	RECOMMENDED		TIMING PARAMETERS				
Speed (mph)	Setback (feet)	Equiv. Second	Min Initial	Max Initial	Passage	Min Gap	Notes
30	80*	1.8	12	12	2.5	2.5	**Low speeds - urban** Detection is primarily to gap out signal. Loops are placed at 80' from the stop bar with a 2.5 second gap to extend
35	**200**	**3.9**	**15**	**24**	**3.0**	**2.5**	**Urban and Suburban Arterials –** Detection is primarily used to determine minimum green times and gap out signal. Detection will be placed to provide limited decision zone protection. . Loops are placed at 4 - 5.5 seconds from the stop bar with a 2.5 second gap to extend vehicles through
40	300	5.1	15	34	6.0	2.5	
45	330	5.0	15	37	6.0	2.5	
50	370	5.0	15	41	6.0	2.5	
55	445	5.5	15	49	6.0	3.0	**High Speed Rural or Access Controlled Arterials –** Detection is primarily used to determine minimum green times and gap out signal. Loops are placed at approximately 5.5 seconds from the stop bar with a 3 second gap to extend vehicles through the decision zone.
60	485	5.5	15	53	6.0	3.0	
>45	**255', 385' ****	**Varies (4-6)**	**15**	**Varies (30-42)**	**3.0 (since 2)**	**2.5**	

SCDOT Setback Detector Placement and Volume Density Timings

Figure 4-7

Setback distances are approximate and may be adjusted based on presence of driveways or pavement types.

* Considered low speed - decision zone not an issue - volume density not used

** Settings for existing setback detection, consisting of 2 6'X6' loops per lane at 255' and 385'

SCDOT Stop Bar Detector Placement

	RECOMMENDED		TIMING PARAMETERS			
Speed (mph)	Setback (feet)	Equiv. Second	Min Initial	Max Initial	Passage	Min Gap
n/a	@Stop Bar	n/a	Typically 4-8 seconds*	n/a	2-3	n/a

(Typically side streets and left turn lanes)

Figure 4-8

* This value can be increased to accommodate pedestrian crossing time each cycle; however additional minimum green time can be obtained by the activation of a pedestrian button.

	1 loop per lane	2 loops per lane
Approach Lanes	Seconds	Seconds
Single through lane	2-3	1-1.5
Two through lanes	1.5-2.0	0.5-1.0
Three (or more) through lanes	1.0-1.5	0.5-0.7

Volume Density Seconds per Actuation

Figure 4-9

These values are approximate and engineering judgement should be used. When traffic is evenly distributed over multiple lanes, use lower number. Increase for high truck traffic.