

APPENDIX B

Transit and Pedestrians

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NYCT SUBWAY STATION
STAIRWAY ANALYSIS

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2004 Existing Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute		LOS	
			Up	Down		SVCD Capacity	V/SVCD Ratio		
Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	17	22	0.90	527	0.07	A
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	77	15	0.80	408	0.23	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	6	305	0.80	432	0.72	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	386	10	0.80	588	0.67	D
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	354	8	0.80	588	0.62	D
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	29	86	0.80	432	0.27	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	470	16	0.80	576	0.84	E
Game Day Saturday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	22	19	0.90	527	0.08	A
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	67	14	0.80	408	0.20	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	31	13	0.80	432	0.10	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	9	936	0.80	588	1.61	F
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	3	914	0.80	588	1.56	F
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	243	13	0.80	432	0.59	C
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	23	835	0.80	576	1.49	F
Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	54	53	0.90	527	0.20	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	102	33	0.80	468	0.29	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	5	242	0.80	432	0.57	C
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	152	2	0.80	588	0.26	B
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	266	3	0.80	588	0.46	C
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	26	163	0.80	432	0.44	C
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	636	20	0.80	576	1.14	F
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-1b
2004 Existing Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute		LOS	
			Up	Down		SVCD Capacity	V/SVCD Ratio		
Non-Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	8	85	0.80	468	0.20	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	48	13	0.80	408	0.15	A
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	22	2	0.80	432	0.06	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	1	9	0.80	588	0.02	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	6	1	0.80	588	0.01	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	13	28	0.80	432	0.09	A
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	13	38	0.80	576	0.09	A
Non-Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	41	147	0.80	468	0.40	C
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	86	44	0.90	459	0.28	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	5	13	0.80	432	0.04	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	10	8	0.90	662	0.03	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	1	1	0.90	662	0.00	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	97	75	0.90	486	0.35	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	38	27	0.90	648	0.10	A
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-2a

2009 No Build Condition: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute		LOS	
			Up	Down		SVCD Capacity	V/SVCD Ratio		
Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	17	23	0.90	527	0.08	A
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	83	18	0.80	408	0.25	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	6	313	0.80	432	0.74	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	396	10	0.80	588	0.69	D
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	363	8	0.80	588	0.63	D
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	30	88	0.80	432	0.27	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	482	16	0.80	576	0.87	E
Game Day Saturday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	23	19	0.90	527	0.08	A
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	71	17	0.80	408	0.22	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	32	13	0.80	432	0.10	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	9	960	0.80	588	1.65	F
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	3	937	0.80	588	1.60	F
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	249	13	0.80	432	0.61	D
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	24	856	0.80	576	1.53	F
Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	55	54	0.90	527	0.21	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	106	36	0.80	468	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	5	248	0.80	432	0.59	C
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	156	2	0.80	588	0.27	B
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	273	3	0.80	588	0.47	C
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	27	167	0.80	432	0.45	C
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	652	21	0.80	576	1.17	F
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-2b
2009 No Build Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute		LOS	
			Up	Down		SVCD Capacity	V/SVCD Ratio		
Non-Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	8	87	0.80	468	0.20	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	53	16	0.80	408	0.17	A
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	23	2	0.80	432	0.06	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	1	9	0.80	588	0.02	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	6	1	0.80	588	0.01	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	13	29	0.80	432	0.10	A
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	13	39	0.80	576	0.09	A
Non-Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	42	151	0.80	468	0.41	C
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	89	47	0.90	459	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	5	13	0.80	432	0.04	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	10	8	0.90	662	0.03	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	1	1	0.90	662	0.00	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	99	77	0.90	486	0.36	A
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	39	28	0.90	648	0.10	A
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-3a
2014 No Build Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute SVCD Capacity	15-Minute V/SVCD Ratio	LOS	
			Up	Down					
Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	18	23	0.90	527	0.08	A
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	81	16	0.80	408	0.24	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	6	321	0.80	432	0.76	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	406	11	0.80	588	0.71	D
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	372	8	0.80	588	0.65	D
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	30	90	0.80	432	0.28	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	494	17	0.80	576	0.89	E
Game Day Saturday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	23	20	0.90	527	0.08	A
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	70	15	0.80	408	0.21	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	33	14	0.80	432	0.11	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	9	984	0.80	588	1.69	F
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	3	961	0.80	588	1.64	F
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	255	14	0.80	432	0.62	D
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	24	878	0.80	576	1.57	F
Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	57	56	0.90	527	0.21	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	107	35	0.80	468	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	5	254	0.80	432	0.60	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	160	2	0.80	588	0.28	B
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	280	3	0.80	588	0.48	C
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	27	171	0.80	432	0.46	C
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	669	21	0.80	576	1.20	F
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-3b
2014 No Build Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute		LOS	
			Up	Down		SVCD Capacity	V/SVCD Ratio		
Non-Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	8	89	0.80	468	0.21	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	50	14	0.80	408	0.16	A
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	23	2	0.80	432	0.06	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	1	9	0.80	588	0.02	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	6	1	0.80	588	0.01	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	14	29	0.80	432	0.10	A
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	14	40	0.80	576	0.09	A
Non-Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	43	155	0.80	468	0.42	C
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	90	46	0.90	459	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	5	14	0.80	432	0.04	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	11	8	0.90	662	0.03	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	1	1	0.90	662	0.00	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	102	79	0.90	486	0.37	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	40	28	0.90	648	0.11	A
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-4a

2009 Build Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute SVCD		LOS	
			Up	Down		Capacity	V/SVCD Ratio		
Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	90	87	0.90	527	0.34	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	83	18	0.80	408	0.25	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	11	319	0.80	432	0.76	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	402	15	0.80	588	0.71	D
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	394	35	0.80	588	0.73	D
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	35	94	0.80	432	0.30	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	482	16	0.80	576	0.87	E
Game Day Saturday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	72	73	0.90	527	0.28	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	71	17	0.80	408	0.22	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	37	17	0.80	486	0.13	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	17	965	0.80	588	1.67	F
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	7	942	0.80	588	1.63	F
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	267	33	0.80	432	0.70	D
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	28	861	0.80	576	1.54	F
Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	123	117	0.90	527	0.46	C
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	106	36	0.80	468	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	10	254	0.80	432	0.61	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	173	18	0.80	588	0.32	B
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	290	19	0.80	588	0.53	C
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	32	173	0.80	432	0.47	C
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	652	21	0.80	576	1.17	F
<p>Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i>.</p>									

Table B-4b
2009 Build Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute		LOS	
			Up	Down		SVCD Capacity	V/SVCD Ratio		
Non-Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	94	171	0.90	527	0.50	C
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	53	16	0.80	408	0.17	A
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	30	9	0.80	432	0.09	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	23	30	0.90	662	0.08	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	28	22	0.90	662	0.08	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	20	36	0.90	486	0.12	A
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	13	39	0.80	576	0.09	A
Non-Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	117	221	0.90	527	0.64	D
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	89	47	0.90	459	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	11	19	0.90	486	0.06	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	29	26	0.90	662	0.08	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	20	19	0.90	662	0.06	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	105	83	0.90	486	0.39	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	39	28	0.90	648	0.10	A
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-5a

2014 Build Condition: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute SVCD		LOS	
			Up	Down		Capacity	V/SVCD Ratio		
Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	92	87	0.90	527	0.34	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	81	16	0.80	408	0.24	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	11	327	0.80	432	0.78	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	425	27	0.80	588	0.77	D
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	391	24	0.80	588	0.71	D
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	35	96	0.80	432	0.31	B
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	494	17	0.80	576	0.89	E
Game Day Saturday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	73	75	0.90	527	0.28	B
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	70	15	0.80	408	0.21	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	38	18	0.90	486	0.13	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	16	991	0.80	588	1.71	F
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	10	968	0.80	588	1.66	F
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	268	26	0.80	432	0.68	D
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	28	883	0.80	576	1.58	F
Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	126	120	0.90	527	0.47	C
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	107	35	0.80	468	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	10	260	0.80	432	0.63	D
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	177	18	0.80	588	0.33	B
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	297	19	0.80	588	0.54	C
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	32	177	0.80	432	0.49	C
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	669	21	0.80	576	1.20	F
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

Table B-5b
2014 Build Conditions: Subway Station Analysis

Stairways	Width (feet)	Effective Width (feet)	15-Minute Pedestrian Volumes		Friction Factor	15-Minute		LOS	
			Up	Down		SVCD Capacity	V/SVCD Ratio		
Non-Game Day Saturday Midday Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	96	174	0.90	527	0.51	C
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	50	14	0.80	408	0.16	A
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	30	9	0.80	432	0.09	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	23	30	0.90	662	0.08	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	23	30	0.90	662	0.08	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	21	36	0.90	486	0.12	A
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	14	40	0.80	576	0.09	A
Non-Game Day Weekday PM Peak Period									
E. 149th Street at Grand Concourse (2/4/5)									
S1	E 149th Street/Grand Concourse (SW corner)	4.90	3.90	119	226	0.90	527	0.65	D
S2	E 149th Street/Grand Concourse (SE corner)	4.90	3.90	90	46	0.90	459	0.30	B
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
S1	E. 161st Street/River Avenue (SW corner, elevated entrance on median, 4 only)	4.60	3.60	11	20	0.90	486	0.06	A
S2	E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	30	26	0.90	662	0.08	A
S3	E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	20	19	0.90	662	0.06	A
S4	E. 161st Street/River Avenue (SE corner, elevated entrance on median, 4 only)	4.60	3.60	108	85	0.90	486	0.40	C
S5	E. 161st Street/River Avenue (SE corner)	5.80	4.80	40	28	0.90	648	0.11	A
Note: Capacities were calculated based on rates presented in the New York City Transit, <i>Station Planning and Design Guidelines</i> (January 2001), in accordance with the <i>CEQR Technical Manual</i> .									

NYCT SUBWAY STATION
REQUIRED STAIRWAY WIDENING

Appendix B-6

2014 Build Condition: Subway Station Stairway Impact Analysis

Stairways	Width (feet)	Effective Width (feet)	SVCD Capacity	NB V/SVCD Ratio	NB LOS	BD V/SVCD Ratio	BD LOS	Required Widening (inches)	
								Back to NB	Back to LOS C/D
Game Day Saturday Midday Peak Period									
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
E. 161st Street/River Avenue (SW corner, closest to intersection)	5.80	4.90	420	0.71	D	0.77	D	3	3
Game Day Saturday PM Peak Period									
E. 161st Street at River Avenue, Yankee Stadium (4/B/D)									
E. 161st Street/River Avenue (SW corner, closest to intersection)	5.90	4.90	588	1.69	F	1.71	F	0.95	N/A
E. 161st Street/River Avenue (SW corner, furthest from intersection)	5.90	4.90	588	1.64	F	1.66	F	0.98	N/A
E. 161st Street/River Avenue (SE corner)	5.80	4.80	576	1.57	F	1.58	F	0.64	N/A

PEDESTRIAN
2004 EXISTING CONDITIONS

Table B-7a

2004 Existing Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	365	2	A	6	B
	East	10	123	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	11.5	9	0	A	4	A
	East	12	9	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	6	0	A	4	A
	East	12.5	13	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	111	1	A	5-	A
	South	13	36	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	158	1	A	5-	A
	East	10	113	1	A	5-	A
150th St. between Walton Ave. and Grand Concourse	North	8	28	0	A	4	A
	South	8	28	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	7	59	1	A	5-	A
	East	9	103	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	3	0	A	4	A
	East	7	2	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	34	0	A	4	A
	East	17.5	13	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	46	0	A	4	A
	South	10	37	0	A	4	A
Game Day Saturday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	626	3	A	7+	C
	East	10	125	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	11.5	12	0	A	4	A
	East	12	12	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	9	0	A	4	A
	East	12.5	17	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	152	1	A	5+	B
	South	13	50	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	216	1	A	5+	B
	East	10	155	1	A	5+	B
150th St. between Walton Ave. and Grand Concourse	North	8	38	0	A	4	A
	South	8	38	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	7	61	1	A	5-	A
	East	9	92	1	A	5-	A
Exterior St. between 150th St. and 149h St.	West	14.5	4	0	A	4	A
	East	7	3	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	47	0	A	4	A
	East	17.5	17	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	55	0	A	4	A
	South	10	21	0	A	4	A
Note: PFM = pedestrians per foot per minute							

Table B-7b

2004 Existing Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	445	2	A	6	B
	East	10	114	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	11.5	11	0	A	4	A
	East	12	4	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	4	0	A	4	A
	East	12.5	6	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	105	1	A	5-	A
	South	13	64	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	215	1	A	5+	B
	East	10	164	1	A	5+	B
150th St. between Walton Ave. and Grand Concourse	North	8	13	0	A	4	A
	South	8	7	0	A	4	A
Grand Concourse between 150th St. and 149h St.	West	7	143	1	A	5+	B
	East	9	95	1	A	5-	A
Exterior St. between 150th St. and 149h St.	West	14.5	2	0	A	4	A
	East	7	1	0	A	4	A
River Avenue between 150th St. and 149h St.	West	8	11	0	A	4	A
	East	17.5	19	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	56	0	A	4	A
	South	10	97	1	A	5-	A
Non-Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	8	0	A	4	A
	East	10	30	0	A	4	A
River Avenue between 153rd St. and 151st St.	West	11.5	4	0	A	4	A
	East	12	4	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	3	0	A	4	A
	East	12.5	6	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	52	0	A	4	A
	South	13	17	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	74	0	A	4	A
	East	10	53	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	13	0	A	4	A
	South	8	13	0	A	4	A
Grand Concourse between 150th St. and 149h St.	West	7	78	1	A	5-	A
	East	9	94	1	A	5-	A
Exterior St. between 150th St. and 149h St.	West	14.5	2	0	A	4	A
	East	7	2	0	A	4	A
River Avenue between 150th St. and 149h St.	West	8	16	0	A	4	A
	East	17.5	6	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	75	1	A	5-	A
	South	10	31	0	A	4	A

Note: PFM = pedestrians per foot per minute

Table B-7c

2004 Existing Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Non-Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	5	0	A	4	A
	East	10	21	0	A	4	A
River Avenue between 153rd St. and 151st St.	West	11.5	6	0	A	4	A
	East	12	2	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	2	0	A	4	A
	East	12.5	3	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	56	0	A	4	A
	South	13	34	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	115	1	A	5-	A
	East	10	88	1	A	5-	A
150th St. between Walton Ave. and Grand Concourse	North	8	7	0	A	4	A
	South	8	4	0	A	4	A
Grand Concourse between 150th St. and 149h St.	West	7	155	1	A	5+	B
	East	9	64	0	A	4	A
Exterior St. between 150th St. and 149h St.	West	14.5	1	0	A	4	A
	East	7	1	0	A	4	A
River Avenue between 150th St. and 149h St.	West	8	6	0	A	4	A
	East	17.5	10	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	62	1	A	5-	A
	South	10	103	1	A	5-	A

Note: PFM = pedestrians per foot per minute

Table B-8a

2004 Existing Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Game Day Saturday Midday Peak Period		Game Day Saturday PM Peak Period		Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	210	A	116	A	221	A
	Southeast	267	A	146	A	332	A
	Southwest	79	A	33	C	74	A
	Northwest	94	A	32	C	93	A
River Avenue and 151st St	Northeast	2259	A	1589	A	4294	A
	Southeast	3626	A	2618	A	3927	A
	Southwest	2684	A	1986	A	3256	A
	Northwest	2397	A	1749	A	3256	A
Grand Concourse and 151st St	Southwest	282	A	207	A	140	A
	Northwest	468	A	341	A	114	A
Grand Concourse and 150th St	Northeast	182	A	131	A	201	A
	Southeast	105	A	75	A	152	A
	Southwest	93	A	66	A	143	A
	Northwest	133	A	95	A	248	A
Exterior St. and 149th St	Southwest	189	A	152	A	114	A
	Northwest	1487	A	1289	A	1756	A
River Avenue and 149th St	Northeast	1005	A	930	A	817	A
	Southeast	855	A	854	A	658	A
Grand Concourse and 149th St	Northeast	166	A	352	A	173	A
	Southeast	505	A	811	A	359	A
	Southwest	241	A	296	A	145	A
	Northwest	235	A	376	A	193	A

Note: SFP = square feet per pedestrian

Table B-8b

2004 Existing Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Non-Game Day Saturday Midday Peak Period		Non-Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	1224	A	1083	A
	Southeast	2246	A	4268	A
	Southwest	3024	A	3020	A
	Northwest	2083	A	2397	A
River Avenue and 151st St	Northeast	4773	A	8593	A
	Southeast	7857	A	7856	A
	Southwest	5710	A	6519	A
	Northwest	5068	A	6519	A
Grand Concourse and 151st St	Southwest	603	A	269	A
	Northwest	1014	A	223	A
Grand Concourse and 150th St	Northeast	400	A	381	A
	Southeast	235	A	286	A
	Southwest	212	A	269	A
	Northwest	295	A	477	A
Exterior St. and 149th St	Southwest	141	A	186	A
	Northwest	1609	A	2762	A
River Avenue and 149th St	Northeast	767	A	1395	A
	Southeast	677	A	734	A
Grand Concourse and 149th St	Northeast	309	A	187	A
	Southeast	676	A	365	A
	Southwest	224	A	131	A
	Northwest	272	A	170	A

Note: SFP = square feet per pedestrian

Table B-9a

2004 Existing Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	583	A	557	A	474	A
	East	15	241	A	237	A	114	A
	South	16	892	A	823	A	562	A
	West	12	85	A	73	A	52	B
River Avenue and 151st St	North	13	8336	A	8163	A	6045	A
	East	12	2283	A	2154	A	1259	A
	South	11.5	1034	A	973	A	556	A
	West	14	1723	A	1723	A	1207	A
Grand Concourse and 151st St	North	12.5	804	A	785	A	460	A
	South	16	1137	A	1109	A	620	A
	West	12	621	A	613	A	184	A
Grand Concourse and 150th St	North	12	270	A	263	A	147	A
	East	11.5	209	A	209	A	43	B
	South	11	150	A	146	A	82	A
	West	14	259	A	254	A	52	B
Exterior St. and 149th St	North	12	1654	A	1549	A	965	A
	South	12.5	1034	A	973	A	556	A
River Avenue and 149th St	North	11	551	A	529	A	150	A
	East	9.5	1778	A	1674	A	943	A
	South	12.5	1034	A	973	A	556	A
Grand Concourse and 149th St	North	16	172	A	158	A	114	A
	East	14	201	A	196	A	75	A
	South	18	196	A	187	A	129	A
	West	10	659	A	635	A	277	A

Note: SFP = square feet per pedestrian

Table B-9b

2004 Existing Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday PM Peak Period								
River Avenue and 153rd St	North	10	210	A	191	A	171	A
	East	15	148	A	141	A	70	A
	South	16	285	A	267	A	180	A
	West	12	35	C	34	C	22	D
River Avenue and 151st St	North	13	5558	A	5452	A	4030	A
	East	12	1674	A	1564	A	923	A
	South	11.5	827	A	801	A	445	A
	West	14	1274	A	1274	A	892	A
Grand Concourse and 151st St	North	12.5	582	A	568	A	333	A
	South	16	831	A	810	A	453	A
	West	12	458	A	453	A	135	A
Grand Concourse and 150th St	North	12	198	A	193	A	108	A
	East	11.5	153	A	153	A	32	C
	South	11	111	A	108	A	60	A
	West	14	190	A	186	A	38	C
Exterior St. and 149th St	North	12	1418	A	1361	A	828	A
	South	12.5	827	A	801	A	445	A
River Avenue and 149th St	North	11	404	A	392	A	110	A
	East	9.5	3912	A	3744	A	2075	A
	South	12.5	827	A	801	A	445	A
Grand Concourse and 149th St	North	16	438	A	396	A	289	A
	East	14	374	A	362	A	140	A
	South	18	250	A	239	A	165	A
	West	10	675	A	640	A	283	A

Note: SFP = square feet per pedestrian

Table B-9c

2004 Existing Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1073	A	1013	A	605	A
	East	15	312	A	307	A	106	A
	South	16	1860	A	1697	A	797	A
	West	12	85	A	73	A	39	C
River Avenue and 151st St	North	13	9067	A	8882	A	4518	A
	East	12	4410	A	4150	A	1781	A
	South	11.5	8021	A	7920	A	4523	A
	West	14	2573	A	2573	A	1353	A
Grand Concourse and 151st St	North	12.5	122	A	119	A	75	A
	South	16	304	A	295	A	177	A
	West	12	178	A	176	A	53	B
Grand Concourse and 150th St	North	12	540	A	525	A	314	A
	East	11.5	193	A	193	A	41	B
	South	11	786	A	765	A	458	A
	West	14	473	A	464	A	96	A
Exterior St. and 149th St	North	12	2205	A	2075	A	1287	A
	South	12.5	766	A	717	A	412	A
River Avenue and 149th St	North	11	568	A	533	A	1287	A
	East	9.5	1504	A	1429	A	798	A
	South	12.5	766	A	717	A	412	A
Grand Concourse and 149th St	North	16	213	A	185	A	141	A
	East	14	167	A	163	A	63	A
	South	18	112	A	107	A	74	A
	West	10	318	A	305	A	133	A

Note: SFP = square feet per pedestrian

Table B-9d
2004 Existing Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	1425	A	1367	A	1159	A
	East	15	2242	A	2193	A	1057	A
	South	16	4104	A	3955	A	2586	A
	West	12	6277	A	6001	A	3870	A
River Avenue and 151st St	North	13	16673	A	16464	A	12091	A
	East	12	5022	A	4926	A	2770	A
	South	11.5	766	A	718	A	412	A
	West	14	3662	A	3662	A	2565	A
Grand Concourse and 151st St	North	12.5	1687	A	1648	A	967	A
	South	16	2400	A	2341	A	1309	A
	West	12	1331	A	1314	A	393	A
Grand Concourse and 150th St	North	12	579	A	564	A	316	A
	East	11.5	446	A	446	A	92	A
	South	11	323	A	315	A	176	A
	West	14	553	A	542	A	111	A
Exterior St. and 149th St	North	12	1804	A	1700	A	1053	A
	South	12.5	766	A	718	A	412	A
River Avenue and 149th St	North	11	433	A	421	A	118	A
	East	9.5	2445	A	2321	A	1297	A
	South	12.5	766	A	718	A	412	A
Grand Concourse and 149th St	North	16	352	A	322	A	232	A
	East	14	394	A	382	A	148	A
	South	18	186	A	178	A	123	A
	West	10	386	A	370	A	162	A

Note: SFP = square feet per pedestrian

Table B-9e
2004 Existing Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1744	A	1658	A	983	A
	East	15	6615	A	6490	A	2252	A
	South	16	5580	A	5366	A	2392	A
	West	12	5292	A	4824	A	2415	A
River Avenue and 151st St	North	13	18135	A	17861	A	9035	A
	East	12	8820	A	8651	A	3562	A
	South	11.5	16042	A	15898	A	9046	A
	West	14	5145	A	5145	A	2705	A
Grand Concourse and 151st St	North	12.5	230	A	224	A	141	A
	South	16	572	A	556	A	333	A
	West	12	332	A	328	A	99	A
Grand Concourse and 150th St	North	12	1041	A	1013	A	606	A
	East	11.5	359	A	359	A	75	A
	South	11	1485	A	1444	A	865	A
	West	14	884	A	868	A	181	A
Exterior St. and 149th St	North	12	3308	A	3121	A	1931	A
	South	12.5	984	A	917	A	530	A
River Avenue and 149th St	North	11	866	A	830	A	236	A
	East	9.5	1956	A	1863	A	1037	A
	South	12.5	984	A	917	A	530	A
Grand Concourse and 149th St	North	16	261	A	220	A	172	A
	East	14	177	A	172	A	67	A
	South	18	125	A	120	A	82	A
	West	10	205	A	195	A	86	A

Note: SFP = square feet per pedestrian

PEDESTRIAN
2009 NO BUILD CONDITIONS

Table B-10a

2009 No Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	375	2	A	6	B
	East	10	127	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	9	0	A	4	A
	East	13	9	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	6	0	A	4	A
	East	12.5	13	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	113	1	A	5-	A
	South	13	36	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	162	1	A	5-	A
	East	10	115	1	A	5-	A
150th St. between Walton Ave. and Grand Concourse	North	8	28	0	A	4	A
	South	8	28	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	14.5	3	0	A	4	A
	East	7	2	0	A	4	A
Exterior St. between 150th St. and 149th St.	West	8	34	0	A	4	A
	East	17.5	13	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	61	1	A	5-	A
	East	9	105	1	A	5-	A
149th St. between Walton Ave. and Grand Concourse	North	8	48	0	A	4	A
	South	10	37	0	A	4	A
Game Day Saturday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	642	4	A	8	C
	East	10	129	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	12	0	A	4	A
	East	13	12	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	9	0	A	4	A
	East	12.5	17	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	156	1	A	5+	B
	South	13	52	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	223	1	A	5+	B
	East	10	160	1	A	5+	B
150th St. between Walton Ave. and Grand Concourse	North	8	38	0	A	4	A
	South	8	38	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	7	1	0	A	4	A
	East	9.5	1	0	A	4	A
Exterior St. between 150th St. and 149th St.	West	14.5	19	0	A	4	A
	East	7	14	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	49	0	A	4	A
	East	17.5	17	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	66	1	A	5-	A
	South	10	26	0	A	4	A

Note: PFM = pedestrians per foot per minute

Table B-10b

2009 No Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	457	3	A	7-	B
	East	10	116	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	11	0	A	4	A
	East	13	4	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	4	0	A	4	A
	East	12.5	6	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	107	1	A	5-	A
	South	13	66	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	221	1	A	5+	B
	East	10	168	1	A	5+	B
150th St. between Walton Ave. and Grand Concourse	North	8	13	0	A	4	A
	South	8	7	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	7	147	1	A	5+	A
	East	9	97	1	A	5-	B
Exterior St. between 150th St. and 149th St.	West	14.5	12	0	A	4	A
	East	7	8	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	11	0	A	4	A
	East	17.5	19	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	64	1	A	5-	A
	South	10	103	1	A	5-	A
Non-Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	8	0	A	4	A
	East	10	30	0	A	4	A
River Avenue between 153rd St. and 151st St.	West	12.5	4	0	A	4	A
	East	13	4	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	3	0	A	4	A
	East	12.5	6	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	54	0	A	4	A
	South	13	17	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	76	0	A	4	A
	East	10	55	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	13	0	A	4	A
	South	8	13	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	80	1	A	5-	A
	East	9	96	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	2	0	A	4	A
	East	7	2	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	16	0	A	4	A
	East	17.5	6	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	77	1	A	5-	A
	South	10	31	0	A	4	A
Note: PFM = pedestrians per foot per minute							

Table B-10c

2009 No Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Non-Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	5	0	A	4	A
	East	10	21	0	A	4	A
River Avenue between 153rd St. and 151st St.	West	12.5	6	0	A	4	A
	East	13	2	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	2	0	A	4	A
	East	12.5	3	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	13.5	2	0	A	4	A
	South	11	2	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	2	0	A	4	A
	East	10	2	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	58	0	A	4	A
	South	13	34	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	161	1	A	5+	B
	East	9	68	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	25	0	A	4	A
	East	7	17	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	6	0	A	4	A
	East	17.5	10	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	79	1	A	5-	A
	South	10	113	1	A	5-	A

Note: PFM = pedestrians per foot per minute

Table B-11a

2009 No Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Game Day Saturday Midday Peak Period		Game Day Saturday PM Peak Period		Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	206	A	114	A	216	A
	Southeast	262	A	143	A	324	A
	Southwest	77	A	32	C	72	A
	Northwest	92	A	31	C	90	A
River Avenue and 151st St	Northeast	2259	A	1589	A	4294	A
	Southeast	3626	A	2618	A	3927	A
	Southwest	2687	A	1903	A	3256	A
	Northwest	2397	A	1684	A	3256	A
Grand Concourse and 151st St	Southwest	276	A	201	A	137	A
	Northwest	462	A	331	A	111	A
Grand Concourse and 150th St	Northeast	178	A	127	A	195	A
	Southeast	103	A	73	A	148	A
	Southwest	91	A	64	A	139	A
	Northwest	130	A	92	A	240	A
Exterior St. and 149th St	Southwest	4284	A	4284	A	535	A
	Northwest	1487	A	618	A	915	A
River Avenue and 149th St	Northeast	985	A	628	A	641	A
	Southeast	855	A	778	A	626	A
Grand Concourse and 149th St	Northeast	162	A	328	A	166	A
	Southeast	493	A	772	A	348	A
	Southwest	233	A	275	A	139	A
	Northwest	230	A	335	A	183	A

Note: SFP = square feet per pedestrian

Table B-11b
2009 No Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Non-Game Day Saturday Midday		Non-Game Day Weekday PM	
		Peak Period		Peak Period	
		SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	1224	A	1052	A
	Southeast	2246	A	4268	A
	Southwest	3024	A	3020	A
	Northwest	2083	A	2397	A
River Avenue and 151st St	Northeast	4773	A	8593	A
	Southeast	7857	A	7856	A
	Southwest	5710	A	6519	A
	Northwest	5068	A	6519	A
Grand Concourse and 151st St	Southwest	594	A	261	A
	Northwest	1014	A	215	A
Grand Concourse and 150th St	Northeast	392	A	366	A
	Southeast	227	A	274	A
	Southwest	204	A	258	A
	Northwest	288	A	452	A
Exterior St. and 149th St	Southwest	4284	A	4284	A
	Northwest	1609	A	639	A
River Avenue and 149th St	Northeast	755	A	691	A
	Southeast	677	A	660	A
Grand Concourse and 149th St	Northeast	303	A	175	A
	Southeast	657	A	349	A
	Southwest	218	A	123	A
	Northwest	266	A	154	A

Note: SFP = square feet per pedestrian

Table B-12a
2009 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
			Game Day Saturday Midday Peak Period					
River Avenue and 153rd St	North	10	583	A	556	A	474	A
	East	15	236	A	231	A	111	A
	South	16	892	A	821	A	562	A
	West	12	83	A	71	A	51	B
River Avenue and 151st St	North	13	8336	A	8156	A	6045	A
	East	12	2283	A	2151	A	1259	A
	South	11.5	892	A	821	A	562	A
	West	14	1723	A	1723	A	1207	A
Grand Concourse and 151st St	North	12.5	804	A	784	A	460	A
	South	16	1137	A	1108	A	620	A
	West	12	608	A	600	A	180	A
Grand Concourse and 150th St	North	12	261	A	255	A	143	A
	East	11.5	204	A	204	A	42	B
	South	11	147	A	143	A	80	A
	West	14	253	A	248	A	51	B
External St. and 149th St	North	12	1654	A	1546	A	965	A
	South	12.5	147	A	143	A	80	A
River Avenue and 149th St	North	11	535	A	512	A	146	A
	East	9.5	1778	A	1671	A	943	A
	South	12.5	1034	A	972	A	556	A
Grand Concourse and 149th St	North	16	169	A	154	A	111	A
	East	14	197	A	192	A	74	A
	South	18	190	A	181	A	125	A
	West	10	643	A	619	A	270	A

Note: SFP = square feet per pedestrian

Table B-12b

2009 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday PM Peak Period								
River Avenue and 153rd St	North	10	207	A	187	A	168	A
	East	15	145	A	137	A	68	A
	South	16	277	A	259	A	175	A
	West	12	34	C	33	C	21	D
River Avenue and 151st St	North	13	5558	A	5448	A	4030	A
	East	12	1674	A	1561	A	923	A
	South	11.5	277	A	259	A	175	A
	West	14	1221	A	1221	A	855	A
Grand Concourse and 151st St	North	12.5	562	A	549	A	322	A
	South	16	800	A	780	A	436	A
	West	12	444	A	438	A	131	A
Grand Concourse and 150th St	North	12	193	A	188	A	105	A
	East	11.5	148	A	148	A	31	C
	South	11	108	A	106	A	59	B
	West	14	184	A	181	A	37	C
External St. and 149th St	North	12	794	A	761	A	463	A
	South	12.5	108	A	106	A	59	B
River Avenue and 149th St	North	11	268	A	259	A	73	A
	East	9.5	2445	A	2337	A	1297	A
	South	12.5	827	A	800	A	445	A
Grand Concourse and 149th St	North	16	352	A	318	A	232	A
	East	14	367	A	355	A	138	A
	South	18	228	A	217	A	150	A
	West	10	643	A	609	A	270	A

Note: SFP = square feet per pedestrian

Table B-12c

2009 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1073	A	1011	A	605	A
	East	15	303	A	299	A	103	A
	South	16	1860	A	1692	A	797	A
	West	12	82	A	70	A	38	C
River Avenue and 151st St	North	13	9067	A	8878	A	4518	A
	East	12	4410	A	4143	A	1781	A
	South	11.5	8021	A	7917	A	4523	A
	West	14	2573	A	2573	A	1353	A
Grand Concourse and 151st St	North	12.5	119	A	115	A	73	A
	South	16	295	A	286	A	171	A
	West	12	174	A	172	A	52	B
Grand Concourse and 150th St	North	12	521	A	506	A	303	A
	East	11.5	188	A	188	A	39	C
	South	11	786	A	764	A	458	A
	West	14	460	A	451	A	94	A
External St. and 149th St	North	12	1240	A	1165	A	724	A
	South	12.5	786	A	764	A	458	A
River Avenue and 149th St	North	11	387	A	362	A	105	A
	East	9.5	1304	A	1237	A	692	A
	South	12.5	766	A	715	A	412	A
Grand Concourse and 149th St	North	16	195	A	169	A	129	A
	East	14	163	A	159	A	61	A
	South	18	107	A	103	A	71	A
	West	10	310	A	298	A	130	A

Note: SFP = square feet per pedestrian

Table B-12d
2009 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	1425	A	1366	A	1159	A
	East	15	2242	A	2192	A	1057	A
	South	16	4104	A	3952	A	2586	A
	West	12	6277	A	5995	A	3870	A
River Avenue and 151st St	North	13	16673	A	16451	A	12091	A
	East	12	5022	A	4921	A	2770	A
	South	11.5	4104	A	3952	A	2586	A
	West	14	3662	A	3662	A	2565	A
Grand Concourse and 151st St	North	12.5	1687	A	1647	A	967	A
	South	16	2400	A	2339	A	1309	A
	West	12	1331	A	1314	A	393	A
Grand Concourse and 150th St	North	12	579	A	564	A	316	A
	East	11.5	432	A	432	A	89	A
	South	11	309	A	301	A	169	A
	West	14	534	A	524	A	107	A
External St. and 149th St	North	12	1804	A	1698	A	1053	A
	South	12.5	309	A	301	A	169	A
River Avenue and 149th St	North	11	423	A	410	A	115	A
	East	9.5	2445	A	2317	A	1297	A
	South	12.5	766	A	717	A	412	A
Grand Concourse and 149th St	North	16	345	A	315	A	227	A
	East	14	386	A	374	A	145	A
	South	18	180	A	172	A	119	A
	West	10	375	A	360	A	158	A

Note: SFP = square feet per pedestrian

Table B-12e
2009 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1744	A	1656	A	983	A
	East	15	6615	A	6488	A	2253	A
	South	16	5580	A	5363	A	2392	A
	West	12	5292	A	4812	A	2415	A
River Avenue and 151st St	North	13	18135	A	17849	A	9035	A
	East	12	8820	A	8645	A	3562	A
	South	11.5	16042	A	15898	A	9046	A
	West	14	5145	A	5145	A	2705	A
Grand Concourse and 151st St	North	12.5	223	A	217	A	137	A
	South	16	572	A	555	A	333	A
	West	12	318	A	314	A	95	A
Grand Concourse and 150th St	North	12	1041	A	1012	A	606	A
	East	11.5	341	A	341	A	72	A
	South	11	1485	A	1443	A	865	A
	West	14	821	A	806	A	168	A
External St. and 149th St	North	12	902	A	850	A	527	A
	South	12.5	1485	A	1443	A	865	A
River Avenue and 149th St	North	11	337	A	322	A	92	A
	East	9.5	1397	A	1329	A	741	A
	South	12.5	984	A	916	A	530	A
Grand Concourse and 149th St	North	16	213	A	178	A	141	A
	East	14	173	A	168	A	65	A
	South	18	116	A	112	A	77	A
	West	10	197	A	188	A	83	A

Note: SFP = square feet per pedestrian

PEDESTRIAN
2014 NO BUILD CONDITIONS

Table B-13a

2014 No Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	383	2	A	6	B
	East	10	129	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	9	0	A	4	A
	East	13	9	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	6	0	A	4	A
	East	12.5	13	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	117	1	A	5-	A
	South	13	38	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	166	1	A	5-	A
	East	10	119	1	A	5-	A
150th St. between Walton Ave. and Grand Concourse	North	8	30	0	A	4	A
	South	8	30	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	62	1	A	5-	A
	East	9	109	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	3	0	A	4	A
	East	7	2	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	36	0	A	4	A
	East	17.5	13	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	48	0	A	4	A
	South	10	39	0	A	4	A
Game Day Saturday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	642	4	A	8	C
	East	10	129	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	12	0	A	4	A
	East	13	12	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	9	0	A	4	A
	East	12.5	17	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	156	1	A	5+	B
	South	13	52	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	223	1	A	5+	B
	East	10	160	1	A	5+	B
150th St. between Walton Ave. and Grand Concourse	North	8	38	0	A	4	A
	South	8	38	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	65	1	A	5-	A
	East	9	95	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	19	0	A	4	A
	East	7	14	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	49	0	A	4	A
	East	17.5	17	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	66	1	A	5-	A
	South	10	26	0	A	4	A
Note: PFM = pedestrians per foot per minute							

TableB-13b

2014 No Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	467	3	A	7-	B
	East	10	120	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	11	0	A	4	A
	East	13	4	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	4	0	A	4	A
	East	12.5	6	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	111	1	A	5-	A
	South	13	68	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	226	1	A	5+	B
	East	10	172	1	A	5+	B
150th St. between Walton Ave. and Grand Concourse	North	8	13	0	A	4	A
	South	8	7	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	152	1	A	5+	B
	East	9	99	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	12	0	A	4	A
	East	7	8	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	11	0	A	4	A
	East	17.5	20	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	64	1	A	5-	A
	South	10	106	1	A	5-	A
Non-Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	8	0	A	4	A
	East	10	32	0	A	4	A
River Avenue between 153rd St. and 151st St.	West	12.5	4	0	A	4	A
	East	13	4	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	3	0	A	4	A
	East	12.5	6	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	54	0	A	4	A
	South	13	17	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	78	0	A	4	A
	East	10	55	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	13	0	A	4	A
	South	8	13	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	82	1	A	5-	A
	East	9	98	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	2	0	A	4	A
	East	7	2	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	16	0	A	4	A
	East	17.5	6	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	79	1	A	5-	A
	South	10	33	0	A	4	A

Note: PFM = pedestrians per foot per minute

Table B-13c

2014 No Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	5	0	A	4	A
	East	10	23	0	A	4	A
River Avenue between 153rd St. and 151st St.	West	12.5	6	0	A	4	A
	East	13	2	0	A	4	A
River Avenue between 151st St. and 150th St.	West	12	2	0	A	4	A
	East	12.5	3	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	58	0	A	4	A
	South	13	36	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	123	1	A	5-	A
	East	10	94	1	A	5-	A
150th St. between Walton Ave. and Grand Concourse	North	8	7	0	A	4	A
	South	8	4	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	165	1	A	5+	B
	East	9	70	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	25	0	A	4	A
	East	7	17	0	A	4	A
River Avenue between 150th St. and 149th St.	West	8	6	0	A	4	A
	East	17.5	10	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	81	1	A	5-	A
	South	10	117	1	A	5-	A

Note: PFM = pedestrians per foot per minute

Table B-14a

2014 No Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Game Day Saturday Midday Peak Period		Game Day Saturday PM Peak Period		Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	201	A	114	A	212	A
	Southeast	255	A	143	A	319	A
	Southwest	74	A	32	C	70	A
	Northwest	89	A	31	C	88	A
River Avenue and 151st St	Northeast	2259	A	1589	A	4294	A
	Southeast	3626	A	2618	A	3927	A
	Southwest	2538	A	1903	A	3256	A
	Northwest	2276	A	1684	A	3256	A
Grand Concourse and 151st St	Southwest	268	A	201	A	133	A
	Northwest	439	A	331	A	109	A
Grand Concourse and 150th St	Northeast	173	A	127	A	191	A
	Southeast	100	A	73	A	144	A
	Southwest	88	A	64	A	135	A
	Northwest	127	A	92	A	236	A
Exterior St. and 149th St	Southwest	4284	A	4284	A	535	A
	Northwest	1381	A	618	A	915	A
River Avenue and 149th St	Northeast	966	A	628	A	625	A
	Southeast	828	A	778	A	597	A
Grand Concourse and 149th St	Northeast	158	A	328	A	162	A
	Southeast	480	A	772	A	339	A
	Southwest	229	A	275	A	135	A
	Northwest	222	A	335	A	178	A

Note: SFP = square feet per pedestrian

Table B-14b

2014 No Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Non-Game Day Saturday Midday Peak Period		Non-Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	1184	A	1052	A
	Southeast	2134	A	4268	A
	Southwest	3024	A	3020	A
	Northwest	2083	A	2397	A
River Avenue and 151st St	Northeast	4773	A	8593	A
	Southeast	7857	A	7856	A
	Southwest	5710	A	6519	A
	Northwest	5068	A	6519	A
Grand Concourse and 151st St	Southwest	575	A	252	A
	Northwest	987	A	209	A
Grand Concourse and 150th St	Northeast	379	A	355	A
	Southeast	225	A	268	A
	Southwest	203	A	252	A
	Northwest	279	A	437	A
Exterior St. and 149th St	Southwest	4284	A	4284	A
	Northwest	1609	A	639	A
River Avenue and 149th St	Northeast	733	A	682	A
	Southeast	643	A	643	A
Grand Concourse and 149th St	Northeast	292	A	170	A
	Southeast	642	A	340	A
	Southwest	212	A	119	A
	Northwest	256	A	150	A

Note: SFP = square feet per pedestrian

Table B-15a

2014 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	558	A	532	A	454	A
	East	15	231	A	226	A	109	A
	South	16	855	A	785	A	539	A
	West	12	80	A	69	A	49	B
River Avenue and 151st St	North	13	8336	A	8153	A	6045	A
	East	12	2283	A	2147	A	1259	A
	South	11.5	855	A	785	A	539	A
	West	14	1628	A	1628	A	1140	A
Grand Concourse and 151st St	North	12.5	767	A	748	A	440	A
	South	16	1080	A	1052	A	589	A
	West	12	582	A	575	A	172	A
Grand Concourse and 150th St	North	12	257	A	250	A	140	A
	East	11.5	198	A	198	A	41	B
	South	11	143	A	139	A	78	A
	West	14	247	A	242	A	50	B
External St. and 149th St	North	12	1527	A	1425	A	891	A
	South	12.5	143	A	139	A	78	A
River Avenue and 149th St	North	11	520	A	497	A	142	A
	East	9.5	1778	A	1669	A	943	A
	South	12.5	984	A	924	A	530	A
Grand Concourse and 149th St	North	16	164	A	149	A	108	A
	East	14	191	A	186	A	72	A
	South	18	186	A	177	A	123	A
	West	10	628	A	604	A	264	A

Note: SFP = square feet per pedestrian

Table B-15b

2014 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday PM Peak Period								
Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	207	A	187	A	168	A
	East	15	145	A	137	A	68	A
	South	16	277	A	259	A	175	A
	West	12	34	C	33	C	21	D
River Avenue and 151st St	North	13	5558	A	5448	A	4030	A
	East	12	1674	A	1561	A	923	A
	South	11.5	277	A	259	A	175	A
	West	14	1221	A	1221	A	855	A
Grand Concourse and 151st St	North	12.5	562	A	549	A	322	A
	South	16	800	A	780	A	436	A
	West	12	444	A	438	A	131	A
Grand Concourse and 150th St	North	12	193	A	188	A	105	A
	East	11.5	148	A	148	A	31	C
	South	11	108	A	106	A	59	B
	West	14	184	A	181	A	37	C
External St. and 149th St	North	12	794	A	761	A	463	A
	South	12.5	108	A	106	A	59	B
River Avenue and 149th St	North	11	268	A	259	A	73	A
	East	9.5	2445	A	2337	A	1297	A
	South	12.5	827	A	800	A	445	A
Grand Concourse and 149th St	North	16	352	A	318	A	232	A
	East	14	367	A	355	A	138	A
	South	18	228	A	217	A	150	A
	West	10	643	A	609	A	270	A

Note: SFP = square feet per pedestrian

Table B-15c

2014 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1073	A	1010	A	605	A
	East	15	298	A	293	A	101	A
	South	16	1860	A	1690	A	797	A
	West	12	80	A	68	A	37	C
River Avenue and 151st St	North	13	9067	A	8872	A	4518	A
	East	12	4410	A	4136	A	1781	A
	South	11.5	8021	A	7917	A	4523	A
	West	14	2573	A	2573	A	1353	A
Grand Concourse and 151st St	North	12.5	117	A	114	A	71	A
	South	16	290	A	282	A	169	A
	West	12	170	A	168	A	51	B
Grand Concourse and 150th St	North	12	521	A	506	A	303	A
	East	11.5	183	A	183	A	38	C
	South	11	742	A	721	A	432	A
	West	14	448	A	439	A	91	A
External St. and 149th St	North	12	1240	A	1163	A	724	A
	South	12.5	742	A	721	A	432	A
River Avenue and 149th St	North	11	379	A	354	A	103	A
	East	9.5	1304	A	1235	A	692	A
	South	12.5	713	A	665	A	384	A
Grand Concourse and 149th St	North	16	193	A	166	A	127	A
	East	14	159	A	154	A	60	A
	South	18	105	A	100	A	69	A
	West	10	300	A	287	A	126	A

Note: SFP = square feet per pedestrian

Table B-15d

2014 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	1425	A	1364	A	1159	A
	East	15	2093	A	2043	A	986	A
	South	16	4104	A	3946	A	2586	A
	West	12	6277	A	5986	A	3870	A
River Avenue and 151st St	North	13	16673	A	16451	A	12091	A
	East	12	5022	A	4921	A	2770	A
	South	11.5	4104	A	3946	A	2586	A
	West	14	3662	A	3662	A	2565	A
Grand Concourse and 151st St	North	12.5	1687	A	1646	A	967	A
	South	16	2400	A	2338	A	1309	A
	West	12	1270	A	1254	A	376	A
Grand Concourse and 150th St	North	12	540	A	526	A	295	A
	East	11.5	425	A	425	A	88	A
	South	11	309	A	301	A	169	A
	West	14	526	A	515	A	106	A
External St. and 149th St	North	12	1804	A	1695	A	1053	A
	South	12.5	309	A	301	A	169	A
River Avenue and 149th St	North	11	413	A	401	A	113	A
	East	9.5	2445	A	2314	A	1297	A
	South	12.5	713	A	666	A	384	A
Grand Concourse and 149th St	North	16	331	A	301	A	218	A
	East	14	374	A	363	A	140	A
	South	18	177	A	169	A	117	A
	West	10	365	A	349	A	153	A

Note: SFP = square feet per pedestrian

Table B-15e

2014 No Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1744	A	1654	A	983	A
	East	15	6615	A	6484	A	2253	A
	South	16	5580	A	5358	A	2392	A
	West	12	5292	A	4801	A	2415	A
River Avenue and 151st St	North	13	18135	A	17849	A	9035	A
	East	12	8820	A	8645	A	3562	A
	South	11.5	16042	A	15889	A	9046	A
	West	14	5145	A	5145	A	2705	A
Grand Concourse and 151st St	North	12.5	217	A	211	A	133	A
	South	16	540	A	524	A	314	A
	West	12	311	A	307	A	93	A
Grand Concourse and 150th St	North	12	972	A	944	A	566	A
	East	11.5	333	A	333	A	70	A
	South	11	1485	A	1442	A	865	A
	West	14	802	A	787	A	164	A
External St. and 149th St	North	12	902	A	849	A	527	A
	South	12.5	1485	A	1442	A	865	A
River Avenue and 149th St	North	11	331	A	316	A	90	A
	East	9.5	1397	A	1328	A	741	A
	South	12.5	940	A	872	A	506	A
Grand Concourse and 149th St	North	16	208	A	173	A	137	A
	East	14	169	A	163	A	63	A
	South	18	114	A	110	A	75	A
	West	10	191	A	182	A	80	A

Note: SFP = square feet per pedestrian

PEDESTRIAN
2009 BUILD CONDITIONS

Table B-16a
2009 Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	530	3	A	7-	B
	East	10	187	1	A	5+	B
River Avenue between 153rd St. and 151st St.	West	12.5	155	1	A	5-	A
	East	13	60	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	67	0	A	4	A
	East	13	18	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	67	0	A	4	A
	East	12.5	18	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	158	1	A	5+	B
	South	13	81	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	209	1	A	5+	B
	East	10	132	1	A	5-	A
150th St. between Walton Ave. and Grand Concourse	North	8	33	0	A	4	A
	South	8	33	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	108	1	A	5-	A
	East	9	126	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	131	1	A	5-	A
	East	7	110	1	A	5+	B
River Avenue between 150th St. and 149th St.	West	8	39	0	A	4	A
	East	17.5	28	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	221	2	A	6	B
	South	10	169	1	A	5+	B
Game Day Saturday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	642	4	A	8	C
	East	10	300	2	A	6	B
River Avenue between 153rd St. and 151st St.	West	12.5	136	1	A	5-	A
	East	13	68	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	57	0	A	4	A
	East	13	21	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	57	0	A	4	A
	East	12.5	21	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	192	2	A	6	B
	South	13	88	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	37	0	A	4	A
	East	10	9	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	42	0	A	4	A
	South	8	42	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	101	1	A	5-	A
	East	9	110	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	104	0	A	4	A
	East	7	88	1	A	5-	A
River Avenue between 150th St. and 149th St.	West	8	53	0	A	4	A
	East	17.5	29	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	194	2	A	6	B
	South	10	126	1	A	5-	A
Note: PFM = pedestrians per foot per minute							

TableB-16b

2009 Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	604	3	A	7+	C
	East	10	172	1	A	5+	B
River Avenue between 153rd St. and 151st St.	West	12.5	158	1	A	5-	A
	East	13	64	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	60	0	A	4	A
	East	13	8	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	60	0	A	4	A
	East	12.5	8	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	146	1	A	5+	B
	South	13	105	1	A	5-	A
Grand Concourse between 151st St. and 150th St.	West	12	39	0	A	4	A
	East	10	8	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	17	0	A	4	A
	South	8	11	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	187	2	A	6	B
	East	9	114	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	104	0	A	4	A
	East	7	93	1	A	5-	A
River Avenue between 150th St. and 149th St.	West	8	15	0	A	4	A
	East	17.5	32	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	215	2	A	6	B
	South	10	223	1	A	5+	B
Non-Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	227	1	A	5+	B
	East	10	113	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	223	1	A	5+	B
	East	13	101	1	A	5-	A
River Avenue between 151st and Garage Entrance	West	12.5	88	0	A	4	A
	East	13	12	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	88	0	A	4	A
	East	12.5	12	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	117	1	A	5-	A
	South	13	80	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	63	0	A	4	A
	East	10	14	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	19	0	A	4	A
	South	8	19	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	144	1	A	5+	B
	East	9	123	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	162	1	A	5-	A
	East	7	139	1	A	5+	B
River Avenue between 150th St. and 149th St.	West	8	22	0	A	4	A
	East	17.5	26	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	308	3	A	7-	B
	South	10	211	1	A	5+	B
Note: PFM = pedestrians per foot per minute							

Table B-16c

2009 Build Conditions: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	169	1	A	5-	A
	East	10	83	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	132	1	A	5-	A
	East	13	50	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	64	0	A	4	A
	East	13	5	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	64	0	A	4	A
	East	12.5	5	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	102	1	A	5-	A
	South	13	78	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	46	0	A	4	A
	East	10	12	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	11	0	A	4	A
	South	8	8	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	205	2	A	6	B
	East	9	87	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	127	1	A	5-	A
	East	7	111	1	A	5+	B
River Avenue between 150th St. and 149th St.	West	8	10	0	A	4	A
	East	17.5	24	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	247	2	A	6	B
	South	10	247	2	A	6	B

Note: PFM = pedestrians per foot per minute

Table B-17a

2009 Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Game Day Saturday Midday Peak Period		Game Day Saturday PM Peak Period		Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	160	A	120	A	178	A
	Southeast	94	A	69	A	134	A
	Southwest	4284	A	4284	A	535	A
	Northwest	127	A	156	A	161	A
River Avenue and 151st St	Northeast	116	A	212	A	125	A
	Southeast	359	A	537	A	285	A
	Southwest	76	A	97	A	63	A
	Northwest	90	A	127	A	88	A
Grand Concourse and 151st St	Southwest	4284	A	4284	A	535	A
	Northwest	127	A	156	A	161	A
River Avenue at Garage Entrance	Northeast	2044	A	1779	A	3902	A
	Southeast	2241	A	1954	A	4280	A
	Southwest	649	A	751	A	720	A
	Northwest	649	A	750	A	720	A
Grand Concourse and 150th St	Northeast	160	A	120	A	178	A
	Southeast	94	A	69	A	134	A
	Southwest	74	A	56	B	110	A
	Northwest	102	A	79	A	170	A
Exterior St. and 149th St	Southwest	204	A	168	A	118	A
	Northwest	285	A	245	A	98	A
River Avenue and 149th St	Northeast	306	A	353	A	376	A
	Southeast	297	A	352	A	338	A
Grand Concourse and 149th St	Northeast	153	A	72	A	161	A
	Southeast	189	A	69	A	224	A
	Southwest	51	B	27	C	49	B
	Northwest	62	A	31	C	62	A

Note: SFP = square feet per pedestrian

Table B-17b

2009 Build Conditions: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Non-Game Day Saturday Midday Peak Period		Non-Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	306	A	315	A
	Southeast	183	A	230	A
	Southwest	4284	A	4284	A
	Northwest	101	A	136	A
River Avenue and 151st St	Northeast	157	A	127	A
	Southeast	393	A	279	A
	Southwest	58	B	56	B
	Northwest	77	A	75	A
Grand Concourse and 151st St	Southwest	4284	A	4284	A
	Northwest	101	A	136	A
River Avenue at Garage Entrance	Northeast	2862	A	5367	A
	Southeast	3139	A	5888	A
	Southwest	498	A	677	A
	Northwest	499	A	677	A
Grand Concourse and 150th St	Northeast	306	A	315	A
	Southeast	183	A	230	A
	Southwest	125	A	168	A
	Northwest	160	A	250	A
Exterior St. and 149th St	Southwest	294	A	198	A
	Northwest	363	A	167	A
River Avenue and 149th St	Northeast	239	A	350	A
	Southeast	222	A	319	A
Grand Concourse and 149th St	Northeast	322	A	376	A
	Southeast	416	A	589	A
	Southwest	116	A	153	A
	Northwest	130	A	171	A

Note: SFP = square feet per pedestrian

Table B-18a

2009 Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	583	A	554	A	474	A
	East	15	163	A	158	A	77	A
	South	16	892	A	819	A	562	A
	West	12	55	B	46	B	34	C
River Avenue and 151st St	North	13	242	A	232	A	175	A
	East	12	474	A	427	A	261	A
	South	11.5	162	A	157	A	132	A
	West	14	244	A	240	A	171	A
Grand Concourse and 151st St	North	12.5	344	A	332	A	197	A
	South	16	1137	A	1095	A	620	A
	West	12	582	A	568	A	172	A
River Avenue and Garage Entrance	North	12	7290	A	6689	A	6147	A
	South	12	7290	A	7014	A	6147	A
	West	10	322	A	322	A	103	A
Grand Concourse and 150th St	North	12	245	A	236	A	134	A
	East	11.5	181	A	181	A	37	C
	South	11	141	A	136	A	77	A
	West	14	186	A	179	A	37	C
External St. and 149th St	North	12	148	A	137	A	86	A
	South	12.5	141	A	136	A	77	A
River Avenue and 149th St	North	11	51	B	43	B	14	E
	East	9.5	134	A	124	A	71	A
	South	12.5	1034	A	970	A	556	A
Grand Concourse and 149th St	North	16	101	A	92	A	66	A
	East	14	159	A	155	A	60	A
	South	18	117	A	111	A	77	A
	West	10	138	A	131	A	58	B

Note: SFP = square feet per pedestrian

Table B-18b
2009 Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday PM Peak Period								
River Avenue and 153rd St	North	10	207	A	187	A	168	A
	East	15	81	A	76	A	38	C
	South	16	104	A	96	A	65	A
	West	12	34	C	32	C	21	D
River Avenue and 151st St	North	13	298	A	286	A	216	A
	East	12	523	A	472	A	288	A
	South	11.5	202	A	195	A	164	A
	West	14	276	A	266	A	194	A
Grand Concourse and 151st St	North	12.5	325	A	313	A	186	A
	South	16	800	A	770	A	436	A
	West	12	444	A	433	A	131	A
River Avenue and Garage Entrance	North	12	5116	A	4150	A	3873	A
	South	12	5116	A	4277	A	3873	A
	West	10	254	A	254	A	61	A
Grand Concourse and 150th St	North	184	A	177	A	100	A	A
	East	139	A	137	A	29	C	C
	South	105	A	101	A	57	B	A
	West	154	A	148	A	31	C	C
External St. and 149th St	North	12	180	A	161	A	105	A
	South	12.5	105	A	101	A	57	B
River Avenue and 149th St	North	11	60	A	50	B	16	D
	East	9.5	173	A	163	A	92	A
	South	12.5	827	A	797	A	445	A
Grand Concourse and 149th St	North	16	180	A	162	A	119	A
	East	14	272	A	263	A	102	A
	South	18	147	A	140	A	97	A
	West	10	167	A	156	A	70	A

Note: SFP = square feet per pedestrian

Table B-18c

2009 Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1073	A	1009	A	605	A
	East	15	200	A	197	A	68	A
	South	16	1860	A	1653	A	797	A
	West	12	57	B	48	B	26	C
River Avenue and 151st St	North	13	297	A	290	A	148	A
	East	12	601	A	561	A	243	A
	South	11.5	193	A	189	A	109	A
	West	14	281	A	271	A	148	A
Grand Concourse and 151st St	North	12.5	101	A	97	A	62	A
	South	16	295	A	282	A	171	A
	West	12	174	A	170	A	52	B
River Avenue and Garage Entrance	North	12	8370	A	7535	A	4720	A
	South	12	8370	A	8153	A	4720	A
	West	10	368	A	368	A	83	A
Grand Concourse and 150th St	North	12	456	A	437	A	265	A
	East	11.5	172	A	169	A	36	C
	South	11	636	A	610	A	371	A
	West	14	303	A	292	A	62	A
External St. and 149th St	North	12	184	A	163	A	107	A
	South	12.5	636	A	610	A	371	A
River Avenue and 149th St	North	11	57	B	44	B	16	D
	East	9.5	147	A	137	A	78	A
	South	12.5	766	A	714	A	412	A
Grand Concourse and 149th St	North	16	124	A	106	A	82	A
	East	14	139	A	135	A	52	B
	South	18	84	A	80	A	55	B
	West	10	117	A	111	A	49	B

Note: SFP = square feet per pedestrian

Table B-18d

2009 Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	1425	A	1365	A	1159	A
	East	15	324	A	314	A	152	A
	South	16	4104	A	3583	A	2586	A
	West	12	113	A	101	A	69	A
River Avenue and 151st St	North	13	176	A	169	A	127	A
	East	12	392	A	383	A	216	A
	South	11.5	115	A	111	A	94	A
	West	14	193	A	171	A	135	A
Grand Concourse and 151st St	North	12.5	352	A	339	A	201	A
	South	16	2400	A	2311	A	1309	A
	West	12	1331	A	1298	A	393	A
River Avenue and Garage Entrance	North	12	7695	A	6442	A	6258	A
	South	12	7695	A	7369	A	6258	A
	West	10	238	A	238	A	76	A
Grand Concourse and 150th St	North	12	476	A	459	A	260	A
	East	11.5	327	A	321	A	68	A
	South	11	275	A	265	A	150	A
	West	14	263	A	253	A	53	B
External St. and 149th St	North	12	118	A	103	A	69	A
	South	12.5	275	A	265	A	150	A
River Avenue and 149th St	North	11	38	C	30	C	10	E
	East	9.5	101	A	94	A	53	B
	South	12.5	766	A	711	A	412	A
Grand Concourse and 149th St	North	16	126	A	114	A	83	A
	East	14	235	A	227	A	88	A
	South	18	101	A	96	A	66	A
	West	10	95	A	89	A	40	B

Note: SFP = square feet per pedestrian

Table B-18e

2009 Build Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1744	A	1639	A	983	A
	East	15	494	A	479	A	168	A
	South	16	5580	A	5270	A	2392	A
	West	12	157	A	142	A	71	A
River Avenue and 151st St	North	13	271	A	266	A	135	A
	East	12	575	A	564	A	232	A
	South	11.5	178	A	177	A	101	A
	West	14	266	A	266	A	140	A
Grand Concourse and 151st St	North	12.5	160	A	154	A	98	A
	South	16	572	A	548	A	333	A
	West	12	318	A	311	A	95	A
River Avenue and Garage Entrance	North	12	7830	A	6727	A	4594	A
	South	12	7830	A	7630	A	4594	A
	West	10	359	A	359	A	82	A
Grand Concourse and 150th St	North	12	911	A	874	A	531	A
	East	11.5	292	A	287	A	61	A
	South	11	1028	A	986	A	599	A
	West	14	401	A	387	A	82	A
External St. and 149th St	North	12	160	A	142	A	93	A
	South	12.5	1028	A	986	A	599	A
River Avenue and 149th St	North	11	52	B	39	C	14	E
	East	9.5	135	A	126	A	72	A
	South	12.5	984	A	914	A	530	A
Grand Concourse and 149th St	North	16	125	A	104	A	82	A
	East	14	144	A	139	A	54	B
	South	18	86	A	83	A	57	B
	West	10	92	A	86	A	38	C

Note: SFP = square feet per pedestrian

PEDESTRIAN
2014 BUILD CONDITIONS

Table B-19a

2014 Build Condition: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	541	3	A	7+	C
	East	10	190	1	A	5+	B
River Avenue between 153rd St. and 151st St.	West	12.5	167	1	A	5-	A
	East	13	81	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	69	0	A	4	A
	East	13	19	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	61	0	A	4	A
	East	12.5	69	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	162	1	A	5+	B
	South	13	83	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	47	0	A	4	A
	East	10	12	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	35	0	A	4	A
	South	8	35	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	109	1	A	5-	A
	East	9	131	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	134	1	A	5-	A
	East	7	112	1	A	5+	B
River Avenue between 150th St. and 149th St.	West	8	41	0	A	4	A
	East	17.5	28	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	225	2	A	6	B
	South	10	174	1	A	5+	B
Game Day Saturday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	658	4	A	8	C
	East	10	307	2	A	6	B
River Avenue between 153rd St. and 151st St.	West	12.5	138	1	A	5-	A
	East	13	70	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	59	0	A	4	A
	East	13	21	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	59	0	A	4	A
	East	12.5	21	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	196	2	A	6	B
	South	13	88	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	37	0	A	4	A
	East	10	9	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	44	0	A	4	A
	South	8	44	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	103	1	A	5-	A
	East	9	114	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	109	1	A	5-	A
	East	7	89	1	A	5-	A
River Avenue between 150th St. and 149th St.	West	8	53	0	A	4	A
	East	17.5	29	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	196	2	A	6	B
	South	10	131	1	A	5-	A

Note: PFM = pedestrians per foot per minute

TableB-19b

2014 Build Condition: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	616	3	A	7+	C
	East	10	176	1	A	5+	B
River Avenue between 153rd St. and 151st St.	West	12.5	160	1	A	5-	A
	East	13	66	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	62	0	A	4	A
	East	13	9	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	62	0	A	4	A
	East	12.5	9	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	151	1	A	5+	B
	South	13	108	1	A	5-	A
Grand Concourse between 151st St. and 150th St.	West	12	266	1	A	5+	B
	East	10	185	1	A	5+	B
150th St. between Walton Ave. and Grand Concourse	North	8	13	0	A	4	A
	South	8	12	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	192	2	A	6	B
	East	9	117	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	107	0	A	4	A
	East	7	94	1	A	5-	A
River Avenue between 150th St. and 149th St.	West	8	15	0	A	4	A
	East	17.5	33	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	218	2	A	6	B
	South	10	228	2	A	6	B
Non-Game Day Saturday Midday Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	230	1	A	5+	B
	East	10	117	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	226	1	A	5+	B
	East	13	105	1	A	5-	A
River Avenue between 151st and Garage Entrance	West	12.5	90	0	A	4	A
	East	13	14	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	90	1	A	5-	A
	East	12.5	14	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	117	1	A	5-	A
	South	13	80	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	63	0	A	4	A
	East	10	14	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	20	0	A	4	A
	South	8	20	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	146	1	A	5+	B
	East	9	126	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	167	1	A	5-	A
	East	7	141	1	A	5+	B
River Avenue between 150th St. and 149th St.	West	8	23	0	A	4	A
	East	17.5	27	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	314	3	A	7-	B
	South	10	216	1	A	5+	B
Note: PFM = pedestrians per foot per minute							

Table B-19c

2014 Build Condition: Pedestrian LOS Analysis for Sidewalks

Location	Sidewalk	Effective Width (feet)	15-Minute Two-Way Volume	Average		Platoon	
				PFM	LOS	PFM	LOS
Non-Game Day Weekday PM Peak Period							
River Avenue between 157th St. and 153rd St.	West	12	171	1	A	5-	A
	East	10	86	1	A	5-	A
River Avenue between 153rd St. and 151st St.	West	12.5	172	1	A	5-	A
	East	13	72	0	A	4	A
River Avenue between 151st and Garage Entrance	West	12.5	66	0	A	4	A
	East	13	7	0	A	4	A
River Avenue between Garage Entrance and 150th St.	West	12	66	0	A	4	A
	East	12.5	7	0	A	4	A
151st St. between Walton Ave. and Grand Concourse	North	8	102	1	A	5-	A
	South	13	80	0	A	4	A
Grand Concourse between 151st St. and 150th St.	West	12	46	0	A	4	A
	East	10	12	0	A	4	A
150th St. between Walton Ave. and Grand Concourse	North	8	12	0	A	4	A
	South	8	9	0	A	4	A
Grand Concourse between 150th St. and 149th St.	West	8	209	2	A	6	B
	East	9	89	1	A	5-	A
Exterior St. between 150th St. and 149th St.	West	14.5	131	1	A	5-	A
	East	7	112	1	A	5+	B
River Avenue between 150th St. and 149th St.	West	8	11	0	A	4	A
	East	17.5	25	0	A	4	A
149th St. between Walton Ave. and Grand Concourse	North	8	251	2	A	6	B
	South	10	252	2	A	6	B

Note: PFM = pedestrians per foot per minute

Table B-20a

2014 Build Condition: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Game Day Saturday Midday Peak Period		Game Day Saturday PM Peak Period		Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	150	A	70	A	159	A
	Southeast	185	A	66	A	222	A
	Southwest	50	B	28	C	47	B
	Northwest	60	A	30	C	60	A
River Avenue and 151st St	Northeast	299	A	334	A	366	A
	Southeast	289	A	339	A	331	A
	Southwest	206	A	245	A	226	A
	Northwest	172	A	203	A	188	A
Grand Concourse and 151st St	Southwest	198	A	163	A	115	A
	Northwest	276	A	240	A	96	A
River Avenue and Garage Entrance	Northeast	1950	A	1779	A	3577	A
	Southeast	2139	A	1954	A	3923	A
	Southwest	631	A	726	A	698	A
	Northwest	631	A	725	A	698	A
Grand Concourse and 150th St	Northeast	155	A	117	A	174	A
	Southeast	91	A	67	A	130	A
	Southwest	72	A	54	B	107	A
	Northwest	98	A	77	A	166	A
Exterior St. and 149th St	Southwest	69	A	4284	A	535	A
	Northwest	149	A	148	A	156	A
River Avenue and 149th St	Northeast	113	A	87	A	78	A
	Southeast	350	A	179	A	153	A
Grand Concourse and 149th St	Northeast	155	A	206	A	122	A
	Southeast	91	A	527	A	278	A
	Southwest	4284	A	95	A	61	A
	Northwest	124	A	124	A	85	A

Note: SFP = square feet per pedestrian

Table B-20b

2014 Build Condition: Pedestrian LOS Analysis for Corner Reservoirs

Location	Corner	Non-Game Day Saturday Midday Peak Period		Non-Game Day Weekday PM Peak Period	
		SFP	LOS	SFP	LOS
River Avenue and 153rd St	Northeast	314	A	372	A
	Southeast	404	A	580	A
	Southwest	115	A	151	A
	Northwest	128	A	169	A
River Avenue and 151st St	Northeast	235	A	341	A
	Southeast	217	A	310	A
	Southwest	154	A	210	A
	Northwest	129	A	175	A
Grand Concourse and 151st St	Southwest	288	A	192	A
	Northwest	356	A	164	A
River Avenue and Garage Entrance	Northeast	2525	A	4293	A
	Southeast	2770	A	4710	A
	Southwest	488	A	658	A
	Northwest	488	A	658	A
Grand Concourse and 150th St	Northeast	293	A	297	A
	Southeast	179	A	221	A
	Southwest	123	A	165	A
	Northwest	156	A	238	A
Exterior St. and 149th St	Southwest	293	A	4284	A
	Northwest	179	A	132	A
River Avenue and 149th St	Northeast	4284	A	71	A
	Southeast	98	A	145	A
Grand Concourse and 149th St	Northeast	153	A	124	A
	Southeast	387	A	274	A
	Southwest	57	B	55	B
	Northwest	76	A	74	A

Note: SFP = square feet per pedestrian

Table B-21a

2014 Build Condition: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	558	A	530	A	454	A
	East	15	159	A	154	A	75	A
	South	16	855	A	778	A	539	A
	West	12	53	B	45	B	33	C
River Avenue and 151st St	North	13	235	A	226	A	170	A
	East	12	474	A	426	A	261	A
	South	11.5	157	A	152	A	128	A
	West	14	238	A	224	A	167	A
Grand Concourse and 151st St	North	12.5	338	A	326	A	193	A
	South	16	1080	A	1040	A	589	A
	West	12	559	A	545	A	165	A
River Avenue and Garage Entrance	North	12	7290	A	6689	A	6147	A
	South	12	7290	A	7014	A	6147	A
	West	10	313	A	313	A	100	A
Grand Concourse and 150th St	North	12	238	A	229	A	130	A
	East	11.5	175	A	172	A	36	C
	South	11	138	A	132	A	75	A
	West	14	181	A	174	A	36	C
External St. and 149th St	North	12	144	A	125	A	84	A
	South	12.5	138	A	132	A	75	A
River Avenue and 149th St	North	11	49	B	37	C	13	E
	East	9.5	131	A	121	A	70	A
	South	12.5	984	A	924	A	530	A
Grand Concourse and 149th St	North	16	98	A	89	A	64	A
	East	14	156	A	151	A	58	B
	South	18	114	A	108	A	75	A
	West	10	136	A	129	A	57	B

Note: SFP = square feet per pedestrian

Table B-21b
2014 Build Condition: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday PM Peak Period								
River Avenue and 153rd St	North	10	200	A	181	A	163	A
	East	15	79	A	75	A	37	C
	South	16	102	A	95	A	64	A
	West	12	34	C	32	C	21	D
River Avenue and 151st St	North	13	283	A	272	A	205	A
	East	12	502	A	450	A	277	A
	South	11.5	197	A	192	A	160	A
	West	14	271	A	260	A	190	A
Grand Concourse and 151st St	North	12.5	325	A	313	A	186	A
	South	16	800	A	770	A	436	A
	West	12	430	A	419	A	127	A
River Avenue and Garage Entrance	North	12	5116	A	4150	A	3873	A
	South	12	5116	A	4277	A	3873	A
	West	10	246	A	246	A	59	B
Grand Concourse and 150th St	North	12	180	A	173	A	98	A
	East	11.5	136	A	133	A	28	C
	South	11	102	A	99	A	56	B
	West	14	149	A	143	A	30	C
External St. and 149th St	North	12	171	A	152	A	100	A
	South	12.5	102	A	99	A	56	B
River Avenue and 149th St	North	11	58	B	48	B	16	D
	East	9.5	170	A	160	A	90	A
	South	12.5	766	A	740	A	412	A
Grand Concourse and 149th St	North	16	176	A	158	A	116	A
	East	14	266	A	257	A	100	A
	South	18	145	A	138	A	95	A
	West	10	163	A	151	A	68	A

Note: SFP = square feet per pedestrian

Table B-21c

2014 Build Condition: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1073	A	1009	A	605	A
	East	15	198	A	194	A	67	A
	South	16	1860	A	1653	A	797	A
	West	12	55	B	47	B	25	C
River Avenue and 151st St	North	13	293	A	286	A	146	A
	East	12	588	A	547	A	237	A
	South	11.5	191	A	187	A	108	A
	West	14	276	A	265	A	145	A
Grand Concourse and 151st St	North	12.5	99	A	95	A	61	A
	South	16	290	A	278	A	169	A
	West	12	170	A	166	A	51	B
River Avenue and Garage Entrance	North	12	8370	A	7735	A	4720	A
	South	12	8370	A	8103	A	4720	A
	West	10	356	A	356	A	81	A
Grand Concourse and 150th St	North	12	456	A	437	A	265	A
	East	11.5	168	A	165	A	35	C
	South	11	607	A	582	A	354	A
	West	14	295	A	284	A	60	A
External St. and 149th St	North	12	179	A	157	A	104	A
	South	12.5	607	A	582	A	354	A
River Avenue and 149th St	North	11	56	B	43	B	15	D
	East	9.5	144	A	134	A	76	A
	South	12.5	713	A	665	A	384	A
Grand Concourse and 149th St	North	16	122	A	105	A	80	A
	East	14	136	A	132	A	51	B
	South	18	82	A	78	A	54	B
	West	10	115	A	108	A	48	B

Note: SFP = square feet per pedestrian

Table B-21d

2014 Build Condition: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Saturday Midday Peak Period								
River Avenue and 153rd St	North	10	1425	A	1365	A	1159	A
	East	15	314	A	304	A	148	A
	South	16	4104	A	3583	A	2586	A
	West	12	111	A	100	A	68	A
River Avenue and 151st St	North	13	172	A	165	A	125	A
	East	12	392	A	383	A	216	A
	South	11.5	112	A	108	A	91	A
	West	14	189	A	168	A	132	A
Grand Concourse and 151st St	North	12.5	344	A	332	A	197	A
	South	16	2400	A	2311	A	1309	A
	West	12	1270	A	1239	A	376	A
River Avenue and Garage Entrance	North	12	7695	A	6442	A	6258	A
	South	12	7695	A	7369	A	6258	A
	West	10	233	A	233	A	75	A
Grand Concourse and 150th St	North	12	438	A	422	A	239	A
	East	11.5	319	A	313	A	66	A
	South	11	270	A	260	A	147	A
	West	14	261	A	251	A	52	B
External St. and 149th St	North	12	115	A	99	A	67	A
	South	12.5	270	A	260	A	147	A
River Avenue and 149th St	North	11	38	C	30	C	10	E
	East	9.5	99	A	92	A	53	B
	South	12.5	713	A	667	A	384	A
Grand Concourse and 149th St	North	16	123	A	112	A	81	A
	East	14	230	A	223	A	86	A
	South	18	99	A	94	A	65	A
	West	10	93	A	89	A	39	C

Note: SFP = square feet per pedestrian

Table B-21e

2014 Build Condition: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non-Game Day Weekday PM Peak Period								
River Avenue and 153rd St	North	10	1744	A	1639	A	983	A
	East	15	486	A	477	A	166	A
	South	16	5580	A	5157	A	2392	A
	West	12	155	A	140	A	71	A
River Avenue and 151st St	North	13	267	A	260	A	133	A
	East	12	563	A	550	A	227	A
	South	11.5	174	A	171	A	98	A
	West	14	262	A	244	A	138	A
Grand Concourse and 151st St	North	12.5	157	A	150	A	96	A
	South	16	540	A	518	A	314	A
	West	12	311	A	304	A	93	A
River Avenue and Garage Entrance	North	12	7560	A	6457	A	4534	A
	South	12	7560	A	7259	A	4534	A
	West	10	355	A	355	A	81	A
Grand Concourse and 150th St	North	12	729	A	699	A	424	A
	East	11.5	283	A	278	A	60	A
	South	11	955	A	915	A	556	A
	West	14	396	A	382	A	81	A
External St. and 149th St	North	12	155	A	136	A	91	A
	South	12.5	955	A	915	A	556	A
River Avenue and 149th St	North	11	51	B	38	C	14	E
	East	9.5	133	A	124	A	71	A
	South	12.5	940	A	872	A	506	A
Grand Concourse and 149th St	North	16	123	A	102	A	81	A
	East	14	141	A	136	A	53	B
	South	18	85	A	82	A	56	B
	West	10	90	A	84	A	38	C

Note: SFP = square feet per pedestrian

PEDESTRIAN
2009 MITIGATION CONDITIONS

2009 Mitigation Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday Midday								
E. 149TH ST./EXTERIOR ST.	NORTH	12	97	A	81	A	54	B
	EAST	0	0	F	0	F		F
	SOUTH	12.5	0	F	0	F		F
	WEST	12	0	F	0	F		F
E. 149TH ST./RIVER AVE.	NORTH	18	54	B	43	B	20	D
	EAST	9.5	138	A	129	A	81	A
	SOUTH	12.5	675	A	612	A	469	A
	WEST	0	0	F	0	F		F
Game Day Saturday PM								
E. 149TH ST./EXTERIOR ST. (OPTION 1)	NORTH	12	107	A	79	A	64	A
	EAST	0	138	A	129	A	81	A
	SOUTH	12.5	675	A	612	A	469	A
	WEST	12	0	F	0	F		F
E. 149TH ST./EXTERIOR ST. (OPTION 2)	NORTH	12	114	A	86	A	66	A
	EAST	0	138	A	129	A	81	A
	SOUTH	12.5	675	A	612	A	469	A
	WEST	12	0	F	0	F		F
E. 149TH ST./RIVER AVE. (OPTION 1)	NORTH	16	52	B	38	C	21	D
	EAST	9.5	187	A	178	A	108	A
	SOUTH	12.5	489	A	460	A	365	A
	WEST	0	33	C	31	C	21	D
E. 149TH ST./RIVER AVE. (OPTION 2)	NORTH	15	52	B	39	C	20	D
	EAST	9.5	218	A	210	A	126	A
	SOUTH	12.5	523	A	493	A	372	A
	WEST	0	33	C	31	C	21	D
E. 151ST ST./RIVER AVE.	NORTH	13	125	A	118	A	127	A
	EAST	12	338	A	303	A	164	A
	SOUTH	11.5	85	A	81	A	98	A
	WEST	14	178	A	171	A	115	A
E. 153RD ST./RIVER AVE.	NORTH	10	218	A	198	A	171	A
	EAST	15	78	A	73	A	37	C
	SOUTH	16	109	A	102	A	67	A
	WEST	12	33	C	31	C	21	D
Game Day Weekday PM								
E. 149TH ST./EXTERIOR ST.	NORTH	12	113	A	83	A	66	A
	EAST	0	134	A	130	A	50	B
	SOUTH	12.5	92	A	89	A	57	B
	WEST	12	113	A	106	A	47	B
E. 149TH ST./GRAND CONCOURSE	NORTH	16	136	A	119	A	84	A
	EAST	14	134	A	130	A	50	B
	SOUTH	18	92	A	89	A	57	B
	WEST	10	113	A	106	A	47	B
E. 149TH ST./RIVER AVE.	NORTH	16	51	B	34	C	20	D
	EAST	9.5	157	A	148	A	91	A
	SOUTH	12.5	469	A	417	A	341	A
	WEST	0	113	A	106	A	47	B

Note: SFP = square feet per pedestrian

Appendix B-22b

2009 Mitigation Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non Game Saturday Midday								
E. 149TH ST./EXTERIOR ST.	NORTH	12	72	A	51	B	43	B
	EAST	0	226	A	218	A	83	A
	SOUTH	12.5	111	A	106	A	68	A
	WEST	12	92	A	86	A	38	C
E. 149TH ST./GRAND CONCOURSE	NORTH	16	138	A	127	A	85	A
	EAST	14	226	A	218	A	83	A
	SOUTH	18	111	A	106	A	68	A
	WEST	10	92	A	86	A	38	C
E. 149TH ST./RIVER AVE.	NORTH	24	51	B	35	C	20	D
	EAST	9.5	107	A	101	A	62	A
	SOUTH	12.5	469	A	414	A	341	A
	WEST	0	92	A	86	A	38	C
Non Game Saturday PM								
E. 149TH ST./EXTERIOR ST.	NORTH	12	114	A	88	A	61	A
	EAST	0	141	A	135	A	52	B
	SOUTH	12.5	92	A	89	A	58	B
	WEST	12	89	A	83	A	37	C
E. 149TH ST./GRAND CONCOURSE	NORTH	16	133	A	112	A	84	A
	EAST	14	141	A	135	A	52	B
	SOUTH	18	92	A	89	A	58	B
	WEST	10	89	A	83	A	37	C
E. 149TH ST./RIVER AVE.	NORTH	17	57	B	39	C	20	D
	EAST	9.5	139	A	132	A	81	A
	SOUTH	12.5	703	A	632	A	459	A
	WEST	0	89	A	83	A	37	C
E. 151ST ST./RIVER AVE.	NORTH	13	253	A	249	A	131	A
	EAST	12	599	A	587	A	241	A
	SOUTH	11.5	167	A	165	A	98	A
	WEST	14	277	A	277	A	145	A
E. 153RD ST./RIVER AVE.	NORTH	10	1125	A	1021	A	855	A
	EAST	15	604	A	590	A	215	A
	SOUTH	16	3600	A	3290	A	2064	A
	WEST	12	192	A	177	A	90	A
Note: SFP = square feet per pedestrian								

PEDESTRIAN
2014 MITIGATION CONDITIONS

Appendix B-23a

2014 Mitigation Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Game Day Saturday Midday								
E. 149TH ST./EXTERIOR ST.	NORTH	12	94	A	67	A	53	B
	EAST	0	604	A	590	A	215	A
	SOUTH	12.5	3600	A	3290	A	2064	A
	WEST	12	192	A	177	A	90	A
E. 149TH ST./RIVER AVE.	NORTH	18	53	B	34	C	20	D
	EAST	9.5	136	A	127	A	79	A
	SOUTH	12.5	643	A	583	A	446	A
	WEST	0	192	A	177	A	90	A
E. 151ST ST./RIVER AVE.	NORTH	13	222	A	214	A	167	A
	EAST	12	489	A	441	A	268	A
	SOUTH	11.5	149	A	144	A	125	A
	WEST	14	246	A	231	A	171	A
Game Day Saturday PM								
E. 149TH ST./EXTERIOR ST. (OPTION 1)	NORTH	12	101	A	74	A	61	A
	EAST	0	489	A	441	A	268	A
	SOUTH	12.5	149	A	144	A	125	A
	WEST	12	246	A	231	A	171	A
E. 149TH ST./EXTERIOR ST. (OPTION 2)	NORTH	12	108	A	81	A	62	A
	EAST	0	489	A	441	A	268	A
	SOUTH	12.5	149	A	144	A	125	A
	WEST	12	246	A	231	A	171	A
E. 149TH ST./RIVER AVE. (OPTION 1)	NORTH	16	50	B	36	C	20	D
	EAST	9.5	184	A	175	A	106	A
	SOUTH	12.5	453	A	428	A	338	A
	WEST	0	246	A	231	A	171	A
E. 149TH ST./RIVER AVE. (OPTION 2)	NORTH	16	53	B	40	B	20	D
	EAST	9.5	215	A	206	A	123	A
	SOUTH	12.5	484	A	459	A	344	A
	WEST	0	246	A	231	A	171	A
E. 151ST ST./RIVER AVE.	NORTH	13	119	A	112	A	121	A
	EAST	12	324	A	289	A	157	A
	SOUTH	11.5	83	A	80	A	96	A
	WEST	14	175	A	168	A	113	A
E. 153RD ST./RIVER AVE.	NORTH	10	211	A	191	A	166	A
	EAST	15	76	A	72	A	36	C
	SOUTH	16	107	A	100	A	66	A
	WEST	12	32	C	30	C	20	D
Game Day Weekday PM								
E. 149TH ST./EXTERIOR ST.	NORTH	12	109	A	79	A	65	A
	EAST	0	133	A	129	A	49	B
	SOUTH	12.5	87	A	84	A	55	B
	WEST	12	112	A	105	A	47	B
E. 149TH ST./GRAND CONCOURSE	NORTH	16	130	A	113	A	82	A
	EAST	14	133	A	129	A	49	B
	SOUTH	18	87	A	84	A	55	B
	WEST	10	112	A	105	A	47	B
E. 149TH ST./RIVER AVE.	NORTH	16	50	B	32	C	20	D
	EAST	9.5	153	A	144	A	89	A
	SOUTH	12.5	436	A	388	A	317	A
	WEST	0	112	A	105	A	47	B

Note: SFP = square feet per pedestrian

2014 Mitigation Conditions: Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	Without Vehicles		With Vehicles		Maximum Surge	
			SFP	LOS	SFP	LOS	SFP	LOS
Non Game Day Saturday Midday								
E. 149TH ST./EXTERIOR ST.	NORTH	12	70	A	48	B	41	B
	EAST	0	225	A	217	A	83	A
	SOUTH	12.5	109	A	104	A	67	A
	WEST	12	91	A	87	A	38	C
E. 149TH ST./GRAND CONCOURSE	NORTH	16	135	A	124	A	83	A
	EAST	14	225	A	217	A	83	A
	SOUTH	18	109	A	104	A	67	A
	WEST	10	91	A	87	A	38	C
E. 149TH ST./RIVER AVE.	NORTH	24	50	B	34	C	20	D
	EAST	9.5	106	A	100	A	61	A
	SOUTH	12.5	436	A	390	A	317	A
	WEST	0	91	A	87	A	38	C
Non Game Day Weekday PM								
E. 149TH ST./EXTERIOR ST.	NORTH	12	111	A	84	A	59	B
	EAST	0	138	A	133	A	51	B
	SOUTH	12.5	91	A	87	A	57	B
	WEST	12	87	A	81	A	36	C
E. 149TH ST./GRAND CONCOURSE	NORTH	16	131	A	110	A	83	A
	EAST	14	138	A	133	A	51	B
	SOUTH	18	91	A	87	A	57	B
	WEST	10	87	A	81	A	36	C
E. 149TH ST./RIVER AVE.	NORTH	17	56	B	38	C	20	D
	EAST	9.5	135	A	128	A	79	A
	SOUTH	12.5	671	A	604	A	438	A
	WEST	0	87	A	81	A	36	C
E. 151ST ST./RIVER AVE.	NORTH	13	249	A	243	A	129	A
	EAST	12	586	A	573	A	236	A
	SOUTH	11.5	163	A	160	A	96	A
	WEST	14	272	A	255	A	143	A
E. 153RD ST./RIVER AVE.	NORTH	10	1069	A	964	A	845	A
	EAST	15	606	A	596	A	218	A
	SOUTH	16	3420	A	2997	A	2039	A
	WEST	12	193	A	178	A	91	A

Note: SFP = square feet per pedestrian

PEDESTRIAN
**DETAILED DESCRIPTION OF
IMPROVEMENTS**

Appendix B-24

2009 Conditions: No Build vs. Build with Improvements
Maximum Surge Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	No Build		Build		Width (feet)	Build with Improvements		Description
			SFP	LOS	SFP	LOS		LOS	SFP	
Game Day Saturday MIDDAY										
E. 149th Street at River Avenue	North	11	79	A	14	E	18	20	D	Widen by 7 feet
Game Day Saturday PM										
E. 149th Street at River Avenue (OPTION 1)	North	11	73	A	16	D	16	21	D	Widen by 5 feet
E. 149th Street at River Avenue (OPTION 2)	North	11	73	A	16	D	15	20	D	Widen by 4 feet
Game Day Weekday PM										
E. 149th Street at River Avenue	North	11	105	A	16	D	16	20	D	Widen by 5 Feet
Non-Game Day Saturday MIDDAY										
E. 149th Street at River Avenue	North	11	87	A	10	E	24	20	D	Widen by 13 Feet
Non-Game Day Weekday PM										
E. 149th Street at River Avenue	North	11	92	A	14	E	17	20	D	Widen by 6 Feet

Appendix B-25

2014 Conditions: No Build vs. Build with Improvements
Maximum Surge Pedestrian LOS Analysis for Crosswalks

Location	Crosswalk	Width (feet)	No Build		Build		Width (feet)	Build with Improvements		Description
			SFP	LOS	SFP	LOS		LOS	SFP	
Game Day Saturday MIDDAY										
E. 149th Street at River Avenue	North	11	77	A	13	E	18	20	D	Widen by 7 feet
Game Day Saturday PM										
E. 149th Street at River Avenue (OPTION 1)	North	11	72	A	16	D	16	20	D	Widen by 5 feet
E. 149th Street at River Avenue (OPTION 2)	North	11	72	A	16	D	16	20	D	Widen by 5 feet
Game Day Weekday PM										
E. 149th Street at River Avenue	North	11	103	A	15	D	16	20	D	Widen by 5 Feet
Non-Game Day Saturday MIDDAY										
E. 149th Street at River Avenue	North	11	85	A	10	E	24	20	D	Widen by 13 Feet
Non-Game Day Weekday PM										
E. 149th Street at River Avenue	North	11	90	A	14	E	17	20	D	Widen by 6 Feet