Assembling the Pieces:

The Economics of Step-by-Step Immigration Reform

May 2015
ACKNOWLEDGEMENTS

Special appreciation is due to Macroeconomic Advisers, LLC (MA) for carrying out the economic modeling in this report. In particular, we thank Joel Prakken and Ben Herzon for their dedication and willingness to put forth extra effort. BPC also gratefully acknowledges the guidance and support of the report’s external reviewers: Keith Fontenot, Visiting Scholar at the Brookings Institution; Doug Holtz-Eakin, President of American Action Forum and Former Director of the Congressional Budget Office (CBO); and Dennis Shea of Shea Public Strategies, LLC. Thanks also to the following BPC staff who contributed to the production and release of this report: Jordan LaPier, Outreach Coordinator; Lindsay Boroush, Marketing Manager; and Abby Kamp, Administrative Assistant. Finally, we gratefully acknowledge the generous support of the John D. and Catherine T. MacArthur Foundation and the Annie E. Casey Foundation.

DISCLAIMER

This report was jointly prepared by the Immigration Task Force staff and a consultant. The findings and conclusions reached in this document do not necessarily reflect the views of BPC’s Immigration Task Force Members or BPC, its founders, or its board of directors.

AUTHORS

Matt Graham
Senior Policy Analyst, Bipartisan Policy Center (BPC)

Joel Prakken
Senior Managing Director and Co-founder, Macroeconomic Advisers

Theresa Cardinal Brown
Director of Immigration Policy, Bipartisan Policy Center

Lazaro Zamora
Policy Analyst, Bipartisan Policy Center
Immigration Task Force Co-Chairs

Haley Barbour
Former Governor of Mississippi

Ed Rendell
Former Governor of Pennsylvania

Henry Cisneros
Former U.S. Secretary of Housing and Urban Development

Condoleezza Rice
Former U.S. Secretary of State

Task Force Members

Howard Berman
Former U.S. Representative

Ed Brady
President, Brady Homes

Eliseo Medina
Chair, SEIU Immigration and Latino Civic Engagement Initiative

Al Cardenas
Senior Partner, Squire Patton Boggs; Former Chairman, American Conservative Union

John Rowe
Chairman Emeritus, Exelon Corporation

John Shadegg
Former U.S. Representative

Hilda Solis
Former U.S. Secretary of Labor

Michael Chertoff
Former U.S. Secretary of Homeland Security; Chairman and Co-Founder, The Chertoff Group

Staff

Theresa Brown
Director of Immigration Policy

Lazaro Zamora
Policy Analyst

Matt Graham
Senior Policy Analyst

Abby Kamp
Administrative Assistant
Co-Chairs Haley Barbour, Ed Rendell, Condoleezza Rice, and Henry Cisneros.
Letter from the Co-Chairs

Our country’s immigration system is in urgent need of reform. It has been 25 years since Congress significantly updated the country’s legal immigration system and nearly 30 years since the Immigration Reform and Control Act tried to address the unauthorized immigrant population. In that time, there have been several significant, but ultimately unsuccessful attempts at comprehensive immigration reform. Many lawmakers now argue that the best chance for effective reform lies in pursuing a sequence of more targeted legislative actions. This new study analyzes the potential macroeconomic and budgetary effects of possible components of such step-by-step immigration reform.

The results reveal that there are numerous paths to effective reform. However, in all cases, the key to future prosperity is a system that combines increases in enforcement with measures that can maintain and grow the labor force. The results of the analysis reveal that an effective enforcement-only approach would lower GDP and increase our national debt, but that combining enforcement with other policies can achieve the best of both worlds.

While our nation’s economic health is obviously a paramount concern, we want to emphasize that economic costs and benefits are only one aspect of immigration reform. This study did not seek to address complex issues regarding security at the border, the mechanics of how to overhaul legal avenues for immigration, or a host of other critical social policy issues.

America’s ability to attract immigrants has helped the United States become history’s greatest mobilizer of human potential. This analysis demonstrates that Congress has the tools to craft a sound, forward-looking immigration system that serves the broad national interest.

The BPC Immigration Task Force remains committed to supporting a center of gravity in the immigration debate that is anchored in evidence, analysis, and substantive debate.
Executive Summary

Introduction

In 2013, the Bipartisan Policy Center (BPC) produced a detailed assessment of immigration reform’s economic and budgetary impacts. At the time, the Senate-passed Border Security, Economic Opportunity, and Immigration Modernization Act of 2013 (S.744) was front and center in the immigration debate. The 2013 study used S.744 as a reference case and then assessed the economic and budgetary impacts of a variety of alternative scenarios and analytic assumptions. The study illustrated that fixing the broken U.S. immigration system has significant potential to improve the country’s economic and fiscal outlook.

Over the past two years, many lawmakers have suggested that immigration reform should proceed not through a single comprehensive bill, but through a sequence of focused legislative efforts. To understand the potential macroeconomic and budgetary effects of “step-by-step” immigration reform, BPC partnered with Macroeconomic Advisers, LLC (M.A.) to conduct this follow-up study. Each of the five scenarios contains one or more components of immigration reform: enforcement (through mandatory electronic employment verification, or “E-Verify”), legalization, lesser-skilled temporary worker programs, and high-skill immigration reforms.

By combining individual policies in different ways, this study establishes a basis to assess the macroeconomic and fiscal implications of different approaches to immigration reform. The study does not seek to design or promote precise policy prescriptions. Instead, it explores core policy options that reveal fundamental budgetary and economic insights.
The analysis concludes that a sequential legislative approach could fix the nation’s broken immigration system. However, the results demonstrate that to meet security imperatives while avoiding potential economic costs, legislative approaches must balance enforcement with other policy changes. If enacted in isolation, enforcement measures that successfully reduce unauthorized immigration also slow down economic growth and increase the federal budget deficit. Policymakers can avoid these impacts by combining enforcement provisions with policies that expand legal immigration and increase access to temporary workers.

The following are the study’s key results. Unless otherwise noted, all of the study’s results are relative to the current law baseline.

• **An enforcement-only approach to immigration reform using E-Verify would limit growth and increase deficits.** Successful enforcement measures would reduce the unauthorized immigrant population, which would shrink the labor force and the economy. Further, because unauthorized immigrants pay some taxes but use few federal services, an enforcement-only approach would also increase the federal deficit.

• **Combining policies that have different effects produced better results.** If policymakers want to reduce unauthorized immigration without reducing GDP or increasing the budget deficit, they can combine enforcement with other policies. Legal temporary worker programs would counteract enforcement’s negative GDP and budgetary effects by adding workers to the economy. Legalization would also counteract enforcement’s negative GDP effects by allowing existing workers to stay in the country and to improve their wages. However, because legalization leading to green cards would also give immigrants access to federal benefits, legalization would not reduce the deficit.

• **Immigration limits must be flexible to stay in step with the economy.** This study modeled temporary worker programs with fixed numerical limits, as is current practice. Eventually, the number of new “replacement” workers entering the economy was unable to keep up with the decrease in the number of unauthorized immigrant workers. This reduced GDP. If caps are regularly adjusted, they are more likely to be in tune with the economy’s needs and mitigate negative economic effects.

• **High-skill reform would have positive effects on GDP and reduce deficits.** As the only scenario that increases the size of the labor force, the high-skill only approach had the most positive effects on GDP. High-skill reform would also produce budgetary savings because high-wage workers tend to pay more in taxes than they use in government services.

• **Advancing all four reform components produced the most budget savings.** Over 20 years, the study’s “all of the above” scenario reduced cumulative deficits by $570 billion. This occurs because the scenario combines two economically sound policies: (1) increasing high-skilled immigration; and (2) addressing the unauthorized immigrant population through a combination of enforcement, legalization, and expanded temporary worker programs.

• **Immigration reform’s wage impacts are generally small.** None of the policy scenarios produced a wage impact of more than 0.3 percent, about $130 per year for the average worker. Wage effects were generally much smaller than reform’s impacts on the GDP or budget. Importantly, the study only examined the overall average change and did not break wage effects down by skill level or industry.

• **Immigration reforms that provide more future immigrants have larger positive effects on GDP.** The demographic implications of any immigration reform—namely, its future immigration levels and those immigrants’ characteristics—are a key determinant of economic results. Larger changes to future immigration levels tend to have larger effects, particularly on GDP. For example, S.744 would have increased future immigration by more than any of this study’s scenarios and therefore was projected to have a greater increase in GDP than any reform considered by this study.
Reform Scenarios

The study modeled five scenarios, each of which contained a different combination of reform policies. In order to illustrate a broad range of reform approaches, the study selected one reform component from each of four main areas of immigration policy: enforcement (through mandatory E-Verify), legalization, lesser-skilled temporary workers, and high-skill workers. The specific policies analyzed were drawn from a combination of current legislative proposals and reflect central ideas in the immigration reform debate.

**Scenario 1: E-Verify Only.** Under this scenario, E-Verify becomes mandatory for all new hires by 2020. By limiting job opportunities for unauthorized immigrants, mandatory E-Verify aims to reduce unauthorized immigration. Mandatory E-Verify has consistently been part of past legislative proposals, both comprehensive and stand-alone.

**Scenario 2: E-Verify and Legalization.** This scenario pairs mandatory E-Verify with a legalization program for unauthorized immigrants. The legalization program would allow unauthorized immigrants to obtain an indefinitely renewable “legalized” status and work authorization. After five years, legalized immigrants could apply for any existing green card category for which they are otherwise eligible; only DREAMers would receive “special” green cards outside the current system.

**Scenario 3: E-Verify, Legalization, and Temporary Workers.** In addition to E-Verify and legalization, two lesser-skilled temporary worker programs (agricultural and non-agricultural) would be created under this scenario. This scenario represents proposals to redirect future unauthorized immigration into legal channels to fill labor force needs.

**Scenario 4: High-Skill Reform Only.** Under this scenario, the only reform enacted is high-skilled immigration reform. High-skilled reform was included on its own because it is often thought to enjoy the most bipartisan support of all individual reform components. The scenario models the effects of several previous high-skilled visa legislative proposals, including: (1) increasing the number of H1B visas; (2) increasing the limit on employment-based green cards; (3) eliminating the family-based green card category for siblings of U.S. citizens; and (4) eliminating the Diversity Visa category. The latter two changes commonly appear in high-skilled reform bills as offsets to increases in employment-based green cards.

**Scenario 5: All of the Above.** All four components are enacted: mandatory E-Verify, legalization, new lesser-skilled temporary worker programs, and high-skill reform. Although this scenario includes a wide range of reforms, it is substantially different than “comprehensive” legislation previously introduced or considered by Congress.
Results in Brief

Economic Growth (GDP)

The study’s first three scenarios—each of which takes a different approach to dealing with the unauthorized immigrant population—highlight the benefits of including policies that impact the economy in different ways. The E-Verify-only approach (Scenario 1), which would remove illegal workers from the economy without adding any new immigrants, had the most negative impact on real GDP. When enforcement was combined with a legalization program (Scenario 2), the negative effect on GDP was reduced. Because legalization occurs before new enforcement measures kick in, fewer people would have to leave the country. Most of the negative GDP effect in the combined legalization and enforcement approach (Scenario 2) occurs as a result of the assumption that fewer unauthorized immigrants would come in the future.

Expanded lesser-skilled temporary worker programs are often suggested as a way to counterbalance the loss of workers that immigration enforcement would cause. The addition of temporary workers in Scenario 3 mitigates E-Verify’s remaining negative effects on economic growth until the 2030s. However, the maximum number of workers who can enter the country is set in statute and does not vary with economic conditions. In the last five years of the study (2031–2035), GDP fell below the baseline because the number of new workers admitted was less than the number of unauthorized workers who would be “lost” to enforcement. Historically, decades have passed between legislative adjustments to the caps on U.S. immigration categories. These results suggest that if immigration caps are not revisited at regular intervals, they will eventually fall out of step with the economic climate and cause a drag on overall economic growth.

The approach (Scenario 5) that combines all of the reform components—E-Verify, legalization, temporary workers, and high-skill reform—had the most positive effects on GDP over the first 15 years. In the 2030s, however, while GDP was higher than the baseline, it was not as high as the high-skill-only approach. This occurs for the same reason as in Scenario 3, described above: eventually, there are not enough new temporary workers to counterbalance the loss of workers due to enforcement.

Federal Budget

To calculate the effects on the federal budget, the model predicts how future revenue, expenditures, and net interest payments would change under each scenario’s reform policies.

The scenario that included all four of the reform components (Scenario 5) produced the most budget savings, reducing cumulative budget deficits by $570 billion over the 20-year study window. These effects were strong and positive because the scenario combined two fiscally and economically sound subsets of policies: (1) increasing high-skilled immigration; and (2) addressing the unauthorized immigrant population through a balanced combination of enforcement, legalization, and expanded temporary worker programs.

High-skill immigration creates budget savings because higher-skilled immigrants pay more in taxes due to their higher wages, and they also generally use fewer benefits than lesser-skilled workers.

Comparing the first three scenarios highlights the benefits of balanced approaches to addressing the unauthorized immigrant population. Mandatory E-Verify would decrease tax revenue by causing millions of unauthorized immigrants to leave the economy, particularly those who work in “above-ground” jobs and pay federal taxes. Legalizing some of these workers would increase revenue due to higher wages and tax compliance, but once the legalized immigrants begin to earn green cards and gain access to federal benefits, they begin to create budgetary costs. Including temporary worker programs counterbalanced the budgetary costs of E-Verify and legalization, since temporary workers pay taxes but are ineligible for most federal benefits.
Wages

The model projected small wage impacts on existing workers from all of the proposed immigration policy changes, compared with the GDP and budget impacts. Throughout the study, existing workers’ average wages never changed, positively or negatively, more than 0.29 percent. The average worker in the United States makes $47,000 per year, implying a maximum real wage effect of about $130 per worker per year. Changes in the labor supply were the most important influence on the results. The scenario that reduced the labor supply most (E-Verify only) had the largest positive effect on wages, while the only scenario to increase the labor supply (Scenario 4) had a negative impact.

Conclusion

Whether Congress passes several individual bills or a single comprehensive one, the effect on the economy will be a result of the specific policy changes enacted. This study shows that a sequential legislative approach can have a positive impact, but only if it intentionally balances the effects of different immigration policies. A step-by-step approach could increase GDP and produce budgetary savings if new enforcement measures are accompanied by policy changes that mitigate enforcement’s negative effects, such as legalization and expanded legal immigration programs. However, the study also shows that an approach that focuses too heavily on enforcement, or that puts enforcement far ahead of other changes, would reduce GDP and increase the federal budget deficit.
## Table of Contents

4  Letter from the Co-Chairs

5  Executive Summary

11  Introduction

14  Reform Scenarios
14    The Current-Law Baseline
15    Scenario 1: E-Verify Only
16    Scenario 2: E-Verify and Legalization
19    Scenario 3: Enforcement, Legalization, and Temporary Workers
19    Scenario 4: High-Skill Only
20    Scenario 5: All of the Above

21  Results
21    Demographic Changes
23    Economic Growth (GDP)
27    Federal Budget
29    Wages

31  Policy Implications
31    GDP and Budget Effects
32    Static Caps
33    The Economic Impacts

34  Conclusion

36  Appendix A: Methodology and Assumptions
37    E-Verify
39    Legalization
41    Temporary Workers
42    High-skill Reform
46    Demographic Characteristics
46    Macroeconomic Model

50  Endnotes
In 2013, the Bipartisan Policy Center (BPC) produced a detailed assessment of immigration reform’s economic and budgetary impacts. At the time, the Senate-passed Border Security, Economic Opportunity, and Immigration Modernization Act of 2013 (S.744) was front and center in the immigration debate. The 2013 study used S.744 as a reference case and assessed the economic and budgetary impacts of a variety of alternative scenarios and analytic assumptions. The study illustrated that fixing the broken U.S. immigration system has significant potential to improve the country’s economic and fiscal outlook.

Over the past two years, many lawmakers have suggested that immigration reform should proceed not through a single comprehensive bill, but through a sequence of focused legislative efforts. To understand the potential macroeconomic and budgetary effects of step-by-step immigration reform, BPC partnered with Macroeconomic Advisers, LLC (MA) to conduct this follow-up study. Each of the five scenarios contains one or more components of immigration reform: enforcement (through mandatory E-Verify), legalization, lesser-skilled temporary worker programs, and high-skill immigration reforms.

By combining individual policies in different ways, the results establish a basis to assess the macro-economic and fiscal implications of different approaches to immigration reform. The study does not seek to design or promote precise policy prescriptions. Instead, the scenarios explore core policy options that reveal fundamental budgetary and economic insights:

**Scenario 1: E-Verify Only**

Under this scenario, electronic employment verification (E-Verify) becomes mandatory for all new hires by 2020.
By limiting job opportunities for unauthorized immigrants, mandatory E-Verify aims to reduce unauthorized immigration. Mandatory E-Verify has consistently been part of past legislative proposals, both comprehensive and stand-alone.

**Scenario 2: E-Verify and Legalization**

This scenario pairs mandatory E-Verify with a hypothetical legalization program for unauthorized immigrants. The legalization program would allow unauthorized immigrants to apply for an indefinitely-renewable “legalized” status and work authorization. Under this scenario, it is assumed that after five years, legalized immigrants could apply for any existing green card category for which they are otherwise eligible; only DREAMers would receive “special” green cards outside the current system.

**Scenario 3: E-Verify, Legalization, and Temporary Workers**

In Scenario 3, in addition to adopting E-Verify and legalization programs, the study assumed that two lesser-skilled temporary worker programs (agricultural and non-agricultural) would be created. This scenario represents proposals to redirect future unauthorized immigration into legal channels to fill labor force needs.

**Scenario 4: High-Skill Reform Only**

Under this scenario, the only reform enacted is high-skilled immigration reform. High-skilled reform was included on its own because it is often thought to enjoy the most bipartisan support of all individual reform components. The scenario models the effects of several previous high-skilled visa legislative proposals, including: (1) increasing the number of H1B visas; (2) increasing the limit on employment-based green cards; (3) eliminating the family-based green card category for siblings of U.S. citizens; and (4) eliminating the Diversity Visa category. The latter two changes commonly appear in high-skilled reform bills as offsets to increases in employment-based green cards.

**Scenario 5: All of the Above**

In this scenario, all four components are enacted: mandatory E-Verify, legalization, new lesser-skilled temporary worker programs, and high-skill reform. Although this scenario includes a wide range of reforms, it is substantially different than “comprehensive” legislation previously introduced or considered by Congress.

The scenarios were designed to be representative and relevant. In order to illustrate a broad range of reform approaches, the study used one reform component from each of four main areas of immigration policy: enforcement, legalization, lesser-skilled workers, and high-skill workers. Including more than one policy from any given area would be less illustrative. For example, all types of immigration enforcement seek to reduce the unauthorized immigrant population, so the study only modeled one type of enforcement (E-Verify). Each reform component was also designed to be relevant, based on past and current legislative proposals, public statements, and BPC’s sense of the

<table>
<thead>
<tr>
<th>Scenario</th>
<th>E-Verify</th>
<th>Legalization</th>
<th>Temporary Workers</th>
<th>High-skill reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: E-Verify Only</td>
<td>![off]</td>
<td>![off]</td>
<td>![off]</td>
<td>![off]</td>
</tr>
<tr>
<td>2: E-Verify &amp; Legalization</td>
<td>![off]</td>
<td>![on]</td>
<td>![on]</td>
<td>![off]</td>
</tr>
<tr>
<td>3: E-Verify, Legalization, &amp; Temporary Workers</td>
<td>![off]</td>
<td>![on]</td>
<td>![on]</td>
<td>![on]</td>
</tr>
<tr>
<td>4: High-Skill Only</td>
<td>![on]</td>
<td>![off]</td>
<td>![off]</td>
<td>![on]</td>
</tr>
<tr>
<td>5: All of the Above</td>
<td>![off]</td>
<td>![on]</td>
<td>![on]</td>
<td>![on]</td>
</tr>
</tbody>
</table>
reform landscape. As a result, the study favored policies that had not been modeled before. For example, BPC’s October 2013 study included a scenario where enforcement worked perfectly, without regard to the means; further, studies that name an enforcement mechanism tend to focus on mass deportation. This study added diversity by focusing on mandatory nationwide E-Verify, which to BPC’s knowledge had never been dynamically scored as a stand-alone policy.

Based on historical data and the assumptions laid out in Appendix A, BPC projected each reform component’s impact on future immigration and the characteristics of new immigrants. MA applied fertility, mortality, and emigration assumptions to these immigration flows based on the U.S. Census Bureau’s population projection methodology. Subsequently, MA inputted these demographic changes into its model, which projected each scenario’s economic impact, including changes to federal revenues and expenditures (i.e., the federal budget) and the overall size of the economy (GDP).
Reform Scenarios

Each of the study’s five reform scenarios combined one or more of four reform components: mandatory E-Verify, a legalization program for unauthorized immigrants, new temporary worker programs for lesser-skilled workers, and high-skilled immigration reform. The following subsections describe the ways that each scenario’s policies would change future immigration relative to the current-law baseline. Appendix A contains a detailed description of the baseline projections and assumptions behind each of the four reform components.

The Current-Law Baseline

Except where explicitly noted, the results are presented as differences from the “current-law baseline,” which assumes that immigration law remains unchanged for the next 20 fiscal years. For example, the baseline forecasts a U.S. population of 371 million in 2035, but under Scenario 1, the 2035 population is projected to be 361 million. Therefore, the study reports that in Scenario 1, the population would be 2.5 percent (ten million) below the baseline.

For this study, BPC projected the effect of changes in law on the utilization of different legal immigration categories, as well as enforcement’s effect on the current unauthorized immigrant population and future unauthorized immigration. Macroeconomic Advisers used these assumptions to modify the MA/US model’s projection of the future U.S. population and its characteristics. By comparing the scenario-specific forecasts with the baseline forecast, the study estimated how each policy would change the United States’ macroeconomic and budget outlook. As described in more detail in Appendix A, the baseline assumes that the
economy will follow a steady growth path over the next 20 years, with no boom years or recessions.

**Scenario 1: E-Verify Only**

Obtaining employment in the United States is a prime motivation for many unauthorized immigrants. Since the 1986 Immigration Reform and Control Act (IRCA), denying employment to unauthorized workers has been considered a key component of immigration enforcement. In Scenario 1, a mandatory electronic employment verification requirement based on the existing E-Verify system is the only legislation enacted. Such requirements have been included in past comprehensive bills in the Senate, as well as in stand-alone House proposals. E-Verify is currently mandatory for all employers in nine states, and 12 other states require some or all public employers to use the system.\(^1\) In this scenario, employment verification would become mandatory for all employers in 2020.

Available estimates suggest that about half of current unauthorized immigrants work in the “above-ground” economy, using fraudulent documents or other people’s Social Security numbers to gain employment through the same channels as work-authorized individuals (and, as a result, paying largely the same employment and income taxes).\(^2\) By improving the verification of these work-authorization documents, E-Verify aims to make it harder for unauthorized immigrants to find above-ground work. The other half of unauthorized immigrants already work in the “underground” economy (i.e., in under-the-table jobs), where employment documents are not necessary. Underground jobs are much less likely to be affected by an enforcement approach that uses E-Verify only. As explained in detail in Appendix A, the study projected the effects of E-Verify using data on state experiences with mandatory E-Verify laws, statistics on job turnover, and assumptions about how migrants might respond to the inability to find a job and how employers might respond to the inability to find unauthorized workers. Under these assumptions, mandatory E-Verify would reduce the unauthorized immigrant population by about 50 percent by 2035, about 15 years after implementation. This projection is relative to the current-law baseline, which includes the existing unauthorized immigrant population and an assumption about

---

**Figure 1. Assumed change to the unauthorized immigrant population, Scenario 1.**

[Graph showing the assumed change to the unauthorized immigrant population over time, with different categories for employment status and the Baseline.]
how many unauthorized immigrants would come in the future under current law. Scenario 1’s policies would result in an unauthorized population of about 8.4 million in FY 2035, versus 17.9 million in the baseline (Figure 1). Additionally, the interaction between job turnover and E-Verify causes an increasingly large share of the remaining unauthorized immigrant population to work in the underground economy over time, because above-ground workers who leave or lose their jobs would have to get around E-Verify to land new above-ground employment. Therefore, the analysis projects that by 2035, less than 1 percent of employed unauthorized immigrants remain in the above-ground economy. It is assumed that most workers “above ground” are paying federal taxes, while those in the underground economy generally do not. By 2034, the study projected that nearly all unauthorized workers would be in the underground economy, essentially reducing unauthorized workers’ tax compliance to zero.

Key to these projections are the assumptions that (1) the mandatory employment verification system would identify people who are using false documents, and (2) most employers would refrain from employing workers who receive final non-confirmations of employment eligibility from the system. The lack of current information on E-Verify’s ability to detect identity fraud makes the first assumption uncertain, and mandatory E-Verify’s actual effect on the labor force would depend to some extent on the specific enforcement policies that surround it. Rather than explicitly account for specific accompanying changes to enforcement policy or resources, the study assumed that employers would choose not to employ workers who receive final non-confirmations (i.e., rejections that are not overturned).

**Scenario 2: E-Verify and Legalization**

Scenario 2 couples the mandatory E-Verify requirement with a legalization program for unauthorized immigrants. The hypothetical legalization program analyzed here would allow legalized immigrants to obtain an indefinitely-renewable “legalized” status with work authorization. After five years, legalized immigrants could apply for any green card category for which their family or employment relationships would otherwise make them eligible—in other words, no new green cards would be allocated for legalized immigrants. The exception to this “back-of-the-line” principle would be unauthorized immigrants brought to the United States as children (commonly known as DREAMers), who the study assumed would be able to directly apply for permanent residence.

Because most available estimates of the characteristics of unauthorized immigrants apply to 2012 or earlier, the study assumed that only unauthorized immigrants who have been present in the country since 2012 (i.e., three years before the legalization program’s hypothetical enactment) would be eligible for legal status. Based on application rates for the 1986 IRCA legalization program and the Deferred Action for Childhood Arrivals (DACA) program, and consistent with previous BPC and Congressional Budget Office (CBO) estimates, this study assumed that 75 percent of unauthorized immigrants residing in the United States would apply for and receive legalized status. Because unauthorized immigrants would be likely to see their labor market fortunes improve after gaining legalized status, the study also assumed that legalized immigrants would see their wages rise 6.5 percent relative to the baseline, phased in gradually over each immigrant’s first five years of legalized status.

Under these assumptions, about 8.4 million individuals would receive legalized status by FY 2019. The study projected how many of these immigrants might apply for a green card and later obtain citizenship. About 4.8 million of the legalized immigrants would receive a green card by 2035, which represents nearly all of the immigrants the study assumed would be eligible.

The study did not consider naturalization because citizenship did not affect the economic or budget assumptions. The 6.5 percent wage bump is assumed to take effect as soon as the immigrant gains employment authorization, and benefits eligibility is tied to the number of years with a green card. Of the 2.7 million green card recipients under IRCA’s legalization program, about 25 percent had naturalized in 1999 (ten years after the first green cards were allocated), and 45 percent had naturalized by 2009.
Figure 2. Unauthorized immigrants’ assumed conversion to legalized status and green cards.

Figure 3. Assumed change to the unauthorized immigrant population with E-Verify and legalization.
By authorizing more than eight million individuals to work, the legalization program changes the estimated population impact of E-Verify (Figure 3). The study removed legalizing immigrants from the starting population of unauthorized immigrants, but did not change any assumptions about E-Verify’s effects on the remaining population. As in Scenario 1, E-Verify also caused the remaining unauthorized immigrant population to switch almost exclusively to underground jobs, which caused nearly all unauthorized immigrants remaining in the country to stop paying federal taxes.

As the differences in Figures 1 and 3 suggest, legalization significantly reduces the number of people living in the United States without authorization over the 2015-2019 period. As a result, though Scenario 2 uses the exact same E-Verify assumptions as Scenario 1, it removes many fewer workers from the economy and results in about 50 percent fewer unauthorized immigrants in the country. Below, Figure 4 compares the two scenarios’ outcomes with the no-reform baseline, which includes (1) the existing unauthorized immigrant population, and (2) the study’s assumption about how many additional unauthorized immigrants might arrive in the future. Under Scenario 1’s E-Verify-only approach, 8.4 million unauthorized immigrants remain in the country after 20 years; by contrast, the unauthorized immigrant population would only be about 4.2 million under Scenario 2’s combination of E-Verify and legalization.

In this study, neither E-Verify alone nor E-Verify with legalization was assumed to reduce the unauthorized immigrant population to zero. First, E-Verify affects only those employees who present documents at the point of hire, so the study assumed that workers in the underground economy would be much less affected and many might choose to remain. Second, although the lack of above-ground jobs would reduce future inflows to an extent, the continued availability of underground jobs would still motivate some unauthorized immigrants to come. Third, in the E-Verify plus legalization approach, only 75 percent of unauthorized immigrants gain legalized status. In contrast to this report, BPC’s October 2013 study contained a scenario that presumed all unauthorized immigrants would be removed or depart and all future unauthorized immigration would be deterred.

Figure 4. Projected outcomes for current-law unauthorized immigrants, FY 2035.
Scenario 3: Enforcement, Legalization, and Temporary Workers

This scenario builds on the E-Verify plus legalization approach by adding new visas for lesser-skilled temporary workers. Based on past legislative proposals, the study assumed the creation of two temporary work visas, one for agricultural workers and the other for non-agricultural workers. The agricultural work visa would replace the current H-2A program and would allow 350,000 workers per year to enter on two-year visas. The non-agricultural program, which would supplement the current H-2B program, would allow 200,000 workers to enter annually on three-year, once-renewable visas. These numerical caps are assumed to be set in statute for the entire study period. The study assumed that the new programs would launch in 2017 and experience slow growth in utilization for the following two years. However, as E-Verify begins reducing the unauthorized immigrant population in 2020, demand for temporary workers surges; by 2026, the study assumed both new temporary worker programs would be fully utilized. Appendix A presents the details of these assumptions, including the bases for the cap numbers, in greater detail.

Scenario 4: High-Skill Only

In this scenario, the only piece of immigration reform legislation to be enacted is high-skilled visa reform based on H.R. 2131 from the 113th Congress, the “SKILLS Visa Act,” which would increase employment-based and high-skilled immigration while reducing other types of immigration. The SKILLS Visa Act was chosen as a point of reference because its key provisions are representative of other recent high-skill proposals. Additionally, at the time of this research, it was the most recent high-skilled bill to have passed out of a congressional committee. Appendix A describes the bill’s proposed changes to the immigration system in detail. Key provisions include:

- **H-1B visas:** The base cap for this high-skilled temporary work visa would increase from 65,000 to 155,000. The advanced degree allocation for this category would climb from 20,000 to 40,000 and would now be reserved for science, technology, engineering, or mathematics (STEM) graduates from qualifying U.S. universities.

- **Employment-based (EB) green cards:** The annual limit on employment-based permanent immigration would increase from 140,000 to 235,000. The cap increase would be for the existing EB-1, EB-2, and EB-3 categories and for the creation of three new EB categories, two for STEM workers and one for entrepreneurs. The current per-country quota for EB visas would be eliminated.

- **Family-based (FB) immigration:** For the first ten years, the annual number of FB immigrant visas available would increase from 226,000 to 251,000. After ten years, the FB-4 category for brothers and sisters of citizens would be eliminated, and the total number of FB visas available would fall to 186,000. The per-country quota for FB visas would rise from 7 to 15 percent.

- **Diversity visa:** The current Diversity Visa category (also called the “green card lottery”) would be replaced by the new EB categories. Over the past decade, about 46,000 immigrants have gained green cards through this category annually. The study assumed that immigrants already awarded visas for 2016 would still be able to come, but that diversity immigration would cease in 2017.
Projections for the utilization of the new and expanded green card categories were based primarily on historical utilization data and the size of current backlogs. For the H-1B program, utilization projections began with actual demand in the FY 2015 cap season; assuming 4 percent annual growth, the new H-1B cap is first reached in FY 2026. Because about 88 percent of EB immigrants adjust from a temporary status, the analysis used recent data on H-1B adjustments to EB green cards to inform the projections.

**Scenario 5: All of the Above**

This scenario includes all four reform components. Although Scenario 5 is broader than the other scenarios, it differs in several respects from “comprehensive” reform proposals in the recent past, including S.744. Compared with S.744, Scenario 5’s policies would result in a smaller increase in the number of employment-based immigrants over the study period and would decrease rather than increase family-based and immediate relative immigration. In addition, while both Scenario 5 and S.744 would replace the diversity visa, the replacement category in S.744 (Merit Track One) would have added many more immigrants than the replacement category in Scenario 5 (the SKILLS Visa Act’s new employment-based categories).

S.744 also included several other policy changes that none of this study’s scenarios included. For example, S.744 contained “recapture” provisions for previously unused employment and family-based visas, and would allow all immigrants currently waiting in line for a visa to acquire one in the first ten years after enactment. Combined, these two provisions constituted about 40 percent of S.744’s projected 20-year total increase in legal immigration. Together, these policy differences make Scenario 5’s effect on future immigration significantly different than S.744.

Over the 20-year period, this study projected that Scenario 5 would reduce the U.S. population to nearly 2.1 million below the no-reform baseline over the next 20 years. By comparison, in October 2013, BPC projected that S.744 would increase the U.S. population to 13.7 million above the baseline over 20 years. The differences in macroeconomic effects between this study and past comprehensive proposals reflect the differences between varying combinations of policies and the resulting differences in demographic implications, not anything inherent about a step-by-step process.
Results

Demographic Changes

Immigration’s macroeconomic impact is largely rooted in its effects on the demographic and labor force characteristics of the future U.S. population. Immigrants, like U.S.-born people, are both workers and consumers, supplying additional labor while simultaneously increasing the demand for goods and services. Holding everything else constant, increasing the number of people in the economy who supply labor and demand goods and services increases the economy’s size; similarly, reducing the number of workers and consumers makes the economy smaller. The characteristics of the immigrant population also affect budget and economic projections. For example, an individual’s age, gender, and nationality help predict their number of working years and the number of children they can be expected to have, which affects the future population and labor force.

Similarly, an individual’s age and income level influence their tax contributions and consumption of government services, the balance of which determines their impact on the federal budget outlook. This study estimated demographic characteristics for each category of immigrants affected by the reform scenarios, and the model translated these assumptions into population projections based on Census methodologies (see Appendix A).

The population impacts of the reform scenarios stem most fundamentally from the policy changes to enforcement and legal immigration. Under the policies in Scenarios 1 and 2 (E-Verify and legalization), the population would not differ from the baseline until 2020, when E-Verify implementation first begins encouraging unauthorized immigrants to leave and discouraging
would-be migrants from coming in the future. E-Verify alone reduced the 2035 population by 2.5 percent relative to the no-reform baseline (Figure 5). Because legalization would shield many workers from the effects of E-Verify, combining the two policies would result in a smaller decline of 1.4 percent from the baseline. Similarly, the addition of temporary workers further mitigated the negative population impact of employment verification, cutting the 20-year population decline to 0.9 percent. The final scenario, which combined the previous changes with high-skill reforms, would result in little population change from the baseline in the first decade, but a 0.6 percent decline after 20 years.

The only scenario to create a net increase in the future population was the high-skill-only scenario, with a 20-year impact of 0.3 percent above the no-reform baseline. Most of this population increase would occur in the first decade for two main reasons. First, utilization of new H-1B temporary worker visas was projected to increase significantly in the first decade but then level out in the second decade as the cap is reached. Second, after the first ten years, this scenario’s policies would eliminate a category of family-based green cards (FB-4), reducing annual immigration by 65,000 per year.

Because immigrants of all types tend to be young and concentrated in the ages most likely to work, changes in immigration tend to have a larger effect on the size of the workforce than on the size of the overall population. Though the population effects of most of the reform scenarios are only around 1 percent or less, the age breakdowns show that different immigration policy choices would have different impacts on the U.S. demographic outlook. For example, today 33 percent of the U.S. population is ages 25-54, the ages with the highest employment rates. By 2035, the Census Bureau projects that 39 percent of the population will be in this age group (Figure 6). In Scenario 1’s E-Verify-only approach, most of the population decline by 2035 (62 percent) would be among the age 25-54 population. In the high-skill-only approach, 84 percent of the population increase is in this age group. By contrast, all of the scenarios would have a very small impact on the over-55 and over-75 populations.

**Figure 5.** Projected change to total population (difference from baseline).
The population and labor force outcomes reflect each scenario’s combination of policies. The only changes to the future population and labor force in Scenarios 1 and 2 are reductions in the unauthorized immigrant population due to E-Verify. Because unauthorized immigrants have higher than average labor force participation, those scenarios see the labor force shrink by more than the overall population. Scenario 3’s addition of temporary workers counterbalances this effect. High-skilled immigration reform (in Scenario 4) increases employer-sponsored migration, which overcomes the relatively smaller decreases in family-based immigration, causing larger impacts on labor force size than population size. Scenario 5, which includes all four policy options, includes components that work in opposite directions. Temporary worker programs and high-skill reform both add more people primarily in the 25-54 age range, which compensates for the disproportionate loss in this age group that E-Verify would cause. As a result, Scenario 5’s decrease in labor force is smaller than the decrease in the overall population.

**Figure 6. Comparison of population and labor force changes by age cohort.**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>1: E-Verify Only</th>
<th>2: E-Verify &amp; Legalization</th>
<th>3: E-Verify, Legalization, &amp; Temporary Workers</th>
<th>4: High-Skill Only</th>
<th>5: All of the Above*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall U.S. population in 2035</td>
<td>370.3</td>
<td>-9.3 (-2.5%)</td>
<td>-5.1 (-1.3%)</td>
<td>-3.2 (-0.8%)</td>
<td>-1.1 (+0.3%)</td>
<td>-2.1 (-0.5%)</td>
</tr>
<tr>
<td>Age: 0-24</td>
<td>108.5 (29%)</td>
<td>-2.4 (26%)</td>
<td>-1.4 (28%)</td>
<td>-1.1 (34%)</td>
<td>-0.1 (9%)</td>
<td>-1.0 (46%)</td>
</tr>
<tr>
<td>Age: 25-54</td>
<td>143.3 (39%)</td>
<td>-5.7 (61%)</td>
<td>-3.2 (62%)</td>
<td>-1.7 (53%)</td>
<td>-0.9 (84%)</td>
<td>-0.8 (37%)</td>
</tr>
<tr>
<td>Age: 5+</td>
<td>118.9 (32%)</td>
<td>-1.2 (12%)</td>
<td>-0.5 (10%)</td>
<td>-0.4 (13%)</td>
<td>-0.1 (7%)</td>
<td>-0.4 (17%)</td>
</tr>
<tr>
<td>Age: 75+</td>
<td>41.1 (11%)</td>
<td>-0.1 (1%)</td>
<td>0.0 (1%)</td>
<td>0.0 (1%)</td>
<td>0.0 (0%)</td>
<td>-0.0 (1%)</td>
</tr>
<tr>
<td>Labor Force</td>
<td>181.9</td>
<td>-6.9 (-3.8%)</td>
<td>-3.7 (-2.1%)</td>
<td>1.8 (-1.0%)</td>
<td>-1.3 (+0.7%)</td>
<td>-0.5 (+0.3%)</td>
</tr>
</tbody>
</table>

Note: For context, 33% of the current population is 0-25, 40% is 25-54, 27% is 55+, and 6% is 75+.11

**Economic Growth (GDP)**

For each scenario, the gross domestic product (GDP) estimates emerge from the interaction between the demographic changes described above and the other economic relationships in the MA/US model. Scenario 1’s E-Verify-only approach had the most negative effect on real GDP. Because Scenario 2 adds a legalization program that reduces the number of workers who leave the country due to employer enforcement, Scenario 2’s policies would have a smaller negative impact. Scenario 3’s addition of lesser-skilled temporary worker programs counterbalanced E-Verify’s remaining negative effects on economic growth until the 2030s, when its fixed caps would cease to provide enough workers to replace all of the unauthorized immigrants that E-Verify was assumed to deter from entering the United States in the future. Scenarios 4 and 5, which both include policies that would increase immigration of high-skilled permanent and temporary immigrants, had a positive impact on GDP.
Figure 7. Change to GDP, 10- and 20-year projections.

Figure 8. Change to GDP, annual projection.
Growth effects of Scenarios 1, 2, and 3

Compared with the no-reform baseline, the most negative effects on GDP occurred under Scenario 1, which would remove the most workers from the labor force. The study projected the most negative GDP effects immediately after E-Verify becomes fully mandatory in 2020, when the unauthorized immigrant population is assumed to decline by 20 percent. Between 2020 and 2022, real GDP fell nearly $100 billion relative to the baseline, the largest two-year swing under any scenario. After 20 years, real GDP in Scenario 1 would be about 1.5 percent lower than the baseline (Figure 7).

In Scenario 2, legalization would mitigate the negative impact of enforcement by allowing millions of workers to stay in the country who E-Verify would otherwise cause to leave. Between 2016 and 2019, Scenario 2’s only economic impacts stem from legalization, which is assumed to increase the wages of legalizing immigrants by 6.5 percent. This early positive impact peaks at 0.14 percent of GDP in 2020 (Figure 8), when E-Verify would begin to push non-legalized workers out of the economy and deter future unauthorized immigrants. The negative GDP impact of workers leaving the economy soon overpowers the smaller positive impact of legalization. By 2025, GDP would be 0.2 percent lower than the baseline under Scenario 2, and by the end of the 20-year period, GDP declines 0.7 percent relative to the baseline.

Scenario 3’s growth path is nearly identical to Scenario 2 through 2019, reflecting the legalization wage bump plus modest utilization of the new temporary worker programs. The growth paths begin to diverge in 2020, when the utilization of the new lesser-skilled temporary worker programs increases rapidly to counter the negative labor force and GDP impact of enforcement. As Figure 9 illustrates, Scenario 3’s combination of policies would cause GDP to be higher than or very close to the baseline for the first 15 years (2016-2030).

Role of Temporary Worker Caps

Scenario 3’s negative GDP effects in the 2030s highlight the influence of temporary worker caps on economic outcomes. Under Scenario 3’s combination of policies, E-Verify and temporary worker programs would place countervailing pressures on the labor force. Until 2027, the temporary worker programs would keep pace with the loss of unauthorized immigrant workers due to E-Verify—between 2016 and 2026, the size of the labor force

Figure 9. Key influences on GDP projections, Scenarios 1-3.
stayed within 0.1 percent of the baseline projections (Figure 10), which keeps the economy close to its current-law growth path. Under this study’s cap assumptions, however, the temporary worker programs would eventually stop supplying enough labor to fully “replace” the number of unauthorized workers that E-Verify would remove from the labor force.

This result highlights the difficulty of determining appropriate caps for temporary worker programs. Under Scenario 3’s policies, the fixed caps on the temporary worker programs would not quite counteract the long-term labor force effects of enforcement, but any number of uncertain factors could alter the landscape. On top of the general difficulty of predicting how the economy will look in 15 or 20 years, estimating the number of future workers who would be “lost” to enforcement depends on two highly uncertain assumptions: (1) how many unauthorized immigrants will come in the future if there are no changes to the law, and (2) how many unauthorized immigrants will no longer come due to enforcement measures. It is impossible to dynamically score enforcement’s macroeconomic impact without making an assumption about both factors, but the uncertainties involved make it difficult to predict the appropriate number of temporary workers in future years.

**Growth Effects of Scenarios 4 and 5**

Scenarios 4 and 5 both had positive growth paths for the entire 20-year period, largely due to high-skilled immigration reforms. However, in Scenario 5, the high-skilled reforms would be implemented alongside the study’s other three immigration reform components, which caused the growth paths to differ. Initially, the more comprehensive policies increased GDP more quickly than high-skill reform alone, due to the improved labor market fortunes of legalized workers (Figure 11). In the 2020s, however, the labor force shrinkage due to employment verification counterbalanced this positive effect. GDP followed a similar path until 2030, when—as in Scenario 3—the temporary worker programs in Scenario 5 stop keeping pace with the number of workers lost due to enforcement (see above). In the 2030s, GDP is still rising relative to the baseline under Scenario 4’s high-skill-only approach, but in Scenario 5, GDP would actually begin to creep closer to the baseline toward the end of the period.
Federal Budget

The budget projections for each scenario were influenced by: (1) changes to the size and characteristics of the U.S. population, and (2) macroeconomic impacts. Based on this information, the model predicts future revenue, expenditures, and net interest on debt. From these figures, the model projects the annual change in the federal budget deficit and the cumulative change in the national debt (i.e., budgetary costs and savings).

Budget projections that include the macroeconomic response to policy changes are often called “dynamic.” By comparison, projections that do not predict how policy would affect worker and consumer behavior are said to be “static.” Although there is often debate about the appropriateness of dynamic scoring, immigration policy has direct and sometimes significant impacts on the size and characteristics of the population and labor force. For these reasons, CBO has generally favored dynamic scoring of immigration legislation for at least the past decade. All of this study’s budget projections were based on dynamic scoring.

Figure 12 summarizes the study’s budget projections. The budget results suggest that broader approaches to immigration reform are more likely to reduce the budget deficit. As stand-alone policies, E-Verify and legalization would create additional net budgetary costs—E-Verify would remove millions of workers from the labor force who pay some taxes but use few benefits, and legalization would give millions of people access to federal benefits. By contrast, the policy approaches that created new visas for legal immigrants decreased the deficit, counteracting the adverse effects of E-Verify and legalization.

The year-to-year deficit paths (Figure 13) help illustrate the factors behind the budget results. Under E-Verify, millions of unauthorized immigrants leave the economy or are deterred from coming in the future. As Figure 12 illustrates, in Scenario 1, annual deficits would rise rapidly after the unauthorized immigrant population begins declining in the early 2020s. This occurs because the unauthorized immigrant population is disproportionately young, mostly working, collects few federal benefits, and pays enough federal taxes to have a positive revenue impact. Over time, as more and more such workers “exit” the labor force (by leaving the country or being discouraged from coming in the first place), revenue declines, increasing the deficit. In Scenario 1, cumulative deficits increased $40 billion in the first ten years and $110 billion over the entire 20-year period.
Scenario 2’s combination of E-Verify and legalization would cause fewer unauthorized immigrant workers to leave the economy, but many of those who remain would gain legalized status. Over the first ten years, because legalization would increase the wages and tax compliance of these formerly unauthorized immigrants, Scenario 2’s policies created $10 billion in budgetary savings, decreasing the deficit. Eventually, however, more than half of the legalized immigrants would get legal permanent resident status (i.e., LPR or a green card), which would give them access to federal benefits after five years. Because unauthorized immigrants tend to earn lower wages, the study projected that the cost of the government services used would exceed the increases in revenue from this population. As a result, Scenario 2’s combination of E-Verify and legalization increased cumulative deficits by about $150 billion over the 20-year period.

Scenario 3, which added temporary workers to E-Verify and legalization, reduced the deficit. The addition of temporary workers countered the adverse budget impacts of E-Verify and legalization for two reasons. First, the temporary workers eliminated most of the slowdown in growth caused by E-Verify, which increased revenue relative to Scenarios 1 and 2. Second, the temporary workers created budget savings because they pay taxes but use few federal benefits.

Figure 12. Change to cumulative budget deficits, 10- and 20-year projections.

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2015 - 2025</th>
<th>2026 - 2035</th>
<th>2015 - 2035</th>
<th>% of GDP 2015 - 2025</th>
<th>% of GDP 2026 - 2035</th>
<th>% of GDP 2015 - 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: E-Verify Only</td>
<td>+ $40</td>
<td>+ $60</td>
<td>+ $110</td>
<td>+ 0.2%</td>
<td>+ 0.1%</td>
<td>+ 0.3%</td>
</tr>
<tr>
<td>2: E-Verify &amp; Legalization</td>
<td>- $10</td>
<td>+ $160</td>
<td>+ $150</td>
<td>- 0.0%</td>
<td>+ 0.4%</td>
<td>+ 0.4%</td>
</tr>
<tr>
<td>3: E-Verify, Legalization, &amp; Temporary Workers</td>
<td>- $60</td>
<td>- $110</td>
<td>- $170</td>
<td>- 0.2%</td>
<td>- 0.2%</td>
<td>- 0.5%</td>
</tr>
<tr>
<td>4: High-Skill Only</td>
<td>- $40</td>
<td>- $270</td>
<td>- $310</td>
<td>- 0.2%</td>
<td>- 0.7%</td>
<td>- 0.8%</td>
</tr>
<tr>
<td>5: All of the Above</td>
<td>- $100</td>
<td>- $470</td>
<td>- $570</td>
<td>- 0.4%</td>
<td>- 1.2%</td>
<td>- 1.5%</td>
</tr>
</tbody>
</table>

Figure 13. Net change to annual budget deficit.
The largest budgetary savings occurred under Scenario 4 (high-skill only) and Scenario 5 (all four reform components). Over 20 years, the policies in Scenario 5 reduced cumulative deficits by $570 billion, nearly twice the savings produced by Scenario 4’s high-skill-only approach. Under Scenario 5, in 2035, the national debt would be 2.3 percentage points smaller relative to GDP.

The high-skill reform policies modeled in Scenario 4 would create budget savings by tilting the labor force more toward employment-based immigrants and high-skilled temporary workers. These workers are a net positive for the budget for three main reasons: (1) high-skilled workers earn higher wages and therefore pay more taxes; (2) like other immigrants, high-skilled workers tend to be young and disproportionately of working age; and (3) temporary workers are generally ineligible for many federal benefits.

**Wages**

Based on changes in labor supply, capital adjustment, and other economic relationships, the MA model also projected changes to real hourly compensation for average workers. The figures reported in this section refer to the average wage effect for “existing” workers in the U.S. economy—in other words, these results apply only to U.S.-born and immigrant workers who already live in the country, not to immigrants who enter or leave the country due to the scenarios’ various policy changes. Previously, BPC’s October 2013 study reported the change in the average wage for all workers in the economy, including the new immigrants who entered under S.744.

In all five scenarios, the study found modest wage effects compared with the study’s other results. In any year, no scenario’s policies caused existing workers’ average wages to change by more than 0.29 percent. The average worker in the United States makes $47,000 per year, implying a maximum real wage effect of about $130 per worker per year.

These results are an overall average, however, and do not speak to the relative effect on different types of workers’ wages. In the broader literature, economists generally agree that immigration’s overall wage effects are small but have not conclusively answered questions about how different types of immigrants affect the wages of different types of workers.

The wage results are primarily influenced by changes to the labor supply. The most positive wage effects occurred under Scenario 1’s E-Verify-only approach. After E-Verify takes effect in FY 2020, existing workers’ wages were about 0.28 percent ($130) higher than in the no-reform baseline. By comparison, the most negative effects occurred under Scenario 4’s high-skill-only approach, which was the only

---

**Figure 14. Wage effect on existing workers.**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Difference from baseline (annual average)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
</tr>
<tr>
<td></td>
<td>2015 - 2025</td>
</tr>
<tr>
<td>1: E-Verify Only</td>
<td>+0.1%</td>
</tr>
<tr>
<td>2: E-Verify &amp; Legalization</td>
<td>+0.1%</td>
</tr>
<tr>
<td>3: E-Verify, Legalization, &amp; Temporary Workers</td>
<td>+0.0%</td>
</tr>
<tr>
<td>4: High-Skill Only</td>
<td>-0.1%</td>
</tr>
<tr>
<td>5: All of the Above</td>
<td>-0.1%</td>
</tr>
</tbody>
</table>
scenario that increased the overall labor supply over the study period. The combination of all of the policies in Scenario 5 had the smallest long-run effect on wages, ending at an average of only three dollars below the baseline in the last four years of the study window (Figure 15). This scenario also had the most neutral long-range wage effects because it had the smallest effect on the size of the labor force.

This study affirms the general consensus of economists: immigration policy changes have a small effect on overall wages. Compared with the study’s other results, the wage effects were significantly smaller in both dollar and percentage terms. For example, the E-Verify-only scenario raised wages by about $130 per worker per year over 2026-2035, but it also increased real federal deficits by an annual average of $300 per taxpayer. Similarly, the scenario with all components included reduced wages by about $30 per worker per year in the second ten years, but also decreased real annual deficits by nearly $300 per taxpayer. Although immigration has larger effects on GDP and the federal budget, because wage issues are important areas of concern for many policymakers, they may seek to incorporate changes that minimize even these small potential negative wage impacts.

Figure 15. Projected change to average wages, percent difference from baseline.
Policy Implications

GDP and Budget Effects Depend on the Future Population’s Size and Characteristics

Demographics drive immigration’s macroeconomic and budgetary effects. Unlike most other policy areas, immigration directly and significantly impacts the number of people living in a country, as well as characteristics such as age and gender. Therefore, immigration’s impact on GDP is straightforward, and is acknowledged even by groups that favor reduced immigration. Immigrants make the economy larger by increasing the number of workers and consumers in the country; conversely, reducing immigration reduces the number of workers and consumers, which makes the economy smaller. This study’s results confirm these findings and imply that policies that allow for larger levels of future immigration will have greater positive GDP impacts.

For example, in this study, Scenario 4’s high-skill-only reform approach had the most positive effects on future economic growth primarily because it was the only scenario to increase the size of the labor force. Conversely, Scenario 1’s E-Verify-only approach had the most negative effect on future GDP because it decreased the size of the labor force the most.

Budgetary impacts are less straightforward, and depend more on the characteristics of the future immigrant population than its size. Scenario 5’s “all of the above” approach had the most significant federal budgetary effects, reducing 20-year cumulative deficits by $570 billion. These effects were strong and positive because Scenario 5 combined two fiscally and economically responsible
subsets of policies: (1) increasing high-skilled immigration, and (2) addressing the unauthorized immigrant population through a combination of enforcement, legalization, and expanded temporary worker programs. On the first point, high-skilled immigration’s positive effect on the budget is straightforward: high-wage earners tend to pay more taxes than they use in federal benefits, thereby creating budgetary savings.

On the second point, the results of the first three scenarios (combinations of E-Verify, legalization and temporary workers) suggest that balanced approaches to addressing the unauthorized immigrant population have more positive implications for economic growth and the federal budget. In Scenario 1, E-Verify would cause millions of unauthorized immigrants to leave the country or never arrive in the future. As a result, tax revenue would fall, the labor force would shrink, and economic growth would slow down. In Scenario 2, legalization mitigated some of E-Verify’s negative GDP impact by enabling more workers to stay in the economy, but also created new budgetary costs because even though legalized immigrants would earn higher wages and pay more taxes than under current law, those who eventually obtain green cards would also gain access to federal benefits. These results suggest that on their own, neither E-Verify nor legalization would improve the budget outlook—and that a successful E-Verify system would actually shrink the economy.

Scenario 3’s addition of expanded lesser-skilled temporary worker programs counteracts the negative growth effects of E-Verify, as well as the adverse budget effects of both E-Verify and legalization. The temporary worker programs add new individuals to the labor force, which counteracts enforcement’s tendency to shrink the workforce and GDP. The choice of temporary visas in this scenario would also create budget savings because temporary workers pay taxes but are eligible for few federal benefits. This combination of additional tax revenue and a faster-growing economy is the reason why Scenario 3 would leave the budget in a much better position than either E-Verify alone or E-Verify with legalization. When temporary worker programs were added (Scenario 3), the 20-year budget score was about $300 billion more positive than the other scenarios.

Previous BPC work also shows that enforcement slows down growth and creates budgetary costs, and that more comprehensive approaches can counterbalance these effects. In October 2013, BPC released a macroeconomic study that focused primarily on variations of S.744, but also included a scenario where enforcement successfully stopped all current and future unauthorized immigration for the next 20 years—essentially, projecting what would happen if enforcement worked perfectly. Because the October 2013 enforcement scenario removed many more workers from the economy than this study’s E-Verify-only scenario, it had significantly more negative impacts on GDP and the federal budget. However, similar to this study, the more comprehensive approaches in the October 2013 study counterbalanced these adverse effects.

**Static Caps on Immigration Categories Eventually Fall Out of Step with the Economy**

Another implication of the study results is that inflexible numerical caps for immigration categories will eventually fall out of step with the economy. Scenario 3 included E-Verify, legalization, and expanded caps for temporary worker programs—modeling an approach to addressing unauthorized immigration that counterbalances enforcement’s negative GDP and budget impacts by adding other measures that keep the labor force from shrinking. For the first 15 years (2016-2030), the temporary worker programs would keep the scenario’s GDP and labor force close to the baseline, but in the early 2030s, the number of workers added by the temporary worker programs would fall behind the “loss” of unauthorized immigrant workers who either leave the country or never arrive. This would create a deficit of labor, which in turn causes GDP to fall below the baseline.

This study does not necessarily show that caps should be higher than in this study’s sample temporary worker programs. Instead, the results illustrate the difficulty of fixing numerical caps for long periods of time—regardless of how many workers one believes the labor market needs. Historically, the United
States has waited at least this long to revise its immigration categories, which are set in statute. This study suggests that if numerical caps for temporary and permanent immigration categories are designed to be flexible or are reviewed more regularly, they are more likely to remain in step with the economy.

**The Economic Impacts of Immigration Reform will Depend on the Specific Proposals Enacted**

Finally, the results highlight the differences between this study’s five reform scenarios and past comprehensive reform proposals that are commonly used as a point of reference. For example, S.744 had higher levels of permanent and temporary immigration than any of this study’s scenarios, and therefore would have larger impacts on GDP and the budget. The differences between this study’s step-by-step scenarios and past comprehensive proposals are not a result of the process by which legislation is enacted. Instead, the substantive differences in the specific immigration reform measures enacted. The differences in results between these scenarios, as well as earlier policy proposals, may help policymakers and the public determine how combinations of immigration reforms would affect the United States’ macroeconomic and budget outlook.
Once dominated by comprehensive bills, the immigration reform landscape has shifted in the past two years. If the 114th Congress moves immigration legislation, it appears likely that reform will proceed through individual bills that address different components of the immigration system. This study informs the current immigration debate by illustrating the general macroeconomic and budgetary effects of different approaches to immigration reform that could result from combinations of individual bills.

This study projected the macroeconomic and budgetary effects of five different approaches to immigration reform. Four different components of immigration reform constituted these five scenarios. Scenarios 1 and 2, which addressed the unauthorized immigration through only enforcement and legalization, had negative impacts on economic growth and the budget outlook. By comparison, Scenarios 3-5, which took more balanced approaches to addressing the unauthorized immigration or included high-skilled immigration reforms, had positive effects on the budget outlook and neutral or positive effects on future economic growth. Wage impacts were small relative to the reform scenarios’ other economic impacts.

The results demonstrate that whether Congress passes several individual bills or a single comprehensive one, the effect on the economy will be a result of the specific policy changes enacted. A sequential legislative approach can have a positive impact, but only if it intentionally balances the effects of different immigration policies. Specifically, a step-by-step approach could increase GDP and produce budgetary savings if new enforcement measures are accompanied by policy changes, such as legalization and expanded legal immigration programs, which mitigate...
enforcement’s negative effects. However, the study also shows that an approach that focuses too heavily on enforcement, or that puts enforcement far ahead of other changes, would reduce GDP and increase the federal budget deficit.
Appendix A: Methodology and Assumptions

This study began with BPC’s projections of how each of the four hypothetical reform components would affect future immigration levels in each affected legal immigration category, as well as the effects on current and future unauthorized immigrants. Once the projections were complete, demographic characteristics were assigned to each group of immigrants based on the most disaggregated publicly available data. After characteristics were assigned to the immigrants from each reform component, those characteristics were aggregated into the five reform scenarios and passed to Macroeconomic Advisers for analysis of the macroeconomic and budget effects.

Macroeconomic Advisers began its portion of the analysis by applying fertility, mortality, and emigration assumptions based on the U.S. Census Bureau’s methodology for population projections. Subsequently, Macroeconomic Advisers inputted these demographic changes into its model, which projected changes to revenues, expenditures, GDP, wages, and other economic variables. Where applicable, appropriations were included based on CBO analysis of past legislation.

This appendix follows the same sequence as the study’s methodology. It begins by describing the changes that each reform component’s policies would make to the immigration system, the resulting projected changes to the relevant immigration categories, and the data and assumptions underlying the projections. The appendix then describes the assignment of demographic characteristics to new immigrants, and concludes with a discussion of the budget and macroeconomic projections.
**E-Verify**

E-Verify is an electronic system for verifying the authenticity of the identity documents workers present at the point of hire. In each scenario that includes E-Verify, the study assumed that it would become mandatory for all employers beginning in 2020. Today, it is estimated that about half of all unauthorized workers gained their employment through the same channels as authorized workers, exploiting the existing paper-based employment verification process (using Form I-9), often using fraudulent documents or stolen identity information. Throughout this report, these individuals are said to work in the “above-ground” economy. Individuals whose employment is not verified through the I-9 system are said to work in the “underground economy,” where the study assumed that neither employers nor workers withhold or file required federal taxes.

E-Verify seeks to improve the current I-9 employment verification process by electronically verifying the documents presented to show work authorization. Rather than requiring employers to inspect documents themselves and attest that each document “reasonably appears on its face to be genuine,”17 employers enter the documents’ information into E-Verify’s online system, which checks its authenticity against government databases, including Social Security Administration and DHS data. When the system works properly, fraudulent documents would be unable to be verified (called a “non-confirmation”), and the workers would not be hired. Under such a system, employers that hired workers who received a final non-confirmation would be more likely to have “knowingly” hired an unauthorized immigrant—the legal standard for punishing employers.

Estimating mandatory E-Verify’s impact on the unauthorized population requires major assumptions in three main categories: (1) how well the system works, (2) how many unauthorized immigrants would come in the future under current law, and (3) how workers and employers would respond if the system became mandatory. With regard to the system’s efficacy, E-Verify errors fall into two basic categories: wrongful rejections (persons who are authorized to work by are wrongfully determined to be unauthorized by the system), and wrongful approvals (persons who are unauthorized but are confirmed as authorized by the system). According to government reports, wrongful rejections fell by about half between 2008 and 2014,18 but the most recent official estimate of E-Verify’s ability to detect unauthorized workers (i.e., wrongful approvals) is seven years old. During April–June 2008, Westat’s external evaluation estimated that E-Verify only rejected 46 percent of unauthorized workers, in large part because it did a poor job of detecting fraudulent documents that had accurate information about some other work-authorized person.19 Since 2008, USCIS has made a number of changes designed to address this shortcoming, including a photo matching tool and improved detection of Social Security numbers that are being used by more than one person. In the absence of better data, this analysis assumed that E-Verify’s improvements would significantly disrupt unauthorized immigrants’ ability to find above-ground employment. Rather than explicitly account for specific accompanying changes to enforcement policy, the study assumed that employers would choose not to employ workers who receive final non-confirmations (i.e., rejections that are not overturned), and that over time, continuing improvements will slightly increase the system’s deterrent effect.

Second, a dynamic score of the effects of any immigration enforcement proposal requires an assumption about how many unauthorized immigrants will arrive in the future. To determine the appropriate baseline level of unauthorized immigration, three main sources were consulted: (1) the Social Security Administration’s (SSA) projections of “other immigration,” (2) CBO’s 2013 cost estimate of the Border Security, Economic Opportunity, and Immigration Modernization Act, and (3) historical change to the unauthorized immigrant population.20 To split the difference, this study assumed future net unauthorized immigration of about 330,000 per year—equal to the average of the three projections.

Third, projecting E-Verify’s effects requires assumptions about how workers and employers would respond if the system became mandatory. A number of states have enacted laws
requiring the use of E-Verify for some or all employers, but most of these mandates are relatively recent, and it is unclear how national-level effects would differ from effects seen at the state-level. The analysis projects how E-Verify would impact two main groups of workers: (1) those already in the country, and (2) future inflows. Based on available research on Arizona’s experience with mandatory E-Verify, the study assumed that one year after E-Verify becomes mandatory, about 20 percent of unauthorized immigrants would leave the country, and future inflows of unauthorized immigrants would immediately drop 40 percent relative to the baseline. Over time, it is assumed that this “deterrence rate” would increase to 50 percent. To approximate the assumption that the mandatory E-Verify would become more effective at preventing above-ground unauthorized employment over time, new unauthorized immigrants entering the country were assumed to have the same above/underground employment distribution as the current year’s population—in other words, if 20 percent of existing unauthorized immigrants work in the underground economy, 20 percent of the new entrants that year would find underground employment.

Most legislative proposals apply E-Verify only to new hires, and current law precludes re-verifying existing employees. Therefore, for unauthorized immigrants who remain in the country after the initial implementation in FY 2020, the study assumed that E-Verify only affects workers who leave their job and must apply for a new one (and therefore, face the risk of being detected by E-Verify). To estimate how often unauthorized immigrants leave their job, the study made use of Bureau of Labor Statistics occupational data on job turnover, weighted based on an estimate of unauthorized immigrants’ occupational distribution from the Pew Research Center. It is assumed that employers would terminate workers at the same rate as in the status quo, but that due to the fear of not being able to find another job, unauthorized immigrants would be half as likely to quit as other workers in those occupations. Initially, 20 percent of above-ground workers who “turn over” were assumed to leave the country (either instead of trying to find a new job or because they cannot find one), consistent with the first-year assumption above. This rate eventually rises to 50 percent as more employers are required to participate in E-Verify. For

Figure A-1. Assumed change to the unauthorized immigrant population due to E-Verify.
workers already in the underground economy, it was assumed that only 5 percent would leave the country after losing their job, with the other 95 percent remaining in the country and finding new underground employment. It should be clarified that these assumptions do not assume any decrease in the availability of jobs in the underground economy as a result of mandatory E-Verify. The scenario does not explicitly model any other changes to enforcement policies, such as worksite enforcement or additional resources to remove unauthorized immigrants. Instead, it assumes that employers would refrain from hiring employees who receive final non-confirmations.

Under these assumptions, the study projected that E-Verify would reduce the 2035 unauthorized immigrant population by 9.5 million in Scenario 1 (E-Verify only) and by 5.2 million in Scenarios 2, 3, and 5 (which respectively added legalization, temporary worker programs, and high-skilled immigration reforms), compared with the baseline population of 17.9 million. In the E-Verify-only scenario, nearly three-quarters of the total reduction in the future unauthorized population was due to departures of people who currently live in the country versus those who were deterred from arriving (Figure A-1). By comparison, in the scenarios that included E-Verify and legalization, the reduction due to E-Verify was evenly split between people who departed and people who never arrived. As explained in the “Reform Scenarios” section, fewer people have to depart the country under Scenarios 2, 3, and 5 because legalization reduces the number of people working without authorization.

To determine an implementation timetable for mandatory E-Verify, the study team examined recent legislative proposals. The Legal Workforce Act, introduced in the 113th Congress and reintroduced in the 114th, would make E-Verify mandatory after two years. S.744 would have made E-Verify mandatory for all employers four years “after regulations are published implementing [the system].” As a middle ground, this study used a four-year timetable for mandatory E-Verify. To estimate the appropriations that would be needed to support mandatory E-Verify, the study used CBO’s projected appropriations for the Legal Workforce Act.

Legalization

Since the BPC study in 2013 evaluated the legalization program from the Senate bill, this study examined an alternate legalization based on legislative or policy proposals from the past ten years. Based on this analysis, this study considered a hypothetical legalization program with the following characteristics:

- **Legalized status:** Unauthorized immigrants present in the country since 2012 would be able to apply for an indefinitely renewable status, which this study terms “legalized status.” The requirements to obtain this status would be similar to those in previous legalization programs, likely to include English language, criminal background checks, and work or study requirements. Crimes related to unauthorized presence would not be a bar to participation. Rather than explicitly assume how many immigrants would pass each requirement, this study assumed 75 percent of unauthorized immigrants would ultimately gain this “legalized” status, consistent with the IRCA experience and assumptions in previous BPC and CBO studies. This assumption is also consistent with high-end estimates of the percentage of eligible individuals who received DACA status, which did not guarantee long-term protection.

- **Back of the line with no special path:** Legalized immigrants must remain in the interim status for at least five years. After five years, immigrants who are eligible for an existing green card category may apply with no bar due to their previous unlawful presence. Immigrants not eligible for an existing green card category may remain in the interim status indefinitely. Because a green card is a prerequisite.

*The five-year waiting period is shorter than proposed under S.744. This waiting period was selected because (1) its length is more consistent with earlier legislative proposals such as S.1033, S.1438, and S.2611 (109th Congress); (2) legalized immigrants could access benefits earlier, allowing the study to capture more of legalization’s budget impacts; and (3) the lack of “special” green cards in this proposal means that immigrants would only be able to get a green card by “getting in line” behind people who came legally. On the third point, S.744 created a new uncapped green card category for legalizing immigrants, but with the exception of DREAMers, did not make that category available until all existing backlogs of legal immigrants had been cleared.*
for applying for citizenship under current law, the lack of new green cards reflects the stated preference of some in Congress that legalization should not create a “special path” to citizenship for newly legalized immigrants.

- **Exception for DREAMers:** Individuals brought to the United States as children (commonly known as DREAMers) would be allowed to apply for a green card immediately after being granted legalized status, regardless of their eligibility for existing green card categories. Compared with the larger unauthorized immigrant population, there has generally been greater support for allowing DREAMers to obtain green cards, based on the understanding that because they were brought to the United States as children, they may not have played an active role in the decision to break the law.

To reflect the fact that some unauthorized immigrants have closer ties to the United States than others, the scenario assumed that 85 percent of unauthorized immigrants who may be eligible for an existing green card category would apply for legalized status, but that only 65 percent of those who are unlikely to be eligible for a green card would apply for the status. Because these groups are about the same size, the overall percentage assumed to obtain legalized status was about 75 percent. Experience with past grants of legal status suggest that some immigrants may not apply immediately, so the study assumed that 60 percent of applicants for legalized status were assumed to apply immediately, while the other 40 percent would apply sometime in the following two years. To address processing time for both legalized status and future green card applications, the study assumed half of the applications would be processed in the same year, and half would be processed the following year. Under these assumptions, 8.4 million unauthorized immigrants would be granted legalized status by 2019.

To assess potential green card eligibility within the unauthorized immigrant population, the scenario started with the Pew Research Center’s estimate of unauthorized immigrant population characteristics for 2012 and supplemented it with other estimates where necessary. Unauthorized immigrants were divided into five groups: DREAMers (all children and some adults), adults with a citizen spouse, adults with a lawful permanent resident (LPR) spouse, adults with U.S. citizen children over age 21, and adults with U.S. citizen children under age 21. The study adopted CBO’s estimate that 1.5 million people would have qualified for S.744’s DREAMer provisions, assuming that this category encompassed nearly all unauthorized immigrant children present in 2012 (800,000) as well as 700,000 additional adults. For the proportion of adults with U.S. citizen and LPR spouses, the study used estimates from the Migration Policy Institute. To estimate the number of adults with an adult U.S. citizen son or daughter to sponsor them, the study used Pew’s estimate of the number of children under 18 living with their parents, combined with BPC’s earlier estimate of how many unauthorized adults who had U.S. citizen children in 1995 were still in the country. Because a negligible number of lesser-skilled immigrants would likely manage to receive a green card under current employment-based categories, only family eligibility factored in to the analysis.

To avoid double-counting green card eligible immigrants, the scenario took advantage of Pew tables that, using addition and subtraction, made it possible to quantify the overlap between individuals with a U.S. citizen or LPR spouse and individuals with a U.S. citizen child. Because no such data were available for the DREAM-eligible population, the study assumed that among adults, DREAMers had U.S. citizen spouses or children in the same proportion as non-DREAMers (i.e., that DREAMer status was independent of the other characteristics). Based on the presumed ease of gaining status, immigrants eligible for multiple green card categories were assumed to prioritize those categories in the following order: DREAM, citizen spouse, citizen child (only if the child is 21 or older), LPR spouse. Under current immigration law, only the final group, spouses of LPRs, is subject to numerical limits.

**Respectively, these five groups align with the following green card categories: a newly created category for DREAMers; the IR-1 category for spouses of citizens; the F-2A category for spouses of LPRs; the IR-5 category for parents of U.S. citizens that are at least 21 years of age; and parents whose children are still under age 21, but will be able to sponsor their parents for an IR-5 visa after their 21st birthday.
caps. Based on the State Department’s Visa Bulletin, this group was assumed to have to wait in a backlog for three years before receiving their green card.  

For green card eligible immigrants in interim status, the speed with which unauthorized immigrants would apply for a green card was based on available information about IRCA’s Section 245A program, which placed legalized immigrants in a temporary status and allowed them to apply for permanent residence after 19 months. Applications for temporary status opened in May 1987, meaning that legalized immigrants could apply for permanent status no sooner than December 1988; by March 1992, about 1.65 million unauthorized immigrants had been approved for the temporary status, and “over 1.5 million” had applied for permanent residence. Based on these figures, the study assumed that 90 percent of green card-eligible immigrants would apply within their first three years of eligibility (i.e., six to eight years after first receiving legalized status); in each of the next seven years, it was assumed that 20 percent of remaining eligible immigrants would apply. In total, over 98 percent of green card-eligible legalized immigrants were assumed to apply for a green card. For sponsorship by U.S. citizen children, parents who had a U.S. citizen child who was over 18 in 2012 were assumed to be immediately eligible, because those children would be at least 21 years old by the time they are eligible to sponsor their parents. Parents with a U.S. citizen child under age 18 in 2012 were divided evenly into 18 cohorts, and the timetable for these individuals’ green card application started the year their child was assumed to turn 21.

Because newly legalized immigrants would have additional opportunities to advance their careers, it is commonly assumed that legalization would result in a “wage bump” for newly legalized immigrants. This study adopted the same assumption as BPC’s October 2013 study, which presumes that five years after gaining legal status, legalized immigrants wages’ would be 6.5 percent higher than in the baseline, in which they would remain in unauthorized status.

Temporary Workers

To estimate the macroeconomic effects of lesser-skilled temporary immigration programs (for occupations requiring less than a bachelor’s degree), BPC examined legislative proposals from the past decade. Based on these proposals, the analysis included two hypothetical temporary worker programs, one for agriculture and another for non-agriculture. These programs were assumed to launch in FY 2017. Consistent with S.744, the agriculture program was presumed to replace the existing H-2A program, while the existing H-2B program (which covers only temporary or seasonal employees) was not replaced by the new non-agricultural program. Although the study did not explicitly model labor market tests to determine wages and assess the need for workers, it assumes that any temporary worker program to pass Congress would contain such protections.

For non-agricultural workers, the last two comprehensive immigration reform bills to pass the Senate each permitted a maximum of 200,000 non-agricultural guest worker visas. S.2611 (109th Congress) created a 3-year, once-renewable visa with a set cap of 200,000, while S.744 (113th Congress) created a 3-year, indefinitely-renewable visa with a cap that could fluctuate between 20,000 and 200,000. As a compromise, the study used a three-year, once-renewable visa with a cap of 200,000 visas per year.

For agricultural workers, two key legislative proposals from the 113th Congress created temporary worker programs specifically for agricultural workers: S.744 and H.R.1773, the AG Act. H.R.1773 would have created an 18-month visa with a numerical cap of 500,000, while S.744 (113th Congress) created a 3-year, indefinitely-renewable visa with a cap that could fluctuate between 20,000 and 200,000. As a compromise, the analysis for the study adopted a two-year visa with a numerical limit of 350,000. Once the numerical limits were established, it was necessary to consider the appropriate utilization levels for the new temporary worker programs. The current agricultural worker visa, the H-2A visa, has no numerical cap; however, business owners
High-skill Reform

To model the effects of reforms focused on the high-skilled end of the immigration system, this study selected the most recent high-skill bill passed out of a House committee: the SKILLS Visa Act. Although the SKILLS Visa Act’s specific provisions differ in some respects from other legislative proposals, the Act embodies many policy choices that appear frequently in high-skill reform proposals: increasing the number of EB green cards, increasing the number of H-1B visas, liberalizing or eliminating per-country quotas, authorizing spouses of H-1Bs to work, and reducing family-based or diversity immigration as a counterbalance to increases in other categories. This reform scenario would make a number of changes to high-skilled immigration. The number of temporary visas and green cards available to high-skilled H-1B immigrants would expand, but this scenario would also immediately eliminate the diversity immigrant visa and would cut the number of family-based green cards after ten years by eliminating green cards for brothers and sisters of U.S. citizens (Figure A-2). Once all changes to green card caps take effect, the scenario would increase the available number of employment-based green cards by 95,000, but would eliminate 120,000 green cards from other parts of the legal immigration system. Thus, although this scenario would increase the U.S. population by about 1.1 million over 20 years, the large majority of this increase would take place in the first ten years, before family-based green cards are cut.

H-1B and H-4 Temporary Visas

The study scenario would increase the base cap on H-1B visas from 65,000 to 155,000, and would increase the additional allotment for advanced degree earners from 20,000 to 40,000 (effectively, one in five H-1B visas is set aside for applicants with advanced degrees). It would also change the requirements for the advanced degree allocation, limiting it to STEM advanced degree holders from high-research American institutions. Available data suggest that about one in five current H-1B recipients would meet the requirements for the new H-1B advanced degree allotment, therefore, the study assumed both caps would be reached at the same time.

To project how these changes would impact the utilization of H-1B and H-4 visas, the analysis begins with an estimate of how many visas might be issued in the first year under an expanded cap. For the FY 2015 cap season, USCIS received about 172,500 petitions for H-1B visas in six days before the cap was reached. Actual approval rates for H-1B petitions are not available, but historically, USCIS approves about 9 H-1B petitions for every ten it receives. Based on these figures, the analysis assumed that about 155,000 H-1B petitions would be approved in the first year. After the first year, the study assumed that the number of H-1B visas issued would climb 4 percent each year. Based on the historical number of H-4 (dependent) visas issued per H-1 or H-2 visa, the flow assumptions add one additional H-4 entrant for every three H-1B visas issued. Under this scenario, consistent with current regulations and the proposed SKILLS Visa Act, H-4 spouses could apply for employment authorization.

Based on these assumptions, the new numerical cap of 195,000 H-1B workers would first be reached in FY 2027, eleven years after the changes first went into effect. Compared with the current-law baseline, this represents an increase of 110,000 H-1B workers per year, along with about 37,000 H-4 spouses.
EB Utilization and H-1B Adjustment to Permanent Status

Because about 88 percent of employment-based green cards currently go to individuals who are already in the country on some temporary status,42 the study explicitly considered the relationship between the increased number of H-1B visas and the existing and new EB green cards under the scenario. After six years, H-1B and H-4 workers are assumed to take one of two paths: (1) leave the country or (2) adjust to an employment-based green card. H-1Bs and H-4s were sorted into these groups in a two-stage process: first estimating how many of the additional H-1Bs would convert to a green card if space allows, and second determining whether space would be available. To do this, an estimate of the number of dependents adjusting was also necessary, since dependents are also counted against the overall EB caps. According to BPC Freedom of Information Act (FOIA) data, between FY 2008 and FY 2014, about two H-4 dependents adjusted to an EB category for every three H-1Bs that adjusted.

---

Table: Major visa categories affected by the SKILLS Visa Act.

<table>
<thead>
<tr>
<th>Category</th>
<th>Current cap</th>
<th>SKILLS Visa Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-1B temporary nonimmigrants</td>
<td>85,000</td>
<td>195,000</td>
</tr>
<tr>
<td>H-1B general cap</td>
<td>65,000*</td>
<td>155,000*</td>
</tr>
<tr>
<td>H-1B advanced degree allocation</td>
<td>20,000</td>
<td>40,000; now limited to STEM degrees</td>
</tr>
<tr>
<td>H-4 spouses and children</td>
<td>Uncapped</td>
<td>Uncapped; now authorized to work</td>
</tr>
<tr>
<td>Employment-based immigrants (total)</td>
<td>140,000</td>
<td>235,000</td>
</tr>
<tr>
<td>EB-2 advanced degree or exceptional ability</td>
<td>40,040</td>
<td>55,040</td>
</tr>
<tr>
<td>EB-3 skilled workers, professionals, &amp; others</td>
<td>40,040</td>
<td>55,040</td>
</tr>
<tr>
<td>EB-6 STEM doctorates</td>
<td>-</td>
<td>55,000</td>
</tr>
<tr>
<td>EB-7 STEM master’s</td>
<td>-</td>
<td>Unused EB-6 visas</td>
</tr>
<tr>
<td>EB-8 entrepreneurs</td>
<td>-</td>
<td>10,000</td>
</tr>
<tr>
<td>Per-country quota</td>
<td>7% of total</td>
<td>Eliminated</td>
</tr>
<tr>
<td>Family-based immigrants (total)</td>
<td>226,000</td>
<td>First 10 years: 251,000. Eliminated thereafter.</td>
</tr>
<tr>
<td>FB-2 spouses and children of LPRs</td>
<td>114,200</td>
<td>139,200</td>
</tr>
<tr>
<td>FB-4 siblings of citizens</td>
<td>65,000</td>
<td>First 10 years: no change. Eliminated thereafter.</td>
</tr>
<tr>
<td>Other F categories (F-1, F-3)</td>
<td>No change</td>
<td>No change</td>
</tr>
<tr>
<td>Per-country quota</td>
<td>7% of total</td>
<td>15% of total</td>
</tr>
<tr>
<td>Diversity immigrants</td>
<td>55,000</td>
<td>Eliminated</td>
</tr>
</tbody>
</table>

* Cap does not apply to H-1B petitions sponsored by universities, nonprofits, or government research organizations.

---

Figure A-2. Major visa categories affected by the SKILLS Visa Act.
compared with just one H-4 for every three H-1B visas issued at consulates abroad. The analysis assumed that two-thirds of H-1B visa holders would sponsor an H-4 dependent when adjusting to a green card.

The projections started with an assumption that additional individuals granted H-1Bs under the scenario would be equally likely to adjust to a green card as current H-1B visa holders. To estimate the green card adjustment patterns of current H-1B beneficiaries, the analysis used data on the prior visa category of EB green card recipients between FY 2008 and FY 2014, which was obtained through a FOIA request to USCIS. Over that period, the number of H-1B visa holders adjusting to an EB green card was about 40 percent of the total number of H-1B visas approved six years prior. Therefore, the study assumed that if space were available under the EB caps, about 40 percent of the additional individuals granted H-1Bs under the scenario would adjust to permanent residence.

The study used the characteristics of current H-1B workers to assign adjusting H-1B visa holders to the existing EB-1 through three categories, and the new EB-6 through 7 categories (described more fully below). Adjusting H-1Bs who met the qualifications for the EB-6 and EB-7 categories (STEM advanced degree) were assumed to prefer those categories, while adjusting H-1Bs with non-STEM advanced degrees were assumed to prefer the EB-2 category. The remaining H-1Bs (those without advanced degrees) were assigned the EB-3 category. Because of the high standards for the EB-1 category and its current underutilization, the study assumed that the scenario would not result in any additional EB-1 adjustments.

Separately, the analysis examined current backlogs and historical utilization of each EB category to determine whether sufficient demand exists to fill the additional EB slots the scenario would create, independent of the new H-1B visas made available. If sufficient overall demand for new visas appeared to exist, it was assumed that the new slots would go to H-1B visa holders (as opposed to other immigrants from outside the United States or in other temporary visa categories) in the same proportion as the status quo. In the EB-2 category, utilization generally exceeds the cap, and a modest backlog exists; here, the study assumed that the 15,000 new visas made available under the scenario would be fully utilized by FY 2025. Because H-1B visa holders currently use 31 percent of EB-2 slots, the study assumed that 31 percent of new slots would be available to H-1Bs. In the EB-3 category, historical utilization greatly exceeds the cap, and the backlog has recently been more than twice the size of the cap; therefore, new EB-3 visas are assumed to be immediately and fully utilized. Based again on current proportions, the study assumed 56 percent of EB-3 visas would be available to H-1B visa holders.

New EB Categories

Based on provisions of the SKILLS Visa Act, the scenario would create three new EB categories: EB-6, EB-7, and EB-8. The EB-6 category would admit workers with STEM doctorates from high-research universities (based on the Carnegie Foundation’s classification); recipients of U.S. medical, dental, or veterinary doctorates; and people who just completed a residency in medicine, dentistry, or veterinary medicine. Eligible for EB-7 visas would be STEM master’s degree earners from high-research universities. The EB-6 category would have a cap of 55,000 visas per year, and the EB-7 category’s cap would be equal to the number of unused EB-6 visas. In other words, the two categories have a combined cap of 55,000, and EB-6 visas get first priority. To ensure a conservative projection of the overall number of new green cards allocated each year, this analysis sets the number of H-1Bs that would adjust through the EB-6 and EB-7 equal to the number of new adjusting H-1Bs with STEM advanced degrees from U.S. institutions. It is likely that if the SKILLS Act were implemented, qualifying individuals who would currently adjust an existing EB category would use the new EB-6 or EB-7 categories instead. The other categories of individuals eligible for the EB-6 and EB-7 visas were projected to have a small impact on utilization.
The final new EB category under the scenario, EB-8, would designate 15,000 green cards for venture capital-backed entrepreneurs (EB-8-1) and treaty investors (EB-8-2). Under current law, no temporary visa or green card is designated for entrepreneurs no current EB category allows immigrant business owners to self-petition for a green card based on their investment alone. The current EB-5 program allots 10,000 green cards each year for foreign investors, the requirements for the temporary E-2 program are significantly different. The EB-8-2 category would primarily allow current E-2 temporary visa holders (treaty investors) the ability to obtain green cards. The analysis assumes that the number of treaty investors adjusting as EB-8-2s starts with the current number of E-2s who get employment-based green cards each year (about 3,000), then doubles to about 6,000 per year. Given the direct alignment between E-2 and EB-8-2 requirements, this may be a conservative assumption. For the EB-8-1 category, the analysis assumes that utilization would follow the same pattern as the past ten years of the EB-5 category.

Although the qualifications for both of these programs are significantly different than the existing EB-5 program, both assumptions reflect a lesson from the EB-5 program’s history: even where demand is likely to exist, utilization of a new green card category can take time to increase as immigrants, immigration lawyers, and government adjudicators gain experience with the program. Under these assumptions, EB-8 utilization steadily increases over the first 11 years before reaching the maximum of 10,000 green cards in FY 2027.

Changes to Other Green Card Categories

Although the SKILLS Act focuses on employment-based temporary and permanent visas, it would also affect three other classes of green cards: family-based (FB), immediate relative (IR), and diversity visas (DV).

The DV category would be eliminated in favor of the new EB-6 and EB-7 categories. The analysis assumes that individuals already awarded green cards for FY 2016 would enter, but that beginning in FY 2017, the elimination of the DV visa would reduce immigration by about 46,000 per year (equal to the category’s historical utilization).

The FB-2 category for spouses and children of green card holders would immediately see its cap increase by 25,000; given that current backlogs are about five times the size of the numerical cap, the study assumed that all of these green cards would be utilized immediately. Meanwhile, the F-4 category for siblings of citizens would be eliminated after ten years, causing a reduction of about 65,000 immigrants per year. In total, these changes increase annual family-based immigration by 25,000 between FY 2016 and FY 2025, followed by a total reduction of 40,000 per year between FY 2026 and FY 2035.

Finally, the IR categories allow U.S. citizens to sponsor their spouses, unmarried children under 21 (including adopted children), and parents (as long as the citizen is at least 21 years old). IR green cards have no numerical limit, meaning that increasing the number of immigrants in the country is likely to subsequently increase the number of IR visas as the new green card holders naturalize and begin to sponsor qualifying relatives. Because the median immigrant takes about nine years to naturalize after earning a green card, the analysis assumed that IR utilization would first be affected in the 10th year after the scenario begins changing the number of employment- and family-based green cards allocated each year. Based on a simple regression, the analysis added one IR immigrant for every five additional green cards allocated ten years earlier. Over the second ten years, this increased total IR immigration by about 3,200 per year.
Demographic Characteristics

After each scenario’s change to future immigration levels was projected, it was necessary to assign demographic characteristics to these immigrant flows. Between the four reform components, available data enabled immigrants to be separated into the following eight categories:

- H-1B temporary workers.
- H-4 spouses of H-1B principals.
- Lesser-skilled agricultural and non-agricultural temporary workers.
- EB permanent immigrants.
- FB permanent immigrants.
- IR permanent immigrants.
- DV permanent immigrants.
- Unauthorized immigrants.

Based on the most detailed data available, each group of immigrants was assigned an age/gender distribution, a nationality distribution, and an average wage level. These percentages were then multiplied by the aggregate number of immigrants to yield the total number of individuals that fell into each group. Nationality distributions were necessary to estimate how long immigrants might live and how many children they might have. The nationality projections divide immigrants into the same four world region categories that the Census Bureau uses for fertility and mortality projections, based on a list obtained from Census Bureau staff in 2013. New legal immigrants were assumed to have the same workforce participation rate as existing immigrants of the same age and gender, and unauthorized immigrants were assumed to have the same workforce participation rate as the existing unauthorized population.

For H-1B workers, information on age, gender, wages, and nationality was derived from USCIS’s annual report on H-1B characteristics. Information for other types of temporary workers is much more limited; for H-4 spouses and lesser-skilled temporary workers, no information on these characteristics is directly available. For H-4s, the analysis used the same nationality distribution as H-1Bs, as well as the same age/gender distribution with the gender flipped. For lesser-skilled guest workers, the analysis used the characteristics of employed noncitizens with less than a high school education in the 2013 American Community Survey, and the average wage was set equal to the post-legalization wages of unauthorized immigrants.

To estimate the characteristics of permanent immigrants, the study relied mostly on data from the Yearbook of Immigration Statistics, which publishes age, gender, nationality, and occupational distributions for each of the broad green card categories listed above (EB, FB, IR, and DV). To estimate wages for each category, the study started with Current Population Survey data on the occupational wages of noncitizens and weighted those data using the Yearbook’s occupational distribution. Although noncitizen wages may understate true earnings due to that category’s inclusion of guest workers and unauthorized immigrants, the study made a conservative assumption.

Unauthorized immigrant characteristics were estimated based on age, gender, and nationality distributions from DHS, whose recent population estimates contain a combined age/gender breakdown. The most recent information on unauthorized immigrants’ earnings was a Pew Research Center estimate from 2009.

Macroeconomic Model

For each of the five scenarios, BPC provided Macroeconomic Advisers with the estimated impact on four different demographic flows: (1) departures; (2) forestalled arrivals; (3) arrivals; and (4) forestalled departures. As described in the previous subsection, each of these flows was further categorized by region of origin, age, gender and, based both on immigration status and assumed occupational mix, employment rates and annual wages and salaries. In addition, based on assumptions described in the preceding sections, BPC provided estimates of the “legalization progression” for the 11 million unauthorized residents currently estimated to be living in the United States. As part of this progression, roughly ¾ of the eight million currently unauthorized workers are assumed to enjoy a 6.5 percent wage “bump”, spread over several years, reflecting an increase in productivity.
that occurs as these workers move to jobs for which they are better qualified.

The Baseline

In the baseline, the economy begins and remains close to full employment, with growth in real (or inflation-adjusted) Gross Domestic Product (GDP) averaging roughly 2 percent over the next two decades and inflation averaging close to the Federal Reserve’s target of 2 percent. Early in the baseline simulation interest rates rise from current low levels back to historical norms as the Federal Open Market Committee raises short-term interest rates and allows the balance sheet of the Federal Reserve to shrink gradually to a normal size relative to the size of the economy. Unlike baseline projections prepared by the Congressional Budget Office (CBO), the baseline here assumes a gradual deviation from current, unsustainable fiscal policies towards a policy that stabilizes the ratio of federal debt to GDP. The baseline assumes both the growth and composition of population reported in the “middle-series” projections prepared by the Bureau of the Census. While these projections reflect an explicit assumption for total immigration, the Census Bureau does not estimate the share of projected immigration that is unauthorized. As described above, the study estimated that eight million workers, or 6.7 percent of the current private workforce, are unauthorized immigrants. Over time, the number removed from the population reflects BPC’s assumptions about the E-Verify program, which as described above, includes a projection of the future level of unauthorized immigration.

Population Projections

For each scenario, and from the assumed immigration flows, Macroeconomic Advisers estimated the impact on US population by age and gender using projections, published by the Bureau of the Census, of fertility, mortality, and emigration rates by age, gender, and region of origin. For example, in Scenario 4, in 2035 the accumulation of incremental immigration flows is 1,007,516, but the corresponding change in population is 1,088,604. The difference of 81,088 reflects the net of births, deaths, and emigration generated by the incremental immigration flows. As a rule, this study did not project the economic impact of policy changes that did not have a clear effect on both the supply of labor and the aggregate demand for goods and services. For example, the high-skilled visa scenario would authorize H-4 spouses of H-1B visa holders to work, which would increase the supply of labor. However, H-4 spouses who would already be in the country under current law would already impact aggregate demand. Because it is not certain how much aggregate demand would increase due to their employment authorization, it is uncertain how significantly their employment authorization would increase total employment. Although it is likely that employment authorization for existing H-4 spouses would have some positive impact on economic growth, the study made a conservative assumption. By contrast, “new” H-4 spouses who would be admitted under the scenario’s expanded H-1B caps would not be in the country under current law, and therefore currently have no impact on the labor supply or aggregate demand. Therefore, the study did project the economic effects of increasing the number of H-4s in the country.

Federal Spending and Benefits Eligibility

For each scenario, Macroeconomic Advisers estimated the change in the number of people (and their ages and genders) that fell into different categories of benefits eligibility. In turn, these projections determined how expenditures on benefits dispersed by various government social programs would change due to immigration law. These categories include: (1) citizens by birth; (2) citizens by naturalization; (3) new legal permanent residents (LPRs); (4) those with LPR status for five years or more; (5) temporary workers; and (6) legalized immigrants. The analysis considered benefits from the following government programs: (1) health insurance subsidies; (2) Medicaid and CHIP; (3) SNAP; (4) Child Nutrition Programs; (5) Social Security—Old Age & Survivors; (6) Medicare; (7) Social Security—Disability; (8) Supplemental Security Income; (9)
higher education assistance; and (10) refundable tax credits. For example, those eligible for SNAP benefits include: (1) new citizens by birth or naturalization; (2) five-year LPRs; (3) children of new LPRs; and (4) children of legalized immigrants.

For each program there is an assumed “take-up” rate from the eligible cohort and an average benefit per beneficiary. From these were calculated the overall change in benefits, relative to the baseline, associated with each scenario. The algorithms for determining eligibility by program, the take-up rates, and the average benefit rates are based on CBO’s analysis of the Border Security, Economic Opportunity, and Immigration Reform Act passed by the Senate in 2013.

For two reform components, the study estimated appropriations using CBO estimates. The E-Verify component included appropriations from the Legal Workforce Act, and the high-skill reform component included appropriations from the SKILLS Visa Act. The study’s treatment of temporary worker fees, which would be the principal change to revenues and expenditures under the legalization program and lesser-skilled temporary worker programs, is explained below.

Revenues

Relative to the baseline, GDP, incomes, and hence tax revenues—personal, corporate, indirect, and FICA—vary with each scenario. Special adjustments were made to reflect that variations in overall income, and hence revenues, may be attributable to variations in the employment of workers with low incomes and marginal tax rates, and/or workers who exhibit low compliance with the nation’s tax laws. For example, in the E-Verify Scenario, of the 6.6 million unauthorized workers who either leave the country or do not arrive by 2035, half are assumed not to comply with the tax code and the other are assumed to face a marginal tax of just 10 percent.

The study did not project the revenue, expenditure, or economic growth impacts of fees paid to U.S. Citizenship and Immigration Services (USCIS) to process new immigrant visas under the lesser-skilled temporary worker programs, new high-skilled temporary worker programs, or the hypothetical legalization program. Nearly all of USCIS’s budget comes from immigrant processing fees, meaning that all changes to USCIS expenditures on immigrant processing are paid for by revenues that cover the cost of that same processing. This effectively makes the fees budget-neutral. The fees also have an economic impact: when USCIS takes on an increase in processing, it hires more employees. For example, Congressional budget justifications suggest that USCIS planned to hire about 2,150 employees using the $530 million in fees it expected to collect from the President’s November 2014 executive actions. However, because the impact of these fees on aggregate demand and total employment is unclear, the study did not project an economic impact. For example, if immigrants did not have to pay the fees, they might have spent that money on other goods and services, which would increase employment in other sectors of the economy.

The study did project a positive revenue impact of fines paid by legalizing unauthorized immigrants. These fines are meant to be a penalty over and above simply covering processing costs. However, for the same reason described above, these fines would create an ambiguous effect on aggregate demand and total employment. Therefore, the study did not include these fines in its economic projections.

Federal Interest and Local Spending

The impact of immigration reform on federal debt service was computed dynamically, allowing both interest rates and the federal debt to vary across immigration assumptions. State and local spending (other than Medicaid benefits, which were determined as described above) was assumed to vary with population.

Productivity and Effective Labor Inputs

Not all labor is equally productive. For example, in Scenario 1, the employment verification program encourages the departure of current unauthorized immigrants and forestalls future unauthorized arrivals. As described above, the best available data suggested that unauthorized immigrant workers annually earn (or would earn) roughly $24,000 in wages and salaries (in 2014 dollars) with few, if any, fringe benefits—considerably less
than the economy-wide average for total annual compensation per worker. Because these workers are relatively less productive than average, the loss of GDP associated with a reduction in their supply of labor should be less than proportional to the decline in labor supply itself. To capture this effect, the incremental flows of immigrant workers were, in each scenario, weighted by the relative wage assigned them by the Bipartisan Policy Center. These changes in “effective labor inputs” also were used to compute the feedback onto wages of any “capital deepening” associated with each scenario.63

Recent CBO and Council of Economic Advisers (CEA) projections of immigration reform’s economic effects have tended to assume that increases in high-skilled immigration would increase future total factor productivity.64 By comparison, this study assumed no such increase in productivity beyond what is already captured by high-skilled immigrants’ higher relative wage rates. Had the study assumed increases in total factor productivity, Scenarios 4 and 5 would have shown more positive effects on wages, growth, and the federal budget.
End Notes


3 See endnotes 26 and 27.


6 The number of FB visas granted each year under current law is equal to 480,000 minus the number of immediate relative (IR) visas issued to family of U.S. citizens with a floor of no less than 226,000 FB visas available. The number of IR visas issued each year is usually high enough that the minimum visa floor comes into play. For example, between Fiscal Year (FY) 2003 and FY2012, the annual average number of IR visas was 480,015 (2013 Yearbook of Immigration Statistics, Table 6). This is why the minimum is usually considered the “effective cap.”


8 Ibid.


17 8 U.S.C. § 1324b


Congressional Budget Office (2013), supra note 20.


Ibid.


USCIS (2014), “USCIS Reaches FY 2015 H-1B Cap,” available at http://www.uscis.gov/news/uscis-reaches-fy-2015-h-1b-cap-0. For the FY 2016 cap season, 233,000 petitions were received during this period, but the study’s assumptions were finalized before this information became available. See USCIS (2015), “USCIS Completes the H-1B Cap Random Selection Process for FY

39 USCIS (2015), at supra note 37.


41 Because existing H-4s are already in the baseline, they already have some impact on aggregate demand, making their macroeconomic impact less certain. By contrast, new H-4s would unambiguously increase both aggregate supply and aggregate demand. Therefore, the study only projected the macroeconomic impact of new H-4s, who were assumed to have the same age- and gender-specific labor force participation rates as other immigrants.


43 The EB-4 and EB-5 categories would not be changed under the SKILLS Act. Both categories have caps of 9,940 visas. EB-5 green cards were fully utilized in FY 2014, and the categories of “special immigrants” eligible for the EB-4 category are unlikely to be eligible for H-1B visas.


46 Recall that, consistent with the status quo, about 40 percent of entering H-1Bs are ultimately assumed to adjust to an EB green card. The “new” H-1Bs included two groups of people. Primarily, “new” H-1Bs are people who came in under the additional H-1B visas the SKILLS Act would make available. Additionally, the analysis assumes that the changes in law would enable H-1Bs with advanced degrees to stay at a 10 percent higher rate than they currently do. This second group increased annual EB6/7 utilization by about 4,500 per year and EB-2 utilization by about 1,900 per year.


52 DHS, Yearbook of Immigration Statistics, 2011-2013 editions, Tables 8-9, supra note 7. DHS publishes a combined age and gender distribution for all arriving immigrants, but separates the age and gender percentages for particular green card categories. The analysis used these data to estimate a combined age and gender distribution for each green card category. First, the analysis took the ratio of the percentage of females in each green card category to the overall percentage of female immigrants. For example, 49 percent of EB immigrants are female, but 55 percent of immigrants overall are female, yielding an “adjustment ratio” of 0.89. Second, the analysis multiplied the percentage of females in each age category for immigrants overall by the adjustment ratio, which yielded a gender breakdown for each age cell in each green card category. For example, 57 percent of all arriving immigrants under one year of age are female, and the adjustment ratio for EB immigrants was 0.89, so 52 percent of arriving employment-based immigrants under one year of age were assumed to be female. Third, this age-specific gender breakdown was applied to
each green card category’s age distribution. This method yielded overall age and gender percentages that were identical to the Yearbook’s overall percentages for each green card category, and within each category, a gender balance that was proportionate to the overall population of arriving immigrants.

55 Passel and Cohn (2009), supra note 24.
56 Spanish Caribbean & Latin America; Europe, Central Asia & Middle East; Asia & the Pacific Islands; Non-Spanish Caribbean & sub-Saharan Africa.

57 These population estimates are calculated by gender and for ages one to 100 by one-year intervals.
58 Eligibility for Medicaid (and CHIP) is determined by the states, but the benefits are partially funded by federal grants-in-aid to the states and so flow back to the federal budget.
59 The take-up rates and average benefits are, after adjusting for inflation, the same as used in Bipartisan Policy Center (2013), supra note 10.
60 Congressional Budget Office (2013), supra note 20.
61 This computation was based on the assumed wage and salary income for a head of household filing jointly using the 2014 IRS schedule.
63 For example, in the E-Verify scenario, the total number of workers in the economy declines 6.6 million by 2035. Their output is lost directly, but (initially) the remaining workers become more productive—and receive a slightly higher wage—because each has more capital with which to work. This calculation of the change in the capital-to-output ratio is based on changes in effective labor inputs, not in the total number of workers.
Founded in 2007 by former Senate Majority Leaders Howard Baker, Tom Daschle, Bob Dole, and George Mitchell, the Bipartisan Policy Center (BPC) is a non-profit organization that drives principled solutions through rigorous analysis, reasoned negotiation, and respectful dialogue. With projects in multiple issue areas, BPC combines politically balanced policymaking with strong, proactive advocacy and outreach.

bipartisanpolicy.org  |  202-204-2400
1225 Eye Street NW, Suite 1000  |   Washington, DC 20005

@BPC_Bipartisan
facebook.com/BipartisanPolicyCenter
instagram.com/BPC_Bipartisan
flickr.com/BPC_Bipartisan

BPC Policy Areas
- Economy
- Energy
- Financial Reform
- Governance
- Health
- Housing
- Immigration
- National Security