

VISSIM Calibration Parameters for Louisiana

Calibration Parameters	Default Value	Suggested Range	
		Basic Segment	Weaving/Merge/Diverge
Freeway Car Following (Wiedemann 99)			
CCO Standstill Distance	4.92 ft	4.5 to 5.5 ft	> 4.92 ft
CC1 Headway Time	0.90 sec	0.85 to 1.05 sec.	0.90 to 1.50 sec.
CC2 'Following' variation	13.12 ft	6.56 to 22.97 ft	13.12 to 39.37 ft
CC3 Threshold for entering 'following'	-8	use default	
CC4 Negative 'following' threshold	-0.35	use default	
CC5 Positive 'following' threshold	0.35	use default	
CC6 Speed Dependency of oscillation	11.44	use default	
CC7 Oscillation acceleration	0.82 ft/s ²	use default	
CC8 Standstill acceleration	11.48 ft/s ²	use default	
CC9 Acceleration at 50 mph	4.92 ft/s ²	use default	
Arterial Car Following (Wiedemann 74)			
Average standstill distance	6.56 ft	3.28 to 6.56 ft	
Additive part of safety distance	2.00	2 to 2.2	
Multiplicative part of safety distance	3.00	2.8 to 3.3	
Lane Change			
Maximum deceleration	-13.12 ft/s ² (own) -9.84 ft/s ² (trail)	-15 to -12 ft/s ² -12 to -8 ft/s ²	
-1 ft/s ² per distance	200 ft (freeway) 100 ft (arterial)	> 100 ft > 50 ft	
Accepted deceleration	-3.28 ft/s ² (own) Arterial: -3.28 ft/s ² (trail) Freeway: -1.64 ft/s ² (trail)	-4 to -2.5 ft/s ² (own) -2.5 to -1.5 ft/s ² (trailing for Freeway)	
Waiting time before diffusion	60 sec	60 sec	
Min. headway (front/rear)	1.64 ft	1.5 to 2.0	
Safety distance reduction factor	0.6	0.25 to 1.0	
Max dec. for cooperative braking	-9.84 ft/s ²	-15 to -8 ft/s ²	
Overtake reduced speed areas	Depends on field conditions		
Advanced Merging	Checked		
Emergency stop	16.4 ft	Depends on field conditions	
Lane change	656.2 ft	Arterial: > 1500'	Freeway: > 2500'
Reduction factor for changing lanes before signal	0.6	0.6	
Cooperative lane change	Unchecked	Checked (particularly for merge/diverge areas on the freeway)	