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LABOR AND PRODUCTION TRENDS IN US AGRICULTURE

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Agricultural Labor Trends in the US

Importance of Farm Labor

- Farm wages and salaries represent roughly
 - 14% of total cash expenses for all farms
 - 39% of expenses for specialty crops

(Source – ARMS)

- Supply of farm labor shrinking

 Farm wages rise

Quotes

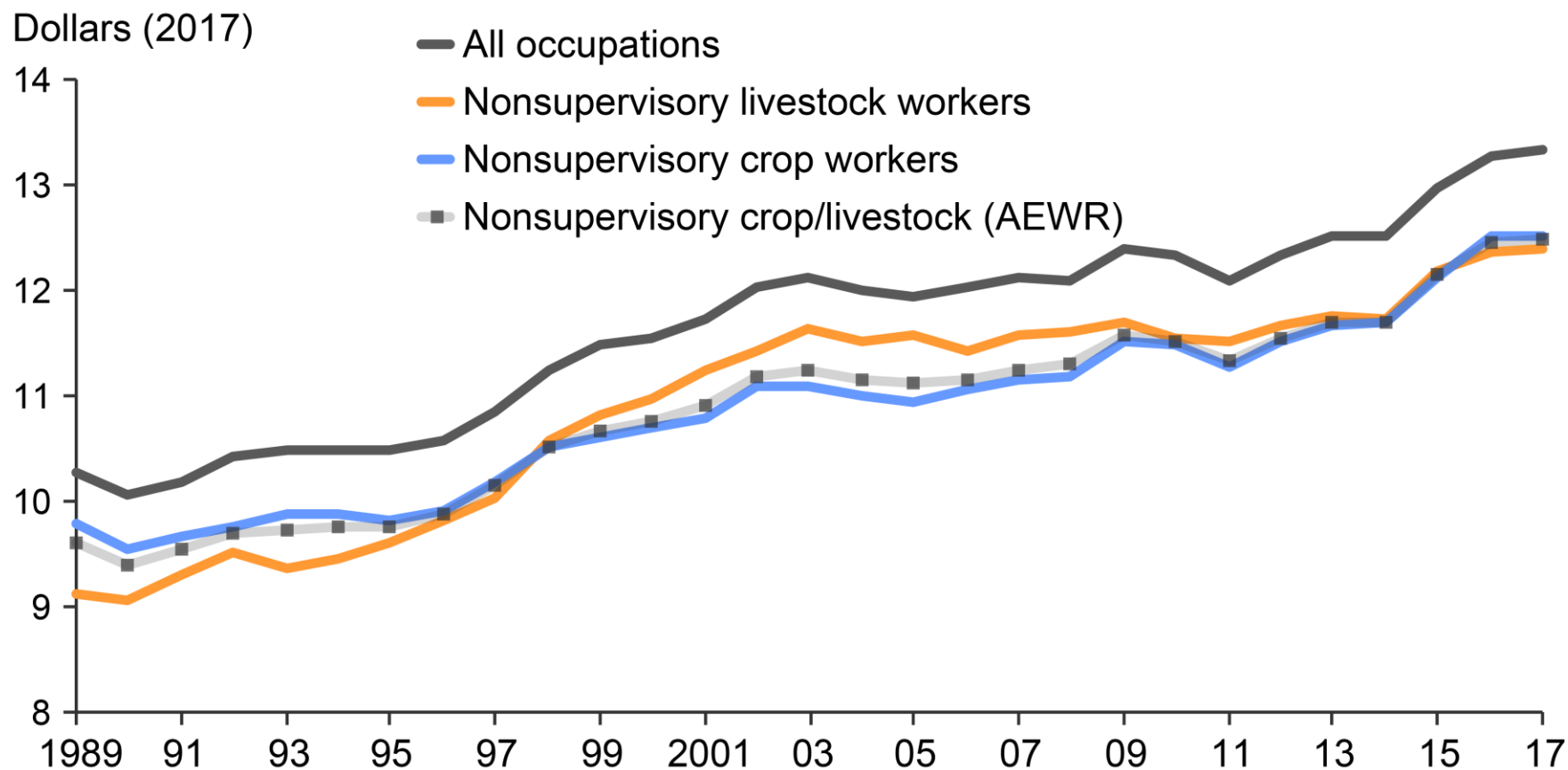
“U.S. agriculture faces a critical shortage of workers every year, as citizens are unwilling to engage in these physical demanding activities and guest-worker programs are unable to respond to the marketplace.”

– American Farm Bureau Federation

“The U.S. pork industry is suffering from a serious labor shortage, negatively impacting farms and processing plants.”

– National Pork Producers Council

Real hourly wages for hired farmworkers, all agricultural workers, and AEW, 1989-2017

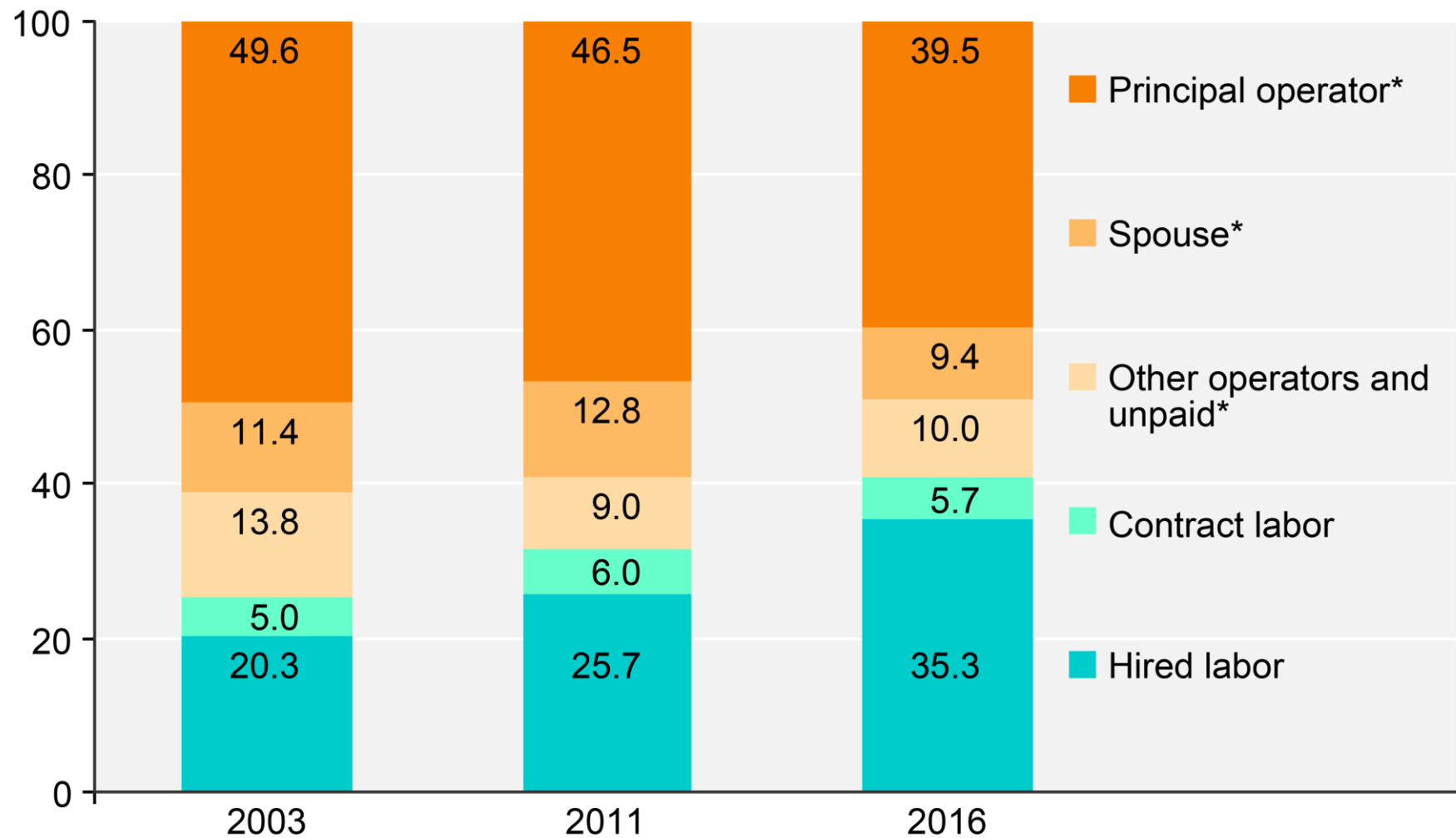


Note: Excludes those hired by labor contractors; includes Hawaii, excludes Alaska. Inflation adjustment uses the CPI-U-RS. AEW is the Adverse Effect Wage Rate; regional estimates of the AEW are used in the calculation of required minimum wages for H-2A temporary agricultural workers.

Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, Farm Labor Survey. Annual averages for livestock workers were calculated by weighting reported quarterly wages by quarterly employment estimates. Nonfarm wages from Bureau of Labor Statistics, Current Employment Statistics.

Paid and unpaid agricultural work by type of worker, 2003-16

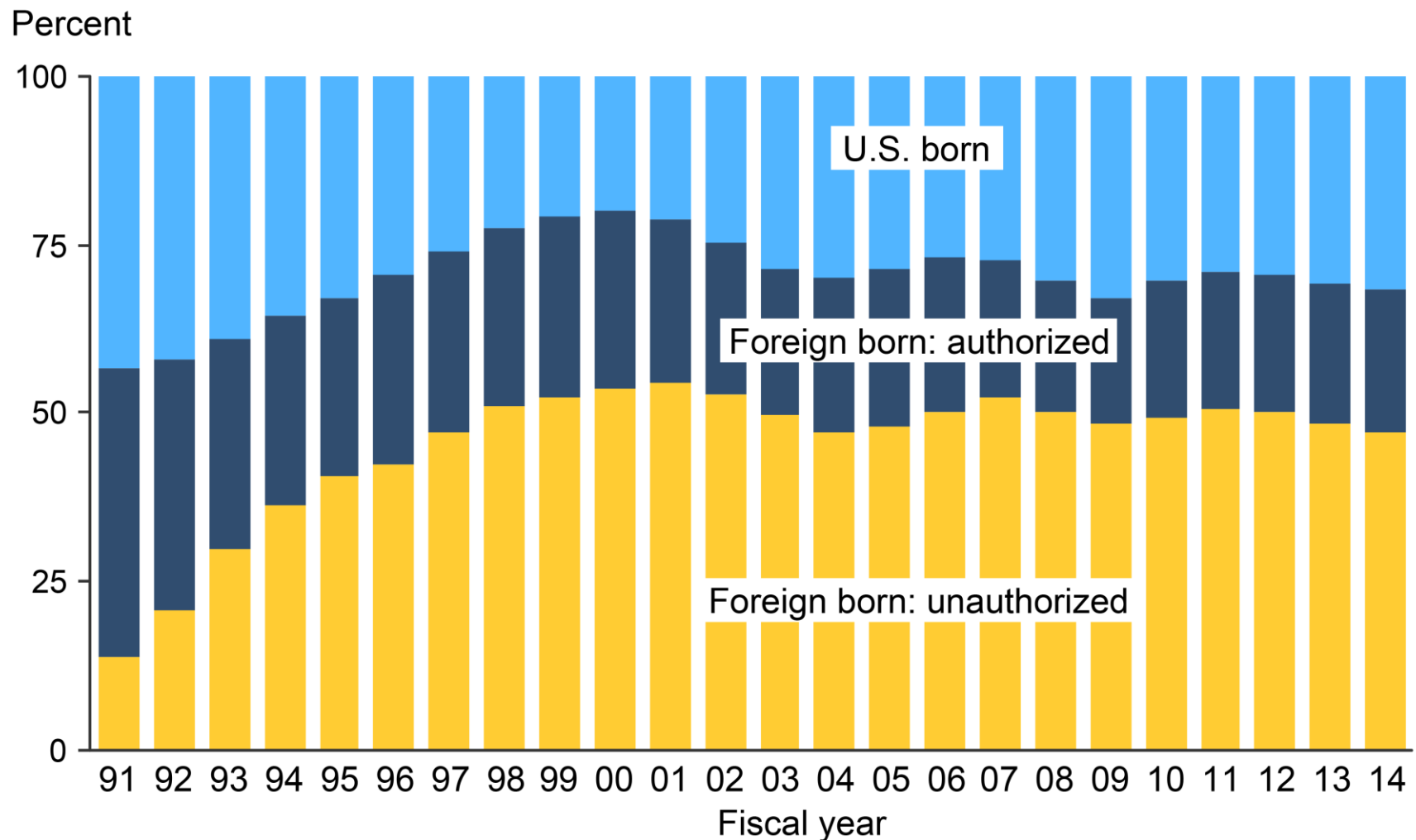
Percent of hours



*Includes paid and unpaid labor.

Source: USDA, Economic Research Service and National Agricultural Statistics Service, Agricultural Resource Management Surveys, selected years.

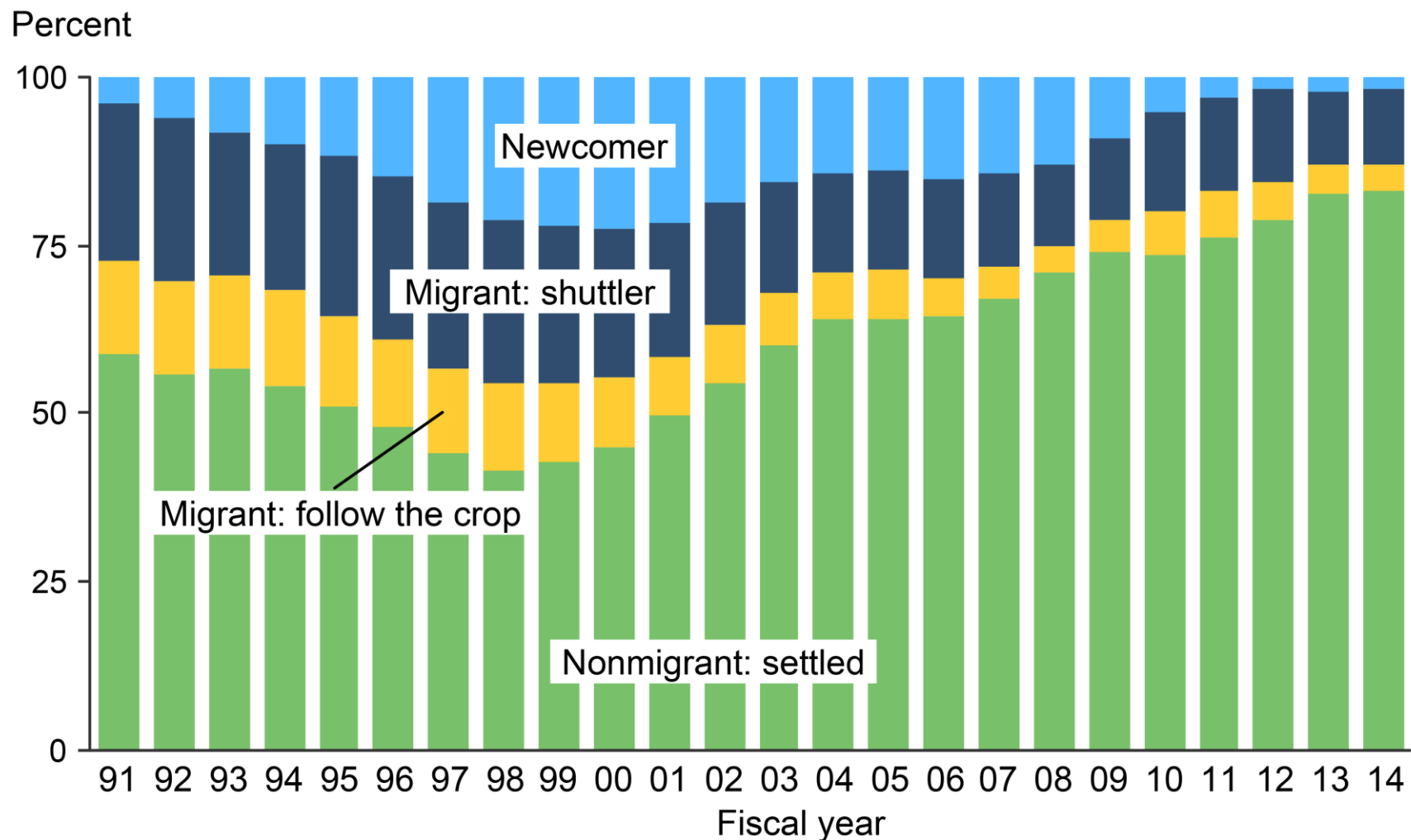
Legal status of hired crop farmworkers, fiscal 1991-2014



Note: Values for each year are 3-year moving averages to smooth fluctuations; e.g., data reported for fiscal 2014 are the average of fiscal 2012-14. U.S. born includes those born in Puerto Rico.

Source: USDA, Economic Research Service using U.S. Department of Labor, National Agricultural Workers Survey.

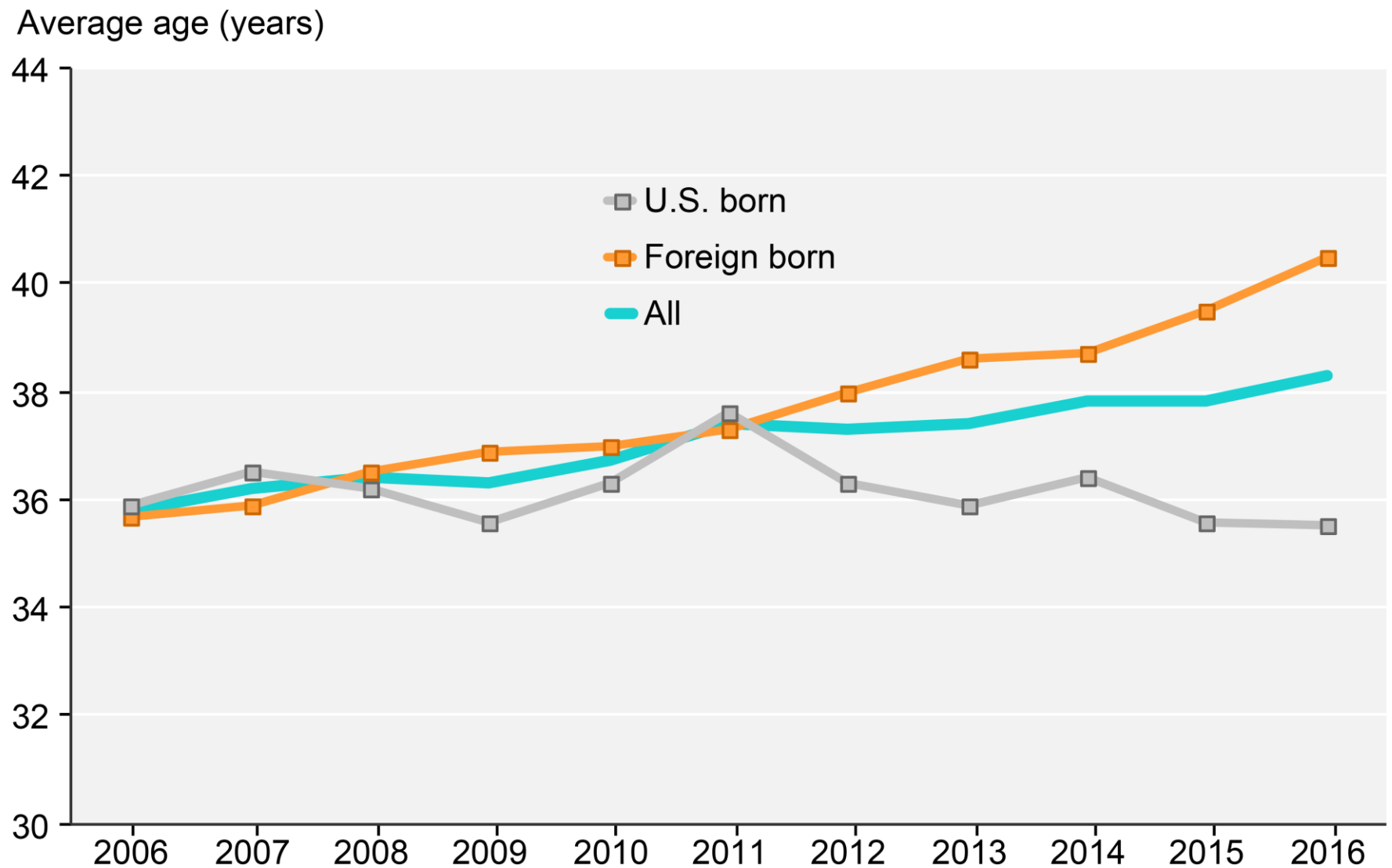
Migration patterns of hired crop farmworkers, fiscal 1991-2014



Note: Values for each year are 3-year moving averages to smooth fluctuations; e.g., data reported for fiscal 2014 are the average of fiscal 2012-14. U.S. born includes those born in Puerto Rico.

Source: USDA, Economic Research Service using U.S. Department of Labor, National Agricultural Workers Survey.

Average age of farm laborers, graders, and sorters, by place of birth, 2006-16



Source: USDA, Economic Research Service using data from U.S. Census Bureau, 2006-16 American Community Survey.

Changing Labor Landscape

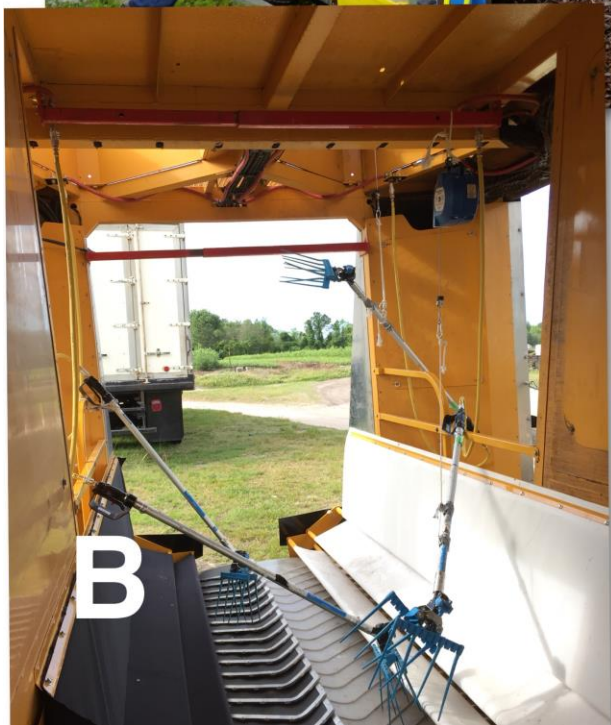
How are agricultural producers adapting to these worker shortages?

- ➡ Technology
- ➡ **H-2A workers**

Technology



Harvest Croo Robotics



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What is H-2A?

- Temporary, legal, agricultural **“guest” workers** from outside the US
- Can only fill positions that employers are not able to fill with legal, domestic workers
- Considerable bureaucracy and costs

Why H-2A?

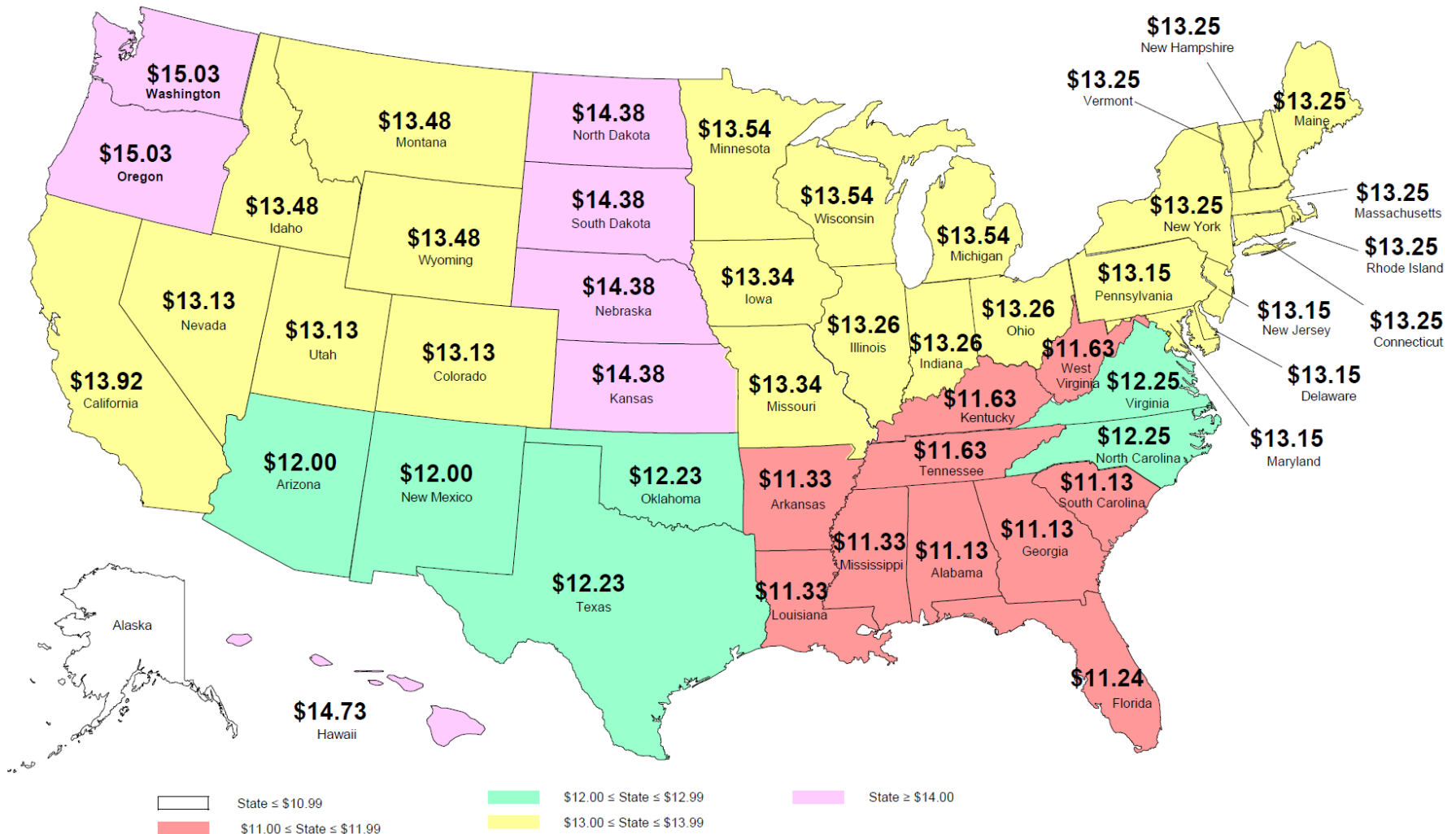
- Make up for worker “shortage”
- Legal
- Reliable
- Productive

H-2A vs Domestic

Description	H-2A Worker	Domestic Worker
Employment status	contract	“at-will”
Minimum average hourly earnings (as of Jan 1, 2017)	\$11.12	\$8.10
Guaranteed hours	75% (total “offered” hrs)	None
In-season transportation	Free – housing	Free – pick up pt
Insurance, WC (mandatory) & ACA (choice)	Yes	Yes
Employer Social Security contribution	No	Yes

H-2A Wage Rate

2019 Adverse Effect Wage Rates



Program Growth

Table 1-1. Number of Hired Farm Workers Employed in U.S. Agriculture

Year	Av. # of Hired Farm Workers ¹	# of H-2A Positions Certified ²	# of H-2A Visas Issued ³	% Farm Work Positions Filled by H-2A
1997	879,000	--	16,011	2%
1998	879,500	--	22,676	3%
1999	923,250	--	28,568	3%
2000	887,750	--	30,201	3%
2001	873,250	--	31,523	4%
2002	884,500	--	31,538	4%
2003	836,000	--	29,882	4%
2004	824,750	--	31,774	4%
2005	777,750	--	31,892	4%
2006	751,250	59,110	37,149	5%
2007	789,667	76,814	46,432	6%
2008	730,750	82,099	64,404	9%
2009	739,250	86,014	60,112	8%
2010	762,500	79,011	55,921	7%
2011	754,667	77,246	55,384	7%
2012	775,250	85,248	65,345	8%
2013	777,250	98,821	74,192	10%
2014	712,500	116,689	89,274	13%
2015	737,250	139,832	108,144	15%
2016	730,750	165,741	134,368	18%
2017	731,250	200,049	161,583	22%

1. Source USDA NASS Farm Labor: average calculated from quarterly employment estimates

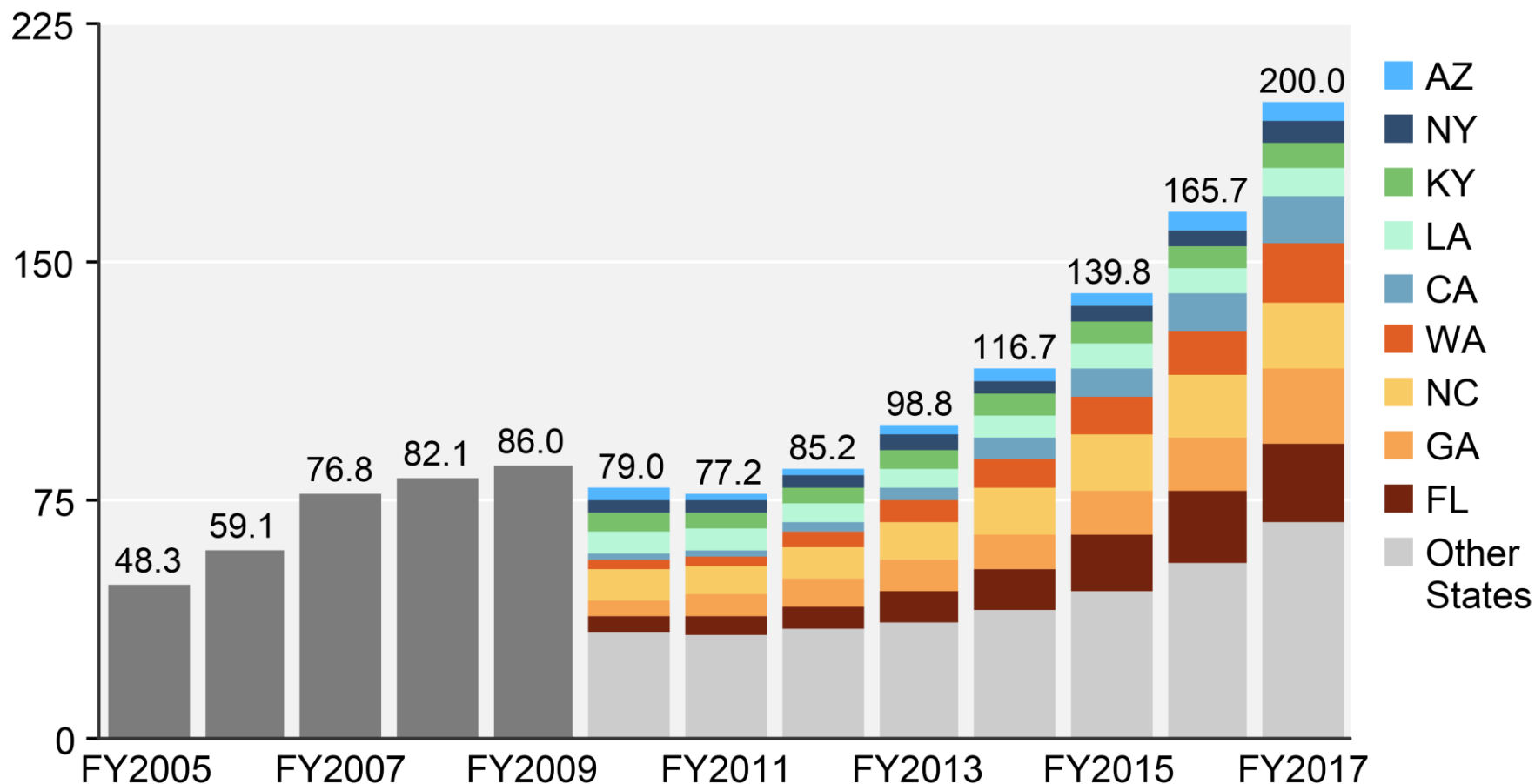
2. Source U.S. DOL H-2A Disclosure Data: total number of H-2A positions for the calendar year

3. Source U.S. Department of State Non-Immigrant Visa Statistics

2018 Certified H-2A Positions = 262,736*

H-2A positions certified by State, fiscal 2005-17

Seasonal positions certified (thousand)



Note: State-level data are not available in public documents for all States in all years. The States included in the chart had more than 2,500 H-2A positions certified in 2010; Arkansas met this threshold, but lacked data for 2015-17. Dark grey bars represent aggregates where individual State-level data are not identified (fiscal 2005-09).

Source: USDA, Economic Research Service using data from U.S. Department of Labor, Office of Foreign Labor Certification (OFLC).

H-2A Occupations by State

Table 2. Occupations of Certified Guest Workers

Type of Work	National		FL		NC		WA		GA		CA	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Fruits & Nuts	58,064	79,963	20,583	18,973	1,594	6,125	13,886	24,320	3,489	6,859	5,272	8,264
Vegetables	51,431	59,097	7,104	9,625	9,969	7,279	860	751	10,468	12,224	6,570	8,039
Grains & Row Crops	41,748	44,845	2,965	5,372	15,869	12,729	355	663	664	622	59	16
Other ^a	28,856	30,418	2,037	5,414	2,063	5,167	7,542	2,632	269	586	224	367
Meat & Dairy	9,827	10,314	8	13	0	1	33	25	4	0	421	426

Notes: These data are from the U.S. Department of Labor (2018).

^a Workers under the category “Other” perform a variety of farm activities ranging from general farm, nursery, greenhouse, Christmas trees, agricultural equipment operators, ..., grass turf work.

Source: Luckstead and Devadoss, 2019

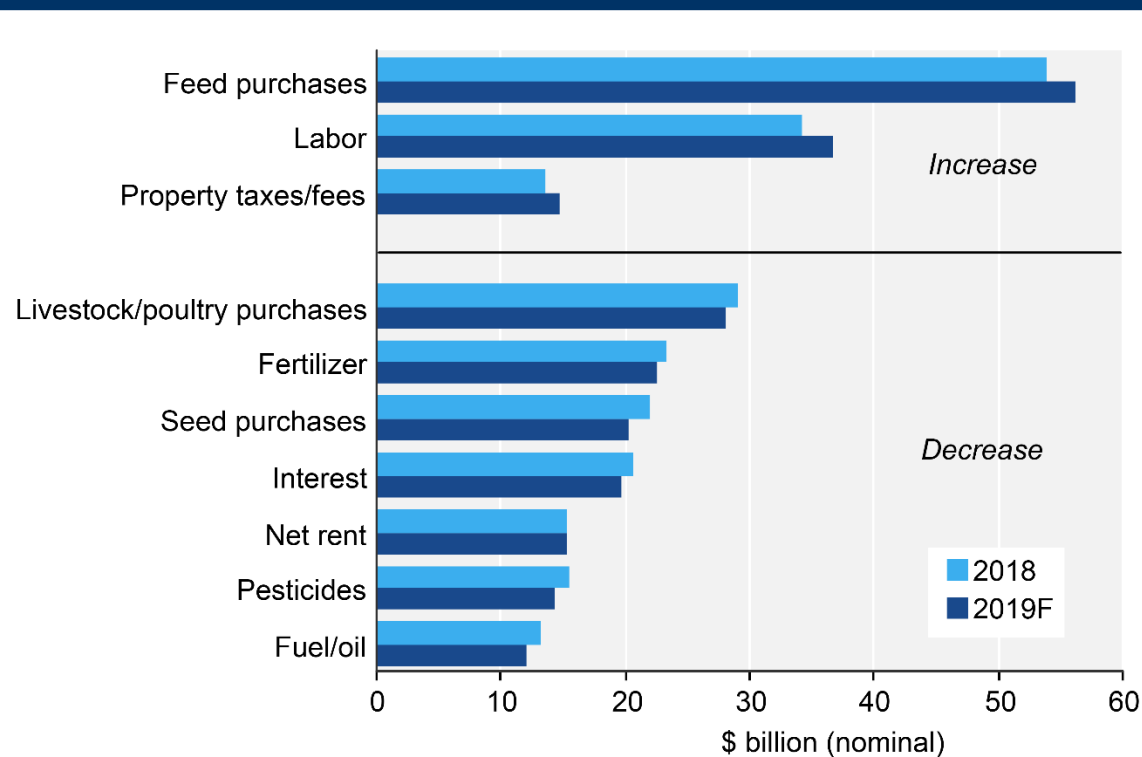
Labor Summary

- *Agricultural workers less available and more expensive*
- Producers turning to the H-2A program
- Outlook depends on macroeconomic conditions and political action

Other Production Trends

Production Expenses

Selected farm production expenses, 2018-19F



Note: F = forecast.

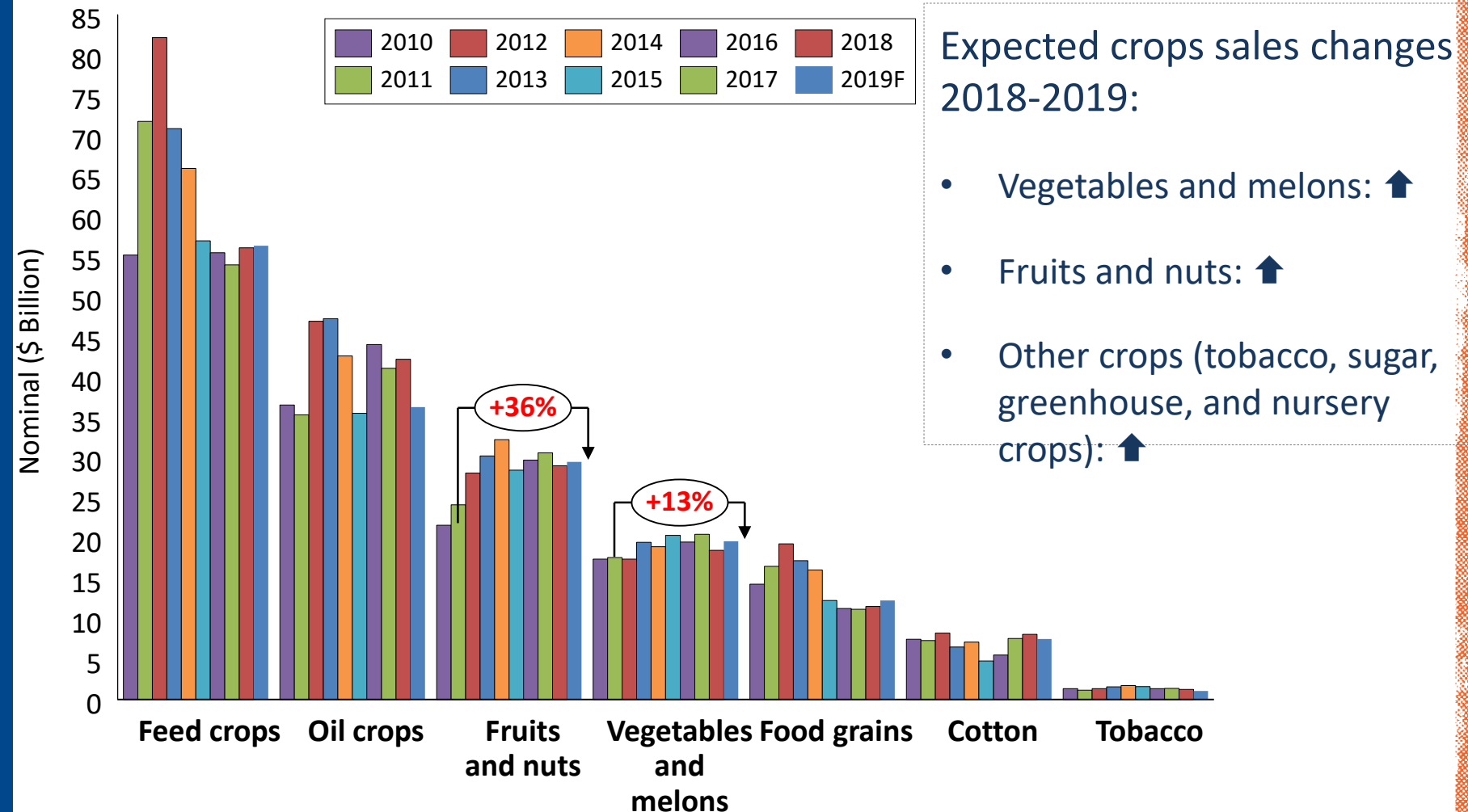
Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

Data as of August 30, 2019.

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Production Values



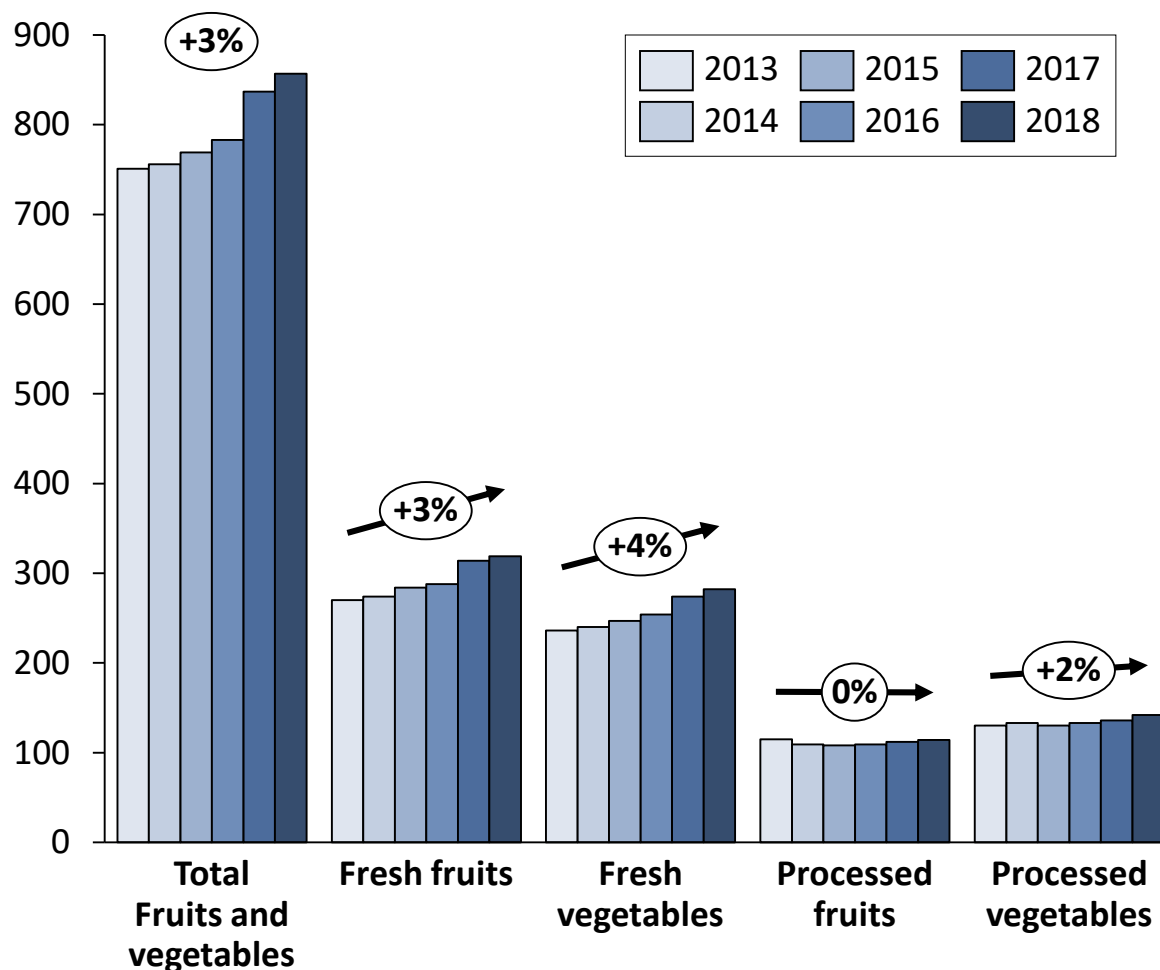
Sources: Dr. Elizabeth Canales / USDA-ERS

Specialty Crop Production

USDA forecasts over the next 10 years:

- 2.7% (annual) increase in value of production per year
 - Mostly due to higher prices
- 0.5% (annual) increase in production
 - Citrus production in decline
 - Tree nut production increasing

Fruit and Vegetable Demand



Sources: Dr. Elizabeth Canales / Bureau of Labor

Other Considerations

- Growth of hemp and related products
 - Potential oversupply?
 - Legal issues
- Trade war and government assistance
 - Policy affects planting and harvesting decisions
 - Price variation
 - Supply chain management

Summary

- Expansion in fruit and vegetable market
 - Especially in fresh market
 - Particularly relevant to Florida
- Increasing labor and feed expenses
- Real estate values steady, with regional variation

Questions?

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