

**Appendix F**  
**Conceptual Analysis Transportation**





**Table F-1 (cont'd)**  
**2021 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis**  
**Signalized Intersections**

Int.	Weekday AM								Weekday Midday								Weekday PM								Saturday								
	2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action				
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	
Madison Avenue & East 46th Street																																	
EB NB	LT	0.52	23.3	C	LT	0.54	23.6	C	T	0.48	22.2	C	T	0.49	22.4	C	T	0.53	23.1	C	T	0.59	24.1	C									
	T	0.89	26.5	C	T	0.93	31.2	C	T	0.75	24.8	C	T	0.78	19.0	B	T	0.95	32.0	C	T	0.99	40.7	D									
	R	0.31	12.4	B	R	0.34	13.2	B	R	0.26	11.6	B	R	0.33	12.8	B	R	0.27	11.8	B	R	0.29	12.3	B									
	Int.		24.5	C	Int.		27.7	C	Int.		19.0	B	Int.		19.6	B	Int.		28.1	C	Int.		33.9	C									
Madison Avenue & East 44th Street																																	
EB NB	LT	0.95	60.9	E	LT	1.05	86.7	F +	LT	0.85	45.6	D	LT	0.95	62.6	E +	LT	0.87	48.4	D	LT	1.04	87.1	F +	LT	0.66	30.2	C	LT	0.74	34.1	C	
	T	1.10	77.5	E	T	1.15	93.7	F +	T	0.89	24.8	C	T	0.92	28.8	C	T	0.98	37.8	D	T	1.02	47.8	D +	T	0.78	18.7	B	T	0.83	20.8	C	
	R	0.20	11.6	B	R	0.18	11.2	B	R	0.25	12.6	B	R	0.51	20.6	C	R	0.23	12.8	B	R	0.24	13.0	B	R	0.10	9.7	A	R	0.22	11.3	B	
	Int.		72.1	E	Int.		90.1	F	Int.		28.7	C	Int.		35.6	D	Int.		39.3	D	Int.		55.7	E	Int.		21.0	C	Int.		23.3	C	
Madison Avenue & East 43rd Street																																	
WB NB	T	0.38	21.9	C	T	0.43	22.9	C	T	0.42	22.6	C	T	0.24	19.6	B	T	0.22	19.4	B	T	0.22	19.4	B	T	0.21	19.2	B	T	0.06	17.4	B	
	T	0.34	22.9	C	T	0.50	27.8	C	R	0.40	23.6	C	R	0.55	28.5	C	R	0.30	22.1	C	R	0.40	24.6	C	R	0.33	21.5	C	R	0.48	25.1	C	
	L	0.82	42.2	D	L	1.02	85.8	F +	L	0.99	80.0+	F	L	0.98	78.6	E	L	1.20	147.6	F	L	1.25	165.4	F +	L	0.36	13.2	B	L	0.39	14.0	B	
	T	0.88	24.6	C	T	0.89	25.2	C	T	0.72	16.7	B	T	0.75	17.6	B	T	0.82	20.0-	B	T	0.83	20.8	C	T	0.66	15.2	B	T	0.71	16.2	B	
Int.		26.2	C	Int.		32.6	C	Int.		25.8	C	Int.		26.4	C	Int.		39.1	D	Int.		42.5	D	Int.		16.0	B	Int.		17.1	B		
Madison Avenue & East 42nd Street																																	
EB WB NB	LT	0.74	29.4	C	LT	0.76	30.4	C	LT	0.80	32.0	C	LT	0.82	32.8	C	LT	0.78	31.0	C	LT	0.82	33.6	C	LT	0.85	34.9	C	LT	0.87	36.5	D	
	T	1.12	94.3	F	T	1.14	101.3	F +	T	0.96	45.9	D	T	1.06	73.1	E +	T	1.02	61.6	E	T	1.07	74.7	E +	T	0.75	28.2	C	T	0.85	33.5	C	
	LT	1.14	90.2	F	LT	1.17	102.0	F +	LT	1.05	55.5	E	LT	1.08	68.9	E +	L	0.10	12.3	B	L	0.10	12.3	B	L	0.07	11.9	B	L	0.07	11.9	B	
	R	0.40	14.3	B	R	0.42	14.9	B	R	0.29	12.0	B	R	0.29	12.0	B	R	0.99	39.1	D	T	1.01	45.1	D +	T	0.79	18.7	B	T	0.84	21.0	C	
Int.		76.8	E	Int.		84.4	F	Int.		45.6	D	Int.		60.6	E	Int.		43.4	D	Int.		50.9	D	Int.		25.6	C	Int.		28.6	C		
Fifth Avenue & East 47th Street																																	
WB SB	L	0.27	35.4	D	L	0.35	37.1	D	L	0.56	43.4	D	L	0.57	43.8	D	L	0.51	41.2	D	L	0.52	41.6	D									
	T	0.63	25.1	C	T	0.67	26.5	C	T	0.58	23.7	C	T	0.60	24.1	C	T	0.44	20.1	C	T	0.57	23.1	C									
	T	1.22	124.8	F	T	1.24	133.3	F +	T	0.97	35.1	D	T	0.99	39.6	D	T	0.98	36.4	D	T	0.99	38.2	D									
	R	0.36	17.9	B	R	0.36	17.9	B	R	0.69	40.3	D	R	0.69	40.3	D	R	0.55	30.2	C	R	0.55	30.2	C									
Int.		106.6	F	Int.		112.8	F	Int.		34.3	C	Int.		37.7	D	Int.		34.6	C	Int.		35.9	D										
Fifth Avenue & West 46th Street																																	
EB SB	TR	0.39	21.0	C	TR	0.41	21.2	C	T	0.39	21.0	C	T	0.40	21.1	C	T	0.41	21.1	C	T	0.46	21.9	C									
	LT	1.11	72.6	E	LT	1.13	82.9	F +	LT	0.93	25.3	C	LT	0.95	27.6	C	LT	1.01	40.5	D	LT	1.02	42.9	D									
	Int.		65.5	E	Int.		74.2	E	Int.		24.5	C	Int.		26.4	C	Int.		37.0	D	Int.		38.8	D									
Fifth Avenue & West 44th Street																																	
EB SB	T	0.40	22.1	C	T	0.42	22.4	C	T	0.36	21.3	C	T	0.37	21.4	C	T	0.38	21.5	C	T	0.46	23.0	C									
	R	0.94	65.4	E	R	0.95	66.8	E	R	1.01	82.0	F	R	1.01	83.8	F	R	1.12	118.9	F	R	1.20	150.0	F									
	LT	1.12	80.9	F	LT	1.16	91.1	F +	LT	0.89	22.3	C	LT	0.93	25.3	C	LT	0.86	20.5	C	LT	0.87	21.1	C									
Int.		74.2	E	Int.		86.0	F	Int.		29.8	C	Int.		32.3	C	Int.		33.3	C	Int.		38.5	D										
Fifth Avenue & 42nd Street																																	
EB WB SB	T	0.63	25.2	C	T	0.64	25.5	C	T	0.68	26.4	C	T	0.69	26.7	C	T	0.62	24.9	C	T	0.64	25.4	C	T	0.77	29.6	C	T	0.79	30.4	C	
	R	0.17	21.1	C	R	0.17	21.1	C	R	0.23	22.8	C	R	0.23	22.8	C	R	0.20	21.8	C	R	0.20	21.8	C	R	0.21	22.0	C	R	0.21	22.0	C	
	LT	1.20	125.9	F	LT	1.21	133.5	F +	LT	1.09	85.4	F	LT	1.21	130.7	F +	LT	1.21	131.0	F	LT	1.26	151.0	F +	LT	0.85	34.0	C	LT	0.97	48.2	D +	
	LT	1.00	36.6	D	LT	1.00	37.2	D	LT	0.85	19.7	B	LT	0.84	19.0	B	LT	0.82	18.4	B	LT	0.83	18.9	B	LT	0.76	16.5	B	LT	0.74	16.2	B	
Int.		62.5	E	Int.		65.4	E	Int.		40.6	D	Int.		56.4	E	Int.		58.9	E	Int.		66.7	E	Int.		24.3	C	Int.		28.9	C		
Sixth Avenue & West 42nd Street																																	
EB WB NB	T	0.59	24.4	C	T	0.60	24.7	C	T	0.63	25.6	C	T	0.65	25.9	C	T	0.56	23.8	C	T	0.59	24.3	C	T	0.76	29.4	C	T	0.78	30.3	C	
	T	0.85	33.7	C	T	0.86	35.0	C	T	0.74	28.5	C	T	0.79	30.6	C	T	0.82	32.3	C	T	0.87	35.1	D	T	0.61	24.7	C	T	0.67	26.2	C	
	R	0.99	75.0	E	R	0.99	75.0	E	R	0.94	68.4	E	R	1.14	125.6	F +	R	0.94	66.4	E	R	0.94	66.4	E	R	0.75	41.5	D	R	0.95	69.7	E +	
	LT	0.75	15.8	B	LT	0.76	16.0	B	LT	0.59	13.2	B	LT	0.59	13.2	B	LT	0.66	14.3	B	LT	0.67	14.3	B									
Int.		26.0	C	Int.		26.4	C	Int.		23.2	C	Int.		29.6	C	Int.		24.0	C	Int.		24.9	C	Int.		20.4	C	Int.		23.4	C		



**Table F-1 (cont'd)**

**2021 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis**

**Signalized Intersections**

Int.	Weekday AM								Weekday Midday								Weekday PM								Saturday							
	2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action			
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS
Sixth Avenue & West 44th Street																																
EB	L	0.17	21.3	C	L	0.17	21.3	C	L	0.35	25.3	C	L	0.35	25.3	C	L	0.19	21.5	C	L	0.19	21.5	C								
	T	0.90	52.1	D	T	1.02	78.4	E +	T	0.69	33.6	C	T	0.71	34.6	C	T	0.48	26.7	C	T	0.50	27.3	C								
NB	TR	0.58	10.2	B	TR	0.59	10.3	B	TR	0.52	9.5	A	TR	0.53	9.7	A	T	0.63	10.8	B	T	0.63	10.8	B								
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	1.07	91.5	F	R	1.11	104.5	F +								
	Int.	17.1	B		Int.	22.4	C		Int.	13.5	B		Int.	13.7	B		Int.	21.5	C		Int.	23.3	C									

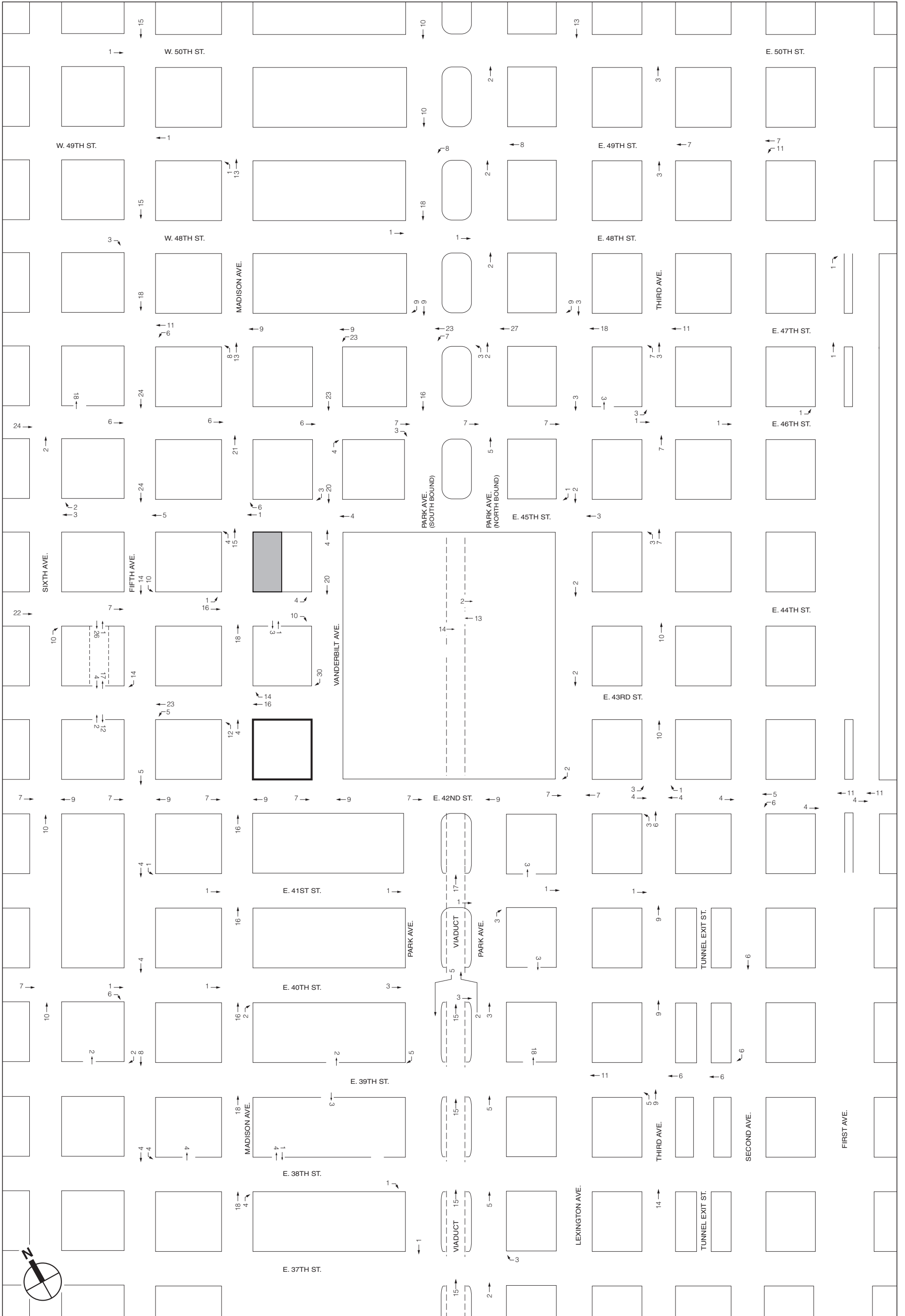
**Notes:** L = Left-turn; T = Through; R = Right-turn; LOS = Level of Service; EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; Int. = Intersection  
 \*\* To mimic actual conditions for NB/SB left turning vehicles on Park Avenue, the sum of two delays were accounted for: (1) delay from making the left-turn; and (2) delay from waiting at the red light after the left-turn.  
 + Denotes a significant adverse traffic impact  
 This table is newly added for this FEIS.

**Table F-2**

**2021 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis  
Unsignalized Intersections**

Int.	Weekday AM								Weekday Midday								Weekday PM								Saturday													
	2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action				2021 No-Action				2021 With-Action									
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS						
Vanderbilt Avenue & East 47th Street																																						
WB	L	0.67	15.5	C	L	0.66	15.2	C	L	0.57	12.7	B	L	0.59	13.1	B	L	0.59	13.1	B	L	0.60	13.4	B														
	T	0.44	10.3	B	T	0.43	10.1	B	T	0.49	10.8	B	T	0.50	11.0	B	T	0.48	10.6	B	T	0.49	10.9	B														
NB	L	0.04	9.0	A	L	0.02	8.9	A	L	0.01	8.7	A	L	0.01	5.7	A	L	0.04	8.9	A	L	0.04	8.9	A														
Vanderbilt Avenue & East 44th Street																																						
EB	LR	0.26	8.6	A	LR	0.28	8.8	A	LR	0.26	8.4	A	LR	0.28	8.6	A	LR	0.20	8.1	A	LR	0.22	8.3	A														
NB <sup>(1)</sup>	T	0.02	8.3	A	-	-	-	-	T	0.11	8.8	A	-	-	-	-	T	0.01	8.0	A	-	-	-	-														
SB	T	0.22	8.7	A	T	0.24	8.9	A	T	0.17	8.4	A	T	0.18	8.6	A	T	0.17	8.2	A	T	0.18	8.3	A														
Vanderbilt Avenue & East 43rd Street																																						
NB <sup>(1)</sup>	LT	0.01	9.1	A	-	-	-	-	LT	0.93	73.6	F	-	-	-	-	LT	0.05	15.3	C	-	-	-	-														
SB	R	0.30	9.7	A	R	0.31	9.8	A	R	0.29	9.7	A	R	0.31	9.8	A	R	0.24	9.3	A	R	0.23	9.3	A														

**Notes:** L = Left-turn; T = Through; R = Right-turn; LOS = Level of Service  
<sup>(1)</sup> In the With-Action condition, Vanderbilt Avenue between East 42nd and East 43rd Streets would be converted to public space and would be closed to vehicular traffic. Also, Vanderbilt Avenue between East 43rd and East 44th Streets would be converted from two-way to one-way southbound. This table is newly added for this FEIS.

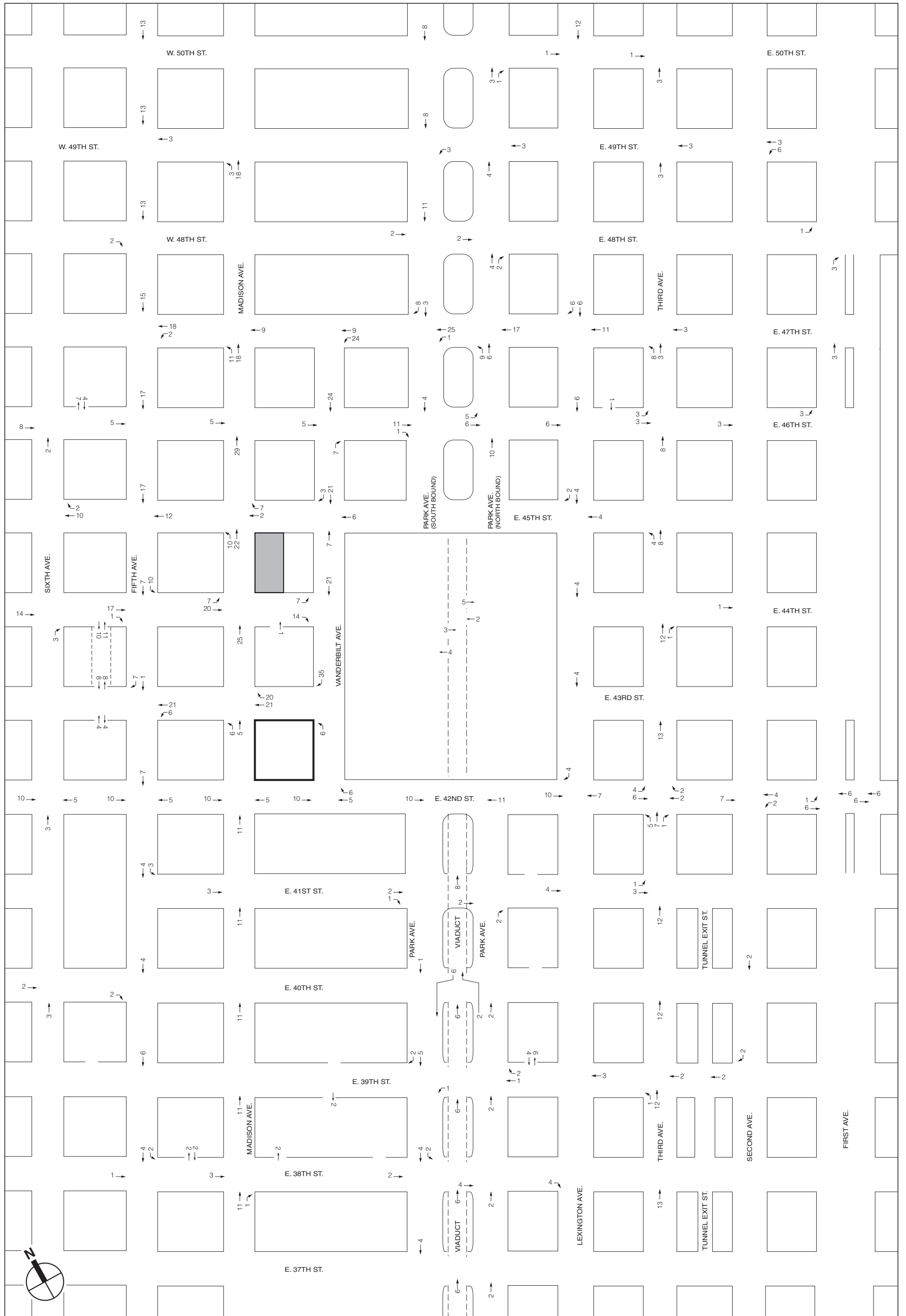


NOT TO SCALE


- One Vanderbilt Development Site
- 2021 Vanderbilt Corridor Development Sites

2021 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
Weekday AM Peak Hour

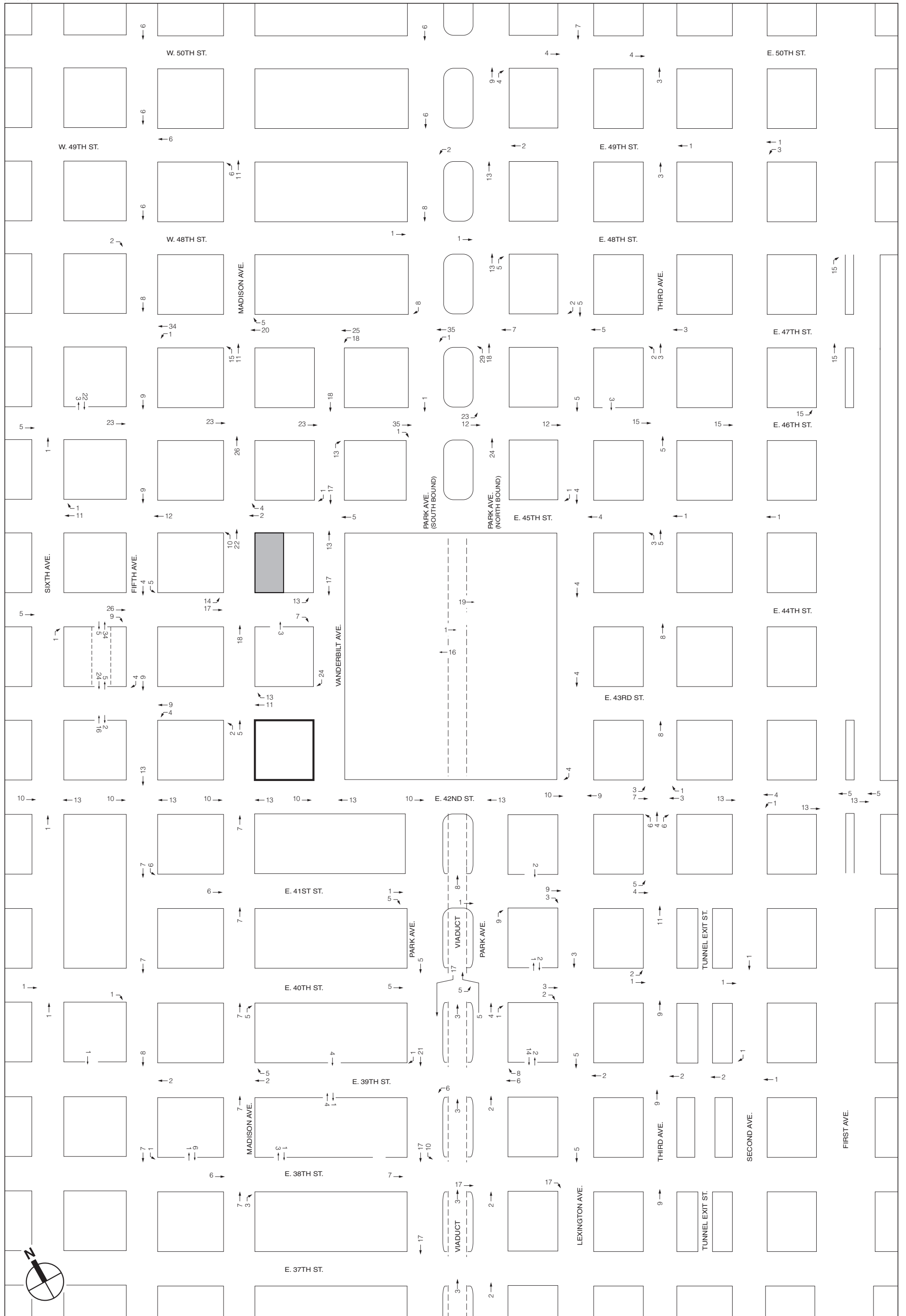




NOT TO SCALE

-  One Vanderbilt Development Site
-  2021 Vanderbilt Corridor Development Sites

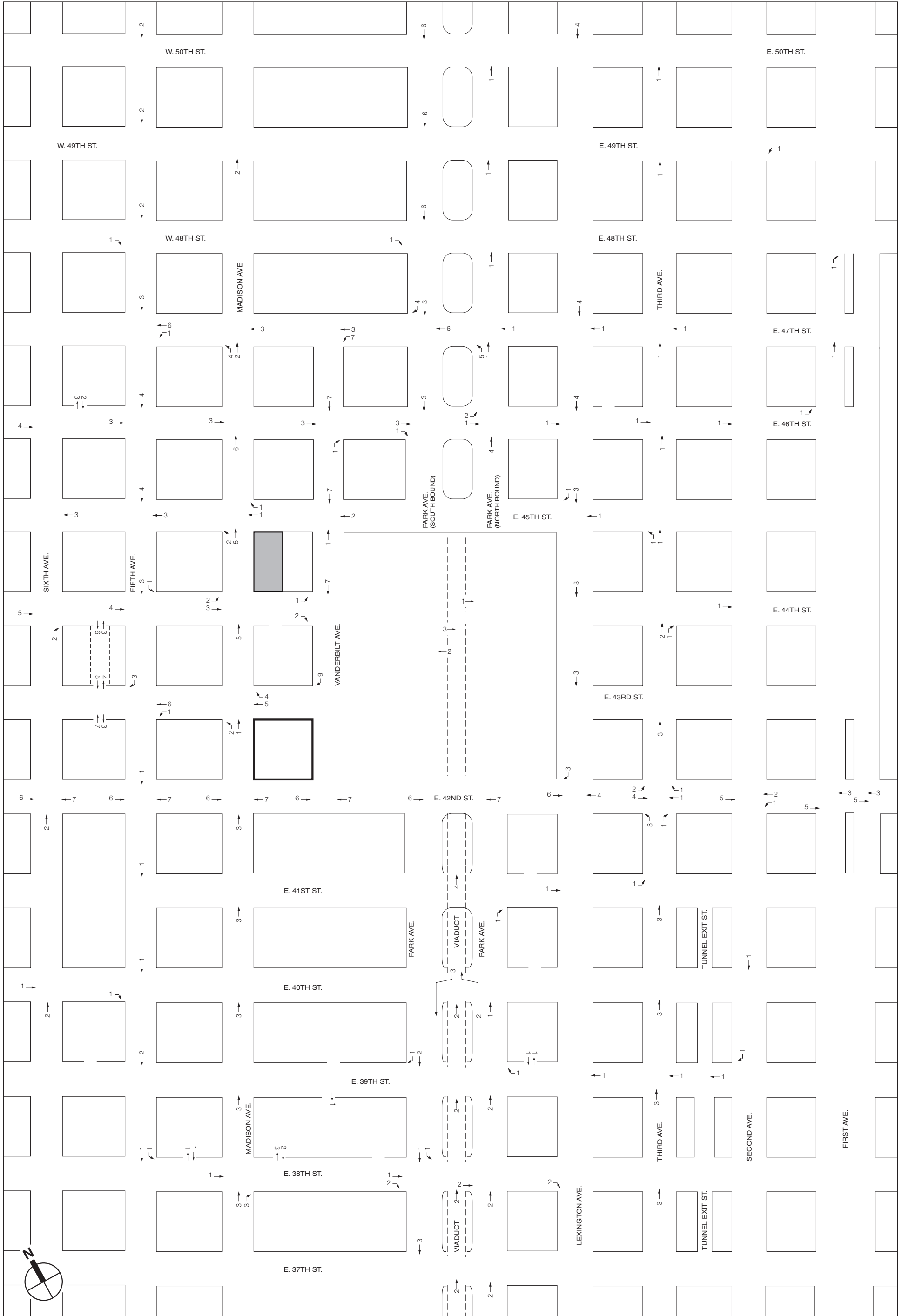
2021 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
 Weekday Midday Peak Hour  
**Figure F-2**



NOT TO SCALE

- One Vanderbilt Development Site
- 2021 Vanderbilt Corridor Development Sites

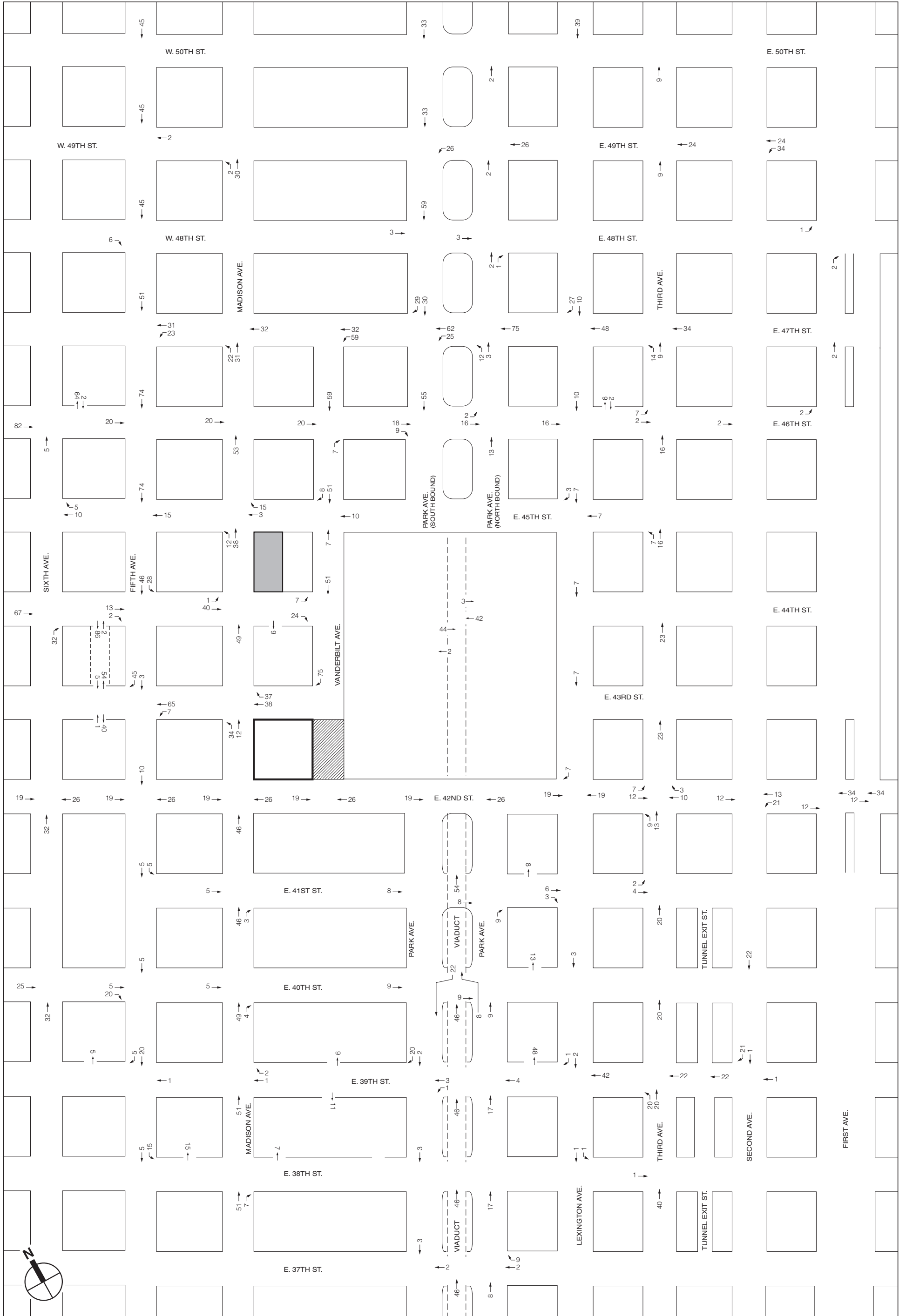
2021 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
 Weekday PM Peak Hour  
**Figure F-3**



NOT TO SCALE

- One Vanderbilt Development Site
- 2021 Vanderbilt Corridor Development Sites

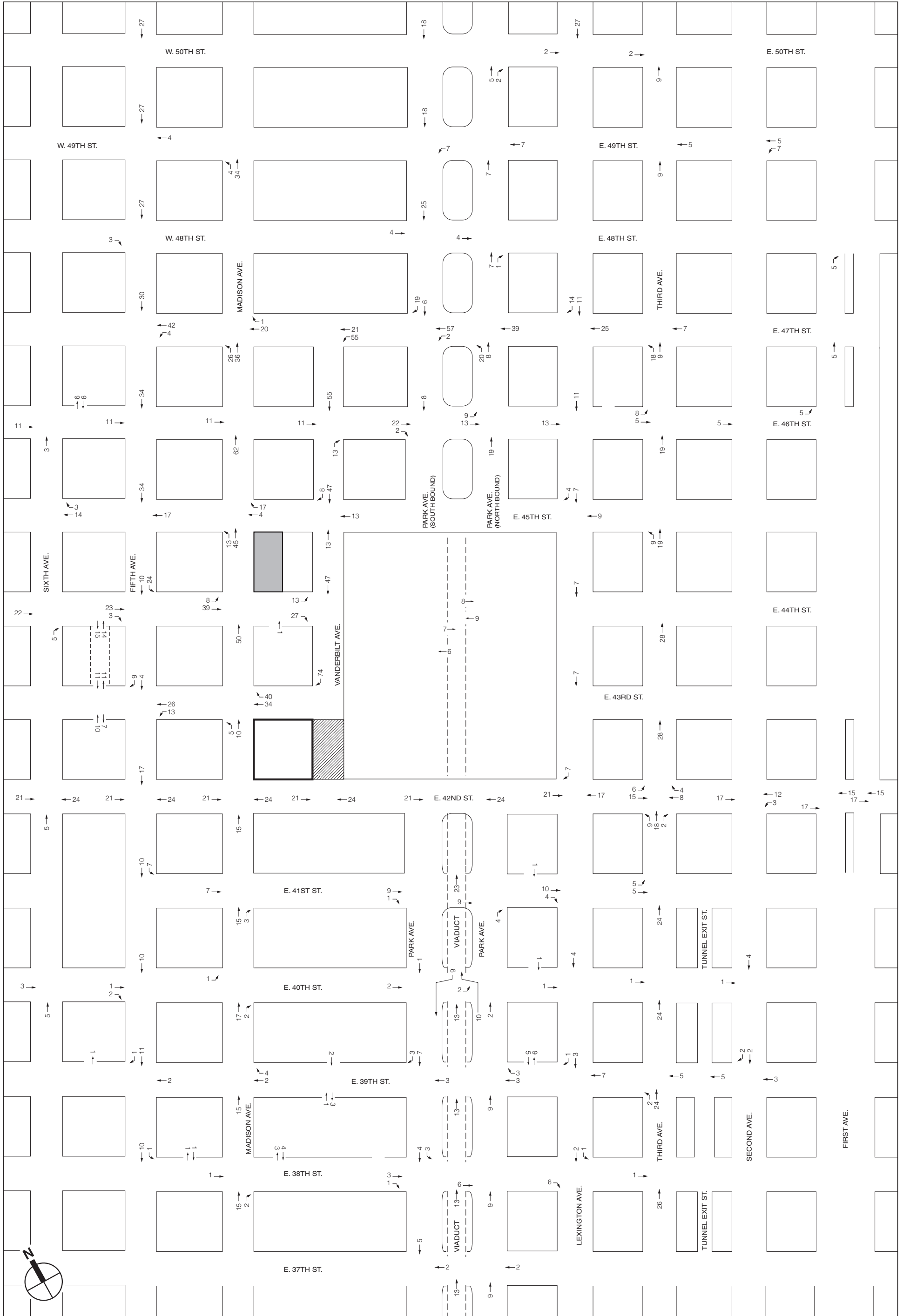
2021 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
 Saturday Peak Hour  
**Figure F-4**




One Vanderbilt Development Site  
 2021 Vanderbilt Corridor Development Sites  
 Proposed Public Place

NOT TO SCALE

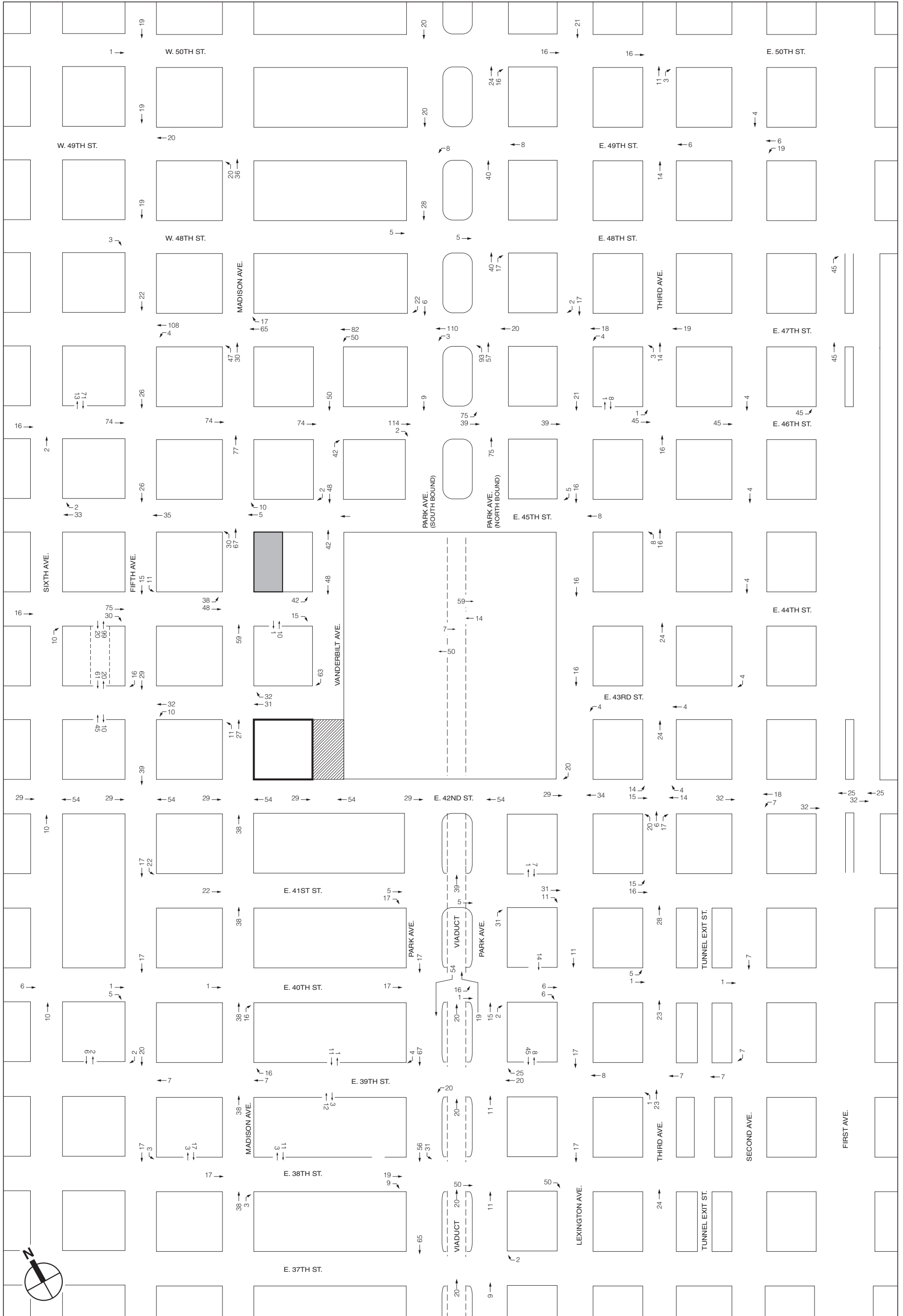
2021 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
 Weekday AM Peak Hour  
**Figure F-5**



NOT TO SCALE

-  One Vanderbilt Development Site
-  Proposed Public Place
-  2021 Vanderbilt Corridor Development Sites

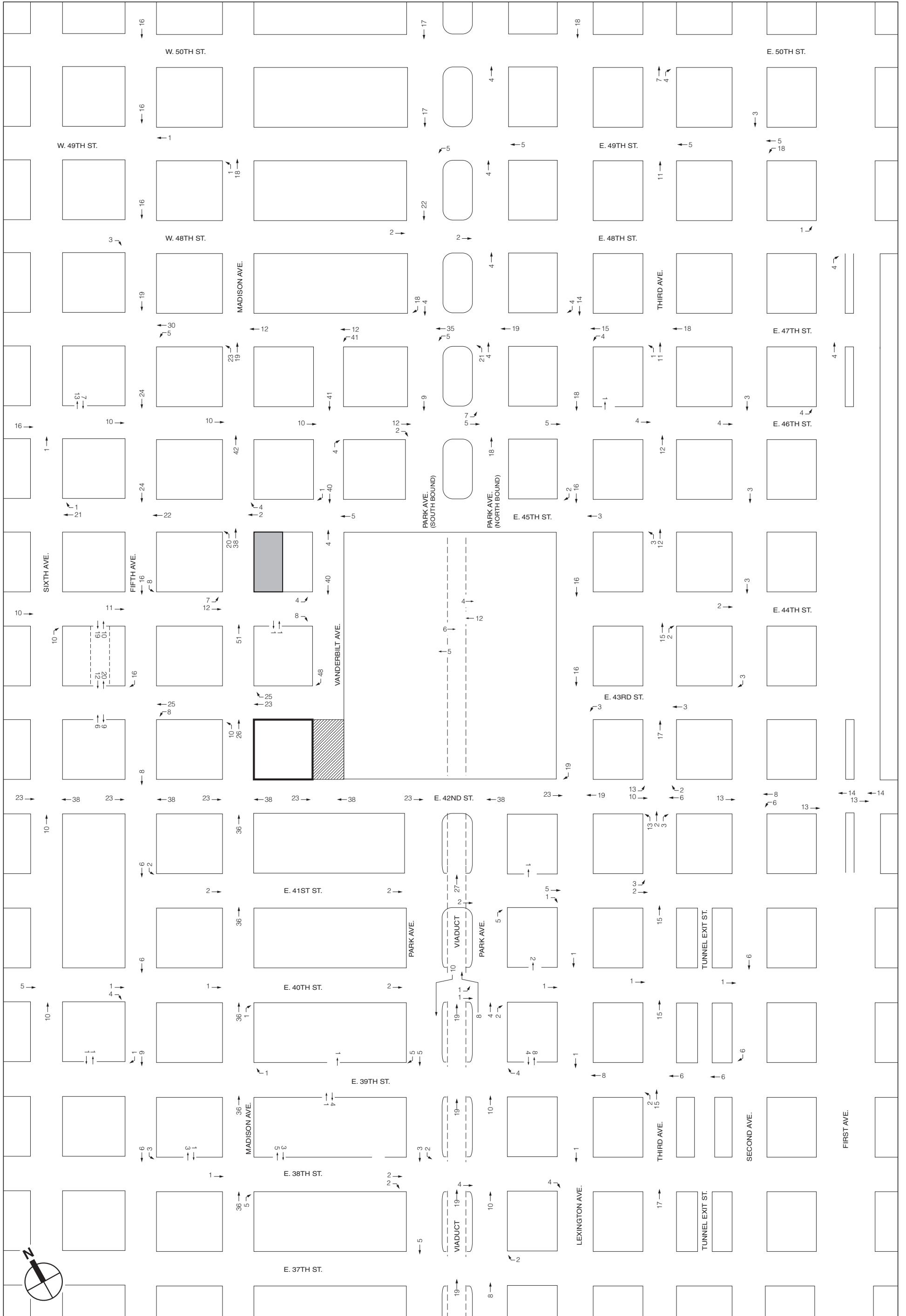
2021 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
Weekday Midday Peak Hour



One Vanderbilt Development Site  
 2021 Vanderbilt Corridor Development Sites  
 Proposed Public Place

NOT TO SCALE

2021 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
 Weekday PM Peak Hour  
**Figure F-7**

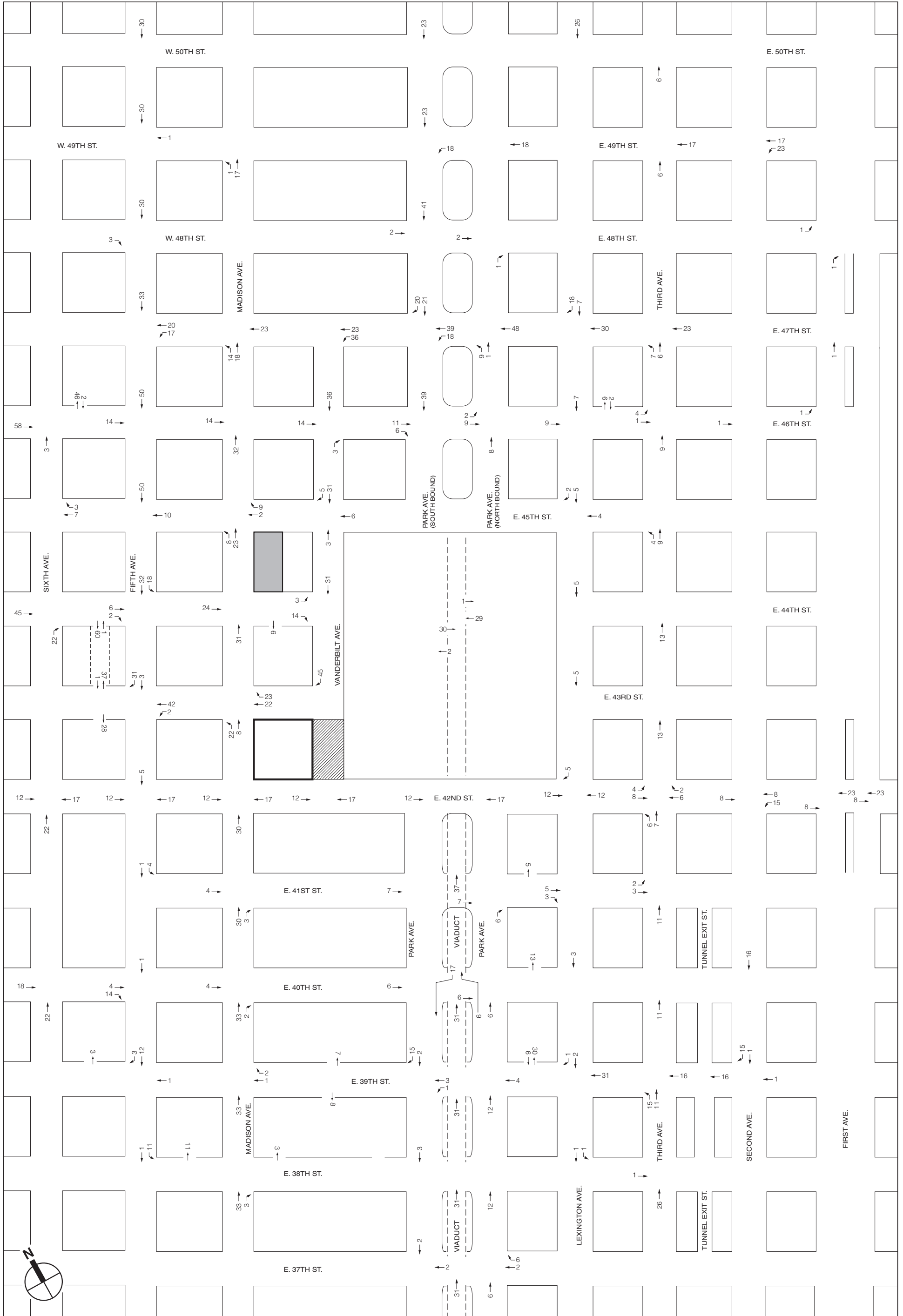



One Vanderbilt Development Site  
 2021 Vanderbilt Corridor Development Sites

Proposed Public Place

NOT TO SCALE

2021 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
 Saturday Peak Hour  
**Figure F-8**



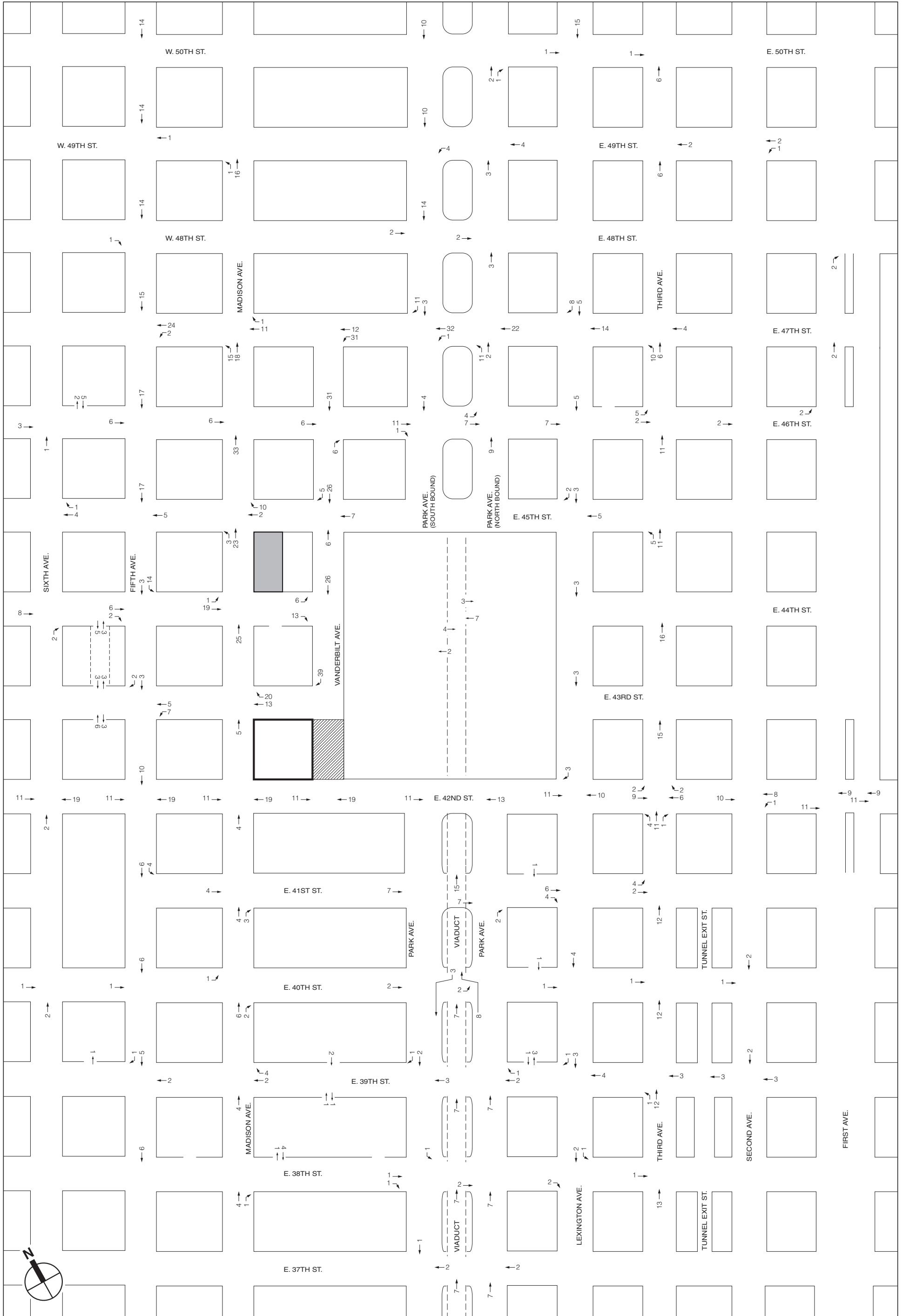
 One Vanderbilt Development Site  
 2021 Vanderbilt Corridor Development Sites


 Proposed Public Place

NOT TO SCALE

2021 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Weekday AM Peak Hour  
**Figure F-9**

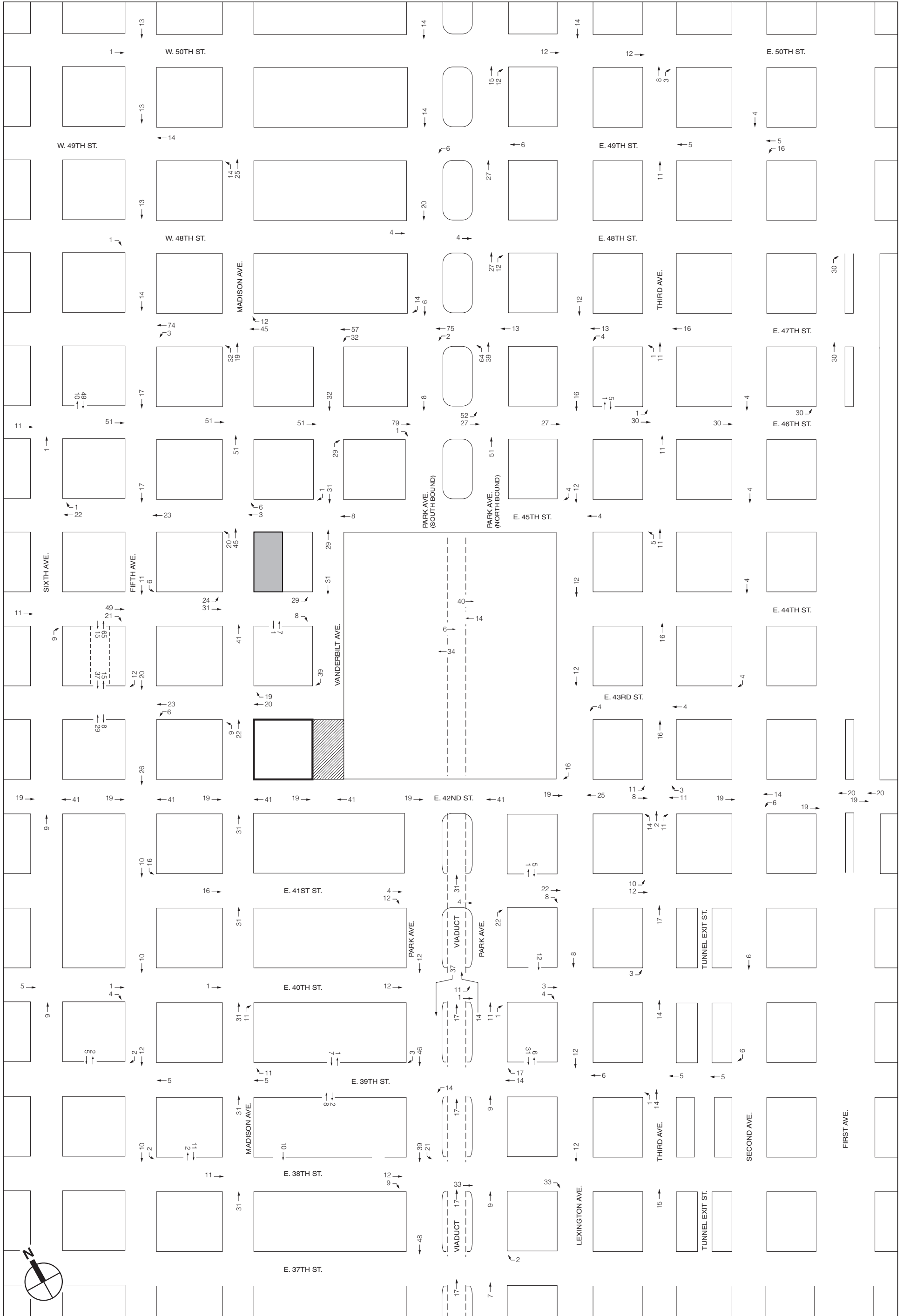




 One Vanderbilt Development Site  
 Proposed Public Place  
 2021 Vanderbilt Corridor Development Sites

NOT TO SCALE

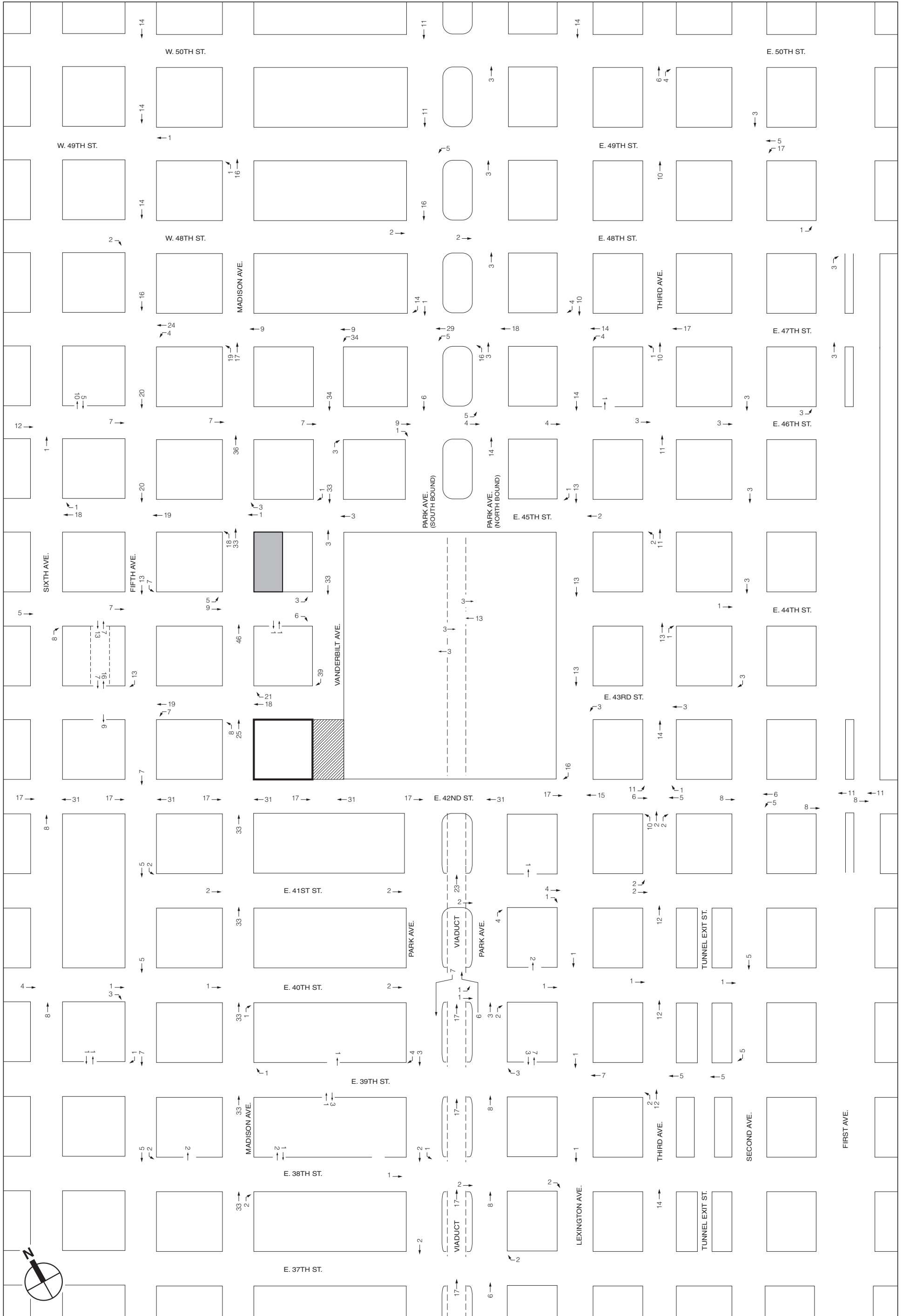
2021 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Weekday Midday Peak Hour  
**Figure F-10**





NOT TO SCALE

- One Vanderbilt Development Site
- 2021 Vanderbilt Corridor Development Sites
- Proposed Public Place

2021 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Weekday PM Peak Hour  
**Figure F-11**



-  One Vanderbilt Development Site
-  Proposed Public Place
-  2021 Vanderbilt Corridor Development Sites

NOT TO SCALE

2021 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Saturday Peak Hour  
**Figure F-12**

**Table F-3**  
**2021 Vanderbilt Corridor No-Action Conditions: Sidewalk Analysis**

Location	Sidewalk	Effective Width (ft)	Two-way Peak Hour Volume	PHF	SFP	Platoon LOS
<b>Weekday AM Peak Hour</b>						
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	5,529	0.92	29.9	D
	North	13.0	3,197	0.93	59.0	C
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,581	0.86	39.6	D
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	1,716	0.80	35.5	D
	East	8.0	1,463	0.85	72.9	C
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	4,808	0.92	31.7	D
	North-East	12.0	5,414	0.92	30.6	D
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	2,786	0.95	69.4	C
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	2,867	0.89	68.1	C
	North	12.0	3,836	0.96	46.4	C
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	3,748	0.89	51.6	C
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	4,308	0.88	37.4	D
	South	15.0	2,993	0.91	71.5	C
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	1,405	0.91	148.4	B
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,148	0.94	113.0	B
Madison Avenue between East 45th Street and East 46th Street	East	7.8	1,654	0.89	66.0	C
<b>Weekday Midday Peak Hour</b>						
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	3,256	0.97	55.7	C
	North	13.0	3,454	0.90	52.6	C
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,420	0.94	48.7	C
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	1,932	0.94	37.1	D
	East	8.0	2,227	0.94	52.5	C
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	4,106	0.94	38.5	D
	North-East	12.0	4,769	0.94	36.0	D
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	2,265	0.96	86.7	C
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	3,606	0.93	56.2	C
	North	12.0	3,270	0.97	55.4	C
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	4,083	0.86	45.5	C
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	3,395	0.95	52.2	C
	South	15.0	2,549	0.93	86.1	C
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	2,434	0.87	81.4	C
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,104	0.98	122.6	B
Madison Avenue between East 45th Street and East 46th Street	East	7.8	1,380	0.94	83.9	C
<b>Weekday PM Peak Hour</b>						
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	7,048	0.96	23.8	D
	North	13.0	4,822	0.96	39.7	D
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	2,547	0.94	25.8	D
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	2,120	0.88	31.2	D
	East	8.0	2,047	0.91	55.4	C
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	6,236	0.95	24.5	D
	North-East	12.0	7,075	0.95	23.4	D
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	2,954	0.92	63.3	C
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	4,119	0.88	46.2	C
	North	12.0	5,932	0.85	25.2	D
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	4,759	0.97	44.0	C
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	5,138	0.94	33.2	D
	South	15.0	3,460	0.92	62.3	C
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	2,078	0.87	95.6	B
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,816	0.95	71.8	C
Madison Avenue between East 45th Street and East 46th Street	East	7.8	1,943	0.88	55.3	C
<b>Saturday Peak Hour</b>						

East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	4,347	0.89	34.1	D
	North-East	12.0	4,661	0.89	34.8	D
East 42nd Street between Madison Avenue and Fifth Avenue	North	12.0	5,941	0.89	26.6	D
Madison Avenue between East 43rd Street and East 42nd Street	East	8.0	1,086	0.89	103.3	B
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	3,607	0.94	48.4	C
<b>Notes:</b>						
SFP = square feet per pedestrian						
This table is newly added for this FEIS						

**Table F-4**  
**2021 Vanderbilt Corridor No-Action Conditions: Corner Analysis**

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS	SFP	LOS
Fifth Avenue and 42nd Street	Northwest	61.2	A	40.7	B	30.4	C	72.8	A
	Northeast	63.8	A	51.2	B	35.3	C	62.6	A
	Southwest	42.1	B	32.2	C	30.7	C		
	Southeast	47.1	B	43.3	B	34.4	C		
Madison Avenue and East 43rd Street	Northwest	28.1	C	27.0	C	11.3	E		
	Northeast	10.3	E	16.1	D	12.9	E		
	Southwest	26.2	C	28.7	C	20.5	D		
	Southeast	30.6	C	38.6	C	37.1	C	138.0	A
Madison Avenue and East 42nd Street	Northwest	26.2	C	23.6	D	14.8	E	28.3	C
	Northeast	23.4	D	27.3	C	19.2	D	22.4	D
	Southwest	81.0	A	75.0	A	69.1	A		
	Southeast	40.7	B	47.3	B	33.6	C		
Madison Avenue and East 41st Street	Northeast	12.6	E	23.9	D	15.9	D		
	Southeast	21.9	D	28.2	C	19.0	D		
Park Avenue and East 41st Street	Southwest	62.0	A	63.1	A	32.5	C		
Lexington Avenue and East 42nd Street	Northeast	25.1	C	15.4	D	18.5	D		
	Northwest	12.2	E	13.6	E	13.7	E		
Fifth Avenue and 43rd Street	Northwest	38.8	C	45.1	B	28.5	C		
	Northeast	53.2	B	62.4	A	39.8	C		
	Southwest	55.9	B	61.3	A	39.6	C		
	Southeast	55.6	B	70.2	A	36.7	C		
Fifth Avenue and 45th Street	Southeast	60.4	A	46.7	B	49.5	B		
Madison Avenue and East 44th Street	Northeast	44.0	B	64.0	A	37.0	C		
	Northwest	55.6	B	50.7	B	34.6	C		
Madison Avenue and East 45th Street	Northeast	8.0	F	10.1	E	4.9	F		
	Northwest	32.5	C	23.9	D	21.2	D		
Madison Avenue and East 46th Street	Northwest	36.9	C	33.8	C	28.9	C		
	Northeast	43.5	B	64.8	A	37.4	C		
	Southwest	29.0	C	29.8	C	28.5	C		
	Southeast	30.4	C	48.9	B	30.6	C		
Madison Avenue and East 47th Street	Southwest	58.1	B	89.7	A	55.0	B		
	Southeast	26.2	C	45.0	B	30.1	C		
<b>Notes:</b>									
SFP = square feet per pedestrian									
This table is newly added for this FEIS									

**Table F-5**  
**2021 Vanderbilt Corridor No-Action Conditions: Crosswalk Analysis**

Location	Crosswalk	Crosswalk Length (ft)	Crosswalk Width (ft)	2-way Peak Hour Volume	SFP	LOS
<b>Weekday AM Peak Hour</b>						
Fifth Avenue and 42nd Street	North	54	21	2,253	22.4	D
	South	54	22	2,986	14.0	E
	East	55	22	2,243	26.0	C
	West	54	21	2,783	20.4	D
Madison Avenue and East 43rd Street	South	54	15	1,330	21.2	D
	West	34	12	1,412	20.4	D
	East	35	14	1,177	38.2	C
Madison Avenue and East 42nd Street	North	53	22	3,349	12.1	E
	South	45	20	2,883	11.2	E
	East	56	19	1,470	36.1	C
Madison Avenue and East 41st Street	East	34	15	2,460	16.1	D
Lexington Avenue and East 42nd Street	North	48	19	2,586	16.6	D
Fifth Avenue and 43rd Street	West	34	22	1,533	32.2	C
	East	34	20	866	74.2	A
Madison Avenue and East 44th Street	West	34	15	1,058	43.5	B
	East	35	15	1,820	24.6	C
Madison Avenue and East 45th Street	North	55	13	1,396	16.9	D
	West	34	15	922	37.6	C
	East	40	12	2,226	13.5	E
Madison Avenue and East 46th Street	South	54	15	1,197	27.5	C
	West	34	12	1,234	30.0	C
	East	30	13	1,442	21.2	D
Madison Avenue and East 47th Street	East	30	15	1,613	28.1	C
<b>Weekday Midday Peak Hour</b>						
Fifth Avenue and 42nd Street	North	54	21	2,637	18.0	D
	South	54	22	2,892	14.2	E
	East	55	22	2,895	23.8	D
	West	54	21	4,500	11.8	E
Madison Avenue and East 43rd Street	South	54	15	1,042	33.1	C
	West	34	12	1,842	18.4	D
	East	35	14	1,388	28.6	C
Madison Avenue and East 42nd Street	North	53	22	3,041	15.0	E
	South	45	20	2,768	13.6	E
	East	56	19	1,821	28.5	C
Madison Avenue and East 41st Street	East	34	15	1,897	24.4	C
Lexington Avenue and East 42nd Street	North	48	19	3,338	10.7	E
Fifth Avenue and 43rd Street	West	34	22	2,053	24.4	C
	East	34	20	1,559	45.4	B
Madison Avenue and East 44th Street	West	34	15	1,234	40.7	B
	East	35	15	1,238	36.9	C
Madison Avenue and East 45th Street	North	55	13	1,141	20.3	D
	West	34	15	1,307	23.2	D
	East	40	12	1,898	18.2	D
Madison Avenue and East 46th Street	South	54	15	982	35.1	C
	West	34	12	1,695	24.2	C
	East	30	13	1,085	33.2	C
Madison Avenue and East 47th Street	East	30	15	1,378	34.4	C
<b>Weekday PM Peak Hour</b>						
Fifth Avenue and 42nd Street	North	54	21	3,814	11.8	E
	South	54	22	3,656	12.1	E
	East	55	22	3,127	19.1	D
	West	54	21	5,026	11.5	E
Madison Avenue and East 43rd Street	South	54	15	1,459	23.7	D
	West	34	12	2,153	13.4	E
	East	35	14	1,339	32.8	C

Madison Avenue and East 42nd Street	North	53	22	3,867	9.9	E
	South	45	20	2,923	10.6	E
	East	56	19	2,547	21.6	D
Madison Avenue and East 41st Street	East	34	15	3,143	12.8	E
Lexington Avenue and East 42nd Street	North	48	19	3,164	13.3	E
Fifth Avenue and 43rd Street	West	34	22	3,096	15.3	D
	East	34	20	2,385	27.3	C
Madison Avenue and East 44th Street	West	34	15	1,291	32.9	C
	East	35	15	2,137	20.9	D
Madison Avenue and East 45th Street	North	55	13	1,146	20.8	D
	West	34	15	1,359	26.9	C
Madison Avenue and East 46th Street	East	40	12	2,591	12.0	E
	South	54	15	1,187	26.4	C
	West	34	12	1,484	23.8	D
Madison Avenue and East 47th Street	East	30	13	1,899	18.3	D
	West	34	13	1,819	24.9	C
<b>Saturday Peak Hour</b>						
Fifth Avenue and 42nd Street	North	54	21	1,935	23.3	D
	West	54	21	1,973	31.9	C
Madison Avenue and East 42nd Street	North	53	22	3,478	9.9	E
	East	56	19	878	66.2	A
<b>Notes:</b>						
SFP = square feet per pedestrian						
This table is newly added for this FEIS						

**Table F-6**

**2021 Vanderbilt Corridor With-Action Conditions: Sidewalk Analysis**

Location	Sidewalk	Effective Width (ft)	Two-way Peak Hour Volume	PHF	SFP	Platoon LOS	
<b>Weekday AM Peak Hour</b>							
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	5,981	0.92	27.4	D	
	North	13.0	3,817	0.93	49.1	C	
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,736	0.86	35.8	D	
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	1,840	0.80	32.9	D	
	East	8.0	2,679	0.85	74.7	C	
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	5,615	0.92	29.4	D	
	North-East	12.0	7,631	0.92	40.7	C	
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	3,089	0.95	62.5	C	
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	3,130	0.89	62.2	C	
	North	12.0	4,824	0.96	36.4	D	
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	3,926	0.89	49.2	C	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	4,673	0.88	34.3	D	
	South	15.0	3,338	0.91	63.9	C	
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	1,524	0.91	136.7	B	
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,845	0.94	69.8	C	
Madison Avenue between East 45th Street and East 46th Street	East	7.8	1,753	0.89	62.2	C	
<b>Weekday Midday Peak Hour</b>							
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	3,522	0.97	51.3	C	
	North	13.0	3,752	0.90	48.3	C	
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,506	0.94	45.8	C	
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	2,139	0.94	33.2	D	
	East	8.0	2,974	0.94	74.4	C	
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	5,142	0.94	33.2	D	
	North-East	12.0	6,037	0.94	53.3	C	
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	2,643	0.96	74.1	C	
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	3,873	0.93	52.2	C	
	North	12.0	3,961	0.97	45.4	C	
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	4,527	0.86	40.8	C	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	4,086	0.95	43.0	C	
	South	15.0	2,966	0.93	73.8	C	
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	2,705	0.87	73.1	C	
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,916	0.98	70.1	C	
Madison Avenue between East 45th Street and East 46th Street	East	7.8	1,605	0.94	72.0	C	
<b>Weekday PM Peak Hour</b>							
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	7,567	0.96	21.9	E	
	North	13.0	5,436	0.96	34.9	D	
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	2,771	0.94	23.4	D	+
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	2,210	0.88	29.8	D	
	East	8.0	3,391	0.91	62.9	C	
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	6,954	0.95	23.9	D	
	North-East	12.0	9,463	0.95	33.4	D	
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	3,076	0.92	60.7	C	
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	4,464	0.88	42.5	C	
	North	12.0	6,855	0.85	21.3	E	+
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	4,842	0.97	43.2	C	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	5,402	0.94	31.4	D	
	South	15.0	3,647	0.92	59.0	C	
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	2,199	0.87	90.3	B	
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	2,651	0.95	48.6	C	
Madison Avenue between East 45th Street and East 46th Street	East	7.8	2,034	0.88	52.7	C	
<b>Saturday Peak Hour</b>							



East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	12.0	4,941	0.89	32.7	D	
	North-East	12.0	6,019	0.89	26.2	D	
East 42nd Street between Madison Avenue and Fifth Avenue	North	22.0	4,630	0.89	66.2	C	
Madison Avenue between East 43rd Street and East 42nd Street	East	15.0	1,164	0.89	181.4	B	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	3,427	0.94	51.1	C	
<b>Notes:</b>							
SFP = square feet per pedestrian							
+ Denotes a significant adverse pedestrian impact							
This table is newly added for this FEIS							

**Table F-7**

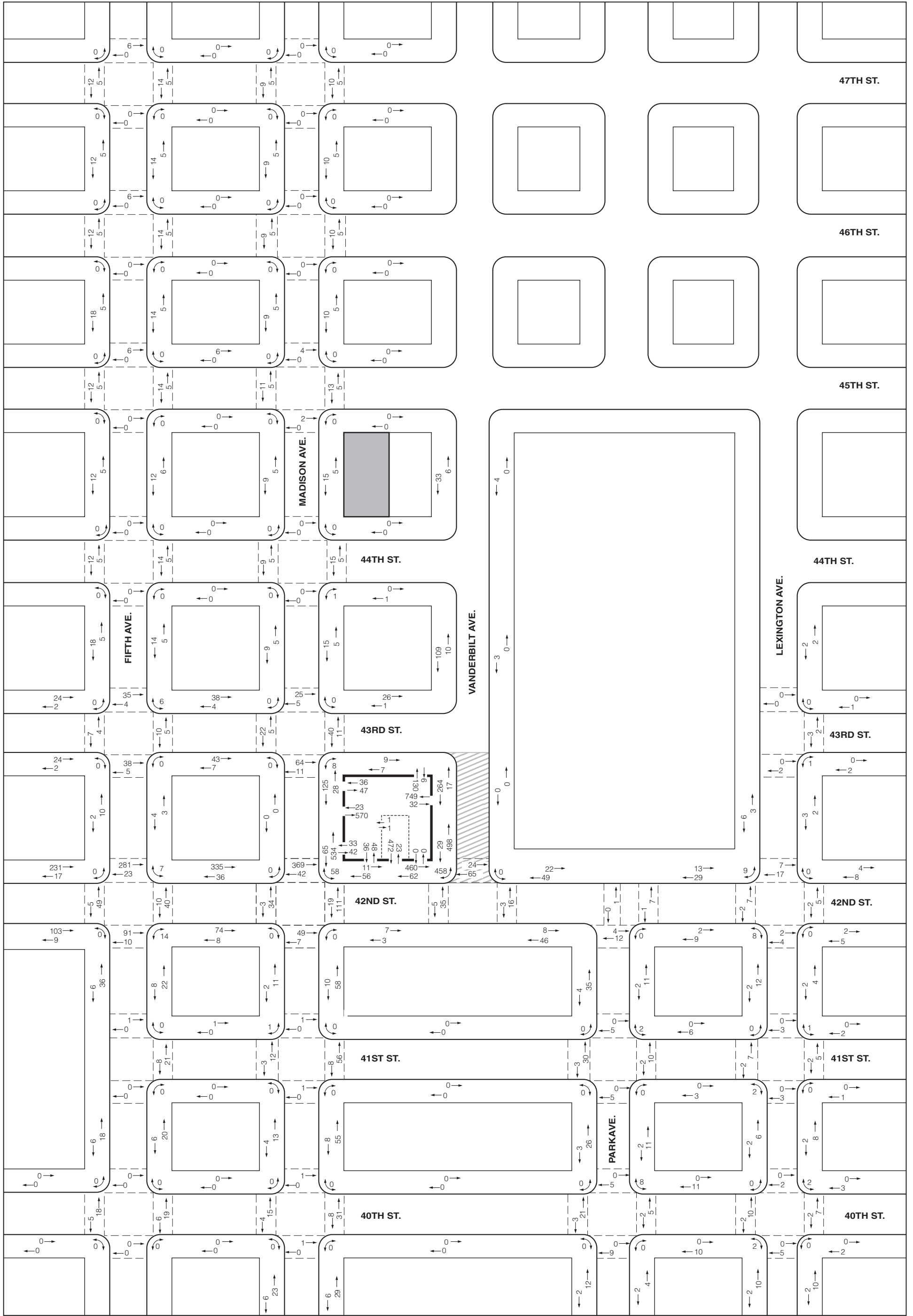
**2021 Vanderbilt Corridor With-Action Conditions: Corner Analysis**

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour			Weekday PM Peak Hour		Saturday Peak Hour		
		SFP	LOS	SFP	LOS		SFP	LOS	SFP	LOS	
Fifth Avenue and 42nd Street	Northwest	49.5	B	37.0	C		26.9	C	67.2	A	
	Northeast	52.7	B	44.4	B		28.6	C	58.3	B	
	Southwest	36.1	C	30.1	C		28.5	C			
	Southeast	41.3	B	39.1	C		29.3	C			
Madison Avenue and East 43rd Street	Northwest	24.6	C	22.9	D		9.8	E	+		
	Northeast	8.6	E	+	10.4	E	+	9.9	E	+	
	Southwest	20.9	D		23.5	D		17.5	D	+	
	Southeast	50.1	B		49.9	B		52.7	B	166.7	A
Madison Avenue and East 42nd Street	Northwest	16.8	D	+	18.6	D	+	11.5	E	+	
	Northeast	33.7	C		36.9	C		25.7	C	39.1	C
	Southwest	74.1	A		69.6	A		63.9	A		
	Southeast	34.3	C		38.0	C		28.7	C		
Madison Avenue and East 41st Street	Northeast	11.2	E	+	20.4	D		15.1	D		
	Southeast	19.4	D	+	24.6	C		18.4	D		
Park Avenue and East 41st Street	Southwest	53.6	B		54.2	B		30.6	C		
Lexington Avenue and East 42nd Street	Northeast	24.3	C		13.8	E	+	18.2	D		
	Northwest	11.7	E		12.0	E	+	13.4	E		
Fifth Avenue and 43rd Street	Northwest	35.3	C		41.9	B		25.9	C		
	Northeast	48.9	B		56.4	B		35.7	C		
	Southwest	50.6	B		56.1	B		37.2	C		
	Southeast	50.4	B		60.1	A		33.8	C		
Fifth Avenue and 45th Street	Southeast	58.2	B		42.7	B		47.6	B		
Madison Avenue and East 44th Street	Northeast	36.8	C		38.3	C		28.2	C		
	Northwest	46.1	B		36.6	C		29.6	C		
Madison Avenue and East 45th Street	Northeast	7.1	F	+	7.3	F	+	4.1	F	+	
	Northwest	30.5	C		20.5	D		20.2	D		
Madison Avenue and East 46th Street	Northwest	35.8	C		30.9	C		28.3	C		
	Northeast	41.3	B		57.0	B		36.0	C		
	Southwest	28.3	C		27.4	C		27.9	C		
	Southeast	29.2	C		43.5	B		29.4	C		
Madison Avenue and East 47th Street	Southwest	57.2	B		89.5	A		54.1	B		
	Southeast	25.5	C		40.3	B		29.1	C		
<b>Note:</b>											
SFP = square feet per pedestrian											
This table is newly added for this FEIS											

**Table F-8**  
**2021 Vanderbilt Corridor With-Action Conditions: Crosswalk Analysis**

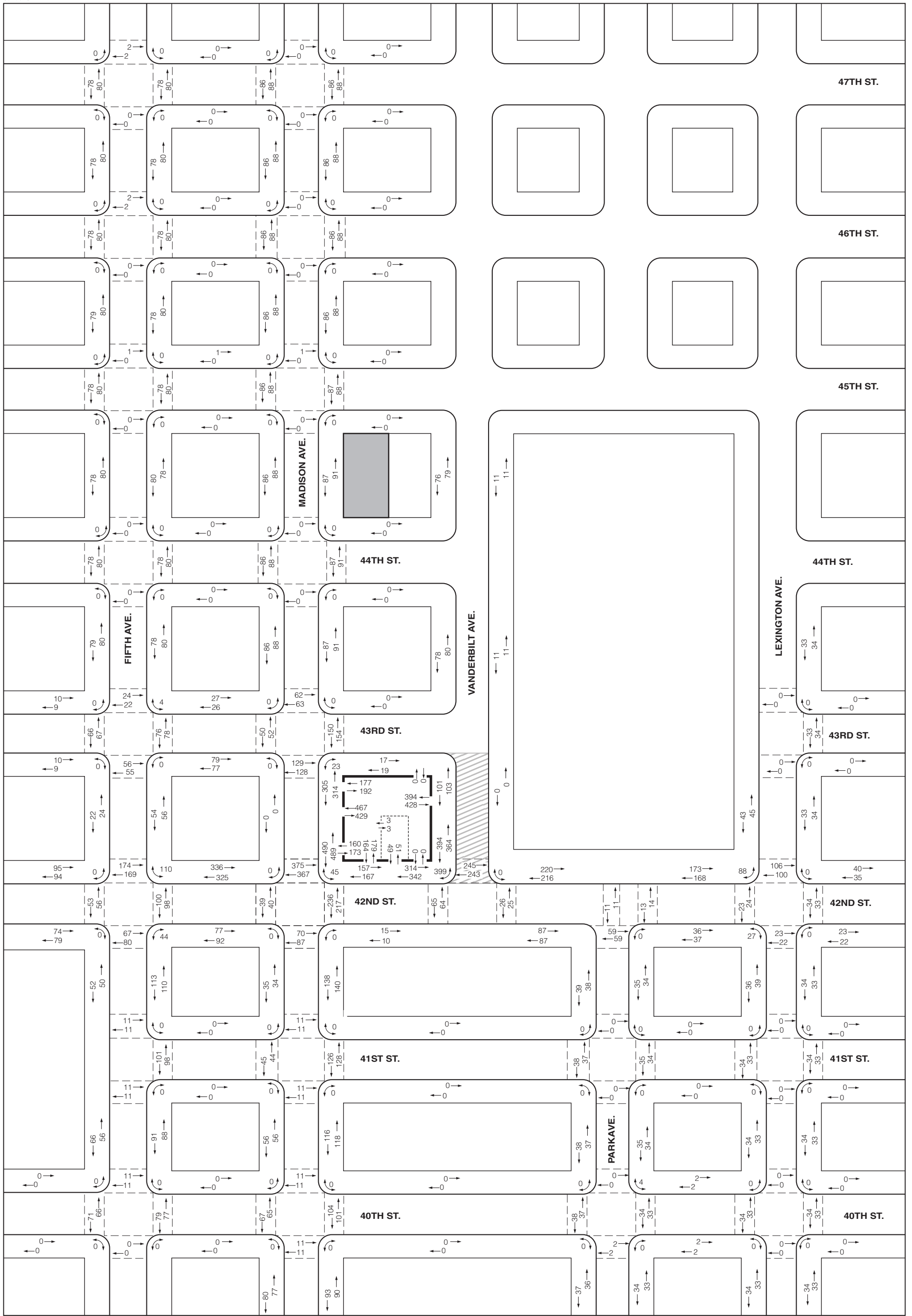
Location	Crosswalk	Crosswalk Length (ft)	Crosswalk Width (ft)	2-way Peak Hour Volume	SFP	LOS	
<b>Weekday AM Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	3,028	16.0	D	+
	South	54	22	3,382	12.0	E	+
	East	55	22	2,470	23.3	D	
	West	54	21	2,977	18.8	D	
Madison Avenue and East 43rd Street	South	54	15	1,530	18.4	D	+
	West	34	12	1,562	17.8	D	+
	East	35	14	1,421	30.9	C	
Madison Avenue and East 42nd Street	North	53	22	4,414	8.7	E	+
	South	45	20	3,074	10.4	E	
	East	56	19	1,990	26.0	C	
Madison Avenue and East 41st Street	East	34	15	2,759	14.0	E	+
Lexington Avenue and East 42nd Street	North	48	19	2,662	16.1	D	
Fifth Avenue and 43rd Street	West	34	22	1,650	31.4	C	
	East	34	20	968	65.8	A	
Madison Avenue and East 44th Street	West	34	15	1,184	38.3	C	
	East	35	15	2,095	20.7	D	
Madison Avenue and East 45th Street	North	55	13	1,434	15.3	D	
	West	34	15	979	41.8	B	
	East	40	12	2,366	12.7	E	
Madison Avenue and East 46th Street	South	54	15	1,197	27.5	C	
	West	34	12	1,280	28.9	C	
Madison Avenue and East 47th Street	East	30	13	1,535	19.8	D	
	East	30	15	1,681	26.9	C	
<b>Weekday Midday Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	3,079	15.1	D	+
	South	54	22	3,152	12.9	E	+
	East	55	22	3,096	22.1	D	
	West	54	21	4,612	11.4	E	
Madison Avenue and East 43rd Street	South	54	15	1,246	27.2	C	
	West	34	12	2,074	15.9	D	+
	East	35	14	1,953	19.2	D	+
Madison Avenue and East 42nd Street	North	53	22	3,738	11.8	E	+
	South	45	20	3,010	12.3	E	+
	East	56	19	2,466	20.3	D	
Madison Avenue and East 41st Street	East	34	15	2,256	19.8	D	
Lexington Avenue and East 42nd Street	North	48	19	3,586	9.8	E	+
Fifth Avenue and 43rd Street	West	34	22	2,226	25.5	C	
	East	34	20	1,802	38.8	C	
Madison Avenue and East 44th Street	West	34	15	1,520	32.2	C	
	East	35	15	1,841	22.7	D	
Madison Avenue and East 45th Street	North	55	13	1,278	18.0	D	+
	West	34	15	1,445	26.6	C	
	East	40	12	2,265	14.7	E	+
Madison Avenue and East 46th Street	South	54	15	984	35.0	C	
	West	34	12	1,892	21.3	D	
	East	30	13	1,299	26.5	C	
Madison Avenue and East 47th Street	East	34	15	1,623	28.5	C	
<b>Weekday PM Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	4,589	9.4	E	+
	South	54	22	4,158	10.3	E	+
	East	55	22	3,373	17.4	D	

	West	54	21	5,204	11.0	E	
Madison Avenue and East 43rd Street	South	54	15	1,713	19.9	D	
	West	34	12	2,338	12.0	E	+
	East	35	14	1,633	26.1	C	
Madison Avenue and East 42nd Street	North	53	22	4,830	7.6	F	+
	South	45	20	3,196	9.5	E	+
	East	56	19	2,975	18.1	D	+
Madison Avenue and East 41st Street	East	34	15	3,265	12.2	E	
Lexington Avenue and East 42nd Street	North	48	19	3,216	13.0	E	
Fifth Avenue and 43rd Street	West	34	22	3,238	16.6	D	
	East	34	20	2,476	26.1	C	
Madison Avenue and East 44th Street	West	34	15	1,412	29.6	C	
	East	35	15	2,466	17.5	D	+
Madison Avenue and East 45th Street	North	55	13	1,200	19.4	D	
	West	34	15	1,403	25.9	C	
	East	40	12	2,757	11.2	E	
Madison Avenue and East 46th Street	South	54	15	1,197	26.2	C	
	West	34	12	1,519	23.1	D	
	East	30	13	1,976	17.5	D	
Madison Avenue and East 47th Street	East	30	15	1,883	23.9	D	
<b>Saturday Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	2,174	20.4	D	
	West	54	21	2,015	31.1	C	
Madison Avenue and East 42nd Street	North	53	22	3,782	9.0	E	+
	East	56	19	1,025	56.2	B	
<b>Notes:</b>							
SFP = square feet per pedestrian							
+ Denotes a significant adverse pedestrian impact							
This table is newly added for this FEIS							



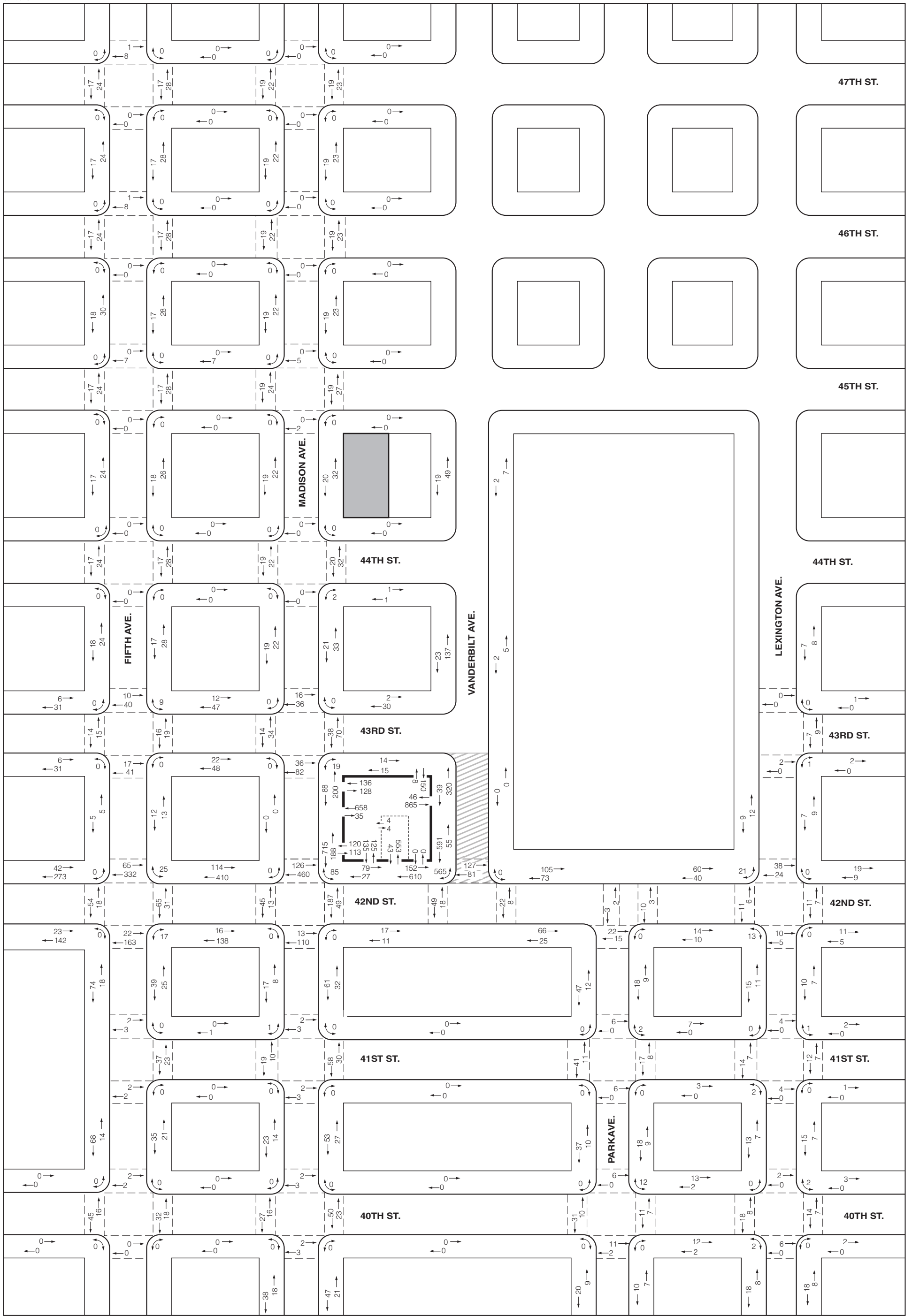
NOT TO SCALE

2021 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
 Weekday AM Peak Hour  
**Figure F-13**



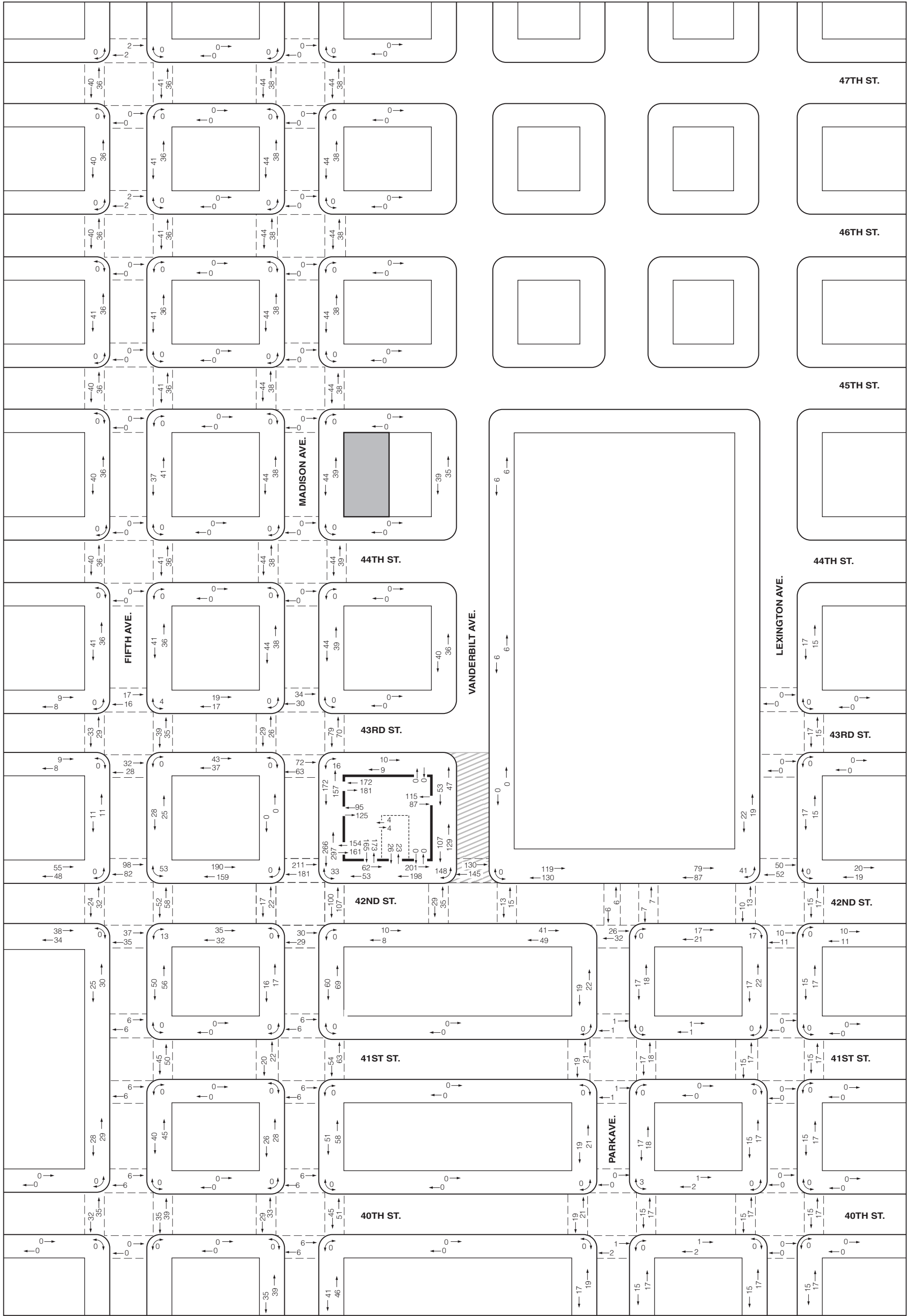
NOT TO SCALE

2021 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
 Weekday Midday Peak Hour  
**Figure F-14**



NOT TO SCALE

2021 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
 Weekday PM Peak Hour  
**Figure F-15**

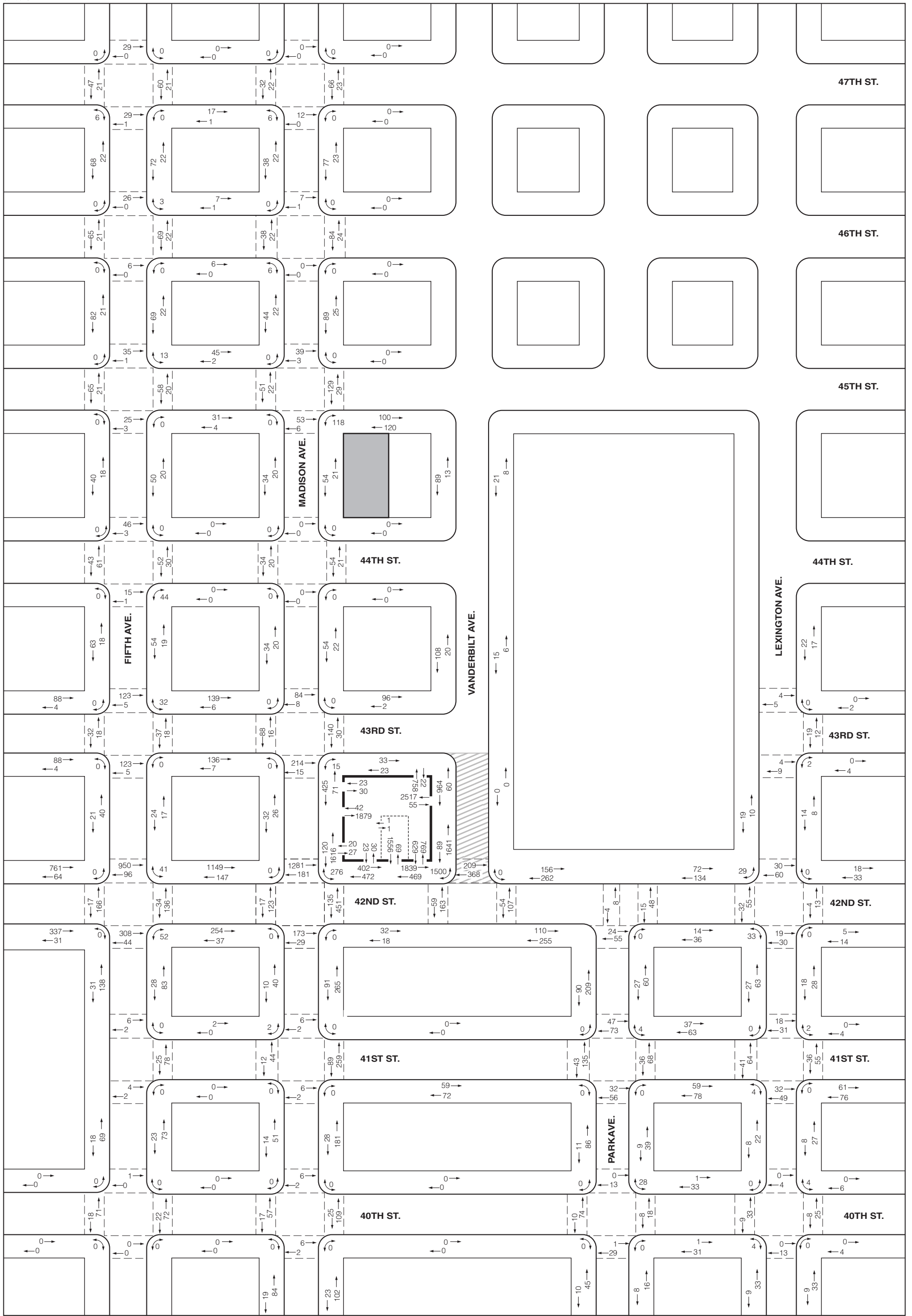


NOT TO SCALE

2021 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
 Saturday Peak Hour  
**Figure F-16**

**Vanderbilt Corridor and One Vanderbilt**

*This figure is new to the FEIS*



- One Vanderbilt Development Site
- MTA Access Area
- 2021 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

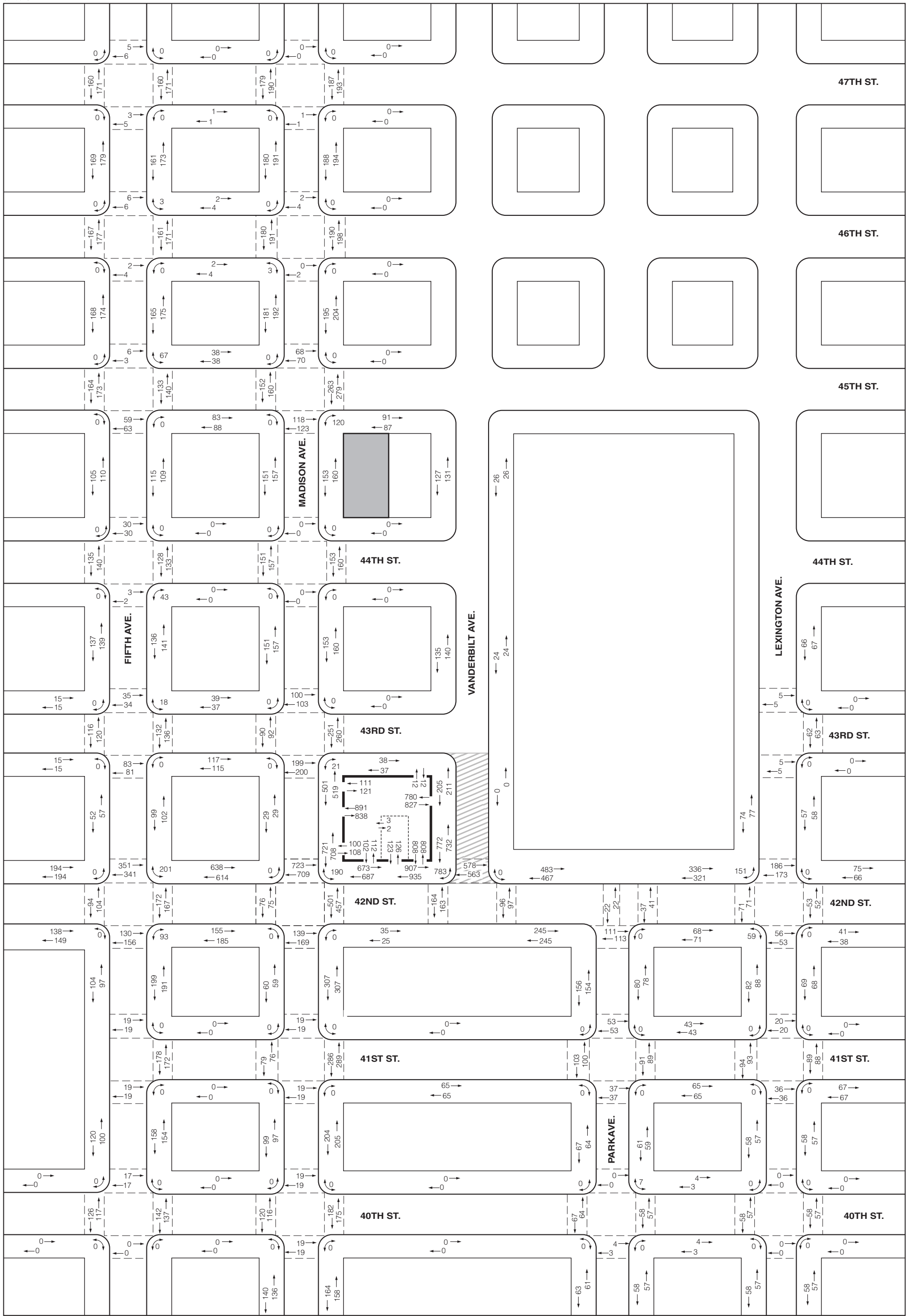
2021 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
Weekday AM Peak Hour

**Vanderbilt Corridor and One Vanderbilt**

*This figure is new to the FEIS*

**Figure F-17**



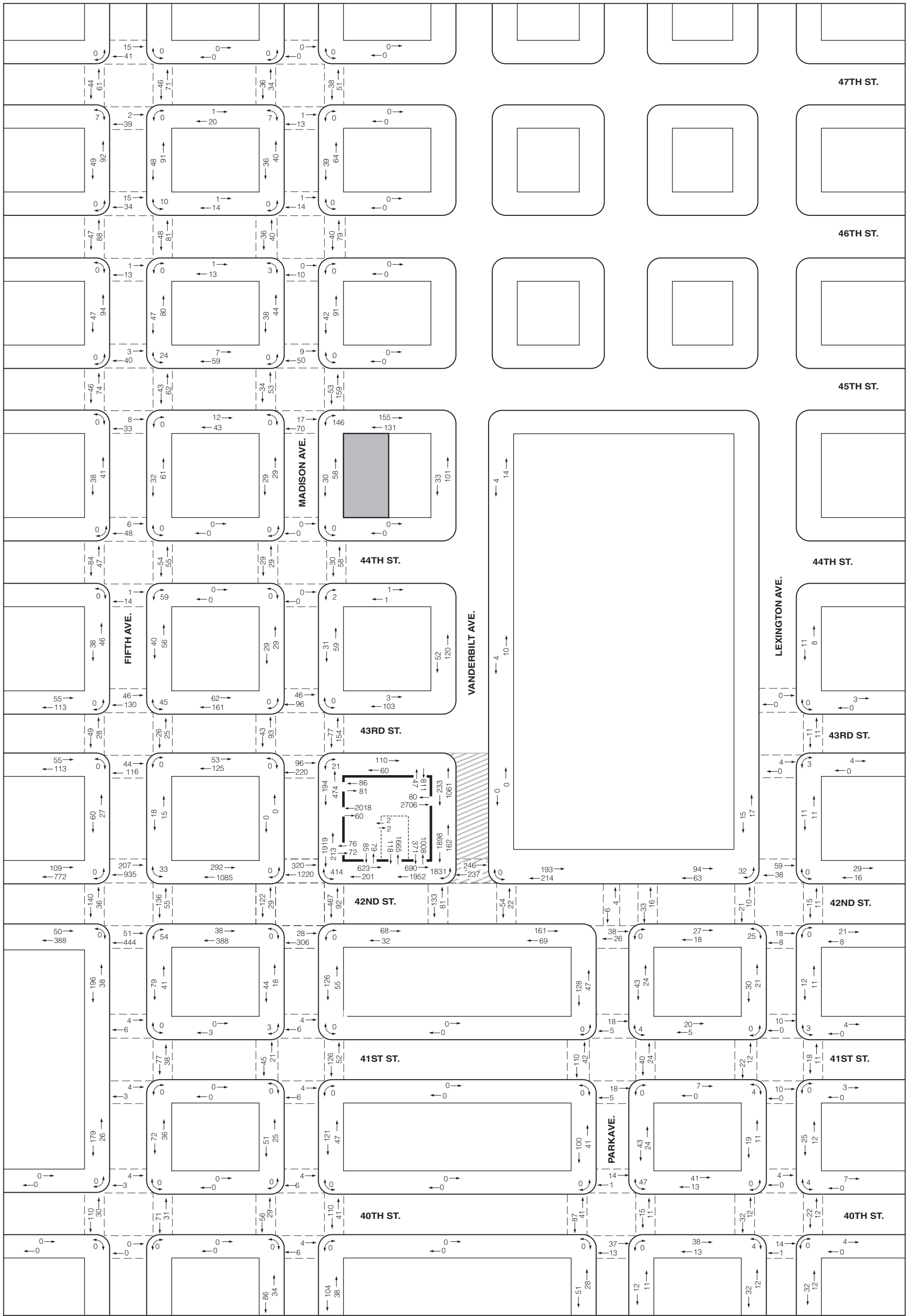


- One Vanderbilt Development Site
- MTA Access Area
- 2021 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

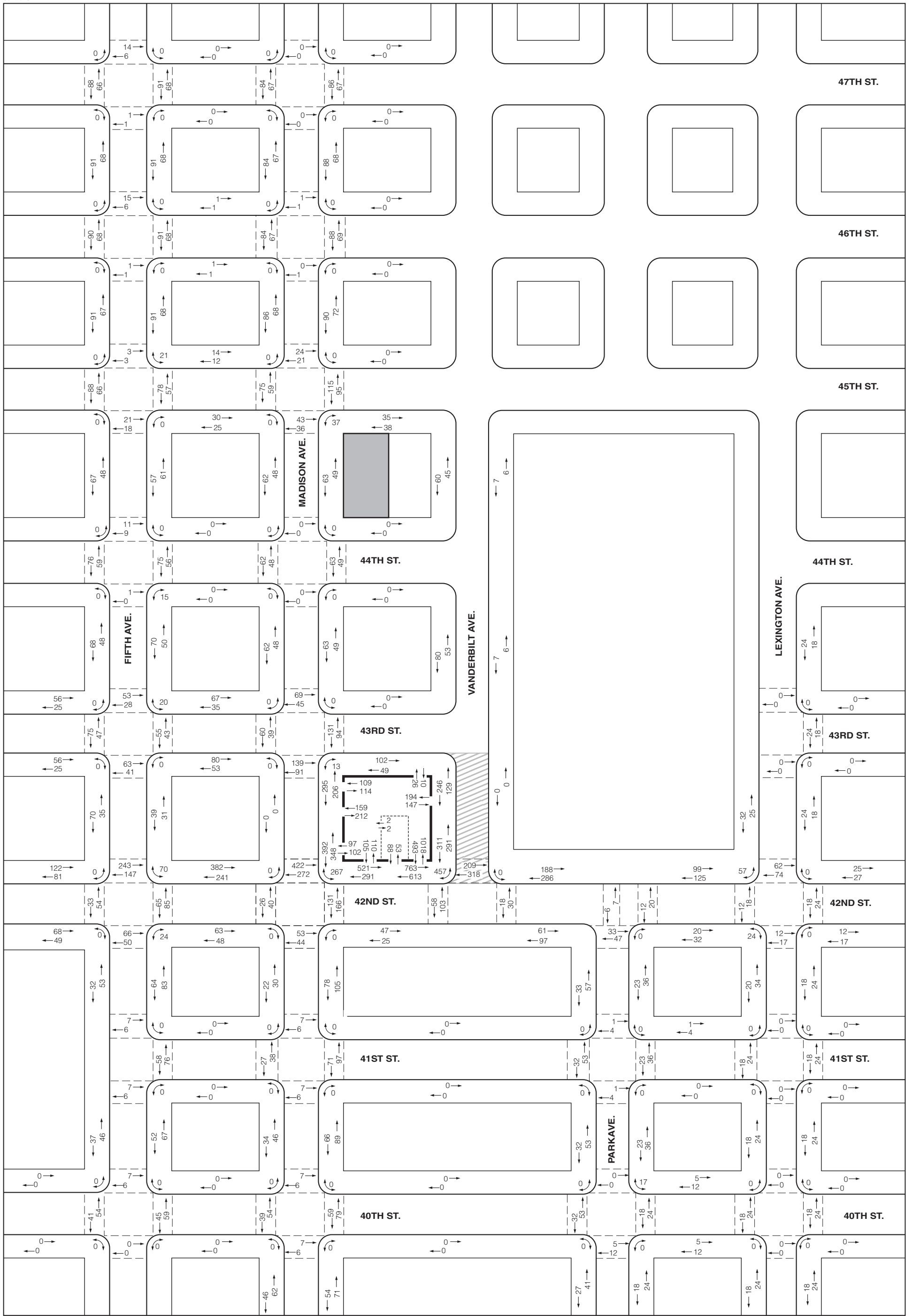
2021 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
Weekday Midday Peak Hour

Figure F-18



NOT TO SCALE

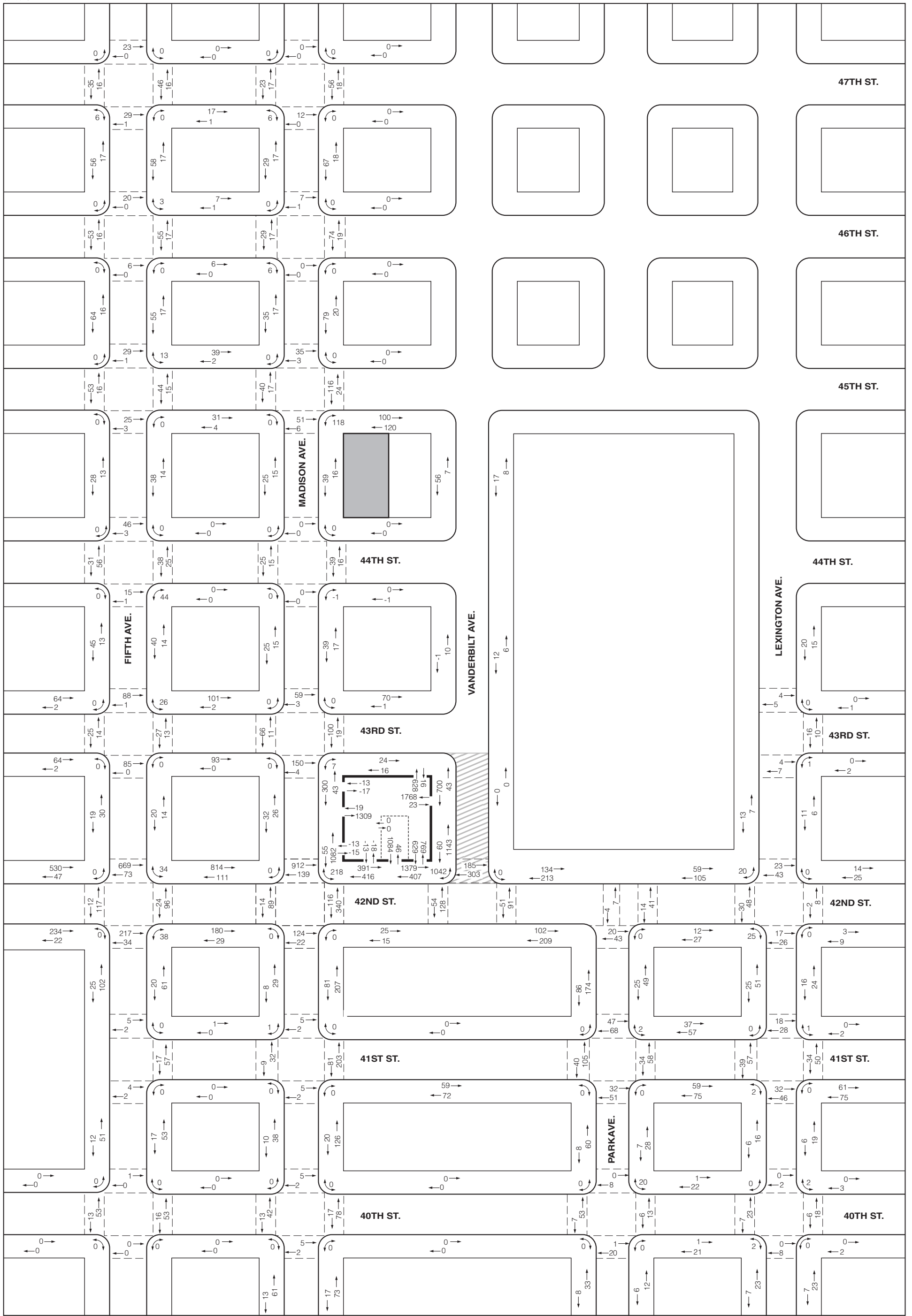
2021 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
Weekday PM Peak Hour



- One Vanderbilt Development Site
- MTA Access Area
- 2021 Vanderbilt Corridor Development Sites
- Proposed Public Place

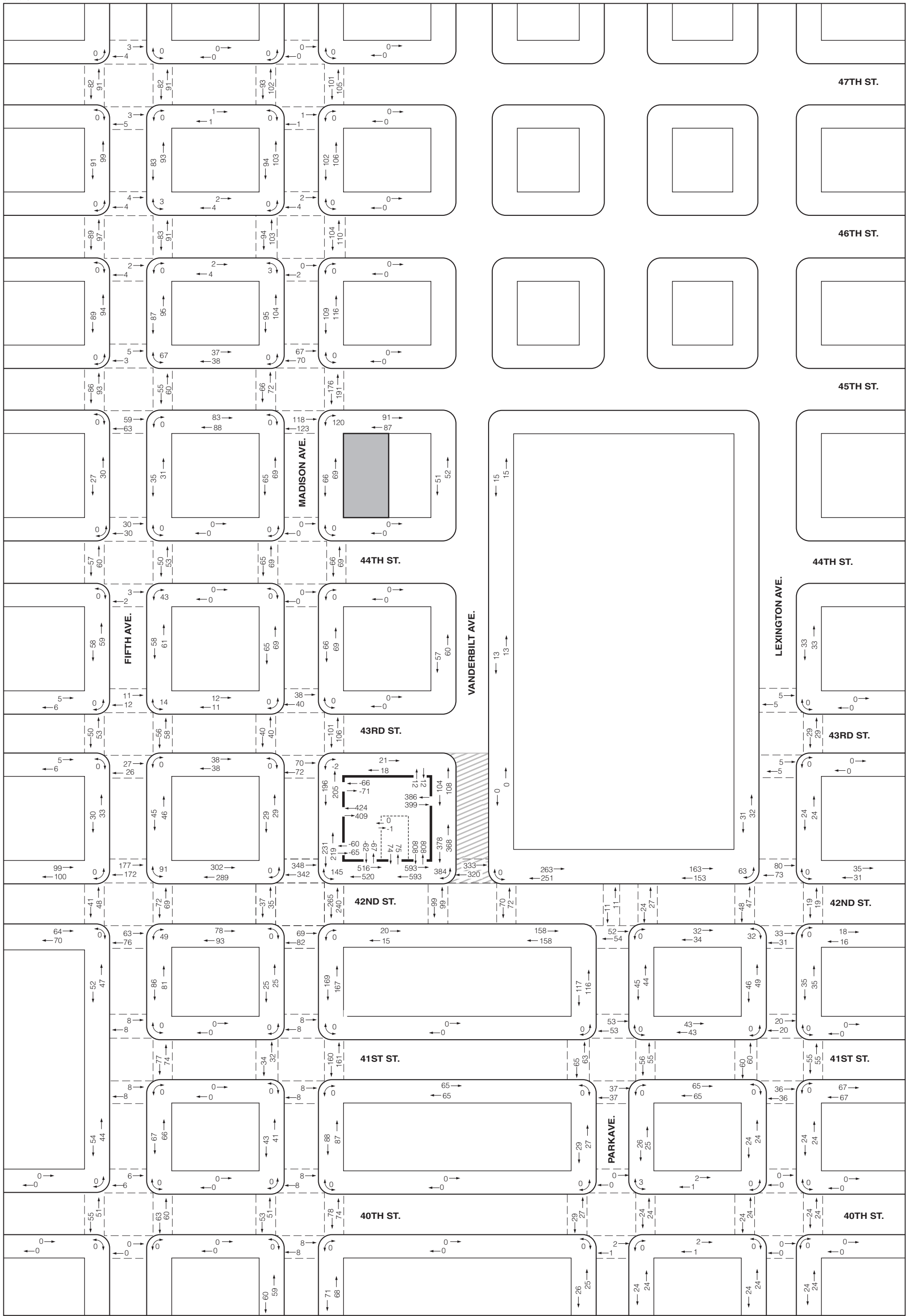
NOT TO SCALE

2021 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
 Saturday Peak Hour  
**Figure F-20**



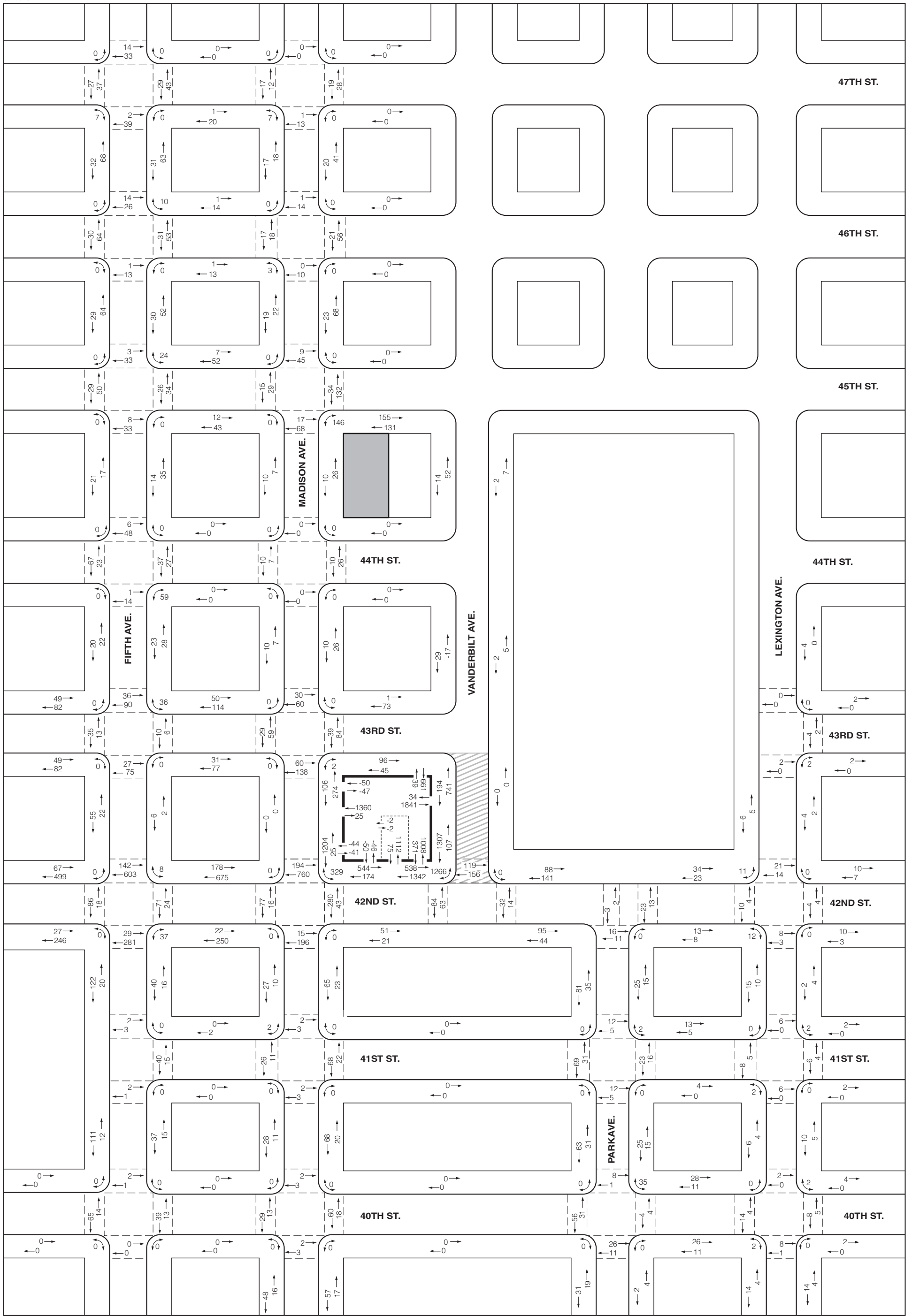
NOT TO SCALE

2021 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
Weekday AM Peak Hour  
Figure F-21



NOT TO SCALE

2021 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
 Weekday Midday Peak Hour  
**Figure F-22**

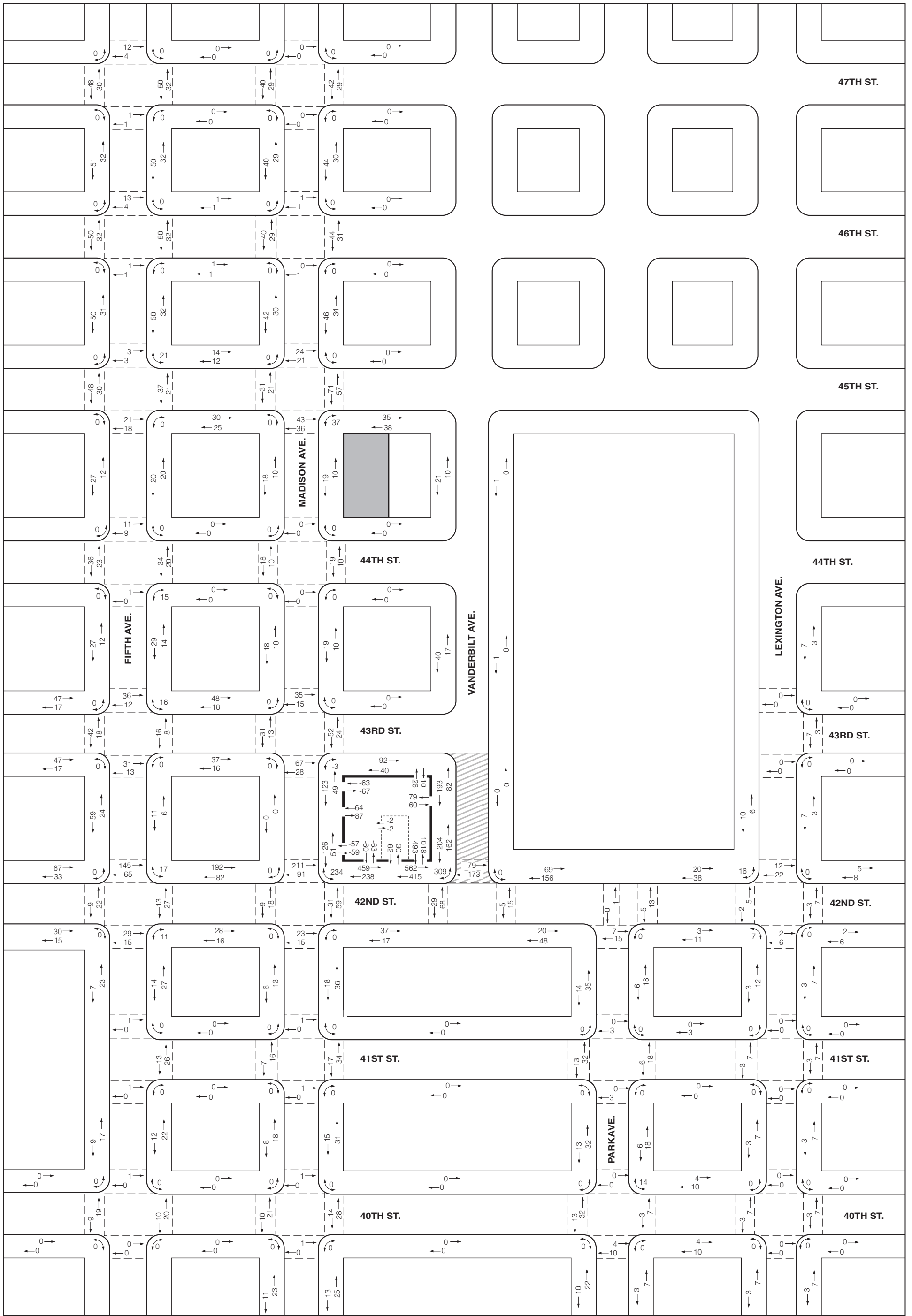


NOT TO SCALE

2021 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
 Weekday PM Peak Hour  
**Figure F-23**

**Vanderbilt Corridor and One Vanderbilt**

*This figure is new to the FEIS*



NOT TO SCALE

2021 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
 Saturday Peak Hour  
**Figure F-24**

**Vanderbilt Corridor and One Vanderbilt**

*This figure is new to the FEIS*

**Table F-9**

**2021 Vanderbilt Corridor No-Action Condition Subway Platform Stair Analysis  
Grand Central-42nd Street Station**

**SEE TABLE 10-36 (No-Action analysis results remained the same)**

**Table F-10**

**2021 Vanderbilt Corridor No-Action Condition Free-Zone Stair Analysis  
Grand Central-42nd Street Station**

**SEE TABLE 10-37 (No-Action analysis results remained the same)**

**Table F-11**

**2021 Vanderbilt Corridor No-Action Condition Subway Escalator Analysis  
Grand Central-42nd Street Station**

**SEE TABLE 10-38 (No-Action analysis results remained the same)**

**Table F-12**

**2021 Vanderbilt Corridor No-Action Condition Fare Array Analysis  
Grand Central-42nd Street Station**

**SEE TABLE 10-39 (No-Action analysis results remained the same)**

**Table F-13**

**2021 Vanderbilt Corridor No-Action Condition Subway Stairway Analysis  
42nd Street-Bryant Park Station**

**SEE TABLE 10-40 (No-Action analysis results remained the same)**

**Table F-14**

**2021 Vanderbilt Corridor No-Action Condition Subway Fare Array Analysis  
42nd Street-Bryant Park Station**

**SEE TABLE 10-41 (No-Action Analysis results remained the same)**

**Table F-15**

**2021 Vanderbilt Corridor No-Action Condition Subway Stairway Analysis  
47th-50th Street Rockefeller Center Station**

**This station was screened out for detailed analysis**

**Table F-16**

**2021 Vanderbilt Corridor No-Action Condition Subway Fare Array Analysis  
47th- 50th Street Rockefeller Center Station**

**This station was screened out for detailed analysis**



**Table F-17**  
**2021 Vanderbilt Corridor With-Action Condition Subway Platform Stair Analysis**  
**Grand Central-42nd Street Station**

Stair	Location	Stairway Width	Effective Width (ft)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surge Factor		V/C Ratio	LOS
				Up	Down	Up	Down		Up	Down		
<b>AM Peak Hour</b>												
P10	SB Lexington Platform	7.50	6.50	1090	1447	327	434	90%	75%	100%	0.99	C
P12	SB Lexington Platform	9.25	8.00	1150	2520	345	756	90%	75%	100%	1.13	D
P14	SB Lexington Platform	9.25	8.00	1133	2400	340	720	90%	75%	100%	1.09	D
P16	SB Lexington Platform	9.25	8.00	967	3210	290	963	90%	75%	100%	1.25	D
P18	SB Lexington Platform	9.25	8.00	1410	2163	423	649	90%	75%	100%	1.12	D
P20	SB Lexington Platform	9.25	8.00	1650	1273	495	382	90%	75%	100%	0.96	C
P22	SB Lexington Platform	9.25	8.00	1127	1127	338	338	90%	75%	100%	0.73	C
P24	SB Lexington Platform	7.00	6.00	823	0	247	0	100%	75%	100%	0.37	A
P13	NB Lexington Platform	9.25	8.00	1900	683	570	205	90%	75%	100%	0.89	C
P15	NB Lexington Platform	9.25	8.00	1347	820	404	246	90%	75%	100%	0.73	C
P17	NB Lexington Platform	9.25	8.00	1713	1697	514	509	90%	75%	100%	1.11	D
P19	NB Lexington Platform	9.25	8.00	1867	1020	560	306	90%	75%	100%	0.97	C
P21	NB Lexington Platform	9.25	8.00	1407	207	422	62	90%	75%	100%	0.58	B
P23	NB Lexington Platform	9.25	8.00	1193	310	358	93	90%	75%	100%	0.53	B
P25	NB Lexington Platform	6.00	5.00	987	103	296	31	90%	75%	100%	0.63	B
U1	Flushing Transfer via SB Lex	6.00	5.00	680	967	204	290	90%	90%	75%	0.76	C
U5	Flushing Transfer via SB Lex	6.00	5.00	1263	877	379	263	90%	90%	75%	1.14	D
U2	Flushing Transfer via NB Lex	7.00	6.00	507	940	152	282	90%	90%	75%	0.67	B
U6	Flushing Transfer via NB Lex	7.00	6.00	273	1133	82	340	90%	90%	75%	0.67	B
PL2	Flushing transfer at platform	7.50	6.50	1870	1747	561	524	90%	75%	95%	1.48	E
PL3	Flushing transfer at platform	7.50	6.50	957	2053	287	616	90%	75%	95%	1.18	D
PL5	Flushing transfer at platform	7.00	6.00	1647	0	494	0	100%	75%	95%	0.73	C
PL6	Flushing transfer at platform	7.00	6.00	2957	120	887	36	100%	75%	95%	1.36	E
PL9A	Flushing transfer at platform	15.00	13.50	3370	560	1011	168	90%	75%	100%	1.28	D
ML1	Flushing transfer at platform	4.58	3.58	0	560	0	168	100%	75%	100%	0.31	A
P10S	Shuttle at platform	15.50	14.00	1870	2297	561	689	90%	75%	100%	0.76	C
P11	Shuttle at platform	9.25	8.00	920	893	276	268	90%	75%	100%	0.59	B
P3	Shuttle at platform	5.00	4.00	227	30	68	9	90%	75%	100%	0.18	A
P4	Shuttle at platform	5.00	4.00	457	43	137	13	90%	75%	100%	0.36	A
<b>PM Peak Hour</b>												
P10	SB Lexington Platform	7.50	6.50	570	530	171	159	90%	75%	100%	0.44	A
P12	SB Lexington Platform	9.25	8.00	443	1070	133	321	90%	75%	100%	0.46	B
P14	SB Lexington Platform	9.25	8.00	430	1207	129	362	90%	75%	100%	0.49	B
P16	SB Lexington Platform	9.25	8.00	443	1873	133	562	90%	75%	100%	0.68	B
P18	SB Lexington Platform	9.25	8.00	717	1757	215	527	90%	75%	100%	0.75	C
P20	SB Lexington Platform	9.25	8.00	297	1380	89	414	90%	75%	100%	0.49	B
P22	SB Lexington Platform	9.25	8.00	287	1253	86	376	90%	75%	100%	0.45	B
P24	SB Lexington Platform	7.00	6.00	133	0	40	0	100%	75%	100%	0.06	A
P13	NB Lexington Platform	9.25	8.00	2553	1293	766	388	90%	75%	100%	1.30	D
P15	NB Lexington Platform	9.25	8.00	1820	1743	546	523	90%	75%	100%	1.16	D
P17	NB Lexington Platform	9.25	8.00	1953	2210	586	663	90%	75%	100%	1.34	E
P19	NB Lexington Platform	9.25	8.00	1927	1600	578	480	90%	75%	100%	1.16	D
P21	NB Lexington Platform	9.25	8.00	1047	970	314	291	90%	75%	100%	0.66	B
P23	NB Lexington Platform	9.25	8.00	843	1380	253	414	90%	75%	100%	0.70	B
P25	NB Lexington Platform	6.00	5.00	680	537	204	161	90%	75%	100%	0.64	B
U1	Flushing Transfer via SB Lex	6.00	5.00	103	987	31	296	90%	90%	75%	0.64	B
U5	Flushing Transfer via SB Lex	6.00	5.00	190	807	57	242	90%	90%	75%	0.57	B
U2	Flushing Transfer via NB Lex	7.00	6.00	217	1967	65	590	90%	90%	75%	1.06	D
U6	Flushing Transfer via NB Lex	7.00	6.00	117	1607	35	482	90%	90%	75%	0.84	C
PL2	Flushing transfer at platform	7.50	6.50	437	2627	131	788	90%	75%	95%	1.14	D
PL3	Flushing transfer at platform	7.50	6.50	217	2683	65	805	90%	75%	95%	1.06	D
PL5	Flushing transfer at platform	7.00	6.00	457	837	137	251	90%	75%	95%	0.55	B
PL6	Flushing transfer at platform	7.00	6.00	807	1313	242	394	90%	75%	95%	0.91	C
PL9A	Flushing transfer at platform	15.00	13.50	1053	2510	316	753	90%	75%	100%	0.99	C
ML1	Flushing transfer at platform	4.58	3.58	0	0	0	0	100%	75%	100%	0.00	A
P10S	Shuttle at platform	15.50	14.00	1780	1537	534	461	90%	75%	100%	0.62	B
P11	Shuttle at platform	9.25	8.00	877	597	263	179	90%	75%	100%	0.49	B
P3	Shuttle at platform	5.00	4.00	40	250	12	75	90%	75%	100%	0.17	A
P4	Shuttle at platform	5.00	4.00	83	373	25	112	90%	75%	100%	0.27	A

Note: This table is newly added for this FEIS.

**Table F-18**  
**2021 Vanderbilt Corridor With-Action Free-Zone Stair Analysis**  
**Grand Central-42nd Street Station**

Free-Zone Stair	Location	Stairway Width	Effective Width (ft)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surge Factor		V/C Ratio	LOS
				Up	Down	Up	Down		Up	Down		
<b>AM Peak Hour</b>												
M8	Control Area R240	19.16	17.66	2433	3993	730	1198	90%	90%	100%	0.84	C
M9	Control Area R240	14.00	12.50	2753	270	826	81	90%	90%	100%	0.59	B
O27	Control Area R240	12.00	10.75	230	1520	69	456	90%	100%	90%	0.40	A
M7	Control Area R238/A	10.00	8.75	873	3597	262	1079	90%	95%	100%	1.15	D
M30(KC)	Control Area R238/A	11.50	10.25	680	6357	204	1907	90%	95%	100%	1.53	E
S1	Control Area R233	4.75	3.75	170	20	51	6	90%	80%	100%	0.14	A
O3	Control Area R233	9.00	7.75	510	57	153	17	90%	80%	100%	0.20	A
<b>PM Peak Hour</b>												
M8	Control Area R240	19.16	17.66	2013	3110	604	933	90%	90%	100%	0.67	B
M9	Control Area R240	14.00	12.50	630	1937	189	581	90%	90%	100%	0.47	B
O27	Control Area R240	12.00	10.75	1067	527	320	158	90%	100%	90%	0.34	A
M7	Control Area R238/A	10.00	8.75	4090	1550	1227	465	90%	95%	100%	1.49	E
M30(KC)	Control Area R238/A	11.50	10.25	1037	2777	311	833	90%	95%	100%	0.84	C
S1	Control Area R233	4.75	3.75	30	157	9	47	90%	80%	100%	0.12	A
O3	Control Area R233	9.00	7.75	93	467	28	140	90%	80%	100%	0.17	A

Note: This table is newly added for this FEIS.

**Table F-19**  
**2021 Vanderbilt Corridor With-Action Subway Escalator Analysis**  
**Grand Central-42nd Street Station**

Escalator	Location	Tread Width (in.)	Peak Hour Volumes		Peak 15-Minute Volumes		Surge Factor		Capacity	V/C Ratio	LOS
			Up	Down	Up	Down	Up	Down			
<b>AM Peak Hour</b>											
ES203(UP)	Flushing East Core	32"	1683	-	505	-	0.80	-	750	0.84	C
ES204(UP)	Flushing East Core	32"	1687	-	506	-	0.80	-	751	0.84	C
ES205(UP)	Flushing Center Core	40"	2337	-	701	-	0.80	-	945	0.93	C
ES206(UP)	Flushing Center Core	40"	2340	-	702	-	0.80	-	946	0.93	C
ES208(UP)	Flushing West Core	40"	2267	-	680	-	0.75	-	945	0.96	C
ES210(UP)	Flushing West Core	40"	2267	-	680	-	0.75	-	946	0.96	C
ES255(UP)	R238 Free Zone	40"	3000	-	900	-	0.90	-	945	1.06	D
ES256(UP)	R238 Free Zone	40"	3000	-	900	-	0.90	-	946	1.06	D
One V Esc 1	R236A/B Free Zone	40"	2043	-	613	-	0.90	-	945	0.72	C
One V Esc 2	R236A/B Free Zone	40"	2043	-	613	-	0.90	-	945	0.72	C
<b>PM Peak Hour</b>											
ES203(UP)	Flushing East Core	32"	1053	-	316	-	0.80	-	750	0.53	B
ES204(DN)	Flushing East Core	32"	-	2510	-	753	-	1	750	1.00	D
ES205(UP)	Flushing Center Core	40"	1283	-	385	-	0.80	-	945	0.51	B
ES206(DN)	Flushing Center Core	40"	-	2067	-	620	-	1	945	0.66	B
ES208(UP)	Flushing West Core	40"	1500	-	450	-	0.75	-	945	0.63	B
ES210(DN)	Flushing West Core	40"	-	3133	-	940	-	1	945	0.99	C
ES255(UP)	R238 Free Zone	40"	3500	-	1050	-	0.90	-	945	1.17	D
ES256(DN)	R238 Free Zone	40"	-	3500	-	1050	-	1	946	1.14	D
One V Esc 1	R236A/B Free Zone	40"	883	-	265	-	0.90	-	945	0.31	A
One V Esc 2	R236A/B Free Zone	40"	-	3500	-	1050	-	1	945	1.11	D

Note: This table is newly added for this FEIS.

**Table F-20**  
**2021 Vanderbilt Corridor With-Action Condition Fare Array Analysis**  
**Grand Central-42nd Street Station**

Peak Period	Fare Array	Control Element	Quantity	Peak Hour Pedestrian Volumes		15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
				In	Out	In	Out				
AM	R233	High Entry/Exit Turnstile	2	73	680	22	204	0.80	0.90	0.22	A
		High Exit Turnstile	1								
	R236	Two-way Turnstile	12	3070	2197	921	659	0.80	0.90	0.31	A
		High Entry/Exit Turnstile	1								
	R236A*	Two-way Turnstile	4	117	787	35	236	0.75	0.90	0.13	A
	R236B*	Two-way Turnstile	5	410	2173	123	652	0.95	0.90	0.30	A
	R237	Two-way Turnstile	7	273	2443	82	733	0.90	0.90	0.23	A
	R237A	High Exit Turnstile	1	N/A	437	N/A	131	0.90	1.0	0.26	A
	R237B	Two-way Turnstile	4	723	3553	217	1066	0.90	0.90	0.65	B
	R238	Two-way Turnstile	16	3237	5980	971	1794	0.90	0.90	0.38	A
	R238A	Two-way Turnstile	8	7110	1057	2133	317	0.90	0.90	0.78	C
	R238B*	Two-way Turnstile	4	360	653	108	196	0.90	0.90	0.17	A
	R240	Two-way Turnstile	11	2827	6623	848	1987	0.90	0.90	0.55	B
	R240A*	Two-way Turnstile	4	103	1633	31	490	0.90	0.90	0.25	A
R241A	Two-way Turnstile	5	560	3370	168	1011	0.90	0.95	0.46	B	
PM	R233	High Entry/Exit Turnstile	2	623	123	187	37	0.80	0.90	0.44	A
		High Exit Turnstile	1								
	R236	Two-way Turnstile	12	2317	2657	695	797	0.80	0.90	0.29	A
		High Entry/Exit Turnstile	1								
	R236A*	Two-way Turnstile	4	763	140	229	42	0.75	0.90	0.14	A
	R236B*	Two-way Turnstile	5	2050	497	615	149	0.95	0.90	0.38	A
	R237	Two-way Turnstile	7	1917	437	575	131	0.90	0.90	0.25	A
	R237A	High Exit Turnstile	1	0	113	0	34	0.90	1.0	0.07	A
	R237B	Two-way Turnstile	4	2870	1497	861	449	0.90	0.90	0.78	C
	R238	Two-way Turnstile	16	4893	6833	1468	2050	0.90	0.90	0.49	B
	R238A	Two-way Turnstile	8	2593	1223	778	367	0.90	0.90	0.35	A
	R238B*	Two-way Turnstile	4	540	757	162	227	0.90	0.90	0.22	A
	R240	Two-way Turnstile	11	5577	2360	1673	708	0.90	0.90	0.53	B
	R240A*	Two-way Turnstile	4	533	810	160	243	0.90	0.90	0.22	A
R241A	Two-way Turnstile	5	2510	1053	753	316	0.90	0.90	0.51	B	

**Source:** New York City Transit, 2015.

**Note:** This table is newly added for this FEIS.

**Table F-21**

**2021 Vanderbilt Corridor With-Action Condition Subway Stairway Analysis  
42nd Street-Bryant Park Station**

**SEE TABLE 10-46 (With-Action analysis results remained the same)**

**Table F-22**

**2021 Vanderbilt Corridor With-Action Condition Subway Fare Array Analysis  
42nd Street-Bryant Park Station**

**SEE TABLE 10-47 (With-Action analysis results remained the same)**

**Table F-23**

**2021 Vanderbilt Corridor With-Action Condition Subway Stairway Analysis  
47th-50th Street Rockefeller Center Station**

**The station was screened out for detailed analysis**

**Table F-24**

**2021 Vanderbilt Corridor With-Action Condition Subway Fare Array Analysis  
47th-50th Street Rockefeller Center Station**

**The station was screened out for detailed analysis**

**Table F-25**

**2021 Vanderbilt Corridor No-Action Condition Subway Line Haul Analysis**

**SEE TABLE 10-49 (No-Action analysis results remained the same)**

**Table F-26  
2021 Vanderbilt Corridor With-Action Condition Subway Line Haul Analysis**

Peak Hour	Line	Direction	Maximum Load Point (Leaving Station)	Average Train Per Hour (1)	Cars Per Hour (1)	Passengers Per Hour (2)	Peak Hour Capacity (3)	V/C Ratio (4)
AM	4	SB	Grand Central-42 St	15.4	154.3	17,919	16,977	1.06
	5	SB	Grand Central-42 St	13.7	136.7	15,000	15,037	1.00
	6	SB	68 St-Hunter College	23.9	239.0	20,142	26,262	0.77
	7 exp	SB	Woodside-61 St	14.8	163.0	16,744	17,978	0.93
	7 loc	SB	40 St-Lowery St	14.8	163.0	14,174	17,935	0.79
	B	SB	72 St	7.3	58.4	5,398	8,176	0.66
	D	SB	125 St	9.6	76.8	10,110	13,475	0.75
	F	SB	Roosevelt Island	14.5	145.0	20,403	21,025	0.97
	M	SB	Queens Plaza	10.1	80.8	6,267	11,771	0.53
	S	SB	Grand Central-42 St	29.5	98.5	4,229	10,835	0.39
	4	NB	14 St-Union Sq	13.0	130.0	14,912	14,300	1.04
	5	NB	14 St-Union Sq	13.0	130.0	14,797	14,300	1.03
	B	NB	7 Av	10.2	81.6	10,705	14,321	0.75
	D	NB	36 St	10.6	84.8	10,730	13,992	0.77
	F	NB	2 Av	14.0	140.0	14,435	20,300	0.71
	M	NB	Marcy Av	10.0	80.0	8,728	10,000	0.87
S	NB	Times Sq-42 St	29.5	98.5	4,706	10,835	0.43	
PM	4	NB	59 St	12.7	127.0	13,905	13,970	1.00
	5	NB	59 St	13.3	133.0	11,472	14,630	0.78
	6	NB	59 St	20.3	203.0	17,203	22,314	0.77
	7	NB	Queensboro Plaza	24.4	244.0	23,796	29,524	0.81
	7	SB	Grand Central-42 St	26.0	286.0	9,464	31,460	0.30
	B	NB	59 St	7.0	56.0	5,091	7,840	0.65
	D	NB	59 St	8.5	68.0	7,321	11,900	0.62
	F	NB	Lexington Av/63 St	15.3	153.0	16,993	22,185	0.77
	M	NB	Lexington Av/53 St	7.8	62.4	4,450	9,035	0.49
	S	NB	Times Sq-42 St	28.0	93.5	4,157	10,285	0.40
	4	SB	14 St-Union Square	14.0	140.0	12,256	15,400	0.80
	5	SB	14 St-Union Square	10.5	105.0	8,275	11,550	0.72
	B	SB	Atlantic Av	8.9	71.2	9,246	12,400	0.75
	D	SB	Pacific St	10.0	80.0	10,443	12,400	0.84
	F	SB	Jay St-Borough Hall	13.1	131.0	12,149	18,995	0.64
M	SB	Essex St	7.8	62.4	6,500	7,176	0.91	
S	SB	Grand Central-42 St	27.5	92.0	4,484	10,120	0.44	
<b>Source:</b> NYCT, 2015. <b>Note:</b> (1) Based on existing average throughput and future anticipated capacity increases (2) Based on Regional Transit Forecasting Model (RTFM) outputs. (3) Capacity based on NYCT rush hour guideline capacities. (4) Volume-to-capacity ratio.								

**Note:** This table is newly added for this FEIS

**Table F-27**  
**2033 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis**  
**Signalized Intersections**

Int.	Weekday AM								Weekday Midday								Weekday PM								Saturday														
	2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action										
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS			
<b>Third Avenue &amp; East 42nd Street</b>																																							
WB	L	1.29	198.2	F	L	1.30	205.9	F +	L	1.31	204.1	F	L	1.32	207.7	F +	L	1.31	207.8	F	L	1.37	234.3	F +															
	T	1.61	306.9	F	T	1.62	313.4	F +	T	1.22	140.0	F	T	1.27	159.2	F +	T	1.57	291.4	F	T	1.59	297.7	F +															
	R	1.21	143.7	F	R	1.22	148.3	F +	R	1.02	74.3	E	R	0.98	64.8	E	R	1.06	86.2	F	R	1.08	92.4	F +															
	LT	1.27	185.6	F	LT	1.30	198.7	F +	LT	1.20	161.8	F	LT	1.26	182.4	F +	LT	1.36	236.0	F	LT	1.40	254.3	F +															
	RT	1.01	47.0	D	RT	1.02	50.1	D	RT	1.10	80.1	F	RT	1.09	75.8	E	RT	0.97	39.5	D	RT	0.99	42.9	D															
Int.	0.34	20.3	C	Int.	0.34	20.3	C	Int.	0.56	28.3	C	Int.	0.57	28.6	C	Int.	0.43	23.0	C	Int.	0.48	24.5	C																
Int.	141.2	F	Int.	146.2	F	Int.	102.5	F	Int.	104.9	F	Int.	127.2	F	Int.	133.7	F																						
<b>Third Avenue &amp; East 41st Street</b>																																							
WB	LT	0.53	26.5	C	LT	0.55	27.0	C	LT	0.89	52.8	D	LT	0.92	58.0	E ±	LT	1.12	110.9	E	LT	1.19	136.5	F +															
	T	0.84	47.5	D	T	0.84	47.5	D	T	0.77	43.0	D	T	0.77	43.0	D	T	0.81	45.1	D	T	0.81	45.1	D															
	R	0.64	14.0	B	R	0.65	14.1	B	R	0.65	14.0	B	R	0.64	14.0	B	R	0.62	13.6	B	R	0.63	13.8	B															
	RT	0.04	9.0	A	RT	0.04	9.0	A	RT	0.05	9.3	A	RT	0.05	9.3	A	RT	0.18	11.2	B	RT	0.18	11.2	B															
	Int.	19.3	B	Int.	19.0	B	Int.	22.5	C	Int.	22.5	C	Int.	34.4	C	Int.	40.0	D																					
<b>Lexington Avenue &amp; East 42nd Street</b>																																							
WB	T	1.07	82.2	F	T	1.09	87.3	F +	-	-	-	-	-	-	-	-	T	1.15	110.1	F	T	1.17	119.7	F +															
	R	0.33	31.1	C	R	0.33	31.1	C	TR	1.30	176.6	F	TR	1.32	183.5	F +	R	0.25	27.7	C	R	0.25	27.7	C															
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-															
	L	0.99	58.0	E	L	1.01	61.6	E	T	1.13	102.8	F	T	1.06	79.8	E	T	0.93	46.0	D	T	0.96	50.6	D															
	LT	0.58	20.9	C	LT	0.58	20.9	C	L	0.53	19.0	B	L	0.59	21.1	C	L	0.71	27.0	C	L	0.71	27.0	C															
Int.	1.96	467.8	F	Int.	1.98	474.7	F +	Int.	1.54	278.0	F	Int.	1.23	145.2	F	Int.	1.98	477.4	F	Int.	2.03	499.1	F +																
<b>Park Avenue &amp; East 47th Street</b>																																							
WB	LT	0.81	36.3	D	LT	0.95	55.0	D +	LT	0.60	25.2	C	LT	0.75	31.3	C	LT	0.57	24.2	C	LT	0.61	25.4	C	LT	0.56	23.9	C	LT	0.68	28.1	C							
	R	0.52	25.2	C	R	0.52	25.2	C	R	0.50	24.7	C	R	0.50	24.7	C	R	0.82	43.9	D	R	0.82	43.9	D	R	0.36	20.1	C	R	0.36	20.1	C							
	L**	0.00	34.4	C	L**	0.00	34.7	C	L**	0.00	34.4	C	L**	0.00	35.0	C	L**	0.00	35.7	D	L**	0.00	38.0	D	L**	0.00	36.0	D	L**	0.00	36.4	D							
	LT	0.53	18.4	B	LT	0.54	18.5	B	LT	0.74	22.8	C	LT	0.76	23.3	C	LT	0.56	18.8	B	LT	0.52	19.6	B	LT	0.60	19.7	B	LT	0.60	19.7	B							
	T	0.59	19.5	B	T	0.60	19.7	B	-	-	-	-	-	-	-	-	T	0.50	18.2	B	T	0.50	18.2	B	T	-	-	-	T	-	-	-							
Int.	1.39	217.7	F	Int.	1.42	260.2	F +	Int.	1.07	68.1	E	Int.	1.09	75.0	E +	Int.	1.68	340.4	F	Int.	1.74	366.8	F +	Int.	0.74	23.2	C	Int.	0.75	23.5	C								
<b>Park Avenue &amp; East 46th Street</b>																																							
WB	LT	0.41	18.7	B	LT	0.48	19.8	B	LT	0.68	23.9	C	LT	0.69	24.2	C	LT	0.68	23.8	C	LT	0.81	28.2	C	LT	0.87	40.9	D	LT	0.83	36.5	D							
	R	0.21	17.0	B	R	0.23	17.4	B	R	0.26	17.9	B	R	0.26	17.8	B	R	0.31	18.6	B	R	0.31	18.8	B	R	0.07	15.1	B	R	0.07	15.1	B							
	T	0.86	29.3	C	T	0.87	29.9	C	T	0.75	24.3	C	T	0.76	24.6	C	T	0.78	25.5	C	T	0.83	27.4	C	T	0.71	23.1	C	T	0.72	23.4	C							
	L**	0.00	35.6	D	L**	0.00	35.6	D	L**	0.00	31.5	C	L**	0.00	31.5	C	L**	0.00	33.7	C	L**	0.00	33.1	C	L**	0.00	33.1	C	L**	0.00	33.1	C							
	I	0.85	29.3	C	I	0.89	32.6	C	I	0.77	25.8	C	I	0.78	26.0	C	I	0.66	22.5	C	I	0.67	22.7	C	I	0.36	17.3	B	I	0.36	17.4	B							
Int.	27.9	C	Int.	29.3	C	Int.	24.7	C	Int.	25.0	C	Int.	24.4	C	Int.	26.2	C	Int.	25.3	C	Int.	24.8	C																
<b>Park Avenue &amp; East 42nd Street</b>																																							
WB	T	0.73	20.7	C	T	0.74	21.0	C	T	0.70	19.6	B	T	0.71	19.9	B	T	0.74	20.6	C	T	0.75	21.1	C															
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-															
	Int.	1.07	65.8	E	Int.	1.08	70.5	E +	Int.	1.18	110.1	F	Int.	1.05	60.7	E	Int.	1.26	146.0	F	Int.	1.30	161.3	F +															
Int.	47.5	D	Int.	50.4	D	Int.	75.6	E	Int.	75.6	E	Int.	43.9	D	Int.	98.2	F	Int.	108.2	F																			



Table F-27 (cont'd)

2033 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis  
 Signalized Intersections

		Weekday AM								Weekday Midday								Weekday PM								Saturday							
		2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action			
Int.	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	
Madison Avenue & East 46th Street																																	
EB NB	LT	0.54	23.6	C	LT	0.58	24.5	C	T	0.50	22.5	C	T	0.52	22.9	C	T	0.55	23.4	C	T	0.64	25.2	C									
	T	1.33	121.9	F	T	1.39	129.8	F +	T	1.30	158.9	F	T	1.35	179.7	F +	T	1.10	74.2	E	T	1.17	103.1	F +									
	R	0.48	15.5	B	R	0.55	18.3	B	R	0.49	16.1	B	R	0.61	20.6	C	R	0.28	11.9	B	R	0.30	12.4	B									
	Int.	125.5	F	Int.	144.9	F	Int.	117.4	F	Int.	131.3	F	Int.	56.4	E	Int.	75.1	E															
Madison Avenue & East 44th Street																																	
EB NB	LT	0.96	64.2	E	LT	1.07	93.8	F +	LT	0.86	47.3	D	LT	0.97	67.3	E +	LT	0.94	61.2	E	LT	1.19	136.1	F +	LT	0.67	30.5	C	LT	0.75	34.9	C	
	T	1.38	192.8	F	T	1.42	213.0	F +	T	1.32	166.5	F	T	1.36	185.6	F +	T	1.12	80.9	E	T	1.16	98.9	F +	T	0.80	19.3	B	T	0.85	21.7	C	
	R	0.20	11.7	B	R	0.25	13.4	B	R	0.26	12.9	B	R	0.58	25.8	C	R	0.23	13.0	B	R	0.24	13.0	B	R	0.10	9.8	A	R	0.22	11.4	B	
	Int.	164.4	F	Int.	185.0	F	Int.	143.7	F	Int.	158.5	F	Int.	75.6	E	Int.	105.2	F	Int.	21.5	C	Int.	21.5	C	Int.	24.1	C	Int.	24.1	C			
Madison Avenue & East 43rd Street																																	
WB NB	T	0.75	33.7	C	T	0.80	37.4	D	T	1.03	76.1	E	T	0.85	41.4	D	T	0.72	31.6	C	T	0.73	32.2	C	T	0.22	19.3	B	T	0.07	17.5	B	
	L	0.73	40.2	D	R	0.90	61.1	E +	R	0.84	48.7	D	R	1.02	84.2	F +	R	0.68	36.5	D	R	0.78	44.9	D	R	0.34	21.2	C	R	0.44	23.9	C	
	R	1.37	150.5	F	L	1.73	371.5	F +	L	1.59	310.3	F	L	1.60	312.7	F	L	1.73	371.5	F	L	1.78	394.3	F	L	0.89	44.3	D	L	0.71	23.4	C	
	Int.	1.03	51.5	D	T	1.04	54.7	D	T	1.00	41.5	D	T	1.04	51.8	D +	T	0.82	22.5	C	T	0.89	24.1	C	T	0.68	15.5	B	T	0.72	16.6	B	
	Int.	68.6	E	Int.	96.8	F	Int.	82.1	F	Int.	85.4	F	Int.	81.3	F	Int.	86.6	F	Int.	21.8	C	Int.	21.8	C	Int.	18.7	B	Int.	18.7	B			
Madison Avenue & East 42nd Street																																	
EB WB NB	LT	1.18	121.2	F	LT	1.20	128.5	F +	LT	1.03	65.0	E	LT	1.12	97.6	F +	LT	1.40	214.9	F	LT	1.43	229.5	F +	LT	1.41	217.2	F	LT	1.43	227.2	F +	
	T	1.50	256.0	F	T	1.51	263.9	F +	T	1.19	123.6	F	T	1.30	168.0	F +	T	1.49	252.7	F	T	1.53	271.2	F +	T	1.35	191.8	F	T	1.46	240.1	F +	
	R	1.39	199.4	F	LT	1.43	216.7	F +	LT	1.47	236.2	F	LT	1.52	257.0	F +	L	0.10	12.3	B	L	0.10	12.3	B	L	0.07	11.9	B	L	0.07	11.9	B	
		0.41	14.6	B	R	0.43	15.0	B	R	0.29	12.0	B	R	0.29	12.0	B	L	0.12	80.0	E	L	0.14	91.2	E	L	0.92	27.3	C	L	0.98	35.9	D	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R	0.41	14.2	B	R	0.17	10.3	B	R	0.17	10.3	B	R	0.18	10.4	B	
	Int.	198.9	F	Int.	210.1	F	Int.	159.3	F	Int.	189.5	F	Int.	171.5	F	Int.	185.9	F	Int.	139.6	F	Int.	139.6	F	Int.	139.6	F	Int.	163.2	F			
Fifth Avenue & East 47th Street																																	
WB SB	L	0.30	36.1	D	L	0.41	38.7	D	L	0.68	49.5	D	L	0.71	52.0	D	L	0.50	40.8	D	L	0.54	42.3	D									
	T	0.73	29.2	C	T	0.81	34.3	C	T	0.82	34.8	C	T	0.88	40.9	D	T	0.54	22.5	C	T	0.75	29.8	C									
	R	1.24	134.5	F	T	1.27	146.3	F +	T	0.99	38.0	D	T	1.01	43.8	D	T	0.98	37.3	D	T	0.99	39.5	D									
	Int.	113.3	F	Int.	121.6	F	Int.	113.3	F	Int.	113.3	F	Int.	43.8	D	Int.	35.3	D	Int.	32.2	C	Int.	32.2	C									
Fifth Avenue & West 46th Street																																	
EB SB	TR	0.41	21.2	C	TR	0.44	21.7	C	T	0.41	21.1	C	T	0.43	21.4	C	T	0.43	21.4	C	T	0.50	22.5	C									
	LT	1.13	82.2	F	LT	1.17	98.2	F +	LT	0.96	28.6	C	LT	0.98	33.2	C	LT	1.01	41.1	D	LT	1.03	46.0	D									
		Int.	73.6	E	Int.	87.0	F	Int.	27.3	C	Int.	31.1	C	Int.	37.4	D	Int.	41.1	D	Int.	41.1	D	Int.	41.1	D								
Fifth Avenue & West 44th Street																																	
EB SB	T	0.41	22.1	C	T	0.43	22.5	C	T	0.37	21.3	C	T	0.38	21.6	C	T	0.42	22.2	C	T	0.53	24.5	C									
	R	1.03	90.0	F	R	1.04	93.3	F	R	1.24	162.1	F	R	1.25	166.5	F	R	1.12	120.2	F	R	1.21	153.2	F +									
	LT	1.15	90.6	F	LT	1.19	109.5	F +	LT	0.89	22.3	C	LT	0.93	25.7	C	LT	0.94	26.6	C	LT	0.95	28.5	C									
	Int.	84.7	F	Int.	100.2	F	Int.	41.9	D	Int.	44.8	C	Int.	36.7	D	Int.	42.5	D	Int.	42.5	D	Int.	42.5	D									
Fifth Avenue & 42nd Street																																	
EB WB SB	T	0.85	34.3	C	T	0.86	35.3	D	T	0.82	32.1	C	T	0.83	32.7	C	T	0.90	38.4	D	T	0.92	41.0	D	T	1.07	76.2	E	T	1.09	82.7	F +	
	R	0.18	21.3	C	R	0.18	21.3	C	R	0.24	23.1	C	R	0.24	23.1	C	R	0.20	22.0	C	R	0.20	22.0	C	R	0.22	22.3	C	R	0.22	22.3	C	
	LT	1.59	296.5	F	LT	1.61	304.6	F +	LT	1.35	191.7	F	LT	1.46	241.9	F +	LT	1.74	362.7	F	LT	1.78	383.8	F	LT	1.51	260.2	F	LT	1.62	312.5	F +	
		1.20	110.9	F	LT	1.20	112.9	F	LT	1.06	54.1	D	LT	1.04	49.7	D	LT	1.11	72.6	E	LT	1.12	78.9	E	LT	0.77	16.8	B	LT	0.75	16.4	B	
		0.00	11.3	B	R	0.00	11.3	B	R	0.00	11.3	B	R	0.00	11.3	B	R	0.00	11.3	B	R	0.00	11.3	B	R	0.05	12.0	B	R	0.05	12.0	B	
	Int.	157.8	F	Int.	161.7	F	Int.	90.5	F	Int.	107.0	F	Int.	169.6	F	Int.	181.1	F	Int.	118.3	F	Int.	118.3	F	Int.	118.3	F	Int.	143.6	F			
Sixth Avenue & West 42nd Street																																	
EB WB NB	T	0.85	34.4	C	T	0.86	35.6	D	T	0.79	31.2	C	T	0.81	31.9	C	T	0.86	34.8	C	T	0.88	36.7	D	T	1.08	79.7	E	T	1.10	86.4	F +	
	R	1.22	135.9	F	R	1.24	143.3	F +	R	0.97	48.6	D	R	1.02	60.9	E	R	1.28	162.9	F	R	1.33	181.3	F	R	1.22	135.8	F	R	1.28	161.4	F +	
	LT	1.00	79.3	E	R	1.00	79.3	E	R	0.97	48.6	D	R	1.17	137.3	F +	R	0.96	71.4	E	R	0.96	71.4	E	R	0.78	43.9	D	R	0.97	75.0	E	
		0.79	16.9	B	LT	0.80	17.2	B	LT	0.61	13.5	B	LT	0.61	13.6	B	LT	0.71	15.1	B	LT	0.71	15.2	B									
		0.48	16.5	B			16.5	B			14.6	B			14.6	B			12.1	B			12.1	B									
	Int.	57.5	E	Int.	59.9	E	Int.	30.7	C	Int.	40.0	D	Int.	67.5	E	Int.	74.2	E	Int.	74.2	E	Int.	74.2	E	Int.	65.1	E	Int.	76.4	E			



Table F-27 (cont'd)

## 2033 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis Signalized Intersections

Int.	Weekday AM								Weekday Midday								Weekday PM								Saturday															
	2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action											
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS								
First Avenue & East 47th Street																																								
WB	TR (east)	0.00	16.8	B	TR (east)	0.00	16.8	B	TR (east)	0.00	16.8	B	TR (east)	0.00	16.8	B	TR (east)	0.00	16.8	B	TR (east)	0.00	16.8	B																
	TR (west)	0.00	16.8	B	TR (west)	0.00	16.8	B	TR (west)	0.00	16.8	B	TR (west)	0.00	16.8	B	TR (west)	0.00	16.8	B	TR (west)	0.00	16.8	B																
	TR (east)	0.84	21.1	C	TR (east)	0.84	21.1	C	TR (east)	0.78	18.3	B	TR (east)	0.78	18.3	B	TR (east)	1.19	109.5	F	TR (east)	1.19	109.5	F																
	L (west)	0.44	12.9	B	L (west)	0.44	12.9	B	L (west)	0.45	13.8	B	L (west)	0.45	13.8	B	L (west)	0.36	11.9	B	L (west)	0.36	11.9	B																
	T (west)	0.70	18.5	B	T (west)	0.70	18.7	B	T (west)	0.59	15.7	B	T (west)	0.57	15.3	B	T (west)	0.74	20.0	B	T (west)	0.79	22.5	C																
Int.	19.1	C		Int.	19.2	B		Int.	17.0	B		Int.	17.0	B		Int.	79.5	E		Int.	79.2	E																		
First Avenue & East 42nd Street																																								
WB	L (east)	0.64	51.0	D	L (east)	0.69	57.8	E +	LT (east)	0.96	54.8	D	LT (east)	1.00	63.0	E +	L (east)	1.29	172.5	F	L (east)	1.35	197.2	F +																
	T (east)	1.08	85.4	F	T (east)	1.09	89.1	F +	-	-	-	-	-	-	-	-	T (east)	-	-	-	T (east)	-	-	-																
	L (west)	1.02	104.7	F	L (west)	1.08	124.0	F +	L (west)	0.93	72.7	E	L (west)	0.91	68.0	E	L (west)	1.08	120.9	F	L (west)	1.13	136.6	F +																
	T (west)	1.24	149.9	F	T (west)	1.25	154.2	F +	T (west)	0.64	28.0	C	T (west)	0.68	28.9	C	T (west)	0.67	28.5	C	T (west)	0.69	29.0	C																
	TR (east)	0.87	38.8	D	TR (east)	0.90	41.4	D	TR (east)	0.52	25.5	C	TR (east)	0.51	25.4	C	TR (east)	0.86	38.7	D	TR (east)	0.89	40.7	D																
	R (east)	0.80	43.2	D	R (east)	0.80	43.2	D	R (east)	0.58	30.5	C	R (east)	0.58	30.5	C	R (east)	0.90	59.7	E	R (east)	0.90	59.7	E																
	TR (west)	0.54	25.8	C	TR (west)	0.56	26.3	C	TR (west)	0.40	23.5	C	TR (west)	0.39	23.4	C	TR (west)	0.49	25.0	C	TR (west)	0.51	25.4	C																
	LT (east)	0.59	19.4	B	LT (east)	0.59	19.4	B	LT (east)	0.51	17.6	B	LT (east)	0.51	17.6	B	LT (east)	1.04	63.2	E	LT (east)	1.04	63.2	E																
	R (east)	0.91	41.6	D	R (east)	0.91	41.6	D	R (east)	0.29	14.7	B	R (east)	0.29	14.7	B	R (east)	0.34	15.5	B	R (east)	0.34	15.5	B																
	L (west)	0.53	18.6	B	L (west)	0.53	18.6	B	L (west)	0.37	15.6	B	L (west)	0.37	15.6	B	L (west)	0.48	17.5	B	L (west)	0.48	17.5	B																
T (west)	0.61	20.2	C	T (west)	0.61	20.2	C	T (west)	0.40	16.2	B	T (west)	0.40	16.2	B	T (west)	0.55	18.6	B	T (west)	0.55	18.6	B																	
Int.	64.2	C		Int.	66.5	E		Int.	31.0	B		Int.	32.5	C		Int.	60.5	B		Int.	65.5	E																		
Third Avenue & East 46th Street																																								
WB	L	0.50	39.2	D	L	0.53	40.3	D	L	0.31	34.4	C	L	0.35	35.3	D	L	0.32	34.4	C	L	0.32	34.4	C																
	T	0.30	14.3	B	T	0.30	14.3	B	T	0.36	14.9	B	T	0.35	14.8	B	T	0.37	15.1	B	T	0.40	15.4	B																
	TR	0.81	36.4	D	TR	0.82	37.9	D	TR	0.62	28.1	C	TR	0.62	28.0	C	TR	0.62	27.8	C	TR	0.66	28.8	C																
	LT	0.83	16.1	B	LT	0.84	16.2	B	LT	0.83	16.1	B	LT	0.81	15.5	B	LT	0.62	10.8	B	LT	0.62	10.8	B																
	Int.	21.4	C		Int.	22.0	C		Int.	19.0	B		Int.	18.6	B		Int.	14.9	B		Int.	15.4	B																	
Lexington Avenue & East 46th Street																																								
WB	TR	0.81	36.4	D	TR	0.82	37.9	D	TR	0.62	28.1	C	TR	0.62	28.0	C	TR	0.62	27.8	C	TR	0.66	28.8	C																
	LT	0.83	16.1	B	LT	0.84	16.2	B	LT	0.83	16.1	B	LT	0.81	15.5	B	LT	0.62	10.8	B	LT	0.62	10.8	B																
Int.	21.4	C		Int.	22.0	C		Int.	19.0	B		Int.	18.6	B		Int.	14.9	B		Int.	15.4	B																		
Park Avenue & East 50th Street																																								
WB	LTR	0.45	22.1	C	LTR	0.45	22.1	C	LTR	0.51	23.2	C	LTR	0.52	23.3	C	LTR	0.53	23.8	C	LTR	0.53	23.8	C																
	TR	0.76	21.3	C	TR	0.76	21.3	C	TR	0.77	21.6	C	TR	0.77	21.7	C	TR	0.79	22.5	C	TR	0.82	23.4	C																
	L**	0.21	40.8	D	L**	0.21	40.8	D	L**	0.12	38.5	D	L**	0.12	38.6	D	L**	0.12	38.4	B	L**	0.12	38.4	B																
	T	1.15	101.1	F	T	1.18	111.1	F +	T	1.05	62.2	E	T	1.06	65.5	E	T	1.11	80.2	F	T	1.12	87.4	F +																
	Int.	57.4	E		Int.	62.3	E		Int.	39.2	D		Int.	40.7	D		Int.	47.6	D		Int.	50.9	D																	
Park Avenue & East 49th Street																																								
WB	LT	0.90	50.0	D	LT	0.92	53.1	D	LT	0.96	59.5	E	LT	0.97	61.5	E	LT	0.92	51.4	D	LT	0.92	52.2	D																
	R	0.34	21.5	C	R	0.34	21.5	C	R	0.42	23.2	C	R	0.42	23.2	C	R	0.50	25.3	C	R	0.50	25.3	C																
	L**	0.09	37.5	D	L**	0.09	37.5	D	L**	0.10	37.9	D	L**	0.10	37.9	D	L**	0.09	37.7	D	L**	0.09	37.7	D																
	T	1.01	51.3	D	T	1.02	52.4	D	T	1.02	54.0	D	T	1.03	55.9	E	T	1.02	54.1	D	T	1.05	63.2	E +																
	TR	0.88	27.4	C	TR	0.90	28.6	C	TR	0.84	25.1	C	TR	0.85	25.4	C	TR	0.87	26.7	C	TR	0.88	27.2	C																
Int.	39.0	D		Int.	40.2	D		Int.	40.3	D		Int.	41.4	D		Int.	39.8	D		Int.	43.7	D																		
Park Avenue & East 48th Street																																								
WB	LT	0.67	28.6	C	LT	0.67	28.7	C	LT	0.80	36.2	D	LT	0.81	36.7	D	LT	0.69	28.6	C	LT	0.69	28.8	C																
	R	0.20	18.5	B	R	0.22	18.8	B	R	0.14	17.6	B	R	0.14	17.6	B	R	0.27	19.8	B	R	0.27	19.8	B																
	TR	0.82	24.9	C	TR	0.82	25.0	C	TR	0.80	24.1	C	TR	0.80	24.2	C	TR	0.84	25.7	C	TR	0.87	27.4	C																
	L**	0.21	40.6	D	L**	0.21	40.6	D	L	0.20	40.3	D	L	0.20	40.3	D	L	0.26	41.7	D	L	0.26	41.7	D																
	T	1.12	90.3	F	T	1.12	90.5	F +	T	1.12	87.3	F	T	1.13	93.9	F +	T	1.12	90.0	F	T	1.15	98.6	F +																
Int.	53.5	D		Int.	61.4	E		Int.	52.5	D		Int.	55.5	E		Int.	53.0	D		Int.	57.1	E																		

**Table F-27 (cont'd)**  
**2033 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis**  
**Signalized Intersections**

Int.	Weekday AM								Weekday Midday								Weekday PM								Saturday													
	2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action									
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS		
Vanderbilt Avenue & East 45th Street																																						
WB	LTR	0.52	20.0	B	LTR	0.53	20.2	C	LTR	0.47	19.1	B	LTR	0.49	19.3	B	LTR	0.43	18.6	B	LTR	0.45	18.8	B														
NB	LT	0.20	16.5	B	LT	0.20	16.6	B	LT	0.23	16.5	B	LT	0.14	15.3	B	LT	0.11	15.0	B	LT	0.16	15.6	B														
SB	TR	1.01	65.1	E	TR	1.11	92.9	F +	TR	0.77	30.0	C	TR	0.92	44.2	D	TR	1.11	96.5	F	TR	1.19	129.9	F +														
	Int.		41.0	D	Int.		58.2	E	Int.		23.5	C	Int.		31.5	C	Int.		60.1	E	Int.		77.6	E														
Madison Avenue & East 45th Street																																						
WB	TR	0.78	31.1	C	TR	0.83	34.2	C	TR	0.53	23.4	C	TR	0.59	24.8	C	TR	0.55	23.6	C	TR	0.60	24.7	C														
NB	L	0.22	10.8	B	L	0.25	11.3	B	L	0.18	10.4	B	L	0.21	10.5	B	L	0.20	10.6	B	L	0.27	11.5	B														
	T	1.14	89.2	E	T	1.17	102.2	F +	T	1.26	141.0	F	T	1.30	158.4	F +	T	1.10	73.1	E	T	1.15	94.1	F +														
	Int.		68.3	E	Int.		77.3	E	Int.		112.2	F	Int.		125.1	F	Int.		57.8	E	Int.		72.2	E														
Madison Avenue & East 41st Street																																						
EB	L	0.46	44.4	D	L	0.46	44.4	D	L	0.43	41.1	D	L	0.43	41.1	D	L	0.49	43.0	D	L	0.49	43.0	D														
NB	TR	0.30	21.2	C	TR	0.31	21.3	C	TR	0.27	19.4	B	TR	0.28	19.6	B	TR	0.20	18.5	B	TR	0.23	18.9	B														
	T	0.93	25.4	C	T	0.95	28.7	C	T	0.99	37.4	D	T	1.02	45.6	D +	T	0.67	15.2	B	T	0.69	15.5	B														
	Int.		25.9	C	Int.		28.8	C	Int.		36.3	D	Int.		43.6	D	Int.		17.0	B	Int.		17.3	B														
Madison Avenue & East 40th Street																																						
EB	L	0.62	52.2	D	L	0.62	52.2	D	L	0.62	50.1	D	L	0.63	50.4	D	L	0.45	42.2	D	L	0.45	42.2	D														
NB	T	1.02	72.0	E	T	1.03	74.8	E	T	0.65	28.2	C	T	0.65	28.2	C	T	0.68	29.1	C	T	0.68	29.2	C														
	TR	0.96	31.7	C	TR	0.99	37.2	D	TR	0.98	35.1	D	TR	1.02	43.0	D	TR	0.70	15.7	B	TR	0.72	16.1	B														
	Int.		41.7	D	Int.		46.2	D	Int.		34.9	C	Int.		41.2	D	Int.		19.0	B	Int.		19.3	B														
Madison Avenue & East 39th Street																																						
WB	T	2.22	580.6	F	T	2.22	581.5	F	T	1.50	260.0	F	T	1.50	261.6	F	T	2.30	618.4	F	T	2.31	623.1	F +														
NB	LT	1.49	287.8	F	LT	1.50	293.0	F +	LT	2.51	734.5	F	LT	2.54	747.6	F +	LT	2.17	583.4	F	LT	2.24	615.3	F +														
	R	0.90	24.5	C	R	0.93	27.0	C	R	0.82	19.4	B	R	0.85	20.6	C	R	0.61	14.2	B	R	0.62	14.5	B														
	Int.		269.3	F	Int.		267.6	F	Int.		201.2	F	Int.		201.7	F	Int.		335.6	F	Int.		339.4	F														
Fifth Avenue & East 45th Street																																						
WB	LT	0.82	34.6	C	LT	0.69	27.3	C	LT	0.44	21.6	C	LT	0.44	21.6	C	LT	0.52	23.0	C	LT	0.54	23.4	C														
NB	T	1.03	45.6	D	T	1.02	57.7	E +	T	0.85	19.8	B	T	0.88	21.0	C	T	0.90	23.0	C	T	0.91	24.0	C														
	R	0.40	13.7	B	R	0.40	13.7	B	R	0.18	10.1	B	R	0.18	10.1	B	R	0.32	12.6	B	R	0.32	12.6	B														
	Int.		41.3	D	Int.		48.6	D	Int.		19.6	B	Int.		20.5	C	Int.		22.5	C	Int.		23.3	C														
Fifth Avenue & East 43rd Street																																						
WB	L	1.29	179.8	F	L	1.41	231.7	F ±	L	1.08	100.4	F	L	0.99	74.8	E	L	1.25	162.6	F	L	1.35	204.8	F +														
NB	T	0.48	23.9	C	T	0.52	26.7	C	T	0.87	43.5	D	T	0.77	34.4	C	T	0.58	26.4	C	T	0.61	27.0	C														
	T	1.06	56.4	E	T	1.07	57.7	E	T	0.82	20.8	C	T	0.82	20.8	C	T	0.94	26.3	C	T	0.95	28.0	C														
	R	1.36	204.7	F	R	1.55	289.3	F +	R	0.33	11.5	B	R	0.33	11.5	B	R	1.33	200.7	F	R	1.41	233.2	F +														
	Int.		85.5	F	Int.		103.6	F	Int.		33.8	C	Int.		28.5	C	Int.		58.8	E	Int.		68.8	E														
Sixth Avenue & West 46th Street																																						
EB	L	0.41	37.6	D	L	0.41	37.6	D	L	0.44	38.8	D	L	0.44	38.8	D	L	0.33	35.6	D	L	0.33	35.6	D														
NB	TR	0.49	20.2	C	TR	0.66	25.3	C	TR	0.35	17.5	B	TR	0.39	18.0	B	TR	0.45	19.2	B	TR	0.49	19.9	B														
	TR	0.69	19.2	B	TR	0.70	19.2	B	TR	0.73	19.8	B	TR	0.75	20.2	C	TR	0.81	22.2	C	TR	0.81	22.2	C														
	Int.		20.1	B	Int.		20.9	C	Int.		20.4	C	Int.		20.8	C	Int.		21.8	C	Int.		21.9	C														
Sixth Avenue & West 44th Street																																						
EB	L	0.21	21.9	C	L	0.21	21.9	C	L	0.37	25.7	C	L	0.37	25.7	C	L	0.20	21.6	C	L	0.20	21.6	C														
NB	T	0.84	44.8	D	T	0.99	70.0	D +	T	0.55	28.8	C	T	0.58	29.5	C	T	0.42	25.5	C	T	0.45	26.1	C														
	T	0.65	11.0	B	TR	0.66	11.1	B	TR	0.59	10.2	B	TR	0.60	10.4	B	TR	0.68	11.6	B	TR	0.68	11.6	B														
	Int.		15.9	B	Int.		20.6	C	Int.		12.8	B	Int.		13.0	B	Int.		22.2	C	Int.		24.3	C														

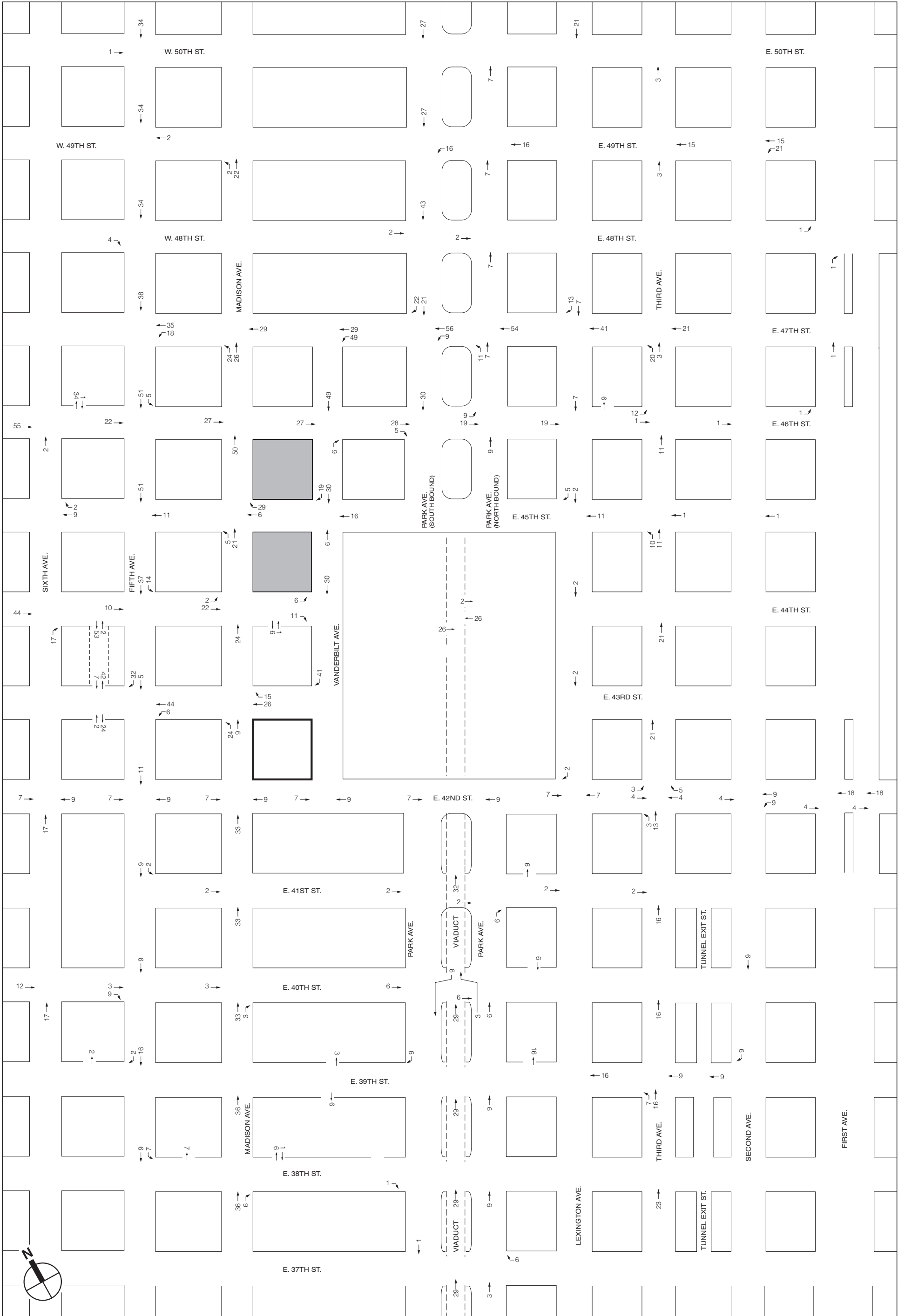
Notes: L = Left-turn; T = Through; R = Right-turn; LOS = Level of Service; EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound; Int. = Intersection  
 \*\* To mimic actual conditions for NB/SB left turning vehicles on Park Avenue, the sum of two delays were accounted for: (1) delay from making the left-turn; and (2) delay from waiting at the red light after the left-turn.  
 + Denotes a significant adverse traffic impact

Table F-28

**2033 Vanderbilt Corridor No-Action and With-Action Conditions Level of Service Analysis  
Unsignalized Intersections**

Int.	Weekday AM								Weekday Midday								Weekday PM								Saturday																
	2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action				2033 No-Action				2033 With-Action												
	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS	Lane Group	v/c Ratio	Delay (sec)	LOS									
Vanderbilt Avenue & East 47th Street																																									
WB	L	0.67	15.5	C	L	0.76	19.4	C	L	0.65	14.9	B	L	0.75	18.7	C	L	0.79	21.0	C	L	0.85	25.6	D																	
	T	0.44	10.3	B	T	0.48	10.8	B	T	0.54	11.8	B	T	0.56	12.0	B	T	0.48	10.6	B	T	0.58	12.2	B																	
NB	L	0.04	9.0	A	L	0.02	9.1	A	L	0.04	9.0	A	L	0.01	8.9	A	L	0.02	9.0	A	L	0.01	9.0	A																	
Vanderbilt Avenue & East 44th Street																																									
EB	LR	0.30	10.0	A	LR	0.34	10.6	B	LR	0.25	10.1	B	LR	0.38	11.6	B	LR	0.22	9.3	A	LR	0.30	10.4	B																	
NB	T	0.02	8.3	A	-	-	-	-	T	0.11	8.8	A	-	-	-	-	T	0.01	8.0	A	-	-	-	-																	
SB	T	0.58	13.7	B	T	0.65	15.9	C	T	0.72	18.5	C	T	0.86	28.9	D	T	0.63	14.4	B	T	0.70	17.5	C																	
Vanderbilt Avenue & East 43rd Street																																									
NB	LT	0.01	9.1	A	-	-	-	-	LT	0.93	73.6	F	-	-	-	-	LT	0.05	15.3	C	-	-	-	-																	
SB	R	0.52	11.9	B	R	0.58	12.8	B	R	0.62	13.5	B	R	0.78	18.8	C	R	0.56	12.4	B	R	0.60	13.3	B																	

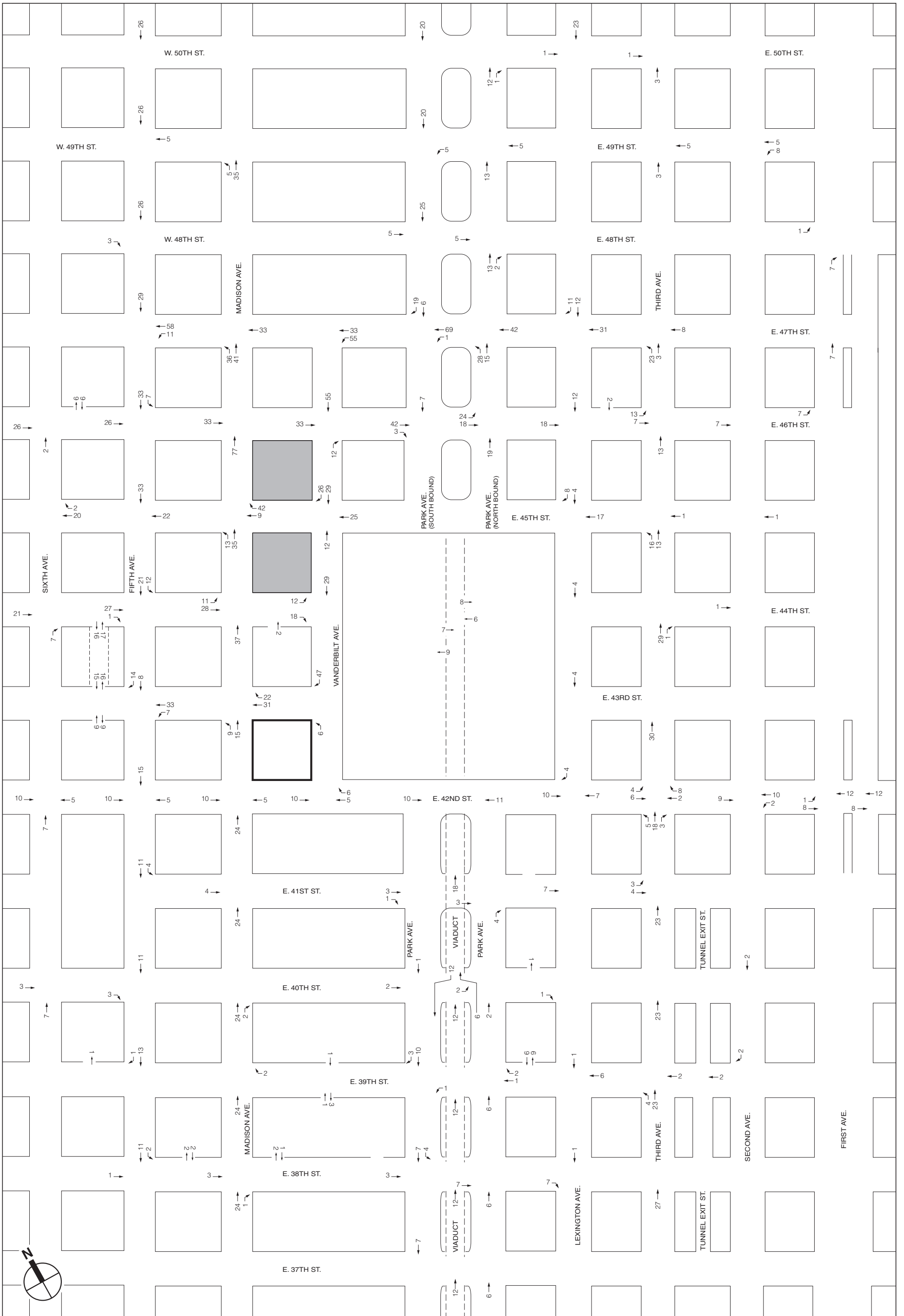
Notes: L = Left-turn; T = Through; R = Right-turn; LOS = Level of Service  
 (1) In the With-Action condition, Vanderbilt Avenue between East 42nd and East 43rd Streets would be converted to public space and would be closed to vehicular traffic. Also, Vanderbilt Avenue between East 43rd and East 44th Streets would be converted from two-way to one-way southbound.



NOT TO SCALE

- One Vanderbilt Development Site
- 2033 Vanderbilt Corridor Development Sites

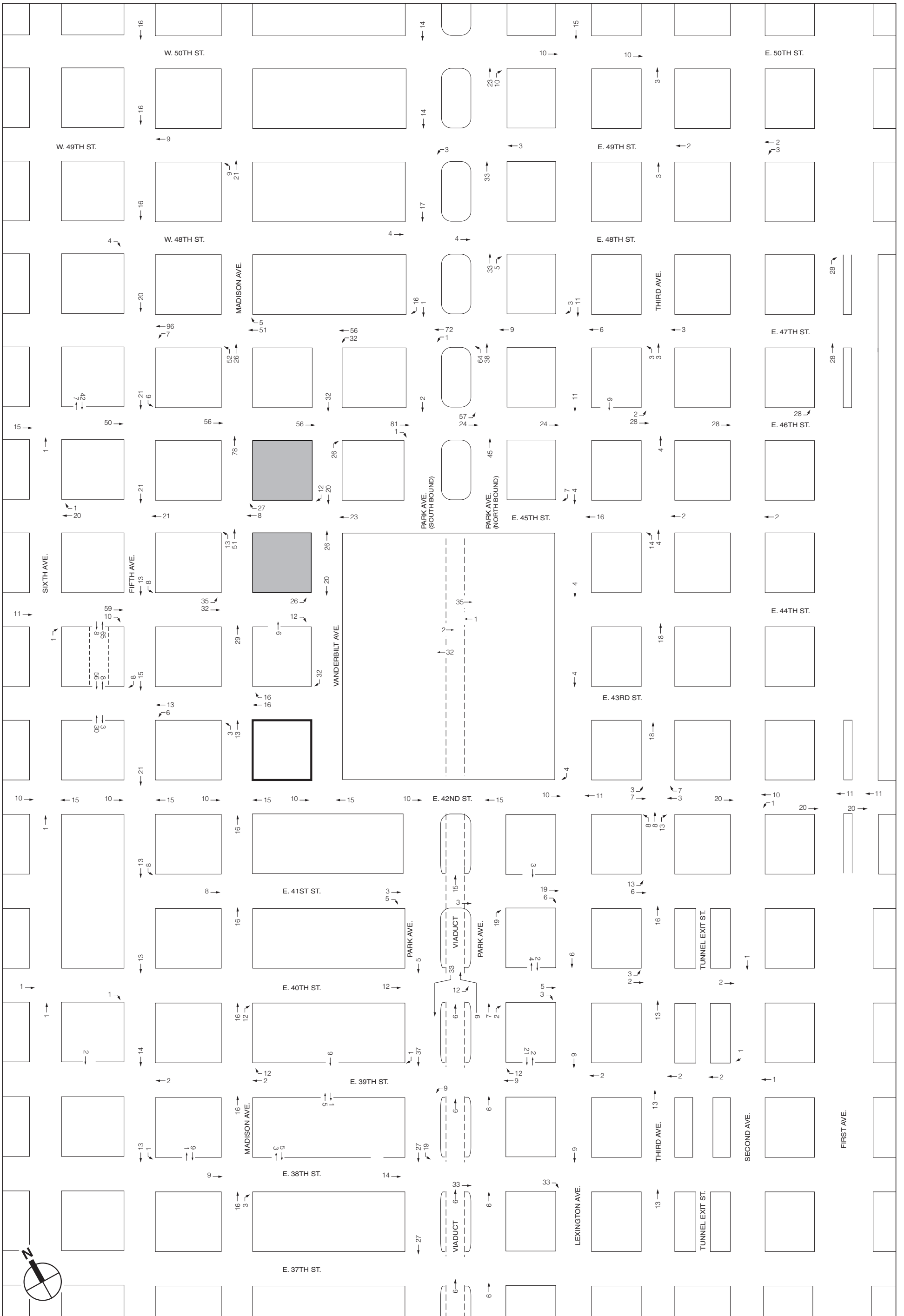
2033 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
Weekday AM Peak Hour



NOT TO SCALE

- One Vanderbilt Development Site
- 2033 Vanderbilt Corridor Development Sites

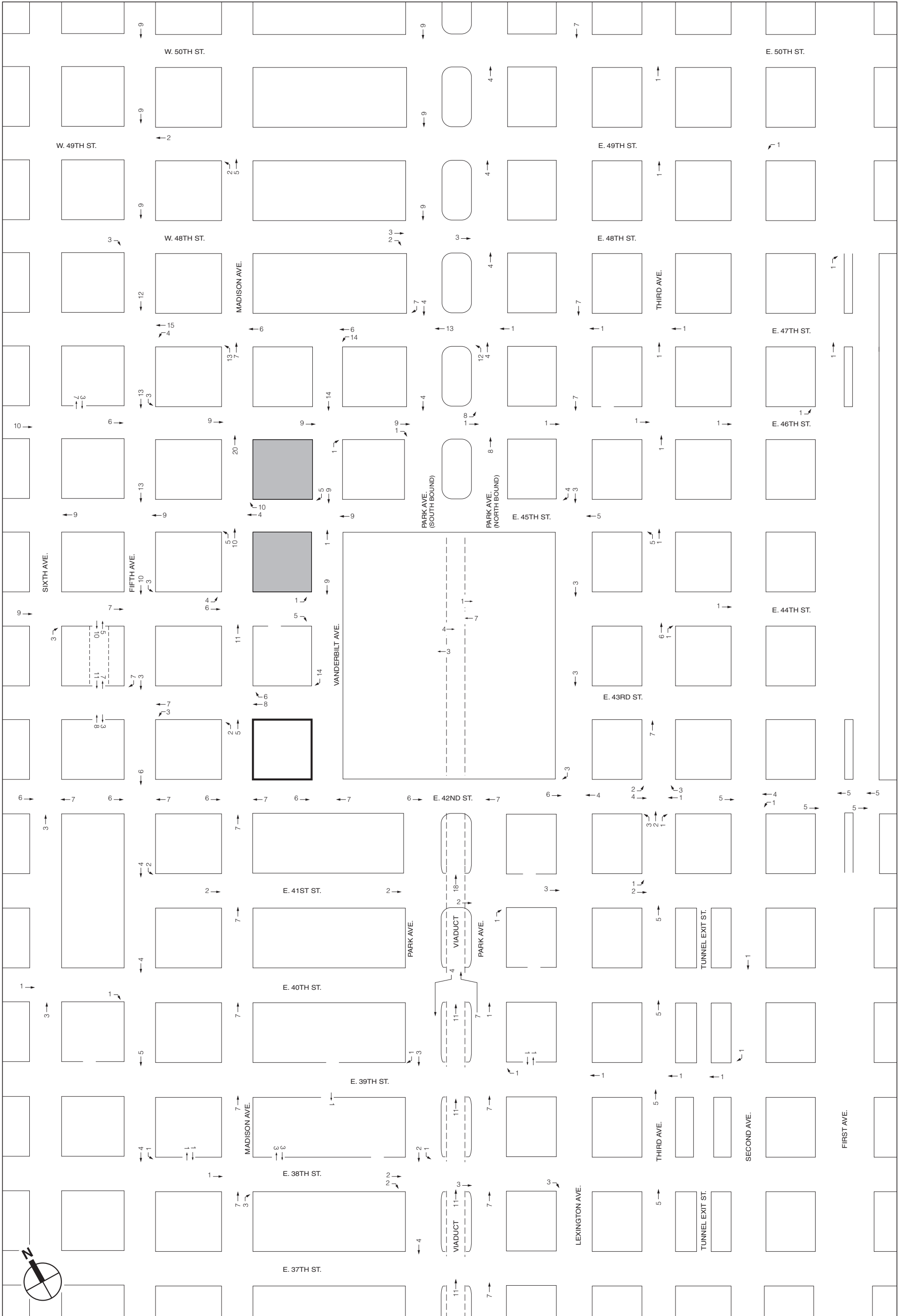
2033 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
Weekday Midday Peak Hour



- One Vanderbilt Development Site
- 2033 Vanderbilt Corridor Development Sites

NOT TO SCALE

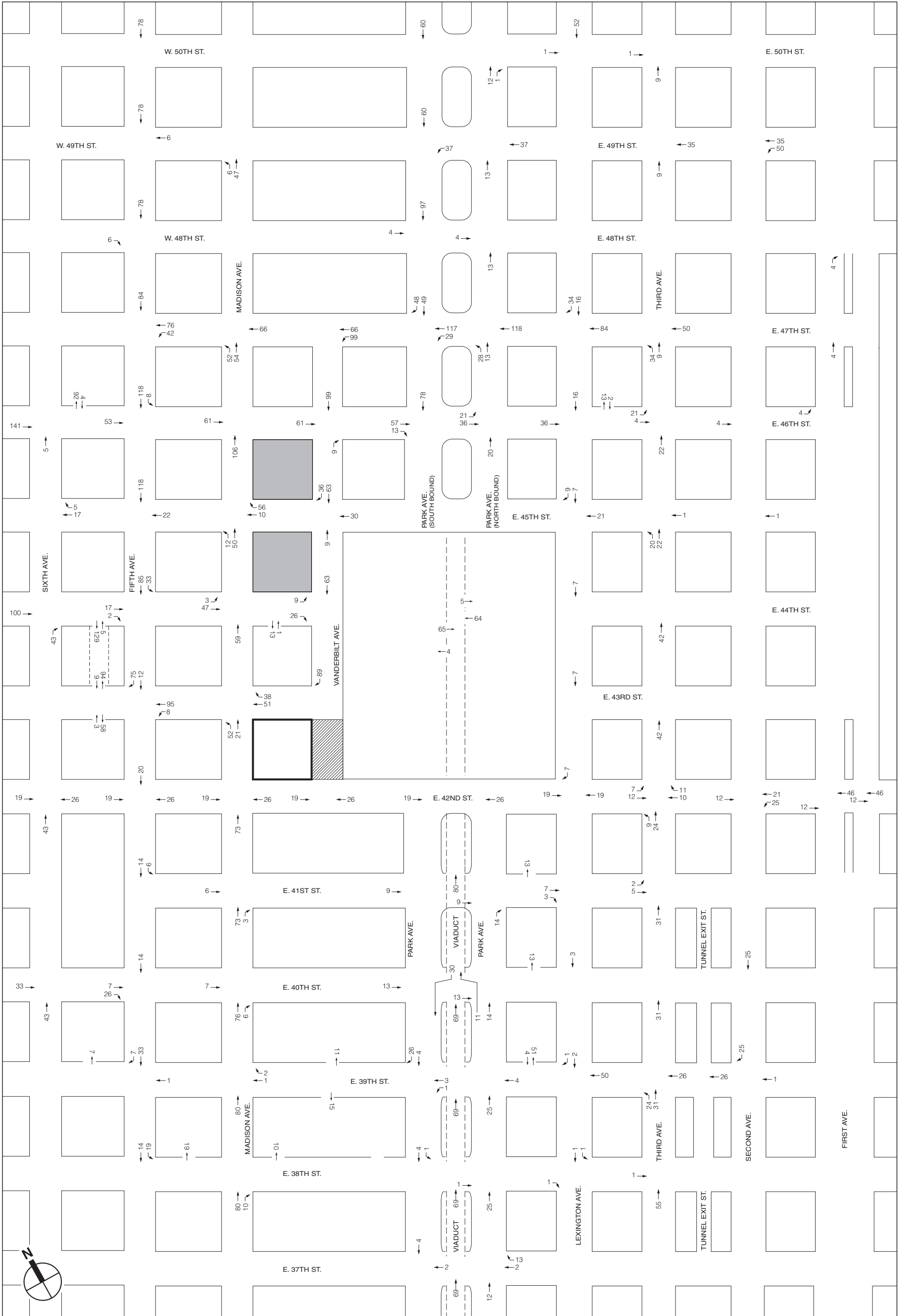
2033 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
 Weekday PM Peak Hour  
**Figure F-27**



NOT TO SCALE

- One Vanderbilt Development Site
- 2033 Vanderbilt Corridor Development Sites

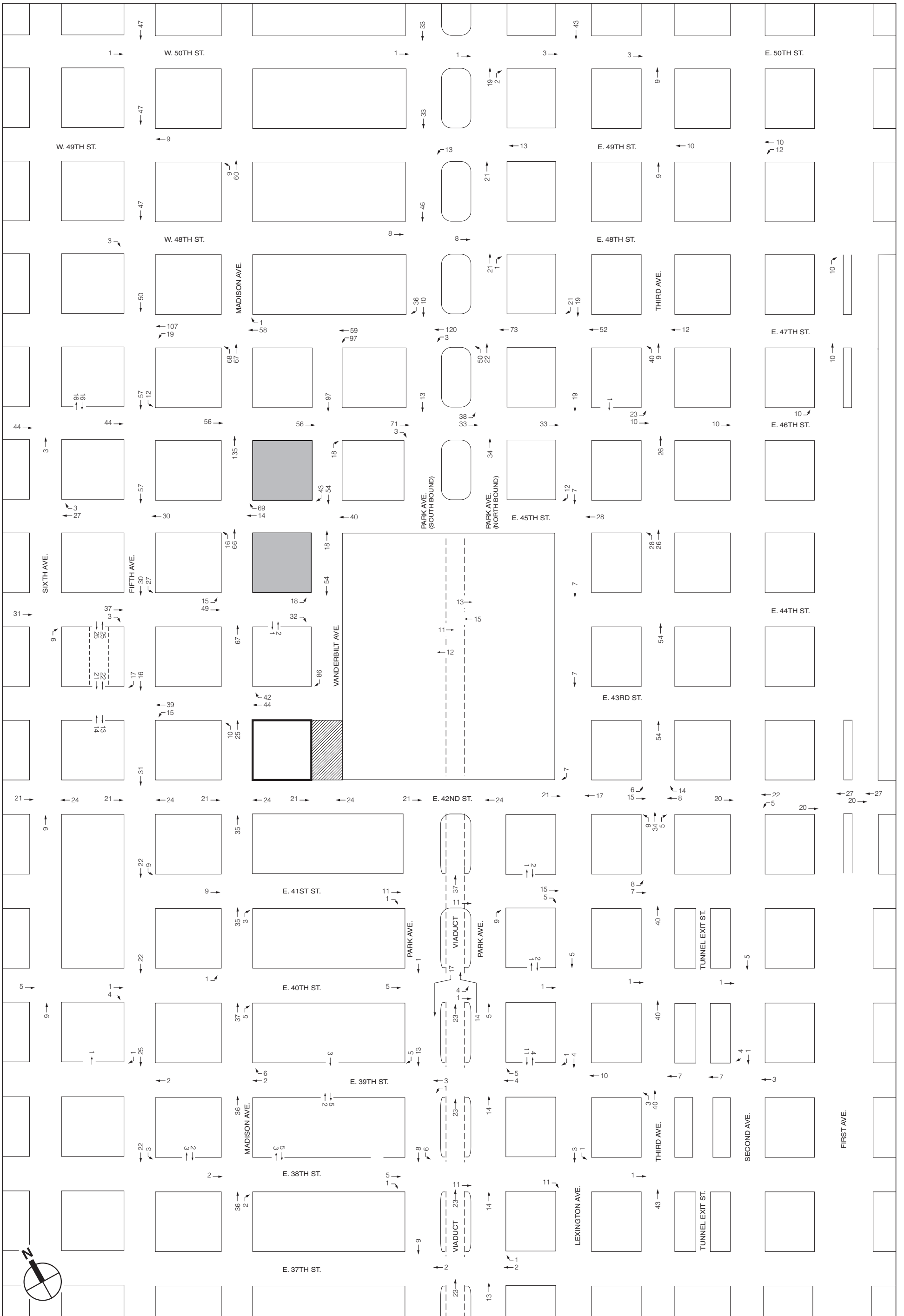
2033 Vanderbilt Corridor No-Action Project Generated Vehicle Trips  
 Saturday Peak Hour  
**Figure F-28**



NOT TO SCALE

2033 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
Weekday AM Peak Hour

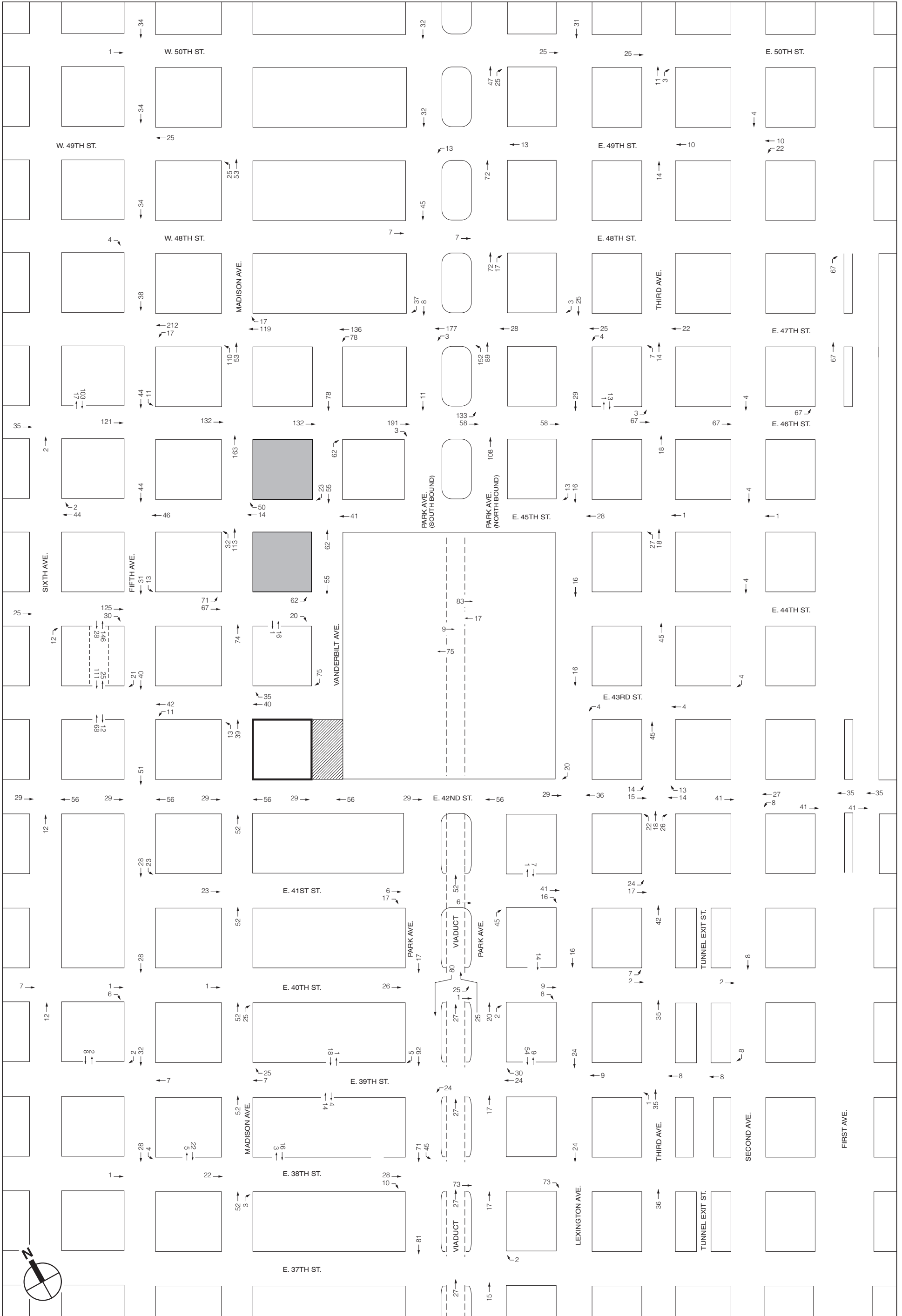




One Vanderbilt Development Site  
 2033 Vanderbilt Corridor Development Sites  
 Proposed Public Place

NOT TO SCALE

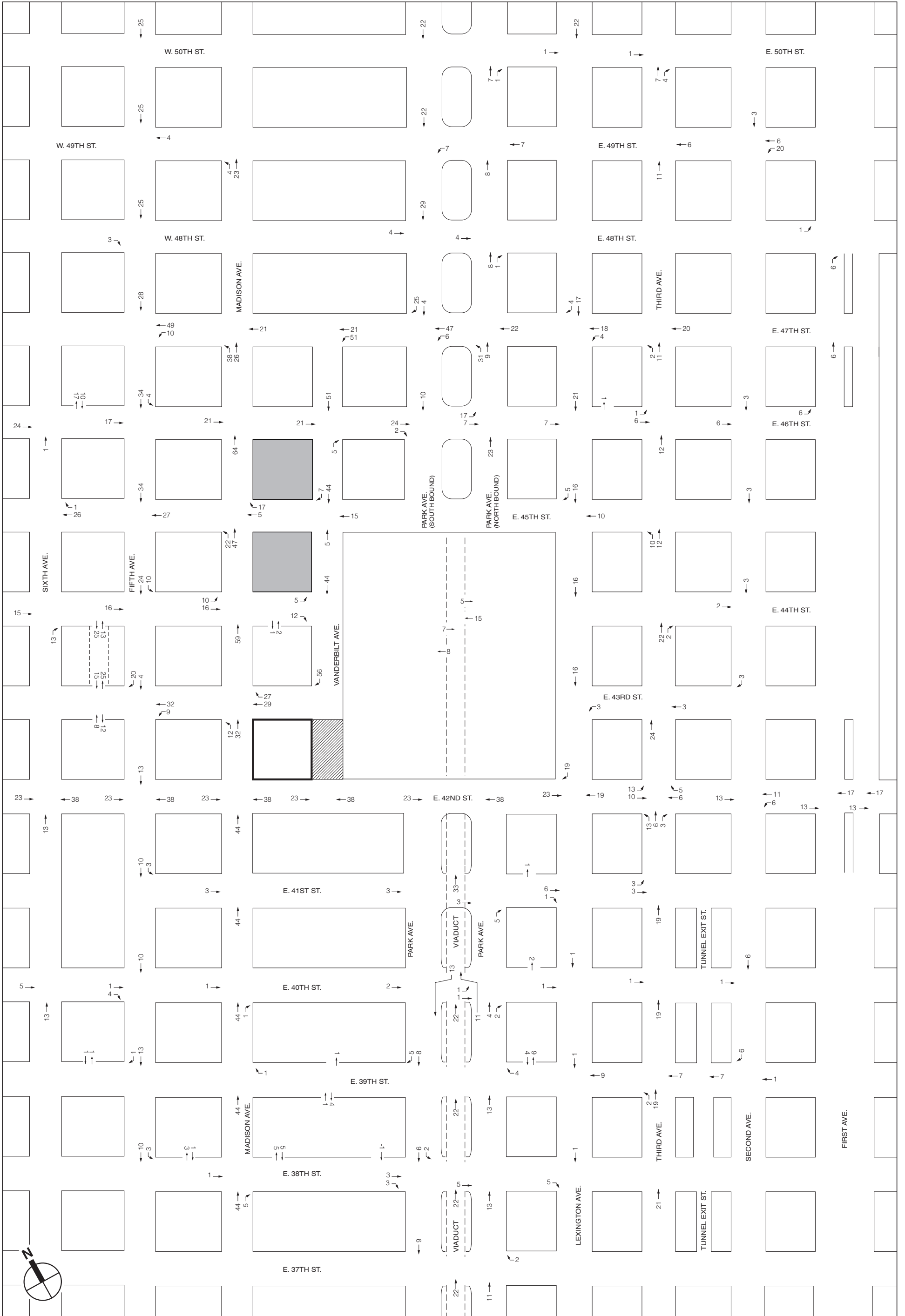
2033 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
Weekday Midday Peak Hour



- One Vanderbilt Development Site
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

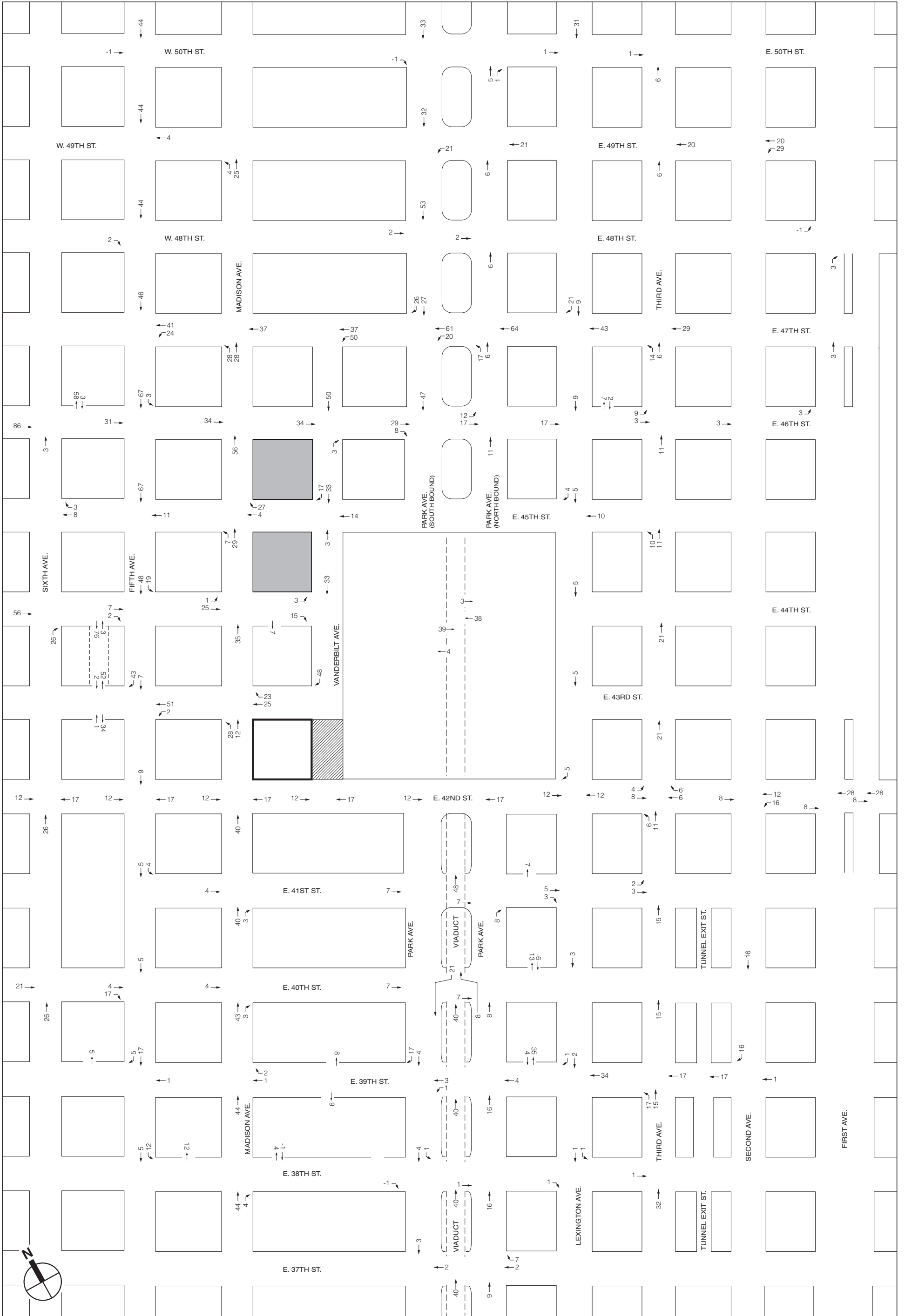
2033 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
Weekday PM Peak Hour



NOT TO SCALE

-  One Vanderbilt Development Site
-  2033 Vanderbilt Corridor Development Sites
-  Proposed Public Place

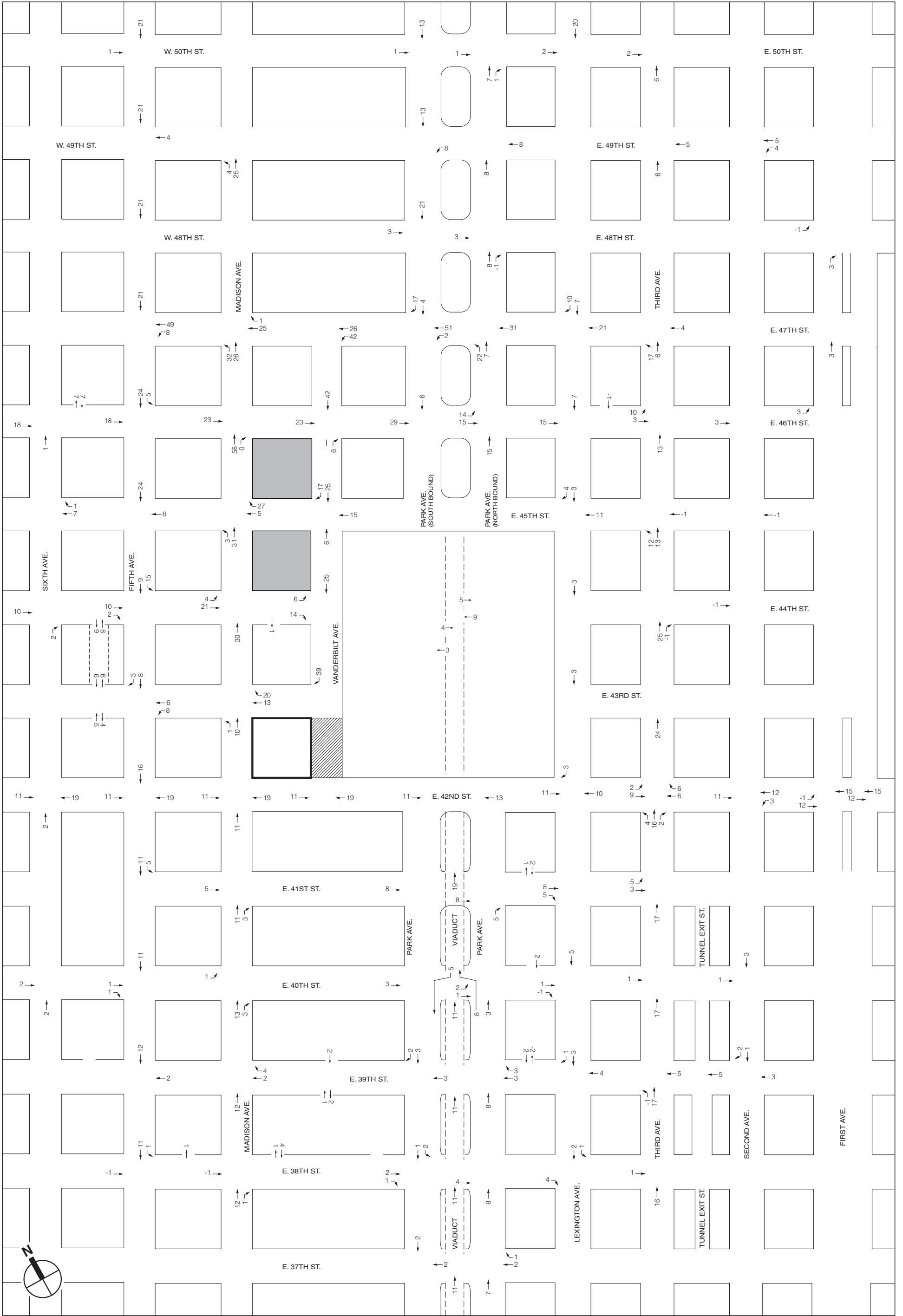
2033 Vanderbilt Corridor With-Action Project Generated Vehicle Trips  
 Saturday Peak Hour  
**Figure F-32**



- One Vanderbilt Development Site
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

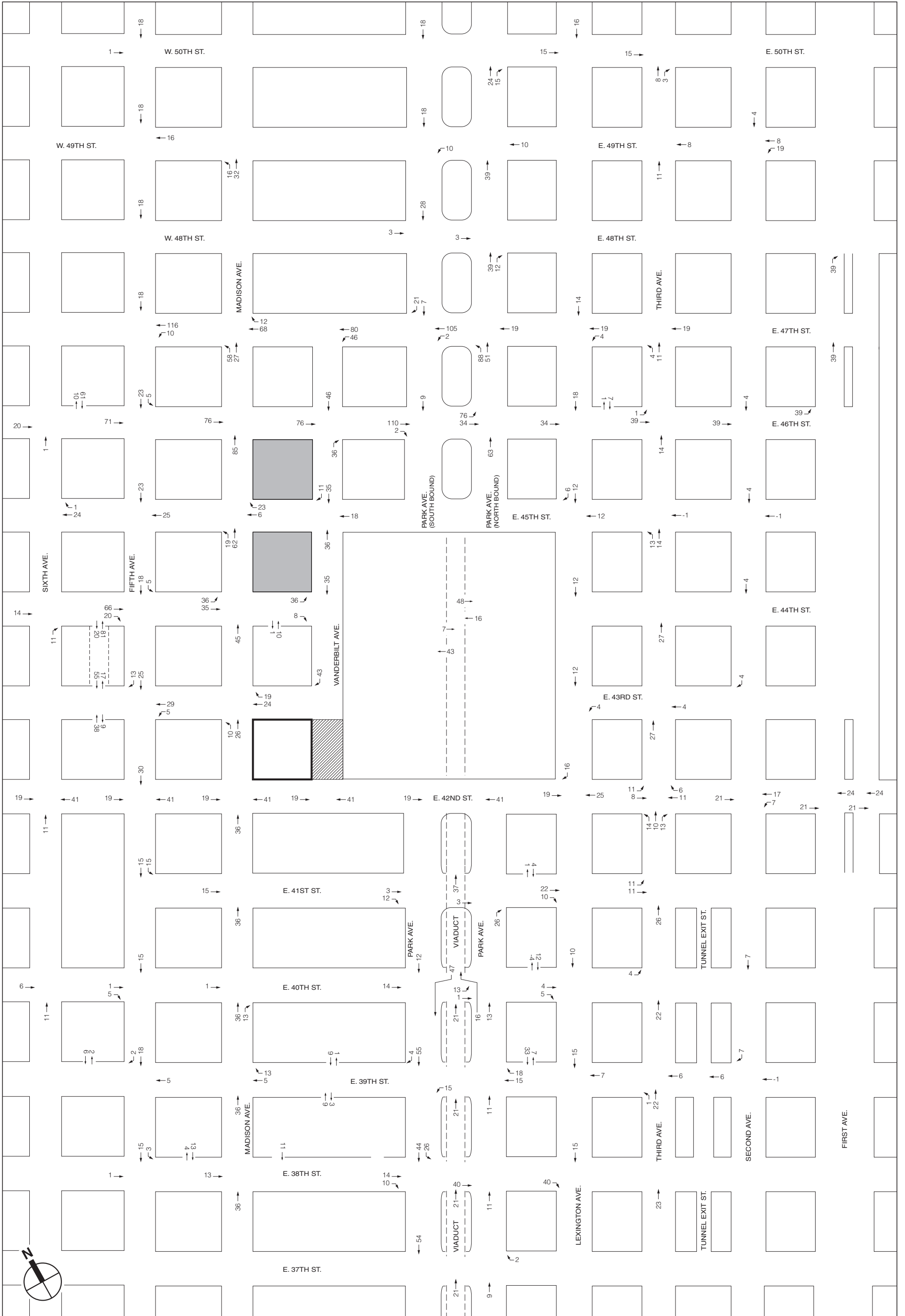
2033 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Weekday AM Peak Hour  
**Figure F-33**



One Vanderbilt Development Site  
 2033 Vanderbilt Corridor Development Sites  
 Proposed Public Place

NOT TO SCALE

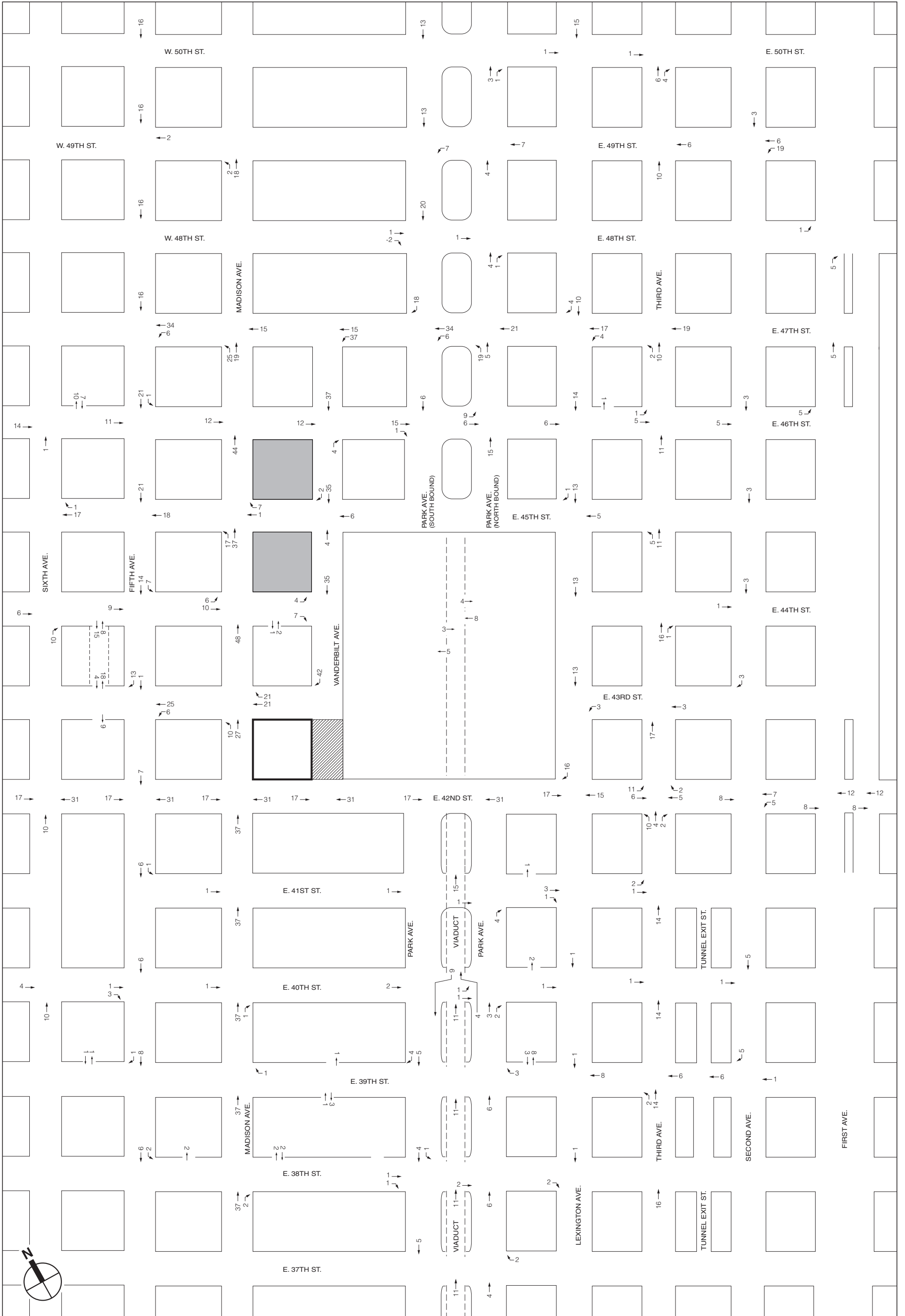
2033 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Weekday Midday Peak Hour  
**Figure F-34**



One Vanderbilt Development Site  
 2033 Vanderbilt Corridor Development Sites  
 Proposed Public Place

NOT TO SCALE

2033 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Weekday PM Peak Hour  
**Figure F-35**



One Vanderbilt Development Site  
 2033 Vanderbilt Corridor Development Sites

Proposed Public Place

NOT TO SCALE

2033 Vanderbilt Corridor With-Action Incremental Vehicle Trips  
 Saturday Peak Hour  
**Figure F-36**

**Table F-29**

**2033 Vanderbilt Corridor No-Action Conditions: Sidewalk Analysis**

Location	Sidewalk	Effective Width (ft)	Two-way Peak Hour Volume	PHF	SFP	Platoon LOS
<b>Weekday AM Peak Hour</b>						
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	6,132	0.92	26.6	D
	North	13.0	3,307	0.93	57.0	C
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,662	0.86	37.5	D
	West	5.0	1,805	0.80	33.6	D
Madison Avenue between East 42nd Street and East 43rd Street	East	8.0	1,538	0.85	69.3	C
	North-West	11.0	4,904	0.92	31.0	D
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-East	12.0	6,010	0.92	27.2	D
	East	13.0	2,851	0.95	67.8	C
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	2,991	0.89	65.3	C
	North	12.0	4,255	0.96	41.6	C
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	3,847	0.89	50.2	C
	North	12.0	4,389	0.88	36.7	D
East 42nd Street between Vanderbilt Avenue and Park Avenue	South	15.0	3,045	0.91	70.2	C
	East	14.5	1,434	0.91	145.4	B
Fifth Avenue between East 42nd Street and East 43rd Street	West	13.7	2,257	0.90	85.7	C
	East	15.0	1,958	0.82	99.0	B
Fifth Avenue between East 43rd Street and East 44th Street	West	16.7	2,017	0.82	106.8	B
	North	8.8	1,160	0.94	111.8	B
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,160	0.94	111.8	B
Madison Avenue between East 45th Street and East 46th Street	East	7.8	1,740	0.89	62.7	C
<b>Weekday Midday Peak Hour</b>						
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	3,604	0.97	50.1	C
	North	13.0	3,681	0.90	49.3	C
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,662	0.94	41.3	C
	West	5.0	2,163	0.94	32.8	D
Madison Avenue between East 42nd Street and East 43rd Street	East	8.0	2,723	0.94	42.5	C
	North-West	11.0	4,232	0.94	37.3	D
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-East	12.0	4,944	0.94	34.6	D
	East	13.0	2,659	0.96	73.6	C
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	3,843	0.93	52.7	C
	North	12.0	3,585	0.97	50.4	C
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	4,435	0.86	41.7	C
	North	12.0	3,762	0.95	46.9	C
East 42nd Street between Vanderbilt Avenue and Park Avenue	South	15.0	2,790	0.93	78.5	C
	East	14.5	2,485	0.87	79.7	C
Fifth Avenue between East 42nd Street and East 43rd Street	West	13.7	1,894	0.80	90.9	B
	East	15.0	2,515	0.89	83.4	C
Fifth Avenue between East 43rd Street and East 44th Street	West	16.7	2,768	0.95	90.0	B
	North	8.8	1,124	0.98	120.4	B
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,124	0.98	120.4	B
Madison Avenue between East 45th Street and East 46th Street	East	7.8	1,616	0.94	71.5	C
<b>Weekday PM Peak Hour</b>						



West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	<u>7,809</u>	0.96	<u>21.0</u>	E
	North	13.0	<u>4,987</u>	0.96	<u>38.3</u>	D
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	<u>2,713</u>	0.94	<u>24.0</u>	D
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	<u>2,259</u>	0.88	<u>29.1</u>	D
	East	8.0	<u>2,193</u>	0.91	<u>51.5</u>	C
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	<u>6,378</u>	0.95	<u>23.9</u>	D
	North-East	12.0	<u>7,763</u>	0.95	<u>20.9</u>	E
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	<u>3,079</u>	0.92	<u>60.6</u>	C
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	<u>4,302</u>	0.88	<u>44.2</u>	C
	North	12.0	<u>6,482</u>	0.85	<u>22.7</u>	D
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	<u>4,933</u>	0.97	<u>42.4</u>	C
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	<u>5,282</u>	0.94	<u>32.2</u>	D
	South	15.0	<u>3,541</u>	0.92	<u>60.9</u>	C
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	<u>2,129</u>	0.87	<u>93.3</u>	B
	West	13.7	<u>2,260</u>	0.90	<u>85.6</u>	C
Fifth Avenue between East 43rd Street and East 44th Street	East	15.0	<u>2,614</u>	0.86	<u>77.5</u>	C
	West	16.7	<u>3,653</u>	0.94	<u>67.1</u>	C
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	<u>1,877</u>	0.95	<u>69.4</u>	C
Madison Avenue between East 45th Street and East 46th Street	East	7.8	<u>2,069</u>	0.88	<u>51.8</u>	C
<b>Saturday Peak Hour</b>						
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	11.0	<u>4,347</u>	0.89	<u>34.1</u>	D
	North-East	12.0	<u>4,661</u>	0.89	<u>34.8</u>	D
East 42nd Street between Madison Avenue and Fifth Avenue	North	12.0	<u>5,941</u>	0.89	<u>26.6</u>	D
Madison Avenue between East 43rd Street and East 42nd Street	East	8.0	<u>1,086</u>	0.89	<u>103.3</u>	B
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	<u>3,607</u>	0.94	<u>48.4</u>	C
<b>Note: SFP = square feet per pedestrian</b>						

**Table F-30**

**2033 Vanderbilt Corridor No-Action Conditions: Corner Analysis**

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS	SFP	LOS
Fifth Avenue and 42nd Street	Northwest	54.0	B	36.8	C	26.3	C	66.0	A
	Northeast	56.9	B	46.4	B	31.2	C	58.7	B
	Southwest	35.9	C	29.3	C	27.9	C		
	Southeast	43.3	B	39.8	C	30.8	C		
Madison Avenue and East 43rd Street	Northwest	26.6	C	23.4	D	10.0	E		
	Northeast	9.7	E	11.2	E	10.9	E		
	Southwest	24.1	C	25.0	C	19.3	D		
	Southeast	28.1	C	29.4	C	33.9	C	108.5	A
Madison Avenue and East 42nd Street	Northwest	24.9	C	21.1	D	13.8	E	26.5	C
	Northeast	22.3	D	22.7	D	17.6	D	20.3	D
	Southwest	77.2	A	68.4	A	65.6	A		
	Southeast	38.5	C	39.3	C	30.9	C		
Madison Avenue and East 41st Street	Northeast	12.0	E	21.5	D	14.9	E		
	Southeast	21.1	D	25.9	C	18.1	D		
Park Avenue and East 41st Street	Southwest	59.7	A	56.7	B	30.5	C		
Lexington Avenue and East 42nd Street	Northeast	24.0	C	13.4	E	17.4	D		
	Northwest	11.7	E	12.1	E	12.9	E		
Fifth Avenue and 43rd Street	Northwest	37.8	C	42.5	B	27.3	C		
	Northeast	50.9	B	57.1	B	37.5	C		
	Southwest	54.6	B	58.8	B	38.3	C		
	Southeast	52.9	B	64.8	A	34.5	C		
Fifth Avenue and 44th Street	Northwest	66.8	A	46.4	B	34.1	C		
	Northeast	54.6	B	41.4	B	33.8	C		
	Southwest	62.8	A	42.3	B	24.6	C		
	Southeast	46.8	B	37.1	C	26.9	C		
Fifth Avenue and 45th Street	Southeast	59.4	B	45.1	B	48.2	B		
Fifth Avenue and 46th Street	Northwest	81.4	A	49.4	B	43.2	B		
	Northeast	158.8	A	136.8	A	105.0	A		
	Southwest	68.3	A	39.6	C	41.6	B		
	Southeast	57.0	B	44.3	B	46.6	B		
Fifth Avenue and 47th Street	Southwest	89.6	A	64.1	A	60.4	A		
	Southeast	52.2	B	49.3	B	46.3	B		
Madison Avenue and East 44th Street	Northeast	41.3	B	53.4	B	34.1	C		
	Northwest	53.0	B	47.9	B	32.0	C		
Madison Avenue and East 45th Street	Northeast	7.2	F	7.4	F	4.0	F		
	Northwest	31.2	C	22.0	D	20.1	D		
Madison Avenue and East 46th Street	Northwest	35.0	C	31.1	C	26.8	C		
	Northeast	41.1	B	54.5	B	34.5	C		
	Southwest	27.3	C	27.4	C	26.7	C		
	Southeast	28.3	C	41.3	B	28.2	C		
Madison Avenue and East 47th Street	Southwest	28.8	C	26.2	C	19.9	D		
	Southeast	24.3	C	37.0	C	27.8	C		

**Note:** SFP = square feet per pedestrian

**Table F-31**

**2033 Vanderbilt Corridor No-Action Conditions: Crosswalk Analysis**

Location	Crosswalk	Crosswalk Length (ft)	Crosswalk Width (ft)	2-way Peak Hour Volume	SFP	LOS
<b>Weekday AM Peak Hour</b>						
Fifth Avenue and 42nd Street	North	54	21	2,482	20.1	D
	South	54	22	3,211	12.8	E
	East	55	22	2,411	23.9	D
	West	54	21	3,196	17.2	D
Madison Avenue and East 43rd Street	South	54	15	1,361	20.7	D
	West	34	12	1,514	17.1	D
	East	35	14	1,288	34.3	C
Madison Avenue and East 42nd Street	North	53	22	3,434	11.7	E
	South	45	20	2,990	10.7	E
	East	56	19	1,562	33.8	C
Madison Avenue and East 41st Street	East	34	15	2,524	15.5	D
Lexington Avenue and East 42nd Street	North	48	19	2,648	16.2	D
Fifth Avenue and 43rd Street	West	34	22	1,557	34.6	C
	East	34	20	911	70.3	A
Fifth Avenue and 44th Street	West	34	15	1,498	30.0	C
	East	34	15	2,019	18.3	D
Fifth Avenue and 47th Street	West	24	21	1,093	51.2	B
	East	34	20	1,063	54.7	B
Madison Avenue and East 44th Street	West	34	15	1,107	41.3	B
	East	35	15	1,915	23.2	D
Madison Avenue and East 45th Street	North	55	13	1,468	15.2	D
	West	34	15	917	45.1	B
	East	40	12	2,342	12.6	E
Madison Avenue and East 46th Street	South	54	15	1,259	26.0	C
	West	34	12	1,286	28.5	C
	East	30	13	1,516	18.9	D
Madison Avenue and East 47th Street	West	34	13	997	37.5	C
	East	30	15	1,697	26.5	C
<b>Weekday Midday Peak Hour</b>						
Fifth Avenue and 42nd Street	North	54	21	2,898	16.1	D
	South	54	22	3,105	13.1	E
	East	55	22	3,078	22.2	D
	West	54	21	4,807	10.9	E
Madison Avenue and East 43rd Street	South	54	15	1,071	32.1	C
	West	34	12	2,137	13.9	E
	East	35	14	1,931	19.4	D
Madison Avenue and East 42nd Street	North	53	22	3,152	14.4	E
	South	45	20	2,984	12.4	E
	East	56	19	2,325	21.7	D
Madison Avenue and East 41st Street	East	34	15	2,080	21.8	D
Lexington Avenue and East 42nd Street	North	48	19	3,585	9.8	E
Fifth Avenue and 43rd Street	West	34	22	2,098	27.4	C
	East	34	20	1,684	41.7	B
Fifth Avenue and 44th Street	West	34	15	2,641	18.0	D
	East	34	15	3,002	13.9	E
Fifth Avenue and 47th Street	West	24	21	2,727	17.1	D
	East	34	20	1,997	27.7	C
Madison Avenue and East 44th Street	West	34	15	1,234	40.7	B
	East	35	15	1,449	30.9	C
Madison Avenue and East 45th Street	North	55	13	1,265	18.6	D
	West	34	15	1,328	29.4	C
	East	40	12	2,197	15.3	D
Madison Avenue and East 46th Street	South	54	15	1,103	30.9	C
	West	34	12	1,728	23.7	D
	East	30	13	1,270	25.7	C
Madison Avenue and East 47th Street	West	34	13	1,645	20.9	D

	East	30	15	1,609	28.7	C
<b>Weekday PM Peak Hour</b>						
Fifth Avenue and 42nd Street	North	54	21	4,119	10.8	E
	South	54	22	3,947	11.0	E
	East	55	22	3,375	17.4	D
	West	54	21	5,585	10.1	E
Madison Avenue and East 43rd Street	South	54	15	1,495	23.1	D
	West	34	12	2,309	11.2	E
	East	35	14	1,533	28.0	C
Madison Avenue and East 42nd Street	North	53	22	3,965	9.6	E
	South	45	20	3,082	9.9	E
	East	56	19	2,741	19.8	D
Madison Avenue and East 41st Street	East	34	15	3,272	12.2	E
Lexington Avenue and East 42nd Street	North	48	19	3,268	12.8	E
	West	34	22	3,138	17.5	D
Fifth Avenue and 43rd Street	East	34	20	2,523	25.6	C
	West	34	15	3,018	14.0	E
Fifth Avenue and 44th Street	East	34	15	2,939	12.8	E
	West	24	21	2,669	19.0	D
Fifth Avenue and 47th Street	East	34	20	1,778	32.4	C
	West	34	15	1,356	31.1	C
Madison Avenue and East 44th Street	East	35	15	2,277	19.3	D
	North	55	13	1,211	19.6	D
Madison Avenue and East 45th Street	West	34	15	1,370	27.1	C
	East	40	12	2,758	11.1	E
	South	54	15	1,265	24.6	C
Madison Avenue and East 46th Street	West	34	12	1,562	22.3	D
	East	30	13	2,023	16.9	D
	West	34	13	1,621	19.8	D
Madison Avenue and East 47th Street	East	30	15	1,937	23.1	D
	<b>Saturday Peak Hour</b>					
Fifth Avenue and 42nd Street	North	54	21	2,077	21.5	D
	West	54	21	2,182	31.4	C
Madison Avenue and East 42nd Street	North	53	22	3,562	9.6	E
	East	56	19	1,074	53.4	B
<b>Note:</b> SFP = square feet per pedestrian						

**Table F-32**

**2033 Vanderbilt Corridor With-Action Conditions: Sidewalk Analysis**

Location	Sidewalk	Effective Width (ft)	Two-way Peak Hour Volume	PHF	SFP	Platoon LOS	
<b>Weekday AM Peak Hour</b>							
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	6,785	0.92	23.7	D	+
	North	13.0	3,971	0.93	47.1	C	
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,813	0.86	34.2	D	
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	1,988	0.80	30.2	D	+
	East	15.0	2,826	0.85	70.7	C	
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	12.0	5,711	0.92	28.8	D	
	North-East	22.0	8,685	0.92	35.4	D	
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	3,165	0.95	60.9	C	
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	3,311	0.89	58.7	C	
	North	12.0	5,298	0.96	32.9	D	
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	4,037	0.89	47.8	C	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	4,768	0.88	33.5	D	
	South	15.0	3,424	0.91	62.3	C	
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	1,638	0.91	127.2	B	
	West	13.7	2,476	0.90	78.0	C	
Fifth Avenue between East 43rd Street and East 44th Street	East	15.0	2,177	0.82	88.9	C	
	West	16.7	2,255	0.82	95.5	B	
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,450	0.94	89.2	C	
Madison Avenue between East 45th Street and East 46th Street	East	7.8	2,654	0.89	40.3	C	
<b>Weekday Midday Peak Hour</b>							
West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	3,959	0.97	45.4	C	
	North	13.0	4,045	0.90	44.6	C	
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	1,722	0.94	39.7	D	
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	2,453	0.94	28.6	D	+
	East	15.0	3,638	0.94	60.5	C	
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	12.0	5,268	0.94	32.3	D	
	North-East	22.0	6,280	0.94	51.1	C	
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	3,213	0.96	60.6	C	
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	4,172	0.93	48.3	C	
	North	12.0	4,333	0.97	41.3	C	
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	4,949	0.86	37.1	D	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	4,551	0.95	38.3	D	
	South	15.0	3,266	0.93	66.9	C	
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	2,862	0.87	69.0	C	
	West	13.7	2,073	0.80	82.9	C	
Fifth Avenue between East 43rd Street and East 44th Street	East	15.0	2,885	0.89	72.6	C	
	West	16.7	3,008	0.95	82.7	C	
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	1,488	0.98	90.7	C	
Madison Avenue between East 45th Street and East 46th Street	East	7.8	3,209	0.94	34.9	D	
<b>Weekday PM Peak Hour</b>							

West 42nd Street between Fifth Avenue and Sixth Avenue	South	12.0	<u>8,556</u>	0.96	<u>18.8</u>	E	+
	North	13.0	<u>5,647</u>	0.96	<u>33.5</u>	D	
East 43rd Street between Madison Avenue and Fifth Avenue	North	4.8	<u>2,933</u>	0.94	<u>21.9</u>	<u>E</u>	+
Madison Avenue between East 42nd Street and East 43rd Street	West	5.0	<u>2,401</u>	0.88	<u>27.2</u>	D	
	East	15.0	<u>3,595</u>	0.91	<u>59.2</u>	C	
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	12.0	<u>7,096</u>	0.95	<u>23.3</u>	D	
	North-East	22.0	<u>10,692</u>	0.95	<u>29.2</u>	D	
Madison Avenue between East 42nd Street and East 41st Street	East	13.0	<u>3,190</u>	0.92	<u>58.5</u>	C	
East 42nd Street between Madison Avenue and Fifth Avenue	South	14.0	<u>4,707</u>	0.88	<u>40.1</u>	C	
	North	12.0	<u>7,457</u>	0.85	<u>19.2</u>	E	+
East 42nd Street between Lexington Avenue and Park Avenue	North	14.0	<u>5,014</u>	0.97	<u>41.6</u>	C	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	<u>5,542</u>	0.94	<u>30.6</u>	D	
	South	15.0	<u>3,755</u>	0.92	<u>57.3</u>	C	
Fifth Avenue between East 42nd Street and East 43rd Street	East	14.5	<u>2,326</u>	0.87	<u>85.3</u>	C	
	West	13.7	<u>2,522</u>	0.90	<u>76.6</u>	C	
Fifth Avenue between East 43rd Street and East 44th Street	East	15.0	<u>2,855</u>	0.86	<u>70.8</u>	C	
	West	16.7	<u>3,881</u>	0.94	<u>63.1</u>	C	
East 44th Street between Madison Avenue and Vanderbilt Avenue	North	8.8	<u>2,245</u>	0.95	<u>57.7</u>	C	
Madison Avenue between East 45th Street and East 46th Street	East	7.8	<u>3,100</u>	0.88	<u>33.7</u>	D	
<b>Saturday Peak Hour</b>							
East 42nd Street between Madison Avenue and Vanderbilt Avenue	North-West	12.0	<u>5,044</u>	0.89	<u>31.9</u>	D	
	North-East	22.0	<u>4,975</u>	0.89	<u>61.5</u>	C	
East 42nd Street between Madison Avenue and Fifth Avenue	North	12.0	<u>6,255</u>	0.89	<u>25.0</u>	D	
Madison Avenue between East 43rd Street and East 42nd Street	East	15.0	<u>1,372</u>	0.89	<u>153.8</u>	B	
East 42nd Street between Vanderbilt Avenue and Park Avenue	North	12.0	<u>4,304</u>	0.94	<u>40.2</u>	C	
<b>Note:</b> SFP = square feet per pedestrian							
+ Denotes a significant adverse pedestrian impact							

**Table F-33**

**2033 Vanderbilt Corridor With-Action Conditions: Corner Analysis**

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS	SFP	LOS
Fifth Avenue and 42nd Street	Northwest	43.6	B	33.3	C	23.1	D	61.3	A
	Northeast	46.7	B	40.3	B	24.7	C	54.9	B
	Southwest	29.3	C	27.1	C	25.4	C		
	Southeast	36.4	C	35.6	C	25.0	C		
Madison Avenue and East 43rd Street	Northwest	23.0	D	19.6	D	8.3	E	+	
	Northeast	7.9	F	6.8	F	8.1	E	+	
	Southwest	18.7	D	20.3	D	16.4	D	+	
	Southeast	46.0	B	39.3	C	48.6	B	140.2	A
Madison Avenue and East 42nd Street	Northwest	15.8	D	16.3	D	10.6	E	+	23.0
	Northeast	32.2	C	30.9	C	23.9	D		36.2
	Southwest	69.4	A	62.3	A	60.1	A		
	Southeast	31.8	C	30.3	C	25.8	C		
Madison Avenue and East 41st Street	Northeast	10.7	E	18.7	D	14.2	E		
	Southeast	18.7	D	23.1	D	17.5	D		
Park Avenue and East 41st Street	Southwest	51.1	B	48.5	B	28.5	C		
Lexington Avenue and East 42nd Street	Northeast	23.2	D	11.7	E	17.0	D		
	Northwest	11.2	E	10.4	E	12.6	E		
Fifth Avenue and 43rd Street	Northwest	33.6	C	38.8	C	24.0	C		
	Northeast	45.5	B	49.7	B	32.6	C		
	Southwest	47.3	B	52.8	B	35.2	C		
	Southeast	45.6	B	53.7	B	31.0	C		
Fifth Avenue and 44th Street	Northwest	59.3	B	43.5	B	31.2	C		
	Northeast	50.6	B	38.2	C	30.9	C		
	Southwest	56.7	B	40.2	B	23.6	D		
	Southeast	43.2	B	34.3	C	25.7	C		
Fifth Avenue and 45th Street	Southeast	55.6	B	41.8	B	45.8	B		
Fifth Avenue and 46th Street	Northwest	76.0	A	45.0	B	40.8	B		
	Northeast	149.8	A	121.6	A	99.1	A		
	Southwest	63.6	A	36.3	C	39.1	C		
	Southeast	54.5	B	40.9	B	44.1	B		
Fifth Avenue and 47th Street	Southwest	84.0	A	58.0	B	57.2	B		
	Southeast	50.0	B	43.3	B	42.9	B		
Madison Avenue and East 44th Street	Northeast	33.1	C	32.6	C	25.2	C		
	Northwest	42.7	B	35.2	C	26.3	C		
Madison Avenue and East 45th Street	Northeast	5.6	F	3.2	F	0.1	F	+	
	Northwest	25.4	C	16.9	D	17.1	D	+	
Madison Avenue and East 46th Street	Northwest	32.7	C	25.7	C	25.6	C		
	Northeast	37.0	C	40.7	B	31.7	C		
	Southwest	25.3	C	21.3	D	25.0	C		
	Southeast	25.8	C	28.9	C	24.8	C		
Madison Avenue and East 47th Street	Southwest	28.1	C	23.8	D	19.3	D		
	Southeast	23.6	D	33.5	C	26.9	C		

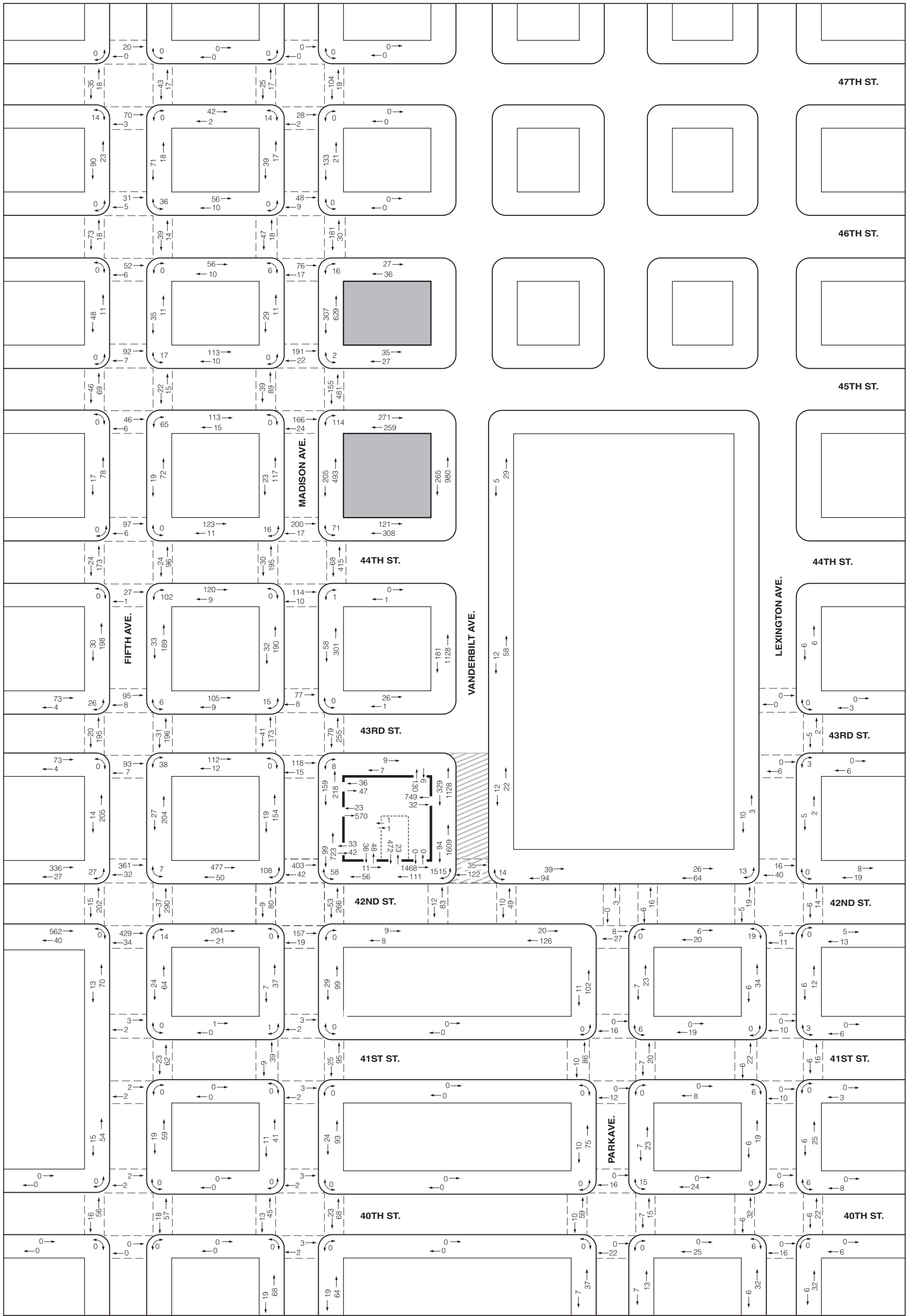
**Note:** SFP = square feet per pedestrian  
 + Denotes a significant adverse pedestrian impact

**Table F-34**  
**2033 Vanderbilt Corridor With-Action Conditions: Crosswalk Analysis**

Location	Crosswalk	Crosswalk Length (ft)	Crosswalk Width (ft)	2-way Peak Hour Volume	SFP	LOS	
<b>Weekday AM Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	<u>3,287</u>	14.5	E	+
	South	54	22	<u>3,757</u>	10.4	E	+
	East	55	22	<u>2,744</u>	20.5	D	
	West	54	21	<u>3,459</u>	<u>15.6</u>	D	+
Madison Avenue and East 43rd Street	South	54	15	<u>1,555</u>	<u>18.1</u>	D	+
	West	34	12	<u>1,731</u>	14.2	E	+
	East	35	14	<u>1,596</u>	<u>26.8</u>	C	
Madison Avenue and East 42nd Street	North	53	22	<u>4,515</u>	8.5	E	+
	South	<u>45</u>	20	3,227	<u>9.8</u>	E	+
	East	56	19	<u>2,140</u>	<u>23.9</u>	D	
Madison Avenue and East 41st Street	East	34	15	<u>2,833</u>	<u>13.6</u>	E	+
Lexington Avenue and East 42nd Street	North	48	19	<u>2,731</u>	15.6	D	
Fifth Avenue and 43rd Street	West	34	22	<u>1,762</u>	<u>28.8</u>	C	
	East	34	20	<u>1,120</u>	56.2	B	
Fifth Avenue and 44th Street	West	34	15	<u>1,697</u>	25.8	C	
	East	34	15	<u>2,160</u>	16.6	D	+
Fifth Avenue and 47th Street	West	24	21	<u>1,121</u>	49.8	B	
	East	34	20	<u>1,097</u>	52.9	B	
Madison Avenue and East 44th Street	West	34	15	<u>1,302</u>	34.2	C	
	East	35	15	<u>2,289</u>	18.6	D	+
Madison Avenue and East 45th Street	North	55	13	<u>1,659</u>	13.0	E	+
	West	34	15	<u>1,049</u>	38.5	C	
	East	40	12	<u>2,921</u>	9.4	E	+
Madison Avenue and East 46th Street	South	54	15	<u>1,329</u>	24.5	C	
	West	34	12	<u>1,351</u>	27.1	C	
	East	30	13	<u>1,693</u>	16.8	D	+
Madison Avenue and East 47th Street	West	34	13	<u>1,014</u>	35.7	C	
	East	30	15	<u>1,765</u>	25.4	C	
<b>Weekday Midday Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	<u>3,396</u>	13.4	E	+
	South	54	22	<u>3,444</u>	11.6	E	+
	East	55	22	<u>3,260</u>	20.8	D	
	West	54	21	<u>4,917</u>	<u>10.6</u>	E	
Madison Avenue and East 43rd Street	South	54	15	<u>1,245</u>	27.2	C	
	West	34	12	<u>2,454</u>	<u>11.7</u>	E	+
	East	35	14	<u>2,635</u>	<u>13.3</u>	E	+
Madison Avenue and East 42nd Street	North	53	22	<u>3,854</u>	11.3	E	+
	South	<u>45</u>	20	3,286	<u>11.0</u>	E	+
	East	56	19	<u>3,199</u>	<u>15.0</u>	E	+
Madison Avenue and East 41st Street	East	34	15	<u>2,402</u>	<u>18.4</u>	D	+
Lexington Avenue and East 42nd Street	North	48	19	<u>3,887</u>	8.8	E	+
Fifth Avenue and 43rd Street	West	34	22	<u>2,320</u>	24.4	C	
	East	34	20	<u>2,066</u>	33.3	C	
Fifth Avenue and 44th Street	West	34	15	<u>2,811</u>	16.7	D	
	East	34	15	<u>3,234</u>	12.3	E	+
Fifth Avenue and 47th Street	West	24	21	<u>3,063</u>	14.8	E	+
	East	34	20	<u>2,327</u>	23.2	D	
Madison Avenue and East 44th Street	West	34	15	<u>1,608</u>	30.2	C	
	East	35	15	<u>2,209</u>	18.3	D	+
Madison Avenue and East 45th Street	North	55	13	<u>1,525</u>	14.7	E	+
	West	34	15	<u>1,553</u>	24.5	C	

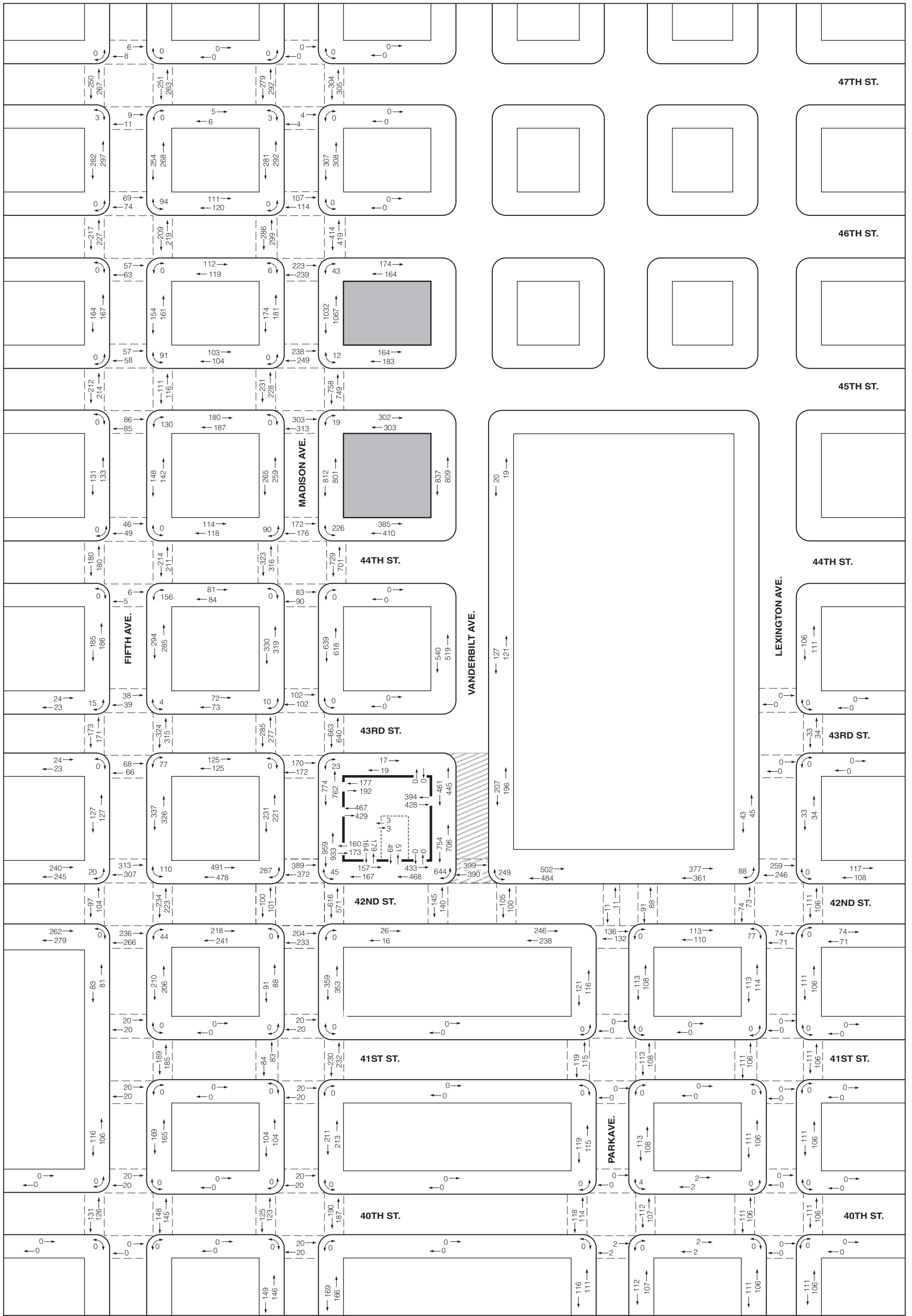


	East	40	12	3,013	10.3	E	+
Madison Avenue and East 46th Street	South	54	15	1,401	23.7	D	
	West	34	12	2,004	19.9	D	
	East	30	13	1,701	17.8	D	+
Madison Avenue and East 47th Street	West	34	13	1,873	17.4	D	+
	East	30	15	1,854	24.4	C	
<b>Weekday PM Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	4,911	8.6	E	+
	South	54	22	4,623	8.9	E	+
	East	55	22	3,738	15.3	D	+
	West	54	21	5,826	9.6	E	
Madison Avenue and East 43rd Street	South	54	15	1,737	19.6	D	
	West	34	12	2,555	9.7	E	+
	East	35	14	1,873	22.1	D	
Madison Avenue and East 42nd Street	North	53	22	4,932	7.4	F	+
	South	45	20	3,414	8.7	E	+
	East	56	19	3,224	16.4	D	+
Madison Avenue and East 41st Street	East	34	15	3,388	11.7	E	
Lexington Avenue and East 42nd Street	North	48	19	3,321	12.5	E	
Fifth Avenue and 43rd Street	West	34	22	3,371	15.8	D	+
	East	34	20	2,728	23.3	D	
Fifth Avenue and 44th Street	West	34	15	3,229	12.8	E	+
	East	34	15	3,078	12.0	E	
Fifth Avenue and 47th Street	West	24	21	2,760	18.2	D	
	East	34	20	1,843	31.2	C	
Madison Avenue and East 44th Street	West	34	15	1,546	26.5	C	
	East	35	15	2,680	15.8	D	+
Madison Avenue and East 45th Street	North	55	13	1,413	16.2	D	+
	West	34	15	1,495	24.0	C	
	East	40	12	3,404	8.3	E	+
Madison Avenue and East 46th Street	South	54	15	1,372	22.4	D	
	West	34	12	1,615	21.5	D	
	East	30	13	2,156	15.7	D	
Madison Avenue and East 47th Street	West	34	13	1,661	18.2	D	
	East	30	15	2,001	22.3	D	
<b>Saturday Peak Hour</b>							
Fifth Avenue and 42nd Street	North	54	21	2,321	19.0	D	+
	West	54	21	2,222	27.9	C	
Madison Avenue and East 42nd Street	North	53	22	3,870	8.7	E	+
	East	56	19	1,251	45.4	B	
<b>Note:</b> SFP = square feet per pedestrian							
+ Denotes a significant adverse pedestrian impact							



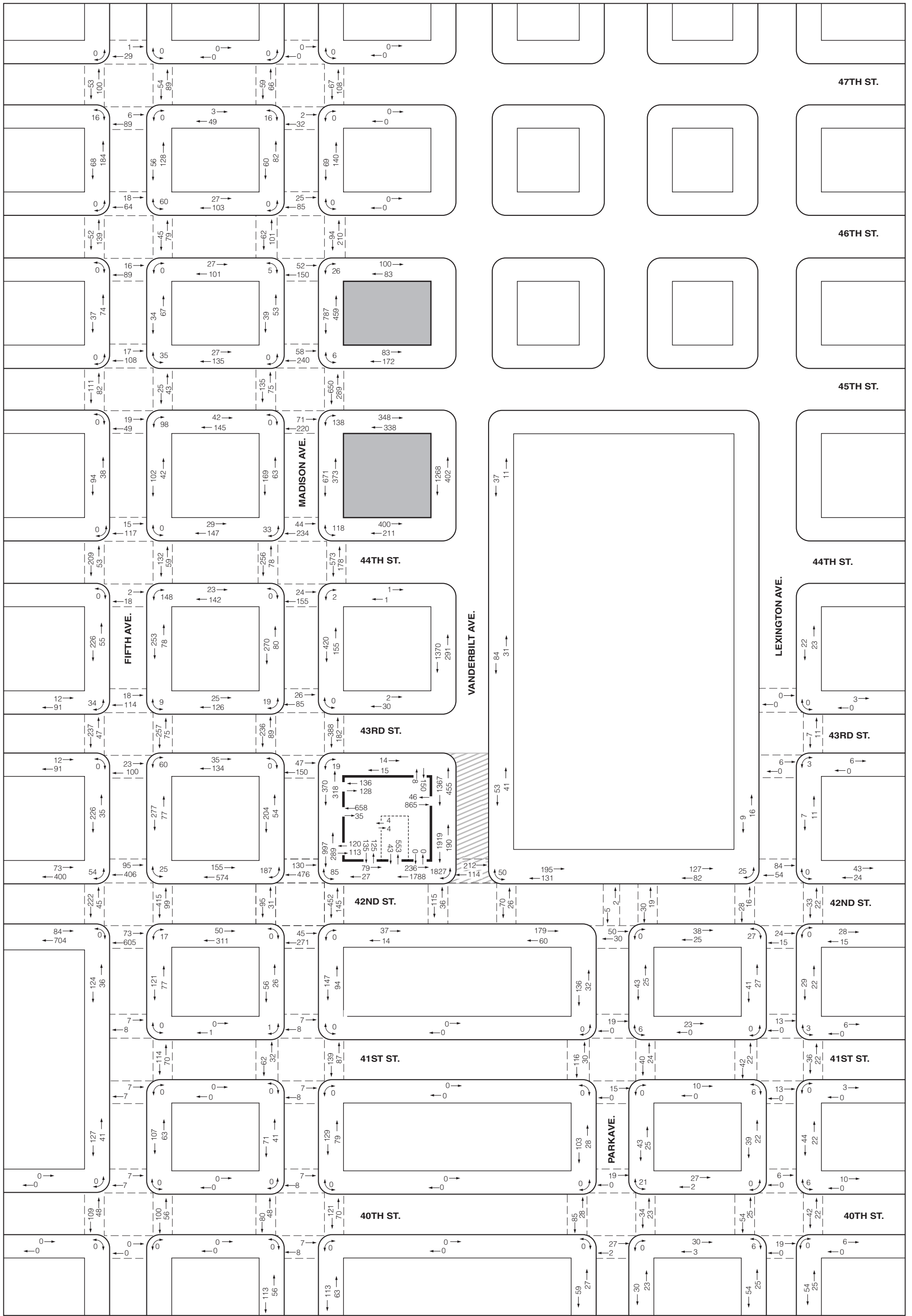
NOT TO SCALE

2033 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
 Weekday AM Peak Hour  
**Figure F-37**



NOT TO SCALE

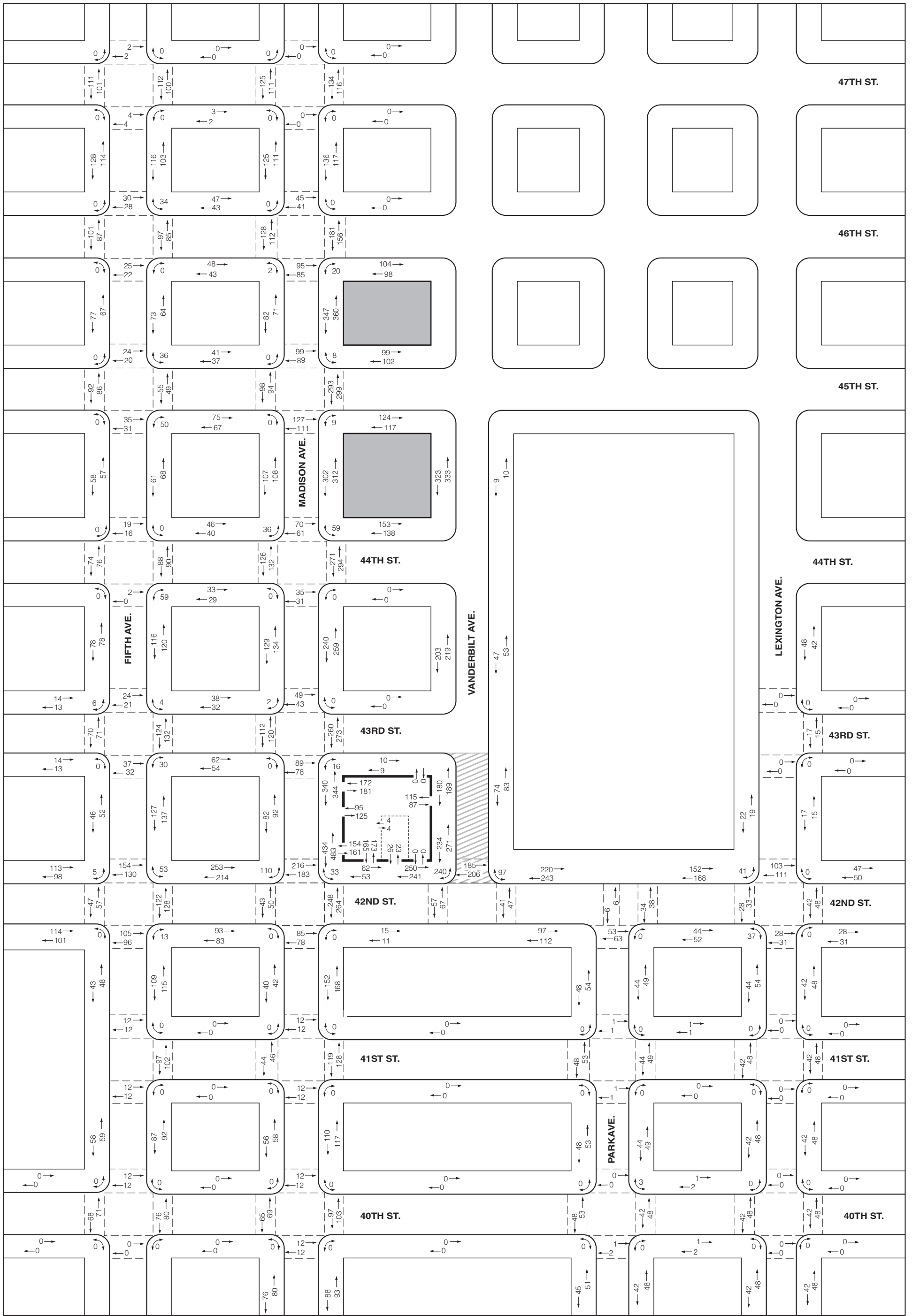
2033 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
Weekday Midday Peak Hour  
Figure F-38



- One Vanderbilt Development Site
- MTA Access Area
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

2033 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
Weekday PM Peak Hour



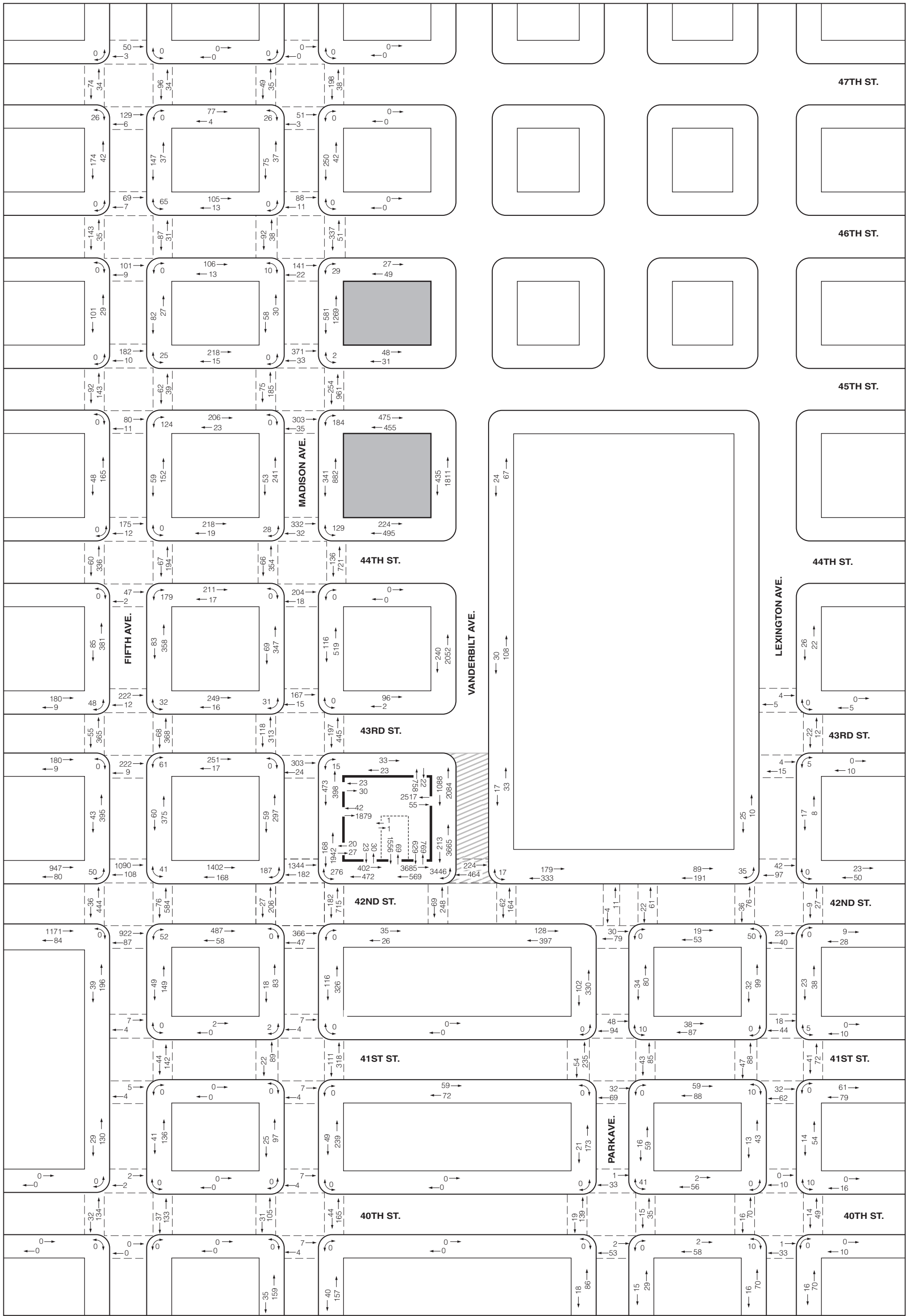
- One Vanderbilt Development Site
- MTA Access Area
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

2033 Vanderbilt Corridor No-Action Project Generated Pedestrian Trips  
Saturday Peak Hour  
Figure F-40

**Vanderbilt Corridor and One Vanderbilt**

*This figure has been updated for the FEIS.*



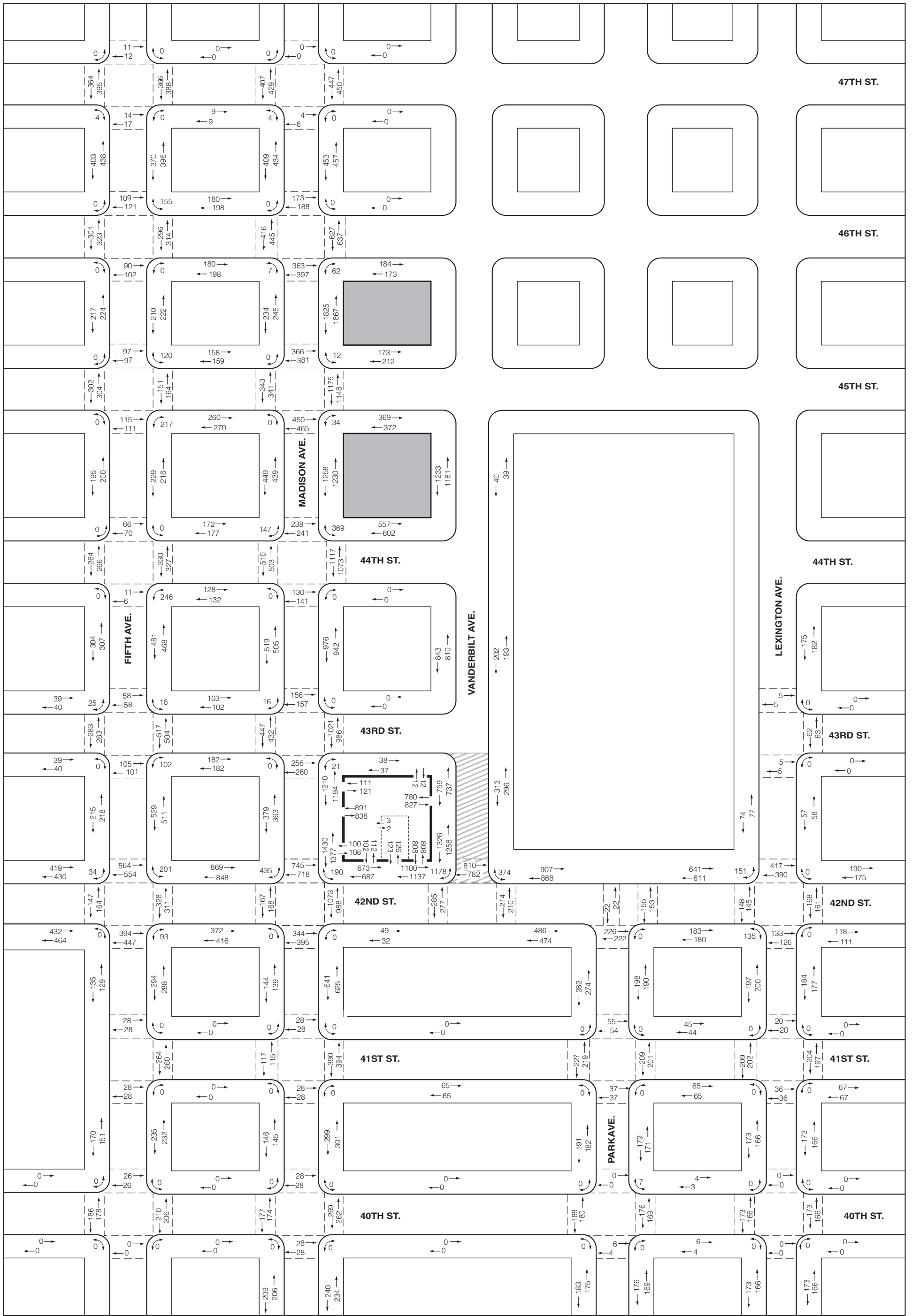
- One Vanderbilt Development Site
- MTA Access Area
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

2033 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
 Weekday AM Peak Hour  
**Figure F-41**

**Vanderbilt Corridor and One Vanderbilt**

*This figure has been updated for the FEIS.*

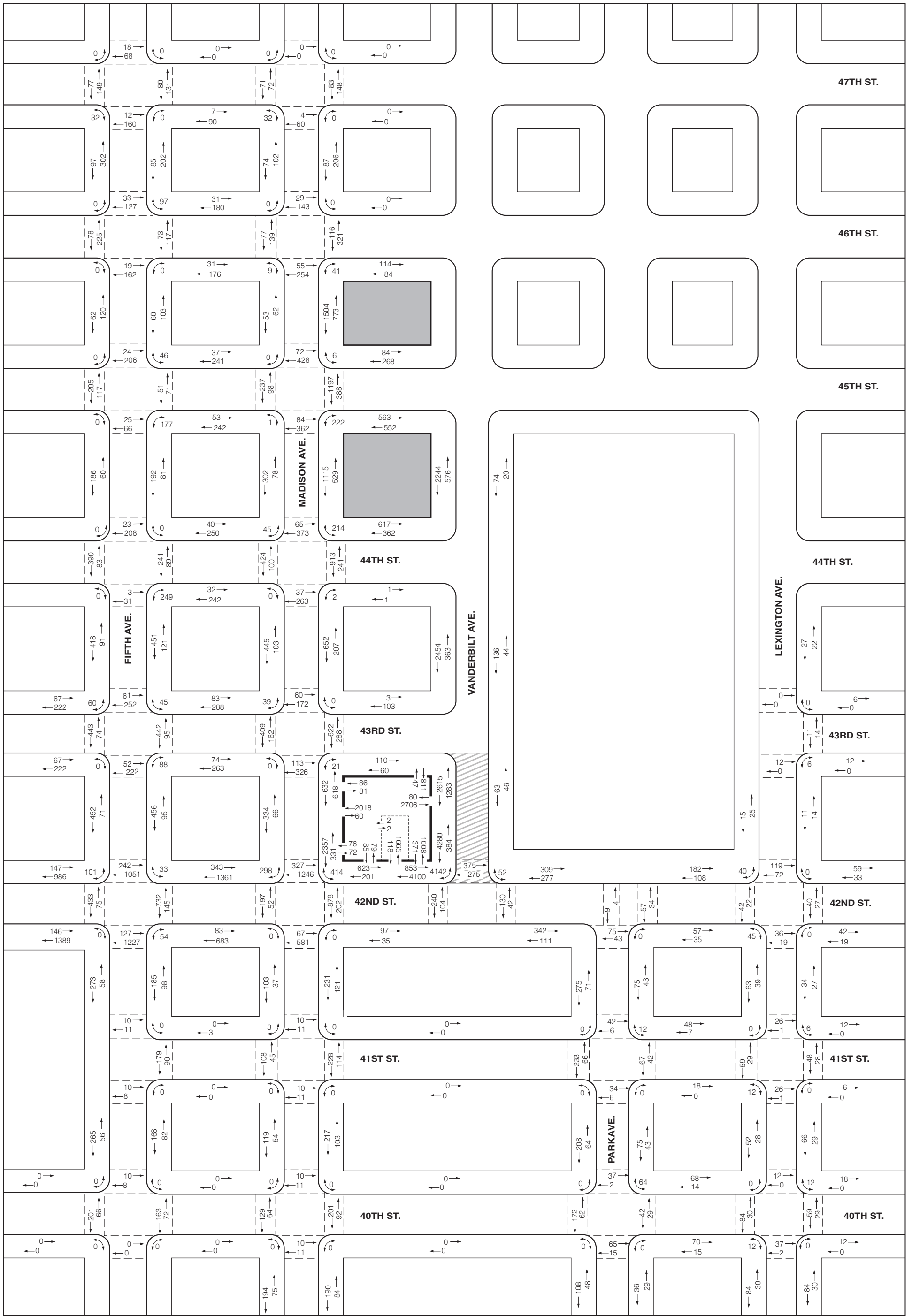


NOT TO SCALE

2033 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
 Weekday Midday Peak Hour  
**Figure F-42**

**Vanderbilt Corridor and One Vanderbilt**

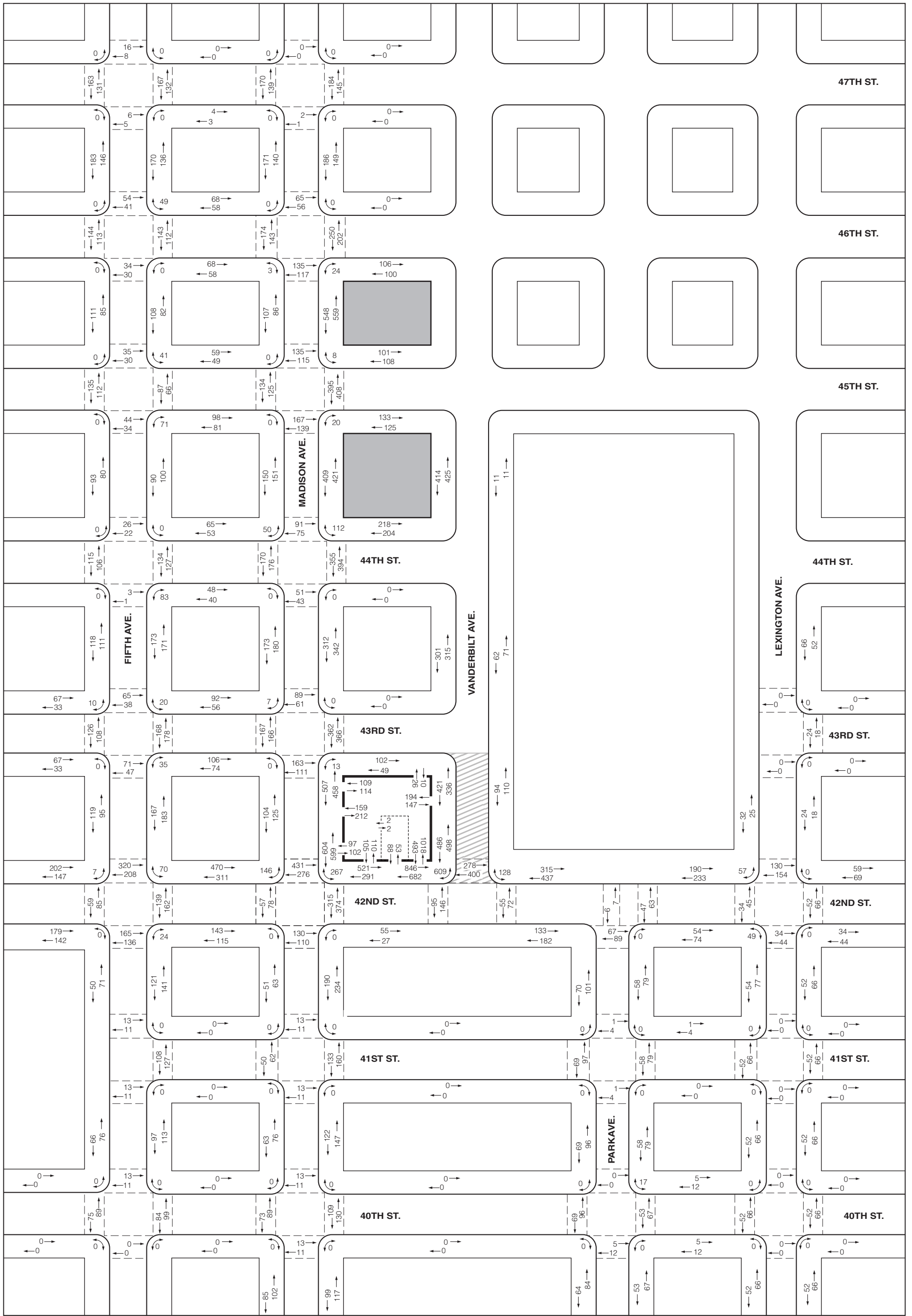
*This figure has been updated for the FEIS.*



NOT TO SCALE

2033 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
Weekday PM Peak Hour





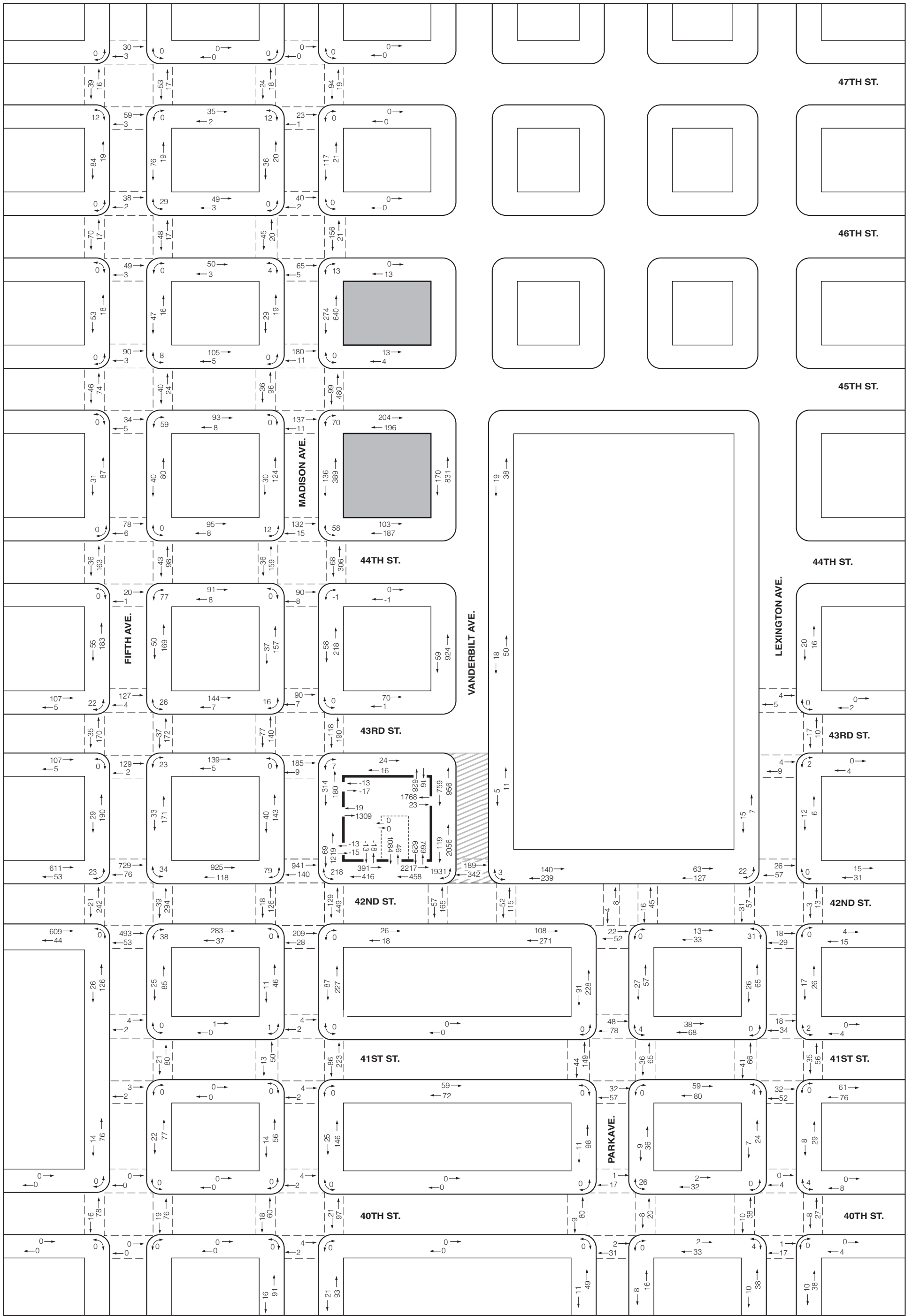
- One Vanderbilt Development Site
- MTA Access Area
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

2033 Vanderbilt Corridor With-Action Project Generated Pedestrian Trips  
 Saturday Peak Hour  
**Figure F-44**

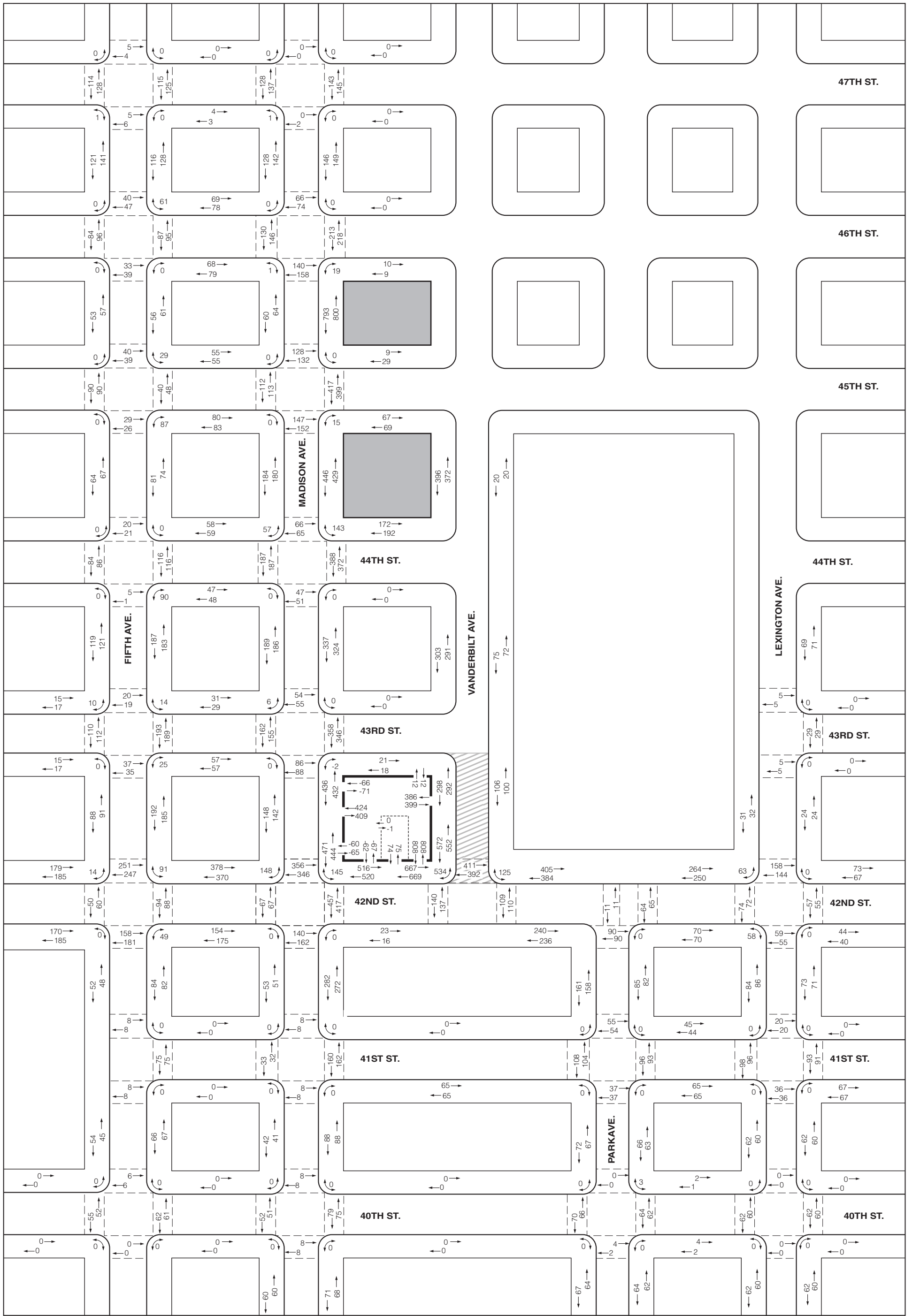
**Vanderbilt Corridor and One Vanderbilt**

*This figure has been updated for the FEIS.*



NOT TO SCALE

2033 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
 Weekday AM Peak Hour  
**Figure F-45**



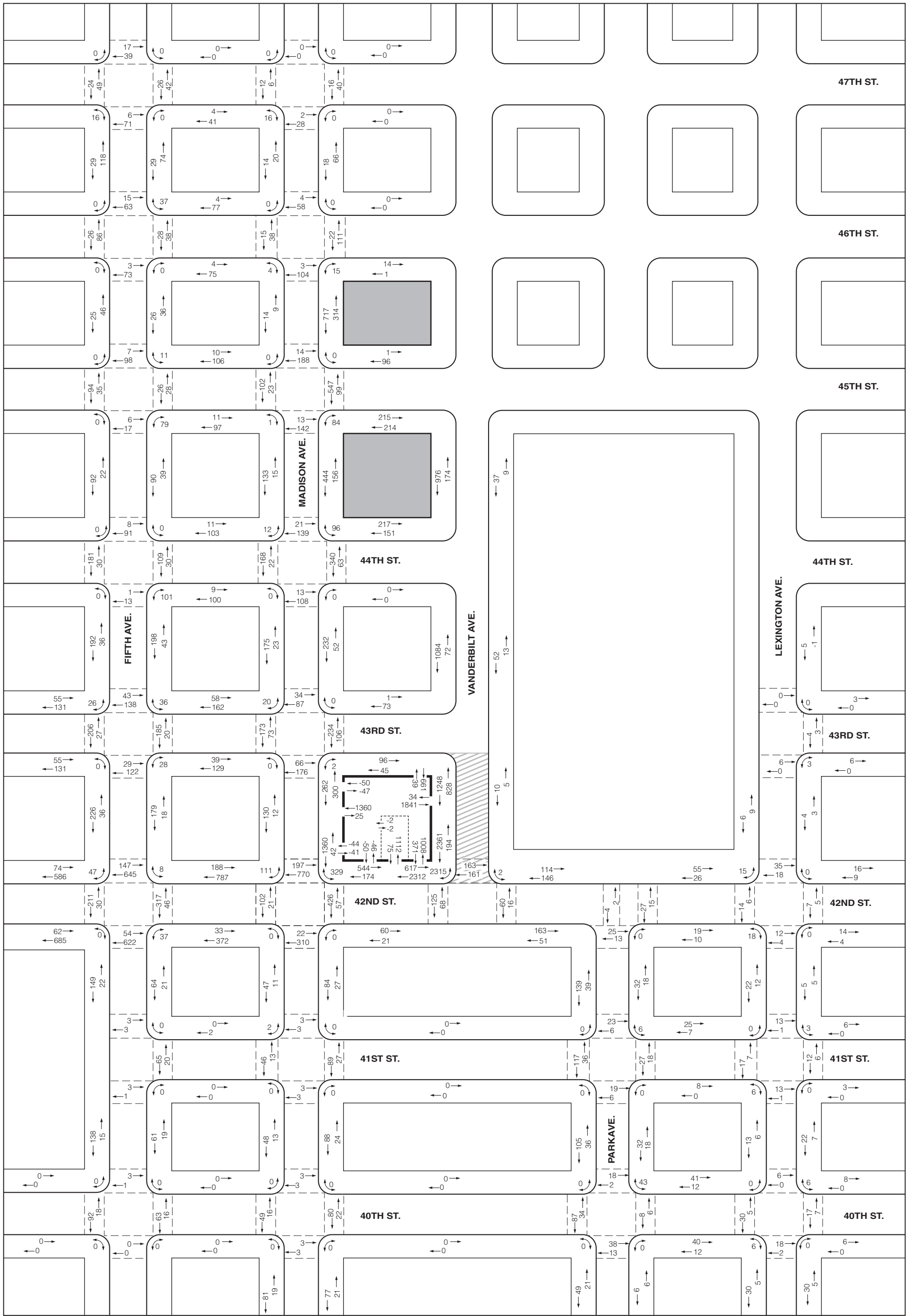
- One Vanderbilt Development Site
- MTA Access Area
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

NOT TO SCALE

2033 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
 Weekday Midday Peak Hour  
**Figure F-46**

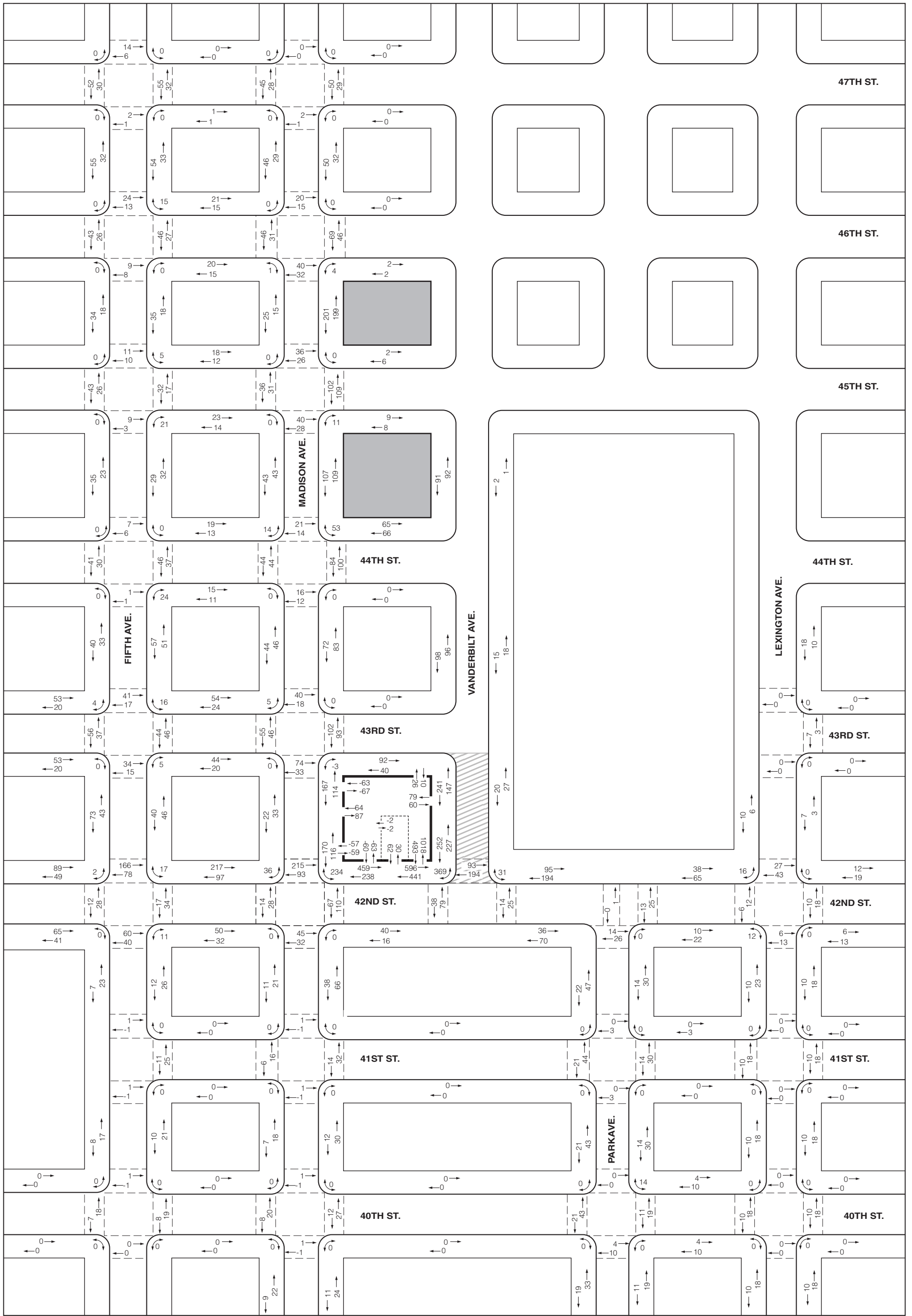
**Vanderbilt Corridor and One Vanderbilt**

*This figure has been updated for the FEIS.*



NOT TO SCALE

2033 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
 Weekday PM Peak Hour  
**Figure F-47**



- One Vanderbilt Development Site
- MTA Access Area
- 2033 Vanderbilt Corridor Development Sites
- Proposed Public Place

2033 Vanderbilt Corridor With-Action Incremental Pedestrian Trips  
Saturday Peak Hour  
**Figure F-48**

Table F-35

**2033 Vanderbilt Corridor No-Action Condition Subway Platform Stair Analysis**  
**Grand Central-42nd Street Station**

Stair	Location	Stairway Width	Effective Width (ft)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surge Factor		V/C Ratio	LOS
				Up	Down	Up	Down		Up	Down		
<b>AM Peak Hour</b>												
P10*	SB Lexington Platform	7.50	6.50	1377	1797	413	539	90%	75%	100%	1.24	D
P12	SB Lexington Platform	10.00	8.75	963	2793	289	838	90%	75%	100%	1.04	D
P14	SB Lexington Platform	10.00	8.75	1080	2997	324	899	90%	75%	100%	1.13	D
P16	SB Lexington Platform	9.25	8.00	837	4150	251	1245	90%	75%	100%	1.46	E
P18	SB Lexington Platform	10.00	8.75	1393	2433	418	730	90%	75%	95%	1.12	D
P20	SB Lexington Platform	10.00	8.75	1823	1823	547	547	90%	75%	100%	1.08	D
P22	SB Lexington Platform	6.16	5.16	1263	1457	379	437	90%	75%	100%	1.35	E
P24*	SB Lexington Platform	7.00	6.00	983	0	295	0	100%	75%	100%	0.44	A
P13	NB Lexington Platform	10.00	8.75	1827	697	548	209	90%	75%	100%	0.80	C
P15	NB Lexington Platform	10.00	8.75	1420	1007	426	302	90%	75%	100%	0.74	C
P17	NB Lexington Platform	10.00	8.75	1537	2703	461	811	90%	75%	100%	1.21	D
P19	NB Lexington Platform	10.00	8.75	1913	1403	574	421	90%	75%	95%	1.02	D
P21	NB Lexington Platform	10.00	8.75	1580	420	474	126	90%	75%	100%	0.64	B
P23	NB Lexington Platform	6.16	5.16	1327	477	398	143	90%	75%	100%	0.97	C
P25*	NB Lexington Platform	6.00	5.00	1180	167	354	50	90%	75%	100%	0.77	C
U1	Flushing Transfer via SB Lex	6.00	5.00	520	1433	156	430	90%	90%	75%	1.11	D
U5	Flushing Transfer via SB Lex	6.00	5.00	963	1397	289	419	90%	90%	75%	1.30	D
U2	Flushing Transfer via NB Lex	7.00	6.00	327	2090	98	627	90%	90%	75%	1.17	D
U6	Flushing Transfer via NB Lex	7.00	6.00	607	1357	182	407	90%	90%	75%	0.92	C
PL2	Flushing transfer at platform	7.50	6.50	1720	2730	516	819	90%	75%	95%	1.77	F
PL3	Flushing transfer at platform	7.50	6.50	847	3333	254	1000	90%	75%	95%	1.59	E
PL5	Flushing transfer at platform	7.00	6.00	2073	63	622	19	100%	75%	95%	0.94	C
PL6	Flushing transfer at platform	7.00	6.00	3217	153	965	46	100%	75%	95%	1.48	E
PL9A	Flushing transfer at platform	15.00	13.50	4343	660	1303	198	90%	75%	100%	1.06	D
ML1	Flushing transfer at platform	4.58	3.58	0	660	0	198	100%	75%	100%	0.37	A
P10S	Shuttle at platform	15.50	14.00	1723	2697	517	809	90%	75%	100%	0.79	C
P11	Shuttle at platform	9.25	8.00	850	1047	255	314	90%	75%	100%	0.61	B
P3	Shuttle at platform	5.00	4.00	227	30	68	9	90%	75%	100%	0.18	A
P4	Shuttle at platform	5.00	4.00	460	47	138	14	90%	75%	100%	0.37	A
<b>PM Peak Hour</b>												
P10*	SB Lexington Platform	7.50	6.50	620	627	186	188	90%	75%	100%	0.50	B
P12	SB Lexington Platform	10.00	8.75	467	1120	140	336	90%	75%	100%	0.44	A
P14	SB Lexington Platform	10.00	8.75	503	1307	151	392	90%	75%	100%	0.50	B
P16	SB Lexington Platform	9.25	8.00	410	1830	123	549	90%	75%	100%	0.66	B
P18	SB Lexington Platform	10.00	8.75	737	1883	221	565	90%	75%	100%	0.73	C
P20	SB Lexington Platform	10.00	8.75	423	1770	127	531	90%	75%	100%	0.59	B
P22	SB Lexington Platform	6.16	5.16	360	1573	108	472	90%	75%	100%	0.88	C
P24*	SB Lexington Platform	7.00	6.00	220	0	66	0	100%	75%	100%	0.10	A
P13	NB Lexington Platform	10.00	8.75	2710	1463	813	439	90%	75%	100%	1.29	D
P15	NB Lexington Platform	10.00	8.75	1900	1863	570	559	90%	75%	100%	1.12	D
P17	NB Lexington Platform	10.00	8.75	2087	2473	626	742	90%	75%	100%	1.33	E
P19	NB Lexington Platform	10.00	8.75	1953	1573	586	472	90%	75%	100%	1.06	D
P21	NB Lexington Platform	10.00	8.75	1427	1120	428	336	90%	75%	100%	0.77	C
P23	NB Lexington Platform	6.16	5.16	1113	1667	334	500	90%	75%	100%	1.36	E
P25*	NB Lexington Platform	6.00	5.00	1030	653	309	196	90%	75%	100%	0.90	C
U1	Flushing Transfer via SB Lex	6.00	5.00	127	1343	38	403	90%	90%	75%	0.86	C
U5	Flushing Transfer via SB Lex	6.00	5.00	237	1100	71	330	90%	90%	75%	0.77	C
U2	Flushing Transfer via NB Lex	7.00	6.00	167	1837	50	551	90%	90%	75%	0.98	C
U6	Flushing Transfer via NB Lex	7.00	6.00	310	2247	93	674	90%	90%	75%	1.24	D
PL2	Flushing transfer at platform	7.50	6.50	587	3117	176	935	90%	75%	95%	1.39	E
PL3	Flushing transfer at platform	7.50	6.50	293	3263	88	979	90%	75%	95%	1.31	D
PL5	Flushing transfer at platform	7.00	6.00	843	720	253	216	90%	75%	95%	0.70	B
PL6	Flushing transfer at platform	7.00	6.00	1427	1227	428	368	90%	75%	95%	1.18	D
PL9A	Flushing transfer at platform	15.00	13.50	1440	3387	432	1016	90%	75%	100%	0.87	C
ML1	Flushing transfer at platform	4.58	3.58	0	543	0	163	100%	75%	100%	0.30	A
P10S	Shuttle at platform	15.50	14.00	2817	2443	845	733	90%	75%	100%	0.98	C
P11	Shuttle at platform	9.25	8.00	363	467	109	140	90%	75%	100%	0.26	A
P3	Shuttle at platform	5.00	4.00	43	253	13	76	90%	75%	100%	0.17	A
P4	Shuttle at platform	5.00	4.00	87	380	26	114	90%	75%	100%	0.28	A
<b>Note:</b>												
* new stairs added in No-Action condition												

**Table F-36**

**2033 Vanderbilt Corridor No-Action Condition Free-Zone Stair Analysis**  
**Grand Central-42nd Street Station**

Free-Zone Stair	Location	Stairway Width	Effective Width (ft)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surge Factor		V/C Ratio	LOS
				Up	Down	Up	Down		Up	Down		
<b>AM Peak Hour</b>												
M8	Control Area R240	19.16	17.66	4283	3110	1285	933	90%	90%	100%	0.99	C
M9	Control Area R240	7.83	6.83	3590	743	1077	223	90%	90%	100%	1.54	E
O27	Control Area R240	12.00	10.75	613	1983	184	595	90%	100%	90%	0.58	B
M7	Control Area R238-A	10.00	8.75	1663	4787	499	1436	90%	95%	100%	1.66	E
M30	Control Area R238-A	11.50	10.25	553	7177	166	2153	90%	95%	100%	1.68	F
S1	Control Area R233	4.75	3.75	170	20	51	6	90%	80%	100%	0.14	A
O3	Control Area R233	9.00	7.75	513	57	154	17	90%	80%	100%	0.20	A
<b>PM Peak Hour</b>												
M8	Control Area R240	19.16	17.66	4020	940	1206	282	90%	90%	100%	0.68	B
M9	Control Area R240	7.83	6.83	913	3637	274	1091	90%	90%	100%	1.51	E
O27	Control Area R240	12.00	10.75	503	3007	151	902	90%	100%	90%	0.79	C
M7	Control Area R238-A	10.00	8.75	5073	1030	1522	309	90%	90%	100%	1.69	F
M30	Control Area R238-A	11.50	10.25	1127	4807	338	1442	90%	90%	100%	1.31	D
S1	Control Area R233	4.75	3.75	33	163	10	49	90%	80%	100%	0.12	A
O3	Control Area R233	9.00	7.75	97	473	29	142	90%	80%	100%	0.17	A

**Table F-37**

**2033 Vanderbilt Corridor No-Action Condition Subway Escalator Analysis**  
**Grand Central-42nd Street Station**

Escalator	Location	Tread Width (in.)	Peak Hour Volumes		Peak 15-Minute Volumes		Surge Factor		Capacity	V/C Ratio	LOS
			Up	Down	Up	Down	Up	Down			
<b>AM Peak Hour</b>											
ES203(UP)	Flushing East Core	32"	2172	-	652	-	0.80	-	750	1.09	D
ES204(UP)	Flushing East Core	32"	2172	-	652	-	0.80	-	750	1.09	D
ES205(UP)	Flushing Center Core	40"	2720	-	816	-	0.80	-	945	1.08	D
ES206(UP)	Flushing Center Core	40"	2720	-	816	-	0.80	-	946	1.08	D
ES208(UP)	Flushing West Core	40"	2687	-	806	-	0.75	-	945	1.14	D
ES210(UP)	Flushing West Core	40"	2687	-	806	-	0.75	-	946	1.14	D
ES255(UP)	R238 Free Zone	40"	3500	-	1050	-	0.95	-	945	1.17	D
ES256(UP)	R238 Free Zone	40"	3500	-	1050	-	0.95	-	946	1.17	D
<b>PM Peak Hour</b>											
ES203(UP)	Flushing East Core	32"	1440	-	432	-	0.8	-	750	0.72	C
ES204(DN)	Flushing East Core	32"	-	2847	-	854	-	1	750	1.14	D
ES205(UP)	Flushing Center Core	40"	2307	-	692	-	0.8	-	945	0.92	C
ES206(DN)	Flushing Center Core	40"	-	1800	-	540	-	1	945	0.57	B
ES208(UP)	Flushing West Core	40"	2430	-	729	-	0.75	-	945	1.03	D
ES210(DN)	Flushing West Core	40"	-	3570	-	1071	-	1	945	1.13	D
ES255(UP)	R238 Free Zone	40"	3500	-	1050	-	0.95	-	945	1.17	D
ES256(DN)	R238 Free Zone	40"	-	3600	-	1050	-	0.95	946	1.17	D
<b>Note:</b> All escalators operate Up in the AM peak.											

**Table F-38**

**2033 Vanderbilt Corridor No-Action Condition Fare Array Analysis**  
**Grand Central-42nd Street Station**

Peak Period	Fare Array	Control Element	Quantity	Peak Hour Pedestrian Volumes		15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
				In	Out	In	Out				
AM	R233	High Entry/Exit Turnstile	2	77	687	23	206	0.8	0.9	0.23	A
		High Exit Turnstile	1								
	R236	Two-way Turnstile	12	3763	2814	1129	844	0.8	0.9	0.39	A
		High Entry/Exit Turnstile	1								
	R237	Two-way Turnstile	7	310	2533	93	760	0.9	0.9	0.24	A
	R237A	High Exit Turnstile	1	N/A	463	N/A	139	0.9	1.0	0.28	A
	R237B	Two-way Turnstile	4	330	2453	99	736	0.9	0.9	0.42	A
	R238	Two-way Turnstile	16	4903	8377	1471	2513	0.9	0.9	0.54	B
	R238A	Two-way Turnstile	8	8767	1397	2630	419	0.9	0.9	0.97	C
	R240	Two-way Turnstile	11	4020	8870	1206	2661	0.9	0.9	0.75	C
R240A	Two-way Turnstile	4	447	987	134	296	0.9	0.9	0.23	A	
R241A	Two-way Turnstile	5	660	4343	198	1303	0.9	0.9	0.58	B	
PM	R233	High Entry/Exit Turnstile	2	633	130	190	39	0.8	0.9	0.45	A
		High Exit Turnstile	1								
	R236	Two-way Turnstile	12	3167	3250	950	975	0.8	0.9	0.37	A
		High Entry/Exit Turnstile	1								
	R237	Two-way Turnstile	7	2000	473	600	142	0.9	0.9	0.27	A
	R237A	High Exit Turnstile	1	N/A	123	N/A	37	0.9	1.0	0.07	A
	R237B	Two-way Turnstile	4	2470	537	741	161	0.9	0.9	0.57	A
	R238	Two-way Turnstile	16	5340	9580	1602	2874	0.9	0.9	0.61	B
	R238A	Two-way Turnstile	8	5027	1433	1508	430	0.9	0.9	0.60	B
	R240	Two-way Turnstile	11	6827	4897	2048	1468	0.9	0.9	0.75	C
R240A	Two-way Turnstile	4	760	204	228	163	0.9	0.9	0.23	A	
R241A	Two-way Turnstile	5	3387	1440	1016	432	0.9	0.9	0.69	B	

Source: New York City Transit, 2014.



**Table F-39**

**2033 Vanderbilt Corridor No-Action Condition Subway Stairway Analysis**  
**42nd Street-Bryant Park Station**

Stairway	Width (ft.)	Effective Width (ft.)	Peak Hour Pedestrian Volumes		Surging Factor for Exiting Passengers	Surging Factor for Entering Passengers	Friction Factor	V/C Ratio	LOS
			Up	Down					
<b>Weekday AM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
<b>Mezzanine Level</b>									
MB20 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	2,299	61	0.90	1.00	1.00	0.62	B
<b>Platform Level</b>									
P13 (West side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	1,071	92	0.75	1.00	0.90	0.40	A
P14 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	2,382	78	0.75	1.00	1.00	0.77	C
<b>Weekday PM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
<b>Mezzanine Level</b>									
MB20 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	198	1,924	0.90	1.00	0.90	0.57	B
<b>Platform Level</b>									
P13 (West side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	173	2,172	0.75	1.00	0.90	0.64	B
P14 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	311	1,227	0.75	1.00	0.90	0.43	A

**Table F-40**

**2033 Vanderbilt Corridor No-Action Condition Subway Fare Array Analysis**  
**42nd Street-Bryant Park Station**

Station Fare Array Elements	Quantity	Fare Array Capacity for 15 Minutes (Per 1 element)		Peak Hour Ped Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
		Entry	Exit	Entry	Exit				
<b>Weekday AM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
Two-way Turnstiles	5	420	645	167	4,337	0.90	1.00	0.33	A
High Entry/Exit Turnstile (HEET)	1	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						
<b>Weekday PM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
Two-way Turnstiles	5	420	645	3,206	537	0.90	0.90	0.52	B
High Entry/Exit Turnstile (HEET)	1	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						

**Table F-41**

**2033 Vanderbilt Corridor No-Action Condition Subway Stairway Analysis**  
**47<sup>th</sup> - 50<sup>th</sup> Street Rockefeller Center Station**

Stairway	Width (ft.)	Effective Width (ft.)	Peak Hour Pedestrian Volumes		Surging Factor for Exiting Passengers	Surging Factor for Entering Passengers	Friction Factor	V/C Ratio	LOS
			Up	Down					
<b>Weekday AM Peak Hour</b>									
S1	5.00	4.00	1750	70	0.9	1.0	1.0	1.01	D
S6	5.00	4.00	977	43	0.9	1.0	1.0	0.56	B
P1	6.67	5.67	4513	37	0.75	1.0	1.0	2.14	F
P2	6.67	5.67	3030	900	0.75	1.0	0.9	1.94	F
P3	8.83	7.58	3830	37	0.75	1.0	1.0	1.36	E
P4	8.83	7.58	2400	1337	0.75	1.0	0.9	1.33	D
<b>Weekday PM Peak Hour</b>									
S1	5.00	4.00	97	1853	0.9	1.0	1.0	0.98	C
S6	5.00	4.00	60	860	0.9	1.0	0.9	0.51	B
P1	6.67	5.67	260	2450	0.75	1.0	0.9	1.10	D
P2	6.67	5.67	303	2757	0.75	1.0	0.9	1.24	D
P3	8.83	7.58	487	2473	0.75	1.0	0.9	0.91	C
P4	8.83	7.58	453	1317	0.75	1.0	0.9	0.56	B

**Table F-42**

**2033 Vanderbilt Corridor No-Action Condition Subway Fare Array Analysis**  
**47<sup>th</sup> - 50<sup>th</sup> Street Rockefeller Center Station**

Station Fare Array Elements	Quantity	Fare Array Capacity for 15 Minutes (per 1 element)		Peak Hour Ped Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
		Entry	Exit	Entry	Exit				
<b>Weekday AM Peak Hour</b>									
N501									
Two-way Turnstiles	8	420	645	137	7800	0.90	1.00	0.36	A
High Entry/Exit Turnstile (HEET)	2	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						
<b>Weekday PM Peak Hour</b>									
N501									
Two-way Turnstiles	8	420	645	4,783	400	0.90	0.90	0.43	A
High Entry/Exit Turnstile (HEET)	2	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						

**Table F-43**

**2033 Vanderbilt Corridor With-Action Condition Subway Platform Stair Analysis  
Grand Central-42nd Street Station**

Stair	Location	Stairway Width	Effective Width (ft)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surge Factor		V/C Ratio	LOS
				Up	Down	Up	Down		Up	Down		
<b>AM Peak Hour</b>												
P10	SB Lexington Platform	7.50	6.50	1507	1823	452	547	90%	75%	100%	1.31	D
P12	SB Lexington Platform	9.25	8.00	1030	2900	309	870	90%	75%	100%	1.19	D
P14	SB Lexington Platform	9.25	8.00	1273	3010	382	903	90%	75%	100%	1.31	D
P16	SB Lexington Platform	9.25	8.00	1007	4283	302	1285	90%	75%	100%	1.56	E
P18	SB Lexington Platform	9.25	8.00	1413	2573	424	772	90%	75%	95%	1.28	D
P20	SB Lexington Platform	9.25	8.00	1860	1673	558	502	90%	75%	100%	1.15	D
P22	SB Lexington Platform	9.25	8.00	1220	1333	366	400	90%	75%	100%	0.82	C
P24	SB Lexington Platform	7.00	6.00	903	0	271	0	100%	75%	100%	0.40	A
P13	NB Lexington Platform	9.25	8.00	2247	720	674	216	90%	75%	100%	1.03	D
P15	NB Lexington Platform	9.25	8.00	1613	1073	484	322	90%	75%	100%	0.90	C
P17	NB Lexington Platform	9.25	8.00	1813	2497	544	749	90%	75%	100%	1.37	E
P19	NB Lexington Platform	9.25	8.00	1937	1553	581	466	90%	75%	95%	1.17	D
P21	NB Lexington Platform	9.25	8.00	1460	333	438	100	90%	75%	100%	0.63	B
P23	NB Lexington Platform	9.25	8.00	1240	383	372	115	90%	75%	100%	0.57	B
P25	NB Lexington Platform	6.00	5.00	1023	120	307	36	90%	75%	100%	0.66	B
U1	Flushing Transfer via SB Lex	6.00	5.00	520	1437	156	431	90%	90%	75%	1.11	D
U5	Flushing Transfer via SB Lex	6.00	5.00	963	1460	289	438	90%	90%	75%	1.34	E
U2	Flushing Transfer via NB Lex	7.00	6.00	373	1927	112	578	90%	90%	75%	1.11	D
U6	Flushing Transfer via NB Lex	7.00	6.00	693	1427	208	428	90%	90%	75%	0.99	C
PL2	Flushing transfer at platform	7.50	6.50	1807	2727	542	818	90%	75%	95%	1.80	E
PL3	Flushing transfer at platform	7.50	6.50	893	3277	268	983	90%	75%	95%	1.59	E
PL5	Flushing transfer at platform	7.00	6.00	2130	87	639	26	100%	75%	95%	0.98	C
PL6	Flushing transfer at platform	7.00	6.00	3267	153	980	46	100%	75%	95%	1.51	E
PL9A	Flushing transfer at platform	15.00	13.50	3730	757	1119	227	90%	75%	100%	0.94	C
ML1	Flushing transfer at platform	4.58	3.58	0	757	0	227	100%	75%	100%	0.42	A
P10S	Shuttle at platform	15.50	14.00	2097	2723	629	817	90%	75%	100%	0.88	C
P11	Shuttle at platform	9.25	8.00	1033	1057	310	317	90%	75%	100%	0.68	B
P3	Shuttle at platform	5.00	4.00	207	27	62	8	90%	75%	100%	0.17	A
P4	Shuttle at platform	5.00	4.00	423	43	127	13	90%	75%	100%	0.34	A
<b>PM Peak Hour</b>												
P10	SB Lexington Platform	7.50	6.50	637	637	191	191	90%	75%	100%	0.51	B
P12	SB Lexington Platform	9.25	8.00	493	1250	148	375	90%	75%	100%	0.53	B
P14	SB Lexington Platform	9.25	8.00	480	1503	144	451	90%	75%	100%	0.60	B
P16	SB Lexington Platform	9.25	8.00	497	2327	149	698	90%	75%	100%	0.83	C
P18	SB Lexington Platform	9.25	8.00	797	2047	239	614	90%	75%	100%	0.86	C
P20	SB Lexington Platform	9.25	8.00	347	1530	104	459	90%	75%	100%	0.55	B
P22	SB Lexington Platform	9.25	8.00	333	1400	100	420	90%	75%	100%	0.51	B
P24	SB Lexington Platform	7.00	6.00	157	0	47	0	100%	75%	100%	0.07	A
P13	NB Lexington Platform	9.25	8.00	2823	1497	847	449	90%	75%	100%	1.46	E
P15	NB Lexington Platform	9.25	8.00	1987	2107	596	632	90%	75%	100%	1.32	D
P17	NB Lexington Platform	9.25	8.00	2163	2633	649	790	90%	75%	100%	1.53	E
P19	NB Lexington Platform	9.25	8.00	1760	1960	528	588	90%	75%	100%	1.20	D
P21	NB Lexington Platform	9.25	8.00	1653	1060	496	318	90%	75%	100%	0.91	C
P23	NB Lexington Platform	9.25	8.00	1083	1513	325	454	90%	75%	100%	0.82	C
P25	NB Lexington Platform	6.00	5.00	907	580	272	174	90%	75%	100%	0.80	C
U1	Flushing Transfer via SB Lex	6.00	5.00	127	1343	38	403	90%	90%	75%	0.86	C
U5	Flushing Transfer via SB Lex	6.00	5.00	237	1100	71	330	90%	90%	75%	0.77	C
U2	Flushing Transfer via NB Lex	7.00	6.00	167	1837	50	551	90%	90%	75%	0.98	C
U6	Flushing Transfer via NB Lex	7.00	6.00	310	2247	93	674	90%	90%	75%	1.24	D
PL2	Flushing transfer at platform	7.50	6.50	597	3163	179	949	90%	75%	95%	1.41	E
PL3	Flushing transfer at platform	7.50	6.50	297	3263	89	979	90%	75%	95%	1.31	D
PL5	Flushing transfer at platform	7.00	6.00	727	907	218	272	90%	75%	95%	0.71	C
PL6	Flushing transfer at platform	7.00	6.00	1273	1460	382	438	90%	75%	95%	1.20	D
PL9A	Flushing transfer at platform	15.00	13.50	1337	2833	401	850	90%	75%	100%	0.76	C
ML1	Flushing transfer at platform	4.58	3.58	0	0	0	0	100%	75%	100%	0.00	A
P10S	Shuttle at platform	15.50	14.00	2080	1787	624	536	90%	75%	100%	0.72	C
P11	Shuttle at platform	9.25	8.00	1023	697	307	209	90%	75%	100%	0.57	B
P3	Shuttle at platform	5.00	4.00	37	247	11	74	90%	75%	100%	0.16	A
P4	Shuttle at platform	5.00	4.00	77	373	23	112	90%	75%	100%	0.26	A

**Table F-44**  
**2033 Vanderbilt Corridor With-Action Free-Zone Stair Analysis**  
**Grand Central-42nd Street Station**

Free-Zone Stair	Location	Stairway Width	Effective Width (ft)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surge Factor		V/C Ratio	LOS
				Up	Down	Up	Down		Up	Down		
<b>AM Peak Hour</b>												
M8	Control Area R240	19.16	17.66	3857	2957	1157	887	90%	90%	100%	0.91	C
M9	Control Area R240	14.00	12.50	3197	333	959	100	90%	90%	100%	0.69	B
O27	Control Area R240	12.00	10.75	273	1767	82	530	90%	100%	90%	0.46	B
M7	Control Area R238/A	10.00	8.75	923	4750	277	1425	90%	95%	100%	1.45	E
M30(KC)	Control Area R238/A	11.50	10.25	307	7127	92	2138	90%	95%	100%	1.62	E
S1	Control Area R233	4.75	3.75	157	17	47	5	90%	80%	100%	0.13	A
O3	Control Area R233	9.00	7.75	473	53	142	16	90%	80%	100%	0.18	A
<b>PM Peak Hour</b>												
M8	Control Area R240	19.16	17.66	3343	900	1003	270	90%	90%	100%	0.58	B
M9	Control Area R240	14.00	12.50	570	3177	171	953	90%	90%	100%	0.68	B
O27	Control Area R240	12.00	10.75	2627	317	788	95	90%	100%	90%	0.62	B
M7	Control Area R238/A	10.00	8.75	4943	907	1483	272	90%	95%	100%	1.55	E
M30(KC)	Control Area R238/A	11.50	10.25	1097	4233	329	1270	90%	95%	100%	1.17	D
S1	Control Area R233	4.75	3.75	30	157	9	47	90%	80%	100%	0.12	A
O3	Control Area R233	9.00	7.75	87	463	26	139	90%	80%	100%	0.16	A

**Table F-45**  
**2033 Vanderbilt Corridor With-Action Subway Escalator Analysis**  
**Grand Central-42nd Street Station**

Escalator	Location	Tread Width (in.)	Peak Hour Volumes		Peak 15-Minute Volumes		Surge Factor		Capacity	V/C Ratio	LOS
			Up	Down	Up	Down	Up	Down			
<b>AM Peak Hour</b>											
ES203(UP)	Flushing East Core	32"	1865	-	560	-	0.80	-	750	0.93	C
ES204(UP)	Flushing East Core	32"	1865	-	560	-	0.80	-	751	0.93	C
ES205(UP)	Flushing Center Core	40"	2773	-	832	-	0.80	-	945	1.10	D
ES206(UP)	Flushing Center Core	40"	2773	-	832	-	0.80	-	946	1.10	D
ES208(UP)	Flushing West Core	40"	3135	-	941	-	0.75	-	945	1.33	D
ES210(UP)	Flushing West Core	40"	3135	-	941	-	0.75	-	946	1.33	D
ES255(UP)	R238 Free Zone	40"	3500	-	1050	-	0.90	-	945	1.23	D
ES256(UP)	R238 Free Zone	40"	3500	-	1050	-	0.90	-	946	1.23	D
One V Esc 1	R236A/B Free Zone	40"	2043	-	613	-	0.90	-	945	0.72	C
One V Esc 2	R236A/B Free Zone	40"	2043	-	613	-	0.90	-	945	0.72	C
<b>PM Peak Hour</b>											
ES203(UP)	Flushing East Core	32"	1337	-	401	-	0.80	-	750	0.67	B
ES204(DN)	Flushing East Core	32"	-	2833	-	850	-	1	750	1.13	D
ES205(UP)	Flushing Center Core	40"	2050	-	615	-	0.80	-	945	0.81	C
ES206(DN)	Flushing Center Core	40"	-	2263	-	679	-	1	945	0.72	C
ES208(UP)	Flushing West Core	40"	2903	-	871	-	0.75	-	945	1.23	D
ES210(DN)	Flushing West Core	40"	-	4217	-	1265	-	1	945	1.34	E
ES255(UP)	R238 Free Zone	40"	3500	-	1050	-	0.90	-	945	1.23	D
ES256(DN)	R238 Free Zone	40"	-	3500	-	1050	-	1	946	1.11	D
One V Esc 1	R236A/B Free Zone	40"	883	-	265	-	0.90	-	945	0.31	A
One V Esc 2	R236A/B Free Zone	40"	-	3500	-	1050	-	1	945	1.11	D

**Table F-46**

**2033 Vanderbilt Corridor With-Action Condition Fare Array Analysis**  
**Grand Central-42nd Street Station**

Peak Period	Fare Array	Control Element	Quantity	Peak Hour Pedestrian Volumes		15-Minute Pedestrian Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
				In	Out	In	Out				
AM	R233	High Entry/Exit Turnstile	2	70	630	21	189	0.80	0.90	0.21	A
		High Exit Turnstile	1								
	R236	Two-way Turnstile	12	3637	2390	1091	717	0.80	0.90	0.36	A
		High Entry/Exit Turnstile	1								
	R236A*	Two-way Turnstile	4	143	943	43	283	0.75	0.90	0.15	A
	R236B*	Two-way Turnstile	5	403	680	22	204	0.95	0.90	0.43	A
	R237	Two-way Turnstile	7	317	2543	95	763	0.90	0.90	0.24	A
	R237A	High Exit Turnstile	1	N/A	467	N/A	140	0.90	1.0	0.28	A
	R237B	Two-way Turnstile	4	850	3737	255	1121	0.90	0.90	0.71	C
	R238	Two-way Turnstile	16	4873	6713	1462	2014	0.90	0.90	0.48	B
	R238A	Two-way Turnstile	8	8160	1080	2448	324	0.90	0.90	0.89	C
	R238B*	Two-way Turnstile	4	540	747	162	224	0.90	0.90	0.21	A
	R240	Two-way Turnstile	11	3390	7060	1017	2118	0.90	0.90	0.61	B
	R240A*	Two-way Turnstile	4	180	1763	54	529	0.90	0.90	0.29	A
R241A	Two-way Turnstile	5	757	3730	227	1119	0.90	0.95	0.53	B	
PM	R233	High Entry/Exit Turnstile	2	620	117	186	35	0.80	0.90	0.43	A
		High Exit Turnstile	1								
	R236	Two-way Turnstile	12	2687	3103	806	931	0.80	0.90	0.33	A
		High Entry/Exit Turnstile	1								
	R236A*	Two-way Turnstile	4	967	163	290	49	0.75	0.90	0.18	A
	R236B*	Two-way Turnstile	5	3117	720	935	216	0.95	0.90	0.57	C
	R237	Two-way Turnstile	7	2123	483	637	145	0.90	0.90	0.28	A
	R237A	High Exit Turnstile	1	0	127	0	38	0.90	1.0	0.08	A
	R237B	Two-way Turnstile	4	3177	1657	953	497	0.90	0.90	0.87	C
	R238	Two-way Turnstile	16	6107	8153	1832	2446	0.90	0.90	0.60	B
	R238A	Two-way Turnstile	8	2760	1763	828	529	0.90	0.90	0.40	A
	R238B*	Two-way Turnstile	4	680	907	204	272	0.90	0.90	0.27	A
	R240	Two-way Turnstile	11	6030	2960	1809	888	0.90	0.90	0.59	B
	R240A*	Two-way Turnstile	4	670	1270	201	381	0.90	0.90	0.32	A
R241A	Two-way Turnstile	5	2833	1337	850	401	0.90	0.90	0.60	B	

Source: New York City Transit, 2014.

**Table F-47**

**2033 Vanderbilt Corridor With-Action Condition Subway Stairway Analysis**  
**42nd Street-Bryant Park Station**

Stairway	Width (ft.)	Effective Width (ft.)	Peak Hour Pedestrian Volumes		Surging Factor for Exiting Passengers	Surging Factor for Entering Passengers	Friction Factor	V/C Ratio	LOS
			Up	Down					
<b>Weekday AM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
<b>Mezzanine Level</b>									
MB20 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	2768	61	0.90	1.00	1.00	0.75	C
<b>Platform Level</b>									
P13 (West side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	1213	92	0.75	1.00	0.90	0.45	B
P14 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	2651	78	0.75	1.00	1.00	0.86	C
<b>Weekday PM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
<b>Mezzanine Level</b>									
MB20 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	198	2367	0.90	1.00	0.90	0.68	B
<b>Platform Level</b>									
P13 (West side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	173	2313	0.75	1.00	0.90	0.67	B
P14 (East side of Sixth Avenue between W. 42nd Street and W. 43rd Street)	10.00	8.75	311	1529	0.75	1.00	0.90	0.51	B

**Table F-48**

**2033 Vanderbilt Corridor With-Action Condition Subway Fare Array Analysis  
42nd Street-Bryant Park Station**

Station Fare Array Elements	Quantity	Fare Array Capacity for 15 Minutes (Per one element)		Peak Hour Ped Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
		Entry	Exit	Entry	Exit				
<b>Weekday AM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
Two-way Turnstiles	5	420	645	167	4,806	0.90	1.00	0.36	A
High Entry/Exit Turnstile (HEET)	1	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						
<b>Weekday PM Peak Hour</b>									
42nd Street – Bryant Park (B/D/F/M line) – N502									
Two-way Turnstiles	5	420	645	3,649	537	0.90	0.90	0.58	B
High Entry/Exit Turnstile (HEET)	1	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						

**Table F-49**

**2033 Vanderbilt Corridor With-Action Condition Subway Stairway Analysis  
47<sup>th</sup> - 50<sup>th</sup> Street Rockefeller Center Station**

Stairway	Width (ft.)	Effective Width (ft.)	Peak Hour Pedestrian Volumes		Surging Factor for Exiting Passengers	Surging Factor for Entering Passengers	Friction Factor	V/C Ratio	LOS
			Up	Down					
<b>Weekday AM Peak Hour</b>									
S1	5.00	4.00	1873	70	0.9	1.0	1.0	1.08	D
S6	5.00	4.00	1100	43	0.9	1.0	1.0	0.63	B
P1	6.67	5.67	4561	37	0.75	1.0	1.0	2.16	F
P2	6.67	5.67	3084	900	0.75	1.0	0.9	1.97	F
P3	8.83	7.58	3906	37	0.75	1.0	1.0	1.38	E
P4	8.83	7.58	2469	1337	0.75	1.0	0.9	1.36	E
<b>Weekday PM Peak Hour</b>									
S1	5.00	4.00	97	2011	0.9	1.0	1.0	1.06	D
S6	5.00	4.00	60	1018	0.9	1.0	0.9	0.60	B
P1	6.67	5.67	260	2556	0.75	1.0	0.9	1.14	D
P2	6.67	5.67	303	2874	0.75	1.0	0.9	1.29	D
P3	8.83	7.58	487	2519	0.75	1.0	0.9	0.93	C
P4	8.83	7.58	453	1359	0.75	1.0	0.9	0.58	B

**Table F-50**

**2033 Vanderbilt Corridor With-Action Condition Subway Fare Array Analysis**  
**47th - 50th Street Rockefeller Center Station**

Station Fare Array Elements	Quantity	Fare Array Capacity for 15 Minutes (per 1 element)		Peak Hour Ped Volumes		Surging Factor	Friction Factor	V/C Ratio	LOS
		Entry	Exit	Entry	Exit				
<b>Weekday AM Peak Hour</b>									
N501									
Two-way Turnstiles	8	420	645	137	8,046	0.90	1.00	0.38	A
High Entry/Exit Turnstile (HEET)	2	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						
<b>Weekday PM Peak Hour</b>									
N501									
Two-way Turnstiles	8	420	645	5,099	400	0.90	0.90	0.46	B
High Entry/Exit Turnstile (HEET)	2	255	540						
High-Exit only –Turnstile (HXT)	2	0	555						



**Table F-51**  
**2033 Vanderbilt Corridor No-Action Condition Subway Line Haul Analysis**

Peak Hour	Route	Direction	Maximum Load Point (Leaving Station)	Average Train Per Hour (1)	Cars Per Hour (1)	Passengers Per Hour (2)	Peak Hour Capacity (3)	V/C Ratio (4)
AM	4	SB	Grand Central-42 St	14.9	149.3	19,145	16,385	1.17
	5	SB	Grand Central-42 St	13.2	131.7	16,015	14,519	1.10
	6	SB	68 St-Hunter College	23.9	239.0	21,729	26,262	0.83
	7 exp	SB	Woodside-61 St	14.8	163.0	17,825	17,978	0.99
	7 loc	SB	40 St-Lowery St	14.8	163.0	16,395	17,935	0.91
	B	SB	72 St	7.3	58.4	5,905	8,176	0.72
	D	SB	125 St	9.6	76.8	10,761	13,475	0.80
	F	SB	Roosevelt Island	14.5	145.0	21,989	21,025	1.05
	M	SB	Queens Plaza	10.1	80.8	6,960	11,771	0.59
	S	SB	Grand Central-42 St	29.5	98.5	4,696	10,835	0.43
	4	NB	14 St-Union Sq	13.0	130.0	15,678	14,300	1.10
	5	NB	14 St-Union Sq	13.0	130.0	15,539	14,300	1.09
	B	NB	7 Av	10.2	81.6	11,535	14,321	0.81
	D	NB	36 St	10.6	84.8	11,453	13,992	0.82
	F	NB	2 Av	14.0	140.0	15,411	20,300	0.76
	M	NB	Marcy Av	10.0	80.0	10,152	10,000	1.02
S	NB	Times Sq-42 St	29.5	98.5	4,671	10,835	0.43	
PM	4	NB	59 St	12.2	122.0	14,586	13,444	1.08
	5	NB	59 St	12.8	128.0	12,017	14,056	0.85
	6	NB	59 St	20.3	203.0	18,673	22,314	0.84
	7	NB	Queensboro Plaza	24.4	244.0	26,161	29,524	0.89
	7	SB	Grand Central-42 St	26.0	286.0	10,891	31,460	0.35
	B	NB	59 St	7.0	56.0	5,569	7,840	0.71
	D	NB	59 St	8.5	68.0	7,779	11,900	0.65
	F	NB	Lexington Av/63 St	15.3	153.0	18,310	22,185	0.83
	M	NB	Lexington Av/53 St	7.8	62.4	4,942	9,035	0.55
	S	NB	Times Sq-42 St	28.0	93.5	4,610	10,285	0.45
	4	SB	14 St-Union Square	14.0	140.0	12,859	15,400	0.83
	5	SB	14 St-Union Square	10.5	105.0	8,647	11,550	0.75
	B	SB	Atlantic Av	8.9	71.2	9,942	12,400	0.80
	D	SB	Pacific St	10.0	80.0	11,172	12,400	0.90
	F	SB	Jay St-Borough Hall	13.1	131.0	12,989	18,995	0.68
	M	SB	Essex St	8.8	70.4	7,547	8,096	0.93
S	SB	Grand Central-42 St	27.5	92.0	4,611	10,120	0.46	

(1) Based on existing average throughput and future anticipated capacity increases  
(2) Based on Regional Transit Forecasting Model (RTFM) outputs.  
(3) Capacity based on NYCT rush hour guideline capacities.  
(4) Volume-to-capacity ratio.

**Table F-52**  
**2033 Vanderbilt Corridor With-Action Condition Subway Line Haul Analysis**

Peak Hour	Route	Direction	Maximum Load Point (Leaving Station)	Average Train Per Hour (1)	Cars Per Hour (1)	Passengers Per Hour (2)	Peak Hour Capacity (3)	V/C Ratio (4)
AM	4	SB	Grand Central-42 St	15.4	154.3	19,165	16,977	1.13
	5	SB	Grand Central-42 St	13.7	136.7	16,038	15,037	1.07
	6	SB	68 St-Hunter College	23.9	239.0	22,197	26,262	0.85
	7 exp	SB	Woodside-61 St	14.8	163.0	17,998	17,978	1.00
	7 loc	SB	40 St-Lowery St	14.8	163.0	16,622	17,935	0.93
	B	SB	72 St	7.3	58.4	5,959	8,176	0.73
	D	SB	125 St	9.6	76.8	10,846	13,475	0.80
	F	SB	Roosevelt Island	14.5	145.0	22,111	21,025	1.05
	M	SB	Queens Plaza	10.1	80.8	7,025	11,771	0.60
	S	SB	Grand Central-42 St	29.5	98.5	4,727	10,835	0.44
	4	NB	14 St-Union Sq	13.0	130.0	15,927	14,300	1.11
	5	NB	14 St-Union Sq	13.0	130.0	15,834	14,300	1.11
	B	NB	7 Av	10.2	81.6	11,682	14,321	0.82
	D	NB	36 St	10.6	84.8	11,586	13,992	0.83
	F	NB	2 Av	14.0	140.0	15,716	20,300	0.77
	M	NB	Marcy Av	10.0	80.0	10,186	10,000	1.02
	S	NB	Times Sq-42 St	29.5	98.5	5,289	10,835	0.49
	PM	4	NB	59 St	12.2	122.0	14,801	13,444
5		NB	59 St	12.8	128.0	12,233	14,056	0.87
6		NB	59 St	20.3	203.0	18,773	22,314	0.84
7		NB	Queensboro Plaza	24.4	244.0	26,485	29,524	0.90
7		SB	Grand Central-42 St	26.0	286.0	10,891	31,460	0.35
B		NB	59 St	7.0	56.0	5,616	7,840	0.72
D		NB	59 St	8.5	68.0	7,850	11,900	0.66
F		NB	Lexington Av/63 St	15.3	153.0	18,419	22,185	0.83
M		NB	Lexington Av/53 St	7.8	62.4	4,981	9,035	0.55
S		NB	Times Sq-42 St	28.0	93.5	4,640	10,285	0.45
4		SB	14 St-Union Square	14.0	140.0	13,104	15,400	0.85
5		SB	14 St-Union Square	10.5	105.0	8,874	11,550	0.77
B		SB	Atlantic Av	8.9	71.2	10,052	12,400	0.81
D		SB	Pacific St	10.0	80.0	11,291	12,400	0.91
F		SB	Jay St-Borough Hall	13.1	131.0	13,101	18,995	0.69
M		SB	Essex St	8.8	70.4	7,593	8,096	0.94
S		SB	Grand Central-42 St	27.5	92.0	4,641	10,120	0.46

(1) Based on existing average throughput and future anticipated capacity increases  
(2) Based on Regional Transit Forecasting Model (RTFM) outputs.  
(3) Capacity based on NYCT rush hour guideline capacities.  
(4) Volume-to-capacity ratio.