2.6
			TR	T	-0.3	-1.6	-5.5
				R	-0.5	-0.7	-1.0
15	Manhattan Bridge and Bowery	NB	T	T	0.0	-0.2	-0.1
		SB	T	T	-0.7	-2.4	-2.8
		WB	R	R	-1.8	-11.1	-3.1
18	Sixth Avenue and Watts Street	WB	TR	T	-0.3	-0.6	-0.6
				R	0.0	-0.1	0.0
		NB	LT	L	-0.6	-1.1	-0.7
				T	-0.3	-0.8	-0.7
19	Canal Street and Sixth Avenue/ Laight Street	NEB	R	R	-0.2	-0.9	-0.6
		NB	LTR	L	-0.2	-0.7	-0.6
				T	-0.2	-0.6	-0.5
				R	0.0	-1.2	-1.2
		EB	T	T	-0.2	-0.3	-0.5
		WB	TR	T	-0.3	-0.7	-0.4
				R	-0.3	-0.6	-0.5

Table 12-3. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Queens-Midtown Tunnel Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
1	E. 37th Street and Third Avenue	NB	LT	L	-0.7	-1.2	-0.2	-1.0
				T	-0.3	-0.6	-0.4	-0.8
		WB	TR	T	0.1	0.4	0.1	1.0
				R	0.1	0.7	0.3	1.4
2	E. 36th Street and Second Avenue	SB	L	L	-0.2	0.1	0.7	1.8
			T	T	-0.1	-0.2	-0.2	-0.1
		EB	T	T	-0.3	0.2	0.6	1.5
			TR	R	-0.1	-0.2	-0.1	-0.7
		WB	L	L	0.0	0.0	0.0	0.0
3	E. 34th Street and Third Avenue	NB	LT	L	-0.3	-0.1	-0.3	-0.3
			T	T	-0.2	-0.5	-0.4	-0.7
			R	R	-0.1	-0.3	-0.1	-0.2
		EB	T	T	-0.4	-0.8	-0.8	-0.7
		WB	T	T	-0.2	0.0	-0.3	0.3
			R	R	-0.1	0.1	-0.2	0.5
4	E. 35th Street and Third Avenue	NB	LT	L	-0.1	-0.3	-0.3	-0.6
			T	T	-0.2	-0.5	-0.4	-0.6
		WB	T	T	-0.3	-0.2	-0.5	-0.3
			TR	R	-0.2	-0.1	-0.6	-0.1
5	E. 34th Street and Second Avenue	SB	L	L	0.0	0.0	-0.1	-0.2
			T	T	-0.1	-0.2	-0.2	-0.1
			TR	R	-0.1	-0.1	-0.2	-1.1
		EB	T	T	-0.1	-0.1	0.0	0.0
			TR	R	0.0	0.0	-0.2	-0.1
		WB	T	T	0.0	-0.4	-0.4	-2.1
6	E. 35th Street and Second Avenue	SB	T	T	-0.1	-0.2	-0.2	-0.1
			TR	R	0.0	0.0	-0.1	0.1
		EB	R	R	0.0	-0.1	0.0	-0.3
		WB	LT	T	0.0	-0.1	0.0	-1.6
			L	L	0.0	0.0	0.0	-1.4

Table 12-4. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Red Hook Brooklyn Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
1	Hamilton Avenue, Clinton Street and West 9th Street	EB	TR	T	0.0	0.0	0.0	0.6
				R	0.0	0.0	0.0	0.0
		NB	LT	L	0.0	0.0	0.0	0.0
				T	-0.1	0.1	-0.1	-0.3
		SB (at W9th)	RT	T	0.1	0.4	0.2	0.9
				R	0.3	0.3	0.1	0.7
		SB (at Clinton St)	LT	L	0.1	0.5	0.3	1.2
				T	0.1	0.3	0.3	0.9
			L	L	0.0	0.8	0.1	0.8
		WB	T	T	0.0	0.0	0.0	0.0
			L	L	0.0	0.0	0.0	0.0
2	Hamilton Avenue NB and West 9th Street	NB	T	T	-0.1	0.1	-0.2	-0.7
		WB	R	R	0.0	0.0	-0.2	-0.3

Table 12-5. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Upper East Side Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
1	E. 60th Street and Queensboro Bridge Exit	NB	LTR	L	-1.1	-1.4	-4.7	-0.6
				T	-1.2	-1.2	-2.9	-0.6
				R	-1.3	-1.2	-2.9	-0.6
		EB	LT	L	0.0	0.0	0.0	0.0
				T	0.0	-1.3	-10.5	-4.8
2	E. 60th Street and Third Avenue	NB	L	L	-1.5	-2.1	-1.6	-0.6
			T	T	-1.5	-1.8	-1.8	-0.7
		WB	T	T	0.4	0.0	-2.1	-3.1
			R	R	0.1	0.0	-1.8	-7.8
3	E. 60th Street and York Avenue	NB	T	T	0.0	0.0	0.0	0.0
		SB	T	T	-1.6	-1.9	-2.1	-3.6
		EB	L	L	-3.9	-2.7	-9.3	-0.3
			LT	T	0.0	0.0	0.0	0.0
			R	R	0.0	0.0	0.0	-3.5
		WB	L	L	0.0	0.0	0.0	0.0
			T	T	0.0	0.0	0.0	0.0
			R	R	0.0	0.0	0.0	0.0
4	E. 59th Street and Second Avenue	EB	T	T	-1.5	-8.8	-9.3	-8.2
			RR2	R	-1.3	-2.0	-4.4	-4.2
				R2	-0.2	-0.2	-0.7	-1.0
		SB	L2	L2	-1.7	-9.7	-11.6	-9.2
			L2L	L	-1.0	-3.0	0.0	-10.6
			T	T	-0.2	-0.6	-1.6	-3.0
5	E. 60th Street and Second Avenue	NWB	L2	L2	0.3	0.0	-2.2	-4.9
			L	L	0.4	0.0	-2.1	-5.2
		SB	L2	L2	0.0	-1.1	-1.5	-9.4
			TR	T	-2.1	-5.1	-6.7	-5.0
				R	-1.1	-2.5	-3.4	-0.2
		WB	LT	L	-4.9	-2.2	-3.1	0.0
				T	0.0	0.0	0.0	0.0
6	E. 60th Street and First Avenue	NB	T	T	-1.4	-1.8	-2.2	-0.8
			TR	R	-1.9	-1.8	-2.3	-1.0
		EB	L	L	0.0	0.0	-0.7	-1.3
			T	T	-3.2	-2.4	-5.5	-0.6
7	E. 60th Street and Lexington Avenue	SB	T	T	-1.2	-1.7	-2.3	-2.6
			TR	R	-0.7	-1.3	-1.9	-2.1
		WB	L	L	0.0	-0.1	-4.2	-5.5
			T	T	0.0	-0.3	-1.6	-1.3
8a	E. 60th Street and Park Avenue NB	NB	LT	L	-0.7	-1.0	-1.6	-0.2
			T	T	-0.9	-1.1	-1.5	-0.3
		SB	T	T	-2.6	-4.7	-4.5	-3.7
			TR	R	-2.1	-1.2	-1.1	0.0

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
8b	E. 60th Street and Park Avenue NB	SB	T	T	-0.1	-0.3	-0.3	-0.8
			TR	R	-0.1	-0.2	-0.2	-0.8
		WB	L	L	0.0	0.0	-2.1	-0.5
			T	T	-0.2	-1.3	-2.1	-2.1
9	E. 60th Street and Madison Avenue	NB	L	L	-0.9	-0.7	-1.0	-0.4
			T	T	-1.1	-1.3	-1.3	-0.6
		WB	T	T	-0.1	0.0	-0.6	-0.9
			TR	R	-0.5	-8.1	-6.1	-5.7
10	E. 62nd Street and Queensboro Bridge Exit	NB	T	T	-1.5	-0.2	-2.9	0.5
			R	R	-1.4	-0.2	-2.9	0.5
		EB	LT	L	-0.3	0.0	0.0	-2.2
			T	T	-1.2	-1.3	-2.3	-2.2
11	E. 60th Street and Fifth Avenue	SB	T	T	-1.1	-1.7	-2.1	-2.5
			R	R	-1.2	-1.5	-2.1	-2.4
		WB	L	L	0.0	0.0	-1.0	-0.5
			T	T	-0.4	-0.6	-1.0	-0.8
12	E. 63rd Street and York Avenue	NB	T	T	-0.6	-0.7	-1.8	-1.1
			TR	R	-0.9	-1.3	-2.5	-2.0
		SB	L	L	-0.2	-0.5	-0.6	-0.8
			T	T	-0.4	-0.4	-0.4	-0.9
			TR	R	0.0	0.0	0.0	-0.1
		WB	L	L	-0.8	-1.7	-1.3	-2.9
			LT	T	-0.8	-1.6	-0.9	-2.2
			TR	R	-0.4	-1.7	-0.6	-1.7
13	E. 53rd Street and FDR Drive	SB	R	R	-0.3	-0.6	-0.7	-1.4
		SWB	R	R	-0.4	-0.7	-0.8	-0.9
14	E. 61st Street and Fifth Ave	SB	T	T	-1.2	-1.5	-1.1	-2.1
		WB	L	L	-1.0	-2.0	-15.3	-6.1
15	E. 65th Street and Fifth Avenue	SB	LT	L	-0.4	-0.3	-0.3	-0.6
			T	T	-0.5	-0.5	-0.4	-0.6
		EB	T	T	-0.2	-0.3	-0.3	-0.1
			R	R	-0.1	-0.3	-0.2	-0.1
16	E. 66th Street and Fifth Avenue	SB	T	T	-0.6	-0.5	-0.3	-0.6
			TR	R	-0.2	-0.3	-0.1	-0.4
		WB	LT	L	-0.3	-0.7	-0.4	-0.3
			T	T	-0.5	-0.5	-0.6	-0.5
17	E. 79th Street and Fifth Avenue	SB	LT	L	-0.4	-0.1	-0.1	-0.3
			T	T	-0.4	-0.3	-0.1	-0.4
			TR	R	-0.8	-0.5	-0.2	-0.5
		EB	T	T	-0.2	-0.4	-0.5	-0.4
			R	R	-0.2	-0.3	-0.4	-0.3
		WB	L	L	-0.3	-0.1	-0.3	-0.6
			T	T	-0.5	-0.4	-0.6	-0.8

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
18	E. 71st Street and York Avenue	NB	LT	L	-0.4	-0.5	-1.0	-0.4
			T	T	-1.1	-1.5	-3.8	-1.1
			TR	R	0.0	0.0	0.0	0.0
		SB	LT	L	0.0	0.0	0.0	0.0
			LTR	T	-1.3	-0.8	-2.6	-1.3
			TR	R	-0.9	-0.6	-1.8	-0.9
		WB	L	L	-0.1	-0.2	-0.2	-0.1
			TR	T	0.0	0.0	0.0	0.0
				R	-0.4	-0.6	-1.4	-0.4

Table 12-6. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Lincoln Tunnel Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE PM	PCE MD	PCE PM
1	Ninth Avenue and W. 33rd Street	SB	T	T	-0.1	-0.2	-0.3
			R	R	-0.7	-0.6	-0.6
		WB	L	L	0.0	0.0	0.0
			T	T	-0.1	-0.7	-0.3
2	Dyer Avenue and W. 34th Street	SB	L	L	-0.1	-0.3	-0.1
			R	R	-0.1	-0.3	0.0
		EB	L	L	0.0	0.0	0.0
			T	T	-0.1	-0.3	-0.3
		WB	T	T	0.0	0.1	0.0
			R	R	0.0	0.0	0.0
3	Twelfth Avenue and W. 34th Street	NB	T	T	0.0	-0.1	-0.1
			R	R	0.0	0.0	-0.2
		SB	L	L	-0.4	-0.3	-0.2
			T	T	-0.2	-0.3	-0.4
		WB	L	L	-0.1	0.1	-0.1
			R	R	0.0	0.0	0.0
4	Eleventh Avenue and W. 42nd Street	SB	L	L	-0.1	-0.1	-0.5
			T	T	-0.4	-1.1	-1.2
			R	R	-0.2	-0.2	-0.4
		EB	T	T	-0.2	-0.3	-0.1
			R	R	-0.1	-0.8	-0.4
		WB	L	L	0.0	0.0	0.0
			T	T	0.0	0.0	0.0
5	Twelfth Avenue and W 34th Street	NB	TR	T	-0.5	-0.6	-1.1
				R	0.0	0.0	-1.0
		SB	L	L	-0.1	-0.3	-0.1
			T	T	-0.1	-0.6	-0.1
			R	R	0.0	-0.5	-0.1
		EB	LTR	L	0.0	0.0	0.0
				T	-0.2	-0.6	-0.4
				R	0.0	0.0	0.0
		WB	R	R	0.0	0.0	0.0
6	Tenth Avenue and W 33rd Street	NB	LT	L	0.0	0.0	0.0
				T	-0.1	-0.2	-0.1
		WB	TR	T	0.0	-3.5	-0.7
				R	-0.1	-0.3	-0.0
7	Eleventh Avenue and W 34th Street	SB	LTR	L	-0.1	-0.1	-0.7
				T	-0.1	-0.2	-0.6
				R	0.0	0.0	-0.5
		EB	L	L	0.0	-0.2	-0.3
			T	T	-0.2	-0.2	-0.2
			R	R	0.0	0.0	0.0
		WB	L	L	0.0	0.0	0.0

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE PM	PCE MD	PCE PM
			TR	T	0.0	0.0	-0.1
				R	0.0	0.0	-0.0
8	Tenth Avenue and W 41st Street	NB	LT	L	-0.6	-1.7	-4.1
				T	0.0	-0.1	-0.1
		WB	T	T	-0.6	-1.7	-5.2
			R	R	-0.1	0.0	-0.4
9	Twelfth Avenue and W 42nd Street	NB	T	T	0.0	0.0	-0.1
			R	R	0.0	-0.3	-0.3
		SB	L	L	-0.2	-0.6	-0.3
			T	T	-0.2	-0.3	-0.3
		EB	LTR	L	0.0	0.0	0.0
				T	0.0	0.0	0.0
				R	0.0	0.0	0.0
		WB	L	L	0.0	0.0	-0.1
			R	R	-0.1	0.0	-0.1

Table 12-7. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: West Side Highway/Route 9A Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	MOVEMENT	LANE GROUP	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
1	W 24th Street and Twelfth Avenue	NB	NBT	T	-0.0	0.0	-0.1	-0.4
			NBR	TR	0.0	0.0	0.0	-0.1
		SB	SBL	L	-0.1	-0.4	-0.2	-0.6
			SBT	T	-0.3	-0.4	-0.4	-0.7
		WB	WBL	LR	0.0	0.0	0.0	0.0
			WBR	R	0.0	0.0	0.0	0.0

Table 12-8. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario C) PCE Divided by No Action Alternative PCE: Downtown Brooklyn Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	MOVEMENT	LANE GROUP	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
1	Flatbush Avenue and Tillary Street	NB	NBL	L	0.0	0.0	0.0	0.0
			NBT	T	-1.0	-2.3	-2.1	-6.1
			NBR	R	0.0	0.0	-0.1	-0.3
		SB	SBT	T	-0.3	-2.4	-1.4	-1.8
			SBR	R	-0.2	-2.5	-1.2	-1.1
		EB	EBL	L	-0.9	-3.7	-2.6	-9.5
			EBT	T	0.0	-0.6	-0.5	-0.9
			EBR	R	0.0	-0.5	-0.4	-0.3
		WB	WBL	L	-0.1	-0.1	0.0	0.0
			WBT	T	0.0	-0.2	-0.1	0.0
			WBR	R	-1.0	-2.6	-2.1	-7.1
2	Adams Street and Tillary Street	NB	NBL	L	0.0	0.0	0.0	0.0
			NBT	T	-0.1	-0.7	-0.5	-2.0
			NBR	R	0.0	0.0	0.0	0.0
		SB	SBL	L	0.0	-1.1	-0.6	-0.9
			SBT	T	0.0	-1.1	-0.6	-1.0
			SBR	R	0.0	-0.6	-0.7	0.0
		EB	EBL	L	0.0	0.0	0.0	0.0
			EBT	T	-0.2	-0.3	-0.3	-2.6
			EBR	R	0.0	0.0	0.0	0.0
		WB	WBL	L	0.0	-0.3	-0.1	-0.2
			WBT	T	0.0	-0.2	-0.1	-0.1
			WBR	R	0.0	0.0	0.0	0.0
3	Old Fulton Street and Vine Street	NB	NBL	L	0.0	-0.6	-0.2	-0.4
			NBT	T	0.0	-0.8	-0.1	-0.2
		SB	SBT SBR	T	0.0	-0.5	-0.3	-1.7

Table 12-9. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Robert F. Kennedy Bridge Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
1	E. 126th Street and Second Avenue	NW	L	L	0.0	0.0	0.0	0.0
			R	R	0.0	0.0	0.0	0.0
		SB	LT	L	0.0	0.0	0.0	0.0
				T	-0.3	-0.5	-0.7	-2.2
		WB	L	L	-0.2	-0.6	-0.9	-2.0
			T	T	-0.2	-0.3	-0.6	0.0
			R	R	-0.1	-0.2	-0.5	-0.1
2	E. 125th Street and Second Avenue	SB	L	L	0.0	-0.1	-0.6	-0.5
			TR	T	-0.4	-0.6	-0.8	-2.4
				R	-0.5	-0.5	-0.9	-2.4
		SW	L	L	0.7	0.1	2.1	0.6
			R	R	0.0	0.1	2.1	0.6
		EB	TR	T	0.3	0.4	0.3	1.2
				R	0.0	0.0	0.0	0.0
		WB	LT	L	0.0	-3.4	-4.9	-3.5
				T	0.0	-5.8	-4.6	-12.4
11	E. 134th Street and St. Ann's Avenue	NB	TR	T	0.0	0.0	0.0	0.0
				R	0.0	0.0	0.0	0.0
		SB	LT	L	0.0	0.0	0.0	0.0
				T	0.0	0.0	0.0	0.0
		EB	LTR	L	0.0	0.0	0.0	0.0
				T	0.0	0.0	0.0	0.0
				R	0.0	0.0	0.0	0.0
22	St. Ann's Avenue and Bruckner Boulevard	NB	LTR	L	0.0	0.0	0.0	0.0
				T	0.0	0.0	0.0	0.0
				R	0.0	0.0	0.0	0.0
		SB	LTR	L	0.0	0.0	0.0	0.0
				T	0.0	0.0	0.0	0.0
				R	0.0	0.0	0.0	0.0
		EB	LTR	L	0.0	0.0	0.0	0.0
				T	0.0	0.0	0.0	0.0
				R	0.0	0.0	0.0	0.0
		WB	LT	L	0.0	0.0	0.0	0.0
				T	0.0	0.0	0.0	0.0
			TR	T	0.0	0.0	0.0	0.0
				R	0.0	0.0	0.0	0.0
17	31st Street and Astoria Boulevard	NB	T	T	-0.9	-6.3	-7.8	-7.1
			R	R	-0.7	0.0	-2.2	-3.4
		SB	T	T	0.0	0.0	-0.4	-0.4
			R	R	0.0	0.0	-0.3	-0.4
		EB	L	L	0.4	0.1	0.0	0.0
			T	T	0.2	0.2	0.2	0.5
			R	R	0.2	0.1	0.1	0.5

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
24	Hoyt Avenue N and 31st Street	NB	L	L	-0.8	-3.6	-6.3	-8.2
			T	T	-1.2	-7.7	-2.2	-3.1
		SB	T	T	0.0	0.0	-2.3	-1.3
			R	R	0.0	0.0	-0.1	-0.2
		WB	L	L	0.0	0.0	0.0	0.0
			T	T	0.0	0.0	-0.2	-0.2
			R	R	0.0	0.0	0.0	0.0
3	Hoyt Avenue S and 31st Street	NB	T	T	-0.7	-5.3	-3.3	-6.5
			R	R	-1.1	1.0	-2.2	1.0
		SB	L	L	0.0	0.0	0.0	0.0
			T	T	0.0	0.0	-0.3	-0.4
		EB	L	L	0.2	0.9	0.0	0.8
			T	T	0.3	0.3	0.1	0.7
			R	R	0.5	0.0	-0.1	-0.5

Table 12-10. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Upper West Side Traffic Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
1	W 72nd Street and West End Avenue	NB	NBL	L	-0.3	-0.2	-0.2	-0.4
			NBT	T	-0.3	-0.3	-0.4	-0.4
			NBR	R	-0.2	-0.1	-0.4	-0.4
		SB	SBT	T	0.0	-0.2	-0.5	-0.3
			SBR	TR	0.0	0.0	0.0	0.0
		EB	EBL	LT	-1.0	-0.8	-1.9	-1.0
			EBT	TR	-1.1	-1.0	-1.9	-1.1
			EBR		-0.9	-1.6	-2.6	-1.4
		WB	WBL	LT	-0.3	-1.0	-1.3	-0.9
			WBT	TR	-0.4	-0.4	-0.4	-1.0
			WBR		-0.2	-0.5	-0.4	-1.0
2	W 61st Street and West End Avenue	NB	NBL	LT	-0.3	-1.0	-0.4	-1.5
			NBT	TR	-1.3	-1.6	-1.7	-2.4
			NBR		-1.2	-1.4	-1.1	-2.3
		SB	SBL	L	0.0	0.0	0.0	0.0
			SBT	T	-1.0	-1.7	-1.6	-2.2
			SBR	TR	0.0	0.0	0.0	0.0
		EB	EBL	LTR	0.0	0.0	-0.2	-0.2
			EBT		-1.3	0.0	0.0	0.0
			EBR		0.0	0.0	0.0	0.0
3a	W 79th Street and Riverside Drive	NB	NBL	LTR	-0.2	-0.1	-0.5	-0.2
			NBT		0.0	0.0	0.0	0.0
			NBR		0.0	0.0	0.0	0.0
		SB	SBL	LTR	0.0	0.0	0.0	0.0
			SBT		0.0	0.0	0.0	0.0
			SBR		-0.3	-0.2	-0.4	-0.3
		EB	EBL	LT	-0.3	-0.4	-0.7	-1.0
			EBT		-0.5	-0.7	-0.8	-1.1
			EBR	TR	-0.5	-0.7	-0.7	-1.1
		WB	WBL	LT	0.0	0.0	0.0	-0.2
			WBT		-0.4	-0.4	-0.8	-0.4
			WBR	TR	0.0	0.0	-0.1	-0.1
4a	W 56th Street and Twelfth Avenue	NB	NBT	T	-0.1	-0.1	-0.2	-0.7
			NBR	TR	-0.2	0.0	-0.1	-0.5
		EB	EBL	LT	0.0	-0.1	0.0	-0.2
			EBT	T	0.0	0.0	-0.1	-0.1
4b	W 56th Street and West Side Highway	NB	NBT	T	0.0	-0.1	-0.1	-0.1
		SB	SBL	L	0.0	-0.1	-0.1	-0.1
			SBT	T	0.0	-0.1	-0.1	-0.2

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
5a	W 55th Street and West Side Highway	NB	NBL	L	0.0	0.0	0.0	0.0
			NBT	T	0.0	0.0	0.0	-0.1
		SB	SBT	TR	0.0	-0.1	-0.1	-0.2
			SBR		0.0	0.0	0.0	0.0
		WB	WBL	LT	0.0	-0.1	-0.3	-0.6
			WBT		0.0	-0.1	0.0	-1.0
			WBR	R	-0.1	-0.2	-0.3	-0.6
5b	W 55th Street and Twelfth Avenue	NB	NBL	L	0.0	0.0	0.0	0.0
			NBT	T	-0.1	-0.1	-0.2	-0.6
		SB	SBT	TR	0.0	0.0	0.0	0.0
			SBR		0.0	0.0	0.0	0.0
		WB	WBL	LT	0.0	0.0	0.0	0.0
			WBT		-0.1	-0.1	-0.2	-0.6
			WBR	R	-0.1	-0.2	-0.2	-0.5
5c	W 55th Street and West Side Highway Arterial	SB	SBT	T	0.0	0.0	0.0	0.0
		WB	WBL	L	0.0	0.0	0.0	-0.2
6	W 60th Street and Broadway	NB	NBL	L	-0.1	-0.2	-0.3	-0.2
			NBT	T	-0.2	-0.2	-0.2	-0.3
		SB	SBT	TR	-0.9	-1.5	-1.4	-2.3
			SBR		-0.9	-1.3	-1.2	-1.4
7	W 60th Street and Columbus Avenue	SB	SBT	TR	-1.1	-1.8	-2.4	-3.4
			SBR		-0.7	-1.9	-2.2	-3.1
		WB	WBL	L	-0.4	-0.8	-0.7	-1.0
			WBT	T	-0.2	0.0	-0.3	-0.0
8	W 60th Street and Amsterdam Avenue	NB	NBL	LT	-0.6	-1.4	-1.5	-0.7
			NBT		-1.2	-1.5	-1.6	-0.8
		WB	WBT	T	-0.7	-1.0	-0.8	-0.7
			WBR	R	0.0	0.0	-1.0	-0.9
9	W 60th Street and West End Avenue	NB	NBL	L	-0.5	-0.5	-1.5	-2.2
			NBT	T	-1.4	-2.3	-1.8	-3.2
		SB	SBT	TR	-1.0	-1.7	-1.8	-2.1
			SBR		-1.5	-2.6	-1.5	-2.2
		EB	EBL	LTR	0.0	0.0	0.0	0.0
			EBT		0.0	0.0	0.0	0.0
			EBR		0.0	0.0	0.0	0.0
		WB	WBL	LTR	0.0	0.0	-0.4	-0.2
10	W 61st Street and Amsterdam Avenue	NB	NBT	T	-1.2	-1.4	-1.6	-0.9
			NBR	TR	-1.0	-1.0	-2.3	-0.6
		EB	EBL	LT	-0.6	-0.9	-2.1	-0.7
			EBT		-0.5	-1.0	-2.8	0.0
		WB	WBR	R	0.0	0.0	-0.2	-0.1
11	W 61st Street and Columbus Avenue	SB	SBL	L	-0.5	-0.7	-1.2	-0.7
			SBT	T	-1.2	-1.8	-2.4	-3.1

INTERSECTION #	INTERSECTION NAME	APPROACH	LANE GROUP	MOVEMENT	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)			
					PCE AM	PCE MD	PCE PM	PCE LN
12	W 61st Street and Broadway	NB	NBT	T	-0.2	0.0	-0.2	-0.3
			NBR	R	0.0	-9.0	0.0	0.0
		SB	SBL	L	0.0	-9.9	-11.1	0.0
			SBT	T	-0.8	-1.5	-1.5	-2.8
		EB	EBL	LTR	-0.5	-0.4	-1.1	-0.3
			EBT		-0.3	-0.4	-1.2	-1.0
			EBR		-0.5	-0.8	-1.5	-0.8
13	W 61st Street and Columbus Avenue	NB	NBT	T	-0.2	-0.3	-0.3	-0.5
		EB	EBL	L	-1.7	-2.1	-3.7	-3.3
14	W 81st Street and Central Park West	NB	NBL	LT	-0.3	-0.1	-0.2	-0.1
			NBT	TR	-0.1	-0.1	-0.1	0.0
			NBR		-0.1	-0.1	-0.2	-0.2
		SB	SBL	LT	-0.1	-0.3	-0.2	-0.9
			SBT	TR	-0.1	-0.2	-0.1	-0.4
			SBR		-0.2	-0.4	-0.4	-1.0
		EB	EBL	L	-0.6	-0.3	-0.8	-0.3
			EBT	TR	-0.5	-0.5	-0.8	-0.5
			EBR		-0.5	-0.3	-0.8	-0.3
		WB	WBL	L	-0.6	-0.4	-0.4	-0.9
			WBT	T	-0.9	-0.8	-0.7	-1.1
			WBR	R	-0.4	-0.5	-0.5	-0.8
15	W 66th Street and Central Park West	NB	NBL	LT	-0.1	-0.1	-0.1	-0.1
			NBT	T	-0.2	-0.2	-0.2	-0.1
		SB	SBT	T	-0.3	-0.5	-0.5	-1.0
			SBR	TR	-0.1	-0.1	-0.2	-0.1
		WB	WBL	L	-0.2	-0.4	-0.8	-2.0
			WBT	T	-0.4	-0.5	-0.6	-0.9
			WBR	R	-0.6	-0.5	-0.6	-0.9
16	W 65th Street and Central Park West	NB	NBT	T	-0.2	-0.2	-0.1	-0.1
			NBR	TR	0.0	0.0	0.0	0.0
		SB	SBL	TL	-0.4	-0.5	-0.6	-1.3
			SBT	T	-0.4	-0.4	-0.6	-1.3
		EB	EBL	L	-0.1	-0.3	-0.2	-0.2
			EBT	TR	-0.4	-0.6	-0.6	-0.2
			EBR		-0.4	-0.1	-0.4	-0.1

Table 12-11. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Little Dominican Republic (Washington Heights) Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	MOVEMENT	LANE GROUP	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
1	W 179th St & Broadway	NB	NBL	L	0.0	0.0	0.0
			NBT	T	0.0	0.0	0.0
		SB	SBT	T	0.0	0.0	0.0
			SBTR	R	0.0	0.0	0.0
		WB	TR	L	0.0	0.0	0.0
				T	0.3	1.2	0.5
				R	0.0	0.0	0.0

Table 12-12. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Lower East Side Analysis Area

INTERSECTION #	INTERSECTION NAME	APPROACH	MOVEMENT	LANE GROUP	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
1	Park Row/Chatham Square & Worth/Oliver St. & Mott St.	NB	NLT	L	0.0	0.0	0.0
				T	0.0	0.0	0.0
			NR	R2	-0.2	-0.7	-0.8
		SB	ST	T	-0.7	-0.9	-0.8
			STR	T	0.0	0.0	0.0
				R	0.0	0.0	0.0
		EB	ETR	T	0.0	0.0	0.0
				R	0.0	0.0	0.0
		WB	WL	L	-0.6	-5.4	-3.9
			WT	T	0.0	0.0	0.0
			WTR	R	-0.5	-4.3	-2.7
		SWB	SLR	L2	0.0	0.0	0.0
				L	0.0	0.0	0.0
				R	0.0	0.0	0.0
2	Chatham Square & East Broadway	NB	NL	L	0.0	0.0	0.0
			NR	R	0.0	0.0	0.0
		EB	ET	T	-0.4	-1.2	-1.3
			ER	R	0.0	0.0	0.0
		WB	WL	L	0.0	0.0	0.0
			WT	T	-0.7	-8.3	-5.1
3	Chatham Square/Bowery & Division St.	NB	NL	L	0.0	0.0	0.0
			NT	T	0.0	0.0	0.0
		EB	ET	T	0.0	0.0	0.0
			ETR	R2	-0.3	-1.1	-1.1
		WB	WLT	L	0.0	0.0	0.0
			WT	T	0.0	0.0	0.0

Table 12-13. Passenger Car Equivalent Analysis Noise Level Change (dB(A)) Findings – CBD Tolling Alternative (Tolling Scenario D) PCE Divided by No Action Alternative PCE: Jersey City, NJ, Analysis Area

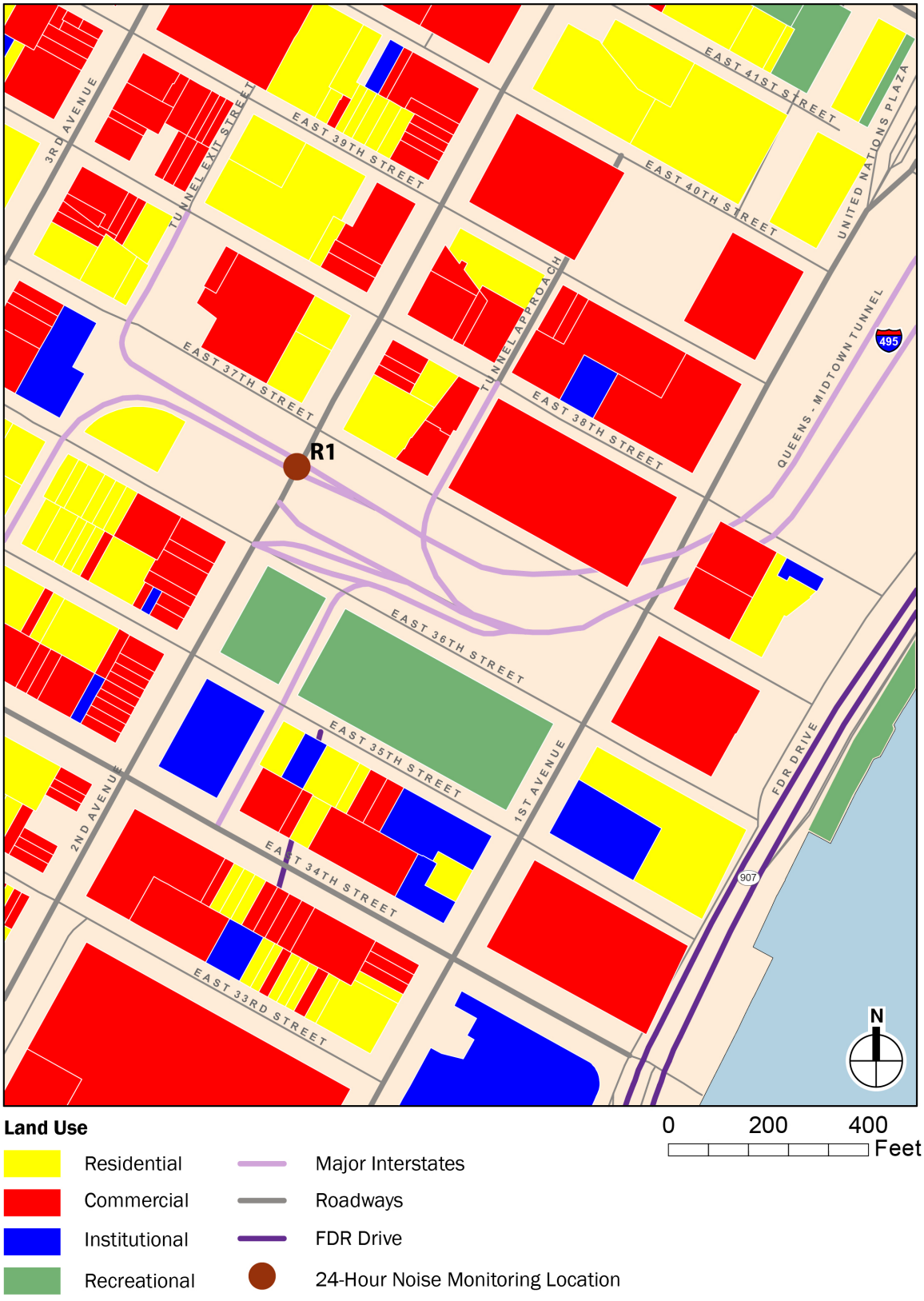
INTERSECTION #	INTERSECTION NAME	APPROACH	MOVEMENT	LANE GROUP	PASSENGER CAR EQUIVALENT NOISE LEVEL CHANGES (DB(A)) (NO MITIGATION)		
					PCE AM	PCE MD	PCE PM
1	14th Street/Holland Tunnel (E-W) & Marin Boulevard (N-S)	WB	TR	T	0.0	0.0	0.0
				R	0.0	0.0	0.0
		WB2	TR	T	0.0	0.0	0.0
				R	0.0	0.0	0.0
		NB	L	L	0.0	0.0	0.0
			T	T	0.0	0.0	0.0
		SB	TR	T	0.0	0.0	0.0
				R	0.0	0.0	0.0
4	14th Street (E-W) & Jersey Avenue (N-S)	WB	L	L	0.0	0.0	0.0
			TR	T	-0.5	-1.0	0.0
				R	0.0	0.0	0.0
		NB	L	L	0.0	0.0	0.0
			T	T	0.0	0.0	0.0
		SB	TR	T	0.0	0.0	0.0
			R	R	0.0	0.0	0.0
5	12th Street (E-W) & Jersey Avenue (N-S)	SE	L	L	0.0	0.0	0.0
			T	T	0.0	0.0	0.0
		EB	L	R	0.0	0.0	0.0
			T	L	0.0	0.0	0.0
			R	T	0.0	0.0	0.0
		SB	L	R	0.0	0.0	0.0
			T	L	0.0	0.0	0.0
8	12th Street/Holland Tunnel (E-W) & Marin Boulevard (N-S)	EB	L	L	0.0	0.0	0.0
			TR	T	0.0	0.0	0.0
				R	0.0	0.0	0.0
		NB	T	T	0.0	0.0	0.0
			R	R	0.0	0.0	0.0
		WB	T	T	0.0	0.0	0.0

12.2 RECEPTOR LOCATION DATA COLLECTION AND SUMMARY

Analysis presented in **Subchapter 4B, "Transportation: Highways and Local Intersections,"** shows that the largest increases in traffic generation would occur under Tolling Scenario D in Manhattan at locations near the Queens–Midtown Tunnel and the Hugh L. Carey Tunnel. Accordingly, 24-hour, long-term noise measurements were collected at representative receptor sites identified near these two locations. The selected noise measurement locations are identified as receptor Sites R1 and R2 on **Figure 12-1 and Figure 12-2**, respectively. Site R1 was located near the portal of the Queens–Midtown Tunnel at Second Avenue and East 37th Street, and Site R2 was located adjacent to the Manhattan portal near West Street at the Hugh L. Carey Tunnel. These two locations were selected for monitoring because they represent areas with some of the highest existing ambient noise levels in New York City and are projected to experience among the highest traffic diversions. Perceptible noise increases generated from Project traffic movements would be most likely to occur at these locations and could potentially worsen traffic noise conditions at sensitive receptors within these adjacent communities. If projected traffic increases would not result in perceptible increases in noise levels, then there would be no anticipated adverse effect at noise sensitive receptor locations within the adjacent communities.

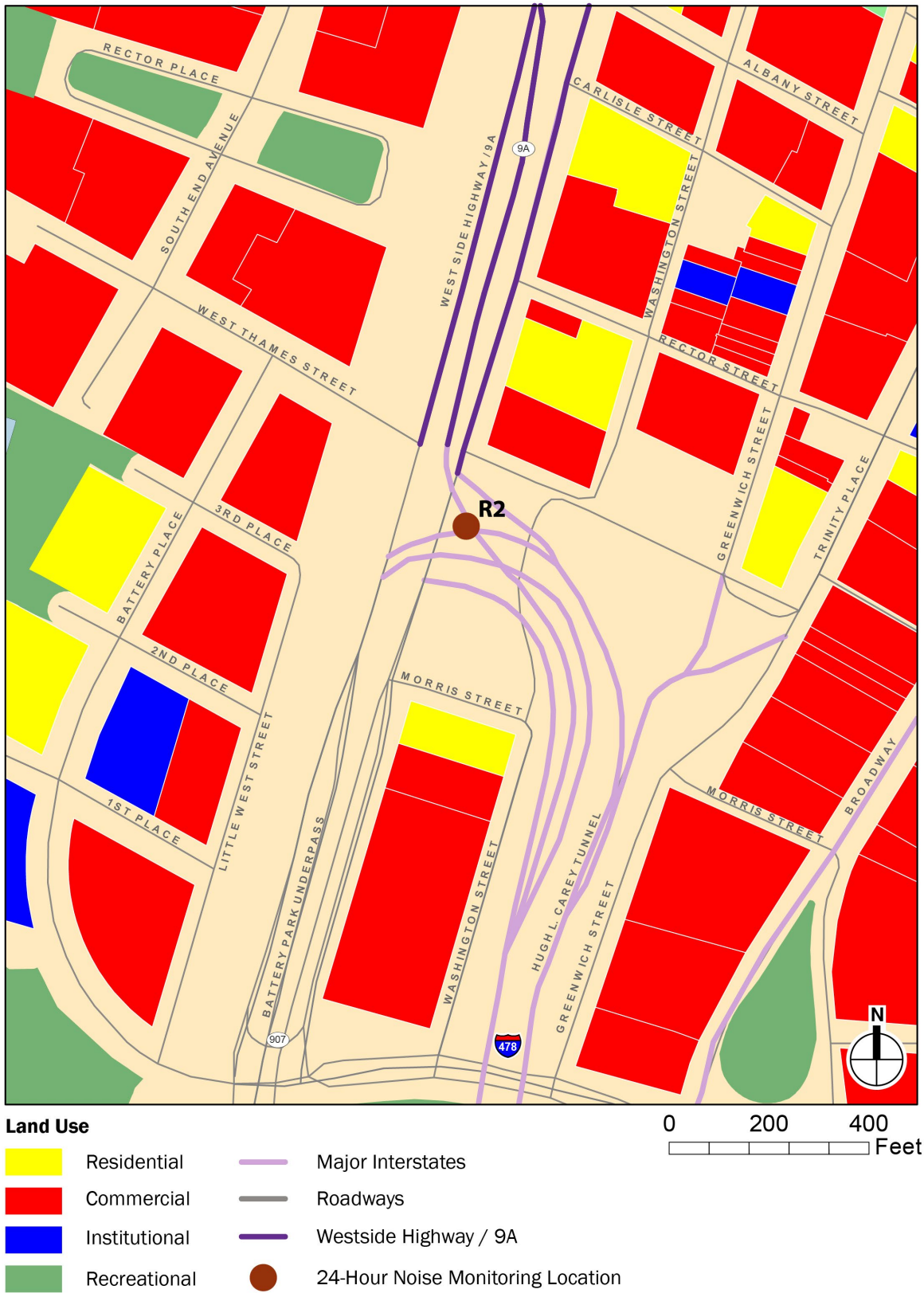
Noise measurements were collected using laboratory-certified noise monitoring equipment that complies with the American National Standards Institute requirements for Type II precision sound level meters. Two Larson Davis Model 720 noise level meters were deployed outdoors on MTA right-of-way property near major roadways leading to the Queens–Midtown Tunnel and the Hugh L. Carey Tunnel. The noise meters were configured to sample and record noise levels in one-hour intervals, with a new reading starting at the beginning of each hour. Hourly monitoring data consisted of A-weighted levels of the L_{eq}, L_{max}, L_{min}, L_1, L_{10}, L_{50}, and L_{90} noise descriptors. At each measurement location, the noise meter was calibrated before monitoring began and after monitoring ended. Noise measurements were collected from October 3, 2019, through October 7, 2019—prior to the COVID-19 pandemic—and reflect traffic patterns and ambient noise exposure conditions that are considered a reasonable estimate of the affected environment and the 2023 No Action Alternative. All noise measurement data collected during weekends or during periods of precipitation were excluded from the measurement survey findings.

Figure 12-1. Queens–Midtown Tunnel—Long-Term Noise Measurement Site R1



Source: ESRI, NYC Open Data, NYMTC 2020 TransCAD Highway Network

Figure 12-2. Hugh L. Carey Tunnel—Long-Term Noise Measurement Site R2



Source: ESRI, NYC Open Data, NYMTC 2020 TransCAD Highway Network

In general, the loudest traffic hour typically experienced at a receptor site consists of a convergence of various factors, such as the total volume of traffic as it passes by the receptor site, its travel speed, and the proportion of the vehicle mix made up of heavy trucks. Table 12-14 provides the noise measurement data collected at Site R1 near the Queens-Midtown Tunnel, and Table 12-15 provides the noise measurement data collected at Site R2 near the Hugh L. Carey Tunnel. Each table presents the L_{eq} data, and the L_{10} levels are approximately 3 dB(A) higher. At each monitoring location, the loudest (worst case) traffic noise hour was determined by averaging all the readings collected during that hour. The average hourly noise levels reported in Table 12-14 and Table 12-15 were derived from measurements collected during each hour over two or more days. Near the Queens-Midtown Tunnel (Site R1), the loudest noise hour occurred from 12:00 to 1:00 p.m., reaching 80.0 dB(A). At Site R2 near the Hugh L. Carey Tunnel, the peak noise hour occurred from 3:00 to 4:00 p.m., reaching 82.4 dB(A) near the tunnel portal. At both long-term monitoring locations, existing ambient noise levels were found to reach 75 dB(A) or higher for the majority of the long-term measurement sampling times. Noise levels below 70 dB(A) occurred only during the early morning hours. The corresponding L_{10} levels for the L_{eq} readings shown in Table 12-14 and Table 12-15 would be approximately 3 dB(A) higher. For Receptor Categories 1, 2, and 3 shown for the External Noise Exposure Standards (Chapter 12, "Noise," Table 12-3), existing ambient levels near these two monitoring locations exceeded the CEQR 60 to 70 dB(A) L_{10} Marginally Acceptable range for nearly all 24 hours of the day.

Table 12-14. Queens-Midtown Tunnel—Long-Term Noise Measurements Collected at Site R1

HOUR OF DAY	DAY 1 (L_{eq} 1-hr.) dB(A) (10/03/19)	DAY 2 (L_{eq} 1-hr.) dB(A) (10/04/19)	DAY 3 (L_{eq} 1-hr.) dB(A) (10/07/19)	AVERAGE L_{eq} (1-hr.) dB(A) Noise Level
12 AM to 1 AM	70.8	66.8	75.1	72.1
1 AM to 2 AM	N/A (Rain)	64.0	74.6	72.0
2 AM to 3 AM	N/A (Rain)	63.9	75.0	72.3
3 AM to 4 AM	N/A (Rain)	64.0	74.5	71.9
4 AM to 5 AM	N/A (Rain)	65.4	74.7	72.2
5 AM to 6 AM	N/A (Rain)	66.3	75.4	72.9
6 AM to 7 AM	N/A (Rain)	67.2	76.6	74.1
7 AM to 8 AM	N/A (Rain)	71.4	76.6	74.7
8 AM to 9 AM	N/A (Rain)	74.1	77.7	76.2
9 AM to 10 AM	N/A (Rain)	74.1	78.3	76.6
10 AM to 11 AM	N/A (Rain)	77.1	79.6	78.5
11 AM to 12 PM	N/A (Rain)	76.5	80.0	78.6
12 PM to 1 PM	N/A (Rain)	79.8	80.3	80.0
1 PM to 2 PM	N/A (Rain)	77.7	80.6	79.2
2 PM to 3 PM	N/A (Rain)	77.3	78.2	77.8
3 PM to 4 PM	N/A (Rain)	77.9	N/A (Rain)	77.9
4 PM to 5 PM	N/A (Rain)	79.2	N/A (Rain)	79.2
5 PM to 6 PM	N/A (Rain)	78.3	N/A (Rain)	78.3
6 PM to 7 PM	N/A (Rain)	76.1	N/A (Rain)	76.1
7 PM to 8 PM	N/A (Rain)	76.8	N/A (Rain)	76.8
8 PM to 9 PM	N/A (Rain)	78.2	N/A (Rain)	78.2
9 PM to 10 PM	N/A (Rain)	76.1	N/A (Rain)	76.1
10 PM to 11 PM	N/A (Rain)	75.9	N/A (Rain)	75.9
11 PM to 12 AM	N/A (Rain)	76.2	N/A (Rain)	76.2

Source: WSP, October 2019
N/A – Not Applicable. No measurement collected due to rain.

Table 12-15. Hugh L. Carey Tunnel—Long-Term Noise Measurements Collected at Site R2

HOUR OF DAY	DAY 1 (L_{eq} 1-hr.) dB(A) (10/03/19)	DAY 2 (L_{EQ} 1-HR.) dB(A) (10/04/19)	DAY 3 (L_{EQ} 1-HR.) dB(A) (10/07/19)	AVERAGE L_{eq} (1-hr.) dB(A) Noise Level
12 AM to 1 AM	73.1	73.9	68.0	72.3
1 AM to 2 AM	N/A (Rain)	72.4	67.2	70.5
2 AM to 3 AM	N/A (Rain)	66.9	71.5	69.8
3 AM to 4 AM	N/A (Rain)	64.7	65.5	65.1
4 AM to 5 AM	N/A (Rain)	68.0	66.0	67.1
5 AM to 6 AM	N/A (Rain)	73.2	71.4	72.4
6 AM to 7 AM	N/A (Rain)	77.3	76.8	77.1
7 AM to 8 AM	N/A (Rain)	81.7	78.5	80.4
8 AM to 9 AM	N/A (Rain)	80.5	79.5	80.0
9 AM to 10 AM	N/A (Rain)	79.3	78.2	78.8
10 AM to 11 AM	N/A (Rain)	82.3	76.1	80.2
11 AM to 12 PM	N/A (Rain)	81.2	75.2	79.1
12 AM to 1 PM	N/A (Rain)	80.7	75.6	78.9
1 PM to 2 PM	N/A (Rain)	80.9	N/A (Rain)	80.9
2 PM to 3 PM	N/A (Rain)	79.5	N/A (Rain)	79.5
3 PM to 4 PM	N/A (Rain)	82.4	N/A (Rain)	82.4
4 PM to 5 PM	N/A (Rain)	78.4	N/A (Rain)	78.4
5 PM to 6 PM	N/A (Rain)	80.0	N/A (Rain)	80.0
6 PM to 7 PM	N/A (Rain)	78.2	N/A (Rain)	78.2
7 PM to 8 PM	N/A (Rain)	76.3	N/A (Rain)	76.3
8 PM to 9 PM	N/A (Rain)	75.6	N/A (Rain)	75.6
9 PM to 10 PM	N/A (Rain)	76.7	N/A (Rain)	76.7
10 PM to 11 PM	N/A (Rain)	73.9	N/A (Rain)	73.9
11 PM to 12 AM	N/A (Rain)	78.9	N/A (Rain)	78.9

Source: WSP, October 2019
N/A – Not Applicable. No measurement collected due to rain.