

REFORMING IMMIGRATION

**Helping Meet America's Need
for a Skilled Workforce**



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**A STATEMENT BY THE RESEARCH AND POLICY COMMITTEE OF THE
COMMITTEE FOR ECONOMIC DEVELOPMENT**

Library of Congress Cataloging-in-Publication Data

Reforming immigration: helping meet America's need for a skilled workforce : a statement on national policy / by the Research and Policy Committee of the Committee for Economic Development.

p. cm.

ISBN 0-87186-140-2

1. United States—Emigration and immigration—Government policy. 2. United States—Emigration and immigration—Economic aspects. 3. Labor supply—United States. 4. Alien labor—United States. 5. High technology industries—Employees—Supply and demand—United States. I. Committee for Economic Development. Research and Policy Committee.

IV6483 .I5534 2001
331.6'2'0973 — dc21

2001017411

First printing in bound-book form: 2001

Paperback: \$15.00

Printed in the United States of America

Design: Rowe Design Group

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RESPONSIBILITY FOR CED STATEMENTS ON NATIONAL POLICY

The Committee for Economic Development is an independent research and policy organization of some 250 business leaders and educators. CED is nonprofit, nonpartisan, and nonpolitical. Its purpose is to propose policies that bring about steady economic growth at high employment and reasonably stable prices, increased productivity and living standards, greater and more equal opportunity for every citizen, and an improved quality of life for all.

All CED policy recommendations must have the approval of trustees on the Research and Policy Committee. This committee is directed under the bylaws, which emphasize that "all research is to be thoroughly objective in character, and the approach in each instance is to be from the standpoint of the general welfare and not from that of any special political or economic group." The committee is aided by a Research Advisory Board of leading social scientists and by a small permanent professional staff.

The Research and Policy Committee does not attempt to pass judgment on any pend-

ing specific legislative proposals; its purpose is to urge careful consideration of the objectives set forth in this statement and of the best means of accomplishing those objectives.

Each statement is preceded by extensive discussions, meetings, and exchange of memoranda. The research is undertaken by a subcommittee, assisted by advisors chosen for their competence in the field under study.

The full Research and Policy Committee participates in the drafting of recommendations. Likewise, the trustees on the drafting subcommittee vote to approve or disapprove a policy statement, and they share with the Research and Policy Committee the privilege of submitting individual comments for publication.

The recommendations presented herein are those of the trustee members of the Research and Policy Committee and the responsible subcommittee. They are not necessarily endorsed by other trustees or by non-trustee subcommittee members, advisors, contributors, staff members, or others associated with CED.

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PURPOSE OF THIS STATEMENT

This assessment of U.S. immigration policy and practice draws on CED's long history of research in the areas of education, worker training, economic growth, and labor market policy reform. In prior policy statements such as *American Workers and Economic Change (1996)*, *Putting Learning First: Governing and Managing the Schools for High Achievement (1994)*, and *New Opportunities for Older Workers (1999)*, CED has emphasized the need for improved education and training of the U.S. workforce. In *America's Basic Research: Prosperity Through Discovery (1998)*, we highlighted the challenges of a global market for highly trained graduates in science and engineering. And in *Fixing Social Security (1997)*, we described the approaching demographic dilemma, when increasing numbers of retirees will have to be supported by fewer active workers.

Immigration issues intersect with each of these policy areas to which CED has addressed its work. In this statement we explore the role that immigration should play in the development of our future workforce and in the continued economic growth and prosperity of our society. We note both the benefits and costs of immigration, examine the current state of immigration policy and administration, and argue that a comprehensive reform of both policy and administration is required to realize immigration's large potential benefits. We offer a set of recommendations that we believe provides a framework for discussion and action in this important area.

We recognize that immigration is a large, complex, and controversial subject. In this report, we have chosen to focus on the area of CED's greatest competence and interest—the relationship of immigration to the workforce and thereby to economic growth and living standards. We acknowledge there are large and important immigration issues that we have not addressed, most notably the social and cultural effects of immigration and the eco-

nomomic and social conditions confronting these “new Americans.” These issues present major problems and opportunities regarding their assimilation into our economy and society. This statement is also principally about legal immigration, although we touch on the problem of unauthorized workers insofar as it is an inextricable part of the workforce issues addressed here. Our report is therefore limited in scope, but we believe it provides useful analysis and sound policy recommendations regarding immigration and the workforce.

ACKNOWLEDGMENTS

We would like to thank the dedicated group of CED Trustees, non-Trustee members, special guests, and advisors who comprised CED's Subcommittee on U.S. Immigration Policy (see page vii). Very special thanks go to the subcommittee's co-chairs, Christopher D. Earl, Managing Director of Perseus Capital LLC, and H.V. Jones, Office Managing Director of Korn/Ferry International, Inc., for their leadership and guidance. We would also like to thank CED's staff and others for the research, analysis, and writing they contributed to this statement: project directors B. Lindsay Lowell, Georgetown University, and Scott Morris, formerly CED Vice President and Senior Economist; CED Research Associates Tarek Anandan and Alastair Smith; and project counselor Van Doorn Ooms, CED Senior Vice President and Director of Research.

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EXECUTIVE SUMMARY

Immigration is a dynamic force in our society and economy. For decades, immigration has helped fuel America's entrepreneurial spirit. However, immigration policy has long been a battleground of competing interests, and its administration has been woefully ineffective.

Our current immigration policy does not adequately address our economic future, and its administration is marked by inefficiency, delay, and frustration. The policy fails to meet the demands of a global marketplace that rewards mobility and skills. CED recognizes that increases in immigration are no panacea for the problems of an aging population and cannot replace basic education and training as the source of a skilled workforce. But an efficient and flexible immigration system can help us confront the economic challenges ahead.

FINDINGS

- **The markets for skilled labor have been very tight in recent years, and the demand for skilled workers will grow rapidly.** Due to an extraordinarily robust economy and a rising demand for skills, employers in many industries have faced worker shortages. The relative wages of skilled workers have risen rapidly, and occupations that require at least an associate's degree are projected to grow twice as fast as total employment during 1998-2008. [p. 4]
- **Today's admission system places too little emphasis on meeting the nation's present and future needs for skilled workers.** The current system fulfills our commitment to family and humanitarian principles, but about 80 percent of legal immigrants face no skill requirements. [pp. 7, 18]
- **Highly skilled immigrants provide important benefits to the U.S. economy.** The overall net economic benefit to the United States from immigration is positive but small, but high-skill immigrants produce disproportionately large benefits. Low-skill immigrants contribute economically, but also depress the wages of poor, low-skill native workers and place a significant fiscal burden on some state and local governments. [p.12]
- **Illegal migration presents serious economic and social problems.** Unauthorized workers make major economic contributions in agriculture, services, and other sectors. But they typically have little education, and they and their children face formidable difficulties in assimilating to American society. [pp. 13, 28]
- **Backlogs and delays in admitting foreign workers reveal failures in immigration administration and management.** The full process of approval for a foreign permanent worker now takes two to ten years, and as much as half the annual allotment of such visas is unused due to such delays. There is a backlog of over one million total "green card" applicants attempting to adjust to permanent status. Workers, employers, and the economy suffer from the uncertainty and delay caused by these bottlenecks. [pp. 20, 24]
- **Failures in the administration of the permanent visa system have distorted and burdened the temporary visa system.** The H-1B temporary specialty worker visa has now become the backdoor entry for permanent admission. Rapid increases in the H-1B admission ceilings, while alleviating immediate hiring problems, will place intolerable strains on the system in the future. [p. 21]

MAJOR RECOMMENDATIONS

CED recommends an integrated approach to the reform of immigration policy and administration that places greater emphasis on labor market skills. The recommended actions would increase the efficiency and flexibility of the system, while preserving America's dedication to family reunification and humanitarian admissions. We address five general themes:

(1) Broaden the Skill Base [p. 30]

- Double the current 140,000 limit on skill-based, permanent employment visas.
- Do not reduce the limits on the core family-based classes of admission.
- Impose flexible country limits on visas for permanent employees, giving preference to under represented countries and to graduates of U.S. educational institutions after country limits have been met.
- Require college degrees for admissions of non-immediate family (siblings and adult children) as well as for applicants to the diversity lottery.
- Make authorized work status a basic labor standard, but recognize that the effective reduction of unauthorized employment requires a comprehensive approach that addresses the fundamental causes of the problem.

(2) Restructure the Administration of Immigration [p. 32]

- Congress and the new Administration should act immediately to comprehensively restructure the management of immigration.
- The new administrative structure should separate the enforcement of immigration

laws from the delivery of immigration services, whether in an independent agency or within the Department of Justice. The authority and policymaking capacity of immigration officials should be consolidated and elevated.

- The INS and other agencies should collect user fees that cover at least the cost of services and that can be used only to fund delivery and improvement of those services.

(3) Rationalize the Admission of Permanent Workers [p. 33]

- Replace employer certification for admission of permanent employees with an attestation requirement. Admission should require weeks, not months or years. Small random audits of attestation, as well as of employers and visa holders during the first year of employment, would strengthen accountability.

(4) Rationalize the Admission of Temporary Workers [p.35]

- Reduce the term of the H-1B visa to three years and require that the worker demonstrate intent to return home. This would restore the temporary nature of this program.
- Auction additional H-1B visas if strong demand for temporary foreign labor results in a number of petitions that exceeds the statutory annual cap.

(5) Create Mechanisms for Flexible Policies [p. 37]

- Congress should require its own review of immigration policy and administration at least once every three years.
- Congress should also create a standing Advisory Board to analyze immigration issues and inform congressional review.

INTRODUCTION



Immigrants have become increasingly important to our economy and workforce. Since 1970, the number of foreign-born individuals in the United States has risen from 10 million to 28 million. Twelve percent of the American workforce is now foreign-born, and immigrants comprise fully one-third of its growth. Over one million new immigrants now join the U.S. population each year, about 800,000 legally and more than 100,000-300,000 (net) illegally.

Immigrants are therefore having an increasing impact on the labor force and the society at large. Particularly in the six states with the largest immigrant populations—California, Texas, Florida, New York, New Jersey, and Illinois—the benefits and costs of immigration are vividly apparent in terms of new business growth, education, and demands on social services.

From the perspective of economic output and growth, legal immigration is a net benefit to the U.S. economy. We believe there are less easily measured benefits as well, as immigrants have contributed significantly to the entrepreneurial spirit that has driven American prosperity. We have concluded, however, that raising the skill levels and educational attainment among workers entering the United States can substantially increase these benefits.

U.S. immigration policy has for decades been a battleground, where adversaries often represent narrow interests intolerant of compromise. The impact of these policy debates has been policy gridlock, in which comprehensive policymaking in the national interest is

difficult. As a result, immigration policy and implementation have failed to adapt to changing times and the demands of the global economy.

The implementation and administration of immigration laws are generally considered some of the least effective functions of the Executive Branch. Backlogs of hundreds of thousands of people awaiting permanent visas, inadequate funding of essential immigration functions, and confused and contradictory regulations have combined to create a system with little credibility, or even legitimacy, among its key stakeholders.

Recent events have provided a compelling example of the urgent challenges facing U.S. immigration policy. In October 2000, Congress enacted the American Competitiveness in the Twenty-First Century Act (AC21). This legislation sharply increased the permitted number of temporary immigration visas for high-technology workers (H-1B visas) to 195,000 for fiscal years 2001–2003, after a previous smaller increase from 65,000 to 115,000 for fiscal years 1999–2000. AC21 followed several years of intense discussion of shortages of information-technology (IT) workers generated by both the tightest overall U.S. labor market in decades and the burgeoning of the “new economy” sectors, such as computers, telecommunications, and many new services based on IT. These sectors have recently experienced a very strong demand for high-technology workers, especially in certain occupations and regions.

CED accepts that AC21 is a necessary response to the exploding demand for high-technology workers. But Congress missed an extraordinary opportunity—one which typically arises no more than once a decade in immigration policy—to achieve deeper, essential reforms that AC21 now makes all the more urgent. As this report illustrates, the fundamental and pervasive problems with the entire immigration system extend far beyond the need for temporary high-technology workers. By focusing narrowly on the H-1B issue and only tentatively dealing with other issues, this legislation neglects other fundamental problems.¹

AC21 will intensify strains on the permanent admissions system and generate expectations of transfer to permanent residency among H-1B workers that cannot be met, given existing limitations and backlogs for green cards. In the absence of further reforms, this policy is likely to create an additional backlog of over half a million U.S.-based applicants for permanent residence over the next five years. It is not difficult to envision the administrative crises, economic disruption, and hardship for individuals that will ensue.

CED believes that such stopgap measures also ignore homegrown solutions to the inexorably growing global demand—and competition—for technical and managerial skills that are in short supply worldwide. While immigration can play an important role in providing skilled workers for the U.S. economy, most of our human capital will have to be homegrown. We cannot neglect the urgent need to improve America's basic education and worker training, which are essential to the creation of the next generation of highly skilled native workers.²

A central theme of this report is that the problems of permanent and temporary visa

systems are inextricable. It is essential to address the legal immigration system with a set of integrated proposals. Recognizing this, we have structured this report to yield recommendations for comprehensive reform.

We first asked two questions:

- *How can immigration best improve the quality and productivity of the U.S. workforce?*
- *What policy and administrative reforms are required to achieve those benefits?*

In Chapter 1, we examine the future workforce needs of the nation and ask how well the characteristics of the immigrant population resulting from our current system and policies meet those needs. We conclude that somewhat higher levels of immigration will help to mitigate the age-related decline in the U.S. labor force in coming decades. More immigrants will not offer a panacea for that looming demographic problem. We also find that successive waves of new immigrants have arrived with ever lower education and skills relative to the native population. We conclude that a gradual shift in the composition of the immigrant population towards those with higher skills will be required to meet the needs of the rapidly evolving economy for such skills and to allow these new Americans to assimilate into our national life and share its benefits more fully.

In Chapter 2 we examine our current immigration policy and its implementation. We find that the current permanent visa system, with its predominant emphasis on family unification, fails to address our long-term workforce needs for permanent and higher skilled workers. Administrative backlogs prevent the issuance of as much as half the employment green cards authorized each year, forcing immigrants and employers alike to turn to temporary visas as the makeshift route to eventual permanent status. As a result, both the permanent and temporary admission systems have become dysfunctional. Employers and immigrants alike have strong incentives to “game the system” instead of playing by the rules.

1. AC21 does contain certain provisions directed at permanent employment visas, processing goals, and the clearance of backlogs. However, as explained in Chapter 2, these provisions are at best a first step and do not effectively address these problems.

2. Committee for Economic Development (1994, 1996).

In Chapter 3 we outline our proposals for integrated reform that would produce a more efficient and fairer system of legal immigration that meets our society's long-term needs. We recommend continuing the generous policy towards family-based and refugee admissions, but argue for increasing opportunities for immigrants with higher education and skills. We also call upon Congress for immediate action to reform the administration of immigration and to streamline and rationalize both the permanent and temporary visa systems. We are gratified that the new Bush Administration has indicated that it places a high priority on resolving some of these problems.

Immigration has become one of the most controversial issues facing our society, especially in regions of high immigrant concentration. Yet the importance of immigration, and the controversy surrounding it, will only increase in the future, as the composition of our population changes and our need for skilled manpower grows. It is essential that we honestly and candidly address these issues *now*, despite their inherent difficulty. The longer we wait to address them, the more difficult they will become, and the smaller will be our economic and political capacity to make the necessary changes. We believe the recommendations we make in this report provide the basis for such a discussion and offer a vision of how immigration can help create a more productive and prosperous nation.

Chapter 1

IMMIGRATION AND THE ECONOMY



America's workforce needs will change dramatically during the next several decades. Our domestic labor force will begin to decline in absolute numbers, producing general labor scarcity. At the same time, American business will find itself competing globally for the services of the "best and the brightest" as technological progress continues to raise the demand for skills and foreign employers increase the quality and compensation for their jobs.

These requirements for skilled workers, of course, only intensify the need to improve U.S. education and to increase the supply of highly skilled native workers, including scientists and engineers. But immigration offers the potential to play a supplementary role in meeting these demands and in alleviating the economic and fiscal problems resulting from the decline in the native work force and the growing population of retirees. In this chapter we examine recent trends in the characteristics of immigrants and outline concerns about the increasing number of unskilled immigrants, particularly illegal immigrants, who can reduce wages and opportunity for both earlier immigrants and native workers. We conclude that the economic benefits of immigration can best be secured if we increase the skill levels of new permanent residents.

AMERICA'S FUTURE WORKFORCE NEEDS

In previous reports, CED has explored the projected labor market in the "new economy" with an aging population and concluded that there will be rapidly growing demand in our

technologically oriented society for skilled workers. In this context, CED has also examined the problems of K-12 education and America's failure to educate enough engineers and other technical professionals to meet the economy's needs.³ Our supply of skilled manpower must ultimately be met by training our own citizens. However, immigration can also play an important role in both alleviating skill shortages in rapidly growing industries and mitigating the larger demographic effects of the approaching decline in the size of the native labor force.

The Increasing Need for Skilled Workers. The American economy continues to demand higher skills for an increasing number of jobs, a trend that will likely continue for decades to come.⁴ The best indicator of this trend is the dramatic increase in the "skill premium"—the widening gap between wages paid highly skilled and less-skilled workers. Male college graduates in 1980 earned on average 62 percent more than high school graduates and 82 percent more than high school dropouts; by 1998 these earnings premiums were 161 and 103 percent respectively, in spite of the fact that the relative supply of college graduates increased during this period.⁵ (See Figure 1.)

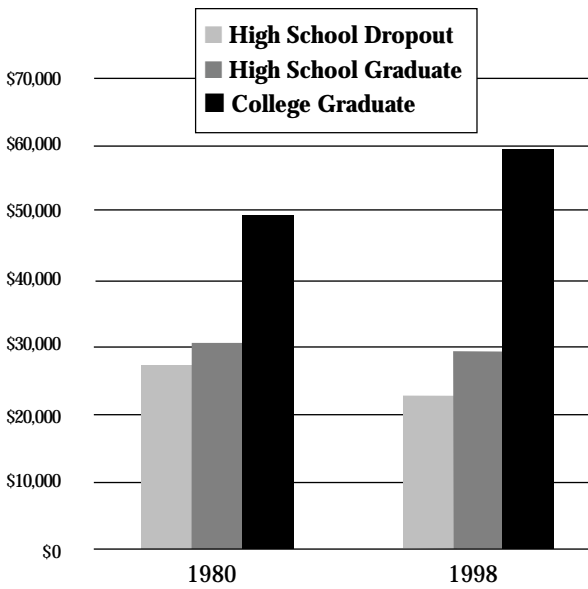
During the past 20 years, the fastest growth has been in occupations requiring at least some college education. As Figure 2 shows, jobs that require at least an associate's degree are pro-

3. Committee for Economic Development (1994, 1996, 1999, 2001b).

4. Bureau of Labor Statistics (1999: Chapter 2).

5. Calculations by CED using Historical Income Tables of the U.S. Census Bureau.

Figure 1
Mean Annual Earnings of Working-Age Population, 1980 and 1998 (in 1998 dollars)



SOURCE: U.S. Census Bureau. Historical Income Tables: People. Tables P-32 and P-34.

jected to grow much faster than total employment during 1998–2008, and jobs requiring a bachelor’s degree will grow about two-thirds faster than overall job growth. Jobs not requiring post-secondary training will grow significantly slower than the average.

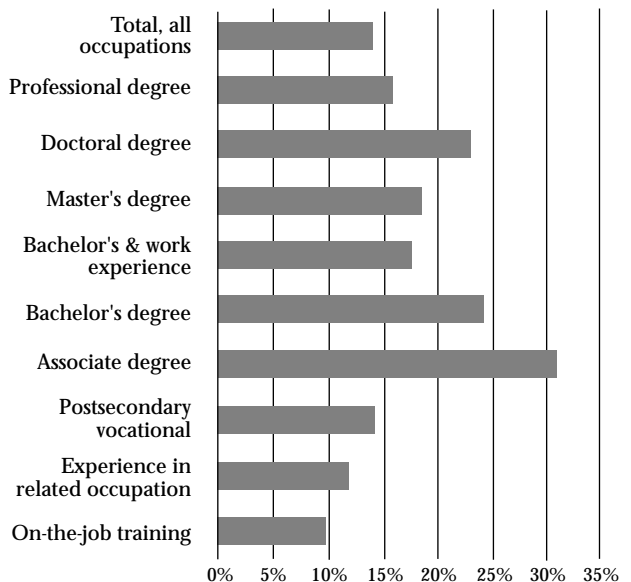
Employers in many industries have recently faced worker shortages due both to emerging skill shortages and an extraordinarily robust economy. Especially tight labor markets appear to have developed in the information technology sector (IT), but this experience has by no means been unique. (See box, “Worker Shortages in Information Technology.”)

Tomorrow’s Overall Labor Scarcity. In 1950 there were seven working-age persons for every person 65 and older in the United States. At present there are five, and by 2030 there will be three. Moreover, in only about 15-20 years the working age native population will actually begin to decline. This unprecedented demographic change will create strains on the economy of several

kinds. First, the shortage of workers will in itself require major changes in business planning, investment, and technology to economize on labor, with new patterns of production, consumption, and trade likely to result. Second, the demographic shift is likely to reduce national saving and investment, producing a slowdown in economic growth per capita on the order of 10 percent.⁶ Finally, in spite of the current temporary federal, state, and local budget surpluses, severe economic strains will arise from rapidly rising public expenditures on federal entitlement programs for the elderly (Social Security, Medicare, Medicaid) and related state and local support programs. Current projections suggest the likelihood of large budget deficits and/or extremely high tax burdens on the working population.⁷

6. Committee for Economic Development (1999); Turner (1998: 6).
 7. Congressional Budget Office (2000); U.S. General Accounting Office (2000).

Figure 2
Projected Job Growth by Education and Training Required, 1998-2008



SOURCE: Bureau of Labor Statistics, U.S. Department of Labor. *Report on the American Workforce*. Washington, DC: 1999.

WORKER SHORTAGES IN INFORMATION TECHNOLOGY

The U.S. average unemployment rate of 4.0 percent in 2000 was the lowest in 30 years, reflecting a record nine-year economic expansion. As a result, the national labor market was extremely tight, and in particular sectors the market was even tighter. A 1997 study commissioned by the Information Technology Association of America found that the IT industry was facing a shortage of 340,000 workers.⁸ The methodology of this report was criticized, and a recent report from the National Research Council (NRC) noted that attempts to quantify “shortages” might not be the most useful analytical approach. Nevertheless, the NRC also concluded, after considering other indicators, that there has been a very tight labor market in the information technology industry.⁹

Statistical indicators, including unemployment, wage growth, and the demand for immigrant visas, provide some support for this conclusion. In 1999, persons in core IT occupations (U.S. Census classifications) experienced unemployment rates between 1.7 and 2.4 percent, while professional specialty occupations as a whole had a jobless rate of 1.9 percent. At the same time, the national unemployment rate was 4.1 percent.¹⁰ In this context, the labor market for IT workers, like that of specialty professionals in general, appears extremely tight.

Demand in excess of supply in specific labor markets should produce relative wage increases. The NRC report found that average real wage increases for computer programmers and computer systems analysts and scientists rose by 3.8 and 4.5 percent respectively between 1996-1999, only somewhat faster than the 3.2 percent for professional specialty occupations as a whole, while national wage growth averaged 3.4 percent.¹¹ (However, some private compensation surveys, although these also vary consider-

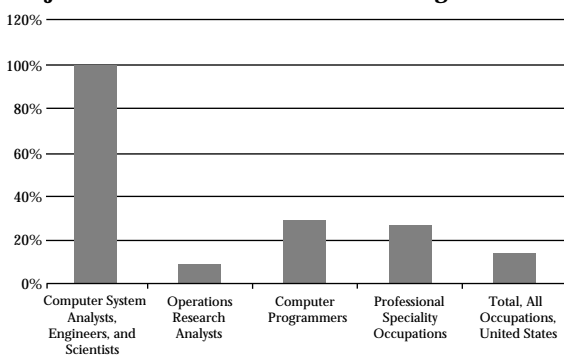
ably, suggest much more rapid IT wage growth, especially in total compensation.¹² Private surveys tend to include select workers and, to some degree, may include stock options and other non-wage compensation.) The evidence suggests that the labor market has been especially tight for certain occupations, such as computer scientists, and in certain locations such as Silicon Valley and Seattle.

What is the Future for IT Workers?

Recent projections for the IT industry do not suggest a slowdown in the demand for workers. The Bureau of Labor Statistics (BLS) expects computer system analysts, engineers, and scientists to be the fastest growing occupations during 1998–2008, increasing by 99 percent. Growth projected for programmers, at 29 percent, is expected to be about twice the average. (See figure below.)¹³

Such projections, of course, are highly uncertain, because the economy will adjust in various ways to such variations in labor demand.¹⁴ Nevertheless, the general conclusion that rapid growth will continue seems warranted.

Projected Growth Rates of IT Jobs through 2008



SOURCE: Braddock, Douglas. “Occupation Employment Projections to 2008”. Monthly Labor Review. Table 2, Employment by Occupation, 1998 and projected 2008. Washington, DC: Government Printing Office, November 1999.

8. Freeman and Aspray (1999: 63).

9. National Research Council (2000: 3.2, 3.8).

10. U.S. Census Bureau (1999).

11. National Research Council (2000: 3.3.4); Bureau of Labor Statistics (2000b).

12. Lerman (1998).

13. Bureau of Labor Statistics (2000); Braddock (1999: Table 2).

14. Bishop (1998).

Immigration, of course, will provide no panacea for these problems. Indeed, it would require roughly a six-fold increase in current immigration levels (assuming the same age structure of immigrants) to maintain today's ratio of workers to retirees—an increase that would be neither socially desirable nor politically viable.¹⁵ Nevertheless, immigration can play an important role in alleviating these strains and will inevitably take on greater importance in the post-baby boomer workforce. In fact, some U.S. states that are experiencing a decline in the working age population (in part due to emigration), such as Iowa, are already urging modifications in immigration policy to mitigate their labor shortages.¹⁶

In the 1950s and 1960s, immigration made no net contribution to the growth of the U.S. working age population. Today, immigrants provide about one-third of this growth, and their contribution will increase dramatically in the future. As Figure 3 shows, assuming that today's levels of immigration continue, immigrants will account for about half of working age population growth during 2006–2015 and for all of this growth between 2016 and 2035, when the native working age population actually declines.

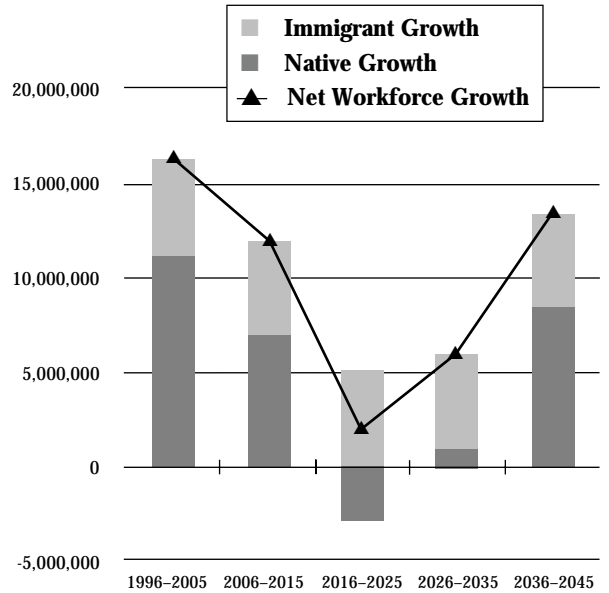
The contribution of immigration to alleviating these economic strains will be determined at least as much by the type of immigrants who arrive on our shores as by their sheer numbers. Dramatically increasing the number of the elderly, children, or unskilled immigrants, who are most likely to be an economic burden, would compound the problems of elderly dependency with other forms of dependency, such as public income support. On the other hand, young skilled immigrants can boost productivity, raise public revenues, and alleviate our demographic problem. The immigrant skill mix not only matters, but probably matters more than the actual immigration levels.

15. CED estimate

16. Strategic Planning Council of Iowa (2000: Goal 1).

Figure 3

Immigration's Contribution to Growth in the Working Age Population (aged 20-64)



SOURCE: U.S. Bureau of the Census and Immigration and Naturalization Service

IMMIGRANTS IN THE ECONOMY TODAY

Although our immigration system is described in the following chapter of this report, a discussion of immigrant characteristics requires a description of the major classes of immigrant admissions.

First, immigrants are either *permanent* or *temporary* residents. In this chapter we are concerned primarily with the former; we return to the latter, and in particular the so-called “skilled, temporary” H-1B workers, in Chapter 2. The major classes of admission, their education and skill requirements, and their proportions of 1998 total admissions, are:

- *family members*, sponsored by previously admitted relatives, have no education or skill requirements (72%),

- *employment* immigrants, sponsored by a U.S. employer, generally must meet certain education or skill requirements (12%),
- *refugees or asylum-seekers*, admitted on humanitarian grounds, have no education or skill requirements (8%),
- *diversity* immigrants, from “underrepresented” countries, must have a high school diploma (8%).

As these data show, 80 percent of legal, permanent 1998 immigrants were subject to no education or skill requirements. However, in addition to these legal immigrants, an estimated 100,000-300,000 (net) illegal immigrants join the permanent U.S. population each year.¹⁷ If these illegal entrants are included, about 84-87 percent of all immigrants are entering without reference to their education or skills.

Education and Skills of Immigrants. Education is the foundation, and a key indicator, of the skills critical to labor market success. And in our increasingly technology-based economy, post-secondary education is increasingly seen as essential for succeeding in the economic life of the middle class.

At the top of the education distribution, immigrants are quite comparable with natives. The proportion of all foreign-born workers with advanced degrees (12 percent) slightly exceeds that of natives (10 percent), and 29-30 percent of immigrant as well as native male and female workers have college degrees. But, at the other end of the educational spectrum, 32 percent of immigrant male workers, and 25 percent of females, have never completed high school, compared with only 8 percent and 6 percent of native-born males and females respectively.¹⁸

17. Warren (2000). Estimates of the unauthorized immigrant population are, by their very nature, subject to great uncertainty. The most recent unofficial estimate is that an annual average of 135,000 (net) unauthorized immigrants joined the U.S. population during 1993-1996. This estimate is approximately one-half of the previous official estimate of 275,000.

18. CED tabulations from Current Population Survey, CPS March Supplement, pooled 1998-2000.

This great disproportion between poorly educated immigrants and natives is a relatively recent development. Over the past three decades there has been a significant decline in the education levels of new immigrants relative to the native population. Whereas in 1960 recently arrived immigrant workers and native workers were about equally likely to have not completed high school, by 1998 new immigrants were almost *four* times as likely as natives to lack a high school diploma.¹⁹

This relative decline in the education levels of new immigrants has resulted from several factors. Family-based admissions, which have dominated immigration numbers since 1965, have no education or skill requirement. As shown in Figure 4, new family-based immigrants average close to 12 years of schooling (high school completion), while those entering on employment visas average 16 years (college graduates). In addition, the education and skills of sponsoring U.S.-resident family members are good predictors of those they sponsor. The personal networks that propel family immigration forward are a powerful force in determining future immigrant characteristics such as education.

Family-based immigration, in conjunction with the removal of national origin quotas, has also produced a substantial shift in the nationality of U.S. immigrants. As more family immigrants from countries with low rates of educational attainment have been admitted, the educational standing of new immigrants has declined relative to natives.²⁰ Forty years ago, 74 percent of U.S. immigrants came from Europe and Canada. During the 1990s, only 14 percent of new immigrants did so, while 30 percent came from Asia and 52 percent from Latin America and the Caribbean, regions with lower education levels on average.

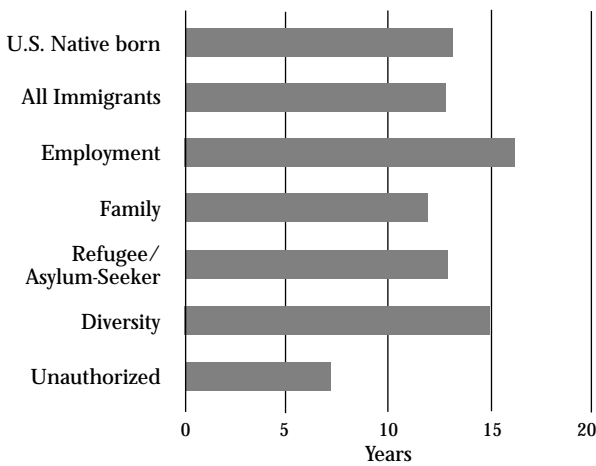
19. Borjas (1999: Table 2-1 and Figure 2-3). The data are for 1998 and refer to civilian salaried workers 25-64 years old.

20. Smith and Edmonston (1997: 185); Betts and Lofstrom (2000: 55).

Yet, while family-based immigrants tend to have less education than employment-based immigrants, the largest source of the poorly educated is found in the illegal population. At five million and growing, illegal immigrants make up nearly one fifth of the foreign-born population. As Figure 4 shows, these unauthorized immigrants are estimated to have only about seven years of education on average.

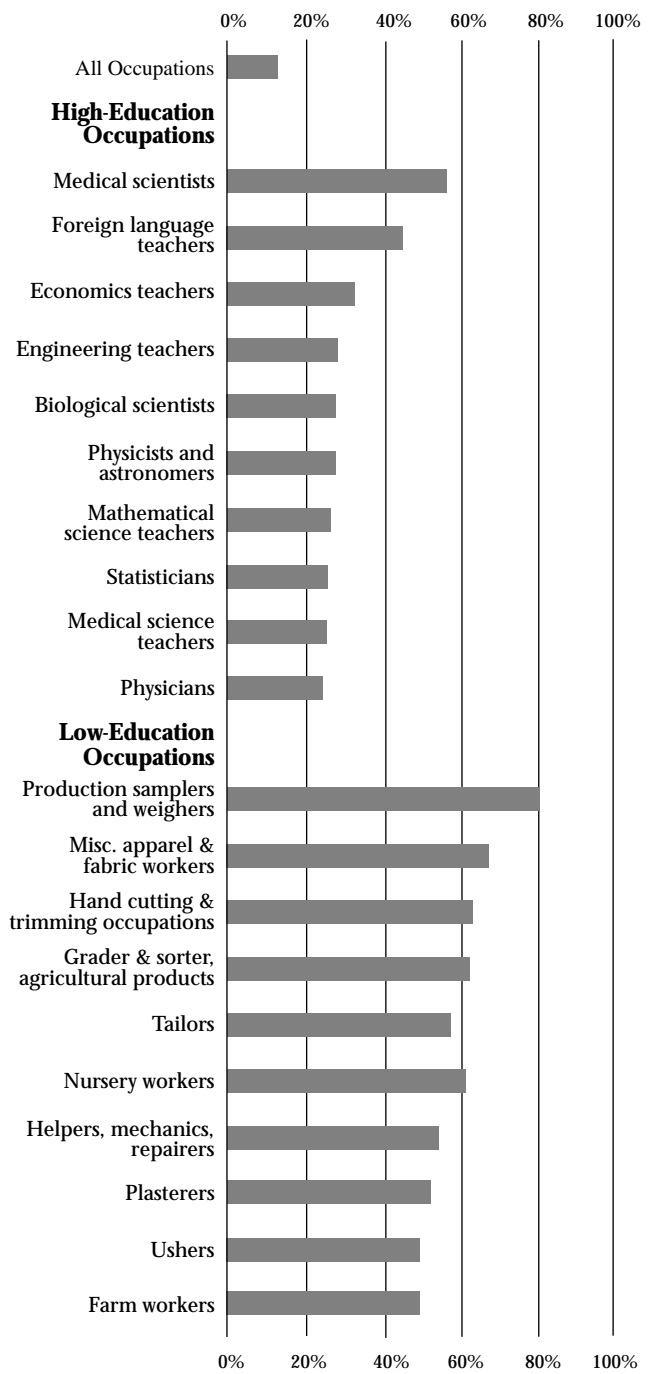
Occupations and Earnings. The education and skills of immigrants, like those of native workers, play a major role in determining the jobs they perform and their earnings from those jobs. While immigrants comprise 12 percent of the labor force, they are highly concentrated in certain occupations—highly skilled jobs requiring advanced degrees and very low-skill jobs requiring little or no formal education. (See box, “Two High-Immigrant Employment Sectors.”) For example, as Figure 5 shows, immigrants make up a greatly disproportionate share of both medical scientists and farm work-

Figure 4
Average Education of New Immigrants by Class of Admission, 1996



SOURCE: Jasso, Gullermina et al. “The New Immigrant Survey Pilot (NIS-P): Overview and new Findings About U.S. Legal Immigrants at Admission.” *Demography*. February 2000; Immigration and Naturalization Service. *Report on the Legalized Alien Population*. Washington, DC: U.S. Department of Justice, 1992.

Figure 5
Immigrants Share of High- and Low-Education Occupations, 1999



SOURCE: Current Population Survey, March 1999 Supplement, Special Tabulations. <http://ferret.bls.census.gov>.

TWO HIGH-IMMIGRANT EMPLOYMENT SECTORS

Immigrants comprise 12 percent of the U.S. workforce, but are found in much higher proportions in certain economic sectors.²¹ This is particularly true in occupations requiring specialized technical skills or advanced degrees in science and engineering. But it is also true for jobs that require very few skills.

University-Based R&D

Foreign graduate students, post-doctoral fellowship recipients, and faculty researchers are critical to many U.S. R&D enterprises. Foreign-born individuals comprised 20 percent of all science and engineering faculty in 1997; 36 percent of engineering professors and 26 percent of math and computer science teachers were foreign-born. Over half of post-doctoral appointments at U.S. universities have gone to non-U.S. citizens in recent years.²² Further, foreign-born recipients of doctorates in science and engineering grew at a rate of over three times that of native-born residents from 1986 to 1997. Today, foreigners account for approximately 40 percent of all science and engineering doctorates earned at American universities.²³

Agriculture

No industry depends more on immigrant labor than agriculture, which employs nearly 2.5 million workers. Nearly 15 percent of all immigrants, most of whom are Mexican, work in agriculture.²⁴ An estimated 600,000 agricultural laborers work in the United States illegally, heavily concentrated in certain crops and states.²⁵

In California, which has the largest number of agricultural jobs, immigrants play a significant role. By some estimates immigrant workers supply nearly all of the farm labor in California. Unfortunately, many rural communities run on a boom-and-bust cycle that follows seasonal demand, and some communities now have large year-round illegal populations with high rates of poverty.²⁶

ers. But immigrants comprise a much larger proportion of the low-skill than of the high-skill occupations. Eighty percent of production samplers and weighers and two-thirds of apparel and fabric workers are immigrants.

This heavy concentration of immigrants in low-skill occupations is reflected, of course, in the distribution of their earnings. In 1998, immigrant males were twice as likely as natives to have earnings in the bottom quintile of the native wage distribution. And, in spite of heavy immigrant representation in certain high-wage occupations, immigrants were less likely than natives to have very high earnings: only about 14 percent of immigrant male workers had earnings in the top quintile of native earnings.²⁷

The earnings of immigrants relative to natives have shown the same deteriorating trend as education levels. In 1960, foreign-born workers as a whole had earnings slightly above those of native workers, while recent male immigrants earned about 13 percent less than natives. During the next four decades, however, the relative earnings of successive new immigrant waves declined sharply and consistently. Male immigrants arriving in the mid-1990s earned 34 percent less than natives. Reflecting this trend, foreign-born males in 1998 earned 23 percent less than natives; for females the earnings gap was 12 percent.²⁸

Although the low earnings of illegal immigrants undoubtedly account for a significant proportion of the immigrant-native wage difference, the earnings and skills of new legal immigrants have also fallen relative to those of natives. Earnings of new non-Mexican immi-

21. Greenhouse (2000).

22. National Science Foundation (2000: Tables 4-45 and 4-46).

23. National Science Foundation (2000: Table 4-41); Bouvier and Simcox (1994: 52).

24. Smith and Edmonston (1997: 149).

25. U.S. General Accounting Office (1997: 5)

26. Taylor and Martin (1997: 855).

27. Borjas (1999: 23 and Figure 2-1).

28. Borjas (1999: Figures 2-1, 2-4 and Table 2-1).

grants, where the illegal component is less important, show much the same pattern during 1960–1998 as the earnings of all immigrants. Similarly, an examination of the reported occupations of three cohorts of legal immigrants admitted in 1977, 1982, and 1994 led the National Research Council to conclude that “...the same general trend of declining relative quality of immigrant cohorts is found using legal immigrants only.”²⁹

Several decades ago, new immigrants, while initially earning less than natives, eventually gained experience and caught up economically. Immigrants typically narrowed the starting wage gap by about 10 percentage points during the first two decades after immigration. As a result of rapid assimilation, immigrants eventually earned on average as much as or slightly more than native-born workers—about 1 percent more in 1970 for example.³⁰

However, this strong convergence of earnings no longer occurs. Today new immigrants with lower skills may never catch up with similar natives.³¹ Mexican immigrants, whose wages at admission were particularly low, experienced *no* convergence of relative wages during 1970–1990, and the gap may have widened.³² Compounding the problem of lower relative earnings is the large increase in the numbers of new immigrants. For both these reasons, upward mobility and middle-class assimilation have become more difficult. Falling education levels have weakened immigrant wage assimilation. Over half the wage gap between today’s immigrants and natives can be attributed to poor immigrant schooling.³³

Differences in earnings are closely related to legal status as a result of the education differences among different classes of admission described above. While there are no data pro-

viding earnings of immigrants by detailed class of admission, the sparse evidence available indicates that employment-based immigrants, at the time they are officially admitted into green card status, have earnings that are more than twice those of family-based immigrants and as much as three times those of illegal immigrants.^{34/35} Family immigrants appear to narrow this gap appreciably over time,³⁶ but illegal immigrants do not. As Figure 6 shows, the households of naturalized citizens have earnings on average about two-thirds larger than those of unauthorized workers, and the earnings of permanent aliens are about one-third

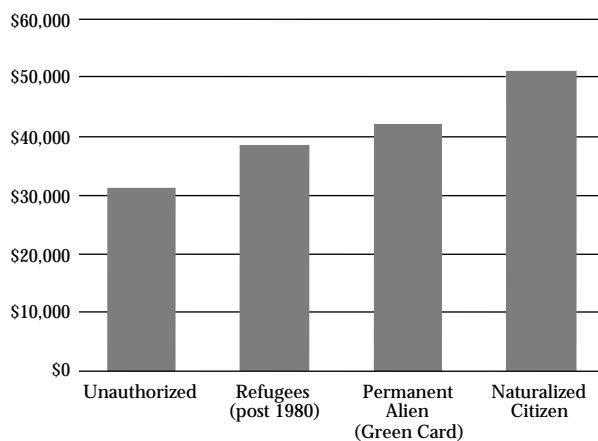
34. Some of this difference may be attributable to the fact that many employment-based immigrants have worked in the U.S. for several years on temporary visas prior to obtaining a green card.

35. Jasso, Massey, Rosenzweig, and Smith (2000)

36. Lowell (1997).

Figure 6

Annual Household Earnings by Legal Status, 1997



SOURCE: Passel, Jeffrey. “A Nation Re-Made: A New Generation of Immigrants to the United States.” Urban Institute Report, Forthcoming. Note: Households are classified according to the legal status of the household head. Earnings represent the sum of all household earnings regardless of an individual’s status within the household. Unauthorized households are, on average, larger and may have more adult earners per household.

29. Borjas (1999: Figure 2-4); Smith and Edmonston (1997: 194 and Table 5-10).

30. Borjas (2000: Table 1.1).

31. Borjas (2000: Chapter 1); Smith and Edmonston (1997: 194-203).

32. Smith and Edmonston (1997: 202).

33. Betts and Lofstrom (2000: 109).

larger. As discussed below, these *average* differences are reflected in much higher rates of poverty among the least-educated immigrant households. Furthermore, since the earnings of immigrants greatly affect the opportunities that their children have, these differences can persist into the next generation.

ECONOMIC EFFECTS OF IMMIGRATION

The economic effects of immigration on the U.S. economy and its consumers, workers, and businesses reflect both the numbers and characteristics of the immigrants, as well as the complex ways in which labor and product markets adjust to immigration. The economic effects on different groups of natives and different regions also vary greatly.

Immigration Produces Positive but Small Net Economic Benefits. Immigration generally provides large economic benefits to the immigrants themselves, whose earnings are usually significantly higher than in their countries of origin, even though they are sometimes very low by American standards. This powerful “job magnet” is why they voluntarily (and eagerly) seek admission and why immigration barriers are so hard to enforce.

There is also general agreement that immigration provides a net economic benefit to U.S. natives *as a whole*. (This benefit excludes possible changes in native tax burdens, as discussed below.) This is because the contribution of immigrant labor to U.S. output and income is greater than just the earnings of the immigrants themselves; this additional income accrues to the U.S. economy in the form of lower prices to consumers, higher wages to workers with complementary skills, and/or higher returns to land and capital. In relation to our \$10 trillion economy, these net gains are quite modest, at least as estimated by conventional economic models. The National Research Council, in reviewing such models, suggested a net economic benefit in the range

of 0.04-0.13 percent of GDP, or roughly \$4-13 billion in today’s economy.³⁷

This calculation, however, masks an important point. Immigration produces both economic winners and losers, and their total gains and losses are substantially larger than the small net benefit found by combining them. As noted below, these gains and losses can be quite important to particular groups of workers, consumers, industries, and regions, even though they also are small in relation to the economy as a whole. Those concerned with the adverse impacts of immigration emphasize the costs to individual groups and regions, as well as the small size of the net benefits. They also argue that important non-economic costs are missing from the equation. Immigration advocates, on the other hand, point not only to the net benefits, but also to the special characteristics of certain immigrant groups and their large contributions to specific sectors, such as scientific research and information technology.

The Benefits of Skilled and Entrepreneurial Immigrants. The U.S. economy benefits most when immigrants complement—that is, differ from and add to—the native-born workforce in terms of abilities, skills, and the willingness to undertake certain jobs.³⁸ Thus both low-skill immigrant workers in agriculture and high-skill specialized scientists make substantial economic contributions.

The economic benefits of highly skilled workers may be significantly understated in conventional economic models. Highly skilled immigrants are very productive and work in high value-added sectors of the economy, and sometimes fill critical gaps for which domestic workers may be unavailable, or available only at much higher cost. In addition, these highly skilled immigrants help produce innovations that put America on the cutting edge of the information age, creating new technologies, products, and exports.

37. Smith and Edmonston (1997: 153).

38. Smith and Edmonston (1997: 136-142).

Immigrant scientists and engineers also contribute disproportionately to research and development (R&D), adding greater value than their numbers alone would suggest. R&D, which has proved to be an important driver of innovation, is critical for a strong U.S. economy.³⁹ Foreign scientists and engineers also garner more patents and citations than their native-born peers.⁴⁰ Technological skill and entrepreneurship have contributed to the success of Silicon Valley, where research and technology-based industries have benefited enormously from immigrant researchers and entrepreneurs (see box, “Chinese and Indian Immigrants in Silicon Valley”).⁴¹

A growing body of evidence suggests that the economic returns from investments in the high technology sector, in which immigrants have played a major role, may be much larger than previously estimated.⁴² There is striking anecdotal evidence of immigrants’ contributions in this sector not only as workers, but also as entrepreneurs and inventors.⁴³ For example, Sun Microsystems reports that immigrant employees created both the Java computer language and the SPARC microprocessor, technological innovations that ultimately created thousands of new jobs for the company.⁴⁴

The United States leads the world in many areas of R&D and technological innovation. Our R&D enterprises attract the world’s best researchers, who want to work in premier universities and corporate labs. Similarly, because the rewards for successful entrepreneurship are very high in the United States, we attract many of the most ambitious entrepreneurs—those who have the best ideas for new products or services, or possess technical or managerial skills that will help build successful businesses.

These activities of highly skilled immigrants illustrate a fundamental point—the strong interdependence in our post-industrial economy between skills, new technology, and the capital investments that embody it. Skills enhance the development of technology and the productivity of capital. In line with this relationship, a recent analysis of the impact of skilled and unskilled immigration finds that shifting the composition of U.S. immigrants towards those with higher skills would raise the economic benefits of immigration for the nation.⁴⁵

Two reservations to these generally positive impacts of skilled immigrants should be noted. The first is their potential to hold in check the wages of native workers with similar skills. The NRC recently reported that “the current size of the H-1B [temporary immigrant] workforce keeps...wages from rising as fast as might be expected in a tight labor market.”⁴⁶ In weaker labor markets, such restraining effects on the wages of skilled workers could be problematic, although they also tend to mitigate the recent national increase in earnings inequality. The second concern is the incentive provided to employers to seek new employees, including immigrants, rather than retrain other native workers. Although this view has only anecdotal support, it is held and expressed forcefully by many advocates of IT workers. Recognizing both of these concerns, our recommendations in Chapter 3 are designed to provide flexibility regarding the levels of immigrant admissions, make the “temporary” visa system genuinely temporary, and create incentives to support and retrain domestic workers.

Low-Skilled Immigrants—Benefits and Costs. The large influx of immigrants with relatively little education and skills during recent decades has added significantly to the U.S. low-skill labor force. For example, immigration increased the number of high school dropouts

39. Committee for Economic Development (1998: 10).

40. Levin and Stephan (1999: 1213).

41. Saxenian (1999: Chapter 5).

42. Committee for Economic Development (1998: Chapter 2).

43. Saxenian (1999); Warner (2000); Black (2000).

44. Alvares (1998).

45. Borjas (1999: 101-103)

46. National Research Council (2000: 5.5).

CHINESE AND INDIAN IMMIGRANTS IN SILICON VALLEY

Thirty-two percent of Silicon Valley's science and engineering workforce is foreign-born, the vast majority Chinese or Indian. Chinese and Indian engineers run one-quarter of all Silicon Valley high-tech businesses. In 1998, these firms employed 58,282 workers (14 percent of the technology work force) and took in over \$16 billion in total sales (17 percent of all firm sales).⁴⁷ According to *Fortune* magazine, Indian immigrants have "created companies that account for \$235 billion of market value."⁴⁸

The background and development of Silicon Valley's Chinese and Indian immigrant populations is remarkably similar. Both point to education and networks. Many of Silicon Valley's Indian-born workers were educated at one of six Indian Institutes of Technology, while a large proportion of the Chinese are graduates from one of several engineering universities in Taiwan. The level of training in these institutions is regarded as equal to that of America's Ivy League schools.⁴⁹

An array of immigrant-oriented professional organizations in Silicon Valley provides immigrants with professional contacts and information. Groups such as the Silicon Valley Indian

Professionals Association (SIPA) and The Indus Entrepreneurs (TiE) were created as a means of bringing Indian immigrants together for social as well as business reasons.⁵⁰ Similarly, a group of Taiwanese engineers started a branch of the Chinese Institute of Engineers in San Francisco in 1979.

Once established in the United States, these highly skilled immigrants often lend their knowledge and success to others. Kanwal Rehki, an Indian entrepreneur reportedly worth \$500 million, is head of TiE.⁵¹ Formerly the chief technology officer at Novell, Rehki has personally supported more than 45 Indian startups.

Many immigrants also return to their native countries as entrepreneurs and investors, creating contacts that open new markets for their U.S.-based firms. This process of reverse migration and cross-investment may help to explain why exports to the Asia-Pacific region are now nearly four times higher than exports to comparable countries in other parts of the world.⁵² Such activities also help to alleviate concerns about brain drain from these countries, as India and China benefit from the successes of their expatriates in the United States.

by about 21 percent between 1979 and 1995.⁵³ These unskilled workers undoubtedly make substantial economic contributions in the jobs they fill—as farm workers, garment workers, housekeepers and cleaners, cooks and waitresses, child care workers, taxi drivers, and in many other occupations. The benefits to native Americans from their work show up most commonly as lower prices for the goods and services they produce.

These benefits, however, come at the very considerable cost of reducing wages for unskilled workers generally in the U.S. economy, thereby adding to the downward pressure on the earnings of low-income Americans that has become a prominent and problematic feature of a labor market increasingly demanding more

skills. The size of these wage reductions is controversial, since the immigration of low-skill workers gives rise to geographical movements of workers (both native and immigrant) and capital and other changes in their behavior. These changes diffuse the economic effects of immigration from high-immigration localities across the national economy, making them difficult to measure directly. Nevertheless, a re-

47. Saxenian (1999: Chapter 4).

48. Saxenian (1999: 5).

49. Warner (2000).

50. Warner (2000).

51. Saxenian (1999: Table 3.1).

52. Warner (2000).

53. Borjas (1999: 83).

cent careful analysis suggests that immigration increased the wage differential between high school dropouts and other workers by 3-6 percentage points during 1980–1995, accounting for roughly one-quarter to one-half of the large increase in that gap from 30 percent to 41 percent during that period.⁵⁴ The wages of earlier immigrants are likely to be most adversely affected by further immigration to the labor markets where they are concentrated.⁵⁵

Poverty and Fiscal Costs. Another important cost of low-skill immigration pertains to its impact on government revenues and spending. Poor households are more likely to need government assistance than other households, while they contribute less in taxes. Immigrants today make up more than one-fifth of the U.S. population living in poverty, twice their proportion of the total population. Again, education and skills play a significant role. Thirty percent of adult immigrants with less than a high school education live in poverty, compared with just 8 percent of those who are college graduates.⁵⁶

Estimates by the National Research Council indicate that immigrant households as a whole provide a net benefit to the federal government, but are a net burden to certain state and local governments by lowering tax revenues and consuming public expenditures. State and local governments are primarily responsible for the public services used by immigrants and, in particular, the cost of education for their children. For high-immigration states these effects can be dramatic: in the extreme case of California, immigrant households in the mid-1990s had on average a negative “net fiscal balance” (taxes paid less public expenditures received) of almost \$3,500, which raised the tax burden of the average native households by

nearly \$1,200.⁵⁷ Unsurprisingly, illegal immigrant households tend to generate the greatest fiscal costs to local government.⁵⁸ Not only do they earn very little and pay correspondingly little in taxes, but they also tend to be larger than average and send more (often U.S.-born) children to local schools.⁵⁹

Such short-term accounting can be misleading, however. As immigrants assimilate they earn more, pay more in taxes, and draw less heavily on some public services. Expenditures on immigrant children are investments in human capital that can produce future benefits, both in higher productivity and wages and in social assimilation. To reflect such factors, the NRC has also made estimates of the very long-term fiscal impact of current immigration, taking into account the future taxes and public expenditures related to the children and succeeding generations of current immigrants. These estimates show a positive net fiscal balance (as a discounted net present value, for all levels of government) of \$80,000 for an *average* 1994 immigrant. Because this estimate is extremely sensitive to assumptions about future tax rates, the precise value is quite uncertain and of limited interest. More reliable, and of much greater importance in our view, are the dramatic estimated *differences* in fiscal impact between immigrants with different education levels. The NRC finds that a high school dropout would have a (long-term) impact of *negative* \$13,000, compared with \$51,000 for a high school graduate and \$198,000 for an immigrant with more than a high school education.⁶⁰ Clearly education and skills make an enormous difference to the fiscal effects of immigration, as well as to its overall economic effects.

54. Borjas, Freeman, and Katz (1997: Tables 12, 18, pp. 47, 62).

55. Greenwood and Tienda (1997: 251-394).

56. Camarota (1999: Table 3).

57. Smith and Edmonston (1997: Chapter 6)

58. Passel and Clark (1998: Section III).

59. Greenwood and Tienda (1997: 258).

60. Smith and Edmonston (1997: 350).

CONCLUSION: THE NEED FOR MORE HIGH-SKILLED IMMIGRANTS

To meet our impending workforce needs, we require a system that modestly increases legal immigration and places more emphasis on education and skills, both in setting criteria for admission and enforcing them. If immigration policy and enforcement continue, in effect, to favor overwhelmingly immigrants with little education and skills, progressively fewer immigrants, and fewer of their children, will succeed and contribute economically or assimilate socially.⁶¹

Beyond an emphasis on skills, we also need a flexible immigration system that can respond to changing economic conditions. While the broad features of tomorrow's economy are visible, its detailed characteristics and short-term variability will surprise us. During the sustained growth of the 1990s, immigrants were especially valuable in supplying labor to meet ex-

panding demand and, as a by-product, tempering wage inflation. Economic conditions, however, inevitably change. Industrial sectors, and the economy as a whole, will expand and sometimes contract. As the economy cools, a continued influx of immigrants may create significant social and economic problems.⁶² The experience of California during the economic slump of the early 1990s showed how hostile and anti-immigrant the social and political climate can become. While such responses may reflect latent nativist sentiment, they may also result from the competition of newcomers in labor markets with slack demand.⁶³

For the long-term, we must improve the skills of our native-born labor force through education reform and worker training. Immigration cannot and should not be a substitute for those endeavors. But immigration, properly managed, can supplement them in addressing both our short- and longer-term economic and demographic needs.

61. Borjas (1999: Chapter 7).

62. Goldsborough (2000: 89).

63. Bean, Hook and Fossett (1999: 31-64).

Chapter 2

IMMIGRATION POLICY TODAY



The U.S. system for immigrant admissions is in disrepair. Its regulatory mechanisms are poorly conceived, the bureaucracies that implement immigration policy function incoherently, and the entire system lacks flexibility in responding to change. Hundreds of thousands of applicants for legal entry and permanent residence languish in backlogs, waiting to be approved or issued a final status. Employers go to great pains to hire foreign talent with no assurance that their needs will be met in a timely fashion. As a result, there is little public confidence in America's immigration policies.

PERMANENT, TEMPORARY, AND ILLEGAL IMMIGRANTS

There are numerous categories of admission to the United States. Each applies uniquely to the circumstances or conditions that govern the means of entry, length of stay, and the rights accorded to individuals once in the United States. However, there are three broad categories of entry:

- *Legal permanent admission* as a “green card” immigrant, either under the sponsorship of a U.S. family member or employer or to seek refuge from persecution. After a five-year stay, permanent residents are eligible to apply for naturalization.
- *Legal temporary admission* for various authorized purposes including tourism, business,

study, cultural exchange, or employment with a U.S. firm. (In technical terms, these are “non-immigrants.”)

- *Illegal entry* either for a short stay or with the intent to stay permanently, generally to find U.S. employment.

Legal permanent admissions currently run about 800,000 yearly. Temporary admissions are inherently difficult to quantify, but about six million such visas are issued each year. Most of these are for tourism or business, and fewer than 200,000 are for employment. Illegal entrants are believed to add about 100,000-300,000 persons (net) each year to the permanent resident population, although many more, whose numbers are unknown, seek unauthorized work for periods of less than a year.

Rapidly increasing legal and illegal immigration has caused a significant rise in the number of foreign-born United States residents, from 10.5 million in 1970 to 28.4 million in 2000.⁶⁴ The movement of permanent residents to the United States increased sharply following the Immigration Act of 1965. Today, the foreign-born account for 10 percent of the U.S. population and about 12 percent of the labor force. Immigrants account for 40 percent of the growth of our population and about one-third of labor force growth.

64. Hansen and Faber (1997); Camarota (2000: 1).

CURRENT IMMIGRATION POLICY UNDERVALUES SKILLS

The legal admission system is inherited, with interim modifications, from the Immigration Act of 1965. (See box, “Origins of the U.S. Immigration System.”) That legislation rectified four decades of quotas that barred Asians and many southern and eastern Europeans, as well as refugees, from coming to America. Today’s admission system builds on the Immigration Act of 1990. It strongly favors immigrants who fulfill our commitment to family

and humanitarian principles but places relatively little emphasis on the education and skills that are critical to economic assimilation.

There are numerous classes and subclasses of permanent admissions, whose numbers vary somewhat from year to year. (See Appendix A: Legal Permanent Resident Classes of Admission and Admissions in 1998.) The most important classes, with their annual numerical limits and the numbers admitted in 1998, are:

Numerically Unlimited Admissions

- *Immediate relatives (spouses, minor children, parents) of U.S. citizens: 283,368 admitted in 1998*

ORIGINS OF THE U.S. IMMIGRATION SYSTEM

Prior to 1965, immigration to the United States was controlled by a national origins quota system that came into effect in 1924 following decades of mass immigration—25.8 million persons between 1881 and 1924. That system allocated visas on the basis of the ethnic composition of the U.S. population. Applicants from Great Britain and Germany, for example, were allocated 60 percent of all visas. Asian immigrants were banned.

The Immigration Act of 1965

The 1965 law significantly altered the size and quality of immigrant flows:

- The use of national origin quotas was ended;
- Total numerical limits on admissions were raised;
- The system of admission preferences was amended, giving top priority to family reunification and reserving less than 20 percent of visas for employment purposes;
- Immediate relatives of U.S. citizens were exempted from numerical caps, further emphasizing family reunification over other objectives.

In 1965, the civil rights movement was at its peak, and there was a desire to change immigration policy to be more equitable to prospective immigrants from all countries. In addition, a restrictive U.S. immigration policy was seen as

inconsistent with our strong opposition to Communist regimes around the world. Immigration had also been relatively low for many years, and the strong mid-1960s economy left little apprehension about the nation’s ability to absorb larger immigrant flows. Concerns about the impact of immigration on domestic workers, however, limited the role that employment-based visas would play in the new policy regime.

The Immigration Act of 1990

Several important changes were made after 1965, notably the establishment of refugees as a separate admission category in 1980 and the granting of amnesty to illegal immigrants in 1986. The Immigration Act of 1990 changed little of the basic structure of the 1965 Act, but revised certain features:

- The total number of visas granted was increased by about 40 percent;
- Employment visas for permanent residence were increased from 54,000 to 140,000;
- A diversity lottery for persons from under-represented nations was established.

While the number of skilled immigrants did rise substantially, the concurrent growth in immediate relatives, refugees, and diversity program immigrants has meant that employment-based immigration has risen only slightly as a share of the total.

- *Refugees and asylum-seekers*: admissions set periodically by the President in consultation with Congress; 54,645 admitted in 1998

Numerically Limited Admissions

- *Family-sponsored*: adult children or siblings of U.S. citizens and spouses and children of resident aliens; limit of 226,000; 191,480 admitted in 1998
- *Employment-based*: prospective workers, sponsored in most cases by U.S. employers, and their immediate family members; limit of 140,000 (including family members); 77,517 admitted in 1998
- *Diversity*: admitted by lottery from “under represented” regions, such as African countries; limit of 55,000; 45,499 admitted in 1998

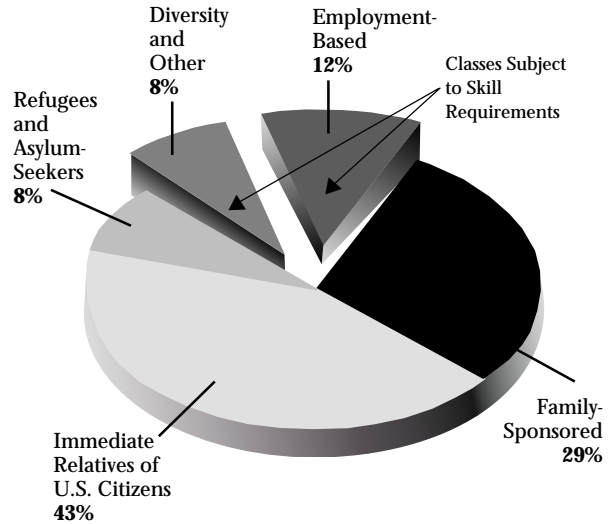
As Figure 7 shows, family-based immigrants enter the U.S. in far greater numbers than the employment, refugee, and diversity classes combined. From 1994 through 1998, citizens’ immediate relatives and other family-sponsored immigrants comprised about 65 percent of admissions; approximately 62 percent were spouses or minor children of citizens or permanent residents.⁶⁵ Employment-based immigration, the only type requiring that the principal immigrant have a bachelor’s degree or special skills, has not exceeded 16 percent of the total in any year during the past two decades.

Within employment-based admissions, there are five classes:

- (EB-1) *priority workers* (experienced professors, multinational executives, or athletes with extraordinary ability). This class demands the highest evidence of skills and does not require employer sponsorship.
- (EB-2) *professionals* (persons with advanced degrees or exceptional ability) often for scientists or business persons.

Figure 7

Permanent Immigrants to the United States by Class of Admission (1998)



SOURCE: Immigration and Naturalization Service, U.S. Department of Justice. *1998 Statistical Yearbook of the Immigration and Naturalization Service*. Washington, DC: U.S. Government Printing Office, 2000.

- (EB-3) *skilled workers* (persons with at least a bachelor’s degree or special skills such as computer programmers). This class includes a special allotment of 10,000 visas to “needed” but non-skilled workers. Both (EB-2) and (EB-3) require employer sponsorship and government certification that concrete steps have been taken in advance to protect domestic workers.
- (EB-4) *special immigrants* (religious workers, for example)
- (EB-5) *employment creation* (entrepreneurs and investors), which is little used.

Numerically limited family-sponsored admissions are also limited to 7 percent of the total for any individual country. Until recently this limitation also applied to employment-based admissions, but the legislative changes in October 2000 have largely removed it. (See box on

65. Immigration and Naturalization Service (2000: Immigrants, Table 4).

AC21 legislation, page 23.) Since networks of families and others of common origin drive immigration, a very few countries can (and to some degree already do) dominate admissions. Both the country limits and the diversity admissions class were adopted to mitigate this domination. At the same time, however, when the demand for particular employment skills is being satisfied from only a few countries, as is currently the case with India and China, turning away green card applicants after their country's cap has been reached may leave positions unfilled. In Chapter 3, we recommend a flexible system of preferences for employment-based admissions to ensure future diversity as well as an adequate pool of skilled workers.

TEMPORARY VISAS FOR TOURISM, STUDY, AND WORK

Whereas legal permanent residents are admitted with the understanding that they may one day choose to become naturalized citizens, legal temporary visas in principle are granted with the understanding that the grantee will return home. Temporary migrants are permitted to stay in the United States for periods ranging from a few days or months to several years. All, with the exception of two visa classes—the H-1B specialty worker and the L intra-company transferee—must clearly establish their intent to return. Furthermore, temporary migrants are given only a limited set of legal rights while here, and only a small share of temporary migrants is authorized to work for U.S. employers.

Most temporary visas are not bound by annual limits. Temporary visitors, including tourists and persons conducting business transactions, comprise by far the largest and fastest growing class, about 75 percent of the 5.5 million individual visas issued in 1997. About 300,000 visas were issued for cultural exchange and for foreign students. In terms of business use, 80,000 visas were issued for intra-company transferees, and 152,000 were issued to work-

ers of all types (skilled and unskilled) in 1997. The balance of temporary visas was issued to diplomats, foreign representatives, and special classes such as crewmen or temporary boarder crossers. (See Appendix B: Temporary Visa Categories and Issuances in 1997.)

The largest and currently most controversial category of temporary work visas is that for the so-called “Specialty Worker” or H-1B program. The H-1B visa is designed to provide the American economy with skilled foreign workers. This visa permits workers to reside and work in the United States for a total of six years; it is issued initially for a three-year period and may be renewed once. The H-1B worker must hold at least the equivalent of a bachelor's degree, and employment must be in an occupation requiring application of a highly specialized body of knowledge.

WORKER POLICIES THAT DON'T WORK

Bottlenecks and delays for immigrating foreign workers have plagued the permanent system and recently surfaced in the temporary admission system. These delays not only highlight failures in the admission regulatory mechanisms, but also indicate fundamental problems in the principles underlying the temporary system and its relationship to the permanent system.

Employers who sponsor foreign workers must first meet certain requirements. In the case of permanent workers, the certification and petition processes currently take years. For temporary workers, however, a simplified attestation and petition process takes weeks or months. Out of frustration with delays in the permanent worker system, employers have turned to the temporary work system with its faster approval process. Prospective immigrants faced with waiting lists, delays, and enormous uncertainty in the permanent system use the temporary system as the preferred means of entry.

The H-1B “temporary” visa has thus now become the de facto transition to permanent residency and employment. At least half of the H-1B workers apply for permanent status.⁶⁶ Consequently, immigrant workers have overwhelmed the temporary visa system. If immigrant workers enter the United States intending to stay permanently, and their employers are placing them in permanent jobs, it is incongruous that they should enter under a temporary system. With an effective permanent visa system, there would be far less dependence on temporary visas.

Problems with “Certification” for Permanent Employment. The regulatory burdens associated with applying for permanent employment-based visas have long been recognized. It can take two to three years for workers to go through the entire process of obtaining permanent residence, and in some, not uncommon, cases the wait may be eight to ten years. While there are significant regional variations, up to four years of the delay is associated with the labor certification process.⁶⁷ As discussed below, this wait is the product of both cumbersome regulations and increasingly poor management. In the end, the excessively slow process produces unreasonable impediments to normal business hiring.

Before hiring a foreign worker on a permanent basis, an employer must submit a Permanent Labor Certification to the Department of Labor (DOL). Subsequent to certification, an employer must also submit to the Immigration and Naturalization Service (INS) a petition showing that the immigrant meets a visa’s requirements, such as educational attainment. In principle, labor certification is intended to protect the employment and working conditions of domestic workers. The DOL has traditionally processed each labor certification by hand, confirming that the employer has, among other requirements, attempted to find a domestic worker for the open position and that

the immigrant will be paid the position’s “prevailing wage.” Because each DOL certification must be verified in this fashion, the process can take years. In addition, such delays and burdens create a large incentive for both employers and immigrants to evade the rules.

The system also imposes great administrative burdens on private employers. Employers must first list job openings in the State Employment Security Agencies, an unlikely source of skilled workers. The prevailing wages, difficult to determine at best, are certified on a case-by-case basis. In the end there is little relationship between conditions at the time of employment and those that are initially certified. According to a review of the employment program by the Carnegie Endowment for International Peace, “the labor certification system has lost even the appearance of protecting native-born workers and jobs.”⁶⁸

The DOL has proposed or implemented a number of reforms intended to improve program efficiency, including expedited processing of some applications and immediate certification of “shortage occupation” visas. Unfortunately, these approaches have failed due to methodological or other implementation difficulties. The DOL recently announced a comprehensive reform to be implemented in 2001 to restructure labor certification and speed processing.⁶⁹ Under this plan, employers will bypass the state employment offices and fax applications directly to DOL to be reviewed only for completeness; a small number of applications would be audited for accuracy. These reforms are laudable, but it remains to be seen whether DOL can implement the new approach.

“Temporary” H-1B Visas and Their Implications. Employers seeking temporary H-1B workers are required only to attest to having met certain conditions, subjecting them to later enforcement action for noncompliance. The

66. Lowell (1998: 9).

67. National Research Council (2000: 5-6).

68. Papademetriou and Yale-Loehr (1996: 109).

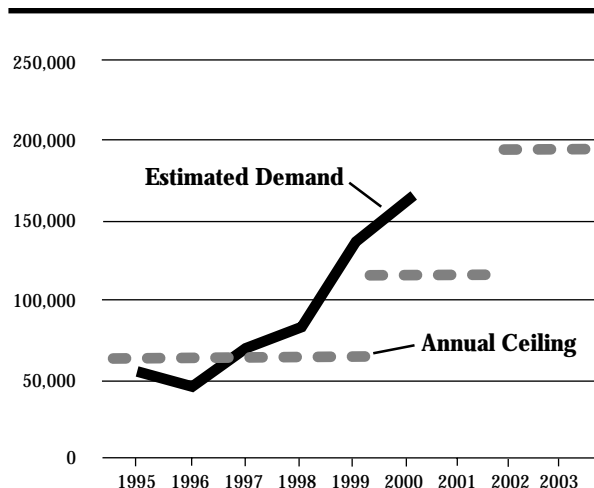
69. In principle, this process would be similar to the attestations used to process the approval for a temporary H-1B visa.

DOL does not have to pre-certify that the conditions have actually been met and, by law, should process the attestation within seven days. As with permanent employment visas, a petition must also be submitted to INS before a visa can be issued, but the use of attestation in lieu of certification shortens the process by years. (However, recent sharp increases in the demand for H-1B visas have begun to produce delays in this system as well.)⁷⁰

Demand for H-1B visas accelerated rapidly after 1997, causing demand (as measured by total applications) to exceed the statutory limits, even though these were sharply raised. (See Figure 8.) In fiscal year 1997, ending on September 30, the 65,000 limit was reached in August, and in 1998 by the end of May. In response, Congress passed the 1998 American Competitiveness and Work Force Improvement

70. U.S. General Accounting Office (2000c:23)

Figure 8
Estimated Demand for H-1B Visas*



SOURCE: Immigration and Naturalization Service, Statistical Branch.

*Estimated demand is the number of individuals receiving H-1B visas plus additional petitions received after the cap was reached. 1999 estimated demand includes approximately 22,000 mistakenly over-issued visas, but may exclude some additional petitions received. 2000 estimated demand is based upon preliminary informal INS estimates.

Act (ACWFIA), which increased the cap to 115,000 for 1999 and 2000.⁷¹ Even these higher limits were insufficient to meet demand, and the new limit was reached in June of fiscal year 1999 and again in March of 2000.

In the face of this burgeoning demand and intensive lobbying by the IT industry, Congress passed the American Competitiveness in the Twenty-First Century Act (AC21) in October 2000. This law further increased the number of H-1B visas to 195,000 for fiscal years 2001-2003, permits an unlimited number of H-1B workers to fill jobs in universities and nonprofit research institutions, and makes other changes. (See box, “American Competitiveness in the Twenty-First Century Act.”)

Unfortunately, while rectifying a difficult short-term problem, AC21 has created new difficulties. Increasing the number of H-1B visas without rationalizing either the temporary or the permanent system will exacerbate present and future problems in both.

H-1B workers can stay in the United States for up to six years, hardly a period of “temporary” stay. During this lengthy period many H-1B workers become established in their communities and workplaces. As a result, most H-1B workers and their employers fully expect a conversion to permanent status, regardless of whether or not the permanent admissions system can actually absorb them. Further, the H-1B program permits the foreign worker to declare an intent to stay *either* temporarily *or* permanently; virtually all other temporary visa holders must demonstrate intent to return to their countries of origin after their visas expire. This very weak test of temporary intent sends an ambiguous message and represents at best a minimal effort to ensure return.

When individual country limits on permanent employment-based visas were in effect, about 25,000 H-1B visaholders were expected to adjust annually from temporary to green

71. The bill also introduced additional worker protections for so-called H-1B dependent firms, those in which H-1B workers comprise 15 percent or more of the workforce.

AMERICAN COMPETITIVENESS IN THE TWENTY-FIRST CENTURY ACT

In October 2000 Congress passed the American Competitiveness in the Twenty-First Century Act (AC21), which introduces many changes in the H-1B visa:

Increases the statutory limit on H-1Bs. The number of H-1B visas that can be issued is increased to 195,000 for fiscal years 2001-2003. Under previous law, the limits were 107,500 for 2001, and 65,000 for 2002 and 2003.

Removes the limit on H-1B visas for universities and research institutions. H-1B visas issued for employees of colleges and universities are no longer counted against the annual cap. Likewise, the annual limit on visas does not apply to employees of nonprofit or government research organizations. This provision will add to the number of H-1B visas issued, possibly beyond the 195,000 annual limits.

Makes the H-1B visa more portable. H-1B workers may switch employers as soon as a new employer *files* a petition with the INS. Former law necessitated the *approval* of a petition before a worker could change employers.

Increases H-1B fees dedicated to training. In conjunction with H.R. 5362, AC21 raises the

H-1B fee from \$500 to \$1000. The bulk of the fee goes to DOL and NSF programs that support education and training for native-born students and workers.

Lifts country limits on permanent employment visas. The 7 percent individual country limit on permanent employment visas no longer applies when the total number of applications received is less than the annual limit.

Extends stays during processing of applications for permanent status. Foreign H-1B workers may stay beyond six years if their green card applications have been in processing for at least a year. One-year extensions may be granted until the employment visa is adjudicated and adjustment of status is final.

Processing goals and backlog clearance. The Act sets "processing goals" of 180 days for immigrant benefits and 30 days for temporary (H-1B) petitions. It also creates an account for INS to draw upon to reduce current backlogs. INS must present Congress with a Backlog Elimination Plan that includes a review of data systems and quality controls and that estimates the costs associated with carrying out the plan.

card status. The recent lifting of these limits permits any number of applicants and their family members from any country to be admitted, up to the annual cap of 140,000. Green card applications by nationals of some countries are therefore likely to expand rapidly. However, the lifting of country limits is only part of a larger issue. Of a year's cohort of 195,000 new H-1B workers, at least 100,000 are likely to seek permanent residency. They and their family members will constitute about 160,000 green card applicants, well in excess of the current 140,000 limit on permanent employment visas.⁷² Furthermore, these H-1B applicants are only one component of the global applicant pool for these 140,000 visas. The

inevitable result will be far too many applicants seeking too few green cards. This will frustrate applicants and employers, create incentives for visa overstay, increase possibilities for exploitation of workers, and intensify the administrative problems discussed below.

Our growing reliance on temporary visas also introduces rigidities into the labor market. Although AC21 improves portability of the H-1B visa between employers, it does not resolve the long-standing problem that H-1B workers seeking permanent residence are effectively tied to the employer sponsoring their green card through the lengthy certification process. While the position awaits certification with DOL, workers find it difficult to switch jobs or negotiate for higher wages. Competing employers may be disadvantaged, innovation

72. Lowell (2000: Table 4).

may be stifled, and competing domestic workers may face intensified downward wage pressures.⁷³

A BROKEN IMMIGRATION MANAGEMENT SYSTEM

Problems with the procedures discussed thus far are compounded by poor implementation by the agencies charged with administering U.S. immigration policy. The full extent of all of the problems cannot be described here; they date back decades and are the substance of legend.⁷⁴

The INS has consistently been rated among the worst performing agencies in the federal government. It has repeatedly been the target of critical reports from the General Accounting Office and the Department of Justice Inspector General's Office. Reports have critically evaluated its enforcement efforts at the border and in the interior, naturalization programs, management of human resources, information systems and statistical collection, financial systems and accountability, and, indeed, almost all its major functions. Despite INS's improvement efforts, *Government Executive's* 1999 Report Card ranked it as one of the worst managed federal agencies; the report card included "D's" for financial management and human resources.⁷⁵

Growing Backlogs. Waiting lists are necessarily created when there are too many applicants for numerically restricted classes of admission. However, cumbersome procedures and inadequate management structures have created backlogs for a host of other functions. As applications rise in the face of management bottlenecks, the number of people affected, and the uncertainty and burdens they face, rise as well. Here are just a few of the most noteworthy examples of immigration backlogs:

- *Waiting Lists.* Numerical caps on classes of admission necessarily create queues of applicants for a limited number of slots. The place in the queue is determined by time of application. Spouses of legal aliens currently wait from four to seven years. Brothers and sisters wait 11 years on average—up to 21 years for the Chinese. The employment waiting list is mostly current, except for Chinese and Indian applicants, but the recent AC21 legislation may change this.⁷⁶ The last available data indicate that in 1997 there were 3.6 million individuals on the various waiting lists.⁷⁷
- *Adjustment Backlogs.* After clearing the waiting list, immigrants who have applied for green cards from within the United States must be formally "adjusted" to permanent residence status. A decade ago, about 100,000 people were in this technical backlog, but today over one million are caught in this situation, which can last over three years. (See discussion below.)
- *Naturalizations.* After five years in the United States, legal permanent residents become eligible for citizenship. A surge in applications in the early to mid-1990s overwhelmed INS's processing capacity, and this backlog grew to 1.8 million with waits up to 28 months. However, recent management changes have helped to standardize naturalization requirements, improve the quality of background checks, and reduce the time from application to final swearing in.⁷⁸
- *Permanent Labor Certification and Petitions.* In the 1970s and 1980s it was possible to obtain an employment-based visa in less than one and one-half years. As noted above, the wait now is at least two to three years, with many delays running much longer. DOL can take up to four years to certify an employer to hire a foreign worker, while INS

73. Robinson (2000).

74. Morris (1985).

75. Government Executive (2000: 96-97).

76. Bureau of Consular Affairs (2000).

77. Visa Office (2000).

78. Immigration and Naturalization Service (2000b).

can take up to a year to approve a foreign worker’s petition.⁷⁹

- *Temporary H-1B Attestations and Petitions.* The law requires DOL to approve an employer’s attestation for hiring an H-1B foreign worker in seven working days, but the time required by INS to process the subsequent petition has increased from about one to four months. AC21, which raised the annual cap by 70 percent and eased portability restrictions, will likely increase the volume of petitions and produce even further delays.⁸⁰

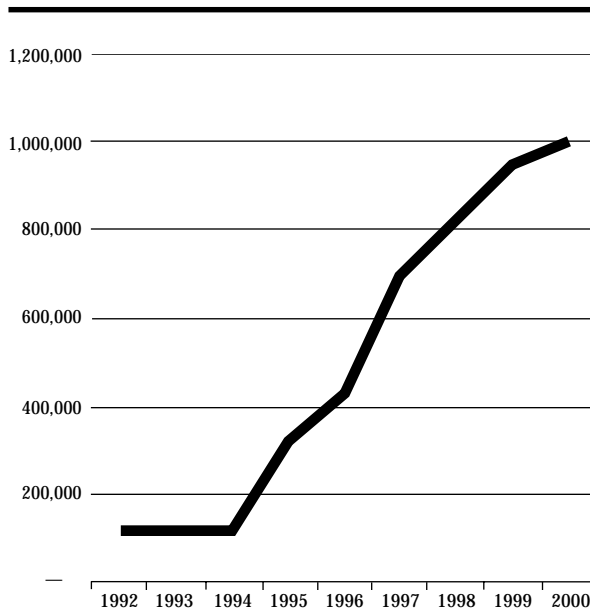
The growth of the green card “adjustment” backlogs during the late 1990s provides a dramatic example of management problems at the INS. Adjustment backlogs grew due to poor anticipation of surging demand for green cards, a lack of manpower, misdirection of user fees to the processing of other functions, and otherwise ineffective administration.

In most instances, adjustment is simply a paperwork process that finalizes the individual’s status as a permanent resident. Employment-based green card applicants often fall into this backlog as they attempt to transfer their status from temporary working visas of one type or another. While final adjustment is pending, the immigrant is stuck in limbo, with reduced rights and the need to file annually for extensions of stay. Technical considerations can create hardship for some or delay family reunification for others. The AC21 legislation makes it easier for some individuals to get annual reauthorizations, but unless the adjustment backlog is cleared, the number of persons caught in this backlog will continue to grow.

Figure 9 shows the rapid growth in total adjustment backlogs for family, employment, and refugee classes over the past decade. As noted below, this backlog grew tenfold during the 1990s, from 100,000 to over one million, as agency-wide INS problems mounted. At least

Figure 9

Backlog of Adjustment of Status Applications (I-485)



SOURCE: Unpublished INS statistics branch data, October 2000. Data represent a sum of persons in the regular, refugee and asylum adjustment backlog from September of each given year; Data for FY2000: Office of Policy and Planning, U.S. Immigration and Naturalization Service. “Monthly Statistical Report, September 2000 FY Year End Report.” October 31, 2000. www.ins.usdoj.gov.

200,000 of these individuals are likely seeking employment-based visas. Waits for final adjustment to legal permanent residency now take from three months to almost four years, depending upon which local INS office is involved.⁸¹

The adjustment backlog accounts in part for the failure to grant the full complement of 140,000 employment-based visas allowed by law. For instance, in 1998 only 77,517 of the 140,000 visas were used.⁸² This shortfall, of course, does not signify a lack of demand. Cumbersome regulations and administrative inefficiencies

79. National Research Council (2000: 5.2.2, 5-6); Shusterman (2000).

80. Committee for Economic Development (2001).

81. Siskand, Suser Hass & Divine (2000).

82. Shusterman (2001).

have kept half of the available visas out of the hands of eligible applicants. Many of these applicants are in the INS adjustment backlog; others await DOL certification. In some cases, the permanent certification process has taken longer than the six-year duration of stay granted to H-1B workers, and the visaholders have had to pull up stakes and return home.

The adjustment backlog is partly due to a significant increase in green card applications that outpaced the INS systems. But poor INS administration has compounded the problem. Indeed, improvements in processing time for one program have often come at the expense of others. For example, when applications for naturalization surged in the mid-1990s, processing delays grew from six months to as much as two years. In many cases paperwork was misplaced or simply lost, sometimes requiring an individual to start the entire process again. In response, administrative reforms and more personnel were employed to reduce the processing time for naturalizations, but at the expense of longer backlogs for other services, including the processing of permanent employment visas.

These problems are related to the dilemma of user fees at the INS. The agency has long been empowered to collect user fees for various services, which currently range from \$6 to \$1000, but they have faced two major problems.⁸³ First, the fees are not tied to funding the services provided. Thus, when demands for naturalization rose, fees were redirected there at the expense of other services.⁸⁴ Second, the typically small fees often do not cover the actual cost of services. The meager \$115 fee for a permanent employment visa does not nearly cover current processing costs, and certainly provides no resources for meaningful reductions in processing time. The Government Accounting Office (GAO) has evaluated the structure of INS user fees and concludes that

the fees do not appear to cover costs, but that the INS is unable to assess costs because it does not have the data necessary to calculate costs accurately.⁸⁵

Broad Agreement on Sources of the Problem. Over the past century 33 organizations have made recommendations to restructure the management of immigration.⁸⁶ (See Appendix C: Organization Chart of the Immigration and Naturalization Service.) Various management reforms have been launched at the INS—at least three in the last decade alone. Nevertheless, in 1999 the GAO offered a bleak assessment of INS's progress in addressing its management and program challenges.⁸⁷ Their critique found deficiencies in strategic planning, organizational structure, communications and coordination, and financial management.

Two recent reports have made comprehensive recommendations for reorganizing the INS. The U.S. Commission on Immigration Reform (the Jordan Commission) and the Carnegie Endowment issued recommendations in 1997 and 1998 respectively. While their recommendations differ markedly, they agree on some fundamental reasons for the continuing failure of INS management.⁸⁸

- *Massive Growth in Workloads and Failure in Service.* The Immigration Act of 1990 increased the limit on permanent admissions by 40 percent and set the stage for rapid growth in temporary visas. As a result, demand for INS services surged. Then, in 1996 the Illegal Immigration Reform and Immigrant Responsibility Act charged the INS with a number of new enforcement missions, from deportations to border inspections. Although INS personnel has grown from about 21,000 in 1995 to about 32,000 today, and its budget from \$2.2 billion to

83. Immigration and Naturalization Service (2000c); U.S. General Accounting Office (1994).

84. U.S. Commission on Immigration Reform (1997: 193).

85. U.S. General Accounting Office (1998: 8-10).

86. Papademetriou, Aleinikoff, and Meyers (1998: 55-59).

87. U.S. General Accounting Office (1999).

88. U.S. Commission on Immigration Reform (1997); Papademetriou, Aleinikoff, and Meyers (1998).

nearly \$5 billion, overload remains a problem.⁸⁹

Congressional appropriations go primarily to enforcement, while visa processing and other services depend substantially on funding from fees. Poor customer service frustrates everyone involved, sets the wrong tone for future citizens, and creates a self-reinforcing negative culture among INS personnel, who become indifferent to constant complaints. Analysts have recommended that user fees be set to reflect true costs and used to cover the services for which the fees are levied, and that a customer service orientation be inculcated within the agency.

- *Conflict between Enforcement and Services at the INS.* Most analysts have argued that INS administration suffers because it tries to combine enforcement and service functions. (Enforcement functions include border control, checks on work authorization, and deportations. Service functions include processing green card and other visa applicants and later processing aliens to become naturalized citizens.) These disparate functions fall under the same executive office at the INS. The border enforcement mentality conflicts sharply with a culture of providing visa services and may also divert scarce resources. Recommendations invariably call for the separate administration of INS's enforcement and service functions.
- *Lack of Accountability.* The Carnegie Endowment report distinguished between external and internal accountability.⁹⁰ In relation to the former, it singled out problems with INS's relationship with Congress, which has often been acrimonious.⁹¹ Frustration with INS failures has led Congress to micromanage instead of relying on INS management. The Jordan Commission called

for Congress to set more manageable and fully funded priorities. As to internal accountability, the Jordan Commission and Carnegie agreed that the accountability of managers must be increased. INS managers are rarely held accountable for poor services or for tolerating enforcement practices that violate agency policies. It was recommended that managers be sanctioned for noncompliance, that innovation should be rewarded, and that the recruitment and training of managers be improved.

- *Poor Information Systems.* Timely and accurate information is required for both effective administration and the production of statistics. Problems with data collection and management of information technology (IT) pervade all functions of INS. GAO has criticized the agency for weaknesses in its IT systems, as well as for poor management of efforts to improve them.⁹² The problem is well illustrated by the consistently late release of the *INS Statistical Yearbook*; the 1998 edition was released in November 2000. This information shortage persisted even while Congress was making changes in immigration policy. It is difficult to identify all the reasons for the failure of INS data systems, but it is clear that automation alone will not resolve the problem. The National Academy of Sciences (NAS), in describing the criteria for a successful statistical system, places a high priority on the independence of the statistical function. The GAO concluded that the INS's Statistics Branch is not independent as NAS defines the term.⁹³ The Jordan and Carnegie reports call for a statistical branch established by statute as a separate entity, headed by a career civil servant, and able to release data on a predetermined schedule without approval of more senior managers.

89. U.S. Department of Justice (2000); U.S. General Accounting Office (2001: 14-15).

90. Papademetriou, Aleinikoff, and Meyers (1998: 28-29).

91. Gimpel and Edwards (1999).

92. U.S. General Accounting Office (2000b, 2000d).

93. The National Academy of Sciences (1992: 1-8); U.S. General Accounting Office (1998b); Lowell and Martin (1999).

- *Multiple Agencies Without a Central Policy Structure.* A variety of agencies have responsibility for immigration functions. The INS has most day-to-day tasks in the enforcement and service functions, the State Department issues visas abroad and handles most refugee issues, the Labor Department processes certifications and attestations and helps enforce workplace rules, and the Department of Health and Human Services manages refugee resettlement with the aid of state and non-governmental organizations. Yet none of these players has a major voice in policy formulation, nor is there a central location and formal structure for policy development. In some areas, such as legal admissions, several agencies are involved in part of the function.

The Jordan Commission recommended a complete restructuring of the U.S. immigration system, with the INS enforcement function to be allocated to Justice; the INS services and benefits functions going to State; its appeals unit going to an Agency for Immigration Review; and all labor standards being administered by the Labor Department.⁹⁴ On the other hand, the Carnegie Endowment argued that all of these functions should ideally be consolidated into a Cabinet level agency, befitting the critical national role of immigration. If that were infeasible, Carnegie recommended that an Associate Attorney General at the Department of Justice head immigration, with enforcement and services functions administered separately.

Recent Reorganization Proposals. Congress is well aware of the growth of backlogs and other processing problems at the INS, as well as successive problems in carrying out its enforcement function. While the INS has made improvements in some areas in recent years, it remains hampered in meeting its multiple missions by an inherently flawed administrative

structure. For the most part, Congress appears to have accepted the widely held view that the INS's enforcement and service functions should be separated, and that the policy authority of immigration should be elevated.

Three major pieces of legislation have been introduced recently for Congressional consideration. The "Immigration Reform and Improvement Act of 1999" would split the INS into two separate agencies within the Department of Justice, one devoted to enforcement and the other to service. The "INS Reform and Border Security Act of 1999" would create a new Immigration Affairs Agency within the DOJ and would give it authority over both enforcement and service. Finally, the "Immigration Restructuring and Accountability Act of 1999" would create a National Immigration Bureau (NIB) within the DOJ and would establish separate NIB divisions for adjudications, enforcement and detention. In addition, the new Bush Administration is expected to offer a proposal to separate the enforcement and service activities.

FAILURE TO CONTROL ILLEGAL MIGRATION

Although this policy statement is directed principally at the legal immigration system, we would be remiss if we did not comment on illegal immigration, which is a major source of very low-skill labor. As noted above, illegal immigration adds an estimated 100,000-300,000 persons (net) to the population each year. About five million persons now reside in the United States illegally, some of whom have been here for years or even decades.⁹⁵ U.S. employment opportunities are a powerful lure for illegal migrants, since U.S. wages are roughly eight times higher than those in Mexico or other Central American countries, and efforts to seal off the borders have not been very successful.

94. U.S. Commission on Immigration Reform (1997: 147-181).

95. Warren (2000: 3); Smith and Edmonston (1997: 51-52).

Since World War II, agriculture in particular has become dependent upon a ready supply of seasonal workers, many of them unauthorized. Illegal workers also can be found outside of agriculture in a variety of non-durable manufacturing and service sector jobs, in rural, suburban, and urban settings. Here too, many employers have become dependent on low-paid, unauthorized workers. We do not underestimate the difficulty of this problem. The wage differentials involved provide a powerful magnet to attract immigrants as well as a powerful temptation for employers to reduce costs.

Policies to control illegal migration and their enforcement have a long and difficult history in the United States. Policies have wavered between attempts at unequivocal crackdowns and a remarkable degree of tolerance. Because employers, wittingly or not, create the demand for illegal migrants, the Immigration Reform and Control Act (IRCA) of 1986 instituted employer sanctions that require employers to keep records on work-authorizing identification presented by new employees.⁹⁶ Fines can be levied for failure to comply, although extremely few have been pursued in practice and enforcement of these sanctions has further eased in recent years.⁹⁷

96. As a complementary action, IRCA conferred permanent legal status (amnesty) on unauthorized residents who had been in the United States since before 1982 or who had worked in agricultural occupations during the mid-1980's. IRCA ultimately legalized about 2.7 million illegal residents.

97. The 1996 Illegal Immigration Reform and Immigrant Responsibility Act attempted to crack down on illegal immigration by enhancing *border* enforcement, as well as by making it more difficult for illegal immigrants to adjust to legal status.

In the meantime, attempts to monitor the border more effectively have not notably reduced illegal entries. Even if border enforcement were more effective, however, such controls would not exclude those illegal immigrants who have overstayed their temporary visas. As a result, and as we note in our recommendations, authorized work status is a labor force standard that is necessary, in conjunction with other approaches, to reduce illegal immigration.

Illegal workers are often exploited as a result of their vulnerable status and accept low wages that undercut those of domestic workers. Likewise, unscrupulous employers who knowingly hire unauthorized workers undercut their competitors and create serious equity problems for native workers.⁹⁸ We recognize that many unauthorized workers have labored hard, have contributed greatly to the benefit of many, and are often an integral part of American families. But a system that encourages a cynical disregard for the law is not in the national interest. As the next chapter argues, we should begin to close the backdoor to unauthorized employment and open the front door wider to legal workers.

98. LeDuff (2000)

Chapter 3

RECOMMENDATIONS FOR AN EFFECTIVE SYSTEM



Immigration has major social and economic effects on the United States, especially in areas where immigrants are concentrated. Immigration policy will decide, whether explicitly or by default, which prospective immigrants we will admit. This decision will reflect not only social and economic considerations, but also our values.

We fully support the family and humanitarian commitments of today's immigration policies. We believe, however, that these policies give insufficient weight to the importance of education and skills in determining the success and contribution of new arrivals. Current immigration policies are more influenced by the interests of individual groups than by our common public interest in economic growth and broadly shared economic opportunity.

CED also believes strongly that major and comprehensive reform of the U.S. immigration system will be required to avoid escalating problems in the future. We believe it is essential to create a system that has legitimacy in the eyes of its stakeholders—a system that is fair and efficient, with rules that are consistently applied. An efficient system should aim to process visas in weeks, not months or years.

Our recommendations for revitalizing the system are designed to address, in an integrated fashion, the serious problems identified in Chapters 1 and 2. We recognize that this will not be easy to accomplish, but the price of inaction will be greater administrative failure, a less productive economy, and the movement of many of today's legal immigrants into illegal status.

Congress and the Administration should act now to broaden the skill base of immigrants, restructure the administration of immigration, rationalize the admission of permanent and temporary workers, and create mechanisms to design and implement flexible policies. The system should emphasize skills as well as immediate family reunification and humanitarian admissions.

BROADEN THE SKILL BASE

CED recommends broadening the skill base of immigration by increasing the number of skill-based employment visas relative to other visa categories. The visas allocated to immediate family members need not be reduced, but more skills should be required of small, selected classes of admission that currently have few or no skill requirements. More employment-based admissions would not only provide greater skills immediately, but would also seed future family immigration networks with more highly skilled sponsors.

The number of permanent employment-based visas should be approximately doubled by either (1) increasing the cap, or (2) counting only visa principals towards the cap. Currently, the principal immigrant, spouse, and children are all counted towards the annual cap of 140,000. Either approach can be defended. Simply increasing the overall cap has historic precedence. Not counting the spouse and children of the principal against the cap would effectively double the number of principal immigrants admitted. This second approach has

the further advantage that adjustments in the cap would have a more concrete meaning in terms of employment, since it would no longer include an unknown number of nuclear family members.

CED does not recommend reducing the numerical limits on the core family-based classes of admission. The rationale for family-based immigration is to reunify family members. Further, family-based adult immigrants have on average at least a high school education, and most have at least modest success in the labor market.

We recommend raising skill requirements for the “special” EB-3, siblings and adult children, and diversity classes. In particular, we recommend converting the 10,000 EB-3 visas that require no skills into skilled EB-3 visas, which require a bachelors degree or higher. In addition, siblings and adult children admitted under family sponsorship should be required to have at least a college degree.* Likewise, we recommend requiring a college degree in the diversity lottery category, which currently requires no employer sponsorship and only a high school education. With these changes, these admission classes will begin to generate networks of skilled sponsors that will produce additional skilled family-based immigrants in the future.

We also recommend that Congress restore a flexible individual country limit for permanent employment-based immigrants. Such a flexible cap would have a higher individual country limit, perhaps 10-15 percent. If this limit were reached, nationals of the country would remain eligible, but preference would be given to under represented countries and graduates of U.S. institutions. In recent years, there have been far more employment-based applicants from countries such as India and China than could be accommodated by the 7 percent per country caps. As noted in Chapter 2, Congress recently lifted these caps. CED supports this action because of extreme labor market tightness and the need to clear current adjustment backlogs.

Without country caps, however, a very few countries will eventually dominate employment-based immigration and even family-based admissions. Hiring networks that are dominated by several countries discourage a global search for the best and the brightest employees and are unfair to applicants from other, underrepresented nations. Flexible caps would encourage diversity and equitable opportunity, but without turning away qualified applicants if the full allocation of employment visas remains unused.

After individual country limits are reached, the system should give priority to immigrants from underrepresented countries. Next in priority should be those U.S.-educated immigrants in whom America has invested (regardless of country of origin). Large numbers of foreign students earn advanced degrees in leading U.S. graduate schools of science and engineering. These highly skilled individuals are a national resource. They have a U.S. education, a head start on English proficiency, and familiarity with our society and culture. Most are, in short, ideal candidates for green cards, and any country limitations should be flexible enough to give them priority.⁹⁹

CED supports the principle that legal authorization to work is an essential labor standard, but recognizes that the effective reduction of unauthorized employment requires a comprehensive approach that addresses the fundamental causes of the problem. We believe such a standard is required to make any temporary employment visa programs function effectively and, most important, to ensure consistent and fair labor market conditions for employers and domestic workers.

We recognize, however, that the forces driving illegal immigration for work run deep and

99. Congress should also consider directing the INS to reinstate a two-year period of work authorization for post-graduation “practical training” for “F” foreign students. The INS revised the program to a one-year period over a decade ago to complement a no longer existing off-campus work program. A two-year period would allow time for testing period and a transition to permanency while lowering demand for H-1B visas.

*See memorandum by MARTIN B. ZIMMERMAN (page 46).

are entrenched in parts of our economy. It would be naïve to expect employers to be the only barrier to the employment of unauthorized workers. We therefore believe that additional, complementary approaches also will be required to significantly reduce illegal immigration—economic development abroad, safer and more effective border enforcement, the channeling of legitimate demand for workers into legal immigration programs, and more effective and less intrusive mechanisms to verify work status.

As part of this approach, current laws that bar unauthorized workers from U.S. employment should be kept on the books, and new mechanisms that are reliable and simplify compliance should be piloted and implemented. Employers have a responsibility to comply with the requirement that their employees are authorized to work in the United States (the “employer sanctions” law). At the same time, CED notes that the cumbersome “I-9” document/identification check is susceptible to fraud and may lead some employers to inadvertently discriminate against foreign-appearing persons. The current system lacks reliability and transparency, making it very difficult to determine worker status.

Recommendations that would make employer sanctions workable without relying on a national identification card have been made, but not effectively followed.¹⁰⁰ In particular, the INS and the Social Security Administration have pilot work authorization programs that crosscheck an individual’s name with a valid Social Security number. In most cases these checks are reliable. When either the name or Social Security number does not check out, the individual is provided an opportunity to explain the discrepancy. This simple check permits unauthorized workers to be quickly identified without requiring the employer or worker to be subjected to unreliable (and potentially fraudulent) document checks, and some employers are now volunteering for these pilot

programs. However, because these programs continue to impose the burdensome I-9 requirements, we recommend that a full evaluation without these requirements be undertaken.

Other proposals to improve the efficacy of sanctions include improved methods of identification and enforcement. This is not the place to review the list of possible innovations. However, we are convinced that new and sophisticated information technology can make effective and reliable law enforcement possible. We must mobilize the political will to do so.

Finally, CED urges employers to act in ways that discourage the employment of unauthorized workers. Where possible, employers should apply greater scrutiny to their contractors’ employment practices and voluntarily create inspection mechanisms and enter into monitoring agreements. Employers should not recruit illegal workers in the United States or in other countries, exploit workers’ questionable legal status to pay sub-market wages, or threaten workers who attempt to unionize. Widespread observance of these principles would deter illegal migration by reducing the demand for unauthorized workers, thereby helping to protect wages and working conditions for native workers and to establish an equitable labor market environment for U.S. employers.

RESTRUCTURE THE ADMINISTRATION OF IMMIGRATION

We call on Congress and the new Administration to move quickly to reform the management of immigration. We applaud the new Administration for making this reform a high priority, and Congress should act immediately on proposals to comprehensively restructure the management of immigration within and across agencies. Piecemeal reforms of the administration of immigration have been inadequate, and a state of crisis now exists at the INS. Credible proposals outside and within

100. U.S. Commission on Immigration Reform (1997: 103-125).

Congress have long existed. They range from a separation of enforcement and service functions, to a redistribution of functions across various agencies, to a consolidation of all functions at the INS. **CED believes that any successful reform must separate enforcement from services to ensure the effectiveness and accountability of these two different management functions. Such a separation would also promote a consumer-oriented approach to service delivery. Adding functions such as an ombudsman will help create a responsive organization.**

In addition, effective reform should consolidate and elevate the authority and policymaking capacity of senior immigration officials. We are strongly sympathetic to the proposals of the Carnegie Endowment to accomplish this, whether through the creation of a new, independent agency or the elevation of the immigration function within the Department of Justice.¹⁰¹

Along with the major task of restructuring the management of immigration on an organizational level, CED believes that two additional changes should accompany such an effort:

The INS and other agencies should collect user fees that at least cover the full costs of services and that can be used only to fund delivery and improvement of those services. User fees must not be allocated to pay for other agency functions, and the agencies must be held accountable, issuing regular performance reports to Congressional oversight committees. For example, the revenues from employment visa fees must be dedicated to program functions related to the delivery of employment visa services. In addition, the fees must be sufficient to fund efficient program delivery. The agencies involved, with audits by a third party, should generate an internal accounting of costs and estimates of appropriate fees.

We believe that employers will be willing to pay substantial fees if they are assured that they can obtain permanent or temporary foreign

workers quickly and efficiently without administrative bottlenecks. (See box, "User Fees at the Food and Drug Administration.") At present, employers pay large explicit and implicit costs in obtaining foreign workers. The U.S. Commission on Immigration Reform estimated that the average costs of labor certification alone, including advertising, legal expenses, and administrative fees, averaged \$7,500 to \$10,000 per worker.¹⁰² We recommend that burdensome and time-consuming certification requirements for permanent employees be replaced with a faster system of attestation. While we cannot specify exactly how large fees should be, because they differ according to service and no public cost estimates exist, we believe that user fees fully covering the costs of worker admissions might be as high as \$5,000-\$10,000.¹⁰³

The INS and other agencies should also explore privatizing some immigration functions in which the private sector has a demonstrated capacity, such as the verification and processing of visa applications. In other public activities it has been demonstrated that, in a variety of cases and settings, public goals can be achieved effectively and efficiently through private means. Examples include service delivery (in some elements of welfare reform), enforcement (the Department of Justice's Civil Debt Collection program), and evaluation (the widespread use of private firms to perform program evaluation for federal and state agencies). We have little doubt that this would prove to be an attractive activity for many businesses.

RATIONALIZE THE ADMISSION OF PERMANENT WORKERS

CED recommends that employer certification for employment-based admissions should

102. U.S. Commission on Immigration Reform (1995: 112).

103. A new Premium Processing Program at the INS is to be initiated in 2001 to provide expedited (15 day) processing of visa petitions for an additional fee of \$1,000. At the time of this writing it is unclear which visas the program will cover or what relationship this fee might have to processing costs.

101. Papademetriou, Aleinikoff, and Meyers (1998: Chapter 7).

USER FEES AT THE FOOD AND DRUG ADMINISTRATION

User fees recently have been widely adopted and used effectively at the Food and Drug Administration (FDA). Prior to 1992, FDA's drug review process was in a state similar to that of the INS today. Staff shortages, limited resources, and an increasing number of applications left the FDA and the industry facing review backlogs and an approval period approaching two years.¹⁰⁴ The Administration as well as industry groups, including the Pharmaceutical Research Manufacturers of America, suggested user fees as a means of alleviating system pressures.¹⁰⁵ In 1992, Congress passed the Prescription Drug User Fee Act (PDUFA), which provided for the funding of 600 additional reviewers through user fees, and later extended its authorization until FY 2002 through the Food and Drug Administration Modernization Act of 1997.¹⁰⁶

Despite the costs that PDUFA user fees imposed on approximately 175 companies (from \$128,000 to \$256,000 each in FY2000), the industry was generally supportive on the condition that the fees would:

- supplement existing appropriations;
- be dedicated to review;
- be reasonable; and

- be based on a long-term government commitment to improving the review process.¹⁰⁷

A spokesperson for the Biotechnology Industry Organization noted that the industry would support user fees as long as the money was used to speed drug approvals, but "not pay the electric bill."¹⁰⁸ An expedited review process allows companies to more quickly release products to the market and recoup upfront review costs. *Since implementation of FDA user fees, review times have been cut in half, approval rates have increased, and drug development times have decreased, all of which have generated substantial economic and health benefits.*¹⁰⁹

FDA user fees are assessed twice in the review process. Fifty percent is due upon submission of an application and 50 percent is due upon receipt of an "action letter" (approval, corrections necessary, or denial). Fees on certain applications qualify for waivers, deferrals and reductions. These include fees that present a "significant" barrier to innovation, where the fee exceeds the review cost, or when the product is similar to already approved drugs. Also, businesses with fewer than 500 employees and no prescription products on the market are charged one-half the normal user fee.

be replaced by an attestation, coupled with random audits. An effective permanent employment admissions system must process visas in weeks not years. It must ensure a fair process for applicants, employers, and domestic workers. The reformed system should include a B2G (business-to-government) Internet application process, computerized check of the application form, and a random audit of successful applicants. The user fees recommended above would provide the resources. As noted in Chapter 2, DOL is currently moving to improve its process along these lines, but DOL's reforms in the past have sometimes been marked by delays or piecemeal implementation.

The attestation should include affirmation of all the items in the current attestation for temporary H-1B workers, including that there

are no strikes, lockouts, or similar job actions at intended places of employment and that a notice or a copy of each application has been conspicuously posted at such places of employment. In addition, petitioning employers should be required to affirm that they have tried to recruit similarly qualified domestic workers; that they intend to pay the immigrant the prevailing wage; and that they have not and will not displace similarly qualified domestic workers in order to hire foreign workers.

104. Henkel (1995).

105. Henkel (1995).

106. Food and Drug Administration (1999).

107. Henkel (1995); Federal Register (1999).

108. Neergaard (1997).

109. Food and Drug Administration (1999).

Following approval of the attestations and immigrant petitions, a small random enforcement program should audit employers and visa holders during the first year of employment.

Accountability should not be sacrificed to the goal of timely and less intrusive visa processing. Critics have questioned whether attestation is sufficient to ensure that domestic workers are not harmed by the importation of green card workers. Problems with fraud and exploitation have been discovered with attestations, particularly in the temporary H-1B program. The Government Accounting Office (GAO) has brought to light a small number of serious infractions on the part of employers who do not comply with their attestations. Likewise, the GAO has found fraudulent claims by some foreign workers with respect to their education and skills. Deceit and fraud, involving however small a portion of incoming workers, can undermine trust in the system, and businesses should therefore recognize that employment audits are essential to its integrity. These audits should cover both permanent and temporary work-related visas and both employers and visa holders. The audits should be as non-intrusive as possible, and procedures should take advantage of existing information when appropriate.

In the event that an audit or complaint indicates an inaccurate attestation, penalties against employers for back pay and other violations should be assessed. Visa violators should face monetary penalties and possible deportation. Those responsible for this enforcement activity must have consistent guidelines and adequate staff and other resources. Attestations and user fees together can deliver a timely, market-responsive visa system, and a small audit program will ensure the integrity of the system.

RATIONALIZE THE ADMISSION OF TEMPORARY WORKERS

The Specialty Worker (H-1B) visa should be thoroughly reformed. The system should be

more flexible in responding to market conditions. The visa should be genuinely temporary, with a three-year term. The worker should demonstrate intent to return home just as other temporary visa holders do. While the recent AC21 legislation has made important improvements, CED believes that more fundamental reform is required. Our recommendations for improving the permanent employment system and those for the temporary system are an integrated package; repair of both is required to make either system function effectively.

A flexible H-1B program would, to some degree, adjust the supply of high-skill labor to meet legitimate employer demands as they respond to changes in economic conditions. Such flexibility can be achieved only if the H-1B is a genuinely temporary visa, not an implied six-year visa serving as the escape valve for a dysfunctional permanent visa system. Our present system, which confounds temporary and permanent status, creates unrealistic expectations for both workers and employers and promotes public cynicism. This makes it difficult to manage an effective permanent visa system and creates administrative and political barriers to adjusting immigration levels.

A genuinely temporary H-1B visa would not mean that workers could not apply for permanent resident status. But we envision a system in which green card processing takes place in weeks and becomes the visa of preference for employers and workers. In such circumstances, an employer can “try out” an H-1B for two years or more before deciding whether to sponsor the worker as a permanent employee. Similarly, H-1B workers would not be tied to a single employer by long processing delays. An effective system will harmonize temporary and permanent visas without creating unrealistic expectations. It must be made explicit that an H-1B visa is not an entitlement to permanent residency.

An auction program to allocate additional H-1B visas should be created. This would provide a market test of employer demand and

would be implemented if the number of H-1B petitions received exceeded the statutory cap. (See box, “How Auctions Work.”) The core H-1B program would allocate a fixed number of visas to be determined by Congress every three years. However, because Congressional action is ill suited to provide a timely response when economic conditions change, a market mechanism should be instituted to allocate an additional allotment of visas during periods of extraordinary demand. This “safety valve” would allow the statutory cap to be set at a level that is less likely to produce an oversupply when the demand for skilled workers weakens. There are many ways in which such an auction might work. One possibility would be a quarterly auction, with the number of visas in a given lot determined by an advisory board. (See recommendation below.) A private sector firm might be placed under contract to conduct the auction.

The auction provides a market mechanism to allocate visas to those industries and firms where skilled labor is at a premium and would be most productive. Existing prevailing wage attestations, subject to random audit, would apply to auction visas. However, visas obtained through auction would not be subject to other attestation requirements, since auction costs should provide adequate incentives for employers to seek out domestic labor. Employers would tender the bids, and, as with the current law for petition fees, foreign workers could not be charged directly with the cost of the auction or other hiring costs incurred by the employer.¹¹⁰

The H-1B visa should be portable among employers. Portability creates a more flexible and efficient labor market and also helps protect both H-1B and domestic workers regarding wages and working conditions. While recently enacted provisions of AC21 increase nominal portability, those provisions do not

110. In practice, employers would be free to make contractual arrangements with workers to reflect such costs, including the risk of having the worker later “pirated” by another employer. Such arrangements would become a normal part of the labor market encompassing the auction.

HOW AUCTIONS WORK

Auctions would provide a market-based allocation of temporary visas and channel human capital to its most productive use in our economy. Auctions have been used effectively not only in the private sector, but by government as well. For example, auctions have been used by the Treasury Department to sell Treasury bills, by the FCC to sell Radio Spectrum Licenses, and by the EPA to allocate Pollution Certificates. Significant economic research also supports their effectiveness.¹¹¹

The chief goal of this proposal is to allocate visas in a manner that maximizes their contribution to the economy. Bids would be a measure of the value each prospective employer places on additional skilled labor relative to other employers; the highest bids would reflect the most productive employment of immigrant workers. The auction might also serve as a safety valve in years when the ceilings have been reached on the regular visa programs.

Auctions could also provide a market-based mechanism for adjusting immigration levels incrementally from year to year. Visa allotments could be increased or decreased based on the previous year’s demand (reflected in bid levels). This would be a much less onerous mechanism than the current system, which requires legislative action for any adjustments. Even if levels were not tied automatically to the auction, it would at least provide important information about the labor market that would be of great use to policymakers. (See recommendations below regarding flexible policies.)

If one agrees that at least some visas should be allocated in response to employment needs in the economy, there is little reason to oppose auctions in principle. Employers and immigrants already bear costs (filing and legal fees, compliance costs) in obtaining visas. Auctions would not only allocate employment visas more efficiently, but significant auction bid costs would provide a signal and incentive for employers to pursue the hiring and training of domestic workers more aggressively.

111. See McAfee and McMillan (1987); Congressional Budget Office (1992); Das and Sundaram (1997).

address the “lock in” of green card applicants, the major cause of worker immobility. Our recommendations for streamlining green card processing by restructuring the immigration bureaucracy and funding efficient administration with user fees directly attack that basic problem.

Following reforms to the permanent employment system, the H-1B visa can meet *genuinely* temporary needs, for which a three-year term should be adequate. Application for permanent resident status would not be barred, but *a priori* intent to return and a three-year stay without extension would signal that permanent resident status should not be expected. When the permanent admission system clears foreign workers for employment in weeks not years, a three-year period will be adequate for those who do move to permanent status.

We urge Congress to move quickly to restructure both the temporary and permanent employment-based visa systems. The forces that have driven Congress to greatly increase the number of H-1B visas are rooted in real economic pressures, as well as failures in *both* permanent *and* temporary admission systems. Both businesses and policymakers need to recognize that the recent increases in the H-1B visa ceiling will rapidly lead to crisis and bureaucratic gridlock as more and more H-1B holders enter the queue for permanent visas. The existing system cannot handle the *current* number of immigrants attempting to adjust from temporary to permanent status. Adding still more applications will push the system towards breakdown. The nation will be best served by an expanded and streamlined permanent visa system combined with a separate and flexible temporary program.

Immigration reform is only one component of a national workforce policy needed to meet the challenges of tomorrow’s economy. Much of the vigorous debate over H-1B visas has sidestepped the fundamental problems that underlie the nation’s shortages of skilled domestic labor. CED’s more comprehensive recommendations in *American Workers and Economic Change*

and other policy statements approach skills building through public-private cooperation, reform of educational institutions, and training.¹¹²

We recommend that a \$1,000 training fee (as currently assessed in the H-1B program) be added to the user fees for permanent employment visas and transferred to a fund for the education and training of native students and workers. Such funds should be employed through public-private partnerships and voucher-type mechanisms that emphasize effective private training and student and worker choice. In this regard, we look forward to expected evaluations of the current H-1B training fee program by the National Science Foundation and Department of Labor.

CREATE MECHANISMS FOR FLEXIBLE POLICIES

We strongly urge the creation of mechanisms that will allow immigration policy to respond flexibly to changing conditions. Immigration policy should be reviewed at least every three years and revised as necessary. Immigration is too important and complex to permit policies to be formulated in a haphazard fashion and then to be locked in by inflexible regulation. Recent legislation exemplifies the *ad hoc* responses that often conflict with underlying principles and fail to make the systematic changes that resolve underlying tensions. In spite of ongoing vigorous debate on the level and composition of immigration, we have no mechanism for routinely reviewing or assessing policy. A mandatory three-year review represents a minimal window for invoking change.

A standing Advisory Board should be created to inform Congress’ review of immigration policy and administration and to prompt action as necessary. Congress and the Administration would appoint the members of the

112. Committee for Economic Development (1994, 1996, 1998, 2001b).

Board, whose role would be comparable to that of the Social Security Advisory Board. It would not issue policy recommendations, but would provide projections and analysis useful for the formulation and consideration of immigration policy. It would be required to issue annual reviews of immigration and immigration policy covering a variety of topical issues.

The Board would also issue an action report every three years directed at Congressional reconsideration of immigration levels. The action report would include an analysis of the economic and social effects of immigration, both current and prospective. It would provide guidance to Congress on the appropriate level and skill composition of immigration upon its three-year review cycle.

We are concerned by the lack of credible and consistent data and analyses of immigration and its effects, particularly those on the labor market. What would be the impact of different levels of immigration? What are the nature and extent of labor market shortages? Useful answers to these questions will come only with routine and consistent research and examination, directed and/or sponsored by the federal government and reviewed by a single advisory body. An independent body, with participants from the private and government sectors, could improve the quality of information in this area, making greater use of macroeconomic, labor market, and fiscal data from federal, state, and local sources.

Finally, we recommend that the Advisory Board also consider international migration issues and engage in discussions with other nations regarding international rules and regulations. The United States should work with other countries to harmonize rules related to international business travel and to remove barriers and inefficiencies in this area. For example, the Asia-Pacific Economic Cooperation forum (APEC) has played a leading role in harmonization initiatives, and one of its recommendations proposes visa-free travel

between member countries for business purposes. Leading bodies such as the International Organization for Migration are actively engaged in developing internationally accepted policies on a wide range of issues related to labor market mobility. Just as an accepted body of policies written into trade accords governs the global flow of goods and services, agreements to govern international flows of labor may become increasingly important. A standing advisory body would prove very useful in evaluating and responding to such initiatives.

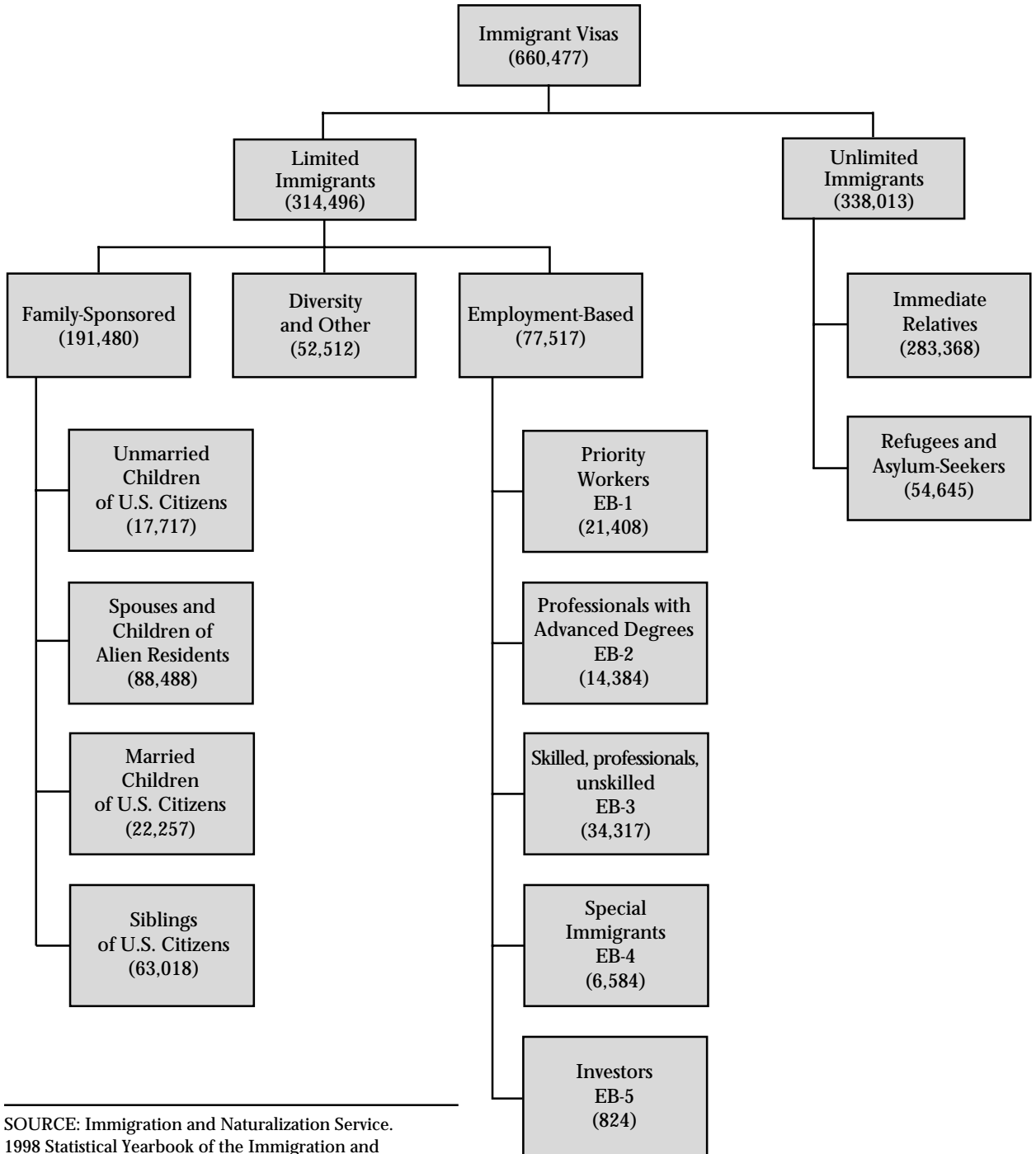
CONCLUSION

As the impending long-term national labor shortage approaches and the relative productivity and importance of skilled workers continues to grow, immigration will become increasingly important as one means of addressing economic change. The successful adaptation of our workforce to the requirements of technological change and globalization in the next several decades will be of profound importance to American workers, business, and the society at large. Successful adaptation will bring stronger productivity growth, higher wages, better living standards, and additional resources to achieve our private and public purposes. A failure to adapt will mean less progress in all of these areas and a diminished American role in the global economy.

This adaptation will require, first and foremost, improvements in the education and training of native workers, as CED has long argued. Nevertheless, immigration has an important supplementary role to play. Our current immigration policies and their administration, however, have failed to produce an immigration system that best serves the nation's interests. We believe the recommendations presented here, taken together, offer a comprehensive and integrated program for realizing the full potential of immigration in building a productive workforce and prosperous nation.

APPENDIX A

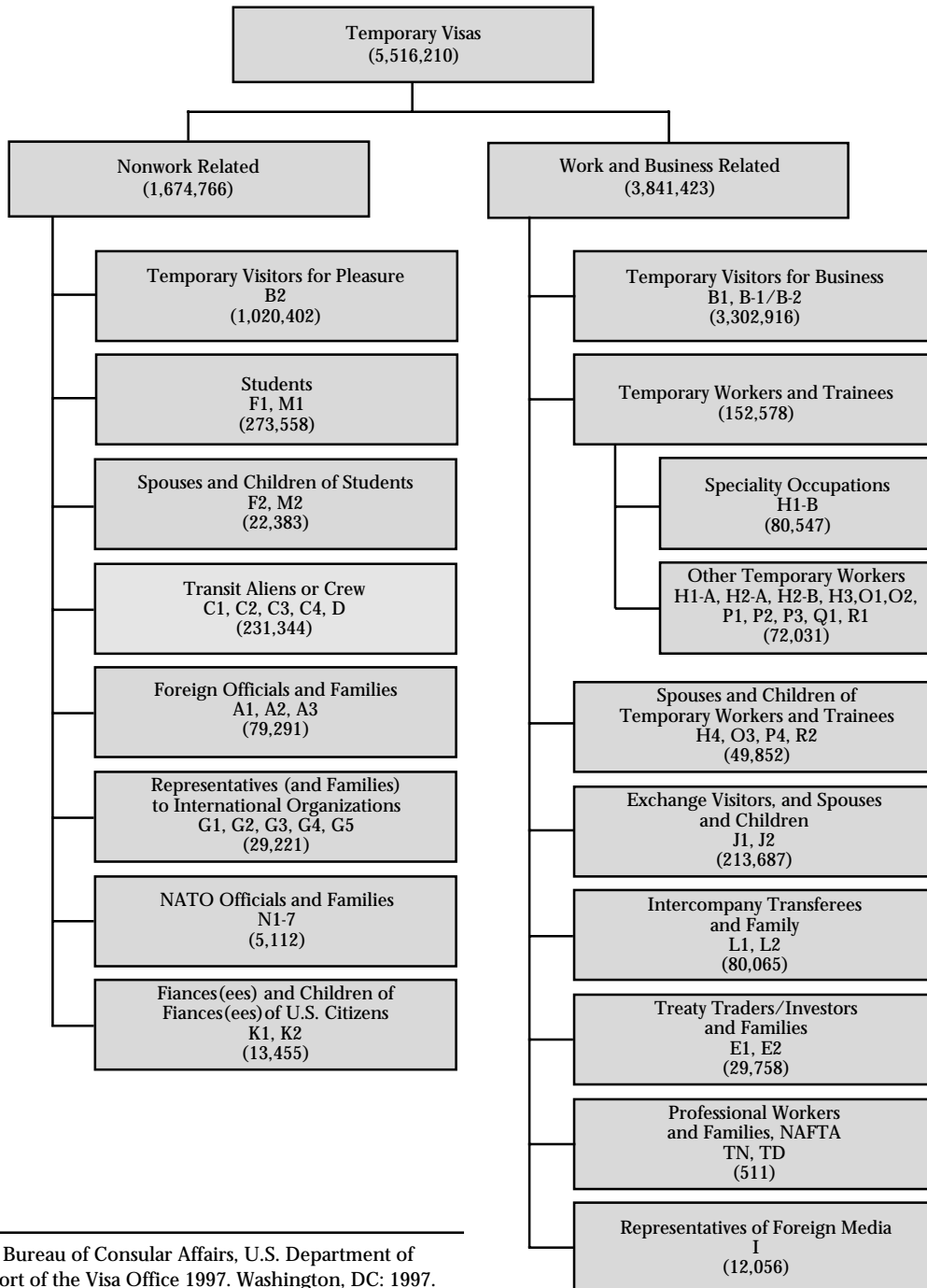
Legal Permanent Resident Classes of Admissions and Admissions in 1998



SOURCE: Immigration and Naturalization Service. 1998 Statistical Yearbook of the Immigration and Naturalization Service. Washington, DC: November 2000.

APPENDIX B

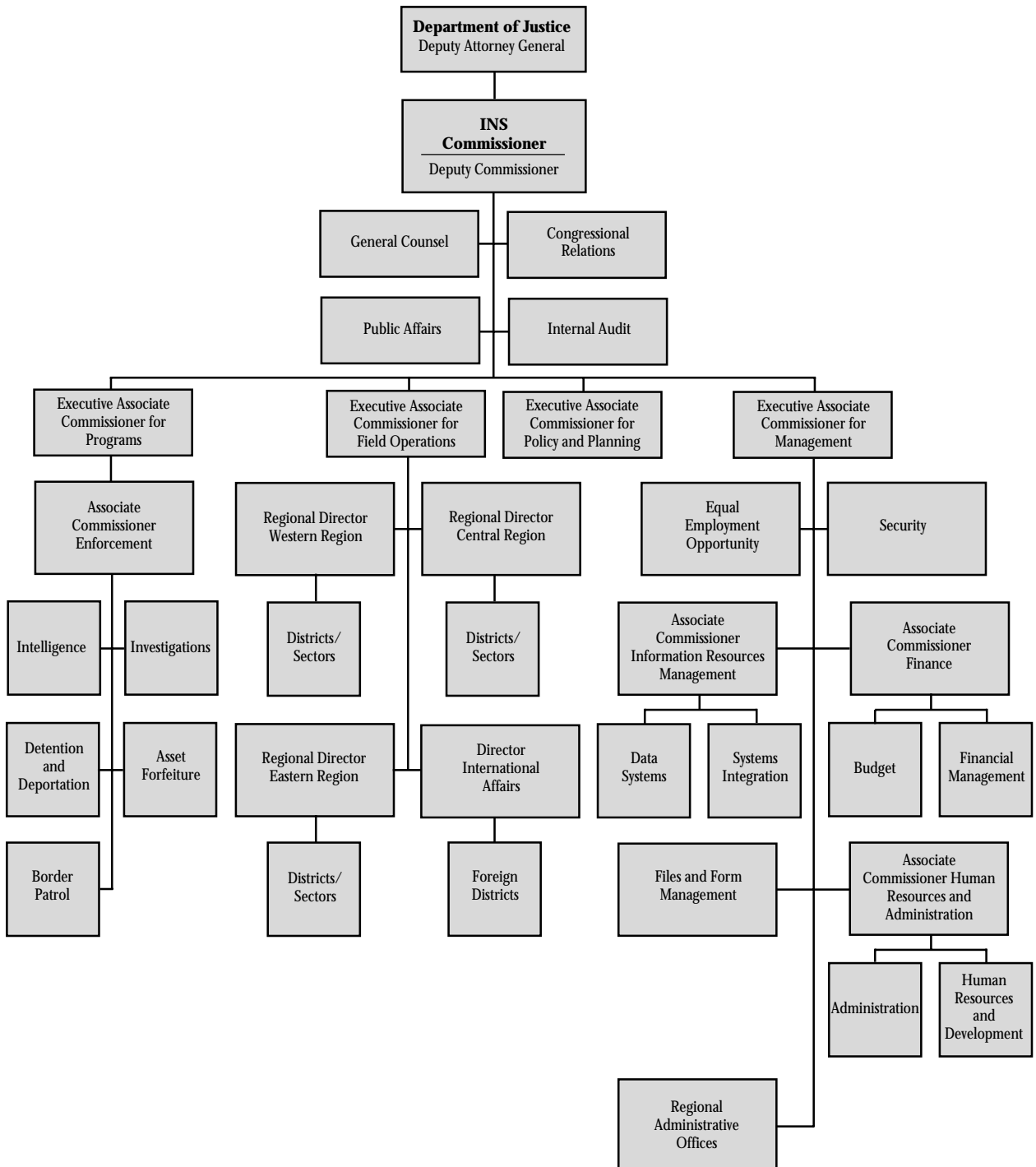
Temporary Visa Categories and Issuances in 1997



SOURCE: Bureau of Consular Affairs, U.S. Department of State. Report of the Visa Office 1997. Washington, DC: 1997. This data, while representing a majority of issuances, only include visas issued abroad.

APPENDIX C

Organization Chart of the Immigration and Naturalization Service (INS)



REFERENCES

Alvares, Kenneth

- 1998 Testimony before the Committee on Judiciary, U.S. Senate, February 25.

Bean, Frank D., Jennifer Van Hook and Mark A. Fossett.

- 1999 "Immigration, Spatial and Economic Change, and African-American Employment." Chapter in *Immigration and Opportunity: Race, Ethnicity, and Unemployment in the United States*. Frank D. Bean and Stephanie Bell-Rose, ed. New York, NY: Russell Sage Foundation.

Betts, Julian R. and Magnus Lofstrom

- 2000 "The Education Attainment of Immigrants: Trends and Implications." Chapter in *Issues in the Economics of Immigration*. George J. Borjas, ed. National Bureau of Economic Research. Chicago, IL: University of Chicago Press.

Bishop, John H.

- 1998 "Is There a Shortage of Information Technology Workers?" Jerome Levy Economic Institute Symposium, June 12. www.levy.org/docs/symposium/sym6-98.html.

Black, Gordon

- 2000 "Indian Immigrants Creating Their Own Subcontinent in the U.S. Dot-Com World." *The Seattle Times*, March 8.

Borjas, George J., Richard B. Freeman and Lawrence F. Katz

- 1997 "How Much Do Immigration and Trade Affect Labor Market Outcomes?" *Brookings Papers on Economic Activity* (1).

Borjas, George J.

- 1999 *Heaven's Door*. Princeton, NJ: Princeton University Press.

Borjas, George, ed.

- 2000 *Issues in the Economics of Immigration*. Chicago: The University of Chicago Press.

Bouvier, Leon F. and David Simcox

- 1994 *Foreign-Born Professionals in the United States*. Washington, DC: Center for Immigration Studies, April.

Braddock, Douglas.

- 1999 "Occupational Employment Projections to 2008." *Monthly Labor Review*. Bureau of Labor Statistics, Department of Labor. November.

Bureau of Consular Affairs

- 2000 *Visa Bulletin*. No. 26, Vol. VIII. Washington, DC: U.S. Department of State, December.

Bureau of Labor Statistics

- 1999 *Report on the American Workforce*. U.S. Department of Labor. Washington, DC.

Bureau of Labor Statistics

- 2000 *Occupation Outlook Handbook (2000-2001)*. Department of Labor. Washington, DC.

Bureau of Labor Statistics

- 2000b Employment Cost Index, Civilian Salaries and Wages. Department of Labor.

Camarota, Steven A.

- 1999 *Importing Poverty: Immigration's Impact on the Size and Growth of the Poor Population*. Center for Immigration Studies, Center Paper No. 15.

Camarota, Steven A.

- 2000 *Immigrants in the United States – 2000: A Snapshot of America's Foreign-Born Population*. Washington, DC: Center for Immigration Studies, January.

Committee for Economic Development

- 1994 *Putting Learning First: Governing and Managing the Schools for High Achievement*. New York, NY: Committee for Economic Development.

Committee for Economic Development

- 1996 *American Workers and Economic Change*. New York, NY: Committee for Economic Development.

Committee for Economic Development

- 1998 *America's Basic Research: Prosperity Through Discovery*. New York, NY: Committee for Economic Development.

Committee for Economic Development

- 1999 *New Opportunities for Older Workers*. New York, NY: Committee for Economic Development.

Committee for Economic Development

- 2001 "The H-1B Reality: Temporary Solution, Long Term Problem." New York, NY: Committee for Economic Development. March.

Committee for Economic Development

- 2001b *The Supply of U.S. Scientists and Engineers.* New York, NY: Committee for Economic Development. Forthcoming.

Congressional Budget Office

- 1992 "Auctioning Radio Spectrum Licenses." Washington, DC: Congressional Budget Office, March.

Congressional Budget Office

- 2000 *The Long-Term Budget Outlook.* Washington, DC: October.

Das, Sanjiv Ranjan and Rangarajan K. Sundaram

- 1997 "Auction Theory: A Summary with Applications to Treasury Markets." NBER Working Paper No. 5873. Cambridge, MA: National Bureau of Economic Research, January.

Federal Register

- 1999 "Notices." Vol. 64, No. 248. Washington, DC: December 28.

Food and Drug Administration

- 1999 "FY 1999 Performance Report to Congress for Prescription Drug User Fee Act of 1992." Washington, DC: U.S. Government Printing Office.

Freeman, Peter and William Aspray.

- 1999 *The Supply of Information Technology Workers in the United States.* Washington, DC: Computing Research Association.

Gimpel, James G. and James R. Edwards Jr.

- 1999 *The Congressional Politics of Immigration Reform.* Boston, MA: Allyn and Bacon.

Goldsborough, James

- 2000 "Out-of-Control Immigration." *Foreign Affairs*, vol. 79, no. 5, September/October.

Government Executive

- 2000 "Measuring Up." Government Executive, March.

Greenhouse, Steven

- 2000 "Foreign Workers at Highest Level in Decades." *The New York Times*, September 4.

Greenwood, Michael and Marta Tienda

- 1997 "U.S. Impacts of Mexican Immigration." Migration Between Mexico and the United States: Binational Study, Research Reports and Background Materials Volume 1. Austin, TX: Morgan Printing.

Hansen, Kristin A. and Carol S. Faber

- 1997 *The Foreign-Born Population: 1996.* Bureau of the Census. Current Population Reports P20-494. Washington, DC: U.S. Government Printing Office, March.

Henkel, John

- 1995 "User Fees to Fund Faster Reviews." FDA Consumer Special Report, January.

Immigration and Naturalization Service

- 1998 1997 Statistical Yearbook of the Immigration and Naturalization Service. U.S. Department of Justice. Washington, DC: U.S. Government Printing Office, October.

Immigration and Naturalization Service

- 2000 1998 Statistical Yearbook of the Immigration and Naturalization Service. Washington, DC: U.S. Government Printing Office, November.

Immigration and Naturalization Service

- 2000b "INS Achieves 2-Year Naturalization Program Goals." News Release. Washington, DC: U.S. Department of Justice, November 15.

Immigration and Naturalization Service

- 2000c "Forms and Fees." www.ins.usdoj.gov.

Jasso, Guillermina, Douglas S. Massey, Mark R. Rosenzweig, and James P. Smith

- 2000 "The New Immigrant Survey Pilot (NIS-P): Overview and New Findings About U.S. Legal Immigrants at Admission." *Demography*, February.

LeDuff, Charlie.

- 2000 "At a Slaughterhouse, Some Things Never Die." *The New York Times*. From the series "How Race is Lived in America," June 16.

- Lerman, Robert.
- 1998 "The Labor Market for Information Technology Workers." Testimony before the Subcommittee on Immigration, Committee on the Judiciary, United States Senate. February 25.
- Levin, Sharon and Paula Stephan
- 1999 "Are the Foreign Born a Source of Strength for U.S. Science?" *Science*. August 20.
- Lowell, B. Lindsay
- 1997 "Immigrant Integration and Pending Legislation: Observations on Empirical Projections." *Immigration and the Family: Research and Policy on U.S. Immigrants*. Booth, Alan, Ann C. Crouter and Nancy Landale, ed. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lowell, B. Lindsay
- 1998 "Comparative Experiences with Temporary Workers: The United States." Paper prepared for the Third International Metropolis Conference, Israel, November.
- Lowell, B. Lindsay
- 2000 "H-1B Temporary Workers: Estimating the Population." Alfred P. Sloan Foundation and the Institute of Electrical Engineers, April 17.
- Lowell, B. Lindsay and Susan Martin.
- 1999 "Priorities for Improving Data on Immigrant Scientists and Engineers." Washington, DC: Institute for the Study of International Migration, Georgetown University, October.
- McAfee, R. Preston and John McMillan
- 1987 "Auctions and Bidding." *Journal of Economic Literature*, Vol. XXV, June.
- Morris, Milton.
- 1985 *Immigration: The Beleaguered Bureaucracy*. Washington, DC: Brookings Institution.
- National Academy of Sciences
- 1992 *Principles and Practices for a Federal Statistical Agency*. Commission on Behavioral Social Sciences and Education, Committee on National Statistics. Washington, DC: National Academy Press.
- National Research Council
- 2000 *Building a Workforce for the Information Economy*. Washington, DC: National Academy Press, October.
- National Science Foundation
- 2000 *Science and Engineering Indicators*. Washington, DC: U.S. Government Printing Office.
- Neergaard, Luran
- 1997 "Drug Firms Want to Continue Paying Fee to FDA." *The Associated Press*, Nando.net.www.nando.net.
- Papademeriou, Demetrios G., T. Alexander Aleinikoff and Deborah Meyers
- 1998 *Reorganizing the INS Immigration Function: Toward a New Framework for Accountability*. Washington, DC: The Carnegie Endowment for International Peace.
- Papademetriou, Demetrios G. and Stephen Yale-Loehr
- 1996 *Balancing Interests: Rethinking U.S. Selection of Skilled Immigrants*. International Migration Policy Program. Washington, DC: Carnegie Endowment for International Peace.
- Passel, Jeffrey and Rebecca Clark.
- 1998 "Immigrants in New York: Their Legal Status, Incomes, and Taxes." Washington, DC: Urban Institute.
- Robinson, Sara
- 2000 "High-Tech Workers are Trapped in Limbo by INS." *The New York Times*, February 19.
- Saxenian, AnnaLee
- 1999 *Silicon Valley's New Immigrant Entrepreneurs*. San Francisco, CA: Public Policy Institute of California.
- Shusterman, Carl
- 2000 "Government Processing Times." *Immigration: A Practical Guide to Immigration to the U.S.* Law Offices of Carl Shusterman, December. www.shusterman.com.
- Shusterman, Carl
- 2001 "Waiting Times for INS District Offices." *Immigration: A Practical Guide to Immigration to the U.S.* Law Offices of Carl Shusterman, January. www.shusterman.com.
- Siskand, Susser Hass & Divine
- 2000 "Local INS Processing Times." Siskand, Susser, Hass & Divine: *Immigration and Nationality Law*. October 20. www.visalaw.com/processing.html.

- Smith, James P. and Barry Edmonston, ed.
 1997 The New Americans. National Research Council. Washington, DC: National Academy Press.
- Strategic Planning Council of Iowa
 2000 Iowa 2010: The Future Face of Iowa. www.iowa2010.state.ia.us.
- Taylor, J. Edward and Philip L. Martin
 1997 "The Immigrant Subsidy in U.S. Agriculture: Farm Employment, Poverty, and Welfare." Population and Development Review, December.
- Turner, Dave et al.
 1998 "The Macroeconomic Implications of Ageing in a Global Context." OECD Working Paper No. 193. March.
- U.S. Census Bureau
 1999 Current Population Survey. March Supplement.
- U.S. Commission on Immigration Reform
 1995 Legal Immigration: Setting Priorities. Washington, DC.
- U.S. Commission on Immigration Reform
 1997 Becoming an American: Immigration and Immigrant Policy. Washington, DC.
- U.S. Department of Justice
 2000 "Budget Trend Data 1975-2000, Immigration and Naturalization Service." www.usdoj.gov.
- U.S. General Accounting Office
 1994 INS User Fees: INS Working to Improve Management of User Fee Accounts. GAO GGD-94-101. Washington, DC: U.S. Government Printing Office.
- U.S. General Accounting Office
 1997 H-2A Agricultural Guestworker Program: Changes Could Improve Services to Employers and Better Protect Workers. T-HEHS-98-200. Washington, DC: U.S. Government Printing Office, December.
- U.S. General Accounting Office
 1998 INS User Fee Revisions. GAO/GGD-98-197. Washington, DC: U.S. Government Printing Office, September.
- U.S. General Accounting Office
 1998b Immigration Statistics: Status of the Implementation of National Academy of Sciences' Recommendations. GAO/GGD-98-119. Washington, DC: U.S. Government Printing Office.
- U.S. General Accounting Office
 1999 Immigration and Naturalization Service: Overview of Management and Program Challenges. GAO/T-GGD-99-148. Washington, DC: U.S. Government Printing Office.
- U.S. General Accounting Office
 2000 "Medicare Reform: Issues Associated with General Revenue Financing." GAO/T-AIMD 00-126. Testimony of Paul L. Posner. Washington, DC: March 27.
- U.S. General Accounting Office
 2000b Information Technology: INS Needs to Better Manage the Development of its Enterprise Architecture. GAO/AIMD-00-212. Washington, DC: August.
- U.S. General Accounting Office
 2000c H-1B Foreign Workers: Better Controls Needed to Help Employers and Protect Workers. GAO/HEHS-00-157. Washington, DC: September.
- U.S. General Accounting Office
 2000d Information Technology: INS Needs to Strengthen Its Investment Management Capability. GAO-01-146. Washington, DC: December.
- U.S. General Accounting Office
 2001 Major Management Challenges and Program Risks. GAO-01-250. Washington, DC: January.
- Visa Office
 2000 Personal Communication. U.S. Department of State.
- Warner, Melanie
 2000 "The Indians of Silicon Valley." Fortune, vol. 141, No. 10. May 15.
- Warner, Robert
 2000 Annual Estimates of the Unauthorized Immigrant Population Residing in the United States and Components of Change: 1987 to 1997. Unofficial Draft U.S. Immigration and Naturalization Service, Office of Policy and Planning. Washington, DC: September.

MEMORANDUM OF COMMENT, RESERVATION, OR DISSENT

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The recommendation is made “that siblings and adult children admitted under family sponsorship should be required to have at least a college degree.” This recommendation is needlessly rigid. Family reunification is an important value in immigration policy. While education could be one consideration in establishing priority, a rigid rule that would exclude those not meeting the proposed threshold runs counter to achieving family reunification.

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