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Farm Labor Shortages and Immigration Policy

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Summary

The connection between farm labor and immigration policies has re-emerged as an issue in the Congress and is under discussion by the Bush and Fox Administrations. Questions have arisen about whether enough workers are available domestically to meet the labor requirements of crop growers and how, if at all, the Congress should change immigration policy, which has long been linked with the seasonal needs of crop producers for direct-hire and contract farmworkers.

Slightly more than half of today's farmworkers are not legally eligible to hold U.S. jobs. Growers are concerned that if certain federal activities are effective, they could lose a considerable portion of their labor force and hence of their livelihood. These federal actions include increased border enforcement efforts, work eligibility verification pilot programs and audits of employees' work authorization documents to determine their authenticity. In addition, the Social Security Administration has more often been sending letters that notify employers of mismatches between their employees' names/social security numbers and those in SSA's database in order to properly credit earnings to employee records.

Growers contend that the sizeable presence of illegal aliens implies a shortage of legal farmworkers. Their advocacy groups argue that growers would rather not employ unauthorized workers because doing so puts them at risk of incurring penalties. Farmworker advocates counter that crop producers prefer illegal to legal employees because the former are in a weaker bargaining position with regard to wages and working conditions. If the supply of illegal workers were curtailed, it is claimed, growers could adjust to a smaller legal workforce by introducing labor-efficient technologies and management practices, and by raising wages, which, in turn, would entice more legal workers 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 illegal aliens in their workforces.

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 databases cover legal *and* illegal employment. (This finding does not preclude the possibility of spot labor shortages, however.) Hired and contract farm employment generally has declined, in contrast to total U.S. employment, since 1990. The length of time hired workers are employed on farms has shown little change or decreased over the years, depending on the measure examined. The unemployment rate of hired farmworkers has varied little and remains much higher than the overall average. Underemployment among farmworkers remains substantial. And, although two data series show different levels and trends in the wages of field workers, the data do concur that these employees earn about 50 cents for every dollar paid to other private-sector employees.

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Farm Labor Shortages and Immigration Policy

Questions have arisen 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 in the Congress,⁵ and it is one of the topics under discussion by members of the Bush and Fox Administrations.

This report first explains why the nexus between farm labor shortages and immigration policy has again arisen. 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 (un)employment, time worked and wages of legal and illegal farmworkers to determine if they are consistent with the existence of a nationwide shortage of domestically available farmworkers.

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

²Oliveira, Victor J., with 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 Number 676, December 1993, p. 2. (Hereafter cited as, Oliveira, Effland, Runyan and Hamm, *Hired Farm Labor on Fruit, Vegetable, and Horticultural Specialty Farms*.)

³U.S. Congress. Senate. Committee on the Judiciary. *Temporary Worker Programs: Background and Issues*. Committee Print. 96th Cong., 2nd Sess. Washington, U.S. Government Printing Office, 1980.

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

⁵For information on legislation see: CRS Report RL30852, *Immigration of Agricultural Guest Workers: Policy, Trends, and Legislative Issues*, by Ruth Ellen Wasem and Geoffrey K. Collver.

Illegal Farmworkers and Activities of the SSA and INS

For the past several years, attention has focused 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 51.5%.⁶

Although a number of studies have found that no nationwide shortage of domestic farm labor exists,⁷ a case is being made that the considerable presence of illegal 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 illegal aliens curtailed sufficiently — a fear that has plagued growers over the years.

Crop producers reportedly believe the latest risk of losing much of their labor force comes from a number of activities being pursued, in some cases independently, and in others jointly, by the Social Security Administration (SSA) and the Immigration and Naturalization Service (INS). These activities are described below:

(1) Since about 1997, the SSA has more often been sending 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

⁶According 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**.

⁷Commission on Agricultural Workers. Report of the Commission on Agricultural Workers. U.S. Government Printing Office, November 1992. (Hereafter cited as Commission on Agricultural Workers, *Report of the Commission on Agricultural Workers*.); U.S. General Accounting Office. H-2A Agricultural Guestworker Program: Changes Could Improve Services to Employers and Better Protect Workers. GAO/HEHES-98-20, December 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, April 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.

letter is to make wage reports more accurate so that the agency can properly credit earnings to employees' records for future benefit payments.⁸

As part of this effort, the SSA has been encouraging 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. Growers have told the SSA that their concern with using the EVS is that when they then discuss any discrepancies with employees, the employees do not return to work. Farmers are also fearful that if they do not act on the SSA letters, they may be liable for penalties (commonly referred to as employer sanctions) due to "constructive knowledge" of illegal workers on their payrolls.⁹ But, the agency's correspondence clearly states that there are many reasons why discrepancies can occur¹⁰ and that the letter, by itself, should not form the basis for taking any adverse actions against employees.

(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.¹¹ Although these programs are voluntary for private employers in a limited number of test areas and are set to last no longer than 4 years, growers believe that their inclusion in P.L. 104-288 has merely delayed the creation of a mandatory nationwide verification system.¹²

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, for example, employers can access the SSA or INS databases 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 INS pilot programs nor its border

⁸Conversations with SSA staff.

⁹Aleinikoff, T. Alexander. The Green Card Solution. *The American Prospect*, December 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. However, this does not often occur according to the SSA.

¹⁰The SSA provides the following examples in its letters of why mismatches might occur: record transcription or typographical errors, incomplete or blank names or SSNs, or name changes.

¹¹Work 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 November 20, 1991. For more information see: Miksch, Karen I. *INS Pilot Programs for Employment Eligibility Confirmation*. Carnegie Endowment for International Peace, International Migration Policy Program, November 1998.

¹²Vice, Bob L. Statement on behalf of the National Council of Agricultural Employers and the American Farm Bureau Federation before the House Judiciary Subcommittee on Immigration and Claims. September 24, 1997.

enforcement initiative were likely to have an immediate, significant effect on the supply to growers of fraudulently documented farmworkers.¹³

(3) The INS reportedly has increased its audits of I-9 forms, but “the incidence ... is still relatively low.” In the audits, the INS checks the authenticity of employees’ work authorization documents against government records. At the audits’ completion, the INS gives employers 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.”¹⁴ This estimate of hired farmworkers who have secured their jobs through presentation of fraudulent documents is at the high end of figures reported elsewhere.¹⁵

Growers are concerned that these SSA and INS activities already 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 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 illegal 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) program¹⁶ — that were intended to compensate for the Act’s expected impact on the farm labor supply and encourage the

¹³GAO, *H-2A Agricultural Guestworker Program*.

¹⁴Holt, James S. Statement on behalf of the National Council of Agricultural Employers before the Senate Judiciary Subcommittee on Immigration. May 12, 1999.

¹⁵Perhaps one-fourth to three-fourths of the hired farm labor force may have relied on fraudulent documents to gain employment. U.S. Department of Agriculture. Status Report: Hired Farm Labor in U.S. Agriculture. *Agricultural Outlook*, October 1998.

¹⁶The 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.

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 illegal aliens have continued to join legal farmworkers in performing seasonal agricultural services (SAS).¹⁷

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.”¹⁸ 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.¹⁹

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 55 (9% and 6%, respectively, in FY1997-1998).²⁰ 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.”²¹ He is now closer to the age of diminished participation in SAS labor: in FY1997-1998, the average age of SAWs was 39, older than U.S.-born farmworkers (32) and unauthorized farmworkers (27).²² 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.²³ The

¹⁷Seasonal 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.

¹⁸Commission on Agricultural Workers, *Report of the Commission on Agricultural Workers*, p. 75.

¹⁹DOL. U.S. Farmworkers in the Post-IRCA Period. Research Report No. 4, March 1993. (Hereafter cited as *DOL, U.S. Farmworkers in the Post-IRCA Period.*)

²⁰DOL. Findings from the National Agricultural Workers Survey: 1997-1998. Research Report No. 8, March 2000. Available on the Internet at: [http://www.dol.gov/dol/asp/public/programs/agworker/report_8.pdf.] (Hereafter cited as *DOL, Findings from the National Agricultural Workers Survey: 1997-1998.*)

²¹Commission on Agricultural Workers, *Report of the Commission on Agricultural Workers*, p. 80.

²²DOL, *Findings from the National Agricultural Workers Survey: 1997-1998.*

²³Alternatively, 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

(continued...)

fraction of IRCA-legalized farmworkers fell from 33% in FY1989 to 16% in FY1997-1998.²⁴ Possibly the leading factor, however, is the substantial increase in the presence of illegal aliens.²⁵ In the first half of the 1990s, unauthorized workers rose from 7% to 37% of the SAS labor force.²⁶ And, their share now stands at 51.5%.²⁷ Moreover, the number of SAS workdays performed by illegal aliens increased dramatically from 57 in FY1989 to 154 in FY1991.²⁸ In addition, of the many newcomers to the sector in FY1994-1995, 70% were employed illegally.²⁹

Illegal aliens, arguably, have been displacing legal workers from jobs in the agricultural industry. Farmworker advocates assert that crop producers prefer illegal employees because they have less bargaining power with regard to wages and working conditions than legal 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 illegal aliens in the U.S. farm labor force implies a shortage of legal workers.

²³(...continued)

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 the 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.

²⁴DOL, *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*.

²⁵The Commission on Agricultural Workers determined that the design of the SAW program was, at least in part, responsible for the increase in illegal 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.

²⁶DOL, *A Profile of U.S. Farmworkers*.

²⁷DOL, *Findings from the National Agricultural Workers Survey: 1997-1998*.

²⁸DOL, *Farmworkers in the Post-IRCA Period*.

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

Farmworker groups and some policy analysts contend that even if the previously described SSA and INS activities were to deprive farmers of many of their illegal 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 legal 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, migratory 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 illegal 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 legal *and* illegal 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 illegal 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 the 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.

The employment of hired workers engaged in crop or livestock production (including contract workers) has fluctuated erratically between 1990 and 2000. However, the trend overall has been downward, ranging from -0.8% to -1.8% (see columns 7 and 3, respectively, 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. 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 since the 1990-1991 recession's end. For the entire period (1990-2000), wage and salary employment in nonfarm industries advanced by 14%. These divergent employment patterns suggest that hired farmworkers have not shared equally in the nation's longest economic expansion and appear to be inconsistent with the presence of a nationwide farm labor shortage.

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	115,570	886	419	892	250	1142
1991	114,449	884	449	910	259	1169
1992	115,245	848	409	866	252	1118
1993	117,144	803	436	857	256	1113
1994	119,651	793	411	840	250	1090
1995	121,460	849	433	869	251	1120
1996	123,264	906	451	832	236	1068
1997	126,159	889	434	876	240	1116
1998	128,085	875	458	880	246	1126
1999	130,207	841	440	929	233	1162
2000	131,903	870	468	890	243	1133

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

Note: Numbers rounded to the nearest thousand.

^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 1990-1999 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 (see columns 5-7 in **Table 1**), was very unstable during the 1990-2000 period.³⁰

Unemployment

Employment data sketch 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) has been and remains quite high. Between 10% and 13% of these workers were without jobs in the 1994-2000 period, or at least twice the average unemployment rate in the nation. There also

³⁰According 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 — 1,377,000.

does not appear to have been an exodus of unemployed workers from farming since the mid-1990s as the number of hired farmworkers who lack jobs has not clearly trended downward.

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.³¹ These kind of findings imply a surplus rather than a shortage of farmworkers.³²

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

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.

Another perspective on the availability of untapped farm labor comes from the DOL's National Agricultural Worker Survey (NAWS).³³ During FY1997-1998, the typical crop worker spent just 47% of the year performing farm jobs. The remainder of the year, these farmworkers either were engaged in nonfarm work (8% of the year)

³¹GAO, *H-2A Agricultural Guestworker Program*.

³²See also: Munoz, Cecilia. Statement on behalf of the National Council of La Raza before the Senate Judiciary Subcommittee on Immigration. May 12, 1999.

³³See "Note" in **Table 5** for information about the survey.

or not working (19%) while in the United States, or they were abroad (24%).³⁴ 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 (June) in 1997, only a small majority of farmworkers (58%) held farm jobs.³⁵

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 ranged narrowly (from 40.0- 40.3 hours) since the mid-1990s. Thus, neither the trend in employment nor in work hours seem to 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 2000, for example, the average week of hired farmworkers was 38.4 hours in mid-January, 40.4 hours in mid-April, 40.0 hours in mid-July and 41.2 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 2000, for example, farmers had 685,000 workers on their payrolls in mid-January; 840,000 in mid-April; 1,084,000 in mid-July; and 952,000 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 665,800 (un)authorized workers in 1999. “Year-round” workers accounted for about 70% of hired farmworkers since the mid-1990s.³⁶

³⁴DOL, *Findings from the National Agricultural Workers Survey: 1997-1998*.

³⁵DOL, *Findings from the National Agricultural Workers Survey: 1997-1998*.

³⁶These figures potentially are relevant to legislative proposals in the 107th Congress that would link eligibility for legalization to time spent in farm work. H.R. 2736 and S. 1313 would require unauthorized workers who want to apply for legal temporary residence to prove that they had performed at least 90 days or 540 hours of farm work, whichever is less, during any 12 consecutive months of the 18-month period ending on June 30, 2001. To adjust status to legal permanent residence, these individuals would have to have been employed on farms

(continued...)

Table 3. Hired Farmworkers by Expected Days of Employment

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	597,000	71	243,000
1995	597,800	69	270,800
1996	593,000	71	239,000
1997	629,000	72	247,300
1998	638,500	73	241,000
1999	665,800	72	263,300
2000	639,800	72	250,500

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).

NAWS data show that the number of days crop workers actually were employed on farms has diminished over time. In FY1990-1992, the typical foreign-born crop worker was employed in farming for 196 days; in FY1993-1995, the number of farm workdays fell to 186; and in FY1996-1998, the average number of days spent in crop production dropped still further to 174.³⁷ SAS workdays fell among native-born crop

³⁶(...continued)

for 90 days or 540 hours in each of 3 years during the 4-year period beginning on the date the alien first obtained employment authorization. In contrast, S. 1161 would require unauthorized workers who want to apply for legal temporary residence to prove that they had performed at least 150 days or 900 hours of farm work, whichever is less, during any 12 consecutive months of the 18-month period ending on July 4, 2001. To adjust status to legal permanent residence, these individuals would have to have been employed on farms for 150 days or 900 hours in each of 4 years during the 6-year period ending in November 2001.

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).

³⁷Calculated by CRS from data reported in DOL, *Findings from the National Agricultural* (continued...)

workers, as well, from 165 to 158. 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.

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 2000, at 43.4% and 37.4%, respectively (see **Table 4**). Nonetheless, field workers' pay hardly increased as a share of other workers' pay: at \$7.50 per hour in 2000, field workers still earned a little more than 50 cents for every dollar earned by other private-sector workers.

NAWS data reveal a different trend in wages. The survey also produces lower wage estimates than those from the FLS. (See **Table 4** and **Table 5**.) 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.

³⁷(...continued)

Workers Survey: 1997-1998. **Note:** The dwindling number of farm workdays over time suggests that illegal alien crop workers could find it increasingly difficult to meet the requirement for adjustment to permanent resident status of performing farm work for 90 days or 540 hours in each of 3 out of 4 years (H.R. 2736/S. 1313) or 150 days or 900 hours in each of 4 out of 6 years.

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	10.01	52.2
1991	5.49	10.32	53.2
1992	5.69	10.57	53.8
1993	5.90	10.83	54.5
1994	6.02	11.12	54.1
1995	6.13	11.43	53.6
1996	6.34	11.82	53.6
1997	6.66	12.28	54.2
1998	6.97	12.78	54.5
1999	7.19	13.24	54.3
2000	7.50	13.75	54.5
1990-2000 % change	43.4	37.4	—

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.

Between 1990 and 1998, the average hourly earnings of crop workers rose to a lesser extent based on the NAWS (18.2%) than on the FLS (33.3%). Crop workers' wages, according to the NAWS, rose to a lesser extent in the 1990-1998 period than those of other workers in the private sector (18.2% and 27.7%, respectively) — just the opposite of the relationship between the FLS and BLS data (33.3% and 27.7%, 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)

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	10.01	52.2
1991	5.57	10.32	53.9
1992	5.33	10.57	50.4
1993	5.46	10.83	50.4
1994	5.54	11.12	49.8
1995	5.71	11.43	49.9
1996	5.67	11.82	47.9
1997	5.89	12.28	47.9
1998	6.18	12.78	48.4
% change	18.2	27.7	—

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.

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 legal and illegal 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 *legal* workers in the seasonal farm labor supply relative to grower demand.

Whether there would be an adequate supply of legal 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 illegal aliens being present in the domestic farm workforce.³⁸

³⁸In 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 illegal into a legal 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 a legal 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.

