



Brave New Century

Current immigration levels have grave demographic and environmental implications.

BY LEON KOLANKIEWICZ

*"It's the end of the world as we know it and I feel fine."*¹
R.E.M.

On January 13, 2000, the U.S. Census Bureau released its latest population projections, as it does every few years. This time, perhaps prompted by the changing century and new millennium, the Bureau took an even longer view than usual. Its demographers aimed their spotting scope of methodologies and assumptions at the distant demographic horizon toward which the vessel *United States of America* is heading. They peered all the way to the year 2100.² What they saw over the coming century is truly ominous: a demographic iceberg looms ahead. The most probable scenario, according to Census, is more than a doubling of an already huge population that ranks third in

the world, surpassed only by colossuses China and India.

But unlike the crew members of the *RMS Titanic* who spotted an iceberg from the crow's nest on that cold April night in 1912, the Census Bureau demographers expressed no particular alarm at their own findings. Far from it. Instead they offered soothing reassurances about where the country's population is headed. Principal author Frederick Hollmann told the *Washington Post*, "Our projections in 2100 will give us a population density one-quarter of the United Kingdom. We'll still be a sparsely populated country among the industrialized countries of the world."³ He may as well have said: "Smooth sailing ahead. Steady as she goes!" Certainly no alarm was sounded, no urgent ad-

visory issued that the nation had better change course, and soon.

Yet if Census' complacency contrasted with that of *Titanic's* iceberg spotters, the widespread apathy of the press, politicians, the general public, and even environmentalists to these projections is similar to that of the doomed luxury liner's passengers moments after it grazed the iceberg—the party continues, and the band plays on. Optimism reigns, at least on the surface. After all, the *United States of America*, like the *Titanic*, is unsinkable. In the glow of generally prosperous times, mesmerized by apparently limitless technological possibilities, why should Americans care if the U.S. population doubles or even quadruples by the end of the new century?

The Projections

As usual, the Bureau released three sets of projections, the lowest, middle, and highest scenarios from 1999 to 2100.

The trends are obvious. From a current U.S. population of about 275 million, the most conservative projection shows population surpassing 300 million before 2025, cresting at 313 million in 2050, before beginning to decline by 2100 toward roughly the same size as our present population. In the middle, considered the most probable, rapid growth continues, and by 2100, population will have doubled. The highest projection shows population growing more than exponentially, as growth increases from 1.2 to 1.5 percent per year, quadrupling our numbers in 100 years.

In the more moderate scenario, annual growth rate declines very gradually from 0.92 percent in 2000 to 0.69 percent in 2100. Yet actual annual population increase rises from 2.5 million in 2000 to 3.8

million in 2100, because the base against which the percentage is applied has swollen so much. Paradoxically, rather like Alice in Wonderland, the closer we seem to get to zero population growth, the further away we actually get. The United States grew by 200 million people in the 20th century; the middle series projects 300 million more in the 21st.

Consider the huge variation between the lowest and highest projections. The highest projection is four times greater than the lowest, and the middle projection is twice the lowest. The two extreme projections are based on lower and higher assumptions about the major determinants of population change: fertility, mortality, and immigration. The Bureau cautions, of course, that neither the lower nor the higher projection is a likely scenario, but instead they are presented to illustrate “a degree of uncertainty around the central series.”⁴ That’s certainly a relief, because if the highest projections were correct, U.S. population in 2100 would approach 1.2 billion—about the same as the current population of China, the world’s most populous nation. And it would be growing by about 18 million a year, more than the current annual increase of India—the fastest-growing country.

Complacency

Unfortunately, for anyone concerned about U.S. population stabilization, it’s hard to be as sanguine as the Census Bureau is. That’s because the fertility and immigration assumptions of the most likely scenario have an air of forced optimism about them. In just the first year of the 100-year projection, population growth is *already* outstripping projected growth. All three projections figured on a population of 276 mil-

lion in 2000. In fact, recently released figures from the 2000 census count now reveal that in April 2000, the U.S. population was actually 281 million—5 million greater than the size projected just a year earlier.⁵

Census authors concede that reviews of fertility trends and existing research by other prominent demographers “provide no definitive long-term direction for the fertility of the United States.” Yet they still assume that total fertility rates of all major racial and ethnic groups will converge conveniently on the magic figure of 2.1 births per average female in 2150, as if that were a magnet. It just so happens that 2.1 is replacement-level fertility, which—if maintained over time—produces a stable population. Yet, in 2000, the fertility rate of the country as a whole is higher than it was a quarter-century ago, and the rate of the most rapidly growing group, Hispanics, is 60 percent greater than that of non-Hispanic whites.⁶

With regard to immigration, the Census authors are also candid in admitting their limitations as soothsayers, claiming that of the three demographic factors that determine population—fertility, mortality, and immigration—demographic science is least certain of the last.⁷ Why then, in view of this inherent uncertainty, does the Census Bureau assume that immigration will slow in the future? Consider that over the last 50 years, immigration has roughly quadrupled from about a quarter-million to a million plus, and that populations of many sending countries are likely on explosive trajectories to double or even quadruple before 2100. Yet the Bureau actually projects a modest *decline* in net immigration from 964,000 in 2000 to 926,000 in 2100.⁸

In fact, unless a strong backlash

to immigration develops, levels could increase dramatically in response to intensifying social, political, and economic pressures. Powerful political forces in the United States and source countries alike benefit from higher immigration levels. Movers and shakers like Federal Reserve Chairman Alan Greenspan opine that our current high immigration rates just aren’t high enough to keep wages and inflation down. The new president of Mexico, Vicente Fox, has advocated open borders, saying that “the United States knows very well that you need people to grow. The United States’ economy cannot grow at rates of 5 percent or more if you do not have Mexicans there.”⁹ In the 2000 Presidential campaign, both candidates eagerly sought to assure immigrant voters and donors that they favor generous immigration policies. In his first trip abroad, President George W. Bush snubbed Canada—the traditional first trip of presidents—and flew to meet Fox in Mexico, where they discussed a proposal to make it easier for Mexicans to get “temporary” legal work in the United States.¹⁰ Experience in this country and others demonstrates that many “temporary” workers never do go home. Even the AFL-CIO, once a staunch opponent of illegal immigration, now advocates a general amnesty for the estimated six million illegal aliens in the country.¹¹

The Growth Imperative

In general, the economic, business, and political establishment believes that a growing economy needs a growing population. If domestic birth rates aren’t contributing evermore workers and consumers, runs the conventional wisdom, then the key ingredient of economic growth—more people—must be

imported to avert stagnation. That's the rationale behind the recent scheme of Iowa Governor Tom Vilsack and a team of business and civic leaders to lure more immigrants to that state, which has had a fairly stable population.¹² In this dominant view, population stabilization is tantamount to economic stagnation. This view brooks no limits to growth that cannot be overcome by free enterprise and technology.

Just how much of projected growth in the United States will be due to immigration? According to the 2000 Census projections, immigration will account for approximately two-thirds of population growth.¹³ In essence, current and projected immigration levels will keep the U.S. population from ever stabilizing.

Thus emerges a paradox. Globally, population increase is slowing, but in the United States it continues to grow. Global population is generally projected to crest between 2050 and 2150. Will the U.S. population continue growing even after the world's has stopped? Could an ever-rising fraction of the world's population eventually live within our borders? Simple common sense suggests not, but conventional economic wisdom—for which perpetual growth of gross domestic product is sacrosanct—holds that a vigorous U.S. economy would have a voracious demand for ever-more domestic workers and consumers. Yet, since a central pillar of modern economic theory is that exports are an indispensable ingredient of growth, raising exports to a shrinking population outside our borders could prove challenging.

Unsustainable Trends

Demographic trends, of course, are not destiny. Americans could still

decide they want to change course and actually reduce immigration levels to stabilize our population. However, the political, economic, and social forces driving the high immigration levels that feed our present growth are enormous, described by one author as a juggernaut.¹⁴ So let us assume that the middle series projection does come to pass—571 million Americans and climbing by 2100. How will more than double the number of Americans treat the environment of their country and the world?

Remarkably, many indicators of U.S. environmental quality are actually better today than at the time of the first Earth Day in 1970, in spite of an additional 80 million Americans.¹⁵ But it is a delusion to believe this progress constitutes authentic sustainable development, defined in 1987 by the World Commission on Environment and Development as that which "...meets the needs of the present without compromising the ability of future generations to meet their own needs."¹⁶ Alas, much of our economic growth and concurrent environmental progress rest precariously on what the late environmental visionary David Brower once called "strength through exhaustion."¹⁷ That is, we are keeping our economy strong and our environment reasonably healthy only by exhausting a one-time endowment of low-entropy, high-quality natural resources that took millions of years to develop. At the same time, expanding human activities are causing large-scale, long-term disruptions to the biosphere.

Americans hypocritically preach sustainable development to the rest of the world when it comes to protecting their rain forests and slowing their population growth, but we do not practice it at home. Our gar-

gantuan energy consumption, greenhouse-gas emissions, farmland and topsoil loss, water use, and numbers of threatened and endangered species are all symptomatic of a nation already living beyond its ecological means—that is, exceeding its carrying capacity. Yet our population and per capita resource consumption will certainly grow tremendously in the new century.

Energy propels both economies and ecosystems. From 1973 to 1995, U.S. energy consumption grew by 22 percent, much less than energy analysts in the 1960s and 1970s predicted, but such growth means increasing dependence on finite reserves of oil, gas, and coal.¹⁸ Population growth alone accounted for 93 percent of the growth in U.S. energy consumption from 1970 to 1990.¹⁹ Rising per capita consumption accounted for only 7 percent. According to the Department of Energy's 1991 Comprehensive National Energy Strategy, most forecasts of U.S. energy use showed moderate growth in demand in the coming decades, more or less matching population growth.²⁰ If per capita energy consumption remains constant, then total U.S. domestic energy consumption will still double along with population over the coming century. But national and world petroleum and natural gas reserves will dwindle to insignificance well before this.²¹ Even if oil *is* found beneath the Alaska National Wildlife Refuge that President Bush proposes to open for drilling, a 1998 U.S. Geological Survey estimates that technically recoverable oil in the refuge amounts to less than what the United States consumes in a year-and-a-half—hardly a long-term solution to our energy problem.²²

The United States is richly endowed with coal and oil shale. Un-

fortunately, these resources are plagued with serious environmental problems: at the point of extraction they disfigure the landscape, require great quantities of water, and cause acid mine drainage. When burned to produce power, they produce high levels of sulfur dioxide and carbon dioxide emissions and contribute to acid rain. Technological optimists argue that growing energy needs could be met with nuclear fission, fusion, breeder reactors, solar thermal, wind, photovoltaic cells, biomass, and greater efficiency, but none of these is free of problems. Even the green renewables are not panaceas: they are expensive and land-intensive, render scenic landscapes unsightly, and in the case of wind turbines have even been implicated in bird kills.

Hot Air

Climatologists generally believe that global warming is occurring and that emissions of the industrial and agricultural greenhouse gases, principally carbon dioxide and methane, are responsible.²³ In the mid-1990s, a U.N.-appointed international group of scientists—the Intergovernmental Panel on Climate Change—predicted that, barring a concerted international effort to reduce carbon dioxide emissions and moderate population and economic growth over the next century, the average global surface temperatures will rise by 2 degrees Celsius (4 degrees Fahrenheit) and sea levels by 0.5 meters (1.7 feet).²⁴ In 2001, the panel issued a new report with even more ominous findings—including an average temperature rise of as much as 10 degrees Fahrenheit—as a result of their conclusion that global warming is happening even faster than earlier predicted.²⁵

Concerns over the myriad poten-

tial economic and ecological implications led to the 1997 signing of the Kyoto Treaty in Japan, which was never ratified by the U.S. Senate and was recently repudiated by the Bush administration.²⁶ Yet, as the country with by far the largest industrial emissions of carbon dioxide, the United States must play a major role in any international effort to address the problem. In Kyoto, recognizing this, the Clinton-Gore administration committed the United States to reducing its carbon dioxide emissions to 7 percent below 1990 emissions by 2010, an ambitious but attainable goal.²⁷ Yet a booming economy and population—and no firm resolve—have boosted our carbon emissions, actually moving us away from the target rather than toward it.²⁸ U.S. population growth nearly doubles the required per capita reduction in carbon emissions needed to reach the goal.²⁹ Achieving environmental goals under perpetual population growth is like playing a football game in which the goal line is continually moved further away. By rejecting efforts to participate in the Kyoto treaty or at least unilaterally rein in U.S. carbon dioxide emissions, the Bush administration has, at least for the time being, turned its back on the game altogether. But the many likely ramifications of global climate change are not something our descendants will be able to just walk away from.

What will the ecological consequences of a warmer climate be in the United States? An initial national assessment ordered by Congress issued draft findings in 2000. Among the predicted changes are

potentially severe droughts, increased risk of flood, mass migrations of species, substantial shifts in agriculture and widespread erosion of coastal zones....³⁰

Shortages ahead

A continually growing population will also worsen urban sprawl. The United States developed an area about the size of the state of Maine and New Hampshire combined—25 million acres (10 million hectares) of forests, rangeland, pastures and cropland—from 1982 to 1997, according to the U.S. Department of Agriculture.³¹ Arable land is also subject to natural and manmade degradation from soil erosion, salinization, and waterlogging. Over-exploitation by intensive agricultural practices to grow more food for America's growing population aggravates these phenomena. All told, the USDA estimates the nation lost or retired some 44 million acres of cropland, 12 million acres of pastureland, and 11 million acres of rangeland in just 15 years, from 1982 to 1997.³²

Thus, the potent combination of relentless development and land degradation is reducing America's productive agricultural land base even as the demands from a growing population increase. If recent trends continue to 2100, the nation will lose about 150 million of its remaining 375 million acres of cropland, even as the U.S. population doubles from 284 million to 571 million. What will we feed Americans then? Soylent Green?³³

These trends—increasing population and decreasing arable land—have led some scientists to think the unthinkable: that one day America may no longer enjoy a food surplus for export to the world.³⁴

Water shortages are already constraining agriculture in the West and will surely intensify as greater numbers of residential, industrial, and commercial water users compete for this critical resource. Even now, groundwater is being mined for irrigated agriculture 25 percent

faster than the recharge rate.³⁵ Yet the limited availability of water is not the only issue. Increased demand for dams and water withdrawals will have profound effects on aquatic and riparian communities. Double the number of water consumers in a century will squeeze both the environment and consumers. Only serious efforts to reduce per capita consumption of water can avert a crisis.

Global Mores

Finally, while the disappearance of rain forests and endangered panda bears, snow leopards, elephants, and gorillas rightly worries Americans, we will have our hands full here with our own biodiversity crisis. In the United States, researchers have already documented 371 terrestrial ecological communities that are globally rare.³⁶ In 1996, after an exhaustive survey of the nation's species databases, the Nature Conservancy reported that almost one-third of 28,000 species and an additional 11,000 subspecies and varieties of plants and animals were in some danger.³⁷ As U.S. population doubles and resource exploitation intensifies to meet rising human demands, pressures on precarious living resources can only increase. The cost of saving endangered species and their habitats will become ever-more prohibitive financially and politically.

While politically correct environmentalists now shrink from saying so publicly, the sacrifices a society is willing to make on behalf of the environment are very much a reflection of its culture and values. How will foreign cultures with different attitudes toward conservation fit into our own established, yet evolving, environmental ethos? Ironically, even as born-in-the-USA McCulture increasingly permeates a

globalized world, Americans themselves may be forced to accept the globalization of our own conservation mores and heritage.

Into Perilous Seas

The new century may see the final resolution of the debate sparked in 1798 with the publication of Thomas Robert Malthus' *Essay on the Principle of Population*. Malthus, of course, first articulated the idea that human population growth and steadfast environmental limits were on a collision course, leading inexorably to misery and vice. Malthus' critics, ranging from leftists like Marx and Engels in the 1800s to rightists like the libertarian Cato Institute and the late Julian Simon more recently, have argued that explosive technological innovation has been more than a match for explosive population growth, rendering Malthusian doctrine as obsolete as a horse-drawn plow.³⁸ In contrast, contemporary neo-Malthusians claim that his insights remain essentially valid. Our children and grandchildren will experience firsthand what happens when the unstoppable force of growth in human population and consumption slams headlong into the immovable object of earthly limits.

Perhaps it is beyond the head-counting mission of the Census Bureau to raise such profound and troubling questions. And moreover, we don't live in an introspective era prone to questioning our own successes...and excesses. "Don't mess with success" might well be our motto. Fundamental reforms are out. Rather, Americans now seem to be living an expansive, self-indulgent moment in history. Twenty years ago the voluminous *Global 2000 Report to the President* caused a stir by painting a disconcerting portrait of Earth in the year

2000 if environmental trends then current continued unabated. Most of them have. Yet as the year 2000 actually approached, that report had long since been forgotten and the biggest fear was not of impending ecological ruin but of the overhyped Y2K computer bug—a sign of just how mesmerized humanity has become by the virtual cyberspace of our own making rather than the natural, real world out there beyond the bubble. That bubble, fabricated by human ingenuity, is not immune from the laws of nature and finite natural resources.

The irony and the tragedy is that the richest, most technologically sophisticated nation in the history of the world, rather than investing in the difficult yet doable transition to a genuinely sustainable future, would squander its largesse on a big blowout—on bigger homes, bigger sport utility vehicles, bigger shopping malls, big-screen televisions... and a bigger population.

This kind of hubris was obvious among the builders, owners, crew, and passengers of the *Titanic*. Americans would do well to consider what happened to this unsinkable ship while there still may be time to change the course of our own vessel.³⁹ ■

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NOTES

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4. Hollmann et al., "Methodology and Assumptions," p. 3.

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