



February 22, 2023

Mr. Eric Otto, P.E.
Civil Engineer
Village of Oak Park
201 South Boulevard
Oak Park, Illinois 60302

**RE: Task Order Request 23-16 – Madison Street Road Diet
Village of Oak Park | Cook County**

Dear Mr. Otto:

On behalf of V3 Companies, Ltd., we are pleased to submit this task order request for traffic engineering services for the Madison Street road diet project for the Village of Oak Park. The services listed herein will be provided under the terms and conditions of our engineering shortlist services agreement.

Project Understanding

V3 understands that the Village of Oak Park (Village) completed a road diet along Madison Street from Harlem Avenue to Austin Boulevard in 2019 and 2020. Madison Street originally provided two travel lanes in each direction in this area. The road diet resulted in Madison Street providing one travel lane with a bike lane and parking lane in each direction separated by a landscaped or striped median, two-way left turn lane, or left turn lanes.

Traffic and safety data was collected along the corridor and at primary intersections pre-road diet in 2016 to 2018 and post-road diet in 2020 to 2022. The Village is requesting V3 to review the traffic and safety data from the pre- and post-road diet conditions and provide a summary of the results. The summary and comparison will be provided along Madison Street and the cross streets where data is provided for both the pre- and post-conditions.

Additionally, a Synchro traffic model will be set up for the length of the entire corridor for the current post road diet conditions with intersections where traffic data is provided. Additional intersections could be included with the traffic model if traffic data and traffic signal timings are available. A traffic capacity analysis will be conducted at the intersections along the corridor for the weekday am, weekday pm, and Saturday midday peak hours. The results of the analysis will be summarized and reviewed for potential improvements to increase the operational efficiency of the corridor and intersections. This could include coordination, optimization, and retiming of the signal timings along the Madison Street corridor and the traffic signals at the Washington Boulevard/Oak Park Avenue and Washington Boulevard/Ridgeland Avenue intersections.

Scope of Services

Data Collection

- Obtain available traffic and safety data for the roadway network along Madison Street from Harlem Avenue to Austin Boulevard. It is our understanding that the Village has pre- and post-road diet data that will be shared, including weekday am, weekday pm, and Saturday midday peak hour traffic data, traffic signal timings, and crash data.
- Identify programmed roadway improvements or other major developments in the area, which could impact traffic conditions along the corridor.
- Conduct a field visit to the site to verify existing conditions including existing traffic control, speed limits, lane use, and adjacent land use.

Traffic Modeling and Capacity Analysis

- Set up a Synchro traffic model of the Madison Street corridor and the intersections of Washington Boulevard/Oak Park Avenue and Washington Boulevard/Ridgeland Avenue and evaluate existing post-road diet conditions at intersections with traffic data provided by the Village.
- It is our understanding that the Village currently has an existing Synchro model. V3 will utilize as much of the Village's existing model when setting up the updated model.
- Conduct the evaluation during the weekday am, weekday pm, and Saturday midday peak hours.
- V3 will submit the draft Synchro model to the Village for review and revise up to two times based on comments received.
- Review existing capacity analysis results and develop potential improvements at the study area intersections to improve the efficiency and operations of the intersections.

Review and Summarize Data

- Review the traffic and safety data provided by the Village for the pre- and post-road diet conditions, comparing traffic volumes, crash data, and capacity analysis results at the study area intersections.
- Provide a summary of the comparison of the pre- and post-road diet traffic, safety, and capacity analysis results. Summarize the recommended improvements, develop budget level cost estimates, and rank the potential improvements for submittal to the Village.
- Provide Village with final electronic Synchro models with optimized traffic signal timing plans for the weekday am, weekday pm, and Saturday peak hours.
- Meet with Village staff to present findings.
- Present summary and findings to Transportation Commission if needed.
- Provide summary for Village Board if needed.

Implementation of Updated Traffic Signal Timing Plans (to be performed by HLR)

- It is anticipated that updated traffic signal timing plans at the Madison Street signalized intersections will improve traffic flow along the corridor.

- If needed, V3 will provide the recommended scope for any additional traffic data collection needed to prepare supplemental or additional traffic signal timing plans, as requested by the Village.
- After review and approval by the Village, the updated traffic signal timing plans will be uploaded and implemented at the identified intersections. This will be completed by a subconsultant that is currently SCAT prequalified with IDOT.
- The SCAT subconsultant will prepare a SCAT report for the Village's record.
- We have provided their resumes and project experience at the end of the request.

Prepare Supplemental and Additional Traffic Signal Timing Plans (if needed)

- If requested by the Village, V3 will prepare supplemental or additional traffic signal timing plans at the study area intersections. A separate scope and fee will be provided for each request.

Compensation

For the Scope of Services provided herein, V3 shall be paid hourly, based on the attached Billing Rate Schedule, with a not-to-exceed fee of \$36,665.00. An hour and rate breakdown for both HLR and V3 has been included to provide more detail of our fee.

This fee includes reimbursable expenses such as mileage, printing, postage, messenger service, and other similar project-related items. If Additional Services are required, they will be subject to a separate agreement. No additional services will be performed without prior written approval from the Village. The Village will be invoiced monthly for professional services and reimbursable expenses.

EXTENT OF REQUEST

This task order request is for traffic engineering services as described above. Furthermore, this request does not include services for:

- Traffic counts at any roadways or intersections;
- Roadway and intersection analyses in addition to those specified above;
- Intersection Design Studies, roadway design, and/or permitting services of any kind, including permit fees and bonds, in addition to that specified above.

MISCELLANEOUS CONTRACTUAL ITEMS

If this request is found to be satisfactory, please sign in the space provided and return one signed copy to our office. Receipt of the signed authorization will serve as our Notice to Proceed for this work. Please feel free to contact us should you have any questions or comments regarding this request. We look forward to continuing our work with the Village.

Sincerely,
V3 Companies, Ltd.



Jason Holy, P.E.
Project Manager



Vincent J. Del Medico, P.E.
Director of Transportation and Municipal Engineering

Cc: Mike Rehtorik, V3

Accepted for:
VILLAGE OF OAK PARK

BY: _____
Authorized Signature

TITLE: _____

DATE: _____



PROFESSIONAL REGISTRATIONS

Professional Engineer, Illinois,
#062.58432, 2005

Professional Engineer, Indiana,
#PE11800571, 2018

Professional Traffic Operations
Engineer, (PTOE), 2009

YEARS OF EXPERIENCE

22 / 17 at HLR

EDUCATION

M.B.A., Finance, 2004, DePaul
University, Chicago, IL

B.S. Civil Engineering, 2000, Purdue
University, West Lafayette, IN

PROFESSIONAL CERTIFICATIONS

Traffic Signal Level II, IMSA, 2018

CONTINUING EDUCATION

ACEC IDOT Phase I Training, April
2016

FHWA Proven Safety Countermeasures
for Intersections, Oct. 2014

Traffic Calming Toolbox Webinar,
Traffic Logix, June 2012

Taking Trip Generation in the Next
Generation, Transoft, March 2012

ADA/PROWAG, IDOT, March 2012

The New AASTO Greenbook, APWA,
March 2012

Pedestrian Safety & Accessibility
Considerations at Roundabouts,
Pedestrian and Bicycle Information
Center, March 2012

IDOT Geometrics Seminar, ACEC,
November 2011

Writing the Perfect NEPA Cumulative
Impact, ACEC, April 2010

Traffic Mediation - Neighborhood and
Pedestrian Safety Programs, APWA,
May 2010

Amy is our Phase I and Traffic Engineering Manager with 22 years of experience in the preparation of Environmental Assessments, Environmental Class of Action Determination documents, and Section 4(f) environmental documents for federally funded projects. She also has extensive public involvement experience. Amy has prepared public hearing presentations and conducted regulatory agency coordination. She is involved in the preparation of highway location/design reports, intersection design studies, traffic projects, traffic capacity analysis, traffic systems analysis and modeling, accident analysis and safety improvement studies, and cost estimates. Prior to joining HLR, Amy worked for IDOT for six years as a Federal Aid Location Engineer (Phase I Project Manager).

REPRESENTATIVE PROJECTS - SIGNAL COORDINATION AND TIMING (SCAT)

Traffic Studies, SCAT, and Traffic Signal Timing Optimization & Re-optimization, Various Public Agencies. As the head of HLR's Traffic Engineering department, Amy assigns work, manages projects, conducts QA/QC reviews, monitors schedules and budgets, and ensures the traffic engineering staff has the training and resources needed to complete projects accurately and efficiently.

SCAT, PTB 185-003 and 161-010, IDOT District 1. Principal-in-Charge for this various/various project optimizing various traffic signal systems in IDOT District 1 per District Traffic Signal Special Provisions including preparation of a SCAT report with a Traffic Responsive Program and Time of Day plans. Systems optimized include IL 68 and U.S. 14 (Eagle 4K), IL 31 and IL 56 (Eagle 8P), IL 43/Harlem Avenue (Econ 61), U.S. 6/159th Street (Eagle 6), IL 132/Grand Avenue (Eagle 7F), IL 59 (Econ 133), U.S. 6/Southwest Highway (Econ 181), U.S. 34/Ogden Avenue (Econ 42).

Signal Coordination and Timing (SCAT), PTB 147-015, IDOT District 1. Principal-in-Charge of the team of engineers involved in all aspects of signal system monitoring, as well as SCAT system optimization projects and on-call assistance to the district's area engineers to respond to signal-related complaints and requests for trouble-shooting and timing adjustments.

Traffic Signal Operations Management Coordination, Kane County Division of Transportation. Principal-in-Charge of the project, including assisting KDOT with the management of their traffic signal operations and the inventory of traffic signal and lighting hardware and software.

Traffic Signal Operations Management and Engineering, City of Elgin. Principal-in-Charge of the engineering team assisting with the management of the City's traffic signals, signal systems and street lighting equipment, including monitoring, troubleshooting, and budget planning.

Glenview Railroad Monitoring, Village of Glenview. Project Manager performing weekly monitoring and detector diagnostics via modem for four intersections with railroad interconnects in Glenview (Dewes and Harlem, Glenview and Harlem, Glenview and Washington, and Chestnut and Lehigh). Weekly report included. On-site meetings for troubleshooting and complaints completed upon request.

Naperville Adaptive Signal Control, City of Naperville, 2018. HLR improved traffic signal timings at the intersections in Naperville, integrating it into the existing signal system within the City, and optimized the timings and coordination settings for the system to improve its performance. Amy determined optimized traffic signal timings using traffic counts conducted during the morning, mid-day, and afternoon peak periods along with field observations of traffic flow, analyzed traffic flow using Synchro/SimTraffic modeling software, coordinated the proposed changes with IDOT for review and approval, and implemented the new signal timings. All required system detector reassignments were made. Traffic responsive program operations were developed and evaluated to verify the proper pattern selection. Peak period traffic operations were observed and fine-tuning adjustments were made to ensure that the new timings resulted in the most optimal traffic flow. A new/updated intersection graphic was prepared and downloaded to the controller. HLR prepared and

Pavement Technology Seminar,
APWA-FV, September 2009

Highway Safety Manual – Multilane
Suburban/Urban Streets and
Intersections, ITE/ASCE, December
2009

APWA Sustainable Design Seminar,
March 2008

Soil Stabilization, Illinois Society of
Professional Engineers, February 2008

Local Agency Highway Safety
Improvement, IDOT, December 2007

Community Impact Assessment, IDOT,
October 2006

Synchro Analysis, Trafficware, 2006

Traffic Impacts of Land Development,
University of Wisconsin, 2006

Context Sensitive Solutions (CSS)
Approach, IDOT, 2006

Program Development Process
Overview Training, IDOT, 2003

Fundamentals of Geometrics,
Northwestern University, 2002

NEPA Environmental Assessment
Training, Northwestern University, 2001

PROFESSIONAL ASSOCIATIONS

American Public Works Association

Illinois Association of Highway
Engineers

Delta Mu Delta Business Honor
Society, Member

Phi Kappa Phi Honor Society, Active
Member

submitted a validation report summarizing the data collection, observations, modeling results, and final optimized timings.

Elgin O'Hare Optimization, Aldridge Electric, 2018. Amy prepared and submitted a SCAT report summarizing the data collection, observations, modeling results, and final optimized timings for the new IL 390 tollway project. The project involved developing a timing program for three separate systems involving a total of 31 intersections. Each system was analyzed after construction and updated accordingly to address the impact of the new tollway. A traffic-responsive program was developed for the IL 83 (Econ 111) system to select appropriate timing plans throughout the day.

IL Route 59 and I-88 Diverging Diamond Interchange, City of Naperville. Amy assisted with the optimized traffic signal timing plans for 25 intersections on two systems in Naperville, including one of the first DDI intersections in Illinois. She timed the two systems to provide coordination between them, as well as with a third system further south on IL Route 59. Amy collected traffic counts, modeled the systems with Synchro/SimTraffic, designed and implemented timings plans and time-of-day schedules, and programmed Traffic Responsive routines. The DDI controller uses unique clearance intervals, and Amy assisted in implementing those and in discovering and resolving an issue related to the clearance intervals and the preemption routines. She also studied before and aftereffects by driving the systems at various times of day with GPS tracking. Amy created new intersection graphics for the system and wrote a SCAT report summarizing the data collection, observations, modeling results, and final optimized timings.

20 Northwest Highway Traffic Impact Study, Village of Cary. Project Manager for a Traffic Impact Study for a proposed cannabis dispensary at 20 Northwest Highway in Cary. HLR's scope of services included traffic counts at one public intersection, data collection and analysis, observation and analysis of existing and anticipated traffic operations, preparation of a traffic impact study summarizing the analyses and recommendations, and attendance at meetings in the Village of Cary.

DeKalb Community Garden Traffic Impact Study, DeKalb County Community Garden. Project Manager for a Traffic Impact Study for a proposed Community Food Health & Education Center at Grant Drive and Annie Glidden Road. HLR's scope of services included data collection and analysis, traffic counts, analysis of the existing and proposed conditions at the intersection, and a Technical Memorandum summarizing the findings of our analysis. A speed study along Annie Glidden Road was also completed.

McLean Boulevard at Bowes Road Pedestrian Crossing Analysis, City of Elgin. Project Manager for the study of the pedestrian crossing improvements at McLean Boulevard and Bowes Road. HLR prepared a planning-level exhibit showing the proposed crosswalks on the west and north legs of the intersection, including necessary curb ramps, sidewalk additions, and pedestrian signals. Additional conduit needed for the improvement was also included in the exhibit. A preliminary engineer's estimate of cost was created. A Technical Memorandum was included with recommendations for proceeding with the design.

IL Route 16 Traffic Signal Design, IDOT District 7, PTB 194-048. Project Manager for traffic signal design along IL Route 16 from US Route 45 to 6th Street. Swords Drive includes pedestrian button upgrades only. The traffic signal work includes new signals and pedestrian push buttons, signal interconnection, advanced loops, emergency vehicle pre-emption, and flashing yellow arrows. All traffic signal sheets, specifications, and estimates were included.

2018 ITS PASSAGE Field Elements, Lake County Division of Transportation. Served as Design Engineer for the locally funded project that includes modification of up to 13 traffic signals to install new ITS elements to existing traffic signal infrastructure. Plans include the installation of fiber-optic interconnect, PTZ cameras, wireless radio interconnect, and other ITS devices. Responsibilities for this project included coordination with LCDOT and IDOT, preparation of plans and specifications, and navigating the IDOT permit process to secure a Highway Permit for construction.



PROFESSIONAL REGISTRATIONS

Professional Engineer, Illinois,
#062.073388, 2021

Professional Traffic Operations
Engineer, #5163, 2021

YEARS OF EXPERIENCE

6 / 6 at HLR

EDUCATION

B.S., Civil Engineering, 2017,
Valparaiso University, Valparaiso, IN

PROFESSIONAL CERTIFICATIONS

Traffic Signal Level II, IMSA, 2019

Work Zone Safety Specialist, IMSA,
2018

Signs and Marking Specialist Level I,
IMSA, 2018

Traffic Signal Inspector, IMSA, 2018

Documentation of Contract Quantities,
IDOT, #22-19674

OSHA 10-Hour General Industry Safety
and Health, 2019

CONTINUING EDUCATION

Communicating Credibility Training,
2019

Traffic Control Corporation Expo, 2019
& 2017

ITS Awareness FHWA Course, 2019

MoboTrex User's Group, 2019

ATC Training, Traffic Control
Corporation, 2018

Aries Training, Traffic Control
Corporation, 2018

Writing-At-Work Seminar, 2018

Traffic 101 Seminar, 2018

Qualifications Based Selection Seminar,
2018

Nick Halan serves as a Project Engineer with HLR's Phase I and Traffic Engineering department. Nick prepares traffic management plans, environmental survey requests, Intersection Design Studies, and project reports. In addition, Nick develops and coordinates traffic studies, traffic signal design, signal coordination and timing (SCAT) plans, and traffic-related construction projects. With his background in information technology, he is at the forefront of leading HLR's Intelligent Transportation System (ITS) design for our clients.

REPRESENTATIVE PROJECTS

Interstate 55 at Weber Road Diverging Diamond Interchange System Optimization, IDOT District 1. This previous diamond interchange has been a congestion point in this area for many years as more and more businesses developed along the I-55 corridor. The DDI is unique in that traffic from the right side of the road transitions to the left side of the road and then back again. This allows for all left turns to occur without having to cross opposing traffic resulting in fewer conflict points. Nick conducted the Signal Coordination and Timing (SCAT) optimization from Lily Cache Road to Romeo Road. This was conducted per District 1 Traffic Signal Special Provisions including preparation of optimized signal timings and system cycle lengths, performing a floating car delay study, and a final SCAT Report with a Traffic Responsive Program and Time-of-Day plans showing the environmental impact of the improvements.

Green Bay Road Signal Timing Evaluation, City of Highland Park. The City had been receiving citizen inquiries into traffic signal operations along Green Bay Road from Park Avenue West to Laurel Avenue. Nick conducted observations via Lake County's PASSAGE ATMS along with evaluating the current traffic signal timing setup at each signalized intersection in the corridor. A list of recommendations was made and summarized into a memorandum to the City. The recommendations subsequently proceeded which Nick implemented.

Naperville Adaptive Signal Control, City of Naperville. HLR improved traffic signal timings at the intersections in Naperville, integrating it into the existing signal system within the City, and optimized the timings and coordination settings for the system to improve its performance. HLR determined optimized traffic signal timings using traffic counts conducted during the morning, mid-day, and afternoon peak periods along with field observations of traffic flow, analyzed traffic flow using Synchro/SimTraffic modeling software, coordinated the proposed changes with IDOT for review and approval, and implemented the new signal timings. All required system detector reassignments were made. Traffic-responsive program operations were developed and evaluated to verify the proper pattern selection. Peak period traffic operations were observed, and fine-tuning adjustments were made to ensure that the new timings resulted in the most optimal traffic flow. A new/updated intersection graphic was prepared and downloaded to the controller. HLR prepared and submitted a Validation report summarizing the data collection, observations, modeling results, and final optimized timings.

Elgin O'Hare Optimization, Aldridge Electric. Prepared and submitted a SCAT report summarizing the data collection, observations, modeling results, and final optimized timings for the new IL Route 390 tollway project. The project involved developing a timing program for three separate systems involving a total of 31 intersections. Each system was analyzed after construction and accordingly updated to address the impact of the new tollway. A traffic-responsive program was developed for the IL Route 83 (Econ 111) system to select appropriate timing plans throughout the day.

IL Route 390, DuPage County. Developed and maintained temporary traffic signal timings during construction of the new IL Route 390 tollway. This project involved replacing the existing arterial street of Thorndale Avenue with a limited-access tollway. Existing signals were replaced with temporary signals along two frontage roads. Nick maintained temporary signal timings throughout construction.

Crystal Lake and Main Street Railroad Report, City of Crystal Lake. Traffic engineer for preparation of the IDOT/ICC Railroad Report for the intersection of Crystal Lake Avenue and Main Street in Crystal Lake. Tasks included field visit, report writing, and CADD drawings.

Glenview Railroad Monitoring, Village of Glenview. Traffic Engineer performing weekly monitoring and detector diagnostics via modem for four intersections with railroad interconnects in Glenview (Dewes & Harlem, Glenview & Harlem, Glenview & Washington, and Chestnut & Lehigh). Weekly report included. On-site meetings for troubleshooting and complaints completed upon request.

IL Route 13 ITS Study, Southern IL Metropolitan Planning Organization. Responsible for evaluating existing signal equipment for the use of Automated Traffic Signal Performance Measures (ATSPM) and developing a report describing what upgrades would be required to implement an ATSPM system. The project consisted of a study to evaluate the improvements necessary to install an ATSPM system and/or an Active Traffic Management System.

Signal Coordination and Timing (SCAT), PTBs 185-003 & 161-010, IDOT District 1. Project Engineer for optimization of various traffic signal systems in IDOT District 1 per District Traffic Signal Special Provisions including preparation of a SCAT Report with a Traffic Responsive Program and Time-Of-Day plans. Also provided on-call assistance to the Bureau of Traffic Area Engineers. Systems optimized include IL 68 & U.S. 14 (Eagle 4K), IL 31 & IL 56 (Eagle 8P), IL 43/Harlem Avenue (Econ 61), U.S. 6/159th Street (Eagle 6), IL 132/Grand Avenue (Eagle 7F), IL 59 (Econ 133), U.S. 6/Southwest Highway (Econ 181), U.S. 34/Ogden Avenue (Econ 42), IL 131/Green Bay Road (Eagle 4P), IL 43/Harlem Avenue (Eagle 5J), State Street (Eagle 6H), IL 62/Algonquin Road (Econ 4), IL 59 & IL 64 (Eagle 5A), US45/IL21 & IL 22 (Former Econ 24), and IL 171 (Eagle 5E).

Traffic Signal Operations Management and Engineering, City of Elgin. Responsible for maintaining an inventory of traffic signal equipment and developing and implementing optimized traffic signal timing plans for various time periods. The overall project consists of assisting the City with the management of its traffic signals. Tasks include checking the traffic signal controller programmed databases (auto-compare) once a week for unauthorized changes, detection problems, and communication problems; coordinating with the City's Electrical Maintenance Contractor daily to address and resolve maintenance issues; and performing quarterly field checks of all traffic signals to ensure all contract traffic signal maintenance is being properly performed. Also developed a scope of long-term modernization updates to the City's traffic signal infrastructure.

Various Temporary Traffic Signal Timing Projects. Develops, implements, and maintains temporary traffic signal timings for various construction projects. Observes traffic throughout construction and adjusts timings to handle changing conditions.

Various Traffic Signal Optimization/Re-optimization Projects. Develops and implements optimized traffic signal system timing plans and conducts on-site observations of traffic to fine-tune the signal timings at the controllers. Executes and coordinates data collection, traffic counts, before and after speed/delay studies, system modeling, and field observation. Recent projects include the following systems:

- 75th Street in Naperville, IL
- 95th Street in Naperville, IL
- 143rd Street in Lockport, IL
- 159th Street in Oak Forest and Markham, IL
- Arlington Heights Road in Elk Grove Village, IL
- Army Trail Road in Bloomingdale, IL
- Arsenal Road in Channahon, IL
- Barrington Road in Hoffman Estates, IL
- Bluff Road in Channahon, IL
- Central Road in Hoffman Estates, IL
- Dixie Highway in Markham, IL
- Euclid Road in Rolling Meadows, IL
- Huntley Road in Gilberts, IL
- IL Route 1/Halsted Street in Harvey, IL
- IL Route 7 in Orland Park, IL
- IL Route 19 in Bensenville, IL
- IL Route 21 & IL Route 60 in Vernon Hills, IL
- IL Route 23 in Ottawa, IL
- IL Route 25 in Aurora, IL
- IL Route 26 in Princeton, IL
- IL Route 38 in Villa Park, IL
- IL Route 43 in Waukegan, IL
- IL Route 47 in Huntley, IL, and Morris, IL
- IL Route 53 and IL Route 390 in Itasca, IL
- IL Route 58 in Schaumburg, IL
- IL Route 59 in Naperville, IL, and Bartlett, IL
- IL Route 62 in Schaumburg, IL
- IL Route 68 in Wheeling, IL
- IL Route 72 in Gilberts, IL
- IL Route 83 in Bensenville and Willowbrook, IL
- IL Route 176 in Green Oaks, IL
- IL Route 390/Thorndale Avenue in Itasca, Wood Dale, and Bensenville
- Lake Cook Road in Deerfield, IL
- Longmeadow Parkway in Algonquin, IL
- Monee-Manhattan Road in Monee, IL
- Plainfield Road in Willowbrook, IL
- Plainfield-Naperville Road in Naperville, IL
- U.S. Route 6 in Channahon, IL
- U.S. Route 12/20/45 (Mannheim Road) in Stone Park, IL
- U.S. Route 12/IL Route 59 & 120 in Lakemoor and Volo, IL
- U.S. Route 34 in Hinsdale, IL
- U.S. Route 52 in Shorewood, IL, and Mendota, IL
- Weber Road in Romeoville, IL
- Weiland Road in Wheeling, IL
- Wolf Road in Wheeling, IL



HAMPTON, LENZINI AND RENWICK, INC.

PTB 185-003, 161-010, 147-015, 137-007, 130-002, AND 125-006 SCAT SERVICES / IDOT District 1, (2003-present)

HLR is experienced in all aspects of signal system monitoring as well as SCAT system optimization projects. The signal systems were monitored on a weekly basis, including over 330 closed-loop systems and over 2,340 signalized intersections. Controller databases were checked on a weekly basis, and diagnostics of system detectors were conducted bi-weekly. Weekly reports of findings were prepared and provided to the District 1 Bureau of Traffic and IDOT's signal maintenance contractor. As part of the monitoring services, we provided on-call assistance to the District's Area Engineers to respond to signal-related complaints and requests for troubleshooting and timing adjustments. The project required coordination with construction contractors to maintain the integrity of coordinated traffic signal systems during roadway reconstruction and installation of new signals within existing systems. The project also included testing of traffic signal controllers for use at signalized railroad at-grade intersections to ensure compliant operation in the field. Systems optimized include IL 68 & U.S. 14 (Eagle 4K), IL 31 & IL 56 (Eagle 8P), IL 43/Harlem Avenue (Econ 61), U.S. 6/159th Street (Eagle 6), IL 132/Grand Avenue (Eagle 7F), IL 59 (Econ 133), U.S. 6/Southwest Highway (Econ 181), and U.S. 34/Ogden Avenue (Econ 42).

TRAFFIC SIGNAL OPERATIONS MANAGEMENT / Kane County Division of Transportation (2005-2015)

HLR is experienced in all aspects of signal system monitoring as well as SCAT system optimization projects and has been providing these services to IDOT District 1 from 2003-present. The signal systems were monitored on a weekly basis, including over 330 closed-loop systems and over 2,340 signalized intersections. Controller databases were checked on a weekly basis, and diagnostics of system detectors were conducted bi-weekly. Weekly reports of findings were prepared and provided to the District 1 Bureau of Traffic and IDOT's signal maintenance contractor. As part of the monitoring services, we provided on-call assistance to the District's Area Engineers to respond to signal-related complaints and requests for troubleshooting and timing adjustments. The project required coordination with construction contractors to maintain the integrity of coordinated traffic signal systems during roadway reconstruction and installation of new signals within existing systems. The project also included testing of traffic signal controllers for use at signalized railroad at-grade intersections to ensure compliant operation in the field. Systems optimized include IL 68 & U.S. 14 (Eagle 4K), IL 31 & IL 56 (Eagle 8P), IL 43/Harlem Avenue (Econ 61), U.S. 6/159th Street (Eagle 6), IL 132/Grand Avenue (Eagle 7F), IL 59 (Econ 133), U.S. 6/Southwest Highway (Econ 181), and U.S. 34/Ogden Avenue (Econ 42).

TRAFFIC SIGNAL OPERATIONS MANAGEMENT / City of Elgin (2008-present)

HLR is responsible for the weekly monitoring of traffic signals systems and detector diagnostics, coordination of Electrical Maintenance Contract (EMC), and on-call construction inspection for traffic signal projects (maintenance transfers, turn-ons, and periodic inspections). Also completed complaint investigation/resolution, plan/catalog cut review, development of equipment specifications, equipment recommendations.

SIGNAL COORDINATION AND TIMING (SCAT) SERVICES / Various Clients

HLR develops and implements optimized traffic signal system timing plans and conduct on-site observations of traffic to fine-tune the signal timings at the controllers. We also execute and coordinate data collection, traffic counts, before and after speed/delay studies, system modeling, and field observation. Recent projects include the following systems:

- » Lorenzo Rd & Ridge Way in Wilmington, IL
- » Hassert Boulevard in Naperville, IL
- » IL Route 62/Dempster Street/Busse Road Triangle in Mount Prospect, IL
- » Lake Cook Road in Deerfield, IL
- » IL Route 38 & I-355 in Glen Ellyn, IL
- » IL Route 2 in Rockford, IL
- » IL Route 173 in Machesney Park, IL
- » I-90 bridge in DesPlaines, IL
- » I-57 & Stuenkel in Monee, IL

IL ROUTE 47 CORRIDOR / City of Yorkville

Developed and implemented new signal timings plans for 19 intersections separated into two signal systems. The two systems were timed to provide progression through both systems, even though they were not interconnected. One system involved two crossing arterials in IL Route 47 and U.S. Route 34. Work included traffic counts collection, system modeling using Synchro/SimTraffic, field implementation, and preparation of a SCAT report summarizing the optimization efforts. We worked closely with City of Yorkville and IDOT District 3 staff.

IL 23 SIGNAL SYSTEM RETIMING / City of DeKalb

The City of DeKalb needed to update traffic signal timings at 10 intersections along IL 23 to increase clearance and pedestrian crossing intervals at the request of IDOT District 3. HLR reviewed traffic signal controller settings and 2006 traffic counts (both provided by the City), prepared signal system models using Synchro software, and prepared a technical memorandum presenting the results of our analyses. Our services also included field implementation assistance and post-improvement observations of traffic flow at the intersections.