For the US, labor is the agricultural sector’s third largest production expense (considering all cash and non-cash expenses, such as capital depreciation), trailing only feed and capital depreciation. For 2008, wages paid to hired farm workers are forecast to be $27.3 billion, and after declining for decades, labor’s share of US farm expenses began increasing in the mid-1980s and has continued to increase through the current period. Moreover, given the reliance on newly arrived immigrants to replenish the supply of such workers, immigration policy has always been one of the greatest policy influences on this sector. This fact sheet briefly describes the farm employment trends of Colorado in the context of national trends to show possible motivations behind recent policy measures in the state.

Growers who specialize in vegetable, fruit, tree nut, or horticultural production, for whom labor costs total 30-40 percent of cash expenses, are especially sensitive to fluctuations in the cost and availability of labor, and are among the largest employers of hired workers. In recent years, the growth in labor intensive agricultural enterprises has increased farm labor demand making employment dynamics and policies within this industry more relevant than ever.

Total agricultural labor expenditures for the US in 2007 totaled $21.9 billion. In January 2009, US farms and ranches had 785,000 hired workers, up 2% from the previous year. Wages paid to hired workers also increased by $0.12 per hour to $10.93. Number of hours worked averaged 38.3 hours per week. However, even with this growth in earnings and payroll, producers are impacted by the instability related to the numbers of workers available in an environment marked by uncertainty with respect to economic conditions and immigration enforcement.

Because producers within the specialty crop sector are the largest employers of hired workers, shortages of labor commonly impact their ability to produce and harvest specialty crops. For Colorado, the significance of labor is of even greater interest because labor market demand has increased at a rate greater than the national average in recent years. Figure 1 illustrates Colorado’s rapidly expanding expenditures in recent years.
Agricultural Labor in Colorado

In recent years, growth in farm related employment in Colorado exceeds the national average. In 2007, Colorado’s total labor expenditures totaled over $390 million. The expansion in employment is primarily fueled by the increase in fruits and vegetable sectors that are better suited to Western climates and also may relate to the significant increases in direct sales over the past decade (since many farmers market and roadside stand products are labor intensive).

Colorado is the dominant employer within the Mountain II region. We estimate that, in 2007, Colorado’s share of labor expenditures was about 65% of the total region. Based on hourly wage rates in 2009 we can also see that Colorado agricultural workers are earning higher wages than other workers within the Mountain II region. In 2009, Colorado’s wage rates had increased almost $0.50 more than the average increase reported for the Mountain II region from the previous year.

In Figure 2, we see labor trends over a longer course of history. Note that the increase in average hours worked in July fluctuates more in Colorado than in other regions in the US. This is significant to understand labor shortages in terms of the growing season when there is a drastic increase in demand or shortfall in supplies when employment is available. Workforce programs or well-crafted immigration policy may serve to fill labor shortages when the flexibility of the workforce required during peak harvest time is crucial.

Colorado’s Green Industry: Another Significant Employment Driver

The expansion of the ornamental horticulture sector makes the green industry one of the fastest growing segments and employers in agriculture. The role of Colorado’s green industry becomes increasingly important as we evaluate its position relative to traditional food crop agriculture, competition for land, water, and labor, and the type of labor and employment necessary. Among US ornamental production firms (numbering 19,878), over $3.5 billion is paid to 376,194 workers. Of this, the Mountain West represents $400 million (11% of the US), and 55,000 workers (or 15% of US total).

The region reported over 55,000 green industry production jobs, which grows significantly if allied...
service, wholesaling and retailing sectors are added. For the allied green industries, 54% of the 62% value added goes to employee compensation, reflecting the labor intensity of the green industry. In 2006, payroll totaled $1.235 billion (an increase of over $84 million). Figure 3 shows how revenue, payroll and workforce contribute to the economic impact of Colorado’s green industry.

As the demand for labor increasingly becomes a concern for growers in a broad sector of industries, agricultural employers are changing their attitudes about current agricultural workforce programs and broader immigration policy. The Hispanic workforce in a sizable majority of hired farm workers and immigration policy changes could significantly impact the potential supply of workers. Alternatively, there are proposals for new programs that would allow migrant workers to fill labor shortages in order to allow for better labor planning and maintenance of current production levels, or even growth. Others believe that farm, green industry, and agribusiness earnings growth is a market driven solution to fuel resident Hispanic and other worker in-migration to the western states.

A Policy and Program Response to Labor Market Uncertainty

International migrants are economic contributors to Colorado agriculture. Recently, however, Colorado farms have reported worker shortages as the above trends might suggest, indicating issues for agriculture related labor in the state. In 2006, for example, estimated potential losses because of labor shortages totaled $59.9 million.

Federal H-2A visas allow temporary or seasonal entry and employment of foreign workers in U.S. agriculture. Currently, more than 9,000 migrant farm workers are estimated to be employed in Colorado, and only a fraction of them have H-2A visas. The estimated share of the work force with questionable documentation totals 50 to 75 percent. Anecdotal evidence suggests that problems with the federal H-2A program may contribute to this statistic. Employers gain approval to hire approximately 45,000 seasonal guest workers per year via the H-2A program. Even though H-2A workers account for only a small percentage (less than 2 percent) of the total U.S. farm worker population, the H2-A workforce has more than doubled in size in the last decade (DOL, 2002).
Total nonimmigrant admissions (1-94) to Colorado, as reported by the Department of Homeland Security and which include H-2A workers, were:

- 302,882 (1 percent of U.S. totals) in 2004
- 322,198 (1 percent) in 2005
- 355,991 (1.1 percent) in 2006

In fiscal year 2007, H-2A approved applications for all but 28 of 1,953 workers requested by 237 Colorado employers. However, H-2A requests were handled too slowly according to some. Bruce Talbott of Talbott Farms, for example, described the H-2A program as “a very expensive, bureaucratic and cumbersome process.” He reports paying $2,400 each year just to apply and $300 per worker for visas and security certification. For 35 H-2A workers, he paid $160 for round-trip transportation and a higher hourly wage: $8.64 an hour in Colorado whereas he used to pay just over $7 an hour. Other employers have reported similar experiences.

Statistics and anecdotal evidence have led to a novel public policy initiative, Colorado HB 1325.

**Legislative Background**

Among the 15 bills that Governor Ritter signed on June 5, 2008 was one to create a pilot program to expedite H-2A visas for Mexican migrant farm workers to come to Colorado. Originally House Bill 1325, a bipartisan bill sponsored by Representative Marsha Looper (R-Calhan), the bill is a response to seasonal worker shortages reported by Colorado farms and essentially mirrors the federal H2-A program.

Specifically, the program aims to help farmers and ranchers use the federal H-2A visa program. Under the bill's provisions, Colorado will hire recruiters in Mexico to attract 1,000 workers in 2009 and 4,000 more in the four years after that. These recruiters or agents will help potential workers with paperwork and coordinate medical screenings. Since H-2A applications are

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2 The U.S. Department of Homeland Security has proposed the continued streamlining of the program including the use of recruiters at the federal level. However, this has not yet been implemented.
complicated and time-consuming, a goal of HB 1325 is to process visas in less than 60 days, compared to the current average of 168 days. This should persuade the use of legal workers as opposed to illegal ones. Visas will last up to 10 months, and farmers will pay for workers’ travel, housing, meals, visa application costs and workers’ compensation insurance. An earlier version of the bill included the safeguard that employers would withhold 20 percent of wages to be paid after a worker returns to his or her home country. Information on the Colorado Non-Immigrant Agricultural Seasonal Worker Pilot Program is available from the Colorado Department of Labor and Employment at http://www.coworkforce.com/Emp/msfw_guestworker.asp.

History of Temporary Farm Worker Programs

Temporary U.S. farm worker programs have a long history. The first was Franklin Delano Roosevelt's Bracero program of 1942. The Bracero program increased the supply of Mexican farm workers in the United States but depressed wages for both international and domestic workers. The program was replaced with the H-2 program in 1964 and subsequently to the H-2A program in 1986 as part of the Immigration Reform and Control Act. Although temporary farm worker programs have tried to dissuade illegal immigration by promoting legal routes to U.S. work, estimates of the illegal population have continued to grow exponentially.

History suggests therefore that while HB 1325 may increase legal immigration to Colorado and help appease worker shortages, it is unlikely that this effort will substantially decrease illegal immigration. Still, the bill represents a complement to the earned legalization proposals of the last few years and provides opportunities for employers to legally access a pool of willing workers.

Comparison to Earned Legalization Initiatives

HB 1325 is only one proposed solution to tensions relating to illegal and legal migration and relationships to Colorado agriculture. Colorado HB 1325 therefore is suggestive of larger research questions as to whether visiting workers or those without a long term commitment to the communities in which they work, in comparison to those offered a path to legalization, mute the economic contribution of sectors.

Industries use their “economic clout” to gain favor in political processes, and promote their “economic impact,” of which, labor spending is significant. Yet, if certain labor or employment is not directly impactful to Colorado communities, these impacts may be exaggerated. Therefore, linking HB 1325 to the broader community economy involves circumspect tracking of the role of labor in Colorado.

The “buying power” of migrants and H2-As are likely lower than those of other immigrants. This indicates a difference between the potential impacts of HB 1325 versus those associated with earned legalization. Remittances are one “leakage.” Fifty-four percent of Hispanic foreign born workers, for example, remit an average of $2,076/yr. A primary question therefore is whether authorization or amnesty would reduce this leakage.

With respect to the broader set of consumer and household spending, H2-A workers may be more like “tourists” economically than would be a newly-legalized workforce. A crucial variable therefore is the share of payroll that is spent locally. Authorization or amnesty also may have differential effects on turnover relevant to Colorado agriculture.

A 2007 estimate by the University of Georgia put Hispanic spending power at $860 billion. The buying power of Hispanic workers in agriculture may vary by major employment sector, and where money is spent matters. Income for all Hispanics in Colorado averages $33,512. In the green industry in comparison, this number is $29,211, 15 percent lower than the state average. In meatpacking, the average is $32,220, or 4 percent lower than the state numbers. Average expenditure for green industry workers is $31,593, totaling $1.1 billion for all workers. For meatpacking, average expenditure is $37,868, or $250 million for all workers.

In another camp of analysts on this issue, some studies have focused on the labor force contraction that might occur if immigration policy severely curtailed drawing from a newly immigrated labor force. Dr. William K. Jaeger, in his report on the impact of “no match” immigration rules on the local Oregon economy, uses the IMPLAN analysis of Economic Contributions to estimate short and long run effects of an elimination of undocumented workers in Oregon. His analysis...
suggests that this type of shock to the labor market would be associated with a short run employment decline of 7.7 percent. This number represents the departure of undocumented workers themselves and resultant lower consumer spending that would affect other Oregon labor markets. Jaeger’s work suggests longer-run economic output losses of 3.5 to 5.0 percent. Adverse effects are estimated to be larger for industries with larger undocumented immigrant shares, and native unemployment rates remain relatively constant due to mismatched skills, education, and location.

Perhaps a future line of research will focus on how different workforce and immigration policies surrounding visiting, “path to legalization” or permanent resident may differentially impact the economies where these industries are located. This line of research is especially needed in an era when employment growth is of paramount importance to policy makers.

**Selected References**


