

Title: Regional Soils Notes  
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The method for preparing the regional soils data set is nearly the same as that used for the Konza soils set. I have included the a modified version of the original document below, with specific changes or additions in [blue](#)...

To build our regional soils data set we are combining data from two main sources, SSURGO and SCD. SSURGO is a spatial dataset of soils series and contains many of the physical properties we are interested. SCD (Soils Characterization Database) data are specific to soil types (not series) associated with a specific pedon/site and contain many of our chemical properties.

Because SSURGO represents an average of a given series, and SCD is a very specific sample of a given type, horizon/depth data do not often line up exactly. To get past this and create one continuous data set we used SSURGO as the main data set and appended SCD data to it. To do this we used a series of criteria for consistency.

- Dominant soil type was used as the SCD data type for each series.
  - Suggested by William Wehmueller (Kansas NRCS) and DeAnn Presley (KSU, Dept of Agronomy)
  - For example, the dominant soil for the Benfield-Florence series would be Benfield.
    - Dwight-Irwin was an exception (per Wehmueller), where Irwin was recommended as the dominant soil type.
      - [We will not double check any of the other 100+ soil series.](#)
- Joining data sets was first based qualitatively based on [both horizon depths and names](#).
  - [Unlike the Konza only dataset, the quantity of soil series/types in the regional set had so much variation that it made sense to utilize the names a bit more to help line up data sets.](#)
  - [Additionally, horizons are named accordingly to fit their properties. Based on this, the use of names for matching is likely more “accurate”.](#)
- In events where horizons do not directly align...
  - Where 2 (or more) SCD horizons fit to 1 SSURGO horizon
    - The average of the those data is used
      - If one of the two (or more) is not available (null, no data, --, or tr.) then the value that is present is used alone.
  - Where 1 SCD horizon fits 2 (or more) SSURGO horizons
    - SCD data will be used more than once
  - [If one set \(either SCD or SSURGO\) has its deepest horizon that does not match the depth or name of the other data set... it will be left out](#)