

Surprisingly little has been made of the recent population increases projected by the Census Bureau. The upward revision from a mere four years ago should warn us all that cultural, infrastructure and environmental problems will be far worse and something needs to be done immediately about population growth. Leon F. Bouvier is a demographer associated with Tulane University and a Senior Fellow at the Center for Immigration Studies (CIS) in Washington, DC. John L. Martin, a retired foreign service officer, is Assistant Director for Research at CIS. This "Backgrounder" was published by CIS in January 1993 and is reprinted with their permission.

Four Hundred Million Americans!

The Latest Census Bureau Projections

By Leon F. Bouvier and John L. Martin

The population projections from the Census Bureau released in December, 1992¹ came as quite a surprise to many Americans. The Bureau projects that by the year 2050, less than sixty years from today, the population of the United States will have grown by over an additional 130 million persons to 383 millions. Depending on what happens with regard to immigration, the population may climb even more steeply.

This projection is based on the Census Bureau's middle or most likely scenario. The middle scenario indicates a net expansion of U.S. population size by over fifty percent above the level enumerated in the 1990 census. The high scenario projects a population in excess of 400 million before the year 2030 and arriving at over 506 million by the middle of the century.

The new governmental report is especially noteworthy when compared to its last previous projection released less than four years ago. According to the Census Bureau's 1989 medium scenario, the U.S. population would peak in 2040 at 302 million and then begin to fall to 292 million, by 2080.² So the most likely scenario for U.S. population at mid-century was just increased by over thirty percent above what was projected just before the 1990 census.

Furthermore, in sharp contrast to the 1989 projection the new middle scenario reflects no end to growth. By 2045-2050, the average rate of growth would be about one-half of one percent per year (see Figure 1). The new Census Bureau projections end in 2050. Were they continued to 2080, as were the previous projections of the Bureau, the half-billion mark would be attained and surpassed not by just the high scenario, but also in the most likely scenario.

Despite this shocking projection, the national media devoted only passing notice to this report. There was virtually no analysis or commentary that identified the enormity of what these scenarios might represent for our society. A generalized lack of understanding of the implications of this continued high level of population growth appears to be the most likely explanation of why there was no alarm voiced

about the potential impact of such growth on every segment of society.

In fact, there are several major stories that could be written about the new data. From what source does the Bureau anticipate an additional 90 million persons unforeseen in the 1989 projection (see Figure 2)? A higher birth rate is the answer most would expect, but that is correct only in part. The rest of the explanation is found in the fact that the U.S. Congress opened the gates wider to legal immigration in 1990, and efforts to control more effectively illegal immigration have not had the desired effect.

A second question, given such a major readjustment to the projection over such a short period of time, is whether the Census Bureau's new projection is likely to hold up better than the earlier one.

Third, the news coverage of the Census Bureau projection is almost exclusively on the middle or most likely scenario. The new low scenario, and thus a less likely projection, reflects a levelling off of population size at about 285 million and then a decline. But the new high scenario, also less likely, exceeds half a billion persons before the middle of the next century. Could anyone concerned about such a possibility not look for a discussion of the conditions that would result in such a momentous projection?

Finally, for the first time the Census Bureau elaborated its population projection by ethnic groups as well as by age groups. This reveals vital information about how our society is likely to change and the challenges that will result. This too should have sparked curiosity, if not controversy.

Earlier Census Projections

By 2050, the difference between the last two Census Bureau reports is about 90 million (see Figure 2). This amount of change in less than four years represents an amount of people equivalent to four people for every three previously projected. By 2080, the differences between the two projections could be as great as 200 million, or about eighty percent of today's total population.

Variations in demographic behavior, especially

fertility and migration, are both unpredictable and volatile.³ These two factors especially must be monitored constantly to detect any changes which would then suggest a need for new projections. The point, therefore, is not that the 1989 projections were in error, although their author recently admitted to the *New York Times* that "the assumption of a decline in fertility was dead wrong."⁴ The assumptions simply reflected what appeared *at that time* to the Census Bureau experts to be the demographic trends.

Will the most recent projections from the Bureau prove to be correct? Perhaps not. They simply reflect what appear *at present* to be the demographic trends, at least in the opinion of the Census Bureau experts. Should we then conclude that such projections are worthless? Definitely not, but we should be reminded that it is important to pay careful attention to the underlying assumptions upon which the projections are based.

Since at least the 1940s, the Census Bureau has formulated projections of the nation's population every four or five years. These have always been intended to reflect the demographic trends at a certain time. They are not predictions; they are simply

projections of what would be the population in future years according to the perceived current trends in demographic behavior, that is, fertility, mortality, and migration. As that behavior changes, the Bureau prepares new projections that take these changes into account.

The value of such projections is that they answer the question: "What will be the population size and composition of the United States in some future year if the present demographic trends remain unchanged?" When the 1989 projections were prepared, the Bureau assumed that all three — fertility, mortality, and net immigration — would fall slightly. That is why the resulting projections reflected an end to population growth before 2050.

Since then both fertility and immigration have gone up rather than down thus requiring new projections that take into account such alterations in demographic variables. Presumably, more changes will occur in the future necessitating more adjustments and new projections.

The Census Bureau made clear in its most recent study that the change in the Immigration and Nationality Act of 1990 was a major factor in its

upward revised projection. It is equally clear that the Census Bureau or other source of demographic expertise could have furnished the Congress projections of what would be the likely consequences of a change in the volume of immigration. Did Congress request a projection of the impact of higher immigration on U.S. population?

In fact, the immigration increase that resulted from the 1990 legislation resembles the projected level of immigration of the Census Bureau's high scenario in the 1989 projection. That scenario was predicated on a net level of 800 thousand immigrants, compared with the projected middle level scenario of 500 thousand net immigrants. The difference between these two 1989 scenarios was shown to cause an increase of over 27 million U.S. inhabitants by the year 2050.

The most recent Census Bureau projections are based on a net annual increase from immigration of 880 thousand. This figure is comprised of legal immigration and humanitarian programs (800 thousand), undocumented, i.e., "illegal," immigration (200 thousand), movement to the United States of U.S. nationals from Puerto Rico and abroad (40 thousand), less U.S. nationals moving abroad (160 thousand).

It is clear that the Census Bureau has the capability to provide projections that would reflect the impact on the U.S. population depending on the outcome of proposed changes in the immigration law. But, it was not asked to do so for the 1990 Act.

Current Demographic Trends

Given the facts that the Census Bureau has just made such a major revision in its projection and that these Census Bureau reports receive widespread media coverage — be it ever so fleeting and focussed only on the middle scenario, it is pertinent to ask if the Bureau correctly interprets current demographic trends.

With the advantage of hindsight, one can see that the Bureau was incorrect in determining the current demographic trends when preparing the 1989 report. That report assumed that fertility would fall slightly to 1.8 live births per woman (the Total Fertility Rate), while in reality fertility began to increase at just about that time. Furthermore, in the 1989 report, the fertility of immigrants, which differ by ethnic groups upon their arrival in the United States and for many years thereafter, did not enter the Bureau's projections. "In the absence of vital statistics information for the foreign-born population...[immigrants were] assumed to immediately begin bearing children at the same rate as the equivalent age-race group in the U.S. population that year." However, the report's authors acknowledged that "this fertility level may be too low." That omission contributed to the overly low fertility assumption, because many recent immigrants maintain the higher fertility of the societies they left behind.

Equally important was the Bureau's conjecture

that net immigration would be limited to 500 thousand annually. It assumed that the level of illegal immigration would be significantly reduced with the passage of the Immigration Reform and Control Act of 1986 (IRCA), which had reduction of illegal movements into the country as one of its purposes. The middle projection was that illegal immigration would be cut in half, from the 200 thousand level to 100 thousand, by 1998. However by 1988, when the projection was calculated, it was clear to many observers that IRCA's effect in limiting clandestine movements was negligible. Furthermore, legal immigration was also beginning to climb.

Criticism that these 1989 projections were too conservative was widespread in the wake of their issuance. Demographers Dennis Ahlburg and J.W. Vaupel were particularly critical of the middle scenario assumptions. Indeed, they forecast a possible population of 811 million by the year 2080.⁵ In *Peaceful Invasions: Immigration and Changing America*, Bouvier ignored the Bureau's middle scenario and projected a population of 388 million by 2050.⁶ Urban Institute demographers, Barry Edmonston and Jeffrey Passel (a former Census Bureau official), writing in 1991, projected that the population would reach 369 million by 2050 and still be growing.⁷ In all these examples, the researchers assumed that immigration would be much higher than indicated in the middle scenario of the 1989 Census report.

Therefore, it is appropriate to ask whether the "current demographic trends" applied in the newest Bureau publication are more realistic than those of its predecessor. It is too early to reach any conclusions based on observation of trends, but it is immediately clear that this latest report represents a major improvement over earlier similar studies by the Census Bureau.

For one thing, the fertility of different ethnic groups is treated independently:

"...age-specific fertility rates are held constant at slightly below 1990 levels for the non-Hispanic White; non-Hispanic Black; and the non-Hispanic American Indian, Eskimo, and Aleut. However, a 10 percent decrease in fertility rates after 2000 is assumed for the Hispanic origin and non-Hispanic Asian and Pacific Islander populations because the share of their fertility contributed by the foreign born is expected to decrease. Unlike previous projections, convergence of the birth rates by race and origin is not assumed." (p. xi)

This approach results in an overall fertility rate of 2.052 in 1992 increasing slightly to 2.119 by 2050. The size of the assumed decline in the Hispanic rate might be questionable, but overall the report's view of fertility trends seems appropriate.

However, we do not know what the future will bring. No one predicted the length of the baby boom; is another such period of high fertility possible? That seems highly unlikely. Will a cure for AIDS be found? The increased participation of women in the workforce with resultant declining fertility is probably unidirectional. President Clinton is far more likely to encourage family planning and abortion counselling at all levels than his predecessors, who discouraged such activities. New contraceptive techniques are becoming available. Could fertility fall again in future years? That is certainly possible, but as yet there is no evidence of such a shift. Thus, the Census Bureau properly relies on current patterns of fertility and extends them to 2050.

The middle scenario of the new report from the Census Bureau assumes that net immigration will remain constant at 880 thousand through 2050. This is far and away the highest assumption ever made about immigration by the Census Bureau. But is it high enough?

We can never be certain of the actual level of total net immigration, but since 1988 the trend has been in an upward direction. The 1990 legislation will result in perhaps 200 thousand additional legal immigrants every year. And as those individuals who opted for amnesty after passage of IRCA attain legal residence and citizenship, additional new immigrants can be expected through the family reunification provisions of the law.

Continuing rapid population growth that outstrips the formation of new employment opportunities in Mexico and Central America can only encourage more people to try to enter the United States illegally. Is the North American Free Trade Agreement (NAFTA) likely to accentuate or abate these pressures for increasing illegal migration from Mexico?

If the middle scenario were based on current numbers, 880 thousand per year might be a reasonable long-term projection. However, it should be based on current trends, which reflect increasing immigration. In both the Bouvier and the Edmonston-Passel studies noted earlier, net immigration was assumed to be 950 thousand annually.

The high scenario of the Census Bureau assumes net immigration to be 1.37 million per year. The assumption underlying that scenario is the fact that the ceiling, or "cap", in the 1990 immigration legislation may be exceeded, and the possibility that refugee flows to the U.S. might increase.

The shadow of a possible new influx of Haitian and Cuban refugees may also have been in the authors' minds. It seems clear that the new high scenario has left a fairly large margin to accommodate changing conditions. In that regard, the high scenario is probably a bit too high, even for those who think the middle scenario is still too low. Perhaps the real current trend lies somewhere between these two

Census Bureau scenarios (see Figure 3).

The low, middle, and high scenarios of the new Census Bureau projections result in a population in the year 2050 of 276 million, 383 million, or 507 million. What should be remembered is that, even with the low scenario, U.S. population is still growing by about ten percent above the current quarter of a billion inhabitants. And, if it is accepted that the middle level scenario may be somewhat on the low side, because of its projected net immigration, then it is likely that the U.S. population will reach 400 million by the middle of the next century.

Age and Ethnic Composition

The average age of the United States population will increase in future years. This has been stated before, and the new Bureau study merely confirms this "prediction."

According to the report's middle scenario, the proportion of elderly (i.e., age 65 and over) will rise substantially after 2010 when the baby boom cohort enters that age category. From the current share of 12.5 percent in 1990, it will increase to over 20 percent by 2040 and remain at that level to 2050 (see Figure 4).

On the other hand, the school-age share (age 5 through 17) will continue to increase numerically, but will decline as a relative share of the population from 18.1 to 16.8 percent. The percentage of the population between ages 18 and 64, i.e., the group currently considered the backbone of the workforce, is projected to hold steady at about 62 percent through 2010, and then begin to decline, reaching 56 percent in 2050.

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The nation's median age will climb from 32.8 in 1990 to 39.3 in 2050. The elderly population is expected to number almost 80 million by 2050, two-and-one-half times today's 32 million. In sharp contrast, the school-age population could grow only from about 45 million to 64 million. By 2030, for the first time in United States history the elderly will outnumber their school-age grandchildren. Similar drastic shifts in age composition have been noted in other studies.

For the first time in a Census Bureau population projection, data are also provided on the trend of shifting racial/ethnic composition of the U.S. population among non-Hispanic whites, blacks, Asians, native-Americans, and Hispanics (see Figure 5). Demographic shifts over this period result, in large

part, from the continued high level of immigration and the greater than average fertility of immigrants.

From 75.7 percent in 1990, the share of the population that is non-Hispanic-white will fall to 52.7 percent by 2050. The black share will rise from 11.8 to 15 percent; that for Asians from 3 to 10 percent; for Hispanics from 9.0 to 21.1; while indigenous groups hold still at about one percent.

This proportional distribution is remarkably similar to that projected for 2050 in *Peaceful Invasions*: i.e., 53.6 (whites); 13.7 (blacks); 11.2 (Asians and Others); 21.5 (Hispanics).⁸ Edmonston and Passel's ethnic distribution in 2050 differs somewhat from those of the Census Bureau and *Peaceful Invasions*: 56.6 non-Hispanic-white; 12.2 African-American; 11.6 Asians and others; 19.6 Hispanics.⁹ All these studies agree that ethnic diversity will grow rapidly in the twenty-first century.

A Summary of the Report's Findings

In sum, this newest report on population projections from the Census Bureau does two things: first, it updates and alters many of the assumptions of the 1989 report that have proved to be obviously incorrect; second, it confirms alternative projections that had already been published in numerous non-governmental publications. Namely, the U.S. population will continue to grow rapidly, more rapidly than other industrialized nations, and it will reach at least 383 million by the middle of the next century.

The ethnic composition of the nation will change dramatically, and by 2050 the long-time majority population will be on the verge of becoming simply the largest minority. The nation will continue to age. This will be particularly marked when the baby boomers become the senior boomers sometimes after 2020. By 2050, the elderly will be nearing 80 million and comprise over one-fifth of the total population.

Although these findings are not new, coming from the Census Bureau they received widespread attention, and deservedly so. In a sense, these newest official projections were like an "imprimatur" placed on the other studies cited above. Yet, they failed to generate much commentary or analysis in the media. For example, neither the *New York Times* nor the *Washington Post* cited any concern with this new "population explosion." The former newspaper included comments from a Census Bureau official to clarify the reasons for the large upward adjustment in the projection. The latter newspaper came closest to touching on the significance of the news in an interview with The Urban Institute's demographer Jeffrey Passel. He was cited as noting that "we will have a much smaller proportion who are of European descent and what we will be calling majority or minority at that point is anybody's guess."¹⁰

Not a single expert was asked about the possibly detrimental consequences of continued rapid growth

on the nation's economy, its educational structure, or its environment. Rather, the news reports merely summarized the Bureau's findings with little apparent understanding or interest in the impact of such growth.

Reasons for Concern

As the nation moves relentlessly towards 300, 400, and even 500 million people, now is the time to ask: how many more Americans can be supported? The question is not one of space; the question is about carrying capacity, or the number of individuals who can be supported without degrading the natural, cultural and social environment, i.e., without reducing the ability of the environment to sustain the desired quality of life over the long term.¹¹

Without going into the complex issues associated with optimal population, it is becoming increasingly obvious that the United States is fast approaching the limits beyond which any further growth would be intolerable. Indeed, many scholars are of the opinion that the nation's population is already too large. For example, Paul Werbos of the National Science Foundation has concluded: "In the long term, the energy sector and the environment would probably be healthiest if the U.S. population were somewhere around 50 to 100 percent of the present level, in my view. If one were optimistic about biomass and international cooperation but pessimistic about high-tech renewables, then the optimum would be more like sixty million people."¹²

Three important sectors seriously affected by population growth are what might be called "the three E's" — that is, economy, education, environment. Interestingly, these are the cornerstones of the Clinton-Gore program to revive American society.

Between 1992 and 2000, the eight years that a Clinton-Gore team could serve, over 20 million people are likely to be added, according the Census Bureau report. Of that total, two-fifths, i.e., over 8 million, will result from immigration. How will the nation put people back to work and reduce the drain on already overburdened resources if it continues to add between 2 1/2 and 3 million people every year?

The economy is far and away the nation's most pressing problem. But in 1991, while about 800 thousand new jobs were created, the labor force grew by over 1.1 million. Given current and potential future levels of immigration, mostly by young adults looking for work, it is reasonable to ask: how can we create enough jobs to absorb so many newcomers to the labor force, both native-born and immigrants?

"How will the nation improve the overall educational level of its work force when millions of poorly schooled immigrants continue to swell that work force?"

President Clinton has made it clear that education is the key to an improved economy in a high-tech era. Incoming Secretary of Labor, Robert Reich, has written extensively on the need for a better educated labor force:

A work force possessing a good basic education, which can efficiently bring the fruits of its labors to the global economy, can attract global capital for its performance of moderately complex tasks... But without adequate skills..., the relationship can be the opposite — a vicious circle in which global money and technology are lured only by low wages and low taxes... Theoretically, it can continue to push wages downward until the citizens of the nation have a standard of living like that typical of the Third World."¹³

How will the nation improve the overall educational level of its work force when millions of poorly schooled immigrants continue to swell that work force? How can the country's health system, especially the public health facilities that care for the poorest in the society, cope with such an influx?

Vice-President Gore's 1991 tour de force, *Earth in the Balance*, addresses many of the environmental problems that all humans face.¹⁴ While he concentrates on the planet, the environmental problems facing the nation are also critical. For one example, let's look at water supply and quality. Currently Americans are drawing down water at a rate 25 percent in excess of recharge rates.

This draw down is particularly severe in our irrigated 'grain belt' lands above the Ogallala aquifer and also in semi-arid California, which is gaining nearly one million new residents a year. Virtually every urban area suffers from some form of water pollution and, due primarily to population-generated urban sprawl, we are losing 1.5 million areas of precious farmland every year."¹⁵

With all these problems that are at least partially attributable to population growth, it is perplexing that the media have failed to make the connection. Could they have been lulled into inertia by the pro-natal policy of the Reagan and Bush administrations, when it was argued that population growth is not a problem?

Whatever the reason, it is clear that little concern over rapid population growth has been exhibited thus far in national debate, either in the presidential electoral campaign or in the "national" media coverage of the momentous new Census Bureau projection. Yet, Americans should concentrate on doing whatever is necessary to limit and eventually end population growth.

Hope for the Future?

At a minimum, the goal should be to ensure that the lower Census Bureau projection be proven correct rather than the middle projection. According to the low scenario, the population would peak at 287 million in 2030 and fall to 276 million by 2050.¹⁶ While still intolerably high, the underlying assumptions for reaching such a goal would not be impossible to achieve. That would require fertility to fall to 1.8 live births per woman and for net immigration to be reduced to 350 thousand annually.

How could such goals be attained? Strong efforts to reduce the level of adolescent pregnancy are called for. If all births were planned and wanted, the fertility rate would fall, perhaps to at least the 1.8 level. There is hope that the new administration will eliminate restrictions on family planning counselling; an injectable drug that offers three-months of protection with 99 percent effectiveness (Depo-Provera) has just been cleared for sale in the U.S.; it is also possible that the French abortifacient pill RU 486 may be accepted for sales in the United States.

However, even if fertility is lowered, population growth cannot come to an end in the foreseeable future without massive reductions in immigration. Immigration is at an all-time high and there is little indication that it will fall any time soon, barring some drastic shifts in the thinking of the federal government.

The Census Bureau's recent population projections serve as a warning to all Americans. Unless the nation addresses the challenge of population growth now, the economic, educational, and environmental problems will be far more difficult to solve, if they are to be solved at all. ■

NOTES

¹ U.S. Bureau of the Census, *Current Population Reports*, P-25-1092, "Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1992 to 2050", by Jennifer Day, GPO, WDC, 1992.

² U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1018, "Projections of the Population of the United States, by Age, Sex, and Race: 1988 to 2080", by Gregory Spencer, GPO, WDC, 1989. The prior projection was published in May, 1984.

³ Mortality is the third demographic variable affecting population change. All models assume an increase in life expectancy.

⁴ As cited in *New York Times*, "U.S. in 2050: Bigger and Less White," December 4, 1992, D18.

⁵ Dennis A. Ahlburg and J. W. Vaupel, "Alternative Projections of the U.S. Population," *Demography* 27, no. 4 (1990); 648.

⁶ Leon F. Bouvier, *Peaceful Invasions: Immigration and Changing America*. Lanham, MD: University Press of America, 1992, chapter 3.

⁷ Barry Edmonston and Jeffrey S. Passel, *The Future Immigrant Population of the United States*. Washington: Urban Institute, 1992.

⁸ Bouvier, 38.

⁹ Edmonston and Passel, p. 39.

¹⁰ As cited in *Washington Post*, "Births, Immigration Revise Census View of 21st Century U.S.," December 4, 1992, A10.

¹¹ This definition was developed by Carrying Capacity Network and is cited in "Balance Report", Population-Environment-Balance, Washington, DC: December, 1992.

¹² Paul J. Werbos, "Energy and Population: Transitional Issues and Eventual Limits," in Lindsey Grant (ed.) *Elephants in the Volkswagen: Facing the Tough Questions about our Overcrowded Country*, New York: W. H. Freeman, 1992, 49.

¹³ Robert Reich, "The Real Enemy," *The Atlantic*, February, 1991, 43.

¹⁴ Al Gore, *Earth in the Balance: Ecology and the Human Spirit*. Boston: Houghton-Mifflin, 1992.

¹⁵ *Balance Report*, 1.

¹⁶ It should be pointed out that this scenario assumes no improvement in life expectancy. Hopefully, this will not be the case.