



A Demographic and Socio-Economic Profile of Allen County, Indiana
based on the 2010 Census and the American Community Survey

Appendices



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Appendix A. Cautions When Using ACS Data

The data collected through the ACS program is matched back to Census estimates and therefore we will not be seeing any revelations about population size, race, or age through the ACS data. We will have to wait for additional data from the 2010 Census to get better data on our population.

The following are specific topics that are treated a little differently between the decennial Census years and the ACS data collection.

1. Population: Where you Live, Age, and Household Composition

The ACS collects data over a 12-month period and not data based on a single day (i.e. April 1 for the decennial census), and therefore areas with seasonal populations will most likely see differences. For the decennial census, you are counted where you reside on April 1 (with some exceptions), for the ACS you are counted based on where you reside when you get the survey, unless you are staying there for less than two months. This might account for larger populations at resort areas or lower populations for college towns, but also incorporated in these estimates are a statistical reliance on the numbers in the Census Population Estimates program, so there may not be that much of a difference. But if this change does indeed affect populations, all the data associated with those populations are now part of the survey. For example, median household incomes and possibly median age could change if a sufficient number of wealthy individuals are now included in a relatively small area, such as a resort town.

This may also affect the count of vacant properties. If the ACS survey form is received at a location at a time when the property is occupied for at least two months, then that housing unit is occupied, even if it is not the usual residence.

When a decennial census is completed, the Census Day of April 1 is the determining factor for usual residence (i.e. usual place of residence). College students, whether living off campus or in a dorm, are residents in the area where they live while attending college. Since the ACS is ongoing throughout the year, the home town may now include the statistics of a college student who is away from home 8-9 months of the year. If the ACS arrives at a household in the summer when the student is living with her/his family, then all characteristics of that student are now included for that place.

2. Income and Poverty

There are two issues connected with the collection of income data:

First, the ACS collects data throughout the year and requests that the survey responders report income over the "past 12 months". Census 2000 (and prior censuses) collected data for an identified time, e.g. the calendar year which began January 1 of the prior year and ended on December 31. Census research has shown that despite some efforts made to adjust for inflation, there is some under-reporting occurring. In general, the ACS version is lower than what had been reported if data was collected as it had been during the decennial censuses.

Secondly, the Census Bureau does adjust the data received over the ACS time period for inflation. When we see a median household income given for the period 2005-2009, that number is the result of five years worth of monthly data being adjusted to the final year, i.e. 2009. Income can be affected using this methodology in some cases. For example, it is possible for an area to have a different median income if persons who used to be counted in that area are not counted as living there now (see point 1), and vice

versa. The same methodology is used for housing costs and similar situations.

Since Poverty is based on income, the same issues exist; i.e. there may be an under-reporting of data occurring with ACS data as compared to decennial census data.

3. Group Quarters Population

Group quarters are places where people live in a group living arrangement that is owned or managed by an organization, and services or housing are provided for the residents. Some of the services may include custodial or medical care, such as correctional facilities or nursing homes. It appears they may be comparability issues between the 2000 Census and the ACS. In addition, some caution is advised when comparing different years of the ACS. Due to the sampling methodology, data at a county level may not be comparable between years of ACS surveys (i.e. do not compare 2008 ACS data with 2009 ACS data).

4. We should be aware of which survey to be used. For example, if we want to compare data across various counties, we should use the ACS for the county with the smallest population. Less than 25 percent of all counties in the U.S. are large enough to have data reported in one year ACS. We can use 2009 ACS if we just want to collect data for Allen County, Indiana, but if we wanted to compare median incomes in Allen and DeKalb Counties, we should use the 3-year ACS. The most reliable data is contained in the 5-year surveys, but those are also the least current.

5. Control totals and adjustments: Although we are very happy to have 2005-09 data available at a census tract level, we may want to revisit some of this analysis in a few years after the 2010 decennial census data has been processed. It is our understanding that the Census Bureau will be adjusting the levels used in the 2005 ACS (actually, they will go back to the 2001 ACS) based on the data received via the 2010 Census. For example, the 2010 Census shows a substantial increase in the number of Asians in Allen County, and we suspect that this represents the influx of Burmese refugees and immigrants. However, the Census does not ask questions about where a person was born or if they are a citizen. That information is only available in the ACS. In a recent newspaper article¹ the comment was made that the number reported by the 2009 ACS for Burma-born population in Allen County by the ACS was certainly low. There is a "better chance" that future ACS data will pick-up on these immigrants since the 2010 Census now has a much larger number of Asians, but we may also be relegated to footnoting our analysis for years to come. There are many dependent variables, such as whether an immigrant family receives an ACS survey and whether they complete it. We may never get good counts on what is happening in terms of immigrants.

But what should happen is that the Census will produce intercensal estimates to correct (or make more appropriate) the data contained in the 2009 Allen County ACS (and also 2005-09 and 2007-09 ACS etc.). Once the Census has done their mathematics, they will use those new models on a future ACS data set. That is, all years will be adjusted. If we were to compare 2005-09 to 2006-11 for this specific Burmese question, we may find a totally different population number, although it is expected that at some point, the revised numbers based on 2010 Census will be part of the equation. Without knowing that the Census had totally revamped their control numbers, we might erroneously assume that some major activity occurred in 2011 to have such an effect on these numbers.

¹ Journal Gazette, "Census info on refugees coming" Angela Mapes Turner. Published Jan 16, 2011

Appendix B. Explanation of Terms and Related Items

Race and Hispanic Origin

Census Background:

Data on race has been collected since the first decennial census in 1790. The Census collects data on race and Hispanic origin by following the guidelines of the U.S. Office of Management and Budget (OMB), and the racial classifications adhere to the October 1997 Federal Register notice entitled “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity.” OMB requires five minimum categories (*italics indicate definition from the OMB Guidelines*):

- *White: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as “White” or report entries such as Irish, German, Italian, Lebanese, Arab, Moroccan, or Caucasian.*
- *Black or African American, abbreviated as Black: A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as “Black, African Am., or Negro” or report entries such as African American, Kenyan, Nigerian, or Haitian.*

- *American Indian or Alaska Native, abbreviated as AIAN: A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicate their race as “American Indian or Alaska Native” or report entries such as Navajo, Blackfeet, Inupiat, Yup’ik, or Central American Indian groups or South American Indian groups.*

Respondents who identified themselves as “American Indian or Alaska Native” were asked to report their enrolled or principal tribe. Therefore, tribal data in tabulations reflect the written entries reported on the questionnaires. Some of the entries (for example, Metlakatla Indian Community and Umatilla) represent reservations or a confederation of tribes on a reservation. The information on tribe is based on self-identification and therefore does not reflect any designation of federally or state-recognized tribe. The information for the 2010 Census was derived from the American Indian and Alaska Native Tribal Classification List for Census 2000 and updated from 2002 to 2009 based on the annual Federal Register notice entitled “Indian Entities Recognized and Eligible to Receive Services From the United States Bureau of Indian Affairs,” Department of the Interior, Bureau of Indian Affairs, issued by OMB, and through consultation with American Indian and Alaska Native communities and leaders.

- *Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. It includes people who indicate their race as “Asian Indian,” “Chinese,” “Filipino,” “Korean,” “Japanese,” “Vietnamese,” and “Other Asian” or provide other detailed Asian responses.*
- *Native Hawaiian or Other Pacific Islander, abbreviated as NHPI: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as “Native Hawaiian,” “Guamanian or Chamorro,” “Samoan,” and “Other Pacific Islander” or provide other detailed Pacific Islander responses.*
- *There is also “Some Other Race”, abbreviated as SOR, added with OMB approval and included in the 2000 Census. Includes all other responses not included in the “White,” “Black or African American,” “American Indian or Alaska Native,” “Asian,” and “Native Hawaiian or Other Pacific Islander” race categories described above. Respondents reporting entries such as multiracial, mixed, interracial, or a Hispanic, Latino, or Spanish group (for example, Mexican, Puerto Rican, Cuban, or Spanish) in response*

to the race question are included in this category. Sources indicate that most respondents who reported Some other race are Hispanic.

- **Two or More Races:** In the 2000 Census, individuals were presented with the option to self-identify with more than one race, and this was true in the 2010 Census. *People may chose to provide two or more races either by checking two or more race response check boxes, by providing multiple responses, or by some combination of check boxes and other responses. The race response categories shown on the questionnaire are collapsed into the five minimum race groups identified by OMB and the Census Bureau's "Some Other Race" category.*

There are 57 possible combinations involving the race categories shown above. For example, some one can self identify as belonging to the White and Black or African American, or as "Native Hawaiian and Other Pacific Islander and Some Other Race and Black, and the response is tabulated as "Two or More Races".

The OMB issued Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity in 1997 and in that document mandated that race and Hispanic origin are separate and distinct concepts.

The definition of Hispanic or Latino Origin in the 2010 Census refers to a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture regardless of race.

The sequence of questions in the 1990 Census was different than in 2000, and the responses were processed differently by the Census Bureau. In the 1980 Census, the census wording asked for Spanish origin; this was changed to Hispanic origin in the 1990 Census.

Other Factors with Race:

The 2010 Census identified the following options when completing the 2010 Census form: White, Black-African Am, or Negro, American Indian or Alaska Native (state enrolled tribe), Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Native Hawaiian, Guamanian or Chamorro, Samoan, Other Pacific Islander (Print Race, e.g. Fijian, Tongan), Other Asian (print race e.g. Hmong, Laotian, Thai, Pakistani, Cambodian, Some other Race (Print Race).

How are the Burmese counted and how can we measure the change? I doubt if the Census data will be detailed enough to measure changes in population between 2000 and 2010. In the 2000 Census, only Asian Indian, Chinese, Filipino, Japanese, Korean and Vietnamese were included as choices. Many Burmese Americans are either mixed Chinese or Indian, or refugees from ethnic minorities that generally do not associate themselves with being "Burmese." Burmese is inclusive of Mon, Karen, Rakhine, Chin, Kachin, Shan, Lisu, Bama, Kayah, Palaung, Padaung, Pa-O, etc. If a Burmese person completes the survey with any of these peoples, it will mostly likely be entered by the Census organization as "Other Asian".

The ACS includes about 50 questions related to households, housing, education, income, employment, disabilities, and citizenship or mobility. In the case of trying to determine immigrant status, the ACS includes questions on whether a person is a citizen of the US (born or naturalized); when did the person come to live in the United States, name of country the person was born in, does the person speak a language other than English at home, and what is that language. Also, the ACS includes a question on where a person lived one year ago. Assuming that the immigrant community receives one of these surveys and then completes their ACS, there is a basis for some information that may help us assess the immigrant population. However, other issues arise. For example, many black immigrants in the United States do not identify with the choices given

on the race question: Black, African Am., or Negro. According to an article in USA Today², many blacks have left the race box blank and have written in their national origin under the “some other race”. Census scanners have instructions to assign write-ins for only a limited number of countries, so depending on what they have written in, they may or may not be assigned as black. This may have occurred in Allen County in the 2010 Census with the African immigrants. Some may be included in the some other race category; some may be in the Black, African Am. Or Negro race, but either way, there is no way to discern whether they are recent immigrants unless they receive an ACS survey and complete it.

Sampling Errors

There are four different measures associated with sampling error, and since the ACS is completed by a sample from the United States population, understanding the basics are helpful when drawing conclusions about the data presented. The following is a very basic summary of the errors.

- **Standard Error:** This indicates the extent to which the estimate from the sample survey can be expected to deviate from the actual population. It is based on the underlying variability in a population and the sample size. If your population has households that are very similar (e.g. let’s say that most families have one child), then the standard error of the estimate of the average children per household will be smaller compared to a population which has more variation.
- **Margin of Error:** This is a measure of precision, and determined by the sample size and the diversity in the population. The number the Census gives us is based on a 90 percent confidence level. That is, there is a 90 percent chance that the results from the sample contain the total population value. These are useful in assessing the reliability of estimate and whether differences are significant. The Census publishes this number right next to the ACS data so it really hits home.
- **Confidence Interval:** This represents the chances of capturing the actual value of the population parameter over many different samples (sample statistic \pm margin of error).
- **Coefficient of Variation:** the relative amount of sampling error-how reliable is the estimate?

In general, data users are encouraged to consider both the margin of error and the coefficient of variation when evaluating the reliability of an estimate.

² Black Coalition pushes for “unified” 2010 Census tally. Haya El Nasser, USA Today. 3/3/2010.

Appendix C. Definition of Poverty

The Census Bureau uses Poverty Thresholds, which is a set of money income thresholds that vary by family size and composition. If a family's total income is less than the threshold, then that family and every individual in it is in poverty. These thresholds were derived in the mid 1960s using USDA food budgets and data about what portion of income families spend on food. These thresholds are updated annually using the Consumer Price Index. These are not the same (although similar) as the DHHS poverty guidelines, which are used to determine participation in many government programs.

Earnings (from work before taxes), unemployment compensation, Social Security, pension income, rents, royalties, trusts, education assistance, alimony, child support, public assistance, and Supplemental Security Income are used to compute poverty status. Public housing, Medicaid, and food stamps, and capital gains and losses are not included when computing the poverty definition.

Although poverty determinations for the 2005-09 ACS were determined using the thresholds applicable for the year of that survey, the following table is for the year 2009 to serve as an example of these thresholds. Similarly, these 2009 thresholds would have been used for the 2009 ACS data.

Poverty Thresholds 2009										
Size of Family Unit	Weighted Average Thresholds	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or
One person (unrelated individual)	\$10,956									
Under 65 years	\$11,161	11,161								
65 years and over	\$10,289	10,289								
Two people	\$13,991									
Householder under 65 years	\$14,439	14,366	14,787							
Householder 65 years and over	\$12,982	12,968	14,731							
Three people	\$17,098	16,781	17,268	17,285						
Four people	\$21,954	22,128	22,490	21,756	21,832					
Five people	\$25,991	26,686	27,074	26,245	25,603	25,211				
Six people	\$29,405	30,693	30,815	30,180	29,571	28,666	28,130			
Seven people	\$33,372	35,316	35,537	34,777	34,247	33,260	32,108	30,845		
Eight people	\$37,252	39,498	39,847	39,130	38,501	37,610	36,478	35,300	35,000	
Nine people or more	\$44,366	47,514	47,744	47,109	46,576	45,701	44,497	43,408	43,138	41,476
Source: US Census Bureau Note: The poverty thresholds are updated each year using the change in the average annual Consumer Price Index for All Urban Consumers (CPI-U). Since the average annual CPI-U for 2009 was lower than the average annual CPI-U for 2008, poverty thresholds for 2009 are slightly lower than the corresponding thresholds for 2008.										

Appendix D. Census Tract Notes

Conversions from 2000 to 2010

The average number of residents in an Allen County tract is 3,701. Generally, census tracts have between 1,500 and 8,000 people, and optimally hold 4,000 people. Tract changes generally occur due to substantial population changes. While tract changes can play havoc with our attempts to make comparisons to earlier Censuses, for the most part, there are few boundary changes. While the population ranges for census tracts in Allen County are from 81 to 6,752, we have two sparsely populated tracts which have a special Census designation. These are tracts 9800.01 and 9800.02³. 9800.01 is the higher educational campuses and 9800.02 is mainly an industrial area although there are 58 housing units clustered within it.

When we compare 2005-09 ACS data to 2000, we use the same 2000 system of census tracts. For comparisons to 2010 data, we need to have a system for conversion. The following is an example of a census tract change in Allen County. Tract 42 existed until the 2010 Census. It was on the corner of Stellhorn Road and St Joe Road, across the street from the main campus of Indiana University Purdue University Fort Wayne, and this tract housed the Fort Wayne Developmental Center. The Center was closed in the early part of the decade and there are no residents remaining in tract 42, so obviously a change had to occur. The Census incorporated this area into a newly formed census tract which includes the IPFW and Ivy Tech campuses and dorms and this area is now known as tract 9800.01.

There were approximately 11 changes between 2000 and 2010, and our number of tracts increased from 90 to 96. Some were tracts split into two tracts, some were consolidations of two tracts into one, and a few were a little more complicated. In order to compare any change from 2000 to 2010, we have established our system for comparisons, and that is enumerated in the reconciliation in this appendix.

The following list identifies the changes in tracts in Allen County from the 2000 Census to 2010.

Reconciliation of 2000 and 2010 Census Tracts: Using Census 2010 data in census tracts with the 2000 Census tract map:

- 2000 tracts 14 and 15 were combined into a single tract known as tract 43 in 2010.
- 2000 tracts 18 and 27 were combined into a single tract known as tract 44 in 2010.
- 2000 tracts 107.03 and 107.04 were combined into a single tract known as tract 107.07 in 2010.
- 2000 tract 112.03 was split into 2 tracts in 2010, 112.04 and 112.05.
- 2000 tract 102 was split into 2 tracts in 2010, 102.01 and 102.02.
- 2000 tract 103.01 was split into 2 tracts in 2010, 103.05 and 103.06.
- 2000 tract 103.03 was split into 2 tracts in 2010, 103.07 and 103.08.
- 2000 tract 108.14 was split into 2 tracts in 2010, 108.15 and 108.16.
- 2000 tract 116.01 was split into 2 tracts in 2010, 116.06 and 116.07.
- 2000 tract 116.02 was split into 2 tracts in 2010, 116.08 and 116.09.
- 2000 tracts 7.03, 33.04, 106.04, and 107.06 were remapped in 2010 to create tracts 9800.02 and 7.04.
 - Tracts 106.04 and 107.06 both lost a small portion of land to create 2010 tract 9800.02 and continue to be known as 106.04 and 107.06.
 - 2000 tract 33.04 lost about ¼ of its land to 2010 tract 9800.02. The tract continues to be known as 33.04.

³ The 9800 series are tracts that contain little or no population and are generally either an industrial park, a National Park, a military installation, or the higher education campus such as 9800.01 in Allen County which encompasses the IPFW and IVY Tech institutions.

- 2000 tract 7.03 lost about half of its land to create 2010 tract 9800.02. The remaining portion was renamed tract 7.04 in 2010.
- 2000 tracts 1, 34, 41.02, and 42 were remapped in 2010 to create tracts 41.03 and 9800.01.
 - 2000 tract 42 was completely absorbed by 2010 tract 9800.01.
 - 2000 tracts 1 and 34 both lost a small portion of land to create 2010 tract 9800.01 and continue to be known as 1 and 34.
 - 2000 tract 41.02 lost about half of its land to create 2010 tract 9800.01. The remaining portion was renamed tract 41.03 in 2010.
- 2000 tracts 108.02 and 108.05 were remapped in 2010 to create tracts 108.17, 108.19, and 108.21.
 - 2000 tract 108.02 lost about a third of its land and to create 2010 tract 108.21. The remaining portion of 2000 tract 108.02 was renamed to 108.19 in 2010.
 - 2000 tract 108.05 lost about half of its land to create 2010 tract 108.21. The remaining portion of 108.05 was renamed 108.17 in 2010.

Special Situations: Tract 42 in 2000 Census; the 9800 tracts in 2010

As stated above, tract 42 from censuses prior to 2010 identified the area where the Fort Wayne Developmental Center was located. This site was closed in the early 2000s, but we would not want to include that tract in our comparisons. It would be singled out for certain measurements such as lack of education attainment, no income, etc. and there is no need for that comparison data. With the 2010 Census, this area was remapped or redefined, and tract 42 no longer exists. Similarly, we do not want to include tracts 9800.01 and 9800.02 in our 2010 comparisons because the population is too small, and these are unique areas. With 664 residents in 9800.01 and 81 in tract 9800.02, the tracts do not offer the broad population characteristics and different neighborhoods found in more populous tracts. Also, it is conceivable that 9800.01 will be changed by the next Census as the student housing around IPFW becomes more populated.

Tracts 113.02 and 113.03

For those interested in the dynamics of these two tracts, the following data on population is provided:

Tract	Total Population 2000	Total Population 2010	Black Population 2000	Black Population 2010	Asian Population 2000	Asian Population 2010
113.02	5,516	5,644	3,081	2,533	78	1,511
113.03	1827	2,079	763	726	3	483

Census Maps

The map of the 2010 census tracts is included in the Population Chapter. The map from 2000 is included here. For more detail, such as street names, you may want to access the Census web site for more detailed maps.

2000 Census Tracts, Allen County

