

# Process for creating CPL Stats Combined at Multi-Location Intersections.

Matthew Nicoll, 2018-11-17

This is done every 3 years by Chuck Hutchinson, in 2015, 2018...  
After the 2018 process, VB code developed for the job (by Matthew Nicoll) was moved into CISutil.

(Simplified **file names** and CIS collision **subset names** are highlighted.)

1. Run a **CIS** Query selecting the required years of data, creating **SubsetA**.
2. Run **CIS** CPL on **SubsetA**, using simple criteria (#clsns >=1) creating IN and NOT IN CPL output subsets **Subset\_Intersections** and (for other purposes) **Subset\_Segments**
3. Use the Rate Table program to determine Average Collision Rates from **Subset\_Intersections**.
4. Manually code the average collision rates into file **ACR.csv**
5. Run **CIS** CPL on **Subset\_Intersections**, providing **ACR.csv**, and the desired detailed criteria, creating CSV output file **CPL.csv**. (Using input **SubsetA** would work just as well.)
6. Run **CISutil** (version 4.4.0 or later) SDF tab function "CPL to SDF, Grouped at Intersections", with: input file **CPL.csv**. the "Nodes Once" option checked, the same LKI version as in CIS, to produce Section Definition File **SDF\_CPL.csv** which has additional sections defined so that locations which have multiple LKI location codes (e.g. at intersections on divided highways) have a section defined for each of the LKI location codes.

Note:

- the "Nodes Once" limits to one section per node,
- a "section" in this SDF is actually just a single location

This runs CISutil module CPL\_utils Sub CPL\_to\_SDF\_Grouped

Note:

- this CISutil function requires LKI version 201807 or later
- in October 2018, LKI\_Code.mdb Sub CPL\_to\_SDF\_NodesOnce was used, with LKI 201707b, with the Intersection table data of the 201807 LKI.

7. In **CIS**, run SSA with input subset **IN\_CPLs**, and input Section Definition File **SDF\_CPL.csv** producing output file **SSA.csv**
8. In Excel, sort **SSA.csv** by GroupID, (because the following step requires all the records of each group to be together.)
9. In **CISutil**, run SSA tab function "Combine Intersection Locations", with input file **SSA.csv**, producing output file **SSA\_Combined.csv** which has a set of SSA fields modified for Chuck Hutchinson's requirements.
10. In CISutil, run SSA tab function "Create KML from CPL or Combined Int. Locns" with input file **SSA\_Combined.csv** and the LKI version as in CIS, producing file **SSA\_Combined.kml**