



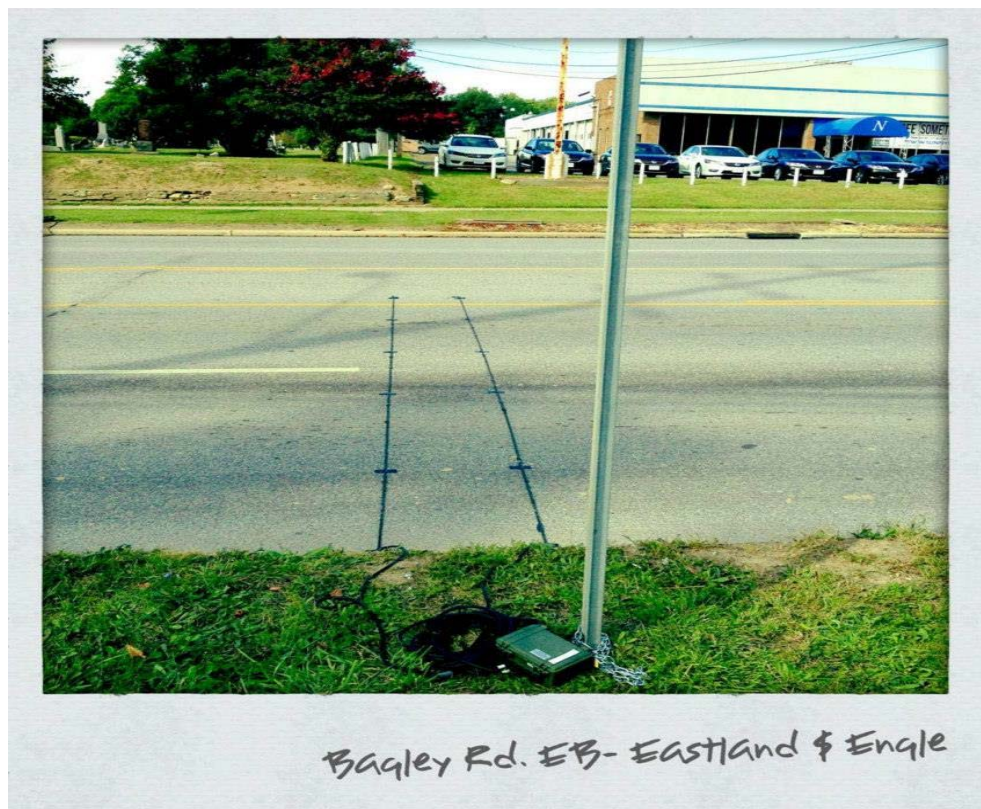
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**PROJECTS –  
TRAFFIC ENGINEERING SERVICES**

PROJECT: Traffic Count Program –  
NOACA (Northeast Ohio Areawide Coordinating Agency)

CONTACT: Mr. Dave Kuebler  
NOACA  
1299 Superior Road  
Cleveland, Ohio 44114

DESCRIPTION: This project involved the collection of 24-hour traffic data at over a thousand locations from 2012 – 2015 throughout Lorain, Medina, Cuyahoga, Lake and Geauga Counties. The collection of the classification and speed traffic data was collected using Jamar Apollyon traffic counters in some very difficult weather and geometric conditions.



PROJECT: Re-Timing Analysis – Mayfield Road  
Mayfield Heights

CONTACT: Mr. Joseph Fornaro  
City of Mayfield Heights  
6154 Mayfield Road  
Mayfield Heights, Ohio 44124

DESCRIPTION: This signal re-timing project was initiated by the City of Mayfield Heights and included the re-timing of 17 signalized intersections on Mayfield Road (US 322) between Iroquois Avenue and Gates Mill Towers. The objectives of the study were to calculate and implement up-to-date clearance timings at the intersections along with optimizing the timings and offsets of each study intersection in order to reduce congestion and increase travel speeds along the corridor.

Based on the results of travel runs before and after the signal re-timing, there was shown to be a 22% reduction in travel time and a 48% reduction in stop delays. This resulted in an increase in travel speeds of 28% and is expected to save 1.6 million dollars a year in time and gas savings. The signal re-timing project was able to achieve a benefit to cost ratio of 88 to 1.



PROJECT: Corridor Analysis – Ridge Road  
Brooklyn, Ohio

CONTACT: Mr. Dave Palmer, P.E.  
Path Master, Inc.  
1960 Midway Drive  
Twinsburg, Ohio 44087

DESCRIPTION: This corridor study was prepared for to adequately assess the average travel time through seven (7) signalized intersections on Ridge Road between the I-480 EB Ramps to Memphis Road. This project involved no actual construction of additional lanes or the installation of new signal equipment but instead involved the revision to the signal timings and offsets along the corridor to reduce the delay experienced along the corridor.

The results of the travel time studies showed the timing improvements resulted in a 25% reduction on travel time for this 1.5-mile corridor in addition to increasing the travel times by 6.1 miles per hour. The reduction in stops and delays was shown to reduce emissions and saved motorists 124,392 gallons of gasoline each year. The Ridge Road Corridor is an example of the immense benefits provided by the optimization of traffic timings along a signal corridor.



PROJECT: Corridor Analysis – CUY-77-82-2.82-11.59  
Broadview Heights, Ohio

CONTACT: Mr. Dave Palmer, P.E.  
Path Master, Inc.  
1960 Midway Drive  
Twinsburg, Ohio 44087

DESCRIPTION: This speed and delay study was prepared for the signalization project on SR 82 in Broadview Heights, Ohio. The signalization project involved the construction of 3 additional traffic signals at the I-77 ramp intersections and the interconnection of all 6 signals within the corridor.

The optimization of the traffic signal timings and offsets resulted in a 7% reduction in travel time along the corridor even with three additional signals on the corridor. The reduction in delay was determined to equate to a savings of 19,710 gallons of gasoline per year.

