

GRIDSMART®
TECHNOLOGIES, INC.

GRIDSMART®

**TRAFFIC SIGNAL
MAINTENANCE & COMMON
PROVISIONS**

PRESENTED BY GRIDSMART

INTRODUCTION

A good preventative maintenance program reduces the number of traffic signal failures and ensures the proper operation of traffic control devices.

INTRODUCTION

In this course, the instructor will review common PM strategies as well as provide a hands-on look at stressed and broken components.

ADMINISTRATION LEVEL

- Traditionally been the responsibility of the electrical organizations within a maintenance division of a city (DPW), state (DOT), highway group, or operations group.
- Often maintenance is considered the “stepchild” of the parent section, usually at/near bottom of the list of priorities.

PERSONNEL CLASSIFICATIONS

- Traffic Signal Mechanic
- Supervising Traffic Signal Mechanic
- Traffic Signal Technician
- Traffic Signal Engineer
- Traffic Engineer

EQUIPMENT REQUIREMENTS

- Maintenance Vehicles
- Test tools and equipment
- Replacement parts and supplies

REPAIR SHOP

- Location
- Layout and Size
- Organization and Outfitting
- Staffing and Budget

MAINTENANCE OPTIONS

- Contract Services vs In-house
- Preventative Maintenance vs Response
- Have a clear plan in place
- What needs to be done
- How quickly

MAINTENANCE RECORDS

- Maintenance manuals & As-Build Plans
- Signal Timing Plans
- Log Books

PREVENTATIVE MAINTENANCE

- Defined
- Aspects
- Intent

RESPONSE MAINTENANCE

- Defined
- Receive Notification
- Secure the Site
- Diagnose the Problem
- Perform Interim Repairs
- Log the Activity
- Response Time

DESIGN MODIFICATION

- Define
- Problem Identification
- Typical Solutions
 - Examples
 - Controller Operation Not Optimum
 - Software Operation Not Optimum

MAINTENANCE

- Preventative Maintenance
 - Cabinet, Ground, Aerial
 - Things to Check/How Often
 - How Time Should Be Divided

MAINTENANCE: CHECKLIST

- Guidelines To Aid Signal Mechanic
- Check Manufacture Manuals
- Recommended Intervals For Certain Components

MAINTENANCE: CABINETS

- Components to check
- Detection cards, MMU, fans, heaters, grounds, timing, filters, programming, firmware updates, interconnected devices, etc....

MAINTENANCE: AERIAL

- Components To Check
- Spans, Signals, Brackets, Poles, Mast Arms, etc....

EMERGENCY REPAIRS

- Emergency Repair Practices
 - Defined/Timeline

JOIN PABLO'S SESSION FOR HOW TO HANDLE
KNOCKDOWNS

