

COMMUNITY IMPACTS OF IDAHO'S DAIRY WORKFORCE

March 16, 2017

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University of Idaho

McClure Center for Public Policy Research

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Community Impacts of Idaho's Dairy Workforce

Priscilla Salant, J.D. Wulfhorst, Erinn Cruz, and Christine Dearien^{1,2}

Executive summary

Study goal, geographic focus, and methodology

This study updates our 2009 analysis of how the dairy industry's workforce impacts communities in Idaho's south central region, commonly referred to as the Magic Valley. The region is home to about 70 percent of Idaho's dairy cows and 10 percent of its residents. In the original study and in the update, we examine community impacts from a demographic, economic, and social perspective. Both studies were funded by grants from the Idaho Dairywomen's Association.

For the 2017 study, we conducted 48 semi-structured interviews with experts and key-informants selected based on their knowledge of the region, its communities, and the dairy industry. In addition to our interviews, we also analyzed secondary data from federal, state, and local sources. These data provide important context to help understand themes, trends, and patterns that emerge from qualitative interviews, and vice versa.

Two key national trends form the context for this report. The first is a continuation of decades-long structural change in the dairy industry, towards fewer and larger farms. The second is slowing growth in the Hispanic population, largely the result of lower birth rates (in both Mexico and the U.S.) and a dramatic decline in the number of Mexican immigrants entering the U.S.

Labor on dairy farms

Large dairy farms require a workforce made up of "very strong, agile young men" who can handle the job requirements. Especially for milkers, who make up about half the workers on a typical large dairy farm, the job is fast-paced and physically demanding. Although there are no reliable statistical estimates from secondary sources on worker characteristics, people we interviewed consistently said the dairy workforce is almost entirely Hispanic and a significant number are undocumented.

The dairy workforce has changed in several ways since our 2009 study. Today workers are more likely to be married, diverse in terms of country of origin, perhaps better paid, and certainly in

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² The authors wish to anonymously thank a group of 12 peer colleagues and professional experts from Idaho and three other states for their review of previous versions of this report.

shorter supply at current wage rates. Changing labor market dynamics, such as upward pressure on wage rates, will influence how quickly the industry automates. The pace and scale of automation will have major consequences for dairy workers and the communities in which they live.

Impacts on economic well-being

Looking at the Magic Valley's recent economic performance is one way to measure the dairy industry's local economic impact. By three important economic measures, the region has done better than Idaho as a whole since the recession: annual average unemployment rate; rate of job growth; and change in the average wage per job. Based on these measures, the region is better off than the state as a whole and it clearly weathered the recession better.

Based on other criteria, the region is worse off than the state. The average annual wage per job is lower and the poverty rate is slightly higher in the Magic Valley than in Idaho as a whole. As in the rest of the nation, more urbanized parts of the Magic Valley are doing better than more rural areas.

Impacts on schools

Summarizing impacts on schools, we wrote in 2009 about changing demographics in Magic Valley schools. We found the increase in dairy employment had closely tracked growth in the Hispanic population, and in turn, in Hispanic school enrollment. We found that some school districts would be losing enrollment if not for the growth in Hispanics. These trends have continued to 2017.

Enrollment in the Magic Valley's 23 public school districts grew 15 percent from the 2000-2001 school year to the 2013-2014 school year. The number of Hispanic students increased 83 percent during this period, while the number of non-Hispanic students was flat. School administrators interviewed for our study frequently talked about having inadequate resources – especially bilingual and bicultural staff – to serve students and facilitate parent engagement among the increasing Hispanic subpopulation. Speaking about the challenge of engaging with parents, a principal said, *“They are just not confident within the culture of the American school system the way they would be in a different cultural setting. So, we don't have enough resources for that.”*

Impacts on health care

Since the 2009 study, Magic Valley health care has improved according to some measures related to this research (including overall lower indigent care costs and improved health insurance coverage). Nevertheless, disparities continue to exist between Hispanics and non-Hispanics, and by geography. Hispanics continue to have lower rates of insurance coverage and lower rates of access in specific areas such as prenatal care. Those trends, along with higher birth rates among Hispanics, indicate that some residents will be underserved and in need of

expanded health care services over the long term. Our interviews and secondary data analyses do not conclusively show that immigrants are taxing the health care system with unpaid expenses. Rather, in many cases, they fail to access health care services because of their economic constraints and lack of security about engaging within the system in general.

Impacts on law enforcement and justice

Our analysis indicates that social and demographic change in the Magic Valley has not resulted in more crime. Rates for most kinds of crime have actually declined in recent years. Moreover, those interviewed concur (as they did in the 2009 study), there are no causal linkages between the influx of the dairy labor force and patterns of crime.

However, people responsible for local law enforcement and justice are sometimes challenged to adapt to the region's changing and more diverse population. In many cases, local agencies need more resources – especially bilingual and bicultural staff – to help manage the change. Overall, the region is still experiencing relatively low crime activity.

Conclusions

As in most states, rural Idaho has had weaker economic performance compared to urban parts of the state, based on unemployment, average wages, and per capita income. Since the recession, rural Idaho has not kept up with urban Idaho in terms of either population or employment growth.

The exception is Idaho's Magic Valley. The region's dairy production industry attracted Hispanic immigrants who were willing to take jobs native-born workers would not, at least at prevailing wages. Immigrants came to the Magic Valley to work. They kept working, married, had children, shopped at local stores, and bought homes – seeking the American dream. Their presence has greatly benefited communities in the region, as has strong regional leadership that helped attract value-added manufacturing.

Nevertheless, the dairy workforce presents some challenges, most notably in schools and particularly in the areas of English language learners and parent engagement. Our study raises concerns that children left behind in early grades because of language barriers will be disadvantaged as they mature and enter the workforce. We also found that the region's most rural communities are challenged to diversify their economies and build infrastructure to attract new businesses.

Increasing automation in response to labor shortages, changing immigration and trade policies, and ongoing integration and assimilation will undoubtedly influence community well-being in the future. The dairy industry will continue to be a driving force in the region going forward.

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Chapter 1: Introduction

Purpose

This study updates our previous analysis of how Idaho's dairy industry and its workforce impact communities in the Magic Valley. (See text box on page 9 and Salant et al., 2009.) In the original study and the update, we examine community impacts from a demographic, economic, and social perspective.

The first study, completed in 2009, examined only the milk production side of the dairy industry. In the 2017 update, we examine milk production as well as milk processing, which has grown alongside production since the early 1990s. Here, we refer to the dairy industry as including dairy *production* on farms and dairy *processing* in manufacturing facilities.

The first study was released in October 2009, four months after the last recession had officially ended. At the time, dairy producers were experiencing financial stress due to high feed costs. Also, milk prices were low due to declining international and domestic demand. In 2016 the industry again experienced financial stress from low milk prices, this time due to rising domestic production, falling exports, and rising imports (MacDonald et al., 2016). Similar to other industries in the Magic Valley, it is also experiencing a labor shortage at current wage rates.

Our second study is timely. Agriculture employs an estimated 31 percent of unauthorized immigrants in Idaho (Pew Research Center, 2016a). While there are no scientific estimates of how many of these immigrants are in dairy, interviews for our 2009 study indicated that a significant part of the industry's workforce is unauthorized. This means the region and

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communities described in this analysis will undoubtedly be impacted by the major changes in U.S. immigration policy being implemented as we complete our report.

Study area

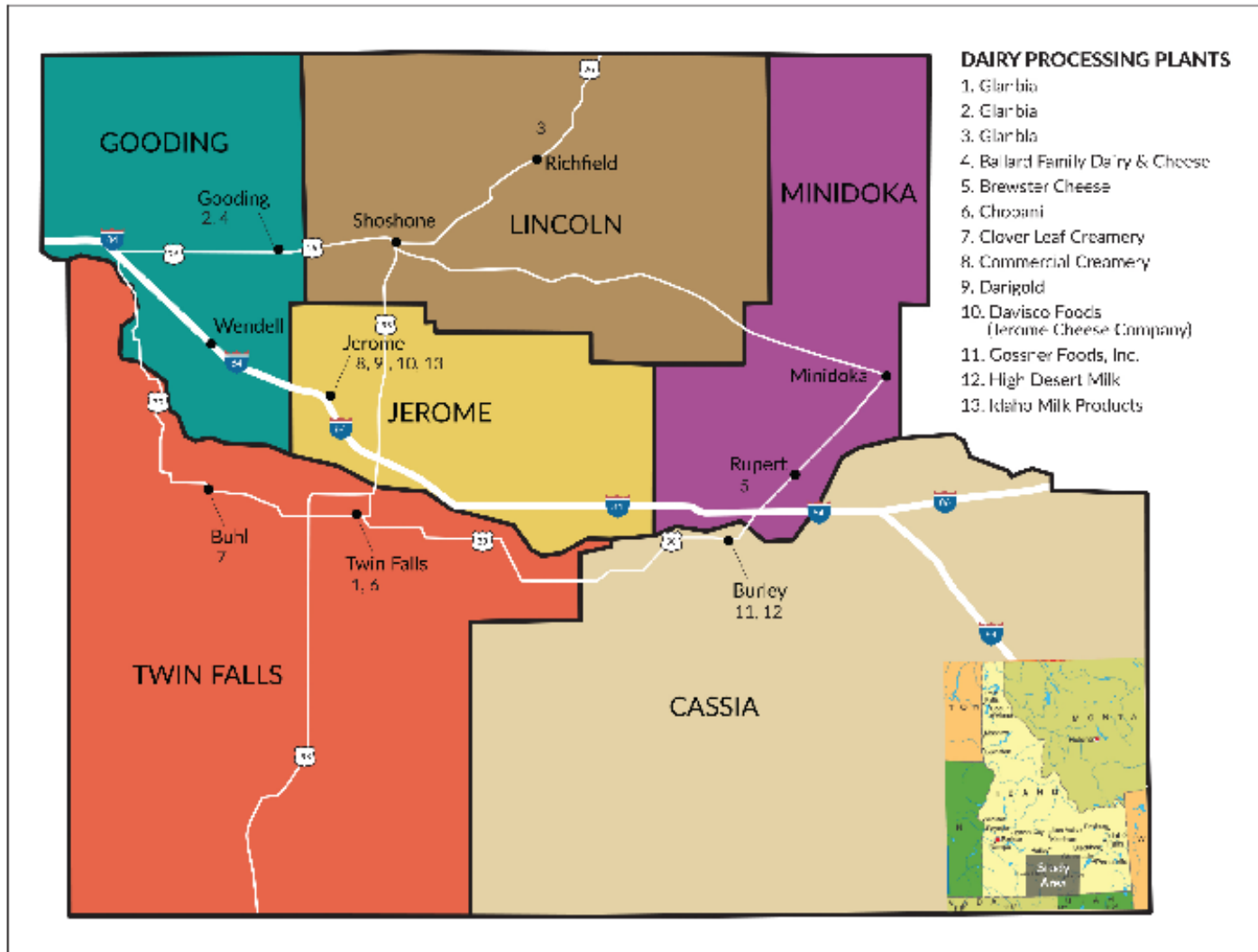
This report focuses on six counties at the heart of Idaho's dairy production and processing industry (Figure 1.1). These counties – Gooding, Jerome, Twin Falls, Cassia, Minidoka, and Lincoln – are home to about 70 percent of Idaho's dairy cows and 10 percent of its people. In everyday language in the region, people refer to the area as both "south central Idaho" as well as more popularly, "the Magic Valley"; within the report, we reference the geography as the latter.

Compared to Idaho as a whole, the Magic Valley's population has grown more slowly since the end of the recession, due to a lower rate of net in-migration (Table 1.1). The region's population differs from the state's population in several ways important to the study. The region:

- is more heavily Hispanic (24 percent compared to 12 percent);
- has a Hispanic population that is more likely to be foreign-born (44 percent compared to 34 percent);
- has a foreign-born Hispanic population that is more likely to speak only Spanish (72 percent compared to 65 percent); and
- has a larger labor-force-age population (66 percent compared to 59 percent).

An important characteristic of the region's Hispanic population is its age structure (Figure 1.2). There are relatively more children and young adults (and fewer older adults) in the Hispanic population than in the non-Hispanic population.

Roughly half of the region's population lives in Twin Falls County, which is dominated by the city of Twin Falls with about 47,000 residents. Twin Falls County and Jerome County together form the Twin Falls Micropolitan Statistical Area. They are likely to meet the metropolitan population



SOURCE: University of Idaho Creative Services

Figure 1.1 – Study area: six counties of the Magic Valley in south central Idaho

Table 1.1 – Demographic indicators, six-county region, Idaho and the U.S., selected years

	U.S.	IDAHO	6-county region	Gooding	Jerome	Twin Falls	Lincoln	Minidoka	Cassia
Population, 2015	321,418,821	1,654,930	169,737	15,284	22,814	82,375	5,297	20,461	23,506
Population change (%), 2010-2015	4.1	5.6	3.9	-1.2	2.0	6.7	1.7	2.0	2.4
Components of population change, 2010-2015:									
Net migration rate (%)	1.7	1.9	0.1	-3.3	-3.7	3.2	-2.2	-2.3	-2.0
Natural change rate (%)	2.4	3.6	3.9	2.2	5.9	3.4	3.8	4.2	4.6
Age structure, 2015:									
Population under age 18 (%)	23	26	23	28	31	14	30	29	32
Population age 65 or older (%)	15	15	11	16	12	7	13	16	14
Median age, 2015	38	35	NA	36	32	35	34	35	32
Birth rate (per 1,000 pop), 2014	12.5	14.0	15.3	13.4	16.8	15.0	11.7	16.0	15.9
Percent Hispanic, 2015	18	12	24	29	35	16	30	34	27
Ability to speak English for Hispanic populaton age 5 years and over, by nativity, 2011-2015 average:									
Native Hispanic population (#)	30,076,898	111,759	18,528	1,790	2,919	6,638	704	3,543	2,934
Speak only English or bilingual (%)	89	93	89	85	82	94	73	88	89
Speak English less than "very well" (%)	11	7	11	15	18	6	27	12	11
Foreign-born Hispanic population (#)	19,024,419	57,645	15,155	2,091	3,532	3,874	667	2,515	2,476
Speak only English or bilingual (%)	34	35	28	30	24	32	23	32	23
Speak English less than "very well" (%)	66	65	72	70	76	68	77	68	77

SOURCES: U.S. CENSUS BUREAU, AND IDAHO DEPARTMENT OF HEALTH AND WELFARE, IDAHO VITAL STATISTICS ANNUAL REPORT

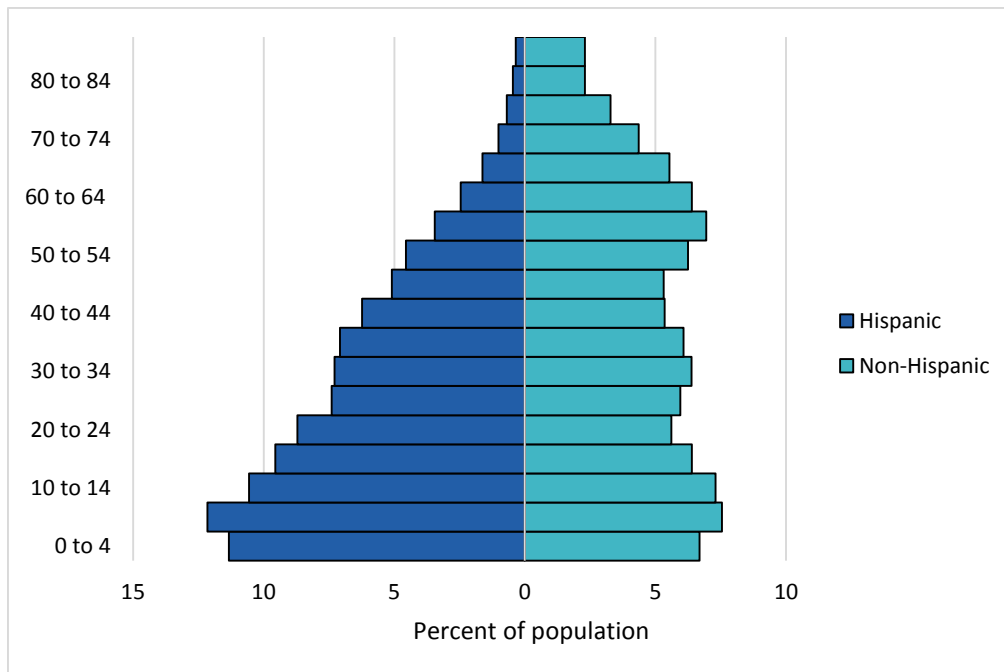


Figure 1.2 – Population distribution by age and ethnicity, six-county region, 2015

SOURCE: POPULATION ESTIMATES PROGRAM, U.S. CENSUS BUREAU

threshold level with the next decennial census but for now are classified as nonmetropolitan, a category that is typically considered “rural.”³

Though Twin Falls is the dominant city, Gooding County on the western side of the region dominates milk production (as described in Chapter 2). With only about 15,000 residents, it is a very rural county. It was home to 180,000 dairy cows in 2012, almost one-third of the state’s total. Because of net out-migration, Gooding County has lost population since the recession. Unlike the rest of the region (except for Jerome County), there are more foreign-born than native-born Hispanics in Gooding County.

Funding

The study was funded by a grant from the Idaho Dairymen's Association (IDA), representing the state's milk producers. As specified in the goals of the project commissioned by IDA, our study documents the community-level impacts related to the industry and its labor force.

³ Metropolitan areas counties have an urbanized area with at least 50,000 people or are linked to such an area in a neighboring county through commuting patterns.

Methodology

We used personal interviews and secondary data analyses to study the dairy industry's community-level impacts in Idaho's Magic Valley.⁴

Interviews

Three members of the research team conducted a total of 48 semi-structured interviews with key informants. (See Appendix B for interview guides.) All but three interviews were conducted in face-to-face settings; the other three were done by telephone (Given, 2012). Team members conducted semi-structured interviews with key informants who have knowledge about the region, its communities, and the dairy industry.

Table 1.2 shows the typology we used to categorize individuals interviewed for the study. The typology aligns generally with the broad community-level themes examined here.

Table 1.2 – Key informant interviews

Type of key informant	Number of interviews
Agricultural educators	5
Local elected representatives	3
Industry representatives and experts	6
Dairy producers and dairy workers	4
Dairy processors	5
Economic development, business, and workforce professionals	8
Education professionals	4
Public assistance and health services professionals	6
Criminal justice professionals	3
Faith and community leaders	4
TOTAL	48

SOURCE: AUTHORS' TABULATIONS

⁴ The University of Idaho Institutional Review Board (IRB) reviewed and approved the methodology for this study (protocol #16-1107; see Appendix A).

Members of the research team conducted the interviews individually and in pairs between March and November 2016. On average, interviews lasted about an hour, and ranged from 30 minutes to three hours. Interviews were transcribed and coded for analysis.

Secondary data

In addition to the interview data, we analyzed secondary data compiled from local, state, and federal sources (Table 1.3). Secondary data provide important context to help understand themes, trends, and patterns that emerge from qualitative interviews (and vice versa).

Table 1.3 – Sources of secondary data used in the analyses

Sources of secondary data used in the analyses		
Idaho Association of Counties	Idaho Department of Labor	U.S. Bureau of Labor Statistics
Idaho Department of Corrections	Idaho State Police	U.S. Census Bureau
Idaho Department of Education	Pew Research Center	U.S. Department of Agriculture
Idaho Department of Health and Welfare	U.S. Bureau of Economic Analysis	U.S. Department of Education

Our research design mirrors the complexity of the community-level issues we address. We examined and synthesized data from a variety of sources and points of view. The data constitute “objective fact” as well as “subjective perceptions.” Although they are sometimes inconsistent with each other, both types of data are valid and have meaning within the context of this type of analysis. When carefully analyzed and synthesized, they enable us to more completely describe and understand community-level impacts by allowing us to identify quantifiable trends alongside public and professional interpretations of how those trends play out at the local level. Thus, while we cannot draw conclusions from any single individual’s input by itself, we can identify patterns and draw conclusions based on input from multiple individuals, especially when considered alongside quantitative data from secondary sources. The result of using this mixed-methods approach is an aggregated analysis that yields the best information available to guide decision-making in and for communities.

A study limitation pertaining to some of our secondary data is related to the rural nature of the Magic Valley (outside the city of Twin Falls). Most social and demographic data reported here for the six counties come from the American Community Survey, which bases its estimates on five-year rolling averages. (For example, Table 1.1 shows average annual net migration rate for the period 2010-2015.) Readers are cautioned that these estimates have large confidence intervals and represent five years of data from small samples of the study population.

Key findings from “Community Level Impacts of Idaho’s Changing Dairy Industry” (2009)

How the dairy industry’s workforce impacts communities demographically and socially depends in large measure on who works on dairy farms. Dairy farm workers tend to be young adult men who are Hispanic, often foreign-born. Some are single and others have families, but because of immigration raids and tighter border controls in recent years, the trend is towards more single men. As a group, the industry’s labor force appears to be driving the growth of the Hispanic population in south central Idaho.

Impact on local economies. The growing dairy sector has contributed to economic growth in south central Idaho, whether measured by job numbers, unemployment rates, per capita income, or other commonly used economic indicators. Nevertheless, some local residents face serious economic hardship. Based on interviews with educators, social service providers, and others, many people in the dairy region are “working poor” but we did not find evidence this can be attributed to the changing dairy industry.

Impacts on schools. The changing dairy industry has two main impacts on schools. First, many school districts in south central Idaho are coping with the increased ethnic diversity associated with growth in the dairy industry, as well as with an increase in students from low-income families. Second, the increase in Hispanic students means some districts (including Gooding, Jerome, and Wendell) are growing when they would otherwise be losing students.

Impacts on health care. Interviews with health professionals in southern Idaho did not indicate disproportionate use of health care services by the Hispanic population in general or employees known to work in the dairy industry. While health care costs are increasing on a per capita basis in some southern Idaho counties, neither our interviews nor the county-level data indicate the increase (where it is occurring) can be attributed to dairy workers.

Impacts on crime. People we interviewed in the law enforcement and justice systems indicated that dairies do not serve as a catalyst for increasing crime. Instead, the main community-level impacts are related to increases in foreign-born individuals who may need assistance if and when they do enter the law or criminal justice systems. Little or no evidence suggests that growth in southern Idaho’s dairy industry has caused an increase in felonies, which are crimes punishable by imprisonment in a state prison or death.

The 2009 study can be found online at <http://www.uidaho.edu/class/mcclure-center/publications-studies/research-reports>.

Chapter 2: Context

National trends

Two key national trends form the context for this report. The first is a continuation of decades-long structural change in the dairy industry. The second – slowing growth in the Hispanic population – has emerged only since the recession.

Dairy growth and structural change

The U.S. dairy industry continues to grow and change in terms of structure, geographic concentration, and market orientation. On the production side, significant economies of scale are moving the dairy industry toward fewer and larger farms, thus, toward greater concentration. In a 25-year period from 1987 – 2012, the nation’s midpoint herd size went from 80 to 900 cows. According to USDA, farms with at least 2,000 dairy cows have costs that are 24 percent below those of farms with 500-999 cows (MacDonald et al., 2016). If efficiency is a primary goal, dairy farmers have clear incentives to get bigger.

A corollary to the industry’s changing structure is increasing geographic concentration in regions with relatively lower costs of production, including the Magic Valley (Figure 2.1).

As the nation’s dairy industry grows and becomes more concentrated, it is increasingly tied to highly competitive global markets through an expanding processing sector. U.S. dairy exports grew more than four-fold from 2004 to 2014. With exposure to global competition comes variability in demand and prices, evident during the recession and continuing today (Cessna et al., 2016).

Hispanic population growth and change

The second key trend is that growth in the nation’s Hispanic population is slowing. In the 1990s, the Hispanic population grew at an annual average rate of 5.8 percent; from 2000 to 2007 by 4.4 percent; and since the recession by 2.8 percent (Stepler and Lopez, 2016).

One reason Hispanic growth is slowing in the U.S. is that birth rates are falling. The birth rate among Hispanic women age 15-44 was 98 births per 1,000 women in 2006 but only 72 births

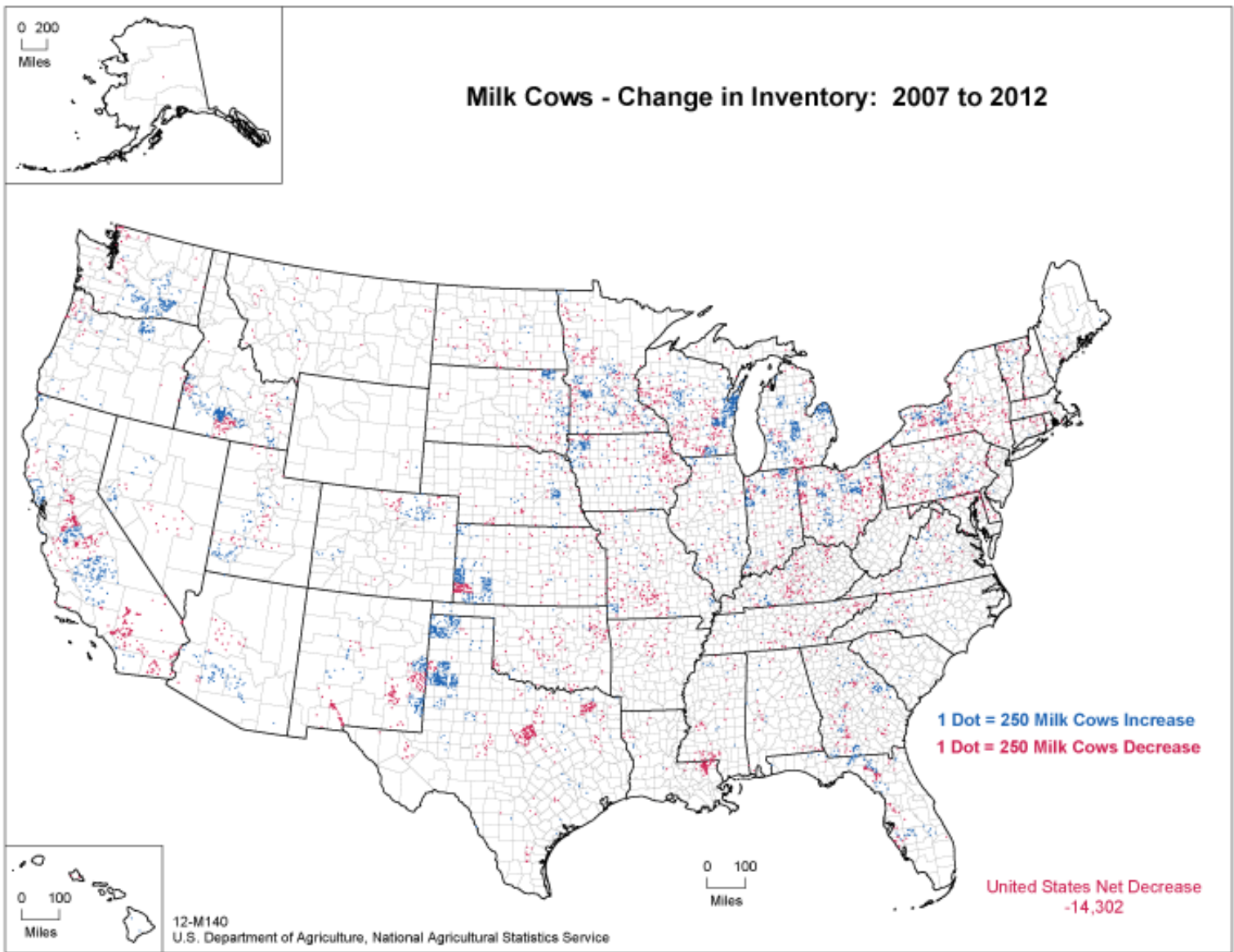


Figure 2.1 – Milk cows, change in inventory, U.S., 2007–2012

SOURCE: AGRICULTURAL CENSUS, U.S. DEPARTMENT OF AGRICULTURE

per 1,000 in 2014 (Stepler and Lopez, 2016). Some analysts attribute declining birth rates to economic distress caused by the recession (Livingston, 2011).

A second reason Hispanic growth is slowing is that net immigration of Mexicans across the U.S. / Mexico border, especially unauthorized immigration, has largely stopped. As Stepler and Lopez (2016) report, “Immigration, which in the 1980s and 1990s was the principal driver of Hispanic growth, began to slow in the mid-2000s. And, in the case of Mexico, immigration has now reversed back toward Mexico since 2009.”

The total number of unauthorized immigrants in the U.S. in 2014 was unchanged from 2009. The number of unauthorized immigrants from Mexico is now lower than in 2009, due to lower fertility rates and more employment opportunities in Mexico, as well as tighter security on the border (Passel and Cohn, 2016).

How national trends play out in Idaho

Dairy growth and structural change

At the national level, Idaho now ranks fourth in the number of dairy cows, behind California, Wisconsin, and New York. It will likely be third soon. Twenty-five years ago, it was 14th (Figure 2.2) (USDA, ERS, 2016).

Idaho now ranks third in pounds of milk produced (Figure 2.3). It recently overtook New York and is currently behind only California and Wisconsin. Twenty-five years ago, Idaho was 12th (USDA, ERS, 2016). After growing at an annual rate of four to 12 percent from 2000 to 2008, production increases in Idaho have been smaller since the recession.

Idaho’s Magic Valley has led the state in terms of dairy production for several decades. In 2012, there were about 410,000 dairy cows in the region, almost 80 percent of all dairy cows in Idaho and 130 percent more than in 1997. Consistent with the national trend towards fewer and larger operations, the number of dairy farms in the Magic Valley declined from 455 to 274 during this 15-year period, resulting in a change in average herd size from 395 in 1997 to 1,502 in 2012 (Figures 2.4, 2.5, and 2.6).

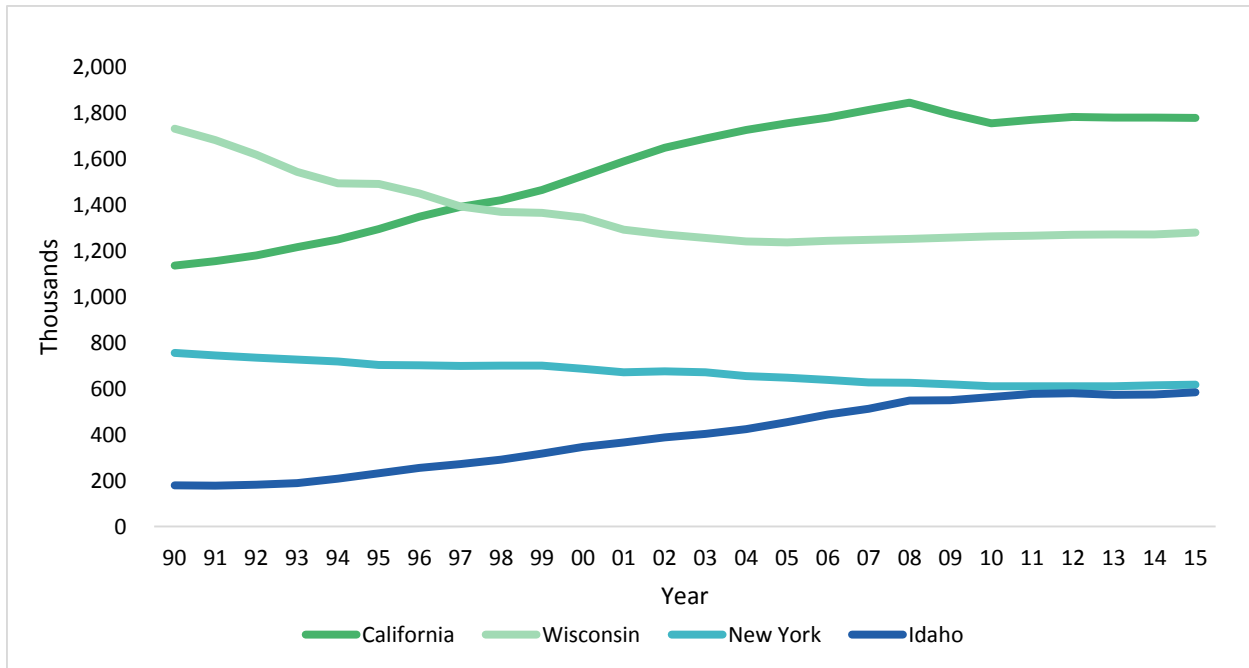


Figure 2.2 – Dairy cows in California, Wisconsin, New York and Idaho, 1990-2015

SOURCE: ECONOMIC RESEARCH SERVICE, U.S. DEPARTMENT OF AGRICULTURE

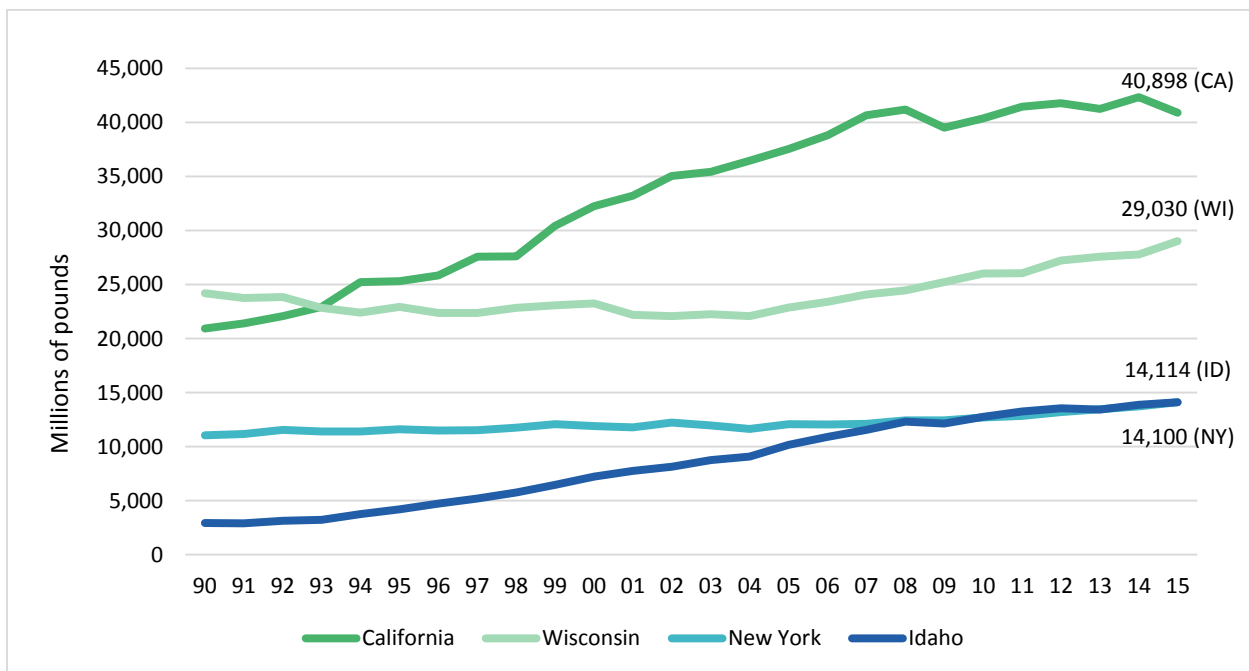


Figure 2.3 – Milk produced in California, Wisconsin, New York, and Idaho, 1990-2015

SOURCE: ECONOMIC RESEARCH SERVICE, U.S. DEPARTMENT OF AGRICULTURE

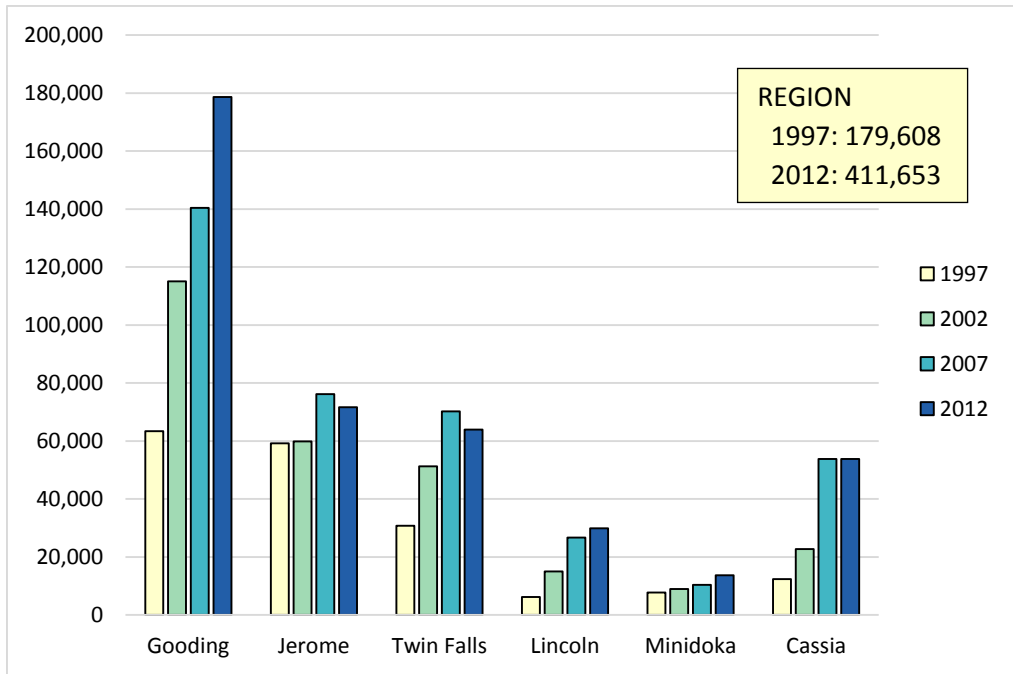


Figure 2.4 – Number of dairy cows, six counties and region, 1997-2012

SOURCE: 2002 & 2012 CENSUS OF AGRICULTURE, U.S. DEPARTMENT OF AGRICULTURE

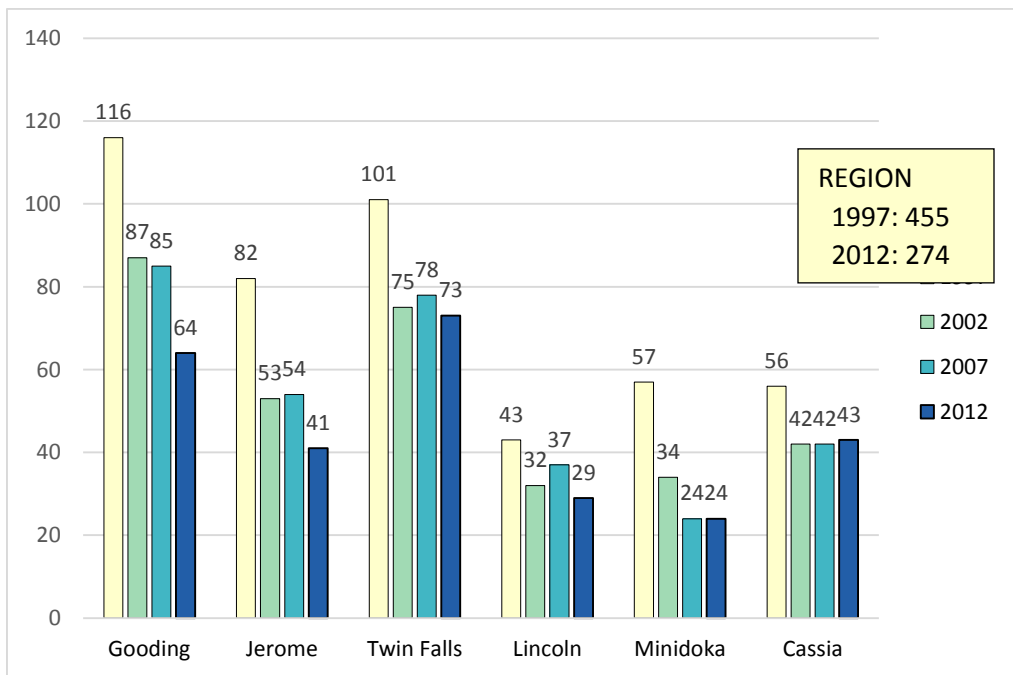


Figure 2.5 – Number of dairy farms, six counties and region, 1997-2012

SOURCE: 2002 & 2012 CENSUS OF AGRICULTURE, U.S. DEPARTMENT OF AGRICULTURE

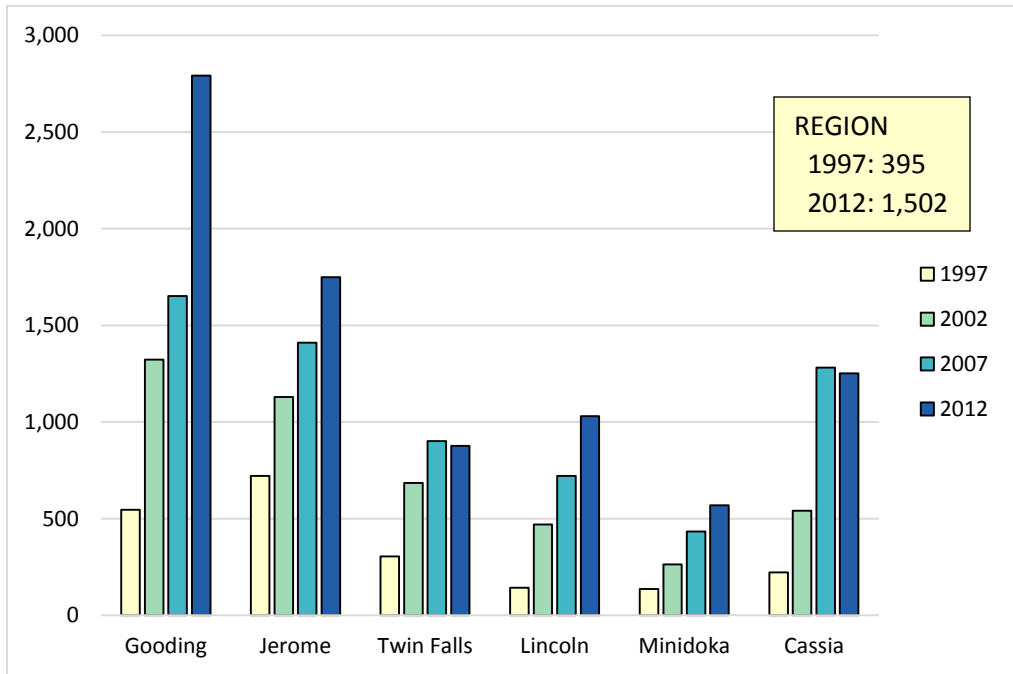


Figure 2.6 – Number of dairy cows per farm, six counties and region, 1997-2012

SOURCE: 2002 & 2012 CENSUS OF AGRICULTURE, U.S. DEPARTMENT OF AGRICULTURE

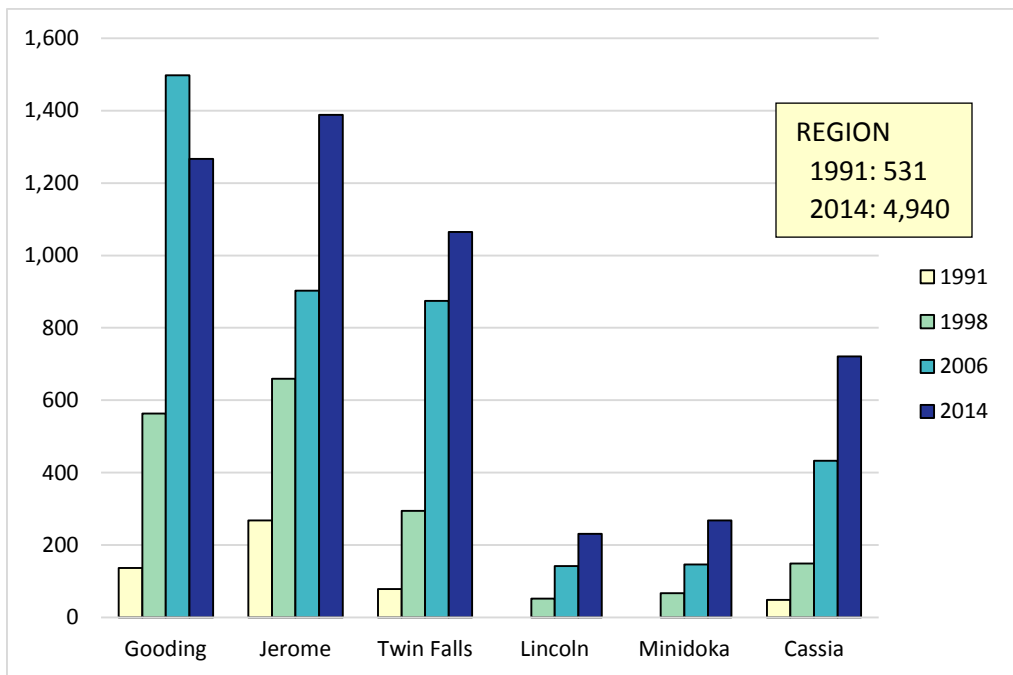


Figure 2.7 – Number of dairy production jobs, six counties and region, 1991-2014

SOURCE: IDAHO DEPARTMENT OF LABOR

With growth in milk production came an increase in employment on dairy farms. In 1991, there were about 550 dairy jobs in the Magic Valley (Figure 2.7). By 2014 there were almost 5,000. Five of the six counties have experienced large increases. Only Gooding County has declined in recent years. (Based on our interviews, this could be due to a combination of factors including automation, a decline in the number of cows, and errors in the data.)

As a dairy farmer said, *“The dairies keep getting larger in order to keep up. People want cheap food. This business is ‘get bigger or get out.’”*⁵

On the Magic Valley’s west side, Gooding County is home to 43 percent of the region’s dairy cows. The next largest shares are in Jerome and Twin Falls counties, at 17 and 16 percent respectively. There have been more dairy cows in Gooding County than in the other counties since at least 1997.

A close look at Figure 2.1 hints at geographic shifts within the region. At least until 2012, the number of cows was falling in Twin Falls and Jerome counties and increasing in Gooding County. However, our interviews indicate a new pattern that has not yet shown up in Agricultural Census statistics. As one industry analyst commented,

“We’re not really seeing new dairies come in [to the region], other than in Minidoka and Cassia counties [in the east]. There aren’t enough acres for feed in the original dairy centric counties. There has been some expansion but growth is mostly coming from increased productivity per cow.”

Another industry analyst explained the Twin Falls decline in dairying as resulting from competing land uses and urbanization:

“Twin Falls jumped off the dairy bandwagon because of some environmental issues in the late 90s or early 2000s when some bad actors created a public nuisance with flies, odor, etc. The county passed some very stringent CAFO laws making it difficult to put any more dairies in this county.”

Though it is losing milk production, Twin Falls County (and the rest of the region) is gaining milk processors. Using cheese as an indicator, overall cheese production in Idaho has grown almost

⁵ Quotations from interviewees in the study appear in *italicized text*, in quotation marks.

four-fold since 1992 (Lewin et al., 2013). Speaking about milk production and processing, an industry analyst said, *“One doesn’t grow without the other.”*

There are 13 milk processing plants in the six-county study area (Figure 1.1), with four plants in Jerome County alone: Commercial Creamery; Darigold; Jerome Cheese Company; and Idaho Milk Products. In addition to cheese, processing plants in the study area produce milk powder, whey, lactose, butter and yoghurt. One of the 13 plants is a small artisan processor, while the others are larger, commercial operations.

In 1991 there were about the same number of dairy production and processing jobs in the Magic Valley (546 and 563, respectively). By 2015 there were roughly 5,100 dairy production jobs in the Magic Valley and another 2,100 jobs in dairy processing plants (Figure 2.8). Thus, in the last 25 years, the number of dairy farm jobs increased ten-fold and the number of processing jobs increased almost four-fold. Together these 7,200 jobs made up almost 12 percent of employment in the six-county area in 2015.

Hispanic population growth and change

The Magic Valley’s Hispanic population grew about four-fold over the last 25 years (Figure 2.9), on the same trajectory as the dairy industry’s labor force (Figure 2.10). This suggests a strong and interdependent relationship between the two. Talking about the two counties most heavily dependent on dairy, a school principal observed,

“The dairy industry is the primary factor for the increase in the Hispanic population. This is true more so on the north side of the [Snake River] canyon. Between 1996 and 2011, the Jerome District grew by close to 50%. The Wendell District was even more – maybe over 50%.”

However, similar to the nation as a whole, Hispanic population growth is slowing in Idaho and the Magic Valley. In Idaho, it grew at an annual rate of 9.2 percent in the 1990s, 7.3 percent in the 2000s and 2.3 percent from 2010 to 2014 (Dearien and Salant, 2016). In the Magic Valley, the Hispanic population grew at an annual rate of 8.9 percent in the 1990s, 6.6 percent in the 2000s, and 2.6 percent from 2010 to 2015.

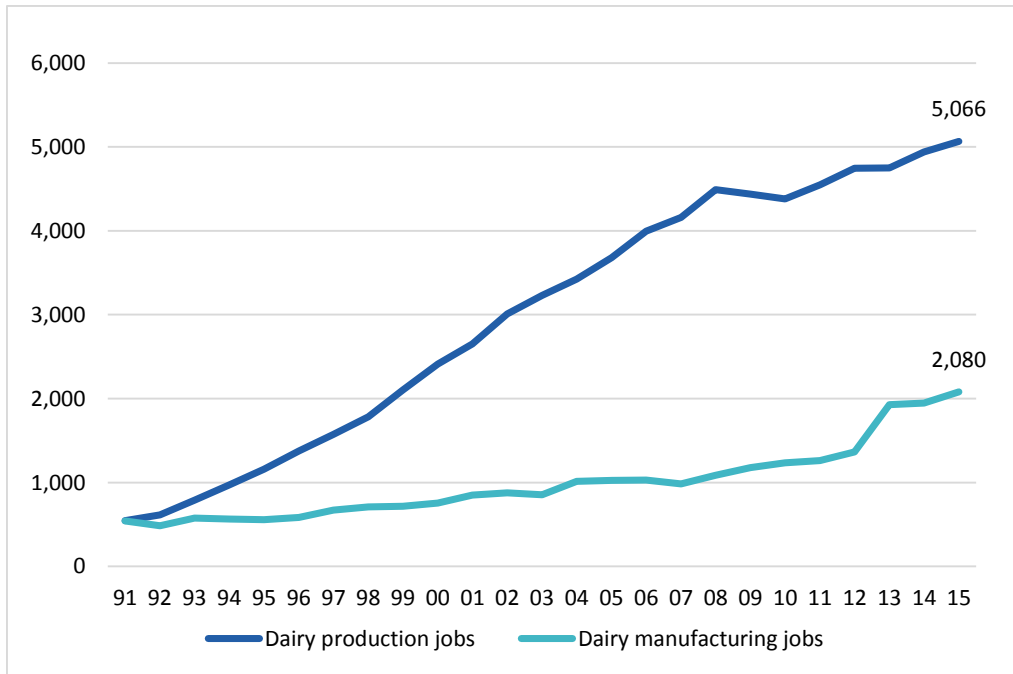


Figure 2.8 – Dairy production and manufacturing jobs, six counties, 1991-2015

SOURCE: IDAHO DEPARTMENT OF LABOR

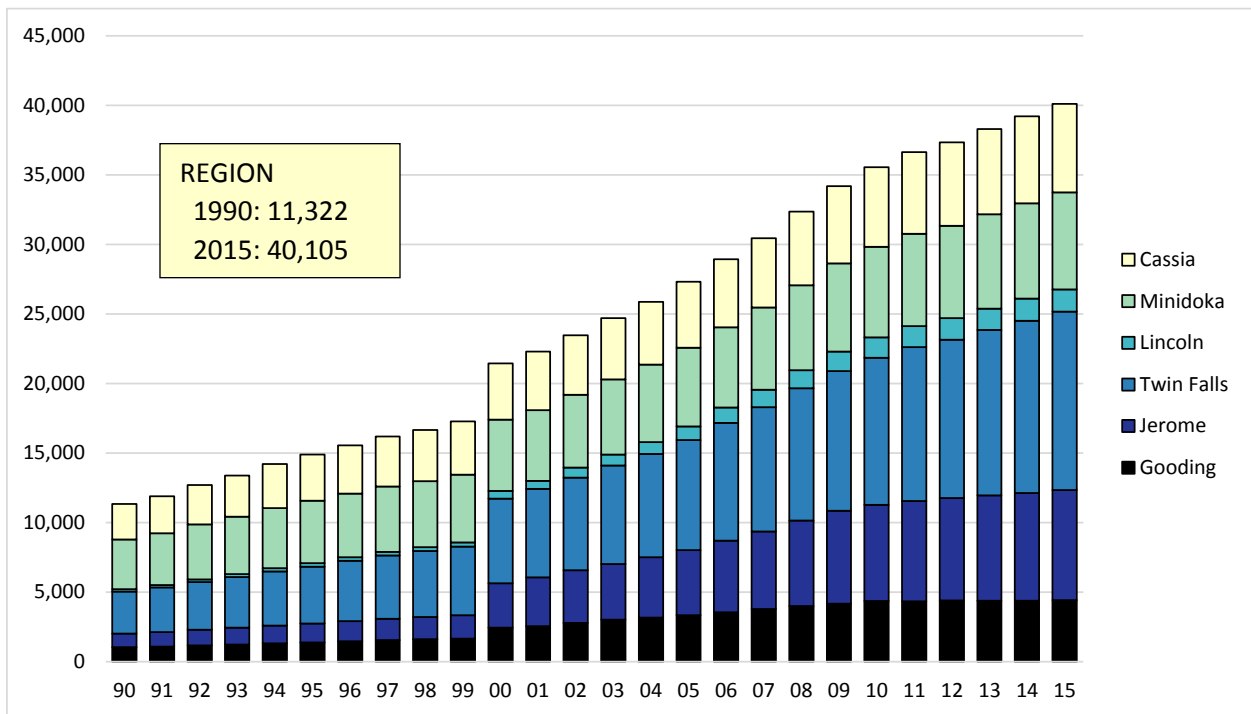


Figure 2.9 – Hispanic population, six counties and region, 1990-2015

SOURCE: POPULATION ESTIMATES PROGRAM, U.S. CENSUS BUREAU

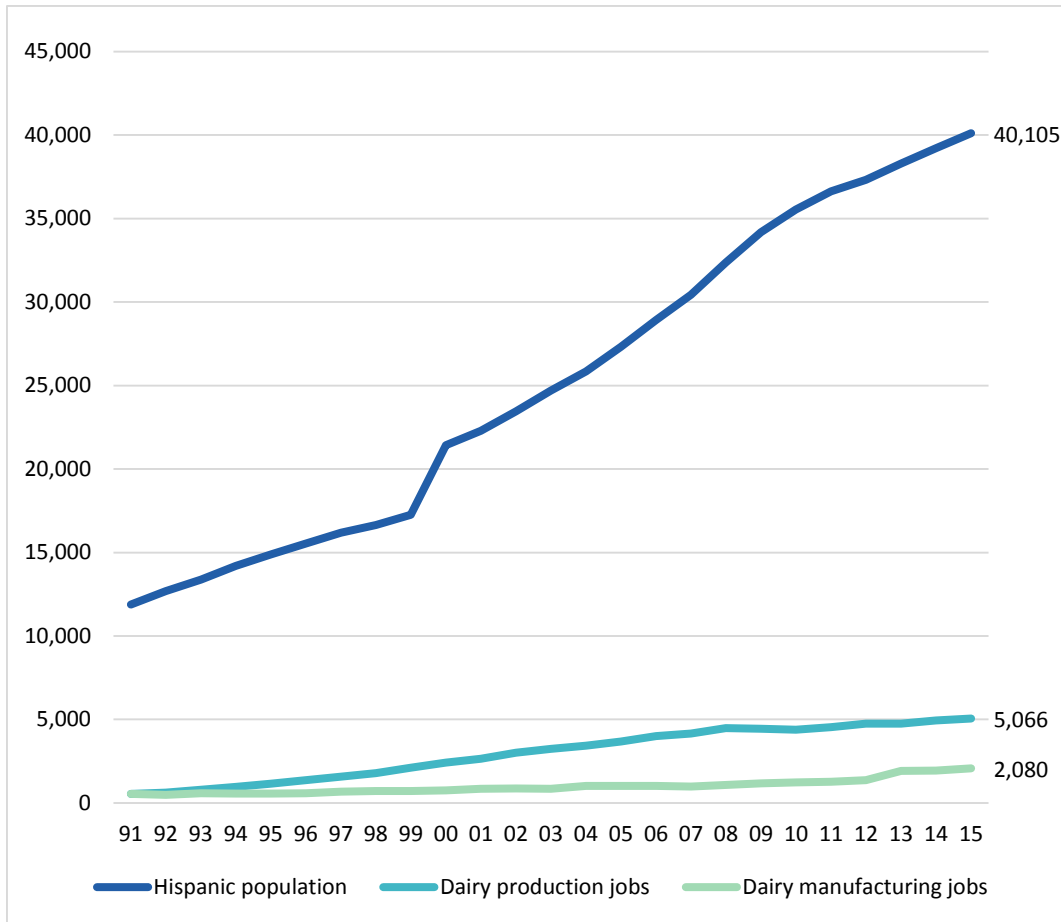


Figure 2.10 – Dairy workers and Hispanic population, six counties, 1991-2015

SOURCE: POPULATION ESTIMATES PROGRAM, U.S. CENSUS BUREAU, AND IDAHO DEPARTMENT OF LABOR

As noted earlier, one reason the nation’s Hispanic population growth has slowed since the recession is that net unauthorized immigration from Mexico has largely stopped. The same is true in Idaho. In 2014, there were about 45,000 total undocumented immigrants in Idaho, roughly the same number as in 2009 (Table 2.1) (Pew Research Center, 2016b).

The two national trends playing out in Idaho – growth in dairy and slower growth in the Hispanic population due partly to virtually no net immigration from Mexico – have profound implications for how the industry impacts communities, as the rest of this report describes.

Table 2.1 – Unauthorized immigrants in Idaho, 2014

	Idaho		U.S.
	Value	Rank	Value
Unauthorized immigrant population (#)	45,000	36	11,100,000
Unauthorized immigrant share of the total population (%)	2.7	23	3.5
Unauthorized share of immigrant population (%)	42	3	26
Unauthorized immigrant share of the labor force (%)	4	21	5
Share of K-12 students with unauthorized immigrant parent(s) (%)	6.8	16	7.3
Mexicans as share of unauthorized immigrants (%)	87	2	52
2009-14 change in unauthorized immigrant population (%)	n.s.	23	n.s.

n.s. = change is not statistically significant

SOURCE: PEW RESEARCH CENTER, 2016B

Chapter 3: Labor on dairy farms

The way a labor market functions directly impacts communities. In the case of the dairy industry, how many workers are employed; their compensation levels; the stability of the work; the occupational mix and human capital requirements (including language); and the substitution of capital for labor all ripple through communities. They determine how much money workers have to spend in local businesses; how engaged they can be in their community, school, and church; and what their future looks like.

This chapter focuses on the supply and demand for dairy farm labor – a distinct market defined by the nature of work and the fact that some workers are unauthorized immigrants.

Personal interviews and secondary data show there have been significant changes in the dairy workforce since our 2009 study. Today workers are more likely to be married, diverse in terms of country of origin, perhaps better paid, and certainly in shorter supply at current wage rates.⁶ Changing dynamics in the workforce, such as upward pressure on wage rates, have implications for how quickly the industry automates.

Nature of the work and schedules

Large dairy farms require a workforce made up of “*very strong, agile young men*” who can handle the job requirements.⁷ Especially for milkers, who make up about half the workers on a typical large dairy farm, the job is fast-paced and physically demanding.

We heard different opinions on working conditions. On one hand, an agricultural educator said, “[Milking] *parlors are nicer to work in than you’d think. Cow comfort has a clear impact on production.*” In contrast, a former industry executive said, “*This work is not for the faint of heart. Hot in summer and cold in winter. It is a very tough working life. By age 50, workers cannot keep the pace up.*”

⁶ A recent survey of Hispanic workers on New York dairy farms yielded somewhat comparable findings (Maloney et al., 2016) despite differences between dairy sectors in Idaho and New York. The survey was an update of a similar study in 2005. Researchers found that compared to 2005, the workers they interviewed were now more likely to be married. The researchers also indicate that dairy wages in New York are not as high as in Idaho.

⁷ Quotations from people interviewed for the study appear in *italics* and quotation marks.

In either case, it is likely that working conditions – including health, safety, and good management practices – vary across farms. Interviews indicated that farms with better practices tend to attract better workers.

Based on interviews with farm owners and others, we conclude most dairy workers work six days a week, 8-10 hours per day. They work longer shifts when “*stuff happens*,” for example when equipment breaks down or the crew is short-handed.

When asked about schedules on dairy farms, a county commissioner said “*the wives I know from church talk about how many hours their husbands work.*” An agricultural educator said, “*Workers don’t have time for anything. Sixty hours per week in a physical job doesn’t leave time for learning English, being part of the community, or attending church.*”

Some farmers are trying new schedules to help retain their workers. One said,

“The dairy workers usually do four 10-11 hour shifts. They have four days on, two days off. They can swap shifts with each other to make their schedule work if they have a doctor’s appointment or something.”

Worker characteristics

Ethnicity

People we interviewed consistently said the dairy workforce is composed of Hispanics. Here is a sampling of their observations.

“If you walk onto a dairy it’s going to be hard to find a non-Hispanic person. Hispanics are the ones that are willing to do the work.” (A former industry executive)

“[Non-Hispanics] don’t want to move here, stay here, and won’t do the work. They can do the work, but they won’t.” (An agricultural educator)

“Without [Hispanics] you wouldn’t be able to fill those jobs, or produce enough milk to supply all of the processors. Without people, the dairies aren’t successful. You can’t find a bunch of 20 something white boys who are willing to do the work on the dairies.” (A city official)

Age, education and language

Many dairy workers are young *“but there are also quite a few people in their 50s or 60s.”* A training specialist said,

“It is one of the few jobs where you can make reasonably good money without an education. What I hear is, ‘Why go to school when I can make pretty good money at a dairy and not go to school?’”

Talking about the older workers, he went on,

“The older generation is the lead man with the equipment. The uneducated, monolingual kind of guy. A lot of them are monolingual. They've been here for quite a while, are older and they had bosses that spoke Spanish so they didn't have to learn English.”

A city administrator told us,

“A lot of the people who work there [at the dairies] do it because the pay is decent, they don't have to have an education, and they don't have to know English.”

Marital and household status

Few individuals interviewed for the 2009 study commented on whether dairy production workers are more likely to be single men or married men with families.

In the 2017 study, people frequently noted that dairy workers are more likely to be married and *“settled.”* For example, an agricultural educator said,

“Most workers have families because the immigration flow slowed . . . The borders are now more secure. During the recession fewer workers came.”

Another educator added,

“I don't think there are as many remittance type situations and single men that make up this workforce as there once was. Dairy owners want them to stay, and if their families are here it's a more stable workforce. Most of these guys are family guys. The people who are happiest here have families here.”

A county commissioner speculated,

“85 percent of dairy workers have families, although there may be some single men in there too. The housekeeping staff at the hospital are usually Hispanic women and I'd bet

they're married to guys who work at the dairies . . . they're mostly families because many of them are buying homes, and families are usually the ones who do that."

These observations about marital status and age are consistent with analysis from the Pew Research Center. Nationwide, the number of unauthorized immigrants has stabilized since the recession. Thus, the ones who remain are more likely to be long-term residents (Passel et al, 2014) and married.

Authorization status

There are no reliable statistical estimates of how many Idaho dairy workers are undocumented. A former industry executive said the share of unauthorized immigrants among dairy workers is *"as high as 85-90% of the workers."* Other people said the percentage was lower. A labor specialist said,

"It's a combination. A number are undocumented, but plenty of others are here legally."

As we explained in the 2009 report, employers are required to ask new workers for their name and Social Security number but are not required to confirm the validity of this information.⁸

According to the Government Accounting Office,

Under IRS regulations, employers must ask new hires to provide their name and SSN [Social Security Number], but are not required to independently corroborate this information with the SSA [Social Security Administration]. DHS [Department of Homeland Security] requires employers to visually inspect new workers' identity and work authorization documents, but employers do not have to verify these documents and they can be easily counterfeited (GAO, 2005).

Even though we have no reliable statistical estimates of how many dairy workers are unauthorized, people we interviewed talked about the consequences of not having legal status, as we explored in depth in the 2009 study.

⁸ In addition to being required to ask for each new worker's name and Social Security number, employers must then withhold a set percentage of the worker's salary each pay period for Social Security (retirement), disability insurance, Medicare, and benefits for survivors. We found no evidence that dairy farmers are not adhering to this requirement. Thus, we may assume that dairy workers pay these taxes, whether or not they will be able to collect Social Security or other benefits in the future.

One Dairy Farm Worker

In the 2009 study, we recommended the dairy industry support a scientific study to learn who their workers are, where they live, and what their needs are. A high-quality survey of workers could be conducted by native Spanish speakers in places where workers feel free to be interviewed.

Doing this kind of survey was beyond the 2017 study scope, but we did have the opportunity to interview one dairy worker in the course of our research. His opinions and perceptions cannot be generalized in any way. Yet the portrait of him that emerged from our conversation – of an unauthorized immigrant who made a good life and whose children seem likely to go to college – provides some insight into the experiences of people employed by the dairy industry.

These are the main themes from the interview that were also consistent with at least one other key informant in our sample, and often with more than one.

Working conditions vary across farms, as do the workers they attract:

“Everyone knows who the good and bad dairies are. The good dairies have less turnover . . . The guys who work on the bad dairies are usually the guys who only work when they need money for something quickly. They aren’t the best workers.”

Dairy workers are more likely to be married and “settled” than they were in the past:

“Most workers have families, either here or in their home country. There used to be more young guys working on dairies, but they’ve stayed in the industry over the last 10 years and now have families.”

The dairy workforce is largely Hispanic:

“In all the years working on dairies, I’ve only seen two non-Hispanic guys. One was a drug addict who couldn’t keep it together, the other left after only a couple of days. Caucasians are only here because they have a lot of issues.”

At the end of the day, hard work pays off:

“There are opportunities to move up beyond milking on the dairy farms if you apply yourself. I asked to learn new skills when I wasn’t busy or on my days off. I speak English, so that helps a lot too.”

Wages and benefits

When we asked how much dairy farm workers are paid, the answers were relatively consistent. People who feed cows are at the low end at \$11-\$12 an hour. Milkers get \$12-14 an hour. A good herdsman can make \$15-16 an hour or more.

Like other agricultural workers in Idaho, dairy workers are not eligible for overtime.

One smaller farm operator said the rates cited by other people we interviewed were low.

“Right now \$15/hour is the low end of the scale on the dairies. If you find someone to work for \$10 or \$12 they won’t stick around for very long. Good employees are paid well.”

The University of Idaho’s most recent dairy budget uses a wage rate of \$13.82 for general livestock labor in Idaho, based on Bureau of Labor Statistics wage estimates (Eborn and Norell, 2016). This rate is within the range of estimates made by people we interviewed.

A Spanish language radio host said a married couple that works on a dairy farm can make more. He gets *“quite a few calls from operators who want married couples to work together on the farm . . . this could be \$50-60,000 household income plus housing.”*

Under the Affordable Care Act’s employer mandate, as of 2015 employers with 50 or more full time equivalent employees are required to provide health coverage to full-time employees or else pay a tax penalty (IRS, 2016). Farms with one employee per 50 dairy cows would need 2,500 cows to fall under the mandate. Those with one employee per 100 cows would need 5,000 cows.

People we interviewed gave differing opinions on whether dairy workers receive employment benefits in the form of in-kind compensation like housing and meat products. People in the western counties, where the concentration of workers and cows is highest, were more likely to say benefits other than the required health insurance are rare.

A county commissioner on the western side of the region said,

“Housing on farms isn’t too common. I have friends who have rentals and they rent to Hispanics.”

He stopped and thought for a minute and then continued,

“But lots of them buy their own houses. Six of our nine neighbors are Hispanic now.”

Those on the eastern side of the Magic Valley said in-kind compensation is important. An agricultural educator said,

“Housing is almost always provided here, at least to some workers. Owners want workers on the place itself, or at least nearby in case something comes up. I wouldn’t be surprised if they get paid \$2,000 cash a month; plus housing, insurance, pickup, meat and milk for some. It’s a real wage. A wage that can support a family here. [The dairymen] don’t want to lose the workers.”

According to a community leader, the quality of housing varies.

“Some of it’s pretty nice, with good flooring. There are also trailers that are 40-50 years old that are dumps.”

The dairy farmers concerned about retention pay more and offer better benefits. A farmer we interviewed is improving working conditions and benefits to retain workers, something no one talked about when we did the first study. He said,

“You need good management and good facilities to attract workers. You have to offer good working conditions and health insurance. I have to provide Obamacare- \$100 a month per employee. The dairies that don’t have insurance might not be as competitive.”

The implication is that in dairy, as in other industries, good employees are paid better and good managers attract better workers.

A county commissioner summed up wages and benefits this way.

“They work and make okay money, and sometimes they have housing as part of the package. But they work long hours for that money. The wages aren’t gorgeous but they aren’t horrible.”

The labor shortage

The people we interviewed about the dairy industry agreed there is a serious labor shortage at current wage rates. One industry expert said,

“There is lots of turnover among labor force, everyone is short on labor now, and it’s never been this bad. [It] has been a concern for a while, but it’s been a significant problem for a year. The labor shortage is in all of the western states, not just Idaho.”

A dairy farmer said,

“The labor situation is alarming in Idaho. Not as many people are coming in looking for work. They used to come every day looking for work. Now we get 1-2 a week.”

When asked why there is a shortage now, people said it was because there are fewer new immigrants. An agricultural educator said,

“There are not a lot of immigrants crossing anymore. During the recession fewer workers came. This means there is less turnover ... still some, but less. An open position could go empty for a while.”

Has the labor shortage put upward pressure on wages?

The people we interviewed did not agree on whether wages will increase on the dairies.

On one hand we were told, *“There’s an upward pressure on wages, but the price of milk keeps them down anyway.”* In other words, it is difficult to raise wages in a competitive global market. Producers don’t have margins to absorb higher labor costs because competition limits wage increases.

Another explanation is that many workers are unauthorized workers and have little bargaining power. An agricultural educator said,

“Wages are stagnant and have been for years. They won’t increase in dairy because the workers are undocumented.”

On the other hand, an industry expert said,

“Because of public concern about animal abuse, the producers are training more and paying workers better. There is likely to be upward pressure on wages.”

A training specialist said,

“The wages have gone up a little bit from what I’ve heard.”

At least in the short term, it is likely that in response to the labor shortage at current wage rates, working conditions will improve and schedules will be more predictable. Some dairy farmers are already starting to do this, as indicated above.

Flux in the labor force

Overall the interviews gave us a sense of significant changes in the supply and demand for labor on dairy farms since our first study, at the end of the recession. Here is an overview of changes in the dairy labor force.

- More families: Workers are now more likely to have families. In 2009, our interviews suggested there were more young single men who had recently immigrated to the U.S. Now, with little if any net in-migration, men have been in the industry longer and have started families.
- Better English: More workers can speak English. An agricultural educator said, *“More and more people have some understanding of English. The workers today have been here much longer than when I first started [ten years ago].”*
- Different values: According to an agricultural educator, *“Native-born [first generation American] Hispanics do not go back to dairies. They want benefits . . . The complaints now are more about quality of life than low wage issues.”*
- More women: A labor expert said, *“There are more women in the dairies now, that’s another example of how the labor shortage is changing things. Women are milking or feeding cows. They might be from their early 20’s to mid-30’s.”* An agricultural educator said, *“I think the jobs are getting easier to do. There are a fair number of women milkers now and in the calf barns. The women care for cows and aren’t just ‘doing their jobs’.”*

- **Refugees on dairies:** Over the past ten years, an average of 300 refugees have re-settled in the Magic Valley each year.⁹ Recently, most have come from Africa and Asia. In our first study we heard about one Oregon dairy farmer who was hiring refugees. Now it is somewhat more common. One dairy farmer said, *“The average American does not want to do these milking jobs. Now, the refugees are coming on the scene and they have more of a desire and motivation to work in the fields, and the dairies Refugees have filled a real gap in the workforce.”*
- **Better jobs:** There is internal movement of workers up the occupational ladder. A labor expert said, *“People can improve their livelihood by leaving the dairy and getting jobs that require less difficult physical labor. A lot of the guys who want Commercial Drivers’ Licenses have come from the dairy. They can make the same pay or a little bit more pretty quickly.”*
- **New Hispanic farmers and other business people:** Several agricultural educators told us dairy workers are starting their own small farms. Agricultural census data support these observations. The number of Hispanic farm operators has increased much faster than the number of non-Hispanic operators in the study region (Table 3.1). One educator said, *“When they first come, they are single with no money but Now, drive down Lincoln Street in Jerome. They are all Hispanic-owned businesses. Another said, I see Hispanics in my . . . management classes. They’re starting to own/lease ground and quit their other jobs . . . They’re doing fairly well.”*

Table 3.1 – Farm operators by ethnicity, Idaho and six-county region, 1997 and 2012

	Hispanic operators	Non-Hispanic operators	Hispanic operators	Non-Hispanic operators	Hispanic operators	Non-Hispanic operators
	1997 (number)		2012 (number)		1997-2012 (percent change)	
IDAHO	328	21,986	1,113	39,477	239	80
Cassia	16	713	90	1,081	463	52
Gooding	23	652	56	956	143	47
Jerome	17	666	75	821	341	23
Lincoln	12	269	34	477	183	77
Minidoka	15	659	64	900	327	37
Twin Falls	30	1,409	76	2,000	153	42
6-county	113	4,368	395	6,235	250	43

SOURCE: 1997 AND 2012 CENSUS OF AGRICULTURE, U.S. DEPARTMENT OF AGRICULTURE

⁹ Refugees are a subset of immigrants. Unlike unauthorized immigrants, they are legal residents whose status is granted by virtue of having left their home country because of fear of persecution or other danger. See The 1951 Refugee Convention at the UN Refugee Agency website, available online at <http://www.unhcr.org/en-us/1951-refugee-convention.html>. Boise and Twin Falls are Idaho’s two resettlement areas.

Automation

Greater diversity in gender and country of origin, better language skills and more family stability are all evident in the dairy workforce. Overshadowing the salience of these changes, however, is the prospect of greater automation.

How quickly farmers automate will have major consequences for communities. Rapid and widespread adoption could displace thousands of workers. On the other hand, gradual adoption might allow on-going generational change to occur as fewer “*strong, agile young men*” cross the U.S. Mexican border and native-born Hispanics seek a better life than their parents had.

Taken together our interviews indicate that more farmers will invest in equipment to replace some number of workers, although how quickly this will happen depends on several factors, including the size and location of farms.

Automation is not an “all or nothing” proposition. Farmers can mechanize individual aspects of work incrementally. The big change (and the largest investment) is introducing robotic milking.

An equipment supplier said,

“Generally, the big guys are not switching over to robotics . . . There are more of these large farms in the Magic Valley than the Treasure Valley. Big farms need labor beyond milkers. They need people to manage the herd and people to manage other employees. Switching to robotic milkers saves them some labor, but not enough. Small farms are the ones switching over. Their largest labor cost is milkers, so the robots often replace all or almost all of their outside labor. The owner and their family can usually handle the rest of the tasks to manage the farm.”

It is possible to retrofit existing equipment, depending on the farm, but typically large farmers invest in robotics when they expand. An industry expert said, “*Robotic milkers start to pay off at \$14 an hour. ... You can mechanize the entire milking process.*” Other people we interviewed said the breakeven point is significantly higher.

“*Automation is coming,*” said an employment specialist.

“Like every other industry that’s out there, they’re going to struggle to keep up otherwise. If they do automate and the undocumented workers are released because of that, it could be hard for [the workers] to find employment. There’s still enough demand in agriculture that that’ll help somewhat.”

Chapter 4. Labor in dairy processing plants

Similar to the milk production side of the dairy industry, milk processing impacts communities primarily through its labor force. The Magic Valley's 13 processing plants employed workers in roughly 2,000 jobs in 2014, a four-fold increase from 1991. About 40 percent of these jobs are in Twin Falls County with another 27 percent in Jerome County and 18 percent in Gooding County.

Processors hire a range of permanent employees, from the majority who have relatively low skill levels and are paid hourly to a smaller group of salaried individuals in occupations such as plant operation, engineering, business, and quality control. Of the two large processors we interviewed, the ratio of permanent hourly to salaried employees at one was 70:30 and at the other, 80:20. These ratios may vary seasonally.

In addition to hiring permanent employees, both large processors we interviewed used temporary employment firms to supply additional, unskilled workers on an as-needed basis. The share of temporary employees varied. At one, 3 percent of employees are temporary while at the other, 16 percent are temporary.

The most common perception among people we interviewed overall was that dairy processors start their hourly workers at lower rates than dairy producers because in some processing jobs, the work is *"so much less physically demanding."* However, entry level wage rates vary from \$12 an hour at one large processor we interviewed to above \$16 an hour at the other (excluding truck drivers who are paid a lower basic rate but with the potential for efficiency related bonuses). At both firms, hourly workers top out at roughly \$30 an hour.

Education requirements for hourly workers in processing plants are higher than for workers on dairy farms. One large processor requires a minimum of a high school diploma or adequate relevant experience; an ability to read, write and understand "basic" English; and flexibility to work overtime and "shifts in a 24x7 environment." In contrast, people we interviewed on the production side said some dairy workers do not speak English and are not required to have a high school education.

All hourly and salaried permanent employees at both processors we interviewed receive benefits. These include 401(k) plans, health insurance, and paid vacation. Whether temporary employees receive benefits depends on the employment firms that supply the workers but is much less likely.

Hourly workers at both processors are more likely to be male than female and more likely to be non-minority than minority. Hispanics make up a large share of minorities at both processors.

As on the production side, processors are investing in technology. Processors we interviewed expect skill requirements for hourly workers to increase as processes become more automated.

Recent and relatively rapid expansion of dairy processing in the Magic Valley has translated into increased demand for labor across a range of skill levels. One large processor we interviewed said the low skill labor shortage at current wage rates may be temporary due to new workers moving to the region. *"People are coming in,"* said the person we interviewed. To the extent this in-migration is occurring, it has not yet shown up in U.S. Census Bureau population estimates. Both processors we interviewed see a role for workforce development efforts, most likely on the part of the region's community college, College of Southern Idaho.

To the extent there is mobility between production and processing labor, it could alleviate some of the shortage at current wage rates. People we interviewed tended to agree that some workers do move between production and processing, most often from the former to the latter. Our analysis of compensation between the two sectors shows that benefits are better on the processing side (at least for hourly and salaried permanent employees), including those with lower skill levels. These benefits are likely to attract workers from production, as could the less physically demanding work environment in processing.

Chapter 5: Impacts on economic well-being

Economic indicators

The Magic Valley's recent economic performance is one criterion for measuring the dairy industry's local economic impact. By three important economic measures, the region has done better than Idaho as a whole since the recession (Table 5.1).

- The 2015 **average annual unemployment rate** was 3.5 percent in the region (with a higher than average rate only in Lincoln County) compared to 4.1 percent in Idaho.
- Since 2008 the **number of jobs** has grown 5.4 percent in the region (led by Minidoka, Cassia, and Twin Falls counties) compared to 2.7 percent in Idaho.
- Also since 2008, the **average wage per job** has increased about 6 percent in the region (with below average growth only in Gooding and Lincoln counties) compared to just under 3 percent in Idaho.

Another criterion is long term unemployment trends. Using this lens, the region has been better off than the state for the last 15 years and clearly weathered the recession better (Figure 5.1).

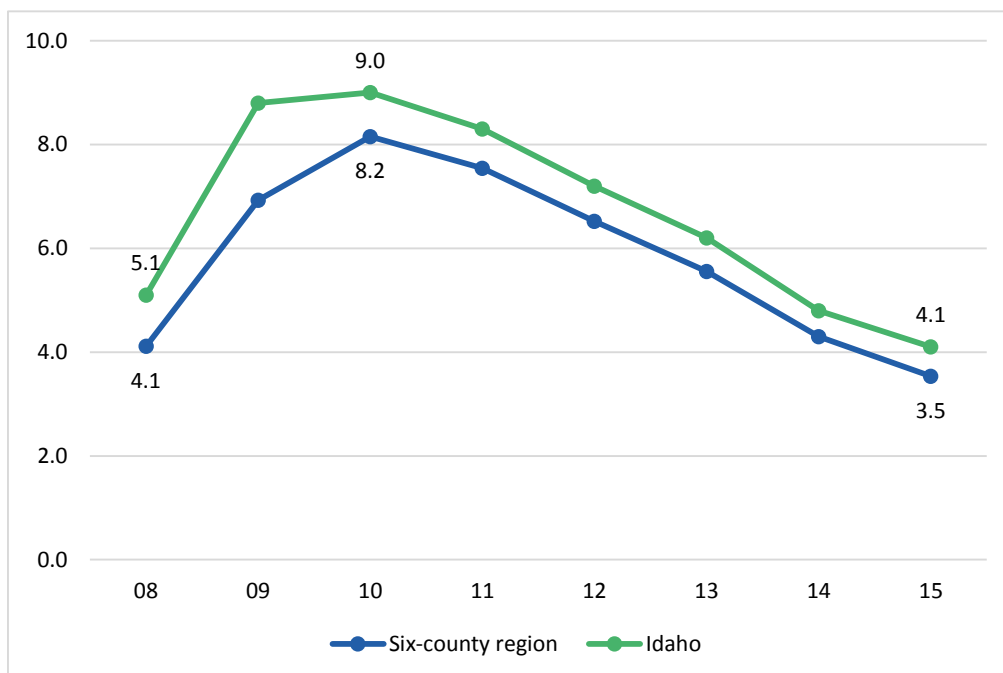


Figure 5.1 – Unemployment rates, six-county region and Idaho, 2000-2015

SOURCE: U.S. BUREAU OF LABOR STATISTICS

Table 5.1 – Economic indicators, U.S., Idaho, and six-county region, select years

	U.S.	IDAHO	6-county region	Gooding	Jerome	Twin Falls	Lincoln	Minidoka	Cassia
Number of jobs, 2015	190,195,400	948,030	97,693	8,497	11,970	49,258	2,528	10,495	14,945
Change in number of jobs (%), 2008-2015	5.9	2.7	5.4	-0.3	3.0	5.3	4.4	11.4	7.3
Average annual unemployment rate (%), 2015	5.3	4.1	3.5	3.4	3.3	3.6	4.4	3.7	3.3
Monthly unemployment rate (%), September 2016	5.0	3.4	2.9	2.7	2.7	3.1	3.2	2.7	2.7
Average wage per job (\$), 2015 ⁽¹⁾	58,228	45,062	49,029	76183 ⁽²⁾	56,269	40,883	51,542	47,952	54,976
Change in average wage per job (%), 2008-2015	4.5	6.5	15.5	43.4	24.1	7.0	3.9	9.9	20.4
Median household income (\$), 2015 ⁽¹⁾	55,775	48,311	NA	48,950	47,034	45,799	46,168	45,429	47,932.0
Change in median household income (%), 2008-2015	-2.6	-7.7	NA	5.9	-2.2	-1.4	-1.5	-4.0	4.3
Overall poverty rate (%), 2015	14.7	14.7	15.3	13.9	15.8	14.6	14.5	17.0	16.7
Change in overall poverty rate (%), 2008-2015	1.5	2.2	1.4	1.3	2.9	0.1	3.8	3.6	1.7
Students eligible for free and reduced-price school lunch (%), 2013-14 school year	51	48	58	63	65	54	68	63	55
Change in percentage of students eligible for free and reduced-price school lunch (%), 2008-09 to 2013-14	8.8	7.8	5.4	6.8	7.3	5.6	4.1	6.8	2.9

NOTES: (1) 2008 values used to calculate change in average wage per job and median household income have been adjusted for inflation to 2015 dollars; and **(2)** Gooding County's estimate for average wage per job, from the Bureau of Economic Analysis, is an outlier that is difficult to explain. One possible explanation is that data from dairy owners is included in the numerator of the estimate.

SOURCES: U.S. BUREAU OF LABOR STATISTICS, U.S. BUREAU OF ECONOMIC ANALYSIS, U.S. CENSUS BUREAU, AND U.S. DEPARTMENT OF EDUCATION

On the basis of three other important criteria, the region is worse off than the state (Table 5.1).

- The **average annual wage** per job in 2015 was about \$26,300 in the region (with the lowest wage in Lincoln County) compared to \$29,400 in Idaho.
- The **poverty rate** was 15.3 percent in the region (based on a five-year average 2010—2015) compared to 14.7 percent in 2015 Idaho.
- More of the region’s students were eligible for **reduced price meals** in 2013-2014 (58 percent) than they were in Idaho (48 percent).

Figures 5.2 and 5.3 suggest that poverty in the region has recently been more intractable among non-Hispanics than among Hispanics. Based on five-year average estimates for the periods 2007-2011 and 2011-2015, the overall and child poverty rates went down among Hispanics but up among non-Hispanics. This was true in both the Magic Valley and Idaho as a whole.

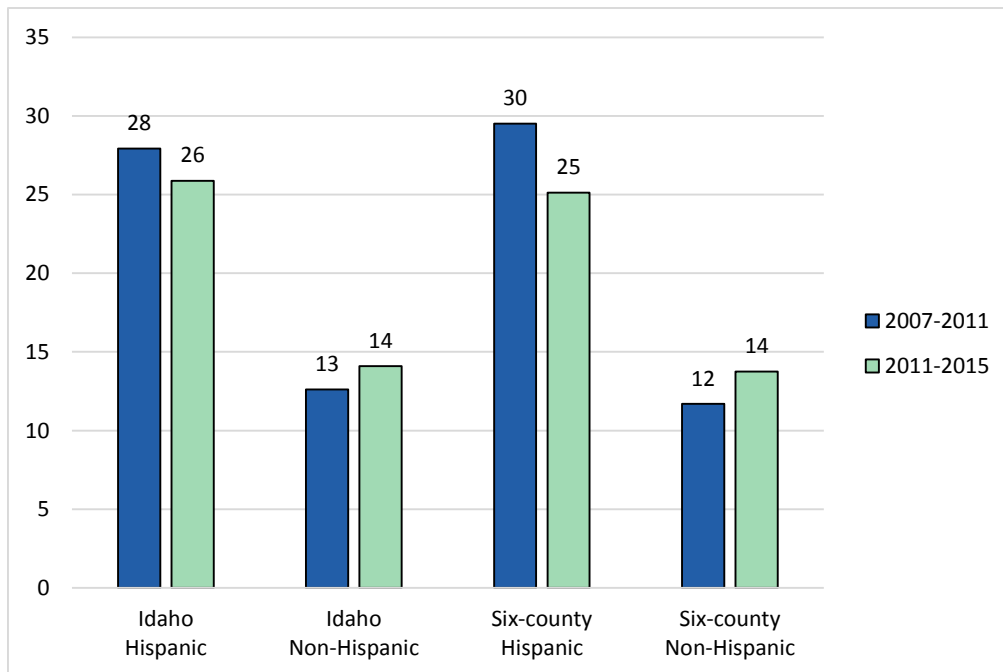


Figure 5.2 – Overall poverty rate by ethnicity, six-county region and Idaho, 2007-2011 and 2011-2015

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

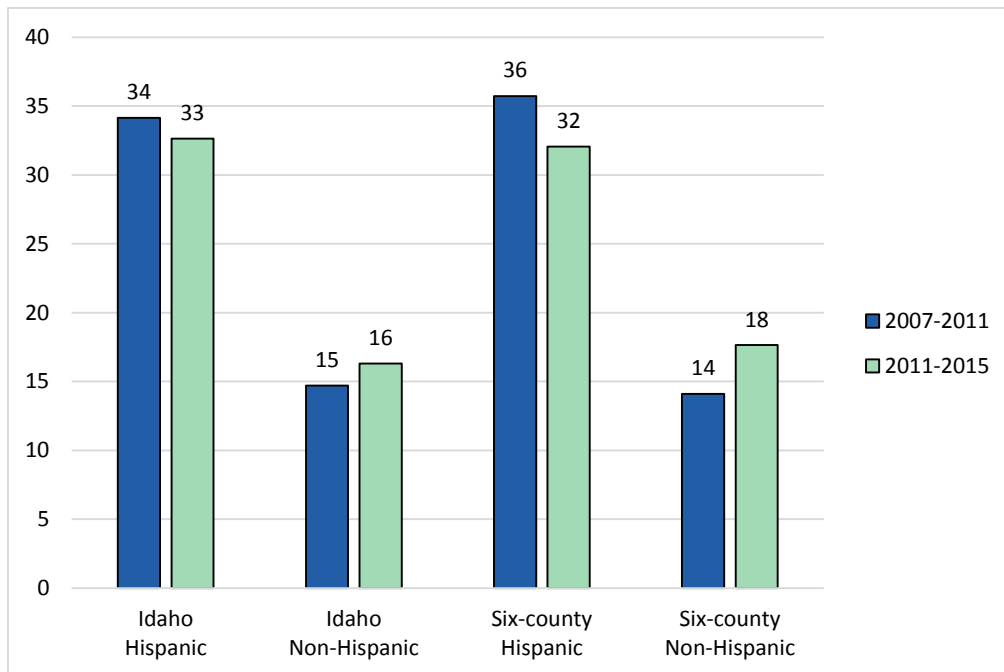


Figure 5.3 – Child poverty rate by ethnicity, six-county region and Idaho, 2007-2011 and 2011-2015

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

Observations made by people we interviewed were generally consistent with secondary data indicating above-average prosperity in the Magic Valley. A local businessman talked about the link between good wages and generational change.

“Many people have money to spend because the wages are decent here. In the last six years especially on Sundays, the Magic Valley mall has been packed, mostly by Latino customers. They have disposable incomes. Kids are more assimilated into the community than their parents were. They’re getting better jobs because they’re more educated. [The kids] are buying \$150-\$200,000 homes when their parents bought homes for say \$60,000 when that kid was 10 years old.”

Often people drew a connection between economic prosperity and the dairy industry.

Referring to recent growth in dairy processing, an economic development professional said,

“Growth in the dairy industry is one of the reasons why we weathered the recession so well . . . You can't say that the dairy industry brought Clif Bar here. But originally [Clif Bar] had written Twin off their list. Between the agricultural economy and the location with the Chobani plant, one of the vice presidents visited the area and decided to put Twin Falls back on their list.”

Geographic differences

As they are across the nation, very small towns in the Magic Valley are doing worse than the region as a whole. A community development professional said,

“The little towns are struggling because their economies are not diverse . . . They are not players. The farther they are from the processors, the impact of growth [in the industry] diminishes.”

Another remarked,

“It’s an uphill battle to convince investors to invest in small towns.”

Of the six counties, Gooding County is faring the worst: employment and population numbers have both fallen since the recession (Tables 1.1 and 5.1). As one elected official explained,

“We’re trying to get economic development going but it’s hard ... We have no trained workforce and no housing.”

The communities in Gooding County are small, without the scale that would help them diversify beyond agriculture and build infrastructure to bring in new firms. And they have not attracted as many processing jobs relative to production jobs as larger communities. In Twin Falls County, 43% of all dairy jobs are in processing, while in Gooding and Jerome counties, the ratios are 27% and 28% respectively.

Small towns are challenged to grow, like other very rural and farm-dependent places across the U.S. Median household income estimates from the U.S. Census Bureau indicate that in 1989, before Idaho’s dairy industry began to grow, Gooding County lagged the other five counties in our study area. Also in 1989, it had the second highest poverty rate of the six counties (U.S. Census Bureau, 1989).

National designation

In the 10 months following December 2012, seven firms announced food processing projects in the Magic Valley worth nearly \$800 million, with the potential to add up to 5,000 new jobs

(Spinner, 2014). The firms – including Chobani, Clif Bar, Glanbia and McCain Foods – brought the kinds of steady jobs with benefits described in Chapter 4.

In 2015, the U.S. Economic Development Administration designated the Magic Valley as one of 12 “Manufacturing Communities” in the U.S. and one of four in the food processing category. The designation was based on workforce and training; advanced research; infrastructure and site development; supply chain support; export promotion; and capital access.

When asked why the region has been so successful in recruiting food processors, an economic development professional talked about the impact of proactive regional leadership:

“SIEDO [Southern Idaho Economic Development Organization] came in and launched it from dairy. It took 10 years to get some big hits and it has really started to get momentum. They had to figure out what kinds of businesses would be interested in being in such a big dairy area. It took a lot of effort to coordinate and brand and cooperate as a region.”

One economic development professional predicted that the impact of development and diversification would be higher wage rates.

“Pay is really important and people are switching jobs to get higher wages . . . Even in manufacturing people keep leaving for a better opportunity. We need to see it's based on wages. It will be really interesting to see whether Clif Bar will create a trickle-down effect on other companies because their wages and benefits are very good.”

Development strategies

Our interviews surfaced different perspectives on where the region should go from here, particularly in terms of business recruitment vs. more locally-based strategies. The region’s Idaho Manufacturing Community proposal (described above) acknowledged these different perspectives by including a strategy to link small businesses to larger firms through supply chains.

A businessman said,

“Entrepreneurship is not promoted enough here . . . It could benefit former dairy workers and family members who want to start and expand their businesses . . . There are empty

buildings and it's not conducive to attracting talent, which is what those companies say they need in order to attract the talent pool they want . . . There needs to be more technical services delivered to emerging Hispanic businesses ... They need help with bookkeeping and qualifying for SBA loans."

Several business people and development professionals we interviewed advocated other strategies, including downtown revitalization, farmers markets, employee ownership options, and business incubators.

Chapter 6: Impacts on schools

Summarizing impacts on schools, we wrote in 2009 about the changing demographics in Magic Valley schools. We found the increase in dairy employment had closely tracked growth in the Hispanic population, and in turn, Hispanic school enrollment. We found that some school districts would be losing enrollment if not for the growth in Hispanics. These trends have continued to 2017.

Enrollment

In the 2013-2014 school year, the Magic Valley's 23 public school districts had roughly 24,000 K-12 students, up 15 percent since 2000-2001.¹⁰ The growth was entirely due to Hispanic students. The number of Hispanic students increased 85 percent during this period, while the number of non-Hispanic students was flat (Figures 6.1 and 6.2). One-third of the region's students were Hispanic in 2013-2014, up from one-fifth in 2000-2001.

In the 2015-2016 school year, Idaho's total K-12 enrollment was 18 percent Hispanic (Table 6.1). Of Magic Valley's 23 school districts, only three had a smaller share of Hispanic students than the proportion of Hispanic students in the state overall. Seven districts had at least 40 percent Hispanic students. Two – Bliss Joint and Wendell in Gooding County – had at least 50 percent.

Between 2010-11 and 2015-16, Hispanic enrollment grew in almost every Magic Valley school district. The fastest growth occurred in North Valley Academy in Gooding County; Jerome Joint; and Kimberly and Xavier Charter in Twin Falls County (Figure 6.3).

These demographics have important implications for the region's districts in terms of funding for staff and other resources, family engagement, integration and achievement.

¹⁰ Analyzing time period change in enrollment by ethnicity is difficult because of some inconsistency in the federal (National Center for Education Statistics) and state (Department of Education) data. Federal data are more complete but less recent and vice versa. Because we have not combined the two sources, time periods in the graphs and discussion do not align. Here, we use federal data for the 2000-01 – 2013-14 period and state data for the 2010-11 – 2015-16 period.

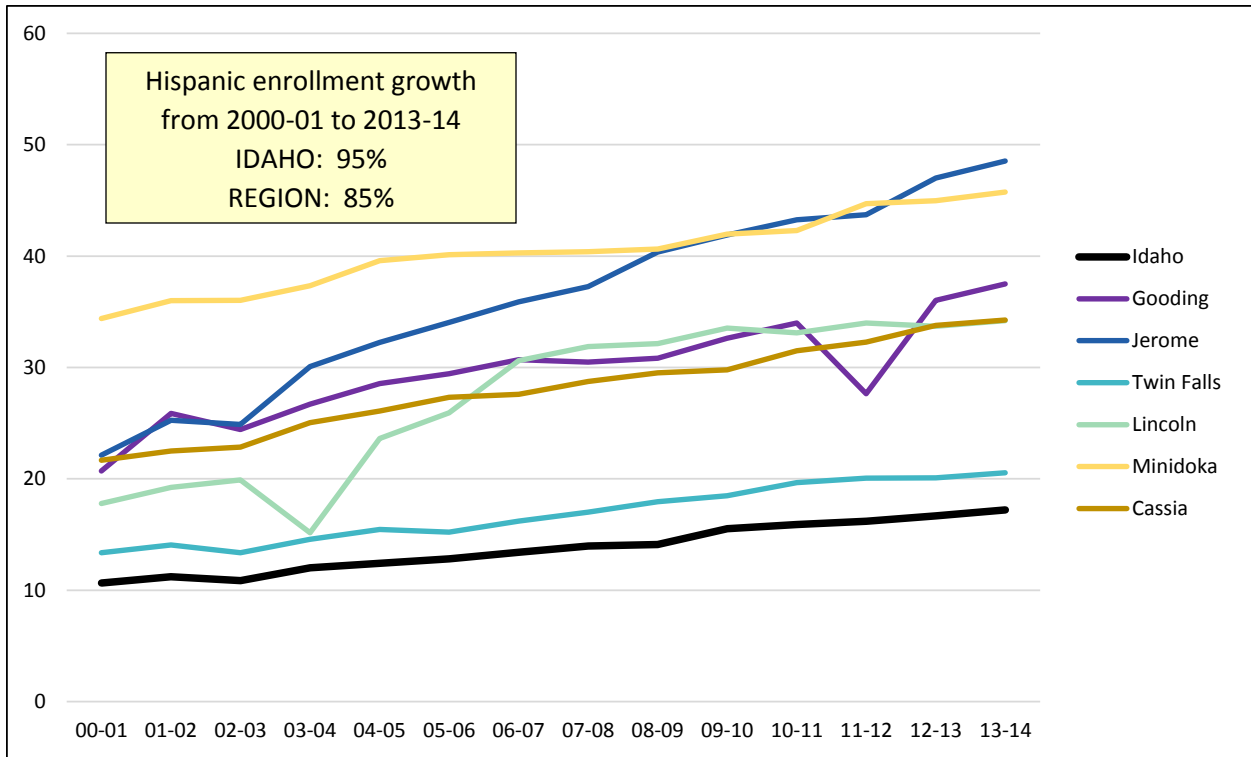


Figure 6.1 – Hispanic enrollment as a percentage of total public K-12 enrollment, 2000-01 to 2013-14
SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS

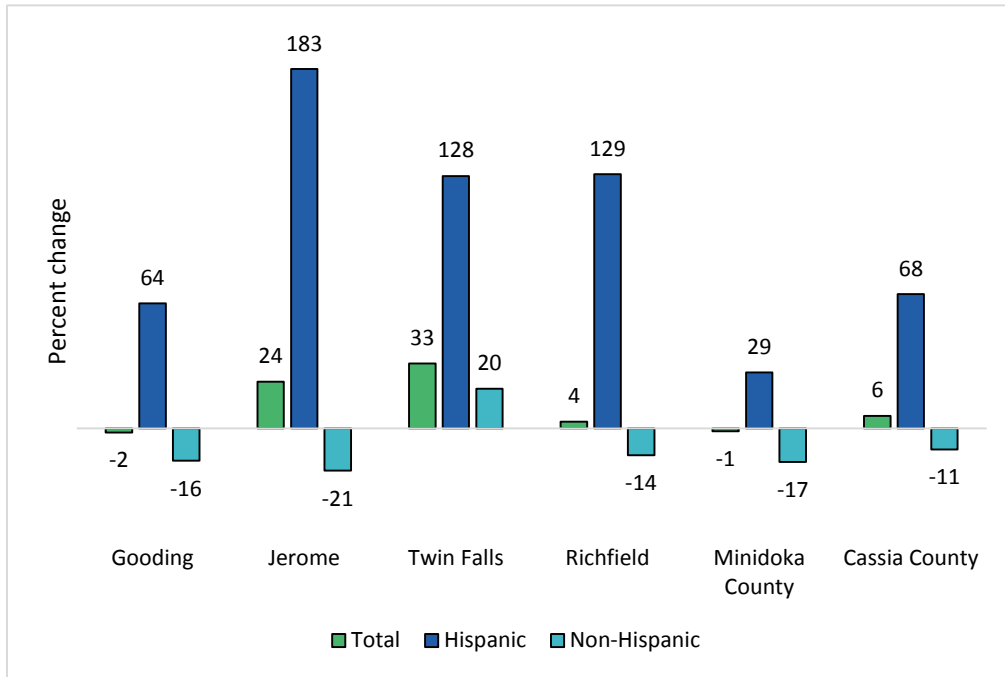


Figure 6.2 – Change in enrollment, select districts, 2000-01 to 2013-14
SOURCE: U.S. DEPARTMENT OF EDUCATION, NATIONAL CENTER FOR EDUCATION STATISTICS

Table 6.1. – Enrollment by school district and ethnicity and percent Hispanic, 2015-16, and enrollment change, 2010-11 to 2015-16

	K-12 public school enrollment 2015-16 (#)			Percent Hispanic 2015-16	Change in enrollment 2010-2011 to 2015-16 (%)		
	Total	Non-Hispanic	Hispanic		Total	Non-Hispanic	Hispanic
IDAHO	291,631	240,323	51,308	18	5	4	14
GOODING COUNTY TOTAL	3,196	1,921	1,275	40	NA	NA	NA
Bliss Joint	126	76	50	40	-17	NA	NA
Gooding Joint	1,276	887	389	30	5	6	2
Hagerman Joint	342	264	78	23	-16	-15	-19
ID Bureau of Educational Services for the Deaf & Blind	74	53	21	28	4	NA	NA
North Valley Academy	246	183	63	26	5	-12	133
Wendell	1,132	458	674	60	3	-18	24
JEROME COUNTY TOTAL	4,598	2,327	2,271	49	NA	NA	NA
Heritage Academy	177	135	42	24	NA	NA	NA
Jerome Joint	3,826	1,875	1,951	51	9	-5	26
Valley	595	317	278	47	-4	NA	NA
TWIN FALLS COUNTY TOTAL	15,329	12,286	3,043	20	NA	NA	NA
Buhl Joint	1,288	824	464	36	9	2	24
Castleford	312	241	71	23	8	NA	NA
Filer	1,604	1,384	220	14	16	19	0
Hansen	314	199	115	37	-18	-18	-16
Kimberly	1,803	1,579	224	12	25	25	24
Murtaugh Joint	283	145	138	49	25	33	18
Three Creek Joint Elementary	11	9	2	18	120	NA	NA
Twin Falls	9,028	7,267	1,761	20	17	18	17
Xavier Charter	686	638	48	7	10	9	23
LINCOLN COUNTY TOTAL	959	601	358	37	NA	NA	NA
Dietrich	236	185	51	22	NA	NA	NA
Richfield	207	155	52	25	4	NA	NA
Shoshone Joint	516	261	255	49	-7	-15	2
MINIDOKA COUNTY TOTAL	4,134	2,211	1,923	47	4	-0.1	8
Minidoka County Joint	4,134	2,211	1,923	47	4	-0.1	8
CASSIA COUNTY TOTAL	5,406	3,548	1,858	34	3	-1	11
Cassia County Joint	5,406	3,548	1,858	34	3	-1	11

NOTE: NA DENOTES DATA THAT WERE NOT PROVIDED BY THE IDAHO DEPARTMENT OF EDUCATION THROUGH A PUBLIC RECORDS REQUEST.

SOURCE: IDAHO DEPARTMENT OF EDUCATION

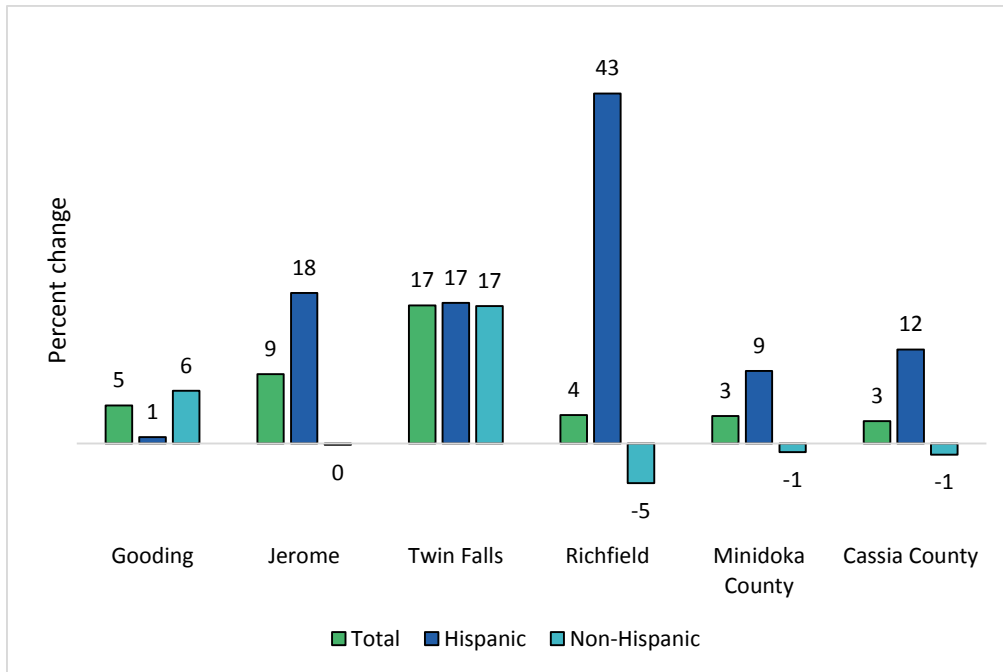


Figure 6.3 – Change in enrollment, select districts, 2010-11 to 2015-16

SOURCE: IDAHO DEPARTMENT OF EDUCATION

Funding and staffing needs

School administrators frequently talked about having inadequate resources to serve students, especially where enrollment is not growing but demographics are changing.

Talking about demographic change, a retired school teacher said,

“Demographic change, with the increase in Hispanic students, means it is harder to reach some students. The student population is now bifurcated, with some families able to afford pre-school and others not. The latter group is not only Hispanic.”

In a district where enrollment has been flat, a principal said,

“There have been some funding reductions over the last eight years due to the recession and decrease in state-based revenues. This mostly affected staffing within the District. We have lost quite a few staff positions.”

Even where enrollment is growing, funding is not increasing enough to meet specialized staffing needs. An assistant principal on the eastern side of the region where enrollment is growing said,

“Resources to help these kids are stretched very thin. I always meet with new students in the first few months they’re here. I ask them if they’re making friends and connections. So yesterday I had a girl in whose grades have not been good. I asked her what kind of problems she was having and it turned out she had been in ESL before she came here. And we looked back in her records and sure enough she had. But we are so overloaded we missed that she was ESL. She struggled unnecessarily for two months. She fell through the cracks.”

A high school principal said,

“There have been changes related to these demographic shifts. One of the most clear is that there is a heavier burden on the ESL department and staff. There are more students that require some special services.”

An assistant high school principal said,

“Out of 70 certified staff, only three are bilingual. The ESL teacher, an aide for ESL and one teacher. The share of Hispanic kids in the school is increasing. We are seeing so much growth.”

A retired school teacher said her district now needs more *“ESL staff who do interventions for kids who have no language skills and support people for dual language programs.”*

Speaking about the high school where she used to work, a former principal said,

“We had one ESL teacher and one paraprofessional for 980 students. That is not enough . . . This is a major issue for schools trying to work through issues with those families.”

The school administrators and staff we interviewed had different opinions on whether the dairies help alleviate funding shortfalls.

A principal said,

“The dairy industry is a huge supporter of the educational system. They make a lot of contributions to the schools that not everyone sees. This happens in lots of ways.”

A retired teacher saw it differently:

“Some dairymen donate to schools, usually to athletics. [A dairy in our district] donated to the school so they could automate the flag.”

A principal observed another dimension of how dairies impact the education system.

“Another relation between the dairies and the schools is some of the dairy families. Sometimes, the dairy operators will opt to send their kids to a charter or private school outside the district system. We do see that effect. Then, when one starts that, it sometimes has become a trend among the dairy families and that does not help with our community integration. Sometimes, it is a religious school that is the reason. Overall though, the dairies have been very supportive of the school system. There is a good relationship there.”

In sum, many schools – especially in rural areas – are challenged to meet student needs with the resources they have.

Parent engagement

Teachers and school administrators often talked about Hispanic parents having different attitudes towards education and comfort levels with “traditional” means of engagement.

A principal said,

“There tends to be a challenge to have parents participate because there are lots of them working long hours, and they are often not supported on HOW they can participate in the school system very well or in the community overall. There are key issues the community faces about HOW to get them to participate in their child’s education. They don’t know how, but that’s not their fault . . . They are just not confident within the culture of the American school system the way they would be in a different cultural setting. So, we don’t have enough resources for that.”

Another principal said,

“Hispanic parents are hesitant to come in to the school. There are language barriers. We tried to make sure we had Spanish-speaking staff in the office . . . The Hispanic families do not have as good of an understanding of the education system. They come in and feel lost. And as educators, we often use jargon they do not understand well. That probably adds to the confusion, like when we speak in acronyms they do not know.”

That doesn’t mean Hispanic parents don’t want to be involved with the schools. The principal continued,

“We held an anti-drug campaign meeting and hundreds of students attended. There was one white parent and 30 Hispanic parents. They were very interested and offering to help. They asked questions and they were very involved. In my observation, the Hispanic parents are often more comfortable in smaller group settings.”

A retired teacher said,

“Hispanics are family centric. They use the whole family to raise the children. This is GOOD. Families are not fractured the way they are in the rest of the state . . . Many parents have jobs and don’t have time to work with their kids or to engage with the school. Those without papers don’t want to call attention to themselves. Some schools have teachers do home visits because parents don’t come in.”

Thus, parents want to engage but they do not always know how. This issue can be addressed with the right resources – in particular bilingual and bicultural staff – to engage Hispanic parents.

Integration

Integration and segregation were common themes in our interviews with teachers and administrators. A principal told us,

“There is definitely a divide between whites and Hispanics. By that, I don’t mean there is major conflict or fights in the halls. It is more subtle and structural. For instance, the football team is ‘white’, and the soccer team is ‘Hispanic’ in a very general way. There is a more natural segregation than being in each other’s’ faces too much.”

A teacher commented,

“Kids are fairly well integrated in the schools, more at the younger ages and less in high school. K-5 kids know nothing about discrimination.”

Given the rapid and substantive growth of the Hispanic community in the Magic Valley, families and students alike continue to experience both integration opportunities and segregated experiences. That many Hispanics still have ongoing concerns about security and presence within the community continues to serve as a barrier to greater levels of integration, even when an ethnic conflict is not dominant in a social setting, a community institution, or a pattern of interactions.

Achievement

The Idaho Standards Achievement Test (ISAT) measures proficiency in science, language arts, and math in grades 3-10. In the 2015-16 school year:

- Hispanic students in the Magic Valley were less likely than non-Hispanics to have proficient or advanced scores on the three ISAT tests.
- Hispanic and non-Hispanic students scored best in science.
- Over 80 percent of Hispanic students scored below proficiency in math (Figure 6.4).

Why are there such discrepancies? The answer is certainly complex. On one hand, administrators and teachers commonly said they had insufficient resources to serve high-need students. On the other hand, some researchers and advocates question the value of standardized tests. They argue the tests do a poor job measuring achievement among students of color, especially those for whom English is a second language (Neill, 2005 and 2009). They propose alternative assessment methods that do not penalize students from low-income families and low-resource schools.

A high school principal said,

“Sometimes there are challenges with the students reaching proficiency in ISAT. The Hispanic population does ok overall, but that’s not clear if you look at our ISAT profile. It shows how the Hispanics are lagging in those standard indicators.”

Talking about language and financial barriers, a teacher said,

“Even a kid that’s gone all the way through the Gooding School District doesn’t necessarily have a great command of the English language. Some kids are going to college, some have to work to bring money in for their families. The population is struggling to become more educated overall.”

Again on the subject of financial barriers, a principal commented,

“There are students that drop out of high school. It is a surprise how much this is NOT viewed as delinquent because everyone knows they just need to in order to help the family make financial ends meet. There are circumstances that put these families in very tough situations that are not their fault. Sometimes, they are just gone abruptly, then they may come back, and re-enroll.”

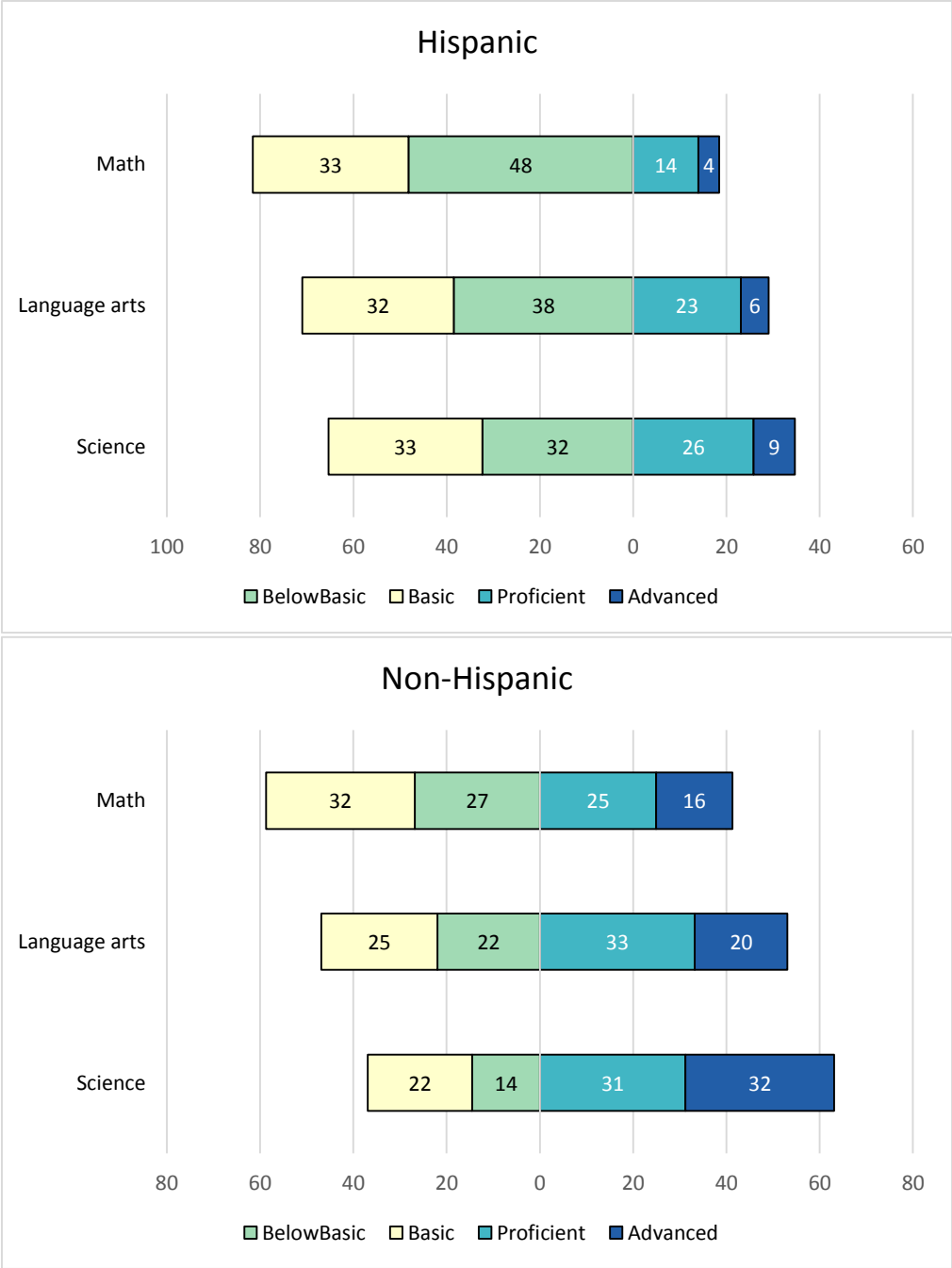


Figure 6.4 – Idaho Standard Achievement Test (ISAT) scores by ethnicity, all grades, six-county region, 2015-16

SOURCE: IDAHO DEPARTMENT OF EDUCATION

Talking about access to post-secondary education at a school where he used to work, a principal said,

“The emphasis was not an ‘all or nothing’ attitude. There are a lot more options like increasing the amount of trade programs at schools. There is a large percentage of kids who will NOT go on to college because of debt load and cost barriers. In the Hispanic community, there is a ton of pressure to help support the family, so they may support education, but sometimes work has to come first.”

To close, growth in Magic Valley school enrollment continues to be from Hispanic students. The opportunity for schools is that Hispanic parents value their children’s education and want to engage. Schools would benefit from having bilingual and bicultural staff to facilitate this relationship building.

Chapter 7: Impacts on health care

Our study also documented the dairy industry's community-level impacts on the Magic Valley's health care system. In this section, we discuss health insurance coverage, selected health indicators, and indigent health care costs. Importantly, this section highlights the intersection of two national policy debates – immigration reform and health care.

Within some news media and easily-accessible online reporting, accounts of immigration impacts often claim impacts to health care costs as one of the primary societal effects (Asbury, 2013; Rosin, 2014). Other analyses find that immigrants access and use disproportionately less health care services than their share of the overall population (Goldman et al., 2006), suggesting they induce less than their share of the costs. Given the limitations many immigrants face in accessing federally-supported health care, especially preventative care, states are responding to support those who do not receive services adequately (Whitman, 2015). We examine the contentious issue of local health care impacts associated with an influx of immigrant labor.

Health insurance coverage

In the last decade, U.S. health care policy has changed, mainly due to the Affordable Care Act (ACA) enacted in 2010 (Siskin and Lunder, 2016). Three key features of the ACA in place at the time of this analysis are the individual mandate to purchase health insurance, federally subsidized insurance premiums, and state-based health insurance exchanges. As many analysts expected, the ACA resulted in fewer citizens without health insurance (using the same five-year benchmark as the Personal Responsibility and Work Opportunity Reconciliation Act, PRWORA, of 1996).

Eligibility requirements for immigrants are less straightforward.¹¹ According to the National Immigration Law Center, lawfully present immigrants are eligible for limited federal coverage.

¹¹ See, for example, "Immigrants and the Affordable Care Act," National Immigration Law Center, "<https://www.nilc.org/issues/health-care/immigrantshcr/>, accessed on January 31, 2017.

For example, they are not eligible for Medicaid in most cases, until after a five-year waiting period (National Immigration Law Center, 2014).

Unauthorized immigrants are covered under the employer mandate if the employer has at least 50 employees. However, they are not eligible for any subsidies, making insurance more difficult to afford. The act was not designed to result in lower numbers of unauthorized immigrants without insurance, except through the “ability and willingness of local safety net providers, such as community health centers, to serve them, which will likely vary from area to area (Kenney and Huntress, 2012).”

The Idaho Department of Health and Welfare has collected statistics on insurance coverage by ethnicity since 2006. In the 2009 study, we found much lower coverage rates among Hispanics (17 percent) than non-Hispanics (44 percent). We also reported a decline in the share of Hispanics with no insurance coverage from 52 percent in 2007 to 44 percent in 2008, before the ACA was passed.

Figure 7.1 shows that the share of Idahoans age 18-64 without health insurance dropped from 25 percent in 2010 to 19 percent in 2014. This trend holds true in all six counties in our study, although in each one, the share of Hispanics without health insurance is higher than in the state as a whole as can be seen from Figure 7.2. In the Magic Valley, Gooding and Jerome counties, which have the most dairy farm workers (Figure 2.7), also have the highest rates of uninsured. Lincoln County, with about half as many dairy farm workers as Gooding and Jerome counties, also has a high share of Hispanics without health insurance.

Figure 7.2 shows very large differences between rates of coverage among Hispanic and non-Hispanic adults. Within every geography (state, region, and individual counties), Hispanics are less than half as likely to have insurance than non-Hispanics. In the region as a whole and all counties except Twin Falls, over 55 percent of Hispanics lack insurance. In Gooding and Jerome counties, which have the most dairy jobs, rates exceed 60 percent. People we interviewed noted that permanent processing jobs provide benefits including health insurance. Twin Falls

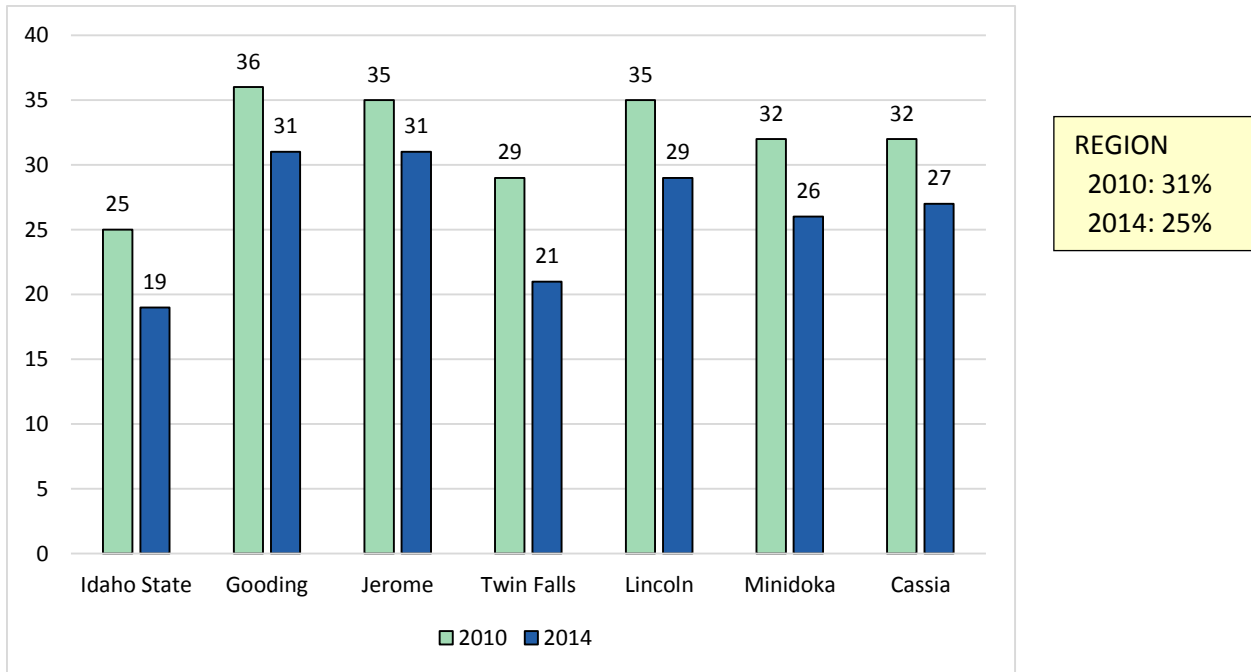


Figure 7.1 – Percent of population age 18-64 without health insurance, six counties and Idaho, 2010 and 2014

SOURCE: U.S. CENSUS BUREAU, SMALL AREA HEALTH INSURANCE ESTIMATES

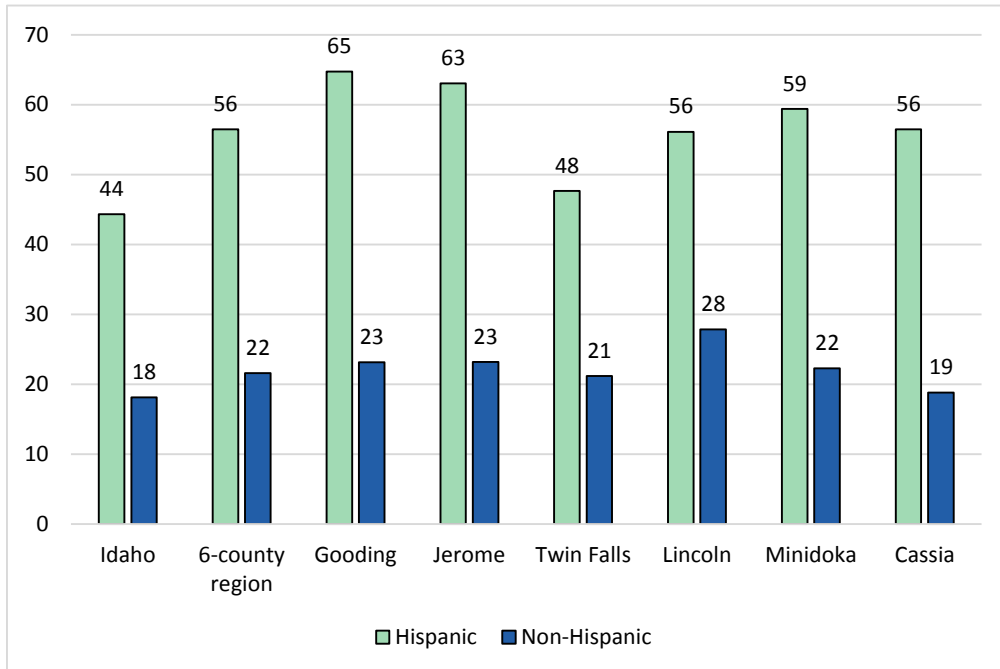


Figure 7.2 – Percent of population age 18-64 without health insurance, by ethnicity, six counties and Idaho, 2011–2015 average

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

County, with the highest ratio of processing jobs to production jobs, has the lowest share of Hispanics without health insurance.

Our interviews echoed themes in academic literature related to factors that discourage people from accessing health care (Hacker et al., 2015). Health care workers and others we interviewed talked about: the fear of deportation; ability to communicate in English; financial resources; knowledge and understanding of the health care system; shame; and stigma.

For example, one health care worker described how a typical dairy worker might experience social and economic barriers affecting health care decisions:

“It is hard for the dairy workers to get time for health care because they don’t get sick leave or time off to come to the clinic usually. If the dairy worker is the breadwinner, he can’t always afford to just take an hour off of unpaid work, so he doesn’t come. He makes himself believe even more he does not need to be seen. In Jerome, we adjusted the clinic hours to try to accommodate the ends of some of their shifts to address this.”

However, our interviews also indicated the ACA has not necessarily translated into increased care for dairy workers, regardless of their immigration status. As a health care administrator explained:

“While the ACA requires insurance for everyone, it did not make a significant impact on our funding because that is not reality for so many of our patients. They will not get insurance even though they have to. They don’t have the ability to pay that premium AND then meet all their primary needs, so this becomes an ‘option’ in their minds. In Idaho, and some other states, this has become known as ‘the Gap population.’ Lots of dairy workers fall in that group.”

Health professionals also identified how good community relations can positively impact individual decisions to access health care:

“Most of the nurses live in the communities they work in and help provide assurances as a community member that patients and their families are safe. They are trusted a lot. We volunteer at the schools and the churches as members there too and the patients see us there and know us that way, so it makes a difference.”

Maternal health and birth rate

More specifically, examining maternal health and birth rate indicators for the Magic Valley also highlights important differences between Hispanics and non-Hispanic whites. The Idaho Department of Health and Welfare tracks pregnancy risk assessment; whether expectant mothers have private health insurance prior to pregnancy; whether they access Medicaid for prenatal care or delivery; and if they participate in the WIC (Women, Infant, & Children) program during pregnancy. Table 7.1 shows results for these indicators at the statewide level by ethnicity. Hispanic mothers are less likely to have private health insurance prior to pregnancy, more likely to use Medicaid for prenatal care and/or delivery, and more likely to use WIC during pregnancy.

Table 7.1 – Key maternal health indicators: health insurance coverage by ethnicity, Idaho, 2014

	Total	Hispanic	Non-Hispanic
	Percent		
No private health insurance prior to pregnancy (does not include Medicaid)	33	69	28
Medicaid use for prenatal care and/or delivery	41	60	39
WIC participation during pregnancy	33	66	29

SOURCE: IDAHO DEPARTMENT OF HEALTH AND WELFARE, BUREAU OF VITAL RECORDS AND HEALTH STATISTICS, PRATS

However, data from the interviews also reveal the complexity many individuals face about whether to access health services. For instance, a health care worker explained how the combination of language barriers, limited financial resources, and general fear of accessing services intersect with policy to affect women’s health care decisions:

“There is a specific effect of how this works that happened in the Women’s Preventive Health Care program. About 3-4 years ago, Idaho changed the policy and now requires us to ask for documentation. So, the next year when our number of patients in this category was much lower, the Health Department called us and said ‘what’s going on? Why do you have so fewer cases all of a sudden?’ It’s clear; it’s because [before] we were seeing that many undocumented women who all needed services. We don’t know where they are now.”

The birth rate is an indicator of how the health care system as a whole may be impacted by low insurance rates among Hispanics. Live births for Hispanics (measured on a per capita basis) are notably higher than among non-Hispanics at every geographic scale (state, region, and each of the six counties), as shown in Figure 7.3. And, as illustrated above, the Hispanic population has a lower median age, possibly affecting the overall birth rate differences.

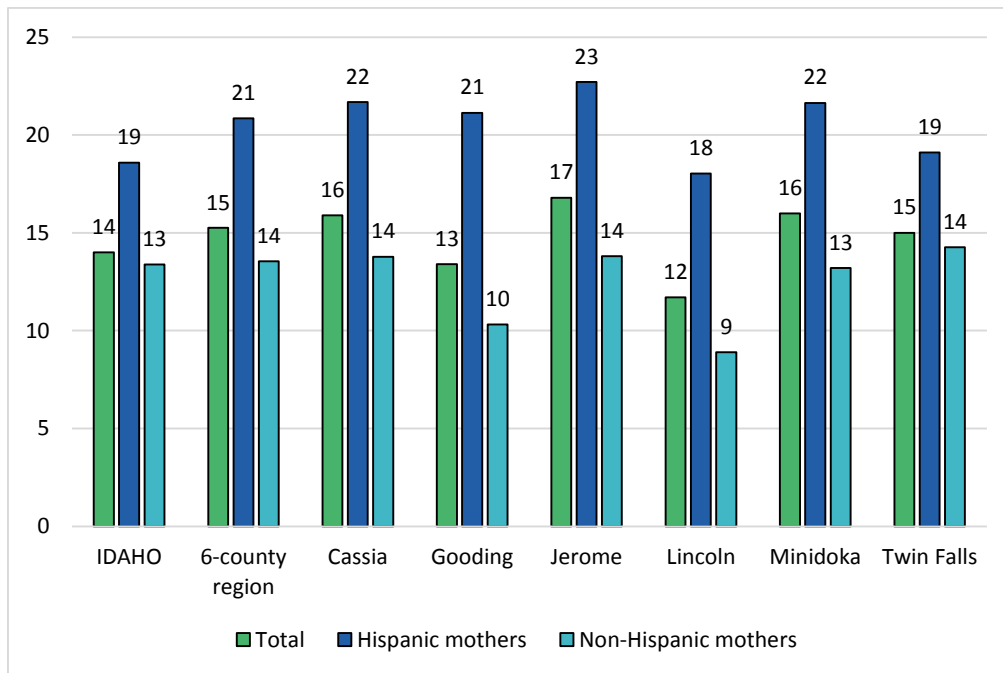


Figure 7.3 – Live births per 1,000 population, by mother’s ethnicity, six counties and Idaho, 2014

SOURCE: DEPARTMENT OF HEALTH AND WELFARE, BUREAU OF VITAL RECORDS AND HEALTH STATISTICS, IDAHO VITAL STATISTICS

Another indicator recorded by the Idaho Department of Health and Welfare, the Adequacy of Prenatal Care Utilization Index (APCU), allows us to analyze whether prenatal care access and utilization differs by ethnicity. In Table 7.2, the APCU aggregated data for 2013 – 2015 reveal that Hispanic and non-Hispanic mothers do not access prenatal care at the same rates. In Idaho and the Magic Valley, non-Hispanics had higher rates for ‘intensive’ and ‘adequate’ levels of prenatal care than Hispanics.¹² The greatest discrepancies between Hispanics and non-Hispanics are in Jerome and Gooding counties. In Gooding County, 48 percent of non-Hispanics had intensive prenatal care, compared to 30 percent among Hispanics.

¹² Index classifications include intensive (110% or more of expected prenatal visits), adequate (80-109%), intermediate (50-79%), inadequate (1-49%), and no prenatal care (0%).

Table 7.2 – Adequacy of Prenatal Care Utilization (APCU) index, by ethnicity, six counties and Idaho, 2013-2015 aggregated data

	TOTAL					HISPANIC					NON-HISPANIC				
	Intensive	Adequate	Intermediate	Inadequate	No Prenatal Care	Intensive	Adequate	Intermediate	Inadequate	No Prenatal Care	Intensive	Adequate	Intermediate	Inadequate	No Prenatal Care
	Percent					Percent					Percent				
IDAHO	34	44	8	13	1	31	39	9	19	1	35	45	7	12	1
6-county region	47	27	7	17	2	38	26	10	23	2	51	28	6	14	1
Cassia	43	37	5	15	0	37	33	6	24	0	47	38	4	10	0
Gooding	41	28	9	20	2	30	25	14	28	3	48	30	6	14	2
Jerome	42	26	9	21	2	33	24	12	28	3	49	29	6	15	1
Lincoln	35	33	9	21	3	31	29	9	27	4	37	35	8	18	2
Minidoka	45	36	4	15	1	41	35	5	19	1	48	37	3	13	0
Twin Falls	52	22	8	15	2	44	20	13	19	3	54	22	7	15	2
PHD 5	46	29	7	16	2	38	28	10	23	2	50	29	6	14	1

SOURCE: IDAHO DEPARTMENT OF HEALTH AND WELFARE, BUREAU OF VITAL RECORDS AND HEALTH STATISTICS, PRATS

Thus, evidence across the sources of data suggests a continuum of health care access exists in the Magic Valley. At one end, non-Hispanics have higher rates of insurance and care access (measured by maternal health indicators and the APCU). In the middle, native-born Hispanics and authorized Hispanic immigrants may be eligible for subsidized insurance and may access care at higher rates than other Hispanics. And, unauthorized and recent Hispanic immigrants not eligible for Medicaid are likely to have the lowest rates of care, measured by health insurance coverage and access of services.

Indigent care costs and social services

As described in our 2009 report, federal legislation passed in the mid-1980s established that emergency services at hospitals must be provided for all patients regardless of ability-to-pay. This legislation caused concerns for some people that immigrants, who are as a group less likely to have health insurance, may tax the health care system with indigent care costs.

In interviews for our 2017 study, health professionals reflected on indigent health care and social services costs. One health worker summarized the primary and pervasive challenges for many dairy workers in Magic Valley:

“Local, affordable healthcare is difficult to find or access. Our county leaders deal a lot with the indigent program. Unauthorized people can only be provided emergency services. Once they are stable, the program will not pay the bills anymore. They cannot afford to go in and get a physical or any preventative care.”

This comment highlights the cumulative challenge for many dairy workers. Although dairies pay wages well above the minimum, many immigrants remain in a lower socio-economic tier. As a consequence, the direct and primary health care system risk is hidden from societal view because of the lack of access and affordable care, leading to less preventative care, which may also eventually translate to greater long-term costs.

Another health care worker described a trend toward fewer people in need who are accessing social services for which they are eligible, such as help with household budgeting and paying utility bills. He also talked about how health care providers manage indigent costs:

“In our office, the incidence of non-medical needs has also gone down. We see patients from all walks of life. Sometimes business professionals can’t pay their bills for a catastrophic situation. The refugees only have a certain number of months for assistance and then cannot participate. The hospitals are doing ‘charity’ with some of the bills. For patients who can’t get indigent care support, or have it and it runs out, [the hospitals] may write this off in many cases. Sometimes they cannot afford to go after the money if it is less than \$10,000.”

Table 7.3 – Total indigent care expenses, six counties and Idaho (\$1,000s), and six-county region indigent care expenses as a share of state total (%), FY12 to FY16

	IDAHO	6-county region		Gooding	Jerome	Twin Falls	Lincoln	Minidoka	Cassia
	\$1,000s	\$1,000s	Percent of state total	\$1,000s					
FY12	55,272	8,177	15	809	591	4,999	186	924	667
FY13	52,670	8,135	15	750	1,801	3,900	284	961	438
FY14	51,529	7,978	15	935	978	4,730	163	675	497
FY15	36,328	7,284	20	891	1,066	3,896	86	645	699
FY16	33,950	5,801	17	734	623	3,338	105	419	582

NOTE: ALTHOUGH THE TIMEFRAME OF THESE DATA DOES NOT FULLY REPRESENT THE FULL TIME PERIOD OUR ANALYSIS REPRESENTS, THE DATA ARE ONLY AVAILABLE BACK TO 2012 THUS LIMITING THE ANALYSIS.

SOURCE: IDAHO ASSOCIATION OF COUNTIES

For the region and all counties except Jerome, total expenditures on indigent care went down from FY2012 to FY2016 (Table 7.3). Expenditures fell by over \$2 million in the Magic Valley, a decline of over 40 percent, but on average still occur at higher rates regionally compared to the state overall. While per capita expenditures for indigent care declined in the region as a whole from FY2012 to FY2015, the regional rates still exceed that of the state overall (Table 7.4). Total expenses for this short period showed increases in Jerome and Gooding counties, while total and per capita expenditures in Jerome County varied greatly over this time period. Table 7.4 also notes the limitation that these secondary data are only available back to fiscal year 2012, well after the dairy industry began growing significantly.

Table 7.4 – Per capita indigent care expenses (\$), six counties and Idaho, FY12 to FY15

	IDAHO	6-county region	Gooding	Jerome	Twin Falls	Lincoln	Minidoka	Cassia
FY12	35	50	53	26	64	35	46	29
FY13	33	49	50	80	49	54	47	19
FY14	32	47	62	43	58	31	33	21
FY15	22	43	58	47	47	16	32	30

SOURCE: IDAHO ASSOCIATION OF COUNTIES AND U.S. CENSUS BUREAU, POPULATION ESTIMATES PROGRAM

In sum, Magic Valley health care has improved overall on some levels (such as lower indigent care costs and improved health insurance coverage), yet disparities continue between Hispanics and non-Hispanics, and by geography. Hispanics continue to lag on insurance coverage and in specific areas such as prenatal care. That trend, along with higher birth rates among Hispanics, indicates that some residents will be underserved and in need of expanded health care services over the long-term. While these data do not provide a conclusive causal relationship (nor the lack thereof) between Hispanics in the Magic Valley and impacts to the health care system, the larger pattern illustrated by the interview results and secondary data analyses reveals that immigrants are not clearly taxing the health care system with unpaid expenses. Rather, in many cases, they fail to access the care and services because of their economic constraints and lack of security about engaging within the system in general.

Chapter 8: Impacts on law enforcement and justice

Summarizing community-level impacts on the criminal justice system, we wrote in 2009 “the law enforcement and justice systems indicated that dairies do not serve as a catalyst for increasing crime.”

In the 2017 study, people we interviewed noted greater civic participation, low unemployment rates, higher average disposable income, and increased business entrepreneurship among Hispanics since the previous study. These and other social and economic conditions shape the context for crime and criminal justice at the community level. Here, we examine recent trends related to crime and law enforcement, and whether the dairy industry has an impact on these trends.

Context of rural crime and immigration perceptions

Rural community research has documented higher rates of crime associated with rapid or substantial community change (Freudenburg and Jones, 1991). Rural community characteristics that may contribute to this relationship include a less diversified economy and a tax base that cannot easily absorb higher criminal justice costs (Weisheit et al., 2006). While most criminological theory and research has focused on urban areas, some work has pointed out the unique context for rural communities, shaped by distance from cities, isolation, and specific offenses related to types of jobs in rural places (Cebulak, 2004). In rural regions, the experience of managing crime can take specific forms including greater informal social control, and attitudes of hostility or suspicion toward government (Cebulak, 2004). Moreover, the interpretation of crime rates at different scales (such as the state vs the six-county region) can also vary due to enforcement style differences.

In most respects, the Magic Valley is more rural than urban. In a rural community context, those who have negative stereotypes about foreign-born labor often target immigrants as a group responsible for higher rates of crime. Yet from 1993 – 2006 when unauthorized immigration reached unprecedented levels in the U.S., crime rates declined nationally and in regions with high concentrations of immigrants (Rumbaut, 2009). This fact challenges a

common misunderstanding sometimes reinforced by political rhetoric and news media that make general statements conflating immigrants and crime.

Arrests

Here we explore arrest patterns over time in Idaho and the Magic Valley, as well as among Hispanics and non-Hispanics. Between 2005 and 2015, overall arrest rates among Hispanics in the Magic Valley remained fairly constant, with small annual fluctuations and a slight overall decrease (Figure 8.1). Total arrests for non-Hispanics decreased over the time period. Adjusting the graph to make the same comparison on a percent-of-population basis, Figure 8.2 shows relatively minor differences in total arrest rates. Figure 8.3 displays the same total arrest results, but on a different percentage scale (0-10%) in order to show the relative differences by ethnicity and geographic scale as negligible.

One law enforcement officer we interviewed explained the trend he has observed in the Magic Valley during the past decade:

“We do have problems in the community, like any other. However, there are no crime or victimization trends related to the dairy industry. As a community, we went through some tough times a few years ago and had a lot of vacant homes. Some of the dairy workers have filled those and contribute to the community. They have long hours and hard shifts, like other agricultural industries; there’s no need to target them from a policing standpoint.”

To summarize, Hispanics have had a decreasing arrest rate in the Magic Valley in the last decade relative to their percent-of-population. And, the overall 2015 arrest rate for Hispanics in the region (3.4 percent) is a fraction of the percent-of-population (24 percent) within the region.

As a subset of total arrests, drug arrests for both Hispanics and non-Hispanics are very low. Figure 8.4 indicates relatively steady rates, by ethnicity and as percent-of-population, of drug arrests over the past decade at both the regional and state levels, suggesting no significant change or difference. This graph is displayed on a 0-10% scale emphasizing the low rate, but in an attempt to show the slight variability between the trends. Crimes against property arrests,

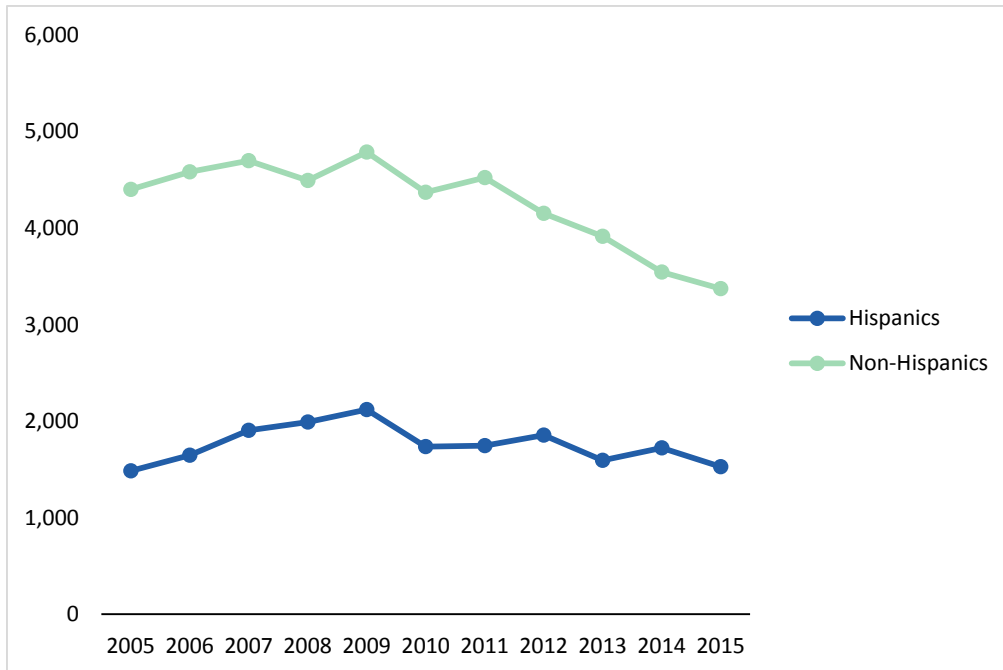


Figure 8.1 – Total arrests, by ethnicity, six-county region, 2005-2015

SOURCE: IDAHO STATE POLICE

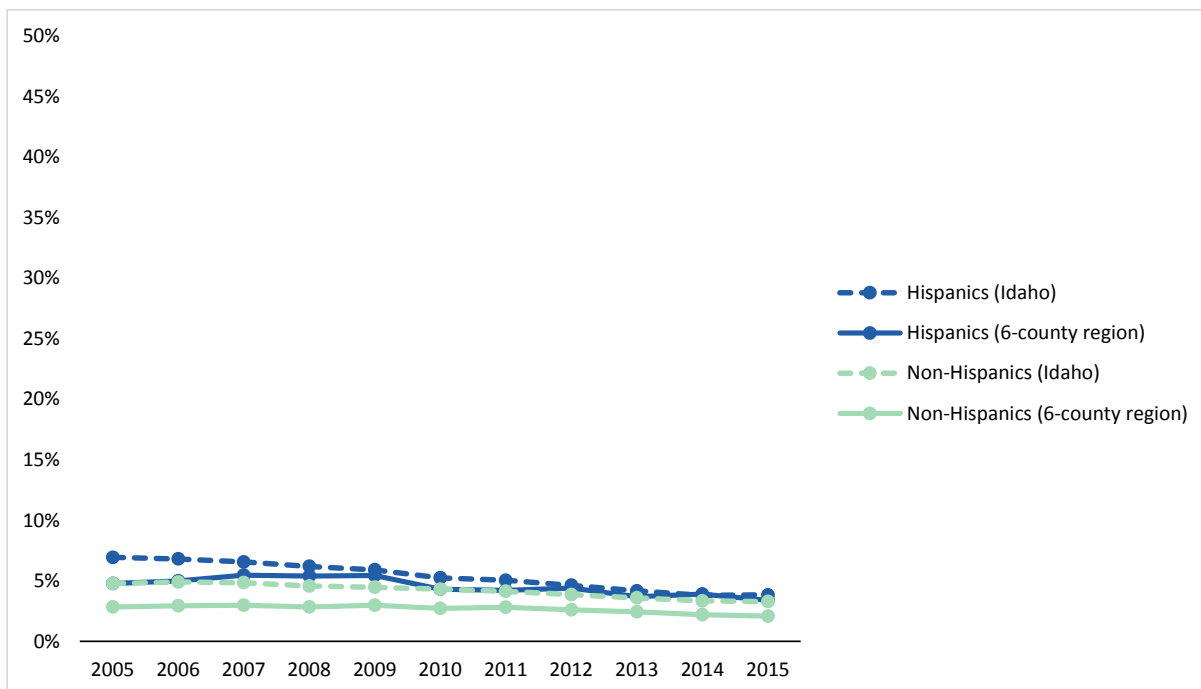


Figure 8.2 – Total arrests, by ethnicity, as percent of total population, six-county region and Idaho, 2005-2015

SOURCE: IDAHO STATE POLICE

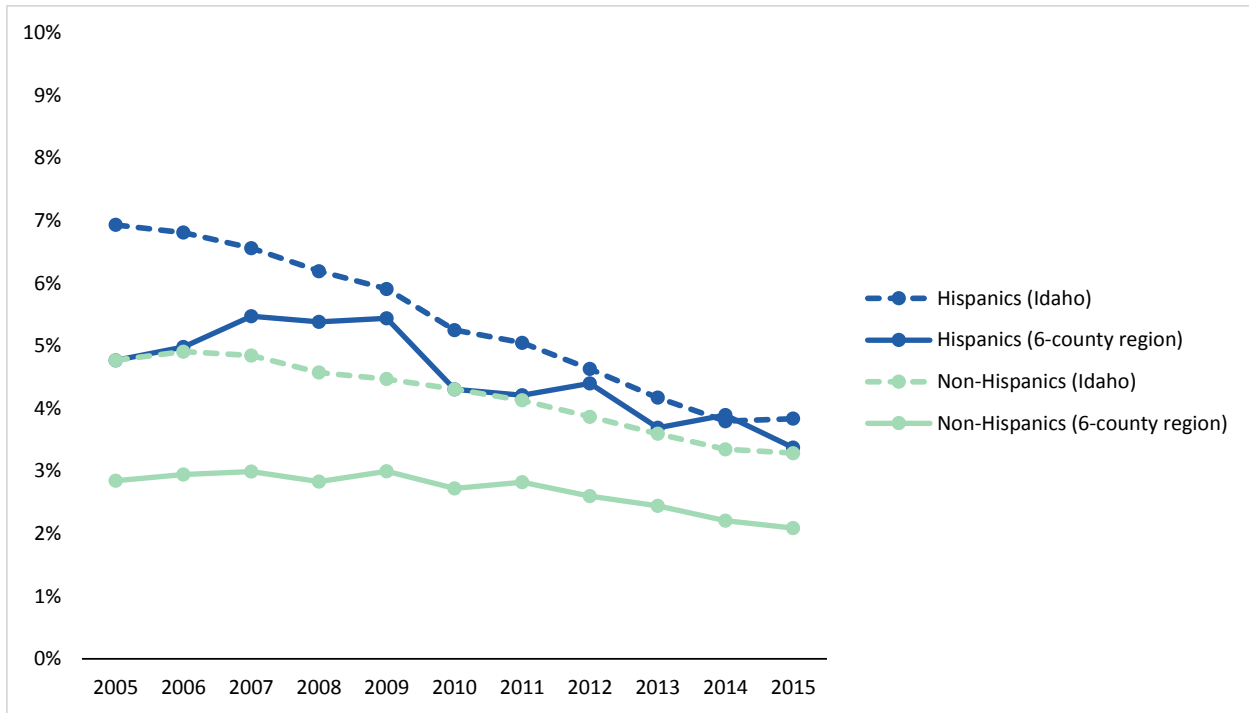


Figure 8.3 – Total arrests, by ethnicity, as percent of total population, six-county region and Idaho, 2005-2015

SOURCE: IDAHO STATE POLICE

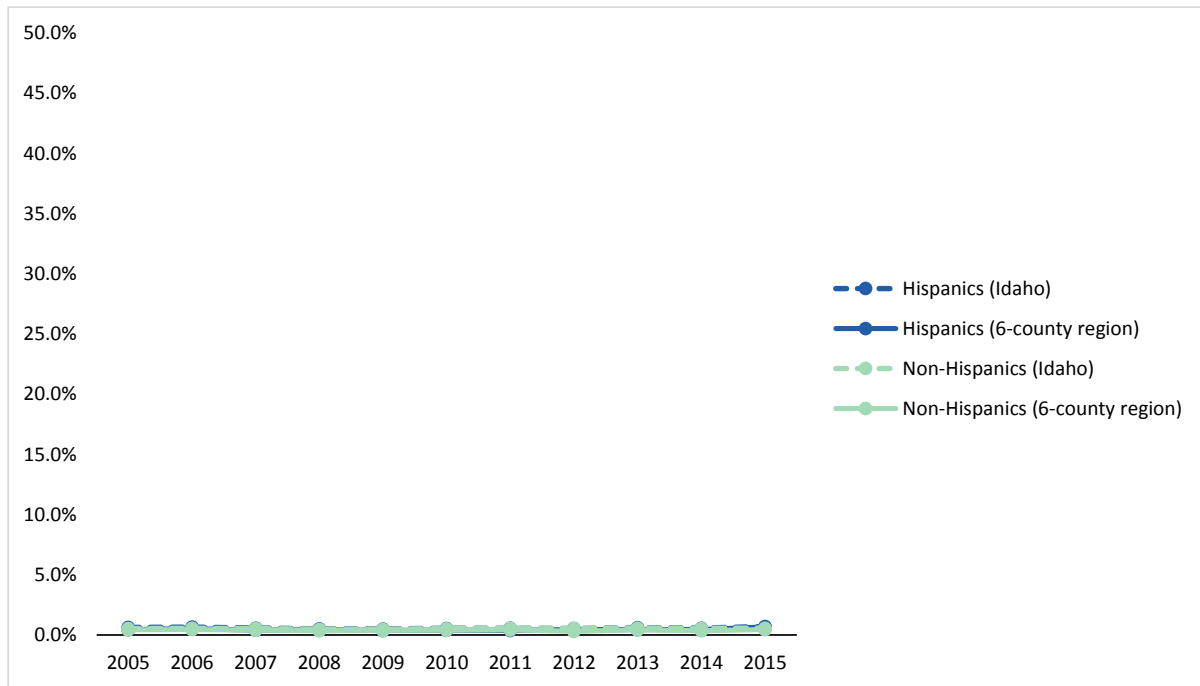


Figure 8.4 – Drug arrests, by ethnicity, as percent of total population, six-county region and Idaho, 2005-2015

SOURCE: IDAHO STATE POLICE

alcohol related arrests, and crimes against society arrests (all, by ethnicity, and percent-of-population) show overall downward trends in rates and relatively equal rates between Hispanics and non-Hispanics.

Felony convictions and rates

In general, with respect to violent crimes between 1980 and 2003, rural county rates of murder and robbery decreased and rates of rape and assault increased at national levels (Weisheit et al., 2006). Based on the most recent 10-year period for which crime data are available, felony convictions in the Magic Valley decreased from 2005 to 2015 for both Hispanics and non-Hispanics (Figure 8.5). As shown in Figure 8.6, felony rates by ethnicity and by percent-of-population for the Magic Valley converged over the last decade to now be equivalent. Notably, rates for Hispanics have declined much more quickly than for non-Hispanics.

Taking a closer look at felony rates for Hispanics and non-Hispanic whites, Figures 8.7a and 8.7b show population growth and per capita felony rates for the Magic Valley over the same ten-year period. Overall, although starting from low rates initially, the relative rates for Hispanics and non-Hispanic whites have dropped while the populations have increased considerably. The Hispanic per capita felony rate dropped at a faster rate than for non-Hispanic whites.

Cascading challenges

The secondary data analysis in the previous section shows that while Magic Valley communities continue to change socially, the criminal justice system is not experiencing substantive increases of crime amidst the community growth. Yet in other dimensions, our interviews also document ongoing and significant challenges as the criminal justice *system* adapts to demographic change.

An example of the challenges is that sometimes a minor violation can ‘cascade’ for an immigrant, not because of his or her ethnicity, but because of limited social and economic security. One criminal justice expert we interviewed described the following:

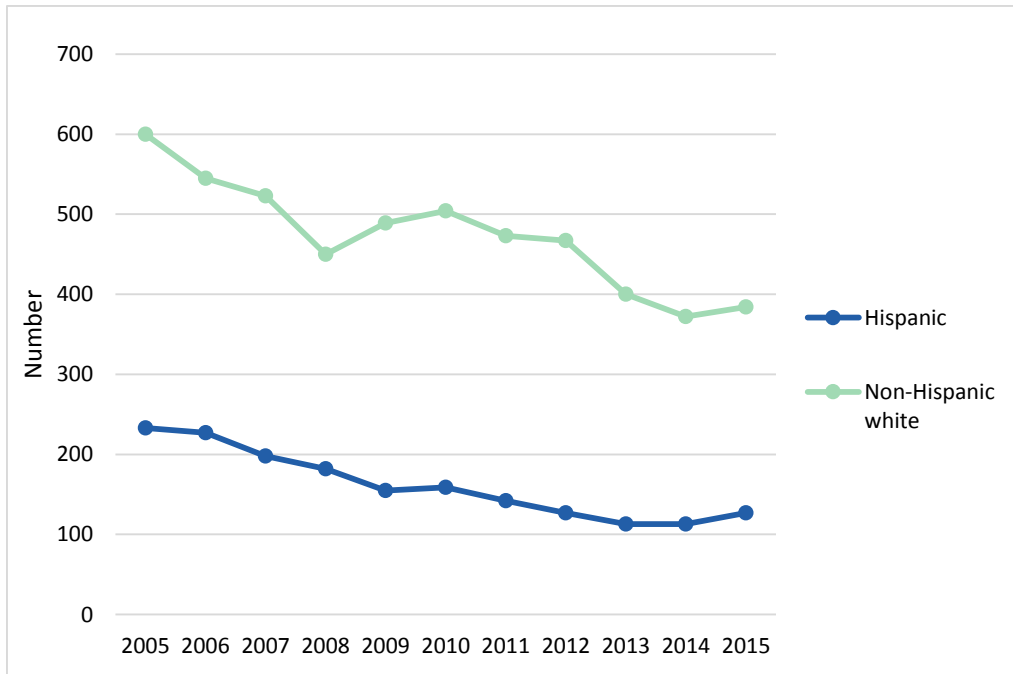


Figure 8.5 – Felony convictions by ethnicity, six-county region, 2005–2015

SOURCE: IDAHO DEPARTMENT OF CORRECTIONS

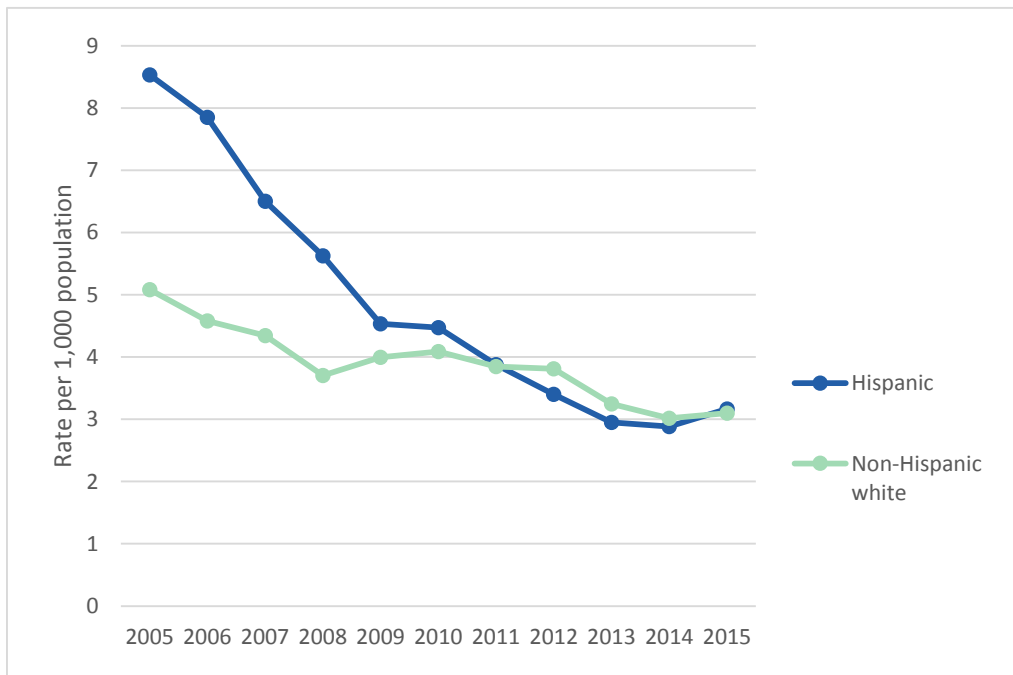


Figure 8.6 – Felony rate per 1,000 population in Idaho, by ethnicity, six-county region, 2005–2015

SOURCE: IDAHO DEPARTMENT OF CORRECTIONS

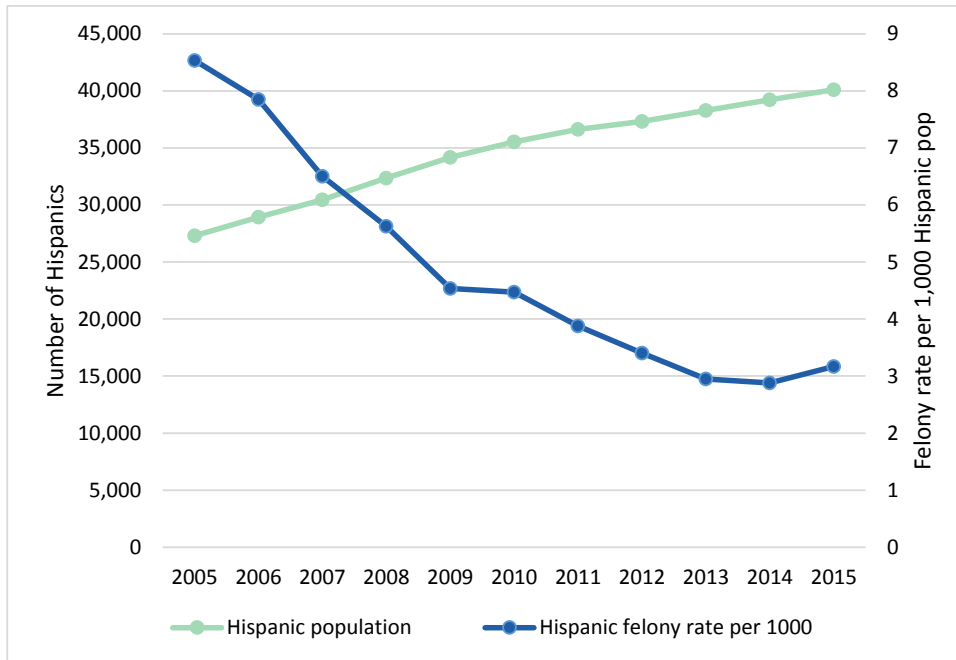


Figure 8.7a – Hispanic population and Hispanic felony rate per 1,000 Hispanics, six-county region, 2005–2015

SOURCE: U.S. CENSUS BUREAU, POPULATION ESTIMATES PROGRAM, AND IDAHO DEPARTMENT OF CORRECTIONS

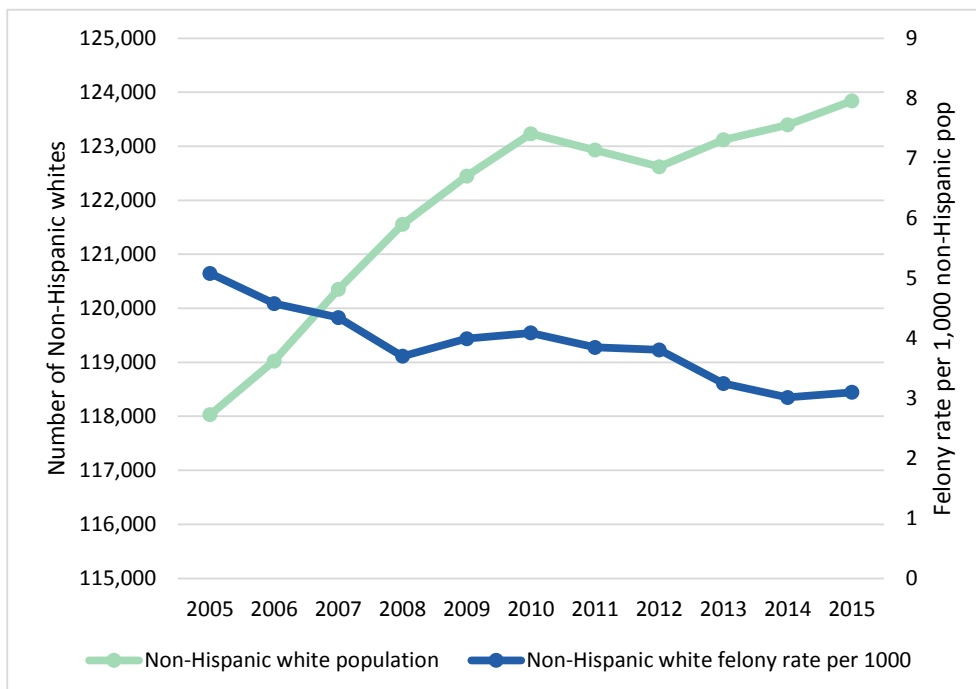


Figure 8.7b – Non-Hispanic white population and non-Hispanic white felony rate per 1,000 non-Hispanic whites, six-county region, 2005–2015

SOURCE: U.S. CENSUS BUREAU, POPULATION ESTIMATES PROGRAM, AND IDAHO DEPARTMENT OF CORRECTIONS

“The dairy workers do not account for a disproportionate number of cases in the court. What typically happens is they get picked up for a traffic violation – say, speeding, or a burned out headlight. They don’t have insurance, so their driving privileges are suspended. If they’re picked up for another violation and don’t have driving privileges, they get a mandatory two-day jail sentence.”

Describing this cascading effect, others we interviewed also talked about how such a scenario can compromise steady employment, timely payment of bills, and ultimately family security. It also may reinforce perceived biases regarding immigrants as criminal rather than struggling to make ends meet.

Over time, the on-going integration and assimilation of Hispanics in the Magic Valley will have an unknown effect on perceptions that immigrants are more likely to commit crimes. Even so, the tensions over social and economic status embedded in those perceptions can linger. A community service leader, interviewed about the growth of refugee labor at the dairies, explained how this tension may manifest on an everyday level:

“People see these refugees are driving new cars. The first thing the refugees will save for is a car. If you’re making \$2,500 a month and the cost of living is affordable here, you are saving some amount each month. It takes three months to buy a car. The refugees know Mercedes, so that’s what they strive for. They are working at WalMart, Winco, and the dairies. These are all jobs that are paying less than the ones with the people who are getting angry.”

Through the interviews, we also identified key areas that can build good relationships between different social groups to lessen and prevent challenges like those described above. For example, people we interviewed about crime and justice recognized and referenced examples of language barriers to integration. They emphasized strongly that the system needs more bilingual law enforcement officers and court personnel. They argued, bilingual receptionists and others who regularly interface with the public have proven invaluable in terms of improving public engagement, education, and overall community relations. One official explained this direct benefit from a co-worker:

“The receptionist is fluent in Spanish. The Spanish-speaking traffic at the front desk has increased because they feel like they can come in and get help. She is a friendly

face and we can serve them better because we can communicate better. People feel more welcome.”

Impacts on communities and the criminal justice system

For communities of the Magic Valley, social and demographic change has not resulted in more crime. Rates for most kinds of crime have actually declined in recent years. Moreover, those interviewed concur (as they did in the previous study), there are no causal linkages between the influx of the dairy labor force and patterns of crime. This does not forecast what trends may happen with crime in the community in the future. Given many factors affect perception of crime in communities, residents in the Magic Valley may continue to live with the false impression that newcomers – immigrants in this case – disproportionately commit crimes.

For the criminal justice system, the jobs of law enforcement and legal processes have added challenges with a changing and more diverse population. Local agencies need support to provide the resources that help manage the change, and those adjustments via municipal taxes do not calibrate as quickly as the social change manifests. Overall, the region is still experiencing relatively low crime activity suggesting the criminal justice system is managing well despite the substantive rate of change.

Chapter 9: Conclusions

Idaho is a relatively rural state. One third of its residents live in rural counties compared to 14 percent nationwide (Dearien and Salant, 2015).

As in most other states, rural Idaho has had weaker economic performance compared to urban parts of the state, based on unemployment, average wages, and per capita income. Since the recession, rural Idaho has not kept up with urban Idaho in terms of either population or employment growth. Five rural counties that have historically depended on natural resource industries have more deaths than births, reflecting decades of young people moving away and older people aging in place.

The exception is Idaho's Magic Valley, the rural version of a post-recession phenomenon described by Mark Muro, an analyst at the Brookings Institution (Porter, 2016). Similar to other typically urban and ethnically diverse parts of the country, the Magic Valley recovered more quickly from the last recession than the rest of the nation. Muro attributes this phenomenon – diversity linked to economic recovery – to growth in lower wage service and other occupations in which Hispanics are highly concentrated.

With its dairy industry, the Magic Valley has a super-size market for occupations in which Hispanics are concentrated, though with a twist. Dairy has historically paid better wages and offered steadier work than traditional farm commodity production like potatoes, also dependent on largely Hispanic immigrant labor but with mainly seasonal jobs. Steady, decent wages give people money to spend in local stores that offer familiar products – food, clothing, and entertainment: “a *welcoming community*” in the words of a local Hispanic business owner.

Demographic diversity, it turns out, can benefit communities whether it comes through immigration or natural increase. In the case of the Magic Valley, diversity is largely the result of immigration. The dairy industry attracted Hispanic immigrants who were willing to take jobs native-born workers would not, at least at prevailing wages. Immigrants came to the Magic Valley to work. They kept working, married, had children, shopped at local stores, and bought homes – seeking the American dream. The dairy production industry in which they worked

grew alongside the dairy processing industry. Together they launched a more diverse and vibrant food processing sector and an economy that weathered the recession better than the rest of the state.

While the region as a whole has benefited economically, the positive impacts are uneven across communities. A possible explanation is related to how many dairy processing jobs communities have, relative to their dairy production jobs. More value-added processing activity is associated with better economic indicators and larger cities and towns, and vice versa.

In 2009 we wrote,

The dairy industry has had positive economic impacts on local communities in south central Idaho. It has brought jobs and people to towns that otherwise would likely be in decline, as are many farm-dependent communities around the country. However, it also imposes some degree of costs, most notably on schools and less so on justice systems. While the private sector has “turned on a dime” to meet the demand of a growing Hispanic population, public systems cannot respond as quickly. Before they can adapt to a changing society, they must first convince voters to pay higher taxes to cover the costs that economic growth brings.

In 2017, schools continue to face the greatest challenges. They need bilingual staff to connect with Hispanic families and ESL teachers to work with immigrant students. The greatest challenges are in schools with falling enrollment and a large proportion of Hispanic students.

Language can be either a common cultural currency or the arena of a major divide. In the Magic Valley, language remains a significant challenge. People in both the public and private sector repeatedly talked about the need for a bilingual workforce. Even though immigration from Mexico seems to have all but stopped since the recession, the foreign-born Hispanic population that immigrated in earlier decades is still assimilating. Not all Hispanics in the Magic Valley speak English – at school, at church, in the bank, or on the dairy farms.

Perhaps the places where language barriers will have the longest-term impacts are schools. Children left behind in the early grades because there aren't enough ESL teachers will be disadvantaged for the rest of their lives. On the whole, they will certainly be disadvantaged in a job market that increasingly demands higher level skills and language ability. In addition to

schools, the health care and criminal justice systems also experience daily impacts from the language gaps. In this way, language may not cause 'injury,' but in the community institutions of education, justice, and public health, it can negatively impact comfort, confidence, security, and trust which provide the glue of strong social relations.

Magic Valley communities have sustained significant economic, demographic, and cultural change for nearly a generation. Adapting to that level of change is hard and takes time. Amidst the change, the dairy industry has thrived and grown.

Labor is essential for the dairy industry and indirectly, for industries that supply its inputs and purchase its outputs. Until now, the industry has been able to attract immigrant workers at prevailing wages. But for economic, demographic, and immigration policy reasons, the net inflow of workers from Mexico has largely stopped. This fact, combined with a growing and globally competitive regional economy, has created a labor shortage at current wage rates. Something has to give. And whatever that is will have repercussions for communities.

Without immigration policy reform that allows more legal immigrant workers into the U.S., we expect something else to change in the labor market. In the short term our study points to limited upward pressure on worker compensation, possibly in the form of better benefits and working conditions, certainly with positive impacts on workers and communities. Longer-term, continued automation is likely, though not overnight, and not universally throughout the industry in the foreseeable future. Gradual automation could be apace with the labor force attrition occurring because younger Hispanics aspire to better jobs.

In sum, the dairy industry has helped make the Magic Valley a resilient and vibrant region. The most rural communities are challenged to diversify their economies and build infrastructure. Increasing automation, changing immigration and trade policies, and ongoing integration and assimilation will undoubtedly influence community well-being in the future. The dairy industry will continue to be a driving force in the region going forward.

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Appendix A: Institutional Review Board (IRB) approval

Exempt Certification for IRB project 16-1107

irb@uidaho.edu

Tue 2/9/2016 8:56 AM

To: Wulforth, J. (jd@uidaho.edu) <jd@uidaho.edu>;

Cc: University of Idaho - Institutional Review Board (irb@uidaho.edu) <irb@uidaho.edu>;

Importance: LOW

Research Administration Portal Message 

University of Idaho

Office of Research Assurances
Institutional Review Board
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Moscow ID 83844-3010
Phone: 208-885-6162
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To: J.D. Wulforth

From: Jennifer Walker
IRB Coordinator, University of Idaho Institutional Review Board
University Research Office
Moscow, ID 83844-3010

Date: 2/9/2016 8:55:57 AM

Title: Update of Community Impacts of Southern Idaho's Dairy Industry

Project: 16-1107

Certified: Certified as exempt under category 2,4 at 45 CFR 46.101(b)(2,4).

On behalf of the Institutional Review Board at the University of Idaho, I am pleased to inform you that the protocol for the above-named research project has been certified as exempt under category 2,4 at 45 CFR 46.101(b)(2,4).

This study may be conducted according to the protocol described in the Application without further review by the IRB. As specific instruments are developed, modify the protocol and upload the instruments in the portal. Every effort should be made to ensure that the project is conducted in a manner consistent with the three fundamental principles identified in the Belmont Report: respect for persons; beneficence; and justice.

Appendix B: Interview guide

Questions for Semi-Structured Interviews of Community Stakeholders in Dairy Study

School administrators and teachers will be asked questions such as:

1. How have enrollment numbers changed in the last several years? How much of this change do you attribute to changes in the dairy and milk processing industries?
2. Have you changed your staffing numbers in the last several years (increased or decreased the number of teachers)? By how much?
3. Have the demographics of the student body changed in the last several years? How so?
4. What are the needs for your schools, as they relate to changes in school enrollment or student body demographics?
5. Do you perceive and other/ additional impacts of the dairy and processing industries on schools in your community?

Social service administrators (including law enforcement officers, judges, and social service providers) and elected and appointed local government officials will be asked questions such as:

1. What changes in population numbers or demographics have you witnessed in the last several years? How much of this change do you attribute to the growth of the dairy and dairy processing industries in your area?
2. How have the needs of the community changed in the past several years? And longer term, say over the last ten years? To what extent do you attribute these changing needs to the growth of the dairy and processing industries in your area? What changes have you had to make in response to the community-level changes (in terms of allocation of funding, staffing, or other resources)?
3. (For local government officials) Has the tax base for your community increased, decreased, or remained the same in the last several years? Have new businesses moved into your community in the past several years? What kinds of businesses? What additional businesses would you like to see?
4. What kind of support do you need to help adjust to growth in your community? Which areas (housing, education, public safety, social services, etc.) are currently being well-met in your community? Which areas are currently under-served? What would help you meet your goals in addressing the needs in your community?

Local business people will be asked questions such as:

1. What changes in your customer/client numbers or demographics have you witnessed in the last several years? How much of this change do you attribute to the growth of the dairy and milk processing industries in your area?
2. Have new businesses moved into your community in the past several years? What kinds of businesses?
3. How do you feel your business has been affected (either for better or worse) by the growth of the dairy and milk processing industries in your area? Do you feel that these industries have changed overall economic and commercial growth in your community?
4. What is the average tenure of businesses in your area? Is this increasing, decreasing, or the same over the last several years?