Getting to MARC: Information on transportation options to the MARC offices, including directions, parking, transit, carpooling, and bicycling, can be found online. 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 visit our webpage.
Welcome & Introductions
Meeting started at 1:30. Derek Olson, the Chair of the committee, welcomed all and conducted introductions.

1. July 23 Committee Minutes – The minutes were approved unanimously.

2. VOTE: Vice-Chair Election – Kevin Manning nominated Sol Moinuddin with Kansas City, MO. The nomination was supported and there were no other nominations. The committee elected Sol unanimously.

3. Two Minute Agency Updates
   - MODOT is supporting Proposition D to be voted on in November which will increase the state gas tax.
   - Independence will be rebuilding Noland & Fair. They will also be purchasing all new controllers for the city intersections soon through a CMAQ funded project. Donna Coatsworth will be retiring November 1st.
   - FHWA has announced that the next issue of MUTCD will be progressed next year with proposed rulemaking out for review.

4. Proposed OGL Steering Committee Meetings for 2019 – The proposed meeting dates were provided: January 28, April 22, July 22, and October 28.

5. 2019 OGL Work Plan – A Work Plan document was included in the meeting packet. System Engineering for ATMS software is a new item for this year. Some of the corridors listed for retiming will likely be done before the end of 2018.
6. **Olathe Traffic Signal Advancement Presentation** – Noel Forrester with Olathe updated the committee on several signal technology efforts the city is pursuing. *Green Driver/Connected Signals* feeds drivers signal information through a mobile app. *Traffic Technology Services (TTS)* feeds signal information to various vehicle manufacturers for in-car systems. *Live Traffic Data (LTD)* receives signal status from TransSuite and provides free performance measures in exchange for the right to sell the signal data to 3rd parties for connected vehicle applications. *Miovision* has installed their performance measures system on a short segment of Santa Fe/135th St, Ridgeview to Greenwood. Some of the *Miovision* monitored intersections have a device in the field cabinet, while others get a status feed from TransSuite.

7. **Open Data Report and Future Direction** – OGL staff would like to know from the Steering Committee whether and how they would like to proceed with releasing signal status data from TransSuite to external private firms such as those Olathe is currently working with. Ideally, one multi-agency agreement could cover all agencies represented by the MARC server. There was general support so MARC staff will work on drafting an agreement through which each agency will allow release of their signal status and data to outside entities and private firms. This work may require input from attorneys and operations staff to address regional agreement requirements.

8. **Incident Management** – Todd Fredericksen with Olsson updated the committee on the incident management plans development progress. A table-top exercise was held in September to help individuals who will be involved get up to speed on how the decision making and communication will flow. The plans are in place and ready to be activated when needed on the I-35 section from 95th to Antioch. Plans are currently being developed for I-435 and I-70 area in Kansas City, MO and Independence.

9. **Performance Measures** – Jeremy Stretz with Olsson updated the committee on the work being done by the Performance Measures subcommittee. The goal is to identify tools and processes to measure and report system performance and use that data to help make decisions on where to spend time and resources across the region. The current plan is to pursue (1) high-level probe speed data from HERE that is available across the region independent of field infrastructure and (2) low-level signal performance measures that may require additional detection and/or controller upgrades and/or other equipment on select high priority corridors. The subcommittee has been working on a dashboard based on HERE data that will show how corridor travel times are changing over time, but currently the data is not available in Kansas and is cumbersome to manually download the raw data and manipulate in Excel. The subcommittee will continue to explore these and other performance measure systems. The needs that come out of this should be fed into the System Engineering for the ATMS software discussion.

10. **Regional ATMS System Engineering Project** – Steve Garbe with Iteris updated the committee on the status. In July many OGL partner agencies met together to discuss system needs and Iteris has also been meeting one-on-one with several agencies to make sure their needs will be captured. An RFI will come out soon to educate us on the capabilities of current state-of-the-art systems.

11. **MO CMAQ, KCMO CCTV, Blue Springs & Grandview Construction Project** – Ray Webb updated the committee on the project. Design is complete and bids from construction contractors are due and will be opened Wednesday morning.

12. **KCRPC Regional Procurement of Traffic Signal Components** – Ray inquired of the committee whether agencies were able to and/or had interest in using KCRPC to purchase signal components. Several agencies expressed interest if the prices were good and several already use KCRPC to purchase other types of equipment. Ray will point agencies to Rita Parker who manages KCRPC contracts.

13. **Quarterly Operations Update** – Chris Jenkins highlighted a few items from the operations report which was included in the meeting packet. Barry Viss mentioned a few new features that came with the latest
version of TransSuite. A Multi-Intersection Timing Plan Editor has been created for quick changes to a corridor’s coordination plans but currently only works with Peek controllers. There are additional options when exporting controller data from the UCM, you can now choose individual jurisdiction(s) and/or specific named version(s) of the controller data which will help keep the file size low if agencies want to use the Stand-Alone UCM. The system can now schedule live time space diagram data collection. Barry has been dialoging with TransCore on their Split Failures monitoring which looks like it may be a useful system-wide performance measure independent of controller type and detection technologies but has a few issues to be addressed before it can be turned on and utilized. Barry reminded the agencies that use SEPAC controllers that staff recommend upgrading firmware to version 4.57 and to feel free to talk with Barry offline for details.

14. Quarterly Budget Report and 2019/2020 Budget – Ray Webb walked the committee through the budget status report and the proposed 2019-2020 budget that was provided. The local agency share will be lowered from $800 to $600 per intersection per year due to continuing budget underruns. This will effectively change the federal funds match percentage that was originally proposed. The OGL program has been building a balance of excess local funds above what is anticipated to be needed. However, should the system engineering process lead us to a large purchase of a new ATMS software package these fund can be available. Kevin Manning moved to accept the proposed budget which included a change to the local match from $800 to $600 per intersection per year. The motion was supported and passed unanimously.

15. Other Business
   - Kevin Manning thanked Derek for his service as chair of the OGL Steering Committee.
   - The new vehicle OGL plans to purchase should be delivered in late November.
   - There is an ATSPM workshop tomorrow, October 23, at the MODOT district office.

Next Regularly Scheduled Meetings: January 28, April 22

Adjournment – Meeting was adjourned at 3:13 PM
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.

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)
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.

Updated October 2013
• 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 www.recovery.gov.

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.
CONTRACT DATABASE

MARC/KCRPC is working with CoProcure in the development of a national contract database. CoProcure is a startup, founded by former public servants and technologists, on a mission to make it easier for public agencies with similar needs to collaborate. The database will make it easier for local governments to find and compare many contracts in one place. The free tool is currently under development and should be available to public agencies soon. CoProcure will be offering additional services, such as market research and others, as a fee subscription in the future.

RECENT LOCAL PURCHASES

Johnson County, Kansas, purchased a Case 521G wheeler loader for $134,717 from Victor L. Phillips, on contract EM06-17 with cost savings of $48,809.

City of Kansas City, Missouri, purchased a Takeuchi TL6 compact track loader for $58,409 from Victor L Phillips, on contract EM06-17 with cost savings of $13,213.

Kansas City, Kansas, Board of Public Utilities purchased five Kubota RTV-X1100CWL-H units for $100,603 from Kubota Tractor Corporation, on contract GR01-18 with cost savings of $23,849.

City of Lenexa, Kansas, purchased a Pierce Impel PUC pumper for $709,258 from Conrad Fire Equipment, on contract FS12-17 with cost savings of $54,752.

Platte County, Missouri, Sheriff’s Department purchased an EYE in-car video system for $5,867 from Kustom Signals, Inc., on contract EF04-17 with cost savings of $1,336.

Unified Government of Wyandotte County, Kansas City, Kansas, purchased a Pierce ladder truck and a Pierce mid-mounted pumper for $1,578,115 from Conrad Fire Equipment on contract FS12-17 with cost savings of $84,996.

Multiple agencies rented various equipment from United Rentals, Inc. on contract RN11-15 during the second and third quarter of 2018 for total spend of $211,438.

Total savings to local governments: $11,394,521

KCRPC ADVISORY COMMITTEE

The committee provides professional government purchasing experience and technical support to the KCRPC. All members of the Advisory Committee must be current members of the Mid-America Council of Public Purchasing. KCRPC invites active agencies to serve on the committee. Please contact us if interested. Current members of the Advisory Committee include cities of Olathe, Independence, Lee’s Summit, Kansas City, Pleasant Hill, North Kansas City and counties of Douglas, Wyandotte, Miami, Clay and Johnson.

ON-SITE PURCHASING WORKSHOPS OR WEBINAR OFFERED

Did you know that KCRPC offers individual onsite workshops or webinars? Your agency can learn how to take advantage of our services, use local contracts and purchase using the HGACBuy contracts. Contact KC RPC to schedule your workshop at no cost for your agency.
Mid-America Regional Council’s
Quarterly Report
For
Operation Green Light

4th Quarter 2018 Report
January 28th, 2019

Prepared For:
OGL Steering Committee

Prepared By:
OGL Operations Team
## Table of Contents

List of Figures ...................................................................................................................... iii
Introduction .......................................................................................................................... 1
Operations Summary ........................................................................................................... 1
  Notes on Operations Summary ...................................................................................... 2
  System Hardware/Software Activities/Issues................................................................. 2
  Interagency Coordination ............................................................................................... 3
Additional Statistics .............................................................................................................. 6
  OGL Network Pod Diagram ............................................................................................ 6
  Repair Tickets by Network Pod ........................................................................................ 7
  Repair Tickets by Equipment Type ................................................................................. 8
  Repair Ticket Statistics by Severity Level ....................................................................... 9
Summary of Critical Events ................................................................................................. 10
  Preventative Maintenance ............................................................................................... 10
  CCTV Operations ........................................................................................................... 10
  Traffic Signal Event Tracking ....................................................................................... 11
List of Figures

Quarterly Repair Ticket Statistics by Month................................................................. 5
Figure 1 – Quarterly Repair Ticket Statistics by Month.................................................. 5
Additional Repair Ticket Details:...................................................................................... 5
Figure 2 – Monthly Repair Ticket Statistics / Prior 15 months........................................ 5
Figure 3 – OGL Network Pod Diagram........................................................................... 6
Figure 4 – Repair Tickets by Network Pod ................................................................. 7
Figure 5 – Repair Tickets by Network Pod / Year – to – date ........................................ 7
Figure 6 – Repair Tickets by Equipment Type.............................................................. 8
Figure 7 – Repair Tickets by Equipment Type / Year – to – Date .................................... 8
Figure 8 – Repair Ticket Statistics by Severity Level.................................................... 9
Figure 9 – Repair Ticket Statistics by Severity Type / Prior 15 months......................... 9
Introduction

Operation Green Light (OGL) is a bi-state 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 system 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 2018 and highlights of signal timing and agency coordination. OGL currently monitors/operates 732 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 http://www.marc.org/Transportation/Commuting.

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 21 repair tickets. OGL uses the repair tracking database to manage work orders and billing for the contractor, but currently doesn’t differentiate between normal repair work and radio upgrades.

Corridor/Signal Timing Efforts
- 10/12 – Rainbow & 36th Updated AM Peak coord plans
- 10/15 – Adjusted coordination plans on Douglas after bridge work complete
- 11/6 – Updated all clearance and ped times on Noland Rd
- 11/7 – Holiday schedules on 39th St updated for 2018 season
- 11/15 – Adjusted coordination plans on Shawnee Mission Pkwy & Antioch
- 11/29 – Adjusted coordination plans at 135th & Roe
- 12/7 – Adjusted various signal operations in response to closures for President Trump’s visit

Training Sessions/ Panels/Events
- 10/4-10/5 – Barry Viss attended MOVITE meeting
- 11/6-11/9 – Chris Jenkins and Scott Cutshall attended Synchro training provided by Trafficware
- 11/15 – Ray Webb and Barry Viss attended KCITE meeting

Additional Information
- OGL took possession of new Ford Transit to help with traffic data collection and field work.
- OGL staff set up and scheduled the Miovision equipment to conduct 23 counts. Most of these were 13-hour turning movement counts and the remaining were 24-hour ADT counts.
Notes on Operations Summary

1. Repair ticket levels used by OGL staff are defined in Exhibit 1 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 3rd Quarter of 2018:

- Both the main server and the replication server were upgraded with new hard drives and additional memory. The operating system was also updated to Windows Server 2016.
- All virtual servers except the main TransSuite and database servers were updated to Server 2016 as well.
- A web version of TransSuite was installed and is currently under review internally.
- A new database server was started to move to SQL 2017 for Solarwinds and TransSuite
- OGL installed and integrated new Avaya phones to become part of the MARC VoIP telephone network
Interagency Coordination

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

- 10/3 – OGL and MoDOT staff met to discuss adding signals to OGL
- 10/3, 10/17, 10/31 – OGL and Olsson held bi-weekly conference calls for contract work
- 10/8, 10/15, 10/22, 10/29 – Barry Viss worked at the KCMO traffic center
- 10/10 – OGL staff met with KC Scout Supervisors to discuss incident coordination
- 10/10 – OGL staff held Pre-Bid meeting for CMAQ project
- 10/11 – OGL and Roeland Park staff discussed possible project to connect Roe Ave
- 10/16 – Chris Jenkins attended MoDOT Core Team meeting for upcoming M152 and I-35 construction project
- 10/16 – Ray presented the OGL program activities to TTPC
- 10/17 – OGL and KCK staff discussed connecting K7 signals to OGL network and other project coordination
- 10/18 – OGL staff met with TransCore staff for client coordination
- 10/18 – OGL staff participated in the OGL Regional TransSuite Monthly Status meeting
- 10/19 – OGL staff met with Overland Park staff to discuss Shawnee Mission Pkwy timing
- 10/22 – OGL team lead the October OGL Steering Committee meeting
- 10/23 – OGL attended the ATSPM Workshop at MoDOT District office
- 10/24 – OGL and MoDOT staff met with Mid-Am Signal to discuss Intelight firmware upgrades
- 10/24 – OGL staff held bid opening for upcoming CMAQ Project
- 10/25 – OGL staff discussed M152 / I-35 bridge project coordination with TranSystem
- 10/29 – OGL and Liberty staff discussed network communications and adding additional signals to OGL
- 11/5, 11/13 – Barry Viss worked at the KCMO traffic center
- 11/9 – OGL and GBA staff discussed project requirements and coordination for Roeland Park, Roe Ave project
- 11/5 – Ray attended ECKC November meeting
- 11/14, 11/28 – OGL and Olsson held bi-weekly conference calls for contract work
- 11/15 – OGL staff participated in the OGL Regional TransSuite Monthly Status meeting
- 11/16 – OGL staff held call for Systems Engineering Update and RFI review
- 11/19 – Ray attended the ATSPM UDOT developer webinar
- 11/20 – Ray attended the TTPC meeting
- 11/27 – OGL staff attended the OGL performance management meeting in Olathe
- 11/28 – Ray attended MARC Highway committee meeting
- 12/3 – Barry met with MODOT to discuss M-9 Cycle Track plans
- 12/3, 12/10 – Barry Viss worked at the KCMO traffic center
- 12/5 – OGL staff held performance management meeting including Michael Pack with RITIS
- 12/6 – OGL staff met with MoDOT Project Managers to discuss future project coordination
• 12/7, 12/21 – OGL and KCK staff discussed connecting K7 signals to OGL network and other project coordination
• 12/11 – OGL staff held call for Systems Engineering Update and RFI review
• 12/12 – OGL and Olsson held bi-weekly conference calls for signal timing work status
• 12/12 – OGL Blue Springs, MoDOT, Grandview and KCMO staff held Pre-Con meeting with upcoming CMAQ contractor to discuss project coordination
• 12/13 – OGL and Leawood staff met to discuss project operations with new City Engineer
• 12/18 – OGL MoDOT and KCPD staff met to discuss possible camera integration on US-71
Quarterly Repair Ticket Statistics by Month
In the 4th Quarter of 2018, OGL staff created and responded to 21 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.
Additional 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 are representing the different type of network connections. A black line represents a 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
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

Figure 5 – Repair Tickets by Network Pod / Year – to – date
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.

![Pie chart showing repair tickets by 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.

![Pie chart showing repair tickets by equipment type year-to-date.]

SU 43%

Switches 9%

Backhaul 19%

AU 29%

Controller 0%

SU 58%

Switches 6%

AU 32%

Backhaul 4%

Controller 0%
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.

![Pie chart showing severity levels: Critical (5%), Major (24%), Minor (71%)](image)

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.

![Bar chart showing repair ticket statistics by month and severity type](image)
Summary of Critical Events
The OGL staff responded to 1 critical events during the 4th Quarter of 2018.

Preventative Maintenance
Each year at the Pod locations for the OGL network, preventative maintenance is performed according to Exhibit I Scope of Services.
Preventative maintenance for was not completed for 2018.

CCTV Operations
As part of the MO American Recovery and Reinvestment Act project in 2010 and the 2015 OGL CCTV and Network Enhancement project, 118 CCTV cameras were constructed at critical locations throughout the region. Since final installation, these cameras have routinely proven valuable to manage traffic and signal timing. During times of timing plan implementation, construction and detours, OGL staff, operations staff and signal electricians have routinely used these cameras to observe traffic and signal operations. Through the use of CCTV combined with TransSuite, malfunctions can be investigated remotely for a variety of issues including detection problems and timing concerns saving time investigating the issue in the field.

A design build project by MoDOT on I-435 on the south side of the metro continued to disrupt traffic in the area. OGL staff continues to monitor this corridor and alternate routes commuters are using and making timing adjustments. Most of this work involves timing changes on Route W/Bannister Rd.
## Traffic Signal Event Tracking

### SharePoint 2018, 4th Quarter

<table>
<thead>
<tr>
<th>Issue</th>
<th>Jurisdiction</th>
<th>Count</th>
<th>Issue</th>
<th>Jurisdiction</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Directions Flashing</td>
<td>Independence</td>
<td>2</td>
<td>Other</td>
<td>MODOT</td>
<td>2</td>
</tr>
<tr>
<td>Harrisonville</td>
<td>1</td>
<td></td>
<td>KCMO</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>KCMO</td>
<td>1</td>
<td></td>
<td>Lee’s Summit</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Leawood</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lee’s Summit</td>
<td>3</td>
<td></td>
<td>Ped Recalling</td>
<td>MODOT</td>
<td>8</td>
</tr>
<tr>
<td>Merriam</td>
<td>3</td>
<td></td>
<td></td>
<td>Lenexa</td>
<td>1</td>
</tr>
<tr>
<td>MODOT</td>
<td>26</td>
<td></td>
<td></td>
<td>Prairie Village</td>
<td>1</td>
</tr>
<tr>
<td>UGOVT</td>
<td>4</td>
<td></td>
<td></td>
<td>NKC</td>
<td>1</td>
</tr>
<tr>
<td>NKC</td>
<td>6</td>
<td></td>
<td></td>
<td>Raymore</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UGOVT</td>
<td>2</td>
</tr>
<tr>
<td>Conflict With Opposing Phase</td>
<td>MODOT</td>
<td>1</td>
<td>Phase Backing Up</td>
<td>MODOT</td>
<td>1</td>
</tr>
<tr>
<td>Cycling improperly</td>
<td>Liberty</td>
<td>1</td>
<td></td>
<td>KCMO</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NKC</td>
<td>1</td>
</tr>
<tr>
<td>Detection Not Working Correctly</td>
<td>Gladstone</td>
<td>1</td>
<td></td>
<td>OP(1/4); MSN(3/4)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>KCMO</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lee’s Summit</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lenexa</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merriam</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mission</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MODOT</td>
<td>18</td>
<td></td>
<td>MODOT</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>UGOVT</td>
<td>9</td>
<td></td>
<td>NKC</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Shawnee</td>
<td>2</td>
<td>TransSuite Database Comparison Diff</td>
<td>Independence</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Leawood</td>
<td>1</td>
</tr>
<tr>
<td>Green Time too short</td>
<td>Raymore</td>
<td>1</td>
<td></td>
<td>Lee’s Summit</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>MODOT</td>
<td>10</td>
<td></td>
<td>Lenexa</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Merriam</td>
<td>1</td>
<td></td>
<td>MODOT</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Liberty</td>
<td>1</td>
<td></td>
<td>NKC</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lee’s Summit</td>
<td>1</td>
<td></td>
<td>Raymore</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>1</td>
<td></td>
<td>Shawnee</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>UGOVT</td>
<td>1</td>
</tr>
<tr>
<td>Long Wait For Green</td>
<td>Gladstone</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>KCMO</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total** 200
MARC's OGL program operates from STP Federal revenues on a reimbursement basis from MoDOT and KDOT who administer the funds. The local match for 2019-2020 is collected annually with a two year agreement which coincides with the time frame of the two year MoDOT and KDOT agreements.

Local funds are combined with federal STP funds to comprise the total operations budget. The current federal to local funding split is 50/50. Reimbursement of federal funds from MoDOT and KDOT are at 80% federal, 20% local rate. In Kansas, all agreements are in the form of a single combined agreement for the 15 agencies. The agreements had been by individual agency till the 2017-2018 agreement but is now combined into a single agreement.

**Budget summary:**
- The budget is for two years starting April 2017
- All Local funds have been collected for 2018
- The % variance column can be used to compare variance to the November close of 83% (20 of 24 months)
- STP funds were fully expended in May. Now operating on local funds until new STP agreements are in place (February / March 2019)
- Equipment/Computer/Supplies line item at 137% includes accelerated expenses to execute the technology plan
- Ten 2019/2020 agreements have been completed. Several others are in progress
- 2019 invoices may be sent in February
<table>
<thead>
<tr>
<th>Expenses</th>
<th>Program Budget</th>
<th>Cumulative To Date</th>
<th>Balance (yet to be spent)</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries, Fringe Benefits, Indirect Costs</td>
<td>$1,099,716.00</td>
<td>$870,381.74</td>
<td>$229,334.26</td>
<td>79.1%</td>
</tr>
<tr>
<td>Consultants/Contracted Services</td>
<td>$865,636.00</td>
<td>942,232.38</td>
<td>(76,956.38)</td>
<td>108.8%</td>
</tr>
<tr>
<td>Legal Fees</td>
<td>$10,000.00</td>
<td>5,264.92</td>
<td>4,735.08</td>
<td>52.6%</td>
</tr>
<tr>
<td>Meeting/Travel (In/Out of Region &amp; Registration)</td>
<td>$16,200.00</td>
<td>13,127.81</td>
<td>3,072.19</td>
<td>81.0%</td>
</tr>
<tr>
<td>Rent</td>
<td>$15,248.00</td>
<td>12,254.84</td>
<td>2,993.16</td>
<td>80.4%</td>
</tr>
<tr>
<td>Telephone/Maint. (Internet, mobile, ConferSave, USB modem)</td>
<td>$48,000.00</td>
<td>28,106.70</td>
<td>19,893.30</td>
<td>58.6%</td>
</tr>
<tr>
<td>Insurance</td>
<td>$8,000.00</td>
<td>6,035.00</td>
<td>1,965.00</td>
<td>75.4%</td>
</tr>
<tr>
<td>Postage</td>
<td>$200.00</td>
<td>31.72</td>
<td>168.28</td>
<td>15.9%</td>
</tr>
<tr>
<td>Equipment/Computer/Supplies</td>
<td>$249,000.00</td>
<td>341,853.38</td>
<td>(92,853.38)</td>
<td>137.3%</td>
</tr>
<tr>
<td>Service Agreements</td>
<td>$2,000.00</td>
<td>1,011.84</td>
<td>988.16</td>
<td>50.6%</td>
</tr>
<tr>
<td>Automobile Gas/Maintenance</td>
<td>$16,000.00</td>
<td>6,588.04</td>
<td>9,411.96</td>
<td>41.2%</td>
</tr>
<tr>
<td>Professional Memberships</td>
<td>$1,000.00</td>
<td>-</td>
<td>1,000.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>Training</td>
<td>$3,000.00</td>
<td>-</td>
<td>3,000.00</td>
<td>0.0%</td>
</tr>
<tr>
<td>Utilities</td>
<td>$10,000.00</td>
<td>8,971.85</td>
<td>1,028.15</td>
<td>89.7%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$2,344,000.00</strong></td>
<td><strong>$2,235,860.22</strong></td>
<td><strong>$108,139.78</strong></td>
<td><strong>95.4%</strong></td>
</tr>
<tr>
<td><strong>Revenues (Reimbursement from DOT's at 80/20)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STP Funding, KDOT</td>
<td>$450,000.00</td>
<td>$450,000.00</td>
<td>-</td>
<td>100.0%</td>
</tr>
<tr>
<td>STP-Funding, MoDOT</td>
<td>$770,000.00</td>
<td>770,000.00</td>
<td>-</td>
<td>100.0%</td>
</tr>
<tr>
<td>Local Govt Rev-Required 20% match of $1,525,000</td>
<td>$305,000.00</td>
<td>305,000.00</td>
<td>-</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Total Revenues for Federal Grant</strong></td>
<td><strong>$1,525,000.00</strong></td>
<td><strong>$1,525,000.00</strong></td>
<td><strong>$-</strong></td>
<td><strong>-</strong></td>
</tr>
<tr>
<td>Local Govt Revenue above 20% match (Total 2 year local commitment $305k + $819k= $1,124,000)</td>
<td>$819,000.00</td>
<td>(710,860.22)</td>
<td><strong>$108,139.78</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Combined Revenues</strong></td>
<td><strong>$2,344,000.00</strong></td>
<td><strong>$814,139.78</strong></td>
<td><strong>$108,139.78</strong></td>
<td></td>
</tr>
</tbody>
</table>

Local Government Balances:

- Funds available from previous budgets: $786,459.81
- Funds collected for current budget period: $1,125,600.00
- Local Operation Green Light Program #65375 (Deferred Rev Balance): $30,120.93
- Total available: $1,942,180.74

Less: Amount applied for current budget period (see above): $(305,000.00)

**Ending Balance November 30, 2018**: $1,637,180.74

**Reserve/Emergency (local funds)**: $300,000.00