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IMMIGRATION
REFORM

Potential Impact on
West Coast
Farm Labor



Human Resources Division

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The Secretary of LaborThe Honorable Clayton K. Yeutter
The Secretary of AgricultureThe Honorable James L. Buck
Acting Commissioner, Immigration and
Naturalization Service
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This report provides information on the possible effect of the Immigration Reform and Control Act of 1986 on the availability of farm labor on the West Coast in 1989. We surveyed a representative sample of West Coast growers of labor-intensive crops, queried staff of farm-related organizations, and asked selected experts for their views on the likely effects of the act on West Coast agriculture.

We undertook this assignment because of broad congressional and executive agency interest in the possibility of a farm labor shortage and the potential impacts of a shortage should it occur. Because GAO finds no need for legislative action in the near term, this report is addressed to the relevant agencies, which may find the information useful. We will also make copies available to others on request.

Please contact me at (202) 275-5365 if you or your staff have any questions concerning this report. Other major contributors to this report are listed in appendix VII.



William J. Gainer
Director of Education and
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Executive Summary

Purpose

California is the leading agricultural state in the nation, with the largest concentration of labor-intensive fruit and vegetable crops; Oregon and Washington also are major agricultural states. For many years, farm employers in all three states have relied heavily for their seasonal work force on aliens who are not authorized to work in the United States.

With the passage of the Immigration Reform and Control Act of 1986, which prohibits the hiring of unauthorized aliens, farm employers became concerned about being able to hire enough farm workers to harvest their crops. GAO undertook to determine the possibility of the act causing a 1989 farm labor shortage because of broad interest on the part of the Congress and the executive agencies involved in implementation of the act.

Background

Before the act, it was illegal for unauthorized aliens to hold jobs, but not illegal for most employers to hire them. The act established sanctions against employers hiring unauthorized workers in an effort to restrain illegal immigration.

At the same time, several provisions of the act were designed to help growers attain access to a sufficiently large legal work force. These include the Special Agricultural Workers (SAW) program to legalize alien farm workers; the "H2-A" program, which allows growers to hire foreign farm workers for temporary jobs; and the Replenishment Agricultural Workers (RAW) program, under which farm workers would be admitted to the United States during fiscal years 1990-1993 if the Secretaries of Labor and Agriculture determine that a labor shortage exists. In addition, the act exempted employers engaged in "seasonal agricultural services" from sanction provisions until December 1, 1988, 2 years after passage of the law.

For this study, GAO sought the views of a broad spectrum of individuals either directly involved in farm employment or having expertise in seasonal farm labor who could provide insights on the act's likely impact. GAO surveyed a representative sample of West Coast growers of labor-intensive crops; queried staff of the Agricultural Extension Service, the Employment Service, and employer and labor organizations in 14 counties in California, Oregon, and Washington; met with officials from the Immigration and Naturalization Service and the U.S. Departments of Labor and Agriculture; and asked selected experts, primarily agricultural economists, for their views on the possible effects of the act on West Coast agriculture.

Results in Brief

No farm labor shortage appears likely on the West Coast in 1989 because of the Immigration Reform and Control Act, even though the majority of West Coast growers reported that they used unauthorized aliens to work their crops during 1987 (see p. 23). This conclusion is based on the following observation. The number of farm workers who have applied for legalization under the SAW program—about 1.3 million, over half on the West Coast—is larger than anticipated and is expected to help maintain the supply of seasonal labor for West Coast growers (see pp. 12 and 62).

At the time of GAO's survey in spring 1988 before the surge in SAW applications, most growers (69 percent) said they expected the act to induce a labor shortage in 1989 (see p. 23). But few growers in spring 1988 were planning changes in farming or labor practices to adapt to a reduced labor supply. This suggests that they did not expect a shortage significant enough to require much adjustment to their practices (see pp. 26-29).

In addition, experts on farm labor and the act who advised GAO concurred that a West Coast farm labor shortage in 1989 is unlikely. Some of the experts also indicated that pressures for outmigration from Mexico and other countries will likely continue. They said that if a shortage of authorized farm workers did occur, growers would employ unauthorized aliens rather than accept crop losses (see pp. 33-34).

Principal Findings

Use of Unauthorized Workers Substantial

The extent of use of unauthorized workers was similar in California, Oregon, and Washington. Overall, about 55 percent of growers reported the use of some unauthorized alien farm workers in 1987. In addition, about 40 percent reported that over half of their seasonal work force was unauthorized (pp. 23-25).

Because about 75 percent of growers said they provided documents to aid some of their workers in applying for legal status, GAO believes the actual use of unauthorized workers could be higher than reported (see pp. 23-24).

Many Unauthorized Aliens Applied for Legalization

In addition to the 1.3 million aliens who applied for legalization under the SAW program, about 70,000 unauthorized alien farm workers applied for legalization under another provision of the act (see p. 16). In part because smaller numbers of SAW applicants were expected, there was concern about fraudulent applications. However, only a small proportion of SAW applications have been rejected to date. The approval rate as of April 1989 was 93 percent (see p. 14).

No Evidence of Growers Planning for Labor Shortage Induced by 1986 Act

In GAO's spring 1988 survey, the majority of growers said that they expected a labor shortage in 1989 induced by the act. However, they may have taken a "wait and see" approach. At that time, no more growers said they planned to offer benefits in 1989 to attract workers than had done so in 1986 (prior to the law's enactment). Nor were there substantial changes (or plans to make changes) in 1986-89 in farming practices to employ fewer workers, such as reducing acreage, shifting to other crops, or using new or additional machinery. Also, during that period no more than 12 percent of the growers said they provided or planned to provide bonuses to returning workers, new or additional housing, travel advances or reimbursements, or new or additional health benefits. Further, there were no substantial shifts in 1987-89 in the proportions of growers using or planning to use particular recruitment methods, such as the Employment Service or advertising (see pp. 26-29).

Consensus Among Experts: No 1989 Shortage

The farm labor and immigration experts who advised GAO called a 1989 labor shortage unlikely. Some believed that poor economic conditions in other countries will result in unauthorized aliens continuing to enter the United States and, if a shortage of authorized farm workers occurs, unauthorized workers would be hired (see pp. 33-34). The experts said, however, that in the unlikely event of an inadequate labor supply, average labor costs would be expected to increase and some growers would shift production away from labor-intensive crops. Others likely would adopt labor-saving techniques such as improved farm worker training and increased use of machinery (see pp. 37-41). Food prices would remain about the same, the experts predicted, and the supply of fruits and vegetables would be maintained, in part because of the availability of foreign farm products (see pp. 41-42).

Policy Considerations

No amendments to the act's agricultural provisions are needed at this time, because no West Coast seasonal farm labor shortage is anticipated. To help ward off possible future shortages, some options not involving

immigration issues may be available to the federal and state governments to help growers adjust to a legal work force. For example, efforts to have growers coordinate farm worker employment within their geographic areas may warrant consideration. (see pp. 43-46.)

Agency Comments

GAO discussed the matters in this report with officials from the Departments of Labor and Agriculture and the Immigration and Naturalization Service having substantive expertise. Their comments have been incorporated where appropriate. In addition, the Immigration and Naturalization Service provided written comments.

The Service agreed with the view that a farm labor shortage on the West Coast in 1989 is unlikely. However, it took issue with the views of a number of experts GAO consulted who thought that the Service's enforcement of the act would be limited. The Service provided early indicators of effective enforcement of the law and employer compliance (see pp. 34-35). However, it remains to be seen whether—in the face of a shortage of authorized farm workers—the Service would effectively overcome the combined pressures for illegal entry and employment of unauthorized workers that concerned our consultants.

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Abbreviations

| | |
|---------|---|
| AFDC | Aid to Families with Dependent Children |
| AFDC-UP | Aid to Families with Dependent Children-Unemployed Parent |
| CBO | community-based organization |
| CPS | Current Population Survey |
| ELR | Employer and Labor Relations |
| ESA | Employment Standards Administration |
| ETA | Employment and Training Administration |
| FmHA | Farmers Home Administration |
| FLC | farm labor contractor |
| GAO | General Accounting Office |
| INS | Immigration and Naturalization Service |
| IRCA | Immigration Reform and Control Act of 1986 |
| LAW | Legally Authorized Worker |
| OSHA | Occupational Safety and Health Act |
| RAW | Replenishment Agricultural Workers |
| SAW | Special Agricultural Workers |
| SIC | Standard Industrial Classification |
| UI | Unemployment Insurance |

Introduction

The Immigration Reform and Control Act of 1986 (IRCA) made it illegal (beginning December 1, 1988) for farm employers to employ unauthorized aliens, a major source of labor supply relied on by West Coast growers. But the act also provided several means of easing the transition to use of a legal work force. These include programs to (1) legalize certain aliens employed in U.S. farm work in an earlier period, (2) allow growers to hire foreign farm workers for temporary jobs, and (3) admit additional farm workers to the United States in 1990-93 in the event of a farm labor shortage.

Broad concerns within the Congress and the responsible executive agencies that IRCA might induce a farm labor shortage in 1989 prompted us to undertake this study. Specifically, we sought to determine the effect of the act on the availability of farm labor in the three West Coast states, California, Oregon, and Washington, all major agricultural producers.

Background

Employer Sanctions Stipulated in Act

The Congress enacted IRCA to curtail illegal immigration by making the hiring of unauthorized alien workers unlawful. Prior to passage of the act, it was unlawful for these workers to hold jobs but not unlawful for most employers to hire them.

Enforcement of employer sanctions against hiring unauthorized aliens for work in seasonal agricultural services began December 1, 1988. For the first violation, employers are subject to civil fines between \$250 and \$2,000 for each illegal alien employed. For the second violation, they can be fined between \$2,000 and \$5,000 and for subsequent violations, \$3,000 to \$10,000. For a "pattern or practice" of violations, employers are subject to criminal penalties of up to \$3,000 for each illegal alien and up to a 6-month jail term. There also are fines for employers who fail to comply with requirements for documenting that the prospective employee is legally authorized to work in the United States. These fines are between \$100 and \$1,000 for each violation. The Immigration and Naturalization Service's (INS's) plans for enforcing employer sanctions are described in appendix I.

Before IRCA,
Unauthorized Farm Labor
Commonly Used in West

Over the past 20 years, growers from the western United States had an ample supply of unauthorized farm workers from Mexico. Prior to that, in the period between 1942 and 1964, western growers had employed “braceros,” Mexican workers who were allowed to do farm work where (at least since enactment of P.L.78 in 1951) the Secretary of Labor certified that there was a shortage of U.S. farm labor.

For about 15 years prior to enactment of IRCA, the Congress considered, but did not adopt, sanctions on employers who hired unauthorized aliens. Agricultural interests played only a minor role in the debate until 1983.

The western growers desired a farm worker program under which foreign workers could enter the United States without contracts to growers, move from farm to farm and then return to their home country. The House of Representatives approved such a program (Panetta-Morrison) in an immigration reform bill in 1984, and the Senate adopted a similar provision (the Wilson amendment) in an immigration reform bill in 1985. Neither bill, however, passed both houses of the Congress.

Organized labor and many Hispanic organizations opposed legislation to admit foreign farm workers temporarily into the United States. Their objections included the adverse impact on U.S. farm workers as well as the lack of labor protections for the foreign workers.

To address these concerns, IRCA contains a “compromise” provision—the Special Agricultural Workers Program (SAW)—developed by Congressman Charles Schumer. It enables “qualified” alien farm workers formerly performing seasonal agricultural services to become legal immigrants and eventually U.S. citizens. In addition, IRCA provides that if a farm labor shortage should ensue, between 1990 and 1993 foreign farm workers could be admitted into the United States under the Replenishment Agricultural Workers (RAW) Program. Finally, IRCA provides for a streamlined “H-2” program that allows growers to hire foreign farm workers for temporary jobs. It is named “H-2A” for the corresponding part of the Immigration and Nationality Act (section 101(a)(15)(H)(ii)(a)). Following is a brief discussion of these provisions.

Labor Supply Provisions

Special Agricultural Workers Program

The SAW program is a special legalization program for alien farm workers. It consists of the following two categories:

1. Up to 350,000 alien workers who, in each of the 12-month periods ending May 1, 1984, 1985, and 1986, have resided in the United States and performed 90 man-days of seasonal farm work in fruits, vegetables, or other perishable commodities. They are granted temporary resident legal status and may adjust to permanent resident status after 1 year; and
2. Workers who, during the 12-month period ending May 1, 1986, resided in the United States and performed at least 90 man-days of qualifying farm work. They are granted temporary resident legal status and may adjust to permanent status after 2 years.

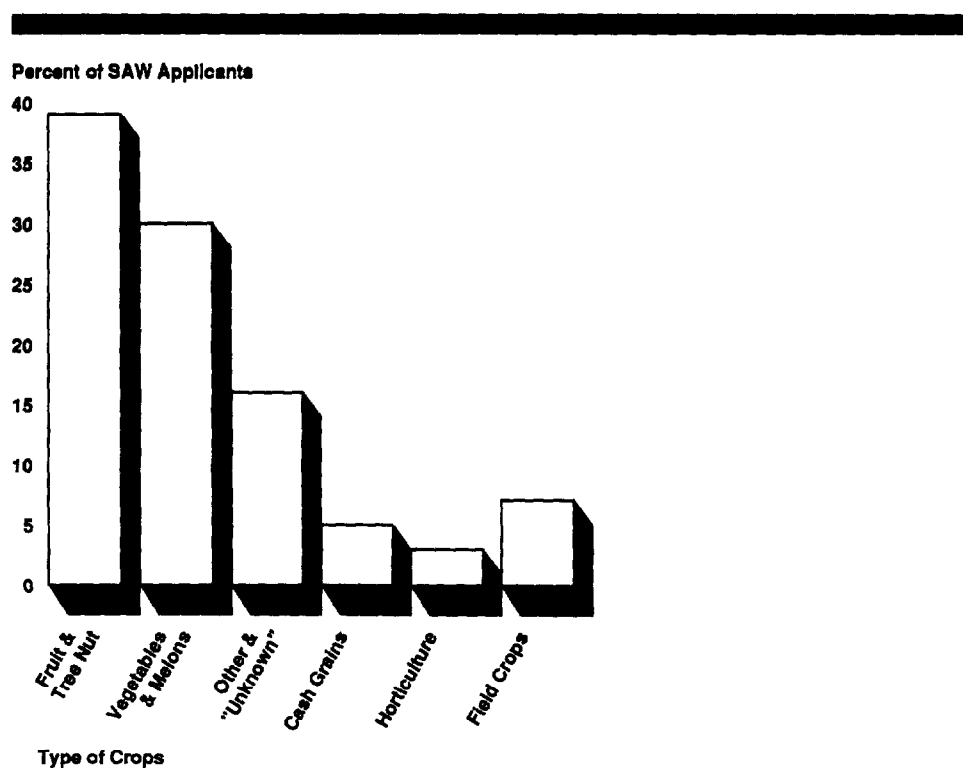
The application period for the SAW program was from June 1, 1987, to November 30, 1988. Farm workers who obtain temporary or permanent legal status are free to live wherever they want in the United States and to take nonfarm jobs.

There were about 1.3 million SAW applicants. Over half were from the West Coast: about 700,000 applications were filed in California, and Washington and Oregon each had about 27,000 applications. Over four-fifths of the applicants were men, the median age of the applicants was 28 years, and over half were single. Most applicants worked in fruit and tree nut crops and vegetables and melons (see fig. 1.1).

Far more persons applied for legalization than most observers had originally expected, although there initially were some concerns when applicants were slow to come forward. These concerns included the following:

1. The 90 man-days work requirement and eligibility period of May 1, 1985-May 1, 1986, would exclude unauthorized alien farm workers with an otherwise long work history in U.S. agriculture.¹ For example, some California workers in raisin grapes work only about 45 days each season and then return to Mexico.
2. Some employers would refuse to provide documents needed to prove unauthorized aliens' farm employment.
3. Some qualified farm workers would not apply because they feared that ineligible family members would be deported.
4. The application fee, \$185 per adult, with a maximum of \$420 per family, would be too high for some farm workers.

Figure 1.1: Percentage of SAW Applicants Working in Various Types of Crops



¹The 90 man-days work requirement was a political compromise. In Congressman Schumer's original provision, the work requirement was 20 man-days; the Judiciary Committee increased it to 60. Then the Senate proponents proposed 120 man-days, and Congressman Panetta countered with 85. Finally, a compromise work requirement of 90 man-days was established.

There also has been concern about fraud in SAW applications.² However, although INS expects that the approval rate will decline as investigations of suspect applications are completed, the INS approval rate as of April 1989 was 93 percent.

Former Secretary of Labor Ray Marshall points out that the burden of proof of SAW program eligibility rests with the government, not the applicant. He adds that a district court ruling (*Haitian Refugee Center v. Nelson*, 694 F. Supp. 864 S.D. Fla. (1988)) that INS has been too restrictive in handling SAW applications may make it very difficult for INS to prevent ineligible aliens from legalizing their status. Dr. Marshall also notes that the average annual employment of hired farm workers was about 1-1.5 million, representing about 2.6 million individuals who worked at any time during 1983, and the number of migrant farm workers appears to have been about 200,000 in the mid-1980s. Thus, large numbers of unauthorized aliens are being legalized under the SAW program, particularly in relation to the size of the hired farm work force.

Finally, a question has been raised: will many of the large numbers of SAW applicants, once they achieve legal status, leave agriculture and move to more stable, less seasonal employment, such as in restaurants and hotels?³

²According to calculations by Dr. Philip Martin, an economist specializing in agricultural labor research, there have been "too many" SAW applications. That is, the number of applications has exceeded the number that might be expected to meet SAW eligibility requirements. From 212 SAW applications filed in California, Dr. Martin found that 88 percent of the workers did 90 days' work with one employer, most worked in one task in one crop, and only 50 percent reported doing harvesting. The SAW applicants' work histories, notes Dr. Martin, "do not conform to the migrant worker stereotype." He also notes that data from California's Unemployment Insurance records show that only "115,000 to 188,000 workers did enough work or earned enough to qualify for the SAW program" and not all of them were unauthorized aliens; yet, there were almost 700,000 SAW applications in California.

³A June 1988 study by the Refugee Policy Group, *Serving the Newly Legalized: Their Characteristics and Current Needs*, notes that SAW workers who are most likely to leave agriculture are young, single men who have done farm work "of necessity"; however, their English language and work skills may not match job requirements in local labor markets. Those least likely to leave farm employment are older men living alone as well as intact families who have been in farm work for many years. Regarding the children of migrants, the report points out that, with schooling and with English competency, they "wish to leave agricultural work and will be able to." The report also mentions, however, an exception: children of migrants in Oregon, who are "said to be used to the 'lifestyle' and will remain in it."

The study is based on interviews with more than 100 individuals and groups (e.g., attorneys), who have worked closely with persons legalizing their status. (The Refugee Policy Group is an independent, nonprofit organization that conducts policy analysis and research on refugee issues.)

The H-2A Program

Under the H-2A program, growers requesting foreign workers for temporary employment must apply to the Department of Labor for certification that (1) there are insufficient workers in the United States “able, willing and qualified and who will be available at the time and place needed,” and (2) the employment of the aliens “will not adversely affect the wages and working conditions” of U.S. workers similarly employed. To be granted certification, growers must recruit U.S. workers and offer prescribed wages and working conditions. In recruiting U.S. workers, growers must file an interstate clearance order⁴ with the state Employment Service; advertise for workers; contact relevant persons and organizations such as schools, farm labor contractors, migrant workers, and unions, where that is the prevailing practice of non-H-2A farm employers; and recruit in a multistate region where the Department of Labor finds that there is a significant number of qualified workers.

Other requirements for the growers include: (1) paying the highest among the prevailing wage, federal or state statutory minimum wage, or adverse effect wage,⁵ (2) providing approved housing at no charge, (3) providing either meals at limited charge or free cooking facilities, (4) providing travel expenses or travel advances (depending on applicable regulations), and (5) guaranteeing employment for at least three-fourths of the total work days of the contract period and any extension to it.

A common set of wages and working conditions apply for both H-2A and U.S. workers hired by the growers. However, the growers pay Social Security and Unemployment Insurance taxes only for their U.S. workers.

Applications for H-2A certification must be filed at least 60 days before the date that workers are needed, but this requirement may be waived in emergency situations. Also, until May 31, 1989, special time frames could apply for employers who request certification for the first time—applications could be filed and accepted 30 days before the date of need. As with the previous H-2 program, H-2A workers can be brought into the United States through associations of farm employers.

⁴A request to recruit one or more workers in another state.

⁵The adverse effect wage rate, established annually by the Department of Labor, and based on Department of Agriculture wage surveys, defines an hourly wage standard aimed at preventing alien employment from depressing farm wages.

Replenishment Agricultural Workers (RAW) Program

Under IRCA's RAW program, additional foreign agricultural workers can be admitted to the United States during fiscal years 1990-93 (i.e., October 1, 1989 through September 30, 1993), if the Secretaries of Labor and Agriculture determine that a farm labor shortage exists.

The maximum number of RAW workers who can enter the United States in fiscal year 1990 is 95 percent of the number of workers who adjusted to legal status through the SAW program minus the number of SAWs who worked 15 days or more in seasonal agricultural services in fiscal year 1989. In the following 3 years, the maximum number is 90 percent of the base⁶ in fiscal year 1990 minus the number of SAWs/RAWS who worked 15 days or more in seasonal agricultural services in the previous fiscal year. In each case, the number of H-2A workers also has to be taken into account. RAW workers, who will be admitted as temporary resident aliens, must work at least 90 man-days in seasonal agriculture in each of the 3 years following the date on which they obtained temporary resident status in order to become permanent resident aliens.

There also are provisions for growers to make requests to the Secretaries of Agriculture and Labor for emergency increases in the numbers of RAW workers, and for RAW workers to request decreases in the number of days of farm work required to maintain their status.

Other IRCA Features

Following are other major features of IRCA relevant to farm workers and employers:

1. General legalization (amnesty)—Most persons who resided continuously in the United States in unlawful status since before January 1, 1982, could adjust to legal status. The application period for general legalization ended May 4, 1988. About 70,000 illegal alien farm workers applied for amnesty under this program.
2. Verification of employment eligibility—All employers must verify eligibility for the potential workers' employment. After the potential employee shows documentation of identity and the right to work in this country, the employer attests that the documents were examined and appear genuine. Both employer and worker sign the verification form, INS Form I-9.

⁶The base is computed in accordance with section 303(a) of IRCA.

3. Prohibitions against discrimination—Employers of four or more workers are prohibited from discriminating against authorized workers because of national origin or citizenship status.

4. Prohibition of field searches without warrants—INS is forbidden to interrogate suspected unauthorized aliens in outdoor agricultural operations without having the owner's consent or a search warrant.

Objectives, Scope, and Methodology

The objective of this study was to provide information on the likelihood of growers in California, Washington, and Oregon facing shortages of seasonal farm labor in 1989 because of IRCA. We looked at factors that were possible indicators of anticipated shortages, such as (1) the extent to which West Coast growers have been dependent on an unauthorized alien work force, (2) changes growers made or planned to make in their labor management and farming practices to meet an IRCA-induced reduction in labor supply, and (3) growers' views on and use of federal programs to provide legal farm labor.

We sought the experience and opinions of individuals who are directly involved in or have expertise on seasonal farm labor in California, Oregon, and Washington and on the likely impact of IRCA on the West Coast supply of seasonal farm workers. Among the approaches we used were: a survey of California, Oregon, and Washington growers; interviews with organizations active in farm labor matters; consultation with selected agricultural labor experts; and review of the literature and discussion with the federal agencies involved.

Representative Growers Sampled

Our telephone survey was directed to a representative sample of 297 West Coast growers of labor-intensive crops.⁷ We asked about the extent of their use of unauthorized farm workers and their views on such topics as the likelihood of an IRCA-induced labor shortage and problems related to IRCA's farm worker legalization requirements. We also tried to gauge the growers' reactions to IRCA by asking about changes they had made or planned to make between 1986 and 1989 in

1. recruitment methods to obtain workers;

⁷Labor-intensive crops are those that have a relatively high labor requirement. Our sample was drawn from growers of the following crops: berries, grapes, citrus, deciduous tree fruits, vegetables and melons, and ornamental floriculture and nursery products.

2. benefits offered to attract workers, such as wage increases, end-of-season bonuses, travel advances, and new housing; and

3. farming practices to accommodate to a reduced labor supply, such as reducing acreage, using more machinery, and changing types of crops grown.

The questions covered 1986, the last “pre-IRCA” year; 1987 and 1988, the first 2 years in which employment of unauthorized aliens has been unlawful; and 1989, the first full year in which sanctions take effect against growers who employ unauthorized aliens to perform seasonal agricultural services.⁸

We recognized potential limitations in asking about growers’ plans for the coming year; changes in management and farming practices might not require a long lead time, and growers might take a “wait and see” approach. However, we were inquiring about a year in which some growers told us they were expecting a reduced labor supply.

Our grower sample was drawn primarily from the name-and-address file of agricultural employers in the “ES-202” program of the U.S. Department of Labor’s Bureau of Labor Statistics and state Employment Security agencies.⁹ The ES-202 covers virtually all of the growers in California, but only the larger ones in Washington and Oregon. Therefore, for Washington we used the 1985 ES-202 file, which had been merged with Workers’ Compensation records and covered over 90 percent of agricultural employment. For Oregon, we supplemented the ES-202 file with current lists of strawberry, caneberry, and pear growers obtained from the respective commissions. Except for Washington, the ES-202 files we used were for the second quarter of 1987. (App. II presents additional information on the sample.)

⁸Seasonal agricultural services as noted in IRCA mean “the performance of field work relating to planting, cultural practices, cultivating, growing and harvesting of fruits and vegetables of every kind and other perishable commodities,” as defined by the Secretary of Agriculture. All crops except the following are included: hay, silage, forage, grain sorghum, milo, sod, turfgrasses, flax, all seed crops (seeds used for propagation), sugar cane, coffee, tea, broomcorn, and other crops not used for human food, except cotton and tobacco.

⁹The ES-202 program provides employment and wage data for workers covered by state Unemployment Insurance laws.

**Key Farm-Related Groups
Surveyed**

To obtain a corresponding perspective on a county-wide basis of the likelihood of an IRCA-caused labor shortage, we conducted a mail survey in 14 West Coast counties with key farm-related groups. These were:

- the Employment Service,¹⁰
- the Agricultural Extension Service,
- grower associations,
- rural legal assistance offices, and
- unions.

The counties chosen are leading producers of major labor-intensive crops in the three states and generally represent geographically distinct labor markets. In California, the counties are Fresno, Imperial, Monterey, Sacramento, Ventura, and Yolo. In Washington, they are Chelan, Skagit, and Yakima, and in Oregon, Hood River, Jackson, Marion, Multnomah, and Washington. (See figs. 1.2, 1.3, and 1.4.)

¹⁰In California counties the Employment Service is part of the Employment Development Department; in Washington counties the Employment Service is part of the Employment Security Department (and known as Job Service Center); and in Oregon the Employment Service is part of the Employment Division.

Figure 1.2: Counties in California
Selected for GAO Survey

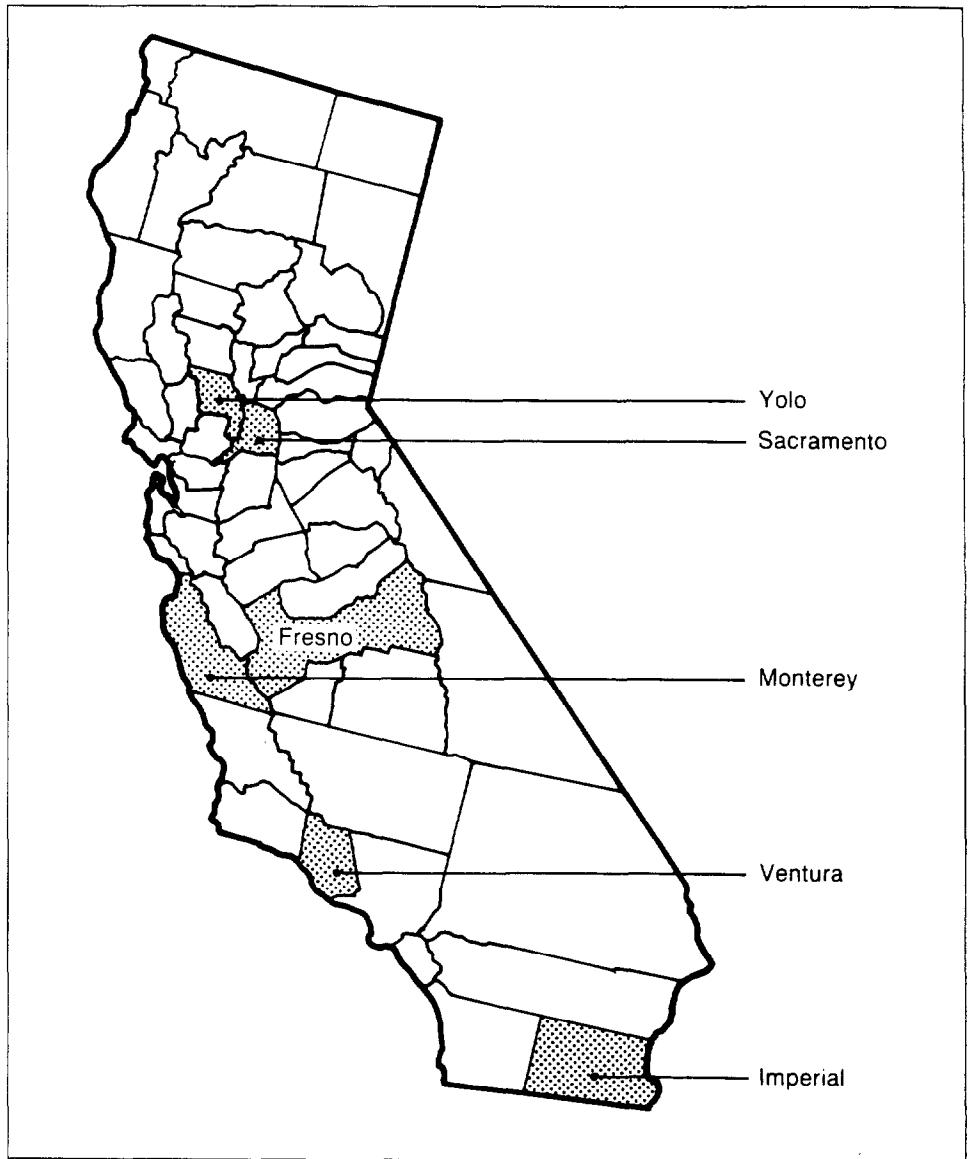
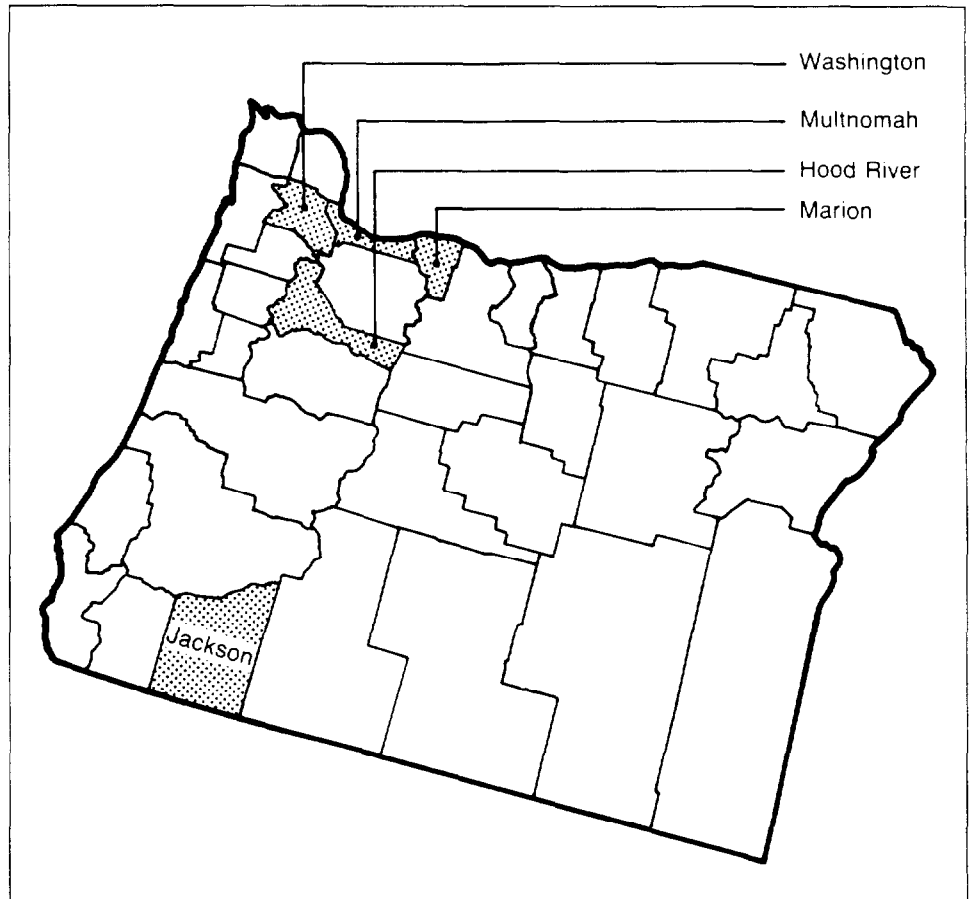


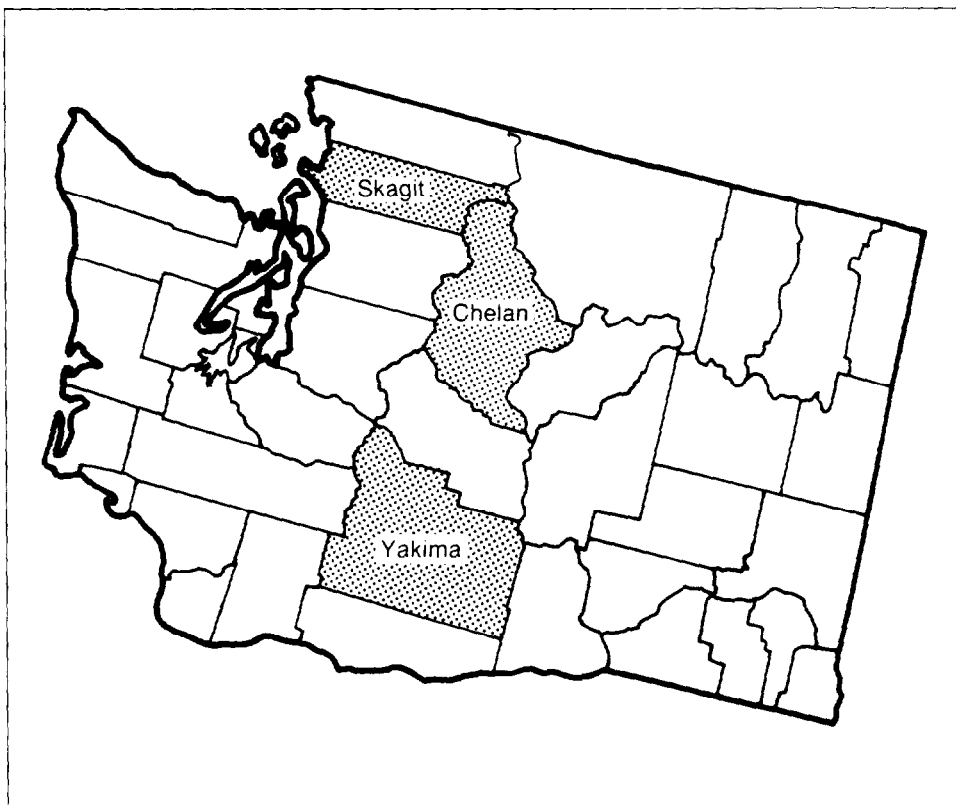
Figure 1.3: Counties in Oregon Selected for GAO Survey



We asked selected experts (primarily agricultural economists but also specialists in labor economics, political science, and farm labor management) for their views on the likelihood of a farm labor shortage on the West Coast due to IRCA, potential grower responses to such a shortage, and the likely consequences. Chapter 3 contains our summary of the experts' views.

In addition to reviewing the literature, we spoke with Immigration and Naturalization Service and Department of Labor and Agriculture officials, and other experts on such topics as IRCA enforcement and IRCA provisions for the temporary employment of foreign workers.

Figure 1.4: Counties in Washington Selected for GAO Survey



We drew together basic information on the nature of West Coast labor-intensive agriculture and on migrant farm worker housing. Information on the magnitude and diversity of fruit and vegetable crops in California, Oregon, and Washington and the estimated size and makeup of the seasonal farm labor force appears in appendix III. It also reviews major factors influencing demand for seasonal farm labor, notably, the particular crop, availability of workers, farm production practices, and market demand for farm products. In appendix IV, we review data on the undersupply of housing for migrant farm workers, federal and state governments' programs of financial assistance for farm worker housing, and federal and state standards for such housing.

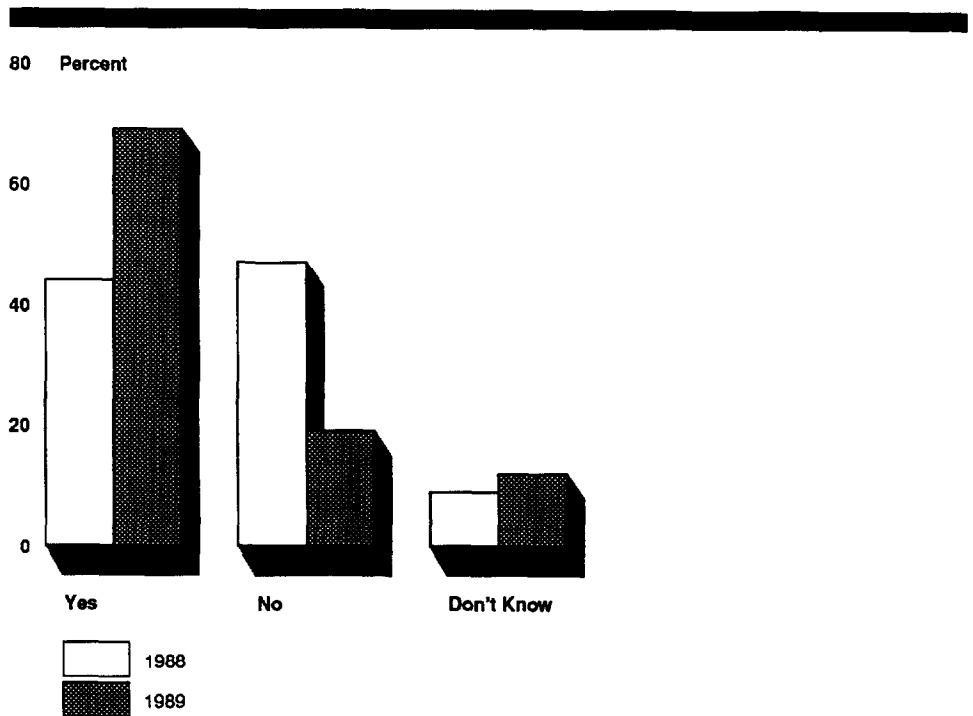
Our work was carried out in 1988, in accordance with generally accepted government auditing standards.

Growers Not Planning for Labor Shortage

Although West Coast growers indicated heavy past reliance on an unauthorized alien work force, few planned to take steps to attract more workers or to adjust to a smaller labor supply. A survey of farm-related organizations indicated a consistent perception that growers were not proceeding as though a labor shortage were imminent.

In spring 1988, we surveyed growers in California, Oregon, and Washington regarding the impact of the Immigration Reform and Control Act on the availability of seasonal farm labor. Nearly all the growers (96 percent) were aware of IRCA. Less than half (44 percent) reported expecting an IRCA-induced shortage in 1988, but 69 percent said they expect one in 1989. (See fig. 2.1).

Figure 2.1: Growers' Expectations of Labor Shortage



Heavy Past Use of Unauthorized Aliens

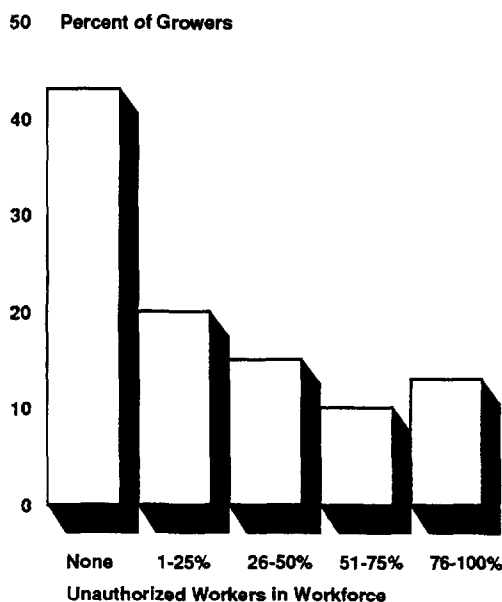
Of the growers we surveyed, 55 percent reported that they employed unauthorized workers as part of their 1987 seasonal work force. However, even though we promised those surveyed confidentiality, and sanctions against growers who employed unauthorized aliens were not in effect in 1987, a higher percentage of the growers than those who admitted use of unauthorized workers may actually have employed

them. This is indicated by the answers the growers gave when asked whether they provided documents to their 1987 workers for legalization under the Special Agricultural Workers program; 75 percent answered "yes." Some of these growers, however, may have offered proof of employment to workers who already were legally eligible to work in the United States.

As seen in figure 2.2, responses to the query on use of unauthorized aliens also show that:

- About 20 percent of the growers reported using unauthorized workers for one-quarter or less of their seasonal work force.
- Over 35 percent of the growers said that unauthorized workers made up more than a quarter of their seasonal work force, with about 13 percent reporting that unauthorized workers constituted over 75 percent of their seasonal work force.

Figure 2.2: Growers' Use of Unauthorized Workers



Among growers who reported employing unauthorized workers, about 40 percent said that such workers made up more than one-half of their seasonal work force.

The distribution of grower responses was roughly similar in each of the three West Coast states (see table 2.1.) Also, there was no relationship between extent of reliance on unauthorized workers and firm size (as measured by size of peak season work force).

Table 2.1: Growers' Self-Reported Use of Unauthorized Workers

| Unauthorized workers as percent of peak season work force | Percent of growers responding, by state | | |
|---|---|------------|------------|
| | California | Oregon | Washington |
| None | 43 | 39 | 47 |
| 1-25 | 21 | 21 | 15 |
| 26-50 | 15 | 16 | 15 |
| 51-75 | 10 | 9 | 9 |
| 76-100 | 11 | 15 | 14 |
| Totals | 100 | 100 | 100 |

Not surprisingly, the more heavily the growers relied on unauthorized workers, the more likely they were to report that they believed that IRCA would generate a shortage in 1989. Of those who said they employed no unauthorized workers, about 60 percent said there would be a shortage, while about 25 percent thought there would not be one (see table 2.2). Of those who reported that their seasonal work force was over half unauthorized workers, about 85 percent said there would be a shortage, as against fewer than 3 percent who said they foresaw no shortage.¹

Table 2.2: Growers' Views on 1989 IRCA-Caused Labor Shortage

| Unauthorized workers as percent of peak season work force | Views as to whether IRCA will cause a labor shortage in 1989 (percent) | | | Totals |
|---|--|----|------------|------------------------|
| | Yes | No | Don't know | |
| None | 61 | 26 | 13 | 100 |
| 1-25 | 81 | 14 | 6 | 100^a |
| 26-50 | 72 | 19 | 9 | 100 |
| 51 to 75 | 84 | 2 | 14 | 100 |
| 76 to 100 | 87 | 3 | 10 | 100 |

^aDetail may not add to 100% due to rounding

¹There were no statistically significant differences by state, although the Oregon growers surveyed tended to respond more often that IRCA will cause a shortage than the growers in California or in Washington.

Initial Fears That SAW Program Too Limited

At the time of the survey, when the number of SAW applications was building slowly the growers cited several factors as probably constraining unauthorized farm workers from applying for legalization under the SAW program.

A considerably larger percentage of growers viewed fear of deportation or family breakup as a barrier to SAW application than viewed most of the programmatic requirements of SAW itself as a barrier (see table 2.3). About one-fourth of the growers thought farm workers' lack of awareness of SAW prevented them from applying for legal status.

Table 2.3: Growers' Views as to Reasons Alien Farm Workers Might Not Apply for Legalization Under SAW Program

| Constraint | Percent of growers citing the constraint |
|--|--|
| Fear of deportation if applying for SAW status | 66 |
| Fear of family breakup if applying for SAW status | 63 |
| Requirement of 3 months' farm work | 59 |
| Application fee too high | 52 |
| Eligibility period too short | 44 |
| Employed by farm labor contractors who may not have provided documents | 32 |
| Unaware of SAW program | 24 |
| Application period too short | 23 |

Few Growers Planning for Labor Shortage

Overall, growers reported no major shift during 1987-89 in the proportions using or planning to use particular recruitment methods for farm labor (see table 2.4.) Signs of planned change were slight. For 1989, a few more of the growers said they expected to advertise for workers and somewhat fewer to rely on farm labor contractors.

Table 2.4: Recruitment Methods Growers Used or Expected to Use

| Year | Recruitment method used/expected to use (percent) | | | |
|------|---|--------------------------------|--------------------|-------------|
| | Farm labor contractors | Referrals from foremen/workers | Employment Service | Advertising |
| 1987 | 20 | 49 | 20 | 11 |
| 1988 | 15 | 47 | 15 | 12 |
| 1989 | 15 | 49 | 19 | 14 |

Some growers appeared to be anticipating difficulty obtaining an adequate supply of labor, as evidenced by their increasing the number of different techniques used for recruitment. But the vast majority used only one technique. Growers' use or planned use of three or more

recruitment techniques increased from 5 percent in 1987 to 6 percent in 1988 and 11 percent in 1989. A fairly stable percentage (about 13 percent) used or planned to use two or more recruitment methods each year between 1987 and 1989.

Except for bonuses to returning workers, no more growers planned to offer benefits to attract workers in 1989 than had done so in 1986, our survey in spring 1988 showed (see fig. 2.3). The other benefits about which we inquired were: increased wages, end-of-season bonuses, new or additional housing, travel advances or reimbursements, and new or additional health benefits. Only a relatively fewer growers (about 11 percent) offered or planned to offer two or more different benefits to attract workers each year during 1986 to 1989. Growers tended to use monetary benefits more than others, such as housing.

There was no evidence of a marked upturn in the number of growers who expected to change their farming practices in 1989 to reduce the number of workers they employ (see table 2.5). Some, however, may have made or planned to make changes for other reasons. The survey showed the following:

- Ten percent of the growers expected to change the types of crops they grow in 1989, compared with 8 percent who changed crops in 1986. (Growers of orchard crops are generally not amenable to a change in crops due to the amount of investment in an orchard.)
- Seven percent of the growers planned to reduce the land they farm in 1989—the same percentage as those who said they reduced their acreage in 1986.
- Thirteen percent planned some changes in harvesting or picking practices in order to use fewer workers in 1989, compared with 10 percent who made such changes in 1986.
- Twelve percent of the growers expected to change their cultivation or irrigation practices in 1989 as against 10 percent who did so in 1986.
- Eighteen percent of the growers said that they would use new or additional machinery or equipment in 1989 in order to use fewer workers, the same percentage as reporting having done so in 1986.

Figure 2.3: Benefits Offered and Planned by Growers

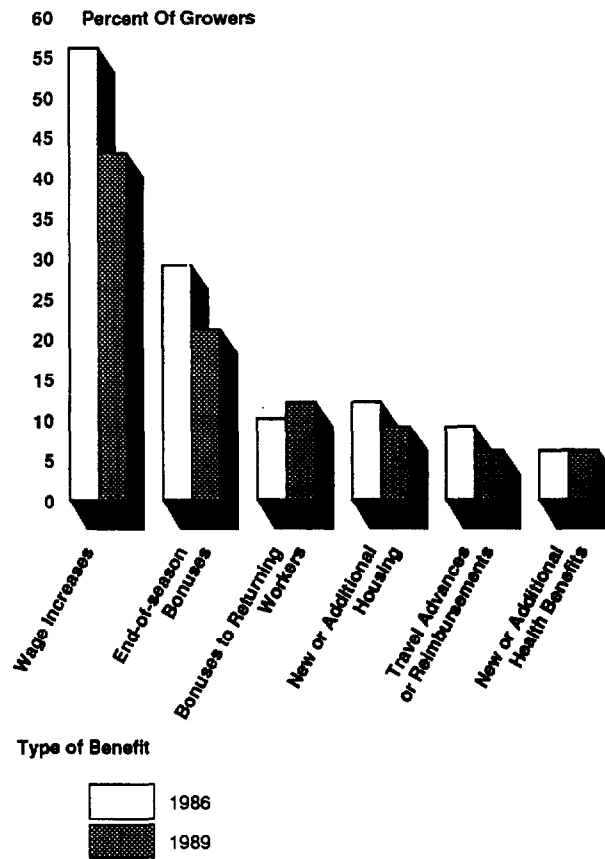


Table 2.5: Changes or Planned Changes in Farming Practices

| Year | Type of crop | Percent of growers who changed or planned changes in | | | |
|------|--------------|--|------------------|--------------------|------------------------|
| | | Reducing acreage | Adding machinery | Harvesting/picking | Cultivation/irrigation |
| 1986 | 8 | 7 | 18 | 10 | 10 |
| 1987 | 8 | 6 | 13 | 9 | 9 |
| 1988 | 10 | 5 | 16 | 14 | 12 |
| 1989 | 10 | 7 | 18 | 13 | 12 |

One possible reason most growers had not planned to accommodate to a reduced supply of labor may be that they may employ a small number of farm workers or anticipate adequate numbers of workers. Or, at the time of the survey (spring 1988), the continuing availability of workers

may have reduced growers' incentive to plan for reductions in the labor supply.²

In the event of a labor shortage, the H-2A program allows growers to hire foreign farm workers for temporary jobs. Forty-six percent of the growers reported they were unaware of the program, 37 percent did not plan to use it, 9 percent did not know yet whether they would turn to it, and 9 percent thought they would use it in 1989.

Farm-Related Organizations See Little Preparation for Shortage

To obtain additional information on farm labor practices and the likelihood of a shortage due to IRCA, we mailed a questionnaire to representatives of organizations associated with farming or farm employment in 14 West Coast counties.³ (See app. V for a brief county-by-county review.)

The responses presented a consistent picture, during 1986-88, of limited attention by growers to efforts or plans to reduce the number of workers employed. Regarding plans for 1989, most respondents said they "don't know" or "a few" might use various methods, such as a change in crop mix or introduction of new or additional equipment or machinery. Similarly, on the question of attracting more workers, the respondents reported that they don't know or that only a modest number of growers (at most) had taken or planned to take such actions as expanding recruitment methods, building new or additional housing, offering end-of-season bonuses, or increasing wages.

On the H-2A program for using foreign farm workers temporarily, the farm-related organizations' staff generally replied that none or "few" of their county's growers would request H-2A workers in 1988 or 1989, or that they did not know whether they would request workers. Several indicated that some 1989 use was possible if there are no alternatives.

²According to a recent study, most nonagricultural employers in southern California have "adjusted easily" to IRCA. More than half of the 100 Southern California employers in the sample expected IRCA to reduce the number of job applicants, but only slightly over one-fourth had made any plans to meet a labor shortage. (Center for U.S. Mexican Studies, University of California, San Diego, *The Persistence of Immigrant Dominated Firms and Industries in the United States, The Case of California* by Wayne A. Cornelius, for presentation at the Conference on Comparative Migration Studies, Paris, France, June 20-23, 1988).

³Six counties were in California, three in Washington, and five in Oregon. There were 50 valid responses to our questionnaire. Organizations queried in each county were the Employment Service, Agricultural Extension Service, grower associations, unions, and rural legal assistance agencies. The questions were largely the same as those used in the telephone survey of the West Coast growers, but they related to practices of all growers in the county, not to those of any individual growers.

As to why growers might reject turning to the H-2A program, the most important reasons respondents cited were the need to provide housing for the workers and the requirement to pay the prevailing wage or adverse effect wage. In addition, the respondents thought that many growers would not draw on the program because they must guarantee wages for three-quarters of the contract period, the program would result in too much paperwork, and it could result in law suits.

Regarding the SAW program, we asked about the extent to which the respondents thought SAW workers would leave agriculture by 1989. Although about 10 percent thought that "most" would leave farm jobs, the vast majority said they thought only "some" or "few" would leave.

The responses as to why unauthorized seasonal farm workers might not have applied for legalization under the SAW program were consistent across counties. From the reasons listed in our questionnaire, most respondents chose the following as definitely or probably preventing farm workers from applying for legalization: the 90-day work requirement, the May 1985-May 1986 eligibility period, the \$185 per worker application fee, and the fear of deportation or family break-up.

Respondents added other reasons to our list of possible constraints, including workers' difficulties in "recalling dates and places employed," poor records kept by growers, growers' failure to "provide requested documentation," and workers' lack of trust in the government.

A consistent picture also emerged as to respondents' expectations of an IRCA-caused labor shortage in 1988: most did not foresee one. As for 1989, Employment Service respondents were roughly evenly divided between expecting a shortage or replying "don't know," while most Extension Service staff simply replied "don't know." The unions and rural legal assistance respondents were more likely to foresee no shortage, while most grower association respondents expected one.

The majority of respondents thought that neither local residents, such as students or unemployed persons, nor residents from outside the county who were within commuting distance would be able to meet an IRCA-induced farm labor shortage. Those respondents whose opinions differed sometimes remarked on the need for improved wages and working conditions to draw resident workers into farm work.

Farm-Related Organizations' Suggestions for Meeting a Shortage

Using "open-ended" questions, we asked the farm-related organization representatives what actions growers could take to compensate for an IRCA-caused shortage and what actions government could take. Cited below are some respondents' suggestions:

1. Growers could use certain practices, which also were referred to in our survey, such as reducing production of hand-harvested crops, mechanizing operations to use fewer workers, and building housing. Regarding the last, the government could offer low-interest loans to build and repair worker housing.
2. Growers could use better planning and closer cooperation, either by themselves or with the state and local Employment Service, e.g.:
 - a. Work together with other employers to try to employ seasonal workers in some type of year-round employment.
 - b. Increase long-range planning and estimation of labor needs, with growers working more closely with grower associations and the state Employment Service to facilitate farm labor recruitment.
 - c. "...[have growers] establish a basic pool of workers who could go from area to area in much like a migrant pattern, but more organized, to assure that labor needs are to be met. (The respondent added, "The biggest problem might be in having available housing.")
 - d. "...share their labor with other employers."
 - e. Plan labor needs in advance and work more closely with the Employment Service to get the workers.
 - f. "[The Employment Service should] work more closely with growers to move workers from one area to another to reduce idle time, using a faster more aggressive communication network to identify shortage and surplus pools of workers. [It also should] work closer with labor groups, CBO's [community-based organizations]... and growers to insure that workers are quickly notified where farm job openings exist. [And the Employment Service] should keep track of spot surpluses statewide and interstate to move workers around quickly to fill areas of shortage."
3. Growers could (a) improve the work environment for farm workers, such as providing adequate sanitation and drinking water, (b) make

stronger efforts to retain workers from year to year, and (c) provide protection against pesticide poisoning.

4. The government could (a) improve the enforcement capability of agencies responsible for overseeing payment of minimum wage and appropriate working conditions, (b) set up a foreign worker program that requires workers to stay in farm work and requires future workers in programs such as RAW to stay in farm work for longer periods of time, (c) provide a national health plan for farm workers, (d) increase the availability of social services, (e) strengthen the Employment Service's ability to recruit experienced farm workers, (f) change welfare rules for welfare recipients who "are capable of working" in agriculture, and (g) be "prepared for emergency importation of foreign labor" (if there is a big crop in the 1989 season, such an emergency program may be needed, because the RAW program would not yet be in effect).

Experts Say Farm Labor Shortage Unlikely

To obtain views on the likely impact of the Immigration Reform and Control Act on West Coast agriculture, we asked selected experts, primarily agricultural economists, to speculate on the effects of IRCA on West Coast growers, farm workers, and consumers of agricultural goods. (See app. VI for a list of our consultants.) The consultants concluded that a labor shortage in 1989 is unlikely.

However, according to most of the consultants, in the unlikely event of an IRCA-caused labor shortage growers, farm workers, and consumers would be affected in the following ways:

- Growers likely would (a) reduce their demand for labor by adopting managerial and/or mechanical labor-saving techniques, (b) increase wages, and (c) attempt to recruit labor from nontraditional sources.
- Some farm workers would benefit by receiving higher wages and working under better conditions.
- Principally because of foreign competition, the price of most agricultural products would be affected only marginally, if at all.
- In the long term, West Coast growers likely would reduce production¹ and shift production away from labor-intensive methods and crops. As a result, foreign growers would supply a somewhat larger share of the fresh fruits and vegetables sold in the United States and abroad.²

Various Factors Affect Likelihood of a Labor Shortage in 1989

Western growers would experience a labor shortage in 1989 if they were unable to hire the same number of workers as they did in 1988 for the prevailing 1988 farm wages (adjusted for inflation).³ The consultants emphasized several factors that would determine the occurrence of a labor shortage in 1989, including INS enforcement, coupled with the degree of grower and alien worker compliance with IRCA, and the effectiveness of the IRCA provisions for obtaining legal foreign workers.

Some of the consultants doubted that INS would be able to enforce the law effectively, because INS lacks sufficient staff and funds to do so.

¹While Philip Martin believes that West Coast growers likely would reduce production, he also points out that when the bracero program was eliminated in 1964, analysts expected domestic tomato production to decline, but instead it increased because of mechanization.

²This effect might be dampened, however, by development of strong consumer preference for U.S.-grown produce or by trade barriers, according to Howard Rosenberg.

³This assumes that other factors, such as recruitment activities and working conditions, remain unchanged. In determining whether a labor shortage exists, IRCA requires the consideration of the effects of enhanced recruitment efforts and working conditions, as well as improvements in wages.

This view is held by Vernon Briggs, who also points out that the continuing plight of the Mexican economy is an overwhelming factor that will encourage Mexicans to try to enter the United States illegally and risk being apprehended by INS border patrols. In addition, Ernst Stromsdorfer doubts that INS will be able to convince growers that the risk of inspection and possible penalty for violation of IRCA is high enough to warrant compliance with the law. James Holt concludes that the perceived risk and cost of noncompliance with IRCA would have to be extremely high for employers to elect to incur the certainty of production losses from not hiring unauthorized aliens.

Summarizing our consultants' views, they believe that a farm labor shortage in 1989 is unlikely, because the likelihood of all the following events occurring is doubtful:

- The number of unauthorized aliens available for farm work is reduced significantly.
- Many of the workers legalized under the SAW program leave agriculture for other industries.
- Growers are unable to recruit sufficient numbers of U.S. workers.
- Growers seek to employ the same number of workers at pre-IRCA wages and working conditions.

These views do not necessarily apply to the years beyond 1989.⁴

Immigration and Naturalization Service Comments and Our Evaluation

INS provided GAO with written comments. In these comments, the Commissioner of INS agreed with the consultants' conclusion that a farm labor shortage on the West Coast in 1989 is unlikely. However, INS took issue with the views of a number of the consultants who said that INS enforcement of IRCA would be limited, that is, INS would not be able to overcome the pressures of continued entry of unauthorized alien farm workers and likely noncompliance by growers if they face crop losses.

⁴The possibility of a labor shortage in future years exists because natural attrition in the agricultural labor force will reduce the farm labor force from its current size. (The seasonal harvest worker typically works in agriculture for well under 15 years.) In addition, the children of immigrants are less likely than their parents to take farm jobs. Also, SAW workers may eventually leave agriculture for jobs in other industries. Further, the Replenishment Agricultural Workers program will not be available to alleviate shortages after 1993. (However, as the last RAW workers will enter the United States in 1993, RAW participation in farm work can be expected to continue to at least 1995, because many RAW workers probably would want to qualify for permanent resident status and perhaps eventual citizenship.)

INS cited indicators of employer compliance, including results of a compliance survey, increased requests from Washington State to Texas for authorized workers for farm jobs, and requests by agricultural representatives to initiate procedures to facilitate worker verification requirements. In addition, INS stated that GAO previously reported that INS's strategy and approach for enforcing IRCA was satisfactory.⁵ Also, INS pointed out that the number of "nonimmigrant overstays" has declined since enactment of IRCA, as have apprehensions at the southern border.

Notwithstanding such early indicators of enforcement and compliance, it remains to be seen whether—in the face of a shortage of authorized farm workers—INS would effectively overcome the combined pressures for illegal entry and employment of unauthorized workers that concerned our consultants.

Effects of a Labor Shortage on Growers

If a labor shortage materialized, according to our consultants, it would most severely affect growers of labor-intensive crops. Growers would adjust to a labor shortage by shifting production to less labor-intensive crops (for example, producing more crops for processing instead of for fresh market), accepting lower yields per acre, and reducing overall production. The extent of growers' adoption of labor-saving techniques depends on the market strength of foreign and domestic competition and the amount of slack in production by western growers.

Impact Dependent on Type of Crop, Geographical Remoteness, Other Factors

The effects of a labor shortage on growers would vary by crop, the consultants stressed, with growers of fresh fruits and vegetables likely to be most adversely affected. These commodities are produced with labor-intensive methods and are perishable, thus requiring timely harvest. According to Holt, labor shortages would be felt most severely in the fall (August through October) followed by the spring (April through June)—the times demanding the highest seasonal labor throughout the West Coast. Commodities with peak labor demand during the fall and spring include grapes and soft fruits in California; apples, pears, and asparagus in Washington; and berries and pears in Oregon. Holt also believes that such commodities as cherries that have short seasons and heavy regional concentrations would be more heavily affected.

⁵Immigration Reform: Status of Implementing Employer Sanctions After Second Year (GAO/GGD-89-16, Nov. 1988)

In addition, remote and inaccessible geographical areas (for example, the North Columbia River Basin in Washington and the vegetable-producing areas of western Washington) were seen as likely to have more difficulty attracting workers. Growers of some commodities, such as avocados and asparagus, which offer less desirable work, also would be likely to face problems in attracting labor. Some remote areas already have difficulty recruiting farm workers, Marshall notes, and presumably would have additional trouble if there were a labor shortage. He also points out that workers would shift from the least desirable jobs, such as stoop labor, to easier harvest activities.

Rosenberg points out that a recent household survey⁶ in Salinas (in Monterey County, California) found that most workers in agricultural jobs generally regarded as less desirable by farm workers (such as planting, hoeing, nursery work, and berry and fruit picking) aspire to more desirable jobs (such as operating machinery, irrigating, and harvesting vegetables). Those in desirable jobs are relatively content to stay in those jobs. He adds that many strawberry harvesters and nursery workers desire employment in lettuce and celery crews, but few lettuce cutters or packers want to change jobs, either within or out of agriculture. Unauthorized workers are much more likely to fill less desirable jobs than more desirable ones, the California survey revealed, in contrast to legal residents new to the labor force. Hence, Rosenberg concludes that a labor shortage would disproportionately affect sectors offering lower pay, shorter term, and less desirable jobs. Growers offering more desirable jobs would have to make few if any adjustments to obtain legal skilled workers, he adds. But growers offering less desirable jobs would have to modify their terms of employment, recruit alternative legal workers, or break the law to maintain employment levels.

If other labor market conditions were similar, according to Rosenberg, growers who produce crops with shorter periods of labor-intensive activity, such as thinning or harvesting, would be more likely to have difficulty finding local workers. To identify such crops, he calculated a seasonality index. Peak month employment is divided by average employment over the other 11 months for commodity sectors with the largest average agricultural employment in each state. Relatively large index values are generally associated with more short-term jobs. In Washington for 1986, vegetables and melons had the highest seasonality index, 2.46 (see table 3.1). In Oregon, berry crops had the highest

⁶The survey was conducted by a University of California doctoral candidate.

seasonality index, 4.90. Grapes, with an index of 2.17, was the highest in California.

Table 3.1: Employment Seasonality Index of Largest Farm Employment Sectors

| Crop | Seasonality index ^a | | |
|------------------------|--------------------------------|--------|------------|
| | Washington | Oregon | California |
| Tree fruit | 1.84 | 2.57 | 1.68 |
| Ornamental/nursery | 1.43 | 1.13 | 1.07 |
| Field crops | 2.17 | • | • |
| Berry crops | • | 4.90 | • |
| Grapes | • | • | 2.17 |
| Vegetables/melons | 2.46 | 2.60 | 1.22 |
| General crop farms | 1.65 | 2.30 | • |
| Farm labor contractors | • | • | 1.50 |

Note: Based on 1986 Unemployment Insurance data from each state.

^aCalculated as employment in peak month divided by average employment in other 11 months.

Sources: State of Washington, Employment Security Dept.; State of Oregon, Employment Division, Dept. of Human Resources; State of California, Division of Employment Data and Research, Employment Development Dept.

Reducing Demand for Labor

Growers would adjust to a labor shortage, the consultants noted, by reducing their demand for labor, trying to retain their legal workers, and attracting other workers currently not in the market. To reduce labor demand, growers may (1) shift production to less labor-intensive crops, (2) accept lower yields per acre, and (3) adopt labor-saving techniques. Stromsdorfer suggests that the structure of production would shift away from labor-intensive crops to those that are less labor-intensive and less perishable.⁷ Generally, the production of fresh fruits and vegetables would decline, with the more delicate or labor-intensive fruits or vegetables most affected. Martin believes that growers will adjust to fewer and higher paid workers by not doing marginal tasks, such as thinning and weeding, or by picking less often and less carefully, even if yields decrease. Growers of tree fruits and citrus probably will pick less often and less carefully, he adds.

Usually there are opportunities to increase productivity, Marshall says. In the 1970s, some Texas, California, and Florida citrus growers employed authorized workers and improved productivity with use of managerial and mechanical labor-saving techniques. But these were not

⁷Holt, however, points out that less labor-intensive commodities also are in surplus supply, and that shifts into these commodities would result in pushing marginal producers out of agriculture.

enough, he noted, “to compensate for the much lower wages... for unauthorized aliens who were employed by the competitor growers.”

The consultants disagree somewhat about grower ability to adopt labor-saving techniques. As with Marshall, Rosenberg argues that virtually every organization has some slack. There are labor savings to be realized in agriculture, he believes, through certain management changes. These include improving (1) the design of workflow and jobs, (2) employee selection (in most crews the best performers typically produce twice as much as the worst), (3) job orientation and training, (4) first-line supervision, and (5) pay administration. The range of possible labor demand reduction for 90 percent of the farm employers, he speculates, is 10 to 25 percent from such management changes. Productivity in the California citrus industry, according to Martin, could be raised 30 percent with relatively little investment. This would reduce the work force from 7,500 to 5,000 to pick the same number of bins. Productivity improvement changes include the use of better clippers, adjustable picking bags, and perhaps a revised piece-rate wage that provides a bonus for quality picking and a second bonus for faster picking.

Additional ways of saving labor suggested by Martin are to

1. mechanize the harvest, as in wine grapes, and
2. use mechanical aids, such as pneumatic citrus clippers, which permit a small group of workers to pick faster, or devices utilizing a different work force, such as field conveyor belts, to enable more women and older men to participate in melon and other field-packing harvests.

In the face of a labor shortage, Martin strongly believes that growers will adopt existing technologies and support the development of new ones. In addition, he thinks that mechanization would maintain production costs at a level that enables them to compete with foreign producers.

Both Rosenberg and Stromsdorfer see serious constraints on near-term labor saving through mechanization, however. Mechanization would be too costly in the short run, according to Stromsdorfer. Rosenberg finds that currently there is little prospect of major technological advances substituting equipment for labor. Growers could make more use of productivity-enhancing equipment—such as conveyor belts, forklifts, and lights enabling night harvesting—he believes. Primarily, this would

shift demand to less strenuous jobs that can be filled from a larger portion of the domestic work force.

Research supports Stromdorfer's and Rosenberg's view on the growers' ability to mechanize in the short term.⁸ Currently, a few fruit and some vegetable crops grown for processing are being successfully harvested and handled mechanically; fruit and vegetable crops grown for the fresh market are handled manually. Growers could mechanize the harvest of some of the fruit and vegetable crops that are currently harvested by hand, but it would require several years to further develop the existing mechanical harvesting technologies and to develop manufacturing capacity for the machinery needed.

Extent of Foreign Competition

How potent is the threat of foreign competition to U.S. agriculture? A 1988 GAO report⁹ concludes that lower production costs in foreign countries have enabled some foreign growers to supply imports that can be sold at prices below those of U.S.-produced goods. According to the report, Mexican producers have significant cost advantages in terms of fertilizers, chemicals, and electricity for irrigation. In addition, in 1986 the average agricultural wage rates were equivalent to about three U.S. dollars a day in Mexico compared with three U.S. dollars an hour in the United States. The cost of growing broccoli in Mexico during the 1986-87 season was 40 percent of the California cost, according to a study¹⁰ sponsored by the University of California Agricultural Issues Center. This was because of lower labor costs for irrigation and harvesting and lower energy and fertilizer costs.¹¹ Because of the cost advantage of foreign growers, this study concludes that:

⁸For a more detailed discussion on the growers' ability to mechanize, see: G.K. Brown, "Fruit and Vegetable Mechanization," Migrant Labor in Agriculture - An International Comparison, edited by Philip L. Martin, papers presented at a conference sponsored by the Giannini Foundation of Agricultural Economics, University of California, and the German Marshall Fund of the United States, Washington, D.C., May 23-25, 1984.

⁹Agricultural Trade: Causes and Impacts of Increased Fruit and Vegetable Imports (GAO/RCED-88-149BR, May 1988).

¹⁰University of California, Agricultural Issues Center, Competitiveness at Home and Abroad: Report of a 1986-87 Study Group on Marketing California Specialty Crops: Worldwide Competition and Constraints.

¹¹The yield per acre in Mexico seems comparable to that in the United States.

"California may not be able to compete on a low-cost basis with many fruits, nuts, and vegetables produced in other countries or even other states. However, California should be able to maintain and build market share by differentiating its products and markets and by improving its technology. . . . California must compete . . . by presenting products that are differentiated by their superior quality."

Marshall suggests that the United States compete by improving productivity, including developing and using leading-edge technology, which in turn requires superior management and a quality labor force, and by finding "niches low-cost foreign producers have trouble filling."

Almost every labor-intensive agricultural commodity produced on the West Coast or in the United States, according to Holt, competes in domestic and/or international markets with the same and similar commodities produced elsewhere in the world. World-wide production capabilities for all agricultural products greatly exceed current market demands. Consequently, if western growers experience a labor shortage, he believes, U.S. competitiveness and the market share of U.S. products would be reduced.

Effects of a Labor Shortage on Farm Labor Market

According to our consultants, a labor shortage, should it occur, would affect the farm labor market in two ways: (1) average personnel expenditures would increase, and (2) total farm employment would decline. Average personnel expenditures would increase because wages, costs of improvements in working conditions, and recruitment expenses would rise. Total farm employment would decline because growers would reduce their demand for labor and decrease their production of labor-intensive crops, and possibly their total crop production.¹²

Growers would increase wages and improve working conditions to retain their present legal work force and to attract both migrant and new local workers. If there is difficulty in obtaining workers, our consultants believe that wages will increase, at least in the short term. Martin states that a major indicator of a reduction in labor supply in 1989 would be a sharp increase in wages. Holt observes that, as a labor shortage results in an increase in wage rates and modest improvements in working conditions, the adjustments would last longer in crops where there are very large fixed costs, as in the case of grapes or orchard crops. In contrast, adjustments would be fewer and of shorter impact in annual crops, such

¹²Holt points out that reduced U.S. production of labor-intensive commodities would reduce not only the level of employment of seasonal and year-round farm jobs, but also employment beyond the farm, such as in the handling of the commodities after production.

as vegetables, and low-investment perennial crops, such as strawberries, because the cost of switching to an alternative crop is lower.

The legalization of former unauthorized aliens through the SAW program will allow manufacturing, hospitality, and other service industries to compete for these newly legalized workers. According to Rosenberg, growers adjacent to urban areas generally will be most vulnerable to such competition for employees. If competition develops, these growers will have to raise wages to attract and retain the workers. He adds that growers in less populous areas who depend on migrant workers to supplement available local workers may have to provide additional compensation for transportation and housing to attract legally employable migrants away from other opportunities.

Increases in wages and improvements in working conditions will attract only a few new domestic workers, most of the consultants believe. Holt doubts that any economically reasonable combination of wages and working conditions would more than marginally enlarge the U.S. migratory farm worker pool. Martin agrees that most American workers probably would require dramatic changes in wages and working conditions to do farm work. The potential for increasing domestic agricultural employment, Holt concludes, is very small.

In the long term, the increase in wages and improvements in working conditions would be somewhat eroded by the competitive forces within agriculture, the consultants expect. In the longer term, most of the initial effects probably would be neutralized by the effects of international competition, Holt argues. Hence, most adjustments would tend to reduce domestic production rather than increase domestic farm worker wages. The reduction in domestic production implies a corresponding reduction in farm worker employment. The percentage of the jobs in West Coast agriculture held by domestic workers and legal migrant workers would increase, Stromsdorfer believes, but the total number of jobs would decrease.

Effects of a Labor Shortage on Consumers

The consumer would see only a small, if any, increase in the price of fruit and vegetables products as a result of a farm labor shortage, according to the consultants. This conclusion is based on the belief that both foreign and domestic competition is sufficiently strong and trade barriers low enough to keep prices down, despite an increase in labor costs for western growers. None of the adjustments made by growers to an IRCA-induced labor shortage, Martin contends, should increase real

food prices. The international purchasing of even fresh fruits and vegetables by major marketers guarantees, he says, that any production that disappears in the United States will be replaced quickly by imports. Holt concludes that commodity prices to U.S. producers and consumers will remain generally unaffected by increased U.S. labor costs.¹³

¹³A Department of Agriculture official suggested that the potential impact of proposed pesticide regulations could affect imports of fresh fruits and vegetables more than domestic production, because domestic producers may be better able to adjust to such controls than foreign producers. If so, the relative cost effect of a reduction in the U.S. farm labor supply would be offset, at least partially, by the U.S. advantage in adjusting to new pesticide regulations.

Conclusions and Policy Considerations

Conclusions

A labor shortage induced by the Immigration Reform and Control Act is unlikely to occur in West Coast agriculture in 1989, despite this being the first full year in which IRCA sanctions against the employment of unauthorized aliens in seasonal agricultural services become effective. Formal procedures established by IRCA appear to be working effectively, providing ample opportunity for those unauthorized aliens who worked in agriculture to be legalized. Some 1.3 million unauthorized aliens applied for SAW status, of whom over half were from the West Coast. If most SAW workers continue in farm work in 1989, as anticipated by representatives of farm-related organizations we surveyed, they would help maintain the prior year's labor supply.

In addition, most West Coast growers surveyed said that, as of spring 1988, they were not planning changes in anticipation of a decline in the availability of unauthorized farm workers in 1989. This suggests that they did not expect a shortage significant enough to require much adjustment to their farming or labor practices. There was little evidence of growers' plans to expand recruitment practices, virtually no indication that more growers intend to offer benefits to attract workers, and no evidence of a marked upturn in the proportion of growers who expect to change their farming practices to employ fewer workers. Also, according to our panel of experts, a West Coast farm labor shortage in 1989 is unlikely. Further, some of the consultants thought that the plight of the Mexican economy will continue to encourage unauthorized immigration to the United States and growers are unlikely to risk production losses to comply with the law.

If there were a shortage, average farm labor costs would likely increase. Growers probably would employ managerial and mechanical labor-saving techniques to improve productivity and, to some extent, shift production away from labor-intensive crops in an effort to reduce their need for labor. The increase in labor costs would result in a decrease in domestic production of fresh fruits and vegetables and an increase in the importation of foreign-produced crops. Workers could expect some increase in wages and improvement in working conditions. Consumers should notice only a marginal, if any, increase in the price of fresh fruit and vegetables.

Policy Considerations

The abundance of unauthorized workers has discouraged West Coast growers from attempting to develop a domestic work force or using other legal means for importing farm labor. Through the SAW program, which enables aliens who worked in seasonal agriculture services to

become legal residents, IRCA has taken the major step of getting farm employers accustomed to relying on a legal work force. The large number of SAW applicants apparently will achieve the act's intent of easing the transition to such a work force.

Because the information obtained by this study and the large number of SAW applicants lead us to conclude that a labor shortage in 1989 is unlikely, we see no need to amend IRCA's agricultural provisions at this time. To help ward off possible shortages in future years, several options not involving immigration issues are available to the federal and state governments to help growers adjust to a legal work force. While this study has not fully explored such options, the following steps may warrant consideration.

Efficient Use of Labor

To help growers use labor more efficiently, the federal and state governments could improve coordination among worker recruitment and grower employment efforts. A California job bank program funded by the California Employment Development Department serves as a model. The program operates an automated job-matching service for growers and workers. Among its objectives are increasing a worker's employment term by coordinating labor needs among local growers with different peak seasons, improving information on worker availability and job opportunities by centralizing employment records and automating job referrals, and improving the quality of personnel record-keeping.

In addition, the Employment Service or other labor market intermediaries could establish special job information channels whereby students who might want to do farm work could more easily find out about harvesting jobs.

Housing for Workers

The federal and state governments could make available more low-interest loans to growers to build and repair housing and provide for mobile homes. They also could help growers negotiate zoning regulations with local municipalities to provide for modest but adequate housing.

Employment of Welfare Recipients

To increase the participation of U.S. workers, states could experiment with welfare regulations to permit recipients to take advantage of temporary jobs in agriculture without jeopardizing their benefits for the period immediately following the termination of their employment.¹

For example, in Fresno, California, the leading agricultural county in the state, there are about 7,000 out-of-school, out-of-work teenagers (most aged 15-18) who receive Aid to Families with Dependent Children (AFDC) benefits. Additionally, the county has about 6,000 male AFDC Unemployed Parent² (AFDC-UP) recipients. Neither category of worker is likely to take advantage of opportunities in seasonal farm work for fear of endangering their welfare benefits under AFDC rules. (This welfare program is hard to reenter after one leaves it and therefore does not encourage short-term employment.) A substantial number of the AFDC-UP families are Hmong and other Southeast-Asian refugees, who were attracted to the Fresno area because of an interest in farming. However, they, like other similar welfare recipients, are unlikely to take advantage of opportunities in seasonal farm work for the following reasons:

- Family members are reluctant to drop out of AFDC for seasonal farm work, because when the job ends the family must reapply for benefits and then lose 28-30 days of coverage before cash benefits resume, unless there is an emergency situation.
- Teenagers are unable to work in the summer without reducing family benefits or causing the family to be dropped from the welfare rolls, because the family's eligibility depends on the entire family's income.
- In other counties—but not in Fresno—primary wage-earners on AFDC-UP cannot take advantage of seasonal farm work opportunities because the 100-hour rule³ limits their participation in the labor market.

Options for experimenting with changed welfare regulations to increase the labor supply could include (1) making it easier for welfare recipients to return to the rolls after working a brief period of time if no more work is available, (2) allowing teenagers to earn money in the summer

¹The following discussion is based on information provided by David North, an expert on immigration matters, including those relating to farm employment.

²A public assistance program that services two-parent households.

³The AFDC-UP program bars the family from receiving benefits if the primary wage-earner works more than 100 hours a month. Fresno County has obtained an exemption from this rule.

without affecting the family basic allotment, and (3) exempting recipients in these counties from the 100-hour rule.⁴

⁴The Family Support Act of 1988 enables demonstration projects to test effects of liberalization or elimination of the 100-hour rule.

IRCA Enforcement

INS Strategy for Employer Compliance

The Immigration and Naturalization Service's strategy for enforcing employer compliance with the Immigration Reform and Control Act in all industries, including agriculture, emphasizes three activities: education, investigations, and inspections. To date, INS has emphasized educating employers about the law, creating a program of continuing education in an effort to obtain voluntary compliance. The formal enforcement mechanisms of investigations and inspections involve warning citations and penalties. Investigations are defined as checks on specific employers based upon "leads." Inspections are reviews of employer compliance based on random selection.

During fiscal year 1988, INS staff included 1,356 investigative agents, 3,353 Border Patrol agents, and 79 Employer and Labor Relations (ELR) staff. ELR staff principally perform education functions. Investigations personnel in the 33 INS districts and Border Patrol agents in 20 of the 22 INS sectors perform all three employer compliance activities. The number of Investigations Special Agents doubled between fiscal years 1986 and 1988 in response to employer compliance responsibilities under IRCA.

The Border Patrol helps obtain employer compliance as it performs its principal duty of protecting the nation's borders from illegal entry. Also in response to IRCA, Border Patrol agents were increased from 3,238 in fiscal year 1986 to 3,353 in fiscal year 1988, of whom 300 staff years were dedicated to ELR and employer sanctions activities. Although the Patrol plans to hire 1,400 more agents and support staff during FY 1989, these positions—also authorized under IRCA—will be for the Patrol's border mission rather than ELR or sanctions work.

Under its employer contact program, INS met a goal of speaking with 1 million of the nation's 7 million employers between June 1987 and June 1988 to encourage voluntary compliance. To accomplish this goal, the INS Commissioner directed that 50 percent of investigations time be devoted to employer education. Although INS decreased the investigations time mandated for this activity as it phased in investigations and inspections work, employer education remains a major part of enforcement. For the year ending June 1989, the Commissioner established a goal of 500,000 employer visits, to be accomplished using 25 percent of investigations time.

The INS General Administration Plan for its field office compliance inspections provides for two inspection programs. One is a general inspection of employers randomly selected within each field office's

jurisdiction from a nationwide database of all employers. The other is a special emphasis program of inspections of employers randomly selected in industries historically found to have relied heavily on unauthorized alien labor in each jurisdiction. In both cases, INS headquarters will supply the names of specific employers to be inspected by district and sector staff, but for the special emphasis program, field staff will design the criteria to be used to select the employers to be visited. INS plans are for 50 percent of inspections to fall under the special emphasis program.

INS also has developed a Legally Authorized Worker (LAW) program to assist employers in complying with the law. Under this program, INS field staff give employers information on sources of legal labor during education visits. Labor sources include trade unions, local state employment agency offices, and state refugee coordinators.

INS Enforcement in West Coast Agriculture

INS officials indicated that enforcement of IRCA in the agriculture industry after the deferral period for penalties against employers of unauthorized aliens in seasonal agricultural services would be consistent with that in other industries. We were told that INS believes employer sanctions should be enforced uniformly across industry and geographic boundaries if they are to succeed. However, employer enforcement activities may emphasize the agriculture industry in geographic areas where it dominates.

Because of the deferral period for penalties against farm employers of unauthorized aliens, until December 1988 INS primarily restricted its enforcement efforts to educational contacts. INS units made no attempt to target any geographic area—e.g., the West Coast states of California, Oregon, or Washington—for special treatment, and agricultural employer education activities in these states were the same as for the rest of the nation.

INS officials interpreted the law as requiring employers producing crops included in seasonal agricultural services to maintain proper administrative documents on employees before the end of the deferral period. But INS policy generally has been not to review employer compliance until the end of the deferment. Thus, although these employers have been included along with other crop employers in the database for all field offices' inspections, investigators and Border Patrol agents were to begin inspecting the deferred crop employers only after December 1, 1988. One reason given for this policy was to avoid interfering with the process for the SAW legalization program, which ended at the same time

as the deferment. INS concluded that this policy was in line with congressional intent.

The Border Patrol, which historically has had responsibility for INS activities in the agriculture sector because of the rural nature of its territory, has modified its activities since the passage of IRCA. Before IRCA, the Patrol concentrated on seeking out unauthorized aliens and enforcing criminal laws against harboring, transporting, or smuggling such aliens. Agents concentrated on apprehending aliens in the streets and performed routine farm and ranch checks for their presence. Since IRCA, the Patrol typically is not making “street sweeps,” and because of the law’s “open fields” provision, agents now are required to obtain a search warrant or consent before making farm and ranch checks.

The agriculture industry was included in ELR employer education efforts from the program’s inception, ELR officials reported, and it has been representatively covered. As the deferment period for seasonal crops was ending, however, ELR stepped up its efforts in the agriculture sector to heighten growers’ awareness of their responsibilities under the law. No geographic areas or specific crops were targeted by this campaign, which included measures used for all industries, but there was more direct aiming at the agricultural community in public service radio and television spots, trade magazine ads, and literature mail-outs.

In planning enforcement activities after December 1988, INS officials stated that agency policy is not to target any specific industry or geographic area. However, they noted that agricultural employers in field office territories dominated by that industry may be heavily represented in the general and/or special emphasis inspections because of the incidence of these employers in the jurisdictions. Officials explained that industries from which employers will be selected for special emphasis inspections will be determined by local field offices, based on past experience with unauthorized alien employment practices in that jurisdiction. Thus, while we were told that INS had no plans to target growers on the West Coast—where agriculture is a major industry—we also were told that agriculture is one of the top five industries for employing unauthorized aliens.

INS officials did not want to release plans for regional or national inspections by industry—e.g., agriculture—in order to maximize the program’s effectiveness.

The Border Patrol's activities in agriculture after the deferment are a shift from education activities to a sanctions mode for the employers, but no major shift in the Patrol's resources to that industry is expected. Follow-up investigations of seasonal crop employers who were visited by agents for education purposes during the deferment period and suspected of violations at that time will be made at the field agents' discretion.

INS plans to continue employer education in the agricultural sector, as in other industries. While ELR's current emphasis on this industry decreases with the ending of the penalty deferment, educating agricultural employers remains one of ELR's top priorities through fiscal year 1989. In general, the INS officials contacted during our work stated that voluntary compliance is a major goal of INS's IRCA enforcement efforts and is necessary for the law to be successful.

Department of Labor's Enforcement Role

The Department of Labor shares responsibility for inspecting administrative requirements placed on employers by IRCA—i.e., I-9 forms. Within Labor, the Wage and Hour Division and the Office of Federal Contract Compliance Programs in the Employment Standards Administration (ESA) routinely conduct I-9 inspections during their standard field inspections of employers under other legislation, including the Fair Labor Standards Act and the Migrant and Seasonal Agricultural Worker Protection Act. According to ESA's field manual procedures, Labor's role is to assist INS by informing employers of their responsibilities under IRCA, verifying their recordkeeping required by the law, and reporting the results of its inspections to INS. Because only INS is authorized to make formal findings of violations, issue citations, or impose penalties, ESA procedures stipulate that ESA staff will report suspicious situations to INS for further action. INS procedures call for coordination between its field staffs and local ESA officials to minimize duplicate inspections.

Technical Description of GAO's Survey Methodology

Survey of Growers

Design of GAO Questionnaire

We developed a questionnaire for use in a telephone survey of California, Oregon, and Washington growers of labor-intensive crops. The questionnaire included questions in three key areas: (1) the degree to which growers depended on unauthorized aliens for their seasonal work force; (2) how growers operated or intended to operate their businesses from 1986 to 1989 in the areas of recruitment, benefits, and farming practices; and (3) the growers' views on, or participation in, specific federal government programs designed to provide legal farm labor. An important feature of the questionnaire's design was its reliance on reported behavior, as well as reported opinion, as an indicator of change.

A series of pretests were conducted in developing the final questionnaire. These tests allowed us to judge the validity of each questionnaire item and determine how well the questions were understood by the respondent population. We used these results to make changes, including shortening the interview to a maximum of 15 minutes. Pretests were conducted by telephone with West Coast growers selected from the same sampling frame used in the study.

The instrument was translated into Spanish for any respondent who did not speak English.

Sampling Frame

A list of agricultural employers and their addresses were taken from Labor's "ES-202" files. The ES-202 consists of data provided by employers in a variety of industries. Four times a year, employers give employment security agencies¹ data on their employees covered by state Unemployment Insurance laws. Using the Standard Industrial Classification (SIC) or industry code, growers of deciduous tree fruits, berries, grapes, citrus, ornamental floriculture and nursery products, and vegetables and melons were selected. These crops were chosen on the basis of the recommendations of experts, who indicated that they would cover the most labor-intensive farm operations in the three states. The resulting sampling frame contained some firms that were not farming operations and had to be screened from the sample during the interview.

¹These agencies usually run Employment Service operations and Unemployment Insurance programs.

Information on the ES 202 varied from state to state. For California, almost all farm employers were listed, since state Unemployment Insurance requirements call for data on all workers in firms with quarterly payrolls of \$100 or more. The lists for Washington and Oregon were less comprehensive, lacking information on smaller growers. The list of Washington growers from the ES 202 was supplemented with data from the state's 1985 Workers' Compensation file, which contains over 90 percent of farm employment in the state. Similarly, the list of Oregon growers was supplemented with 1988 lists of strawberry growers (provided by the Oregon Strawberry Commission) and caneberry growers (from the Oregon Caneberry Commission), and a 1986 test of pear growers (from the Oregon Pear Commission).

The final lists for the three states differed by the level of information each contained about the number of employees. This was an important selection criterion because, for example, the very small growers (those with five or fewer workers) were not the focus of the study. The California and Washington lists contained information on the number of employees for each grower. This made it possible to drop the very small growers from the final list before selecting the sample. The initial Oregon list contained no information on the number of employees. Screening the very small growers from the Oregon list could not be done at this point but had to be done during the interview. Therefore, the sampling frame for this state contained growers with the full range of employees.

Sample Selection

A stratified, random sample was selected from the final lists. Each state represented a stratum and was sampled separately. Before selecting the samples from the California and Washington strata, the growers were ranked by the number of workers they employed. We determined from these lists that a few large growers accounted for a disproportionately large number of employees. To avoid missing this important group, we decided to include the 11 largest growers in California and the 10 largest in Washington in each stratum sample. This added two additional strata, one for each state. Since the number of growers was unknown for Oregon, a slightly different situation existed. We needed a larger sample from this state in order to screen out very small growers during the survey.

All of the California and Washington strata representing large growers were used in the survey. A sample was selected from each of the other three state strata. The number selected from each state and the strategy used follows.

Beginning with a list of 10,792 California growers, we dropped 6,451 because they had fewer than six employees, leaving 4,330 eligible growers. Including the 11 largest growers, the sample selected was as shown in table II.1.

Table II.1: Initial and Final Samples of California Growers

| Universe | Initial sample | Final sample |
|---|-----------------------|---------------------|
| Largest growers | 11 | 11 |
| Randomly selected from the remaining 4,319 | 90 | 140 |
| Total samples | 101 | 151 |

During the survey, we determined that 50 more growers were required to obtain the desired level of precision. The same method for randomly selecting 90 from the list of 4,319 was used to select another 50 from this same group to reach the final sample (also shown in table II.1).

This strata began with a total of 7,551 Washington growers from the employment list. We dropped 5,590 because they employed fewer than five workers, leaving 1,961 eligible growers. Including the 10 largest growers, a sample was selected as shown in table II.2.

Table II.2: Initial and Final Samples of Washington Growers

| Universe | Initial sample | Final sample |
|---|-----------------------|---------------------|
| Largest growers | 10 | 10 |
| Randomly selected from the remaining 1,951 | 100 | 125 |
| Total samples | 110 | 135 |

During the survey, we determined that 25 more growers were needed to obtain the desired level of precision. The same method for randomly selecting 100 from the list of 1,951 was used to select another 25 from this same group, yielding the final sample shown in table II.2.

For California, we selected growers of vegetables and melons, berries, grapes, deciduous tree fruits, citrus, and ornamental floriculture and nursery products. For Washington, we sampled growers of vegetables and melons, berries, and deciduous tree fruits. For Oregon, we selected growers of berries, deciduous tree fruits, and ornamental floriculture and nursery products. The total sample for the five strata is shown in table II.3.

Table II.3: Total Sample of Growers

| State/category | No. of Growers |
|----------------|----------------|
| California: | |
| Large | 11 |
| Other | 140 |
| Subtotal | 151 |
| Oregon | 194 |
| Washington: | |
| Large | 10 |
| Other | 125 |
| Subtotal | 135 |
| Total | 480 |

Survey Preparation

Two weeks before beginning the survey, we sent letters to the selected growers explaining our objectives and announcing the approximate time and date they would be called. Most of the telephone numbers used in the survey were obtained from directory assistance. In cases where we could not obtain a telephone number, we wrote to growers asking them to provide a current phone number. The phone number could not be located or had been disconnected in 30 cases (11 in California, 14 in Oregon, 5 in Washington).

We contracted with a firm to obtain trained telephone interviewers. Each interviewer was given about 4 hours of training in the use of a computer-assisted telephone interview system. This training, conducted by GAO staff, consisted of familiarizing each interviewer with the subject of the study, the questionnaire, and procedures for handling calls and call-backs.

Interviewers were briefed on the intent of each question and on how to interpret unclear or unusual responses that had been encountered in the pretests. They were instructed to contact the respondent, identify themselves and the purpose of the study, and attempt to interview the respondent. If the respondent could not be interviewed at that time, the interviewer was to attempt to reschedule the interview. Respondents who refused were recontacted, and we further explained the purpose of the study and attempted to obtain the interview.

Log sheets were prepared on each respondent, containing a case identification number, name of the grower or farming operation, address, and

phone number (when available). In addition, space was provided to record the interviewer's initials, time and date of the call, and disposition of the call. Interviewers used the log sheets to record the disposition of the call (interview completed, rescheduled, or refused), any comments the respondent might wish to make concerning the interview, and other relevant information. At the end of each day, GAO supervisors reviewed the log sheets and consulted with interviewers when necessary.

Interviews were conducted during the periods May 9-27 and June 6-14, 1988. The second session of interviews was needed because of the adjusted sample in California and Washington. Calls were made during the hours of 3:00-9:00 p.m., PDT. This time block was designed to cover the late afternoon and early evening in the three West Coast states. Our aim was to reach growers during business hours, when much of the field work was over, or at home in the evening when work was completed.

Calls by each interviewer were randomly monitored by GAO staff. Adjustments were made as a result of the monitored calls. In addition, GAO staff conducted some 30 telephone interviews with growers who originally had declined to participate.

After all interviews were completed, GAO staff contacted the respondents in a randomly selected sample of 25 completed interviews to verify the interview. Selected items at different points in the interview were used to verify completion of the item, exercise of the skip pattern, and accuracy of the recorded data. Out of the 25 selected, 23 call-backs were completed. We were unable to contact two growers during the period allotted for verification.

The survey response figures are shown in table II.4.

Appendix II
 Technical Description of GAO's
 Survey Methodology

Table II.4: Survey Responses

| Response | California total no. | Oregon total no. | Washington total no. | Overall total no. |
|--|----------------------|------------------|----------------------|-------------------|
| Completed interviews | 95 | 103 | 99 | 297 |
| Missing or incorrect phone numbers | 11 | 14 | 5 | 30 |
| Not eligible for interview: | | | | |
| Respondent not a grower | 24 | 6 | 5 | 35 |
| Operation too small/did not employ workers | 7 | 46 | 8 | 61 |
| Operation out of business | 3 | 10 | 9 | 22 |
| Subtotal | 34 | 62 | 22 | 118 |
| Refusals | 2 | 1 | 2 | 5 |
| Not interviewed: | | | | |
| Unable to contact | 7 | 7 | 2 | 16 |
| Other | 2 | 7 | 5 | 14 |
| Subtotal | 9 | 14 | 7 | 30 |
| Totals | 151 | 194 | 135 | 480 |

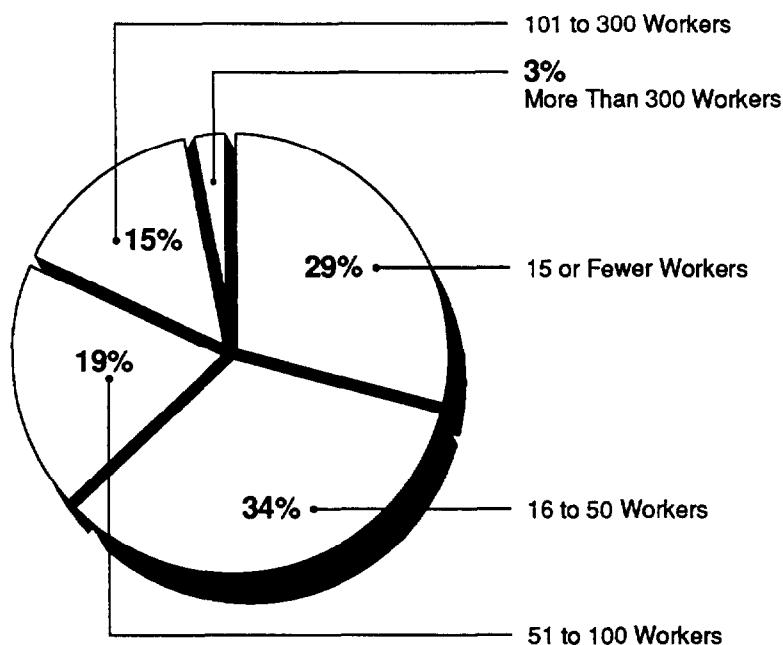
From these results, we estimated an adjusted universe of eligible growers and used it to calculate an error range for each question at a 95-percent confidence interval. These calculations were made for the total sample and for each of three state strata. At a 95-percent confidence interval, no item's error range exceeded + 6 percent for the total sample or + 10 percent for any of the three state strata.

The final composition of the respondents for the completed interviews, in terms of number of crops grown and farm size (by acreage, cash value, and number of workers at the peak of the 1987 harvest season), was as follows:

- Thirty-four percent of the farm employers interviewed grew only 1 crop, 37 percent grew 2 or 3 crops, and most of the others grew between 4 and 10.
- One-fourth had 30 acres or less under cultivation in 1987, and one-fourth had 250 acres or more.
- About 30 percent of the sample produced crops whose cash value in 1987 was under \$75,000, while about 30 percent had crops with a cash value of at least \$400,000.

At the peak of their 1987 harvest season, most growers employed 50 or fewer workers, as seen in figure II.1.

Figure II.1: Distribution of Growers by Number of Workers (Peak 1987 Harvest Season)



Data Processing and Analysis

Using SPSS, a statistical software program, we analyzed data collected through these interviews. We tabulated basic frequencies on each item of the questionnaire, searched for any outliers, and made several corrections as a result. A number of composite variables were computed with the corrected database. After cleaning the data, we weighted them to adjust for sampling different strata. The following weights were applied:

- California large growers—1.0000
- Other California growers—28.6755
- All Oregon growers—9.5030
- Washington large growers—1.0000
- Other Washington growers—15.8060

We analyzed cross-tabulations of the data to examine the relationship between different population characteristic and outcome variables. Where questions concerning relationships or differences arose, we used the McNemar test to determine if they were statistically significant. This paired chi-square test examines changes among respondents for three

different time periods. Any observed difference or association with a p value equal to or less than .05 was considered significant.

Mail Survey of Key Groups

In addition to the survey of growers, we identified and surveyed key groups in each county of interest. These groups included growers' associations, unions, migrant legal action agencies, and employment service and agricultural extension service offices. Our primary purpose was to obtain a corresponding perspective on the likelihood of an IRCA-caused labor shortage.

To obtain this information, we administered a mailed questionnaire similar to that for the growers. The survey of key groups collected information on the different groups' perceptions of what recruitment and farming practices growers in their counties used, or planned to use, in the periods before and after the passage of IRCA. The groups also were asked their opinions concerning, for example, aspects of the Special Agricultural Workers program (e.g., barriers to SAW application), and whether the groups foresaw future shortages in the supply of labor as a result of IRCA.

The mailed questionnaire was pretested using corresponding key groups located on the East Coast. Recognizing the differences that may exist between farming practices in the two regions, this pretesting permitted us to identify problem areas in the questionnaire and revise it accordingly. We mailed the pretested questionnaire to 112 key groups in the three states during the first 2 weeks of July 1988. A total of 58 questionnaires were returned. A breakdown of respondents by county is provided in table II.5.

**Appendix II
 Technical Description of GAO's
 Survey Methodology**

**Table II.5: Farm-Related Organizations'
 Response by County**

| State/county | Questionnaires | | |
|---------------|----------------|-----------|---------------|
| | Sent | Completed | Not completed |
| California: | | | |
| Fresno | 10 | 7 | 0 |
| Imperial | 10 | 2 | 0 |
| Monterey | 10 | 5 | 0 |
| Sacramento | 8 | 1 | 1 |
| Ventura | 9 | 2 | 1 |
| Yolo | 8 | 2 | 0 |
| Washington: | | | |
| Chelan | 8 | 4 | 1 |
| Skagit | 5 | 2 | 0 |
| Yakima | 12 | 7 | 2 |
| Oregon: | | | |
| Hood River | 7 | 5 | 1 |
| Jackson | 5 | 2 | 1 |
| Marion | 7 | 3 | 0 |
| Multnomah | 6 | 4 | 1 |
| Washington | 7 | 4 | 0 |
| Totals | 112 | 50 | 8 |

After reviewing the returned questionnaires, we determined that 50 (or 45 percent) were usable. The others were either not completed or had incorrect information, such as responses for counties not included in our study.

We summarized and analyzed the questionnaire responses, treating this information primarily as "qualitative" data. Estimates received from the respondents were used only as broad indicators. Their value in large part is their correspondence to the data received through the telephone survey.

Nature of West Coast Labor-Intensive Agriculture

Over half of the fruits and vegetables produced in the United States come from the West Coast, mainly California. Data are not available to determine precisely the number of seasonal farm workers (legal and illegal) in West Coast agriculture, but a rough estimate for California is about 850,000. Farm employment is significantly affected by the types of crops grown, makeup of the farm labor supply, agricultural production methods, and market and price factors.

Major Fruit and Vegetable Crops

In 1986, California's output of fruits and vegetables was valued at \$5.8 billion; Washington's, at about \$.8 billion; and Oregon's, at nearly \$.3 billion. (See table III.1.) Production of these crops tends to be labor-intensive.

Table III.1: West Coast States: Leading National Producers of Fruit and Vegetable Crops

| Crops | California | | Oregon | | Washington | |
|---------------------------|--------------------------|----------------------------|--------------------------|----------------------------|--------------------------|----------------------------|
| | State rank in production | Percent of U.S. production | State rank in production | Percent of U.S. production | State rank in production | Percent of U.S. production |
| Fruits and berries | | | | | | |
| Apples | 5 | 7 | 8 | 2 | 1 | 39 |
| Apricots | 1 | 91 | • | • | 2 | 8 |
| Cherries (sweet) | 4 | 6 | 2 | 28 | 1 | 45 |
| Lemons | 1 | 82 | • | • | • | • |
| Grapes | 1 | 91 | • | • | 3 | 3 |
| Oranges | 2 | 31 | • | • | • | • |
| Peaches | 1 | 61 | • | • | 7 | 3 |
| Pears | 1 | 40 | 3 | 22 | 2 | 35 |
| Red raspberries | • | • | • | • | 1 | 53 |
| Strawberries | 1 | 77 | 3 | 6 | 6 | 1 |
| Vegetables | | | | | | |
| Asparagus | 1 | • | • | • | 2 | 35 |
| Broccoli | 1 | 97 | 3 | 3 | • | • |
| Carrots | 1 | 56 | 11 | 2 | • | • |
| Cauliflower | 1 | 79 | 3 | 6 | • | • |
| Celery | 1 | 72 | • | • | • | • |
| Lettuce | 1 | 72 | • | • | • | • |
| Onions | 1 | 29 | 2 | 14 | • | • |
| Tomatoes | 1 | 77 | • | • | • | • |

Note. Data are for 1986

• Unavailable

• Ranks first for processing carrots, with 26 percent of U.S. production.

Although about 82,000 farms in California produce over 250 commodities, most production is on large farms. These farms also account for the majority of hired farm labor. For example, the largest 200 vegetable farms account for about 80 percent of all vegetable farm jobs in the state. Because most of the fruit and vegetable farm jobs are seasonal, growers seek many workers for short-term employment, particularly for brief harvesting periods—typically lasting 3 to 10 weeks on a farm, depending on the crop and the task.

About 38,000 farms in Washington and about the same number in Oregon produce some 200 and 170 commodities, respectively. Most are family farms. In contrast to California, there are few large corporate enterprises. For Washington's major crops, harvest periods run from about 2-1/2 weeks (for cherries) to 10 weeks (for asparagus). For Oregon, harvest periods are from 3-1/2 or 4 weeks (for strawberries) to 6 weeks for hops and pears.

The Seasonal Work Force

The total number of seasonal workers in West Coast farm production may be about 1 million, but data are not available to determine the precise number. Nor are data available to determine the number of farm workers who are unauthorized aliens. Two national household surveys that include farm worker information are (1) the Decennial Census of Population and (2) the Hired Farm Working Force Survey (a biennial supplement to the December Current Population Survey).¹ These surveys, however, are limited in their ability to provide such data. For example, the Hired Farm Working Force Survey has (1) large error rates for multistate estimates due to small sample size and (2) a biased sample because the survey, conducted in December, misses farm workers who have left the country. Regarding the decennial census, because the questions on occupation are asked only for March, they miss the much larger number of farm workers who were employed in the busier agricultural months.

State Unemployment Insurance (UI) data for agriculture also have some limitations. For example, the California data do not distinguish between farm workers and those in other occupations on farms (such as clerks and mechanics), and there is some degree of nonreporting of workers for tax avoidance. The Washington and Oregon UI data suffer more serious

¹The Current Population Survey (CPS), a monthly survey of the U.S. population conducted by the Bureau of Census for the Bureau of Labor Statistics, is representative of the working-age, civilian, noninstitutional population of the United States. (The Hired Farm Working Force Survey was terminated with the December 1987 survey.)

limitations because they include only a minority of farm employers, as compared with California, where coverage is close to 100 percent. Nonetheless, the data provide some rough indication of seasonal employment. The total number of workers on California farms employed at some time in 1985 in temporary jobs (as indicated by earnings of less than \$12,500 in the year) was about 850,000.

About 54 percent of the 850,000 worked for very brief periods (earnings of less than \$1,000). The remainder, earning between \$1,000 and \$12,500, were on average employed for only about 20 weeks.

Estimates of how many farm workers were in the West Coast states illegally vary widely. For example, a statewide survey by the California Employment Development Department, interviewing a household sample of farm workers in August 1983, found 24 percent reporting that they were unauthorized aliens. Another 54 percent said they were immigrants with documents authorizing them to work in the United States. Only 22 percent said they were U.S. citizens. However, the survey did not request documentation of legality or try to verify legal status. Therefore, the estimate of 24-percent unauthorized aliens is likely low.

A report on workers who harvested the 1987 Oregon strawberry crop estimated that 44 percent were unauthorized aliens. In a 1987 survey of California farm employers, about 70 percent of the respondents reported having hired at least one unauthorized alien in 1986. However, for employers in crops with workers covered under IRCA's special farm worker legalization program (SAW program) the proportion was about 80 percent. Another California survey found that about 67 percent of the farm employers reported having unauthorized alien workers in 1987.

Need for Seasonal Farm Workers

Market forces and grower decisions affect the demand for seasonal farm labor. Among the major factors influencing demand are (1) the crop, (2) the availability of workers, (3) farm production practices, and (4) market demand and price and cost relationships. The following sections discuss these factors.

The Crop

How much and when labor is needed for seasonal work vary considerably by crop. For example, UI data show that in 1985, California grape growers employed about 88,000 workers on their farms during the peak September harvest period, but only about 50,000 in February. Most of the workers on grape farms were employed only briefly.

Significant variables in crop labor demand include:

- Degree of hand labor. The most labor-intensive major crops include strawberries, cherries, and asparagus. To harvest one acre, 200 hours of labor are needed for strawberries, 160 hours for cherries, and 150 hours for asparagus.
- Degree of crop perishability. Perishability affects the timing and duration of harvest. Crops that perish most quickly include asparagus and strawberries; less perishable are cherries, peaches, pears, carrots, and lettuce; and least perishable are citrus (which usually can stay on the trees for several weeks with little loss), apples, and potatoes.
- Time of year of harvest. There is some winter harvest in vegetables and citrus in Southern California; spring harvest in strawberries and vegetables in coastal areas and then inland in cherries and other early fruits; high activity in July and August in vegetables, melons, and summer citrus; and peak labor demand in September with grape picking and the Washington apple harvest. Some crops have multiple planting and picking periods (for example, lettuce and broccoli), enabling employment for longer periods.
- Need for preharvest labor. While most labor need generally is in the harvest period, some crops require extensive preharvest work as well. For example, half of the seasonal labor demand for clingstone peaches is for pruning and thinning.
- Intensity of harvest. Crops vary in the frequency and care of harvesting. Lettuce fields can be harvested four times, for example, although the yields from a third or fourth harvest are much smaller. Thus, a smaller amount of labor is needed over a longer period of time in comparison with, say, strawberries, where a large labor force is required for a relatively short time period.
- Weather. Weather conditions introduce some uncertainty as to timing and scale of harvest.

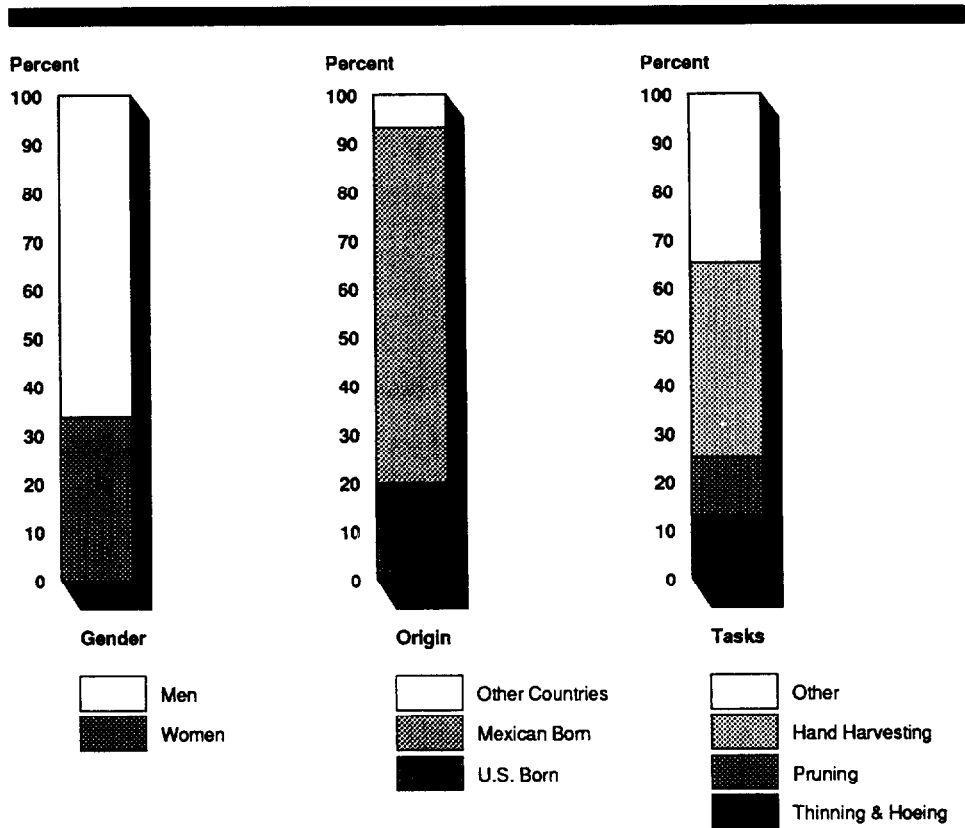
Availability of Workers

The availability of labor and its characteristics influence the amount and type of crops produced. Generally, West Coast seasonal farm workers are a foreign-born work force (mainly Mexican). Some of these come to the United States expressly to obtain such employment because of a preference for farm work, lack of other skills, or limited alternative opportunities and because even low U.S. wages are far higher than the wages in their home country. Thus, such workers are usually far more willing than U.S. workers to do arduous farm work under very poor working conditions at low wages. Further, their farm earnings are unlikely to be supplemented by substantial nonfarm work. In 1983, for

Appendix III
 Nature of West Coast Labor-
 Intensive Agriculture

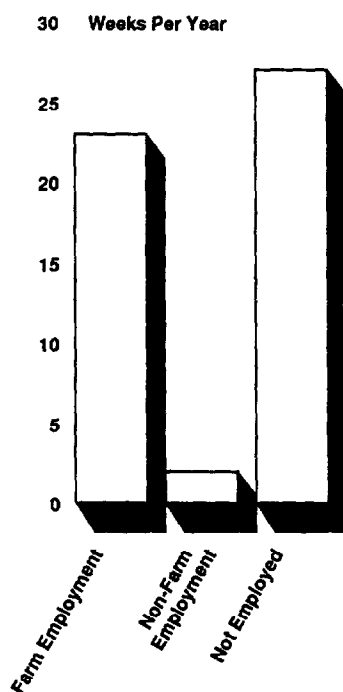
example, California seasonal farm workers were mostly male and Mexican-born and worked at a variety of tasks (see fig. III.1). Generally, they worked a partial year, mainly in agriculture, as figure III.2 shows.

Figure III.1: Distribution of California Seasonal Farm Workers by Gender, Origin, and Work Tasks (1983)



Source: California Employment Development Department, survey of farm worker household samples (Aug. 1983).

Figure III.2: Workyear of California
Seasonal Farm Workers (1983)



Source: California Employment Development Department, survey of farm worker household samples (Aug. 1983).

Recruitment of seasonal workers for California farms is largely decentralized and informal. According to Philip Martin, growers rely mainly on bilingual foremen or farm labor contractors (FLCs) to recruit and supervise workers. These intermediaries locate workers (often in Mexico); arrange for transportation, meals, and housing; determine piece rates; and oversee the work. Individual foremen and FLCs develop their own recruitment network and labor pool and tend to specialize in particular crops. They tend not to move the workers to other growers to obtain longer employment for them, although some FLCs migrate with their crew to crops that ripen later in other counties or states. Under this decentralized system, it is not uncommon for a foreman's or FLC's workers to be underutilized on a single crop or return to their home area while growers of other crops or in other areas are seeking more workers.

About 1,200 farm labor contractors are registered to do business in California. About 920 paid UI taxes in 1985. The UI data for them indicate that they employed over 300,000 workers, of whom about 80 percent

worked only brief periods, yielding less than \$1,000 in reported earnings.

Washington and Oregon growers are less dependent on FLCs. However, recruitment of workers also is predominantly decentralized and informal.

Farm Production Practices

The amount and type of farm labor needed is determined also by agricultural production methods. Changes can be made to reduce the need for labor.

- Mechanization leads to reduced labor needs for many crops, although its economic and technological feasibility varies by crop and task. Tomatoes for processing (e.g., canning) are a prime example of substitution of machines for hand labor. Peak harvest employment for such tomatoes in 1960 was 45,000 workers, who hand-picked 168,000 acres. Development of a mechanical harvester (and of a uniformly ripening tomato) curtailed the need for labor to the point that, in 1986, harvesting of over 40 percent more acreage required less than one-half the labor. In another instance, mechanization of wine grape harvesting has led to almost half of California's wine grape acreage now being machine-harvested. Tree shakers are used for certain fruits where some degree of damage to the fruits is acceptable. Products not amenable thus far to machine harvest include melons, citrus, strawberries, and most fresh-market vegetables.
- Mechanical aids may enable labor savings or use of alternative labor pools. For example, pneumatic citrus clippers have permitted more yield per worker, and field conveyor belts have enabled a wider range of workers to be utilized for melons and other crops.
- Improvements in planting and growing methods have increased average yields per worker. For example, more effective herbicides have reduced the need for thinning and hoeing labor. Advances in fertilizers, irrigation methods, and plant breeding have increased productivity, permitting the use of fewer workers to meet a given crop demand.
- Reducing the intensity or frequency of some tasks can reduce the need for labor with only marginal loss. Reduced preharvest weeding and thinning and reduced pickings of the same field or orchard permit production of the most economically worthwhile crop with fewer workers.

Market Demand and Price and Cost Relationships

The demand for farm workers is related to demand for commodities, which is affected by supply, import and domestic competition, substitutability of products, and changes in consumer preferences. Farmers take such factors into account in planning what and how much to grow.

**Appendix III
Nature of West Coast Labor-
Intensive Agriculture**

Market demand, price, and labor costs are all influential. Thus, a third or fourth (low-yield) picking of a lettuce field may not be undertaken if labor is in short supply or judged too costly in relation to the market price for lettuce.

Migrant Farm Worker Housing

Growers are concerned about the threat of a labor shortage, but one problem related to that threat could be eased if the supply of housing for domestic migrant farm workers was increased. The supply of adequate housing falls far short of demand. However, public financial assistance to some growers for housing repair and new construction is inadequate. Federal and state housing standards sometimes differ, and growers are expected to conform with the more stringent ones.

Supply of Housing for Migrant Farm Workers

The supply of adequate farm worker housing does not meet the demand for it. While available data may be imprecise, they indicate clearly, as shown in table IV.1, that the annual migrant work force and the annual migrant population (which includes migrant children) exceed the amount of available registered housing.

Table IV.1: Farm Worker Housing Overview

| State | No. of state camps | No. of registered private camps ^a | Total authorized housing capacity | Annual migrant work force | Annual migrant population ^b |
|------------|--------------------|--|-----------------------------------|---------------------------|--|
| California | 27 | 1,067 | 41,000 | 50,000–200,000 | |
| Oregon | 0 | 250 | 14,732 | 63,845 | 100,000 |
| Washington | 0 | 220 | 10,000 | 121,656 | 185,000 |

^aThe data include grower-provided housing.

^bUnavailable.

A major reason for the undersupply of adequate housing is the cost of construction. According to a study, The Dilemma of Farmworker Housing: An Issue of Statewide Concern in Oregon (1986), by the Oregon Bureau of Labor and Industries, construction costs, as provided by a representative of the Fruit Growers League of Jackson County, were \$1,700 to \$4,000 per occupant. One grower association consultant puts the cost of constructing barracks-type housing at \$35 to \$37 per square foot. As federal regulations require a minimum of 50 to 100 square feet per occupant (depending on the purpose of the room), this housing would cost at least \$1,750 to \$3,700 per occupant.

Operating and maintaining housing requires additional expense. The Oregon housing study cited estimates made by the Jackson County Fruit Growers League representative that operation costs were \$170-\$624 per occupant per season.

Because most migrant workers are employed for relatively short periods of time, it is not as economically feasible for farmers to make the necessary investments for housing as it would be if the workers were employed year-round.¹ Economic conditions within the agricultural industry, such as persistent farmer indebtedness and intense foreign competition, "indicate that growers are not in a position to increase their financial commitment to provide housing..." according to a recent report by the California Department of Housing and Community Development.²

Many rental housing units are unavailable to migrants, who may not be able to meet credit checks or provide landlord-requested deposits, the California report notes. Also, some landlords tend not to rent to migrants, who may double or triple up in single rooms in order to pay the rent or who cannot enter into long-term rental, leasing, or purchase contracts.

Another reason for limited farm worker housing in some areas is local opposition to proposed housing sites, through denials of building permits and local zoning ordinances. According to a Washington state official, county planning commissions who act on land zoning and the amount of housing that can be built may use formulas, weighing such factors as sewage disposal and soil usage, proximity to water, and noise levels, to limit housing density.

Because housing is in short supply, farm workers look for shelter wherever they can find it. According to the California housing report, migrants who cannot find housing may go homeless for extensive periods, living in fields, in cars, under bridges, and in other nonbuilding locations.

Financial Assistance Programs

Federal and state financial assistance programs for farm worker housing generally are inadequate to close the gap between housing supply and numbers of farm workers requiring housing.

¹A Department of Agriculture official suggests that improvement in migrant housing will occur once farmers think about such housing in the same way they think about other prices of capital items used in farms, such as harvesting equipment, which also are used only for short periods of time.

²State of California Department of Housing and Community Development, Migrant Farm Worker Housing in California (1988).

Two Farmers Home Administration (FmHA) programs provide financial aid for building or renovating farm worker housing, as well as for buying housing and building sites, purchasing basic furnishings, and developing water sewage disposal, heating, and lighting systems. One program, under Section 514 of the National Housing Act, provides loans for farmers, farm workers, farmer associations, nonprofit farm worker organizations, and broad-based public or private nonprofit organizations that are unable to obtain funds from private lenders on terms and conditions they can reasonably be expected to meet. The loans have a 1-percent mortgage rate on the unpaid principal and run for a maximum term of 33 years.

The other FmHA program specifically for farm worker housing, Section 516, provides for grants up to 90 percent of the housing developmental costs for new or rehabilitated housing. Grants are available for a state or political subdivision, a broad-based nonprofit organization, or a nonprofit farmer organization. However, it is questionable whether FmHA programs are adequately funded. According to the California housing report, a FmHA representative felt that the amount of funding for the nationwide FmHA program could be used in California alone. Funding levels for the two programs have been cut by two-thirds over the last decade, from \$68.7 million in 1979 to \$18.3 million in 1987.

Of the three West Coast states studied, only California has any state financing program for farm worker housing. Beyond funding its network of 27 camps or "migrant housing centers" (Oregon and Washington have no such centers), California has had two financial assistance programs:

1. The Farmworker Housing Grant Program provides funds for development costs of housing, including land acquisition payments, site improvement costs, and construction or rehabilitation costs. Grants also may be used for mortgage writedowns to reduce mortgage and rental payments for low-income homeowners and renters. The program aided about 300 families in fiscal year 1987 at a cost of \$2.5 million.
2. The Farm Labor Housing Rehabilitation Loan Program, discontinued in 1988, provided up to 50-percent matching loans with an interest rate up to a maximum of 7 percent to owners to upgrade farm worker housing. It was scaled to assist 450 farm workers at a cost of \$1.5 million annually, but during the less than 2 years of its existence (during 1986-

88), only three applications were made for loan funds (only one of which was deemed appropriate).³

In Oregon, no specific housing finance-assistance program exists. However, two other types of assistance programs are related to farm worker housing. The Oregon Rural Rehabilitation Program provided \$200,000 in May 1987 in the form of loans (for 8 years at 1-1/2-percent interest) to growers unable to find financing elsewhere. The other source of assistance is a Housing Development Account with a fund of \$150,000 set up in March 1988 to study the problems associated with inadequate housing and the obstacles that inhibit housing development, develop a technical assistance network to help builders through the administrative process, and establish an information and referral service on farm worker housing.

No finance-assistance program exists in Washington. A Farm Worker Housing Bill to aid housing development was killed in the state legislature this year and last.

Housing Standards

Federal Housing Standards Three federal acts dealing with farm worker housing are enforced by the Department of Labor.

1. Wagner-Peyser Act. Under this act, farm employers who use the Interstate/Intrastate Job Order Clearance System of the U.S. Employment Service must comply with Labor's Employment and Training Administration (ETA) regulations for minimal housing standards. Preoccupancy camp inspections are supposed to be conducted, and occupancy inspections may be conducted on an unannounced basis. Federal inspections take place on a small scale. Due to Labor's limited resources and its deferring to state agencies that have similar housing standards, only 22 Labor housing inspections occurred in 1984 for the region encompassing Oregon, Washington, and Idaho.

2. Occupational Safety and Health Act of 1970 (OSHA). Housing completed after April 2, 1980, generally is subject to OSHA standards.

³Of the three applications, one was considered inappropriate because it was for a project that had been completed a year before the program began and another because it was for the construction of multifamily rental units, not farm labor housing units.

Employers supplying housing that was under construction before April 3, 1980, contracted for prior to March 4, 1980, or completed before April 3, 1980, may continue to apply ETA standards if the housing was constructed in accordance with ETA standards.

3. Migrant and Seasonal Agricultural Worker Protection Act of 1983. This act mandates a preoccupancy inspection by appropriate government authorities such as the Employment Standards Administration and the posting of the inspection certificate at the farm worker camp. While ESA has no housing quality standards of its own, it requires growers to meet applicable OSHA, ETA, and state regulations. Because OSHA and ETA standards are similar, OSHA inspectors also look for ETA violations.

Farmers who wish to obtain H-2A certification must supply housing free of charge for nonlocal workers. If it is employer-provided housing (owned or leased by the owner for farm worker housing), it must comply with either OSHA or ETA standards, depending on when it was built. If other accommodations for housing are made, in rental housing or public accommodations, the housing must meet local or state standards (which may not require a preoccupancy inspection), rather than Labor standards (which do require it).

Some persons argue that certain OSHA standards may be so stringent as to deny the use of housing that is generally acceptable. For example, according to a growers' association official, the OSHA regulation that mandates two exits from each room effectively prohibits the use of older or little used motels, which usually have one exit only. According to a Washington State official, another example is the OSHA regulation that mandates a 7-foot high ceiling, which effectively prohibits some standard mobile homes with a ceiling height of 6 feet 8 inches.

State Housing Standards

In Washington, two sets of state standards affect farm worker housing:

1. The state Board of Health Standards for Labor Camps is enforced by the Department of Social and Health Services and addresses health and sanitation conditions of labor camps. The Department of Social and Health Services is responsible for an annual preoccupancy inspection and certification of housing. Washington county health departments act as administrative agents in enforcing the state health standards.

2. The other set of state standards, which are administered by the Department of Labor and Industries, are identical to the federal OSHA regulations.

In California, the Department of Housing and Community Development addresses the quality of farm worker housing in administering title 25 of the California Administrative Code and the California Health and Safety Code. County health departments, whose enforcement staff receive training, certification, and supervision from state officials, are relied on to enforce the state standards.

In Oregon, the Accident Prevention Division of the Workers Compensation Department administers the Farm Labor Camp Regulations.

Differences Between Federal and State Standards

According to Labor and Washington state staff, it is rare for standards to differ so significantly that it is not possible to comply with both sets of requirements. However, the federal and state standards may differ in stringency. When this occurs, growers are expected to comply with the more stringent requirements.

In Oregon, the Farm Labor Camp Regulations are similar to federal regulations. In fact, Labor has deferred much of its OSHA-inspection responsibility to the state level because it is satisfied that the state standards provide adequate worker protection. Still, some differences exist: one example is the square-footage-per-person requirement, which is more stringent under OSHA than under the state standards.

In Washington, state regulations recently were amended so as not to conflict with those at the federal level, but some differences in stringency remain. In California, state regulations are also similar to federal regulations. As a result, OSHA regulations are enforced by the California Department of Housing and Community Development, and its officials and Labor's often take part in joint housing inspections.

Housing Conditions

Farm worker housing is quite diverse. One Washington study found that housing facilities included cabins, houses, apartments, converted motels, trailers, and camp sites, ranging in size from 1 to 139 units. The housing sites are often deficient in some respect, however. For example, the Oregon State Accident Prevention Division in 1985 inspected 115 labor camps and found 1,179 violations, 130 of which were classified as serious. Of the labor camps inspected, 90 percent failed to comply with

some camp regulations, and 38 percent were so deficient as to be regarded as "uninhabitable." In some cases, farm workers are housed in areas not intended for residential use, including sheds, garages, and barns. Another characteristic of poor housing is overcrowding. According to the Office of Rural and Farm worker Housing in central Washington, for example, surveys of six communities in the Yakima Valley found that 60 percent of all seasonal farm worker families were living in overcrowded conditions.¹

Mobile Housing as an Alternative

The mobile homes used to house farm workers vary greatly. They include production-line mobile homes adapted to single-adult and mixed-adult crews, standard 48-foot trailers customized and mass-produced to house up to 18 people or three families, and adapted pickup trucks.

Mobile homes have several reported advantages over permanent housing. They (1) are less expensive; (2) offer greater flexibility (including availability of leasing for limited periods), which is better suited to the seasonal nature of the work force; and (3) are better suited to rural areas that lack basic services, as they can be largely self-sufficient, with their own water, electrical, and sewage systems. However, mobile home sites may need to meet code requirements for such developments, including grading and electricity, water, and sewage systems provision, which may cost \$1,800-\$3,000 per unit.

While mobile housing holds some promise, it also faces certain problems:

1. It is expensive for mass use. This is true, according to a grower association official, even though at \$20-28 per square foot (which translates into \$1,000 to \$2,800 per occupant, based on minimum footage requirements and room purpose) it generally is cheaper than permanent housing.
2. Long-term maintenance is relatively more difficult for mobile homes than for permanent housing, as mobile home construction is somewhat less sturdy.
3. Housing regulations would have to be relaxed in order for certain types of mobile homes to be approved. For example, the custom 48-foot trailers do not meet the OSHA minimum footage requirement of 100

¹According to a representative from this office, housing units are classified as overcrowded if there is more than one person for each room (not including bathrooms, hallways, closets, and utility rooms).

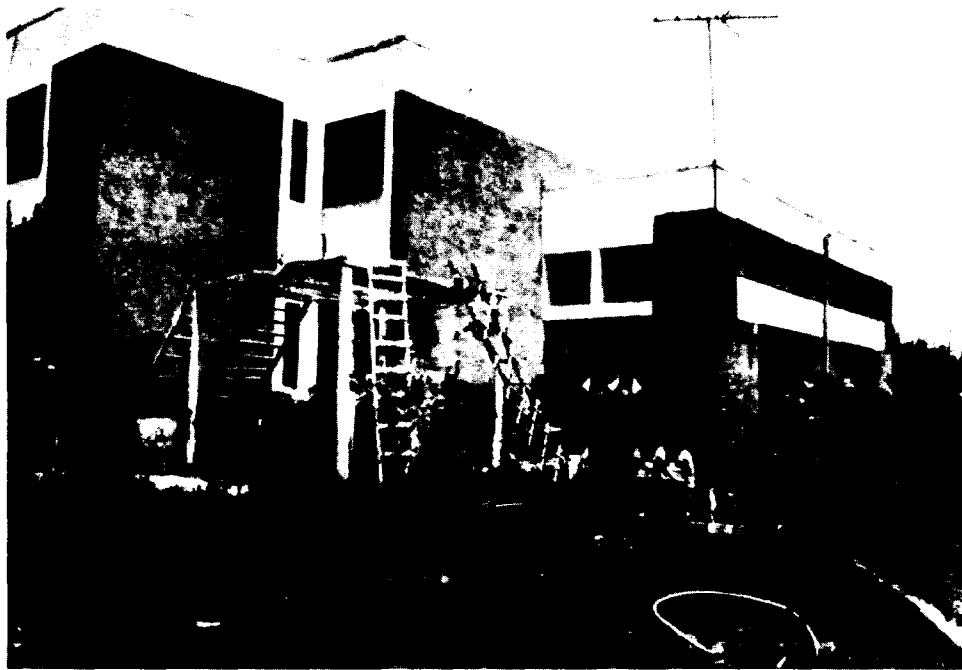
square feet per occupant in rooms for cooking, living, and sleeping purposes or 50 square feet per occupant in rooms for sleeping purposes only. Such mobile housing has a total of 408 square feet. Assuming a maximum capacity of 18 occupants, the minimum required square footage would be 900 square feet if the trailers were used for sleeping purposes only. Thus, these trailers fall well short of the footage requirement if they are used at full capacity.

4. Problems in obtaining the proper zoning approval for mobile housing sites arise if local opposition exists.

Model Housing

Although much farm worker housing fails to comply with all applicable housing quality regulations, some model housing does exist (see fig. IV.1). These housing units boast amenities similar to those of regular market housing. According to the Oregon housing report, such amenities include complete indoor plumbing, recreation areas for children, parking spaces for tenants, adequate heating sources, and properly functioning appliances.

Figure IV.1: Model Migrant Housing



Award-winning houses for migrant farm workers in central California.
Source: National Housing Task Force.

Appendix IV
Migrant Farm Worker Housing



A FmHA-financed project in Nyssa, Oregon.
Source: Oregon Bureau of Labor and Industries.

Characteristics of Farm Employment in 14 Counties Reviewed by GAO

This review of each of the 14 counties covered by our study illustrates the diversity in county and farm size, crop specialization, peak farm employment, and composition of the seasonal work force.

The data source for county size and county population is the 1988 County and City Data Book of the U.S. Bureau of the Census and, for information on farm acreage and number of farms, the 1982 Census of Agriculture. The county data refer to 1986 and the farm data to 1982. The remaining data are estimates provided by the responding organizations in the counties surveyed. There were wide variations in responses across organizations within some counties, suggesting a lack of information on farm employment.

Fresno County, California

| | |
|--------------------------|--|
| Size | Nearly 6,000 square miles. |
| Location | Inland in central California. |
| Population (1986) | 588,000. |
| Number of Farms (1982) | Nearly 7,400. |
| Average Farm Size (1982) | 280 acres (63 percent of the farms under 50 acres and 8 percent over 500). |
| Discussion | Fresno is the largest agricultural county in the state in terms of crop dollar value. Its major labor-intensive crops are grapes (table grapes, wine grapes, and raisins) and deciduous tree fruits (such as plums and peaches). At peak harvest season in 1987, about 24,000 workers were estimated to be employed in grapes and 9,000-11,000 in deciduous tree fruits, according to staff of two of the county organizations. Among the other five respondents, one had substantially lower estimates, one had a |

far higher estimate for raisins alone, and the others did not provide any figures. A majority of the total seasonal work force was reported to be unauthorized, according to the two persons answering the question.

One respondent pointed out that growers often are not the employers. A common practice is for the growers (or corporations) in the county to hire farm labor contractors, who recruit, direct, and pay the work force. The farm labor contractors in turn hire foremen, who hire the workers, or hire "dayhaulers," who hire the workers.

There were extreme differences in impressions among the respondents as to the composition of the seasonal work force. For example, responses on the proportion who were migrant workers varied from 9 to 100 percent. One respondent noted that an increase of migrant farm workers was occurring in the area, probably because of California's \$.90-an-hour increase in the minimum wage (to \$4.25 an hour in July 1988).

Commenting on the potential for obtaining new sources of farm labor in the event of an IRCA-caused shortage, one respondent asserted that most workers outside agriculture will not do harvest work in preference to what they are doing now. Students are available only when classes are not in session, the respondent pointed out, but most of the grape harvest takes place after school starts in the fall. Finally, "most local farm workers are already employed if they want to work during harvest time."

Monterey County, California

| | |
|------|---------------------|
| Size | 3,300 square miles. |
|------|---------------------|

| | |
|----------|--|
| Location | On California coast between San Francisco and Los Angeles. |
|----------|--|

| | |
|-------------------|----------|
| Population (1986) | 340,000. |
|-------------------|----------|

| | |
|------------------------|---------------|
| Number of Farms (1982) | Nearly 1,350. |
|------------------------|---------------|

Average Farm Size (1982) Almost 1,000 acres (44 percent of the farms under 50 acres and 27 percent over 500).

Discussion More than 35 crops are grown in Monterey County for commercial use. Monterey's chief labor-intensive crops are lettuce, strawberries, and broccoli, with over 5,000 workers estimated as employed at peak harvest season in 1987 in lettuce, close to 7,000 in strawberries, and close to 2,000 in broccoli. Most of the county's seasonal farm labor force consists of local workers, but an appreciable proportion (about 20 to 40 percent, according to three estimates) are migrants. (The other two responses were 10 and 15 percent migrants.) Most of the seasonal workers were believed to be unauthorized.

There has been some change from direct hiring to reliance on farm labor contractors in the county, one respondent commented, so that the contractors will be responsible for the "paperwork" showing that only legal workers are employed. Also, a few more growers might use the Employment Service in 1989 because of the advantage of getting legal workers. This respondent also noted a slow but steady change to more mechanized harvesting, adding that the change cannot be made very quickly because capital costs of equipment are high. Regarding 1988, labor is plentiful and relatively cheap, he said, and labor costs not as much of a concern as 3 or 4 years ago.

A respondent pointed out that because of high agricultural wages paid to farm workers in the county, "... shortages, if any, will last for as long as it takes farm workers from other counties and states to [get to] the agri[culture]-shortage sites."

Ventura County, California

Size 1,860 square miles.

Location Along the California coast northwest of Los Angeles.

Appendix V
Characteristics of Farm Employment in 14
Counties Reviewed by GAO

| | |
|--------------------------|--|
| Population (1986) | 611,000. |
| Number of Farms (1982) | 2,064. |
| Average Farm Size (1982) | 146 acres (70 percent of the farms under 50 acres and 6 percent over 500). |

Discussion

Strawberries, lemons, and celery are among Ventura County's major labor-intensive crops. One respondent estimated that 9,500 farm workers were employed in these crops at the peak of the 1987 harvest season, while the other estimated 12,000. About 70 percent of all seasonal farm workers in the county were unauthorized, according to the one person who answered the question.

The two respondents varied in their perceptions of the makeup of the seasonal farm work force, but each reported that the majority consists of local farm workers. (One respondent estimated 90 percent and the other, about 60 percent.)

The long harvest season for the major labor-intensive crops in Ventura County, running from November through June, "has generated a fairly stable local work force," one respondent observed. If there were an IRCA-induced labor shortage, he noted, local students would not be available (because of time of need), but a limited number of local unemployed persons perhaps would do seasonal farm work. The respondent concluded that "migrant workers . . . whose normal work pattern does not fall at the time of peak needs in this county might be the answer," but he also cited the lack of available housing for the migrant workers as a problem.

This respondent noted, too, that with the possible exception of citrus, the crops in the county have not yet lent themselves to mechanization: "The research has not been developed as yet, and this would take time."

Imperial County, California

| | |
|--------------------------|---|
| Size | 4,200 square miles. |
| Location | Along the Mexican border. |
| Population (1986) | 107,000. |
| Number of Farms (1982) | Nearly 800. |
| Average Farm Size (1982) | About 700 acres. (The farms were almost evenly distributed among those with less than 50 acres, between 50 and 500 acres, and more than 500 acres.) |
| Discussion | <p>Lettuce, cantaloupes, onions, broccoli, and cauliflower are Imperial County's leading labor-intensive crops. About 3,700 farm workers were employed in lettuce and cantaloupes at the peak of the 1987 harvest season, according to the one person who gave estimates. This respondent also reported that there were 7,250 farm workers in the county in 1987, of whom over 90 percent were seasonal workers. Only about 20 percent of the seasonal workers were estimated to be unauthorized. (Many of the legal farm workers are Mexicans authorized to commute across the border.)</p> <p>One respondent commented: "We do not expect any labor shortages as we have a town with 1,000,000 people on our border that supplies us with field labor." Another said, "Imperial County has not experienced any type of labor shortage due to implementation of the IRCA program."</p> |

Yolo County, California

Size 1,000 square miles.

Location Northwest of Sacramento County.

Population (1986) 126,000.

Number of Farms (1982) 970.

Average Farm Size (1982) About 560 acres (46 percent of the farms under 50 acres, 22 percent over 500 acres).

Discussion Tomatoes, sugar beets, and apricots are among Yolo County's largest labor-intensive crops.

According to one respondent, there were 5,600 farm workers in the county in 1987, of whom 3,700 were seasonal workers. Unauthorized workers made up an estimated 70 percent of the seasonal work force. (The other respondent gave no estimates.)

Local workers probably would not be able to compensate for an IRCA-caused labor shortage, both respondents thought. Most local workers will not take harvesting jobs, one commented. He suggested that growers go out of the fruit business and replant with less labor-intensive crops, adding that "this area will continue to lose fresh fruit acreage that demand large seasonal labor forces."

Sacramento County, California

| | |
|--------------------------|--|
| Size | 970 square miles. |
| Location | Surrounding the city of Sacramento in north-central California. |
| Population (1986) | 915,000. |
| Number of Farms (1982) | About 1,850. |
| Average Farm Size (1982) | About 230 acres (68 percent of the farms under 50 acres; 10 percent over 500). |
| Discussion | <p>Sacramento County's chief labor-intensive crop is pears, the county's one respondent reported, and there were an estimated 4,500 farm workers in the county in 1987. About 2,600 were seasonal workers, of whom an estimated 60 percent were unauthorized.</p> <p>Migrants make up about 45 percent of the county's seasonal farm work force. Persons residing outside the county but within commuting distance make up another 20 percent. If there were an IRCA-induced shortage, the respondent reported, local students, local unemployed persons, and other residents "if heavily recruited, could fill some of the void."</p> |

Washington County, Oregon

| | |
|------|-------------------|
| Size | 725 square miles. |
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Appendix V
Characteristics of Farm Employment in 14
Counties Reviewed by GAO

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| Location | Borders Multnomah County on the west. |
| Population (1986) | 271,000. |
| Number of Farms (1982) | Over 1,900. |
| Average Farm Size (1982) | 79 acres (69 percent of the farms less than 50 acres, 3 percent over 500 acres). |
| Discussion | <p>The largest crop grown in Washington County is strawberries, with some 10,000 farm workers employed at peak harvest season in 1987. Caneberries and cucumbers also are important crops. About 3,500 workers were employed in these crops in 1987's peak harvest season, respondents estimate.</p> <p>Washington County draws heavily on an unauthorized work force for its seasonal farm needs. Estimates of the proportion of seasonal workers in 1987 who were unauthorized ranged from 55 to over 90 percent.</p> <p>About three-fourths of the farm work force during harvesting consists of migrant workers. Local farm workers represent less than 10 percent of the seasonal work force. The remainder are persons residing outside the county but within commuting distance and local residents, primarily students. Three respondents reported that local residents will not work in the fields in any numbers and, therefore, probably could not meet an IRCA-caused labor shortage.</p> <p>One of the respondents commented, "We will see the demise of the strawberry industry It used to be that strawberry production was controlled primarily by supply and demand within the markets. It's very likely that beginning in 1989 strawberry production will be controlled by the number of migrant pickers available."</p> |

Marion County, Oregon

| | |
|--------------------------|---|
| Size | 1,200 square miles. |
| Location | Northwestern Oregon. (The Cascade Mountains dominate the eastern portion; the state capital of Salem is on its western border.) |
| Population (1986) | 215,000. |
| Number of Farms (1982) | Over 2,800. |
| Average Farm Size (1982) | 110 acres (64 percent of farms under 50 acres, 5 percent over 500). |
| Discussion | <p>Marion County's chief crop is strawberries, with about 5,800 persons employed at 1987's peak harvest season, according to one respondent, and over double that number, according to another. Boysenberries and cherries also are important crops, as are caneberries and cucumbers. About 47 percent of all the seasonal farm workers in 1987 were estimated to be unauthorized, according to the one person answering the question.</p> <p>About 70 or 80 percent of the county's seasonal labor force consists of migrants, and about 10 percent are local farm workers. The remainder are local students, local unemployed persons, and residents from outside the county who are within commuting distance. Two of the three respondents report that these groups probably could not compensate for an IRCA-caused labor shortage. In response to a question asking what action growers could take to compensate for such a shortage, a respondent said "reduce acreage or use unauthorized aliens."</p> |

Multnomah County, Oregon

| | |
|--------------------------|---|
| Size | 431 square miles (smallest Oregon county in land area). |
| Location | Bounded by Hood River County on the east and Washington County on the west (includes Portland, the state's largest city). |
| Population (1986) | 567,000. |
| Number of Farms (1982) | 610. |
| Average Farm Size (1982) | 58 acres (over three-fourths of the farms less than 50 acres, 2 percent over 500 acres). |
| Discussion | <p>Among Multnomah County's chief labor-intensive crops are strawberries and raspberries; about 5,000 persons worked in these crops at the peak of the 1987 harvest season.</p> <p>About 80 percent of the county's seasonal workers are unauthorized, according to one respondent, and about 70 percent are migrant workers. Other respondents had different perceptions of the makeup of the seasonal labor force, with estimates of the proportion of migrants ranging from 30 to 90 percent.</p> <p>A respondent remarked, "Harvesting small fruit crops is not attractive to Americans residing in the area . . . [Local workers] cannot . . . compensate for the loss in labor which growers will suffer due to IRCA"</p> |

Jackson County, Oregon

Size 2,800 square miles.

Location Along California border in southwestern Oregon.

Population (1986) 140,000.

Number of Farms (1982) About 1,630.

Average Farm Size (1982) 185 acres (66 percent of the farms less than 50 acres, 5 percent over 500 acres).

Discussion Jackson County's major crop is pears, with 1,500 farm workers employed in that crop at peak harvest season in 1987, according to one respondent, and 1,300 according to the other. Peaches and apples also are important crops. As to the proportion of the seasonal labor force in the county who were unauthorized workers, the one person who replied to the question estimated 60 percent.

Jackson County relies heavily on migrant workers (estimates were 75 and 80 percent). The respondents reported that neither local residents, such as farm workers, students, and unemployed persons, nor residents from outside the county but within commuting distance are likely to be able to meet farm labor needs in the event of an IRCA-caused labor shortage.

Some growers (about one-third, according to one respondent) will be offering benefits to attract workers in 1989. These include increasing wages, providing end-of-season bonuses, and building new or additional housing.

Hood River County, Oregon

| | |
|--------------------------|--|
| Size | 521 square miles. |
| Location | Mostly in Cascade Mountains. |
| Population (1986) | 16,200. |
| Number of Farms (1982) | 546. |
| Average Farm Size (1982) | 49 acres (69 percent of farms less than 50 acres). |

Discussion

At 1987 peak season, over 1,600 persons were estimated to farm pears and apples, Hood River's major labor-intensive crops. According to four of the five respondents, about four-fifths or more of the county's farm work force during harvest season consists of migrant workers. Many of the seasonal workers were unauthorized aliens; respondents' estimates range from 42 to 86 percent.

A few of the growers (about 10 percent or fewer) provided or planned to provide new or additional housing to attract workers. It may be that others already have adequate housing available, based on the following comments from two respondents: One noted, "Historically, we have had good employer-employee relations. This along with adequate housing is what we will use to recruit SAW legal workers for the short term." Another said, "In our area we have quite good housing. We will be promoting this along with good working conditions in order to get SAW legal workers in 1988 and 1989."

Yakima County, Washington

| | |
|--------------------------|--|
| Size | 4,300 square miles. |
| Location | Eastern border of Cascade Mountains in south-central Washington. |
| Population (1986) | 183,200. |
| Number of Farms (1982) | Nearly 4,600. |
| Average Farm Size (1982) | 374 acres (most farms under 50 acres, 4 percent over 500). |
| Discussion | <p>Apples, cherries, asparagus, and hops are Yakima County's major labor-intensive crops, with roughly 30,000-40,000 workers employed at peak harvest season. According to one respondent, about 80 percent of seasonal workers in Yakima in 1987 were unauthorized. (None of the other six responses included an estimate.)</p> <p>In their estimates of the makeup of the seasonal farm work force, respondents varied. For example, responses ranged from 35 to 66 percent as to the proportion of migrant workers in the county. However, five of the seven respondents agreed that local students, farm workers, and the unemployed in the area probably would be inadequate to provide the harvest workers needed in the county in the event of an IRCA-induced shortage. One respondent noted that peak periods of labor need and the availability of labor "don't always coincide. Labor shortages usually occur during peak fruit harvesting periods and usually require large numbers [of harvest workers] that are not available locally." The respondent who felt the number of workers was adequate commented that the lack of decent wages, benefits, and working conditions "causes resident workers to avoid farm work. . . . Just about 10 years ago most of the fruit in Washington was picked by . . . Anglo farm workers. These workers were driven out of agriculture because of a deterioration of</p> |

wages and working conditions caused by a huge surplus of unauthorized workers.”

A respondent noted that Yakima’s “growers have planted trees which will be in the ground for 30 to 50 years. They have invested large economic sums in getting them into the commercial production of fruit. You cannot remove an apple orchard simply out of a fear that there may not be adequate harvest labor in 1989.” He also noted that tree fruit cannot be harvested by machine.

The respondent also commented: “While growers can improve certain aspects of their labor recruitment to compensate for any shortage of workers caused by IRCA, this power is limited by the operation of economics. Our growers are not protected from foreign competition.”

Chelan County, Washington

| | |
|--------------------------|--|
| Size | 2,900 square miles. |
| Location | Mainly in Cascade Mountains. |
| Population (1986) | 50,000. |
| Number of Farms (1982) | 1,350. |
| Average Farm Size (1982) | 100 acres (nearly three-fourths of farms under 50 acres, 2 percent over 500 acres). |
| Discussion | Chelan County’s major labor-intensive crops are apples, pears, and cherries. Estimates of the number of farm workers employed at peak harvest season in 1987 in these crops ranged from 17,000 to 60,000. Estimates of the proportion of migrant workers in the county’s seasonal work |

force ranged from 35 to 70 percent. About 60 percent of all seasonal farm workers in the county were estimated to be unauthorized, according to the one person who answered the question.

Two of the four respondents did not believe there are enough local residents to meet an IRCA-caused labor shortage. One of the respondents who disagreed pointed out that the extent to which these workers can be used as replacements depends on such factors as increased wages, improved working conditions, and improved housing.

The county's growers seem to be turning more to the Employment Service to obtain labor. The Employment Service received 1,500 job orders from growers in 1986 and double that number in 1987.

Skagit County, Washington

| | |
|------|---------------------|
| Size | 1,735 square miles. |
|------|---------------------|

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|----------|--|
| Location | Casade Mountains on the east to the coast on its west. |
|----------|--|

| | |
|-------------------|---------|
| Population (1986) | 70,000. |
|-------------------|---------|

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|------------------------|-------------|
| Number of Farms (1982) | Nearly 900. |
|------------------------|-------------|

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|--------------------------|--|
| Average Farm Size (1982) | 122 acres (over one-half of farms less than 50 acres, 4 percent over 500). |
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| Discussion | Strawberries, raspberries, and cucumbers are Skagit County's three major labor-intensive crops. |
|------------|---|

The two respondents had minor differences in their perceptions of the makeup of the county's seasonal farm work force. According to one,

Appendix V
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40 percent of the seasonal farm labor force is made up of local workers, 20 percent consists of residents from outside the county who are within commuting distance, and 40 percent are migrants. The other respondent reported up to 50 percent local workers, 2 to 10 percent commuters, and 40 to 50 percent migrants.

List of Consultants

The experts we consulted were:

- Vernon Briggs, Professor of Labor Economics, Cornell University
- Bruce Gardner, Professor of Agricultural and Resource Economics, Department of Agricultural and Resource Economics, University of Maryland
- Enrique E. Figueroa, Assistant Professor of Agricultural Economics, Department of Agricultural Economics, Cornell University
- James S. Holt, Agricultural Economist, Holt, Miller, and Associates
- Ray Marshall, Professor, University of Texas, Austin, and former Secretary of Labor
- Philip Martin, Professor of Agricultural Economics, University of California, Davis
- Demetrios G. Papademetriou, Executive Director, Population Associates International
- Leo C. Polopolus, Professor of Food and Resource Economics, Institute of Food and Agricultural Sciences, University of Florida
- Howard R. Rosenberg, Extension Specialist, Agricultural Labor Management, Department of Agricultural and Resource Economics, University of California, Berkeley
- Ernst W. Stromsdorfer, Professor of Economics, Washington State University

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Related GAO Products

The H-2A Program: Protections for U.S. Farmworkers (GAO/PEMD-89-3, Oct. 1988).

Immigration Reform: Status of Implementing Employer Sanctions After One Year (GAO/GGD-88-14, Nov. 1987).

Immigration Reform: Status of Implementing Employer Sanctions After Second Year (GAO/GGD-89-16, Nov. 1988).

Immigration Reform: Status of Employer Sanctions After Second Year and Plans for Third Year (GAO/T-GGD-89-24, May 17, 1989).