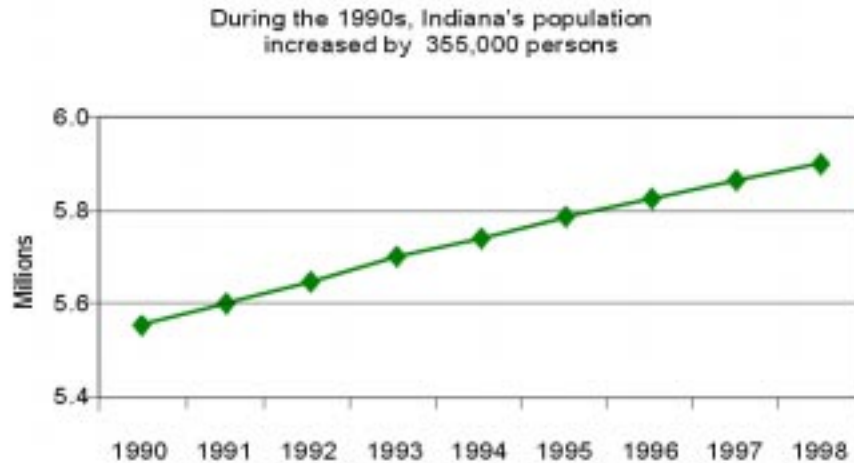


Indiana Population Change in the 1990s:

A Graphic View

Figure 1



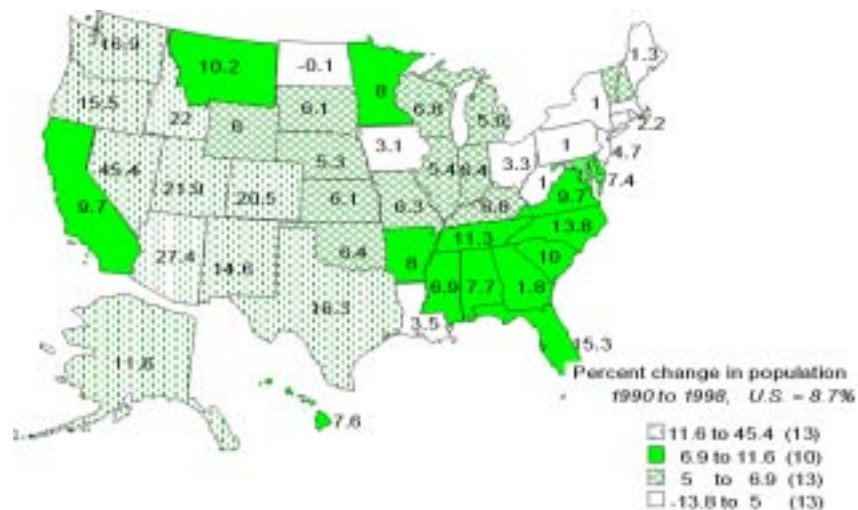
Morton J. Marcus

Director, Indiana Business Research Center, Kelley School of Business, Indiana University

Indiana's Population Growth, 1990-1998

In 1990, Indiana ranked 14th among the 50 states in total population, with Missouri 15th and 427,000 persons behind us. Our addition of 355,000 persons was the 18th highest increase for the period. Thus, in 1998, our 14th-ranked position is less secure. Washington State is 15th and our lead is only 210,000 persons.

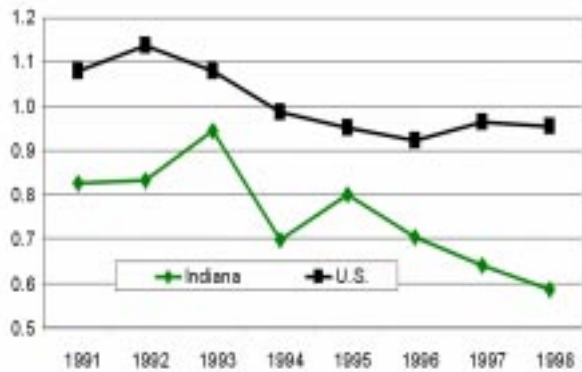
Figure 2



Percent Change in Population (by state), 1990-1998

Between 1990 and 1998, Indiana's population grew by 6.4% (29th in the nation). Although greater than many of our neighboring states, this increase lagged behind the 8.7% national rate of growth.

Figure 3



Annual Percent Change in Population (versus U.S.), 1990-1998

Each year during this decade, Indiana's population growth rate has been lower than that of the nation as a whole.

Although both the state and the nation are experiencing declining growth rates, the difference between Indiana and the U.S. is increasing.

Indiana's Share of the U.S. Population, 1990-1998

As a result of this slower growth path, Indiana's share of the U.S. population has fallen from 2.23% in 1990 to 2.18% in 1998.

Figure 4

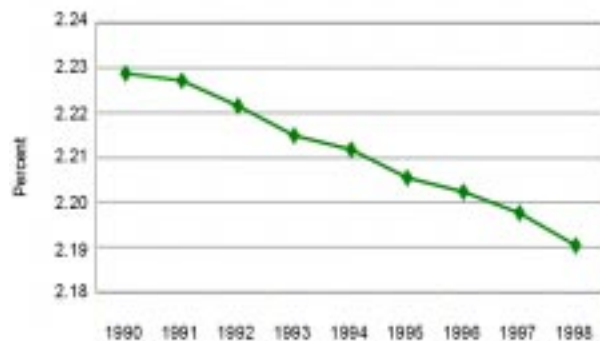
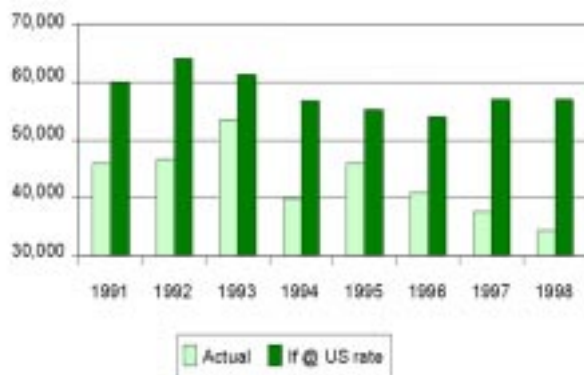


Figure 5

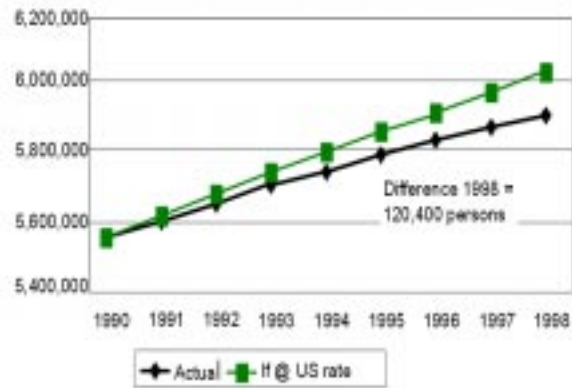


Annual Change in Indiana's Population, 1990-1998

Only in 1993 did Indiana's population growth exceed 50,000 persons. There is also a declining trend in the additions to the state's population each year.

Had Indiana grown each year at the national rate, there would have been no years with increases less than 50,000.

Figure 6



Indiana's Population Change (versus U.S.), 1990-1998

There were 240,000 fewer persons in Indiana in 1998 than would have been the case if the state had grown at the national rate.

If a 93rd county had been formed with this population, it would have ranked 11th in the state.

Figure 7

Sources of Population Change in Indiana, 1990-1998

Indiana's growth in population was largely a result of natural increase (the excess of births over deaths).

Net migration (the difference between the number of persons moving into the state and the number leaving) accounted for 28% of the change from 1990 to 1998.

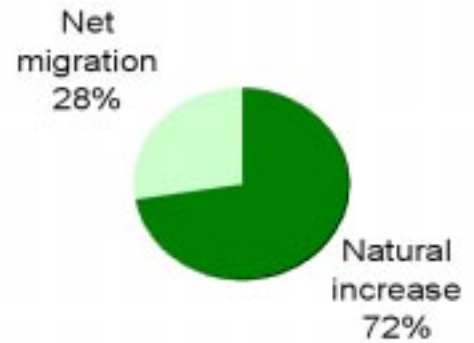
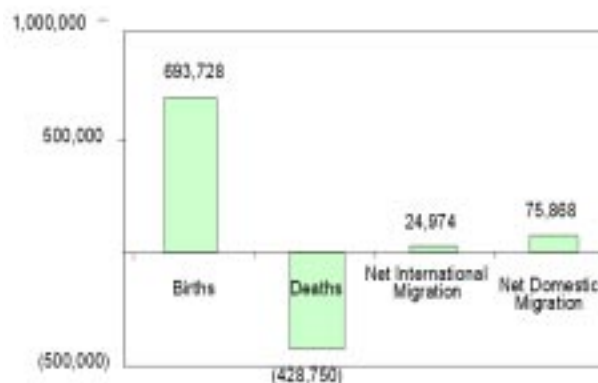


Figure 8

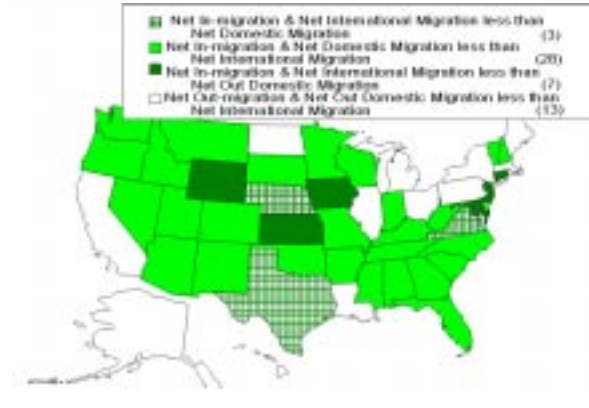


Components of Change in Indiana's Population, 1990-1998

Indiana had 2.11% of the nation's births compared with 2.31% of the deaths in the U.S. Together that gave the Hoosier State 1.85% of the nation's natural increase.

Indiana had just 0.37% of the net international migration of the U.S. and 0.52% of the net domestic migration.

Figure 9



National Migration Status, 1990-1998

Indiana was one of 28 states where domestic in-migration was the dominant contributor to growth from migration. In three states (Texas, Nebraska, and Virginia) the net in-flow of international migrants exceeded net domestic in-migration.

California and other large states (including New York, Michigan, Illinois, and Ohio) all saw net domestic out-migration exceed their net in-flow of international migrants. Iowa was among the states where in-migration was positive because the in-flow of international migrants exceeded the net domestic out-migration.

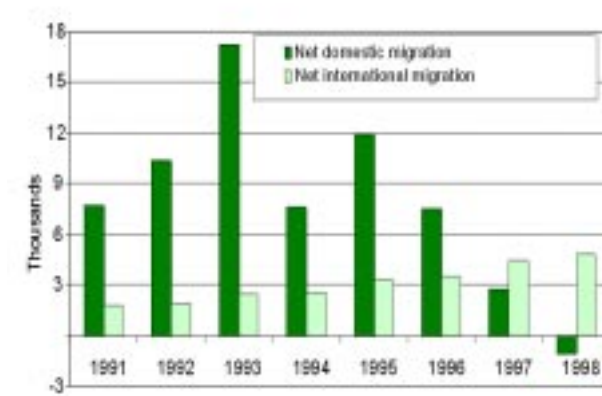
Components of Natural Increase in Indiana's Population, 1990-1998

While Indiana births declined by 2,100 between 1991 and 1998, deaths increased by 3,600. The effect was a decline of 5,700 in the state's annual natural increase.

Figure 10



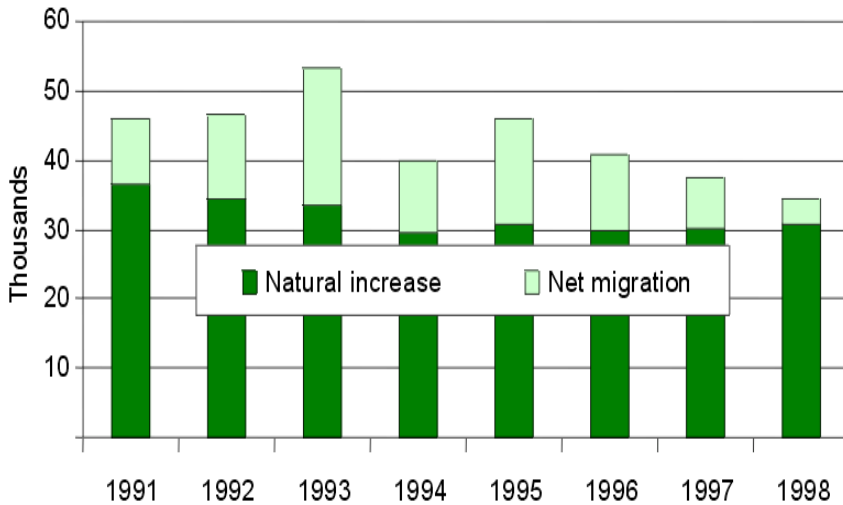
Figure 11



Components of Migration in Indiana's Population, 1990-1998

Net domestic in-migration peaked in 1993 and has been in decline since 1996. In 1998, the number became negative. For the first time in many years, the number of persons leaving Indiana for other states was higher than the in-flow from those states. Throughout the 1990s, net international migration to Indiana has been increasing.

Figure 12

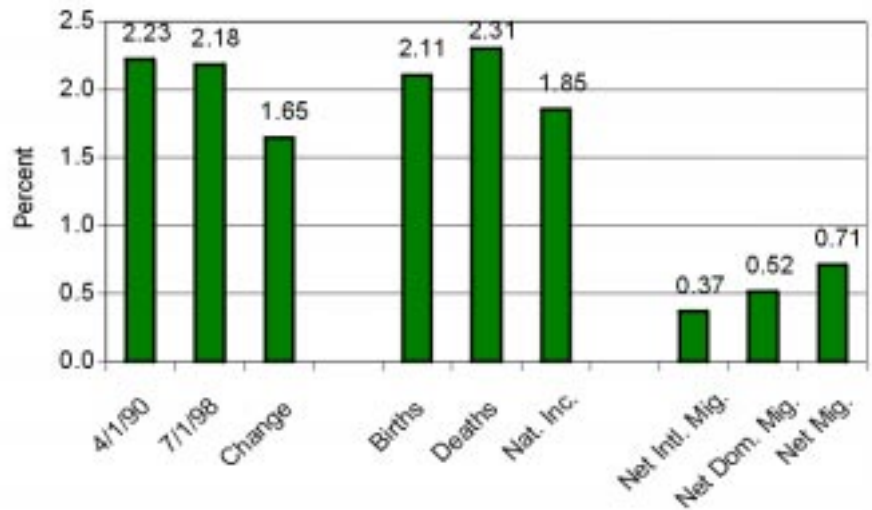


Components of Change in Indiana's Population, 1990-1998

In summary, the change in Indiana's population has been slowing in the last few years, both in natural increase and net migration.

Note: The components of change are calculated from the Census date (April 1990) while the total population numbers reported here are based on the estimated population figures for July of each year. Between April and July of 1990, Indiana's population is estimated to have grown by 11,000 people.

Figure 13
Indiana's Share of the Nation's Population Dynamics, 1990-1998



Indiana Population Change in the 1990s:

A Narrative View

Hoosier State's Population Continues to Grow

Indiana's population continues to grow. Population estimates released by the U.S. Census Bureau in December 1998 indicate that the state's population grew to almost 5.9 million on July 1, 1998, up from 5.5 million counted during the most recent census on April 1, 1990. (See **Figure 1**)

The net increase of 355,000 persons between 1990 and 1998 is attributed to natural increase (more births than deaths) and to positive net migration (more people moving into the state than moving out of the state) since 1990. About 75% (265,000 persons) of the net population growth was a result of natural increase, with the remaining 25% (90,000 persons) due to positive net migration.

The estimates indicate the state's population has grown much more rapidly in the most recent eight years than in the previous two decades. The state's growth rate since the 1990 census was 6.4%. The state grew by 5.7% (295,000 persons) between 1970 and 1980, and only by 1.0% (54,000 persons) between 1980 and 1990. Indiana experienced net out-migration during the 1980s, when the number of people moving out of the state exceeded the number moving into the state. The state's slight growth in the '80s was due to natural increase.

Indiana's population growth has not kept pace with the growth experienced by the nation. The

state's rate of growth of 6.4% since 1990 was lower than the growth rate of 8.7% for the nation during the same period. Indiana remains the 14th most populous state, but its share of the nation's population continues to decline, from 2.56% in 1970, to 2.42% in 1980, to 2.23% in 1990 and to 2.18% in 1998.

Indiana has been the 29th fastest growing state in the nation since 1990. The fastest growing states are in the southern and western regions of the nation. The Hoosier State's growth rate of 6.4% compares favorably with the growth rates of neighboring states. The Midwest grew by 5.4% since 1990. Indiana grew faster than Michigan (5.6%), Illinois (5.4%) and Ohio (3.3%), with a slightly lower rate of growth than Kentucky (6.8%). (See **Figure 2**)

The annual rate of population growth in the state appears to have peaked between 1991 and 1993, with annual growth rates of 0.8% and 0.9%. In the most recent two-year period, annual growth rates slowed to 0.6%.

Indiana's population is projected to continue growing, but with decreasing rates of growth. It is projected that the state of Washington, currently ranked 15th in population, will pass Indiana by the year 2005. Washington has been the 7th fastest growing state in the nation since 1990.

Joan Rainey

Research Director, Indiana Business Research Center, Kelley School of Business, Indiana University

Figure 1
Actual Population Change (by state), 1990-1998

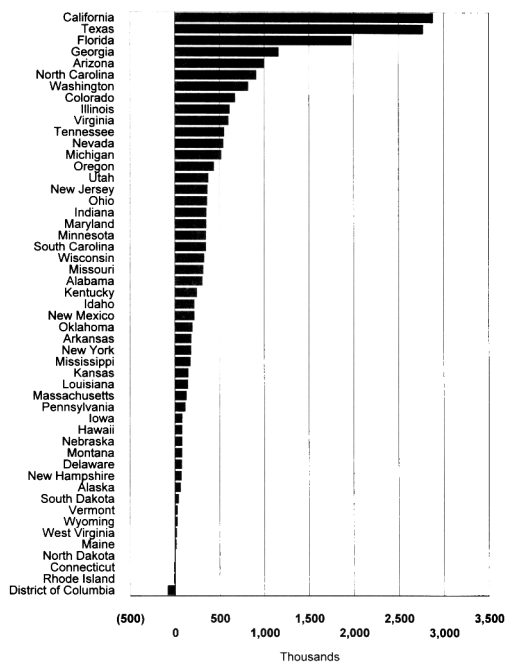
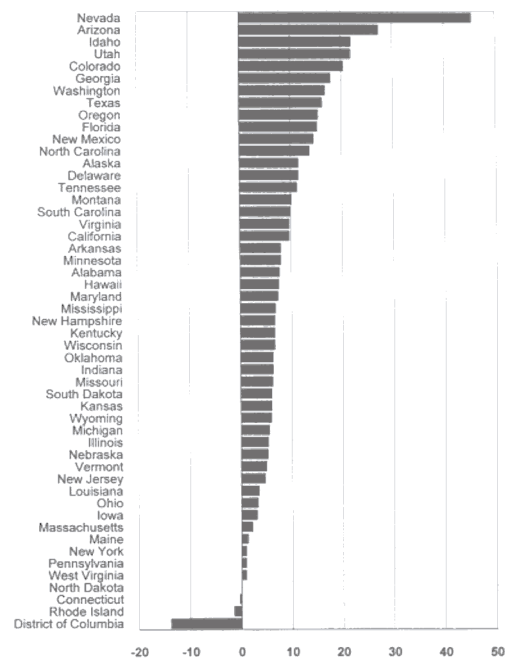


Figure 2
Percent of Population Change (by state), 1990-1998



Migration Into and Out of the Hoosier State

The largest number of people moving into Indiana has been from neighboring states, led by Illinois. It is estimated that 42% of the people moving into Indiana between 1996 and 1997 were from Illinois, Ohio, Kentucky, or Michigan. People also moved into Indiana in significant numbers from Florida, California, Texas and from foreign countries.

The largest numbers of Hoosiers moving to other states between 1996 and 1997 tended to move to neighboring states or to states in the South or West: Illinois, Florida, Ohio, Kentucky, Michigan, Texas, Tennessee and California.

Another way to view the migration picture between Indiana and other states is to look at the number of net migrants between pairs of states. Indiana's estimated in-migration of 119,000 and out-migration of 116,000 between 1996 and 1997 resulted in a net migration figure of 3,000. This means that 3,000 more people moved into the state than out of the state during this period. The largest numbers of in-migrants were from Illinois, California, foreign countries, Ohio, New York and Pennsylvania. States that accounted for the largest number of net out-migrants from Indiana were Florida, Arizona, Tennessee, Georgia, Texas, North Carolina and South Carolina.

Rapid Population Growth in Suburban Counties

The most recent county population estimates for July 1, 1997 indicated that 76 of 92 Hoosier counties grew by 1% or more since 1990, with 49 of these

counties growing faster than the state. Eleven counties showed little population change (less than 1%) and five Indiana counties experienced population decline exceeding 1% since the 1990 census.

Hamilton has been the fastest growing county in the state, adding 46,000 persons since the 1990 census, for a growth rate of 42.1%. Hamilton county's growth rate was double the growth rate of the 2nd fastest growing county, Hendricks. Hamilton was the fastest growing county in the five state region consisting of Indiana and neighboring states Illinois, Michigan, Ohio and Kentucky.

The fastest growing counties in the state since 1990 were primarily suburban counties. In addition to Hamilton and Hendricks, Johnson, Dearborn, Owen, Hancock, Morgan, Jasper and Jennings all experienced growth rates of 15% or higher between 1990 and 1997.

Counties that experienced population decline since 1990 were Miami, Delaware, Grant, Vigo and Wabash. Estimates indicate that the population of Miami County has been growing since 1995, due to redevelopment efforts there after the restructuring of Grissom Air Force Base resulted in significant population decline earlier in the decade.

The ten largest Hoosier counties in terms of population are Marion, Lake, Allen, St. Joseph, Elkhart, Vanderburgh, Hamilton, Porter, Tippecanoe, and Madison. The smallest Indiana counties are Ohio, Union, Warren, Switzerland and Benton, each with populations less than 10,000.

Indiana Farms: Bigger, But Fewer

The average size of Indiana's farms increased from 249 acres in 1992 to 261 acres in 1997, even while the land in farms decreased by 3 percent during the same five year span. (See **Figure 1**) But the number of farms in Indiana decreased between 1992 and 1997 (the years of the latest censuses of agriculture) by 14 percent, from 31,547 farms to 26,993. (See **Table 1** and **Figure 2**) Indiana ranked 1st in the number of ducks, geese, and other poultry sold (10,547,462 were sold in 1997), and was among the top ten states in sales of other agricultural items:

Item	Value	Indiana's Rank
Value of Crops (including nursery)	\$3,246,617,000	9th out of 50 states
Corn for Grain	\$1,515,617,000	5th out of 48 states
Soybeans	\$1,344,904,000	4th out of 40 states
Hogs and Pigs	\$ 843,002,000	6th out of 50 states

Table 1
Selected Indiana Data Just Released from the Agriculture Census

1997 Census of Agriculture, U.S. Dept. of Agriculture	Farms (number)	Land in Farms (acres)	Average size of farm (acres)	Median size of farm (acres)	Total cropland (acres)
INDIANA	57,916	15,111,022	261	100	12,848,950
ADAMS	1,093	208,653	191	75	191,192
ALLEN	1,440	276,385	192	79	246,668
BARTHOLOMEW	577	166,612	289	111	146,039
BENTON	433	256,820	593	420	247,562
BLACKFORD	303	85,958	284	82	76,593
BOONE	611	228,328	374	127	212,137
BROWN	173	21,707	125	80	10,381
CARROLL	563	218,170	388	125	198,014
CASS	700	205,380	293	100	179,249
CLARK	647	108,773	168	80	75,586
CLAY	520	159,441	307	143	134,623
CLINTON	585	236,320	404	219	222,586
CRAWFORD	410	61,320	150	106	29,601
DAVISS	1,101	217,131	197	64	188,972
DEARBORN	679	81,383	120	90	44,856
DECATUR	654	198,614	304	162	170,873
DEKALB	785	162,936	208	95	135,205
DELAWARE	635	173,443	273	80	159,571
DUBOIS	812	191,053	235	126	138,274
ELKHART	1,335	182,771	137	60	160,160
FAYETTE	420	106,737	254	120	85,029
FLOYD	310	28,708	93	54	18,472
FOUNTAIN	550	204,554	372	159	177,202
FRANKLIN	776	138,635	179	112	91,558
FULTON	622	170,645	274	119	151,322
GIBSON	579	232,839	402	148	211,810
GRANT	575	192,292	334	137	178,082
GREENE	878	205,628	234	105	146,620
HAMILTON	591	140,813	238	57	126,509
HANCOCK	549	163,704	298	87	155,422
HARRISON	1,108	161,378	146	78	109,853
HENDRICKS	631	167,228	265	78	150,491
HENRY	770	177,601	231	78	161,322
HOWARD	486	147,750	304	136	137,933
HUNTINGTON	651	184,137	283	112	168,886
JACKSON	809	201,006	248	116	157,403
JASPER	618	282,915	458	239	257,576
JAY	839	179,794	214	98	157,345
JEFFERSON	796	126,379	159	80	80,534
JENNINGS	605	130,373	215	85	91,446
JOHNSON	526	135,563	258	80	121,046
KNOX	584	280,628	481	205	255,766
KOSCIUSKO	1,130	246,907	219	80	210,148
LAGRANGE	1,392	189,932	136	75	156,233
LAKE	442	148,872	337	100	138,929
LAPORTE	749	247,756	331	120	226,816
LAWRENCE	875	170,811	195	98	100,355
MADISON	738	223,751	303	94	208,843
MARION	225	29,034	129	27	24,102
MARSHALL	865	201,637	233	95	176,837
MARTIN	335	70,105	209	102	46,451
MIAMI	678	197,198	291	121	175,108
MONROE	473	62,149	131	77	36,214
MONTGOMERY	681	273,258	401	160	243,976
MORGAN	601	133,958	223	69	110,972

1997 Census of Agriculture, U.S. Dept. of Agriculture	Farms (number)	Land in Farms (acres)	Average size of farm (acres)	Median size of farm (acres)	Total cropland (acres)
NEWTON	381	207,315	544	280	192,801
NOBLE	942	181,963	193	86	147,016
OHIO	252	29,880	119	88	15,949
ORANGE	531	123,343	232	120	77,911
OWEN	569	107,265	189	90	70,022
PARKE	471	188,816	401	137	146,125
PERRY	484	84,251	174	120	44,187
PIKE	288	84,237	292	130	70,123
PORTER	476	134,505	283	110	122,766
POSEY	437	195,305	447	153	180,104
PULASKI	531	236,332	445	240	216,338
PUTNAM	794	195,377	246	82	152,919
RANDOLPH	851	223,817	263	109	202,017
RIPLEY	821	159,460	194	100	123,794
RUSH	663	227,874	344	189	207,225
ST. JOSEPH	666	154,142	231	73	139,661
SCOTT	348	57,372	165	66	41,364
SHELBY	641	200,661	313	110	185,603
SPENCER	638	172,687	271	98	142,200
STARKE	410	135,643	331	108	116,495
STEUBEN	581	123,953	213	100	99,218
SULLIVAN	473	176,895	374	120	154,407
SWITZERLAND	541	67,881	125	80	33,929
TIPPECANOE	665	241,539	363	109	220,806
TIPTON	415	158,440	382	150	147,636
UNION	268	82,500	308	183	68,968
VANDERBURGH	271	72,112	266	84	66,532
VERMILLION	249	118,065	474	199	101,027
VIGO	455	114,889	253	78	99,012
WABASH	762	188,230	247	112	163,227
WARREN	378	184,653	489	201	162,247
WARRICK	356	98,549	277	100	80,901
WASHINGTON	914	181,298	198	100	125,278
WAYNE	814	172,860	212	95	142,427
WELLS	660	195,901	297	115	182,069
WHITE	620	272,072	439	200	253,021
WHITLEY	787	165,067	210	80	138,872

Figure 1
A Comparison of Selected Census Categories, 1992-1997

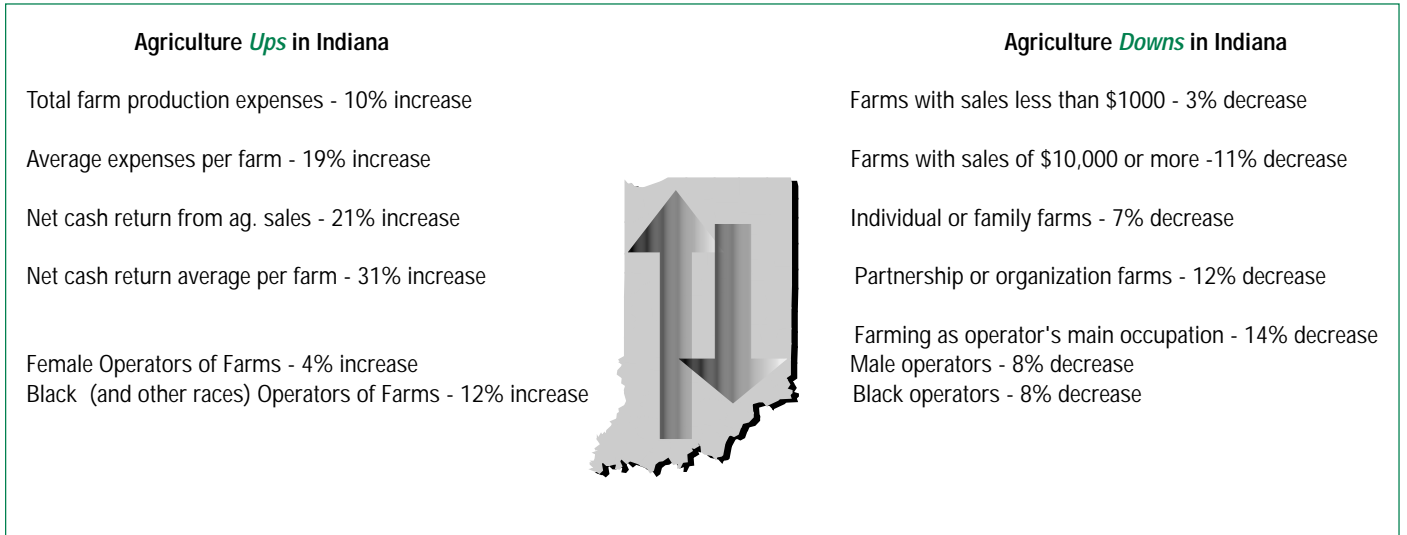
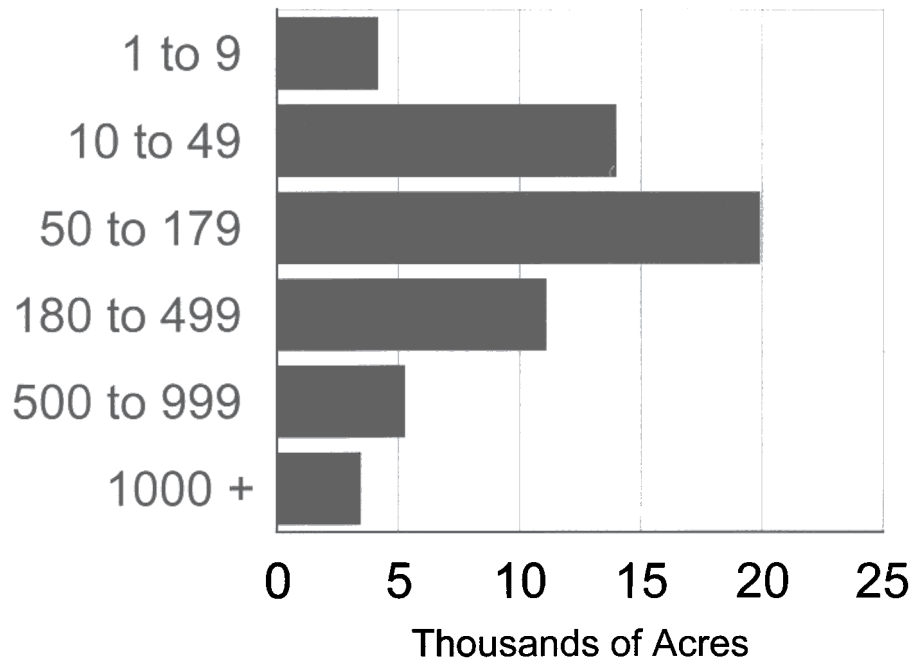


Figure 2
Indiana Farms By Size of Farm



Census 2000 Update

Carol O. Rogers

*Editor, and Information Services
Director, Indiana Business
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The Sampling Issue - Resolved?

The question of whether or not to include sampling in the Census 2000 population count was recently answered by the U.S. Supreme Court. The court handed down its decision in January, stating that sampling could not be used in the count used for apportionment. Many thought this would be an end to the sampling controversy that has plagued the census for more than a year, but it seems now that might not be the case. In late February, recently appointed Census Bureau Director Dr. Ken Prewitt announced that sampling would be used to correct all but the apportionment count. The Bureau is planning to conduct a post-enumeration survey to measure the accuracy of the count and then to adjust the census figures based on that sample survey, called *ACE - Accuracy and Coverage Evaluation*. Some members of Congress, and notably the chair of the census oversight committee (Dan Miller, R-FL), are opposed to this new plan, while other members support the use of sampling to improve coverage.

A Traditional Census, Plus

At a recent meeting with senior census staff,* plans to enhance various aspects of the count were unveiled. This was done in the context of director Prewitt's comment rebutting statements oft-repeated in Congress that the 1990 census was a failed census: "The 1990 census was not a failed census. A failed census is one that is not used. The 1920 census was a failed census. Congress was not happy with the results and did not reapportion itself until after the 1930 census." But to increase the accuracy and completeness of the count, the Bureau now plans to pursue three strategies:

1. To gain public cooperation to get a high mail return
2. To gain cooperation for enumeration in non-response follow up
3. To gain improvements in coverage (both geographically and in terms of hard-to-count persons)

The Bureau expects a return rate of 65 percent nationally on the mailout/mailback portion of the census. This can vary by state. Indiana is typically among the states with the highest initial return rate for forms that are mailed to and then mailed back from households. Each percentage point of non-returned forms costs \$25 million in follow-up (calling and visiting the household). The Census Bureau believes that an enhanced partnership program can help increase response rates and plans to funnel more money, more employees and more promotional materials into this program (which is pre-

dominantly the Complete Count Committee program and Address List Review). The Bureau will also spend more money on ad campaigns, with more messages aimed at the hard-to-enumerate and in areas that have low participation rates in other activities, such as voting. Some of these messages will be designed to change attitudes rather than to urge turning in the form. The ads will be professionally produced and begin airing in the Fall of 1999.

Other actions to be taken by the Census Bureau to ensure an accurate census in 2000:

• Non-Response Follow Up

The Bureau has to follow up every questionnaire that goes out in the mail but does not come back. Some forms will be returned because the post office says they are not deliverable. The Census Bureau must follow up on these and estimates there will be 45 million such non-responses (which are based on households) nationwide. With sampling, so much follow up would not have been an issue. With a traditional census now the order of the day, more temporary employees must be hired and trained and will spend 10 weeks doing the follow up. There is concern at the Bureau about finding sufficient employees to do this work and there has been some difficulty even now, in the winter and spring, in accomplishing the address checks that have been conducted in many urban areas in Indiana.

• Coverage Improvement

One simple way to help coverage was to expand the number of persons in a household that could be included on the form. Originally, the limit was five but the new form will accommodate six persons. For every person beyond that limit, the Census Bureau must send out an enumerator to contact the household and collect the data, so increasing the limit will reduce the need for that follow up. Other ways to improve coverage include better quality control with housing units marked as vacant or non-existent. Those units will be visited by a second enumerator to a double check. In 1990, the Census Bureau picked up 1.5 million people by double-checking the first enumerator, so it is a proven quality control measure. In some areas of our state, housing units may not seem obvious from the road or street. Examples of hard-to-locate units might include a trailer behind a house, or what looks like a single-family home that has actually been converted into multiple units. Enumerators will

closely check returned forms. If the questionnaire says several people at a given location, but information is given for only one person, the enumerator will conduct a telephone interview with that household to clear up the discrepancy. Because the census is so labor intensive the people who become enumerators must receive training with emphasis on map reading and spotting difficult-to-find housing.

- Address List Review

The 1998 program is actually still underway. Participating cities, if willing, were able to check their local information on addresses against the Census Bureau's (after signing an oath not to divulge any of this information for any reason). This is a difficult, time-consuming and, from what we have heard from some communities, frustrating program. But the payoff could come in terms of improving the mailing list the Bureau will use to send out millions of questionnaires in our state alone.

The 1999 program has begun, with workshops offered throughout Indiana in January and February. Communities and areas outside of urban cities and towns can, if willing, check the Census Bureau's maps and estimated number and location of housing units against its own records. Participation among units of government in Indiana is approximately 20%, although if one takes out township governments (1,008) the rate goes up appreciably.

- Complete Count Committees

Every community in Indiana has the opportunity to establish a Complete Count Committee, and many did for the 1990 census. At this time, less than 100 of our communities have established such groups, but more are submitting proclamations (the first step) every day to the Census Bureau office in Chicago. The fundamental work of these committees is to promote the census within the community and to encourage response by its residents.

- Census in the Schools

Designed by Scholastic, this is one of the most interesting initiatives developed for the Census to encourage participation. The purpose is to incorporate the census in teaching about citizenship, geography, math, map skills, social studies and community involvement. The Bureau just announced plans to expand this program significantly so that every school in Indiana and the nation will be able to incorpo-

rate the specially designed materials into their curricula for the 1999/2000 school year. Response cards will be sent to teachers this spring and for those who respond, materials will be supplied during the summer. Those same materials will be available for download via the Internet.

Detailed information on the Census 2000 plans and other materials are available at www.iupui.edu/it/ibrc.

*The author is a member of the national data center steering committee, an elected body of nine that represents a network of 1500 such centers nationwide, and the IBRC Director is the Governor's Liaison to the Bureau for Census 2000.



THIS IS YOUR FUTURE.
DON'T LEAVE IT BLANK.