

OGL Concept of Operations: Roles and Responsibilities

Signal Timing

Initial Deployment of Timing Plans

Member agencies shall provide OGL with all traffic data currently available with the agency including:

- Existing timing plans and data in the existing traffic controller (controller data sheets)
- Intersection geometry
- Signal phasing information and policy
- Historical traffic count information available
- Approved yellow and all-red clearance intervals (or policy)
- Pedestrian timing (or policy)
- Signal phasing policy (Lead only/lead-lag/vary lead-lag by time-of-day)
- Historical citizen complaints on the intersection operation as needed

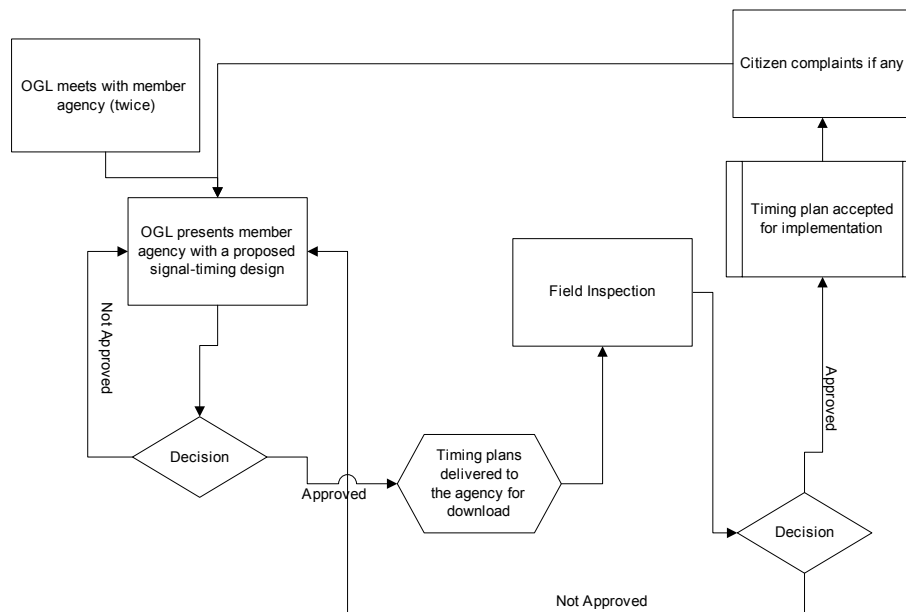


Figure 1

OGI shall provide member cities with regionally optimized timing plans for approval and download into the local controller. The steps involved in the process are:

- OGI shall collect traffic counts on the arterial
- OGI shall conduct travel-time studies and speed profile studies on the arterial prior to implementation of the timing plans
- OGI shall hold two design meetings with representatives from the impacted agencies
- OGI shall provide signal timing plans for agency approval and download to local controllers
 - OGI shall strictly adhere to agency policy on yellow and all-red clearance

- intervals
 - OGL shall strictly adhere to agency policy/design of pedestrian timing
 - OGL shall strictly adhere to agency policy on signal phasing
 - OGL shall strictly adhere to Manual of Uniform Traffic Control Devices (MUTCD) standards
- OGL shall field-monitor each arterial after timing plan download and provide further optimization if necessary by submitting updated timing plans for agency consideration and download
- OGL shall conduct travel-time and speed profile studies on arterials after implementation of the optimized signal timing plans

Figure 1 depicts the flow of the signal-timing process.

Providing Maintenance Timing Plans

OGL will examine the signal system network periodically and determine if optimization is necessary. If changes are required at a single intersection, the following steps shall be followed in the maintenance operation:

- OGL shall collect traffic counts at the problem intersection
- OGL shall optimize signal splits based on demand and adjust relevant offsets
- OGL shall meet/communicate with affected member agency if necessary
- OGL shall provide optimized signal timing plans for agency download
- OGL shall conduct post-download studies

If changes are to be made along the entire arterial, the following steps shall be followed:

- OGL shall conduct travel-time and speed profile studies along the arterial
- OGL shall meet with affected member agencies if needed
- OGL shall collect traffic counts if necessary
- OGL shall develop and provide optimized arterial timing plans to member agency for consideration and download
- OGL shall conduct travel-time and speed profile studies on the arterial after implementation of the optimized timing plans
- OGL shall field-monitor each arterial after timing plan download and provide further optimization if necessary by submitting updated timing plans for agency consideration and download

Incident Management

OGL and member agencies shall identify locations along the arterial where incidents are prone to happen. These locations shall be manually forced to run special plans when an incident is observed at the TOC. The following steps shall be followed for planned, recurring, and anticipated incident response:

- OGL and member agencies shall identify incident-prone locations
- OGL shall meet with affected member agencies to discuss solutions
- OGL shall develop signal timing plans for the incident
- OGL shall submit such plans for approval by responsible agencies
- OGL and agencies shall jointly determine the parameters required for invoking such a plan by the TOC
- Once the plan has been invoked (when the required parameters are met) OGL shall inform the affected agencies immediately

- After the incident has been cleared, OGL shall put signals back on their regular plans and inform member agencies

The Member Agency shall inform OGL about construction/roadway closures and request signal timing plan adjustments. OGL shall provide special timing plans to optimize traffic flow for agency consideration and download.

Citizen Complaints

Member agencies shall route/report citizen complaints/requests on OGL signals to the TOC and OGL shall respond to the complaint/request in a timely manner. OGL also shall route/report received citizen complaints to the member agencies and maintain a response log.

Field Communication Design and Installation

OGL will meet with each individual member agency to determine their communication requirements. Each member agency shall provide OGL with details of existing conduit and communication infrastructure. Figure 2 depicts the flow diagram involved in the design and acceptance of the OGL field communication network.

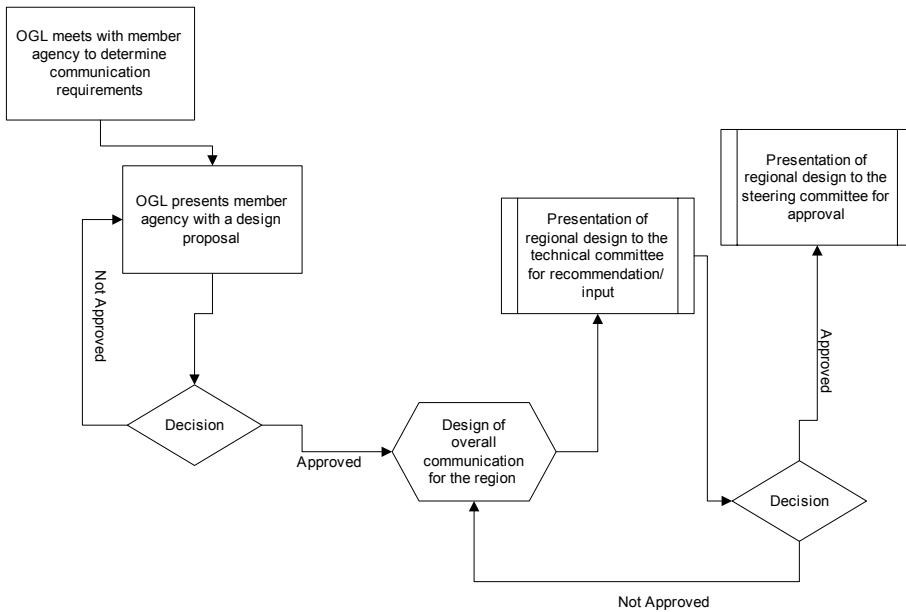


Figure 2

Once the design is approved, and the field contractor is selected for field communication network installation, the contractor shall coordinate with the member agency for the installation of communication equipment in agency right-of-way. All construction shall be in strict compliance with the agency’s accepted standards and policies or based on a mutually agreed upon standard. The agency shall be responsible for making information available to the FIELD DESIGN CONSULTANT and approving the construction and design plans.

Controller Upgrades and Work inside the Traffic Controller Cabinet

OGL shall upgrade traffic controllers that are incapable of communicating with the central system software. When work is performed that involves the opening of a traffic controller cabinet, the member agency shall coordinate with the contractor and have a representative in the field. The



member agency shall test and approve/disapprove the work performed by the contractor and inform OGL of the fact. OGL shall be responsible for administration and final approval of all construction projects.

Technical Support for OGL Computer Network

OGL shall provide workstations and laptops to member agencies to connect to the OGL computer network. OGL shall provide technical support for the central system software and the laptop version of the central system software. OGL shall also maintain the computer network hardware along with all network components such as network hubs, routers, modems etc.

The Traffic Operations Center

OGL shall staff its operations at the Traffic Operations Center (TOC). The TOC is currently expected to be co-located with the KC Scout project. The decisions about details of the co-location of the OGL TOC and KC Scout will be discussed and determined jointly at a later date.

The TOC shall be manned from 6:30 a.m. to 6:30 p.m. OGL expects to coordinate with Kansas City Scout and use the video monitoring capabilities available at the KC Scout TOC to alleviate congestion along arterials.

The staff shall interact with citizens and the media and provide answers to traffic signal timing questions on OGL signals. OGL shall develop a media relations plan at a later date.