Construction and manufacturing are industries traditionally associated with unionized blue-collar workers earning higher than average wages. During the 1950s and 1960s, sons often followed fathers into apprenticeship programs to learn construction jobs and into factories whose assembly lines produced cars and appliances.

Employment trends have diverged in these goods-producing industries. Since 1970, US construction employment more than doubled to a peak 7.7 million in 2006 before falling sharply during the housing bust and the 2008-09 recession. Manufacturing employment peaked at almost 20 million in 1979, and has since fallen to 11 million due to rising productivity and increasing imports of manufactured goods.¹ In construction and manufacturing, the share of foreign-born workers exceeds the 16 percent average in the overall US labor force. Particular segments of each sector, including helpers in residential building and remodeling and production workers in food processing and garments and apparel, have above-average levels of foreign-born workers.

The rising share of foreign-born workers in construction and manufacturing has been facilitated by industry and labor market changes. Construction has long relied on subcontractors, and those specializing in drywall, roofing, and similar trades hired lower wage migrants to help build private homes at a time when union strength was eroding. The rising tide of foreign-born workers in meatpacking, the largest manufacturing industry in rural America, is linked to the shift of meatpacking firms from urban to rural areas, where large plants often operate two shifts in places with many animals and few residents.

¹ Manufacturing employment as a share of US employment peaked at one-third in the early 1940s. Manufacturing employment declined every year for a decade before increasing by 109,000 in 2010 and 237,000 in 2011. Some manufacturers in 2012 complained of labor shortages, asserting that they were unable to find enough machinists and technicians.
The construction boom drew Hispanic immigrants into urban areas, while the rising share of Hispanic immigrants in meatpacking transferred some from rural Mexico to rural America or from one part of agricultural America to another (Parrado and Kandel, 2010). Many immigrant construction workers find it hard to afford housing in urban areas despite relatively high construction wages, while some farm workers moved from California to midwestern and southeastern meatpacking plants for year-round work and more affordable housing.

Construction firms and meatpackers belong to associations that lobby for easier access to foreign guest workers. For example, the Associated General Contractors in 2005 called for immigration reforms that included “a new guest worker program that …can help address the shortage of skilled and unskilled workers which continues to face the construction industry.” The National Association of Home Builders complained of “a chronic shortage of skilled workers” in the housing industry and endorsed “legislation and regulation that will facilitate and expand opportunities for foreign-born workers to be employed in the United States.”

During the late 1990s, when a quarter of meatpacking workers were believed to be unauthorized and unemployment rates were low, the then INS launched Operation Vanguard to check the I-9 forms completed by employers and newly hired workers. The INS obtained employment data from employers, flagged the employees who appeared to be unauthorized, and instructed employers to have these workers correct their data or face termination. The result was a wave of terminations that led to complaints from migrant advocates, meatpackers, and farmers. Former Nebraska Governor Ben Nelson complained in 1999 that: "It was ill-advised for Operation Vanguard to start out in a state with such low employment and an already big problem with a shortage of labor... There has been an adverse economic impact on agriculture because of this.” Operation Vanguard was stopped in 2000.

Construction and meatpacking illustrate the processes that introduce migrant workers into an industry. Once migrants are established, networks and institutions make employing more migrants ever easier.

Construction
The construction industry (NAICS 23) involves the erection, maintenance and repair of physical structures. Construction contributes about five percent to US GDP, about the same as its share of employment. Like agriculture, construction is


geographically dispersed, but most occurs in the metro areas in which over 80 percent of Americans live.

The industry has a few large and many small employers. There were almost 730,000 construction establishments with 7.3 million employees in 2007, according to the census, including 80 percent with fewer than 10 workers. Over 80 percent of construction jobs were with firms that have fewer than 10 employees.4

The construction industry has three major subsectors. Construction of buildings (NAICS 236) includes residential homes (NAICS 2361) and nonresidential (NAICS 2362) buildings, such as shopping centers and factories, and accounts for almost a quarter of total construction employment; wages are typically higher in nonresidential buildings. The projects subsector (NAICS 237) is associated with infrastructure such as highways and bridges and accounts for a seventh of construction employment. Specialty trades (NAICS 238) include almost two-thirds of total construction employment. Residential specialty trades (NAICS 238001) employed about half of the laborers, plumbers, electricians, and carpenters and masons; the other half were in nonresidential NAICS 238002) specialty trades.5

Laborers are the largest single construction occupation, almost 800,000 workers earning an average $16 an hour in May 2010 (Cover, 2011, p24). There were 600,000 carpenters earning an average $21 an hour in May 2010, 500,000 electricians earning an average $25 an hour, and 400,000 plumbers earning an average $24 an hour. Average hourly earnings for private sector US workers were $20 an hour in 2010, lower than the average $21 for all construction workers.40

Total construction employment peaked at 7.7 million in 2006, rising by 1.3 million jobs between 2002 and 2006, and fell to 5.5 million in 2010 before rising slightly in 2011. Only about 40 percent of total construction employment is in residential building, where employment rose faster before the 2006 peak and fell further.6 Over half of the 1.3 million construction jobs added between 2002 and 2006 were in residential construction (Byun, 2010, 10).

4 It should be noted that construction workers employed by real estate firms or government agencies are not included in these data, and there are construction workers employed outside the construction industry. Two-thirds of the jobs in the construction industry are filled by workers with construction occupations—the others are managers or secretaries.
5 An overview of the construction industry labor market is available at: www.bls.gov/oco/cg/cgs003.htm
6 Byun (2010, 9) repored that about 41 percent of total construction jobs in Current Employment Statistics were in residential construction, 45 percent were in nonresidential building such as shopping centers and office buildings, and 14 percent was in heavy and civil engineering such as bridges.
Much of the construction employment boom and bust can be traced to very low interest rates and financial innovations such as subprime mortgages. The US population increases by about three million a year, so that 1.2 million new homes are built in a “normal” year to handle population growth. During the housing boom in 2005-06, the number of new home starts rose to two million a year, and the value of all US homes approached $19 trillion by 2006. Declining home prices cut the value of US homes to $12 trillion by 2011, and the large number of foreclosed homes has slowed a rebound in construction employment because there is little new home construction.

Figure 7.1 Employment in US Construction, 2000-2011

Jobs and Workers
Construction is a project-oriented industry. A general contractor usually assumes responsibility for building a home, highway or factory, and utilizes his or her own employees and workers provided by specialized subcontractors to complete the project. Construction employment is usually temporary at a project site, so workers move from one project to another. Work is typically outdoors and can require heavy lifting or working on ladders and roofs, helping to explain higher-than-average injury rates among construction workers.
Construction workers often identify with a craft or occupation such as carpenter more than with a particular employer. Some unions operate hiring halls to deploy carpenters, electricians and other craft workers to employers according to union rather than employer seniority. Many employers and unions cooperate to operate three to five year apprenticeship programs that trained workers on the job, but many of these joint apprenticeship programs have disappeared, so that today most construction workers are trained in technical or trade schools or in employer-run training and apprenticeship programs.

The fact that construction workers have skills that are used in other industries often makes workers mobile than employers. This mobility was an advantage for unionized workers, who could call a strike in one town and go to work in another, putting many of the costs of the strike on relatively small employers. However, the unionized share of workers in construction occupations fell from other 40 percent in the 1970s to 14 percent in 2010 (www.bls.gov/news.release/union2.toc.htm).

Table 7.1 US Construction Industry Employment, 2010 (000)

<table>
<thead>
<tr>
<th>Employment</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>5,526</td>
</tr>
<tr>
<td>Construction of Buildings</td>
<td>1,222</td>
</tr>
<tr>
<td>Residential building</td>
<td>572</td>
</tr>
<tr>
<td>Nonresidential building</td>
<td>660</td>
</tr>
<tr>
<td>Heavy and Civil Engineering</td>
<td>829</td>
</tr>
<tr>
<td>Utility system</td>
<td>390</td>
</tr>
<tr>
<td>Highway, street, and bridge</td>
<td>289</td>
</tr>
<tr>
<td>Other heavy and civil</td>
<td>150</td>
</tr>
<tr>
<td>Special trade contractors</td>
<td>3,465</td>
</tr>
<tr>
<td>Residential</td>
<td>1,467</td>
</tr>
<tr>
<td>Nonresidential</td>
<td>1,999</td>
</tr>
<tr>
<td>Not seasonally adjusted</td>
<td></td>
</tr>
</tbody>
</table>


The workers employed in the construction industry have occupations ranging from executive to helper, but two-thirds have “construction occupations” such as

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7 Under the National Apprenticeship Act of 1937 (Fitzgerald Act), US DOL’s Bureau of Apprenticeship registers training programs and those being trained. In FY99, some 37,000 programs were training 432,000 apprentices (www.doleta.gov/atels_bat/bat.cfm)
carpenter, laborer, or electrician. Foreign-born workers are concentrated in six of the 14 construction occupations that account for a third of total employment, including carpet installers, cement masons, laborers and helpers, drywall installers, and roofers. In some of construction occupations, a third or more of the workers are self-employed, including carpet installers, painters, and carpenters.

Efforts to distinguish trends in employment and earnings in residential and nonresidential construction suggest that employment rose faster between 2002 in residential construction, peaking at over a million jobs in 2006. (Moehrle, 2010, p33). Almost two-thirds of construction employees are hired by specialty trades contractors, and those employed in residential building rose from 1.8 million to 2.4 million between 2002 and 2006, so that residential specialty trades employment equaled non-residential specialty trades employment (Moehrle, 2010, p34). However, wages in the two sectors diverged.

Residential workers have traditionally earned less than nonresidential workers, but the gap widened from $20 an hour for residential and $22 for non-residential workers in 2004 to the same $20 for residential workers in 2009 versus $28 for non-residential workers (Moehrle, 2010, p35). Real wages in residential construction fell, while real wages rose for non-residential construction workers. The gap is even wider if benefits are included in cost comparisons.

Employment rose and real wages fell in residential construction in part because immigrant workers were readily available. Between 2002 and 2006, net unauthorized migration, 60 percent Mexican, was over 500,000 a year. Some unauthorized workers found their first US job building homes, while others moved from seasonal jobs such as farm work into construction in order to earn higher wages. The housing bust knocked these immigrant workers off their first rung up the US job ladder, but most appear to have remained in the US.

Migrant Workers
The number of Hispanic construction workers quadrupled between 1990 and 2007, from about 700,000 to almost three million. About a third of production workers employed in the construction industry are Hispanic, and many Hispanics are immigrants from Mexico and Latin America. Hispanics are younger than other workers: most Hispanic construction workers are in the 30-34 year age group, while most non-Hispanic construction workers are in the 45-49 age group. Many Hispanic construction workers have little education; half have not completed high school.

At the peak of the housing boom, a quarter of Hispanic construction workers were laborers, followed by 15 percent carpenters and 10 percent painters. Over half of drywallers were Hispanic, as were 40 percent or more of workers in roofing, concrete, and carpeting and painting. The Pew Hispanic Center

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8 Construction industry workers are often classified as being structural (carpenters, cement and iron workers), finishing (drywall installers and painters), or mechanical (plumbers and sheet metal workers) reflecting their role in building a project.
estimated that a seventh of all construction workers, and at least a third of those employed in low-skilled construction trades, were unauthorized (Passel, 2006).

Las Vegas, Nevada provides an example of the economic boom that attracted foreign-born workers. Between 1990 and 2007, the population of metro Las Vegas (Clark county) more than doubled from less than 750,000 to 1.8 million. Employment rose even faster, from less than 375,000 to almost 930,000. Nevada’s new workers included US-born and foreign-born residents, many of whom moved other states to fill construction and service jobs in the booming gaming industry that gave Las Vegas 140,000 hotel rooms, the most of any US city. Some of the construction and service workers attracted to Las Vegas were unauthorized, giving Nevada the highest share of unauthorized workers of any state in 2008, when 12 percent of the state’s workers were believed to be unauthorized (Passel and Cohn).⁹

Migrant workers were often cited as a critical ingredient for the Las Vegas boom. The share of immigrants in Nevada’s population doubled from nine percent in 1990 to 19 percent by 2007, making immigrants and their US-born children the fastest-growing segment of the state’s population. Half of Nevada’s construction workers were Latino immigrants, and state and local leaders warned of widespread economic disruption if there were stepped-up enforcement of immigration laws and no legalization, as was threatened by the Bush Administration after the failure of comprehensive immigration reform in the Senate in June 2007 (Ginzberg, 2007).

After 12 construction-related workplace deaths in 18 months, a series of articles in the local newspaper⁹ prompted Congressional hearings, sporadic strikes, and stepped up enforcement of labor and safety standards. Even though many of the workers on major construction projects were represented by unions, the fact that many were apparently unauthorized and that contractors were under pressure to work fast contributed to the rash of workplace accidents. Nissen et al (2008) find that neither unionization nor legal status was associated with more safer workplaces in South Florida’s construction industry.

Between May 2006 and May 2010, construction employment in Nevada fell by 55 percent; Nevada also had the largest increase in average hourly earnings in construction occupations over this period, suggesting that mostly lower-wage workers in residential construction occupations were laid off (Cover, 2011, 28).¹¹

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⁹ About 25 percent of Nevada workers were foreign-born in 2007, meaning that half of the foreign-born workers in the state were unauthorized (Newburger Gryn, 2009, 12). By contrast, California had 35 percent foreign-born workers, about 6.6 million, but only 1.9 million or 30 percent were believed to be unauthorized.


¹¹ Nevada was followed by Arizona, where employment in construction occupations fell about 50 percent between 2006 and 2010, Florida, where construction employment fell 45 percent, and California, where construction employment fell 40 percent.
Kochhar (2008) found that foreign-born and especially Mexican-born immigrant workers were among the first construction workers to be laid off.

It is very hard to evaluate the Las Vegas boom. There is no doubt that the availability of foreign-born workers helped to hold down labor costs and accelerate growth in Las Vegas during the economic boom, and no doubt that many of the foreign-born workers who secured a rung on the US job ladder lost it during the 2008-09 recession. The fact that foreign-born Hispanics were a disproportionately large share of new hires in US construction during the boom made them vulnerable to layoffs during the bust, which has persisted longer than expected.

A major difference between migrants in the US and UK construction industries is that Mexican and Latin American immigrants entering the American construction industry generally have less education and certification of construction skills than US workers, while Poles and other Eastern Europeans who entered the British construction industry in the past decade often have more education and certification of construction skills than British workers. The British construction industry is unusual in having a third of its 1.9 million workers in 2009 be self employed (Chan, Clarke, Dainty, 2010).

British employers and unions largely abandoned joint on-the-job apprenticeship training systems that were operated with unions in the 1980s and 1990s. Average skill levels declined along with wages, especially in residential and remodeling work, and the migrant share of the construction labor force rose, especially as older workers who were trained when the apprenticeship system was more robust began to retire. Construction has long been a network industry, meaning that sons followed fathers into building trades, and such network hiring, plus the high share of self-employed workers, allowed so-called “Polish plumbers” from the Central European countries that joined the EU May 1, 2004 to expand their presence in the UK construction labor market. In this way, migrants from countries with more formal construction training systems provided the UK with some of the missing skills that arise from its inadequate training system.

Construction has long been a network industry, meaning that sons followed fathers into building trades. However, a combination of relatively low entry-level wages in a sometimes seasonal industry with low status meant that many youth shunned their father’s construction jobs in the past several decades. The replacement for missing apprenticeships, Further Education Colleges that teach construction skills, have a poor record of having trainees complete their programs and get construction jobs, which makes the major recommendation to deal with employer complaints of labor shortages is a revamped skills training system that helps Britain to grow more of its own construction workers (Chan, Clark, and Dainty, 2010).

**Meatpacking**

Construction employment rose in only two states between 2006 and 2010, North Dakota and Wyoming, with both increases liked to energy production.
The $70 billion meat slaughtering and processing industry employs about 500,000 workers to turn cattle, hogs, sheep, and poultry into meat and other products. Animal slaughtering and processing is the largest manufacturing industry in rural America, accounts for a third of food manufacturing employment, and is the only food manufacturing industry projected to expand employment significantly in the next decade.

Meat processing is a nonfarm industry critical to US agriculture. Livestock and products account for over half of the $300 billion in annual farm sales, and cattle, hogs, and broilers account for two-thirds of livestock sales. Red meat production has been rising, from 39 billion pounds in 1990 to 47 billion pounds in 2003, while poultry meat production rose from 23 billion pounds to 28 billion pounds in the same period. Exports of beef, pork, and poultry more than tripled from $1.5 billion in 1990 to $5.1 billion in 2003. The US also imports meat products, worth $1.7 billion in 2003, but runs a significant trade surplus in meat.

From Urban to Rural

Meat processing has changed in scale and location. There are fewer and larger farms, feedlots, and meat processors, reflecting a general consolidation in US agriculture and manufacturing. Meat production in the 1960s and 1970s shifted from urban areas near the consumers of meat products to rural areas nearer cattle and poultry producers, as from Chicago to Garden City Kansas. The share of meat processing employees in nonmetro areas rose from less than half in 1980 to 60 percent by 2000, and many of the newer rural plants are larger than the older urban plants they replaced. By most estimates, over 85 percent of the beef, pork, and chicken is from large plants that process at least 500,000 cattle, a million hogs, and several million chickens a year, and most have more than 400 employees. Meat products are usually transported from the plants to supermarkets and other outlets via refrigerated truck.

The shift of meatpacking to nonmetro areas was prompted by several factors, including lower land and labor costs as well as less stringent environmental restrictions in rural areas. Lower labor costs in rural areas encouraged urban supermarkets paying high wages to butchers to request preparation of meat

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12 Animal slaughtering and processing (3116) employed about a third of the 1.5 million workers in food manufacturing in 2003 and 10 percent of the 5.5 million workers employed in nondurable goods manufacturing. US Statistical Abstract, 2004-05, Tables 982.

13 US meat production in 2003 included 26 billion pounds of beef, 20 billion pounds of pork, and 39 billion pounds of chicken and turkey. Per capita consumption or meat, poultry, and fish in 2003 was 234 pounds, and included half red meat, 43 percent poultry, and 7 percent fish.

14 The US accounts for about 20 percent of global beef and pork exports and almost half of poultry meat exports.

15 Nonmetro is a residual category for counties that are not defined as metro. There are 3,141 US counties and 2,297 were classified as nonmetro by the Office of Management and Budget as of 2002, which means they do not have an urbanized area of 50,000 or more plus surrounding counties linked by commuting patterns, the definition of a metro county.
products at the processing plant, so that boxed, vacuum-packed, and cut-up and sometimes cooked and seasoned meat products are now prepared in processing plants. Retail packages of meat rather than carcasses became the primary output of the plants, and many of the workers in the plants are less skilled than the butchers in retail store they replaced.\(^\text{16}\) One summary concluded that meatpacking work is “hard and dangerous and wages are low by manufacturing standards, although often high compared with alternative employment in the rural communities in which plants are concentrated.” (Craypo, 1994, 85).

The meatpacking industry has been expanding, while the fruit and vegetable preserving industry has been shrinking. Cannery wages were traditionally higher than meatpacking wages, reflecting the fact that most plants were in high-wage states such as California and that the work was often seasonal. However, as the characteristics of the labor forces in meatpacking and canneries converge, wage gaps have narrowed. Hourly earnings for production workers in smaller food manufacturing industries, such as oilseed milling, sugar or chocolate manufacturing, and dairy products tend to be higher than in meatpacking, $15 to $20 an hour versus $12 to $14 an hour.

The meat processing industry has four major segments, animal slaughtering (311611), meat processed from carcasses (311612), rendering and meat byproduct processing (311613), and poultry processing (311615). The Economic Census of 2002 reported 506,000 employees in almost 4,000 meat processing establishments.\(^\text{17}\) About 86 percent or 435,000 of these employees were production workers, and they earned an average $22,400 in 2002, or about $10.80 an hour. There were 214,000 meat and 216,000 poultry processing workers, and the meat processing workers earned higher wages because more of them are in the higher wage Midwest.

The poultry processing industry (NAICS 311615) comprised 311 firms with 536 establishments. The poultry industry developed later than meatpacking and in the south, but became the first vertically integrated meat industry, meaning that poultry processors supply chicks and feed to farmers who own the buildings and supply the labor to raise the chickens. Almost all US broilers are raised under contracts with processors. The cattle industry is least vertically integrated, in part because it has two distinct segments— mostly small feeder cattle operations that raise calves and generally larger feedlots that "finish" the cattle. The more concentrated poultry industry has been associated with falling costs and rising consumption of poultry products.\(^\text{18}\)

\(^{16}\) About 39 percent of all meat sold at retail in 2000 was prepackaged, or "case-ready," compared with 23 percent in 1997.

\(^{17}\) The 773 meat processing establishments with 100 more employees accounted for over two-thirds of total employment.

\(^{18}\) Per capita consumption of chicken first surpassed per capita consumption of pork and beef in the early 1970s, largely because chicken producers were able to reduce costs and prices dramatically. It takes 10 pounds of feed and 11 weeks to produce a five-pound broiler, and chickens have become so uniform in size that consumers know what to expect with each purchase.
Food manufacturing pays less than the average wage in the US private sector, and meatpacking pays less than average wage in food manufacturing. However, food manufacturing workers tend to work more hours per week than other private sector workers, 40 in 2002 versus 34, which narrows the weekly earnings gap. The median hourly earnings (half earned more and half less) of meatpacking workers were $9.80 an hour in 2002 for slaughterers and meatpackers and $8.47 for meat, poultry, and fish cutters and trimmers. In 2002, about 18 percent of meatpacking workers belonged to unions.

Meatpacking is one of the most dangerous manufacturing jobs in the US. Common injuries include muscular trauma, repetitive motion disease, cuts, and strains. The Bureau of Labor Statistics (www.bls.gov/iif/oshwc/osh/os/ossm0014.pdf) conducts an annual survey of workplace injuries and reports an incidence rate by industry, the number of injuries and illnesses reported per 100 full-time equivalent workers. In 2003, there were 106 million private sector workers, and the injury-incidence rate was five percent, meaning that 5 of 100 full-time workers had a reportable injury or illness, and 2.6 percent of these incidents resulted in days away from work or job transfers. The incidence rate was 6.8 percent in manufacturing and 8.6 percent rate in food manufacturing, and 10.3 percent in animal slaughtering and processing.

Historically, most meatpacking workers outside the southern states were represented by unions that had master agreements with the largest packers. Union strength peaked in the 1960s, when over 90 percent of meat production workers belonged to unions and the average meatpacking wage of $3.45 an hour in 1968 was 15 percent above the average manufacturing wage of $3 an hour (Craypo, 1994, 71). Meatpacking changed in the 1980s as plants shifted from urban to rural areas, new technologies were introduced, and the demand for meat fell, leading to closures of especially of unionized plants in urban areas. There were 158 strikes in meatpacking involving 40,000 workers between 1983 and 1986. By 1986, average meatpacking wages of $8.24 an hour were 18 percent below the average manufacturing wage of $9.75. Meatpacking wages continued to fall, and by 1990 the $8.73 an hour wage was 24 percent below the $10.85 average manufacturing wage (Craypo, 1994, 71).  

Migrant Workers
Meat-packing has long attracted workers with relatively little education and sometimes little English, but meatpacking wages were comparable to those of other manufacturing industries when meat processors were in urban areas. Meat processing facilities in rural areas generally do not have to compete with other factories for workers, and often recruit workers from out of the area, especially to staff second or night shifts. Refugee resettlement in the 1970s and 1980s brought Asians to the Midwest, and the 1986 Immigration Reform and Control Act

19 USDA estimated that large hog plants paid 10 to 12 percent higher wages than smaller plants in the early 1980s. About 90 percent of US meat and poultry is from plants that have 400 or more employees.
facilitated the geographic and occupational mobility of newly legalized Mexicans, many of whom saw moving from seasonal farm to year-round meat processing jobs as a step up the US job ladder.\textsuperscript{20}

There is little systematic data on employer preferences for particular types of workers. Poultry plant managers in the late 1980s told interviewers that Asians and Hispanics had a “better work ethic” than local Blacks and whites; Griffith also noted that economic growth offered local workers other job opportunities. Many immigrant workers moved to fill meatpacking jobs on their own, but some plants offered cash bonuses of several hundred dollars to current workers and others who referred persons who stay on the job 60 or 90 days.\textsuperscript{21} As a result, networks evolved to bring US-born as well as Mexican-born Hispanic workers from south Texas and other areas with high unemployment rates to midwestern meatpacking plants.

Once a core group of Asians or Hispanics is employed in a plant, network hiring can take over recruitment, with current workers bring friends and relatives to fill vacant jobs (Griffith, 1988, p35).\textsuperscript{22} Network hiring shifts most recruitment costs to currently employed workers, who bring only those who can do the work and often act as their mentors as they learn the job. Critics of the meat packing industry allege that network hiring gives managers more control of workers, as some managers allegedly threaten to fire an entire crew if there are problems with one worker. Some plants provide company housing, so that losing a job also means losing housing. The rising share of foreign-born Hispanics in the meatpacking industry has been associated with the creation of a labor force comprised of a stable core and a transient periphery, with some of the workers on the periphery migrating from plant to plant as they did when they were seasonal farm workers.

\textsuperscript{20} The Los Angeles Times on February 16, 2004 profiled six brothers from Los Cerritos, Michoacan who migrated to Oxnard, California to pick strawberries in the 1970s and 1980s, and in 1993 began to move to Rogers, Arkansas to work for Tyson Foods. They noted that their earnings rose from $8,000 a year picking strawberries to $20,000 a year in the plants, their wives could also work, and low-cost housing enabled them to become homeowners. Daryl Kelley and Carlos Chavez, "The Carranza family, like many Latino immigrants, found its way into the American middle class by leaving the Golden State," Los Angeles Times, February 16, 2004.

\textsuperscript{21} If companies directly recruit out-of-state workers, they may be liable for return transportation for workers who quit. For example, under Nebraska law, companies with at least 10 percent non-English-speaking workers must report any recruitment of those workers from more than 500 miles away and must pay their travel expenses to the work place. If the out-of-area workers quit within two weeks, the company must pay their travel expenses back to the place of recruitment.

\textsuperscript{22} Griffith reported that over three-quarters of poultry processing plant managers in North Georgia, North Carolina, and Delmarva in 1988 thought it would be more difficult to recruit workers after immigration reform in 1986, but only a quarter of the managers in Texas and Arkansas anticipated future recruitment problems (p40). Griffith emphasized the importance of local economic conditions in the ease of recruitment, noting that North Georgia plants had more trouble attracting and retaining workers because of booming nearby Atlanta than plants in Texas and Arkansas (43-45).
The Los Angeles Times on November 10-12, 1996 profiled Hispanic network that moved workers along the so-called "the chicken trail" from south Texas to Missouri (Katz, 1996). Hudson Foods, based in Noel, Missouri, paid south Texas recruiter B. Chapman $175 for each worker who was hired in its chicken processing plant. The reporter was selected by Chapman and lived with 135 other migrant poultry workers in a converted motel, paying rent of $45 per week. Hudson employed 200 workers to process 1.3 million chickens a week. Annual turnover exceeded 100 percent, and Hudson hired 50 new workers a month. About 45 percent of the unionized labor force were Latinos, and Hudson offered current employees who referred new workers a $300 bonus. Hudson's human resources director said: "there's a large number of jobs that very few citizens in the US want to do, but they're there and they need to be done...One of the social goods the poultry industry provides is employing people who would otherwise have a great deal of trouble getting employed."

The arrival of immigrant workers at Hudson and other meat processing plants rarely displaced local workers and sometimes increased productivity. New plants in rural areas tend to have more labor-saving and worker-friendly technologies, such as a cleaner and safer work environment. If the availability of immigrant workers allows a second work shift, employers may invest in air- and electric-powered knives that make work easier for all workers, potentially reducing injuries and illnesses in meatpacking.24

Community Impacts
The arrival of Hispanic workers can quickly change the face of rural areas that sometimes have not experienced significant immigration for a century. The new residents have been welcomed in most areas, especially those losing people and jobs as they buy homes and shop at local markets, helping to stabilize areas and economies that were often losing people and jobs. However, there are also new tensions with demographic change. Many local residents complain about the side effects of the changing labor force, including more students with limited English proficiency in local schools and more uninsured patients seeking health care at local clinics and emergency rooms. Many meat processing plants provide health insurance and other benefits after 60 or 120 days of employment but, with high turnover, a significant share of the workers in a particular plant may not have health insurance.

23 The motel management took every new Hudson worker to apply for food stamps at the Division of Family Services, and the number of Latinos receiving food stamps in Noel increased from 35 per month in 1993 to 375 per month in 1996. In 1997, Hudson invested $3 million to build 60-920 square foot duplex units to rent to newly-arrived workers.

24 In 2002, there were 9.3 cases of work-related injury or illness per 100 full-time food manufacturing workers, almost double the 5.3 cases per 100 workers for the entire private sector. Meatpacking at 15 incidents per 100 workers had the highest rate (www.bls.gov/oco/cg/print/cgs011.htm). Meatpacking workers are highly susceptible to repetitive strain injuries to hands, wrists, and elbows.
Two extremes mark the reactions of meat processors to these externalities. Many recognize that they are hiring workers with little English and formal schooling, and some have formed partnerships with local community colleges and high schools to offer classes in English, finance and other life skills to their workers. For example, Tyson Foods has an education assistance plan that reimburses 75 percent of the cost of tuition, books and fees (up to $3,500 a year) for coursework toward a degree that helps to meet the company’s business needs. In Grand Island, Nebraska, Swift & Co. built a two-classroom school near its plant in 2002 so workers could attend high school classes before and after their work shifts; the local school district provided a teacher and a teacher’s aide.

The other end of the spectrum is marked by processors who say that their major economic contribution is the facility they provide for local farmers and the payroll they provide to local workers. Such attitudes may have contributed to the backlash in some areas, as exemplified by cities and counties voting against zoning or other changes needed to open or re-open meat processing facilities. There has also been a backlash against meat packers who received subsidies to open or re-open plants that attracted migrant workers.

A profile of Beardstown, Illinois, a city of 7,000 famous for the Beardstown Ladies Investment Club, concluded that the city is "propped up by one major employer, a partially undocumented work force and uneasy residents." (Walker, 2003). Hispanics became the majority of residents because of Excel reopened a pork processing plant that had been closed by Oscar Mayer in 1986. Privately owned Excel parent Cargill was granted state tax benefits without opening its books under a special exception to tax subsidy rules in order to get the plant reopened in 1987. However, Excel reduced the starting wage from Oscar Mayer’s $8.75 to $6.50 an hour and began to recruit workers in the Rio Grande Valley, providing those with work authorization documents who could pass a drug test a $400 advance and a bus ticket to Beardstown.

After immigration agents arrested several residents for selling false IDs, Beardstown mayor Bob Walters accused Excel of playing "in the gray area. They don’t violate the law, but they sure don’t play by the book, either." Excel countered that it "follows the government’s I-9 requirements for verifying employment eligibility," prompting Walters to assert that immigration authorities "could come down here on any given day and put up a roadblock and Excel would have trouble operating the plant."

Many rural counties in the Midwest are losing people, forcing residents to choose between depopulation and diversity. Over the past 50 years, census-defined rural counties without a city of at least 2,500 people lost more than a third of their people in 11 Great Plains states, with farm-based counties away from

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25 “Meatpacking industry providing education to workers.” AP. June 10, 2005
26 The Great Plains are usually defined as all or part of west Texas and eastern New Mexico north to western Minnesota, the Dakotas, and eastern Montana.
interstate highways losing the most residents. Of the 99 US counties with the highest percentage of residents older than 85, all but two are in the Great Plains.

The General Accounting Office, in a March 1998 report on communities in Nebraska and Iowa that had large meatpacking work forces, concluded that there were mixed effects of immigrants in often small cities and towns. On the one hand, the arrival of immigrants helped to stabilize populations that were shrinking, and counties with meatpacking plants had faster increases in per capita incomes and retail sales than non-meatpacking countries. On the other hand, the increased number of poor and limited-English proficient children in schools and very high turnover among workers prompted teachers to complain that it was very hard to educate children. The housing market tightened with the influx of workers, especially for inexpensive rental housing such as mobile homes.

Some Canadian meatpackers use probationary immigrants on their dis-assembly lines. Maple Leaf Foods, Canada’s largest meatpacker, employs temporary foreign workers in its Brandon, Manitoba pork processing plant and nominates some of them to the provincial government for immigrant visas after two years of satisfactory work. Over 70 percent of the 11,200 immigrants in Manitoba in 2008 were provincial nominees recommended by the provincial government rather than admitted via the federal government’s point system, and about three-fourths of Canada’s provincial nominee immigrants were from Manitoba in 2008. After six months of work in a year-round job, an employer may nominate a foreign worker for immigrant status under the provincial nominee program.

Toronto-based Maple Leaf, which opened the Brandon plant in 1999, spends C$6,000 per migrant to cover recruitment and costs and the first month’s rent in the city of 40,000. Maple Leaf’s Brandon workers are represented by UFCW Local 832, which negotiated a five-year contract in January 2010 that raised wages and required Maple Leaf to translate the contract and employee handbook into languages spoken by at least 100 employees, currently English, Spanish, Ukrainian and Mandarin, and to provide translators for foreign workers. About 75 percent of the 2,220 workers at Maple Leaf’s Brandon plant are temporary foreign workers, and over 90 percent hope to earn immigrant visas.