**Asset type:** Guardrail

**Process map name:** Guardrail Maintenance

**Identifier:** PM.G.2

**OVERVIEW**

Guardrail maintenance is very important for keeping the roadway safe for travel. Maintaining and updating the proper digital records throughout the entire process helps promote efficiency and stops the recreation of the same information at every data exchange.

**ACTORS**

The process map is focusing on these main actors in the new guardrail/guardrail reconstruction process:

* District Bridge Inspector/Call-Center
* Maintenance Shop
* Contractor

**District Bridge Inspector/ Call Center**

In this row of the process map, the initiation of a project begins. Through some sort of formal or informal communication, a guardrail need is found. This usually is triggered by either an accident or just deterioration of an asset. The bridge inspector or call center will then notify the proper shop, whether it be by phone or email, with the work order that has the information needed to make a repair.

**Maintenance Shop**

The maintenance shop’s job is to make sure all the work that needs to be done is completed. After receiving the work order, they must then determine if their people will do the work or if the work has been contracted to an outside company. If the work is to be done in-house, the shop will then send a crew out to do the work. The foreman will fill out a paper sheet with hours and general things, which is turned in at the end of the day and saved to ERMS. A bill will also be sent out to the person that caused the damage if it is known. If the work is to be done by a contractor, a repair order will be faxed out once a week.

**Contractor**

Most Contractor contact with the Iowa DOT comes through fax, at which time the Iowa DOT requests for all current work that needs to be done. When done, they will send a return note of job completion. All contact at this point is in non-intelligent formats (PDF, paper, fax, ect.).

**Databases:**

The following is the databases used to archive data created through the entire workflow of new guardrail:

* ERMS database
* ProjectWise

**Software applications and data format**

* Google Earth
* Roadview
* Collector App
* Microsoft Word
* Excel

**DATA EXCHANGE**

This row shows the Exchange Requirement (ER) documents for different exchange cases within the workflow. There are cases where data exchange is required that are listed below. The detail of this data to be exchanged are presented in these ERs.

* Inspector to Maintenance Shop
* Maintenance Shop to Contractor

**ISSUES AND SOLUTIONS**

\*\*\*\*\*Want to finish the improved process map first\*\*\*\*\*