

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)	64	379	0	381	234	0
Peak Hour Factor	0.81	0.81	0.92	0.92	0.86	0.86
Hourly flow rate (vph)	79	468	0	414	272	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	479	136	272			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	479	136	272			
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	47	100			
cM capacity (veh/h)	515	888	1288			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	79	468	207	207	136	136
Volume Left	79	0	0	0	0	0
Volume Right	0	468	0	0	0	0
cSH	515	888	1700	1700	1700	1700
Volume to Capacity	0.15	0.53	0.12	0.12	0.08	0.08
Queue Length 95th (ft)	13	79	0	0	0	0
Control Delay (s)	13.2	13.5	0.0	0.0	0.0	0.0
Lane LOS	B	B				
Approach Delay (s)	13.5		0.0		0.0	
Approach LOS	B					

Intersection Summary			
Average Delay		6.0	
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		