

Traffic Optimization Report

This report analyzes traffic congestion levels and suggests optimizations for traffic light durations.

Initial - Green Light Duration = 5s, Yellow Light Duration = 3s, Red Light Duration = 3s

Lane	Congestion Level	Congestion Category
straight_left	13.47	Medium
straight_right	11.74	Medium
straight_front	3.29	Good
straight_down	0.22	Good
right_down	5.11	Medium
right_left	9.35	Medium
right_front	3.49	Good
right_right	0.22	Good
left_left	6.69	Medium
left_right	12.16	Medium
left_front	6.39	Medium
left_down	3.47	Good

The traffic light durations have been optimized based on the analysis to improve traffic flow.

Based on the data analysis, the recommended average durations for optimized traffic flow are:

Green Light = 5.17s, Yellow Light = 3s, Red Light = 3s.