

HCM Unsignalized Intersection Capacity Analysis
 20: SR 24 EB Off Ramp & Oak Hill Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	108	436	0	349	281	0
Peak Hour Factor	0.92	0.92	0.78	0.78	0.85	0.85
Hourly flow rate (vph)	117	474	0	447	331	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	640					
pX, platoon unblocked						
vC, conflicting volume	554	165	331			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	554	165	331			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	75	44	100			
cM capacity (veh/h)	462	850	1226			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	117	474	224	224	165	165
Volume Left	117	0	0	0	0	0
Volume Right	0	474	0	0	0	0
cSH	462	850	1700	1700	1700	1700
Volume to Capacity	0.25	0.56	0.13	0.13	0.10	0.10
Queue Length 95th (ft)	25	88	0	0	0	0
Control Delay (s)	15.4	14.4	0.0	0.0	0.0	0.0
Lane LOS	C	B				
Approach Delay (s)	14.6		0.0		0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			6.3			
Intersection Capacity Utilization			41.4%		ICU Level of Service	A
Analysis Period (min)			15			