
Appendix A

Statistical Methodology and General Terms

CONGRESSIONAL DISTRICT ASSIGNMENT METHODOLOGY

The 113th Congress Congressional District (CD) tabulations of 2012 Census of Agriculture data are based on the location of the operations. Census respondents are asked to declare their principal county of operation as the county with the greatest share of their total value of production. Additionally, the operator's zipcode is known; however, this zipcode does not necessarily relate to the location of the farm or ranch. The CD assignments were based on files produced by the National Agricultural Statistics Service (NASS), as well as other files produced outside of NASS. Digitized county and CD boundary files were provided by the U.S. Census Bureau, the federal agency responsible for congressional apportionment among the States, as well as for mapping the resulting CDs in accordance with State requests. Digitized zipcode boundary files for 2013 were obtained from Environmental Systems Research Institute, Inc.'s (Esri) data and maps. In addition, digitized agricultural/non-agricultural land boundaries were produced by NASS.

Of the 1,382,099 farm and ranch reports returned for the 2012 census that were determined to be in-scope farms, 60.9 percent were deterministically assigned to a CD because geocoding software was available that enabled NASS to geocode the operation's location to the appropriate CD (i.e., for records where the zipcode was within the reported principal county, calculate geographic coordinates for an operation's address and spatially determine in which CD an operation's coordinates are located). Another 34.9 percent of the records were deterministically assigned to a CD because the operation's reported principal county fell entirely within a CD. Another 0.7 percent of the total farm and ranch records were assigned deterministically to a CD because their mailed zipcode was located in the operation's principal county, and the zipcode fell entirely within

a single CD. The remaining 3.5 percent of census farm and ranch records were assigned probabilistically following a statistical model. These records involved farm operations where either the county or the zipcode contained multiple CDs. For these cases, two models for multiple CD probabilistic assignments were developed. The first model was used if the mailed zipcode was located in the operation's principal county. Then probabilities of assignment to each CD within the zipcode were the proportion of the zipcode's digitized agricultural land contained in the CD, as maintained by NASS. The second model was used if the mailed zipcode was not located in the operation's principal county; NASS used the principal county in carrying out the CD assignment. The probabilities of assignment to each CD within the principal county were the proportion of the county's digitized agricultural land contained in the CD, as maintained by NASS.

Selected probabilistically assigned farms and ranches were reviewed by NASS Regional Field Offices to verify their assignments and, in some cases, corrections were made. The farms and ranches chosen for this review were typically large operations (with respect to their total value of production), or operations with a rare commodity. All published farm counts and totals were fully adjusted for nonresponse, misclassification, and coverage.

GENERAL TERMS

Acres. Crops were reported in whole acres, except for the following crops that were reported in tenths of acres: tobacco, land in vegetables including potatoes and sweet potatoes, berries, and land in orchards. Totals for crops reported in tenths of acres were rounded to whole acres at the aggregate level during the tabulation process.

If a crop was planted but not harvested, the acres were not reported as harvested. This does not include land in fruit and nut orchards, vineyards, berries, Christmas trees (cut or to be cut), and short rotation woody crops. Acres in these commodities were included in cropland harvested whether the crop was harvested or not.

Crop year or season covered. Acres harvested are for the calendar year 2012, except the data for citrus crops in Arkansas, Florida, Louisiana, Mississippi, Missouri, and Texas relate to the quantity harvested in the September 2011 through August 2012 harvest season. The citrus crops data for California and Arizona relate to the 2012 through 2013 harvest season, except for lime data in Florida and Texas, which relate to the April 2012 through March 2013 harvest season. The data for avocados in Florida and Texas relate to the April 2012 through March 2013 harvest season; for California and Arizona, the November 2011 through November 2012 harvest season. The data for olives in California and Arizona relate to the September 2011 through March 2012 harvest season.

Cropland, harvested. See Harvested cropland.

Forage - land used for all hay and haylage, grass silage, and greenchop. Data shown represent the area harvested with each acre counted only once if dry hay, haylage, grass silage, or greenchop were cut from the same acreage or if there were multiple cuttings of dry hay, haylage, grass silage, or greenchop

Government payments received. This category consists of direct payments as defined by the 2008 Farm Bill; payments from the Conservation Reserve Program (CRP), Wetlands Reserve Program (WRP), Farmable Wetlands Program (FWP), and Conservation Reserve Enhancement Program (CREP); loan deficiency payments; disaster payments; other conservation programs; and all other federal farm programs under which payments were made directly to farm operators. Commodity Credit Corporation (CCC) proceeds, amount from State and local government agricultural program payments, and federal crop insurance payments were not tabulated in this category.

Harvested cropland. This category includes land from which crops were harvested and hay was cut, land used to grow short-rotation woody crops and land in orchards, citrus groves, vineyards, Christmas trees (cut and to be cut), berries, vegetables, nursery and greenhouses. Land from which two or more crops were harvested was counted only once. Land in tapped maple trees was included in woodland not pastured.

Land in farms. The acreage designated as “land in farms” consists primarily of agricultural land used for crops, pasture, or grazing. It also includes woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it was part of the farm operator’s total operation. Large acreages of woodland or wasteland held for nonagricultural purposes were deleted from individual reports during the edit process. Land in farms includes CRP, WRP, FWP, and CREP acres.

Land in farms is an operating unit concept and includes land owned and operated as well as land rented from others. Land used rent free was reported as land rented from others. All grazing land, except land used under government permits on a per-head basis, was included as “land in farms” provided it was part of a farm or ranch. Land under the exclusive use of a grazing association was reported by the grazing association and included as land in farms. All land in American Indian reservations used for growing crops, grazing livestock, or the potential of grazing livestock was included as land in farms. Land in reservations not reported by reservation, individual American Indians or non-Native Americans was reported in the name of the cooperative group that used the land. In many instances, an entire American Indian reservation was reported as one farm.

Land in orchards. This category includes land in bearing age and nonbearing age fruit trees, citrus or other groves, vineyards, and nut trees of all ages, including land on which all fruit crops failed. Respondents were instructed not to report abandoned plantings and plantings of fewer than 20 total fruit, citrus, or nut trees or grapevines.

Market value of agricultural products sold. This category represents the gross market value before

taxes and production expenses of all agricultural products sold or removed from the place in 2012 regardless of who received the payment. It is equivalent to total sales and it includes sales by the operators as well as the value of any shares received by partners, landlords, contractors, or others associated with the operation. It includes value of direct sales and the value of commodities placed in the Commodity Credit Corporation (CCC) loan program. Market value of agricultural products sold does not include payments received for participation in other federal farm programs. Also, it does not include income from farm-related sources such as customwork and other agricultural services, or income from nonfarm sources.

The value of crops sold in 2012 does not necessarily represent the sales from crops harvested in 2012. Data may include sales from crops produced in earlier years and may exclude some crops produced in 2012 but held in storage and not sold. For commodities such as sugarbeets and wool sold through a co-op that made payments in several installments, respondents were requested to report the total value received in 2012.

The value of agricultural products sold was requested of all operators. If the operators failed to report this information, estimates were made based on the amount of crops harvested, livestock or poultry inventory, or number sold. Sales figures are expressed in current dollars and have not been adjusted for inflation or deflation.

Nursery, greenhouse, floriculture, and sod. These data include sales of aquatic plants, floriculture and bedding crops, nursery crops, sod, propagative materials, food crops grown under protection, and mushroom crops.

Operator characteristics. Operators (up to three operators per farm) were asked to report primary occupation, sex, age, race, place of residence, if retired, number of days worked off farm, year in which his/her operation of the farm began, year began operating any farm, hired manager, number of persons living in the operators' households, internet access and type of services, and Spanish, Hispanic, or Latino origin. Information on the total number of operators and total number of women operators was

collected from each operation. The principal operator was asked to report the percentage of total household income that came from the farm operation. In addition, operators two and three were asked if they were the spouse of the principal operator.

Operators. The term operator designates a person who operates a farm, either doing the work or making day-to-day decisions about such things as planting, harvesting, feeding, and marketing. The operator may be the owner, a member of the owner's household, a hired manager, a tenant, a renter, or a sharecropper. If a person rents land to others or has land worked on shares by others, he/she is considered the operator only of the land which is retained for his/her own operation. The census collected information on the total number of operators, the total number of women operators, and demographic information for up to three operators per farm.

Operators, all. Demographic and other information were collected for up to three operators per farm: the principal operator plus one or two additional operators. This may be fewer than the total number of operators on some farms. All operators refers to these multiple operators. Demographic data for up to the three operators reported are presented separately for women, by race categories, and for Spanish, Hispanic, or Latino origin.

Operators, total. Data represent the total reported number of operators on farms and ranches.

Other animals and other animal products sold. Data are for the total market value of all animals and animal products not having specific codes on the 2012 census report form.

Other crops and hay. Data are for the total market value of all crops not categorized into one of the prelisted crop sales categories on the census report form and include hay sales. This category includes crops such as grass seed, hay and grass silage, haylage, greenchop, hops, maple syrup, mint for oil, peanuts, sugarcane, sugarbeets, etc.

Primary occupation of operator. Data on age and primary occupation were obtained from up to three

operators per farm. The primary occupation classifications used were:

1. *Farming or ranch work.* The operator spent 50-percent or more of his/her worktime during 2012 at farming or ranching.
2. *Other.* The operator spent less than 50-percent of his/her worktime during 2012 in farming or ranching operations.

Principal operator. The person primarily responsible for the on-site, day-to-day operation of the farm or ranch business. This person may be a hired manager or business manager. See Operators for further explanation

Race of operator. With the exception of Hawaii, data were collected for American Indian (included Alaska Native), Asian, Black or African American, Native Hawaiian and Other Pacific Islander, and White operators. Respondents were asked to mark one or more of the race categories. In Hawaii operator race data were collected for American Indian (included Alaska Native), Chinese, Filipino, Japanese, Korean, Other Asian, Black or African American, Native Hawaiian, other Pacific Islander, and White. The combination of Native Hawaiian and Other Pacific Islander is equivalent to the Native Hawaiian or Other Pacific Islander category on the other forms. The combination of the Chinese, Filipino, Japanese, Korean, and Other Asian categories is equivalent to the Asian category on the other forms. The Volume 1, Geographic Area Series, U.S. Summary publication only displays counts for the categories of Native Hawaiian and Other Pacific Islander and Asian. Data for the 11 Hawaii race categories are published in chapter 2 of the Hawaii publication of the Volume 1 series.

Spanish, Hispanic, or Latino origin. Operators of Spanish, Hispanic, or Latino origin are found in all

of the racial groups listed in the census and were tabulated according to the race reported, as well as on tables pertaining only to this group.

Sugarcane for sugar. Acres harvested for Hawaii are for the calendar year 2012. Data for acres harvested in Florida, Louisiana, and Texas are for cuttings from September 2012 through April 2013.

Tenure of principal operator. All farms were classified by tenure of operators. The classifications include:

- Full owners operated only land they owned.
- Part owners operated land they owned and also land they rented from others.
- Tenants operated only land they rented from others or worked on shares for others.

Legal status for tax purposes. All farms were classified by legal status in the 2012 census. In 2007 this category was referred to as type of organization. The classifications include:

1. Family or individual (sole proprietorship), excluding partnership and corporation.
2. Partnership, including family partnership
3. Corporation, including family corporations.
4. Other, such as estate or trust, institutional, etc.

Vegetables harvested for sale. The acres of vegetables harvested is the summation of the acres of individual vegetables harvested. When more than one vegetable crop was harvested from the same acreage, acres were counted for each crop.