

Gresham Phase 2B Signal System and Optimization Project

Table of Contents

1.0	EXECUTIVE SUMMARY	PAGE 1
	System Integration	1
	Signal Timing Plan Development	2
	Project Benefits	3
	Recommended Improvements	5
2.0	SYSTEM INTEGRATION	PAGE 7
	System Communication	7
	Series 2000 Graphic	7
	Sampling Loops	11
3.0	SIGNAL TIMING PLAN DEVELOPMENT	PAGE 13
	Data Collection	13
	Model Coding and Calibration	14
	Signal Timing Optimization	16
	Field Implementation and Fine-Tuning	19
	Affects on other Modes	19
4.0	PROJECT BENEFITS	PAGE 20

List of Figures

1.0	EXECUTIVE SUMMARY	
	Figure 1 Signals Connected to the Signal System	2
2.0	SYSTEM INTEGRATION	
	Figure 2 Project Benefits	4
	Figure 3 Communication Channels	8
	Figure 4 Sampling Loops	12
3.0	SIGNAL TIMING PLAN DEVELOPMENT	
	Figure 5 Weekday Traffic Flow Profile	15

Gresham Phase 2B Signal System and Optimization Project

4.0	PROJECT BENEFITS	
	Figure 6	Travel Time Savings 21
	Figure 7	Vehicular Delay Savings 22
	Figure 8	Fuel Consumption Savings 23
	Figure 9	Vehicular Stops Savings 24
	Figure 10	System Speed Improvements 25

List of Tables

1.0	EXECUTIVE SUMMARY	
	<i>No Tables contained in this Section</i>	
2.0	SYSTEM INTEGRATION	
	Table 1	Traffic Signal Communications 9
3.0	EXECUTIVE SUMMARY	
	Table 2	Time of Day Schedule-Powell at Hogan 18
	Table 3	Time of Day Scheduel-Waters to Cleveland 18
4.0	PROJECT BENEFITS	
	<i>No Tables contained in this Section</i>	

