```
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD:
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
NOTE *** Data pane was used to change the worksheet
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt_annual_10m';
 SUM;
 OVERLAY;
 CATONLY.
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD;
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD;
 COMMA:
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
ERASE luof count
MEAN population
ERASE population
COPY C4 C6
COPY rt annual 10m C4
COPY rt annual 10m C4
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD;
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
```

```
SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD:
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt_annual_10m';
 SUM;
 OVERLAY;
 CATONLY.
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD:
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA:
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt annual 10m';
 SUM:
 OVERLAY.
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD;
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA:
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt_annual_10m'.
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD;
```

```
COMMA;
 TDELIMITER:
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt annual 10m'.
WOPEN "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\summary_udp_majority_victim_luof.csv";
 FIELD:
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 SHEET 1;
 VNAMES 1;
 FIRST 2;
 DATA:
 IGNOREBLANKROWS;
 EQUALCOLUMNS.
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt annual 10m'.
NCHART 'typology text' 'Majority' 'victim race';
 FUNCTION 'rt_annual_10m'.
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt_annual_10m';
 SUM.
NCHART 'typology_text' 'Majority' 'victim_race';
 FUNCTION 'rt annual 10m';
 SUM;
 OVERLAY;
 CATONLY.
NOTE *** Data pane was used to change the worksheet
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt_annual_10m';
 SUM;
 OVERLAY;
 CATONLY.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\udp_expansion.mpx";
 Project.
NOTE *** Data pane was used to change the worksheet
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt_annual_10m';
 SUM;
 OVERLAY;
 CATONLY.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\udp_expansion.mpx";
 Project.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\udp_expansion.mpx";
 Project.
LPLO MEAN('rt_annual_10m') * ('Typology');
 IGRAPH;
```

```
NODTITLE;
 NOGRID 1:
 GROUP 'Majority';
 CONNECT 'Majority';
 SYMBOL 'Majority';
 SEPARATE 'Victim Race'.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1) PS-Honors\udp expansion\udp expansion.mpx";
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt_annual_10m';
 SUM.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt annual 10m';
 SUM;
 OVERLAY
CONCAT Typology Majority C5
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\udp_expansion\udp_expansion.mpx";
 Project.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt annual 10m';
 MEAN;
 OVERLAY;
 CLUSTER 'Typology';
 CATONLY.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
 Project.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt annual 10m';
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt annual 10m';
 MEAN;
 OVERLAY.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt annual 10m';
 MEAN;
 OVERLAY;
 CLUSTER 'Typology'.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt annual 10m';
 MEAN;
 OVERLAY;
 CLUSTER 'Victim Race';
 CATONLY.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt annual 10m';
 OVERLAY;
 CATONLY.
MTITLE "test"
endmtitle
Chart ('rt_annual_10m') * 'Typology';
 Summarized;
 Group 'Majority' 'Victim Race';
 Title "Rate of LUOF";
 Bar.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
CHART MEAN('rt_annual_10m') * 'Typology'
```

```
CHART MEAN('rt_annual_10m') * 'Typology' 'Majority'
CHART 'rt_annual_10m' * 'Typology'
CHART 'rt_annual_10m' * 'Typology'.
CHART 'rt_annual_10m' * 'Typology';
 SUMMARIZED
CHART 'rt_annual_10m' 'Typology' 'Majority'.
Chart ('rt_annual_10m') * 'Typology';
 Summarized;
 Group 'Majority' 'Victim Race';
 Title "Rate of LUOF";
 Bar.
Chart ('rt_annual_10m') * 'Typology';
 Summarized;
 Group 'Majority' 'Victim Race';
 Overlay;
 Title "Rate of LUOF";
 Bar.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'rt_annual_10m';
 SUM;
 OVERLAY;
 CLUSTER 'Victim Race';
 CATONLY.
CHAR 'rt annual 10m'.
CHAR 'rt_annual_10m';
 GROUP 'Typology' 'Majority';
 BAR 'rt_annual_10m'.
CHAR 'Typology';
 GROUP 'Typology' 'Majority';
 BAR 'rt_annual_10m'.
CHAR 'Typology';
 GROUP 'rt_annual_10m' 'Typology' 'Majority';
 BAR.
CHAR 'Typology';
 GROUP 'rt_annual_10m' 'Majority';
 BAR 'Typology'.
CHAR 'Typology';
 GROUP 'rt_annual_10m' 'Majority';
 BAR.
CHAR 'Victim Race';
 GROUP 'rt_annual_10m' 'Majority';
 BAR 'Typology'.
CHAR 'Victim Race';
 GROUP 'Majority';
 BAR 'rt annual 10m'.
CHAR 'Victim Race';
 GROUP 'Majority' 'Typology';
 BAR 'rt_annual_10m'.
CHAR 'Victim Race';
 GROUP 'Majority' 'Typology' 'Victim Race';
 BAR 'rt annual 10m'.
CHAR 'rt_annual_10m';
 GROUP 'Majority' 'Typology';
 BAR 'rt_annual_10m'.
CHAR 'rt_annual_10m';
 GROUP 'Majority' 'Typology';
 BAR 'rt annual 10m';
 OVER.
```

```
CHAR 'rt annual 10m';
 GROUP 'Majority' 'Typology' 'Victim Race';
 BAR 'Victim Race'.
CHAR 'rt annual 10m';
 GROUP 'Majority' 'Typology' 'Victim Race';
 BAR 'Victim Race' 'Majority'.
CHAR 'rt annual 10m';
 GROUP 'Majority' 'Typology' 'Victim Race';
 BAR 'Majority' 'Typology' 'Victim Race' .
CHAR 'rt_annual_10m';
 GROUP 'Majority' 'Typology' 'Victim Race';
 BAR 'Majority' 'Typology' 'Victim Race';
 OVER.
CHAR 'rt_annual_10m';
 GROUP 'Majority' 'Typology' 'Victim Race';
 BAR 'Majority' 'Typology' 'Victim Race'.
CHAR 'rt annual 10m';
 GROU 'Majority' 'Typology' 'Victim Race';
 BAR 'Majority' 'Typology' 'Victim Race'.
INTP 'rt_annual_10m' * 'Majority';
 BAR 'Majority' 'Typology' 'Victim Race'.
INTP 'rt_annual_10m' * 'Majority';
 BAR 'Majority'.
INTP 'rt_annual_10m' * 'Majority';
 GROU 'Victim Race';
 BAR 'Majority'.
INTP 'rt_annual_10m' * 'Majority';
 BAR 'Majority'.
INTP 'rt annual 10m' * 'Majority';
 GROU 'Victim Race' 'Typology';
 BAR 'Majority'.
INTP 'rt_annual_10m';
 GROU 'Victim Race' 'Typology';
 BAR 'Majority'.
INTP 'rt_annual_10m' * 'Victim Race';
 GROU 'Victim Race' 'Typology';
 BAR 'Victim Race'.
INTP 'rt_annual_10m' * 'Victim Race';
 GROU 'Victim Race' 'Typology';
 BAR 'Victim Race'.
INTP 'rt annual 10m' * 'Victim Race';
 GROU 'Majority' 'Typology';
 BAR 'Victim Race'.
INTP 'rt annual 10m' * 'Victim Race'.
INTP 'rt annual 10m' * 'Victim Race';
 GROU 'Majority' 'Typology';
 BAR.
INTP 'rt_annual_10m' * 'Victim Race';
 GROU 'Majority' 'Typology';
 BAR 'Typology' .
INTP 'rt annual 10m' * 'Victim Race';
 GROU 'Majority' 'Typology';
 TITLE "Rate of LUOFs, 2015-2020";
 BAR 'Typology' .
INTP 'rt_annual_10m' * 'Victim Race';
 GROU 'Majority' 'Typology';
 TITLE "Rate of LUOFs, 2015-2020";
 AXLABEL 1 "Typology/Majority";
```

```
AXLABEL 2 "Annual Rate per 10 Million Population";
 BAR 'Typology' .
INTP 'rt_annual_10m' * 'Typology';
 GROU 'Majority' 'Victim Race';
 TITLE "Rate of LUOFs, 2015-2020";
 AXLABEL 1 "Typology/Majority";
 AXLABEL 2 "Annual Rate per 10 Million Population";
 BAR 'Victim Race'.
INTP 'rt_annual_10m' * 'Typology';
 GROU 'Majority' 'Victim Race';
 TITLE "Rate of LUOFs, 2015-2020";
 AXLABEL 1 "Typology/Majority";
 AXLABEL 2 "Annual Rate per 10 Million Population";
 NOPERFOOTNOTE;
 BAR 'Victim Race'.
INTP 'rt_annual_10m' * 'Typology';
 GROU 'Majority' 'Victim Race';
 TITLE "Rate of LUOFs, 2015-2020";
 AXLABEL 1 'BLAH';
 AXLABEL 2 "Annual Rate per 10 Million Population";
 BAR 'Victim Race'.
INTP 'rt_annual_10m' * 'Typology';
 GROU 'Majority' 'Victim Race';
 TITLE "Rate of LUOFs, 2015-2020";
 AXLABEL 2 "Annual Rate per 10 Million Population";
 BAR 'Victim Race'.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
 Project.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
 Project.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
 Project.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
 Project.
WOPEN "C:\Users\madou\Downloads\all_tracts.csv";
 FIELD;
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS:
 SHEET 1;
 VNAMES 1;
 FIRST 2.
WOPEN "C:\Users\madou\Downloads\all tracts.csv";
 FIELD:
 COMMA:
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 DATA:
 IGNOREBLANKROWS;
```

```
EQUALCOLUMNS;
 SHEET 1;
 VNAMES 1;
 FIRST 2.
WOPEN "C:\Users\madou\Downloads\all_tracts.csv";
 FIELD;
 COMMA;
 TDELIMITER;
 DOUBLEQUOTE;
 DECSEP;
 PERIOD;
 DATA;
 IGNOREBLANKROWS;
 EQUALCOLUMNS;
 SHEET 1;
 VNAMES 1;
 FIRST 2.
HELP
INTP 'Annual Rt Per 10 Mil Population' * 'Typology';
 GROU 'Majority' 'Victim Race';
 TITLE "Rate of LUOFs, 2015-2020";
 AXLABEL 2 "Annual Rate per 10 Million Population";
 BAR 'Victim Race'.
Save "C:\Users\madou\OneDrive - UCLA IT Services\1)_PS-Honors\HP_PC\udp_expansion_HP\udp_expansion.mpx";
 Project.
nchart C1 C4
NCHART 'Typology' 'Majority' 'Victim Race' 'Annual Rt Per 10 Mil Population';
 OVERLAY.
NCHART 'Typology' 'Majority' 'Victim Race' 'Annual Rt Per 10 Mil Population';
 OVERLAY;
 FUNCTION 'Annual Rt Per 10 Mil Population'.
NCHART 'Typology' 'Majority' 'Victim Race' 'Annual Rt Per 10 Mil Population';
 OVERLAY;
 FUNCTION 'Annual Rt Per 10 Mil Population';
 MEAN.
NCHART 'Typology' 'Majority' 'Victim Race';
 FUNCTION 'Annual Rt Per 10 Mil Population';
 OVERLAY;
 CATONLY.
NCHA 'Typology' 'Majority' 'Victim Race';
 FUNC 'Annual Rt Per 10 Mil Population';
 OVER;
 CLUS 'Victim Race';
```

CATONLY.