Projects First-Round Winner

Innovations Challenge

April 2017 Prepared by Transportation Planning Missouri Department of Transportation

Tower Light Remote Monitoring System





Description

The Engineering Policy Guide Article 770.4 requires MoDOT to monitor the FAA tower lights on a daily basis. Twice per week and after all storms, MoDOT is required to monitor the Coast Guard required lights. There have been two options for monitoring lights. One process is to contract with a local person or company for approximately \$100 per month to monitor each site. Another option is to have local MoDOT maintenance or electrician employees monitor the lights. The Kansas City District's Traffic Division is now utilizing the Tower Light Remote Monitoring System for navigation and aviation lights on Missouri River bridge structures and radio towers. The Elecsys Company provides the equipment and monitoring service with no contract required, which is much cheaper than the other options. This web-based system monitors the status of the lights and immediately sends a notification to electrician supervisors via email or text of all outages and malfunctions.

Benefit

The timely notification is critical for FAA and Coast Guard to improve safety for airplanes and barges that rely on these lights to be working. Since the system continually monitors the lights, MoDOT staff does not have to spend valuable time driving to sites to visually check the lights. The Elecsys system saves time and money; it simplifies work and improves safety for MoDOT staff.

Materials and Labor

3 hours of electrician staff time with \$1,200 materials per site. Cellular service recurring costs for each site is \$8 - \$15 per month.

For More Information Contact:

Derek Olson at <u>Derek.Olson@modot.mo.gov</u> or (816) 607-2107. Alternate contact: Scott Brelsford at <u>Scott.Brelsford@modot.mo.gov</u> or (816) 564-3123

Additional photos or videos can be seen by accessing the Innovations Challenge SharePoint page at: http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx.

