



Study

A PROJECT OF THE PEW CHARITABLE TRUSTS AND USC ANNEBERG SCHOOL FOR COMMUNICATION

Guest Workers: New Solution, New Problem?

by

Philip Martin
University of California at Davis

March 21, 2002

The opinions expressed in this study are those of the author and do not necessarily reflect the views of The Pew Charitable Trusts.

Guest Workers: New Solution, New Problem?

Philip Martin

TABLE OF CONTENTS

HOW MANY UNAUTHORIZED?	2
TABLE 1. HOW MANY UNAUTHORIZED WORKERS?	5
HOW MANY WOULD BE ELIGIBLE?	5
TABLE 2. FARM WORK DAYS: 1/2 OF UNAUTHORIZED ARE NOT ELIGIBLE AT 90 DAYS.....	7
TABLE 3. INCOME TEST: 1/3 OF UNAUTHORIZED ARE NOT ELIGIBLE	8
HOW MANY NEW ADMISSIONS?	9
TABLE 4. HOW MANY NEW ADMISSIONS?	10
TABLE 5. LEGALIZING FARM WORKERS MAY DO 24-24 PERCENT OF FARM WORK.....	12
ALTERNATIVE SCENARIOS	12
TABLE 6. MAJOR IMMIGRATION REFORM OPTIONS AND THEIR IMPACTS	13
BIBLIOGRAPHY	14
APPENDIX 1: IMMIGRATION AND AGRICULTURE PROPOSALS: THE 1990S	15
APPENDIX 2: CALCULATING THE NEED FOR WORKERS-RAW	16
TABLE A2-1. CALCULATING ANNUAL RAW ADMISSIONS: 1989-93.....	16
APPENDIX 3: ADDITIONAL FARM LABOR DATA	18
TABLE A3-1. HIRED FARM WORKERS: 1910-2001 (IN THOUSANDS)	18
TABLE A3-2. DOL H-2A CERTIFICATIONS, 1985-2000	19
TABLE A3-3. SAWS AND UNAUTHORIZED WORKERS, NAWS, 1989-98	19
TABLE A3-4. MEDIAN WEEKLY EARNINGS FOR SELECTED OCCUPATIONS, 1988-1999 (IN U.S.\$).....	0

Highlights

- About 1.2 million or 47 percent of the 2.5 million persons employed for wages on US farms are unauthorized. The share of unauthorized workers is highest in seasonal fruit and vegetable crops.
- A legalization program that required unauthorized workers to have done at least 90 days of farm work in the preceding year would allow 50 to 70 percent of currently unauthorized workers, 600,000 to 840,000 individuals, to legalize their status.
- If newly legalized workers exit the farm work force at the same rate as Special Agricultural Workers (SAWs) did after being legalized in 1987-88, about 125,000 new workers would be needed each year. Taking into account exits of all types of farm workers, it is likely that at least 250,000 new workers would be needed each year if farm labor conditions remain unchanged.

This paper addresses three questions:

- How many unauthorized workers are employed in U.S. agriculture?
- How many unauthorized farm workers would be eligible for a legalization or guest worker program that required e.g. 60, 90 or 120 days of U.S. farm work during a qualifying 12-month base period?
- How many guest workers would be admitted under the most likely legalization/guest worker programs; that is, what are likely exit rates from the farm work force for newly legalized workers?

The concluding section discusses the implications of alternative scenarios for dealing with immigration and farm workers.

How Many Unauthorized?

Agriculture is the nation's oldest industry: the nation's first census in 1790 reported that 90 percent of the four million U.S. residents lived in rural areas, where most were farmers or farm workers. Since 1910, the USDA has estimated employment on farms each quarter, and distinguished between hired and operator and family workers. These USDA Farm Labor estimates show that average hired worker employment is about 1.2 million a year, including agricultural service workers – persons brought to farms by labor contractors and similar nonfarm operators – and that an average 2 million farm operators and unpaid family workers are employed on farms, many part-time.

Between the 1950s and the late 1980s, USDA estimated the total number of hired farm workers by having questions attached to the December Current Population Survey (CPS) that asked whether anyone in the sample household did farm work for wages during the preceding 12 months. The CPS is a random sample of housing units, and these CPS data were expanded to estimate that there were 2.5 million persons employed for wages on U.S. farms during a typical year in the 1980s and 1990s. The CPS data were also used to report the characteristics of farm workers, such as the number of migrants – about 8 percent of hired workers in 1970 and 1980 crossed county lines in the U.S., and stayed away from their usual homes, in order to do farm work for wages.

About 72 percent, or 1.8 million, of the total number of hired workers were employed on crop farms¹ in 1977. Under the Special Agricultural Worker (SAW) program of the Immigration Reform and Control Act of 1986 (IRCA), about 1.2 million of the 1.3 million applicants who submitted evidence of having done at least 90 days of farm work in 1985-86 as unauthorized workers became immigrants. The Immigration Reform and Control Act established a Replenishment Agricultural Worker (RAW) program to admit additional foreign farm workers if labor shortages developed as a result of SAWs quickly leaving the farm work force. Three federal agencies were involved in estimating farm labor shortages between 1989 and 1993, when the RAW program was in effect:

- The U.S. Department of Agriculture estimated the demand for labor, and crop losses due to labor shortages.
- The U.S. Department of Labor estimated the supply of labor, including days worked by SAWs.
- The Bureau of the Census collected data from farm employers on the SAW workers they employed.

These data did not demonstrate any farm labor shortages in the early 1990s, the RAW program was allowed to expire, and USDA and Census stopped collecting farm labor shortage-related data.

¹ The 72 percent share of workers employed on crop farms was derived by dividing labor expenditures in the 1997 Census of Agriculture by average hourly earnings of field and livestock workers from the USDA-NASS Farm Labor survey to get hours of farm work done on crop farms – 1.9 billion – and on livestock farms – 750 million. About 72 percent of the 2.6 billion total hours worked in the COA were on crop farms in 1997.

However, the U.S. Department of Labor, which launched the National Agricultural Workers' Survey (NAWS) in 1989 to estimate the supply of farm labor, continued its survey of crop workers. Unlike the CPS, the NAWS has no national sampling frame that permits the sample to be expanded to report the number of workers in any particular state or region – the NAWS was designed to answer questions about farm worker characteristics and days of farm and nonfarm work. The NAWS has become the most widely cited data source on farm worker characteristics, including reports that most crop workers are unauthorized (46 percent in 1995-96; 52 percent in 1997-98; a projected 58 percent in 2001-02).²

Table 1 includes three estimates of how many unauthorized farm workers there may be in 2002 – the range is 1 to 1.4 million:

- The first column, 58/20, estimates 1.2 million unauthorized foreign farm workers, based on projected NAWS data that 58 percent of crop workers were unauthorized, and my estimate that 20 percent of livestock workers are unauthorized.
- The second column shows that if 2/3 of the crop workers are unauthorized, and 1/3 of the livestock workers are unauthorized, there are 1.4 million unauthorized U.S. farm workers.

² A 1999 review of the NAWS at 10 cautioned that NAWS data apply only to crop agriculture, NAWS data are most useful at the national level and for multi-year periods, and the post-sampling weighting procedure is confusing to researchers because it assumes that the sample data obtained can be weighted to reflect “normal” conditions – without a sampling frame.

- The second column shows that if 50 percent of crop workers and if 10 percent of livestock workers are unauthorized, there are 1 million unauthorized farm workers.

Table 1. How many unauthorized workers?

How many unauthorized workers?			
Unauthorized crop/livestock %	<i>58/20</i>	<i>2/3-1/3</i>	<i>50/10</i>
Hired workers(mils)	2,500,000	2,500,000	2,500,000
Crop workers(mils)	1,800,000	1,800,000	1,800,000
Percent unauthorized	58	67	50
Number unauthorized	1,044,000	1,200,600	900,000
Livestock workers	700,000	700,000	700,000
Percent unauthorized	20	33	10
Number unauthorized	140,000	233,100	70,000
Total unauthorized	1,184,000	1,433,700	970,000

Source: see text

In a total hired farm work force of 2.5 million, the percentage of unauthorized workers is most likely 1.2 million or 47 percent. The percentage of unauthorized workers varies by several well-known factors – size of farm, type of employer, commodity and geography. Larger farms with significant numbers of workers brought to the farm by labor contractors have more unauthorized workers than smaller farms with only directly hired workers, the percentage of unauthorized workers is highest in very seasonal fruit and vegetable crops, but the percentage of unauthorized workers has become more uniform as newly arrived immigrants spread from the southwest throughout the U.S.

How Many Would be Eligible?

Under IRCA, unauthorized foreigners had to do at least 90 days of farm work between May 1, 1985 and May 1, 1986 to qualify for legal status.

This work requirement was based on the CPS data, which showed that the 2.5 to 2.6 million hired workers averaged about 100 days of farm work a year in the early 1980s. However, this 100-day average tends to obscure the fact that 60 to 70 percent of hired workers were employed on farms less than 50 days in 1983.

The NAWS interviews workers at work, and uses a grid to collect information about farm and nonfarm work as well as unemployment and time spent abroad during the previous year. Workers are asked their days worked per week for each farm and nonfarm job, over the previous year—the worker's choices are doing farm work, not working in the U.S., and being abroad. During the 1990s, crop workers interviewed in the NAWS typically did 23-24 weeks of farm work a year, 36-38 hours a week or 115 to 120 days of farm work if workers are employed in 5-day weeks.

It is not clear how reliable NAWS recall and average days-a-week data are, but they show that, when grouped by days of farm work during the previous year:

- immigrant workers were most likely to have done at least 90 days of farm work—75 percent
- unauthorized workers were least likely to have done at least 90 days of farm work—51 percent

If the qualification for temporary legal status were at least 90 days of farm work, the NAWS data show that about half of the workers interviewed would be eligible. If the days worked requirement were reduced to 60

days, about 65 percent of the unauthorized workers would be eligible, and if the requirement were 120 days, only about 40 percent would be eligible.

Table 2. Farm Work Days: 1/2 of Unauthorized are not eligible at 90 days

Crop Workers: Days Worked by Legal Status

Percent of workers who did at least 60, 90, and 120 days of farm work over 12 months, 1993-98

	60 days	90 days	120 days	Share of Workers 1997- 98(%)	
All Workers	68	56	47	47	100
US Citizens	59	47	39	39	22
1997-98	66	55	45	45	
Immigrants	84	75	67	67	24
1997-98	85	75	66	66	
Unauthorized	65	51	41	41	52
1997-98	64	50	37	37	

Source: NAWS interviews with crop workers, 1993-98

NAWS also reports total annual income. On September 1, 1997, the federal minimum wage increased from \$4.75 to \$5.15 – it was/is higher in many states with large numbers of farm workers. If unauthorized workers had the same income patterns as legally authorized workers, then half of the workers in each NAWS income group were authorized and half were unauthorized.³

³ Unauthorized workers are likely to be in the lower income groups if income increases with US experience. In 1997-98, the half of the farm workers who were authorized had an average of 13 years of US farm work experience; the half who were unauthorized had an average of four years of US farm work experience. In 1997-98 the average hourly earnings of US citizens were \$6.30, S.D. \$2.14, for immigrants also \$6.30, S.D. \$1.49, and for unauthorized \$5.63, S.D. \$1.23. In 1997-98, 38 percent of the unauthorized earned less than \$500, reflecting the fact that some were interviewed shortly after their illegal arrival in the US.

Table 3 shows that a significant share of unauthorized workers, about one-third, would not satisfy a *90-days of farm work in the previous year* requirement. This means that if there were 1.2 million unauthorized farm workers about 400,000 would not satisfy the work requirement. If the period for satisfying the work requirement were increased from 12 to 18 months, then the percentage of workers with too few days would fall from 31 to 23 percent.

The exact number of workers who qualify for legalization will depend on the definition of a work day (for the SAW program, a day was defined as one hour or more), the definition of agriculture (IRCA legalization was limited to Seasonal Agricultural Services or most of crop agriculture), and the proof that a worker must provide (IRCA required only an affidavit from an employer or co-worker, not pay stubs or income tax returns).

Table 3. Income Test: One-third of Unauthorized are Not Eligible

How many unauthorized are eligible?

NAWS-percent of workers by earnings				Earnings
>90 days of farm work	\$5/hour	7 hours/day	\$35/day	3,150
>90 days of farm work	\$6/hour	7 hours/day	\$42/day	3,780
>90 days of farm work	\$7/hour	7 hours/day	\$49/day	4,410

NAWS-1997-98 Personal Income distribution for 1.8 million farm workers

Annual Income, 1997	Per Dist	Days worked@upper earnings limit		
		\$35/day	\$42/day	
<\$500		20	14	12
\$500-999		3	29	24
\$1000-\$2499		8	71	60
\$2500-\$4999		13	143	119
\$5000-\$7499		16	214	179
\$7500-\$9999		13	286	238
\$10,000 or more		26		

23 to 31% of NAWS crop workers are NOT likely to be eligible

Source: NAWS, March 2000, p. 46

How Many New Admissions?

Farm work is often described as a job, not a career. Data and logic suggest that the average farm worker is in the hired farm work force about 10 years, based on the following – the median age of farm workers is about 28 and, with an overall stable work force, a constant median age suggests that exiting older workers are replaced by young new entrants.⁴ About half of the crop workers interviewed in 1997-98 told NAWS interviewers they intended to remain farm workers as long as possible, while the other half intended to exit the farm work force within five years, which would imply a 10 percent annual exit rate.

Projecting admissions is difficult because it requires assumptions about conditions in the farm labor market as well as in the nonfarm economy. If there were legalization, and there was no requirement to continue working in agriculture, and farm and nonfarm labor conditions were “normal,” then the annual exit rate of hired workers is likely to be between 10 and 20 percent, implying 250,000 to 500,000 new entrants each year to keep the farm work force at 2.5 million. It could be argued that turnover is 10 percent only in crop agriculture, where the demand for labor is seasonal. If there is no turnover in livestock agriculture, then the number of new entrants would be 180,000 to 360,000 a year.

⁴ In 1998, about 54 percent of US workers were male, and 39 percent were under 35 years of age. Some 80 percent of crop workers were men, and 67 percent were under 35, in the 1997-98 NAWS.

Table 4. How Many New Admissions?

How Many New Admissions?

Exit rates/year(a)	10	20	30
2,500,000	250,000	500,000	750,000
1,800,000	180,000	360,000	540,000

a. Percent of workers employed in year 1 but not in year 2

Farm workers would likely exit the farm work force at a slower pace if farm wages and benefits rose relative to nonfarm wages and benefits – they fell during the 1990s – or if seasonality decreased so that farm workers got more days/weeks of work each year. Turnover would also be slowed by higher nonfarm unemployment rates.

The RAW program and AgJOBS and similar legalization-guest worker proposals pending in Congress seek to slow exits from the farm work force by giving unauthorized workers a temporary legal status, and requiring them to do a certain amount of farm work each year to maintain that status and eventually convert the temporary legal status into an immigrant status. Any of the RAWS who could have been admitted between 1989 and 1993 to curb farm labor shortages would have had to do at least 90 days of work in crop agriculture a year for three years before they could apply for immigrant status. AgJOBS and similar proposals would require 60 to 100 days of farm work in order to convert temporary legal status into immigrant status.

If the farm labor expenditures of farmers reported in the 1997 Census of Agriculture (COA) are divided by the average hourly earnings of field and livestock workers in each state/region from the USDA-NASS Farm

Labor survey, there were about 2.6 billion hours of farm work done by hired workers in 1997, including 1.9 billion hours or 72 percent of the time in crop agriculture. This estimate yields too many work hours, because the COA includes payroll taxes and fringe benefits, while NASS excludes them.⁵ If the value of employer payroll taxes and fringe benefits is 20 percent of gross earnings, the number of hours of farm work should be reduced by 20 percent to 2.1 billion hours and, with 72 percent in crops, there would be 1.5 billion crop hours and 600 million livestock hours.

Given a total hired farm work force of 2.5 million, these calculations suggest that all workers average approximately 833-840 hours of farm work a year, and that 800,000 legalized workers, each doing 90 days of farm work for 7 hours a day, would contribute 24 percent of all farm work hours and 34 percent of crop work hours. The actual hours of farm work likely to be contributed by temporary legal workers, and the extent to which legalized workers continue to perform farm work, will depend on many variables, from the farm-nonfarm wage and benefit gap to enforcement of the farm labor requirement.

⁵ COA Appendix B-15: "Item 8. Cost of Hired Farm and Ranch Labor – includes gross salaries and wages, commissions, dismissal pay, vacation pay and paid bonuses paid to hired workers, family members, hired managers...Include supplemental cost for benefits such as employer's social security contributions, unemployment compensation, workman's compensation insurance, life and medical insurance, pension plans etc."

Table 5. Legalizing Farm Workers May Do 24-24 Percent of Farm Work

What About Requiring Continued Farm Work?

1997 COA	Total Hours	Crop Hours
Hours worked	2,100,000,000	1,500,000,000
Average hours per worker	840	833
800,000 legalized workers	504,000,000	504,000,000
Percent work done by legalizing	24%	34%

Hours worked are 1997 COA labor expenditures divided by average hourly earnings and reduced by 20% for payroll taxes

Average hours per worker is based upon 2.5 million workers

800,000 legalized workers are assumed to do 90 days of farm work and 7 hours a day

Alternative Scenarios

The immigration policy decisions of 2002 will have important impacts on farmers, workers and rural communities. The status quo promises uncertainty and risk for farm employers, forces workers to make often dangerous crossings of the Mexico-U.S. border and ends up with solo male workers concentrated in farm worker communities.

Guest worker programs can provide growers with a legal farm work force that must remain in their employ to legally remain in the U.S., but at the cost to farmers of providing housing or housing allowances and paying at least government-set wages. Farm employers may also become more vulnerable to inspections by government agencies, unions and NGOs. Guest workers enter the U.S. legally and have the certainty of a U.S. job but are dependent upon their U.S. employer to remain in the country. There may be few direct community impacts of guest workers, especially if guest workers are housed on farms. But their presence in the fields may limit increases in wages and benefits, encouraging U.S. workers to leave farm work. Labor activist and author Ernesto Galarza argued that

the Bracero program during the 1950s had this effect, encouraging Mexican-Americans to leave the farm work force for California cities where there was no Bracero competition.

The SAW legalization program seemed to speed up the revolving door through which farm workers pass en route to the nonfarm labor market. As immigrants, SAWs were more mobile in the U.S. labor market, and many soon left for nonfarm jobs, leading to the entry of unauthorized replacement workers. Many of the legalized farm workers united their families in the U.S. in the early 1990s, which had significant impacts on their communities. It is in this sense that earned legalization tries to slow worker departures from agriculture, and delay family unification impacts on communities.

Table 6. Major Immigration Reform Options and Their Impacts

	Farmers	Workers	Communities
Status Quo	Uncertainty, risk	Danger crossing	Solo males living in worker communities
Guest Workers	Certainty, government-set wages and housing	Certainty of employment; dependence upon employer	Few impacts if growers provide on-farm housing
Legalization	Workers may leave for nonfarm jobs	More opportunities in U.S.; right to unify families	Schooling; other impacts with family unification
Earned Legalization	Slower exit from farm jobs	Eventually earn immigrant status	Delays family unification and its impacts

Bibliography

Smith, Leslie Whitener and Robert Coltrane. 1981. Hired Farmworkers: Background and Trends for the Eighties. USDA, Economic Research Service RDRR 32. September.

Oliveira, Victor. 1989. Trends in the Hired Farm Work Force: 1945-87. USDA, Economic Research Service AIB 561. April.

USDA. NASS. Quarterly. Farm Labor.
<http://www.usda.gov/nass/pubs/estindx.htm>

Appendix 1: Immigration and Agriculture Proposals: the 1990s

- Commission on Agricultural Workers, 1992. There are no farm labor shortages, and none are foreseeable, so the RAW program should be allowed to expire as scheduled in 1993. Farm employers did not raise wages or improve housing to retain newly-legalized SAW workers; instead, they switched to hiring unauthorized workers who continued to be available through “risk-absorbing” farm labor contractors.
- President Clinton, June 1995: "I oppose efforts in the Congress to institute a new guestworker or 'bracero' program that seeks to bring thousands of foreign workers into the United States to provide temporary farm labor."
- Rep Richard Pombo (R-CA), a bill to allow the admission of up to 250,000 foreigners a year to do farm work outside the H-2A program. It failed in the House on a 180-242 vote March 21, 1996.
- GAO report, December 31, 1997, concluded there are "no national agricultural labor shortage at this time" and that "A sudden, widespread farm labor shortage requiring the importation of large numbers of foreign workers is unlikely to occur in the near future."
- Agricultural Job Opportunity Benefits and Security Act of 1998 or AgJOBS (S2337). Senator Gordon Smith (R-OR) and Senator Ron Wyden (D-OR) approved by US Senate 68-31 on July 23, 1998 as an amendment to the Commerce-Justice-State Department appropriations bill (S 2260). Key features-- creation of DOL-operated registries in each state from which farm employers request legally authorized workers; employers pay federal FUTA and FICA taxes to a Trust Fund rather than to UI and SSA agencies to cover administrative costs – 20 percent of workers wages could be withheld; AgJOBS workers doing at least six months of farm work in each of four consecutive calendar years could become immigrants, with no numerical limits.
- December 2000, Berman compromise. Legalize unauthorized farm workers who did at least 100 days of farm work in the preceding 18 months, and allow them to become immigrants if they did at least 360 days of farm work in the next six years, including 275 days in the first three years. Also froze the Adverse Effect Wage Rate (AEWR) for two or three years, and eliminated the housing requirement if employers paid foreign workers 1/4 of the Section 8 housing allowance for that region.

Appendix 2: Calculating the Need for Workers-RAW

The Immigration Reform and Control Act (IRCA) of 1986 included a quasi-legalization Replenishment Agricultural Worker (RAW) program that allowed the employment of legal foreign workers outside the H-2A program in the event of farm labor shortages. The RAW program was a response to fears that employer sanctions would make it impossible to employ unauthorized foreign workers, that newly legalized Special Agricultural Workers (SAWs) would leave the farm work force quickly for nonfarm jobs in the late 1980s, when the unemployment rate was about 5.5 percent, and that the revised H-2A program was too “inflexible” to obtain legal farm workers for perishable crop agriculture in the western states.

The number of RAWs was to be determined under a formula spilling over 9 pages of IRCA. The annual limit on admissions was the lesser of two calculations: the Absolute Ceiling and the Shortage Calculation:

Table A2-1. Calculating Annual RAW Admissions: 1989-93

Absolute Ceiling

1. 95 percent of (Approved SAWs - SAWs doing days of SAS work \pm change in H-2A workers)

The annual number of RAW visas
lesser smaller of:

Shortage Calculation

2. $\frac{\text{Man-days Needed} - \text{Man-days Available}}{\text{Average Man-days worked}}$

The **absolute ceiling** --the maximum number of RAWs to be admitted to the US in FY90, for example--was 95 percent of the number of SAWs, minus the number of SAWs who did at least 15 days of work in Seasonal Agricultural Services (SAS) in FY 1989, and plus or minus the change in the number of H-2A workers in SAS crops admitted in FY89 versus FY88. There were 1.2 million SAWs, so the absolute ceiling on RAW admissions for FY90 was 1.1 million minus 350,000 SAWs who did at least 15 days of SAS work in FY89, and minus the 3,000 increase in the number of H-2A workers between FY88 and FY89 (certifications rose from 23,700 to 26,600), so the **absolute ceiling** was 747,000 RAWs.

The **shortage calculation** required three data elements, each from a different agency:

- USDA estimated the demand or need for labor in crop agriculture (SAS)s,
- DOL determined the supply or availability of labor to SAS, and
- farm employers reported to the Census the names, A-numbers, and SAS days worked of SAWs.

For example, if USDA determined that there were 180 million man days worked in SAS in FY89 and that no significant changes were expected in this demand or need number for FY90, and if DOL determined that 20 percent of the SAS mandays were lost annually because of exiting workers and that no new domestic workers would be available to work in SAS,⁶ then the RAW shortage number would be 20 percent of 180 million or 36 million mandays. This shortage number was to be converted into RAW visas or workers on the basis of Bureau of the Census analysis of the ESA-92 forms on which farmers reported the days (four hours or more) worked by SAWs. SAWs were expected to average 90 days of farm work, so 36 million divided by 90 gives a shortage number of 400,000.

Shortage calculations in the early 1990s found few exits of SAW workers, and the RAW program did not admit any additional foreign farm workers before expiring in 1993.

⁶ DOL estimated that 4.7 percent of the SAS mandays available in FY 1989 would not be available in FY 1990 based on exits from the farm work force between FY88 and FY89, and that the days worked by new entrants and continuing farm workers increased by 14.4 percent, so that the days available to SAS agriculture in FY90 would increase by 9.7 percent.

Appendix 3: Additional Farm Labor Data

Table A3-1. Hired Farm Workers: 1910-2001 (thousands)

**Hired Farm Workers: 1910-2001
(thousands)**

	Hired Average Employment	Hired Total Workers	Hired Migrant Workers	Family Average Employment
1910	3,381			10,174
1920	3,391			10,041
1930	3,190			9,307
1940	2,679			8,300
1950	2,329	4,342	403	7,597
1960	1,885	3,693	409	5,172
1970	1,175	2,488	196	3,348
1980	1,303	2,652	217	2,402
1987	1,051	2,463		1,846
2000	1,190	2,500		2,062
2001	1,173	2,500		2,050

1980 hired total and migrant workers is 1979 data

2000/2001 hired average workers, 890,000 and 870,000,
are increased by 300,000 for ag service workers

2000/2001 hired total and migrant workers data are estimates

Sources: Smith and Coltrane, Oliveira, USDA

Table A3-2. Department of Labor H-2A Certifications, 1985-2000

H-2A Certifications: 1985-2000

	Workers Certified	Sugarcane	Tobacco	Sheep
1985	20,682	10,017	831	1,433
1986	21,161	10,052	594	1,043
1987	24,532	10,616	1,333	1,639
1988	23,745	10,751	2,795	1,655
1989	26,607	10,610	3,752	1,581
1990	25,412	9,550	4,666	1,677
1991	25,702	7,978	2,257	1,557
1992	18,939	4,271	3,080	1,522
1993	17,000	2,319	3,570	1,111
1994	15,811	1,419	3,720	1,305
1995	15,117		4,116	1,350
1996	19,103		9,756	1,366
1997	23,562		14,483	1,667
1998	34,898		16,984	1,961
1999	41,827		16,206	1,443
2000	44,017		14,554	1,865

Source: US Department of Labor, ETA, OWS. Annual Reports.

Table A3-3. Special Agricultural Workers and Unauthorized Workers, NAWS, 1989-98

SAWs and Unauthorized Workers in US Crop

Ag: 1989-98

	SAWs	Unauthorized
1989	37	8
1990	30	17
1991	27	19
1992	23	33
1993	12	44
1994	20	38
1995	19	40
1996	16	50
1997	17	51
1998	15	52

Source: US Department of Labor. 2000

Table A3-4. Median Weekly Earnings for Selected Occupations, 1988-1999 (Dollars)

Occupation	Median Weekly Earnings for Selected Occupations, 1988-1999 (\$)												Percent Change	
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1988-93	1994-99
All Workers	385	399	415	430	445	463	467	479	490	503	523	549	20%	18%
Private household	140	158	172	164	179	187	179	195	212	215	223	243	34%	36%
Child care workers	119	127	132	132	154	152	158	180	198	202	204	211	28%	34%
Cleaners and servants	160	185	190	186	191	205	195	202	220	220	235	259	28%	33%
Cooks	215	216	226	240	245	251	254	257	264	280	289	302	17%	19%
Waiters' and waitresses' assistants	191	199	206	211	212	213	228	246	259	267	267	286	12%	25%
Miscellaneous food preparation	183	195	209	218	216	218	224	239	231	245	265	268	19%	20%
Cleaning and building service occupations	250	261	272	283	283	291	286	290	298	308	319	321	16%	12%
Maids and housemen	201	213	220	228	233	245	246	247	264	266	277	296	22%	20%
Janitors and cleaners	259	269	280	292	291	303	293	293	301	313	327	324	17%	11%
Carpet installers	n.a.	313	376	324	373	n.a.	412	344	402	510	476	507		23%
Drywall installers	382	403	412	480	422	399	419	466	430	430	493	483	4%	15%
Roofers	503	353	341	376	416	338	371	387	363	407	441	467	-33%	26%
Butchers and meat cutters	313	303	314	323	310	354	329	347	366	400	416	400	13%	22%
Bakers	264	276	304	303	305	344	330	320	327	334	352	394	30%	19%
Textile, apparel and furnishing machine operators	206	218	228	233	236	247	258	266	268	277	293	298	20%	16%
Textile sewing machine operators	193	205	214	215	217	226	237	251	254	263	280	282	17%	19%
Pressing machine operators	190	213	222	235	240	248	275	252	244	243	276	268	31%	-3%
Laundry and dry cleaning machine operators	214	211	220	230	241	251	253	259	254	273	287	294	17%	16%
Construction laborers	308	326	347	356	347	379	338	356	372	377	390	414	23%	22%

Vehicle washers and equipment cleaners	221	232	249	247	273	268	280	273	292	303	317	312	21%	11%
Hand packers and packagers	256	252	258	276	268	278	283	289	310	310	304	317	9%	12%
Farming, forestry and fishing	229	246	257	263	263	269	282	287	294	295	302	331	17%	17%
Farm occupations, except managerial	205	219	233	242	237	248	260	261	271	275	285	311	21%	20%
Farm workers	202	215	229	239	232	246	254	258	265	273	281	304	22%	20%
Related agricultural occupations	252	261	271	276	280	277	294	295	298	300	308	330	10%	12%
Groundskeepers and gardeners, except farm	245	254	267	269	276	273	287	287	294	298	306	322	11%	12%

Source: U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings