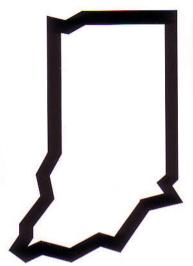
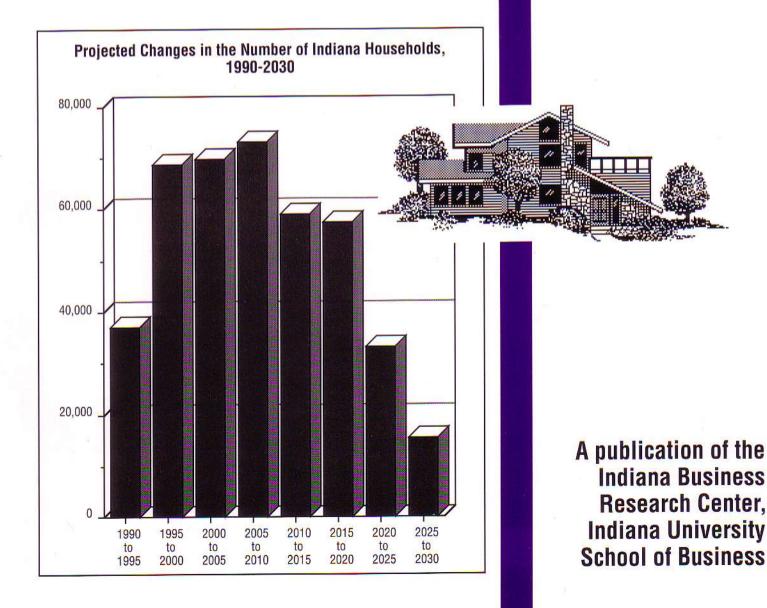
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Contents

Susan Brudvig
Household Projections for Indiana, 1995 to 2030

Upcoming issues will look at . . .

- · Indiana county household projections
- · "What if" household projection scenarios

Did you notice we've changed?

The *IBR* has changed—it is now three publications in one. We've merged the content of the *Indiana Population Report* and now have the *Indiana Update* as an integral insert of the *IBR*. The idea was simple: The readers of one publication were also readers of the others, needing economic as well as demographic news of the state.

The *Indiana Business Review* is now a monthly publication. However, in months when we don't have longer articles to publish, you will receive just the *Update*. December will be the month for the now annual Outlook Edition of the *IBR*. Please write or e-mail us (rogersc@indiana.edu); we always welcome your comments and suggestions.

The new IBRC homepage is: http://www.iupui.edu/it/ibrc/ibrchm.html

Household Projections for Indiana, 1995 to 2030

Susan Brudvig

Research Demographer, Indiana Business Research Center, Indiana University School of Business, IUPUI

Terms and Usage

The terms "household,"
"families," and "homes" are
not interchangeable. A
household is nothing more
than an occupied housing unit.
Most households contain
families of two or more people
related by blood, marriage, or
adoption. Non-family
households contain individuals
living with non-relatives or an
individual living alone.

All people do not live in households. Some people live in group quarters (e.g., military barracks, prisons, college dormitories). People in group quarters were projected in the IBRC's county population projections. Because the household population excludes people who live in group quarters, the projected number of group quarters residents is excluded from all calculations of total households.

The terms "householder" and "head" are interchangeable as used in this report, although they are not interchangeable in census usage. Because there is only one head per household, the number of heads, or householders, is always equal to the number of households.

rojections of the number and type of households are useful for many purposes. Household growth and change are indicators of consumer demand; many products—microwaves, computers, magazines, and so on—are sold to

households rather than to individuals. Household change is also an indicator of housing needs; a geographic area primarily composed of elderly people living alone has very different housing needs than an area primarily composed of young families.

Below are some of the highlights of the household projections for 1995-2030. A table detailing Indiana household characteristics at the state level can be found on pages 2-3.

Short-Term Trends-1990 to 2010

Between 1990 and 2010, the number of Indiana households is projected to grow from 2.07 million to 2.31 million, an increase of nearly one-quarter of a million households. Growth in eight counties—Marion, Allen, Elkhart, Hamilton, St. Joseph, Tippecanoe, Monroe, and Porter—is expected to account for more than half of the state's increases in the 20-year period.

The number of households in the state is expected to grow by 12% during this period. Elkhart County is expected to outpace the state's growth by more than two times. The number of households in Hamilton and Lagrange counties is expected to grow more than three times faster than the state.

Between 1990 and 2010, household growth is expected to be twice as fast as household population growth. In 10 counties, household growth is projected to be four times as fast as household population growth. Despite projected decreases in household population in 25 counties, 17 counties are projected to experience an increase in the number of households.

Indiana's average number of persons per household will continue to decline, from 2.61 (1990) to a projected 2.45 (2010). Lagrange County will continue to have the highest average in the state, with 3 people per household in 2010. The greatest declines are anticipated in Porter, Hendricks, and Hancock counties.

Between 1990 and 2010, growth in the number of households will be concentrated in those households headed by middle-aged people. The number of householders aged 45 to 64 is projected to increase from 610,000 to 880,000, constituting a growth rate of more than 40%.

In 2010, Indiana is projected to have 1.7 million family households, an increase of 190,000 since 1990. One-person households are projected to increase by nearly 56,000, from almost 500,000 to more than 550,000.

Long-Term Trends—1990 to 2030

Between 1990 and 2030, the number of Indiana households is projected to grow from 2.07 million to 2.48 million, an increase of more than 400,000 households. Change in the Indianapolis MSA alone is projected to account for one-third of the state's change over the 40-year period. Grant County is expected to experience the largest decrease during this period—a net loss of 1,800 households.

The number of Indiana households is expected to grow at 20% during this period. Adams, Elkhart, Hamilton, and Lagrange counties are projected to grow at twice the state's rate. Almost one-half of Indiana's counties are projected to increase at a rate less than 10% between 1990 and 2030.

Between 1990 and 2030, household growth will likely be three times faster than household population growth. On average, counties with a projected population increase can expect household growth to be four times faster than population growth. In the long run, only four Indiana counties are projected to experience net decreases in both the number of households and the household population.

Indiana's average number of persons per household will continue to decline, from 2.61 (1990) to a projected 2.31 (2030). Lagrange County will continue to have the highest average in the state at 2.92 (2030). The greatest decline in average per household can be expected in Porter, Johnson, and Hamilton counties.

Between 1990 and 2030, the number of households headed by people under 45 years of age is projected to decline nearly 100,000. The number of householders aged 65 to 74 years is projected to increase more than any other age group, from 260,000 to more than 400,000. The number of householders aged 75 years and over is projected to grow the fastest, at a rate of 67%.

Family households will still make up the majority of Hoosier households through 2030, despite increases in other living arrangements. One-person households are projected to increase by nearly 150,000 between 1990 and 2030, with females living alone accounting for three-quarters of the change.

		4000	4005	0000	0005	0010	2020	2020
	1980	1990	1995	2000	2005	2010	2020	2030
ALL HOOSIERS	5,490,224	5,544,159	5,625,600	5,703,000	5,776,200	5,837,600	5,915,000	5,879,10
n Households	5,344,543	5,382,167	5,463,600	5,541,000	5,614,200	5,675,500	5,753,000	5,717,100
Householder	1,927,050	2,065,355	2,102,500	2,171,300	2,241,000	2,314,100	2,430,700	2,479,200
Male	1,433,990	1,446,551	1,475,490	1,528,810	1,582,720	1,637,640	1,712,060	1,725,610
Female	493,060	618,804	627,020	642,470	658,240	676,490	718,660	753,570
Family Householder	1,455,556	1,480,351	1,511,140	1,563,150	1,614,500	1,667,910	1,738,340	1,746,72
Male	1,242,845	1,198,208	1,225,230	1,271,550	1,318,280	1,366,280	1,430,410	1,440,39
Female	212,711	282,143	285,910	291,600	296,220	301,630	307,930	306,33
Non-family Householder	471,494	585,004	591,360	608,130	626,460	646,220	692,380	732,46
Male	191,145	248,343	250,260	257,260	264,440	271,360	281,650	285,22
Living Alone	155,339	193,625	195,530	201,500	207,680	213,740	218,760	224,38
	280,349	336,661	341,100	350,870	362,010	374,860	410,730	447,24
Female		303,216	307,470	316,800	327,450	339,570	355,650	375,53
Living Alone	257,653	303,210	307,470	310,000	021,430	555,570	000,000	0,0,00
EOPLE 15-24 YEARS OLD	1,048,289	845,214	885,610	897,370	875,760	875,180	819,060	791,54
Households	966,403	765,516	806,100	817,850	796,240	795,670	739,550	712,02
Householder	176,626	118,383	123,120	124,570	122,100	123,530	115,020	109,50
Male	127,974	73,358	77,620	78,960	77,030	77,270	76,260	71,90
Female	48,652	45,025	45,500	45,600	45,070	46,260	45,990	43,11
Family Householder	110,852	63,223	66,460	67,390	65,640	65,830	64,810	61,21
Male	89,246	41,930	44,840	45,720	44,420	44,230	43,440	41,13
Female	21,606	21,293	21,620	21,670	21,220	21,600	21,370	20,09
Non-family Householder	65,774	55,160	56,660	57,180	56,460	57,700	57,440	53,80
Male	38,728	31,428	32,780	33,250	32,610	33,040	32,830	30,78
Living Alone	24,644	16,353	17,160	17,430	17,040	17,230	17,080	16,04
Female	27,046	23,732	23,880	23,930	23,850	24,670	24,610	23,03
Living Alone	17,893	12,648	12,740	12,760	12,630	13,010	12,970	12,13
		045 400	000 040	707 700	022 720	995 740	000 700	750,82
PEOPLE 25-34 YEARS OLD	874,408	915,109	806,340	787,720	833,730	835,740	808,780	735,89
n Households	864,917	900,308	791,400	772,790	818,790	820,800	793,850	
Householder	441,505	440,659	389,170	383,790	407,970	408,400	394,480	365,51
Male	356,748	327,183	287,410	286,370	309,020	311,230	300,790	298,97
Female	84,757	113,476	101,770	97,420	98,950	97,170	94,370	95,51
Family Householder	355,979	330,794	289,970	286,350	307,150	309,150	299,080	297,36
Male	300,538	256,113	223,650	222,900	242,090	244,900	236,740	234,53
Female	55,441	74,681	66,320	63,450	65,060	64,250	62,340	62,82
Non-family Householder	85,526	109,865	99,210	97,440	100,820	99,250	96,080	97,12
Male	56,210	71,070	63,760	63,470	66,930	66,330	64,050	64,44
Living Alone	43,660	51,398	46,030	45,830	48,380	47,980	46,310	46,57
Female	29,316	38,795	35,450	33,970	33,890	32,920	32,040	32,69
Living Alone	24,441	29,921	27,300	26,150	26,120	25,380	24,690	25,18
PEOPLE 35-44 YEARS OLD	613,583	819,161	875,060	852,310	759,980	752,190	809,160	783,76
n Households	609,416	810,958	866,780	844,030	751,700	743,910	800,890	775,49
	The state of the s	448,437	478,630	464,600	415,670	416,180	450,010	434,89
Householder	331,859		368,330	355,650	316,450	319,350	347,780	351,66
Male	274,805	345,445			99,220	96,830	99,650	98,35
Female	57,054	102,992	110,290	108,950	341,310	341,710	369,500	373,08
Family Householder	297,728	371,279	396,110	383,530				
Male	252,106	296,674	316,260	304,850	270,070	272,280	297,650	301,91
Female	45,622	74,605	79,850	78,690	71,240	69,440	71,850	71,17
Non-family Householder	34,131	77,158	82,520	81,060	74,360	74,470	77,930	76,94
Male	22,699	48,771	52,070	50,800	46,380	47,070	50,130	49,75
Living Alone	19,230	39,543	42,200	41,150	37,560	38,120	40,600	40,32
Female	11,432	28,387	30,450	30,260	27,980	27,400	27,800	27,18
Living Alone	10,074	23,926	25,670	25,510	23,600	23,100	23,440	22,9

	1980	1990	1995	2000	2005	2010	2020	2030
PEOPLE 45-54 YEARS OLD	550,112	570,791	672,010	770,990	831,020	815,210	723,460	780,260
In Households	546,259	566.316	667,510	766,490	826,530	810,720	718,960	775,770
Householder	302,013	322,486	379,580	435,580	468,760	458,300	413,260	448,180
Male	246,602	250,634	294,850	338,050	363,040	352,760	314,880	318,870
Female	55,411	71,852	84,730	97,530	105,730	105,540	96,390	94,400
				355,770	382,480	372,600	332,670	334,670
Family Householder	261,372	263,407	310,100					
Male	227,497	221,102	260,230	298,340	320,200	310,530	276,180	279,370
Female	33,875	42,305	49,880	57,430	62,280	62,080	56,490	55,300
Non-family Householder	40,641	59,079	69,470	79,810	86,280	85,700	78,590	78,590
Male	19,105	29,532	34,620	39,710	42,840	42,230	38,700	39,500
Living Alone	16,888	24,595	28,830	33,070	35,690	35,190	32,240	32,900
Female	21,536	29,547	34,850	40,100	43,440	43,460	39,890	39,100
Living Alone	19,873	26,309	31,020	35,680	38,650	38,670	35,470	34,750
PEOPLE 55-64 YEARS OLD	511,803	482,056	466,340	514,140	613,570	708,110	750,850	667,630
n Households	506,798	477,516	461,790	509,590	609,020	703,560	746,310	663,080
Householder	297,831	283,057	274,600	304,070	362,780	418,660	441,670	398,450
Male	222,819	207,812	202,760	225,860	269,230	310,280	334,010	324,410
Female	75,012	75,245	71,840	78,200	93,550	108,380	117,810	117,260
Family Householder	229,640	213,966	208,320	231,530	276,210	318,590	343,350	334,210
Male	202,955	183,810	179,580	200,260	238,800	275,170	296,070	287,120
		30,156	28,750	31,260	37,420	43,420	47,280	47,090
Female	26,685							
Non-family Householder	68,191	69,091	66,280	72,540	86,570	100,070	108,470	107,460
Male	19,864	24,002	23,180	25,600	30,440	35,110	37,940	37,290
Living Alone	18,167	20,983	20,260	22,370	26,600	30,680	33,150	32,570
Female	48,327	45,089	43,100	46,940	56,130	64,960	70,530	70,170
Living Alone	46,264	42,728	40,840	44,490	53,190	61,550	66,820	66,470
PEOPLE 65-74 YEARS OLD	350,459	402,041	403,010	379,180	374,830	418,440	580,240	613,900
n Households	342,257	393,504	394,470	370,640	366,290	409,910	571,700	605,360
	228,066	260,106	261,110	245,970	243,990	273,800	380,890	401,540
Householder				152,290	152,630	172,720	207,500	239,480
Male	138,913	158,881	160,330					
Female	89,153	101,225	100,780	93,680	91,360	101,070	121,910	141,410
Family Householder	138,003	160,420	161,660	153,180	153,020	172,720	207,670	239,880
Male	120,784	136,336	137,670	130,890	131,310	148,710	178,710	206,240
Female	17,219	24,084	23,980	22,290	21,710	24,000	28,960	33,640
Non-family Householder	90,063	99,686	99,450	92,790	90,970	101,080	121,740	141,000
Male	18,129	22,545	22,660	21,400	21,320	24,010	28,790	33,230
Living Alone	17,042	20,745	20,850	19,690	19,620	22,100	26,500	30,580
Female	71,934	77,141	76,800	71,390	69,650	77,070	92,950	107,770
Living Alone	70,038	75,261	74,920	69,660	67,950	75,200	90,680	105,130
		10,201		30,000				
PEOPLE 75 YEARS AND OLDER	234,925	294,155	300,110	322,010	331,190	325,260	350,870	464,690
n Households	204,241	254,922	260,880	282,780	291,960	286,030	311,640	425,460
Householder	149,150	192,227	196,290	212,720	219,680	215,260	235,390	321,110
Male	66,129	83,238	84,190	91,630	95,320	94,030	95,960	106,770
Female	83,021	108,989	112,100	121,080	124,360	121,230	119,940	128,620
Family Householder	61,982	77,262	78,520	85,410	88,680	87,320	88,600	97,930
Male	49,719	62,243	63,000	68,600	71,390	70,470	71,950	80,100
								17,830
Female	12,263	15,019	15,520	16,810	17,290	16,850	16,650	
Non-family Householder	87,168	114,965	117,770	127,310	131,000	127,950	127,310	137,460
Male	16,410	20,995	21,200	23,040	23,930	23,570	24,010	26,670
Living Alone	15,708	20,008	20,200	21,950	22,790	22,450	22,880	25,400
Female	70,758	93,970	96,580	104,270	107,070	104,380	103,290	110,790
Living Alone	69,070	92,423	94,980	102,550	105,300	102,650	101,580	108,960
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(Details may not sum to total due to rounding.) Sources: Indiana Business Research Center, IU School of Business The value of household projections for Indiana and its counties was first recognized in these pages in 1984, when Morton Marcus and John Lim prepared a tentative set of county household projections to the year 2000. Later, in 1986, Dick Pfister recognized the limitations of the first attempt and proposed changes in the methodology. In 1995, I am participating in this exchange by extending the work undertaken here at the IBRC more than a decade ago.

This article has two objectives. First, it lays out the methodology, an extension of Pfister's work, that is necessary to provide projections of households by type. Second, it reports state-level results suggesting that fluctuations in the number of households are due to the differing sizes of age groups, and that overall household growth conceals the variable growth in the type of households and household characteristics. (See, for example, "Detailed Indiana Household Characteristics," pp. 2-3.)

METHODOLOGY

The use of population projections is necessary for business planning and government administration. Yet these projections are most useful when the numbers themselves are translated into terms that apply to a problem. One way to accomplish this is to prepare functional projections from the IBRC's county population projections. Converted into functional terms, we can now answer the following question:

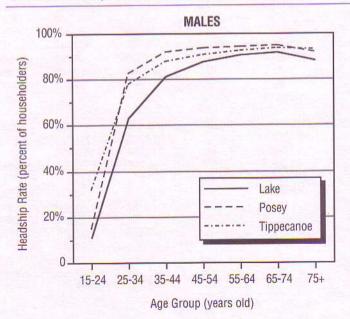
Given a population with a certain age-sex composition, how many households can we expect?

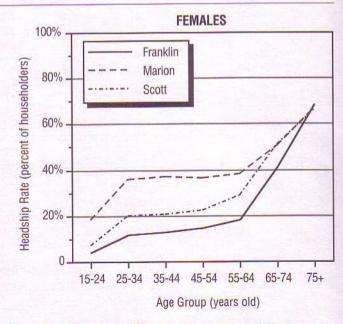
Our household projections were constructed using the "headship rate" method. This method uses sex- and age-specific headship propensities: that is, the number of householders in a given age-sex group expressed as a proportion of all people in households in that group. Headship was chosen over other methods of projecting households.

"Overall household growth conceals the variable growth in the type of households and household characteristics."

Headship differs primarily by age, sex, and place (see **Figure 1**), and is not evenly distributed in any population. Male headship rises rapidly between the ages of 15 and 34 years, and often decreases in the retirement years. In all, Indiana's counties have remarkably similar patterns of male headship. Three of the most dissimilar counties are shown in Figure 1. In contrast, female headship is lower overall, but rises rapidly after age 55. Though the general pattern is the same, female headship levels are variable across Indiana's counties.

Figure 1 Household Headship Rates for Selected Counties by Age and Sex, 1990





NOTE: The sources for all figures and tables in this article are the U.S. Bureau of the Census for 1980 and 1990 data, and the Indiana Business Research Center for 1995+ data.

Headship also differs by type of household. To yield finer detail of projected household characteristics, three types of households were cross-classified: (1) headship family, (2) non-family living alone, and (3) non-family not living alone. As a result, the headship calculations were mechanically cumbersome. For each of Indiana's 92 counties, 42 headship propensities were prepared from 1990 census data to account for two sexes, three household types, and seven age groups.

The "constant rate" variant of the headship rate method was employed. Constructed from 1990 census data, it uses each county's headship rates by type of household. For every five-year projection period to 2030, the 1990 headship rates by type were applied to the calculated projected household population by age and sex. The result: Total households, plus various household and householder characteristics, were projected from 1995 to 2030 for each county. The counties were then summed to provide the total household projections for the state.

Using a constant rate approach infers that assumptions about the future of socioeconomic trends are not considered. For example, the household projections contain no judgments about the future patterns of marriage, divorce, cohabitation, family sizes, rental costs, housing supply, or per capita income. The projections are functional because they are based on population projections that in turn are based on assumptions about the future of births, deaths, and

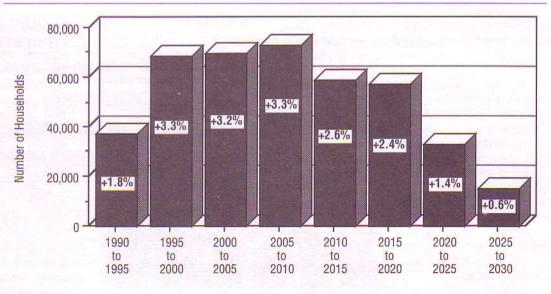
migration. The demographic assumptions used to prepare the population projections can be found in *Indiana County Population Projections: 1995 to 2030* (IBRC, 1993).

These household projections warrant two caveats. First, it is likely that they are conservative by nature. Household projections prepared with variable rates can yield higher levels of total households if they take into account new emerging trends. Second, household projections prepared at a constant level are measures of future change solely attributable to population change—its growth and its composition. If the population projections over- or underestimate populations in any age group, the household projections falter as well. In sum, the results are appropriately interpreted as a "baseline" level of future household growth and change. The actual number of future households will probably be higher.

PROJECTED HOUSEHOLD TRENDS FOR THE STATE Growth of Total Households

Between 1990 and 2030, the number of Hoosier households is projected to grow from 2.07 million to 2.48 million—an increase of more than 400,000 households, or 20%. The largest increases will occur between 1995 and 2010 as more than 210,000 households are added in the state. The rate of household growth varies by projection period (see **Figure 2**). Fluctuations in the number of households are due to the differing sizes of age groups in Indiana.





The variable rates of household change reflect the aging of Indiana's population in two divergent and distinct ways. First, people who were born between 1930 and 1939 are passing the peak of household headship and heading into their retirement years. Born during the Depression era, this age group is a relatively small one and contributes minute increases to the total number of future households. Second, the

Figure 3 Household and Population Growth, 1960 to 2030

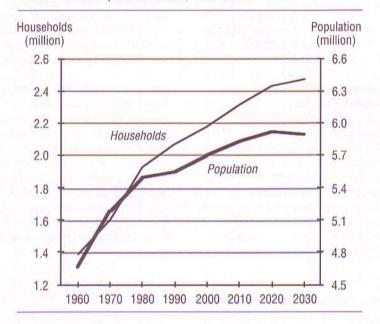
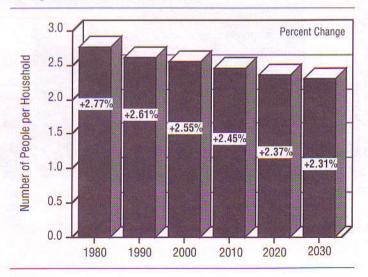


Figure 4 Average Household Size, 1980 to 2030



Baby Boomers hit their middle years between 1995 and 2010. For instance, in the year 2005 Boomers will be 41 to 59 years old—ages when total headship is very high.

Household Growth and Population Growth

In the 1980s, Indiana's households grew seven times faster than the population. The number of households will continue to grow in the future, but it is unlikely that household growth will out-pace population growth to the degree it did in the last decade. Between 1990 and 2010, household growth is expected to be twice as fast as household population growth. Over the 40-year projection span, household growth is expected to be three times faster than household population growth.

The greatest increases in household growth are expected to occur before 2010. But the greatest ratio of household growth to population growth will likely occur after 2010, when household growth is expected to out-pace population growth fourfold. In the year 2011, the oldest Baby Boomers will hit their retirement years, the age when headship for the total population is at its highest. Even if Indiana's population declines after 2020 as projected, the number of households will probably continue to increase (see Figure 3).

"Between 1990 and 2010, household growth is expected to be twice as fast as household population growth."

Declining Average Size of Households

Indiana's average number of persons per household will continue to decline. It is projected to drop below 2.5 persons by 2010 and to fall to almost 2.3 by the year 2030. However,the average *size* of households will probably not decline as fast as it did during the 1980s, from 2.77 persons per household in 1980 to 2.61 in 1990 (see **Figure 4**). Decrease in average household size is one reason an area sees increases in the number of occupied housing units without corresponding population change.

In the past, several trends have encouraged the formation of smaller households: more female-headed families, more people living alone, and smaller families with fewer or no children. Experts often agree that these trends will slow or stabilize. Because our household projections assume no change in these social trends, what is the catalyst behind the projected decreasing size of Hoosier households?

Until 2010 the decreasing average size is due to the Baby Bust. This group of individuals born between 1965 and 1976 is small compared to the numbers of Baby Boomers. As a result, fewer young people are in key family formation years between 1995 and 2010. After 2010, though, the decreasing average size will be due to the Baby Boom. By that time, this age group will be in its retirement years, when they will be more likely to live alone due to widowhood or divorce, or by choice.

Figure 5 Households by Type, 1990 to 2030

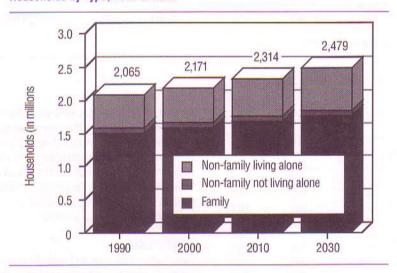
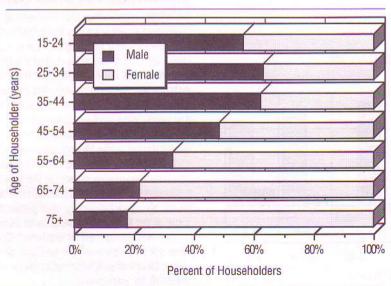


Figure 6 One-Person Households, 1990



Households by Type

Family households numbered 1.48 million in 1990, and the number is projected to increase by 190,000 to 1.67 million in 2010. Between 1990 and 2010, the pace of growth will be slightly faster for family households than for non-family households. Between 2010 and 2030, an additional 80,000 family households will be added in the state, but the pace of growth will decline to less than 5%. Family households will continue to be the majority of Hoosier households through 2030, despite increases in other living arrangements (see Figure 5).

The number of non-family households will continue to grow. By 2030, increases in non-family households will account for more than one-third of the change in all households (see **Table 1**). Between 2010 and 2030, increases in the number of non-family households are expected to outstrip increases in the number of family households.

Growth in one-person households (non-family, living alone) will be the fastest of all household types, with a jump of about 30% over the projection period. Of the nearly 150,000 one-person households added to the state by the year 2030, increases in the number of females living alone will account for three-quarters of this change. For people living alone, younger men outnumber younger women, and older women outnumber older men (see **Figure 6**). When the headship of elderly women is coupled with the aging of the Baby Boom, growth in one-person households is the result.

Even so, the household projections probably underestimate the number of elderly people who will live alone in the future. In their later years, women have lived alone due to widowhood. However, Baby Boomers are increasingly living alone because of divorce or by choice. These trends are not reflected in the projections; it is likely Boomers will not mirror the patterns of their parents.

Households by Age of Householder

Between 1990 and 2010, a slight increase in the number of young householders—those people under 25 years—is projected. This growth is due to the slight increases in this age group as the Baby Boomlet's youngest people reach age 15. However, growth in the number of households will be concentrated in those households headed by middle-aged people (see Figure 7). The number of householders aged 45 to 64 is projected to increase from 610,000 to 880,000. During this 20-year period, the number of middleaged householders will grow nearly four times as fast as the number of all householders.

Between 1990 and 2030, the number of households headed by people under 45 years of age is projected to decline by 100,000 householders. The

Table 1 Household Change by Household Type and Sex of Householder, 1990 to 2010: Total and Percent Change

	Change 1	990-2010	Change, 2	010-2030	Change, 1	990-2030
	Number	Percent	Number	Percent	Number	Percen
Householders	249,000	12.0	165,000	7.1	414,000	20.0
Family	188,000	12.7	79,000	4.7	266,000	18.0
Non-family, not living alone	5.000	5.4	-3,000	-3.1	2,000	2.1
Non-family, living alone	56.000	11.4	89,000	16.1	146,000	29.3
Male Householders	191,000	13.2	88,000	5.4	279,000	19.3
Family	168,000	14.0	74,000	5.4	242,000	20.2
Non-family, not living alone	3.000	5.3	-2,000	-3.5	1,000	1.6
Non-family, living alone	20,000	10.4	16,000	7.4	36,000	18.6
Female Householders	58,000	9.3	77,000	11.4	135,000	21.8
Family	19.000	6.9	5,000	1.6	24,000	8.6
Non-family, not living alone	2.000	5.5	-1,000	-2.4	1,000	3.0
Non-family, living alone	36,000	12.0	73,000	21.6	110,000	36.1

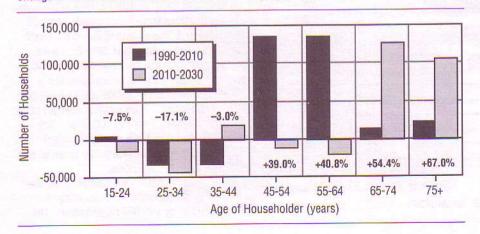
(Details may not sum to total due to rounding.)

Table 2 Household Change by Age of Householder, 1990 to 2030: Total Households and Percent Distribution

	19	90	20	10	20	30
	Number*	Percent	Number*	Percent	Number*	Percent
Householders	2.065	100.0	2,314	100.0	2,479	100.0
15-24 years	118	5.7	124	5.3	110	4.4
25-34 years	441	21.3	408	17.6	366	14.7
35-44 years	448	21.7	416	18.0	435	17.5
45-54 years	322	15.6	458	19.8	448	18.1
55-64 years	283	13.7	419	18.1	398	16.1
65-74 years	260	12.6	274	11.8	402	16.2
75 years and over	192	9.3	215	9.3	321	13.0

^{*}Numbers are in 000s. (Details may not sum to total due to rounding.)

Figure 7
Change in Number and Percent of Householders by Age, 1990 to 2030



number of householders aged 65 to 74 years is projected to increase more than any other age group, from 260,000 to over 400,000 by 2030 (see **Table 2**). And the number of householders aged 75 and over is projected to grow the fastest, at a rate of 67%. Between 2010 and 2030, the number of elderly householders (those people 65 years and over) will increase by nearly one-quarter of a million.

CONCLUSION

To project the number and type of households, 1990 headship rates by type were applied to Indiana's projected population. As mentioned before, because of the constant rate approach, fluctuations in the number of households are due to the differing sizes of projected cohorts. Although most analysts agree that the trends in headship rates are leveling off, these household projections can be faulted on two points. First, the behavior of any given age group tends to be unlike that which precedes it, and a constant rate approach does not recognize that Baby Boomers, for instance, do not form households as their parents did. Second, the household projections rest upon population projections, and any change in the projected population results in a change in total households. Future issues of the IBR will address these matters.

It was also noted that overall household growth conceals the variable growth in the type of households and household characteristics. State-level trends also conceal county-level patterns. In the next issue of the *IBR*, county patterns of future household growth and change will be examined. County projections are currently available on EDIN, the on-line Economic Development Information Network. Write to the IBRC for information.

Indiana Business Review September 1995

Indiana Business Research Center Graduate School of Business Indiana University Bloomington, IN 47405

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Indiana Update

A Monthly Overview of Indiana's Economic Trends Indiana University School of Business Indiana Business Research Center

September 1995

Hot and Cold Spots of Economic Development

Businesses look for the *hot spots* in the nation or the state. These are the places where growth is taking place most rapidly. Hot spots are often the most desirable markets for expansion. Where growth is occurring, new entrants can take advantage of an expanding market rather than trying to fight it out with existing firms for market share in a slowly growing or declining market.

The most obvious type of growth is the percent change in *population*. That story has been told often for Indiana. From 1982 to 1992, for example, Hamilton County led the state with a population growth of 43% followed by Brown, Johnson, and Dearborn counties. The cold spots, the places with the slowest growth or decline, were Warren, Blackford, Sullivan, and Vermillion counties. Map 1 shows the top ten hot and cold spots of population change in Indiana.

But population alone may not be sufficient to tell the story. Other dimensions of economic growth may also figure into a comprehensive analysis of hot and cold spots. For example, employment growth

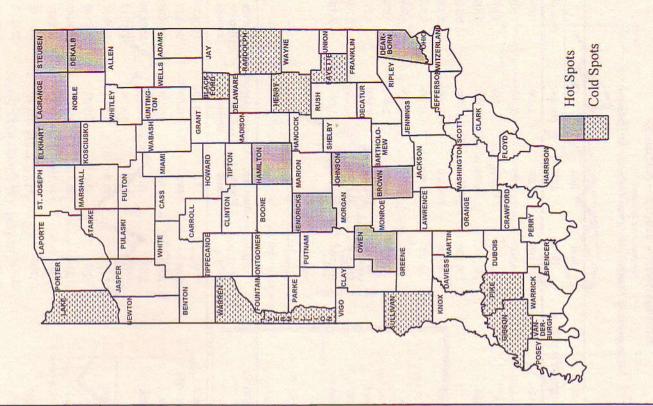
may not be closely related to population growth. Jobs may be created in a county, but the people working there may commute from other counties. Similarly, a high rate of population growth may indicate a development of housing opportunities, while jobs are still held in the core county of a metropolitan area. Map 2 shows the ten hot and cold spots for employment growth in Indiana from 1982 to 1992.

Another important dimension of economic advance would be per capita personal income growth. This measure may advance in a stagnant community as children move out, reducing the population, while their parents continue to earn the same money as when the kids were at home. If two children leave a four person household, with income remaining constant, per capita income will double. For the period 1982 to 1992, Map 3 shows the ten hot and cold spots of Indiana.

Finally, economic development officials may be concerned with still a different dimension of community well-being:

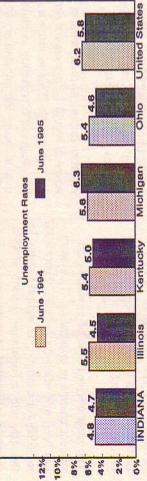
see Development page 6

Map 1. Percent Change in Population 1982 - 1992



The Regional Employment Situation

Total Persons Employed	June 1994	June 1995	Change	% Change	Rank in US
INDIANA	2,944,900	3,042,700	008'26	3,32%	12
Illinois	5,800,500	5,883,000	82,500	1.42%	30
Kentucky	1,753,500	1,815,000	61,500	3.51%	10
Michigan	4,519,100	4,519,000	-100	0.00%	41
Ohio	5,288,800	5,357,100	68,300	1.29%	33
United States	123,864,000	125,720,000	1,856,000	1.50%	N/A



Employment - Hours - Earnings by Industry

			CHIEF SYLLES			THE REAL PROPERTY.
bab,	Establishment Related Employment	Related	Average Weekly Hours	Weekly	Average Weekly (Real) Earnings	Weekly
2 Am	June 1995	% Chg. 94/95	June 1995	% Chg. 94/95	June 1995	% Chg. 94/95
Total Non-Ag	2,754,000	1.2%	NA	NA	NA	NA
Mining	6,700	-4.3%	44.9	-6.1%	\$795.63	1.9%
Construction	138,400	3.7%	45.0	5.8%	\$706.86	8.7%
Manufacturing	683,500	2.3%	41.9	-2.3%	\$575.29	-3.2%
Durable	489,300	2.8%	42.2	-2.5%	\$600.93	-3.0%
Non-durable	194,200	1.1%	41.2	-1.9%	\$507.58	-4.3%
Wholesale	138,300	3.9%	37.0	-1.9%	\$431.42	-4.2%
Retail	527,400	1.8%	28.9	-1.0%	\$212.13	-0.4%
Finance, Insurance & Real Estate	133,300	-0.7%	36.3	-0.8%	\$360.82	-3.5%
Services ⁺	623,800	1.8%	32.3	-1.8%	\$330.11	-2.0%

Employment - Hours - Earnings

(Not seasonally adjusted)

Metropolitan Statistical Areas (MSAs) in Indiana

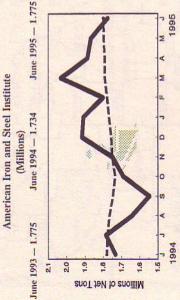
NON-AG WAGE &	June	June	Change	
SALARIED EMPLOYMENT	1994	1995	Number	Percent
Bloomington MSA	60,100	61,200	1,100	1.8%
Elkhart-Goshen MSA	116,500	119,900	3,400	2.9%
Evansville MSA	148,300	147,500	-800	-0.5%
Fort Wayne MSA	255,500	264,300	8,800	3.4%
Gary MSA	250,800	250,100	-100	-0.3%
Indianapolis MSA	778,900	796,100	17,200	2.2%
Kokomo MSA	50,100	51,700	1,600	3.2%
Lafayette MSA	81,200	86,200	5,000	6.2%
Muncie MSA	57,900	60,500	2,600	4.5%
New Albany Area*	79,000	74,200	-4,800	-6.1%
South Bend MSA	128,500	128,500	0	0.0%
Terre Haute MSA	67,300	68,300	1,000	1.5%

MANUFACTURING June 1995

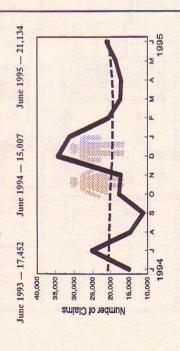
*Employment includes schools; Hours and Earnings excludes schools. "The New Albany Area (Clark, Floyd, Harrison, Scott counties) is part of the larger Louisville MSA. (Real) indicates dollars adjusted for changes in consumer prices to 1994 level. Employment and earnings data based on preliminary and revised series provided by the Indiana Department of Workforce Development.

Indiana Economic Activity

Raw Steel Production

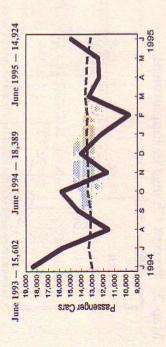


Initial Unemployment Insurance Claims Indiana Department of Workforce Development



0

New Car Registrations R. L. Polk and Company

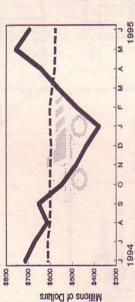


Monthly Data

=== 12 Month Moving Average

Total Construction Activity

June 1995 - \$695.5 F. W. Dodge Construction Potentials Bulletin June 1994 - \$713.9 (Millions) June 1993 - \$742.0

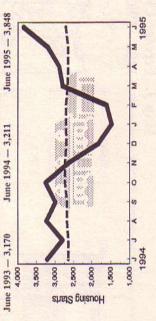


(based on July 1994 through June 1995 and compared to same Ups or Downs... Indiana Indicators Year-to-Date period the year before, unless otherwise noted) Raw steel produced in Indiana totaled 21.6 million net tons for the twelve-month period, up by 200,000 tons over last year. 1 The dollar value of all construction activity for the year was \$6.9 billion, down by \$412 million for the period. Electricity sales to industry increased steadily, with a total of 33 billion kilowatt hours for the year and an increase of 1.4 billion hours.

New cars registered in Indiana totaled 158,095 for the period, an increase of 1,326 new cars. 1 Housing starts showed a slight increase (821) over the same time last year, with a total of 32,538 new Hoosier homes built. 1 Retail sales between June 94 and May 95 continue to increase, with a total of \$50.8 billion spent by consumers, increasing by \$3.5 billion over last year. 100

Housing Starts

F.W. Dodge Construction Potentials Bulletin

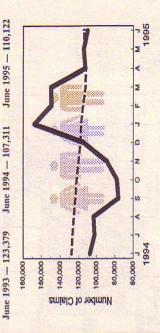


Industrial Electricity Sales

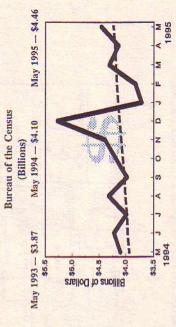
June 1995 - 2.821 1995 (The 5 investor owned utilities) June 1994 — 2.776 0 (Billions) June 1993 - 2.680 2.70 2.65 2.80 2.75 2.90 2.85 2.80 Billions of Kilowatt Hours

Continued Unemployment Insur. Claims

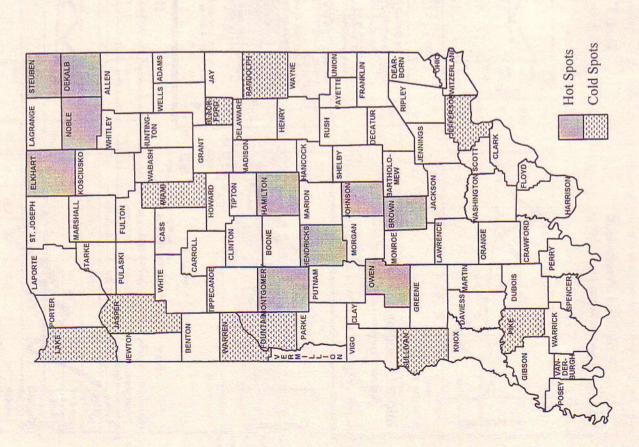
Indiana Department of Workforce Development



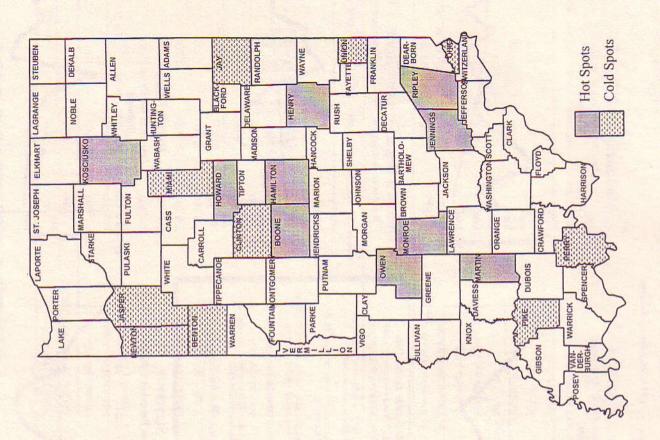
Retail Sales



Map 2. Percent Change in Employment 1982 - 1992



Map 3. Percent Change in Per Capita Personal Income 1982 - 1992



	Cumulative Score
Top and Bottom Five Counties in Indiana Ranked by Growth Rates 1982 - 1992	Private Non-Farm Earnings Per Employee
Ranked by Growth Rates 1982 - 1992	Per Capita Personal Income
Kalike	Employment
	Rank in State Population

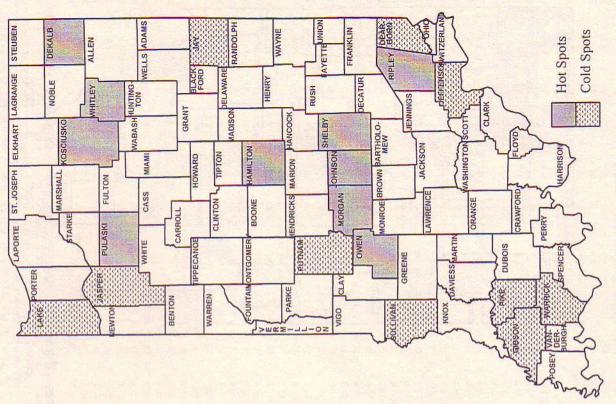
Hot Spots (13 Different Counties)

Hamilton	Owen	Brown	Steuben	Johnson	
Owen	Hamilton	Whitley	Shelby	Ripley	THE PARTY NAMED IN
Jennings	Hamilton	Ripley	Martin	Monroe	
Hamilton	Steuben	Brown	Noble	Johnson	
Hamilton	Brown	Johnson	Dearborn	Owen	THE RESERVE OF THE PARTY OF THE

Cold Spots (14 Different Counties)

Pike	Ohio Jefferson Benton	Warrick	Jasper	Sullivan
	Warren Ol			
Pike	Vermillion	Sullivan	Blackford	Warren

Map 4. Percent Change of Earnings in Private Non-Farm Jobs, 1982 - 1992

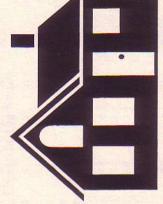


building permits, which are authorized by city or permit-issuing places across the nation submitted building permit offices in approximately 19,000 reports to the U.S. Bureau of the Census. The final tally for 1994 is now available for states, One way of tracking new housing is through county units of government. In 1994, local

Residential Permits - 1994 Compared to 1990 Ten Counties With Largest Increases in

including Indiana and its counties.

County	Number Increase in Permits 1990 - 1994	% Change in Permits 1990 - 1994	% Change in Population 1990 - 1994
Hamilton	1,107	62.26	23.28
Monroe	671	124.03	4.42
Lake	604	43.61	1.26
Porter	593	65.31	61.7
Johnson	473	73.45	12.36
Hendricks	463	70.15	11.07
Allen	335	22.80	2.28
Clark	315	82.03	3.56
Howard	288	144.00	2.69
Hancock	268	89.33	8.51
Tippecanoe	266	35.37	2.91
Morgan	255	73.07	80.6
Elkhart	244	32.80	4.99
Wayne	237	175.56	0.62
Jasper	232	229.70	9.78



permit-issuing only 58 of the currently 338 have all land 92 counties In Indiana, area in the However, there are places.

the county covered. Keep this in mind when using have portions (generally the incoporated areas) of covered by building permit systems, according to Census Bureau records. The remaining counties building permits as an indicator of construction county activity in your area.

Kenosha, and the New York-Northern New Jerseymost active metropolitan areas of the country were excluding mobile homes) were issued in Indiana in 1994, compared to 1.37 million nationwide. The Washington-Baltimore, Atlanta, Chicago-Gary-(including single-family and multi-family, but Nearly 35,000 permits for residential homes Long Island.

However, the permits can't be added to the tally of construction. Permits are one of many general existing homes, since not all permits result in Not all of those units were necessarily built, however, since a permit does not guarantee indicators of economic activity in an area. finished units.

Information Network). If you don't currently have access, call Detailed building permit information is available in monthly and annual tables on EDIN (Economic Development us at 317-274-0897 for more information.



Indiana Update

Indiana Business Research Center Indiana University School of Business Bloomington, Indiana 47405