FDOT

Florida Department of Transportation

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SECRETARY

DME MEMORANDUM NUMBER 20-05

DATE: October 1, 2020

TO: DISTRICT MAINTENANCE ENGINEERS

FROM: Rudy Powell

DocuSigned by:

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COPIES: Peter Loughlin (AMOTIA), Jared Causseaux, Cindy Dunkle, Kirk Hutchison, Kristin Tadlock, Scott Timmons, Jonathan Fischer, David Fairchild, and Tim Allen

SUBJECT: E-Maintenance Feature- Highway Lighting Inventory and Outage Survey

What is this E-Maintenance Feature and What are the benefits?

This Highway Lighting Inventory and Outage Survey (HWLO) E-Maintenance Feature is the collection of detailed highway lighting inventory and outage survey data. Current inventory data in the Roadway Characteristics Inventory (RCI) for highway lighting provides broad inventory data primarily for budgeting purposes. This E-Maintenance Feature is a tool that the districts can use to manage highway lighting by collecting more detailed inventory data per pole/ fixture for standard, underdeck, high mast, and overhead sign lighting and connect the outage survey data with the detailed inventory data.

The Office of Maintenance has developed two standard statewide smart forms to collect detailed inventory and outage survey data using ESRI ArcGIS software applications (ArcGIS Survey123, ArcGIS Collector, and ArcGIS Explorer). One smart form records the collection of highway lighting inventory data and the other smart form records the collection of highway lighting outage survey data. Offline maps and imagery are also available if needed, and data collection can continue uninterrupted even with little to no Wi-Fi or LTE signal availability, providing additional flexibility while in the field. The data collected will be stored in a geospatial database cloud environment.

Use of this E-Maintenance Feature is a district option. Some districts have collected detailed inventory data outside of RCI using various means. For the most part, this existing data will be migrated into the new statewide ArcGIS database. A district can choose to continue using processes currently in place for managing highway lighting or the district can choose to use the statewide smart forms, but the district cannot continue to use existing processes and migrate that

data into the statewide database on an ongoing basis. Once data is migrated or collected in an area, data migration in that area will stop to avoid the potential of overwriting or duplicating data.

The intent is to collect the detailed highway lighting inventory data while performing other maintenance activities with the goal of having the inventory data completed in five years. The inventory data may be collected by in-house staff, contract staff, or possibly local agency staff. The outage survey portion of this E-Maintenance Feature is contingent on having the inventory data collected so a strategic approach for inventory collection is needed to take advantage of the outage survey in areas as soon as possible.

E-Maintenance is a statewide initiative. Unless there is specific language in an asset maintenance contract for E-Maintenance Features, any costs to asset maintenance contractors for the collection of the lighting inventory need to be tracked and handled in accordance with the Substantial Economic Impact factor language in the contract. Costs for the use of the outage survey portion of the E-Maintenance Feature should be minimal, if any.

Maintenance procedures will be updated to incorporate this E-Maintenance Feature.

What is the implementation schedule?

The E-Maintenance Feature for Highway Lighting Inventory and Outage Inspection Survey will be available for use starting October 1, 2020.

Who can answer questions?

The District Champion is the first point of contact for issues with or questions about performing highway lighting inventory and outage collection using the HWLO E-Maintenance Feature:

CO – Kirk Hutchison	(850) 410-5515	FDOT (880-5515)
D1 – Paul Barnes	(863) 519-2680	FDOT (881-2680)
D2 – Paul Grochowski	(386) 961-7385	FDOT (882-7385)
D3 – Jeff Barbee	(850) 330-1258	FDOT (883-1258)
D4 – Dellis Stanberry	(954) 717-2249	FDOT (884-2249)
D5 – Dennis Kirk	(386) 943-5278	FDOT (885-5278)
D6 – Michael Hughes	(305) 640-7160	FDOT (886-7160)
D7 – Eugene Giambra	(813) 975-6110	FDOT (887-6110)
TP – David Soto	(954) 934-1241	FDOT (888-1241)

What training and resources are available?

Training materials and resources are available online. Please check the following websites for training materials and resources:

https://www.fdot.gov/maintenance/e-maint/default.shtm

https://www.fdot.gov/maintenance/e-maint/highway-lighting-inventory

How will updates be handled?

Periodic unspecified updates to the ESRI cloud database and the ESRI applications that reside on the tablet or smartphone will occur at any given time. The notification process for software updates can vary, and subsequent modifications made to the software can possibly go undetected until an incompatibility or problem is discovered. However, within deployment of the last few software releases there has been code included for the notification of software updates.

With the deployment of the HWLO E-Maintenance Feature, the latest releases of ESRI software provides for notification of form updates within the app itself, notifying users of the need to refresh their smart forms on the device. The ESRI ArcGIS app versions for Survey123, Collector, and Explorer on the mobile devices will continue to be routinely monitored by the FDOT Enterprise GIS Office, OIT, and the Office of Maintenance E-Maintenance group.

All subsequent updates to the HWLO E-Maintenance Feature, system, and workflows will continue to be vetted through district consensus agreements and then forwarded to the Office of Maintenance E-Maintenance group for implementation.

If further clarification or additional information is needed on any of these items or topics, please contact Kirk Hutchison at kirk.hutchison@dot.state.fl.us or Scott Timmons at scott.timmons@dot.state.fl.us

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