

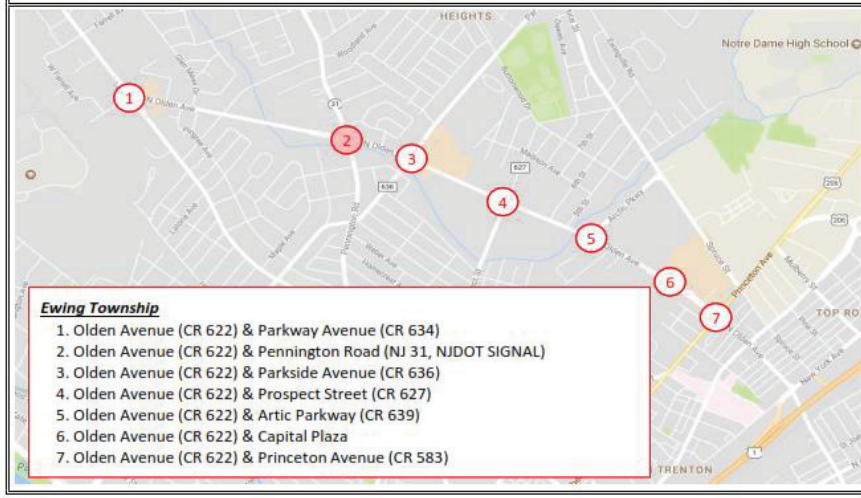
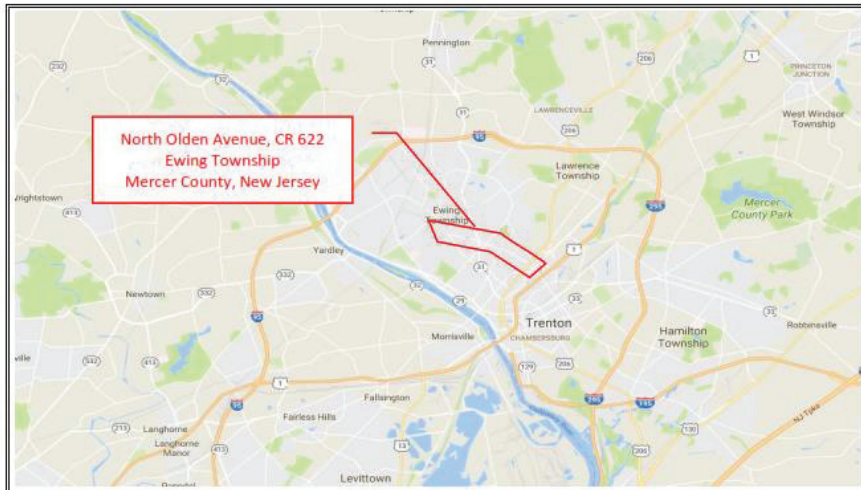


# DVRPC NEW JERSEY COUNTY SIGNAL RETIMING INITIATIVE

## North Olden Avenue, Mercer County Route 622



**LOCATION MAP**  
 DVRPC NEW JERSEY SIGNAL TIMING INITIATIVE  
 CR 622 - OLDEN AVENUE  
 EWING TOWNSHIP, MERCER COUNTY



Traffic signal retiming work at 7 signalized intersections along North Olden Ave (CR 622) in Ewing Township, Mercer County. This work started May 2018 following completion of Phase 1 which established a consensus priority list. Updated timing plans, adjustments to cycle lengths, splits, offsets, and introduction of additional time-of-day coordination patterns were implemented by October 31, 2018.

### Data Collection/Analysis

The TWT team used ADT counts to determine the number of system programs. Through use of Sychro/SimTraffic 8.0 and TruTraffic, the team provided traffic demand accommodations throughout the day.

### Implementation

During the week of October 8, 2018, the TWT team implemented the optimization timing plans into the Parkside Ave and Princeton Ave, and North Olden Ave and Parkway Ave intersections. All clocks have been adjusted to a US Navy observatory time based on UTC.

### Fine Tuning

Split and offset adjustments were made to manage movements and intersections that were over capacity to manage queue spillback and blockage using Tru-Traffic and a GPS unit. Several minor adjustments were made to split and offset times.

### North Olden Ave Peak Hour Travel Time and Delay Comparison

Direction		AM Peak		Mid-day Peak		PM Peak		Weekend Mid-day Peak	
		Travel Time (s)	Delay (s)	Travel Time (s)	Delay (s)	Travel Time (s)	Delay (s)	Travel Time (s)	Delay (s)
Southbound	Existing	127	20	155	47	153	46	149	42
	Implemented	115	7	138	31	147	39	138	30
	Difference	-13*	-13	-16*	-16	-7*	-7	-11	-11*
	% Difference	-10%	-64%	-11.0%	-35%	-4%	-14%	-8%	-27%
Northbound	Existing	135	13	157	35	166	44	169	47
	Implemented	120	-3	135	12	129	6	126	3
	Difference	-15	-15*	-23*	-23	-37*	-37*	-44*	-44
	% Difference	-11%	-122%	-14.0%	-66%	-22%	-85%	-26%	-93%
Both Directions	Existing	131	16	156	41	159	45	159	44
	Implemented	117	2	136	21	138	23	132	17
	Difference	-14	-14	-20	-20	-21	-22	-28*	-28
	% Difference	-11%	-86%	-13%	-48%	-13%	-49%	-17%	-62%

\*Value as reported in Tru-Traffic summary report. Rounding errors possible.

**Southbound:** Parkside Ave to Capital Plaza  
**Northbound:** Capital Plaza to Parkside Avenue



Abeck Gerken, Inc., Imperial Traffic & Data Collection, McMahon Associates, Inc.  
 In Partnership With:  
 Burlington County, Camden County, Gloucester County, Mercer County, NJDOT