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Farm Labor Shortages and Immigration Policy

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Summary

The connection between farm labor and immigration policies is a longstanding one, particularly with regard to U.S. employers' use of workers from Mexico. The Congress is again taking up the issue as part of a larger debate over initiation of a broad-based guest worker program, increased border enforcement, and employer sanctions to curb the flow of unauthorized workers into the United States.

Two decades ago, the Congress passed the Immigration Reform and Control Act (IRCA, P.L. 99-603) to reduce illegal entry into 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, IRCA included legalization programs specific to the agricultural industry 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, however, have not operated in the offsetting manner that was intended, as substantial numbers of unauthorized aliens have continued to join legal farmworkers in performing seasonal agricultural services (SAS).

Currently, a little more than one-half of the SAS workforce is not authorized to hold U.S. jobs. Perishable crop growers contend that their sizable presence implies a shortage of native-born workers willing to undertake seasonal farm jobs. (An increasing share of IRCA-legalized farmworkers have been entering the ages of diminished participation in the SAS workforce, as well.) Grower advocates argue that farmers would rather not employ unauthorized workers because doing so puts them at risk of incurring penalties. Farmworker advocates counter that crop growers prefer unauthorized workers 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 U.S. workers to seek farm employment. Farmers 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 because perishable crop growers have rarely, if ever, operated without unauthorized aliens in their workforces.

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 labor shortages, however.) Farm employment did not show the same upward trend of total U.S. employment during the 1990s expansion. The length of time hired farmworkers are employed has changed little or decreased over the years. Their unemployment rate has varied little and remains well above the U.S. average, and underemployment among farmworkers also remains substantial. These agricultural employees earn about 50 cents for every dollar paid to other employees in the private sector. This report will be updated as warranted.

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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 industry¹ 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.”² 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.³ In addition, a sizeable fraction of immigrants historically have found employment on the nation’s farms.⁴

The intersection between farm labor and immigration has again emerged as a policy issue. The terrorist attacks of September 11, 2001 effectively quashed the discussions on this subject between the Bush and Fox Administrations that took place shortly after President Bush first 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 bills and the President’s proposal, see CRS Report RL32044, *Immigration: Policy Considerations Related to Guest Worker Programs*, by Andorra Bruno.)

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 whether

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

² Victor J. Oliveira, Anne B. W. Effland, Jack L. Runyan and Shannon Hamm, *Hired Farm Labor on Fruit, Vegetable, and Horticultural Specialty Farms*, U.S. Department of Agriculture, Economic Research Service, Agricultural Economic Report 676, Dec. 1993, p. 2. (Hereafter cited as, Oliveira, Effland, Runyan and Hamm, *Hired Farm Labor on Fruit, Vegetable, and Horticultural Specialty Farms*.)

³ U.S. Congress, Senate Committee on the Judiciary, *Temporary Worker Programs: Background and Issues*, committee print, 96th Cong., 2nd sess. (Washington: GPO, 1980).

⁴ Philip L. Martin, “Good Intentions Gone Awry: IRCA and U.S. Agriculture,” *Annals of the American Academy of Political and Social Science*, July 1994.

they 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-FY1995. Shortly thereafter (FY1997-FY1998), unauthorized aliens' share of the estimated 1.8 million workers employed on crop farms reached 52%.⁵ By FY1999-FY2000, their proportion had increased to 55% before retreating somewhat — to 53% — in FY2001-FY2002.⁶

Although a number of studies found that no nationwide shortage of domestic farm labor existed in the past decade,⁷ 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

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 DOL, *Findings from the National Agricultural Workers Survey (NAWS) 2001-2002*, Research Report No. 9, Mar. 2005. (Hereafter cited as DOL, *Findings from the NAWS 2001-2002*.)

⁷ Commission on Agricultural Workers (CAW), *Report of the Commission on Agricultural Workers*, (Washington: GPO, Nov. 1992). (Hereafter cited as CAW, *Report of the Commission on Agricultural Workers*.) U.S. General Accounting Office (GAO), *H-2A Agricultural Guestworker Program: Changes Could Improve Services to Employers and Better Protect Workers*, GAO/HEHES-98-20, Dec. 1997. (Hereafter cited as GAO, *H-2A Agricultural Guestworker Program*.) DOL, *A Profile of U.S. Farmworkers: Demographics, Household Composition, Income and Use of Services*, Research Report No. 6, Apr. 1997. (Hereafter cited as DOL, *A Profile of U.S. Farmworkers*.) And, annual calculations in the early 1990s by the U.S. Departments of Labor and Agriculture.

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 (SSA). 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 “no match letters” to employers who submit a substantial number of W-2 forms for which the agency cannot find corresponding earnings records in its database. The purpose of the letters 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.

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 in January 2003, SSA sends far fewer no-match letters to employers. In 2005, for example, just 127,652 no-match letters were sent to employers.¹¹

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.

¹¹ Testimony of James B. Lockhart III, Deputy Commissioner of Social Security, before the Subcommittee on Oversight of the House Committee on Ways and Means, Feb. 16, 2006.

(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.¹² Employer participation in these programs, which was set to last no more than four years, has been voluntary and the programs have involved a limited number of areas. Nonetheless, organizations of growers testified that inclusion of the pilot programs in P.L. 104-288 merely delayed the creation of a mandatory nationwide verification system.¹³ And indeed, in the Basic Pilot Program Extension and Expansion Act of 2003 (P.L. 108-156), Congress extended the program for five years through 2008 and expanded it to include all states, *but* employer participation in the program remains optional. In addition, the Basic Pilot continues to be little-used: although up substantially from the 2,924 employers who were registered to participate in December 2004, when the pilot was expanded nationwide, only about 5,500 employers (representing some 22,500 employer sites) had signed agreements with DHS and SSA as of early 2006.¹⁴

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 an initiative referred to as the Basic Pilot, employers can access the DHS system to validate a newly hired citizen's or non-citizen's eligibility to work.¹⁵ If employers receive a final nonconfirmation of employment eligibility, they must either fire the new-hire or be subject to financial penalties.¹⁶

¹² Work eligibility verification demonstrations in addition to the IIRIRA pilots are authorized under Section 274A(d)(4) of the Immigration and Nationality Act and Presidential Executive Order 12781 of Nov. 20, 1991. For more information see Karen I. Miksch, *INS Pilot Programs for Employment Eligibility Confirmation*, Carnegie Endowment for International Peace, International Migration Policy Program, Nov. 1998.

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 Testimony of James B. Lockhart III, Deputy Commissioner of Social Security, and Barbara D. Bovbjerg, Government Accountability Office, before the Subcommittee on Oversight of the House Committee on Ways and Means, Feb. 16, 2006.

¹⁵ Under the Basic Pilot, employers electronically send worker information to DHS, which forwards it to SSA. SSA compares the information provided against its database, and in the case of non-citizens, additionally refers the employer request to DHS. If DHS is unable to verify the employee's work authorization against its automated records, the request is forwarded to a DHS field office where further research is conducted. If SSA is unable to confirm the worker's SSN, name, and date of birth or the DHS records search cannot verify work authorization, the employer is sent a tentative nonconfirmation response. The employer then is to check the accuracy of the information with the worker, inform him or her of the government's finding, and refer the worker to either SSA or DHS to clear up the matter. If the worker does not contest the finding, a final nonconfirmation is issued to the employer.

¹⁶ In addition to potential fines under immigration law, the Internal Revenue Service (IRS) may charge employers \$50 for each W-2 form that omits or includes an incorrect Social Security number, up to \$250,000 per employer in a calendar year. The IRS is unaware of

(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."¹⁷ This estimate of hired farmworkers who have secured their jobs through presentation of fraudulent documents is at the high end of figures reported elsewhere, however.¹⁸

While a grower representative 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 led the American Farm Bureau Federation to speculate that more raids could be forthcoming.¹⁹ A representative 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."²⁰

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

¹⁶ (...continued)

any employer having to pay a penalty for submitting an erroneous wage report, according to testimony of Mark W. Everson, IRS Commissioner, before the Subcommittee on Oversight of the House Committee on Ways and Means, Feb. 16, 2006.

¹⁷ Testimony of James S. Holt on behalf of the National Council of Agricultural Employers before the Senate Judiciary Subcommittee on Immigration, May 12, 1999.

¹⁸ Perhaps one-fourth to three-fourths of the hired farm labor force may have relied on fraudulent documents to gain employment, according to U.S. Department of Agriculture, "Status Report: Hired Farm Labor in U.S. Agriculture," *Agricultural Outlook*, Oct. 1998.

¹⁹ Testimony of Larry Wooten on behalf of the American Farm Bureau Federation before the House Committee on Agriculture, Jan. 28, 2004.

²⁰ Fawn H. Johnson, "Immigration: Goodlatte Calls for Prevailing Wage in H-2A Program, Condemns Amnesty," *Daily Labor Report*, Jan. 29, 2004, p. A-3.

industry-specific legalization programs — the Special Agricultural Worker (SAW) program and the Replenishment Agricultural Worker (RAW) program²¹ — 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).²²

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.”²³ 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.²⁴

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 (19% and 7%, respectively, in FY2001-FY2002).²⁵ 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.”²⁶ As the average age of an authorized foreign-born cropworker in FY2001-FY2002 was 40,²⁷ he is now at the age of diminished participation in SAS labor. It thus appears that the 1986 legalization program has become less useful over time in fulfilling the labor requirements of crop producers.

²¹ 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-FY1993 period found no national shortages of farmworkers.

²² 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 other perishable commodities. The terms “SAS,” “seasonal farm work,” “field work” and “crop work” are used interchangeably in this report.

²³ CAW, *Report of the Commission on Agricultural Workers*, p. 75.

²⁴ DOL, *U.S. Farmworkers in the Post-IRCA Period*, Research Report No. 4, Mar. 1993. (Hereafter cited as *DOL, U.S. Farmworkers in the Post-IRCA Period*.)

²⁵ DOL, *Findings from the NAWS 2001-2002*.

²⁶ CAW, *Report of the Commission on Agricultural Workers*, p. 80.

²⁷ DOL, *Findings from the NAWS 2001-2002*.

A combination of factors likely has contributed to the decrease in SAWs' share of agricultural employment.²⁸ While the share of IRCA-legalized farmworkers has been falling over time due to aging and the availability of nonfarm jobs,²⁹ the leading factor probably is the substantially increased presence of illegal aliens.³⁰ In the first half of the 1990s, unauthorized workers rose from 7% to 37% of the SAS labor force.³¹ Their share climbed to 52% by FY1997-FY1998;³² then, rose further to 55% by FY1999-FY2000, before it dropped somewhat to 53% in FY2001-FY2002.³³ Moreover, the number of SAS workdays performed by unauthorized aliens more than tripled between FY1989 and FY2002.³⁴ In addition, of the many foreign-born newcomers to the sector in FY2000-FY2002, 99% were employed without authorization.

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

²⁸ 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 to 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.

²⁹ DOL, *Findings from the National Agricultural Workers Survey: 1997-1998*, Research Report No. 8, Mar. 2000. (Hereafter cited as DOL, *Findings from the National Agricultural Workers Survey: 1997-1998*.) 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*.

³⁰ 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." CAW, *Report of the Commission on Agricultural Workers*, p. 67.

³¹ DOL, *A Profile of U.S. Farmworkers*.

³² DOL, *Findings from the National Agricultural Workers Survey: 1997-1998*.

³³ DOL, *Findings from the NAWS 2001-2002*.

³⁴ DOL, *Farmworkers in the Post-IRCA Period* and *Findings from the NAWS 2001-2002*.

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 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?

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 pick up 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.

Although the employment of hired workers engaged in crop or livestock production (including contract workers) has fluctuated erratically over time, the trend overall has been downward (see columns 3 and 7 in **Table 1**). 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 18%. These divergent employment patterns suggest that hired farmworkers did not share equally in the nation's long economic expansion, and appear to be inconsistent with the presence of a nationwide farm labor shortage.

The labor market continued to contract in 2002, despite the 2001 recession's end in November. Nonfarm wage and salary employment showed signs of revival in 2003 that has since continued. Employment of hired farmworkers has not followed a similar upward trend. (See columns 3 and 7 of **Table 1**).

Table 1. Hired Farm Employment
(numbers in thousands)

Year	Total nonfarm wage & salary employment ^a	Economic Research Service (ERS) ^b		National Agricultural Statistics Service (NASS) ^c		
		Hired farm workers ^d	Hired crop workers ^e	Hired farm workers ^f	Agricultural service workers ^g	Total
1990	105,705	886	419	892	250	1,142
1991	104,520	884	449	910	259	1,169
1992	105,540	848	409	866	252	1,118
1993	107,011	803	436	857	256	1,113
1994	110,517	793	411	840	250	1,090
1995	112,448	849	433	869	251	1,120
1996	114,171	906	451	832	236	1,068
1997	116,983	889	432	876	240	1,116
1998	119,019	875	458	880	246	1,126

Year	Total nonfarm wage & salary employment ^a	Economic Research Service (ERS) ^b		National Agricultural Statistics Service (NASS) ^c		
		Hired farm workers ^d	Hired crop workers ^e	Hired farm workers ^f	Agricultural service workers ^g	Total
1999	121,323	840	440	929	233	1,162
2000	125,114	878	468	890	243	1,133
2001	125,407	745	392	881	244	1,125
2002	125,156	793	370	886	225	1,111
2003	126,015	777	372	836	236	1,072
2004	127,463	712	368	825	277	1,102
2005	129,931	n.a.	n.a.	779	282	1,062

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

Note: n.a. = not available.

- 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.
- 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 (FLS), 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 FLS 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, which annual average data masks. Demand for hired farm labor typically peaks in July when many crops are ready to be harvested. The July employment data from the NASS Farm Labor Survey has ranged from less than 1.1 million to less than

1.5 million between 1990 and 2005. In July 2005, employment was a little more than 1.3 million.

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, or about twice the average unemployment rate in the nation at a minimum. 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.³⁵ These kinds of findings imply a surplus rather than a shortage of farmworkers.³⁶

Another perspective on the availability of untapped farm labor comes from the DOL's National Agricultural Worker Survey (NAWS).³⁷ During FY2001-FY2002, the typical crop worker spent 66% of the year performing farm jobs. The remainder of the year, these farmworkers either were engaged in nonfarm work (10% of the year) or not working (16%) while in the United States, or they were out of the country (7%).³⁸ 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. Even in a month of peak industry demand, however, only a small majority of farmworkers hold farm jobs.³⁹

³⁵ GAO, *H-2A Agricultural Guestworker Program*.

³⁶ 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.

³⁷ See "Note" in **Table 5** for information about the survey.

³⁸ DOL, *Findings from the NAWS 2001-2002*.

³⁹ DOL, *Findings from the National Agricultural Workers Survey: 1997-1998*.

Table 2. The Rate and Level of Unemployment

Year	Unemployment rate		Number of unemployed hired farmworkers (in thousands)
	All occupations	Hired farmworkers	
1994	6.1	12.1	109
1995	5.6	12.5	121
1996	5.4	11.5	118
1997	4.9	10.6	106
1998	4.5	11.8	117
1999	4.2	10.6	100
2000	4.0	10.6	104
2001	4.7	12.1	103
2002	5.8	11.4	102
2003	6.0	12.9	100
2004	5.5	11.4	92
2005	5.1	n.a.	n.a.

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 2005, for example, the average week of hired farmworkers was 37.0 hours in mid-January, 39.9 hours in mid-April, 40.6 hours in mid-July and 42.0 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 2005, for example, farmers had 589,000 workers on their payrolls in mid-January; 753,000 in mid-April; 936,000 in mid-July; and 840,000 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. The 150-day low was almost matched in 2005. Typically, these “year-round” workers have accounted for more than 70% of hired farmworkers.⁴⁰

According to the NAWS, the number of actual farm workdays varies by legal status.⁴¹ Unauthorized workers averaged 197 days in crop production, compared to 185 days for authorized workers in FY2001-FY2002. More unauthorized than authorized workers were likely to spend at least 200 days in farm jobs (58% and 50%, respectively). Within the authorized population, citizens averaged 175 days and permanent residents, 195 days of employment in farming during the year.

Table 3. Hired Farmworkers by Expected Days of Employment
(numbers in thousands)

Year	150 Days or more of expected employment		149 Days or less of expected employment
	Number of hired workers	Percent of all hired farmworkers	
1994	597	71	243
1995	598	69	271
1996	593	71	239

⁴⁰ These figures potentially are relevant to legislation that would link eligibility for legalization to time spent in farm work. 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).

⁴¹ DOL, *Findings from the NAWS 2001-2002*.

Year	150 Days or more of expected employment		149 Days or less of expected employment
	Number of hired workers	Percent of all hired farmworkers	
1997	629	72	247
1998	639	73	241
1999	666	72	263
2000	640	72	251
2001	658	75	224
2002	679	77	207
2003	635	76	201
2004	611	74	246
2005	594	76	185

Source: Annual averages calculated by CRS from quarterly releases of the FLS.

Note: The NASS FLS 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.

As shown above in **Table 4**, 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 2005, at 66.2% and 58.1%, respectively. Nonetheless, field workers' pay has hardly increased compared to other workers' pay: at \$8.69 per hour in 2005, 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)

Year	Average hourly wages of field workers	Average hourly wages of production or nonsupervisory workers in the private nonfarm sector	Ratio of hourly field worker wages to private nonfarm worker wages
1990	\$5.23	\$10.19	0.51
1991	5.49	10.50	0.52
1992	5.69	10.76	0.53
1993	5.90	11.03	0.53
1994	6.02	11.32	0.53
1995	6.13	11.64	0.53
1996	6.34	12.03	0.53
1997	6.66	12.49	0.53
1998	6.97	13.00	0.54
1999	7.19	13.47	0.53
2000	7.50	14.00	0.54
2001	7.78	14.53	0.54
2002	8.12	14.95	0.54
2003	8.31	15.35	0.54
2004	8.45	15.67	0.54
2005	8.69	16.11p	0.54
1990-2005 change	66.2%	58.1%	—

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's 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 2002, the average hourly earnings of crop workers rose to a lesser extent based on the NAWS (39.6%) than on the FLS (55.3%). Crop workers' wages, as shown in **Table 5**, rose to a lesser extent in the 1990-2002 period than those of other workers in the private sector (39.6% and 46.7%, respectively) — just the opposite of the relationship between the FLS and BLS data (55.3% and 46.7%, respectively). As a result of the relatively lower wage estimates and the relatively slower 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.

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

Year	Average hourly wages of crop workers	Average hourly wages of production or nonsupervisory workers in the private nonfarm sector	Ratio of hourly crop worker wages to private nonfarm worker wages
1990	\$5.23	\$10.19	0.51
1991	5.57	10.50	0.53
1992	5.33	10.76	0.50
1993	5.46	11.03	0.50
1994	5.54	11.32	0.50
1995	5.72	11.64	0.49
1996	5.69	12.03	0.47
1997	5.81	12.49	0.47
1998	6.40	13.00	0.48
1999	6.54	13.47	0.48
2000	7.00	14.00	0.48
2001	7.11	14.53	0.49
2002 ^a	7.30	14.95	0.49
1990-2002 change	39.6%	46.7%	—

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. Calendar year data, except for 2002 which covers January to September.

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.