

Figure 19: Background Peak Hour Traffic Volumes

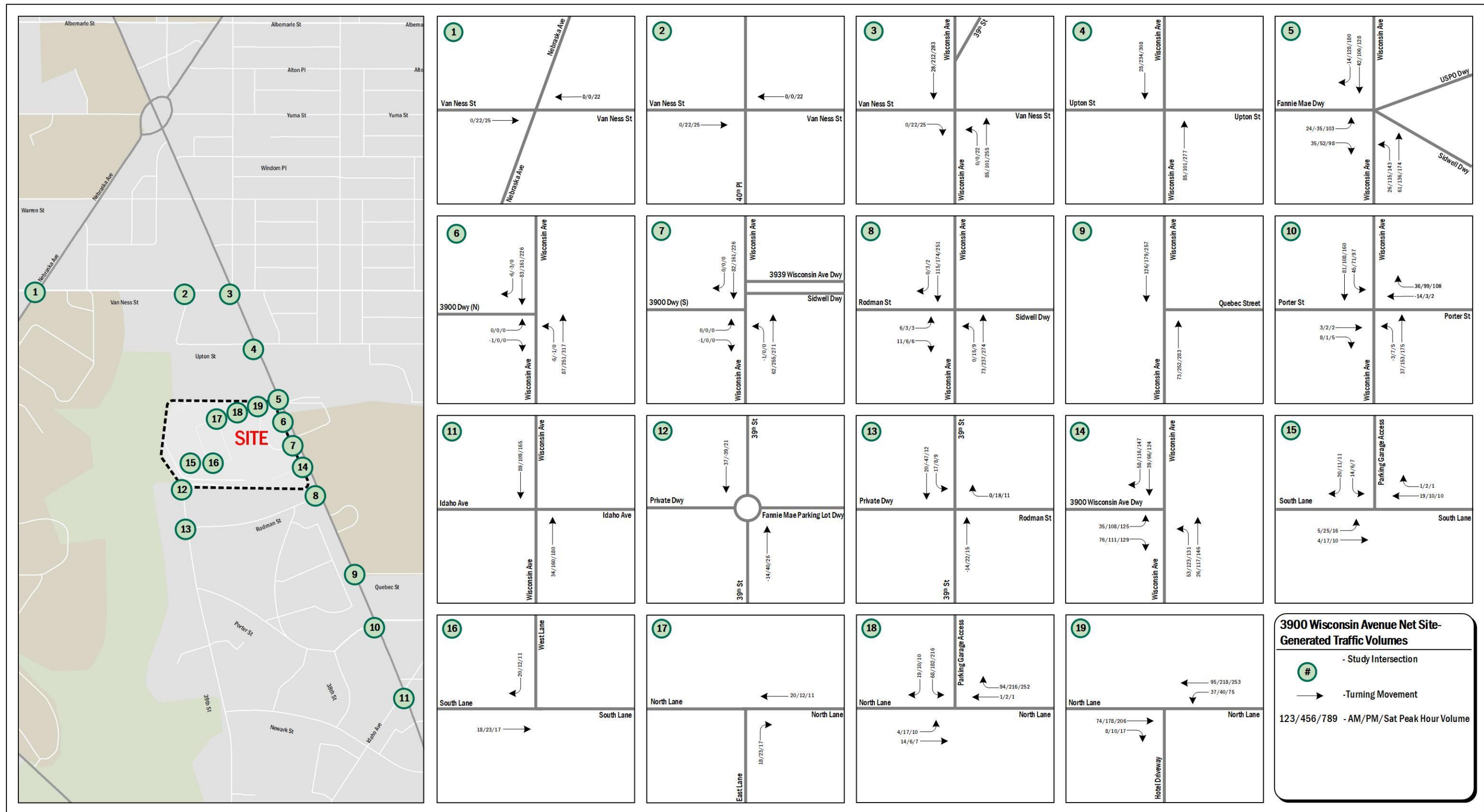


Figure 20: 3900 Wisconsin Avenue Net Site-Generated Peak Hour Traffic Volumes

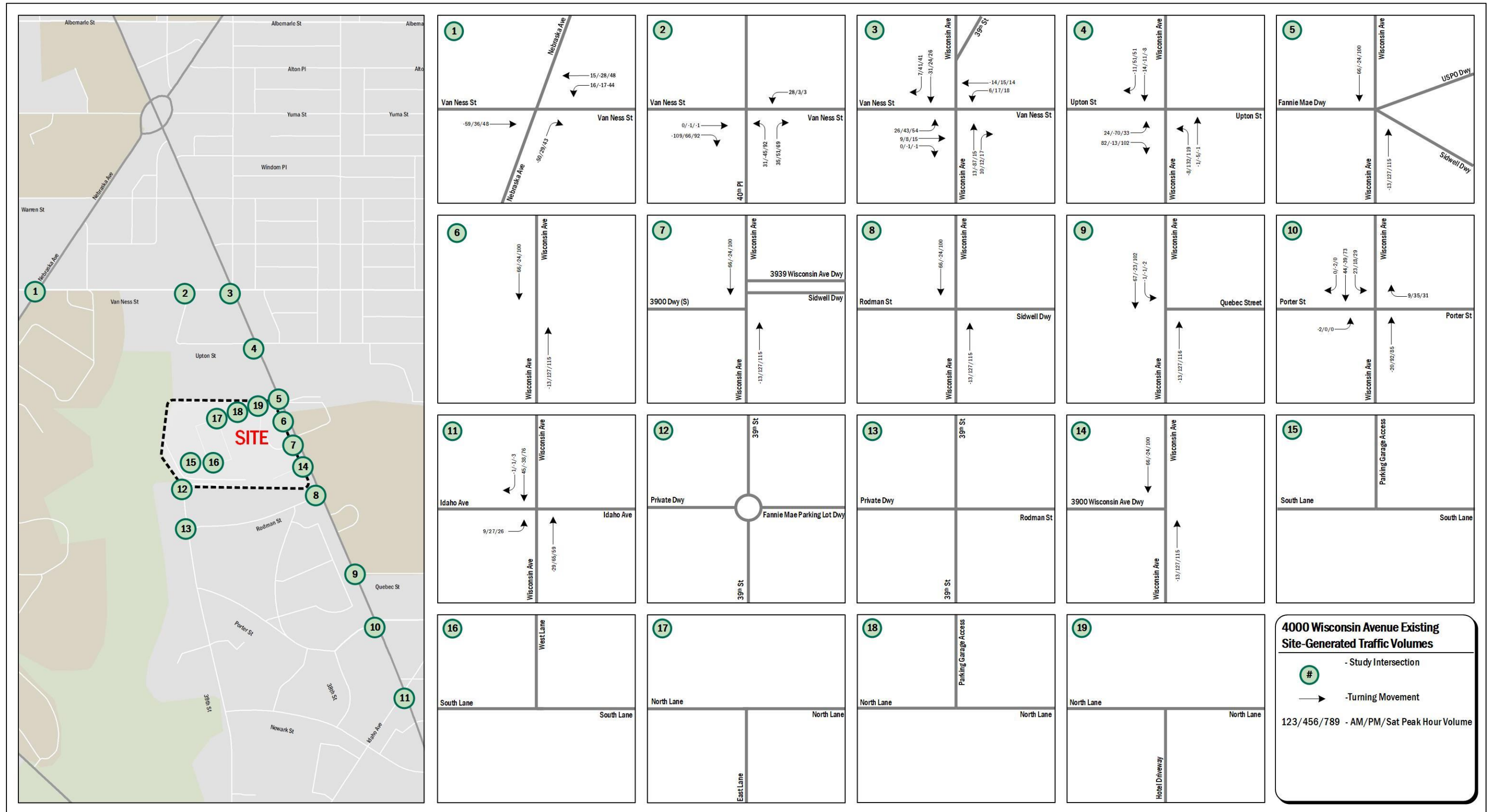


Figure 21: 4000 Wisconsin Avenue Net Site-Generated Peak Hour Traffic Volumes

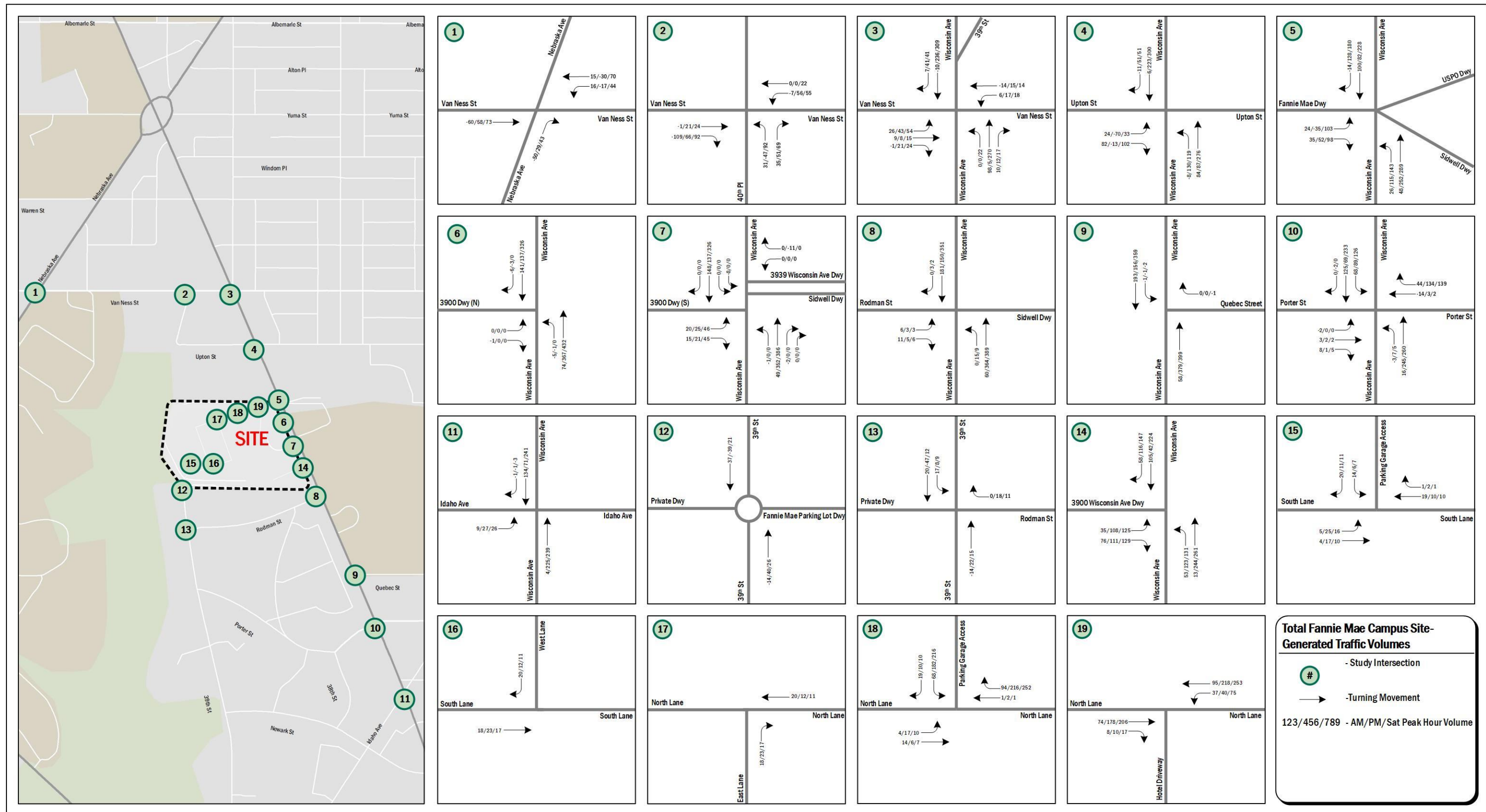


Figure 22: Total Fannie Mae Campus Net Site-Generated Peak Hour Traffic Volumes

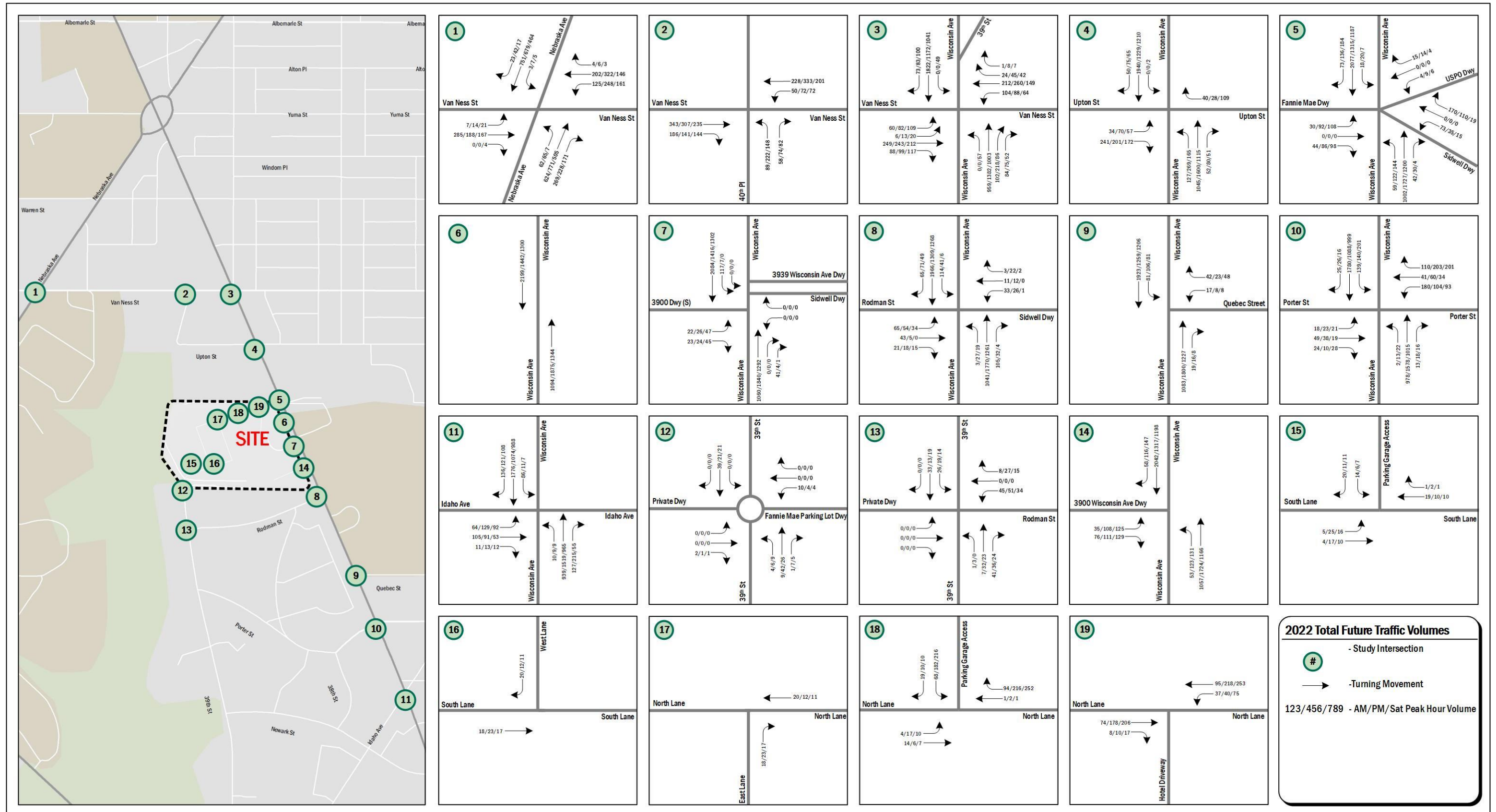


Figure 23: Future Peak Hour Traffic Volumes

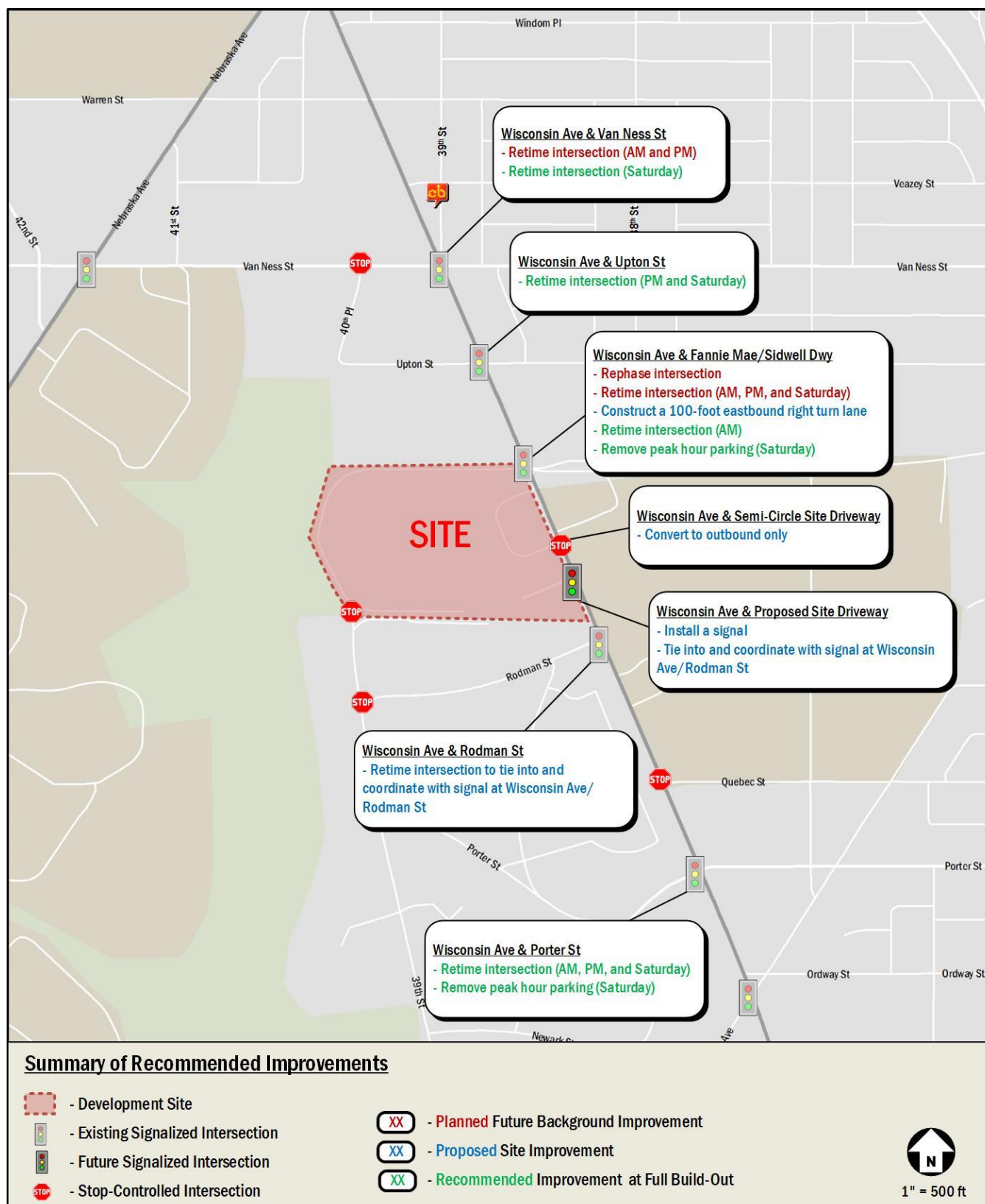


Figure 24: Summary of Recommended Improvements



Table 12: LOS Results

Intersection	Approach	Existing Conditions (2017)						Background Conditions (2022)						Future Conditions (2022)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour		AM Peak Hour		PM Peak Hour		Saturday Peak Hour		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Van Ness Street & Nebraska Avenue NW	Overall	21.9	C	27.0	C	19.8	B	23.8	C	27.5	C	19.9	B	22.2	C	28.2	C	22.6	C
	Eastbound	43.7	D	30.1	C	22.6	C	47.9	D	30.4	C	22.7	C	42.0	D	32.0	C	24.5	C
	Westbound	42.0	D	41.5	D	19.1	B	46.2	D	42.4	D	18.9	B	43.9	D	43.8	D	24.1	C
	Northbound	15.8	B	22.2	C	23.9	C	15.9	B	22.5	C	24.2	C	15.3	B	23.6	C	27.4	C
	Southbound	12.6	B	21.9	C	13.3	B	12.6	B	22.2	C	13.3	B	12.6	B	22.2	C	13.3	B
Van Ness Street & 40th Place NW	Eastbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	Westbound	2.6	A	0.5	A	0.8	A	2.5	A	0.5	A	0.8	A	2.1	A	2.3	A	2.8	A
	Northbound	14.7	B	55.6	F	13.1	B	15.2	C	59.0	F	13.2	B	16.2	C	81.8	F	23.2	C
Wisconsin Avenue & Van Ness Street & 39th Street	Overall	14.8	B	15.5	B	17.9	B	19.1	B	16.3	B	18.1	B	20.7	C	21.1	C	23.8	C
	Eastbound	43.4	D	43.4	D	41.2	D	51.1	D	45.5	D	41.9	D	52.2	D	59.5	E	50.2	D
	Westbound	39.9	D	44.3	D	34.6	C	68.0	E	46.6	D	34.8	C	83.2	F	58.0	E	39.4	D
	Northbound	2.6	A	6.3	A	10.5	B	3.1	A	6.7	A	10.7	B	4.2	A	8.6	A	17.0	B
	Southbound	11.5	B	10.4	B	10.7	B	12.1	B	10.5	B	10.8	B	12.0	B	12.7	B	16.8	B
Wisconsin Avenue & Upton Street	Overall	22.7	C	15.7	B	14.0	B	27.2	C	16.3	B	14.1	B	32.3	C	22.8	C	28.8	C
	Eastbound	28.9	C	27.4	C	22.3	C	28.9	C	27.4	C	22.3	C	33.2	C	44.9	D	24.3	C
	Westbound	28.5	C	28.3	C	29.0	C	28.5	C	28.3	C	29.0	C	28.5	C	28.3	C	29.3	C
	Northbound	41.4	D	12.1	B	7.5	A	52.4	D	12.8	B	7.5	A	64.3	E	13.9	B	34.9	C
	Southbound	10.7	B	17.5	B	17.8	B	12.4	B	17.9	B	17.9	B	12.3	B	30.7	C	23.6	C
Wisconsin Avenue & Fannie Mae Driveway/Sidwell Dwy	Overall	12.2	B	14.9	B	6.5	A	15.4	B	15.7	B	6.7	A	22.9	C	23.5	C	34.4	C
	Eastbound	38.8	D	38.3	D	43.3	D	32.7	C	76.5	E	43.0	D	32.9	C	40.7	D	44.4	D
	Westbound	39.1	D	35.5	D	43.1	D	47.4	D	46.1	D	48.8	D	47.4	D	47.4	D	48.8	D
	Nwestbound	52.1	D	60.4	E	62.2	E	51.4	D	32.2	C	44.5	D	57.0	E	43.5	D	38.0	D
	Northbound	20.1	C	5.7	A	9.3	B	22.4	C	7.6	A	9.8	A	40.9	D	24.6	C	64.0	E
Wisconsin Avenue & Fannie May Dwy (N)	Eastbound	9.6	A	0.0	A	0.0	A	10.3	B	0.1	A	0.0	A	-	-	-	-	-	-
	Northbound	0.2	A	0.0	A	0.0	A	0.2	A	0.0	A	0.0	A	-	-	-	-	-	-
	Eastbound	17.5	C	15.9	C	34.0	D	16.6	C	14.3	B	34.0	D	88.3	F	22.2	C	41.4	E
	Northbound	0.1	A	9.3	A	0.0	A	0.0	A	9.3	A	0.0	A	0.0	A	0.0	A	0.0	A
	Southbound	0.1	A	0.0	A	0.0	A	1.2	A	0.3	A	0.0	A	1.4	A	0.4	A	0.0	A
Wisconsin Avenue & Rodman Street/Sidwell Dwy	Overall	77.5	E	10.8	B	8.0	A	73.3	E	12.8	B	7.9	A	40.3	D	32.7	C	22.2	C
	Eastbound	35.3	D	33.8	C	31.4	C	35.3	D	33.8	C	31.4	C	36.0	D	33.9	C	31.5	C
	Westbound	32.8	C	32.5	C	31.2	C	32.8	C	32.5	C	31.2	C	32.8	C	32.5	C	31.2	C
	Northbound	178.8	F	10.6	B	9.5	A	166.0	F	10.5	B	9.6	A	52.0	D	38.6	D	40.8	D
	Southbound	12.6	B	8.5	A	5.7	A	18.8	B	13.0	B	5.5	A	33.7	C	25.5	C	5.0	A



Wisconsin Avenue & Quebec Street	Westbound	13.0	B	22.4	C	13.7	B	13.1	B	32.1	D	13.8	B	12.3	B	76.1	F	18.9	C
	Southbound	0.8	A	1.8	A	1.4	A	0.9	A	1.8	A	1.4	A	0.9	A	2.5	A	2.0	A
Wisconsin Avenue & Porter Street	Overall	25.0	C	18.5	B	8.5	A	28.5	C	17.7	B	8.6	A	31.7	C	83.4	F	37.7	D
	Eastbound	35.1	D	34.4	C	34.0	C	35.2	D	34.5	C	34.0	C	35.7	D	36.0	D	35.2	D
	Westbound	113.0	F	71.5	E	46.8	D	130.2	F	70.3	E	47.0	D	182.9	F	253.0	F	126.1	F
	Northbound	9.9	A	9.0	A	3.7	A	10.2	B	9.1	A	3.7	A	10.2	B	10.1	B	4.9	A
	Southbound	18.9	B	16.5	B	2.9	A	22.4	C	15.2	B	3.2	A	18.3	B	119.3	F	41.9	D
Wisconsin Avenue & Idaho Avenue	Overall	15.7	B	14.4	B	11.3	B	16.6	B	14.6	B	11.3	B	17.8	B	15.7	B	15.2	B
	Eastbound	40.3	D	44.1	D	28.4	C	40.9	D	44.4	D	28.4	C	41.4	D	47.0	D	29.2	C
	Northbound	12.1	B	11.1	B	11.7	B	12.4	B	11.2	B	11.7	B	12.5	B	12.3	B	13.3	B
	Southbound	15.8	B	13.1	B	8.5	A	16.9	B	13.3	B	8.5	A	18.8	B	14.1	B	14.9	B
39th Street/Fannie Mae Driveway	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39th Street & Rodman Street	Eastbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	Westbound	9.5	A	9.9	A	9.0	A	9.5	A	9.9	A	9.0	A	10.4	B	10.4	B	9.5	A
	Northbound	0.1	A	0.5	A	0.0	A	0.1	A	0.5	A	0.0	A	0.1	A	0.3	A	0.0	A
	Southbound	3.1	A	1.2	A	3.1	A	3.1	A	1.2	A	3.1	A	3.1	A	3.2	A	3.4	A
Proposed Site Driveway & Wisconsin Avenue	Overall	-	-	-	-	-	-	-	-	-	-	-	-	22.1	C	27.1	C	40.5	D
	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	33.8	C	35.0	C	35.3	D
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	5.7	A	8.4	A	51.3	D
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	30.2	C	50.1	D	31.0	C
West Lane & Parking Garage	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	4.4	A	4.4	A	4.4	A
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	8.7	A	8.7	A	8.6	A
South Lane & West Lane	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	8.4	A	8.4	B	8.4	A
East Lane & North Lane	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	7.1	A	7.0	A	7.0	A
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	6.4	A	6.4	A	6.4	A
North Lane & Parking Garage	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	1.6	A	5.6	A	4.6	A
	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	9.2	A	10.9	B	11.3	B
North Lane & Hotel Driveway	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	2.2	A	1.4	A	2.3	A

**Table 13: Intersection Summary - Capacity Analysis Results**

Van Ness Street & 40th Place NW			
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
		Northbound 40th Place: EX, BG, TF	
Percent of future traffic attributable to development:		0%	
Summary of capacity analysis results:	The northbound delays at this intersection during the afternoon peak period are due to the existing unsignalized traffic control and lane configurations. Given that the intersection is located adjacent to the existing 4000 Wisconsin Avenue site, there is a significant amount of outbound traffic at the northbound approach during the afternoon peak period. The addition of background growth, trips generated by the Sidwell Friends School background development, and trips generated by the 4000 Wisconsin Avenue redevelopment exacerbate the existing afternoon delays.		
Wisconsin Avenue & Van Ness Street/39th Street NW			
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
	Westbound Van Ness Street: BG, TF	Westbound Van Ness Street: TF Eastbound Van Ness Street: TF	
Percent of future traffic attributable to development:		Westbound Van Ness Street: 0% Eastbound Van Ness Street: 5%	
Summary of capacity analysis results:	The westbound delays at this intersection during the morning peak period are due to the existing signal timing and lane configurations. The addition of background growth, trips generated by the Sidwell Friends background development, and trips generated by the 4000 Wisconsin Avenue redevelopment exacerbate the existing morning delays. The addition of 4000 Wisconsin Avenue site-generated trips also causes the westbound approach to operate under unacceptable conditions during the afternoon peak period. The addition of site-generated trips at the eastbound approach also contributes to unacceptable conditions during the afternoon peak period. The trips associated with the 3900 Wisconsin Avenue redevelopment consist of right turns only, while the trips associated with the 4000 Wisconsin Avenue redevelopment consist primarily of left turns at this approach. Given this, and the existing signal timings and lane configurations, it is likely that the additional left turns cause the eastbound approach to operate under unacceptable conditions.		
Wisconsin Avenue & Upton Street NW			
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
	Northbound Wisconsin Avenue: TF		
Percent of future traffic attributable to development:		7%	



Summary of capacity analysis results:	The addition of site-generated trips associated with the 3900 Wisconsin Avenue development increase the delay at the northbound approach during the morning peak hour such that it operates under unacceptable conditions.		
Wisconsin Avenue NW & Fannie Mae/Sidwell Friends Driveway			
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
	Westbound Sidwell Friends Driveway: TF	Westbound Sidwell Friends Driveway: EX Eastbound Fannie Mae Driveway: BG	Westbound Sidwell Friends Driveway: EX Northbound Wisconsin Avenue: TF
Percent of future traffic attributable to development:	0%		Northbound Wisconsin Avenue: 24%
Summary of capacity analysis results:	The westbound delays at the Sidwell Friends driveway approach at this intersection during the afternoon and Saturday peaks period are due to the existing signal timing and lane configurations. It was recommended that the signal be re-phased and retimed as part of the Sidwell Friends development such that the driveway operates concurrently with the eastbound Fannie Mae driveway and that these movements receive additional green time. While this signal change improves operations at this approach during the afternoon and Saturday peak periods, the addition of 3900 Wisconsin Avenue site-generated trips causes it to operate under unacceptable conditions during the morning peak period. Although no trips associated with the 3900 Wisconsin Avenue redevelopment are added to this approach, there are additional conflicting trips generated by the development at the Fannie Mae driveway, which exacerbates the delay at the Sidwell Friends driveway. Similarly, the eastbound Fannie Mae driveway operates under unacceptable conditions during the afternoon peak hour due to the signal changes and additional trips generated by the Sidwell Friends development at the westbound school driveway. The addition of site-generated trips associated with the 3900 Wisconsin Avenue redevelopment at the northbound approach, in addition to existing lane configurations, also contribute to unacceptable conditions during the Saturday peak period.		
Wisconsin Avenue NW & Semi-Circle Site Driveway			
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
	Eastbound Site Driveway: TF		Eastbound Site Driveway: TF
Percent of future traffic attributable to development:	78%		99%
Summary of capacity analysis results:	The eastbound semi-circle site driveway serves a very low amount of existing traffic but is planned to process all hotel trips associated with the redevelopment of the site. As such, the addition of trips generated by the 3900 Wisconsin Avenue redevelopment cause the driveway to operate under unacceptable conditions during the morning and Saturday peak periods.		
Wisconsin Avenue NW & Rodman Street			
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
	Overall Intersection: EX, BG Northbound Wisconsin Avenue: EX, BG		



Percent of future traffic attributable to development:				
Summary of capacity analysis results:	The overall and northbound delays at this intersection during the morning peak period are due to the existing signal timings and lane configurations. The addition of background growth and the trips generated by the Sidwell Friends School background development exacerbate the existing morning delays. Of note, under future conditions this intersection is planned to be tied into and coordinated with a proposed site driveway for the 3900 Wisconsin Avenue development such that both intersections operate under acceptable conditions.			
Wisconsin Avenue NW & Quebec Street				
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)		AM Peak Hour	PM Peak Hour	Saturday Peak Hour
			Westbound Quebec Street: TF	
Percent of future traffic attributable to development:				
Summary of capacity analysis results:	The westbound delays at this intersection during the afternoon peak period are due to the existing unsignalized traffic control and lane configurations, and are exacerbated by the addition of trips associated with the 3900 Wisconsin Avenue redevelopment. Although the project does not add additional westbound trips, it generates a number of trips along Wisconsin Avenue that decrease the acceptable gap for westbound vehicles turning from Quebec Street onto Wisconsin Avenue.			
Wisconsin Avenue NW & Porter Street				
Location/Scenarios with LOS E or F: EX = Existing (2017) BG = Future Background (2022) TF = Total Future (2022)		AM Peak Hour	PM Peak Hour	Saturday Peak Hour
		Westbound Porter Street: EX, BG, TF	Westbound Porter Street: EX, BG, TF Southbound Wisconsin Avenue: TF Overall Intersection: TF	Westbound Porter Street: TF
Percent of future traffic attributable to development:		7%	Westbound Porter Street: 28% Southbound Wisconsin Avenue: 14%	34%
Summary of capacity analysis results:	The westbound delays at this intersection during the morning and afternoon peak periods are due to the existing signal timings and lane configurations, and are exacerbated by the addition of background growth, trips generated by the Sidwell Friends School background development, and trips generated by the 3900 and 4000 Wisconsin Avenue redevelopments. The addition of trips generated by the 3900 and 4000 Wisconsin Avenue redevelopments also causes the westbound approach to operate under unacceptable conditions during the Saturday peak period, and the southbound approach and overall intersection to operate under unacceptable conditions during the afternoon peak period.			



Table 14: Queuing Results

Intersection	Lane Group	Storage Length (ft)	Existing Conditions (2015)						Background Conditions (2022)						Total Future Conditions (2022)					
			AM Peak		PM Peak		Sat Peak		AM Peak		PM Peak		Sat Peak		AM Peak		PM Peak		Sat Peak	
			50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
Van Ness Street & Nebraska Avenue NW	Eastbound LTR	100	251	334	74	125	58	98	291	381	81	135	59	99	230	310	118	184	101	154
	Westbound Left	230	81	#168	180	#296	41	70	84	#187	182	#310	41	70	94	#194	173	#310	77	m140
	Westbound TR	230	106	169	218	316	25	m48	128	198	229	330	26	m49	147	225	213	309	61	m94
	Northbound LTR	230	206	270	321	405	321	475	210	275	326	412	327	484	198	260	344	434	366	546
	Southbound LTR	480	163	206	373	524	83	114	166	208	381	534	84	116	166	208	381	534	84	116
Van Ness Street & 40th Place NW	Eastbound TR	600	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Westbound LT	220	-	5	-	1	-	1	-	6	-	1	-	1	-	4	-	6	-	6
	Northbound LR	300	-	18	-	202	-	12	-	20	-	210	-	12	-	39	-	255	-	82
Wisconsin Avenue & Van Ness Street & 39th Street	Eastbound Left	220	23	54	29	70	39	m78	23	56	30	71	40	m79	40	85	61	#161	79	m139
	Eastbound TR	220	186	#289	176	#280	160	m261	216	#365	188	#315	164	m266	222	#377	210	#364	201	m#341
	Westbound Left	480	42	87	38	88	25	60	~81	#178	43	#111	25	61	~94	#193	59	#159	38	#101
	Westbound TR	480	143	210	178	#283	92	158	166	239	185	#308	94	161	154	224	197	#332	104	176
	Northbound LTR	300	30	m31	138	210	280	68	37	m37	102	238	287	74	54	m51	250	287	307	m317
Wisconsin Avenue & Upton Street	Southbound LTR	220	231	273	168	214	136	175	253	299	175	223	138	177	253	299	259	327	232	293
	Eastbound Left	450	6	20	73	128	12	32	6	20	73	128	12	32	20	44	35	72	28	61
	Eastbound Right	450	70	117	74	127	12	38	70	117	74	127	13	39	120	184	0	0	55	101
	Westbound Right	330	0	0	0	0	0	21	0	0	0	0	0	23	0	0	0	0	6	49
	Northbound LTR	300	335	#226	51	87	177	34	~185	#252	74	101	87	32	~191	m#278	180	m149	~125	m#246
Wisconsin Avenue & Fannie Mae Driveway/Sidwell Driveway (N)	Southbound TR	280	101	111	176	203	262	330	121	m146	185	213	265	335	123	m145	236	#600	421	#500
	Eastbound LTR	1100	0	0	33	94	4	13	8	26	100	#218	4	13	15	41	55	99	71	117
	Westbound LTR	370	0	24	4	42	0	0	-	-	-	-	-	0	0	0	22	0	27	0
	N'westbound LTR	370	12	36	15	42	7	25	0	0	0	0	0	0	0	0	0	0	0	0
	Northbound LTR	560	305	m276	79	102	106	375	159	#245	19	72	23	55	158	#281	96	151	21	46
Wisconsin Avenue & Fannie Mae Driveway (N)	Southbound TR	300	75	151	~620	#826	30	48	203	m174	89	102	108	380	283	#544	163	#641	265	m#563
	Eastbound LR	430	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
	Northbound LT	200	-	1	-	0	-	0	-	1	-	0	-	0	-	-	-	-	-	-
	Northbound Thru	520	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
	Southbound Thru	40	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
Wisconsin Avenue & Fannie Mae Driveway (S)	Southbound TR	40	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
	Eastbound LTR	430	-	3	-	1	-	1	-	2	-	1	-	1	-	58	-	17	-	65
	Westbound LTR	200	-	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0
	Northbound LT	310	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Northbound TR	310	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
Wisconsin Avenue & Rodman Street	Southbound LT	600	-	1	-	0	-	0	-	15	-	0	-	0	-	18	-	0	-	0
	Southbound Thru	180	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	2	-	0
	Southbound TR	180	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Eastbound LTR	125	71	120	38	77	0	5	71	120	38	77	0	5	81	135	42	82	0	16
	Westbound LTR	230	27	59	23	59	0	0	27	59	23	59	0	0	27	59	23	59	0	0
Wisconsin Avenue & Quebec Street	Northbound LTR	600	~579	m#651	219	263	101	115	~554	m#624	220	m263	102	117	426	m#467	420	m#499	402	m#494
	Southbound LTR	320	194	125	118	m107	16	233	183	254	176	187	15	218	233	m229	168	m176	47	m49
Wisconsin Avenue & Quebec Street	Westbound TR	445	-	25	-	22	-	12	-	11	-	19	-	12	-	10	-	43	-	18
	Northbound Thru	265	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Northbound TR	265	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Southbound LT	490	-	10	-	20	-	10	-	11	-	20	-	10	-	12	-	30	-	17
Wisconsin Avenue & Quebec Street	Southbound Thru	490	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0



Wisconsin Avenue & Porter Street	Eastbound LTR	220	46	89	36	74	32	69	46	91	36	75	32	69	51	98	38	80	36	76
	Westbound LTR	310	~204	#367	164	#301	110	#188	~222	#387	163	#299	111	#190	~266	#438	~362	#533	~243	#415
	Southbound LTR	800	369	450	243	326	31	19	420	471	280	319	36	19	472	m491	~572	#698	426	#566
Wisconsin Avenue & Idaho Avenue	Eastbound LTR	310	102	167	149	231	61	110	111	180	153	236	61	111	117	189	177	269	76	132
	Northbound LTR	145	222	276	191	226	128	168	237	294	196	231	131	171	240	298	246	287	190	244
	Southbound LTR	400	308	370	251	314	65	111	336	405	259	323	63	115	387	464	288	360	188	m189
39th Street/Fannie Mae Driveway & Parking Lot Driveway	Eastbound LTR	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Westbound LTR	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Northbound LTR	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound LTR	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39th Street & Rodman Street	Eastbound LTR	180	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Westbound LTR	640	-	6	-	7	-	3	-	6	-	7	-	3	-	6	-	9	-	4
	Northbound LTR	360	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Southbound LTR	220	-	0	-	1	-	0	-	0	-	1	-	0	-	1	-	1	-	1
Proposed Site Driveway & Wisconsin Avenue	Eastbound Left	145	-	-	-	-	-	-	-	-	-	-	-	-	20	49	66	119	77	136
	Eastbound Right	145	-	-	-	-	-	-	-	-	-	-	-	-	0	40	0	48	0	51
	Northbound LT	100	-	-	-	-	-	-	-	-	-	-	-	-	118	m82	124	m125	~551	m#661
	Southbound TR	600	-	-	-	-	-	-	-	-	-	-	-	-	~576	#661	503	#663	274	#594

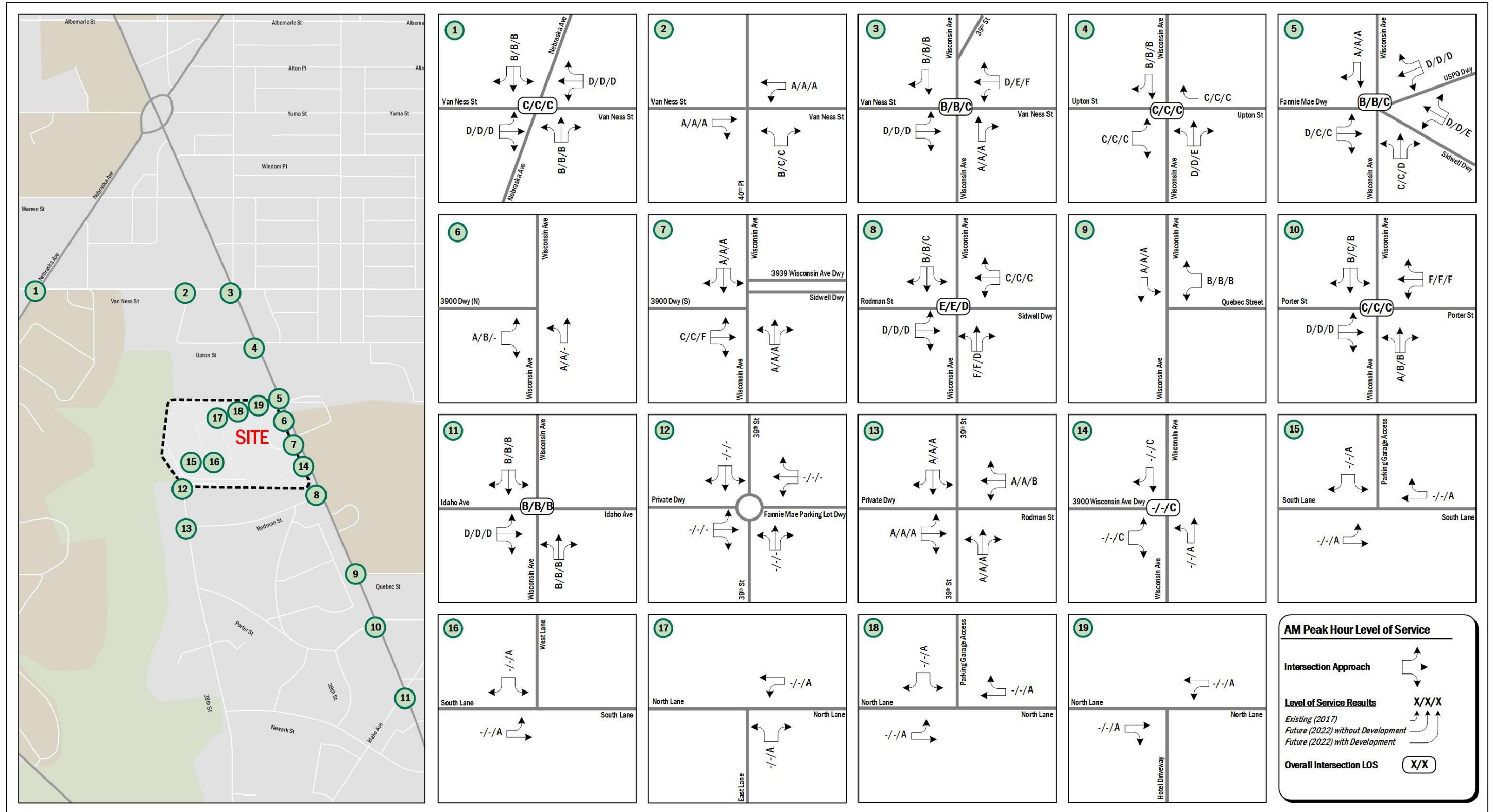


Figure 25: Morning Peak Hour Capacity Analysis Results

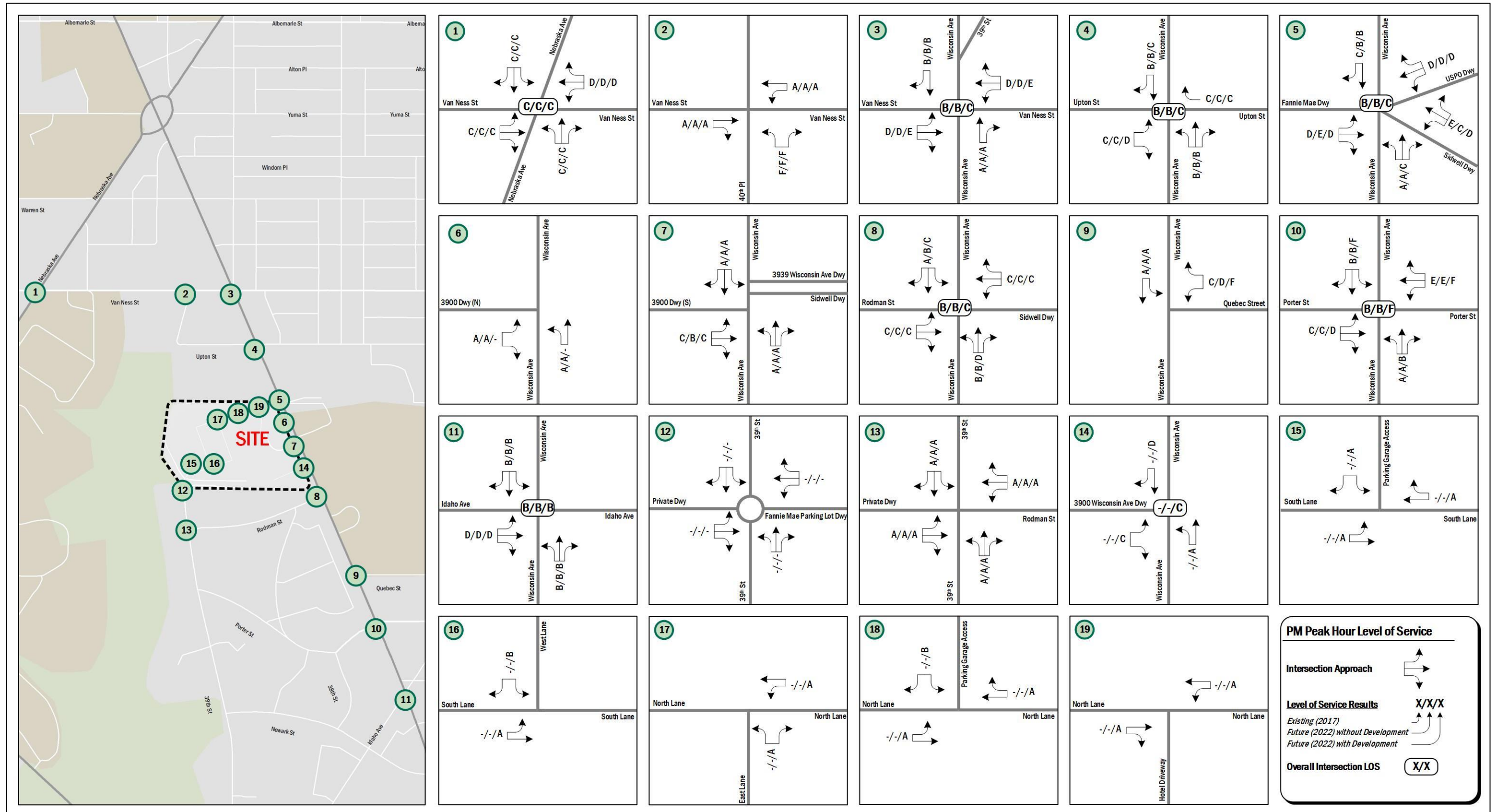


Figure 26: Afternoon Peak Hour Capacity Analysis Results

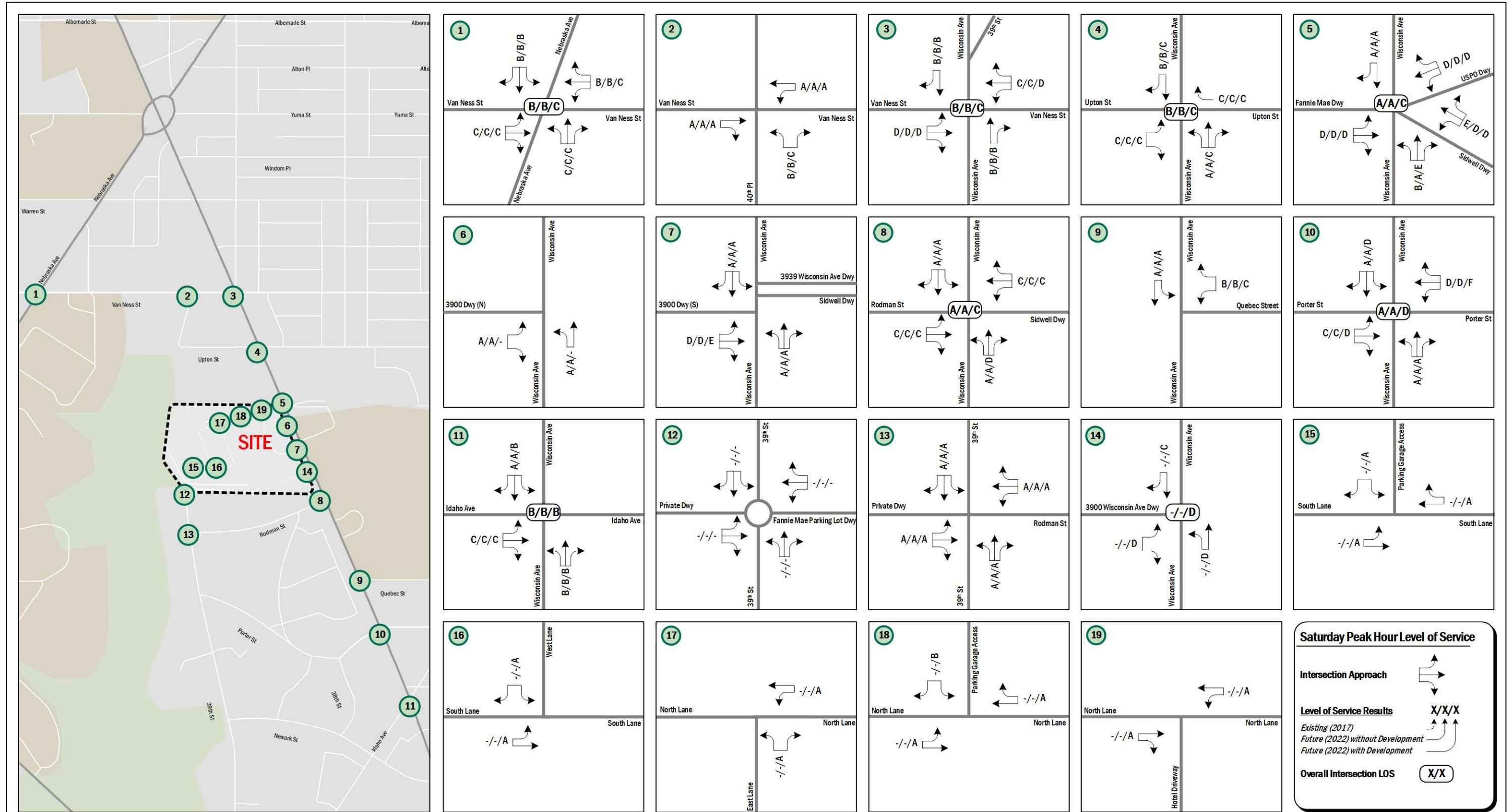


Figure 27: Saturday Peak Hour Capacity Analysis Results



Table 15: Mitigated LOS Results

Intersection	Approach	Existing Conditions (2017)						Background Conditions (2022)						Future Conditions (2022)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour		AM Peak Hour		PM Peak Hour		Saturday Peak Hour		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Van Ness Street & Nebraska Avenue NW	Overall	21.9	C	27.0	C	19.8	B	23.8	C	27.5	C	19.9	B	22.2	C	28.1	C	22.6	C
	Eastbound	43.7	D	30.1	C	22.6	C	47.9	D	30.4	C	22.7	C	42.0	D	32.0	C	24.5	C
	Westbound	42.0	D	41.5	D	19.1	B	46.2	D	42.4	D	18.9	B	43.9	D	43.7	D	24.1	C
	Northbound	15.8	B	22.2	C	23.9	C	15.9	B	22.5	C	24.2	C	15.3	B	23.6	C	27.4	C
	Southbound	12.6	B	21.9	C	13.3	B	12.6	B	22.2	C	13.3	B	12.6	B	22.2	C	13.3	B
Van Ness Street & 40th Place NW	Eastbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	Westbound	2.6	A	0.5	A	0.8	A	2.5	A	0.5	A	0.8	A	2.1	A	2.3	A	2.8	A
	Northbound	14.7	B	55.6	F	13.1	B	15.2	C	59.0	F	13.2	B	16.6	C	81.8	F	23.2	C
Wisconsin Avenue & Van Ness Street & 39th Street	Overall	14.8	B	15.5	B	17.9	B	19.1	B	16.3	B	18.1	B	18.1	B	17.5	B	23.2	C
	Eastbound	43.4	D	43.4	D	41.2	D	51.1	D	45.5	D	41.9	D	36.2	D	41.7	D	50.2	D
	Westbound	39.9	D	44.3	D	34.6	C	68.0	E	46.6	D	34.8	C	37.4	D	40.5	D	39.4	D
	Northbound	2.6	A	6.3	A	10.5	B	3.1	A	6.7	A	10.7	B	8.7	A	6.9	A	15.2	B
	Southbound	11.5	B	10.4	B	10.7	B	12.1	B	10.5	B	10.8	B	16.4	B	15.7	B	16.9	B
Wisconsin Avenue & Upton Street	Overall	22.7	C	15.7	B	14.0	B	27.2	C	16.3	B	14.1	B	27.2	C	17.6	B	34.9	C
	Eastbound	28.9	C	27.4	C	22.3	C	28.9	C	27.4	C	22.3	C	30.0	C	30.3	C	24.9	C
	Westbound	28.5	C	28.3	C	29.0	C	28.5	C	28.3	C	29.0	C	28.5	C	28.3	C	29.3	C
	Northbound	41.4	D	12.1	B	7.5	A	52.4	D	12.8	B	7.5	A	50.5	D	13.0	B	50.6	D
	Southbound	10.7	B	17.5	B	17.8	B	12.4	B	17.9	B	17.9	B	12.2	B	21.3	C	21.6	C
Wisconsin Avenue & Fannie Mae Driveway/Sidwell Dwy	Overall	12.2	B	14.9	B	6.5	A	15.4	B	15.7	B	6.7	A	19.8	B	23.5	C	11.6	B
	Eastbound	38.8	D	38.3	D	43.3	D	32.7	C	76.5	E	43.0	D	32.5	C	40.7	D	44.4	D
	Westbound	39.1	D	35.5	D	43.1	D	47.4	D	46.1	D	48.8	D	47.4	D	47.4	D	48.8	D
	Nwestbound	52.1	D	60.4	E	62.2	E	51.4	D	32.2	C	44.5	D	54.5	D	43.5	D	38.0	D
	Northbound	20.1	C	5.7	A	9.3	B	22.4	C	7.6	A	9.8	A	32.4	C	24.6	C	11.8	B
Wisconsin Avenue & Fannie May Dwy (N)	Eastbound	9.6	A	0.0	A	0.0	A	10.3	B	0.1	A	0.0	A	-	-	-	-	-	-
	Northbound	0.2	A	0.0	A	0.0	A	0.2	A	0.0	A	0.0	A	-	-	-	-	-	-
	Eastbound	17.5	C	15.9	C	34.0	D	16.6	C	14.3	B	34.0	D	85.6	F	22.2	C	41.4	E
	Northbound	0.1	A	9.3	A	0.0	A	0.0	A	9.3	A	0.0	A	0.0	A	0.0	A	0.0	A
	Southbound	0.1	A	0.0	A	0.0	A	1.2	A	0.3	A	0.0	A	1.4	A	0.4	A	0.0	A
Wisconsin Avenue & Rodman Street/Sidwell Dwy	Overall	77.5	E	10.8	B	8.0	A	73.3	E	12.8	B	7.9	A	39.3	D	30.3	C	22.2	C
	Eastbound	35.3	D	33.8	C	31.4	C	35.3	D	33.8	C	31.4	C	36.0	D	33.9	C	31.5	C
	Westbound	32.8	C	32.5	C	31.2	C	32.8	C	32.5	C	31.2	C	32.8	C	32.5	C	31.2	C
	Northbound	178.8	F	10.6	B	9.5	A	166.0	F	10.5	B	9.6	A	50.3	D	34.1	C	40.8	D
	Southbound	12.6	B	8.5	A	5.7	A	18.8	B	13.0	B	5.5	A	32.9	C	25.5	C	5.0	A
Wisconsin Avenue & Quebec Street	Westbound	13.0	B	22.4	C	13.7	B	13.1	B	32.1	D	13.8	B	11.7	B	54.8	F	16.1	C
	Southbound	0.8	A	1.8	A	1.4	A	0.9	A	1.8	A	1.4	A	0.9	A	2.1	A	1.9	A



Wisconsin Avenue & Porter Street	Overall	25.0	C	18.5	B	8.5	A	28.5	C	17.7	B	8.6	A	34.7	C	28.5	C	19.0	B
	Eastbound	35.1	D	34.4	C	34.0	C	35.2	D	34.5	C	34.0	C	32.5	D	23.5	C	27.3	C
	Westbound	113.0	F	71.5	E	46.8	D	130.2	F	70.3	E	47.0	D	119.3	F	52.1	D	48.3	D
	Northbound	9.9	A	9.0	A	3.7	A	10.2	B	9.1	A	3.7	A	12.1	B	19.2	B	6.7	A
	Southbound	18.9	B	16.5	B	2.9	A	22.4	C	15.2	B	3.2	A	33.6	C	32.3	C	21.1	C
Wisconsin Avenue & Idaho Avenue	Overall	15.7	B	14.4	B	11.3	B	16.6	B	14.6	B	11.3	B	17.8	B	15.7	B	11.3	B
	Eastbound	40.3	D	44.1	D	28.4	C	40.9	D	44.4	D	28.4	C	41.4	D	47.0	D	29.2	C
	Northbound	12.1	B	11.1	B	11.7	B	12.4	B	11.2	B	11.7	B	12.5	B	12.3	B	13.3	B
	Southbound	15.8	B	13.1	B	8.5	A	16.9	B	13.3	B	8.5	A	18.8	B	14.1	B	7.0	A
39th Street/Fannie Mae Driveway	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39th Street & Rodman Street	Eastbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	Westbound	9.5	A	9.9	A	9.0	A	9.5	A	9.9	A	9.0	A	9.7	B	9.9	A	9.2	A
	Northbound	0.1	A	0.5	A	0.0	A	0.1	A	0.5	A	0.0	A	0.1	A	0.4	A	0.0	A
	Southbound	3.1	A	1.2	A	3.1	A	3.1	A	1.2	A	3.1	A	3.4	A	4.6	A	3.2	A
Proposed Site Driveway & Wisconsin Avenue	Overall	-	-	-	-	-	-	-	-	-	-	-	-	25.0	C	33.0	C	40.5	D
	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	33.8	C	33.4	C	35.3	D
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	6.0	A	50.8	D	51.5	D
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	34.6	C	9.9	A	30.9	C
West Lane & Parking Garage	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	4.4	A	4.4	A	4.4	A
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	8.7	A	8.7	A	8.6	A
South Lane & West Lane	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	8.4	A	8.4	B	8.4	A
East Lane & North Lane	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	7.1	A	7.0	A	7.0	A
	Northbound	-	-	-	-	-	-	-	-	-	-	-	-	6.4	A	6.4	A	6.4	A
North Lane & Parking Garage	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	1.6	A	5.6	A	4.6	A
	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Southbound	-	-	-	-	-	-	-	-	-	-	-	-	9.2	A	10.9	B	11.3	B
North Lane & Hotel Driveway	Eastbound	-	-	-	-	-	-	-	-	-	-	-	-	0.0	A	0.0	A	0.0	A
	Westbound	-	-	-	-	-	-	-	-	-	-	-	-	2.2	A	1.4	A	2.3	A



Table 16: Mitigated Queuing Results

Intersection	Lane Group	Storage Length (ft)	Existing Conditions (2015)						Background Conditions (2022)						Total Future Conditions (2022)					
			AM Peak		PM Peak		Sat Peak		AM Peak		PM Peak		Sat Peak		AM Peak		PM Peak		Sat Peak	
			50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
Van Ness Street & Nebraska Avenue NW	Eastbound LTR	100	251	334	74	125	58	98	291	381	81	135	59	99	230	310	118	184	101	154
	Westbound Left	230	81	#168	180	#296	41	70	84	#187	182	#310	41	70	94	#194	173	#310	73	m137
	Westbound TR	230	106	169	218	316	25	m48	128	198	229	330	26	m49	140	214	206	300	62	m94
	Northbound LTR	230	206	270	321	405	321	475	210	275	326	412	327	484	198	260	344	434	366	546
	Southbound LTR	480	163	206	373	524	83	114	166	208	381	534	84	116	166	208	381	534	84	116
Van Ness Street & 40th Place NW	Eastbound TR	600	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Westbound LT	220	-	5	-	1	-	1	-	6	-	1	-	1	-	4	-	6	-	6
	Northbound LR	300	-	18	-	202	-	12	-	20	-	210	-	12	-	40	-	255	-	82
Wisconsin Avenue & Van Ness Street & 39th Street	Eastbound Left	220	23	54	29	70	39	m78	23	56	30	71	40	m79	36	75	56	#132	79	m139
	Eastbound TR	220	186	#289	176	#280	160	m261	216	#365	188	#315	164	m266	206	308	196	303	201	m#341
	Westbound Left	480	42	87	38	88	25	60	~81	#178	43	#111	25	61	68	#146	53	#129	38	#101
	Westbound TR	480	143	210	178	#283	92	158	166	239	185	#308	94	161	140	205	186	286	104	176
	Northbound LTR	300	30	m31	131	211	280	68	37	m37	102	238	287	74	194	m187	224	m236	291	m293
Wisconsin Avenue & Upton Street	Southbound LTR	220	231	273	168	214	136	175	253	299	175	223	138	177	303	358	293	370	232	293
	Eastbound Left	450	6	20	73	128	12	32	6	20	73	128	12	32	20	44	35	72	28	61
	Eastbound Right	450	70	117	74	127	12	38	70	117	74	127	13	39	114	175	5	61	57	103
	Westbound Right	330	0	0	0	0	0	21	0	0	0	0	0	23	0	0	0	0	7	50
	Northbound LTR	300	335	#226	51	87	177	34	~185	#252	74	101	87	32	~186	m#276	184	m128	~126	#240
Wisconsin Avenue & Fannie Mae Driveway/Sidwell Driveway (N)	Southbound TR	280	101	111	176	203	262	330	121	m146	185	213	265	335	109	120	202	#277	390	#442
	Eastbound LTR	1100	0	0	33	94	4	13	8	26	100	#218	4	13	15	41	55	99	71	117
	Westbound LTR	370	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	22	0	27
	N'westbound LTR	370	0	24	4	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Northbound LTR	560	12	36	15	42	7	25	159	#245	19	72	23	55	158	#271	96	151	21	46
Wisconsin Avenue & Fannie Mae Driveway (N)	Southbound TR	300	305	m276	79	102	106	375	203	m174	89	102	108	380	172	#553	163.0	#641	149	m180
	Eastbound LR	430	75	151	~620	#826	30	48	73	#98	174	236	31	49	85	#623	239	m#676	71	159
	Northbound LT	200	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
	Northbound Thru	520	-	1	-	0	-	0	-	1	-	0	-	0	-	-	-	-	-	-
	Southbound Thru	40	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
Wisconsin Avenue & Fannie Mae Driveway (S)	Southbound TR	40	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
	Eastbound LTR	430	-	0	-	0	-	0	-	0	-	0	-	0	-	-	-	-	-	-
	Westbound LTR	200	-	3	-	1	-	1	-	2	-	1	-	1	-	57	-	17	-	65
	Northbound LT	310	-	0	-	1	-	0	-	0	-	1	-	0	-	0	-	0	-	0
	Northbound TR	310	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
Wisconsin Avenue & Rodman Street	Southbound LT	600	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Southbound Thru	180	-	1	-	0	-	0	-	15	-	0	-	0	-	18	-	0	-	0
	Southbound TR	180	-	0	-	0	-	0	-	0	-	1	-	0	-	0	-	2	-	0
	Eastbound LTR	125	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Westbound LTR	230	71	120	38	77	0	5	71	120	38	77	0	5	81	135	42	82	0	16
Wisconsin Avenue & Quebec Street	Northbound LTR	600	27	59	23	59	0	0	27	59	23	59	0	0	27	59	23	59	0	0
	Southbound LTR	320	~579	m#651	219	263	101	115	~554	m#624	220	m263	102	117	469	m#524	426	#543	420	#546
	Westbound TR	445	193	125	128	m111	16	233	183	254	176	187	15	218	233	m229	168	m176	47	m49
	Northbound Thru	265	-	25	-	22	-	12	-	11	-	19	-	12	-	10	-	33	-	15
	Northbound TR	265	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Southbound LT	490	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Southbound Thru	490	-	10	-	20	-	10	-	11	-	20	-	10	-	11	-	45	-	16
	Eastbound LTR	220	46	89	36	74	32	69	46	91	36	75	32	69	49	94	31	64	32	67
	Westbound LTR	310	~204	#367	164	#301	110	#188	~222	#387	163	#299	111	#190	~241	#413	248	#413	195.0	#340



Wisconsin Avenue & Porter Street	Northbound LTR	375	167	206	137	166	20	26	179	220	141	170	19	26	200	246	263	317	35	42
	Southbound LTR	800	367	450	257	326	32	19	420	471	280	319	36	19	479	m499	250	261	319	368
Wisconsin Avenue & Idaho Avenue	Eastbound LTR	310	102	167	149	231	61	110	111	180	153	236	61	111	117	189	177	269	76	132
	Northbound LTR	145	222	276	191	226	128	168	237	294	196	231	131	171	240	298	246	287	190	244
	Southbound LTR	400	308	370	251	314	65	111	336	405	259	323	63	115	387	464	288	360	71	156
39th Street/Fannie Mae Driveway & Parking Lot Driveway	Eastbound LTR	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Westbound LTR	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Northbound LTR	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound LTR	1100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39th Street & Rodman Street	Eastbound LTR	180	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Westbound LTR	640	-	6	-	7	-	3	-	6	-	7	-	3	-	6	-	9	-	4
	Northbound LTR	360	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0
	Southbound LTR	220	-	0	-	1	-	0	-	0	-	1	-	0	-	1	-	1	-	1
Proposed Site Driveway & Wisconsin Avenue	Eastbound Left	145	-	-	-	-	-	-	-	-	-	-	-	-	20	49	66	119	77	136
	Eastbound Right	145	-	-	-	-	-	-	-	-	-	-	-	-	0	40	30	48	0	51
	Northbound LT	100	-	-	-	-	-	-	-	-	-	-	-	-	80	m82	120	m125	~551	m#661
	Southbound TR	600	-	-	-	-	-	-	-	-	-	-	-	-	~257	#641	504	#663	273	#594



TRANSIT

This section discusses the existing and proposed transit facilities in the vicinity of the site, accessibility to transit, and evaluates the overall transit impacts due to the 3900 Wisconsin Avenue project.

The following conclusions are reached within this chapter:

- The development site is 0.5 miles from the Tenleytown-AU Metrorail station and is surrounded by several Metrobus routes that travel along multiple primary corridors
- As Fannie Mae is completely vacating the site, it is assumed that these trips will be removed from the network. Given this, the proposed development is projected to generate fewer transit trips than the existing site during the morning peak hour, and more transit trips during the afternoon and Saturday peak hours. However, the transit facilities in the vicinity of the site are able to accommodate the overall increase in trips due to the development.

EXISTING TRANSIT SERVICE

The study area is well served by Metrobus and has access to Metrorail. Combined, these transit services provide local, city wide, and regional transit connections and link the site with major cultural, residential, employment, and commercial destinations throughout the region. Figure 28 identifies the major transit routes, stations, and stops in the study area.

The Tenleytown-AU Metrorail station is located less than 0.5 miles from the development site. The Tenleytown-AU Metrorail station is served by the Red Line, which travels south from

Glenmont, through downtown DC, and then continues north through the District core to Shady Grove. Trains run approximately every four to eight minutes during the morning and afternoon peak hours. They run about every 12 minutes during weekday non-peak hours, every eight to 12 minutes on weekday evenings, every 15 to 18 minutes after 9:30 pm, and every 12 to 15 minutes on the weekends.

The site is also serviced by nine Metrobus routes along five lines serving multiple primary corridors. These bus lines connect the site to many areas of the District and Maryland, including several Metrorail stations serving four of the six lines. Table 17 shows a summary of the bus route information for the routes that serve the site, including service hours, headway, and distance to the nearest bus stop. Figure 29 shows the weekday frequency of bus service servicing the site. As can be seen, 42 buses service the site during the AM peak hour and 56 buses during the PM peak hour, providing a good connection to Metrorail and other destinations.

Figure 28 shows a detailed inventory of the existing Metrobus stops within a quarter-mile walkshed of the site. Each stop is evaluated based on the guidelines set forth by WMATA's *Guidelines for the Design and Placement of Transit Stops*, as detailed in Table 18. A detailed list of Metrobus stops within a quarter-mile walkshed of the site, detailing individual bus stop amenities and conditions is included in the Technical Appendix.

PROPOSED TRANSIT SERVICE

Due to growth of population, jobs, and retail in several neighborhoods in the District and the potential for growth in other neighborhoods, the District's infrastructure is challenged with the need for transportation investments to support the recent growth and to further strengthen neighborhoods. In order to meet these challenges and capitalize on future

Table 17: Metrobus Route Information

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
30N, 30S	Friendship Heights-Southeast Line	Weekdays: 4:30 AM – 2:18 AM Weekends: 4:37 AM – 2:40 AM	20-30 min	<0.1 miles, 1 minute
31, 33	Wisconsin Avenue Line	Weekdays: 5:15 AM – 12:10 AM Weekends: 5:50 AM – 12:00AM	12-30 min	<0.1 miles, 1 minute
H2, H3, H4	Crosstown Line	Weekdays: 5:08 AM – 1:35 AM Weekends: 5:18 AM – 1:35 AM	10-40 min	<0.1 miles, 1 minute
37	Wisconsin Avenue Limited Line	Southbound: 6:52 AM – 9:30 AM Northbound: 4:34 PM – 7:35 PM	15-20 min	0.2 miles, 4 minutes
96	East Capitol Street-Cardozo Line	Weekdays: 5:51AM – 12:52 AM Weekends: 5:56AM – 12:45 AM	20-35 min	<0.1 miles, 1 minute



opportunities, DDOT has developed a plan to identify transit challenges and opportunities and to recommend investments. *MoveDC* is a long-range plan that provides a vision for the future of DC's transportation system, specifically in a way that expands transportation choices while improving the reliability of all transportation modes.

The *MoveDC* report outlines recommendations by mode with the goal of having them complete by 2040. The plan hopes to achieve a transportation system for the District that includes:

- 70 miles of high-capacity transit (streetcar or bus)
- 200 miles of on-street bicycle facilities or trails
- Sidewalks on at least one side of every street
- New street connections
- Road management/pricing in key corridors and the Central Employment Area
- A new downtown Metrorail loop
- Expanded commuter rail
- Water taxis

In direct relation to the proposed development, the *MoveDC* plan outlines a Bus Rapid Transit line on Wisconsin Avenue. This recommendation would create additional multi-modal capacity and connectivity to the proposed development, but is not yet funded.

WMATA Metrobus Studies

WMATA and local transportation agencies in the District, Maryland, and Virginia have been reviewing Metrobus lines and system wide facilities for service improvements since 2007. In direct relation to this development, the 30s, the Crosstown (H2,H3,H4), and the East Capitol Street-Cardozo (96,97) lines were studied.

WMATA and DDOT published the *Metrobus 30s Line Studies* in July 2008, which discusses recommendations for the 30s Metrobus line. The report cites the need for improved transit travel times and schedule adherence. As a possible solution, the report proposes creating a new route 37 with limited-stop services from Friendship Heights to the Archives Metro station. The report also recommends reserving transit/HOV-only lanes along Wisconsin Avenue between Calvert Street and Western Avenue. As of this report, the new route 37 has been created, but no other recommendations outlined in the WMATA Metrobus study for the 30s line have been enacted.

The *Metrobus Service Evaluation Study (2013)*, published October 2013, discusses recommendations for the Crosstown (H2,H3,H4) Metrobus line. The report cites the need for improved reliability, passenger convenience, and reduced operating costs. The first recommendation is to convert H3 trips to limited stop service. Under this change, the number of

Table 18: Transit Stops Requirements

Feature	Basic Stop	Enhanced Service Bus Stop	Transit Center
Bus Stop Sign	Yes	Yes	Yes
ADA 5'x8' Landing Pad - at a minimum, a clear, unobstructed, paved boarding area that is 8 feet deep (perpendicular to the curb) by 5 feet wide (parallel to the curb) and compliant with the ADA Accessibility Guidelines (ADAAG)	Yes	Yes	Yes
Sidewalk - connected by a paved sidewalk that is at least 4 feet wide	Yes	Yes	Yes
Lighting - adequate lighting either from street lights, lights from an adjacent business, or shelter lighting (particularly stops that are served in the evenings)	Evening Service	Yes	Yes
Seating	Trip Generator Based	Yes	Yes
Information Case - detailed schedule information on services	Yes	Yes	Yes
Trash Receptacle - trash receptacle (particularly at locations that are close to fast food establishments and convenient stores)	Site Specific	Yes	Yes
Shelter(s) - shelter with interior seating if there are 50 or more boardings per day (including transfers)	1 (50+ boardings/day)	1	2+
System Map	Contingent on Shelter	Yes	Yes
Real-time Display (LED + Audio)	Optional	Yes	Yes
Interactive Phone System On-Site - real time bus arrival information through an interactive phone and push button audio system	No	No	Yes
Expanded Boarding & Alighting Area (Rear-door Access)	No	Site Specific	Yes
Bus Bay (Pull Off)	No	Site Specific	Yes



trips currently run on the H3 would remain the same, but the number of stops serviced by the line would be reduced. The second recommendation is to add a trip to the H2 route at the beginning of the day. Other recommendations include adjusting scheduled run times to reflect actual run times, implementing dedicated supervision to ensure correct headway separation, and improving bus stop amenities. As of this report, an earlier trip has been added to the H2 route, but no other recommendations outlined in the WMATA *Metrobus Service Evaluation Study (2011)* for the Crosstown line have been enacted.

The *Metrobus Service Evaluation Study (2013)*, published January 2013, discusses recommendations for the East Capitol Street-Cardozo (96,97) Metrobus line. The report cites the need for improved reliability and transit travel times. The report recommends adjusting the first Saturday trip for the 96 route earlier so that it arrives at Capitol Heights Metro before 7:00am, as well as having a dedicated supervisor to help buses adhere to the schedule and maintain adequate headway separation. As of this report, earlier Saturday trips have been added to the 96 route, but no other recommendations outlined in the WMATA *Metrobus Service Evaluation Study (2011)* for the East Capitol Street-Cardozo line have been enacted.

SITE-GENERATED TRANSIT IMPACTS

The proposed development is projected to generate 444 transit trips (204 inbound, 240 outbound) during the morning peak hour, 895 transit trips (487 inbound, 408 outbound) during the afternoon peak hour, and 1,012 transit trips (540 inbound, 472 outbound) during the Saturday peak hour.

Based on the existing vehicular trips to and from the site and the number of Fannie Mae employees who work at the existing headquarters, the site currently generates approximately 596 transit trips (525 inbound, 71 outbound) during the morning peak hour, 564 transit trips (96 inbound, 468 outbound) during the afternoon peak hour, and 131 transit trips (70 inbound, 61 outbound) during the Saturday peak hour.

As Fannie Mae is completely vacating the site, it is assumed that these trips will be removed from the network. Given this, the proposed development is projected to generate fewer transit trips than the existing site during the morning peak hour, and more transit trips during the afternoon and Saturday peak hours. However, the transit facilities in the vicinity of the

site are able to accommodate the overall increase in trips due to the development.

US Census data was used to determine the distribution of those taking Metrorail and those taking Metrobus. The site lies in TAZ 10082 which shows that approximately 53 percent of transit riders used Metrorail and the remainder use Metrobus. Given the size of the development, approximately 235 people will use Metrorail and 209 will use Metrobus during the morning peak hour; approximately 474 people will use Metrorail and 421 will use Metrobus during the afternoon peak hour; and approximately 536 people will use Metrorail and 476 will use Metrobus during the Saturday peak hour.

For comparison, under existing conditions, approximately 316 people are expected to use Metrorail and 280 are expected to use Metrobus during the morning peak hour; approximately 299 people are expected to use Metrorail and 265 are expected to use Metrobus during the afternoon peak hour; and approximately 69 people are expected to use Metrorail and 62 are expected to use Metrobus during the Saturday peak hour.

WMATA studied capacity along Metrobus routes. DC's *Transit Future System Plan (2010)* lists the bus routes with the highest load factor (a ratio of passenger volume to bus capacity). A load factor is considered unacceptable if it is over 1.2 during peak periods or over 1.0 during off-peak or weekend periods. According to this study Metrobus routes that travel near the site operate under the acceptable load factors listed above during all periods of the day, except for routes H2, H3, and H4 which critically exceed capacity during peak periods. Based on this information and the adequate Metrobus service surrounding the site, it is not expected that site-generated transit trips will cause detrimental impacts to Metrobus service.

Of note, the project proposes to add a new site driveway near the intersection of Wisconsin Avenue and Rodman Street. As shown on Figure 28, there is an existing near side Metrobus stop at this location. This bus stop is proposed to be relocated to the far side of the intersection in order to accommodate the proposed site driveway. The Applicant will coordinate with DDOT to determine the location of the relocated bus stop.

Overall, the additional transit riders generated by the site are not expected to have an adverse impact to the existing transit system.

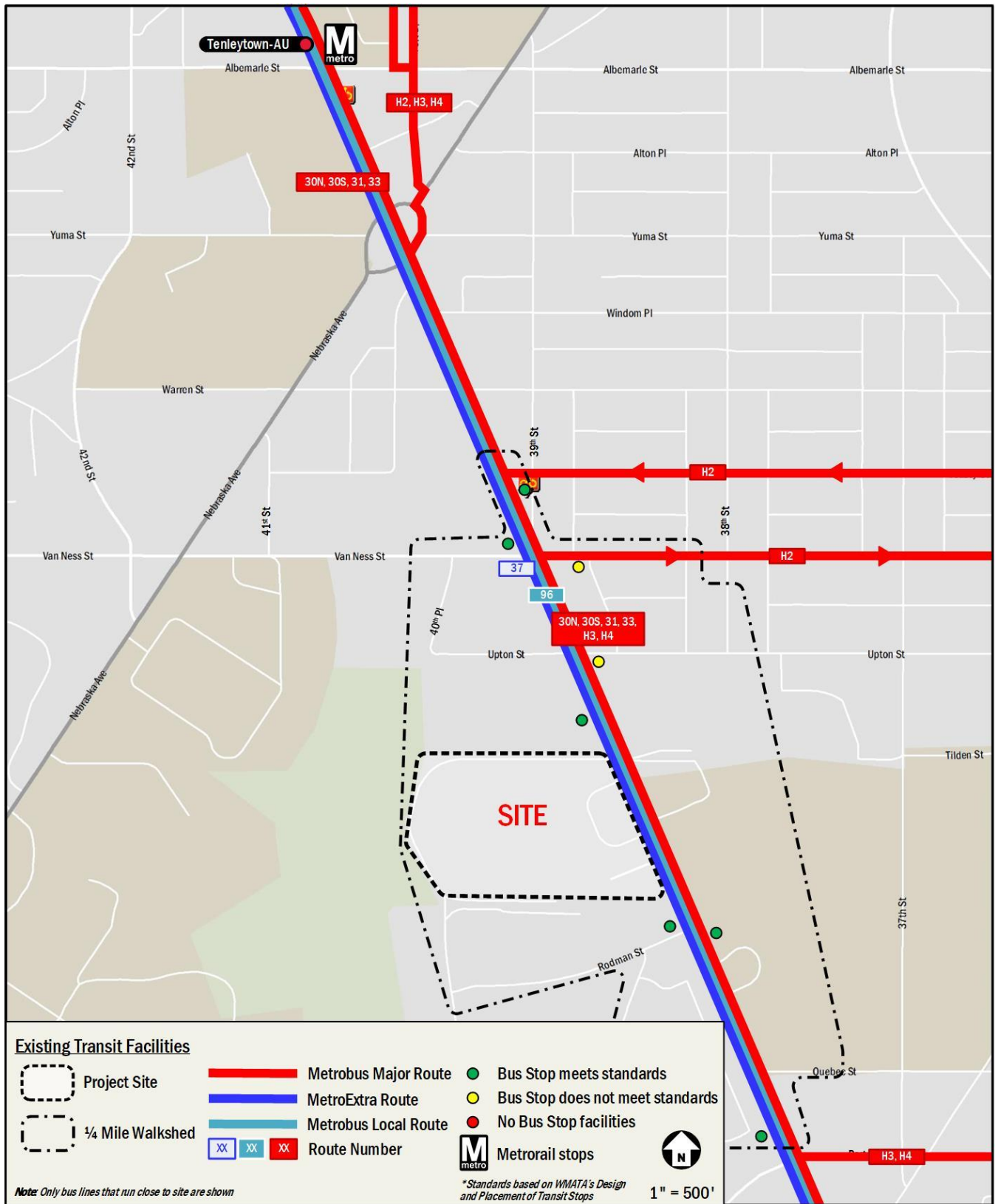


Figure 28: Existing Transit Service

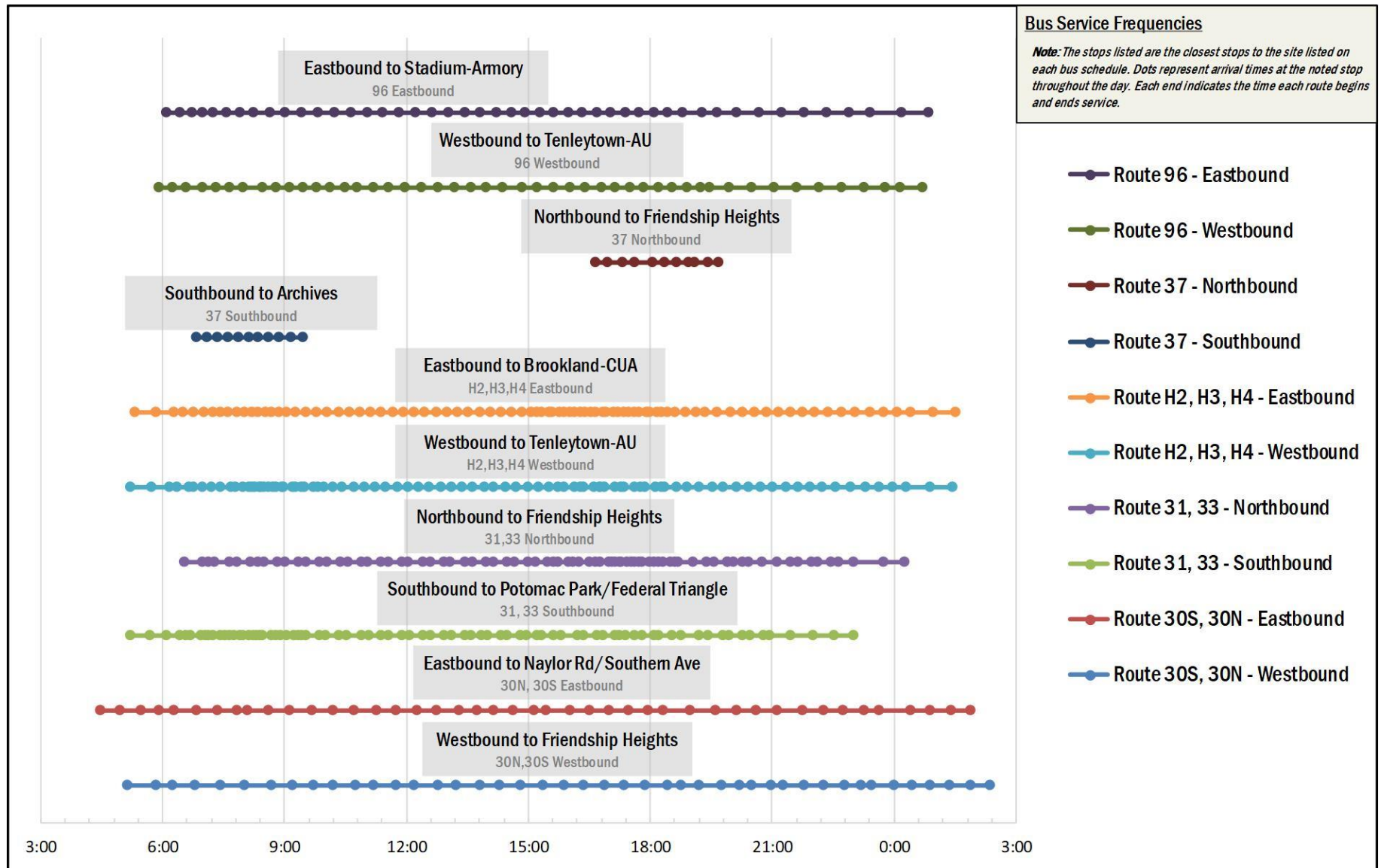


Figure 29: Bus Headways and Frequency (weekdays)

PEDESTRIAN FACILITIES

This section summarizes existing and future pedestrian access to the site and reviews walking routes to and from the site.

The following conclusions are reached within this chapter:

- The existing pedestrian infrastructure surrounding the site provides an excellent walking environment. There are some gaps in the system, but there are sidewalks along all primary routes to pedestrian destinations.
- The site is expected to generate a manageable amount of pedestrian trips; however, the pedestrian trips generated by walking to and from transit will be more substantial.
- Improvements to pedestrian infrastructure surrounding the site and within the site will improve pedestrian comfort and connectivity.

PEDESTRIAN STUDY AREA

Facilities within a quarter-mile of the site were evaluated as well as routes to nearby transit facilities. The site is easily accessible to transit options such as bus stops along Wisconsin Avenue, as well as the Tenleytown-AU Metrorail Station. There is excellent pedestrian infrastructure within the study area that positively impacts the quality of and attractiveness of the walking environment. This includes roadway conditions that enhance the quality of walking conditions, wide sidewalks, and complete and sufficient crossings at busy intersections. Figure 30 shows suggested pedestrian pathways, walking time and distances, and barriers or areas of concern.

PEDESTRIAN INFRASTRUCTURE

This section outlines the existing and proposed pedestrian infrastructure within the pedestrian study area.

Existing Conditions

A review of pedestrian facilities surrounding the planned development shows that most facilities meet DDOT standards and provide an acceptable walking environment. Figure 31 shows a detailed inventory of the existing pedestrian infrastructure surrounding the site. Sidewalks, crosswalks, and curb ramps are evaluated based on the guidelines set forth by DDOT's *Public Realm Design Manual* in addition to ADA standards. Sidewalk widths and requirements for the District are shown below in Table 19.

Within the area shown, most roadways are considered residential and commercial with a low to moderate density. All primary pedestrian destinations are accessible via routes with sidewalks, most of which meet DDOT standards.

ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks is not desired. As shown in Figure 31, under existing conditions there are some issues with crosswalks and curb ramps near the site, but most curb ramps comply with ADA standards.

Pedestrian Infrastructure Improvements

As a result of the development, pedestrian facilities along the perimeter of the site will be improved such that they meet or exceed DDOT requirements and provide an improved pedestrian environment.

Within the site, the development will provide pedestrian facilities that meet or exceed DDOT and ADA standards, with an emphasis on pedestrian safety and comfort. This includes sidewalks that meet or exceed the width requirements, crosswalks at all necessary locations, curb ramps with detectable warnings, and additional design elements such as curb extensions and room for outdoor seating. In addition, a pedestrian plaza that will be a focal point of the development is planned in the northern portion of the site. Additional enhanced pedestrian gathering and recreational areas will be distributed through the site.

Table 19: Sidewalk Requirements

Street Type	Minimum Sidewalk Width	Minimum Buffer Width
Residential (Low to Moderate Density)	6 ft	4 ft (6 ft preferred for tree space)
Residential (High Density)	8 ft	4 ft (6 ft preferred for tree space)
Commercial (Non-downtown)	10 ft	4 ft
Downtown	16 ft	6 ft

SITE IMPACTS

This section summarizes the impacts of the development on the overall pedestrian operations in the vicinity of the site.

Pedestrian Trip Generation

The planned development is expected to generate 157 walking trips (85 inbound, 72 outbound) during the morning peak hour, 371 walking trips (194 inbound, 177 outbound) during the afternoon peak hour, and 450 walking trips (237 inbound, 213 outbound) during the Saturday peak hour. The origins and destinations of these trips are likely to be:

- Employment opportunities where residents can walk to work;
- Retail locations outside of the site;
- Employees and patrons of the development; and
- Neighborhood destinations such as schools, libraries, and parks in the vicinity of the site.

In addition to these trips, the transit trips generated by the site will also generate pedestrian demand between the site and nearby transit stops.

Based on the existing vehicular trips to and from the site and the number of Fannie Mae employees who work at the existing headquarters, the site currently generates approximately 104 walking trips (92 inbound, 12 outbound) during the morning peak hour, 99 walking trips (17 inbound, 82 outbound) during the afternoon peak hour, and 23 walking trips (12 inbound, 11 outbound) during the Saturday peak hour.

As Fannie Mae is completely vacating the site, it is assumed that these trips will be removed from the network. Given this, the proposed development is projected to generate more walking trips during the morning, afternoon, and Saturday peak hours. However, the pedestrian facilities in the vicinity of the site are able to accommodate the overall increase in trips due to the development.

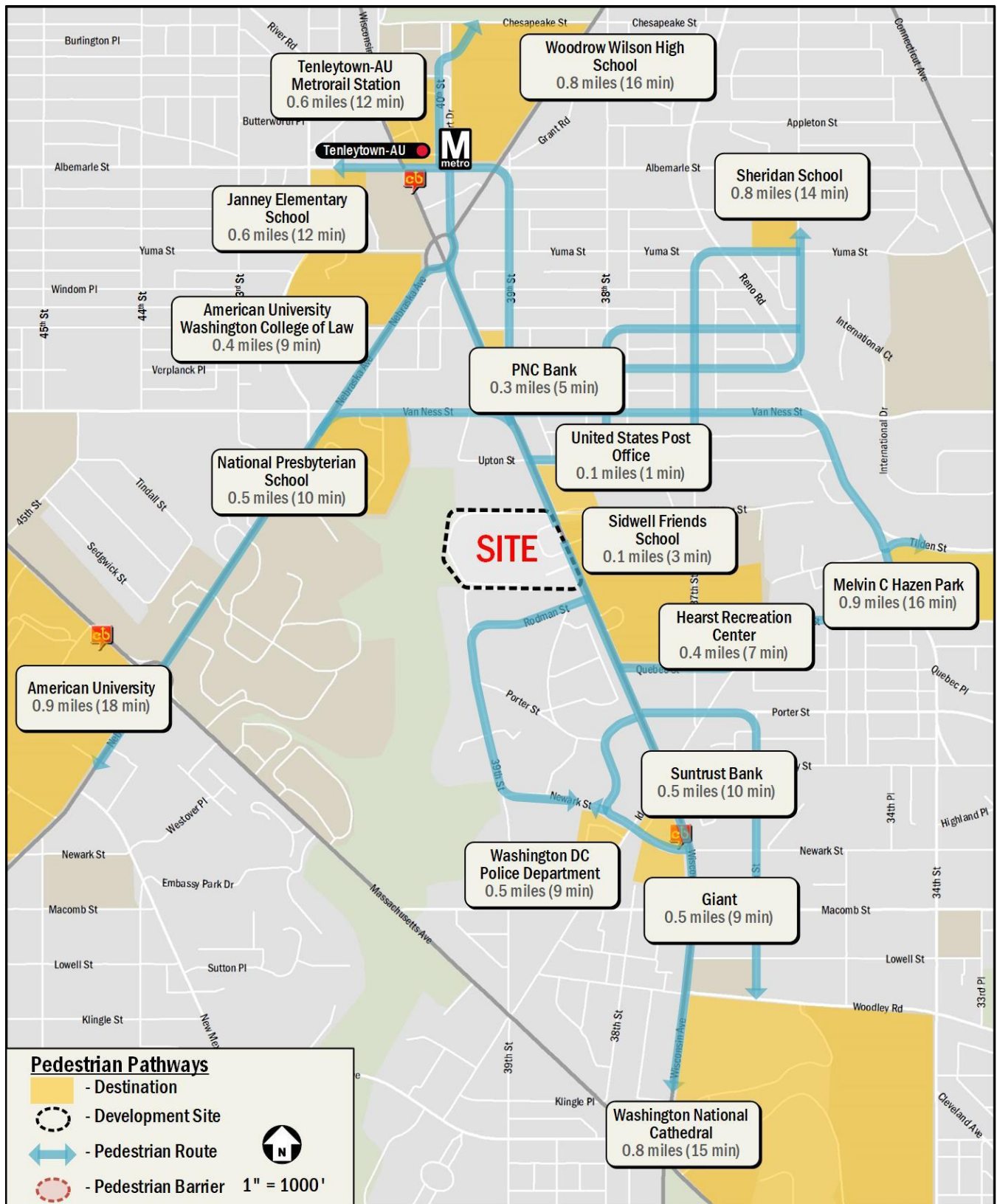


Figure 30: Pedestrian Pathways

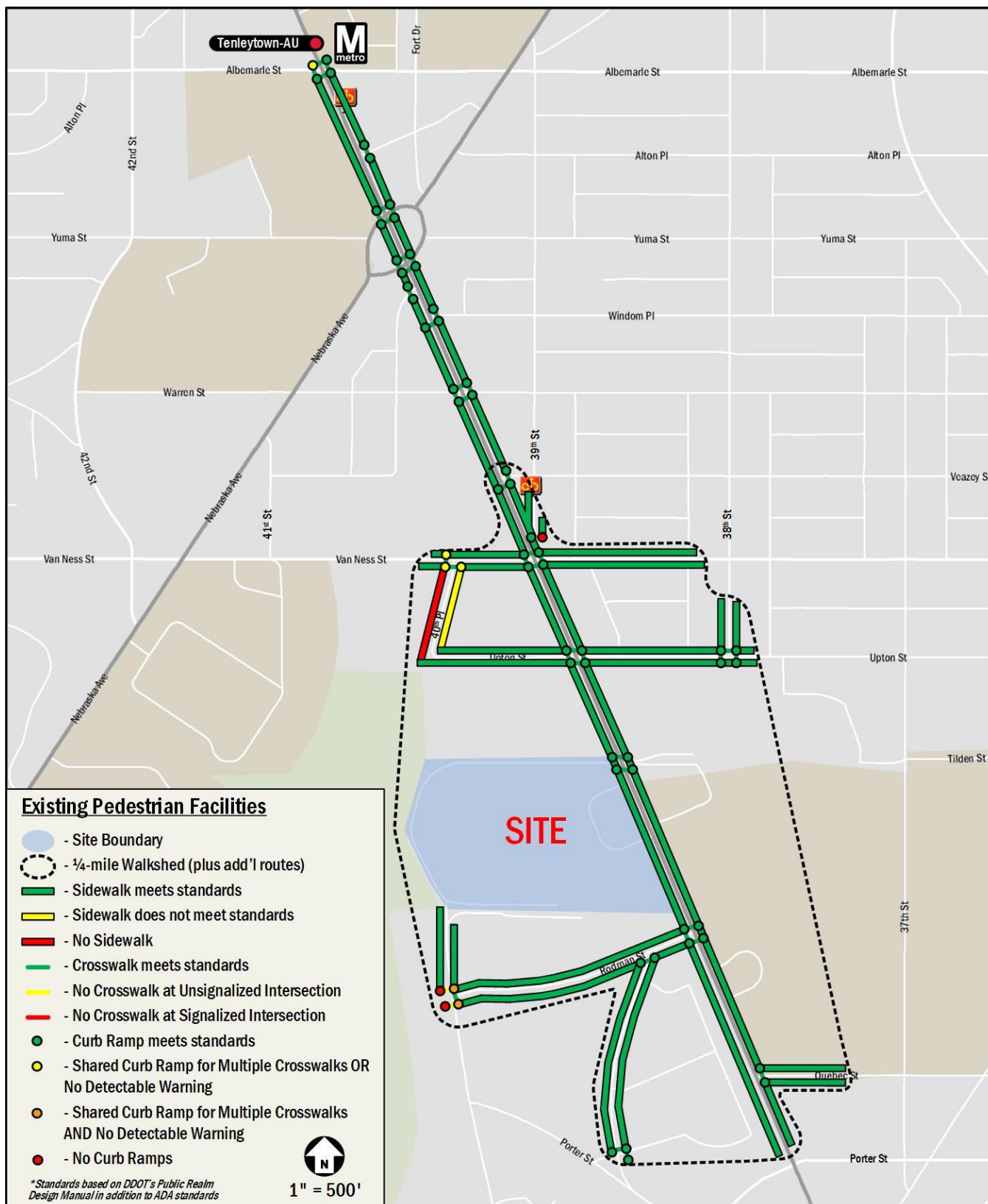


Figure 31: Existing Pedestrian Infrastructure

BICYCLE FACILITIES

This section summarizes existing and future bicycle access, reviews the quality of cycling routes to and from the site, and presents recommendations.

The following conclusions are reached within this chapter:

- The site has access to shared lanes on Van Ness Street and signed routes on 36th and 37th Street.
- The site is expected to generate a relatively large amount of bicycle trips, which can be accommodated by proposed and planned bicycle facilities.
- The development will include long-term bicycle parking within each building.
- The development will include short-term bicycle racks throughout the site.
- The development will include showers and changing facilities that meet or exceed the number required by zoning.

EXISTING BICYCLE FACILITIES

The site has access to existing on- and off-street bicycle facilities. East-west connectivity is provided along shared lanes on Van Ness Street. North-south connectivity is provided along on-street signed routes on 36th Street and 37th Street. Figure 32 illustrates the existing bicycle facilities in the area.

No designated bike parking is provided along the perimeter of the site under existing conditions.

In addition to personal bicycles, the Capital Bikeshare program provides additional cycling options for residents, employees, and patrons of the planned development. The Bikeshare program has placed over 440 Bikeshare stations across Washington DC, Arlington, and Alexandria, VA, and most recently Montgomery County, MD, with over 3,700 bicycles provided. Within a quarter-mile of the site, there is one Bikeshare station that houses a total of 14 bikes. Figure 32 illustrates the existing Capital Bikeshare facilities in the area.

PROPOSED BICYCLE FACILITIES

On-Site Bicycle Elements

The project will provide amenities that cater to cyclists including long-term bicycle spaces and short-term bicycle racks. Exact numbers and locations of bicycle racks have not yet been determined; however, it is expected that secure long-term

bicycle spaces will be located in each building and bicycle racks will be located throughout the site.

SITE IMPACTS

This section summarizes the impacts of the development on the overall bicycle operations surrounding the site and develops recommendations for connectivity improvements.

Bicycle Trip Generation

The planned development is expected to generate 49 bicycle trips (25 inbound, 24 outbound) during the morning peak hour, 115 bicycle trips (63 inbound, 52 outbound) during the afternoon peak hour, and 130 bicycle trips (69 inbound, 61 outbound) during the Saturday peak hour. Although bicycling will be an important mode for getting to and from the site, with facilities located on site and routes to and from the site, the impacts from bicycling will be relatively less than impacts to other modes.

Based on the existing vehicular trips to and from the site and the number of Fannie Mae employees who work at the existing headquarters, the site currently generates 45 bicycle trips (39 inbound, 6 outbound) during the morning peak hour, 42 bicycle trips (7 inbound, 35 outbound) during the afternoon peak hour, and 10 bicycle trips (5 inbound, 5 outbound) during the Saturday peak hour.

As Fannie Mae is completely vacating the site, it is assumed that these trips will be removed from the network. Given this, the proposed development is projected to generate more bicycle trips during the morning, afternoon, and Saturday peak hours. However, the bicycle facilities in the vicinity of the site are able to accommodate the overall increase in trips due to the development.

The addition of planned and proposed bike facilities in the vicinity of the site unrelated to this development, including the bike lanes along Nebraska Avenue, shown in Figure 32, that will provide additional north-south connectivity, will make using a bicycle a convenient and comfortable option for residents, employees, and patrons of the development.

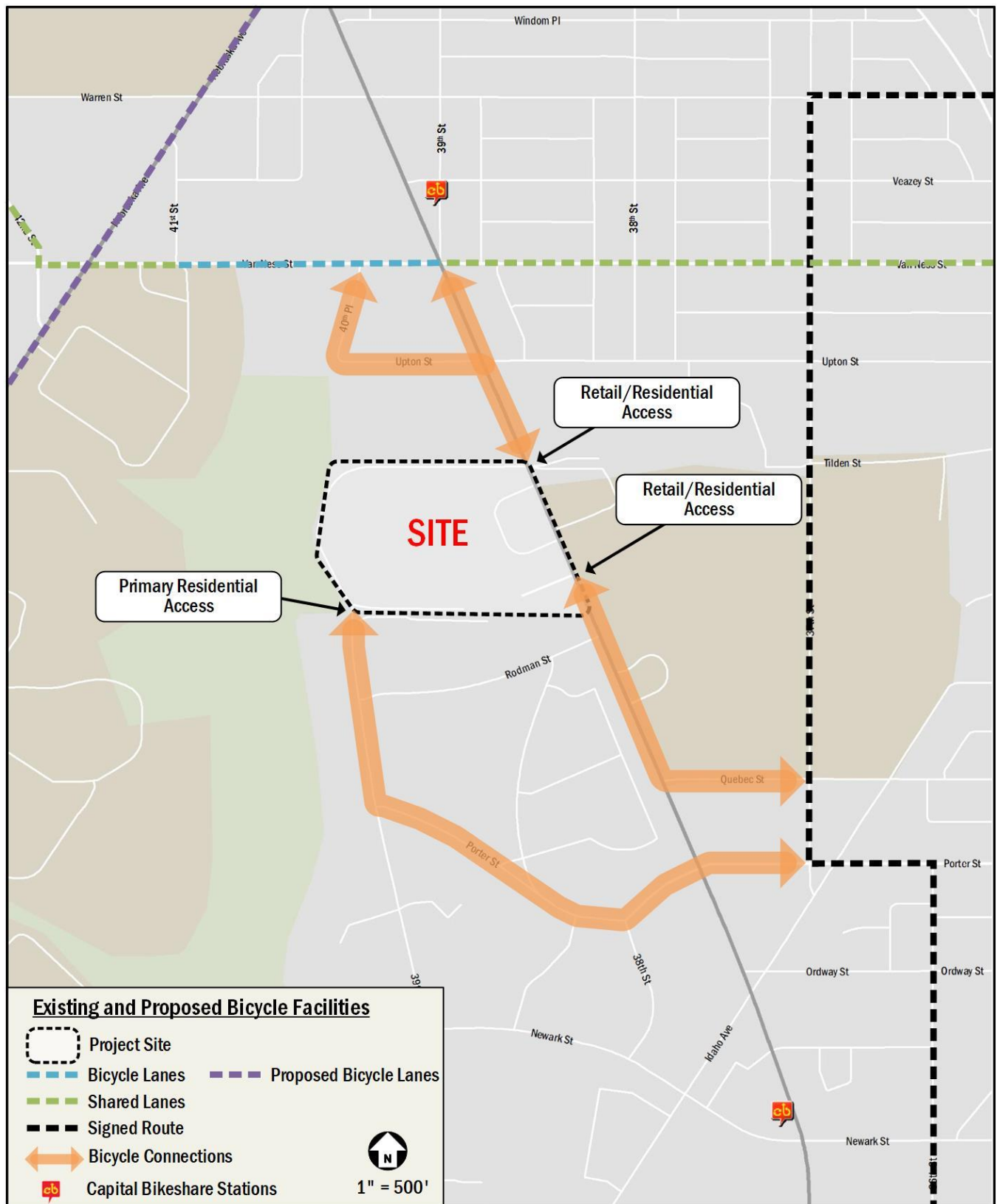


Figure 32: Existing and Proposed Bicycle Facilities

CRASH DATA ANALYSIS

This section of the report reviews available crash data within the study area, reviews potential impacts of the proposed development on crash rates, and makes recommendations for mitigation measures where needed.

SUMMARY OF AVAILABLE CRASH DATA

A crash analysis was performed to determine if there was an abnormally high crash rate at study area intersections. DDOT provided the last three years of intersection crash data, from 2013 to 2015 for the study area. This data was reviewed and analyzed to determine the crash rate at each location. For intersections, the crash rate is measure in crash per million-entering vehicles (MEV). The crash rates per intersections are shown in Table 20.

According to the Institute of Transportation Engineer's *Comprehensive Transportation Review for Site Development*, a crash rate of 1.0 or higher is an indication that further study is required. One (1) intersections in this study area meets this criterion (as shown in red in Table 20 and detailed in Table 21). The 3900 Wisconsin Avenue development should be developed in a manner to help alleviate, or at minimum not add to, the conflicts at these intersections.

A rate over 1.0 does not necessarily mean there is a significant problem at an intersection, but rather it is a threshold used to identify which intersections may have higher crash rates due to operational, geometric, or other issues. In some cases, the crashes were located near the intersection and not necessarily within the intersection.

For this intersection, the crash type information from the DDOT crash data was reviewed to see if there is a high percentage of certain crash types. Generally, the reasons for why an intersection has a high crash rate cannot be derived from crash data, as the exact details of each crash are not represented. However, some summaries of crash data can be used to develop general trends or eliminate possible causes.

Table 21 contains a breakdown of crash types reported for the one intersection with a crash rate over 1.0 per MEV.

POTENTIAL IMPACTS

This section reviews the location with existing crash rates over 1.0 MEV and reviews potential impacts of the proposed development.

- Wisconsin Avenue & Upton Street NW
This intersection is over the threshold of 1.0 crashes per MEV, with a rate of approximately 1.45 crashes per MEV over the course of the three year study period. The majority of crashes at this intersection were rear-end crashes and side-swiped vehicles, which are consistent with crashes that could occur at intersections such as this one. Elevated rear-end crashes are typically observed at signalized intersections. The high instance of side-swiped vehicles may be due to the significant amount of bus activity at this intersection, including a bus stop on the northbound approach, which may cause vehicles to change lanes abruptly and side-swipe another vehicle.

This report does not recommend mitigation measures at this intersection as the development is not projected to make changes to the commuting patterns, operations, or geometry of this intersection that could negatively influence safety.

Table 20: Intersection Crash Rates (2013-2015)

Intersection	Total Crashes	Ped Crashes	Bike Crashes	Rate per MEV*
Van Ness Street & Nebraska Avenue NW	11	1	1	0.32
Van Ness Street & 40th Place NW	3	0	1	0.22
Wisconsin Avenue & Van Ness Street/39th Street NW	46	5	1	0.98
Wisconsin Avenue & Upton Street NW	64	6	1	1.45
Wisconsin Avenue & Fannie Mae Dwy/Sidwell/Post Office Dwy^				
Wisconsin Avenue & 3900 Driveway (N)^				
Wisconsin Avenue & 3900 Driveway (S)^				
Wisconsin Avenue & Rodman Street NW	22	1	0	0.52
Wisconsin Avenue & Quebec Street NW	12	0	0	0.31
Wisconsin Avenue & Porter Street NW	31	2	0	0.77
Wisconsin Avenue & Idaho Avenue NW	3	0	0	0.07
39 th Street & Fannie Mae Driveway/Parking Lot Driveway^				
39th Street & Rodman Street NW	2	0	0	0.88

* - Million Entering Vehicles; Volumes estimated based on turning movement count data

^ - Crash Data unavailable

Table 21: Crash Type Breakdown

Intersection	Rate per MEV	Right Angle	Left Turn	Right Turn	Rear End	Side Swiped	Head On	Parked	Fixed Object	Ran Off Road	Ped. Involved	Backing	Non-Collision	Under/Over Ride	Unspecified	Total
Wisconsin Avenue & Upton Street NW	1.45	1 2%	4 6%	1 2%	18 28%	16 25%	2 3%	5 8%	2 3%	0 0%	4 6%	3 5%	0 0%	8 13%	0 0%	64

SUMMARY AND CONCLUSIONS

This report presents the findings of a Comprehensive Transportation Review (CTR) for the 3900 Wisconsin Avenue development. The purpose of this study is to evaluate whether the project will generate a detrimental impact to the surrounding transportation network. This evaluation is based on a technical comparison of the existing conditions, background conditions, and total future conditions. This report concludes that **the project will not have a detrimental impact** to the surrounding transportation network assuming that all planned site design elements and mitigations are implemented.

Proposed Project

Under existing conditions, the project site is part of the overall Fannie Mae campus, which consists of approximately 720,000 total square feet of office space along the surrounding Wisconsin Avenue corridor. This includes the 3900 Wisconsin Avenue site as well as adjacent properties at 4000 Wisconsin Avenue to the north of the site and 3939 Wisconsin Avenue to the east of the site. Fannie Mae currently employs approximately 3,213 employees in these three buildings.

This Application proposes to redevelop the existing Fannie Mae headquarters located at 3900 Wisconsin Avenue NW into a multi-building, mixed-use development consisting of residential, hotel, retail, office, and other uses with a three-level below-grade parking garage. Overall the development will contain approximately 702 residential units, 34,488 square feet of general retail, just under 86,000 square feet of grocery space, approximately 6,500 square feet of restaurant space to be operated by the grocer, a 650-seat movie theater, 34,056 square feet of office, 37,566 square feet of fitness club space, 34,056 square feet of cultural/arts space, and 140 hotel rooms with an approximately 1,400 space below-grade parking garage. The development will also construct an internal street network consisting of North Lane, East Lane, South Lane, and West Lane. The development program is as follows:

- Parcel A of the development will be located in the eastern portion of the site with frontage on Wisconsin Avenue, and will include the existing building. Parcel A will include 140 hotel rooms and approximately 12,000 square feet grocery space including ground-floor mechanical area and approximately 6,500 square feet of restaurant space to be operated by the grocer.

- Parcel B of the development will be located southwest of Parcel A, with frontage along East Lane. Parcel B will include 174 mid-rise residential units, and approximately 80,000 square feet of grocery space.
- Parcel C of the development will be located southwest of Parcel B, with frontage along South Lane. Parcel C will include 42 mid-rise residential units.
- Parcel D will be located to the north of Parcel C, in the center of the internal roadway network. Parcel D will include 34,056 square feet of office space, a 37,566-square foot fitness center, and 34,488 square foot of retail space. Parcel D will include an additional 34,056 square feet of cultural/arts space.
- Parcel E1 will be located to the west of Parcel D with frontage along West Lane. Parcel E1 will include approximately 198 mid-rise residential units.
- Parcel E2 will be located to the north of Parcel D with frontage on North Lane. Parcel E2 will include 215 mid-rise residential units and a 650-seat movie theater.
- Parcel F will be located to the east of Parcel E2 with frontage on North Lane. Parcel F will include 12,949 square feet of retail space and 74 mid-rise residential units.
- Parcel G will be located in the southwest corner of the site with frontage on Wisconsin Avenue. Parcel G will include 35,680 square feet of hotel amenity space.

A total of approximately 1,400 parking spaces will be shared in a below-grade parking garage. The garage will consist of three (3) levels and will accommodate approximately 600 parking spaces for the residential components and the remaining parking for retail and other commercial components.

The development will include a new pedestrian-friendly roadway network, as well as minor modifications to internal roadways that intersect Wisconsin Avenue under existing conditions. Under current conditions, there are four (4) curb cuts that provide vehicular access to the site: three (3) along Wisconsin Avenue and one (1) along 39th Street. Along Wisconsin Avenue the northernmost curb cut is signalized and provides full access to the site. The two (2) southern curb cuts on Wisconsin Avenue provide access to an existing semi-circular driveway and are both unsignalized, with free-flowing traffic on Wisconsin Avenue. The curb cut on 39th Street provides full access at an unsignalized intersection which functions as a roundabout. It should be noted that this access point is only open during the morning and afternoon peak



periods to help process existing peak office traffic, due to Fannie Mae's traffic control measures.

Future vehicular access to the site will be primarily via two existing curb cuts and one new curb cut off of Wisconsin Avenue, with some residential access via an existing curb cut off of 39th Street. Along Wisconsin Avenue, two of the curb cuts are planned to operate as signalized and one is planned to operate as unsignalized. Under full buildout conditions, the existing half-circle driveway, which fronts the existing building, will be converted to one-way traffic such that the southern curb cut serves outbound traffic only. The northernmost curb cut along Wisconsin Avenue will be relocated such that it connects to the new internal roadway network as opposed to Wisconsin Avenue. The new southern curb cut will connect to a below-grade parking garage as well as loading facilities for the site.

A total of 14 loading berths and service/delivery spaces will be provided on site. Based on an analysis of anticipated loading activity, the development provides sufficient loading facilities to accommodate practical loading needs.

Pedestrian access to the development is expected to occur via Wisconsin Avenue and 39th Street. Additional connections to the adjacent neighborhoods along the north and south sides of the site are possible, but must be coordinated with the neighbors. A connection to the existing trail within Glover Archbold Park will also be available pending coordination with National Park Service.

Internal to the site, much of the space is dedicated to pedestrian circulation and urban plaza area, such that pedestrians can easily traverse between the buildings and the adjoining public space. There is also extensive green space that can be used as pedestrian gathering and recreation areas. Overall, the pedestrian connectivity and circulation within the site is expected to deliver an ideal pedestrian environment.

Multi-Modal Impacts and Recommendations

Transit

The site is adequately served by regional and local transit services such as Metrorail and Metrobus. The site is less than 0.5 miles from the Tenleytown-AU Metrorail station. Nine Metrobus routes along five different lines service the site, with 42 buses scheduled to arrive during the peak morning commute time and 56 buses during the peak afternoon

commute time, providing a good connection to Metrorail and other destinations. Metrobus stops are located within a block of the site along Wisconsin Avenue.

Although the development will be generating new transit trips on the network, the existing facilities have enough capacity to handle the new trips. The Tenleytown-AU Metrorail station does not have existing capacity concerns and is not expected to as a result of the planned development.

Pedestrian

The site is surrounded by a pedestrian network with good connections. Most roadways within a quarter-mile radius provide sidewalks and acceptable crosswalks and curb ramps, particularly along primary walking routes. The area in the vicinity of the site is considered to be above the District average in terms of quality of pedestrian facilities.

As a result of the development pedestrian facilities along the perimeter of the site will be improved. The development will improve sidewalks adjacent to the site such that they meet or exceed the District Department of Transportation (DDOT) requirements and provide an improved pedestrian environment. In addition, the development will include an internal pedestrian network that will provide quality pedestrian facilities and a pedestrian plaza and other open spaces that links the various uses of the site.

Bicycle

The site has adequate access to existing bicycle facilities. Shared lanes on Van Ness Street offer east-west connectivity, and on-street signed routes along 36th and 37th Street offer north-south connectivity. The planned development will meet zoning requirements for bicycle parking and related support facilities/amenities.

Vehicular

The site is well-connected to regional roadways such as Interstate 66 and Interstate 495, primary and minor arterials such as Wisconsin Avenue, Connecticut Avenue, and Massachusetts Avenue, as well as an existing network of collector and local roadways.

In order to determine if the proposed development will have a negative impact on the transportation network, this report projects future conditions with and without the overall Fannie Mae Campus. Following DDOT guidelines there are impacts to seven (7) intersections as a result of the overall Fannie Mae



campus redevelopment. The total future scenario includes the removal of the existing Fannie Mae trips and the addition of site-generated trips for both 3900 Wisconsin Avenue and 4000 Wisconsin Avenue. (The 3939 Wisconsin Avenue building is being absorbed into the Sidwell Friends School campus). As such, these seven (7) intersections are impacted by the combination of the redevelopments and the applicability of mitigation measures as a result of the 3900 Wisconsin Avenue development was appropriately and proportionately reviewed. Mitigation measures were tested at these intersections and following conclusions were made:

- *Van Ness Street & 40th Place*
The addition of traffic generated by the 4000 Wisconsin Avenue redevelopment, adjacent to the 3900 Wisconsin Avenue site, causes the northbound approach at this intersection to operate under unacceptable conditions in the future scenario. Therefore, this report does not recommend any mitigations to this intersection as part of the 3900 Wisconsin Avenue redevelopment. We anticipate that mitigations to this intersection will occur as part of the redevelopment of the neighboring property.
- *Wisconsin Avenue & Van Ness Street*
Signal timings can be adjusted during the morning and afternoon peak periods as recommended in an existing study for 4000 Wisconsin Avenue by Wells and Associates, dated August 2017, such that the eastbound and westbound approaches receive more green time. Additional signal timing adjustments are recommended during the Saturday peak period in order to allow more green time for the northbound and southbound movements.
- *Wisconsin Avenue & Upton Street*
This report recommends improving this intersection by adjusting signal timings. Signal timings can be adjusted such that green time is shifted from the northbound protected left turn to the southbound movement.
- *Wisconsin Avenue & Fannie Mae/Sidwell Friends Driveway*
This report recommends adjusting signal timings such that the northwestbound movement at the Sidwell Friends driveway receives more green time versus northbound and southbound movements along Wisconsin Avenue. Additionally, it is recommended that parking along the northbound approach be restricted during the Saturday

peak period in order to allow the intersection to more adequately process the heavy northbound thru traffic.

- *Wisconsin Avenue & Quebec Street*
This intersection was evaluated to determine if restriping would improve operations, but there is not enough width curb to curb to create an additional lane. Signal warrants were also performed but were not met. Therefore, this report does not recommend any mitigations to this intersection.
- *Wisconsin Avenue & Porter Street*
The intersection can be improved by adjusting signal timings such that the westbound phase receives more green time. It is also recommended that parking along the southbound approach along Wisconsin Avenue be restricted during the Saturday peak period.
- *Wisconsin Avenue & Semi-Circle Site Driveway*
Given that the queue lengths at the eastbound approach are low and are able to be contained on-site, no mitigations are recommended at this intersection.

Four (4) of these intersections were already operating at unacceptable levels under the existing conditions, therefore the proposed mitigation measures will also help improve existing some traffic concerns.

Summary and Recommendations

This report concludes that the proposed development will not have a detrimental impact to the surrounding transportation network assuming that all planned site design elements and operational recommendations at study intersections are implemented.

The development has numerous positive elements contained within its design that minimize potential transportation impacts and improve multi-modal travel, including:

- The inclusion of secure long-term bicycle parking spaces within the development that meet or exceed zoning requirements.
- The installation of short-term bicycle parking spaces at the site that meet or exceed zoning and DDOT requirements.
- The creation of an internal roadway network that will promote pedestrian safety and comfort and improve porosity and circulation for pedestrians through the site.

- The inclusion of electric vehicle (EV) parking spaces within the parking garage.
- A robust Transportation Demand Management (TDM) plan that reduces the demand of single-occupancy, private vehicles during peak period travel times or shifts single-occupancy vehicular demand to off-peak periods.

This report analyzed the potential impacts of the development, and concluded that the development will not have a detrimental impact to the surrounding transportation network, as long as the project implements the recommendations as follows:

- Signal timing improvements to the intersection of Wisconsin Avenue and Van Ness Street.
- Signal timing improvements to the intersection of Wisconsin Avenue and Upton Street.
- Signal timing improvements and peak parking restrictions at the intersection of Wisconsin Avenue and the existing Fannie Mae/proposed North Lane driveway.
- Signal timing improvements to the intersection of Wisconsin Avenue and Quebec Street.
- Signal timing improvements and peak parking restrictions at the intersection of Wisconsin Avenue and Porter Street.
- A new traffic signal at the intersection of Wisconsin Avenue and the proposed south site driveway, which is tied into and coordinated with the existing traffic signal at the intersection of Wisconsin Avenue and Rodman Street.
- Installing/upgrading curb ramps and crosswalks as necessary around the site.
- Implementing the Transportation Demand Management (TDM) plan detailed within the body of this report.

The following summarizes the overall conclusions of the vehicular analysis as it relates to the roadway network as a whole:

- The overall change in use of the Fannie Mae campus results in vehicular traffic that is spread out over a larger amount of time, but generally less concentrated than the existing office use. The change in use also results in a significant increase in weekend traffic compared to that of an office use.
- There is minimal change in overall operations during the morning and afternoon peak hours, with signal timing adjustments able to mitigate the majority of issues. This is because the net increase in traffic on weekdays is more

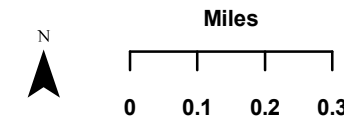
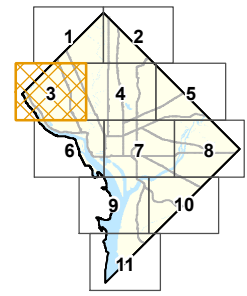
minimal compared to Saturday, but there is a change in the directionality of the traffic.

- More significant changes to the surrounding roadway network are required on Saturday including the removal of parking along some roadways segments for specific time periods. This makes sense given the increase in traffic on Saturday for the proposed use mix as compared to an office use.
- The overall design of the 3900 Wisconsin Avenue site is expected to operate efficiently, such that the majority of vehicular traffic is processed at the signalized intersections, and the internal roadway network is more pedestrian-oriented.

Exhibit F

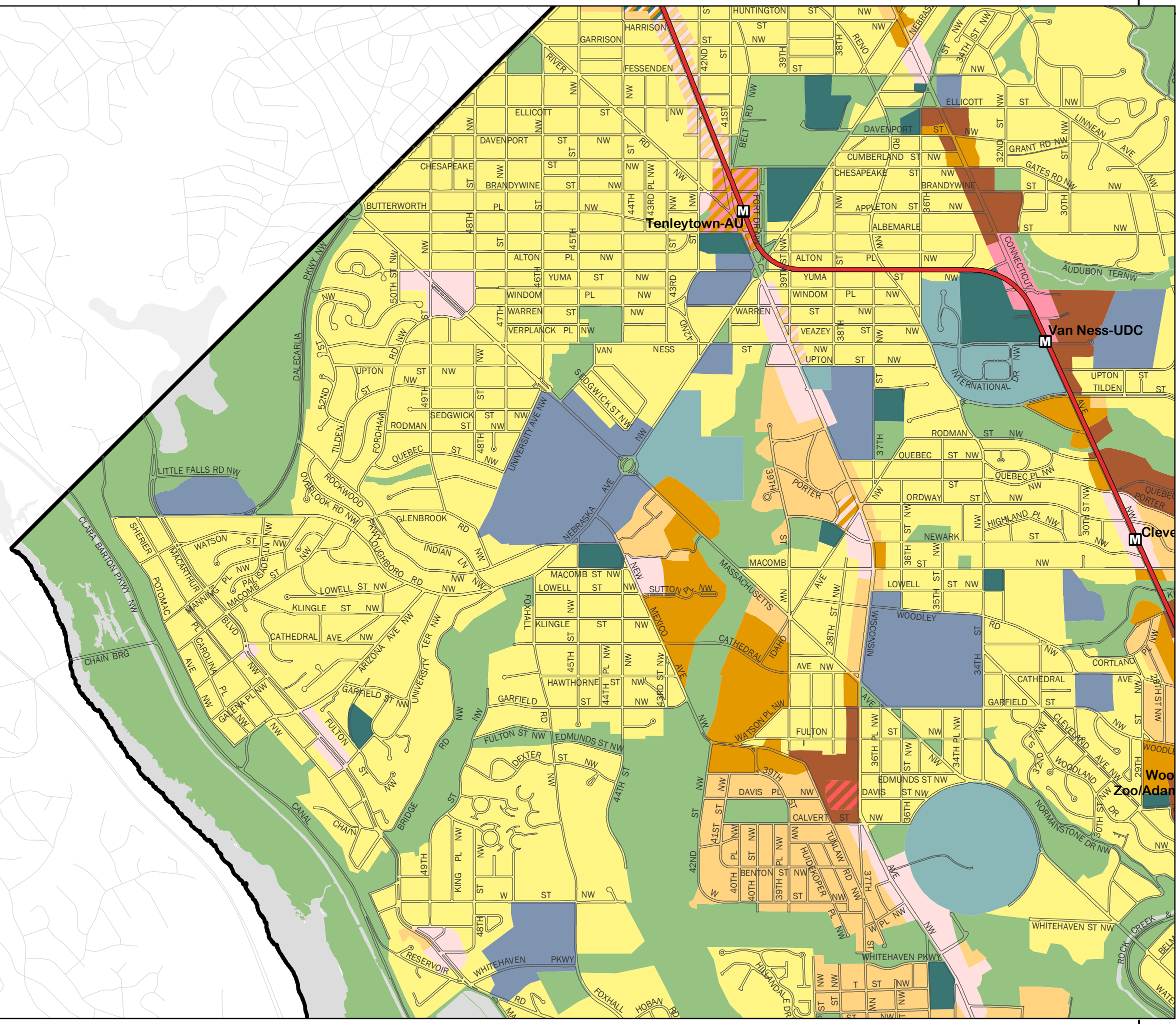
Comprehensive Plan Future Land Use Map 3

- Low Density Residential
- Moderate Density Residential
- Medium Density Residential
- High Density Residential
- Low Density Commercial
- Moderate Density Commercial
- Medium Density Commercial
- High Density Commercial
- Production, Distribution, and Repair
- Federal
- Local Public Facilities
- Institutional
- Parks, Recreation, and Open Space
- Mixed Land Use
- WATER



Government of the District of Columbia
Office of Planning ~ January 2013

This map was created for planning purposes from a variety of sources. It is neither a survey nor a legal document. Information provided by other agencies should be verified with them where appropriate.



Comprehensive Plan Generalized Policy

Map 3

- Neighborhood Conservation Areas
 - Neighborhood Enhancement Areas
 - Land Use Change Areas
 - Land Use Change Areas (Federal)
- Commercial/ Mixed Use Areas**
- Main Street Mixed Use Corridors
 - Neighborhood Commercial Centers
 - Enhanced/New Neighborhood Centers
 - Multi-Neighborhood Centers
 - Enhanced/New Multi-Neighborhood Centers
 - Regional Centers
- Other Map Elements**
- Federal Lands
 - Central Washington
 - Institutional Uses
 - Parks - Federal and District-owned
 - Water Bodies

