

HCM Unsignalized Intersection Capacity Analysis

6: Cesar Chavez & Langham

UNM Gibson Commercial District
2015 PM Peak Hour - Build - With Left Out at Gibson

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (veh/h)	128	1039	134	4	1256	1	136	1	33	6	0	205
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	151	1222	158	5	1478	1	160	1	39	7	0	241
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		Raised			Raised							
Median storage (veh)		1			1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1479			1380			2345	3091	486	2236	3169	493
vC1, stage 1 conf vol							1602	1602		1488	1488	
vC2, stage 2 conf vol							743	1488		748	1681	
vCu, unblocked vol	1479			1380			2345	3091	486	2236	3169	493
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	67			99			0	95	93	91	100	54
cM capacity (veh/h)	451			493			30	26	527	81	60	522
Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1	NB 2	SB 1	SB 2
Volume Total	151	489	489	402	5	591	591	297	160	40	7	241
Volume Left	151	0	0	0	5	0	0	0	160	0	7	0
Volume Right	0	0	0	158	0	0	0	1	0	39	0	241
cSH	451	1700	1700	1700	493	1700	1700	1700	30	336	81	522
Volume to Capacity	0.33	0.29	0.29	0.24	0.01	0.35	0.35	0.17	5.37	0.12	0.09	0.46
Queue Length 95th (ft)	36	0	0	0	1	0	0	0	Err	10	7	60
Control Delay (s)	16.9	0.0	0.0	0.0	12.4	0.0	0.0	0.0	Err	17.2	53.7	17.7
Lane LOS	C				B				F	C	F	C
Approach Delay (s)	1.7				0.0				8002.6		18.7	
Approach LOS									F		C	
Intersection Summary												
Average Delay				464.4								
Intersection Capacity Utilization			64.9%		ICU Level of Service				C			
Analysis Period (min)			15									