

## Joining Lower Level Data to Higher Levels

Peter S. Wattson  
Senate Counsel

1. Set aggregation defaults for lower layer, e.g. ccblk.cdf
  - a. Open lower layer
  - b. Open dataview
    - i. Modify Table
      - (1) Aggregation
        - (a) Add: data fields for population, election results, etc.
        - (b) None: everything else
      - (2) Index: Yes for all fields
      - (3) OK, Yes to modify table
    - c. Close dataview
2. Join to higher layer, e.g. ccvtd.cdf
  - a. Open layer
  - b. Open dataview
  - c. Join
    - i. Layer From (upper box)
      - (1) e.g. Precincts00
      - (2) Field: e.g. VTD
    - ii. Table To (lower box)
      - (1) e.g., ccblk.bin
      - (2) Field: e.g. VTD
    - iii. Options
      - (1) One-to-Many Join
      - (2) Show joined view in a dataview
    - iv. OK one-to-many join
  - d. Redistricting - Plan Utilities - Copy Joined Fields
  - e. Modify Table
    - i. Drop excess fields
    - ii. Index remaining fields
    - iii. Set aggregation default to include new fields (Add only)
3. Join to next higher layer, e.g. ccmcd.cdf
  - a. Open layer
  - b. Open dataview
  - c. Join
    - i. Layer From (upper box)
      - (1) e.g. Citytown00
      - (2) Field: e.g. MCD
    - ii. Table To (lower box)
      - (1) e.g., ccvtd.bin

- (2) Field: e.g. MCD
  - iii. Options
    - (1) One-to-Many Join
    - (2) Show joined view in a dataview
  - iv. OK one-to-many join
- d. Redistricting - Plan Utilities - Copy Joined Fields
- e. Modify Table
  - i. Drop excess fields
  - ii. Index remaining fields
  - iii. Set aggregation default to include new fields (Add only)