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Farm Labor Shortages and Immigration Policy

Linda Levine
Congressional Research Service

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Farm Labor Shortages and Immigration Policy

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Farm Labor Shortages and Immigration Policy

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Summary

The connection between farm labor and immigration policies reemerged as an issue in the Congress and was under discussion by the Bush and Fox Administrations before the terrorist attacks of September 11, 2001. President Bush’s remarks in December 2003 about a broad-based temporary foreign worker program have reignited interest in the issue. Questions have again arisen about whether enough workers are available domestically to meet the requirements of farmers and how, if at all, the Congress should change immigration policy, which has long been linked with the seasonal needs of crop growers for direct-hire and contract farmworkers.

Fifty-five percent of today’s hired farmworkers are not authorized to hold U.S. jobs. For many years, farmers have expressed concern that if certain federal activities prove effective, a considerable portion of the agricultural labor force and hence of their livelihood could be lost. These federal actions include increased border enforcement efforts, work eligibility verification pilot programs and audits of employees’ work authorization documents to determine their authenticity.

Growers contend that the sizeable presence of unauthorized aliens implies a shortage of legal farmworkers. Their advocates argue that farmers would rather not employ unauthorized workers because doing so puts them at risk of incurring penalties. Farmworker advocates in turn counter that crop growers prefer unauthorized employees because they are in a weak bargaining position with regard to wages and working conditions. If the supply of unauthorized workers were curtailed, it is claimed, farmers could adjust to a smaller workforce by introducing labor-efficient technologies and management practices, and by raising wages, which, in turn, would entice more authorized persons to become farmworkers. Grower advocates respond that further mechanization would be difficult for some crops and that substantially higher wages would make the U.S. industry uncompetitive in the world marketplace without expanding the legal farm labor force. These remain untested arguments, as perishable crop growers have rarely, if ever, operated without unauthorized aliens in their workforces.

At the present time, trends in the agricultural labor market generally do not suggest the existence of a nationwide shortage of domestically available farmworkers, in part because the government’s databases cover authorized and unauthorized employment. (This finding does not preclude the possibility of spot agricultural labor shortages, however.) Hired and contract farm employment has not shown the same generally upward trend of total U.S. employment from 1990 through 2003. The length of time hired farmworkers are employed has changed little or decreased over the years, depending on the measure examined. Their unemployment rate has varied little and remains well above the overall average. Underemployment among farmworkers also remains substantial. And, although two data series show different levels and trends in the wages of field workers, they do concur that these agricultural employees earn little more than 50 cents for every dollar paid to other employees in the private sector.

This report will be updated as new data becomes available.
Farm Labor Shortages and Immigration Policy

Questions often have arisen over the years about (1) whether sufficient workers are available domestically to meet the seasonal employment demand of perishable crop producers in the U.S. agricultural industry and (2) how, if at all, the Congress should change immigration policy with respect to farmworkers. Immigration policy has long been intertwined with the labor needs of crop (e.g., fruit and vegetable) growers, who rely more than most farmers on hand labor (e.g., for harvesting) and consequently “are the largest users of hired and contract workers on a per-farm basis.” Since World War I, the Congress has allowed the use of temporary foreign workers to perform agricultural labor of a seasonal nature as a means of augmenting the supply of domestic farmworkers. In addition, a sizeable fraction of immigrants historically have found employment on the nation’s farms.

The intersection between farm labor and immigration has again emerged as a policy issue. The terrorist attacks of September 11, 2001 effectively quashed discussions on this subject between the Bush and Fox Administrations that took place shortly after President Bush came into office, but the proposal of a broad-based temporary foreign worker program that President Bush sketched in December 2003 has revived interest in the labor-immigration nexus. (For a discussion of the bills that have thus far been introduced in the 108th Congress and the President’s proposal see CRS Report RL32044, Immigration: Policy Considerations Related to Guest Worker Programs.)

This report first explains the connection made over the past several years between farm labor and immigration policies. It next examines the composition of the seasonal agricultural labor force and presents the arguments of grower and farmworker advocates concerning its adequacy relative to employer demand. The report closes with an analysis of the trends in employment, unemployment, time worked and wages of authorized and unauthorized farmworkers to determine if they

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1 In this report, the terms “agriculture” and “farming” will be used interchangeably as will the terms “producer,” “grower,” and “farmer.”


are consistent with the existence of a nationwide shortage of domestically available farmworkers.

**Farmworkers and Activities of SSA and DHS**

During the second half of the 1990s, attention began to focus on the growing share of the domestic supply of farmworkers that is composed of aliens who are not authorized to work in the United States. The U.S. Department of Labor (DOL) estimated that foreign-born persons in the country illegally accounted for 37% of the domestic crop workforce in FY1994-1995. Shortly thereafter (FY1997-1998), unauthorized aliens’ share of the estimated 1.8 million workers employed on crop farms reached 52%. And, by FY1999-2000, their proportion had increased to 55%.

Although a number of studies found that no nationwide shortage of domestic farm labor existed in the past decade, a case has been made that the considerable presence of unauthorized aliens in the seasonal agricultural labor force implies a lack of legal farmworkers relative to employer demand. Arguably, the purported imbalance between authorized-to-work farm labor and employer demand would become more apparent were the supply of unauthorized aliens curtailed sufficiently — a fear that has plagued growers for some time.

Crop producers and their advocates have testified at congressional hearings over the last several years that they believe the latest risk of losing much of their labor force comes from certain activities of the Bureau of Citizenship and Immigration Services and the Bureau of Immigration and Customs Enforcement within the Department of Homeland Security (DHS) and the Social Security Administration.

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5 According to *U.S. Department of Labor Report to Congress: The Agricultural Labor Market — Status and Recommendations*, the 1.8 million figure was developed by dividing the hourly earnings of field and livestock workers into farm labor expenditures to estimate the number of work hours on crop and livestock farms. As it was calculated that 72% of the hours were being worked on crop farms, the percentage was then applied to the Commission on Agricultural Workers’ estimate for 1992 of 2.5 million persons employed for wages on U.S. farms to yield a current estimate of the hired crop workforce. The Commission had developed its earlier farm employment figure from a variety of data sources because there is no actual head count of farmworkers. For other current estimates of hired farm and crop workers see Table 1.

6 Based upon public access data from the DOL’s National Agricultural Worker Survey (NAWS).

Growers have asserted that these activities have disrupted their workforces by increasing employee turnover and therefore, decreasing the stability of their labor supply. The perception that government actions might negatively impact the agricultural workforce — allegedly to the extent that crops would not be harvested, farmers would go bankrupt or produce costs to U.S. consumers would rise — has prompted a legislative response in the past.

The SSA and DHS activities are briefly described below:

(1) The SSA sends employers “educational correspondence” that includes a sample of mismatches between the names/social security numbers (SSNs) that appear on the W-2 forms employers must submit to the agency annually and those in the SSA’s database. The purpose of the “no-match letter” is to make wage reports more accurate so that the agency can properly credit earnings to employees’ records for future benefit payments. As part of this effort, the SSA has encouraged employers not to wait until the annual submission of W-2 forms and instead, to use its Enumeration Verification Service (EVS) to match the names/social security numbers of employees with those in the agency’s database.8

Growers have told the SSA that their concern with using the EVS is that when they discuss any discrepancies with employees, the employees do not return to work. The National Council of Agricultural Employers has testified about the large and growing numbers of employers receiving no-match letters.9 The American Farm Bureau Federation has said that growers are apprehensive about being liable for penalties (commonly referred to as employer sanctions) due to “constructive knowledge” of illegal workers on their payrolls if they do not act on the SSA letters.10 The agency’s correspondence clearly states, however, that there are many reasons why discrepancies can occur and that the letter, by itself, should not form the basis for taking any adverse actions against employees.11

SSA has responded to the growers’ concerns in a variety of ways over the past few years. The agency has, for example, translated into Spanish portions of the letter so that if growers show it to farmworkers they can see they have nothing to fear from it. In addition, based upon a change in selection criteria that went into effect January 2003, SSA has stopped sending no-match letters to virtually all employers. Letters now are received by thousands rather than millions of employers.

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8 Conversations with SSA staff.

9 Testimony of James S. Holt on behalf of the National Council of Agricultural Employers before the Senate Judiciary Subcommittee on Immigration, May 4, 2000.

10 Testimony of Josh Wunsch on behalf of the American Farm Bureau Federation before the Senate Judiciary Subcommittee on Immigration, May 4, 2000; and Alexander T. Aleinikoff, “The Green Card Solution,” The American Prospect, Dec. 1999. Note: In addition to potential fines under immigration law, the Internal Revenue Service may charge employers or employees $50 for providing incorrect information on W-2 forms.

11 The SSA provides the following examples in its letters of why mismatches might occur: errors in spelling the employees’ names or in listing their SSNs, not reporting name changes, and names or SSNs that are incomplete.
(2) The Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA, P.L. 104-288) provided for increased border enforcement efforts and for employment verification pilot programs.\(^\text{12}\) Employer participation in these programs, which was set to last no more than 4 years, has been voluntary and the programs have involved a limited number of areas. Organizations of growers nonetheless testified that inclusion of the pilot programs in P.L. 104-288 merely delayed the creation of a mandatory nationwide verification system.\(^\text{13}\) And indeed, in the Basic Pilot Program Extension and Expansion Act of 2003 (P.L. 108-156), Congress extended the program for 5 years through 2008 and expanded it to include all states, but employer participation in the program remains optional.

Currently, employers fulfill the legal requirement to not knowingly hire illegal workers by viewing documents that show the new-hire’s identity and eligibility to work in the United States, and by completing an I-9 (employment eligibility verification) form. Under the Basic Pilot Program, employers can access the Customs and Immigration Services’ system to validate a newly hired citizen’s or non-citizen’s eligibility to work. If employers receive a final nonconfirmation of employment eligibility, they must either fire the new-hire or be subject to financial penalties. The U.S. General Accounting Office reported in 1997 that neither the pilot programs nor the agency’s border enforcement initiative were likely to have an immediate, significant effect on the supply to growers of fraudulently documented farmworkers.\(^\text{14}\)

(3) The Bureau of Immigration and Customs Enforcement (another former part of the Immigration and Naturalization Service, INS) reportedly increased its audits of I-9 forms even before September 11, 2001, but the incidence was and remains relatively low according to the agency. In the audits, the bureau checks the authenticity of employees’ work authorization documents against government records. At the audits’ completion, employers are given a list of employees whose documents were deemed to be invalid. According to a representative of the growers, “Frequently, INS audits of agricultural employers reveal that 60 to 70 percent of seasonal agricultural workers have provided fraudulent documents. The employer is then required to dismiss each employee on the list who cannot provide a valid employment authorization document, something few workers can do.”\(^\text{15}\) This


\(^{13}\) Testimony of Bob L. Vice on behalf of the National Council of Agricultural Employers and the American Farm Bureau Federation before the House Judiciary Subcommittee on Immigration and Claims, Sept. 24, 1997.

\(^{14}\) GAO, H-2A Agricultural Guestworker Program.

\(^{15}\) Testimony of James S. Holt on behalf of the National Council of Agricultural Employers before the Senate Judiciary Subcommittee on Immigration, May 12, 1999.
estimate of hired farmworkers who have secured their jobs through presentation of fraudulent documents is at the high end of figures reported elsewhere, however.16

While a grower representative recently testified that “agriculture has historically not been a major target” of immigration enforcement activities, he pointed to some experiences involving Vermont dairy farmers and Georgia onion growers in the last few years. The increased attention that has been paid to homeland security since September 11, 2001 and the better integration of agencies within DHS has led the American Farm Bureau Federation to speculate that more raids could be forthcoming.17 Stuart Anderson of the National Foundation for American Policy testified, however, that DHS “does not have the resources to enforce those [immigration] laws in a manner that would stop employers from using illegal workers.”18

The Composition of the Seasonal Farm Labor Force

Immigration legislation sometimes has been crafted to take into account the purported labor requirements of U.S. crop growers. In 1986, for example, Congress passed the Immigration Reform and Control Act (IRCA, P.L. 99-603) to curb the presence of unauthorized aliens in the United States by imposing sanctions on employers who knowingly hire individuals who lack permission to work in the country. In addition to a general legalization program, P.L. 99-603 included two industry-specific legalization programs — the Special Agricultural Worker (SAW) program and the Replenishment Agricultural Worker (RAW) program19 — that were intended to compensate for the Act’s expected impact on the farm labor supply and encourage the development of a legal crop workforce. These provisions of the Act have not operated in the offsetting manner that was intended, however, as substantial numbers of unauthorized aliens have continued to join legal farmworkers in performing seasonal agricultural services (SAS).20


17 Testimony of Larry Wooten on behalf of the American Farm Bureau Federation before the House Committee on Agriculture, Jan. 28, 2004.


19 The INS approved over 1 million of the applications that individuals filed under the SAW program to become legal permanent residents. Anticipating that SAWs would leave farming because IRCA did not require them to remain in order to adjust their status, P.L. 99-603 included the RAW program as a back-up measure to ensure growers of an adequate labor supply. The RAW program was never used because the annual calculations of farm labor supply and demand that were made by the U.S. Departments of Labor and Agriculture during the FY1990-1993 period found no national shortages of farmworkers.

20 Seasonal agricultural services (SAS) were defined broadly in IRCA as field work related to planting, cultivating, growing and harvesting of fruits and vegetables of every kind and (continued...
On the basis of case studies that it sponsored, the Commission on Agricultural Workers concluded in its 1992 report that individuals legalized under the SAW program (i.e., SAWs) and other farmworkers planned to remain in the agricultural labor force “indefinitely, or for as long as they are physically able.”21 According to the DOL’s National Agricultural Workers Survey, two-thirds of SAWs stated that they intended to engage in field work until the end of their working lives.22

For many SAWs, the end of their worklives — at least their worklives in farming — may now be near at hand. The diminished physical ability generally associated with aging in combination with the taxing nature of crop tasks could well be prompting greater numbers of SAWs to leave the fields. Relatively few farmworkers are involved in crop production beyond the age of 44 and even fewer beyond the age of 54 (15% and 5%, respectively, in FY1999-2000).23 The Commission on Agricultural Workers noted that the typical SAW in 1990 was a 30-year-old male who “is likely to remain in farm work well into the 21st century.”24 He is now closer to the age of diminished participation in SAS labor: in FY1999-2000, the average age of SAWs was 40, older than U.S.-born farmworkers (33) and unauthorized farmworkers (27).25 Thus, the 1986 legalization program has become less useful to fulfilling the labor requirements of crop producers.

A combination of factors (e.g., aging and the availability of nonfarm jobs) likely has contributed to the decrease in SAWs’ share of agricultural employment.26 The fraction of IRCA-legalized farmworkers fell from 33% in FY1989 to 15% in FY1999-2000.27 Possibly the leading factor, however, is the substantial increase in

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20 (...continued)
other perishable commodities. The terms “SAS,” “seasonal farm work,” “field work” and “crop work” are used interchangeably in this report.

21 Commission on Agricultural Workers, Report of the Commission on Agricultural Workers, p. 75.


23 Based upon public access data from NAWS.


25 Based upon public access data from NAWS.

26 Alternatively, there are a number of reasons why SAWs would remain in farm employment (e.g., limited English-language fluency and little formal education). In light of these competing factors, the Commission on Agricultural Workers concluded that it would be difficult to estimate the attrition rate of SAWs from the fields. The existence of fraud in the SAW program further complicates such a calculation because the stock of SAWs who genuinely were farmworkers is unknown: when Congress was debating immigration proposals in the mid-1980s, the U.S. Department of Agriculture estimated that there were 300,000-500,000 unauthorized farmworkers, but more than twice the upper-end estimate were legalized under the SAW program; this large discrepancy, as well as additional research, led to the widely held conclusion that fraud was extensive.

27 Department of Labor, Findings from the National Agricultural Workers Survey: 1997-(continued...
Unauthorized aliens, arguably, have been displacing legal workers from jobs in the agricultural industry. Farmworker advocates assert that crop producers prefer unauthorized employees because they have less bargaining power with regard to wages and working conditions than other employees. Growers counter that they would rather not employ unauthorized workers because doing so puts them at risk of incurring penalties. They argue that the considerable presence of unauthorized aliens in the U.S. farm labor force implies a shortage of legal workers.

Farmworker groups and some policy analysts contend that even if the previously described DHS and SSA activities were to deprive farmers of many of their unauthorized workers, the industry could adjust to a smaller supply of legal workers by (1) introducing labor-efficient technologies and management practices, and (2) raising wages which, in turn, would entice more authorized workers into the farm labor force. Grower advocates respond that further mechanization would be difficult to develop for many crops and that, even at higher wages, not many U.S. workers

27 (...continued)
Note: In addition to the more than 1 million workers legalized through the SAW program, about 7% (119,000) of the 1.7 million aliens granted legal permanent resident status under IRCA’s general amnesty program were employed in agriculture when they filed their applications. Oliveira, Effland, Runyan and Hamm, Hired Farm Labor in Fruit, Vegetable, and Horticultural Specialty Farms.

28 The Commission on Agricultural Workers determined that the design of the SAW program was, at least in part, responsible for the increase in unauthorized immigration because if dependents of SAWs did not similarly have their status adjusted, they might have illegally entered the United States to join family members. In addition, the network or kinship recruitment process for SAS work continued to flourish and to facilitate not only job placement, but also migration by assisting in border-crossing and in acquiring fraudulent work authorization documents. These findings led the Commission to conclude that “the concept of a worker-specific and industry-specific legalization program was fundamentally flawed. It invited fraud, posed difficult definitional problems regarding who should or should not be eligible, and ignored the longstanding priority of U.S. immigration policy favoring the unification of families.” Commission on Agricultural Workers, Report of the Commission on Agricultural Workers, p. 67.

29 DOL, A Profile of U.S. Farmworkers.

30 DOL, Findings from the National Agricultural Workers Survey: 1997-1998 and public access data from NAWS.

31 DOL, Farmworkers in the Post-IRCA Period and public access data from NAWS.

32 Based upon public access data from NAWS.
would want to perform physically demanding, seasonal farm labor under variable climactic conditions. Moreover, employer representatives and some policy analysts maintain that growers cannot raise wages substantially without making the U.S. industry uncompetitive in world markets which, in turn, would reduce farm employment. In response, farmworker supporters note that wages are a small part of the price consumers pay for fresh fruits and vegetables and accordingly, higher wages would result in only a slight rise in retail prices. These remain untested arguments as perishable crop growers have rarely, if ever, had to operate without unauthorized aliens in their workforces.

A Farm Labor Shortage?

At the present time, trends in the farm labor market generally do not suggest the existence of a nationwide shortage of domestically available farmworkers, in part because the government’s statistical series cover authorized and unauthorized workers. This overall finding does not preclude the possibility of farm labor shortages in certain areas of the country at various times of the year (i.e., spot labor shortages).

Caution should be exercised when reviewing the statistics on farmworkers’ employment, unemployment, time worked and wages that follow. The surveys from which the data are derived cover somewhat different groups within the farm labor force (e.g., all hired farmworkers as opposed to those engaged only in crop production or workers employed directly by growers as opposed to those supplied to growers by farm labor contractors), and they have different sample sizes. A household survey such as the Current Population Survey (CPS) could well understate the presence of farmworkers because they are more likely to live in less traditional quarters (e.g., labor camps) and of unauthorized workers generally because they may be reluctant to respond to government enumerators. And, some of the surveys have individuals as respondents (e.g., the CPS and DOL’s National Agricultural Workers Survey) while others have employers as respondents (e.g., the U.S. Department of Agriculture’s National Agricultural Statistics Service Farm Labor Survey). Surveys that query employers are more likely to pickup unauthorized employment than are surveys that query individuals.

Employment

The demand for and supply of labor typically cannot be measured directly. Instead, proxies are used such as the trend in employment. Decreases in an occupation’s employment or small gains compared to those recorded for other occupations might signal that labor demand is not approaching a supply constraint.

As shown in Table 1, the employment of hired workers engaged in crop or livestock production (including contract workers) has fluctuated erratically over time (columns 3 and 7). However, the trend overall has been downward. The employment pattern among crop workers hired directly by growers (i.e., excluding those supplied by farm labor contractors and crew leaders) has regularly risen and then fallen back, but to a higher level through 2000 (column 4). This ratcheting
upward of employment produced a 12% gain over the 1990-2000 period. In contrast, other wage and salary workers have experienced steady and robust job growth over almost the entire period: from 1990 to 2000, wage and salary employment in nonfarm industries advanced by 14%. These divergent employment patterns suggest that hired farmworkers did not share equally in the nation’s longest (1992-2000) economic expansion and appears to be inconsistent with the presence of a nationwide farm labor shortage.

In recent years, the labor market has been slow to rebound from the latest recession. Although nonfarm wage and salary employment showed signs of revival in 2003, the same may not be said for hired farmworkers (columns 2 and 7 of Table 1).

### Table 1. Hired Farm Employment
(numbers in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total nonfarm wage &amp; salary employment</th>
<th>Economic Research Service (ERS)</th>
<th>National Agricultural Statistics Service (NASS)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Hired farm workers</td>
<td>Hired crop workers</td>
<td>Hired farm workers</td>
</tr>
<tr>
<td>1990</td>
<td>115,570</td>
<td>886</td>
<td>419</td>
<td>892</td>
</tr>
<tr>
<td>1991</td>
<td>114,449</td>
<td>884</td>
<td>449</td>
<td>910</td>
</tr>
<tr>
<td>1992</td>
<td>115,245</td>
<td>848</td>
<td>409</td>
<td>866</td>
</tr>
<tr>
<td>1993</td>
<td>117,144</td>
<td>803</td>
<td>436</td>
<td>857</td>
</tr>
<tr>
<td>1994</td>
<td>110,517</td>
<td>793</td>
<td>411</td>
<td>840</td>
</tr>
<tr>
<td>1995</td>
<td>112,448</td>
<td>849</td>
<td>433</td>
<td>869</td>
</tr>
<tr>
<td>1996</td>
<td>114,171</td>
<td>906</td>
<td>451</td>
<td>832</td>
</tr>
<tr>
<td>1997</td>
<td>116,983</td>
<td>889</td>
<td>432</td>
<td>876</td>
</tr>
<tr>
<td>1998</td>
<td>119,019</td>
<td>875</td>
<td>458</td>
<td>880</td>
</tr>
<tr>
<td>1999</td>
<td>121,323</td>
<td>840</td>
<td>440</td>
<td>929</td>
</tr>
<tr>
<td>2000</td>
<td>125,114</td>
<td>878</td>
<td>468</td>
<td>890</td>
</tr>
<tr>
<td>2001</td>
<td>125,407</td>
<td>745</td>
<td>392</td>
<td>881</td>
</tr>
<tr>
<td>2002</td>
<td>125,156</td>
<td>793</td>
<td>370</td>
<td>886</td>
</tr>
<tr>
<td>2003</td>
<td>126,015</td>
<td>n.a.</td>
<td>n.a.</td>
<td>836</td>
</tr>
</tbody>
</table>

**Source:** Created by the U.S. Congressional Research Service (CRS) from sources cited below.

**Note:** n.a. = not available
According to the Farm Labor Survey, hired farmworker and agricultural services employment was as follows in July of each year:

- 1990: 1,462,000
- 1991: 1,486,000
- 1992: 1,417,000
- 1993: 1,420,000
- 1994: 1,381,000
- 1995: 1,414,000
- 1996: 1,346,000
- 1997: 1,409,000
- 1998: 1,450,000
- 1999: 1,474,000
- 2000: 1,374,000
- 2001: 1,374,000
- 2002: 1,262,000
- 2003: 1,072,000

a. Data are from the monthly CPS, a survey of households, as reported by the DOL’s Bureau of Labor Statistics (BLS) for individuals age 16 or older. Because the CPS was substantially revised, data from 1994 forward are not strictly comparable with data from earlier years.
b. Data are from the monthly CPS as reported by the U.S. Department of Agriculture’s ERS for individuals age 15 or older.
c. Data are from the Farm Labor Survey, a quarterly survey of farm operators, as reported by the U.S. Department of Agriculture’s NASS. The statistics reflect individuals on employers’ payrolls during the survey week in January, April, July, and October. Data for Alaska are not included. 1990-1994 annual averages for all hired farmworkers and all annual averages for agricultural service workers were calculated by CRS.
d. In the CPS, an individual’s occupation is based on the activity in which he spent the most hours during the survey week. Hired farmworkers are those whose primary job is farmwork and for which they receive wages, as opposed to unpaid family workers or self-employed farmers. Hired farmworkers include individuals engaged in planting, cultivating, and harvesting crops or tending livestock whom growers employ directly or through agricultural service providers (e.g., farm labor contractors and crew leaders), as well as farm managers, supervisors of farmworkers, and nursery and other workers.
e. The ERS disaggregates hired farmworkers by the kind of establishment employing them (i.e., establishments primarily engaged in crop production, livestock production or other). As “other” includes agricultural service providers, the figures for crop workers are limited to farmworkers whom growers employ directly.
f. The NASS counts as hired farmworkers only those persons paid directly by farmers. Hired farmworkers include field workers (i.e., those who plant, cultivate and harvest crops), livestock workers (i.e., those who tend livestock, milk cows or care for poultry) and supervisory workers (e.g., managers or range foremen) as well as other workers on farmers’ payrolls (e.g., bookkeepers, secretaries or pilots).
g. Includes contract, custom or other workers supplied to farmers but paid by agricultural service firms (e.g., farm labor contractors or crew leaders).

Farm employment is subject to considerable seasonal variation during the course of a year. Typically, demand for hired farm labor peaks in July when many crops are ready to be harvested. The July employment data from the NASS Farm Labor Survey, like the annualized data from the same survey shown in Table 1, was very unstable between 1990 and 2003.

Unemployment

Employment data paint an incomplete picture of the state of the labor market. At the same time that employment in a given occupation is decreasing or increasing relatively slowly, unemployment in the occupation might be falling. Employers would then be faced with a shrinking supply of untapped labor from which to draw. A falling unemployment rate or level would offer some basis for this possibility.

As shown in Table 2, the unemployment rate of hired farmworkers engaged in crop or livestock production (including contract labor) is quite high. Even the economic boom that characterized most of the 1990s did not reduce the group’s unemployment rate below double-digit levels (ranging between almost 11% and 13%), or about twice the average unemployment rate in the nation at a minimum.

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- 2001: 1,374,000
- 2002: 1,262,000
- 2003: 1,072,000.
Discouragement over their employment prospects in agriculture or better opportunities elsewhere may have prompted some unemployed farmworkers to leave the sector as evidenced by their reduced number after 1998 (see column 4).

Other observers have examined the unemployment rates in counties that are heavily dependent on the crop farming industry. The GAO, for example, found that many of these agricultural areas chronically experienced double-digit unemployment rates that were well above those reported for much of the rest of the United States. Even when looking at monthly unemployment rates for these areas in order to take into account the seasonality of farm work, the agency found that the agricultural counties exhibited comparatively high rates of joblessness.34 These kind of findings imply a surplus rather than a shortage of farmworkers.35

Another perspective on the availability of untapped farm labor comes from the DOL’s National Agricultural Worker Survey (NAWS).36 During FY1999-2000, the typical crop worker spent 56% of the year performing farm jobs. The remainder of the year, these farmworkers either were engaged in nonfarm work (6% of the year) or not working (13%) while in the United States, or they were out of the country (21%).37 This pattern also suggests an excess supply of labor, assuming that the workers wanted more farm employment. Grower advocates contend that the pattern is a manifestation of working in a seasonal industry. But, during the peak month in 1997, only a small majority of farmworkers (58%) held farm jobs.38

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34 GAO, H-2A Agricultural Guestworker Program.
35 See also testimony of Cecilia Munoz, on behalf of the National Council of La Raza before the Senate Judiciary Subcommittee on Immigration, May 12, 1999.
36 See “Note” in Table 5 for information about the survey.
37 Based upon public access data from NAWS.
Table 2. The Rate and Level of Unemployment

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment rate</th>
<th>Number of unemployed hired farmworkers (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All occupations</td>
<td>Hired farmworkers</td>
</tr>
<tr>
<td>1994</td>
<td>6.1</td>
<td>12.1</td>
</tr>
<tr>
<td>1995</td>
<td>5.6</td>
<td>12.5</td>
</tr>
<tr>
<td>1996</td>
<td>5.4</td>
<td>11.5</td>
</tr>
<tr>
<td>1997</td>
<td>4.9</td>
<td>10.6</td>
</tr>
<tr>
<td>1998</td>
<td>4.5</td>
<td>11.8</td>
</tr>
<tr>
<td>1999</td>
<td>4.2</td>
<td>10.6</td>
</tr>
<tr>
<td>2000</td>
<td>4.0</td>
<td>10.6</td>
</tr>
<tr>
<td>2001</td>
<td>4.7</td>
<td>12.1</td>
</tr>
<tr>
<td>2002</td>
<td>5.8</td>
<td>11.4</td>
</tr>
<tr>
<td>2003</td>
<td>6.0</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Source: CPS data tabulated by the BLS (column 2) and the ERS (columns 3 and 4).

Note: In the CPS, an individual’s occupation is based on the activity in which they spent the most hours during the survey week. The ERS defines hired farmworkers as individuals age 15 or older whose primary job is farmwork and for which they receive wages. Hired farmworkers include individuals engaged in crop or livestock production whom growers employ directly or through agricultural service providers (e.g., farm labor contractors), as well as farm managers, supervisors of farmworkers, and nursery and other workers.

n.a.=not available

Time Worked

Another indicator of supply-demand conditions is the amount of time worked (e.g., hours or days). If employers are faced with a labor shortage, they might be expected to increase the amount of time worked by their employees.

The Seasonality of Demand: Hours Versus Employment. Recent data reveal no discernible year-to-year variation in the average number of weekly hours that hired farmworkers are employed in crop or livestock production. According to the NASS Farm Labor Survey (FLS), the average workweek of hired farmworkers has ranged narrowly around 40.0 hours since the mid-1990s. Thus, neither the trend in employment nor in work hours imply the existence of a farm labor shortage.

There also is not much variability in demand over the course of a year based on hours worked. In 2003, for example, the average week of hired farmworkers was 37.7 hours in mid-January, 40.1 hours in mid-April, 39.8 hours in mid-July and 40.2 hours in mid-October.
The instability of the demand for farm labor within a year (i.e., seasonality) is reflected in employment levels more than in work hours per week. The FLS data show that in 2003, for example, farmers had 729,000 workers on their payrolls in mid-January; 781,000 in mid-April; 943,000 in mid-July; and 891,000 in mid-October.

**The Number of Days Worked.** Another measure of time worked available from the FLS is “expected days of employment” (i.e., farm operators are asked the number of days they intend to utilize their hired farmworkers over the course of a year). As shown in Table 3, they anticipated a low of 593,000 farmworkers on their payrolls for at least 150 days in 1996 and a high of 679,000 (un)authorized workers in 2002. Typically, “year-round” workers accounted for more than 70% of hired farmworkers since the mid-1990s.39

NAWS data show that the number of days crop workers actually were employed on farms has diminished over time. In the early 1990s, the typical foreign-born crop worker was employed in farming for 196 days; over the mid-1990s the number of farm workdays fell first to 186 and then to 174; and by FY1999-2000, foreign-born crop workers averaged 161 days of employment in farming.40 Thus, the trend in days worked — in addition to the previously discussed trends in employment and in hours worked — appear to suggest that a nationwide farm labor shortage is not at hand.

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39 These figures potentially are relevant to the one bill thus far introduced in the 108th Congress that would link eligibility for legalization to time spent in farm work. H.R. 3142/S. 1645 would require unauthorized workers who want to apply for legal temporary residence to prove that they had performed at least 100 days or 575 hours of farm work, whichever is less, during any 12 consecutive months of the 18-month period ending on Aug. 31, 2003. To adjust status to legal permanent residence, these individuals would have to have been employed on farms for at least 360 days or 2,060 hours during the 6-year period from September 2003 through August 2009. Most of the continued employment in agriculture is front-loaded (i.e., 240 days or 1,380 hours, whichever is less, during the 3-year period from September 2003 through August 2006).

While some might wish to use the above-described data to roughly estimate the number of unauthorized farmworkers who would be eligible to adjust status, they describe the expectations of farmers and they do not distinguish between legal and illegal workers. In addition, the data could produce an underestimate because they omit the more than 200,000 contract workers on the payrolls of agricultural service providers. Alternatively, the data could produce an overestimate because they include employees not normally thought of as farmworkers (e.g., bookkeepers, secretaries or pilots).

40 Calculated from data reported in DOL, Findings from the National Agricultural Workers Survey: 1997-1998 and public access data from NAWS. Note: The dwindling number of farm workdays over time suggests that unauthorized crop workers could find it difficult to meet the farm employment requirement to apply for temporary resident status and then for adjustment to permanent resident status in H.R. 1645/S. 1645.
Table 3. Hired Farmworkers by Expected Days of Employment  
(numbers in thousands)

<table>
<thead>
<tr>
<th>Year</th>
<th>150 Days or more of expected employment</th>
<th>149 Days or less of expected employment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of hired workers</td>
<td>Percent of all hired farmworkers</td>
</tr>
<tr>
<td>1994</td>
<td>597</td>
<td>71</td>
</tr>
<tr>
<td>1995</td>
<td>598</td>
<td>69</td>
</tr>
<tr>
<td>1996</td>
<td>593</td>
<td>71</td>
</tr>
<tr>
<td>1997</td>
<td>629</td>
<td>72</td>
</tr>
<tr>
<td>1998</td>
<td>639</td>
<td>73</td>
</tr>
<tr>
<td>1999</td>
<td>666</td>
<td>72</td>
</tr>
<tr>
<td>2000</td>
<td>640</td>
<td>72</td>
</tr>
<tr>
<td>2001</td>
<td>658</td>
<td>75</td>
</tr>
<tr>
<td>2002</td>
<td>679</td>
<td>77</td>
</tr>
<tr>
<td>2003</td>
<td>635</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: Annual averages calculated by CRS from quarterly releases of the Farm Labor Survey.

Note: The NASS Farm Labor Survey counts as hired farmworkers only those persons paid directly by farmers (i.e., contract, custom or other workers paid directly by agricultural service providers are excluded). Hired farmworkers include field workers (i.e., those who plant, cultivate and harvest crops), livestock workers (i.e., those who tend livestock, milk cows or care for poultry) and supervisory workers (e.g., crew leaders or range foremen) as well as other workers on farmers’ payrolls (e.g., bookkeepers, secretaries or pilots).

Wages

Economic theory suggests that if the demand for labor is nearing or has outstripped the supply of labor, firms will in the short-run bid up wages to compete for workers. As a result, earnings in the short-supply field would be expected to increase more rapidly than earnings across all industries or occupations. The ratio of, in this instance, farm to nonfarm wages also would be expected to rise if the former’s labor supply were especially constrained.

The average hourly earnings of field workers (excluding contract workers) rose to a greater extent than those of other employees in the private sector between 1990 and 2003, at 58.9% and 50.9%, respectively. (See Table 4) Nonetheless, field workers’ pay hardly increased compared to other workers’ pay: at $8.31 per hour in 2003, field workers still earn little more than 50 cents for every dollar earned by other private sector workers.
Table 4. Average Hourly Earnings of Field Workers and Other Workers in the Private Sector
(in nominal dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Average hourly wages of field workers</th>
<th>Average hourly wages of production or nonsupervisory workers in the private nonfarm sector</th>
<th>Ratio of hourly field worker wages to private nonfarm worker wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>$5.23</td>
<td>$10.19</td>
<td>0.51</td>
</tr>
<tr>
<td>1991</td>
<td>5.49</td>
<td>10.50</td>
<td>0.52</td>
</tr>
<tr>
<td>1992</td>
<td>5.69</td>
<td>10.76</td>
<td>0.53</td>
</tr>
<tr>
<td>1993</td>
<td>5.90</td>
<td>11.03</td>
<td>0.53</td>
</tr>
<tr>
<td>1994</td>
<td>6.02</td>
<td>11.32</td>
<td>0.53</td>
</tr>
<tr>
<td>1995</td>
<td>6.13</td>
<td>11.64</td>
<td>0.53</td>
</tr>
<tr>
<td>1996</td>
<td>6.34</td>
<td>12.03</td>
<td>0.53</td>
</tr>
<tr>
<td>1997</td>
<td>6.66</td>
<td>12.49</td>
<td>0.53</td>
</tr>
<tr>
<td>1998</td>
<td>6.97</td>
<td>13.00</td>
<td>0.54</td>
</tr>
<tr>
<td>1999</td>
<td>7.19</td>
<td>13.47</td>
<td>0.53</td>
</tr>
<tr>
<td>2000</td>
<td>7.50</td>
<td>14.00</td>
<td>0.54</td>
</tr>
<tr>
<td>2001</td>
<td>7.78</td>
<td>14.53</td>
<td>0.54</td>
</tr>
<tr>
<td>2002</td>
<td>8.12</td>
<td>14.95</td>
<td>0.54</td>
</tr>
<tr>
<td>2003</td>
<td>8.31</td>
<td>15.38p</td>
<td>0.54</td>
</tr>
<tr>
<td>1990-2003 change</td>
<td>58.9%</td>
<td>50.9%</td>
<td>—</td>
</tr>
</tbody>
</table>

Source: Created by CRS from FLS (column 2) and BLS (column 3) employer survey data.

Note: Field workers are a subset of hired farmworkers who engage in planting, tending and harvesting crops. The data relate to all field workers regardless of method of payment (i.e., those paid an hourly rate, by the piece or a combination of the two). Contract, custom or other workers paid directly by agricultural service providers are excluded.

NAWS data reveal a different trend in wages, which cannot be explained by the different periods covered in Table 4 and Table 5. The survey also produces lower wage estimates than those from the FLS. These disparities likely are related to differences between the two surveys. Although the populations covered by the NAWS and the FLS are similar, the NAWS’ wage figures include contract labor while those from the FLS do not. As workers supplied to growers by farm labor contractors generally are paid less than direct-hires, this difference could have contributed to the lower hourly earnings of the NAWS. In addition, the NAWS questions workers; the FLS, employers. Figures supplied by employers usually are thought to be more accurate than those recalled by workers. And, while both surveys are designed to reflect seasonal variations during the course of a year, they do not cover identical reference periods.
Between 1990 and 2000, the average hourly earnings of crop workers rose to a lesser extent based on the NAWS (28.7%) than on the FLS (43.4%). Crop workers’ wages, as shown in Table 5, rose to a lesser extent in the 1990-2000 period than those of other workers in the private sector (28.7% and 37.4%, respectively) — just the opposite of the relationship between the FLS and BLS data (43.4% and 37.4%, respectively). As a result of the relatively lower wage estimates and the relatively slow wage growth derived from the NAWS, the typical crop worker was estimated to have dropped below 50 cents for every dollar paid to other private sector workers since the late 1990s.

### Table 5. Average Hourly Earnings of Crop Workers and Other Workers in the Private Sector
(in nominal dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Average hourly wages of crop workers</th>
<th>Average hourly wages of production or nonsupervisory workers in the private nonfarm sector</th>
<th>Ratio of hourly crop worker wages to private nonfarm worker wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>$5.23</td>
<td>$10.19</td>
<td>0.51</td>
</tr>
<tr>
<td>1991</td>
<td>5.57</td>
<td>10.50</td>
<td>0.53</td>
</tr>
<tr>
<td>1992</td>
<td>5.33</td>
<td>10.76</td>
<td>0.50</td>
</tr>
<tr>
<td>1993</td>
<td>5.46</td>
<td>11.03</td>
<td>0.50</td>
</tr>
<tr>
<td>1994</td>
<td>5.54</td>
<td>11.32</td>
<td>0.50</td>
</tr>
<tr>
<td>1995</td>
<td>5.71</td>
<td>11.64</td>
<td>0.49</td>
</tr>
<tr>
<td>1996</td>
<td>5.67</td>
<td>12.03</td>
<td>0.47</td>
</tr>
<tr>
<td>1997</td>
<td>5.89</td>
<td>12.49</td>
<td>0.47</td>
</tr>
<tr>
<td>1998</td>
<td>6.18</td>
<td>13.00</td>
<td>0.48</td>
</tr>
<tr>
<td>1999a</td>
<td>6.47</td>
<td>13.47</td>
<td>0.48</td>
</tr>
<tr>
<td>2000a</td>
<td>6.73</td>
<td>14.00</td>
<td>0.48</td>
</tr>
<tr>
<td>1990-2000 change</td>
<td>28.7%</td>
<td>37.4%</td>
<td>—</td>
</tr>
</tbody>
</table>

**Source:** Created by CRS from NAWS worker (column 2) and BLS employer survey data (column 3).

**Note:** Crop workers include field packers, supervisors and other field workers who engage in such activities as planting, tending and harvesting crops. Initially, the survey included only field workers on perishable crop farms to comply with IRCA: NAWS was developed to enable the DOL to calculate changes in the supply of SAS labor, which was then used in the shortage calculation conducted by the U.S. Departments of Labor and Agriculture for triggering the RAW program. In the mid-1990s, the survey was expanded to include field workers in non-perishable crops (e.g., silage or other crops intended solely for animal fodder). The data relate to the farm earnings of field workers age 14 or older, regardless of method of payment (i.e., those paid an hourly rate, by the piece or a combination of the two). The sample includes direct-hires and contract labor. The survey is conducted at different times over the course of a year to capture seasonal variations.

a. Only fiscal year data for 1999 and 2000 are available from the NAWS public access data shown in column 2. All other data in the table are on a calendar year basis.
Conclusion

In summary, indicators of supply-demand conditions generally are inconsistent with the existence of a nationwide shortage of domestically available farmworkers in part because the measures include both authorized and unauthorized employment. This finding does not preclude the possibility of farmworker shortages in certain parts of the country at various times during the year. The analysis does not address the adequacy of authorized workers in the seasonal farm labor supply relative to grower demand.

Whether there would be an adequate supply of authorized U.S. farmworkers if new technologies were developed or different labor-management practices were implemented continues to be an unanswered question. Whether more U.S. workers would be willing to become farmworkers if wages were raised and whether the size of the increase would make the industry uncompetitive in the world marketplace also remain open issues. These matters remain unresolved because perishable crop growers have rarely, if ever, had to operate without unauthorized aliens being present in the domestic farm workforce.41

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41 In the conference report for the Labor Department’s FY2000 appropriation (H.Rept. 106-479), the Congress charged the DOL with reporting on ways to promote a legal domestic workforce in the agricultural sector and on options for such things as improving farmworker compensation, developing a more stable farm workforce, and enhancing farmworkers’ living conditions. The report (U.S. Department of Labor Report to Congress: The Agricultural Labor Market—Status and Recommendations), issued in December 2000, recommends that the federal minimum wage be raised, agency funding for labor law enforcement increased, congressional appropriations for AgWork (i.e., an internet-based, on-line job matching system specifically for agricultural employees and employers) continued, growers’ greater use of automated employee verification systems encouraged, H-2A program streamlining further pursued while maintaining protections for U.S. and foreign farmworkers and discussions held with countries from which farmworkers come to “explore ways in which their legal rights can be better protected.” The Department concluded that IRCA’s farm legalization program failed to turn an unauthorized into an authorized workforce. It asserted that congressional proposals to ease growers’ access to temporary farmworkers outside the existing H-2A program “would not create a legal domestic agricultural workforce” and instead “would lower wages and working and living conditions in agricultural jobs resulting in fewer domestic workers continuing employment in agriculture and perpetuating the industry’s dependence on a foreign labor force.” The DOL pointed out that another approach to creating an authorized supply of crop workers has never been tried — increasing wages and improving working conditions “by normalizing legal protections for farm workers and increasing mechanization,” which has the potential to attract more U.S. workers to agriculture and raise the productivity of a possibly smaller farm labor force. In recognition that there might be short-run increases in farm labor costs were its recommendations implemented, the Department urged the Congress to consider ways to temporarily assist crop growers.