Immigration & Farm Labor
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Percent Change in Real Wages From Year Ago
Crop Workers, CA, FL, US

U.S. Unauthorized Immigrant Population Levels Off

- 14 million
- 12 million
- 10 million
- 8 million
- 6 million
- 4 million
- 2 million
- 0 million


2010 2011 2012 2013 2014 2015
Highlights

• **Hired workers** do most of the work in FVH commodities (fruits, veggies, & nurseries)

• **Hired farm workers** = Mexican-born (70%); **not** authorized to work in the US (45%); settled & aging

• **Employer responses to fewer newcomers**
  - Satisfy **current workers**: bonuses, super training—growers think inelastic supply, so wage increases do not help
  - Stretch **current workers**: mechanical aids, change production practices to make work easier; older & women
  - **Substitution**: labor-saving mechanization
  - **Supplement**: young H-2A workers provide fresh blood, but (1) recruit US, (2) provide housing, (3) pay AEWR ($12 CA)
  - Uncertainty: no one knows best combination
FVH ag = 3 Ss: Sales, Labor’s Share, Seasonality

• Farm sales = CA $43 bil (2012); IA = $31 bil
  – CA = 12% of US $395 billion in farm sales
  – US farm sales: 54% crops, 46% livestock
  CA farm sales: 70% crops, 30% livestock
  – CA $26 bil of $30 bil crop sales or 87% = FVH commodities

• FVH: labor’s share: 30% of prod costs

• Seasonality: Ave CA farm employ 414,000 (2014). Peak 471,000 Aug; low 344,000 Jan.
  Peak-trough ratio = 1.4, & up as geography down; 100 to 1 on a farm (standby workers).
CA Shares of US FVH Production

### Fruits
- Lemons: 91%
- Strawberries: 91%
- Grapes: 88%
- Apricots: 86%
- Avocados: 86%
- Peaches: 73%
- Raspberries: 56%

### Vegetables
- Artichokes: 100%
- Broccoli: 96%
- Leaf Lettuce: 85%
- Carrots: 83%
- Spinach: 70%
- Bell Peppers: 60%
- Asparagus: 46%
Who hires? CA since 2007: more workers brought to farms by crop support (FLCs) than hired directly. Gap is widening.
3,000 US FLCs; 1,200 in CA
FLCs: Increase efficiency of worker-job matching or risk absorbers?
Common crop support: harvesting tree fruits
CA strawberries: 90% of US 3 billion pounds
40,000 acres, 60,000 to 70,000 workers
Vegetables: both direct-hire & workers via crop support firms
Nursery & dairy
Big 5 of 15: crop support, FVH, & dairy = 95% of CA ag employment & wages
CA Hired Crop Workers

• Men born in Mexico: 90%; 60% unauthorized. V-shape legal status
  – Fewer newcomers (workers in US less than 1 year). From 20% to 2% today. Result: average age (38) & weeks of farm work (35) up
  – 50% of all crop workers, & 2/3 of foreign-born farm workers, are unauthorized. CA has > % unauthorized because more CA farm workers are foreign born

• Employ and earns: more weeks, higher wages
  – Average $9.31/ hour across US; $9.22 in CA in 2012
  – 35 weeks of farm work + 7 weeks of nonfarm work: 42 weeks, or close to 48 weeks full-time work
  – Annual earnings average $15,000-$17,000/ year

• Farm work like nonfarm work: live off the farm, commute to work, have 1 farm employer/year
Inverted V: Migrancy, youth, low education, FLC peak in 2000

US crop worker characteristics, 1990, 2000, recent (share of workers)

- Migrant
- Age 20-34
- Less than HS
- Married parents
- FCL employer

1990
2000
Recent
Agriculture: first to feel effects of fewer newcomers
Employers: 4-S responses

- **Satisfy** current farm workers with bonuses, benefits, & better supervisors. *If supply of workers in US = inelastic, wage increases do not add to supply*

- **Stretch** with mechanical aids that increase productivity: conveyor belts in fields, dwarf trees. *How much to invest, how fast to deploy?*

- **Substitute**: labor-saving mechanization. *Will wages keep rising to justify long-term investments? Involve seed companies with long horizons?*

- **Supplement** the labor force with H-2As. *Will expanded H-2 show that current program is OK or will Congress enact a no-recruitment & no-housing guest worker program?*
Satisfy: bonuses, benefits, supervisor training & respect
Most farmers: satisfy will not ENLARGE ag workforce
Stretch: mechanical aids to raise worker productivity
Bell peppers: with and without conveyor belt
Thinning and harvesting apples from platforms

Workers share piece rate wages when picking on platforms.
Sweet tango apples
Dwarf trees & no ladders
Substitute: mechanize olives, carrots, tomatoes, nursery
Defense vs Ag: Performance & Costs
Mechanization
Forbes: drew 425 participants to Salinas: LettuceBot
Supplement with H-2As: 75,000 FY07, 140,000 FY15. CA&WA

**OFFICE OF FOREIGN LABOR CERTIFICATION**

**H-2A Temporary Agricultural Labor Certification Program - Selected Statistics, FY 2015**

### Applications Received

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<th>YTD</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
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<td>Total</td>
<td>7,562</td>
<td>1,570</td>
<td>3,359</td>
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### Applications Processed

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<td>- Denied</td>
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<td>38</td>
<td>57</td>
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<td>Positions Requested</td>
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<td>45,480</td>
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<td>Positions Certified</td>
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<td>21,720</td>
<td>43,740</td>
<td>47,092</td>
<td>27,280</td>
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### Top States

- Florida: 30%
- North Carolina: 13%
- Georgia: 10%
- Washington: 8%
- California: 6%
- Louisiana: 5%
- Kentucky: 5%
- New York: 4%
- Arizona: 4%
- South Carolina: 3%
- Remaining States: 2%

### Top Employers

- North Carolina Growers Association, Inc. (NCGA): 11,767
- Washington Farm Labor Assn.: 7,895
- Fresh Harvest, Inc.: 3,176
- Zirkle Fruit Company: 2,889
- Rodrigo Gutierrez-Tapia: 2,308
- Virginia Agricultural Growers Assn., Inc. (VAGA): 1,626
- R & R Harvesting, Inc.: 1,578
- Peri & Sons Farms, Inc.: 1,565
- H-2A Complete II, Inc.: 1,533
- Sierra Cascade Nursery, Inc.: 1,305

### Top Crops

- Tobacco: 5%
- Berries: 4%
- Hay and Straw: 4%
- Apples: 3%
- Oranges: 3%
- Fruits and Vegetables: 3%

### Top 10 Crops/Occupations

- Tobacco: 23,291
- Berries: 12,358
- Hay and Straw: 6,763
- Apples: 6,641
- Oranges: 5,733
- Fruits and Vegetables: 5,421
- Nursery and Greenhouse Workers: 4,997
AEWRs 2015: $10.32 in NC, $12.42 in WA, $11.33 in CA

H-2As concentrated in brown states with lowest AEWRs
CA H-2As: 3,000 in 2012, 8,600 in 2015

- **CA**: many vegetable firms operate year-round. Leafy green vegetables in Yuma, SJV, & Salinas
  - Border labor force is legal
  - Bring border H-2As to Salinas: move from motels to FW housing? (T&A: $8 million to house 800 workers in Spreckels, $10,000 per bed)
  - Old: largest CA H-2A user: Sierra-Cascade strawberry nursery (1,300 H-2As in Tulelake; WWII Japanese intern)

- **H-2A expansion**: led by coastal vegetable growers, not SJV fruit industry. Half of CA farm labor is in SJV, where fruit industry is concentrated, & there is less grower-shipper integration

- **Some shippers**: increase imports, esp of Mexican berries
T&A 800 beds in Spreckels: return to on-farm housing?

T&A: 800 employees at 145-unit apt in Yuma, AZ since 2007
Summary

• Average farm employment up as expansion offsets mechanization. Berries up as raisins mechanize
• Farm workers: fewer new entrants & aging, settled farm workforce with US-born children
• Employer responses to fewer newcomers
  – Satisfy: 40/40 rule: keep current workers longer
  – Stretch: labor-stretching mechanical aids
  – Substitute: labor-saving mechanization
  – Supplement: H-2A workers; try to change rules to reduce requirements on employers via recruitment, housing, & AEWR
• Which of the 4 S’s takes priority? What variance by commodity and area?