**Background:**

* The U.S. Department of Agriculture (USDA) has discretion in how yields are set for administering the Agriculture Risk Coverage county yield (ARC-CO) program. Yields are critical to setting both the benchmark guarantee for a county and the county’s actual yield in any given year. Data requirements for ARC-CO include approximately 100,000 separate crop/county yields in any given year. The accompanying data file includes only crop/county combinations for which ARC-CO yields are established in the 2009-15 data series. The initial posting includes corn, soybean, and wheat data.
* The ARC-CO calculation requires six yields to calculate a payment for each county:
* Five historical yields used in calculating the benchmark yield, dropping the high and the low yield (when multiplied by the benchmark price, this is the basis for the revenue guarantee).
* The actual yield for the year (which is critical to determining the payment rate).
* Variation in ARC-CO payments across counties is due to differences in actual yields in any given year relative to the benchmark.
* FSA prioritizes the use of different yield data sources using a “cascade” approach if:
  + National Agricultural Statistics Service (NASS) county data are available, that is the data used;
  + NASS data are unavailable, Risk Management Agency (RMA) county data are used; and
  + Neither NASS nor RMA data are available, yields are determined by Farm Service Agency (FSA) State Committees (based on NASS crop reporting district data, interaction with extension specialists, or other sources).

**Note:** Any given row in the file contains NASS yield data, RMA yield data, and/or blank entries. Blank entries indicate that neither a NASS nor RMA yield was available for that county/crop combination in that year. Blank entries were provided by the State FSA committees and appear in the “2014 and 2015 ARC-County Yield, Revenue, and Payment Rates…” file also located on the ARC/PLC Program Data page.

**Specifics on NASS and RMA Data:**

* NASS-based yields used for ARC-CO are different than the yields reported in NASS publications and in the QuickStats database. NASS publishes a harvested acre yield; by statute, ARC-CO uses a planted acre yield.
* For all crops except for wheat, corn, grain sorghum, barley, and oats, NASS-based planted-acre yields for ARC-CO purposes are computed by dividing NASS planted acres into NASS production.
  + For wheat, corn, grain sorghum, barley, and oats, the calculation is modified to exclude the acreage of these crops intended for harvest other than for grain, such as for haying, grazing or for silage. The ARC-CO yield formula for these crops divides NASS harvested acres plus RMA unharvested acres into NASS production.
* County-average RMA yields are computed by dividing RMA planted acres into RMA production, using a file provided every summer by RMA using the criteria below. Published county-level data on the RMA website may not match data in the ARC-CO yield file due to FSA’s use of the criteria below and due to timing issues.
* The following criteria apply to use of NASS and RMA data in the ARC-CO calculations:
  + - 1st choice: NASS county data
      * Criteria to provide data for a county: At least 30 yield observations, or reports containing positive yields account for 25 percent or more of harvested acres in the county.
    - 2nd choice: RMA county data
      * Criteria to provide data for a county: At least 5 yield observations and those observations account for more than 25 percent of FSA reported acreage in the county.
* For those counties in which payments were made in 2014 and 2015, NASS and RMA yield data cover approximately 90 percent of the base acres. The remaining 10 percent of base acres use data compiled by State Committees.

**How to Use the Detailed County Yield File:**

* The detailed county yield file has three components for each crop, county, and crop year:
  + NASS yields;
  + RMA yields; and
  + 70 percent of the t-yield.

For any given year, the “NASS-first” yield cascade described above is used. For the annual yields used for the benchmark yield calculations, 70 percent of the t-yield is substituted if the NASS (or RMA) yield is below 70 percent of the t-yield. T-yields are not used in any way in the actual yield calculation.

* The yields in this file are used to calculate ARC-CO payment rates found in the “ARC-CO yields, revenues, and payment rates” files located at: https://www.fsa.usda.gov/programs-and-services/arcplc\_program/arcplc-program-data/index.

* The county yield file can be used to analyze the implications of changing FSA’s cascade approach and to analyze the data sources used by FSA in ARC-CO calculations. As an example of the latter, the data sources used in the 2014- and 2015-crop corn ARC-CO calculations are composed of:
  + Counties using NASS data exclusively: 33 percent.
  + Counties using RMA data exclusively (where no NASS data are available): 7 percent.
  + Counties using a mix of NASS and RMA data: 35 percent.
  + All, or some, yields determined by the FSA State office: 25 percent (most of these are marginal growing areas with little base).

These percentages encompass 2009-15 data used for both benchmark and actual yields.