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OGL STEERING COMMITTEE AGENDA Monday, January 23, 1:30 PM On-Line TEAMS and in-person, at MoDOT, 600 NE Colbern, Rm 236





Welcome & Introductions

- 1. VOTE: Approval of October 24 Committee Minutes* (page 2)
- 2. VOTE: 2023 RFQ Traffic Signal Timing and Engineering Support Selection* (page 4)
- 3. MO Vice-Chair vacancy
- 4. MARC Conflict of Interest & Whistleblower Policies (page 6)
- 5. Agency Updates (Construction, Work zones, Agency changes and updates)
- 6. Hot Topic: St. Louis Regional Operations Presentation, Jamie Rana-MoDOT
- 7. Traffic Technology Services Update (page 11)
- 8. OGL Regional Tech Plan Update and Presentation
- 9. MO and KS CMAQ Construction Project Updates
- 10. 2025 STBG/CMAQ Call for Project (OGL Funding) (MO and KS) (page 13)
- 11. Quarterly Operations Report (page 15)
- **12. Quarterly Budget Report**

Other Business

Next Regularly Scheduled Meetings: Mondays at 1:30, April 24; July 24; October 23

Adjournment

*Action Items

Getting to MARC: Information on transportation options to the MARC offices, including directions, parking, transit, carpooling, and bicycling, <u>can be found online</u>. If driving, visitors and guests should enter the Rivergate Center parking lot from Broadway and park on the upper level of the garage. An entrance directly into the conference area is available from this level.

Parking: Free parking is available when visiting MARC. Visitors and guests should park on the upper level of the garage. To enter this level from Broadway, turn west into the Rivergate Center parking lot. Please use any of the available spaces on the upper level at the top of the ramp.

Special Accommodations: Please notify MARC at (816) 474-4240 at least 48 hours in advance if you require special accommodations to attend this meeting (i.e., qualified interpreter, large print, reader, hearing assistance). MARC programs are non-discriminatory as stated by Title VI of the Civil Rights Act of 1964. For more information or to obtain a Title VI Complaint Form, call 816-474-4240 or <u>visit our webpage</u>.



OGL STEERING COMMITTEE MEETING MINUTES Monday, October 24, 2022, 1:30 p.m.

Hybrid In-Person/Virtual Meeting: MARC – Lewis & Clark Room and online via Microsoft Teams

	MARC Staff	
Members Present	Present	Non-Members Present
Derek Olson, MoDOT, Vice Chair	Barry Viss	Alex Preston, TransCore
Noel Forrester, Olathe, Chair	Scott Cutshall	Kurt Rotering, Olsson
Michael W. Spickelmier, Lansing	Cedrick Owens	Blake Hansen, Olsson
Adam Hilgedick, Blue Springs	Ron Achelpohl	Christos Achillides, Iteris
Thomas Northup, KDOT	Ray Webb	Janelle Clayton, Merge Midwest
Ryan Hale, MODOT		
Shawn Gotfredson, Overland Park		
Sol Moinuddin, KCMO		
Jim MacDonald, Merriam		
Bill Stogsdill, Fairway		
Steve Schooley, Lenexa		
Dave Northup, KDOT		
Sarah Peters, KDOT		
David LaRoche, FHWA		
Brian Scovill, Leawood		
Mark Green, Independence		
Brian Shields, Overland Park		
Melissa Schmitz, MoDOT		

Welcome

The meeting started at 1:30 p.m. Noel Forrester, Chair, welcomed all.

- 1. July 25, 2022, committee minutes Steve Schooley made a motion to accept the minutes. The motion was supported and approved unanimously.
- 2. OGL vice-chair election Chris Sandie is no longer with the City of Blue Springs and as such is no longer the OGL chairperson. Noel has vacated the vice-chair position to become chair, thus a new vice-chair is needed, from a Missouri agency. Steve Schooley nominated Derek Olson for vice-chair. There were no other nominations. The nomination was supported and approved unanimously.
- 3. TransCore contract extension The sub-committee that has been focusing on the ATMS software effort has recommended staying with TransSuite rather than issuing an RFP for a new system. After viewing demos of several other system providers, the group felt the 2023/2024 CMAQ money OGL received for ATMS software would be better spent enhancing TransSuite. Transcore sent three of their staff to the KC region on October 11 and 12 for in-person meetings with the group to better understand our needs, specifically with regards to the web UI. MARC staff recommend extending TransCore's contract by one year with an additional \$300,000 for continued support of the OGL program and enhancements to the TransSuite software to better meet our needs. Brian Scovill made a motion to extend the contract as recommended. The motion was supported and approved unanimously.
- 4. MO and KS CMAQ project bids and update Ray Webb updated the committee on the status of the bids recently received for the OGL CMAQ enhancement projects in each state. The bids received for both

projects were significantly over budget. Agencies involved will be contacted regarding their preferences on how to deal with the discrepancy. The agencies involved could cover the difference with their own funds or the bids could be rejected and the projects re-bid with different scope and/or terms.

- 5. Agency roundtable operations updates Lansing and Leavenworth are working on upgrading the intersection of K-7 & Eisenhower. Leawood and Prairie Village have been working on a project on Mission Rd that will continue causing delays in that part of the city for the rest of the year.
- 6. Hot topic: displaced left intersection at Old 56 & Lone Elm in Olathe Noel gave a presentation on the operations of the new displaced left turn intersection in Olathe. Projected volumes for 2040 showed that this intersection was going to be a challenge to keep an acceptable level of service. They decided on a design that displaces the EB and WB left turns so that they can serve concurrently with the EB and WB through movements. The controller programming is complicated, and some drivers have trouble navigating the EB and WB lefts, but it has resulted in reduced vehicle delays.
- 7. 2023 work plan Barry highlighted a few items from the work plan that was included in the meeting packet. If there are comments or additions to the list of corridors for signal timing, please communicate those to OGL staff.
- 8. Quarterly operations report The operations report was included in the meeting packet. Barry highlighted a few items for the committee to be aware of, including several roadwork events, crashes, and other events that we responded to. Steve thanked the OGL staff for their assistance with operations in Lenexa.
- 9. Quarterly budget report The quarterly budget report was included in the meeting packet. The ending balance at the end of the quarter was \$272,096. Agreements with KDOT and MoDOT are in place however obligation has yet to be received. It is unlikely we will be able to start 2023 operating funds till December1 and will continue with local funds only. At this point there are some budget concerns without the planned October 1 federal funds start.

2023 and 2024 budget is shown in the packet for information and were approved last year.

Other Business – There was a brief discussion on SMART grants. This federal grant program is intended to support innovative solutions to transportation problems and does not require a local match. Several committee members expressed support for OGL applying for funds through this program to purchase arterial performance measure systems.

Next meeting date: January 23, 2023.

Adjournment – Meeting was adjourned at 2:34 p.m.

BOARD AGENDA ITEM

For: _X_ B&P __ CSC

Board: ___ Presentation ___ Discussion ___ Brief Report __X_ Board Consent

January 2023 Item No. x Transportation & Environment Department

ISSUE:

VOTE: Authorization to enter into contracts with consulting firms, Olsson and Iteris, Inc., for traffic signal timing and engineering support services for MARC's Operation Green Light Program.

BACKGROUND:

Operation Green Light (OGL) is a regional traffic signal coordination and operations program involving local governments and the State Departments of Transportation in Kansas and Missouri. This initiative improves regional traffic flow, air quality and fuel consumption. As a key part of this work, OGL develops and implements traffic signal timing plans in cooperation with participating state and local governments and monitors real-time operations on roadway intersections in the program. Continued traffic signal timing and engineering support services will be integral to the successful operation of the OGL program.

These services are needed to continue efforts to keep signal timing at its peak level of performance at the over 750 traffic signals that OGL currently supports for 27 agencies and over 1500 traffic signals supported by the regional software.

MARC has contracted with Olsson since 2019 which expires March 2023. MARC has also contracted with Iteris since 2019 which contract expires June 2023. MARC issued an RFQ November 10, 2022. Upon close of the RFQ period on December 12, 2022, the firms of Olsson, HDR, CBB and Iteris provided proposals. A selection committee comprised of key OGL partners agencies selected two firms, Olsson and Iteris based on advertised selection criteria. Olsson has performed key work for the program and was selected as well as Iteris Inc. Two teams provides the region the ability to respond to peaks of regional needs for additional signal timing and engineering capacity.

BUDGET CONSIDERATIONS

Funds for this purchase are included in the Operation Green Light operations budget. This procurement will be funded through Federal Grants administered by the Kansas and Missouri Departments of Transportation. Participating local governments provide matching funds for this grant.

COMMITTEE ACTION

The Operation Green Light Steering Committee will meet on January 23, 2023 to vote to recommend the selection of Olsson and Iteris, Inc. for two-year contracts not to exceed \$300,000 per contract.

RELATED JURISDICTIONS:

Missouri Department of Transportation, the Cities of Belton, Blue Springs, Gladstone, Grandview, Independence, Kansas City, Lee's Summit, Liberty, MoDOT, North Kansas City, Raymore in Missouri and the jurisdiction of the Kansas Department of Transportation, the Cities of Bonner Springs, Fairway, Lansing, Leavenworth, Leawood, Lenexa, Merriam, Mission, Mission Woods, Olathe, Overland Park, Prairie Village, Roeland Park, Shawnee, Westwood and the Unified Government of Wyandotte County/Kansas City in Kansas.

BOARD AGENDA ITEM

RECOMMENDATION

Authorize the Executive Director to enter into contracts with Olsson and Iteris Inc., for Traffic Signal Timing and Engineering Support Services for the Operation Green Light Program.

STAFF CONTACT Ron Achelpohl Ray M. Webb

Mid-America Regional Council Conflict of Interest Policy Governing all Boards, Commissions, Committees and Subcommittees

The Mid-America Regional Council (MARC) is dedicated to building a stronger metropolitan region by promoting regional cooperation and developing innovative solutions to regional challenges. MARC strives to operate in an open and transparent way that inspires confidence that the organization is an effective steward of public resources. The purpose of this conflict of interest policy is to ensure that participants on the MARC board and committees have clear guidance when a participant in any MARC decision-making process could have a conflict of interest and what the appropriate action would be in those circumstances.

It is in the best interest of the MARC Board of Directors, Mid-America Head Start and all other boards, commissions, committees and subcommittees to be aware of and properly manage all conflicts of interest and any appearances of conflicts of interest. This conflict of interest policy is designed to help directors, officers, employees and volunteers identify conflicts of interest and disclose them to the appropriate authority. It is also designed to provide a procedure to appropriately manage conflicts in accordance with legal requirements and the goals of accountability and transparency in all MARC operations.

The MARC Board, and boards that work through MARC such as the Mid-America Solid Waste Management District, make decisions in a number of program areas that impact the availability of federal, state and local government funds and private contributions. This conflict of interest policy is intended to support those decision-making processes.

This policy is intended to supplement but not replace any state or federal laws that govern conflicts of interest in public, non-profit, and charitable organizations.

1. Interested Person

Any member of a MARC board, commission, committee or subcommittee charged with decision-making or making recommendations for funding, who has a direct or indirect financial interest, as defined below, is an interested person.

2. Financial Interest Defined

A person has a financial interest if the person has, directly or indirectly, through business, investment, or family:

- a. An ownership or investment interest in any entity with which MARC has a transaction or other financial arrangement,
- b. A compensation arrangement with MARC or with any entity or individual with which MARC has a transaction or arrangement, or
- c. A potential ownership or investment interest in, or compensation arrangement with, any entity or individual with which MARC is negotiating a transaction or arrangement.

For purposes of this policy, "family members" includes spouses, parents, children, and siblings (including those related by marriage), as well as significant others and any other person who resides with the committee/board member.

3. Procedure

In connection with any actual or possible conflict of interest, an interested person must disclose the existence of the conflict of interest to members of the committee considering the proposed action or recommendation.

A person who has a conflict of interest in a certain matter shall not participate in the discussion of that matter except to disclose material facts and to respond to questions. Such person shall not attempt to exert his or her personal influence with respect to the matter, either at or outside the meeting.

The interested person shall abstain from any votes on funding recommendations, contracts or transactions in which there is an interest as defined above, and shall abstain from any votes for all meeting minutes or other records of the meeting.

4. Gifts, Gratuities and Entertainment

MARC committee members and directors shall avoid accepting, directly or indirectly, any rebate, gift, money or anything of monetary value from an organization or vendor that could benefit from a MARC committee action regarding funding recommendations, vendor selection or other transactions. From time to time, vendors may pay for meals apart from a bid process.

5. Committee Representation

MARC makes decisions on federal and state funding that benefits local communities within the Kansas City region. The MARC Board and many of its committees are composed of local officials representing the communities that may benefit from MARC Board decisions. It is not a conflict of interest for a board member or a committee member, who are also elected officials or local government staff members, to advocate for or vote on issues that will affect their jurisdiction. If an elected official serves on another public board by virtue of their elected office, it is not a conflict of interest for that elected official to participate in discussions and vote on matters affecting that other public body.

In the past, smaller communities have at times been represented by consulting engineers on committees which rely on both technical and community considerations to make funding recommendations. Private consultants or other private parties shall abstain from any discussion or vote on all matters before the committee that might pose a conflict of interest due to a relationship between the project applicant and the private consultant. The private consultant or party should limit any participation in discussion to answering questions asked by other committee members. Individual committees may adopt specific procedural requirements for participation by members and others present at meetings.

6. Disclosure, Notification, and Review Policy

Each director, officer, and committee member shall disclose any relationships, positions or circumstances in which he or she is involved that he or she believes could contribute to a conflict of interest when and if such situations arise.

If a board member or committee member is unsure as to whether or not a conflict of interest exists, it is their responsibility to consult a MARC staff member associated with that committee to make a determination. If after such consultation, the individual is still unsure, then a determination will be made by the executive director of MARC.

If the board of directors, the Head Start Policy Council or other commission or committee has reasonable cause to believe a member has failed to disclose actual or possible conflicts of interest, that body shall inform the member of the basis for such belief and afford the member an opportunity to explain the alleged failure to disclose.

If such a report is made regarding a member of the board, committees or commissions, the following steps will be taken:

- MARC staff, including the Executive Director, will review the information and attempt to clarify if a conflict of interest exists or if additional information is needed. MARC staff will contact the board/committee member and discuss the issue. In most cases, the issue may be one of clarifying a relationship or disclosing it for future decision-making processes.
- If the conflict is one that could raise questions by funding agencies or others regarding MARC's decisions, the issue will be discussed with the MARC board officers to determine appropriate disciplinary and corrective action.

This policy shall be distributed annually to all decision-making bodies associated with the Mid-America Regional Council, including but not limited to the Mid-America Head Start, for their review.

Adopted by the MARC Board of Directors, August 25, 2009 (Updated September 26, 2013 and May 23, 2017)

Mid-America Regional Council Whistleblower Policy

Policy Objective:

MARC is committed to lawful and ethical behavior in all of its activities and requires all staff to act in accordance with all applicable laws, regulations and policies and to observe high standards of business and personal ethics in the conduct of their duties and responsibilities.

This policy is intended to:

- Encourage individuals to bring ethical or legal violations to the attention of an internal or external authority so that action can be taken to resolve the problem.
- Establish guidance and procedures for staff (paid and volunteer) or others to report illegal, unethical or inappropriate behaviors or practices, in good faith, without fear of retribution.
- To provide a constructive process for individuals to report issues of concern.
- Emphasize the importance of adherence to MARC's standards of conduct.

Overview:

A whistleblower is a person (often an employee) who raises a concern about serious wrongdoing occurring in an organization. Examples of misconduct that might lead to whistleblowing include the violation of laws, rules or regulations; fraud, mismanagement or corruption; or direct threats to the public interest, such as health or safety violations.

In general, whistleblowing refers to reporting misconduct outside the normal chain of command. Most workplace issues are, and to the extent possible, should be resolved by working with direct supervisors and department directors as described in the Issues Resolution policy. However, if an individual, acting in good faith, has reasonable grounds for believing that serious wrongdoing is taking place that has not been addressed or cannot be addressed through normal channels, he or she has the option of "whistleblowing" without fear of retribution.

Examples of the types of situations a whistleblower might report may include, but are not limited, to the following:

- A violation of law.
- Questionable accounting or monitoring practices.
- Discrimination based on protected classes.
- Fraud, waste or mismanagement.

Examples of problems that can be addressed through normal issues resolution procedures may include, but are not limited, to the following:

- Disagreements or misunderstandings between employees.
- Issues related to employment or working conditions.
- Personality conflicts.
- Working relationships between employees or employees and supervisors.

See the Issues Resolution policy for more information.

Reporting Procedures

Individuals may report misconduct, without fear of retribution, through the following procedures:

• For internal employee relations issues, seek assistance from supervisors, department directors or Human Resources staff as described in the Issues Resolution policy.

- For issues related to harassment, immediately report to a supervisor, department director, executive director or Human Resources as described in the Harassment-Free workplace policy.
- For all other issues related to suspected fraud, theft, harassment or other illegal activity, contact a supervisor, department director, executive director or call the "WeTip" hotline at 1-800-782-7463 or go online to www.wetip.com.
- For issues related to suspected mismanagement or waste of American Recovery and Reinvestment Act (ARRA) funds, call 1-877-392-3375 or go online to <u>www.recovery.gov</u>.

After the Report:

Response procedures for whistleblower reports will vary according to how the report was made.

- Reports related to ARRA funding will be addressed by the U.S. Recovery Accountability and Transparency Board.
- Reports to the "WeTip" hotline are forwarded to designated members of MARC's management team (i.e., the Executive Director, Finance and Administration Department Director, Human Resources Manager, and MARC Board Chair) for review and resolution.

All reports will be acknowledged promptly and handled with due care and diligence. Those who receive the reports have the full authority to investigate all concerns raised, and may use other resources such as legal counsel, accountants, private investigators or others as reasonably necessary to conduct a full and complete investigation. Reports and concerns will be kept confidential to the extent possible.

If a report is found to be of merit or is substantiated, MARC management will take appropriate steps and will adhere to the federal rules for that grant, if applicable. No employee who, in good faith, makes a whistleblowing report will be threatened, discriminated against or otherwise subject to any retaliation or adverse employment consequences. Any staff member who attempts to retaliate against someone who reported a concern in good faith may be subject to discipline.

Allegations that prove to have been made maliciously, recklessly, with gross negligence, or with the foreknowledge that the allegations are false, will be viewed as a serious offense and may result in disciplinary action against the reporting employee.

Any situation involving an issue relating to harassment should be reported **immediately** to the employee's supervisor, department director, executive director or Human Resources. Specific information relating to MARC's policy regarding a harassment-free workplace can be found on the MARC intranet under Policies. Complaints of this nature are taken very seriously and will be fully investigated.

Personal Signal Assistant[®] - Deployment: MARC

Traffic Technology Services, Inc. (TTS) is an information service provider supporting connected and automated vehicle applications. Cities, counties, and states across the North America partner with TTS to implement a connected vehicle technology service, <u>Personal Signal Assistant[®]</u>, to support environmental, mobility, and safety connected vehicle applications. Currently TTS is working with over 125 agencies and support service at over 55,000 intersections in North America.



Since 2019, a partnership with TTS has been offering solutions in the Kansas City region through the Mid-America Region Council (MARC) program, Operation Green Light (OGL). In total, 29 agencies in the region coordinate operations through OGL. TTS is working with 8 of these agencies, including MoDOT, totaling 466 signalized intersections; in addition, the City of Overland Park, KS and City of Olathe, KS also support TTS deployment.

MARC's OGL is a cooperative effort to improve the coordination of traffic signals and incident response on major routes throughout the Kansas City area on both sides of the state line. This helps reduce unnecessary delay, improve traffic flow, and reduce vehicle emissions.

Traffic Signal Control - Advanced Traffic Management System (ATMS)

The MARC traffic management system utilizes the TransCore TransSuite TCS, which includes over 750 signalized intersections networked to the MARC servers.

The Data Sharing Process

TTS and the MARC's vendor, TransCore, collaborate to implement and configure an interface with the ATMS platform. TransSuite includes a built-in module or application programming interface (API) to collect real-time traffic signal and timing information. TTS utilizes the API to collect relevant data and establish a one-way data feed to TTS servers. TransCore activates all necessary licenses and coordinates work on ATMS.

The data feed is a HTTP web service, utilizing TCP RESTFUL protocol for safe and efficient transfer of data through a MARC firewall. The data packets between the MARC and TTS servers are very small, requiring less than 1 Mbps bandwidth for the entire system.

traffictechservices.com

TRAFFIC

TECHNOLOGY SERVICES



Connected Vehicle Technology

The value offered for connected vehicle technologies is TTS' ability to predict traffic signal operations from the ATMS data feed. The TTS product, <u>Personal Signal Assistant</u>[®], is an information service that provides automotive-grade messages following the SAE J2735 standard.

TTS customers implement connected vehicle applications and utilize cellular communication to their

connected vehicle or mobile device. Some of the world's most prominent automotive manufacturers, such as Audi, Daimler Mercedes-Benz, Ford, and Volkswagen Group integrate this information into the instrument clusters or multimedia interfaces used in their vehicles.

Value to Drivers or End Users

Connected vehicle applications are designed to provide end users the information required to improve traffic flow, save fuel and money, and improve travel comfort. Utilizing the TTS service, connected vehicle applications can generate <u>fuel and energy savings up to 15%</u>. These savings are achievable because connected vehicle applications have notified drivers of the remaining time-to-green or suggested speed to avoid stopping. Drivers receive information through different means; for example, <u>connected Audi drivers</u> receive information through their vehicle instrument cluster or drivers using the mobile <u>CēVē app</u> receive audible notifications.

Agency Benefits

Through its partnership with TTS, participating MARC agencies will receive periodic signal performance metric reports summarizing intersection performance and connected vehicle crossings. These metrics will help traffic engineers identify and quantify opportunities to improve traffic signal timing operations for all users. TTS provides these reports at no cost to the agency, as an entitlement for data sharing.



How to Participate

MARC has executed a Data Authorization Agreement with TTS that allows for member participation as a supplier to the Personal Signal Assistant[®] service. Agencies only need to execute the Agency Participation Agreement (Exhibit A) and deliver to the MARC contact. TTS will then engage TransCore to automatically include the associated jurisdiction in the data feed.

No changes are required to the agency's traffic controller hardware or communication networks.

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BOARD AGENDA ITEM TEMPLATE

For: ____Board Agenda __X__Board Consent Agenda __X__Budget & Personnel ____CSC

January 2023 Item No. x Efficient Transportation and Quality Places

ISSUE:

VOTE/REPORT: Authorize receipt of FFY 2025-2026 Congestion Mitigation/Air Quality program (CMAQ) and/or Surface Transportation Block Grant program (STBG) funds for MARC's Active Transportation, Air Quality Public Education, RIDESHARE, Operation Greenlight, Planning Sustainable Places, and Regional Electric Vehicle projects/programs.

BACKGROUND:

One of MARC's fundamental roles as Metropolitan Planning Organization is to provide a forum and facilitate processes for cooperative decision-making about the use of federal transportation dollars for projects and programs in the Kansas City area.

In January 2023, the MARC Board is scheduled to approve programming recommendations that include 2025-2026 CMAQ and/or STBG funding for MARC's Active Transportation, Air Quality Public Education, RIDESHARE, Operation Greenlight, Planning Sustainable Places, and Regional Electric Vehicle projects/programs. MARC staff is seeking authorization to enter into the agreements necessary to secure funding to support these projects as detailed below:

• Active Transportation

This program includes three components: public outreach to educate and encourage human-powered transportation, monitoring to evaluate shifts in active transportation traffic counts and focused technical assistance for walking and bicycling programs.

<u>Air Quality Public Education</u>

MARC provides information to the region regarding ground level ozone pollution and transportation-related strategies that businesses, local governments and residents can take to improve air quality.

• <u>RIDESHARE</u>

This program provides information to employers and commuters about alternatives to driving alone and provides free ride-matching services to area residents who wish to carpool for some of their trips as a strategy to reduce ozone precursor emissions.

• Operation Green Light Arterial Traffic Management System (ATMS) Operations

The Operation Green Light Program (OGL) assists state and local governments that own and operate traffic signals on regional arterial roadways to coordinate traffic signal timing and operation oversight to improve traffic flow, reduce excessive fuel consumption and reduce emissions throughout the region. MARC's OGL program staff provides traffic signal timing operations support, maintains its regional communications network and oversees the advanced traffic management system software that allows for real-time traffic signal operations.

Operation Green Light Arterial Traffic Signal Performance Measures System

This project will utilize crowd, probe, and traffic signal data sources, depending on the system, to provide key performance measures including historical trends that will lead to improved performance of the arterials and awareness of key arterial performance trends currently not available.

• <u>Planning Sustainable Places</u>

The Planning Sustainable Places Program (PSP) provides local governments and agencies with financial support to advance detailed local planning and project development activities in direct support of the Creating Sustainable Places (CSP) Initiative, Connected KC 2050's (CKC2050) Activity Centers and Corridors framework, and the MARC Board's policy on regional land use direction.

<u>Regional Electric Vehicles (EV) and EV Infrastructure Expansion</u>

This project includes electric vehicles and charging station infrastructure to expand the current regional fleet and network. Charging stations will be installed in areas of the region where there are significant gaps in the charging network today.

BUDGET CONSIDERATIONS

The funds detailed in the table below will be added to the MARC budget.

Project/Program		Kansas				Missouri				Match	
		CMAQ		STBG		CMAQ		STBG		Required	
Active Transportation	\$	72,000			\$	72,000			\$	36,000	
Air Quality Public Education	\$	555,000			\$	555,000			\$	277,500	
Rideshare ¹	\$	300,000			\$	300,000			\$	-	
OGL ATMS Operations			\$	500,000			\$	1,200,000	\$	1,700,000	
OGL Arterial Performance Measures System					\$	421,680			\$	105,420	
Planning Sustainable Places ²			\$	720,000			\$	720,000	\$	360,000	
Regional Electric Vehicles and Infrastructure	\$	150,000			\$	150,000			\$	75,000	

¹ No matching funds are required for this project

² Historically, each funding round of the Planning Sustainable Places program has exceeded the 20% local match requirement. The number shown here represents the 20% local match minimum. The actual amount may be greater.

COMMITTEE ACTION

The MARC Board of Directors is scheduled to approve funding recommendations including these programs/projects in January 2023 as part of the 2023 First Quarter Amendment to the 2022-2026 Transportation Improvement Program.

RECOMMENDATION

Authorize the Executive Director to enter into agreements with the Kansas Department of Transportation (KDOT), Missouri Department of Transportation (MoDOT), Federal Transit Administration (FTA) and local agencies as needed to receive federal Congestion Mitigation/Air Quality (CMAQ) funds, federal Surface Transportation Block Grant Program (STP) funds and matching funds as described above.

STAFF CONTACT

Ron Achelpohl Beth Dawson Karen Clawson Patrick Trouba Ray Webb



Mid-America Regional Council's Quarterly Report For Operation Green Light

4th Quarter 2022 Report January 23rd, 2023

Prepared For:

OGL Steering Committee

Prepared By: OGL Operations Team

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OGL Operations Report 4th Quarter 2022

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Introduction

Operation Green Light (OGL) is a bi-state, multi-jurisdictional regional effort to improve traffic flow and reduce vehicle emissions. Managed by the Mid-America Regional Council (MARC), Operation Green Light works with federal, state, and local agencies to operate a program that coordinates traffic signal timing and communication between intersections across jurisdictional boundaries.

This report details the work performed on the Operation Green Light communications network during the 4th Quarter of 2022 and highlights of signal timing and agency coordination. OGL currently monitors/operates 755 signals and manages over 1200 network devices. These devices include intersection controllers, wireless radios, switches, cameras, routers, serial-to-IP converters, and servers. For more information on the program, visit <u>www.marc.org/OGL</u>.

Operations Summary

A summary of the operational results and activities of the OGL program staff during the reporting period is presented below.

Repair tickets

• OGL staff actively responded to **5** repair tickets.

Corridor/Signal Timing Efforts

- 10/10 Signal timing plans on Noland Rd through Independence were updated
- 10/31 Signal timing plans on Bannister Rd near I-435 and Blue Ridge Blvd near I-470 were updated
- 11/14 Signal timing plans on Troost, Rockhill, Holmes, and 75th were updated

Training Sessions/Panels/Events

• 11/10 – Scott Cutshall attended the KSITE Chapter Meeting

Additional Information

• OGL staff set up and scheduled the Miovision equipment to conduct **5** counts. Most of these were 13-hour turning movement counts.





Operation Green Light 2 Quarterly Operations Report

Notes on Operations Summary

- 1. Repair ticket levels used by OGL staff are defined in Exhibit I Scope of Services as follows:
 - Minor investigate and resolve communication problem within 5 business days, weather permitting
 - Major investigate and resolve communication problem within 2 business days, weather permitting
 - Critical investigate and resolve communication problem within 24 hours, weather permitting

System Hardware/Software Activities/Issues

The following list represents major software or hardware activities performed during the 4th Quarter of 2022:

- 10/6 TransSuite was updated to 22.3
- 10/27 Solarwinds software package was upgraded to 2022.3.0
- 10/28 OGL Genetec system was upgraded to 5.11.0
- 12/20 TransSuite software patch was installed





Operation Green Light 3 Quarterly Operations Report

Interagency Coordination

During the 4th Quarter, OGL staff participated in the following interagency activities:

- 10/3 OGL staff hosted CMAQ traffic signal Prebid meeting
- 10/4 OGL staff met with One Network staff to discuss a shared work zone management solution
- 10/5 & 10/26 OGL staff met with Iteris regarding contract work
- 10/11 & 10/12 OGL, several agencies and TransCore staff conducted a workshop to discuss TransSuite Web UI.
- 10/12, 10/26 OGL and Olsson held bi-weekly conference calls for contract work
- 10/18 Ray Webb attended TTPC
- 10/20 Chris Jenkins attended the KC Scout Infrastructure meeting
- 10/20 OGL and several agencies met informally to discuss various technical topics
- 10/20 OGL conducted CMAQ traffic signal Bid Opening
- 10/24 OGL team held the July OGL Steering Committee meeting
- 10/26 OGL, KCMO, and Iteris staff met to discuss KCMO signal timing implementation
- 10/28 OGL and Econolite staff met to discuss future wireless network products
- 11/1 OGL, Affinis, and Missouri CMAQ partners met to discuss CMAQ traffic signal bids
- 11/1, 11/8, 11/15 OGL, Olsson, and several member agencies met to discuss SMART Grant
- 11/1 OGL, Affinis, and Kansas CMAQ partners met to discuss CMAQ traffic signal bids
- 11/2, 11/30 OGL staff met with Iteris regarding contract work
- 11/9, 11/23 OGL and Olsson held bi-weekly conference calls for contract work
- 11/15-16 Ray Webb presented and participated in NoCOE peer exchange
- 11/16 OGL staff participated in the OGL Regional TransSuite Monthly Status meeting
- 11/17 Chris Jenkins attended the KC Scout Infrastructure meeting
- 11/17 OGL and several agencies met informally to discuss various technical topics
- 11/19 OGL staff attended the KDOT CMAQ Project letting
- 11/21 OGL, Olsson, and Merriam staff met to discuss traffic issues @ 67th & I-35
- 11/23 OGL, Affinis, and Missouri CMAQ partners met to discuss CMAQ traffic signal bids
- 11/29 OGL met with Cook, Flatt, and Strobel and discussed OGL operations
- 12/1-2 Ray Webb presented and participated in FHWA Crowdsourcing peer exchange
- 12/5 OGL and MoDOT staff met to discuss CMAQ project
- 12/7, 12/21 OGL and Olsson held bi-weekly conference calls for contract work
- 12/7 OGL and Leawood staff met to discuss CMAQ construction inspection
- 12/12 OGL and MODOT staff met with Miovision regarding their Traffop product.
- 12/15 Chris Jenkins attended the KC Scout Infrastructure meeting
- 12/15 OGL and several agencies met informally to discuss various technical topics
- 12/15 OGL staff participated in the OGL Regional TransSuite Monthly Status meeting
- 12/20 OGL and several agencies met to discuss OGL Signal Timing RFP submittals
- 12/22 OGL met with MoDOT staff to discuss upcoming SB US 169 closing
- 12/28 OGL and Olsson staff met to discuss updates to the OGL Technology Plan





Operation Green Light 4 Quarterly Operations Report

Quarterly Repair Ticket Statistics by Month

In the 4th Quarter of 2022, OGL staff created and responded to **5** repair tickets in the Kansas City area.

Figure 1 – Quarterly Repair Ticket Statistics by Month



Additional Repair Ticket Details:

Figure 2 – Monthly Repair Ticket Statistics / Prior 15 months

Figure 2 shows the number of repair tickets that OGL staff responded to for the last 15 months. It is intended to show long-term trends in incidents that are occurring on the OGL network.







Operation Green Light 5 Quarterly Operations Report

Additional Communications Statistics

OGL Network Pod Diagram

Figure 3 shows the overall design of the OGL Network and Pod Locations. It is noted that the different color of lines between the Pods represent the different type of network connections. A black line represents an FCC licensed link, an orange line represents a fiber optic connection, and a light blue line represents an unlicensed radio link. The OGL network now has 2 wireless rings as seen in the diagram.



Figure 3 – OGL Network Pod Diagram





Operation Green Light 6 Quarterly Operations Report

Repair Tickets by Network Pod

OGL staff is continually working on improving the reliability of the OGL network. Therefore, staff monitors and tracks which network pods continually have incidents. Figure 4 shows the number of repair tickets for each Pod and Figure 5 shows the number of repair tickets year-to-date for each Pod.



Figure 4 – Repair Tickets by Network Pod









Operation Green Light 7 Quarterly Operations Report

Repair Tickets by Equipment Type

Figure 6 – Repair Tickets by Equipment Type

Figure 6 shows the number and percentage of incidents that occur for each equipment type for the quarter.



Figure 7 – Repair Tickets by Equipment Type / Year – to – Date

Figure 7 shows the percentage of repair tickets year – to – date for each equipment type.







Operation Green Light 8 Quarterly Operations Report

Repair Ticket Statistics by Severity Level

Figure 8 – Repair Ticket Statistics by Severity Level

Figure 8 shows the number and percentage of incidents by severity level for the quarter.



Figure 9 – Repair Ticket Statistics by Severity Type / Prior 15 months

Figure 9 shows the number of incidents by severity type that OGL staff has managed in the last 15 months.







Operation Green Light 9 Quarterly Operations Report

Summary of Critical Events

The OGL staff responded to **0** critical events during the 4th Quarter of 2022.

Preventative Maintenance

Each year at the Pod locations for the OGL network, preventative maintenance is performed according to Exhibit I Scope of Services.

There was no Preventative Maintenance scheduled for the 3rd quarter.

Incident Management

FHWA's Congestion Report estimates the following causes of congestion on US roadways:



Noticing that Traffic Incidents, Work Zones, Bad Weather, and Special Events account for approximately 55% of congestion, OGL responds to these types of events. When traffic patterns are abnormal, signal timing can often be adjusted to reduce the impact.

OGL staff responded to **112** incidents in the 4th quarter of 2022. These consisted of weather events, crashes, or roadwork events (either on the interstate system or on surface streets) or other abnormal events that impacted traffic flow. Of these events, OGL staff made operational changes to traffic signals for **83** of them. The remainder resulted in communication with KC Scout, or the agency involved or monitoring of the situation only.





Some examples include:

- Roadwork continued on 87th near I-435 in Lenexa requiring signal timing adjustments on various occasions.
- Roadwork continued on 75th St at Nieman and Quivira in Shawnee requiring signal timing adjustments on various occasions.
- Roadwork continued on Quivira Rd through Lenexa until 11/23 at which time signal operation was restored to normal.
- Roadwork continued at Holmes Rd & Red Bridge Rd. Signal operation was adjusted.
- Various concerts and other events at the Cable Dahmer Arena in Independence required signal timing adjustments to accommodate ingress traffic.
- Roadwork continued at K-7 & Eisenhower, including a full closure of the North leg 10/14. Signal operation was adjusted.
- 10/12 Lane closures began as part of the K-7 & Parallel intersection rebuild. Signal operation was adjusted.
- 10/19 A crash closed 87th St at Hauser Ct. Signal operation at Pflumm was adjusted.
- 10/20 A crash closed SB K-7 at Leavenworth Rd. Signal operation was adjusted.
- 10/20 Roadwork closed lanes on 63rd St between Woodland and US-71. Signal operation was adjusted.
- 10/25 Expansion joint repair on I-35 caused various lane closures for several days. Signal operation on M-9 was adjusted.
- 11/3 A crash on I-70 WB at Noland caused diversion onto US-40. Signal operation was adjusted.
- 11/21 Roadwork on Chipman Rd EB from US-50 to Donovan began. A special coord plan was developed, installed and commanded as necessary from day to day through 12/12.
- 11/23 A crash closed US-71 NB at Bannister. A special plan was developed, installed and commanded to assist with diverting traffic.
- 12/6 Expansion joint repair on I-435 WB at Blue River caused delays on area surface streets for several days. Signal operation at many locations in the area was adjusted.





Operation Green Light Quarterly Operations Report

Figure 10 – Number of Incidents Responded to

Figure 10 shows the trends in the number of incidents OGL responded to during the last 6 quarters.







11

Operation Green Light 12 Quarterly Operations Report

Traffic Signal Event Tracking

•	•				
Issue	Jurisdiction	Count	Issue	Jurisdiction	Count
All Directions Flashing	Belton	1	Other	MODOT	3
	Leavenworth	1		Lenexa	1
	Leawood	1			
	Lee's Summit	1	Ped Recalling	MODOT	1
	Merriam	2		Belton	1
	MODOT	28		Independence	1
	NKC	3		Shawnee	1
	Shawnee	2			
	UGOVT	6	Phase Backing Up	MODOT	2
				Merriam	2
Detection Not Working Correctly	UGOVT	1			
	MODOT	13	Phase Skipped	Belton	1
	КСМО	1		NKC	1
	Lee's Summit	5			
	Lenexa	4	Preempt Not Working	Merriam	1
	Merriam	3			
	Roland Park	1	Preempt Not Working Correctly	Independence	1
	Shawnee	5			
			Program Replacement Controller	MODOT	2
Green Time to short	MODOT	2		Independence	1
	Lee's Summit	2		Raymore	1
Indication Burned Out	MODOT	2	TransSuite Database Comparison Diff	Leavenworth	2
				Grandview	2
Intersection not running Correct plan	Bonner Springs	1		Independence	2
	MODOT	1		Lee Summit	2
	Independence	1		Lenexa	8
	Lee's Summit	2		MODOT	11
				NKC	1
				Shawnee	g

Total

UGOVT

149

3





Operation Green Light 13 Quarterly Operations Report

Figure 11 – Number of Traffic Signal Events

Figure 11 shows the trends in the number of traffic signal events OGL responded to during the last 6 quarters.











WHAT IS OGL?

Operation Green Light (OGL) is a regional effort to improve traffic flow, reduce emissions, and increase safety in the Kansas City region. Coordinated through the Mid-America Regional Council (MARC), it is supported by local agencies, driven by their expert staff, and powered by technology.



WHAT WE DO

OGL works with federal, state, and local agencies to develop and implement a regional network of signals. This system provides uniform traffic management across jurisdictional boundaries in the Kansas City region allowing for better collaboration among all agencies.

SPECIFICALLY, OGL:

- Develops traffic signal timing plans.
- Manages signal communication equipment.
- Tracks and maintains signal malfunctions.
- Initiates developed arterial diversion route timing plans.
- Maintains a traffic responsive pilot on U.S. Highway 71.

OGL is paving the way to a more efficient and effective future for the traffic sector in the Kansas City region through innovation and collaboration.













3,000 TONS

AVOIDED

POLLUTANTS

ANNUAL BENEFITS







*https://www.sciencedirect.com/science/article/pii/S2095756416000027

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FAST FACTS

- 750+ Traffic Signals
- 200+ Roadway Miles
- 1.7 Million Trips/Day
- 50/50 Local Agency/Federal Funding
- **\$800** Local Agency Annual Cost Per Signal

MOVING FORWARD

OGL continually works with partner agencies to discover new and innovative strategies to further improve traffic conditions within the Kansas City region. Some of the strategies and technologies we are currently investigating and implementing include the following:

- Use of crowd-sourced data in decision-making
- Actively preparing for the integration of connected and automated vehicles
- Identifying new funding sources

AGENCIES & PARTNERS



MISSOURI

Kansas City
Lee's Summit
Liberty
North Kansas City
Raymore

KANSAS	
Bonner Springs	Mission
Fairway	Mission Woods
Kansas City	Olathe
Lansing	Overland Park
Leavenworth	Prairie Village
Leawood	Roeland Park
Lenexa	Shawnee
Merriam	Westwood

BENEFITS OF PARTICIPATION

There are many benefits to partnering in the OGL program. OGL staff coordinate better traffic flow along every corridor by constantly monitoring real-time operations, assisting with timing changes for roadwork projects and incidents, and supporting agency traffic signal maintenance activities. OGL partners often pursue additional funding for traffic signal system improvements together, increasing the chances of being selected. OGL leads the way by providing leadership and coordination in the evaluation of new strategies and technologies to improve the system and benefit every traveler in the Kansas City region.



Learn more at marc.org/OGL

Data is estimated based on current OGL corridors relative to MoDOT and KDOT AADT reports, U.S. Census Bureau population estimates, and timing benefits from OGL efforts.