

TRAFFIC COUNTS, SIGNAL WARRANTS ANALYSIS, ELECTRICAL ENGINEERING DESIGN AND SIGNAL COORDINATION

CLIENTS AND PRIME CONSULTANTS: Illinois Department of Transportation / PTB 170, Item 6 Parsons Engineering / Douglas Brazelton, P.E.

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PROJECT PURPOSE:

- Assess Existing Traffic Patterns and Turning Movements
- Identify Opportunities to Improve Intersections and Corridors
- Support Warrants for Signalization Improvements

DAMA Consulting, Inc., has worked on traffic count, signalization, and intersection projects in the City of Chicago and Suburban areas of IDOT District 1. Project sites have included the Woodlawn, Hyde Park, Washington Park, and Englewood neighborhoods and the municipalities of Vernon Hills, Long Grove, Buffalo Grove, Elmhurst, Villa Park, Addison, and Lockport.

DAMA developed intersection diagrams, geometric data, traffic counts, truck counts, and pedestrian counts and assess turning movements and signaling conditions. These findings were used to support warrants for traffic signalization changes and to identify intersection improvement projects. DAMA has also developed dynamic traffic simulation models using the VISSIM modeling package to assess existing traffic patterns, model crash hazards, and identify how Intelligent Transportation System (ITS) deployments could produce benefits including improving traffic flows and reducing the impacts of roadway incidents.

As the Divsion Head of the Traffic Engineering for the Cook County Highway Department, Monte Chen, PE, a Senior Transportation Engineer with DAMA, oversaw the expansion of Lake-Cook Road from a 2 lane, undivided roadway to a 5 to 6 lane corridor with medians and gradeseparated interchanges. His work on at the Lake-Cook Road and Milwaukee Avenue (US-45) interchange defined a grade separated interchange that accommodated users of the Des Plaines River Trail, automobile traffic, and access to adjacent businesses.

IMAGE SOURCES: Google, Inc. Google Maps Web Site. Retrieved 28 October 2015 from maps.google.com; Illinois Department of Transportation: ITS Program Office. TravelMidwest.com Web Site. Retrieved 29 April 2016 from www.travelmidwest.com; U.S. Census Bureau. "TIGER/Line 2010: Counties (and Equivalent)" and "TIGER/Line 2014: Places." U.S. Census Bureau TIGER/Line Shapefiles Web Site. Retrieved 10 November 2015 from www.census.gov; Illinois Department of Transportation. "HWY2014: Highways." Illinois Technology Transfer Center Web Site. Retrieved 22 December 2015 from http://apps.dot.illinois. gov/gist2/







