

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)	65	450	0	336	223	0
Peak Hour Factor	0.82	0.82	0.94	0.94	0.83	0.83
Hourly flow rate (vph)	79	549	0	357	269	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	447	134	269			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	447	134	269			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	85	38	100			
cM capacity (veh/h)	540	890	1292			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	79	549	179	179	134	134
Volume Left	79	0	0	0	0	0
Volume Right	0	549	0	0	0	0
cSH	540	890	1700	1700	1700	1700
Volume to Capacity	0.15	0.62	0.11	0.11	0.08	0.08
Queue Length 95th (ft)	13	109	0	0	0	0
Control Delay (s)	12.8	15.3	0.0	0.0	0.0	0.0
Lane LOS	B	C				
Approach Delay (s)	15.0		0.0		0.0	
Approach LOS	C					

Intersection Summary						
Average Delay			7.5			
Intersection Capacity Utilization	40.7%		ICU Level of Service		A	
Analysis Period (min)	15					