

APPENDIX H

MINIMUM GREEN TIME CALCULATIONS

**Table H-1 - Calculation of Minimum Green Times
Existing Intersection Geometrics**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
1 Palm Avenue/Fifth Street				
North Leg	82	5	4	26
South Leg	82	5	4	26
East Leg	82	5	4	26
West Leg	82	5	4	26
Minimum Northbound/Southbound:				26
Minimum Eastbound/Westbound:				26
2 Palm Avenue/Third Street				
North Leg	80	5	4	25
South Leg	80	5	4	25
East Leg	48	5	4	17
West Leg	80	5	4	25
Minimum Northbound/Southbound:				25
Minimum Eastbound/Westbound:				25
5 Church Avenue/Fifth Street				
North Leg	46	5	4	17
South Leg	n/a	n/a	n/a	n/a
East Leg	n/a	n/a	n/a	10
West Leg	90	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				17
7 SR-30 Southbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n/a
South Leg	30	5	4	13
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				13

**Table H-1 - Calculation of Minimum Green Times
Existing Intersection Geometrics**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
8 SR-30 Northbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n
South Leg	52	5	4	18
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
				Minimum Northbound/Southbound: 10
				Minimum Eastbound/Westbound: 18
9 Boulder Avenue/Fifth Street				
North Leg	90	5	4	28
South Leg	90	5	4	28
East Leg	90	5	4	28
West Leg	90	5	4	28
				Minimum Northbound/Southbound: 28
				Minimum Eastbound/Westbound: 28

**Table H-2 - Calculation of Minimum Green Times
Year 2008 Mitigated -- Land Use Alternative 2, Access Alternative C**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
1 Palm Avenue/Fifth Street				
North Leg	82	5	4	26
South Leg	94	5	4	29
East Leg	82	5	4	26
West Leg	82	5	4	26
Minimum Northbound/Southbound:				26
Minimum Eastbound/Westbound:				29
2 Palm Avenue/Third Street				
North Leg	80	5	4	25
South Leg	80	5	4	25
East Leg	48	5	4	17
West Leg	80	5	4	25
Minimum Northbound/Southbound:				25
Minimum Eastbound/Westbound:				25
5 Church Avenue/Fifth Street				
North Leg	46	5	4	17
South Leg	46	5	4	17
East Leg	n/a	n/a	n/a	10
West Leg	90	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				17
7 SR-30 Southbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n/a
South Leg	30	5	4	13
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				13

Table H-2 - Calculation of Minimum Green Times
Year 2008 Mitigated -- Land Use Alternative 2, Access Alternative C

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
8 SR-30 Northbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n
South Leg	52	5	4	18
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
				Minimum Northbound/Southbound: 10
				Minimum Eastbound/Westbound: 18
9 Boulder Avenue/Fifth Street				
North Leg	90	5	4	28
South Leg	90	5	4	28
East Leg	90	5	4	28
West Leg	90	5	4	28
				Minimum Northbound/Southbound: 28
				Minimum Eastbound/Westbound: 28

**Table H-3 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 1, Access Alternative A**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
1 Palm Avenue/Fifth Street				
North Leg	94	5	4	29
South Leg	106	5	4	32
East Leg	94	5	4	29
West Leg	94	5	4	29
Minimum Northbound/Southbound:				29
Minimum Eastbound/Westbound:				32
2 Palm Avenue/Third Street				
North Leg	104	5	4	31
South Leg	104	5	4	31
East Leg	48	5	4	17
West Leg	92	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				31
5 Church Avenue/Fifth Street				
North Leg	46	5	4	17
South Leg	n/a	n/a	n/a	n/a
East Leg	n/a	n/a	n/a	10
West Leg	90	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				17
7 SR-30 Southbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n/a
South Leg	30	5	4	13
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				13

**Table H-3 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 1, Access Alternative A**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
8 SR-30 Northbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n
South Leg	64	5	4	21
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				21
9 Boulder Avenue/Fifth Street				
North Leg	102	5	4	31
South Leg	102	5	4	31
East Leg	90	5	4	28
West Leg	102	5	4	31
Minimum Northbound/Southbound:				31
Minimum Eastbound/Westbound:				31

**Table H-4 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 1, Access Alternative B**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
1 Palm Avenue/Fifth Street				
North Leg	82	5	4	26
South Leg	82	5	4	26
East Leg	94	5	4	29
West Leg	94	5	4	29
Minimum Northbound/Southbound:				29
Minimum Eastbound/Westbound:				26
2 Palm Avenue/Third Street				
North Leg	80	5	4	25
South Leg	92	5	4	28
East Leg	48	5	4	17
West Leg	80	5	4	25
Minimum Northbound/Southbound:				25
Minimum Eastbound/Westbound:				28
5 Church Avenue/Fifth Street				
North Leg	46	5	4	17
South Leg	46	5	4	17
East Leg	n/a	n/a	n/a	10
West Leg	90	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				17
7 SR-30 Southbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n/a
South Leg	30	5	4	13
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				13

**Table H-4 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 1, Access Alternative B**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
8 SR-30 Northbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n
South Leg	64	5	4	21
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				21
9 Boulder Avenue/Fifth Street				
North Leg	102	5	4	31
South Leg	102	5	4	31
East Leg	90	5	4	28
West Leg	102	5	4	31
Minimum Northbound/Southbound:				31
Minimum Eastbound/Westbound:				31

**Table H-5 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 2, Access Alternative C**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
1 Palm Avenue/Fifth Street				
North Leg	94	5	4	29
South Leg	94	5	4	29
East Leg	94	5	4	29
West Leg	94	5	4	29
Minimum Northbound/Southbound:				29
Minimum Eastbound/Westbound:				29
2 Palm Avenue/Third Street				
North Leg	92	5	4	28
South Leg	92	5	4	28
East Leg	48	5	4	17
West Leg	92	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				28
5 Church Avenue/Fifth Street				
North Leg	46	5	4	17
South Leg	n/a	n/a	n/a	n/a
East Leg	n/a	n/a	n/a	10
West Leg	90	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				17
7 SR-30 Southbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n/a
South Leg	30	5	4	13
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				13

**Table H-5 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 2, Access Alternative C**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
8 SR-30 Northbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n
South Leg	64	5	4	21
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				21
9 Boulder Avenue/Fifth Street				
North Leg	102	5	4	31
South Leg	102	5	4	31
East Leg	90	5	4	28
West Leg	102	5	4	31
Minimum Northbound/Southbound:				31
Minimum Eastbound/Westbound:				31

**Table H-6 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 1, Access Alternative A**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
1 Palm Avenue/Fifth Street				
North Leg	82	5	4	26
South Leg	82	5	4	26
East Leg	94	5	4	29
West Leg	94	5	4	29
Minimum Northbound/Southbound:				29
Minimum Eastbound/Westbound:				26
2 Palm Avenue/Third Street				
North Leg	80	5	4	25
South Leg	92	5	4	28
East Leg	48	5	4	17
West Leg	80	5	4	25
Minimum Northbound/Southbound:				25
Minimum Eastbound/Westbound:				28
5 Church Avenue/Fifth Street				
North Leg	46	5	4	17
South Leg	n/a	n/a	n/a	n/a
East Leg	n/a	n/a	n/a	10
West Leg	90	5	4	28
Minimum Northbound/Southbound:				28
Minimum Eastbound/Westbound:				17
7 SR-30 Southbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n/a
South Leg	30	5	4	13
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				13

**Table H-6 - Calculation of Minimum Green Times
Year 2030 Mitigated -- Land Use Alternative 1, Access Alternative A**

	Street Width (ft)	Assumed # Peds/Cycle	Walk Speed (ft/s)	Minimum Green (sec)
8 SR-30 Northbound Ramps/Fifth Street				
North Leg	n/a	n/a	n/a	n
South Leg	64	5	4	21
East Leg	n/a	n/a	n/a	10
West Leg	n/a	n/a	n/a	10
Minimum Northbound/Southbound:				10
Minimum Eastbound/Westbound:				21
9 Boulder Avenue/Fifth Street				
North Leg	102	5	4	31
South Leg	102	5	4	31
East Leg	90	5	4	28
West Leg	102	5	4	31
Minimum Northbound/Southbound:				31
Minimum Eastbound/Westbound:				31