Agenda

• Mid – America Regional Council
• What We Do
• Program Funding
• Program Details
• Future Efforts
Mid-America Regional Council

- Metropolitan Planning Organization
- Formed in 1972
- Created by an inter-local agreement between counties and the region’s largest cities
- Programs in Transportation: Emergency Management, Homeland Security, Regional 911 System, Environmental Policy, Early Childhood Education, etc.
Kansas City Region

- 2 States
- 9 Counties
- 120 Cities
- 2.1 m Pop.
- 16,000 Lane Miles
- 4,400 Sq Miles
Operation Green Light

• Traffic Signal Coordination
• Improving:
  – Traffic Flow & Air Quality
  – Incident Response
• 22 Partner Cities and Agencies
  – 3 to add in 2014
  – 3 to add in 2017
• 697 OGL Intersections currently
  – On ATMS in Region approx. 1000
What OGL Does

Mission: Operation Green Light monitors and manages the existing transportation system through safe and efficient traffic signal operations to reduce travel time, fuel consumption and air pollution.

Elements include:

• Traffic Signal Timing
• Regional Network
• ATMS Software
What OGL Does

• Maintain Regional wire/wireless network
• Monitor / Troubleshoot Signals
  – Detection problems etc.
  – TransSuite’s split logger
• Signal Coordination Plans
  – Develop
  – Implement and tweak
  – Measure effectiveness
  – Maintain and adjust
• Incident Management, KCSCOUT
### Program Funding

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Project before 2010</td>
<td>$13.1 M</td>
</tr>
<tr>
<td>- CMAQ, STP, KDOT ITS, Local</td>
<td></td>
</tr>
<tr>
<td>ARRA Funding 2009-2010</td>
<td>$4.7 M</td>
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<tr>
<td>STP 2015/16 Operations (50/50)</td>
<td>$1.2 M</td>
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<tr>
<td>STP 2017/18 Operations (50/50)</td>
<td>$1.1 M</td>
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<tr>
<td>CMAQ 2017/18 Project</td>
<td>$570k</td>
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## OGL System Benefits

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Benefit : Cost</th>
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<tbody>
<tr>
<td>Johnson Dr.</td>
<td>23 : 1</td>
</tr>
<tr>
<td>North Oak</td>
<td>11:1</td>
</tr>
<tr>
<td>Ward Parkway</td>
<td>37:1</td>
</tr>
<tr>
<td>Shawnee Mission Parkway</td>
<td>60:1</td>
</tr>
<tr>
<td>Noland Road</td>
<td>18:1</td>
</tr>
<tr>
<td>75th Street</td>
<td>7:1</td>
</tr>
<tr>
<td>Red Bridge</td>
<td>12:1</td>
</tr>
</tbody>
</table>
Operations

- 5 Full Time Staff
  - 1 Program Manager
  - 3 Signal Analyst
  - 1 Administrative Assistant
- $1.1m Annual Cost
  - Contractor for Field Network Support
  - Contract for ATMS Software
  - Consultant Support – Signal Timing
- Formal Agreements
  - Agreement – STP/local share
  - Outline of Responsibilities
<table>
<thead>
<tr>
<th>KANSAS</th>
<th>MISSOURI</th>
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<tbody>
<tr>
<td>Bonner Springs</td>
<td>MoDOT</td>
</tr>
<tr>
<td>Fairway</td>
<td>Gladstone</td>
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<td>Independence</td>
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<td>Kansas City</td>
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<tr>
<td>Leawood</td>
<td>Lee’s Summit</td>
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<td>Lenexa</td>
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<td>Merriam</td>
<td>North Kansas City</td>
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<tr>
<td>Mission</td>
<td>Raytown</td>
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<td>Mission Woods</td>
<td>Raymore</td>
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<tr>
<td>Prairie Village</td>
<td></td>
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<td>Olathe</td>
<td></td>
</tr>
<tr>
<td>Overland Park</td>
<td></td>
</tr>
</tbody>
</table>
Communications

Communication Towers

Roof tops

Water Towers
Backbone

- Hybrid 11-18GHz Technology
- Life: 7-10 Yrs.
- 800 Mbps
- Performance: Solid
Wireless Distribution

- Unlicensed Wireless / minimal fiber
- Life: 7-10 Years
- Growing Interference
System Software
Incident Management

• Working with the Kansas City Scout freeway management system helps better respond to traffic incidents
Future Direction

- 2015-2016 Operating Agreements
- Incident Management with KC Scout
- Current CCTV Project
- Refine Operations
- New ATMS Functionality (2017/18 CMAQ Funds)
- Additional Agencies 2014 (9 intersection)
- Additional Agencies (2017/18 CMAQ Funds)
Future Direction

For More Information:

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Questions?