



Fiscal Impacts of the Foreign-Born Population

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October 19, 2011

Congressional Research Service

7-5700

www.crs.gov

R42053

Summary

This report reviews estimates of fiscal impacts to the federal, state, and local governments of the foreign born who reside in the United States. It examines the academic and policy literature on fiscal impacts of two populations: all U.S. foreign born and unauthorized aliens. Computing such fiscal impacts involves numerous methodological and conceptual challenges, and resulting estimates vary considerably according to the assumptions used, including those about the time frame considered, the treatment of U.S.-born children, the unit of analysis used, and which costs and revenues are included.

For the total foreign-born population, the findings of a 1996 analysis commissioned by the National Research Council entitled *The New Americans* remain authoritative and relevant. The report estimated that each new immigrant at that time, with his or her descendents, would generate an average net fiscal surplus. The authors illustrated how their estimate varied according to foreign-born residents' age composition and educational attainment. Varied assumptions about education generated substantially different impacts. For instance, immigrants with above-average education generated a considerably larger than average net fiscal surplus; those with below-average education levels generated a net fiscal deficit. Reducing the time frame of the analysis to fewer generations changes the average net fiscal surplus into an average net fiscal deficit.

This study and others confirm that the foreign born, like the native born, impose their largest costs on U.S. taxpayers as children, through their consumption of public education, and as the elderly, through their consumption of government-funded public health programs. Yet, the majority of the foreign born come to the United States as young adults, where they pay taxes and contribute to programs like Social Security for most of their working lives. Relatively young ages at arrival for most foreign born help explain why many fiscal impact studies found that foreign-born residents generated net fiscal surpluses over the long term.

Findings from all of the studies reviewed in this report indicate different impacts at the state and federal levels. Many federal programs, such as Social Security and Medicaid, are oriented toward assisting the elderly, while many state and local level jurisdictions are responsible for services consumed by younger persons, such as public education and criminal justice administration. Foreign-born residents' relatively young age distribution thus accentuates the degree to which states and localities incur greater fiscal costs from the foreign born than the federal government.

Fiscal impact studies of unauthorized aliens reach less consensus than those of the total foreign-born population. Three national estimates evaluated in a 1995 General Accounting Office (GAO) report varied considerably and left the agency unable to definitively quantify such fiscal impacts. Subsequent state-level studies emphasized fiscal impacts of costly public services: public education, health care, and law enforcement. Many estimated tax and other fiscal contributions.

Studies estimating fiscal impacts for unauthorized aliens are more likely to yield estimated net fiscal deficits than those estimating fiscal impacts for all foreign born, because unauthorized aliens, on average, tend to be younger and less educated. Consequently, they are more likely to use public education for their children and contribute relatively less in tax revenues compared to all foreign born. Given their unauthorized status, they are also less likely themselves to receive public benefits, although their U.S.-born children may be more likely to qualify for such benefits. However, deriving more specific conclusions or estimates from studies of unauthorized aliens reviewed in this report remains elusive due to variation in study design and methodology.

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Introduction

This report reviews estimates of fiscal impacts to the federal, state, and local governments of the foreign born who reside in the United States.¹ By fiscal impacts, the report refers to both tax-funded expenditures for public services such as public education and public health programs, and tax revenues received through payroll withholdings on income, property taxes, sales taxes, and other taxes. The analysis of tax-funded expenditures and tax revenues together is referred to as the net fiscal impact.

Congress has had a long-standing interest in the fiscal impacts of the foreign born. Congressional interest has emphasized two public policy issues: immigration policy, particularly what categories of foreign nationals and what number should be granted admission into the country; and to a lesser extent, budget concerns over the cost of public services used by the foreign born. For instance, concerns about consumption of public services by unauthorized aliens and other foreign-born persons caused Congress to pass the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA, P.L. 104-193), which statutorily barred many legal permanent residents and other noncitizens from many federal assistance programs.²

This report focuses exclusively on literature that examines *fiscal impacts* of the foreign born. However, it does not address the following topics: *economic impacts* of the foreign born, such as their effect on industrial competitiveness, economic development, or the employment prospects, wages, and working conditions of U.S. workers; *demographic impacts* of the foreign born, such as their effect on the size and composition of the U.S. population; *socio-cultural impacts* of the foreign born, such as their effects on language use and civic participation; and *environmental impacts* of the foreign born, such as their effects on pollution generation, public goods consumption, and traffic congestion. Nor does it address, for the unauthorized alien population, costs to the federal government of enforcing immigration laws, such as investigating, arresting, detaining, and removing unauthorized aliens from the United States.

The report examines the academic and policy literature on fiscal impacts of two populations: the entire foreign-born population and the unauthorized alien population. While many studies have been conducted to estimate fiscal impacts of just the unauthorized alien population, few have estimated fiscal impacts of just the legally residing foreign-born population. For example, *The*

¹ Studies on the fiscal impacts of the foreign born frequently use the term “immigrants” to refer to the foreign-born. However, the term “foreign born” used in this report specifically refers to people born outside the United States who do not automatically acquire citizenship at birth. The foreign born have a variety of immigration statuses and include the following groups of individuals: legal immigrants, refugees, asylees, legal nonimmigrants, and unauthorized aliens. The term “immigrant” used in this report, and as defined in the Immigration and Nationality Act (INA) encompasses any foreign national admitted to the United States for legal permanent residence (LPR). Immigrants who obtain citizenship through naturalization are classified as naturalized citizens. All other foreign-born persons who are not naturalized citizens, LPRs, refugees, or asylees, are classified as nonimmigrants or unauthorized aliens. The term “nonimmigrants” refers to foreign nationals admitted legally on a temporary basis for a specific purpose and length of time and include tourists, diplomats, foreign students, persons on work visas, temporary agricultural workers, and exchange visitors. An alien is “any person not a citizen or national of the United States” and is synonymous with noncitizen. We use the term ‘unauthorized aliens’ throughout this report to refer to aliens who reside unlawfully in the United States. Not all studies of unauthorized aliens use that term although they generally refer to that population. Exceptions to these definitions are noted in the text.

² For more information, see CRS Report R40772, *Noncitizen Health Insurance Coverage and Use of Select Safety-Net Providers*, by Alison Siskin and CRS Report RL33809, *Noncitizen Eligibility for Federal Public Assistance: Policy Overview and Trends*, by Ruth Ellen Wasem.

New Americans, an authoritative report discussed extensively below, considers all foreign born without analyzing populations separately according to legal status. Consequently, the first portion of this report evaluates studies of all foreign born, irrespective of legal status. The second portion evaluates studies of only the unauthorized alien population.

This report is not an exhaustive review of the literature. Reviewed studies were generally selected if they included attempts to quantify the cost of public services and benefits received by the foreign born and/or tax revenues contributed, and they explained their methodologies for computing estimates. Hence, studies that applied excessively simple, incomplete, or undisclosed methodologies were generally not included. This report also excluded studies that intended to show only a favorable or unfavorable portrait of the foreign born, unless their methodological sophistication warranted their inclusion. The span of methodologies used in the analyses presented in this report ranges from basic arithmetic computations to sophisticated microeconomic and macroeconomic models. Moreover, the report distinguishes between cross-sectional studies that consider the fiscal impacts of the foreign born at a particular year, versus longitudinal studies that attempt to capture fiscal impacts of the foreign born across longer periods or several generations.

With the exception of studies discussed in a 1995 General Accounting Office (GAO) report³ that assess fiscal impacts of the unauthorized alien population, studies reviewed herein were completed after 1996. Studies within each section are generally reviewed in chronological order, with the earliest studies evaluated first. The **Appendix** summarizes findings for all studies reviewed. Because of differences in research scope, methods, specific populations analyzed, and other factors, the report refrains from synthesizing these results beyond what is presented in its conclusion section.

The report begins by discussing challenges of enumerating the foreign born, including the unauthorized alien population, and estimating fiscal impacts of the foreign born. Next, it reviews four sets of studies. The first, included in a National Research Council (NRC) report entitled *The New Americans*, represents an evaluation of short- and long-term fiscal impacts of the entire foreign-born population that served as a touchstone for subsequent research assessing the impact of U.S. immigration. The second part of this report reviews scholastic research on fiscal impacts of the total foreign-born population published after the NRC report. These scholastic analyses, published mostly in peer-reviewed academic journals, generally encompass greater analytic rigor than policy studies. The third part of this report reviews policy studies of fiscal impacts of the total foreign-born population conducted at the national and state levels that were undertaken by policy organizations. The fourth part considers the unauthorized alien population by first discussing a seminal policy debate between 1993 and 1995 assessing fiscal impacts of unauthorized aliens, and continuing with a review of policy studies conducted mostly at the state level on fiscal impacts of unauthorized aliens.

³ U.S. General Accounting Office, *Illegal Aliens: National Net Cost Estimates Very Widely*, GAO/HEHS-95-133, July 1995.

Challenges for Estimating Fiscal Impacts

Analysts have long attempted to estimate the fiscal impacts of immigrants to the United States.⁴ Their work has produced useful conceptual and analytic frameworks to guide such research.⁵ These frameworks typically describe elements necessary to produce accurate and comprehensive impact estimates: defining precisely the foreign-born population analyzed; distinguishing among the foreign born by legal status, education, decade of U.S. arrival, or other policy-relevant criteria; determining an appropriate unit of analysis for computing fiscal impacts; deciding which public service costs and tax revenues to include; making assumptions about the extent to which the foreign born use public services and contribute taxes relative to native residents; and deciding over how many generations to compute impacts. Studies can be evaluated on the extent to which they incorporate or address such elements. However, analysts face a number of methodological hurdles to incorporating these elements into fiscal impact studies.

Data Challenges

Accurately Enumerating the Total Foreign-Born Population

To produce viable estimates of fiscal impacts, analysts must accurately count the population of interest. The foreign born who legally reside in the United States, for instance, technically include naturalized citizens, legal permanent residents, refugees, asylees, and legal noncitizens such as temporary workers.⁶ They do not include unauthorized aliens who overstayed their legally obtained visas, violated the terms of their admission, or entered the United States unlawfully.⁷ The foreign born can be distinguished in large-scale data sets such as the Current Population Survey (CPS), the Decennial Census of the Population (Census), or the American Community Survey (ACS).⁸ However, while these data sets distinguish between foreign born who are

⁴ For example, see U.S. Department of Labor, Bureau of International Labor, *The Effects of Immigration on the U.S. Economy and Labor Market*, Immigration Policy and Research Report 1, Washington, DC, 1989 for an extensive review of earlier work.

⁵ For two examples, see Georges Vernez and Kevin F. McCarthy, “The Costs of Immigration to Taxpayers: Toward a Uniform Accounting Framework,” *Population and Environment*, vol. 18, no. 1 (September 1996), pp. 9-36; and Thomas MaCurdy, Thomas Nechyba, and Jay Bhattacharya, “An Economic Framework for Assessing the Fiscal Impacts of Immigration,” in *The Immigration Debate*, ed. James P. Smith and Barry Edmonston (Washington, DC: National Research Council, 1998), pp. 13-65.

⁶ These legal distinctions have considerable fiscal impacts. For instance, unauthorized aliens are often ineligible to receive public services and cash benefits. Refugees and asylees, on the other hand, can immediately access a range of public services, and evidence suggests that they use them at relatively higher rates and for more prolonged periods than other foreign born groups or native residents. See George J. Borjas, *Heaven's Door: Immigration Policy and the American Economy* (Princeton, NJ: Princeton University Press), 1999, pp. 108-111.

⁷ For more information, see CRS Report R41207, *Unauthorized Aliens in the United States*, by Andorra Bruno.

⁸ These three datasets are among the most widely used to analyze the U.S. population. Each asks citizenship status, but not immigration or legal status. The Decennial Census occurs every 10 years and represents a complete enumeration of the U.S. population. Until 2010, the Census included a “short form” collected from all households for only capturing the most basic demographic characteristics such as age, gender, and race and ethnicity, as well as a “long form” sent to approximately one in six households that collected more detailed information. The Current Population Survey is a continuous monthly survey of almost 60,000 households sampled to represent the U.S. population, and collects very detailed information on demographic and labor force characteristics. The American Community Survey (ACS) Public Use Micro Sample (PUMS), is the largest most representative dataset available on the U.S. population. Based on a monthly rotating sample of about 250,000 households, the ACS collects almost all the detailed information previously (continued...)

naturalized citizens and those who are noncitizens, they do not distinguish between noncitizens with legal status and noncitizens who are unauthorized aliens. They also do not distinguish between refugee or asylee status, or between legal temporary noncitizens, such as temporary workers, and legal permanent residents.

The studies reviewed in the first half of this report estimate fiscal impacts of all foreign-born persons. To evaluate fiscal impacts for only the legally residing foreign born, analysts must isolate that population from the unauthorized alien population. This can be done in several ways, including making assumptions about the legal proportion of the total foreign-born population, subtracting estimates of the unauthorized population from the total foreign-born population, or applying methodologies that assign legal or unauthorized status to a dataset's cases based on individual case characteristics and then analyzing only cases with legal status in that dataset. These methodological challenges may have contributed to the paucity of fiscal impact studies of legal immigration.⁹ Consequently, analyses of the foreign-born population's fiscal impacts sometimes yield ambiguous policy implications because they combine effects of legally residing foreign born and unauthorized aliens, two groups with distinct educational profiles and employment trajectories.¹⁰

Legal status also affects fiscal impacts according to federal law. For instance, whether foreign-born persons must pay taxes depends both on their legal status and if tax treaties or agreements exist between their countries and the United States.¹¹ However, a foreign-born person's legal status may limit his or her eligibility to receive public services.

Accurately Enumerating the Unauthorized Alien Population

Studies that estimate fiscal impacts of the unauthorized alien population are hampered by difficulties associated with accurately enumerating that population. People who try to avoid being detected by the government are difficult to count using formal surveys.¹² As noted above, large nationally representative surveys that serve as primary data sources of socioeconomic information—the CPS, the Census, and the ACS—ask citizenship status but not immigration or legal status.¹³ Researchers wishing to know the cost of public services used or contribution of taxes contributed by unauthorized aliens must use alternative methods.

Given the methodological challenges to accurately estimating the number, distribution, and demographic characteristics of the unauthorized alien population, researchers typically rely upon

(...continued)

captured by the Decennial Census long form.

⁹ In contrast, many policy studies have estimated fiscal impacts of unauthorized aliens using estimates of that population for a particular state, and then estimating per-capita tax contributions and public service costs accordingly.

¹⁰ For more information on how legal status differentiates the foreign-born population, see CRS Report R41592, *The U.S. Foreign-Born Population: Trends and Selected Characteristics*, by William A. Kandel.

¹¹ For more information, see CRS Report RS21732, *Federal Taxation of Aliens Working in the United States and Selected Legislation*, by Erika K. Lunder.

¹² For example, see Gordon H. Hanson, "Illegal Migration from Mexico to the United States," *Journal of Economic Literature*, vol. 44, no. 4 (2006), pp. 869-924; and Frank D. Bean, Rodolfo Corona, and Rodolfo Tuiran, et al., "Circular, invisible, and ambiguous migrants: Components of difference in estimates of the number of unauthorized Mexican migrants in the United States," *Demography*, vol. 38, no. 3 (2001), pp. 411-422.

¹³ While these surveys permit analyses on noncitizens, they do not distinguish between authorized and unauthorized noncitizens.

existing estimates.¹⁴ Much literature cites estimates of the unauthorized population produced annually by Jeffrey Passel of the Pew Hispanic Center. Most recently, the Pew Hispanic Center estimated that approximately 11.2 million unauthorized (illegal) aliens resided in the United States in March 2010.¹⁵ Published estimates by the Department of Homeland Security's Office of Immigration Statistics (OIS) yielded results consistent with but not equivalent to Passel's. OIS estimated that 10.8 million unauthorized aliens resided in the United States as of January 2010.¹⁶ Part of the difference stems from the use of different datasets: OIS uses ACS data to produce its estimates while the Pew Hispanic Center relies on CPS data. Such discrepancies suggest that attempts to quantify the fiscal impact of unauthorized aliens are hindered by disagreement over how many reside in the United States, among other factors.

Conceptual Challenges

Which Costs and Revenues Should be Estimated?

Producing comprehensive and realistic estimates of fiscal impacts of the foreign born requires the analyst to select which costs and revenues should be included. Most state-level analyses reviewed in this report highlighted the largest budget expenditures that varied with the size of the foreign-born population, such as public education costs, criminal justice administration costs, and the cost of public health care programs.¹⁷ Some studies attempted to estimate less expensive services such as sanitation and police and fire protection. Some included the cost of federal income transfers, such as the Supplemental Security Income (SSI) program, the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), Medicaid, and the Temporary Assistance for Needy Families (TANF) program. Others included public infrastructure and service costs, such as those for highways, parks, and libraries, which pose particular challenges to quantifying costs from additional use by the foreign born. Finally, some studies estimated costs for pure public goods that require little or no additional spending for new foreign-born persons residing in the United States, such as national defense, medical and technical research, or interest on the national debt.¹⁸

For revenues, most state-level studies estimated state and local income taxes based on recorded survey data or from estimates based on recorded or estimated annual incomes. Other frequently

¹⁴ See CRS Report RL33874, *Unauthorized Aliens Residing in the United States: Estimates Since 1986*, by Ruth Ellen Wasem; and CRS Report R41592, *The U.S. Foreign-Born Population: Trends and Selected Characteristics*, by William A. Kandel.

¹⁵ Jeffrey S. Passel and D'Vera Cohn, *Unauthorized Immigrant Population: National and State Trends, 2010*, Pew Hispanic Center, Washington, D.C., February 1, 2011, p. 25.

¹⁶ Michael Hofer, Nancy Rytina, and Bryan C. Baker, *Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2010*, Department of Homeland Security, Office of Immigration Statistics, Washington, DC, February 2011. Department of Homeland Security, Office of Immigration Statistics, *Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2005*, by Michael Hofer, Nancy Rytina, and Christopher Campbell, 2006.

¹⁷ These programs include Medicaid and Medicare, the eligibility for which is regulated according to legal status. Hence, for example, while unauthorized aliens are ineligible for most forms of public health assistance, they do incur costs for the use of emergency Medicaid.

¹⁸ Ronald D. Lee and Timothy W. Miller, "The Current Fiscal Impact of Immigrants and Their Descendants: Beyond the Immigrant Household," in *The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration*, ed. James P. Smith and Barry Edmonston (Washington, DC: National Research Council, 1998) pp. 188-189. Note that *The Immigration Debate*, published in 1998, was a companion volume to *The New Americans* published in 1997, with additional analyses and commentary. Hereinafter referred to as "Lee and Miller, 1998."

estimated tax revenues included property, sales, and excise taxes. While some studies limited their analyses of fiscal impacts entirely to state and local costs and revenues, others expanded their scope to include federal revenues such as federal taxes, FICA, and Medicare withholdings. Including estimated federal tax contributions in an analysis but not estimated federal public services costs (or vice versa) distorts estimates of the net fiscal impacts of the foreign born.

What Time Frame is Appropriate?

A major challenge for researchers conducting studies of fiscal impacts of immigration is to select an appropriate time frame. Fiscal impacts are often measured as the difference between estimates of annual tax and other revenues from noncitizens (or noncitizen headed-households) and estimated costs of government services and benefits to these persons or households. However, because fiscal impacts of foreign-born persons accumulate over their lifetimes, this methodology represents a static, cross-sectional perspective that obscures their more substantial costs as young consumers of public education or elderly consumers of public health care services, as well as their contributions as working-age taxpayers. Estimates from such annual studies thereby implicitly assume a demographic “steady state” condition whereby the age and skill composition of the foreign born remains unchanged over time.¹⁹ Such circumstances hardly ever occur: over even short periods of time, foreign-born populations change in size, age composition, and educational composition, all of which affect public service consumption and tax revenue contributions.

Many policy studies reviewed in this report applied a cross-sectional approach. However, several academic studies employed longitudinal approaches that attempted to overcome this shortcoming. Some of these methods accumulate fiscal impacts of the foreign born over their expected life spans as U.S. residents, while others incorporate assumptions about generations of the foreign born to estimate fiscal impacts more extensively.

What Unit of Analysis is Appropriate?

Studies sometimes use households rather than individuals as the unit of analysis because households act as primary units through which taxes are paid and public services consumed. Nonetheless, households can pose methodological complications if they contain citizens and noncitizens. Such “mixed status” families and households not only constitute a sizeable portion of all foreign-born households,²⁰ but they also complicate fiscal impact analyses because of variation in federal program eligibility.²¹ As an example of how this issue was treated, *The New Americans*, reviewed below, included revenues and expenditures for all children of noncitizens, including U.S. citizen children, but only for those who lived in the household. As such, this analysis overstated estimated costs to U.S. taxpayers of noncitizen households because most U.S. citizen

¹⁹ Most studies also assume current tax rates and public service utilization rates. However, given the looming fiscal challenges posed by impending baby boomer generation retirements, such assumptions may not be tenable. Moreover, legislation, such as the Personal Responsibility and Work Reconciliation Act of 1996, which affected foreign-born individuals’ eligibility for public services, can limit or expand their costs imposed on native taxpayers.

²⁰ Of the 16.2 million children under 18 with at least one foreign-born parent in 2008, 13.9 million were born in the United States. CRS Report R41592, *The U.S. Foreign-Born Population: Trends and Selected Characteristics*, by William A. Kandel. See also Jeffrey S. Passel and Paul Taylor, *Unauthorized Immigrants and Their U.S.-Born Children*, Pew Hispanic Center, Washington, DC, August 11, 2010, <http://pewhispanic.org/files/reports/125.pdf>.

²¹ For more information on how mixed status families are treated for purposes of receiving federal benefits, see CRS Report RL34500, *Unauthorized Aliens’ Access to Federal Benefits: Policy and Issues*, by Ruth Ellen Wasem.

children were in the household during the relatively costly school-age period but not when they were of tax-contributing working ages.

How Should U.S.-Born Children be Treated?

Another analytic issue centers on children of the foreign born. An “immigrants only” approach to estimating fiscal impacts includes only foreign-born individuals and their foreign-born children, not their U.S. citizen children. In contrast, an “immigrant households” approach includes their U.S. citizen children under the assumption that such children reside in the United States solely because of the presence of their foreign-born parents in the United States.

Studies of the Total Foreign-Born Population

The New Americans (1997)

The New Americans was undertaken at the behest of the bipartisan Commission on Immigration Reform established by Congress in 1990 to recommend immigration policy reforms.²² The report addressed three topics: (1) the effect of immigration on the future size and composition of the U.S. population; (2) the influence of immigration on the economy (i.e., labor markets, wages); and (3) the fiscal impact of immigration on federal, state, and local governments. Although the report includes estimated impacts for all foreign-born persons, regardless of legal or temporal status, it is considered authoritative because of its thorough and rigorous methodology.

This study, and several others reviewed in this report, were conducted using data prior to 1996. As such, they do not reflect changes imposed by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 that statutorily barred LPRs and other noncitizens from many federal assistance programs. It is expected that, all else being equal, a similar analysis using data after 1996 would yield larger estimated surpluses and smaller deficits to some unknown degree because of greater restrictions placed on the foreign born to accessing public services.

Short-Term Impacts

The New Americans distinguished between short-term (annual) and long-term impacts of the foreign born.²³ The conclusions of the report’s annual impact analysis relied on studies of California²⁴ and New Jersey,²⁵ states with sizable foreign-born populations. The annual impact

²² James P. Smith and Barry Edmonston, eds., *The New Americans: Economic, Demographic, and Fiscal Effects of Immigration*, (Washington, DC: National Academy Press, 1997); hereinafter referred to as “Smith and Edmonston, 1997.”

²³ In general, scholars typically estimate short-term or annual impacts by subtracting estimated costs of an array of public services consumed by foreign-born households from estimated annual taxes contributed by those households, for a single year. These annual analyses vary according to what costs are included, with some including a wide range of public services, and others focusing on those deemed the most expensive, such as education and health care.

²⁴ Michael S. Clune, “The Fiscal Impacts of Immigrants: A California Case Study,” in *The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration*, ed. James P. Smith and Barry Edmonston (Washington, DC: National Research Council, 1998), pp. 120-182.

²⁵ Deborah L. Garvey and Thomas J. Espenshade, “Fiscal Impacts of Immigrant and Native Households: A New Jersey Case Study,” in *The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration*, (continued...)

analysis estimated revenues and costs associated with foreign-born households and co-resident U.S.-born children, in contrast to the long-term impact analysis, which considered all children of foreign-born parents regardless of where they resided. The authors cautioned that excluding U.S.-born children not residing in such households in the short-term analysis most likely overstated the fiscal burden of the foreign born because while it included children's considerable costs at younger ages when they were most likely to live with their parents, it excluded their tax contributions as adults when children were most likely to live separately.

Results for the New Jersey and California studies were expressed as estimated benefits or costs to native-headed households. *At the state level*, the estimated impact of a foreign-born-headed household amounted to a net cost to each native-headed household of \$232 and \$1,178 in 1996 dollars for New Jersey and California, respectively, or \$322 and \$1,637 in 2010 dollars, respectively. *At the federal level*, the estimated impact amounted to a much smaller net benefit of about \$3 in 1996 dollars for each of the two states. Yet, because of these two states' sizable foreign-born populations, California and New Jersey more accurately represent such fiscal impacts primarily for residents living in similarly populated states than they do for other states in the country. When the authors broadened their analysis and estimated the impact of all U.S. foreign-born-headed households on all U.S. native-headed households, the resulting net impact at the state level was a lower cost, ranging from \$166 to \$226 to each native-headed household in 1996 dollars for each foreign-born-headed household, or \$231 to \$314 in 2010 dollars. At the federal level, when the study was expanded to the entire nation, foreign-born-headed households were expected to produce a larger net fiscal benefit than the \$3 figure estimated for just New Jersey and California, although the authors did not estimate this amount.

According to the authors, three factors explain why foreign-born households consume more in public services than they contribute in tax revenues. First, foreign-born households have greater numbers of children and consume more public education services. Second, on average, foreign-born households are poorer and consequently receive more income transfers and benefits. Third, because the foreign-born earn lower average incomes and own less property, they contribute less income and property taxes.

Annual estimates, however, should not be extrapolated to determine long-term fiscal impacts for several reasons. First, timing distorts the ultimate fiscal impact of foreign-born households. For example, young foreign-born persons consume costly public education services but subsequently contribute considerable tax revenues over the course of their working lives. Older foreign-born persons arriving to the United States later in their working lives may contribute withholdings immediately to support Social Security and Medicare but not for a sufficient period to balance the cost of their subsequent use of those services upon retirement. Short-term analyses cannot factor in other predictable changes that affect public service consumption or tax contributions, including changes in tax rates as incomes increase, changing public service eligibility with age, and the degree to which current demographic and fiscal conditions in the United States may alter the provision of future public services or receipt of tax revenues. Finally, the foreign born arriving in the United States during different decades have encountered different economic, demographic, labor market, and regulatory circumstances that have significantly affected their fiscal impacts.

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ed. James P. Smith and Barry Edmonston (Washington, DC: National Research Council, 1998), pp. 66-119.

Long-Term Impacts

To estimate long-term fiscal impacts of the foreign born, the authors of *The New Americans* extended their methodology for computing annual estimates by making assumptions regarding several factors, including future taxes and public service expenditures; characteristics of the new foreign born; foreign born and native differences in characteristics ranging from fertility to lifetime earnings trajectories; and discount rates used to translate future revenues and costs into current dollars. Altering these assumptions generated different estimates, which were discussed at length.

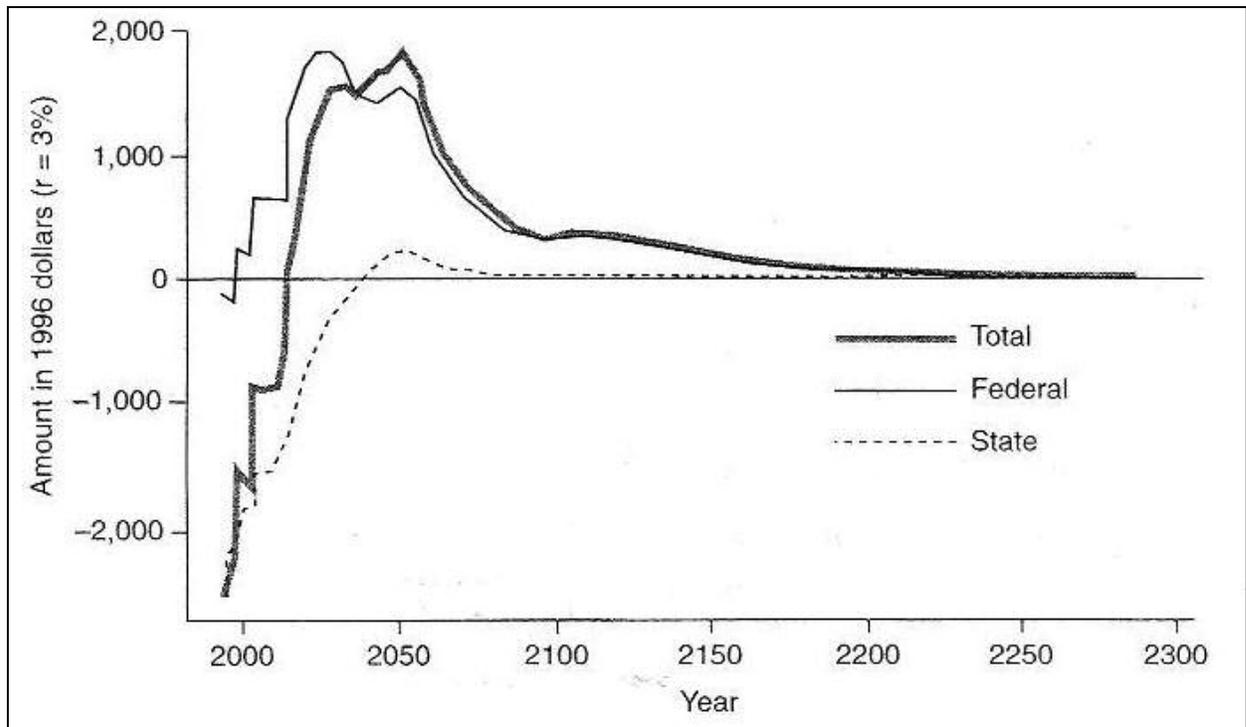
The analysis yielded several overall conclusions regarding the fiscal impact of the foreign born. On the cost side, the authors found little difference between the estimated cost of public services used by foreign-born and native residents over the long term. Although some foreign born and native differences in estimated per-capita costs varied substantially across the separate government programs examined, combined per-capita costs for major government programs yielded little difference. Similarly, while the study found that the foreign born incurred higher estimated social program costs than native residents at younger ages, it also found that they incurred lower costs in old age, a difference which tended to balance out over lifetimes. On the revenue side, the study found considerable differences between foreign-born and native residents' tax contributions, stemming largely from differences in future earnings.

The analysis estimated the net fiscal impact of the presence of a new foreign-born individual in the United States by subtracting the cost of his or her estimated social benefit consumption from estimated tax contributions, at every age, over three centuries to account for all descendants.²⁶ The resulting estimated net fiscal impact for someone arriving in 1994 is an \$80,000 net surplus. This baseline figure varies substantially by personal characteristics and model assumptions.

²⁶ The authors acknowledged that projections for such a lengthy period were unlikely to be reliable but contended they were necessary for two reasons. First, computing such fiscal impacts requires a time frame encompassing several generations. Second, producing net present value estimates with a discount rate at 3% reduces the effect of the future on fiscal impact estimates to virtually nothing. This can be seen in **Figure 1**, with the estimated values after the year 2100, and particularly after 2200 summing to a relatively small portion of the total estimate of \$80,000.

Figure 1. Estimated Net Present Value of Annual Fiscal Impacts of a Foreign-Born Person Arriving in 1994

(Each year's impact is discounted at an annual rate of 3%)



Source: James P. Smith and Barry Edmonston, eds., *The New Americans: Economic, Demographic, and Fiscal Effects of Immigration*, (Washington, DC: National Academy Press, 1997), p. 341.

Notes: The graph represents the net fiscal surplus or deficit created by a single new immigrant arriving in 1994 and that of his descendants over 300 years. Because of invariable changes in family structure, the authors chose as their unit of analysis an individual immigrant rather than an immigrant-headed household. Weighted average values are used for critical variables such as age at arrival and educational attainment. The model incorporates a host of assumptions related to, for instance, macro-level monetary adjustments, tax contributions, fertility rates, educational attainment of immigrant children, future public service costs and consumption, and emigration rates.

Figure 1 graphs the net present value²⁷ of this total fiscal impact, which is represented by the total area between the graph lines and the horizontal axis. For instance, the estimated federal impact from 1994 through 2050 is a surplus because the thin solid line falls above the axis, while the state impact for that period is a deficit because the broken line falls below the axis. The \$80,000 estimate (\$111,000 in 2010 dollars) represents the sum of the total federal and state estimates for each year, summed across all 300 years. It illustrates how one foreign-born individual, arriving in 1994, produces varied state and federal impacts over time. Like native residents, the foreign born are costly to society at young and old ages, but are net revenue generators during working ages. As a result, according to the study, a foreign-born individual's long-term fiscal impact depended largely on age at arrival in the United States. Most foreign born between ages 10 and 25 produced a net fiscal surplus, while those arriving at retirement age produced a net fiscal deficit.²⁸ Because most foreign born arrive as young adults, estimates

²⁷ Net present value (NPV) in this context refers to the current value of future impacts, discounted to account for the time-value of money. This analysis uses a 3% interest rate to discount future costs and benefits to their present value.

²⁸ The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA, Division C of P.L. 104-208) (continued...)

produced by this type of analysis typically yield net fiscal surpluses. Finally, **Figure 1** shows that the estimated fiscal impact differs markedly at the federal and state levels, with the federal government reaping surpluses over the life of the individual and his/her descendents, and state and local governments incurring deficits.

Table 1. Estimated Net Present Value of Average Fiscal Impact of a Foreign-Born Person Arriving in 1994, by Education

(figures presented in 2010 dollars)

	Less than High School	High School Graduate	More than High School	Overall
Foreign-born individual <i>and</i> descendents	(\$18,000)	\$71,000	\$275,000	\$111,000
Foreign-born individual	(\$124,000)	(\$43,000)	\$146,000	(\$4,000)
Foreign-born individual's descendents	\$106,000	\$114,000	\$129,000	\$115,000

Source: James P. Smith and Barry Edmonston, eds., *The New Americans: Economic, Demographic, and Fiscal Effects of Immigration*, (Washington, DC: National Academy Press, 1997), p. 334.

Notes: Figures extend the analysis shown in **Figure 1** and represent the net present value of an additional immigrant and his/her descendents for 300 years. Figures have been translated from 1996 dollars to 2010 dollars using the Consumer Price Index (CPI-U) from the U.S. Department of Labor's Bureau of Labor Statistics.

Impact estimates were especially sensitive to assumptions about educational attainment (**Table 1**). Foreign-born persons with less than a high school diploma generated an estimated net deficit of \$18,000 (in 2010 dollars) over their lifetimes, while those with more than a high school education produced an estimated net surplus of \$275,000.²⁹ Education differences altered the range of estimates for foreign-born persons by themselves, from -\$124,000 for less than a high school education to +\$146,000 for more than a high school education, a difference of \$270,000. By contrast, the range of estimates for descendents of the foreign born, from \$106,000 to \$129,000, produced a difference of only \$23,000. Education also altered fiscal impact differences within the same education categories. Foreign-born persons with less than a high school education generated an estimated fiscal deficit of \$124,000, while their descendents generated a surplus of \$106,000, a gap of \$230,000. For foreign born with more than a high school education, that same gap amounted to -\$17,000.

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and the welfare reform provisions in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA, P.L. 104-193), both substantially increased the legal obligations of persons who sponsor immigrants arriving or adjusting to LPR status in the United States, to ensure they do not become "public charges". For more information, see CRS Report RL33809, *Noncitizen Eligibility for Federal Public Assistance: Policy Overview and Trends*, by Ruth Ellen Wasem.

²⁹ All figures in this paragraph are cited in 1996 dollars. In 2010 dollars, the estimated fiscal impact for foreign-born residents with less than a high school diploma is -\$18,071 and with more than high school is +\$275,321.

Table 2. Effect of Changing Analysis Assumptions on Estimated Average Fiscal Impact of a Foreign-Born Person Arriving in 1994

(figures presented in 2010 dollars)

	Total Net Present Value	Implied Effect of this Change
Average estimated fiscal impact of foreign born and their descendants	\$111,000	
If the foreign born had the same education as native residents	\$168,000	\$57,000
If the foreign born had the same age composition as native residents	\$44,000	(\$67,000)
If the foreign born paid the same taxes by age as native residents	\$211,000	\$100,000
If the foreign born received the same benefits by age as native residents	\$69,000	(\$44,000)

Source: James P. Smith and Barry Edmonston, eds., *The New Americans: Economic, Demographic, and Fiscal Effects of Immigration*, (Washington, DC: National Academy Press, 1997), p. 345.

Notes: Figures have been translated from 1996 dollars to 2010 dollars using the Consumer Price Index (CPI-U) from the U.S. Department of Labor's Bureau of Labor Statistics.

The estimated fiscal impact of \$111,000 (in 2010 dollars) that the authors produced was based upon assumptions using average characteristics of the foreign born at the time of the analysis. The authors extended their analysis to suggest what altering those assumptions implied for U.S. immigration policy (**Table 2**). For instance, if the United States were to admit foreign-born persons whose educational profile matched that of U.S. native residents, the average estimated fiscal impact would increase from +\$111,000 to +\$168,000. On the other hand, if the foreign born admitted possessed the same older age profile as U.S. native residents—thereby reducing the span over which they paid taxes—their estimated average fiscal impact would decrease from \$111,000 to \$44,000. Age-adjusted “sensitivity analyses”³⁰ conducted by the authors indicated that on average, the foreign born paid less taxes and received fewer benefits than native residents.

Geographically, the authors found that the foreign born generated net federal fiscal surpluses throughout the country, in contrast to net state and local fiscal deficits concentrated among states with large foreign-born populations. As a result, this study suggested that native residents in those states incurred net fiscal costs while residents in all other states reaped net fiscal benefits. Since *The New Americans* was published in 1997, considerable foreign-born population growth has occurred in new urban and rural destinations outside of traditional immigrant-receiving states.³¹ Yet, even in 2008, roughly two-thirds of the foreign born remained concentrated in just six U.S. states.³²

³⁰ Sensitivity analysis is a technique by which variables in a model are systematically altered to determine the effects of such changes.

³¹ For more information, see *New Faces in New Places: The Changing Geography of American Immigration*, ed. Douglas S. Massey (New York: Russell Sage Foundation, 2008) and William Kandel and John Cromartie, *New Patterns of Hispanic Settlement in Rural America*, Economic Research Service, USDA, Rural Development Research Report No. 99, Washington, DC, May 2004.

³² See CRS Report R41592, *The U.S. Foreign-Born Population: Trends and Selected Characteristics*, by William A. Kandel.

Borjas' Critique of The New Americans

A widely cited and authoritative analysis by George Borjas of Harvard University critiqued assumptions and findings from long-term impact studies found in *The New Americans*.³³ Borjas acknowledged the superior conceptual approach and more complete accounting from analyzing fiscal costs and contributions of the foreign born over their lifetimes. However, he questioned, for several reasons, the finding that admitting a foreign-born person to the United States in 1994 yielded an estimated \$111,000 (in 2010 dollars) net fiscal national surplus over the long run of 300 years (see **Figure 1** and discussion above).

Borjas first questioned the assumption that the federal government, facing fiscal imbalances, would pass substantial tax increases to reduce national debt growth in 2016.³⁴ This assumption, the author contended, automatically incorporated into the analysis a favorable result for the foreign born who, by shouldering their portion of an assumed tax increase, would make themselves more fiscally valuable. According to his own calculations, removing this assumption changed the estimated \$111,000 net fiscal surplus to a \$21,000 net fiscal deficit (in 2010 dollars).

Borjas also critiqued the study's 300-year time frame, which he argued was excessive given widely acknowledged limitations of standard economic forecasts. According to the author's computations, adopting a 50-year time frame from the time a new foreign-born person arrived in the United States reduced the estimated net surplus from \$111,000 to just over \$15,000. A 25-year time frame yielded an estimated \$26,000 deficit.³⁵

Borjas concluded that variations in estimated fiscal impacts found in the research literature stemmed mostly from assumptions about the appropriate time frame, with short-run and long-run estimates each containing inherent flaws. Short-run estimates from *The New Americans* (noted above) suggested that foreign-born households cost each native household between \$166 and \$226 in additional taxes each year (\$231 and \$314 in 2010 dollars). Moreover, according to the author's computations, the long-term estimated fiscal impact in that same study, when computed for a 50-year work-span and annualized, generated an annual fiscal surplus of just \$450 (\$625 in 2010 dollars).³⁶

Academic Studies

The Current Fiscal Impact of Immigrants and Their Descendants: Beyond the Immigrant Household (1998)

The authors of this analysis estimated the fiscal impacts of the foreign born at the national level using a cross-sectional approach not found in many contemporary analyses.³⁷ The methodology adopted represented a conceptual experiment that estimated the fiscal impact of a situation in

³³ George J. Borjas, *Heaven's Door: Immigration Policy and the American Economy* (Princeton, NJ: Princeton University Press), 1999, pp. 105-126; hereinafter referred to as "Borjas, *Heaven's Door*."

³⁴ The specific assumption is "Starting in 2016, and thereafter, fiscal policy will hold the debt/DGP ratio constant at the level of 2016." See Smith and Edmonston, *The New Americans*, p. 325.

³⁵ *Ibid*, p. 343.

³⁶ Borjas, *Heaven's Door*, p. 126.

³⁷ Lee and Miller, 1998, pp.183-205.

which all the foreign born were removed from the calculations in a given year, along with all of their descendents. The data, taken from the 1994 and 1995 Current Population Surveys, represented 40.4 million persons, including 22.8 million foreign-born individuals alive in 1994, their 13.8 million surviving U.S.-born children, and their 3.9 million grandchildren (born to U.S.-born children).³⁸ The latter two categories, children and grandchildren, were referred to as “concurrent descendents.”

Four categories of public expenditures were estimated: (1) public goods, the cost of which does not increase with population size (e.g., national defense, publicly funded medical research); (2) public debt servicing; (3) congestible public goods, the cost of which does increase with population growth (e.g., roads, police, libraries); and (4) transfer programs (e.g., Social Security, Medicare, food stamps). The authors obtained most of their data for their estimates from variables available in the CPS data. Other variables were constructed, including individuals’ share of corporate and business taxes, sales taxes, and property taxes from rental units. This yielded a detailed accounting, for state and local governments and for the federal government, of fiscal revenues and costs for many public expenditures and taxes.

The authors estimated that for states and localities, the foreign born and their concurrent descendents in 1994 generated \$88.9 billion in public service costs and \$61.5 billion in tax revenues, for an estimated net fiscal deficit of \$27.4 billion in 1994 dollars. Translating that into per-capita numbers yielded a net fiscal deficit of \$680 per foreign-born individual and concurrent descendent versus a \$200 surplus per native-born individual and concurrent descendent. According to the study, the difference stemmed from two sources: the foreign-born population’s greater costs for public education, bilingual education, noninstitutional Medicaid, and other public health services; and their lower per capita tax payments. At the federal level, however, the foreign born and their concurrent descendents paid an estimated \$153.4 billion in taxes and consumed \$102.5 billion in public services, for an estimated net fiscal surplus of \$50.9 billion. Translating that into per-capita numbers yielded an estimated net fiscal surplus of \$1,260 per foreign-born individual or concurrent descendent versus \$1,340 per native-born individual.³⁹

Table 3. Net Fiscal Impact of Different Foreign-Born Populations, 1994
(billions of 1994 dollars)

Definition	Net Impact	Federal Impact	State and Local Impact
Foreign born only	\$32.4	\$28.2	\$4.2
Foreign-born households	-\$13.3	\$16.0	-\$29.3
Foreign born and concurrent children only	\$29.5	\$48.9	-\$19.3
Foreign born and all concurrent descendents (children and grandchildren)	\$23.5	\$50.9	-\$27.4

³⁸ By contrast, there were 38.0 million foreign-born individuals alive in 2008 and 16.2 million children with at least one foreign-born parent. CRS Report R41592, *The U.S. Foreign-Born Population: Trends and Selected Characteristics*, by William A. Kandel.

³⁹ Many of these cost estimates became invalid following passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) which statutorily barred many legal permanent residents and other noncitizens from many federal assistance programs.

Source: Ronald D. Lee and Timothy W. Miller, “The Current Fiscal Impact of Immigrants and Their Descendents: Beyond the Immigrant Household,” in *The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration*, James P. Smith and Barry Edmonston, eds., (Washington, DC: National Research Council, 1998), p. 198.

Table 3 illustrates how these estimated net fiscal impacts changed according to who was included in the definition of foreign-born population. In the first formulation of this conceptual experiment, the foreign born by themselves represent a mostly working-age population with no children and yielded estimated fiscal surpluses at all levels. In the second formulation, foreign-born households include co-residing U.S.-born (citizen) children, who, being mostly school-aged, caused the estimated net fiscal impact to change from a \$32.4 billion surplus to a \$13.3 billion deficit. According to the authors, state and local costs for public education accounted for most of the difference in estimates between the first and second formulations. The study’s third formulation, of the foreign born and all of their children, regardless of where the latter resided, yielded a net fiscal surplus of \$29.5 billion, reflecting the tax contributions of the adult children of the foreign born. Finally, the study’s fourth formulation, which included the foreign born, their children, and their grandchildren, reduced the estimated net fiscal surplus from \$29.5 billion to \$23.5 billion while increasing the estimated deficit on states and localities from \$19.3 billion to \$27.4 billion.

Table 4. Per Capita Net Fiscal Impact of Foreign Born and Concurrent Dependents on Native Residents, in “High Immigration” States and in All Other States, 1994

	Net Impact	Net impact for Federal Taxes	Net impact for State and Local Taxes
All 50 states	\$107	\$231	-\$124
High immigration states	-\$49	\$231	-\$280
All other states	\$182	\$231	-\$49

Source: Ronald D. Lee and Timothy W. Miller, “The Current Fiscal Impact of Immigrants and Their Descendents: Beyond the Immigrant Household,” in *The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration*, James P. Smith and Barry Edmonston, eds., (Washington, DC: National Research Council, 1998), p.196.

Notes: This table gives per-capita fiscal impacts in 1994 measured in 1994 dollars. High immigration states included California, Texas, New York, Florida, Illinois, and New Jersey.

According to the study, impacts differed for the six high immigration states, which possessed roughly three-fourths of all foreign-born persons and their concurrent descendents, and all other U.S. states. **Table 4** presents the estimated net fiscal impacts on just native residents if the foreign born and their concurrent descendents were to have vanished in 1994. The study estimated that throughout the country, each native resident would have had to pay an average of \$107 more in taxes or suffer an equivalent reduction in public services and benefits. However, in high immigration states, native residents would have received a net benefit of \$49 based largely on reduced state and local fiscal impacts, while native residents in all other states would have had to pay \$182 more in taxes.

Analyzing the Fiscal Impact of U.S. Immigration (1999)

In this national-level empirical analysis, the authors used a methodology known as “generational accounting” to overcome one of the primary shortcomings of static, cross-sectional approaches that compare fiscal revenues and costs across a single year.⁴⁰ They evaluated the long-term fiscal impact of the foreign-born population projected as of 2000, not only quantifying the outcome as a net surplus or deficit, but also estimating the impact relative to the overall fiscal imbalance (i.e., the national budget deficit). The analysis did not distinguish legal status and it used a number of macroeconomic assumptions related to variables in the model such as estimated taxes paid over the lifetimes of the foreign born, public goods and services consumed by the foreign born, length of time the foreign born spent in the host countries, and population growth, among others. Total fiscal impacts reflected the discounted difference between tax payments and income transfers that the foreign born received while in the host country.

The analysis produced three different sets of results reflecting six different scenarios. First, results were estimated for contemporary newborn native residents and for future generations of native residents. Second, two immigration policy scenarios were used and involved either contemporary immigration policies⁴¹ or a hypothetical extreme policy that halted all immigration starting in the year 2000. Third, the analysis differentiated two policy environments, one in which current taxpayers addressed current fiscal imbalances, and another in which that responsibility was passed to future generations.⁴²

Based on the results of their econometric model, the authors concluded that estimates of the fiscal impact of the foreign born depended on whether the burden of current fiscal imbalances was borne by future generations or by current taxpayers through an immediate imposition of fiscal policy. If future generations were responsible for addressing the fiscal imbalance, then eliminating immigration in 2000 would hurt native residents, raising the net fiscal burden by an estimated average present value of 3.7%. This result suggested that foreign born residents assisted native residents in restoring fiscal balance. If, on the other hand, the burden of current fiscal imbalances were borne by current taxpayers, then halting immigration in 2000 benefitted future generations, reducing the net fiscal burden by an estimated average present value of 5.4%. This finding suggested that immigration has two opposing impacts; it can assist in reducing current fiscal imbalances as well as generate costs for future taxpayers. The authors also concluded that the impact of the foreign born on the fiscal balance was “extremely small” relative to the size of the imbalance, suggesting that U.S. immigration was neither a cause nor cure for national-level budget imbalances.

⁴⁰ Alan J. Auerbach and Philip Oreopoulos, “Analyzing the Fiscal Impact of U.S. Immigration,” *The American Economic Review*, vol. 89, no. 2 (May 1999), pp. 176-180.

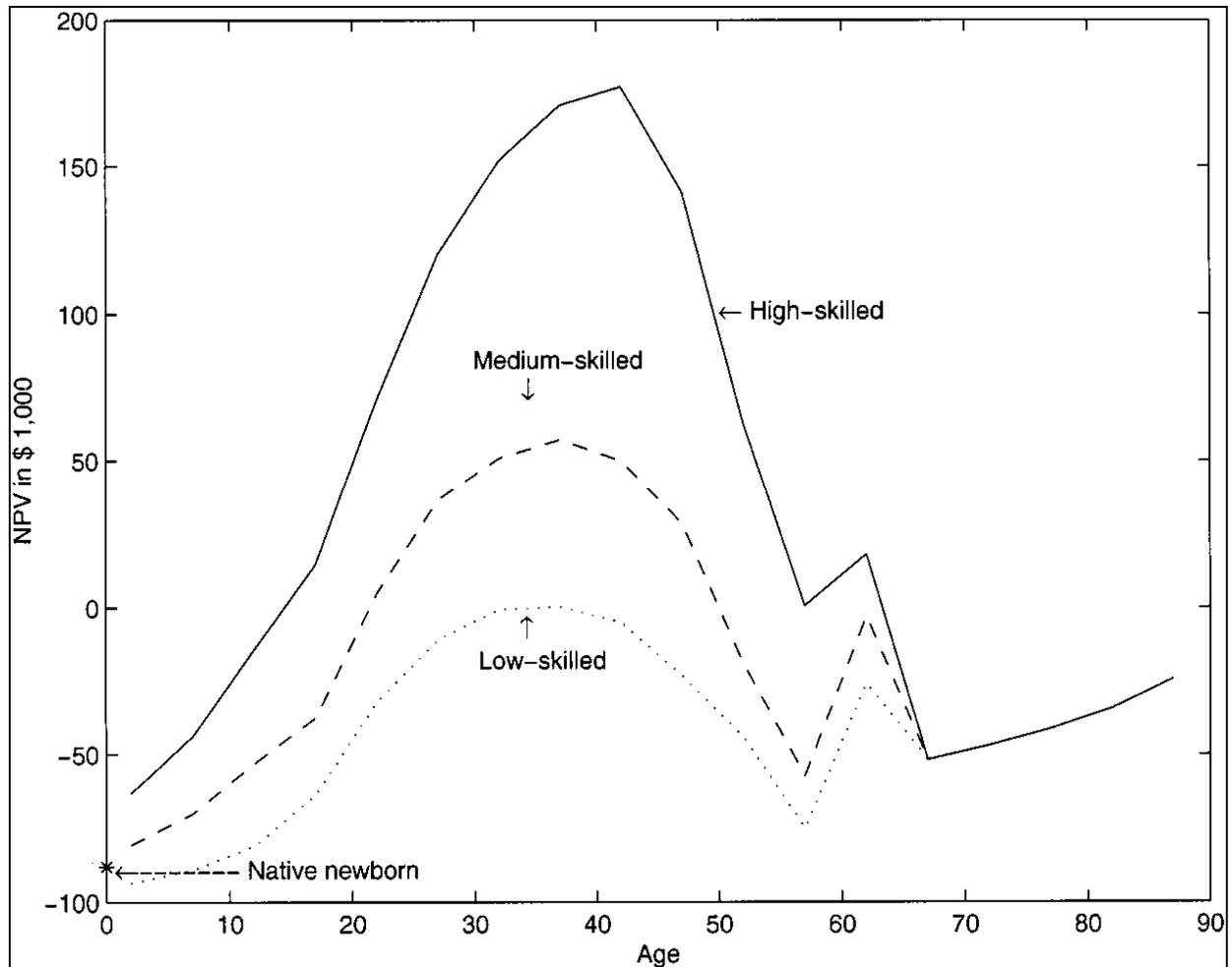
⁴¹ Contemporary immigration policies in 1999 resemble current policies in 2011 in terms of numerical limits for legal immigration and prohibitions against illegal immigration. For more information, see CRS Report RL32235, *U.S. Immigration Policy on Permanent Admissions*, by Ruth Ellen Wasem.

⁴² Fiscal imbalances refer to national debt growth, exacerbated by U.S. population aging. The authors incorporated into their model the assumption that this issue would be addressed by some combination of public service reductions and tax increases.

Sustaining Fiscal Policy through Immigration (2000)

This analysis considered how changing U.S. immigration policy could alter the nation's fiscal condition in light of impending retirements and public service demands of baby boomers.⁴³ The author used a "calibrated general equilibrium overlapping generations" model that accounted for the impacts of changing wages and interest rates resulting from changes in immigration inflows.⁴⁴

Figure 2. Discounted Net Fiscal Impact of Admitting One New Immigrant, Conditional on Age and Skills, 1993



Source: Kjetil Storesletten, "Sustaining Fiscal Policy through Immigration," *The Journal of Political Economy*, vol. 108, no. 2 (April 2000), p. 316.

Notes: Values in the text refer to summed net present values (NPV) for each age across the total age-span displayed.

⁴³ Kjetil Storesletten, "Sustaining Fiscal Policy through Immigration," *The Journal of Political Economy*, vol. 108, no. 2 (April 2000), pp. 300-323.

⁴⁴ General equilibrium models analyze economic variables in an economy with several interacting markets that equilibrate at one set of prices. The model in this paper represents an extension of general equilibrium models because it incorporated elements to compute long term impacts of changes in foreign-born population size.

The author derived national-level conclusions based on individual-level computations that estimated the net present value (NPV) of foreign-born persons equal to the discounted value of future tax receipts minus future public expenditures (**Figure 2**). His computations yielded average NPVs (in 1993 dollars) of \$96,000, -\$2,000, and -\$36,000 respectively for high-, medium-, and low-skilled legal foreign born, irrespective of age.⁴⁵ High-skilled foreign born, ages 40-44, who did not incur taxpayer-sponsored public education costs, yielded the highest NPV of \$177,000. The family migration alternative scenario, which included the existing children of highly skilled foreign born, yielded a lower NPV of \$140,000. To provide context, the author also estimated the NPV of a newborn native-born resident (-\$88,000) and a new unauthorized alien (-\$54,000).

According to the author, the analysis implied that selective immigration policies could reduce or eliminate the need for anticipated fiscal reforms—tax hikes and/or spending cuts—associated with baby boomer aging. For that to occur, however, foreign-born composition and the number of foreign born admitted would have to change substantially from existing policies. Specifically, the author posited that annual immigration would have to change from 0.44% of the U.S. population to 0.62%, or from 1.1 million to 1.6 million persons (as of 2000). Moreover, all new foreign born would have to be between 40 and 44 years old and highly skilled. Acknowledging the infeasibility of such an immigration policy, the author proposed expanding annual immigration flows even further to 1.08% of the U.S. population, or 2,700,000 persons, consisting entirely of families headed by high-skilled foreign-born individuals who were between the ages of 45 and 49.

Are Immigrants a Drain on the Public Fisc? State and Local Impacts in New Jersey (2002)

In this analysis, the authors assessed the degree to which foreign-born status or nativity affected the degree to which individuals paid taxes, consumed public services, and thereby generated a deficit or surplus for New Jersey taxpayers.⁴⁶ While New Jersey possesses characteristics that make the study's findings relevant to other states, the authors also noted that the state's foreign born originate from more countries and are more educated than foreign-born populations of other states. Foreign-born households were defined as those headed by foreign-born individuals, either naturalized citizens or noncitizens. The study relied on 1990 Census data and used multivariate regression analysis to isolate the impact of being foreign born, after controlling for other standard socioeconomic characteristics that influence tax contributions and public service consumption.

The authors found that foreign-born households in New Jersey paid higher average taxes and consumed fewer state government services than statistically equivalent native households. Some differences by region of origin emerged. For instance, Latin American immigrant households consumed less in state government services than comparable European households. At the local level, being foreign born was found to have no statistical effect on local benefit use but generated a net surplus for local tax contributions. The authors concluded from their analysis that if foreign-born households possessed the average characteristics of native households, they would consume fewer state-level services and the same quantity of local services as native households.

⁴⁵ Immigrant skills were operationalized as completed education. Low, medium, and high skills correspond, respectively to high school or less; more than high school but less than a bachelor's degree; and a bachelor's degree or more. An analysis of the foreign-born population from the 1990 Decennial Census allocates it into these three groups in roughly equal proportions.

⁴⁶ Deborah L. Garvey, Thomas J. Espenshade, and James M. Scully, "Are Immigrants a Drain on the Public Fisc? State and Local Impacts of New Jersey," *Social Science Quarterly*, vol. 83, no. 2 (June 2002), pp. 537-553.

The Fiscal Impact of Immigration on the Advanced Economies (2008)

This paper reviewed the academic literature on estimation of fiscal impacts of immigration in advanced economies, mostly in Europe and the United States.⁴⁷ The author found that while the highly skilled foreign born made net fiscal contributions, the unskilled foreign born imposed net costs to native taxpayers. However, the unskilled foreign born could also be net fiscal contributors provided they did not settle in host countries and used public services sparingly. Most empirical studies reviewed found relatively minor fiscal impacts, typically within the range of +/-1% of Gross Domestic Product (GDP), a result that held up across a variety of methodologies and countries.

Economic Impacts of Immigration: A Survey (2011)

In this review of the economic literature, the authors surveyed studies that evaluated the impact of immigration on host countries' public finances.⁴⁸ According to the authors, findings from initial studies conducted in the United States during the 1960s and 1970s suggested that foreign-born families used public social services less frequently than comparable native families.⁴⁹ Subsequent studies detected a substantial increase in foreign born use of public services beginning in the 1970s, a shift found at all age levels and attributed to the weaker labor market position of more recent foreign born.⁵⁰ According to the authors, different research findings sometimes emerged because of noncomparable emphases on the quantity of public service used by the foreign born versus frequency of public service use. Other differences stemmed from differing assumptions used.⁵¹ Ultimately, the authors found that the academic literature yielded few definitive conclusions and often produced conflicting results on foreign born use of taxpayer funded social services over time as well as the size of their overall fiscal impact. The authors did find consistent evidence that such fiscal impacts were relatively modest compared to nations' GDPs.⁵²

National-Level Policy Studies

The academic studies reviewed above consisted either of empirical experiments, simulations, and quantitative analyses that estimate fiscal impacts, or literature reviews that attempted to summarize findings from a range of academic studies. The policy studies below represent cross-sectional analyses at both the national and state levels.⁵³ They typically estimate fiscal impacts by

⁴⁷ Robert Rowthorn, "The Fiscal Impact of Immigration on the Advanced Economies," *Oxford Review of Economic Policy*, vol. 24, no. 3 (2008), pp. 560-580.

⁴⁸ Sari Pekkala Kerr and William R. Kerr, "Economic Impacts of Immigration: A Survey," National Bureau of Economic Research, *Working Paper 16736*, January 2011; hereinafter referred to as "Kerr and Kerr, 2011."

⁴⁹ See for example, Francine Blau, "The use of transfer payments by immigrants," *Industrial and Labor Relations Review*, vol. 37, no. 2 (1984), pp. 222-239 and Marta Tienda and Leif Jensen, "Immigration and public assistance participation: Dispelling the myth of dependency," *Social Science Research*, vol. 15, no. 4 (1986), pp. 372-400.

⁵⁰ See for example George Borjas and Stephen Trejo, "Immigrant participation in the welfare system," *Industrial and Labor Relations Review*, vol. 44, no. 2 (1991), pp. 195-211 and W-Y. Hu, "Elderly immigrants on welfare," *Journal of Human Resources*, vol. 33, no. 3 (1998), pp. 711-741.

⁵¹ See George Borjas, "The economic benefits from immigration," *Journal of Economic Perspectives*, vol. 9, no. 2 (1995), pp. 3-22, who found that differing assumptions caused estimates of the net impact of immigration to the United States in an unspecified year to range from either a \$16 billion cost to a \$60 billion benefit.

⁵² Kerr and Kerr, 2011, p.21.

⁵³ Cross-sectional studies analyze data at one point in time, such as in a given year. By contrast, longitudinal studies (continued...)

tabulating estimated costs of providing the foreign born with public services and subtracting this amount from their estimated tax contributions.

The Fiscal Cost of Low-Skill Immigrants to the U.S. Taxpayer (2007)

This national-level analysis examined the fiscal impact of households headed by foreign-born persons with less than a high school diploma, referred to in the paper as “low-skilled immigrant households.”⁵⁴ In FY2004, these 4.5 million households represented 15.9 million people, or about 5% of the U.S. population. According to the study, an estimated 59% of such households were headed by persons with legal status, and 41% were headed by unauthorized aliens.⁵⁵

Relying on a variety of federal data sources and published policy reports, the authors estimated over 50 separate expenditures for immediate benefits and services, yielding fiscal costs of the foreign born in greater detail than those found in many other studies reviewed in this report. Fiscal costs were divided into six categories. The first four—“immediate benefits and services”—included (1) direct benefits, including Social Security, Medicare, and smaller transfer programs; (2) means-tested benefits such as cash, housing, social services, and medical care for the poor and near poor; (3) public education expenditures at all education levels; and (4) population-based services, which included police and fire protection, infrastructure, food safety inspection, and public parks. The report discussed, but excluded from its analysis, two additional cost categories, often labeled “pure public goods,” that the authors asserted accrue public expenditure over the longer term from low-skilled immigrant households: (1) interest payments on government debts and expenditures related to public services provided in earlier years; and (2) the cost of “pure public goods” such as national defense, international affairs, scientific research, and some environmental expenditures.

The authors also tallied 31 separate sources of taxes and revenues paid by low-skilled immigrant households. Of these, five—Social Security contributions, sales taxes, federal income taxes, property taxes, and corporate income taxes—accounted for almost 80% of the total paid. The last two were assumed to be passed through to low-skilled workers by landlords and corporations, respectively.

The authors estimated that in FY2004, low-skilled foreign-born households received \$30,160 in immediate benefits and services, roughly three times their estimated tax contributions of \$10,573. The authors estimated that this fiscal gap of \$19,588 between costs and revenues occurred for low-skilled foreign-born households regardless of the household head’s age. Hence, they estimated that over an estimated adult life span of 60 years, from age 18 to age 78, the average lifetime cost to U.S. taxpayers for the presence of each low-skilled foreign-born household was nearly \$1.2 million. Alternatively, extending the annual \$19,588 shortfall to the nation’s 4.5 million low-skilled foreign-born households yields an estimated annual cost to U.S. taxpayers of \$89.1 billion.⁵⁶

(...continued)

analyze data over a period of time, such as between two points in time, or over a lifetime.

⁵⁴ Robert Rector and Christine Kim, *The Fiscal Cost of Low-Skill Immigrants to the U.S. Taxpayer*, The Heritage Foundation, SR-14, Washington, DC, May 21, 2007.

⁵⁵ *Ibid.*, p. 9.

⁵⁶ The report’s methodology and conceptual framework are not without critics. See, for instance, Walter A. Ewing and (continued...)

State-Level Policy Studies

Economic Impact of Immigrants (Minnesota) (2006)

This report evaluated findings from other studies of Minnesota to assess, rather than estimate, fiscal impacts of the foreign born on the state.⁵⁷ Regarding tax revenues, the authors posited that the foreign born are, for the most part, subject to the same tax requirements and eligible for the same tax refunds as native residents. They noted that Minnesota's Department of Revenue does not collect information on immigration status and cannot compute contributions, refunds, and rates of compliance with tax requirements according to nativity or legal status. Hence, while nothing clearly suggested differences in revenue contributions between foreign-born and native residents, the authors acknowledged that this assessment remained ambiguous.

On the cost side, the report presented information on programs for which immigration status was known. Census data indicate that the foreign born made up close to 7% of Minnesota's total population in 2006. According to the report, they accounted for a slightly disproportionate share of some state expenditures, including 10% of food support programs and 11% of state public financial assistance.⁵⁸ According to the authors, the report did not quantify the foreign born consumption of the state's other costs such as public infrastructure because of the difficulty attributing consumption patterns to particular groups. Moreover, at the time the report was issued, there were no comprehensive analyses of fiscal impacts of the foreign born on the state from which to cite additional figures or findings. The authors acknowledged studies done on the short-term fiscal impacts of other states but chose to highlight conclusions from *The New Americans* because of its estimation of long-term impacts of the foreign born.

Minnesota differs from many other states because its foreign-born population includes a sizeable share of refugees. According to the report, refugees made up half of the state's new foreign born in 2004 and 44% of all noncitizens receiving public health care benefits. The authors pointed to research indicating that refugees have higher levels of public service consumption than other foreign born⁵⁹ and that over the long term, refugees' earnings, while initially lower, eventually surpass those of economic migrants.⁶⁰

Citing the findings of *The New Americans*, the authors concluded

There is little compelling evidence to suggest that the impacts of Minnesota's immigrants on taxpayers would be less positive than those suggested by such national analyses. Minnesota's

(...continued)

Benjamin Johnson, *Dollars without Sense: Underestimating the Value of Less-Educated Workers*, Immigration Policy Center, Policy Brief, Washington, DC, May 2007.

⁵⁷ Program Evaluation Division, Office of the Legislative Auditor, State of Minnesota, *Economic Impact of Immigrants*, St. Paul, MN, May 2006.

⁵⁸ Minnesota Office of the Legislative Auditor, *Public Health Care Eligibility Determination for Noncitizens*, St. Paul, MN, April 2006.

⁵⁹ Michael Fix and Jeffery S. Passel, *Immigration and Immigrants: Setting the Record Straight* (Washington, DC: Urban Institute, 1994).

⁶⁰ Economic migrants refer to individuals who migrate primarily for economic reasons. For more information, see Kalena Cortes, *Are Refugees Different from Economic Immigrants? Some Empirical Evidence on the Heterogeneity of Immigrant Groups in the United States*, Institute for the Study of Labor Discussion Paper 1063, March 2004.

immigrants tend to be somewhat younger and better educated than immigrants nationally, suggesting greater potential for earnings and tax revenues over time. The long-term impact of immigrants on taxpayers depends considerably on the earnings of immigrants' children and grandchildren, and this may depend on their success in Minnesota's schools.

Civic Contributions: Taxes Paid by Immigrants in the Washington, DC, Metropolitan Area (2006)

This report examined taxes paid by the foreign born in the Washington, DC, metropolitan area, which includes the District of Columbia and portions of suburban Maryland and Northern Virginia.⁶¹ It differs from other studies presented in this review by its exclusive focus and detailed analysis of foreign-born persons' tax contributions, without an analysis of their fiscal costs. According to the report, the Washington, DC, metropolitan area is relatively affluent, possesses a strong economy, and is home to many highly skilled and highly educated foreign born. The report also noted that the area's 1.16 million foreign-born residents made up 20% of the area's population in 2004, compared with the national foreign-born proportion of 12%.⁶²

According to the report, foreign-born households contributed an estimated \$9.8 billion in taxes in 1999, representing 18% of all taxes paid.⁶³ Federal taxes accounted for almost three-fourths of all taxes paid by both foreign-born and native households. Foreign-born households in the Washington, DC, metropolitan area had relatively lower average incomes and paid an average of 28% of their incomes in taxes in 1999-2000, compared with 31% for native households. Differences, however, appeared at both ends of the income range, with foreign-born households in the highest earning groups paying a greater share of their incomes in taxes than native households, and those in the lowest earning groups paying a smaller share. According to the report, taxes paid by foreign-born households were positively correlated with naturalized citizenship status,⁶⁴ educational attainment, English language proficiency, and household origins from most regions of the world except Central America and sub-Saharan Africa.⁶⁵

A Profile of Immigrants in Arkansas (2007)

This report's authors used 1990 and 2000 Census data to estimate economic and fiscal impacts of Arkansas' foreign-born population on the state in 2004.⁶⁶ The report, which did not distinguish between legal foreign born and unauthorized aliens, estimated that the foreign born that year numbered 123,000, or 4.5% of the state's 2004 population. After accounting for money that foreign nationals sent back to their countries of origin (remittances), savings, and interest

⁶¹ Randy Capps, Everett Henderson, and Jeffrey S. Passel, et al., *Civic Contributions: Taxes Paid by Immigrants in the Washington, DC, Metropolitan Area*, The Urban Institute, Washington, DC, May 2006.

⁶² U.S. Census Bureau, 2004 American Community Survey data, obtained from the 2007 Statistical Abstract of the United States, <http://www.census.gov/prod/2006pubs/07statab/pop.pdf>.

⁶³ The report uses 2000 Census data which collects information on income and taxes from 1999. The authors note that this 18% figure is mostly likely an underestimate, given the Washington DC metropolitan area's foreign-born population growth from roughly 850,000 in 1999 to 1,160,000 in 2004.

⁶⁴ Naturalization is the legal process by which legal permanent residents become U.S. citizens.

⁶⁵ Foreign-born residents from most regions except Central America and sub-Saharan Africa contributed comparable taxes as their native counterparts.

⁶⁶ John D. Kasarda, James H. Johnson, Jr., Stephen J. Appold, et al., *A Profile of Immigrants in Arkansas: Volume 2: Impacts on the Arkansas Economy*, Winthrop Rockefeller Foundation, Washington, DC, April, 2007.

payments, the authors estimated that the total economic impact of the foreign-born population amounted to a \$2.9 billion surplus through the effects of its purchasing power.

Estimated expenditures for public services in 2004 were computed for the foreign born share of K-12 public education (\$186 million), health care (\$37 million), and criminal justice expenditures (\$15 million), for a total of \$237 million.⁶⁷ The authors estimated 2004 state income tax revenues at \$47 million, corporate income tax contributions at \$5 million, and property tax contributions at \$30 million, yielding a total estimated tax contribution by the foreign born of \$82 million. The authors also estimated that Arkansas' foreign-born population paid \$111 million in sales and motor vehicle use taxes. Taxes collected by the state as an indirect result of foreign born consumer spending were estimated at \$47 million for income and property taxes paid by businesses, and \$17 million for income, property, and consumer taxes paid by the employees of those same businesses. In sum, Arkansas' foreign born contributed an estimated \$257 million in direct and indirect tax contributions to the state.

After accounting for education, health care, and corrections costs, the authors estimated the fiscal impact to the state's budget as a \$19 million net surplus, roughly \$158 per foreign-born person. The report also emphasized the geographic concentration of economic benefits among four counties, the contribution the foreign born made on the state's manufacturing competitiveness, and the inability of localities to completely tap immigrants' purchasing power by marketing their goods and services to them.

Immigrants in Florida: Characteristics and Contributions (2007)

This study estimated and compared taxes contributed by and economic benefits received from foreign-born and native residents in Florida.⁶⁸ Among the foreign born, no distinction was made between naturalized citizens, legal permanent residents, noncitizen aliens, and unauthorized aliens. The report focused exclusively on taxes paid and benefits (transfer payments) received annually for the period between 2002 and 2004. The authors did not evaluate costs of public services, such as education, health care, or criminal justice services, used by the foreign born for two reasons: the complexity of estimating the cost for all public services used (e.g., miles driven on roads, library services) and the explicit perspective of the authors who viewed education and health spending as investments rather than costs. The authors used data from the CPS Annual Social and Economic supplement (ASEC) that was incorporated into a U.S. Census Bureau tax return simulation model to estimate contributions from income taxes, FICA withholdings, and property taxes. To estimate sales taxes paid, the authors used an income-based model devised by the Institute on Taxation and Economic Policy. The resulting estimates indicated that the foreign born in Florida contributed \$3,314 per capita in federal and FICA taxes compared to \$3,554 for native residents.

⁶⁷ Education spending was estimated as the foreign-born proportion of the student population (6.1%) times the total state education spending after federal transfers of \$3.1 billion. Health care costs were estimated using data from Centers for Medicare and Medicaid Services and the Medical Expenditure Panel Study on health service payments by race and ethnicity, multiplied by estimates of the foreign-born population in each racial and ethnic group. Criminal justice expenditures were estimated using Census of Government data on state and local expenditures for corrections, police protection, and the judiciary, applied to the proportion of the foreign born in Arkansas prisons and jails. Summed values differ slightly from the total cited due to rounding.

⁶⁸ Emily Eisenhauer, Yue Zhang, and Cynthia S. Hernandez, et al., *Immigrants in Florida: Characteristics and Contributions*, Research Institute for Social and Economic Policy (RISEP), Florida International University, May 21, 2007.

To estimate property taxes in the CPS, the Census Bureau statistically applies data from the American Household Survey. According to the authors, these data indicated that Florida foreign-born and native residents who were homeowners paid \$388 and \$448, respectively, in property taxes. However, a greater proportion of the foreign born (34%) than native residents (21%) in Florida rent rather than own, requiring additional estimates to account for indirect property tax contributions. To do so, the authors modeled income, property, and sales tax contributions based on income rather than homeownership. Including these estimates increased estimated per capita property tax contributions of foreign-born and native residents to \$421 and \$528, respectively. Using this model, the authors also estimated sales tax contributions for foreign-born and native residents at \$1,020 and \$1,180, respectively.

To estimate receipts of transfer payment benefits, including cash benefits and other public assistance, the authors relied on the ASEC, which includes information on Social Security payments, Supplemental Security Income, disability income, veterans' benefits, unemployment compensation, Temporary Assistance to Needy Families (TANF), food stamps, housing subsidies, and energy assistance. The authors estimated that the foreign born received \$1,619 in these public cash benefits and public assistance grants compared with \$2,218 received by native residents.⁶⁹ The authors also estimated the market value of Medicare and Medicaid benefits received. Foreign-born residents received an average of \$1,255 in Medicare and \$385 in Medicaid compared with \$1,331 and \$324, respectively, for native residents.

Summing all tax estimates yields a total estimated per-capita tax contribution—from federal income, FICA, property, and sales taxes—of \$4,756 for foreign-born residents compared to \$5,262 for native residents, a difference of \$506 or 11%.⁷⁰ Summing all cash benefits and public assistance yields a total estimated per-capita public benefits receipt of \$3,259 for foreign-born residents and \$3,873 for native residents. The final net estimated difference between taxes paid and benefits received was an estimated positive contribution of \$1,497 for foreign-born residents and \$1,388 for native residents.⁷¹

The Impact of Immigration on Indiana (2007)

This study estimated foreign-born residents' state and local tax contributions and costs for their public education, direct public assistance, and criminal justice services for one year, 2007.⁷² Unlike many studies that assess the impact of the foreign born as a single group, this analysis estimated fiscal impacts separately for naturalized citizens, legal permanent residents, and unauthorized aliens. The authors used 2007 American Community Survey (ACS) Public Use Micro Survey (PUMS) data and employed a method similar to that used by the Pew Hispanic

⁶⁹ The \$565 difference in Social Security payments accounted for most of the \$599 difference in total benefits received, and stems from the fact that a far greater proportion of Floridians over age 60 are native residents. Persons over age 60 are more likely to be retired than younger persons, and having worked longer, are more likely to receive larger Social Security payments that are based on lifelong contributions to the fund.

⁷⁰ Florida does not have a state income tax.

⁷¹ Results from this study are not strictly comparable with those of other studies that typically estimate costs of the most expensive public services consumed such as public education, emergency medical care, and incarceration. Moreover, the authors did not clarify how U.S. citizen children of foreign-born parents were treated for computing per-capita tax contributions and per-capita benefits received.

⁷² Justin Heet, Courtney Burkey, and John Clark, et al., *The Impact of Immigration on Indiana*, Sagamore Institute, Indianapolis, IN, February 2009.

Center to assign legal status to each of the roughly 3 million cases in the dataset.⁷³ Tax information was either taken from the ACS or estimated using alternative data sources.⁷⁴

Revenues were estimated separately for the following taxes: state income, county income, sales, food and beverage, property, federal income, and federal payroll. According to the analysis, in 2007 naturalized citizens, legal permanent residents, and unauthorized aliens contributed an estimated \$370 million, \$270 million, and \$97 million, respectively, for all taxes except federal income and federal payroll taxes. Including the two latter taxes raised estimated contributions to \$1,163 million, \$902 million, and \$256 million, respectively.

The authors estimated three fiscal expenditures for the foreign born: primary and secondary public education,⁷⁵ criminal justice (which included the cost of incarceration, policing, and court functioning),⁷⁶ and public assistance receipts reported in the ACS (but not including Social Security). Public education costs dominated the three items estimated, accounting for \$453 million, or 89%, of the \$509 million fiscal cost total in 2007. Of this estimated \$453 million expenditure, naturalized citizens, authorized foreign-born residents, and unauthorized aliens generated costs of \$123 million, \$149 million, and \$181 million, respectively.⁷⁷

Subtracting estimated fiscal costs from estimated fiscal revenues yielded an estimate for the net fiscal impact at the state level of \$234 million for naturalized citizens, \$103 million for authorized foreign-born residents, and -\$109 million for unauthorized aliens in 2007. However, when federal tax estimates were included with revenues, the net impact increased to \$1,027 million, \$735 million, and \$50 million, respectively.

The authors addressed several methodological omissions in their report.⁷⁸ For instance, unlike several comparable state-level analyses, the authors did not estimate fiscal impacts of foreign-born residents' health care utilization. They justified this omission by asserting that data limitations made such costs too difficult to estimate and that other evidence suggested such costs would be relatively modest. Similarly, they did not estimate foreign-born residents' revenue contributions for several Indiana taxes, including fuel, "sin,"⁷⁹ and corporate taxes. Citing the need to put some parameters around a potentially onerous and excessive series of estimates on both the cost and revenue side, the authors contended that they produced conservative estimates that would not change substantially with more detailed analyses.

⁷³ See for example, Jeffrey S. Passel and D'Vera Cohn, *A Portrait of Unauthorized Immigrants in the United States*, Pew Hispanic Center, Washington, DC, April 14, 2009. This method uses Current Population Survey data from the Census Bureau to assign a legal status to each case based upon individual characteristics.

⁷⁴ For more information on this and other methodologies employed in this analysis, see Justin Heet, *The methodology of Sagamore Institute for Policy Research's estimates of the unauthorized and authorized immigrant population*, Appendix to Sagamore Institute's *The Impact of Immigration on Indiana*, Indianapolis, IN, 2009.

⁷⁵ Ibid. For education, the authors used school district per-pupil attendance costs data from the Indiana Department of Education and applied them based on school attendance information in the ACS.

⁷⁶ For criminal justice/incarceration costs, the authors identified individuals living in institutional settings using the ACS and applied FBI government expenditure data based on a ratio between incarcerated and institutionalized persons by age. For more information, see Heet, 2009.

⁷⁷ Differences in expenditures were explained entirely by variation in population size of student groups, not by legal status per se.

⁷⁸ Ibid, Chapter VII, pp.5-6.

⁷⁹ Sin taxes typically refer to state-sponsored taxes added to products or services viewed as vices, such as alcohol, tobacco, and gambling.

Immigrants in Arizona: Fiscal and Economic Impacts (2008)

This report estimated costs for providing critical public services to foreign-born residents in Arizona in 2004.⁸⁰ It also estimated their tax contributions as well as other economic benefits not discussed herein. The author relied on the IMPLAN economic impact assessment model to compute estimated fiscal impacts.⁸¹ The report estimated these impacts for all foreign-born residents, distinguishing only between naturalized citizens and noncitizens. It concluded that foreign-born residents' total estimated state revenue contributions of \$2.4 billion exceeded the estimated \$1.4 billion in costs to provide education, health care, and law enforcement services.

Costs to the state in 2004 were estimated as follows. The analysis used English Language Learner (ELL) enrollment to proxy foreign-born children in public schools. Such ELL programs cost the state an estimated \$540 million. Note that this figure includes only ELL program costs and excludes all other public education costs. The foreign born accounted for an estimated \$150 million in uncompensated health care costs and \$640 million to serve them through Arizona's Medicaid program. Of this total \$790 million figure, \$620 was attributed to noncitizen utilization. Foreign-born residents' incarceration costs in 2004 totaled \$91 million, almost all of which was for noncitizens.

The author estimated total state tax revenues attributable to immigrant workers at \$2.4 billion, with naturalized citizens and noncitizens contributing an estimated \$860 million and \$1.5 billion, respectively. Personal taxes, business taxes, and sales taxes accounted for 15.6%, 41.0%, and 43.4%, respectively, of the total \$2.4 billion in tax revenues generated.

Nebraska's Immigrant Population: Economic and Fiscal Impacts (2008)

This report, which broadly evaluated economic impacts of all foreign born in Nebraska, included an analysis, *Fiscal Contribution and Social Cost Pressures from the Immigrant Population in Nebraska*, that estimated public service costs and tax revenues for the state's foreign-born and native residents.⁸² In 2006, the foreign-born population of 99,500 represented 5.6% of the state's total population of 1.77 million.⁸³ Using 2006 ACS PUMS and other data, the authors estimated that the foreign born contributed \$155 million in property, income, sales, and gasoline taxes in 2006, representing 4.6% of total state revenues from those sources.⁸⁴

⁸⁰ Judith Gans, *Immigrants in Arizona: Fiscal and Economic Impacts*, Udall Center for Studies in Public Policy, The University of Arizona, 2008. In addition to estimating fiscal impacts, the study also estimated the economic impacts of foreign-born residents' consumption, labor force participation, and other economic contributions. Those economic impacts are not discussed in this CRS report.

⁸¹ According to the authors, IMPLAN is "an economic impact assessment modelling system that quantifies the structural relationships among sectors of the economy, tracing flows between producers, intermediate users and final consumers. It calculates the consequences of these flows for incomes, output, employment, and taxes. It is widely used to estimate the impacts of specific "events" on a region's economy." Ibid, p.40.

⁸² Christopher Decker with Jerry Deichert and Lourdes Gouveia, *Nebraska's Immigrant Population: Economic and Fiscal Impacts*, Omaha, NE: University of Nebraska at Omaha, Office of Latino/Latin American Studies, 2008. Other elements in the Nebraska study include impacts of foreign-born residents' consumption expenditures and labor force participation on state and regional economic production.

⁸³ Based on 2006 American Community Survey state profile data obtained from the Census Factfinder website, <http://factfinder.census.gov>.

⁸⁴ Sales and gasoline taxes were estimated based on data from *Consumer Expenditures in 2005*, Report 998, U.S. Department of Labor, US Bureau of Labor Statistics.

In turn, foreign-born residents consumed an estimated \$145 million in food stamps, public assistance, health services,⁸⁵ and public education,⁸⁶ representing 4.3% of state expenditures on these services. Native residents contributed \$3,243 million in tax revenues and consumed \$3,239 million of the same public services, representing 95.4% and 95.7%, respectively, of state total amounts. Foreign-born residents' per-capita revenue contributions and public service consumption, at \$1,554 and \$1,455, respectively, were lower than that of native residents (\$1,944 and \$1,941, respectively), while their ratio of contributions to costs, at 1.07, was slightly higher than that of native residents (1.00).⁸⁷

Massachusetts Immigrants by the Numbers: Demographic Characteristics and Economic Footprint (2009)

This demographic and economic profile of the foreign born in Massachusetts used 2007 ACS data to compare estimates of foreign-born and native residents' revenue contributions and public service costs.⁸⁸ The authors selected only items that could be readily estimated: state, local, sales, excise, and property tax contributions; expenditures for public school enrollment; expenditures for institutionalization in a variety of facilities; and transfer payments for food stamps, public assistance, Supplemental Security Income (SSI), unemployment compensation, and Social Security. Federal income taxes were not estimated. The study found that differences between foreign-born and native residents' tax contributions and public service expenditures and transfer payments were relatively modest compared to the revenues and expenditures themselves.

Foreign-born residents' estimated tax contributions were less than those of native residents, a finding the authors attributed to their relatively lower incomes and wealth. For instance, foreign-born households' lower state tax payments (\$2,700) compared to those of native households (\$3,600) in 2005 were explained by differences in average adjusted gross incomes of \$61,500 versus \$77,000, respectively. The study distinguished between average incomes of "recent" foreign born arriving in the United States between 1997 and 2007 (\$46,146) and those of "established" foreign born arriving earlier (\$70,142) to illustrate the narrowing of the foreign born and native income gap with foreign-born residents' increased experience in the United States. Similar results were found for native residents, established foreign-born residents, and recent foreign-born residents who paid \$3,016, \$2,913, and \$2,431, respectively, in property taxes in 2007.⁸⁹ Estimates of sales and excise taxes indicated that foreign-born households, who made up 15.9% of Massachusetts households in 2006, accounted for 14.5% of the state's sales and excise tax receipts.

⁸⁵ Health expenditures were estimated using both the ACS data and the 200 Medical Expenditure Panel Survey from the U.S. Department of Health and Human Services.

⁸⁶ Based on ACS data and the *Annual Financial Report*, Educational Support Services, Nebraska Department of Education, year not specified.

⁸⁷ Unlike a number of other state-level fiscal studies, incarceration and criminal justice costs were not estimated. While including such costs would have increased the cost of publicly funded services for foreign-born residents, it remains unclear whether foreign-born residents consume a greater or lesser proportion of such public services than native residents in Nebraska.

⁸⁸ The Immigrant Learning Center, Inc., *Massachusetts Immigrants by the Numbers: Demographic Characteristics and Economic Footprint*, Malden, MA, June 2009.

⁸⁹ Property tax estimates for this study include property taxes paid indirectly by renters.

Using data from the following year, the authors estimated that children from foreign-born households, which made up 15.5% of all Massachusetts households in 2007, accounted for 19.1% of all school enrollments. The authors attributed a third of this proportional difference of 3.6% to the relatively younger ages of foreign-born household heads.⁹⁰ If foreign-born households had possessed identical school enrollment rates to those of native households, the authors estimated that 39,000 fewer foreign-born children would have been attending public schools, reducing educational expenditures by an estimated \$440 million, based on an \$11,210 per-pupil cost in the 2005-2006 school year.

Foreign-born residents across all age groups were less likely to reside in mostly taxpayer-funded institutions such as correctional facilities, juvenile facilities, nursing homes, skilled nursing facilities, residential schools, and psychiatric institutions. The authors estimated that had the foreign born been institutionalized at similar rates as natives in 2007, they would have added 5,100 individuals to the state's institutionalized population, at an estimated cost of \$300 million.

The authors' analysis of transfer payments revealed relatively minor differences between foreign-born and native residents, except for Social Security. In 2007, an estimated 8% of all foreign-born households received food stamps (Supplemental Nutrition Assistance Program or SNAP) versus 6.2% of native households. In the same year, an estimated 1.5% of foreign-born residents received an average of \$3,878 per person in public assistance, compared to an estimated 1.4% of native residents who received \$4,006. Between 2005 and 2007, an estimated 3.3% of foreign-born wage-earners received an average of \$5,563 per person each year in unemployment compensation, compared with 2.6% of native wage-earners who received \$5,362. Recent foreign-born residents were less likely (0.5%) than established foreign-born residents (4.7%) to receive unemployment compensation, and the amounts they received were also less, an estimated \$3,031 versus \$5,705. However, for Social Security, an estimated 11.4% of eligible foreign-born residents received an average of \$9,763 per person in 2007, compared to 18.1% of native residents who received \$11,146.⁹¹ In sum, in 2007 16.4% of all foreign-born residents received an estimated average of \$8,674 in total transfer payments compared to 22.3% of all native residents who received \$10,453, a difference in per-capita transfer payments of \$1,779. Most of that difference (78%) stemmed from differences in Social Security receipts.

Studies of the Unauthorized Alien Population⁹²

This section reviews selected studies that examine fiscal impacts to federal, state, and local governments of just the unauthorized alien population. Similar to the section of this report above that reviewed studies of the entire foreign-born population, this section begins by reviewing an authoritative report that reflected a prominent policy debate in the mid-1990s on the fiscal impact of unauthorized aliens. It is followed by policy studies that quantified fiscal impacts of just the

⁹⁰ The authors do not explain what accounts for the other two-thirds difference in proportion enrolled.

⁹¹ This authors do not explain this difference between foreign-born and native residents compared with differences for all other transfer payments receipts. However, other findings in this study indicate that, on average, foreign-born residents are younger and earn lower incomes than native residents. This would explain why they are less likely than native residents to receive Social Security payments and receive lower amounts when they do receive them.

⁹² This section relies substantially on a Congressional Distribution Memorandum, "Cost Estimates of Unauthorized (Illegal) Immigration" by Alison Siskin, May 27, 2007, and subsequently updated as "Estimates of Fiscal Costs and Revenues of Unauthorized Aliens" by Alison Siskin and William Kandel, May 31, 2011.

unauthorized alien population. Only studies with clear explanations of their estimate methodologies were included.

Fiscal impact analysis for unauthorized aliens poses greater challenges than that for all foreign-born persons. Two reasons explain the absence of reliable estimates. First, reliable estimates of public service costs and tax revenues of unauthorized aliens require the following: accurate counts of unauthorized aliens and accurate measures of their socioeconomic characteristics, reliable and complete information on public service utilization and associated costs, and reliable and complete information on tax and withholding revenue generated by unauthorized aliens. Since these data generally do not exist, many studies are based on assumptions of the very items they are trying to estimate. Without additional data, net fiscal impacts of unauthorized aliens remain estimates, with varying and unknown margins of error.

Second, as with research on the total foreign-born population, studies of unauthorized aliens analyze different services and revenues, hindering cross-study comparisons. State and local governments bear much of the cost of providing public services to unauthorized aliens residing in their jurisdictions.⁹³ The most expensive public services are public education, health care, and law enforcement, although such spending for unauthorized aliens often makes up a small proportion of these governments' total spending.

Given these challenges, researchers attempting to quantify the costs and revenues of unauthorized aliens used more circumscribed methodologies. Not all studies estimated both public service costs and revenue contributions. Many studies analyzed limited geographic regions, such as border communities and states, and/or limited their analyses to discrete issues, such as the cost of medical care or criminal justice services. Many relied on published data and quantitative modeling to estimate fiscal impacts. Some overcame the lack of legal status information in conventional data sets by surveying immigrant communities and asking immigration status or by asking local agencies to estimate the cost of public services provided to unauthorized aliens. Other studies used proxies to determine unauthorized status, such as the combination of being foreign-born and earning low wages. Each method has strengths and limitations, and none provided estimates that all researchers accept.

General Accounting Office Review (1995)

In 1994, the U.S. General Accounting Office (GAO), now named the U.S. Government Accountability Office, was commissioned to examine estimates of the net cost of unauthorized aliens. In response, it issued a 1995 report, *Illegal Aliens: National Net Cost Estimates Vary Widely*,⁹⁴ in which it examined 13 studies published between 1984 and 1994 that estimated the net costs of unauthorized aliens. Only three of these studies provided national estimates, which GAO examined in detail. GAO concluded that national studies of the net costs and revenues of

⁹³ The 2005 Economic Report to the President concluded that while unauthorized aliens do not impose a net cost at the federal level, they do at the state and local levels. See Council of Economic Advisors, *Economic Report to the President*, Executive Office of the President, Washington, DC, February 2005, p. 105. Moreover, according to a 2007 Congressional Budget Office (CBO) report, the federal government mandates that state and local governments provide certain services (e.g. public education, Medicaid) to all individuals regardless of legal status or ability to pay. See Congressional Budget Office, *The Impact of Unauthorized Immigrants on the Budgets of State and Local Governments*, Washington, DC, December 2007.

⁹⁴ U.S. General Accounting Office, *Illegal Aliens: National Net Cost Estimates Vary Widely*, GAO/HEHS-95-133, July 1995.

unauthorized aliens in the United States varied considerably, and they were unable to definitively quantify the fiscal impact of unauthorized aliens. The studies examined in the GAO report were (1) “The Costs of Immigration” by Rice University Professor Donald Huddle;⁹⁵ (2) “How Much Do Immigrants Really Cost? A Reappraisal of Huddle’s ‘The Cost of Immigrants’” by the Urban Institute;⁹⁶ and (3) “A Critique of the Urban Institute’s Claims of Cost Free Immigration: Huddle Findings Confirmed,” by Huddle.⁹⁷

In their review of the three studies, GAO found that approaches used to estimate costs were “often based on assumptions whose reasonableness is unknown,” and contended that data limitations prevented a fair assessment of the validity of several assertions made by the researchers. GAO noted that few datasets were available on unauthorized aliens’ use of public services and payment of taxes, and that the three studies used indirect and varying approaches that made them difficult to compare. GAO asserted that small changes in assumptions often yielded large differentials in net estimated costs.

GAO also stated that unauthorized aliens generate revenues that offset some costs governments incur. GAO noted that the studies indicated that many unauthorized aliens “pay taxes, including federal and state income taxes; Social Security tax; and sales, gasoline, and property taxes,” but researchers disagree on the amount of revenues generated and the extent to which they offset government costs. GAO concluded from reviewing all 13 studies initially examined that unauthorized aliens generate more costs than revenues, although the magnitude of those costs was a subject of “continued debate.” Major conclusions of the three more comprehensive studies that GAO reviewed thoroughly in its report are summarized below.

Donald Huddle’s “The Costs of Immigration” (1993)

Huddle’s study, “The Costs of Immigration,” estimated the national net cost of unauthorized aliens to federal, state, and local governments at \$11.9 billion in 1992. Huddle obtained estimates of per-capita tax revenue collected from unauthorized aliens from a 1992 Los Angeles County study⁹⁸ and extrapolated these estimates to arrive at a national estimate of taxes paid by all unauthorized aliens in the United States.

The Urban Institute’s “How Much Do Immigrants Really Cost? A Reappraisal of Huddle’s ‘The Cost of Immigrants’” (1994)

The Urban Institute’s authors acknowledged that Huddle’s approach was theoretically valid. Nonetheless, they argued that because the Los Angeles study underestimated taxes paid by unauthorized aliens, its estimates were not representative of the country as a whole, thus discrediting Huddle’s public service cost estimates. The authors also asserted that Huddle overestimated U.S. worker job displacement. Re-estimating the net cost for unauthorized aliens

⁹⁵ Donald Huddle, *The Cost of Immigration* (Washington, D.C.: Carrying Capacity Network, June 4, 1993).

⁹⁶ Jeffrey Passel, *How Much Do Immigrants Really Cost? A Reappraisal of Huddle’s The Cost of Immigrants* (Washington, D.C.: Urban Institute, 1994).

⁹⁷ Donald Huddle, “A Critique of the Urban Institute’s Claims of Cost Free Immigration: Huddle Findings Confirmed,” *Population and Environment*, vol.16, no. 6 (July 1995).

⁹⁸ Internal Services Division (ISD), *Impact of Undocumented Persons and Other Immigrants on Costs, Revenues and Services in Los Angeles County: A Report Prepared for the County Board of Supervisors*, (Los Angeles County, 1992).

using its own “corrected” assumptions, the Urban Institute authors estimated that unauthorized aliens cost the nation a net \$1.9 billion, considerably lower than Huddle’s \$11.9 billion estimate.

Donald Huddle’s “A Critique of the Urban Institute’s Claims of Cost Free Immigration: Huddle Findings Confirmed” (1995)

Following the Urban Institute review, Huddle updated his analysis, producing a revised estimated net cost of unauthorized aliens of \$19.3 billion in 1993, which not only supported his initial findings but increased the estimated net cost by \$7.4 billion. Central among the differences between Huddle’s and the Urban Institute’s analyses was the treatment of Social Security contributions. The Urban Institute treated such contributions as revenues and included them in their analysis, while Huddle treated them as purchases of future benefits and excluded them from his study.⁹⁹

Federal, State, and Local Policy Studies

Illegal Immigrants in U.S./Mexico Border Counties: Cost of Law Enforcement, Criminal Justice, and Emergency Medical Services (2001)

The United States/Mexico Border Counties Coalition received a grant from the Department of Justice¹⁰⁰ to measure costs to the general funds of all 24 border counties for providing law enforcement, criminal justice, and emergency medical services to unauthorized aliens for FY1999. Since many services were provided to noncitizens without ascertaining immigration status, it was unclear how accurately the data measured the unauthorized alien population.

Four university researchers collected data by conducting site visits and interviewing governing board members, department heads, judicial officials, division heads, county managers, and information management specialists. The Border Patrol and state agencies were consulted. The study used CPS and Census data, border crossing data from the former Immigration and Naturalization Service (INS), Border Patrol apprehension data, newspaper accounts, public documents, congressional hearings, and previous research. It found that border counties in FY1999 spent \$23.3 million in Texas, \$5.0 million in New Mexico, \$24.2 million in Arizona, and \$55.7 million in California to provide law enforcement, criminal justice, and emergency medical services consumed by unauthorized aliens.¹⁰¹ The average per-capita cost for all persons residing in the 24 county region was \$17.31 per year.

⁹⁹ While either treatment is theoretically valid for legal immigrants, unauthorized aliens are prohibited from receiving Social Security benefits while illegally present in the United States. For more information, see CRS Report RL32004, *Social Security Benefits for Noncitizens*, by Dawn Nuschler and Alison Siskin.

¹⁰⁰ The Department of Justice was the federal agency responsible for immigration policy until the establishment of the Department of Homeland Security in 2003.

¹⁰¹ United States/Mexico Border Counties Coalition, *Illegal Immigrants in U.S./Mexico Border Counties: Cost of Law Enforcement, Criminal Justice, and Emergency Medical Services* (Washington, D.C.: United States/Mexico Border Counties Coalition, Feb. 2001).

Medical Emergency: Costs of Uncompensated Care in Southwest Border Counties (2002)

This United States/Mexico Border Counties Coalition study estimated the cost of emergency medical services provided to unauthorized immigrants using statistical modeling.¹⁰² The methodology, referred to as cluster analysis, identified non-border counties that “capture essential characteristics of each border county with respect to the demand for emergency medical services.” The researchers noted the challenge of finding comparable non-border counties that match U.S.-Mexico border counties, given that the latter are unique in many important dimensions, and they acknowledge that this complexity may have impacted their results. After identifying 117 non-border counties with a roughly comparable demand for emergency medical services that could serve as a comparison group, the researchers constructed a linear regression model to express unreimbursed hospital costs as a function of five critical variables, including whether a county lies on the border. Applying the value of the resulting coefficient to average hospital costs yielded an estimate of \$189.6 million spent by all hospitals in the 24 Southwest border counties to provide uncompensated care to unauthorized aliens in 2000. This amount, stemming mostly from emergency medical treatment, represented about 25% of all uncompensated care by these hospitals.

Chicago’s Undocumented Immigrants: An Analysis of Wages, Working Conditions, and Economic Contributions (2002)

This study by the Center for Economic Development at the University of Illinois at Chicago surveyed 1,653 legal and unauthorized aliens living in the Chicago metro area. To capture the unauthorized population in their study, researchers conducted the survey through community-based organizations, yielding a non-random sample.¹⁰³ It remains unclear whether the area surveyed is representative of other geographic areas. The authors asserted that their conclusions related to recent low-wage workers of Latin American and Eastern European ancestry who were most likely to seek services of social-service providers. The estimate was based on the survey data, 2001 CPS data, and INS estimates of the unauthorized alien population living in Illinois in 2001. The study estimated that unauthorized aliens in the Chicago area spent \$2.89 billion annually and generated an additional \$2.56 billion in local spending.¹⁰⁴ Costs from public service utilization were not addressed in the study.

¹⁰² United States/Mexico Border Counties Coalition, *Medical Emergency: Costs of Uncompensated Care in Southwest Border Counties* (Washington, D.C.: United States/Mexico Border Counties Coalition, Sept. 2002).

¹⁰³ Nonrandom surveys are often used to capture data on populations, such as unauthorized aliens, that may be under-represented in more conventional formal surveys.

¹⁰⁴ Chirag Mehta, Nik Theodore, Iliana Mora, and Jennifer Wade, *Chicago’s Undocumented Immigrants: An Analysis of Wages, Working Conditions, and Economic Contributions*, University of Chicago Center for Urban Economic Development, Feb. 2002.

The High Cost of Cheap Labor: Illegal Immigration and the Federal Budget (2004)

This study by the Center for Immigration Studies¹⁰⁵ used CPS and Census data as well as the methodology found in two frequently cited studies of fiscal impacts of immigration: *The New Americans* (1997)¹⁰⁶ and *Immigrants in New York: Their Legal Status, Incomes and Taxes* (1998).¹⁰⁷ The study used households as the unit of analysis, arguing that the household is the primary unit through which taxes are paid and public services used. Given the lack of legal status information in the CPS, the study statistically assigned such status to each individual represented in the CPS dataset based on socioeconomic characteristics such as age, gender, education, and country of origin. Each household's legal status was then designated according to the assigned status of the household head. The study estimated that in FY2002, unauthorized households paid approximately \$4,200 in all forms of federal taxes¹⁰⁸ (e.g., payroll taxes, Medicare taxes, income taxes), but consumed about \$6,950 worth of federal public services, for an average net federal cost of \$2,736.¹⁰⁹

Impact of Illegal Immigration on Minnesota (2005)

The Office of Strategic Planning and Results Management for the State of Minnesota reported that in FY2005, unauthorized aliens cost Minnesota between \$176 million and \$188 million.¹¹⁰ The study used the estimates of the unauthorized population from Pew Hispanic Center researcher Jeffrey Passel.¹¹¹ The study estimated costs of public services to unauthorized aliens but did not consider taxes and other public revenues. To estimate education costs to the state, the study utilized data from the Urban Institute to estimate the number of unauthorized alien children ages 5 to 18 in the state¹¹² and used the average daily operating expenditures per child for the

¹⁰⁵ Steven A. Camarota, *The High Cost of Cheap Labor: Illegal Immigration and the Federal Budget* (Washington, D.C.: Center for Immigration Studies, Aug. 2004).

¹⁰⁶ Smith and Edmonston, 1997.

¹⁰⁷ Jeffrey S. Passel and Rebecca L. Clark, *Immigrants in New York: Their Legal Status, Incomes, and Taxes*, The Urban Institute, Washington, DC, April 1, 1988.

¹⁰⁸ The study estimated that more than half of unauthorized aliens pay payroll taxes and that households headed by unauthorized aliens paid \$1,371 in income taxes, \$1,687 in Social Security taxes, \$446 in Medicare taxes, \$83 in unemployment taxes, \$84 in corporate income taxes (by business owners), and \$541 in excise and other taxes.

¹⁰⁹ Unauthorized household generated the following estimated costs: \$289 for Social Security and Medicare, \$40 for cash welfare programs, \$499 for food assistance programs, \$659 for Medicaid, \$182 for non-cash welfare programs, \$591 for treatment for the uninsured, \$442 for other tax credit and assistance programs, \$371 for education, \$760 for prisons/courts and immigration enforcement, and \$3,115 for other federal costs including infrastructure maintenance and criminal justice services. Note that although unauthorized aliens are ineligible to receive many federal benefits including Medicaid and Medicare, unauthorized alien households, which make up the unit of analysis for this study, may include U.S. citizen children and adults who are eligible for, and do receive, such services. Costs for these programs for unauthorized alien households are "extremely low relative to the rest of the population, but not zero." *The High Cost of Cheap Labor*, p.18.

¹¹⁰ Minnesota Department of Administration, Office of Strategic Planning and Results Management, *The Impact of Illegal Immigration on Minnesota: Costs and Population Trends*, Minnesota Department of Administration, Dec. 8, 2005.

¹¹¹ Jeffrey Passel, *The Size and Characteristics of the Unauthorized Migrant Population in the U.S.: Estimates based on the March 2005 Current Population Survey*, Pew Hispanic Center, Research Report, Washington, DC, March 7, 2006. According to the report, the authors discussed estimates of Minnesota's unauthorized alien population with Dr. Passel and were informed that the state's estimate was 85,000.

¹¹² Michael E. Fix and Jeffery S. Passel, *U.S. Immigration: Trends and Implications for Schools*, (Washington, D.C.: (continued...))

school year. Estimates of the costs to Minnesota's health assistance programs were provided by the Minnesota Department of Health and Human Services. Estimates on incarceration costs were provided by the Minnesota Department of Corrections.

The study concluded that Minnesota spent an estimated \$176 million to \$188 million on public services for unauthorized aliens (after federal reimbursement for some health costs), including \$146 million to \$158 million spent for K-12 public education, \$17 million spent for public assistance health care programs, and \$13 million spent for incarceration.

Undocumented Immigrants in Texas: A Financial Analysis of the Impact to the State Budget and Economy (2006)

This study by the Comptroller of the State of Texas estimated the fiscal impact of unauthorized aliens in Texas using population estimates from the Pew Hispanic Center;¹¹³ reports by the Government Accountability Office (GAO)¹¹⁴ and the Border Counties Coalition; and the state's own information on public service costs and tax revenues.¹¹⁵ The report estimated that unauthorized aliens consumed an estimated \$1.16 billion in state services, including \$968 million for K-12 and public higher education,¹¹⁶ \$58 million for healthcare,¹¹⁷ and \$130.6 million for incarceration.¹¹⁸

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Urban Institute, Jan. 2003).

¹¹³ Pew Hispanic Center, *Estimates of the Unauthorized Migrant Population for States Based on the March 2005 CPS*, (Washington, D.C.: Pew Hispanic Center, Apr. 26, 2006). (Hereafter Pew Hispanic Center, *Estimates of the Unauthorized Migrant Population for States Based on the March 2005 CPS*.)

¹¹⁴ Government Accountability Office, *Information on Criminal Aliens Incarcerated in Federal and State Prisons and Local Jails*, GAO-05-337R, April 7, 2005. (Hereafter GAO, *Information on Criminal Aliens Incarcerated in Federal and State Prisons and Local Jails*.)

¹¹⁵ Carole Keeton Strayhorn, *Undocumented Immigrants in Texas: A Financial Analysis of the Impact to the State Budget and Economy*, Office of the Comptroller of Texas, Dec. 2006.

¹¹⁶ The Texas Comptroller estimated that 135,000 unauthorized alien children attended Texas public schools in the 2004-2005 school year. The Texas Educational Agency reported that for the same school year, local expenditures (excluding federal expenditures) averaged \$7,085 per student. Because the Texas Comptroller was unable to estimate the state's higher education costs for unauthorized aliens classified as Texas residents, she used the estimate of all noncitizens in Texas who qualified for in-state tuition as Texas residents, which included unauthorized aliens as well as legal nonimmigrants (e.g., children of diplomats or their employees). The estimate assumed that all noncitizens who qualified for in-state tuition were unauthorized aliens.

¹¹⁷ This amount included \$38.7 million in emergency Medicaid costs; \$7.2 million for nonimmigrant alien children with special health needs; \$3.9 million for public health agencies; \$3.8 million for mental health services; \$3.4 million for emergency medical services; and about \$1 million for other medical services. According to the report, Texas paid approximately 40% of Medicaid costs for unauthorized aliens, with the federal government paying the other 60%. Most of the expense consists of emergency medical care. In general, not all unauthorized aliens seeking medical care qualify for emergency Medicaid since they must meet the program's eligibility requirements. In addition, not all aliens who receive emergency Medicaid are unlawfully present, although nationally, an estimated 96% of emergency Medicaid recipients are unauthorized aliens. Legal permanent residents who are barred from full Medicaid coverage—by either having arrived during the previous five years or by residing in a state which elected not to provide coverage to them under Medicaid—and nonimmigrants (i.e., aliens in the United States for a specific period of time and purpose) may also qualify for emergency Medicaid. For more information on emergency Medicaid and alien eligibility, see CRS Report R40772, *Noncitizen Health Insurance Coverage and Use of Select Safety-Net Providers*, by Alison Siskin.

¹¹⁸ This estimate was calculated by multiplying the \$40 daily per-capita incarceration cost by the 3,259,818 unauthorized alien inmate days reported by the Texas Department of Criminal Justice (TDCJ). The estimate implies that on any given day during FY2006, there were an average of 8,931 unauthorized aliens incarcerated in Texas (continued...)

To estimate state revenues contributed by unauthorized aliens, the study used estimates from the comptroller's model of the tax impact on households in Texas given a specific average income level.¹¹⁹ The model also relied on Pew estimates of unauthorized aliens in Texas and the income and demographic characteristics of unauthorized aliens nationwide.¹²⁰ Revenue estimates were based on sources that reflected spending by unauthorized aliens such as utility tax revenues, lottery revenues, and revenues from other consumer taxes. The study estimated that in FY2005, unauthorized aliens contributed \$1,581 million, or 3.6%, of state revenues analyzed in the analysis, including \$582 million, or 2.9%, of total school property tax revenues. Subtracting the estimated expenditures of \$1,156 million from the estimated revenues of \$1,581 million yielded an estimated net fiscal surplus of \$425 million at the state level.

At the local level, however, the report found that local governments paid \$1.44 billion in uncompensated health care and law enforcement costs that were not reimbursed by the state.¹²¹ The comptroller estimated that local hospitals spent \$1.3 billion and local jails spent \$141.9 million on services to unauthorized aliens. The study also estimated that unauthorized aliens paid at least \$513 million in local taxes, yielding a net fiscal deficit at the local level of \$929 million. The study concluded that while *state* revenues exceeded state expenditures for unauthorized aliens, *local* governments and hospitals had the reverse experience, with spending on unauthorized aliens exceeding revenues paid.

Immigrants and the Cost of Medical Care (2006)

In this study, researchers extrapolated results from the 1992 Los Angeles County study¹²² to the entire United States. The study used the estimated finding that the total medical costs for the nonelderly unauthorized alien population in Los Angeles County was \$887 million and extrapolated it to the nation. The authors then used additional assumptions taking into account the unique socio-demographic characteristics of Los Angeles County to translate the costs to the national level.

The analysis yielded an estimate of \$1.1 billion spent on medical costs for nonelderly, unauthorized aliens in the United States in 2000, representing 1.3% of all such public spending. Total public, private, and personal medical costs for nonelderly, unauthorized aliens were estimated at \$6.5 billion, or 1.5%, of national public, private, and personal medical costs, a smaller percentage than their 3.2% population share.¹²³ Of this amount, an estimated \$2.4 billion,

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prisons, and during the course of the entire year, TDCJ incarcerated an estimated 13,006 unauthorized alien offenders. However, these computations, which are inferred estimates, cannot be confirmed by TDCJ which lacks accurate data on the number of unauthorized aliens incarcerated in Texas prisons.

¹¹⁹ Texas has no income tax and relies on consumption and business taxes at the state and local levels. Thus, it is more likely to capture tax revenue from workers who do not report their income. Consumption taxes make up a greater proportion of state tax revenue in Texas than in most other states.

¹²⁰ The authors were unable to locate estimates on the income and demographic characteristics of unauthorized aliens in Texas.

¹²¹ Three Central Texas counties track the percent of uninsured unauthorized aliens they serve using a web-based system called the Community Health and Social Services Information System (CHASSIS). In FY2005, 14% of all patients screened with CHASSIS were unauthorized aliens.

¹²² Internal Services Division (ISD), *Impact of Undocumented Persons and Other Immigrants on Costs, Revenues and Services in Los Angeles County: A Report Prepared for the County Board of Supervisors*, (Los Angeles County, 1992).

¹²³ Dana P. Goldman, James P. Smith, and Neeraj Sood, "Immigrants and the Cost of Medical Care," *Health Affairs*, (continued...)

or 36%, was paid by unauthorized aliens, leaving \$4.1 billion in estimated unreimbursed public and private spending on medical care. Of this amount, \$1.1 billion came from public sources. The study concluded by estimating per-household expenditures for medical care for the foreign born, and specifically unauthorized aliens. It computed an estimate of \$56 as the public portion paid by each U.S. household to fund medical care for each nonelderly foreign-born individual. That figure amounted to only \$11 paid by each U.S. household for each nonelderly, unauthorized alien because of lower health care utilization rates and less reliance on public providers.¹²⁴

Cost of Federally Mandated Services to Undocumented Immigrants in Colorado (2006)

This study by the Bell Policy Center used demographic estimates by the Pew Hispanic Center to estimate how much Colorado spent to provide federally mandated services (K-12 education, emergency medical care, and incarceration) to unauthorized aliens.¹²⁵ The authors estimated that Colorado spends approximately \$224.9 million a year on services to unauthorized aliens,¹²⁶ including \$175.6 million on public primary and secondary education, \$31.3 million on emergency Medicaid,¹²⁷ and \$18.0 million on incarceration.¹²⁸

The cost of providing public primary and secondary education was calculated by taking the estimated number of school-aged unauthorized aliens in Colorado and multiplying that by the average cost per student per year in Colorado (\$6,167). To estimate the number of primary and secondary students who were unauthorized alien children in Colorado, the study used figures from the Pew Hispanic Center, which estimated that 16% of the unauthorized alien population in 2005 was under age 18 and that Colorado's unauthorized alien population numbered between 225,000 and 275,000. The study assumed that the age distribution of Colorado's unauthorized alien population was similar to the nation's. Because 28.4% of Colorado's under-18 population was under age 5, the study assumed that 28,480 unauthorized alien children between ages 5 and 17 lived in Colorado. Incarceration costs were calculated by multiplying the daily prisoner incarceration cost by the number of inmate days of "verifiable illegal aliens" for which the state and some Colorado counties received SCAAP funding in 2004.¹²⁹

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vol. 25, no. 6 (November/December 2006), pp. 1700-1708.

¹²⁴ Ibid, p. 1710.

¹²⁵ Rich Jones and Robin Baker, *Costs of Federally Mandated Services to Undocumented Immigrants in Colorado*, (Denver, CO: Bell Policy Center, June 30, 2006).

¹²⁶ These estimates were calculated by using the Pew Hispanic Center's median estimate of 250,000 unauthorized aliens in Colorado as well as its estimate that 16% of all unauthorized aliens nationwide are under age 18.

¹²⁷ This estimate is for calendar year 2004 and represents 50% of the total cost. The federal government reimbursed Colorado for the other half of the costs. As in the 2001 Texas study described above, these payments may cover costs of legally present aliens.

¹²⁸ This estimate is for calendar year 2004.

¹²⁹ The number of "verifiable illegal aliens" inmate days was calculated to be 330,947 and the daily cost was \$72. As previously noted, not all incarcerated unauthorized aliens meet the criteria for SCAAP funding, and not all counties may have submitted requests for reimbursement.

State and Local Taxes Paid in Colorado by Undocumented Immigrants (2006)

In an accompanying study to the one discussed above, the Bell Policy Center estimated state and local tax revenues paid by unauthorized alien households.¹³⁰ The study found that unauthorized alien households paid between \$159 million and \$194 million in state and local sales taxes, income taxes, and property taxes in 2005. Using the finding from their companion study, the authors estimated that the taxes paid by unauthorized alien households compensated for 70% to 86% of state and local governments' costs of providing federally mandated services to unauthorized aliens.

To estimate taxes paid by unauthorized aliens, the researchers used tax data on Colorado provided by the Institute on Taxation and Economic Policy's Microsimulation Tax Model.¹³¹ The study also used estimates by the Pew Hispanic Center on the number of unauthorized aliens living in Colorado, their average household size, and their average income.¹³² The researchers estimated the amount of remittances sent to unauthorized aliens' home countries, and adjusted sales tax estimates downward to account for the effects of remittances on consumer spending.¹³³

The study estimated that in 2005, an unauthorized alien household in Colorado paid an average of \$1,861 in taxes: \$1,265 in sales taxes, \$491 in income taxes, and \$105 in property taxes. It estimated that *all* unauthorized alien households in Colorado paid between \$159 million and \$194 million in taxes, including \$125 million to \$151 million in sales taxes, \$24 million to \$30 million in state income taxes, and \$10 million to \$13 million in property taxes.

Undocumented Workers: Impact on Missouri's Economy (2006)

This policy brief by the Missouri Budget Project (MBP)¹³⁴ used the Pew Hispanic Center's range of estimates of Missouri's unauthorized alien population—35,000 to 65,000 individuals, or 15,285 to 31,707 families—and Pew's national average annual income estimate of \$27,400 for an unauthorized alien family. Applying an unpublished methodology provided by the Institute on Taxation and Economic Policy, MBP estimated sales and property tax payments of unauthorized aliens in 2005 at \$25 million to \$50 million and state income tax payments at \$4 million to \$7 million.

¹³⁰ Rich Jones and Robin Baker, *State and Local Taxes Paid in Colorado by Undocumented Immigrants*, (Denver, CO: Bell Policy Center, June 30, 2006). In this study, the researchers use the term "unauthorized immigrant household," and, as in the Pew study, the term refers to a family in which the household head, or the spouse is an unauthorized alien.

¹³¹ The data used in the tax model is derived from a stratified random sample of approximately 365,000 federal tax returns. For a full description of this model see http://www.itepnet.org/about/ITEP_tax_model_simple.php, visited May 26, 2011.

¹³² These estimates were calculated by using the Pew Hispanic Center's middle estimate of 250,000 unauthorized aliens living in Colorado. In addition, the estimates use the Pew Hispanic Center's estimate that unauthorized alien households contain an average of 2.29 people and earn an average annual income of \$27,400.

¹³³ The researchers estimated that on average adult unauthorized aliens sent home \$1,400 a year, or \$2,800 per unauthorized alien household. This estimate was arrived at by using findings from a study by the Inter-American Development Bank on remittances in Colorado, and assumes that 70% of unauthorized alien households send remittances to their home countries.

¹³⁴ Ruth Ehresman, *Undocumented Workers: Impact on Missouri's Economy*, The Missouri Budget Project, June 21, 2006.

Estimates of public service costs were limited to K-12 education. They were computed by multiplying the estimated unauthorized alien population by the proportion expected to be enrolled in grades K-12, and multiplying that figure by the state's share of public education costs of \$3,000 per child. The authors thus estimated a total state cost of between \$17.5 million and \$32.6 million for educating children of unauthorized alien parents. The authors asserted that remaining education costs borne by local districts were outweighed by unauthorized aliens' contributions to local economies through consumer purchases but provided no supporting evidence.

Undocumented Immigrants in New Mexico: State Tax Contributions and Fiscal Concerns (2006)

This report, by the Fiscal Policy Project of New Mexico Voices for Children (NMVC), an advocacy organization, presents estimates of public education costs and state tax revenues of unauthorized aliens in New Mexico for 2004.¹³⁵ NMVC focused exclusively on education costs. Annual per-student expenditures incurred at the state and local level were estimated at \$7,331, with the remaining difference between that and the total per-pupil cost of \$8,838 covered by the federal government. Using an estimate of 40,000 unauthorized aliens and 6,700 students from the former Immigration and Naturalization Service (INS), the study estimated the state's total education costs at \$49.1 million. Using the Pew Hispanic Center's lower bound estimate of 55,000 unauthorized aliens¹³⁶ and 9,200 students yielded an estimate of \$67.4 million. Both estimates excluded the federal portion of education costs. The study also estimated total state and local tax revenues from unauthorized aliens at between \$50.4 million and \$69.3 million, the higher figure of the range exceeding unauthorized alien children's cost of public education to state and local taxpayers. No other fiscal impacts were estimated in the study.

Unauthorized Immigrants in Iowa: Estimated Tax Contributions and Fiscal Impact (2007)

This study compared tax revenues and social service costs of unauthorized aliens in Iowa in 2007.¹³⁷ The analysis began with a national estimate for the average annual income of an unauthorized family (\$27,400) computed by the Pew Hispanic Center. This figure was then adjusted to account for circumstances facing unauthorized alien families, such as having unrecorded income and remitting income abroad. Using this adjusted income estimate, Iowa's estimated unauthorized alien population size, and an estimate of the proportion of unauthorized aliens whose incomes were formally recorded, the authors computed estimated withholdings for state taxes, state unemployment insurance taxes, Social Security, and Medicare for unauthorized alien employees and their employers. To compute the cost of public education, emergency medical care, and incarceration for unauthorized aliens, the authors applied the costs of such services used by legal immigrant families with similar incomes.

¹³⁵ New Mexico Fiscal Policy Project, New Mexico Voices for Children, *Undocumented Immigrants in New Mexico: State Tax Contributions and Fiscal Concerns*, May 2006.

¹³⁶ Jeffrey S. Passel, *Unauthorized Migrants: Numbers and Characteristics*, Pew Hispanic Center, Background Briefing Prepared for Task Force on Immigration and America's Future, Washington, DC, June 14, 2005.

¹³⁷ Beth Pearson and Michael F. Sheehan, *Undocumented Immigrants in Iowa: Estimated Tax Contributions and Fiscal Impact*, Iowa Policy Project, Mount Vernon, IA, October 2007, pp. 29-30.

The net fiscal impact computed by the study depended on the size of the unauthorized alien population in Iowa, which ranged from an estimated 55,000 to 85,000 persons. That range in turn yielded an estimated range of 24,017 to 37,118 unauthorized alien families, based upon an average nationwide unauthorized family size of 2.29 persons per family.¹³⁸ The authors estimated that the state's unauthorized aliens contributed between \$40 million and \$62 million in state revenue through property, sales, excise, and income taxes, and they cost the state an estimated \$54 million to \$81 million in K-12 public education, emergency medical care, and incarceration services. The authors did not estimate costs of other public services. Unlike legal immigrants, unauthorized aliens in Iowa are ineligible for unemployment benefits, in-state public university tuition, the Iowa children's health insurance program, and child-care assistance. The study, however, estimated that unauthorized aliens contributed between \$52 million and \$81 million in unemployment insurance, Social Security, and Medicare withholdings.¹³⁹

Immigration Issues in Tennessee (2007)

This report issued by the Comptroller of the Treasury in Tennessee used several different data sources to estimate public education, emergency medical care, and law enforcement costs to the state of Tennessee attributed to unauthorized aliens.¹⁴⁰ Tax revenues of unauthorized aliens in the state were not estimated.

The report used the number of students lacking proficiency in English (English Language Learners or ELLs) as a "rough" estimate of the number of unauthorized aliens in elementary and secondary schools in Tennessee.¹⁴¹ Given an estimated 26,707 ELL students, and average statewide operating expenditures per student of \$7,469,¹⁴² the report estimated that state and local funding for ELL students totaled \$32 million in FY2006.¹⁴³ In addition, the study noted that the Tennessee General Assembly appropriated \$14.9 million in FY2007-FY2008 to lower teacher-student ratios in ELL classes.

The state's health care program, TennCare,¹⁴⁴ reportedly spent an estimated \$4.9 million, including \$1.8 million in state funds, on emergency treatment for 1,300 unauthorized aliens in FY2005. In addition, the authors stated that in July 2006, TennCare covered emergency care for 62 unauthorized aliens at a cost of \$1.7 million.¹⁴⁵ Using the number of children who are

¹³⁸ Jeffrey Passel, *The Size and Characteristics of the Unauthorized Migrant Population in the U.S.: Estimates based on the March 2005 Current Population Survey*, Pew Hispanic Center, Research Report, Washington, DC, March 7, 2006.

¹³⁹ As noted above, unauthorized aliens are ineligible for Medicaid and Medicare, and they are also ineligible for Social Security as long as they reside as unauthorized aliens in the United States.

¹⁴⁰ Susan Mattson, Ethel R. Detch, and Douglas Wright, et al., *Immigration Issues in Tennessee*, Tennessee Offices of Research and Education Accountability, Nashville, TN, August 2007.

¹⁴¹ The students in the study include an unknown proportion of legally present aliens because a precise count of unauthorized alien students in elementary and secondary schools was unavailable. The 26,707 English Language Learner (ELL) students made up about 3% of the state's total enrollment in 2006, an increase from 1% in 2000.

¹⁴² The report did not present an overall cost for educating ELL students.

¹⁴³ Of this funding \$5.5 million was from the federal government under Title III of the No Child Left Behind Act for FY2006 for ELL students. For more information on the No Child Left Behind Act, see CRS Report RL33960, *The Elementary and Secondary Education Act, as Amended by the No Child Left Behind Act: A Primer*, by Rebecca R. Skinner.

¹⁴⁴ TennCare is Tennessee's Medicaid program.

¹⁴⁵ It was also noted that unauthorized aliens comprised a small number of individuals compared to the TennCare (continued...)

ineligible for TennCare as a proxy for unauthorized status, the authors estimated that the Tennessee Department of Children's Services spent only about \$8,000 to provide 20 to 25 unauthorized alien children with non-emergency medical care for roughly three months.¹⁴⁶

The report estimated that the Tennessee Department of Corrections spent an average of \$3.2 million annually incarcerating unauthorized aliens.¹⁴⁷ This number was calculated by checking inmate records in July 2006 to determine the number of inmates with detainers requiring that the Department of Homeland Security, Immigration and Customs Enforcement (ICE) be notified before the offender was released.¹⁴⁸ The researchers found 152 inmates with such detainers, and then multiplied that number by 365 days per year and again by the average daily incarceration cost of \$57.33.

Undocumented Immigrants in U.S.-Mexico Border Counties: The Costs of Law Enforcement and Criminal Justice Services (2007)

Similar to their 2001 report (discussed above), the United States/Mexico Border Counties Coalition measured the public cost to all 24 border counties for law enforcement and criminal justice services needed to process unauthorized aliens apprehended on state felonies or multiple misdemeanors, for FY1999 through FY2006.¹⁴⁹ County operations included patrol, investigation, sheriff administrative operations, detention, lower and trial courts, district and county attorneys and clerks, indigent defense, adult probation, and juvenile probation and detention. In some cases the costs also included the use of the judicial system for civil purposes. Researchers collected data by visiting sites and interviewing governing board members, department heads, elected officials, data specialists, budget specialists, judicial officials, and county managers. The Border Patrol was also consulted. Estimates for each department were based on their general fund budgets and the estimated portion of the workload attributable to unauthorized aliens. The researchers noted that county agencies did not track the legal status of clients.¹⁵⁰

The report estimated that between FY1999 and FY2006,¹⁵¹ the 24 border counties spent a cumulative \$1.23 billion on services to process unauthorized criminal aliens through the law enforcement and criminal justice system. For just FY2006, these border counties spent \$191.9

(...continued)

program's total population of 1.2 million people. The authors also cited testimony from a U.S. House of Representatives hearing in Brentwood, TN, that Vanderbilt University Medical Center estimated the annual cost of unreimbursed care provided to unauthorized aliens at \$3.8 million, which made up approximately 5% of the annual uncompensated care costs of \$74 million. Note that these figures are estimates by TennCare, and the methodology to compute them was not published.

¹⁴⁶ The department's total case load was approximately 9,000 children.

¹⁴⁷ The Tennessee Department of Corrections received \$212,435 from the State Criminal Alien Assistance Program (SCAAP) in FY2005.

¹⁴⁸ Detainers are issued to removable aliens, both those legally and illegally present. Most crimes for which a legally present alien would be incarcerated in a state prison provide grounds for deportation.

¹⁴⁹ United States/Mexico Border Counties Coalition, *Undocumented Immigrants in U.S.-Mexico Border Counties: The Costs of Law Enforcement and Criminal Justice Services*, (Washington, D.C.: United States/Mexico Border Counties Coalition, Sept. 2007). (Hereafter United States/Mexico Border Counties Coalition, *Undocumented Immigrants in U.S.-Mexico Border Counties: The Costs of Law Enforcement and Criminal Justice Services*.)

¹⁵⁰ United States/Mexico Border Counties Coalition, *Undocumented Immigrants in U.S.-Mexico Border Counties: The Costs of Law Enforcement and Criminal Justice Services*, p. 9.

¹⁵¹ The fiscal year is from July 1 through June 30.

million, of which Arizona spent \$26.6 million, California \$82.6 million, New Mexico \$7.3 million, and Texas \$75.4 million.

The Fiscal Burden of Illegal Immigration on United States Taxpayers (2010)

This report, undertaken by the Federation for American Immigration Reform (FAIR), estimated the net fiscal impact of unauthorized aliens for the United States at the federal, state, and local levels.¹⁵² The authors estimated net fiscal deficits at the federal (\$19.3 billion) and state and local (\$79.9 billion) levels, yielding an estimated national net fiscal deficit of \$99.2 billion, and representing an estimated \$1,075 cost to each household headed by a U.S. citizen.

The authors of the report began with several assumptions. They estimated the unauthorized alien population at 13 million.¹⁵³ They included in their estimates the fiscal impacts of children born to unauthorized aliens both abroad (1.3 million) and in the United States (3.9 million).¹⁵⁴ The authors assumed a population size of 8.4 million working unauthorized aliens, half of whom worked in the underground economy and did not pay taxes.¹⁵⁵

Based on these initial assumptions, the authors estimated the net fiscal costs at the federal level of the unauthorized population at \$28.8 billion, comprised of public expenditures for education (\$2.1 billion), medical services (\$5.9 billion), justice administration (\$7.8 billion),¹⁵⁶ welfare benefits (\$4.7 billion), and general expenditures (\$8.2 billion).¹⁵⁷ The authors estimated net federal tax receipts from the unauthorized alien population at \$9.5 billion, comprised of Social Security (\$7.0 billion), Medicare (\$1.6 billion), excise and miscellaneous taxes (\$2.5 billion), employer taxes (\$0.6 billion) and income taxes (-\$2.3 billion). This net deficit of \$2.3 billion estimated for income taxes derives from estimated income tax revenues (\$1.6 billion) less claims for the Earned Income Tax Credit (\$1.8 billion) and for the Child Tax Credit (\$2.2 billion).

¹⁵² Jack Martin and Eric A. Ruark, *The Fiscal Burden of Illegal Immigration on United States Taxpayers*, Federation for American Immigration Reform, Washington, DC, July 2010. FAIR describes itself as a “national, nonprofit, public-interest, membership organization” and is known for its promotion of immigration restrictionist policies.

¹⁵³ This estimate exceeded by 2.2 million (20%) the estimates produced by the Department of Homeland Security for 2009 and 2010 and by 1.9 million and 1.8 million the estimates produced by the Pew Hispanic Center for 2009 and 2010, respectively. See Michael Hoefler, Nancy Rytina, and Bryan C. Baker, *Estimates of the Unauthorized Immigrant Population Residing in the United States: January 2010*, Department of Homeland Security, Office of Immigration Statistics, Washington, DC, February 2011 and Jeffrey S. Passel and D’Vera Cohn, *Unauthorized Immigrant Population: National and State Trends, 2010*, Pew Hispanic Center, Washington, DC, February 1, 2011. The authors argued that their figures differed from the DHS estimates because of differences in the classification of aliens in the country less than one year, aliens illegally present when received Temporary Protected Status, and aliens paroled into the country or contesting their removal. Some have also critiqued the inclusion of U.S.-born children in estimates of fiscal impacts of unauthorized aliens on methodological grounds, arguing that such treatment accounts for their current costs as public education consumers but not future revenues as working taxpayers. See for instance, Immigration Policy Center, American Immigration Council, *Statistical Hot Air: FAIR’s USA Report Lacks Credibility*, March 29, 2011.

¹⁵⁴ The population of U.S.-born children of unauthorized aliens has been estimated by the Pew Hispanic Center at 4.0 million. See Jeffrey S. Passel and Paul Taylor, *Unauthorized Immigrants and Their U.S.-Born Children*, Pew Hispanic Center, Washington, DC, August 11, 2010.

¹⁵⁵ This proportion of taxpayers is consistent with those found in other studies, including several cited herein. See Camarota, 2004 and Capps et al 2006.

¹⁵⁶ This figure includes an estimated \$2.5 billion cost for detention and removal. A considerable portion of this expense is not applicable to the unauthorized alien population living in the United States but rather to aliens attempting to enter the United States illegally. A similar qualification applies to the cost estimates for “Residual ICE Functions” (\$2.8 billion), “Coast Guard Operations” (\$0.5 billion), and “National Guard Operations” (\$0.6 billion).

¹⁵⁷ General expenditures refer to other federal services provided for the public and used by unauthorized aliens.

Subtracting all revenues (\$9.5 billion) from costs (\$28.8 billion) yields an estimated net fiscal deficit at the federal level of \$19.3 billion. The authors produced these estimates using basic computational methods that relied on assumptions about what proportions of unauthorized aliens used a particular program or service and multiplying that proportion by the total program cost.¹⁵⁸

The authors computed similar estimates for the unauthorized population at the state and local level. Total costs were estimated at \$83.9 billion, comprised of: K-12 education (\$40.9 billion); services to K-12 students with limited English proficiency (\$8.3 billion); university education (\$0.2 billion); Medicaid (\$8.6 billion); the State Children's Health Insurance Program (CHIP) (\$2.3 billion); justice administration (\$8.7 billion); welfare benefits (\$5.4 billion); and general expenditures (\$9.6 billion). Net state and local tax receipts were estimated at \$4.0 billion, which consisted of property taxes (\$1.4 billion); sales taxes (\$2.3 billion); and income taxes (\$0.3 billion).¹⁵⁹ Subtracting all revenues (\$4.0 billion) from costs (\$83.9 billion) yields an estimated net fiscal deficit at the state and local level of \$79.9 billion. Cost and revenue estimates for each state are presented separately in the FAIR report.¹⁶⁰

Conclusions

As Congress addresses issues related to the current economic downturn and budgetary constraints, attention might be given to the fiscal impacts of changes in immigration policy. While such considerations have been a long-standing interest of Congress, they receive renewed attention in times of fiscal stress because they represent the intersection of two prominent public policy issues: immigration policy governing the categories and numbers of foreign born admitted to the United States, and budget concerns over public service costs. Concerns about public service use by the foreign born partly explain why Congress passed the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), which statutorily barred many legal permanent residents and other noncitizens from many federal assistance programs.

Despite the limited scope, computing net fiscal impacts of either the total foreign-born population or the unauthorized alien population—the difference between taxes paid and the cost of public services consumed—remains challenging. Methodological hurdles limit the degree to which analysts can produce viable results comparable across time periods, geographies, and populations. Obstacles include datasets that have limited information on legal status, differences in the costs and revenues analysts chose to analyze, and the treatment of U.S.-born children. While a number

¹⁵⁸ Some estimates relied on assumptions that were presented but not explained or justified by the authors. For instance, the authors assume that “virtually all of the K-12 student children of [unauthorized] aliens will be eligible for either free or reduced price meals” (p. 26) but do not explain how they arrived at this proportion. In another example, the authors estimate “as many as 3 million low-income families with one or more illegal alien parent and U.S.-born children” eligible for public housing (p. 29), but provide no citations or explanation for their 3 million figure.

¹⁵⁹ The authors mentioned two studies with estimates that differ substantially from that of their report (p.33). In 2004, the Center for Immigration Studies (CIS) estimated that unauthorized aliens paid almost \$16 billion in federal income taxes. See Camarota, 2004, cited herein. In 2006, the IRS estimated that unauthorized aliens paid \$50 billion in federal income taxes between 1996 and 2003, or \$6.25 billion per year. See Statement of The Honorable Mark W. Everson, Commissioner, Internal Revenue Service, testimony before the House Committee on Ways and Means, July 26, 2006.

¹⁶⁰ Separate cost and revenue estimates permit some degree of comparison between estimates in the FAIR report and those of other state-level analyses. For instance, the FAIR report estimated 2010 public service costs for unauthorized aliens in Texas at \$8.9 billion, and tax revenues at \$490 million. By contrast, the Texas Comptroller estimated in 2005 (reported herein) that unauthorized aliens cost the state \$2.6 billion for state and local public services and paid an estimated \$2.9 billion in state and local tax revenues.

of state-level policy studies reviewed in this report began with Pew Hispanic Center estimates of the unauthorized alien population, they diverged in what public service costs and revenue streams were analyzed. In some cases, the lack of data influenced what was quantified. Nevertheless, several recurring themes appeared throughout many of the studies considered in this report.

Studies of both the total foreign-born population and the unauthorized alien population suggest that foreign-born residents' age composition substantially affects their net fiscal impact. The foreign born, like the native born, impose their largest costs on U.S. taxpayers as children through their consumption of public education, and as the elderly through their consumption of public health services from programs like Medicare and their receipt of Social Security retirement benefits. Yet, the majority of the foreign born who come to the United States as young adults and reside permanently pay taxes and contribute to programs like Social Security for most of their working lives. The relatively young ages at arrival for most foreign born help explain why many fiscal impact studies reviewed by the authors of *The New Americans*, for example, found that foreign-born residents over the long term generated net fiscal surpluses.¹⁶¹

Educational attainment of the foreign-born population also remains a critical determinant of net fiscal impacts. Findings from the seminal study, *The New Americans*, which received empirical support from several subsequent academic studies reviewed in this report, bear reiteration. The study estimated that foreign-born residents with less than a high school education created a long-term deficit of \$18,000, while those with more than a high school education generated a long-term surplus of \$275,000.¹⁶² These figures illustrate the degree to which one sophisticated estimation procedure yields substantially different fiscal impacts by varying one key characteristic: education.

Fiscal impacts differ at the state and federal levels. Differences varied according to which contributions and public services were considered, what time frame was used, and the taxing scheme of the state in which the study was undertaken. Hypothetically, a legal permanent resident could contribute more federal taxes than the cost of Social Security, Medicare, and other federal public services he and his family consume in a given year, yielding a net fiscal surplus at the federal level. However, if his children attended public schools, whose costs are borne by local residents through state and local income and property taxes, he and his family could generate a net fiscal deficit at the state level during the same year.¹⁶³

Foreign-born residents' relatively young age distribution accentuates the degree to which states and localities incur greater fiscal costs from the foreign born than the federal government. Federal programs such as Social Security and Medicare are oriented toward assisting the elderly, while state and local level jurisdictions are often responsible for services consumed by younger persons, such as public education and criminal justice administration.¹⁶⁴

¹⁶¹ Smith and Edmonston, 1997, p. 11.

¹⁶² Ibid, p. 12.

¹⁶³ For example, Los Angeles County found in a 1992 study that foreign-born residents contributed more revenues than the cost of public services they consumed. Yet, the county incurred much of those costs while the Federal government received most of the tax revenues. For more information, see Los Angeles County, *Impact of Undocumented Persons and Other Immigrants on Costs, Revenues and Services in Los Angeles County: A Report Prepared for Los Angeles County Board of Supervisors*, Los Angeles County, Internal Services Division, 1992.

¹⁶⁴ Lee and Miller, 1998, p. 197.

Studies of the fiscal impact of unauthorized aliens reach less consensus than those of the total foreign-born population. Three national estimates of the net fiscal impact of unauthorized aliens evaluated in a 1995 GAO report varied considerably and left the agency unable to definitively quantify such impacts. Subsequent state-level studies emphasized fiscal impacts from the most costly public services: public education, health care, and law enforcement. Many also estimated tax and other fiscal contributions. Studies estimating fiscal impacts for unauthorized aliens were more likely to yield estimated net fiscal deficits than those that estimated fiscal impacts for all foreign born. On average, unauthorized aliens tend to be younger and less educated, thereby earning lower wages and salaries than all foreign-born workers. As a consequence, they are more likely to use public education for their children and contribute relatively less in tax revenues compared to all foreign born. However, deriving more specific conclusions or estimates from studies of unauthorized aliens reviewed in this report remains elusive due to differences in study methodology and variation in costs across states where these analyses were conducted.

Policy analyses reviewed in this report illustrate two key findings. First, both the noncitizen foreign born and many unauthorized aliens can generate significant fiscal expenditures. Moreover, the relative pervasiveness of document fraud among unauthorized aliens working in the formal economy¹⁶⁵ suggests that some portion of those nominally ineligible for public services can still obtain them.¹⁶⁶ Second, these analyses also indicate that the noncitizen foreign born and many unauthorized aliens pay taxes at all government levels and contribute to the Social Security program from which they may never obtain benefits.¹⁶⁷

¹⁶⁵ Because unauthorized aliens cannot work legally in the “formal” economy, they often use false documents to secure such employment. According to a 2002 GAO report, the Immigration and Naturalization Service (INS) reported that large-scale counterfeiting has made fraudulent employment eligibility documents (e.g., Social Security cards) widely available. See U.S. General Accounting Office, *Identity Fraud: Prevalence and Links to Alien Illegal Activities*, GAO-02-830T, June 25, 2002, p. p.1.

¹⁶⁶ The Systematic Alien Verification for Entitlements (SAVE) System provides federal, state, and local government agencies access to data on immigration status that are necessary to determine noncitizen eligibility for public benefits. See, for instance, CRS Report R40889, *Noncitizen Eligibility and Verification Issues in the Health Care Reform Legislation*, by Ruth Ellen Wasem, p. 19.

¹⁶⁷ Noncitizens who work in Social Security-covered employment must pay Social Security payroll taxes, including those who are in the United States working temporarily or without authorization. In general workers must have 10 years of Social Security-covered employment to be eligible for retirement benefits, although less time is required for disability and survivor benefits. The Social Security Act of 2004 (P.L. 108-203) also prohibits the payment of benefits to aliens in the United States who are not “lawfully present.” Under certain circumstances, however, alien workers and their dependents and survivors may receive benefits while residing outside the United States, including benefits based on unauthorized work. For more information, see CRS Report RL32004, *Social Security Benefits for Noncitizens*, by Dawn Nuschler and Alison Siskin.

Appendix. Summary of Studies

Table A-1. Summary of Findings: Academic Studies of Fiscal Impacts of the Total Foreign-Born Population

Study Name and Year	Study Author(s) and Supporting Affiliation	Population Analyzed	Findings
<i>The New Americans</i> , 1997	James P. Smith and Barry Edmonston, National Research Council	All U.S. foreign born in NJ and CA for short-term analyses; all U.S. foreign born nationally for long-term analysis.	In the short term, at the state-level foreign-born households each year cost native households \$322 in NJ and \$1,637 in CA (2010 dollars). For all U.S. households, costs range from \$231-\$314 (2010 dollars) In the short term, at the federal level, foreign-born households generate a small annual benefit of about \$4 (2010 dollars). Over the long term (300 years), each foreign-born person and their descendents create an average net fiscal surplus of \$111,000 (2010 dollars). Impacts vary substantially by education and age at arrival.
<i>Heaven's Door: Immigration Policy and the American Economy</i> , 1999	George Borjas, Harvard University	All U.S. foreign born	Redoing the analysis of <i>The New Americans</i> (above) without assuming substantial federal tax increases in 2016 yields an average net fiscal deficit of \$21,000 instead of an \$111,000 surplus (2010 dollars). Redoing the analysis with a shorter time frame (50 years vs 300 years) yields an average net fiscal surplus of \$15,000 instead of \$111,000. A 25 year time frame yields a \$26,000 deficit (2010 dollars).
<i>The Current Fiscal Impact of Immigrants and Their Descendents: Beyond the Immigrant Household</i> , 1998	Ronald D. Lee and Timothy W. Miller, University of California, Berkeley	All U.S. foreign born	In 1994, foreign-born individuals and their concurrent descendents generated a net fiscal deficit of \$680 for states and localities versus a net fiscal surplus of \$200 for native residents. Foreign-born individuals and their concurrent descendents generated a net fiscal surplus of \$1,260 at the federal level, versus a net fiscal surplus of \$1,340 for native residents. Impacts vary substantially for "high immigration" states versus all other states.
<i>Analyzing the Fiscal Impact of U.S. Immigration</i> , 1999	Alan J. Auerbach and Philip Oreopoulos, University of California, Berkeley	All U.S. foreign born	If future generations address fiscal imbalances, the hypothetical scenario of eliminating immigration in 2000 would raise the net fiscal burden of native residents by 3.7%. If current taxpayers address fiscal imbalances, then eliminating immigration in 2000 reduces the net fiscal burden of future generations by an estimated 5.4%. Thus immigration can both assist in reducing current fiscal imbalances and generate costs for future taxpayers. However, the impact of the foreign born on the fiscal balance was "extremely small" relative to the size of the imbalance.
<i>Sustaining Fiscal Policy through Immigration</i> , 2000	Kjetil Storesletten, Stockholm University	All U.S. foreign born	Net present fiscal impacts of foreign-born persons are -\$36,000, -\$2,000 and \$96,000 for low, medium, and high skilled persons, respectively. Including children increases the estimated deficit while being age 40-44 increases the estimated surplus.

Study Name and Year	Study Author(s) and Supporting Affiliation	Population Analyzed	Findings
<i>Are Immigrants a Drain on the Public Fisc? State and Local Impacts in New Jersey, 2002</i>	Deborah L. Garvey, Thomas J. Espenshade, and James M. Scully, Santa Clara University and Princeton University	All U.S. foreign born	At the local level, being foreign born had no statistical effect on local benefit use and a positive effect on local tax contributions. If foreign-born households possessed average characteristics of native households, they would consume fewer state-level services and the same quantity of local services as native households. Foreign-born households in New Jersey in 1990 paid higher average taxes and consumed fewer state government services than statistically equivalent native households.
<i>The Fiscal Impact of Immigration on the Advanced Economies, 2008</i>	Robert Rowthorn, Cambridge University	All U.S. foreign born	Reviewed studies suggest that in advanced economies, highly skilled foreign born made net fiscal contributions, while unskilled foreign born imposed net costs to native taxpayers. Unskilled foreign born could also be net fiscal contributors if they did not settle in host countries and used public services sparingly. Most empirical studies reviewed found fiscal impacts within +/-1% of GDP across varied methodologies and countries.
<i>Economic Impacts of Immigration: A Survey, 2011</i>	Sari Pekkala Kerr and William R. Kerr, Wellesley College and Harvard University	All U.S. foreign born	A review of academic literature yielded few definitive conclusions and often produced conflicting results on foreign born use of taxpayer funded social services over time as well as the size of their overall fiscal impact. Consistent evidence indicated that such fiscal impacts were relatively modest compared to nations' GDP.

Source: CRS

Table A-2. Summary of Findings: Policy Studies of Fiscal Impacts of the Total Foreign-Born Population

Study Name and Year	Study Author(s) and Supporting Affiliation	Population Analyzed	Findings
<i>Economic Impact of Immigrants (Minnesota) (2006)</i>	Program Evaluation Division, Office of the Legislative Auditor, State of Minnesota	All foreign born in Minnesota (6.6% of the state's population)	The foreign born in 2006 accounted for an estimated 7% of state health care programs, 10% of food support programs, and 11% of state public financial assistance. For revenues, findings were ambiguous, with no outstanding differences between foreign-born and native residents' contributions.
<i>Civic Contributions: Taxes Paid by Immigrants in the Washington, DC, Metropolitan Area (2006)</i>	Randy Capps et al, Urban Institute	All foreign born in the Washington, DC Metropolitan area (20% of the area's population)	Between 1999 and 2000, foreign-born households contributed 18% of all taxes paid, and paid 28% of their incomes in taxes compared to 31% for native households. Public service costs were not assessed.
<i>The Fiscal Cost of Low-Skill Immigrants to the U.S. Taxpayer (2007)</i>	Robert Rector and Christine Kim, Heritage Foundation	4.5 million U.S. households headed by foreign-born residents with less than a high school diploma (5% of the U.S. population)	Low skilled foreign-born households received an estimated \$30,160 in immediate public benefits and services and contributed \$10,573 in estimated tax contributions in 2004.
<i>A Profile of Immigrants in Arkansas (2007)</i>	John Kasarda et al, The Winthrop Rockefeller Foundation	All foreign born in Arkansas (4.5% of the state population)	The foreign born in 2004 consumed an estimated \$186 million in K-12 public education, \$37 million in health care, and \$15 million in criminal justice expenditures, for a total estimated cost of \$237 million. They paid an estimated \$47 million in state income taxes, \$5 million in corporate income taxes, \$30 million in property taxes, \$111 million in sales and motor vehicle use taxes, and \$64 million in indirect income and property taxes for a total estimated contribution of \$257 million.
<i>Immigrants in Florida: Characteristics and Contributions (2007)</i>	Emily Eisenhauer et al, Florida International University	All foreign born in Florida	Foreign-born residents received an estimated \$1,619 in per-capita public assistance and cash benefits, \$1,255 in Medicare, and \$385 in Medicaid, compared to \$2,218, \$1,331, and \$324, respectively, for native residents. Foreign-born residents contributed an estimated \$3,314 in federal and FICA taxes, \$421 in property taxes, and \$1,020 in sales taxes compared to \$3,554, \$528, and \$1,180, respectively, for native residents. Figures are annual estimates computed for the period from 2002 to 2004.
<i>The Impact of Immigration on Indiana (2007)</i>	Justin Heet et al, Sagamore Institute	All foreign born in Indiana	In 2007, naturalized citizens, noncitizen foreign born, and unauthorized aliens accounted for an estimated \$123 million, \$149 million, and \$181 million, respectively, for the cost of providing public education, criminal justice administration, and public assistance. Naturalized citizens, noncitizen foreign born, and unauthorized aliens contributed an estimated \$1,163 million, \$902 million, and \$256 million, respectively, in state income, county income, sales, food and beverage, property, federal income, and federal payroll taxes.

Study Name and Year	Study Author(s) and Supporting Affiliation	Population Analyzed	Findings
<i>Immigrants in Arizona: Fiscal and Economic Impacts (2008)</i>	Judith Gans, University of Arizona	All foreign born in Arizona	In 2004, the foreign born accounted for estimated expenditures of \$540 million for public education, \$150 million for uncompensated health care, \$640 million for Medicaid, and \$91 million for incarceration. They contributed \$2.4 billion in state revenues.
<i>Nebraska's Immigrant Population: Economic and Fiscal Impacts (2008)</i>	Christopher S. Decker et al, Office of Latino/Latin American Studies, University of Nebraska, Omaha	All foreign born in Nebraska, 5.6% of the state's population	The foreign born in 2006 consumed an estimated \$145 million in food stamps, public assistance, health expenditures, and public education, representing 4.3% of state expenditures on these services. They contributed \$155 million in property, income, sales, and gasoline taxes, or 4.6% of total state revenues from those sources.
<i>Massachusetts Immigrants by the Numbers: Demographic Characteristics and Economic Footprint (2009)</i>	The Immigrant Learning Center, Inc.	All foreign born in Massachusetts	In 2007, 16.4% of foreign-born residents received an average of \$8,674 in federal and state transfer payments compared to 22.3% of native residents who received \$10,453. Foreign-born households paid an estimated average of \$2,700 in taxes compared to \$3,600 by native residents.

Source: CRS

Table A-3. Summary of Findings: Policy Studies of Fiscal Impacts of the Unauthorized Alien Population

Study Name and Year	Study Author(s) and Supporting Affiliation	Population Analyzed	Findings
<i>The Costs of Immigration</i> (1993)	Donald Huddle, Rice University and Carrying Capacity Network	All unauthorized aliens in the United States	Total costs of unauthorized aliens to federal, state, and local governments were estimated at \$14.4 billion in 1992. Revenues were estimated at \$2.5 billion, yielding an estimated net fiscal deficit of \$11.9 billion.
<i>How Much Do Immigrants Really Cost? A Reappraisal of Huddle's The Cost of Immigrants</i> (1994)	Jeffrey Passel and Rebecca Clark, The Urban Institute	All unauthorized aliens in the United States	Total costs of unauthorized aliens to federal, state, and local governments were estimated at \$8.9 billion in 1992. Revenues were estimated at \$7.0 billion, yielding an estimated net fiscal deficit of \$1.9 billion.
<i>A Critique of the Urban Institute's Claims of Cost Free Immigration: Huddle Findings Confirmed</i> (1995)	Donald Huddle, Rice University and Carrying Capacity Network	All unauthorized aliens in the United States	Total costs of unauthorized aliens to federal, state, and local governments were re-estimated at \$29.3 billion in 1993. Revenues were estimated at \$10.0 billion, yielding an estimated net fiscal deficit of \$19.3 billion.
<i>Illegal Immigrants in U.S./ Mexico Border Counties: Cost of Law Enforcement, Criminal Justice, and Emergency Medical Services</i> (2001)	Tanis Salant et al, University of Arizona and United States/Mexico Border Counties Coalition	Unauthorized aliens in all 24 border counties in Texas, New Mexico, Arizona, and California	In FY1999, border counties spent an estimated \$23.3 million in Texas, \$5 million in New Mexico, \$24.2 million in Arizona, and \$55.7 million in California to provide law enforcement, criminal justice, and emergency medical services to unauthorized aliens. Average estimated per-capita costs for the 24 county region were \$17.31 per year. Revenues were not analyzed in the study.
<i>Medical Emergency: Costs of Uncompensated Care in Southwest Border Counties</i> (2002)	United States/Mexico Border Counties Coalition	Unauthorized aliens in all 24 border counties in Texas, New Mexico, Arizona, and California	In 2000, hospitals in the Southwest border communities spent an estimated \$189.6 million on uncompensated care for unauthorized aliens. Revenues were not analyzed in the study.
<i>Chicago's Undocumented Immigrants: An Analysis of Wages, Working Conditions, & Economic Contributions</i> (2002)	Chirag Mehta et. al. University of Illinois at Chicago	Unauthorized aliens in the Chicago metro area	In 2001, unauthorized aliens in Chicago spent an estimated \$2.89 billion annually which generated an additional estimated \$2.56 billion in local spending for a total estimated impact of \$5.45 billion. Public service costs were not analyzed in study.
<i>The High Cost of Cheap Labor: Illegal Immigration and the Federal Budget</i> (2004)	Steven Camarota, Center for Immigration Studies	U.S. households headed by unauthorized aliens	In FY2002, each unauthorized alien household cost the federal treasury an estimated \$6,949 for all public services and contributed an estimated \$4,200 in all forms of federal taxes, yielding an estimated net fiscal deficit of \$2,736.
<i>Impact of Illegal Immigration on Minnesota</i> (2005)	Minnesota Department of Administration, Office of Strategic Planning and Results Management	Unauthorized aliens in Minnesota	In FY2005, unauthorized aliens cost Minnesota an estimated \$176 million to \$188 million, comprised of: \$146 million to \$158 million for K-12 public education, \$17 million for public assistance health care programs, and \$13 million for incarceration. Revenues were not analyzed in the study.

Study Name and Year	Study Author(s) and Supporting Affiliation	Population Analyzed	Findings
<i>Immigrants and the Cost of Medical Care (2006)</i>	Dana P. Goldman, James P. Smith, and Neeraj Sood, RAND	Unauthorized aliens in Los Angeles County extrapolated to the United States	Total health care costs in 2000 for nonelderly, unauthorized aliens were estimated at \$6.5 billion, of which an estimated 17% or \$1.1 billion represented the publicly financed portion. The \$1.1 billion represented an estimated 1.3% of total health care expenditures for the comparable total U.S. population. Revenues were not analyzed in the study.
<i>Undocumented Workers: Impact on Missouri's Economy (2006)</i>	Missouri Budget Project (MBP)	Unauthorized aliens in Missouri	Estimated K-12 public education costs for children of unauthorized aliens ranged from \$17.5 million to \$32.6 million in 2005. State income, sales, and property tax contributions were estimated at \$29 million to \$57 million.
<i>Undocumented Immigrants in Texas (2006)</i>	Carole Keeton Strayhorn, Texas Comptroller of Public Accountants	Unauthorized aliens in Texas	In FY2005, unauthorized aliens cost the state of Texas an estimated \$1.16 billion for state services, and \$1.44 billion in uncompensated health care and law enforcement costs for local governments. They generated an estimated \$1.58 billion in state tax revenues and \$513 million in local tax revenues.
<i>Costs of Federally Mandated Services to Undocumented Immigrants in Colorado (2006)</i>	Rich Jones and Robin Baker, The Bell Policy Center	Unauthorized aliens in Colorado	In 2005, Colorado spent an estimated \$224.9 million on federally mandated services to unauthorized aliens. Revenues were estimated in an accompanying report (below).
<i>State and Local Taxes Paid in Colorado by Undocumented Immigrant Households (2006)</i>	Rich Jones and Robin Baker, The Bell Policy Center	Unauthorized alien households in Colorado	In 2005, unauthorized alien households in Colorado paid an estimated \$159 million to \$194 million in state and local sales taxes, income taxes and property taxes. Costs were estimated in an accompanying report (above).
<i>Undocumented Immigrants in New Mexico: State Tax Contributions and Fiscal Concerns (2006)</i>	The Fiscal Policy Project, New Mexico Voices for Children (NMVC)	Unauthorized aliens in New Mexico	The state's K-12 public education costs for unauthorized aliens in 2004 were estimated at between \$49.1 million and \$67.4 million. Other public service costs were not estimated. Estimated state and local tax revenues from unauthorized aliens were estimated at between \$50.4 million and \$69.3 million.
<i>Immigration Issues in Tennessee (2007)</i>	Offices of Research and Education Accountability, Tennessee Comptroller of the Treasury	Unauthorized aliens in Tennessee	In FY2005, Tennessee's Medicaid program spent an estimated \$4.9 million (\$1.8 million in state funds) on emergency treatment for an estimated 1,300 unauthorized aliens. Revenues were not analyzed in the study.
<i>Undocumented Immigrants in Iowa (2007)</i>	Beth Pearson and Michael F. Sheehan, The Iowa Policy Project	Unauthorized aliens in Iowa	In 2006, estimated public spending on K-12 public education, emergency medical, and incarceration expenses for unauthorized alien adults in Iowa ranged between \$35.4 million and \$54.7 million; \$14.2 million and \$21.9 million; and \$4.1 million, respectively. Estimated state and local tax revenue ranged from \$40.1 million to 62.0 million. Other estimated state and federal contributions totaled between \$52.2 million and \$80.7 million.

Study Name and Year	Study Author(s) and Supporting Affiliation	Population Analyzed	Findings
<i>Undocumented Immigrants in U.S.-Mexico Border Counties: The Costs of Law Enforcement and Criminal Justice Services (2007)</i>	Tanis Salant et al, University of Arizona and United States/Mexico Border Counties Coalition	Unauthorized aliens in all 24 border counties in Texas, New Mexico, Arizona, and California	Between FY1999 and FY2006, the 24 border counties spent an estimated \$1.23 billion to process criminal unauthorized aliens through the criminal justice system. In FY2006, they spent \$192 million on criminal justice services to unauthorized aliens. Of this, Arizona counties spent \$26.6 million, California counties spent \$82.6 million, New Mexico counties spent \$7.3 million, and Texas counties spent \$75.4 million. Revenues were not analyzed in the study.
<i>The Fiscal Burden of Illegal Immigration on United States Taxpayers (2010)</i>	Jack Martin and Eric A. Ruark, Federation for American Immigration Reform (FAIR)	Unauthorized aliens in the United States, including their U.S. citizen children	Estimated net fiscal deficits for all unauthorized aliens and all their children in 2010 amounted to \$19.3 billion at the federal level and \$79.9 billion at the state and local level, yielding an estimated national net fiscal deficit of \$99.2 billion, and representing an estimated \$1,075 cost to each U.S. household headed by a U.S. citizen.

Source: CRS

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