

## **QUESTIONS AND ANSWERS**

September 09, 2019

1. **How do I determine the manufacturer and model of the specific crash cushion or guardrail approach terminal?** Refer to the Product Identification Guide and other resources available at <http://www.fdot.gov/maintenance/E-Maint/ISPE.shtm>.
2. **What do I do if I am unable to determine the manufacturer and model of the specific crash cushion or guardrail approach terminal or the manufacturer and model is not listed on the form?** Indicate the crash cushion or guardrail approach terminal as “Other” on the form and take photos of the device to aid in future identification. The inventory data can be sorted by “Other” and reported for further review as needed.
3. **What do I do if the incident is not located at a crash cushion or guardrail approach terminal?** Do not collect any incident data. Only collect data from incidents involving a crash cushion or guardrail approach terminal.
4. **What do I do if the vehicle involved in the incident is not at the scene?** Collect as much data as is available or can be determined at the scene. If within the limits of a TMC, include the photographs provided by the TMC.
5. **How do I load the ESRI ArcGIS applications, smart forms, and electronic forms on my mobile device or computer?** To load the ESRI ArcGIS applications, an ESRI ArcGIS Online Account is needed and the individual added to the Department’s ESRI ArcGIS Online Maintenance Group. There are three scenarios- Department employee, non-Department employee with an ESRI ArcGIS Online Account through the employee’s company, and non-Department employee without an ESRI ArcGIS Online Account through the employee’s company.

### **Department employee:**

1. Submit a request for an ESRI ArcGIS Online Account and to become a member of the Department’s ESRI ArcGIS Online Maintenance Group to the District ISPE champion.
2. The District ISPE champion will review the request and make a recommendation to the Office of Maintenance Performance Management Manager.
3. The Office of Maintenance Performance Management Manager will create the ESRI ArcGIS Online Account. Upon creation of the account, an automated email will be sent to the Department employee requesting the employee to acknowledge the account. After the account is acknowledged, the Office of Maintenance Performance Management Manager will add the employee to the Department’s ESRI ArcGIS Online Maintenance Group as a user. Upon adding the

employee to the Maintenance Group, an automated email will be sent to the Department employee notifying the employee of being added to the Maintenance Group.

4. Submit a service desk ticket with the Office of Information and Technology (OIT) to install the Survey123 and Collector applications on Department mobile devices or computers. Windows 10 operating system is required for Collector to be installed on a computer.
5. To access the smart forms and electronic forms, open and log into the Survey123 application for the inventory smart forms or the Collector application for the incident electronic forms; or, log into ESRI ArcGIS Online and access the forms through the Maintenance Group.

**Non-Department employee with an ESRI ArcGIS Online Account through the employee's company:**

1. Submit a request to become a member of the Department's ESRI ArcGIS Online Maintenance Group to the District ISPE champion.
2. The District ISPE champion will review the request and make a recommendation to the Office of Maintenance Performance Management Manager.
3. The Office of Maintenance Performance Management Manager will add the non-Department employee to the Department's ESRI ArcGIS Online Maintenance Group. Upon adding the employee to the Maintenance Group, an automated email will be sent to the non-Department employee notifying the employee of being added to the Maintenance Group.
4. The non-Department employee is responsible for loading the applications on the mobile device or computer.
5. To access the smart forms and electronic forms, open and log into the Survey123 application for the inventory smart forms or the Collector application for the incident electronic forms; or, log into ESRI ArcGIS Online and access the forms through the Maintenance Group.

**Non-Department employee without an ESRI ArcGIS Online Account through the employee's company:**

1. Submit a request for an ESRI ArcGIS Online Account and to become a member of the Department's ESRI ArcGIS Online Maintenance Group to the District ISPE champion.
2. The District ISPE champion will review the request and make a recommendation to the Office of Maintenance Performance Management Manager.
3. The Office of Maintenance Performance Management Manager will create the ESRI ArcGIS Online Account. Upon creation of the account, an automated email will be sent to the non-Department employee requesting the employee to establish the account which requires the creation of a password. After the account is established, the Office of Maintenance Performance Management Manager will

add the non-Department employee to the Department's ESRI ArcGIS Online Maintenance Group as a user. Upon adding the employee to the Maintenance Group, an automated email will be sent to the non-Department employee notifying the employee of being added to the Maintenance Group.

4. The non-Department employee is responsible for loading the applications on their mobile device or computer.
  5. To access the smart forms and electronic forms, open and log into the Survey123 application for the inventory smart forms or the Collector application for the incident electronic forms; or, log into ESRI ArcGIS Online and access the forms through the Maintenance Group.
6. **How do I use the inventory smart forms?** The inventory smart forms have built in logic to guide the user step by step in collecting the appropriate data.
  7. **How do I use the inventory smart forms if I have a mobile device but do not have a data plan or there is no connectivity?** Use the inventory smart forms the same with or without a data plan. Without a data plan, the data collected using the smart forms will be temporarily stored on the mobile device and will be uploaded to the ESRI ArcGIS database once connected via Wi-Fi or connectivity is restored.
  8. **How do I use the incident electronic form?** The incident electronic form asks a series of questions to guide the user step by step in collecting the appropriate data.
  9. **How do I use the incident electronic form if I have a mobile device but do not have a data plan or there is no connectivity?** Use the paper form.
  10. **What do I do if an incident occurs before an initial inventory has been completed?**
    1. Collect and upload the initial inventory data using either the crash cushion or guardrail approach terminal inventory smart form using the Survey123 application for ArcGIS.
    2. Once the initial inventory data is uploaded, collect the incident data using the electronic incident form using the Survey123 application for ArcGIS.
    3. If the mobile device does not have a data service plan or if there is no connectivity, complete step 1 and collect the incident data using the incident paper form. See below for more information on the use of the paper forms.
  11. **How do I correct a mistake when I have already submitted the inventory smart form?**
    1. Open the Collector application for ArcGIS on a desktop, tablet, or smart phone.
    2. Navigate on the map to the inventory point that needs to be edited and select the specific inventory point.
    3. When the specific inventory point is selected, a details tab will appear on the right side. Select the box with the up arrow and select "edit it." The specific point should now be shown as a red circle.

4. Edit the location of the specific inventory point by selecting a different location on the map.
  5. Edit a response to a question by selecting the question and typing a different response.
  6. Select “update” in the top right corner when the edits are complete.
12. **How do I correct a mistake when I have already submitted the incident electronic form?**
1. Open the Collector application for ArcGIS on a desktop, tablet, or smart phone.
  2. Navigate on the map to the point that needs to be edited. Select the specific inventory point and then select the incident report within that inventory point that needs to be edited.
  3. Scroll down to the bottom of the page where the header “Incident” is shown. Under “Incident”, select “View” and then select the incident report that needs to be edited.
  4. Select the box with the up arrow and select “edit it.” The specific point should now be shown as a red circle.
  5. Edit a response to a question by selecting the question and typing a different response.
  6. Select “update” in the top right corner when the edits are complete.
13. **How do I update the incident data to provide the Florida Crash Report Number if the number was not available at the scene?** See answer to #12.
14. **Can I load the ESRI ArcGIS applications and smart forms on more than one mobile device or computer?** Yes.
15. **How do I use the inventory and incident paper forms?** Complete the paper forms the same as other similar paper forms.
16. **How do I enter the inventory data collected on paper forms into the ESRI ArcGIS database?** You must be a member of the FDOT ArcGIS Maintenance ISPE Editing Group to enter the data into the ESRI ArcGIS database. If you are a member, enter the data using either the crash cushion or guardrail approach terminal inventory smart form using the Survey123 application for ArcGIS on a mobile device, laptop computer, or desktop computer. If you are not a member, provide the paper forms to the District Champion or designee for input.
17. **How do I enter the incident data collected on paper forms into the ESRI ArcGIS database?** You must be a member of the FDOT ArcGIS Maintenance ISPE Editing Group to enter the data into the ESRI ArcGIS database. If you are a member, after the inventory data has been entered into the ESRI ArcGIS database, enter the incident data using the incident electronic form using the Survey123 application for ArcGIS on a mobile device. The laptop or desktop computer must be running Windows 10 in order to

load the Collector application for ArcGIS. If you are not a member, provide the paper forms to the District Champion or designee for input.

18. **What do I do with the inventory and incident paper forms once the data has been entered into the ESRI Arc GIS database?** The data is maintained in the ESRI ArcGIS database and is reportable as needed. The paper shall be disposed in accordance with retention policy.
19. **How do I inventory a new crash cushion or guardrail approach terminal when it replaces a damaged crash cushion or guardrail approach terminal that was previously inventoried using Survey123 and the incident data was collected using Collector?** Perform the inventory of the new crash cushion or guardrail approach terminal using the Survey123 application. The inventory and incident data of the original crash cushion or guardrail approach terminal will be archived for future reporting but no longer displayed on the ArcGIS Map. Identify the need to archive the original crash cushion or guardrail approach terminal by editing the original inventory record using Collector. See “How to Guides” on the E-Maintenance website for more information. At this time, in addition, notify the District Champion of the need to archive a point using a separate email. The District Champion will notify the OOM Performance Management Section of the need to archive the point. Currently, the Performance Management Section will handle this function. The plan is to eventually have the District Champions handle this function in the district.
20. **Will notifications be provided when the smart and electronic forms are changed?** Yes. The Office of Maintenance will provide advance notification of any changes to the smart or electronic forms and any specific instructions to the District Champions. The plan is to schedule updates in advance.
21. **If a different person is in charge of the incident data collection and is not one of 100 members of the maintenance group, how would they know if the crash cushion or guardrail approach terminal has been inventoried?** That individual would not know and would use the paper form since the individual is not one of the 100 users. The paper form would then be given to a user to input the data into the ESRI ArcGIS database. See Question and Answer # 17. The Office of Maintenance recognizes that the 100 users is a limitation and hopes to increase that number as the E-Maintenance Proof of Concept evolves.
22. **Should the paper form include weather information?** This has been reviewed and determined that weather information is not needed for ISPE Phase 3 which will be performed by others.
23. **How can contractors keep their own copy of inventory and incident data?** This is something the contractor needs to determine how to do if the contractor wishes to maintain an independent database. The record data will be the data in the Department’s ESRI ArcGIS database.

24. **Would it be possible to add a field for contractor's name?** No. That data point is not necessary. The data record identifies the user who submitted or edited the data.
25. **Would it be possible to add "other" or "comments" field?** An "other" is provided within the crash cushion or guardrail approach type selection. An overall "other" or "comment" field will not be added.
26. **Would it be possible to have the paper form as a pdf interactive form since we are going paper less and the persons that are not members of the maintenance group will be able the fill it out and email it to the respective person which is part of the maintenance group?** Yes. An interactive pdf will be provided.
27. **Will the 100 users of the maintenance group increase in the future?** That is the plan. There is a cost for each user so that needs to be considered. The scope for the Proof of Concept is limited to find out what works and what doesn't.
28. **Do I inventory a guardrail approach terminal if it is on the trailing end of a guardrail run?** Yes. All guardrail approach terminals need to be inventoried. This includes those approach terminals which are on the trailing end of the guardrail length of need segment along the near lane because that guardrail run is within the clear zone of vehicles approaching from the opposing lane. The trailing end of the guardrail along the near lane is a guardrail approach terminal for the opposing lane. This is common on two-lane, two-way rural roadways. Please note, end treatments like CRT and Type II are considered trailing end terminals, and would not be included in this inventory.
29. **How do I correctly take pictures with my mobile device?** For Android devices there are currently no issues with taking photos. However, the preferred method for capturing images will be "landscape" to keep all photos consistent.
30. **How do I improve the accuracy of the GPS location of my inventory feature and accurately place the point on the map?** When using mobile devices, it is highly recommended that you first have a data plan. Dependent upon cell tower locations and different times of the day, the accuracy will be somewhat true from a 'distance' standpoint from the position, rather than from a 'directional' standpoint from your position. (One morning the point maybe a little north of your exact position, then that afternoon the point could be slightly south of your positioning.)

As a general rule, when filling out the Survey123 smart form, at the top of the form, be sure to first 'Select your Location' by placing the point onto the intended spot on the map for the inventory item, and then save the location. Next, to adjust and accurately place the point onto the exact spot for the inventory item, you will need to go into 'World Imagery' view, which is the satellite view, and drill down as much as possible to the intended inventory feature. Then physically tap and move the point to the exact spot for the inventory item and again, save the location. For more information, see the "How to fill out Smart Form" document on the ISPE website.

31. **Do I collect a CRT or Type II if it is on the approach or beginning of the guardrail?**  
No CRT and Type II are considered trailing end terminals. Do not include them in this inventory, but send the information and location to the local maintenance unit.
32. **Do I archive the point if the approach terminal or crash cushion has been replaced with an identical device? Yes.**