**Asset type:** Sign

**Process map name:** Sign maintenance activity

**Identifier:** PM.S.3

**OVERVIEW**

Sign maintenance activity involves tasks from the following project phases: operation and maintenance, design, and fabrication and installation. Actors participating in the workflow, as presented in the left column of the process map, are field maintenance staff, traffic engineering (operation function), and Iowa sign shop.

**ACTORS**

**Field Maintenance Staff**

Field maintenance staff is responsible for most of the activities in this workflow. Their specific tasks include sign inspection, sign condition evaluation, and sign maintenance. Data collection is completed using an ESRI data collector application to put in new or update information or condition of existing signs. They will also do some small scale sign replacement projects where a sign has been knocked down or damaged.  Depending on the size of the sign, either the local shop will do the repair, the district sign team will do the repair, or the sign will be added to the monthly sign replacement letting. For non-MUTCD signs which is not specified in the sign standards, the field staff will need a detail design from designer before fabrication. If not, they can send a fabrication order directly to Iowa sign shop. Field maintenance staff coordinate with the traffic operation engineers to update the inventory data in the oracle database.

**Traffic Engineering - design function**

See PM.S.1

**Iowa Sign Shop**

See PM.S.1

**Databases:**

The following is the databases used to archive data created through the entire workflow of sign maintenance.

* Oracle database

**Software applications and data format**

* The ArcGIS collector app for smartphones and tablets are used to add/update information collected in the field into an online GIS map.

**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.

* Field maintenance staff to Traffic engineers (design function)
* Designer to Iowa sign shop or fabricator (only for non-MUTCD signs)
* Field maintenance staff to Iowa sign shop
* Office of contracts to contractor
* Designer to field maintenance staff (only for non-MUTCD signs)