**Comparison Tools**

Description: The comparison tools evaluate attribute and spatial changes between two different data resources. These tools are intended to be run against same-PSAP data as it changes through time to flag edited, updated and deleted records.

NOTE: 1.1 geodatabases can only be compared with other 1.1 geodatabase, and 2.0 geodatabases can only be compared with 2.0 geodatabases.

*Compare NG911 Data*: compares two NG911 feature classes of similar kinds (ex. Address points edited recently against address points from three months ago). This check will flag all attribute edits, spatial edits, new records and deleted records between the two feature classes compared.

*Compare NG911 Geodatabases*: compares two NG911 geodatabases (ex. Geodatabase edited recently against geodatabase from a year ago). This check will flag all attribute edits, spatial edits, new records and deleted records between all common layers and tables in the two geodatabases.

The comparison tools require:

* One Python script called Comparison\_CompareDataLayers.py

Running Compare NG911 Data:

1. Open ArcCatalog and navigate to the toolbox called “Kansas NG911 GIS tools”, expand the toolbox, then expand the toolset called “Comparison Tools.”
2. Double click the script titled “Compare NG911 Data.”
3. In the parameter for “One NG911 Feature Class”, enter in the full path to an NG911 feature class you wish to compare with another.
4. In the parameter for “The other NG911 Feature Class,” enter in the full path to an NG911 feature class of a similar kind. For example, you will want to compare a road centerline feature class with another road centerline feature class. You will not be able to compare a road centerline feature class with any other kind.
5. In the parameter for “Table for comparison results,” enter the full path to where the results table should be saved. This can reside inside an NG911 geodatabase or not, it does not matter.
6. Click OK and wait for the tool to process.
7. The results table will show descriptions of edits as well as the unique ID of the features edited. The unique ID shown is NOT the object ID, but instead of the unique ID outlined in the Kansas NG911 Data Model.

Running Compare NG911 Geodatabases:

1. Open ArcCatalog and navigate to the toolbox called “Kansas NG911 GIS tools”, expand the toolbox, then expand the toolset called “Comparison Tools.”
2. Double click the script titled “Compare NG911 Geodatabases.”
3. In the parameter for “One NG911 Geodatabase”, enter in the full path to an NG911 geodatabase you wish to compare with another.
4. In the parameter for “The other NG911 Geodatabase,” enter in the full path to an NG911 geodatabase completed by the same PSAP.
5. In the parameter for “Table for comparison results,” enter the full path to where the results table should be saved. This can reside inside an NG911 geodatabase or not, it does not matter.
6. Click OK and wait for the tool to process.
7. The results table will show descriptions of edits as well as the unique ID of the features edited. The unique ID shown is NOT the object ID, but instead of the unique ID outlined in the Kansas NG911 Data Model.

Support Contact:

For issues or questions, please contact Kristen Jordan Koenig with the Kansas Data Access and Support Center. Email Kristen at Kristen@kgs.ku.edu and please include in the email which script you were running, any error messages, and a zipped copy of your geodatabase (change the file extension from zip to piz so it gets through the email server).

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