



# **FARM FOUNDATION® FORUM**

## **GROWING TOGETHER: TRENDS AND TRANSFORMATION IN U.S. AGRICULTURE LABOR**

**NOVEMBER 19, 2024**



**FARM CREDIT**

Today's webinar is made possible by a grant from Farm Credit

**#FarmFoundationForum**

**Farm  
Foundation®**  
*Accelerating people & ideas*





# **FARM FOUNDATION® FORUM**

## **GROWING TOGETHER: TRENDS AND TRANSFORMATION IN U.S. AGRICULTURE LABOR**

**NOVEMBER 19, 2024**



**FARM CREDIT**

**Today's webinar is made possible by a grant from Farm Credit**

**#FarmFoundationForum**





# TIM BRENNAN

Vice President, Programs and Strategic Impact



# MEET FARM FOUNDATION

A 501(C)(3) NON-PROFIT AT THE INTERSECTION OF AGRICULTURE AND SOCIETY



**Farm Foundation  
is an ACCELERATOR  
of practical solutions  
for agriculture.**

**We accelerate PEOPLE  
and IDEAS into ACTION**





# OUR MISSION AND VISION GUIDE OUR WORK

## **Mission:**

**To build trust and understanding  
at the intersections of agriculture  
and society.**

## **Vision:**

**To build a future for farmers,  
our communities and our world.**





# BECOME A FRIEND OF FARM FOUNDATION

See link in chat function

- **Donate to Farm Foundation to support our mission**
- **Receive exclusive benefits and curated content**
- **Help us continue to provide valuable content like today's Forum**



# CONNECT & COLLABORATE WITH US!



[www.farmfoundation.org](http://www.farmfoundation.org)



[@farmfoundation](https://twitter.com/farmfoundation)



[@farm-foundation](https://www.linkedin.com/company/farm-foundation)



[@farmfoundationorg](https://www.instagram.com/farmfoundationorg)



[@thefarmfoundation](https://www.facebook.com/thefarmfoundation)



[@thefarmfoundation](https://www.youtube.com/thefarmfoundation)

[#FarmFoundationForum](https://twitter.com/FarmFoundationForum)

# IMPORTANT NOTES

- Submit questions by clicking on the **Q&A Button** at the bottom of your screen.
- Please **include your name and company** so questions may be contextually understood.
- Due to **time limits**, we may not be able to ask all questions submitted.
- This Forum is being recorded and will be posted on our website at **farmfoundation.org** as well as the Farm Foundation **YouTube** channel.
- Please take the **short survey** at the conclusion of the Forum.





# **FARM FOUNDATION® FORUM**

## **GROWING TOGETHER: TRENDS AND TRANSFORMATION IN U.S. AGRICULTURE LABOR**

**NOVEMBER 19, 2024**



**FARM CREDIT**

Today's webinar is made possible by a grant from Farm Credit

**#FarmFoundationForum**

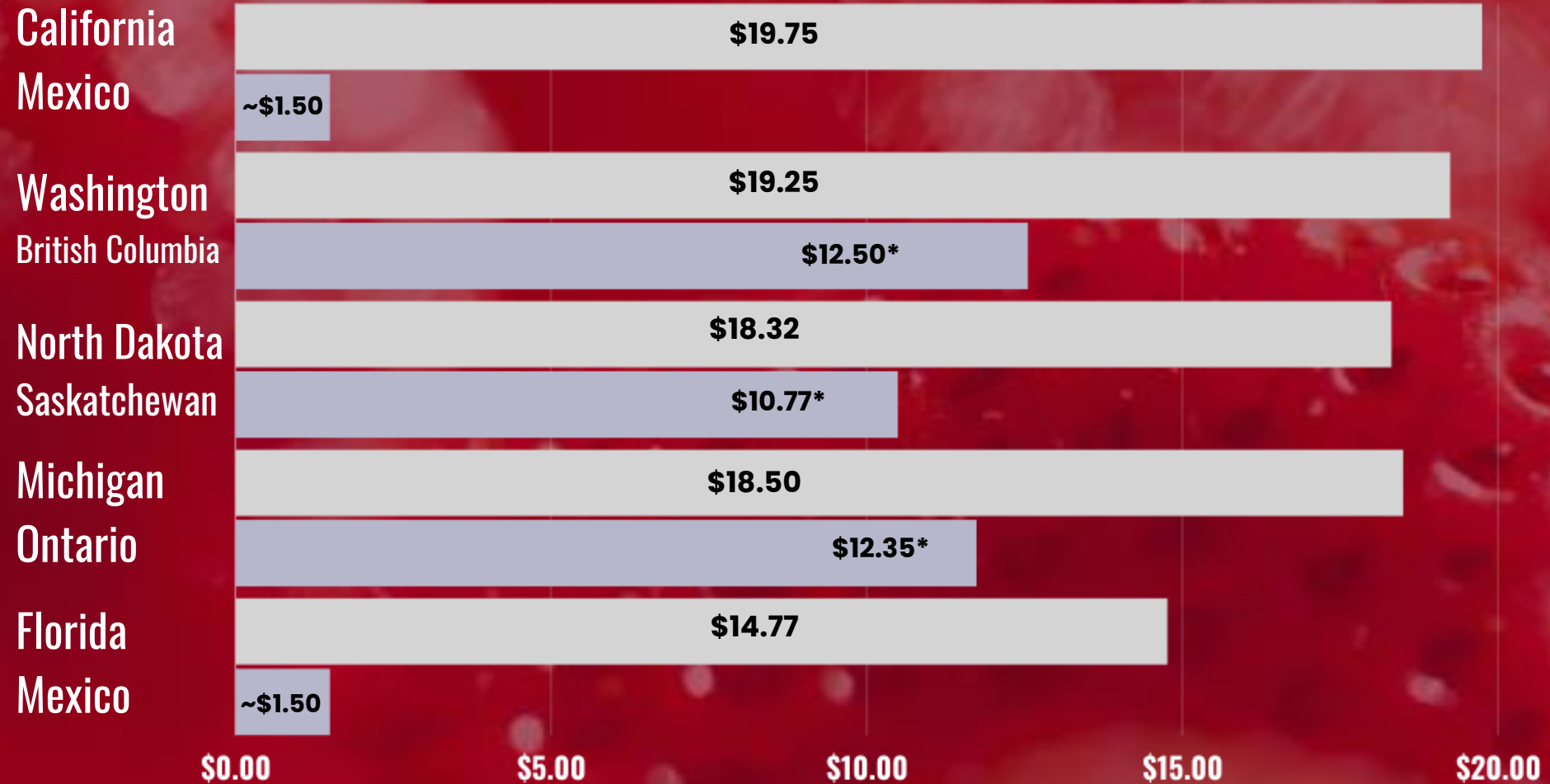
**Farm  
Foundation®**  
*Accelerating people & ideas*



MODERATOR  
MICHAEL MARSH

President and CEO,  
National Council of Agricultural Employers

# ADVERSE EFFECT WAGE RATE



U.S. Dollars Per Hour

\*CDN = \$0.72



U.S.



Foreign Competition



NATIONAL  
COUNCIL OF  
AGRICULTURAL  
EMPLOYERS



The background features several large, stylized paper fans in red, white, and blue, arranged in a circular pattern. A large American flag is visible in the lower right corner, partially obscured by the fans. The overall theme is patriotic and celebratory.

# Elections have consequences

- President
- House of Representatives
- Senate
- Continuing Resolution
  - Lame Duck Plays with Appropriations Riders
    - AEWR Freeze
    - Worker Protection Rule
- FLS (Su and Vilsack)
- 3,000 pgs
- 1,640 more



# Litigation, etc.

---

- AEWRR
  - Western District of Florida (FLS and OEWS)
  - North Carolina
  - Louisiana (partial injunction)
  - New FLS on the way
- Petition for change in AEWRR methodology
  - 20 CFR 655.120 (b)(1)(i)(a)
- Program Rule





## Litigation, etc.

- Worker Protection Rule
  - Georgia (GFVGA)
    - Enjoined in 17 states
    - 17 AG's
    - Tough language
  - North Carolina (NCFBF)
  - Mississippi (IFPA, AFBF) Hearing



# Breaking News!

---

- Worker Protection Rule - NCAE
  - Hearing November 4<sup>th</sup>
  - Western District of KY
  - “Fix looking for a problem”
- Judge’s thoughts
  - *Cedar Point*
  - Incremental changes?!
  - DOL’s remedy
  - *Chevron* deference







# PHILIP MARTIN

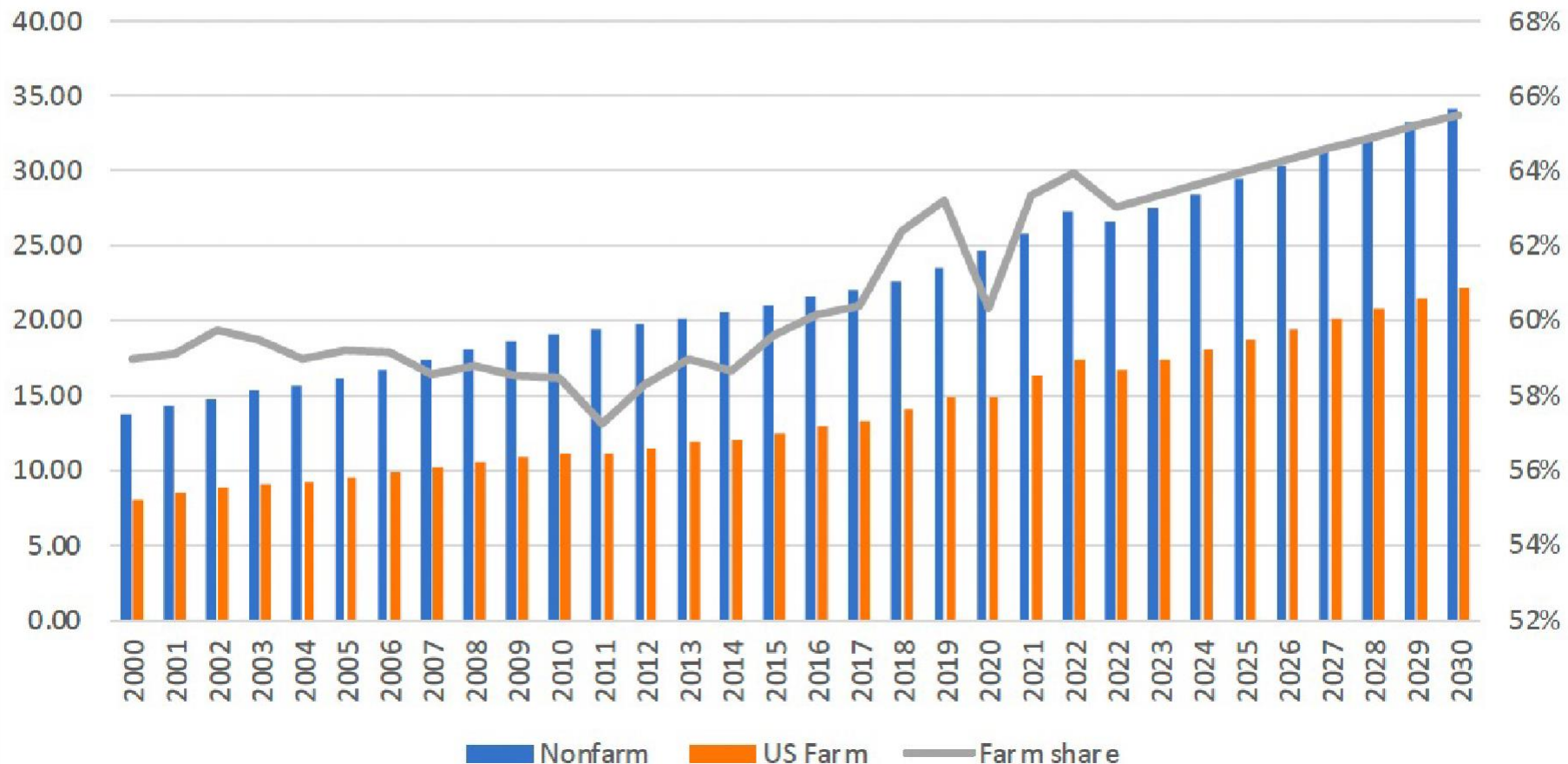
Professor Emeritus, Agricultural and Resource Economics  
University of California, Davis

# Farm Labor: machines, migrants, imports

Philip Martin: [plmartin@ucdavis.edu](mailto:plmartin@ucdavis.edu)

Average Hourly Farm Earnings of \$22 are Projected to be 65% of Nonfarm \$34 in 2030

Nominal farm and nonfarm hourly earnings, 2000-2030





# **Labor costs up & MMI responses**

- **Stable D, shrinking S = wages up**
  - 1.5 mil average ag jobs; 2.5 million farm workers
  - NF crop support: 40% in US; 60% CA; 50% H-2A
  - Why wages up:  $D > S$ , min & AEWR, OT, regs
- **2 mil or 80% of farm workers = Mex-born**
  - 1.7 million settled; 50% unauthorized, average 42
  - 300,000 H-2A; average 32; 15 to 30% higher prody
- **MMI: Mechanization, Migrants, Imports**
  - Mech: pre-har vs har; mechanical aids; CEA (greenhouse)
  - H-2As: build housing or hope Congress changes?
  - Imports: 60% fresh fruit; 40% fresh vegs; Mex: 50 & 75%
- **Where to invest for F&V prod: all 3 MMI?**

# Farm Labor System (supertanker)

- **Overall Changes**

- Ag exceptions down; FW regulated like non-FW
- Settled FWs working longer, 200+ days
- US-educated FW children climb US job ladder

- **Outsourcing to FLCs: best & worst**

- FLCs can be win-win for ers & ees or risk absorbers
- Challenge: hard-to-regulate FLCs & hard-to-protect H2As

- **Opportunities**

- Incentivize & reward best ers & H2As; TSA-precheck?
- Can H-2As become FIFO crews (min # trained do work)?
- Can buyer certification sustain labor law compliance?
- Can policy integrate mechanization, H-2A regs, retraining, trade etc reshaping farm labor market?

## **H-2A future: 2025 to 2030**

- **Trump 1.0: No significant changes to H-2A**
  - H-2A up, FWMA passed House in 2019
- **Biden: FWMA 2021 & H-2A changes**
  - From 1 AEWR/state to 10+ AEWRs
  - 2024 worker protection regs
  - Will courts block or Trump #2 reverse?
- **Trump 2.0: Make H-2A easy or phase out?**
  - Freeze/modify AEWR, no to Biden regs, year-round jobs
  - Project 2025: phase out H-2A and subsidize mechaniza
- **H-2A 2025-2030? (famous without right)**
  - Few newcomers; H-2A = fresh blood
  - Machines & CEA in US up; Imports up *if* trade allows



**US ag = 30+ sectors. Big 5 paid 2/3 of \$57 bil UI farm wages in 2023**  
**Crop support: \$14b; Green \$8b; F&N \$6b; Dairy \$5b; Veggies \$4b**  
**We do not know commodity of crop support workers**







**FLCs: 55% of crop  
support emp; 43% of  
CS wages**

**3,100 US FLC estabs;  
1,500 in CA**

**FLCs: Increase efficiency  
of worker-job matching  
OR act as risk absorbers  
for violations?**





**FLCs: 183,000 or 21% of average US crop employment in 2023**  
**QCEW: 542k direct hire, 333k CS (38%) of 875k average crop employ**  
**UI covers 80% of US ag employment (1.1 million C+CS)**





**Greenhouse & Nursery: 10k estabs, 175,000 ave employ, \$8b wages**  
 **$\frac{1}{2}$  G&N employ = nursery & tree production;  $\frac{1}{4}$  = food under cover**





**F&N = 6 crops each have \$1 bil in direct-hire QCEW wages  
Apples, grapes, straws, other berries, tree nuts & other  
non- citrus fruit; each has 20k to 30k ave direct employment**



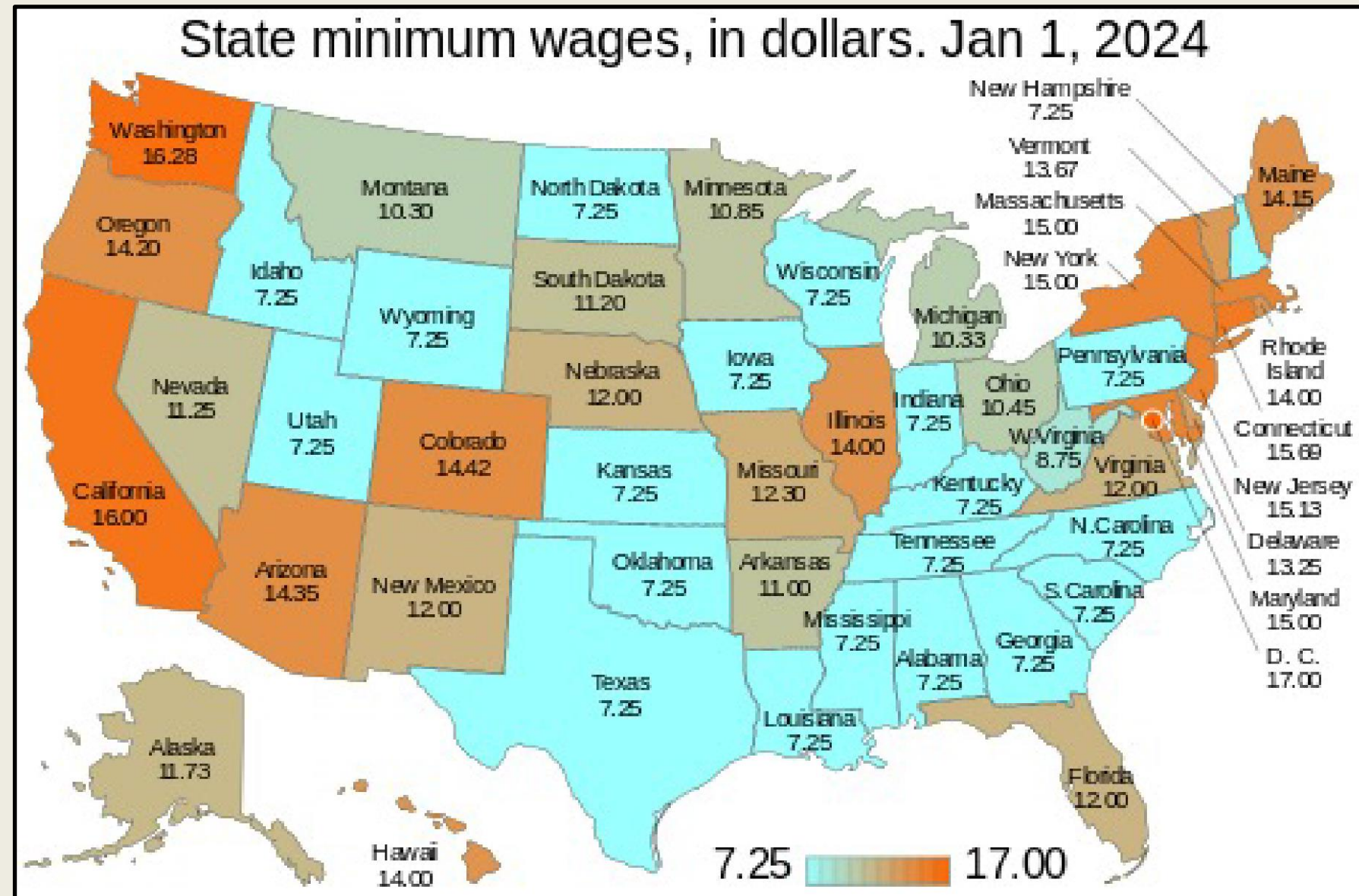


## **Few US-educated children of settled Mexican-born workers become seasonal farm workers**





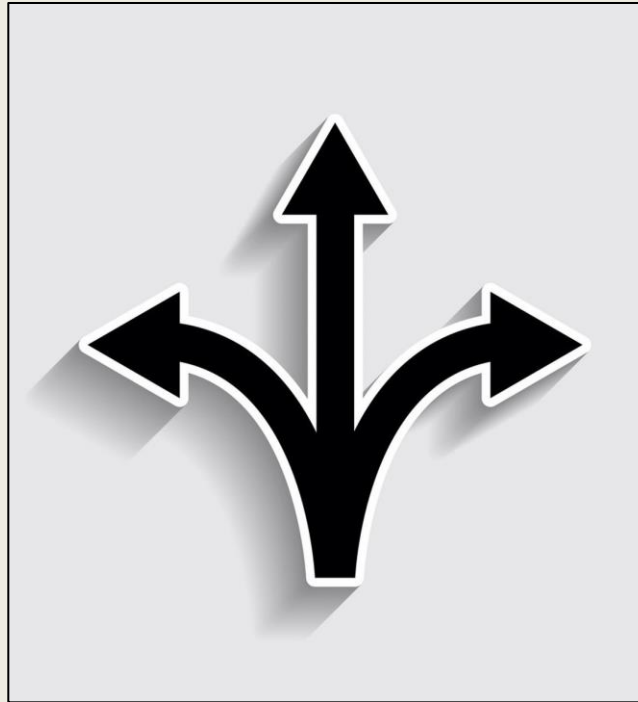
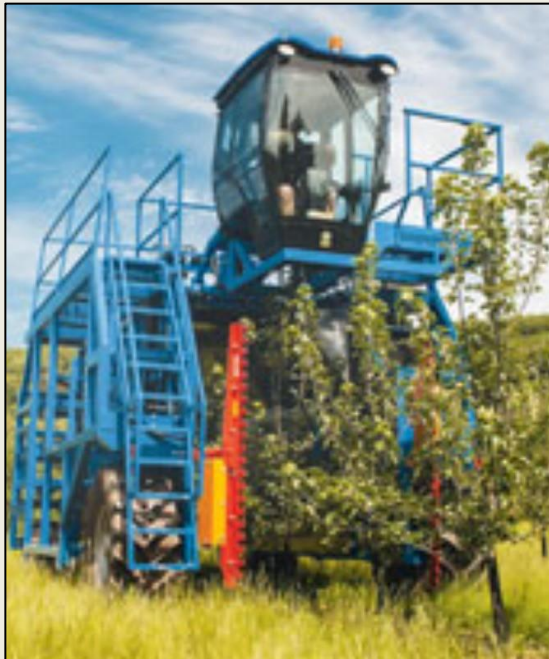
# California 2024: \$16 min wage, #2 to WA \$16.28 (\$7.25 fed) Minimum wages in CA & WA are 2x GA & NC



# 3 responses to rising farm labor costs

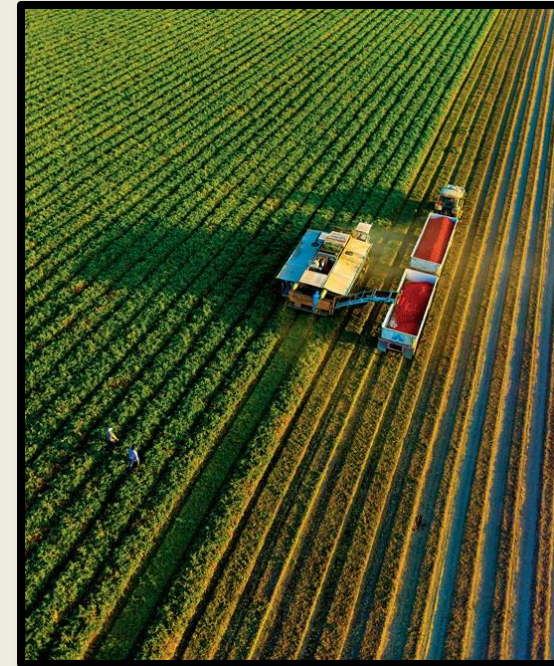
## MMI: Machines, Migrant H-2As, Imports

***We provide and manage H-2A Workforce***





**Mechanize olives, carrots, processing tomatoes, tree nuts Harvest:  
usually most labor intensive & time sensitive**





**\$100,000+/acre to produce straws; \$1,000+ for corn & soy Machines:  
adapt to current farming systems OR change farming system to use machines  
(easiest in CEA)?**





# Robot strawberry harvester & current farming system

## Robot picks 50-70%, hand workers follow, shed pack





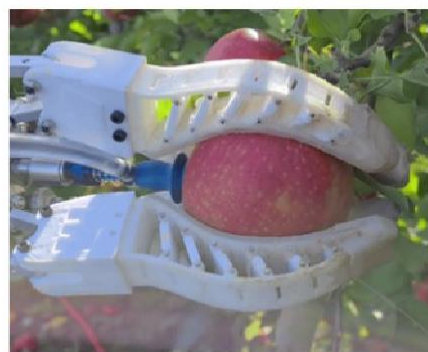
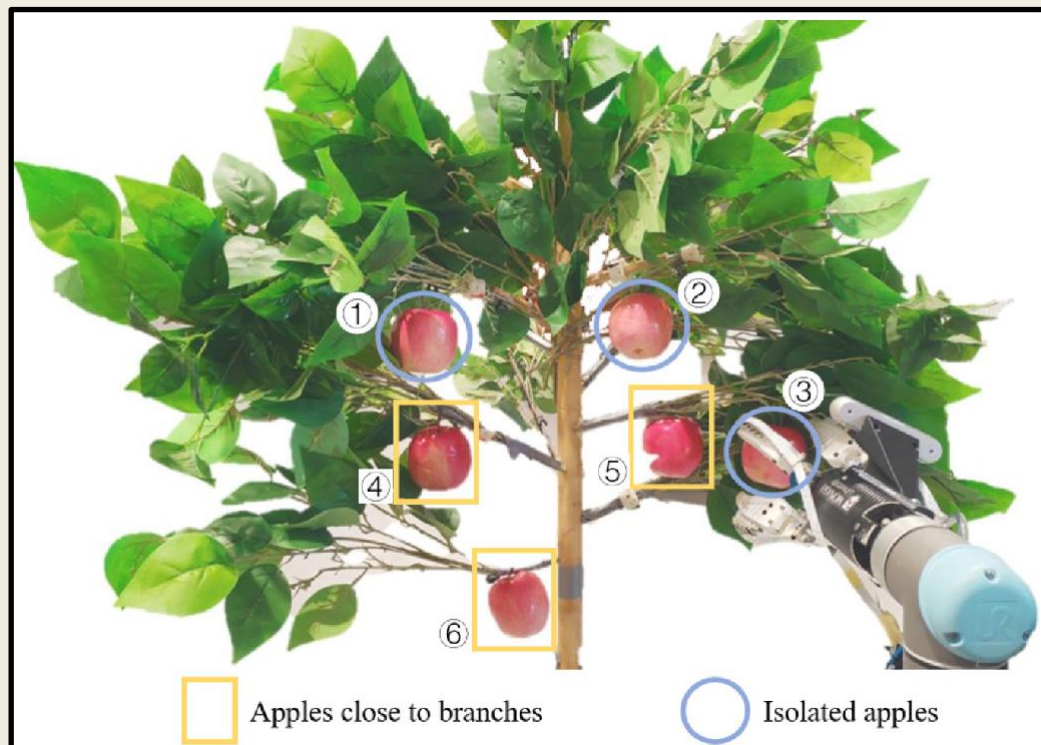
# Robot apple pickers: same output as hand pickers: bins





# Robot challenges: find apples, grasp, & convey to bin

## Issues: branches & leaves, drops, debarking, bruising



(a) Good grasp



(b) Null grasp



(c) Branch interference



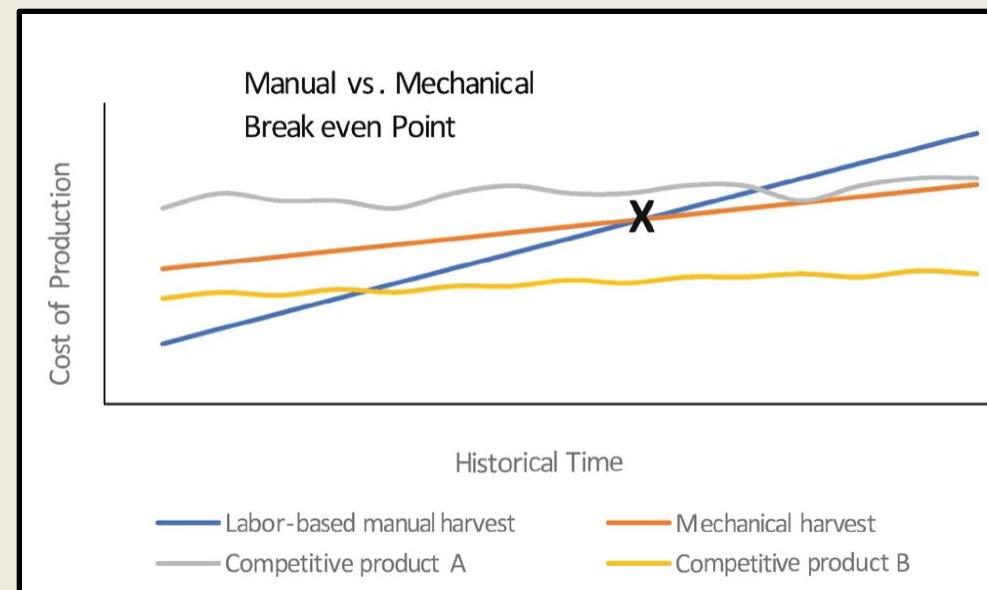
(d) Finger obstructed

**Hand pick: 6 bins in 8-hour day, 80-925 pound bins/acre**  
**Piece rate: \$30/bin + payroll taxes, & super = \$40/bin**  
**When do robots become cheaper than hand workers?**



Formula	Explanation
<b>\$31</b> Money to devote to CapEx	<b>\$31/Bin</b> Money to devote to CapEx
x 1.4 Bins/Hr	2,750 Apples per Hour / 2,000 Apples per Bin
<b>= \$43/Hr</b>	<b>Money to devote to CapEx</b>
x 900 Hrs/Yr	Harvest operations across 3 months per year
x 5 Yrs	Acceptable customer payback period
<b>= \$190K</b>	<b>Maximum product price to customer</b>
@ 35% margin	Expected gross profit for advanced.farm
<b>= \$123K</b>	<b>Maximum acceptable bill of materials cost*</b>

2028 Cost per Bin (\$)





**Hand-picker: 1 apple or strawberry every 2 seconds, 95% efficiency**  
**Detect (95%), position (95%), pick (95%), convey (95%) = 81% efficiency**  
**Can growers lose 20% of crop? Is venture capital patient for ag robots?**





# Mechanical aids: Reduce lifting and carrying



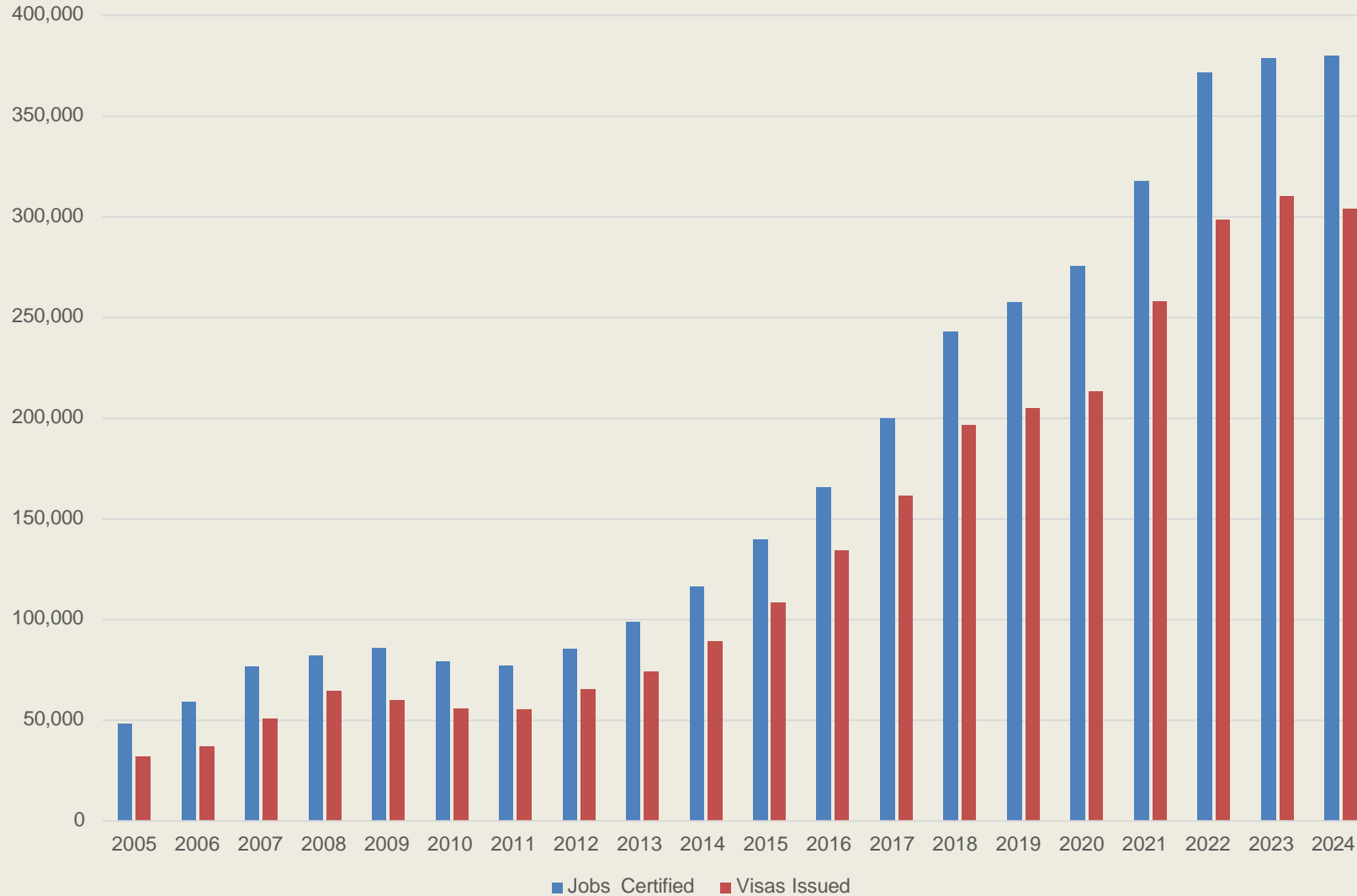
Dwarf trees & \$60,000  
platforms; lights at night  
Conveyor belts & robot  
carriers

Culture change: from  
individual to shared/crew  
piece rate wages

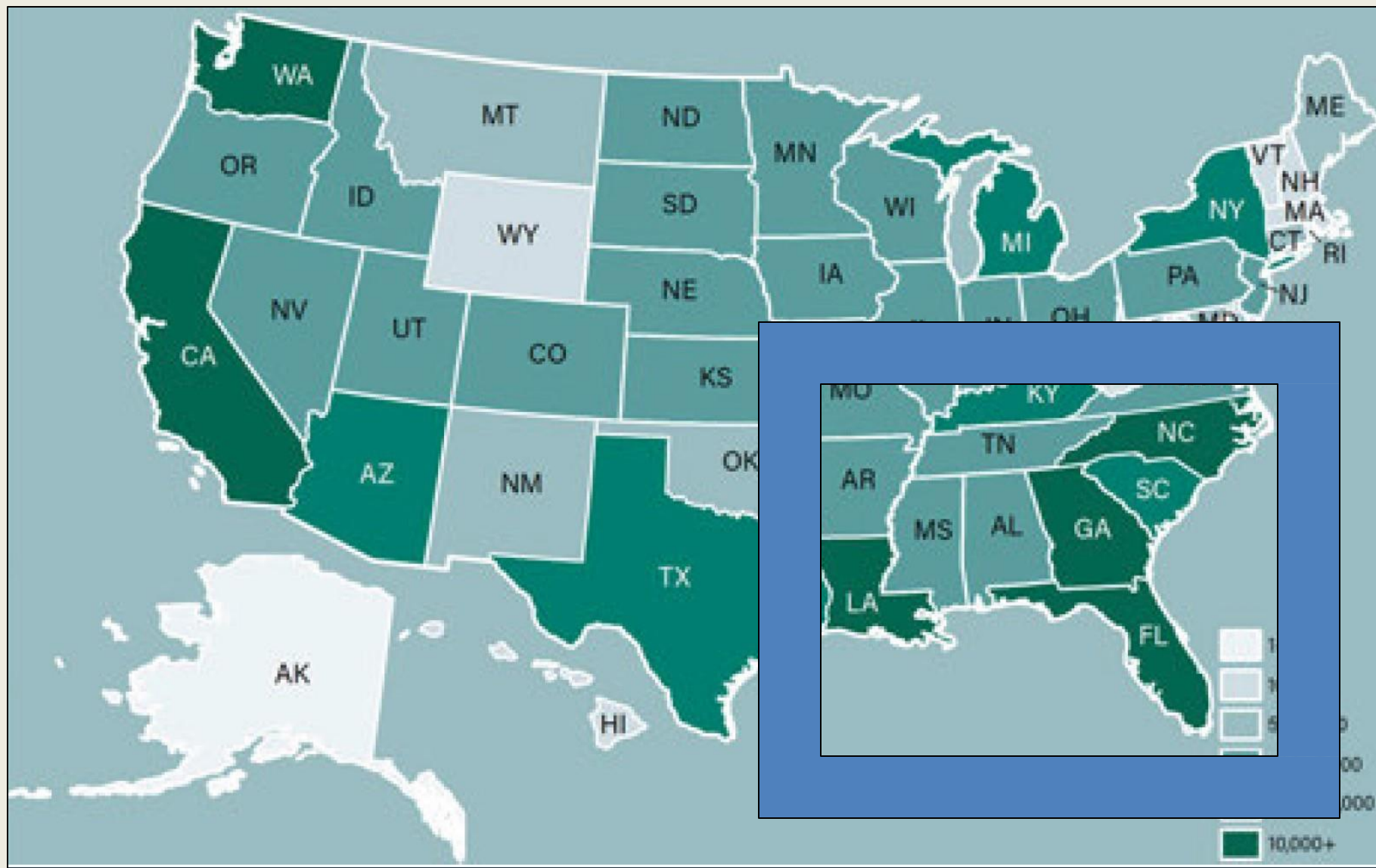




**H-2A: 378,000 jobs (blue) certified in FY23; 300,000 visas or 80%  
From 100,000 jobs in FY13 to 450,000? (Bracero peak = 455,000)**



**H-2A jobs are concentrated in SE states**  
**But: ½ of hired FWs in western states; CA & WA = 45%**





# DOL regs: from 1 to multiple AEWRs/state, new worker protections?

## Does DOL slow H-2A growth with higher costs?

### The rise and rules of H-2A

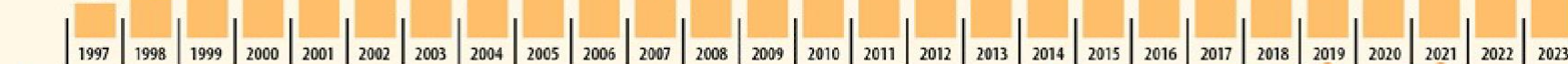
Here's a timeline of the changes and attempted changes to the H-2A program.

300,000  
H-2A VISAS ISSUED

200,000

100,000

16,011  
VISAS



1986: H-2A visa created.

#### 2021 FINAL RULE

- Not enacted due to presidential administration change.
- Would have mandated electronic job order filing.
- Would have permitted joint applications.
- Would have permitted staggered worker entry.

#### 2010 FINAL RULE

- Reinstates use of USDA Farm Labor Survey.
- Reinstates role of State Workforce Agencies.

#### 2009 FINAL RULE

- Uses Occupational Employment and Wage Statistics data to set AEWR.
- Prohibits charging worker placement fees.
- Reduces re-entry time from 6 to 3 months.
- Creates eligible countries list.

#### FEB. 2023 FINAL RULE

- Changes AEWR methodology.

#### OCT. 2022 FINAL RULE

- Updates prevailing wage survey methods.
- Clarifies joint employer restrictions.
- Mandates electronic applications.

#### JUNE 2024 FINAL RULE

- Requires procedures for discipline.
- Allows union and legal aid visits.
- Mandates seat belts.
- Increases penalties and risk of disbarment.

2019 Farm Workforce Modernization Act  
Passes House, no vote in Senate.

2021 Farm Workforce Modernization Act  
Passes House, no vote in Senate again.

## **CA H-2As cost \$30/hour vs US \$20/hour**

- **H-2A: 15-30% higher productivity; accept job assignments = labor insurance, no Soc Sec tax**
- **US workers: more diverse, less loyal; change employers for higher earnings**
- **H-2A reform: wait for Congress or change regs?**
  - **Multi-year cert & visas for A-rated ers & ees?**
  - **FIFO: turn-key crews with supers, drivers, cooks**
  - **Fewer & larger recruiters/FLCs achieve econ of scale & use systems to protect reputations**





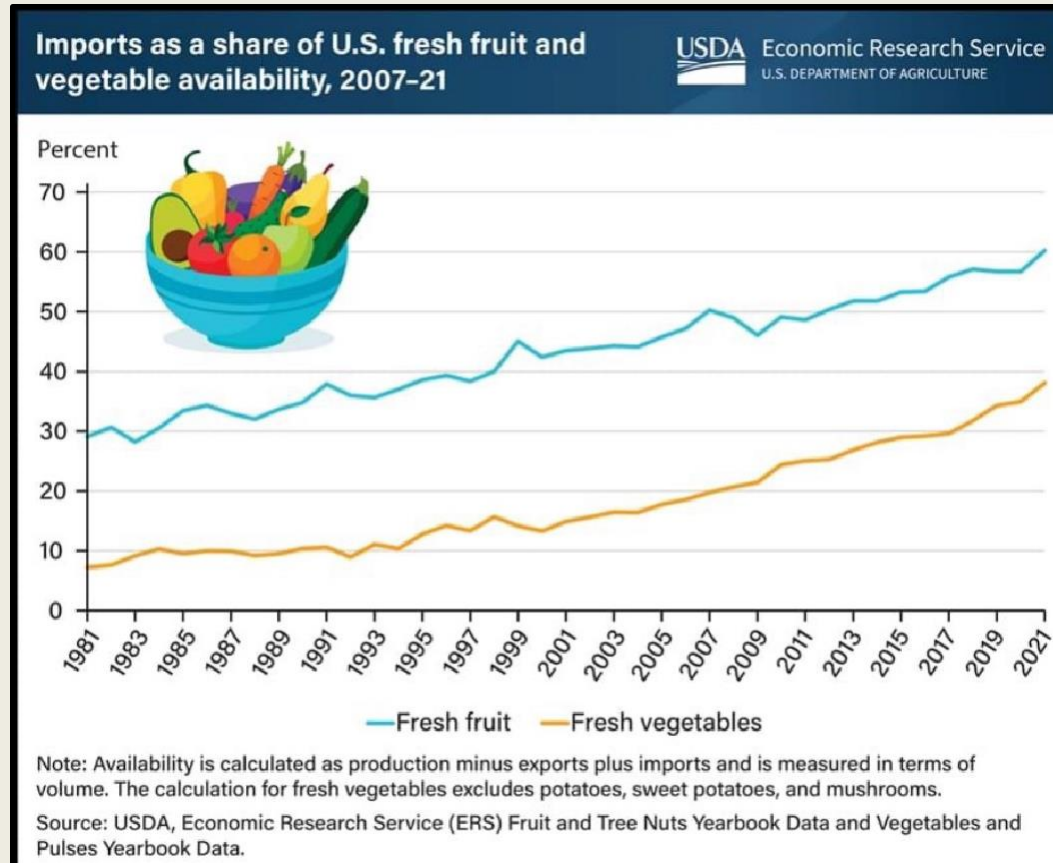
## **FWMA HR 1603 passed House 2019 & 2021**

- **Title 1. Unauthorized who did >180 days of farm work in prev 2 years = legal CAWs; 5.5 yr TPS**
  - *CAWs & their families* can become immigrants if CAW does >100 days of farm work/year over next 4 or 8 years
- **Title 2: Streamline H-2A program**
  - 3-year visas for H-2A workers & multiple employers
  - 20,000 visas a year for year-round ag jobs (dairies)
  - Freeze AEWR & study need for AEWR & methodology
- **Title 3: Farm employers must use E-Verify to check new hires**



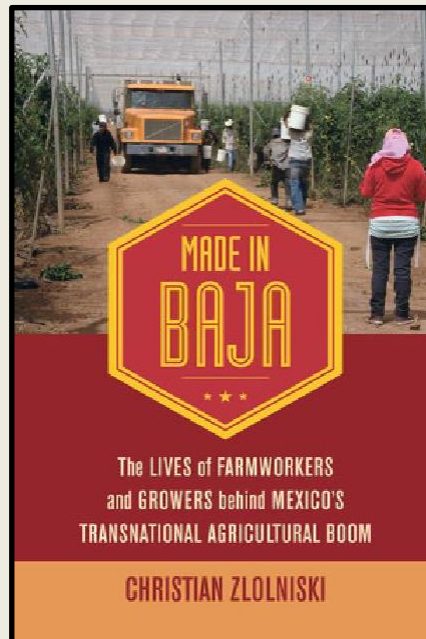
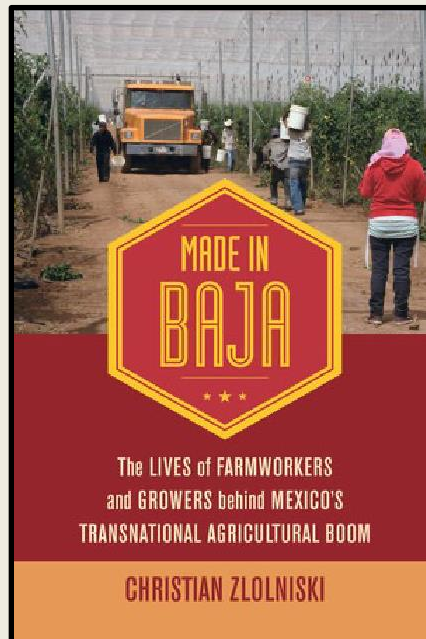
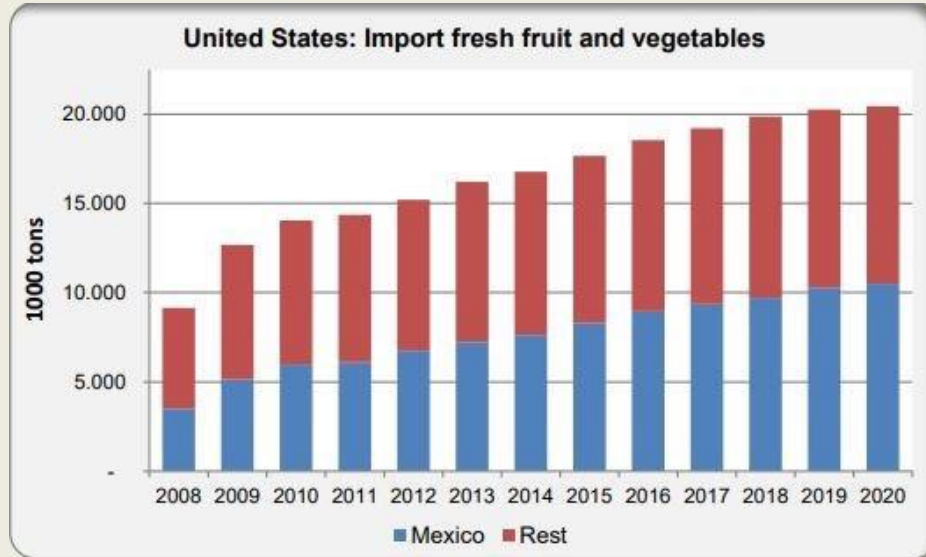
**FARM WORKFORCE  
MODERNIZATION ACT**

# 60% of US fresh fruit & 40% of US fresh vegs are imported Mexico: $\frac{1}{2}$ of US fruit imports, $\frac{3}{4}$ vegetable imports



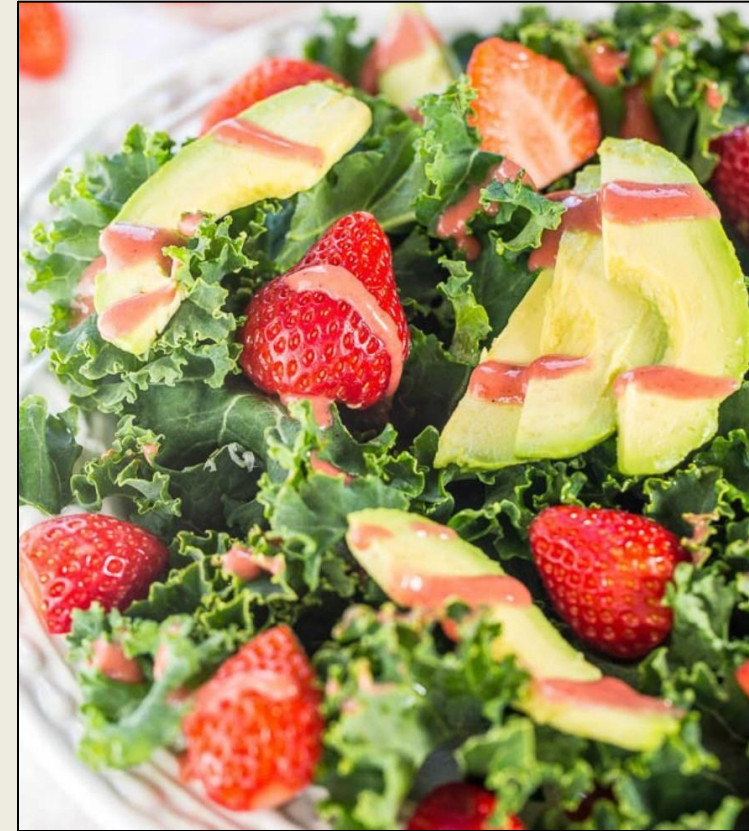


# Big 3 Mex X: tomatoes, avocados, berries (blue = Mexico share)





**>60% of Mex-grown cukes, aspar, & broc exported to US**  
**>40% of Mex avocados, lettuce, tomatoes & straws to US**





# **2020s: a farm labor hinge?**

- **1960s hinge:  $D > S$ , wages up, mechaniza, unions,**
  - Bracero program ended 1964; civil rights for Latinos
  - Demand for FVH up: incomes up & baby boom
  - Rising wages & mechanization: forklifts & bins in fields
  - UFW & Cesar Chavez: boycotts work if inelastic demand
  - Reduce ag exceptionalism: 1966 = fed min wage for FWs
- **1990s: unauthorized FWs replace SAWs**
  - FLCs and unauthorized: risk absorbers for violations
- **2020s:  $D > S$ , wages up, mechaniza, imports**
  - Mechanize in fields & CEA; aids to help hand workers
  - Less ag exceptionalism: OT, pro-union, heat safety etc
  - What mix of mechanize US production versus imports?
  - Integrate public policies, buyer requires, tech changes?

# Farm Labor 2020s

- **Wages up, exceptionalism down**
  - Narrowing of farm-nonfarm hourly earnings gaps
  - Overtime, health & safety, card check
  - Buyers & NGOs: certify compliant growers & FLCs
- **Hard-to-regulate FLC share of employ up**
  - What are FLC bus models? Are FLCs risk absorbers for violations? What would make FLCs win-win?
  - Why aren't FLC businesses bought & sold? Why no Manpower with FLC franchises?
- **Future of FVH ag**
  - Mechanize in fields & CEA to keep production in US?
  - Import more migrants & keep hand production in US?
  - Import more labor-intensive F&V commodities?



# No country has solved seasonal farm labor issue

<http://migration.ucdavis.edu>

Migration Dialogue

## Rural Migration News

Blog 305

OCTOBER 2022

### U.S. Farm Labor Outlook

The US farm labor market employs about 2.5 million workers sometime during a typical year to fill 1.5 million full-time equivalent jobs (average employment). About 80 percent of hired farm workers, some two million, were born in Mexico, including 1.75 million who have settled in the US and 250,000 who work seasonally as H-2A workers for an average six months a year. Most of the settled Mexican-born workers arrived in the 1990s and early 2000s in their 20s, and are now in their 40s; half are unauthorized.

Farming has two major subsectors, crop and animal agriculture. Crop agriculture accounts for three-fourths of US farm employment and an even higher share of seasonal workers. Average crop employment has been relatively stable at 1.1 million over the past two decades, but a rising share of crop workers, 40 percent in 2020, are brought to farms by nonfarm crop support employers (NAICS 1151), over half of whom are farm labor contractors. About 80 percent of crop employment is covered by unemployment insurance.

US crop employment is 60 percent direct hire and 40 percent crop support. In California the ratio is 40-60, meaning that more workers have been brought to crop farms by crop support employers than were hired directly since 2010.

Farm production is concentrating on fewer and larger farms, and the marketing of many commodities is dominated by a few firms. Economics often assumes that many farmers produce identical corn, soybeans and wheat, and sell their crops in competitive markets where supply and demand determine prices, making farmers price takers in both input and output markets and

explaining why governments often support farm incomes.

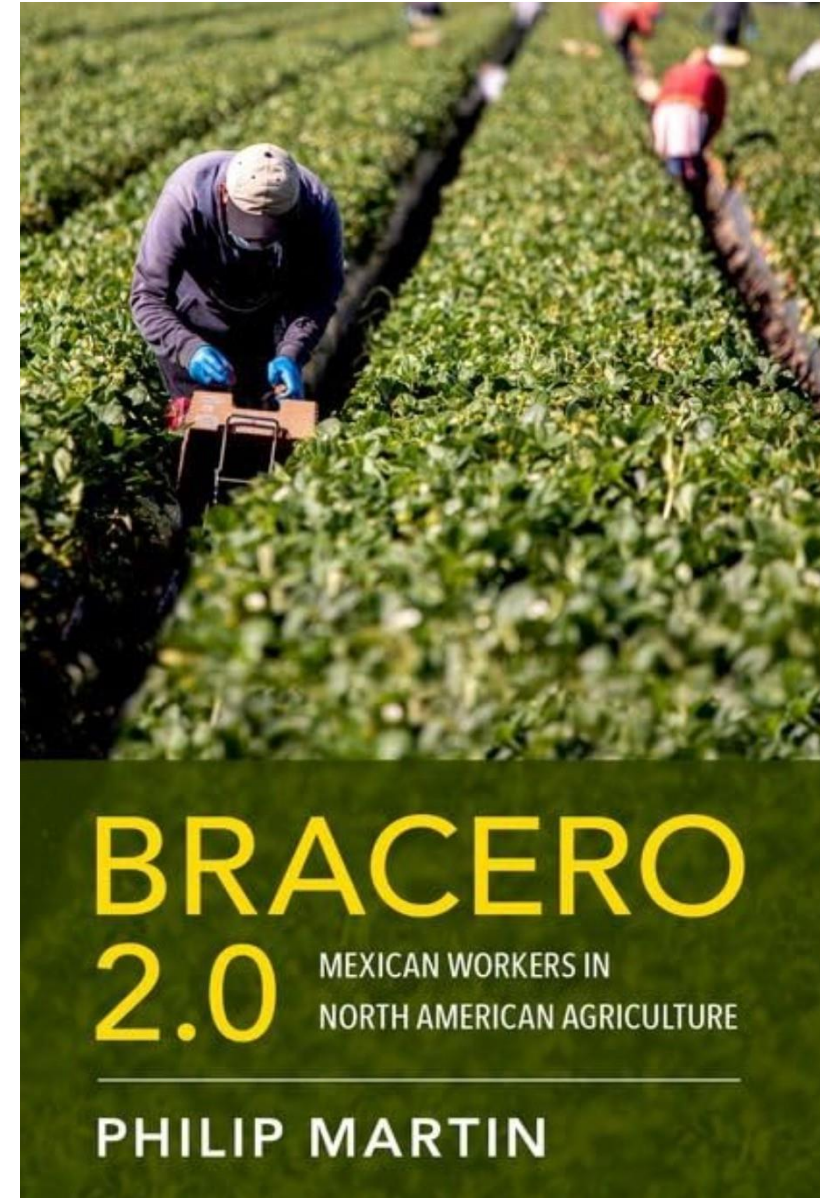
Labor-intensive fruits and nuts, vegetables and melons, and horticultural specialties that include flowers, mushrooms, and nursery (FVH) crops are different from field crops such as corn or wheat in many ways. The 10 largest lettuce or mushroom growers, or the five largest marketers of avocados and berries, often supply a commodity year-round to supermarkets and food service firms by operating or purchasing in multiple locations. The 10 largest farms or marketers may account for half or more of total production or sales of a particular commodity.

For example, the 2017 Census of Agriculture reported over 25,000 US apple farms, but the largest 800 or three percent each had 100 or more acres of apples and collectively accounted for over 70 percent of US apple acreage; the 1,000 apple farms that each had sales of \$1 million or more accounted for two-thirds of US apple acreage. The COA reported over 1,100 lettuce farms, but the largest 67 or six percent that each harvested 1,000 or more acres accounted for over 80 percent of harvested lettuce acreage.

The production and marketing of many fresh fruits and vegetables is

80% of U.S. Hired Farm Workers Were Born in Mexico











# ANDREW PADOVANI

Project Director, National Agricultural Workers Survey (NAWS)  
JBS International Inc.



# The Changing Farm Labor Force Data from the National Agricultural Workers Survey

Andrew Padovani, JBS International

Wenson Fung, JBS International

Emily Finchum-Mason, DOL/ETA

Daniel Carroll, DOL/ETA

The Changing Landscape of Farm Labor Conditions in the United States:  
What the Future Holds and How to Prepare for It

September 17-19, 2024

Disclaimer: The views are solely those of the presenters.



# National Agricultural Workers Survey (NAWS) Background

National study of crop workers (migrant and seasonal, excluding H-2A workers)



Primary source of national and regional information about crop worker demographics, employment, and health.

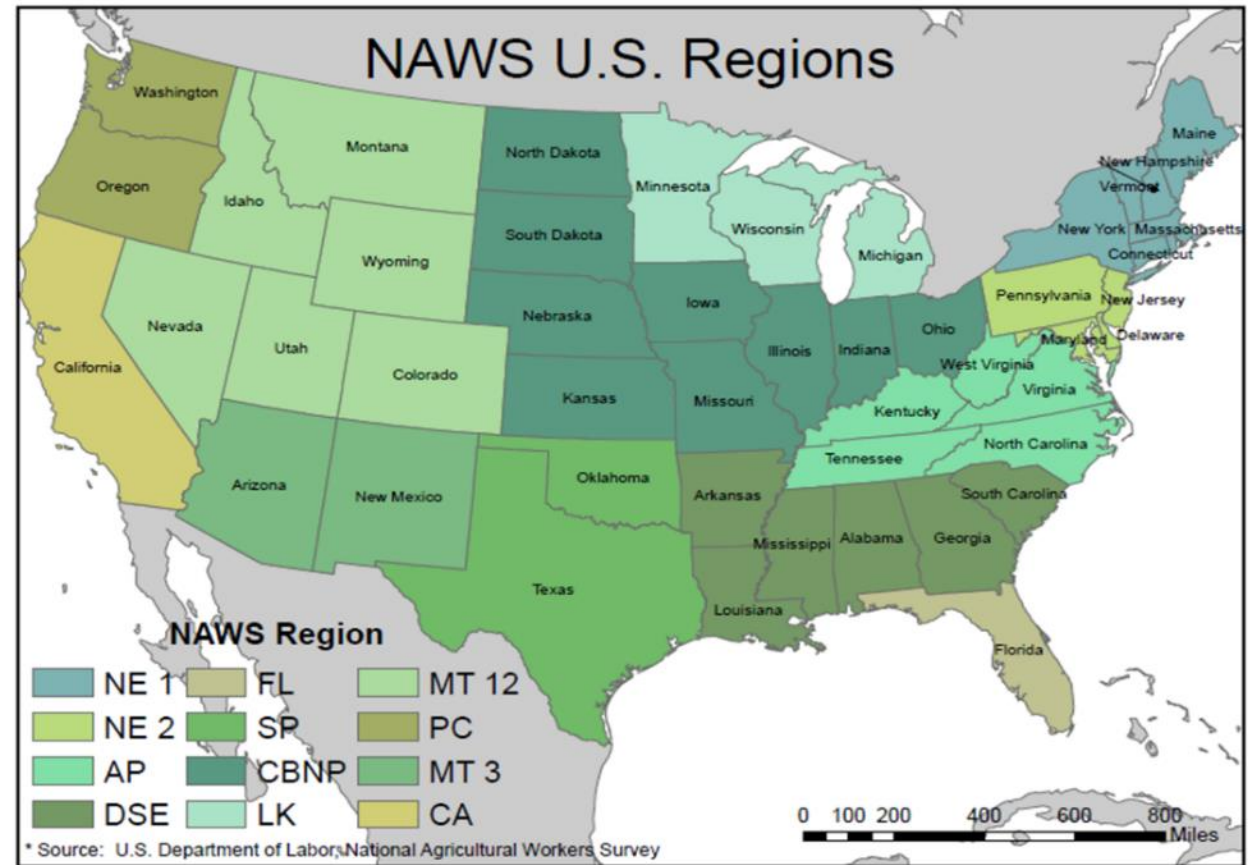


Thirty-four years of continuous data collection on crop workers in the United States.



# NAWS Sampling Methodology

- Multi-stage, stratified random sample across 12 NAWS sampling regions.
- Includes between 1,100 and 3,600 crop workers per year.
- Crop workers interviewed where they work.
- Public use data can be analyzed for six NAWS regions





# National Agricultural Workers Survey (NAWS)

## Survey Domains

**Demographic  
characteristics**

**Housing**

**Farm job  
characteristics**

**12-month  
employment  
history**

**Income, assets,  
and use of  
assistance  
programs**

**Lifetime health  
history**

**Health insurance  
coverage**

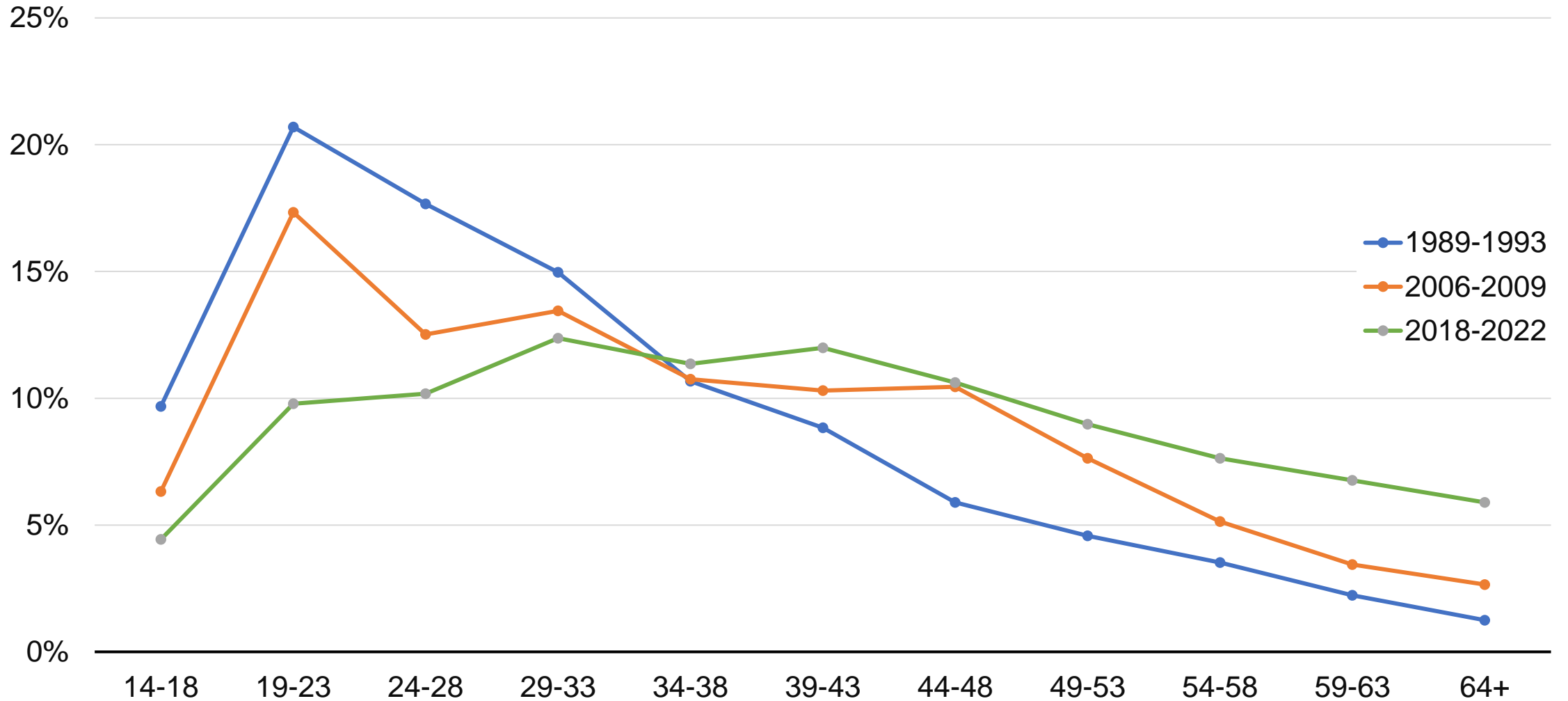


# Demographics



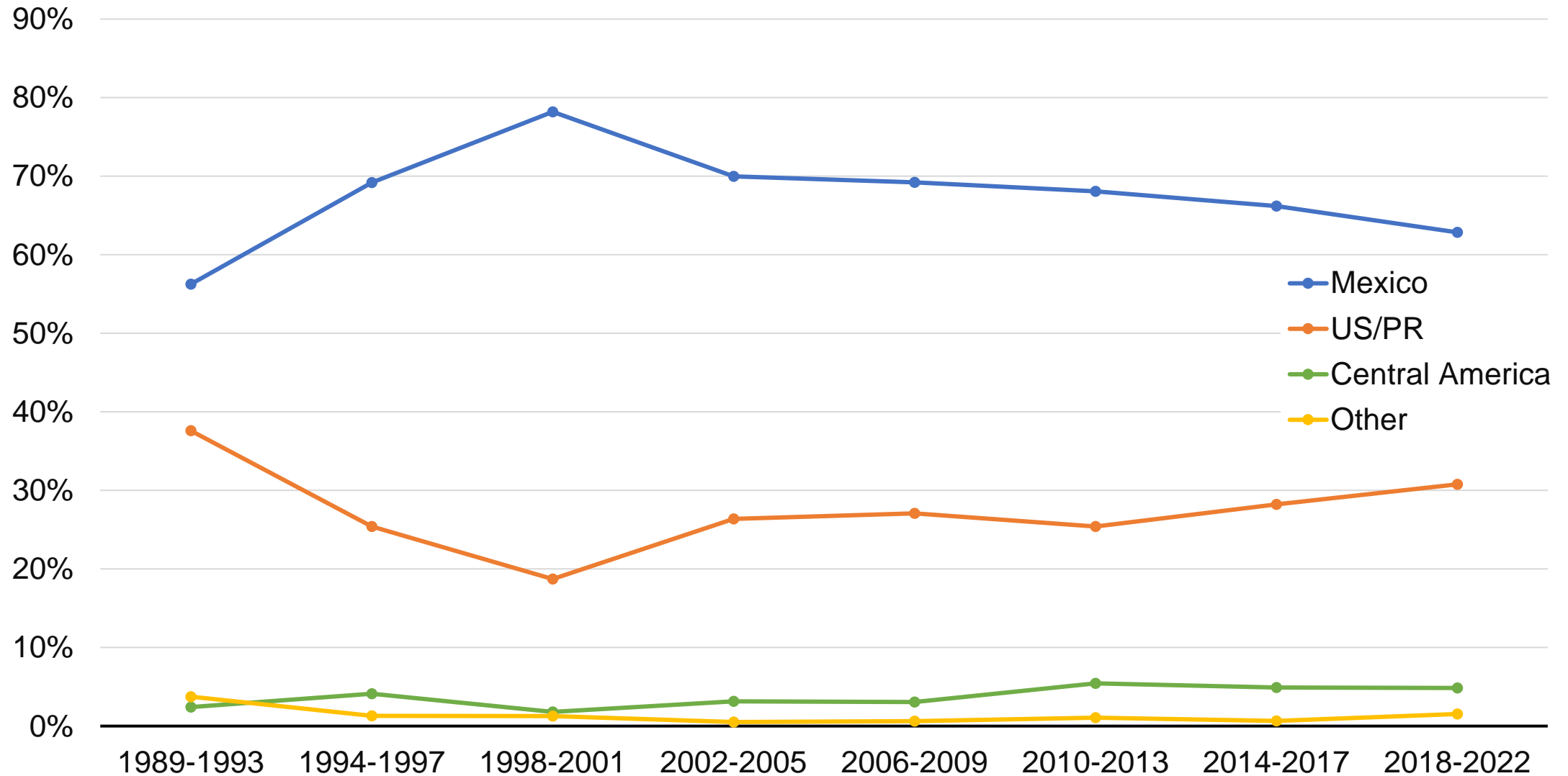
# Distribution of crop worker age

Crop workers are aging, with about half of crop workers aged 39 years or older.



# Crop worker place of birth

Fewer crop workers are born in Mexico in recent years.

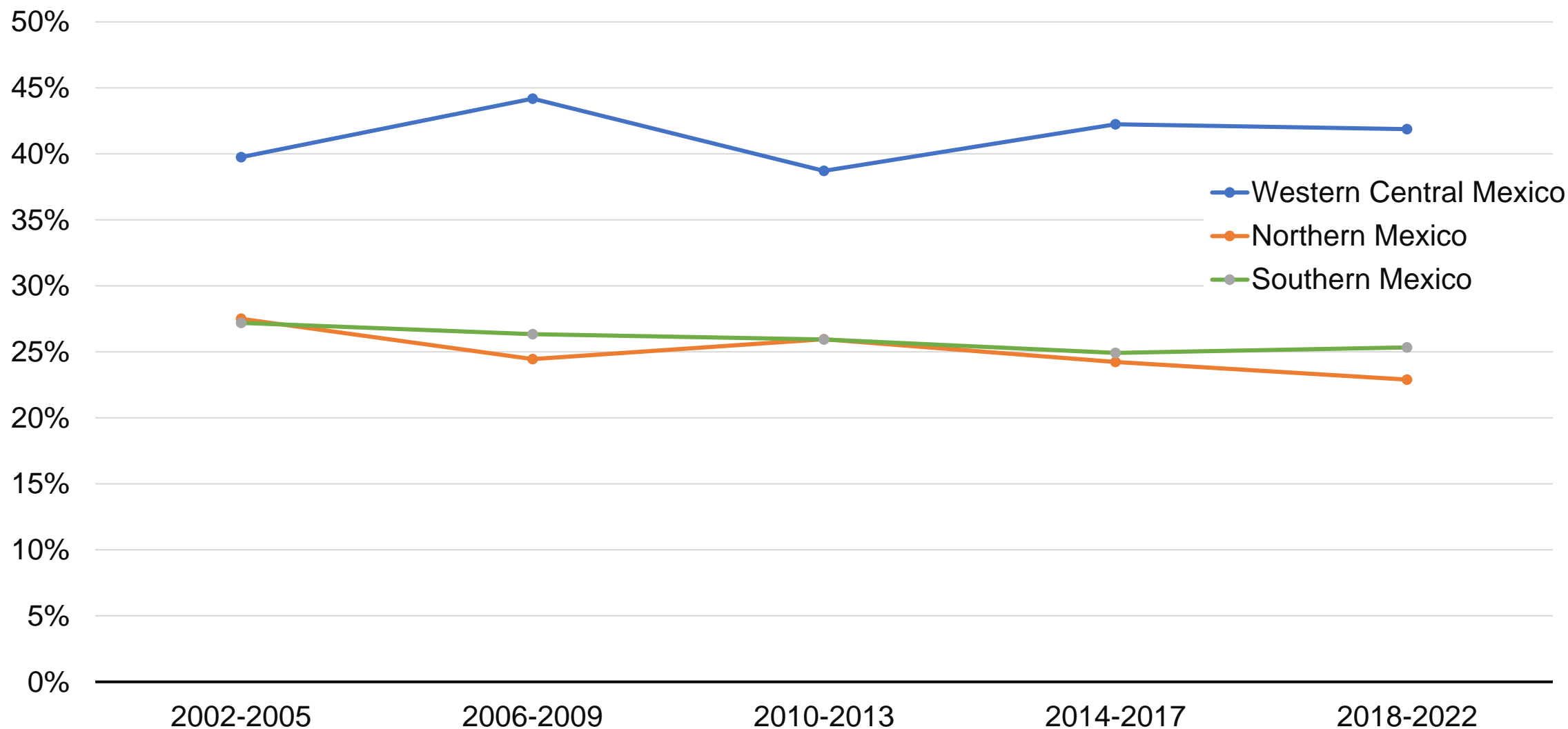


Note: "Other" in 2018-200 has relative standard error between 31% and 50% and should be interpreted with caution.




# Crop worker place of birth (among foreign born)

4-in-10 foreign-born crop workers were born in Western Central Mexico.



# NAWS Mexico Sending Regions



-  Northern Mexico
-  Western Central Mexico
-  Southern Mexico

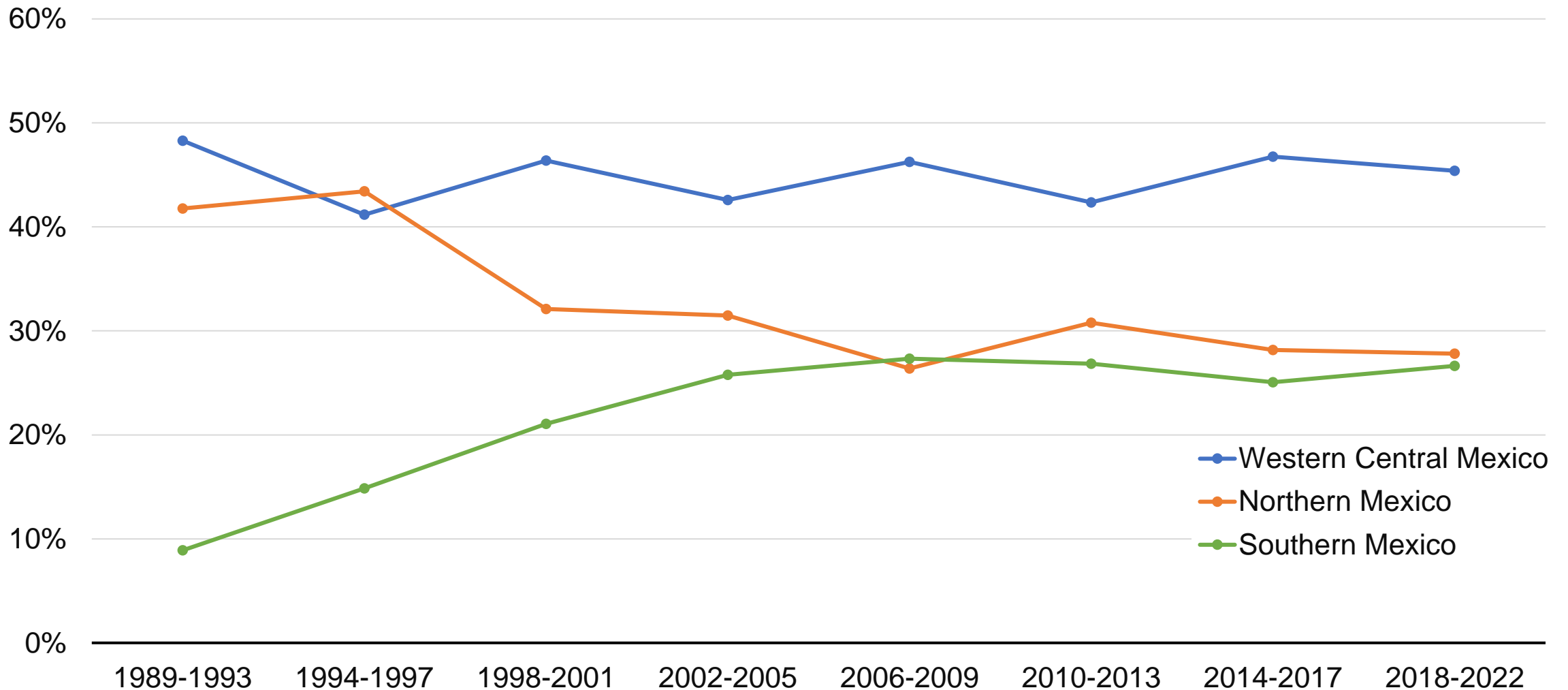
0 100 200 400 600 800 Miles

\* Source: U.S. Department of Labor, National Agricultural Workers Survey



# Mexico sending region

Crop workers are increasingly coming from Southern Mexico, fewer from Northern Mexico.



# Chronic health conditions

An increasing share of crop workers report being diagnosed with high blood pressure and diabetes.

	1998-2001	2002-2005	2006-2009	2010-2013	2014-2017	2018-2022
High blood pressure	4%	8%	10%	8%	10%	16%
Diabetes	2%	3%	4%	5%	8%	10%
Asthma	2%	3%	3%	3%	4%	4%
Heart disease	1%	1%	1%	1%	1%	3%
Tuberculosis	1%	1%	0% <sup>a</sup>	0%	1%	2%
Urinary tract infections	1%	2%	1%	2%	2%	5%
Cancer	---	---	---	---	---	1%
High cholesterol	---	---	---	---	---	13%
HIV (AIDS)	---	---	---	---	---	2%
Covid	---	---	---	---	---	19%
Other	3%	4%	4%	5%	7%	9%

<sup>a</sup> Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

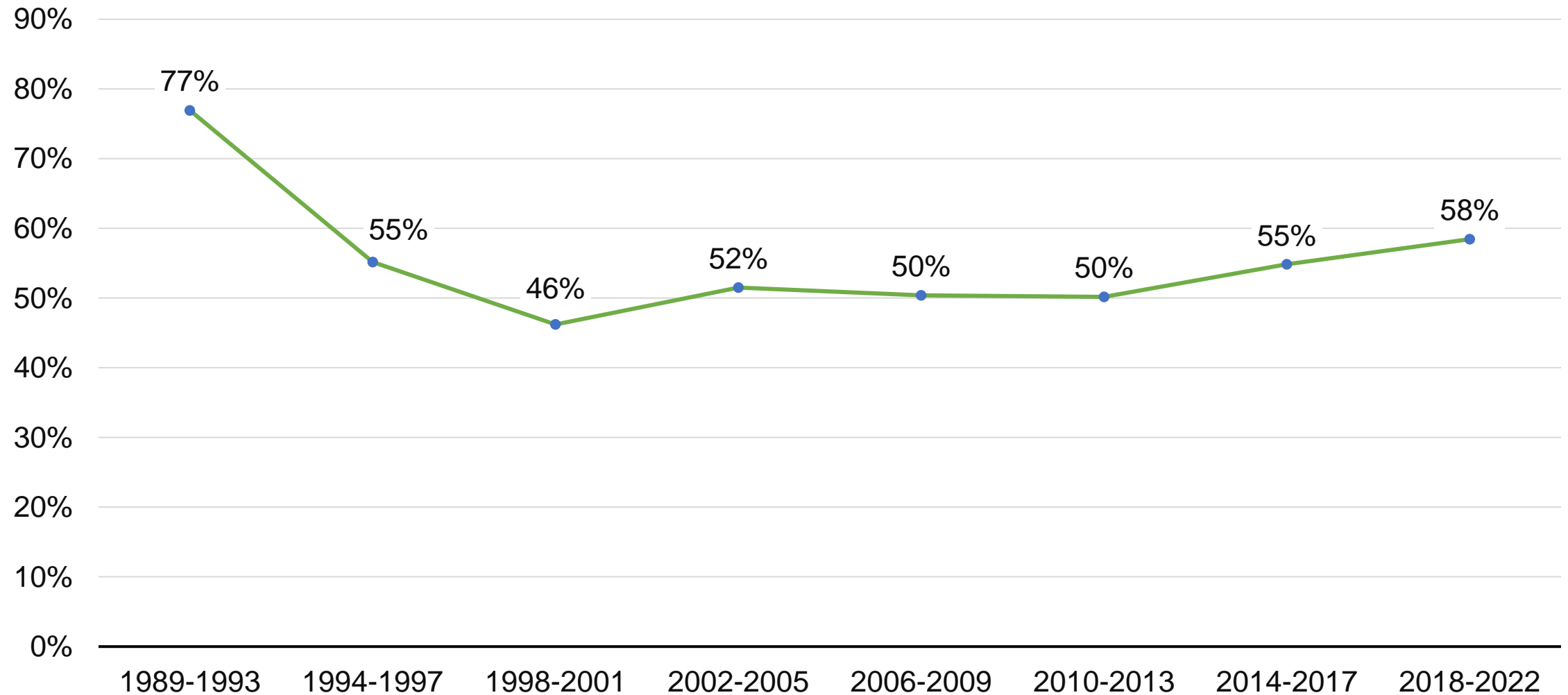




# Employment and Income

# Legal status of crop workers

More workers have work authorization in recent years.





# Program (among authorized)

Most foreign workers authorized to work in recent years obtained it through Spousal or Family programs

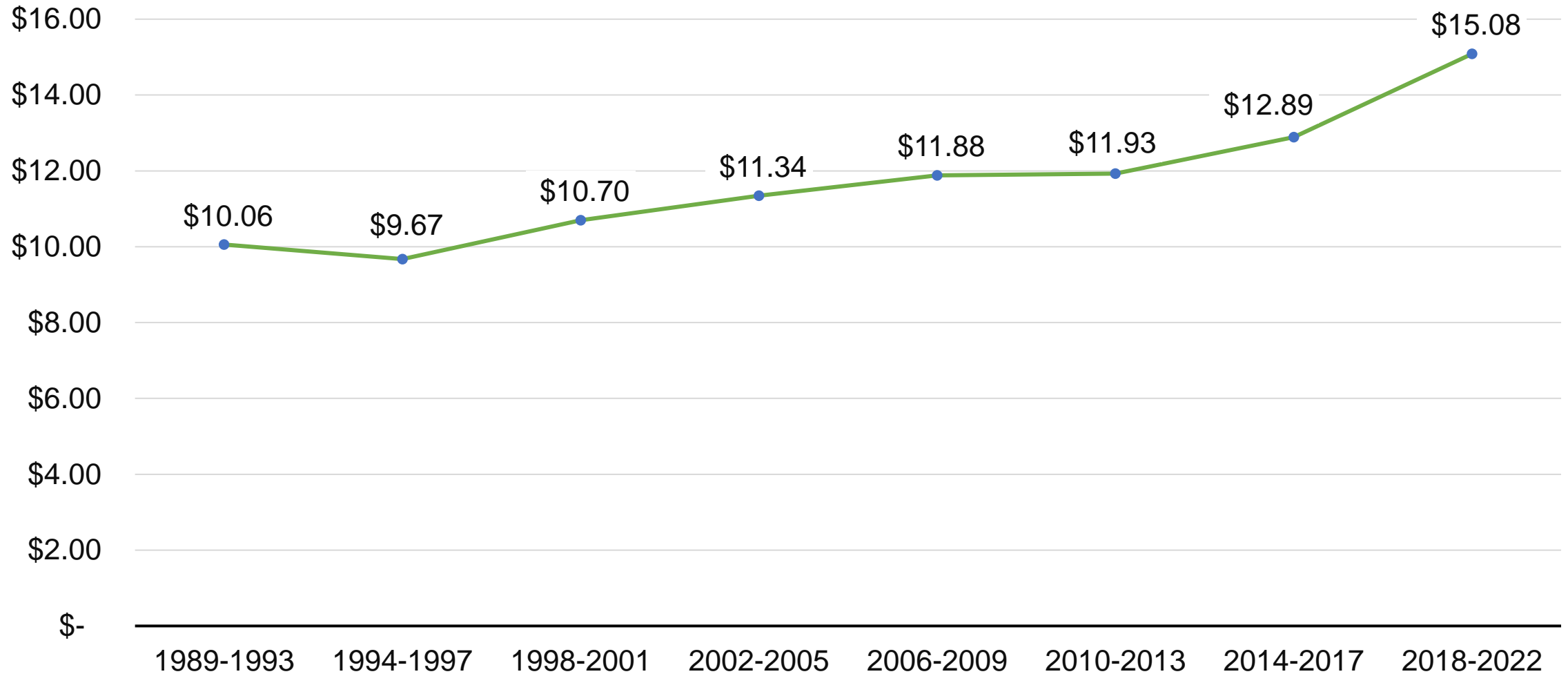
	1989-1993	1994-1997	1998-2001	2002-2005	2006-2009	2010-2013	2014-2017	2018-2022
Spousal petition/Family Unity	12%	29%	37%	43%	41%	51%	58%	66%
Amnesty (SAW 90-day program)	65%	49%	35%	38%	38%	35%	30%	25%
Amnesty (5-year program)	9%	13%	17%	15%	18%	9%	7%	5%
Labor certification	2%	2%	8%	2%	2%	1%	1%	0% <sup>a</sup>
DACA	0%	0%	0%	0%	0%	<sup>b</sup>	2% <sup>a</sup>	1%
Other	12%	6%	1% <sup>a</sup>	0% <sup>a</sup>	1% <sup>a</sup>	1%	2%	1%

<sup>a</sup> Estimates have relative standard errors between 31% and 50% and should be interpreted with caution.

<sup>b</sup> Estimates are suppressed because number of responses is less than 4 or relative standard errors for the estimates are greater than 50%.

# Mean real hourly wage

Crop workers' wages have steadily increased.

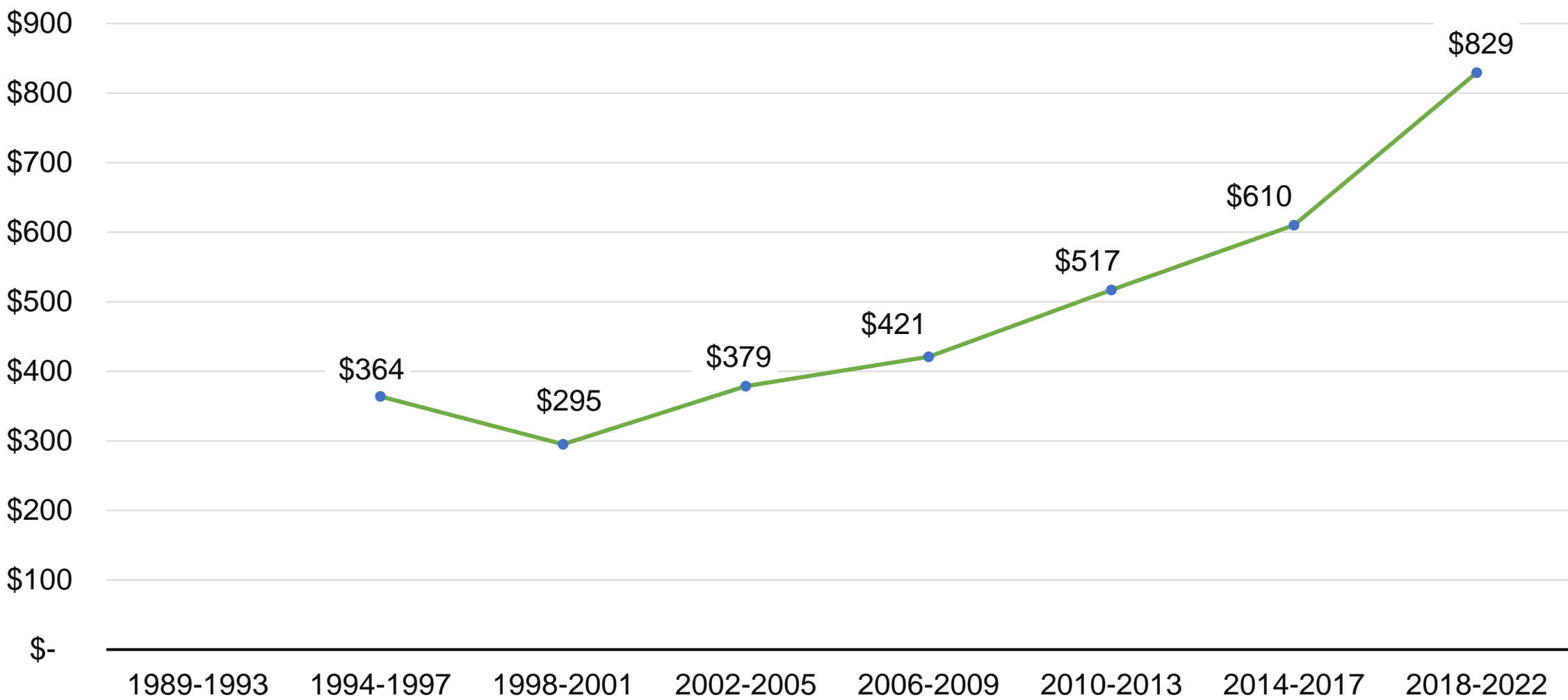


Note: Adjusted for inflation to 2022 dollars.



# Mean real monthly housing cost

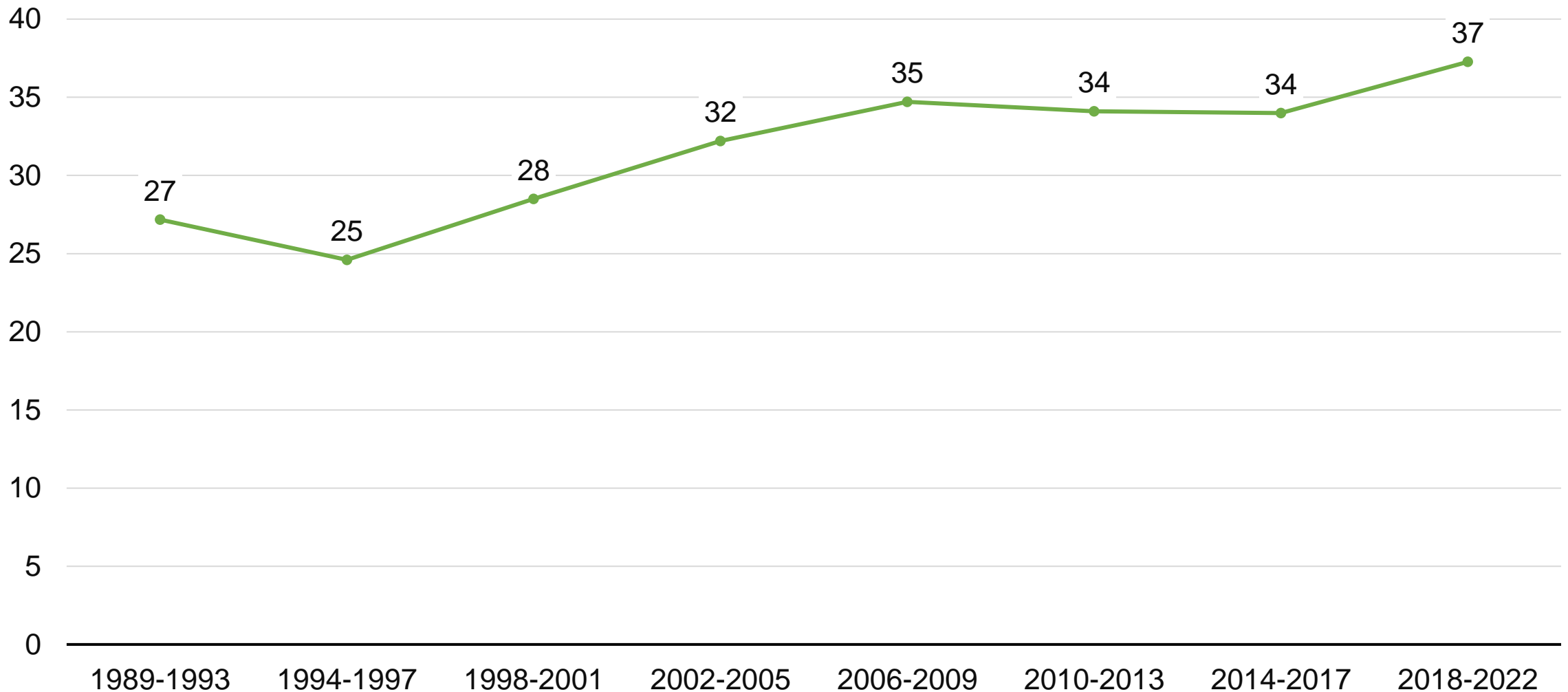
Housing costs have increased.



Note: Adjusted for inflation to 2022 dollars.

# Farmwork weeks

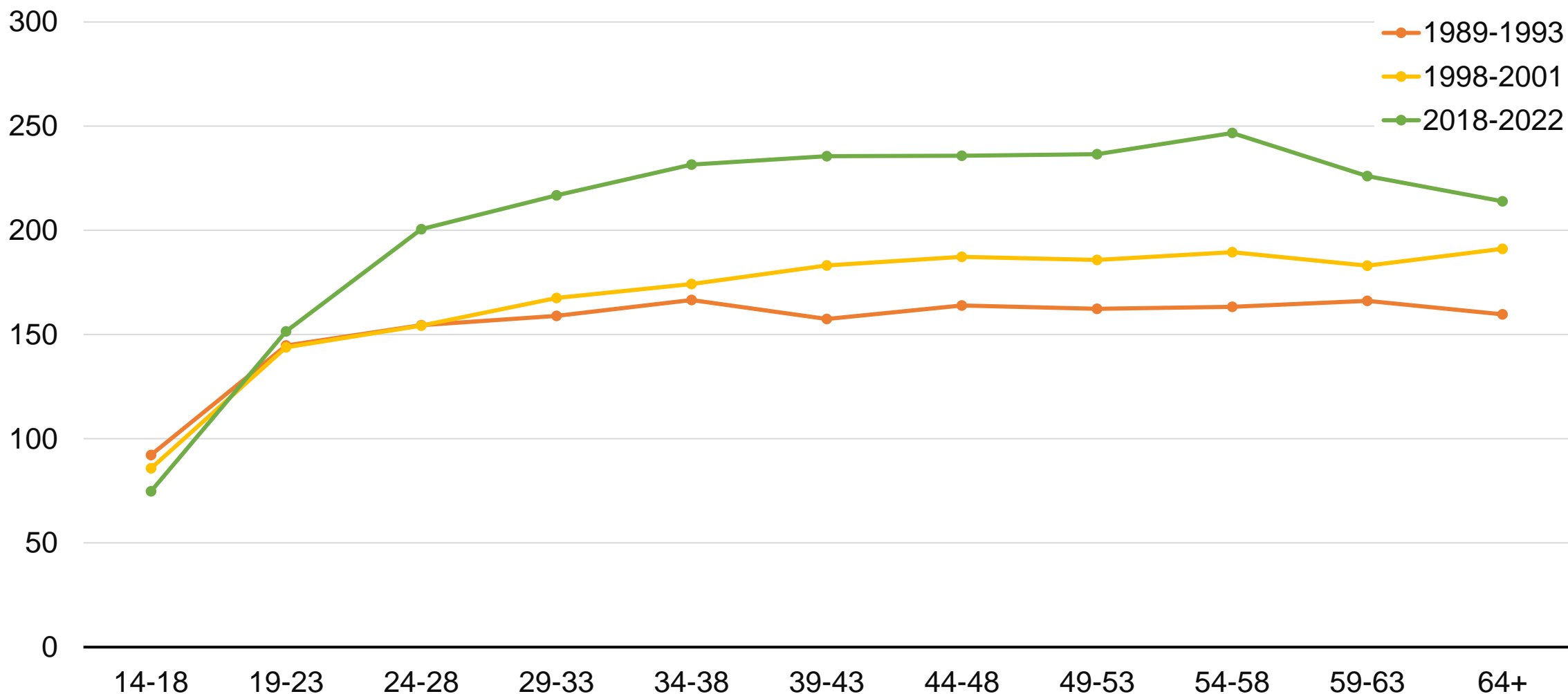
Number of weeks doing farm work has also increased.





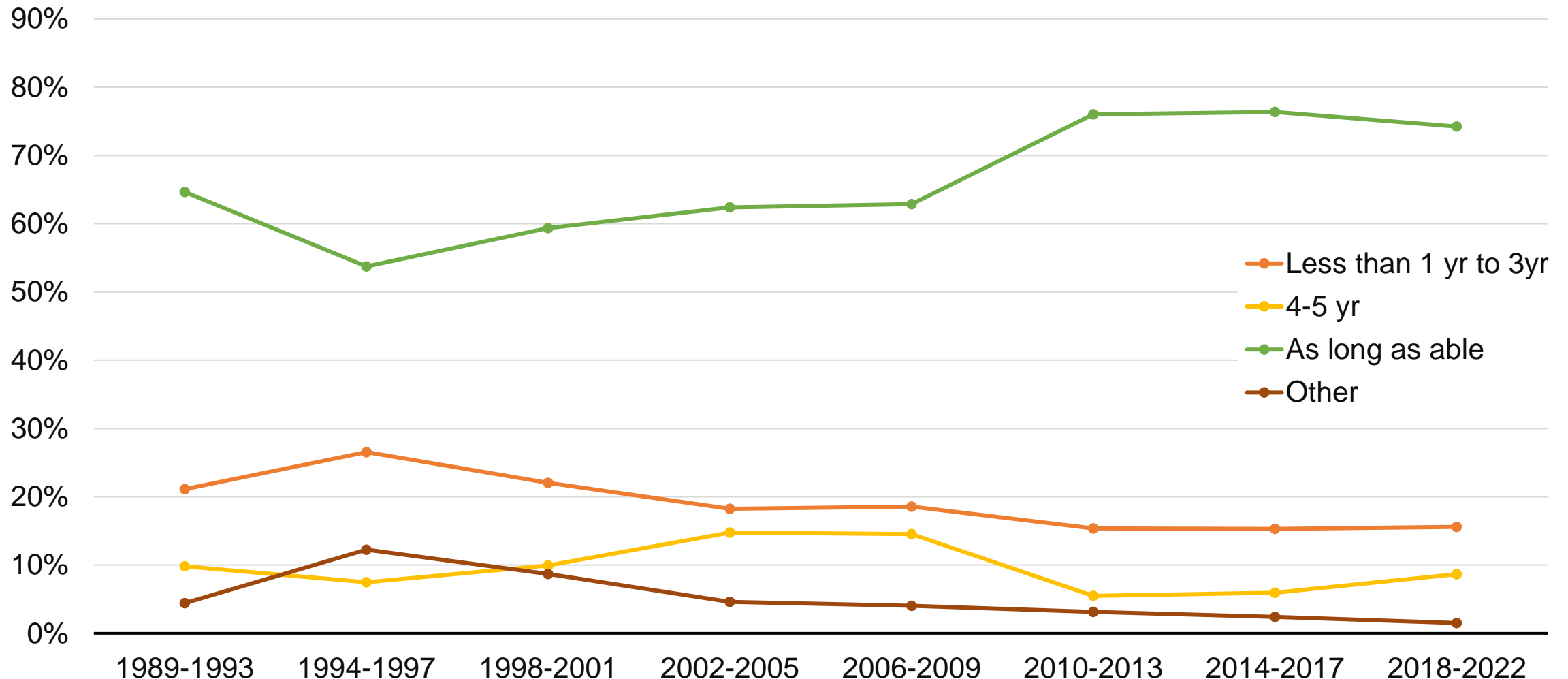
# Farm workdays by age

Crop workers 34 and older are working more than young workers.



# Plans to remain in farm work

Most crop workers plan to do farm work as long as they are able.



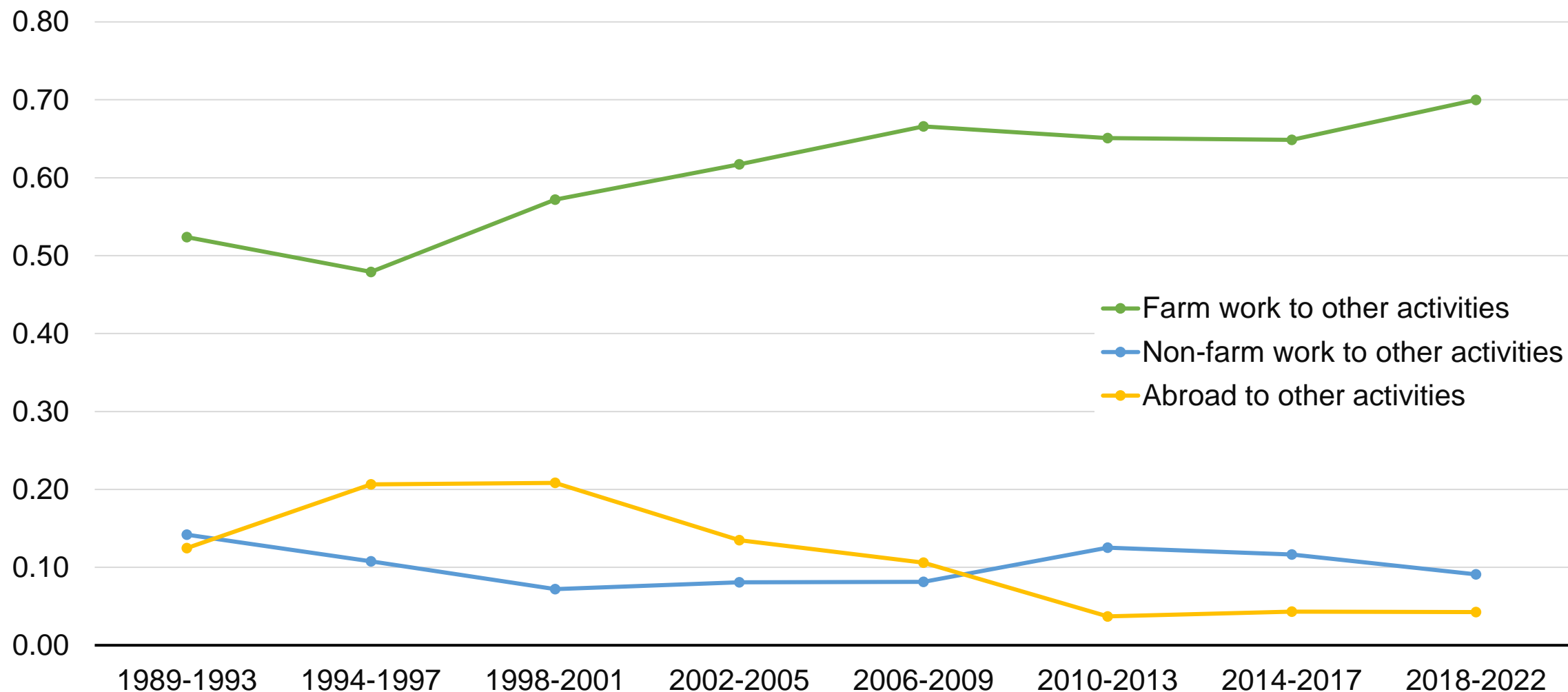
Note: “Other” in 2018-200 has relative standard error between 31% and 50% and should be interpreted with caution.

If workers selected “Other” they have the option to write in open responses. Examples of these are: Don’t know, until something better comes up, until I finish college, until season is over, while finding another job that pays more.



# Farmwork attachment (ratio of farmwork to other activities)

Crop worker spending less of their time abroad and more





# Contact Information

For more information on the NAWs:

<https://www.doleta.gov/naws/>

- Andrew Padovani [apadovani@jbsinternational.com](mailto:apadovani@jbsinternational.com)
- Wenson Fung [wfung@jbsinternational.com](mailto:wfung@jbsinternational.com)
- Emily Finchum-Mason [Finchum.Emily.A@dol.gov](mailto:Finchum.Emily.A@dol.gov)
- Daniel Carroll [carroll.daniel.j@dol.gov](mailto:carroll.daniel.j@dol.gov)







# ALEXANDRA HILL

Assistant Professor of Cooperative Extension  
University of California, Berkeley

# The US Farm Workforce Outlook: As Farmworkers Flock North, Will Jobs Move South?

Alexandra E Hill<sup>1</sup> & James Sayre<sup>2</sup>

<sup>1</sup>Assistant Professor, University of California, Berkeley

<sup>2</sup>Assistant Professor, University of California, Davis



# Take Home Messages: US Workforce Outlook

## **Domestic farm employees will continue to be...**

- Harder to find
- More and more expensive to employ

## **The H-2A program... A solution?**


- Offers a temporary solution for worker shortages
  - The high wages are attracting large numbers of Mexican farmworkers
- But high costs might reduce US agricultural competitiveness
  - Will this drive US production to places with lower input costs?

## **US farm employers will need to...**

- Find ways to reduce labor and other costs or **increase revenues**

# Why are farm employees harder to find?

## #1 workers are more settled

2000  2022

**Fewer** migrant workers:

**49%** **15%**

**More** have US-born kids:

**29%** **44%**

**More** time living in the US:

**8yrs** **21yrs**

## #2 fewer new immigrant workers

2000  2022

**Fewer** foreign-born:

**83%** **68%**

Workers are **aging**:

**31yrs** **40yrs**

**More** farm experience:

**9yrs** **16yrs**

# Why are farm employees harder to find?

## #1 workers are more settled

2000  2022

**Fewer** migrant workers:

**49%** **15%**

**More** have US-born kids:

**29%** **44%**

**More** time living in the US:

**8yrs** **21yrs**

## #2 fewer new immigrant workers

2000  2022

**Fewer** foreign-born:

**83%** **68%**

Workers are **aging**:

**31yrs** **40yrs**

**More** farm experience:

**9yrs** **16yrs**

**NOT because farmworkers want to leave ag**  
Similar share intend to work in ag “as long as able”

**70%**

**74%**



# What trends in MX have implications for US?

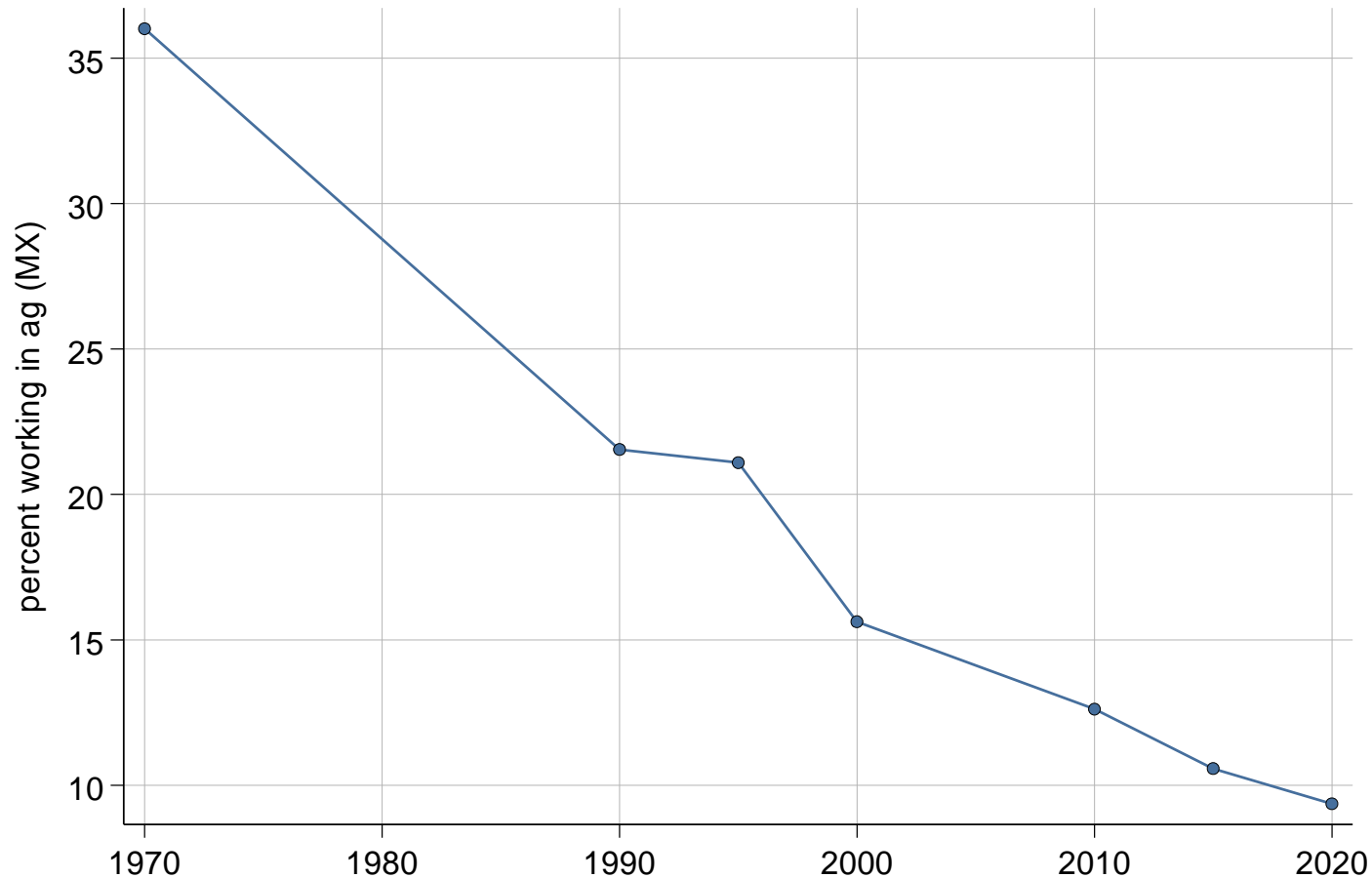
## Why focus on Mexico?

In 2022, 90% of foreign-born  
farmworkers were born in **Mexico**  
(97% in 2000)

# What trends in MX have implications for US?

Two negative trends...

## Fewer working in agriculture

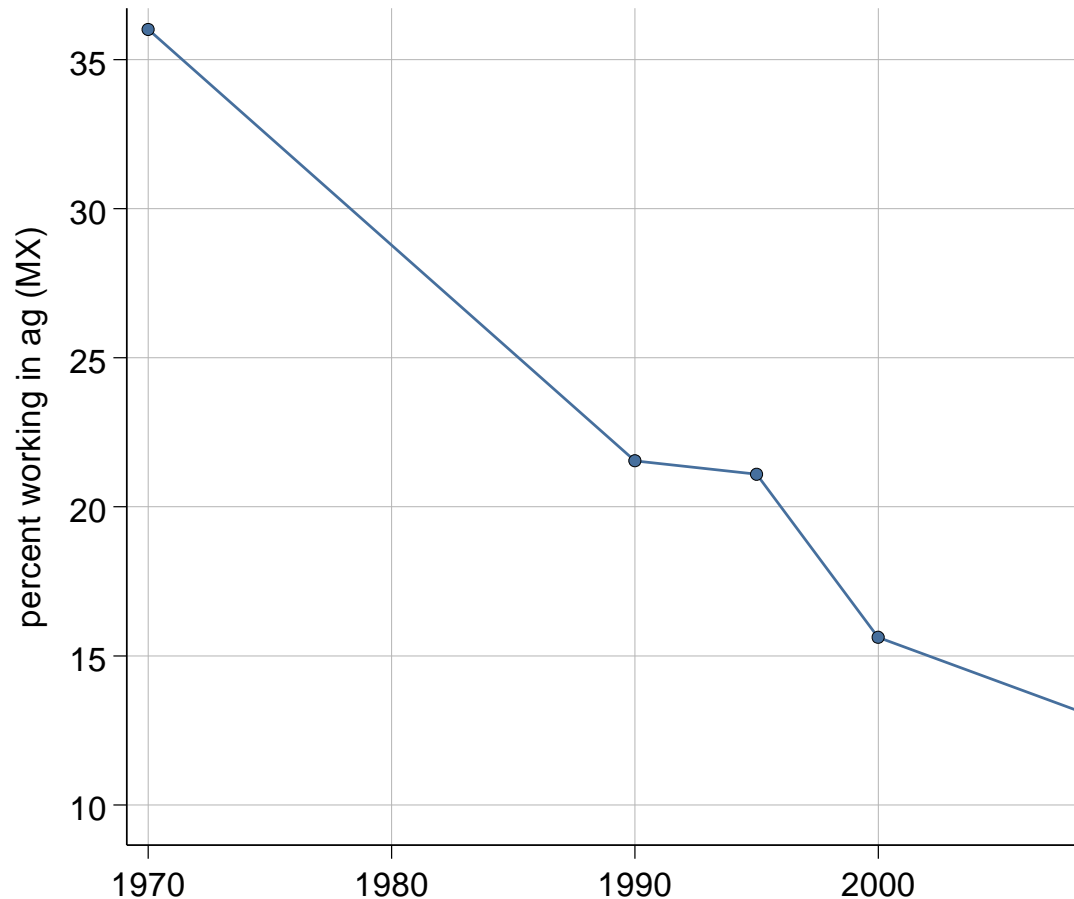


Data from MX Population Census and Intercensus Surveys

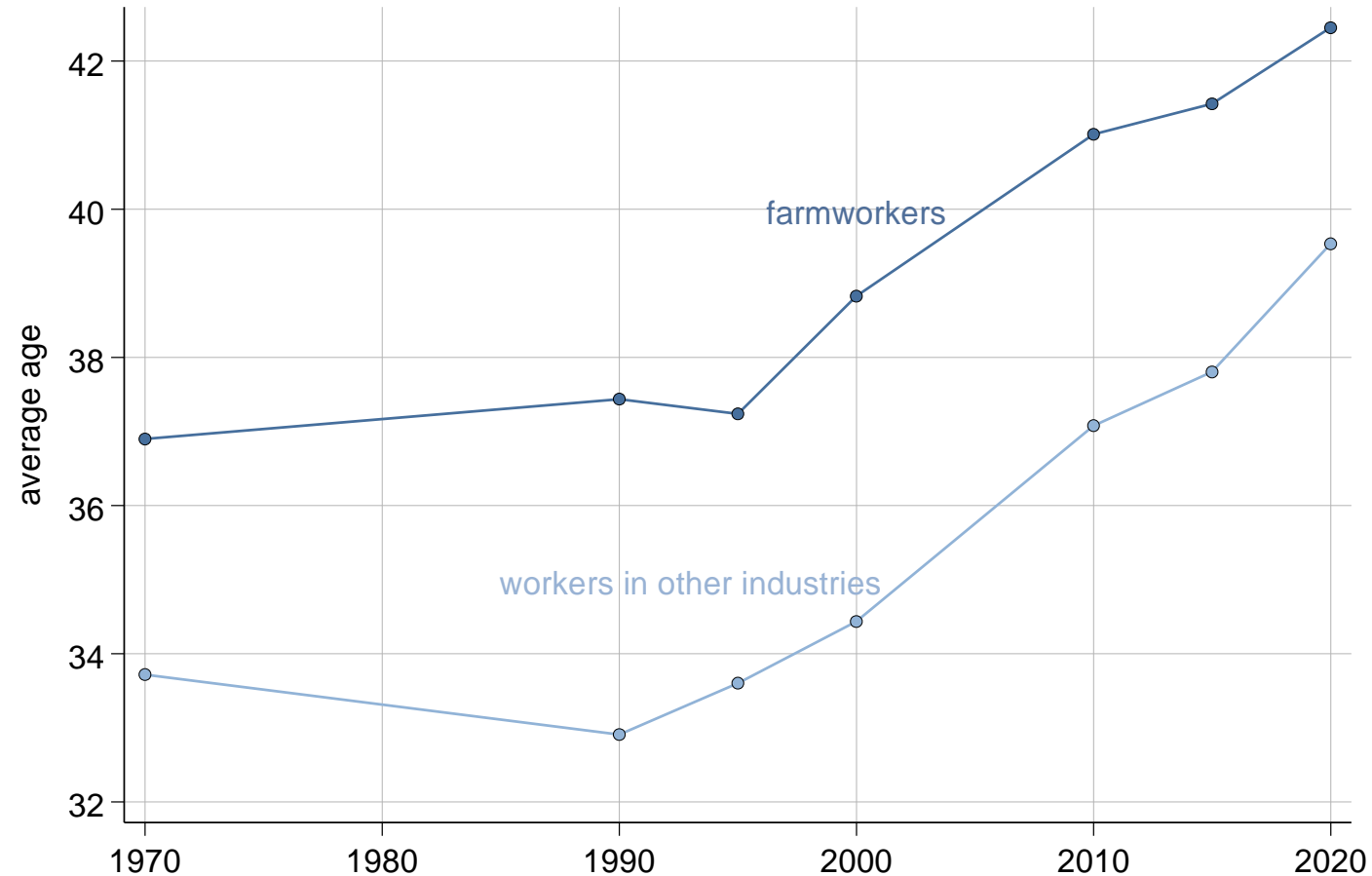
# What trends in MX have implications for US?

Two negative trends...

## Fewer working in agriculture



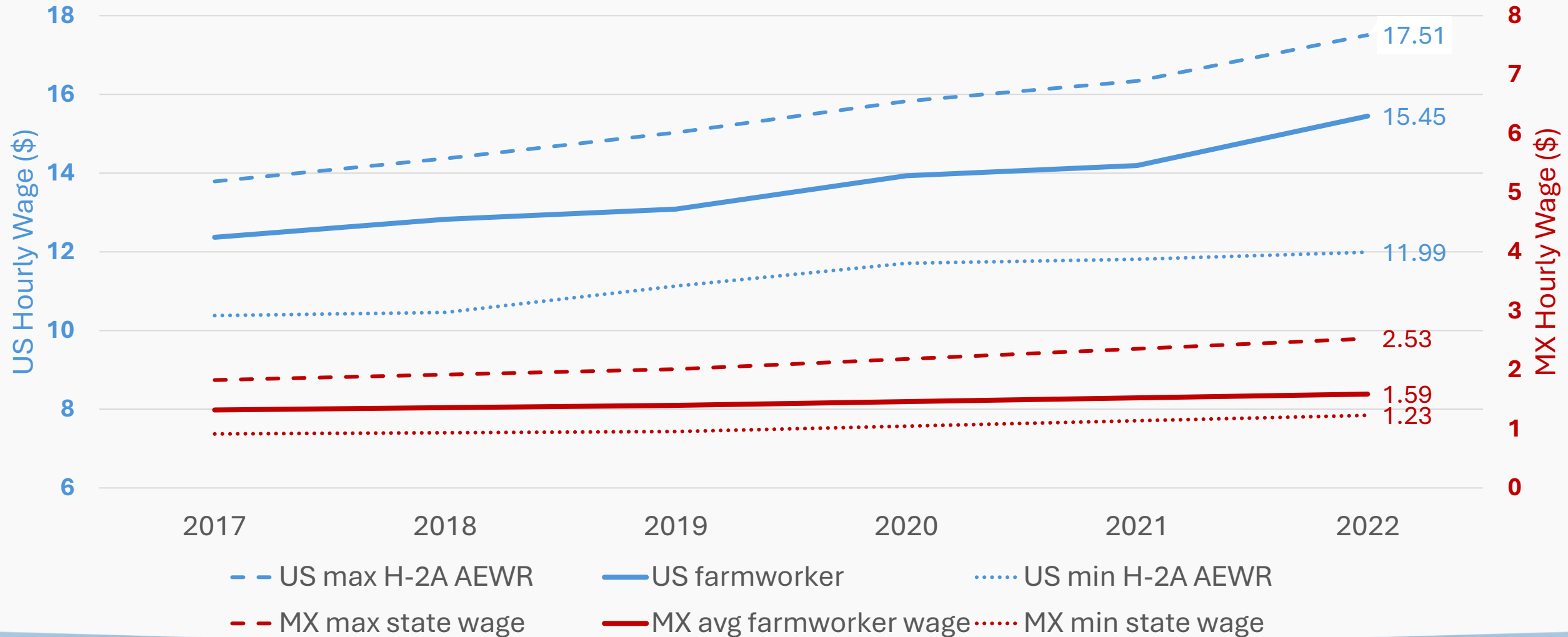
## Farmworkers are aging





# What trends in MX have implications for US?

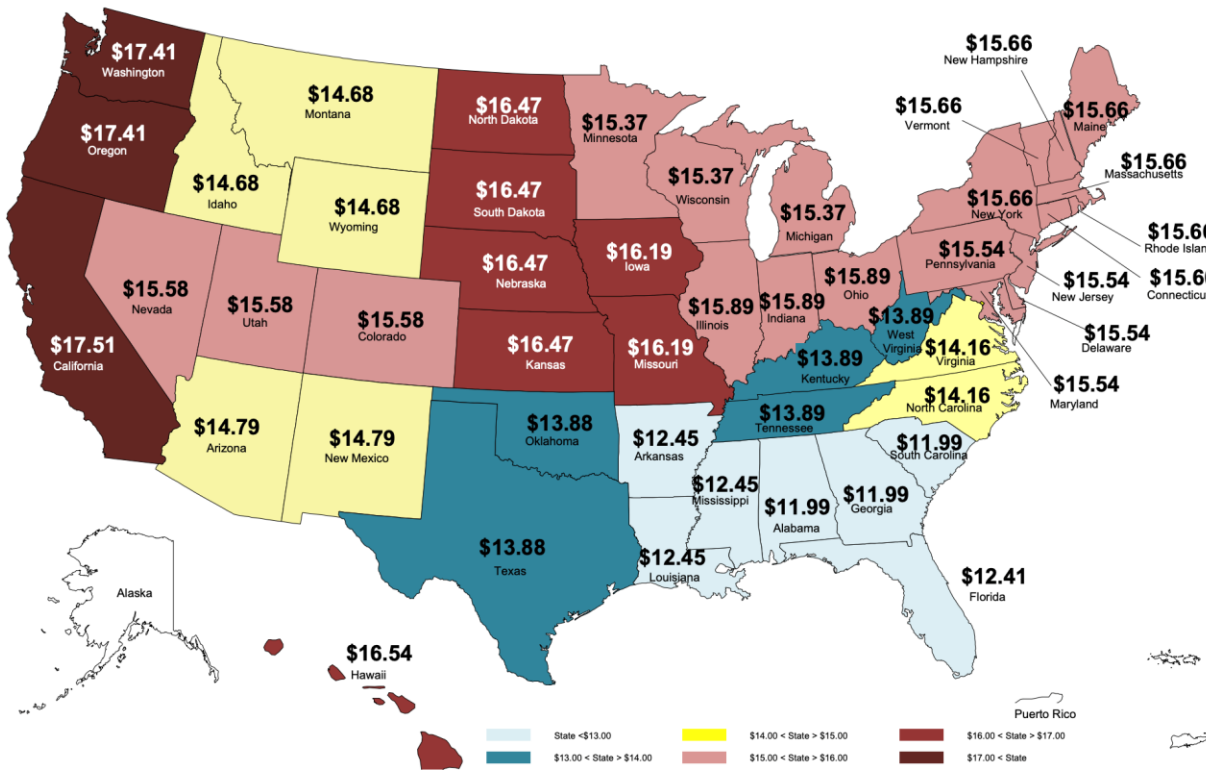
And one upside: Workers can earn more in the US



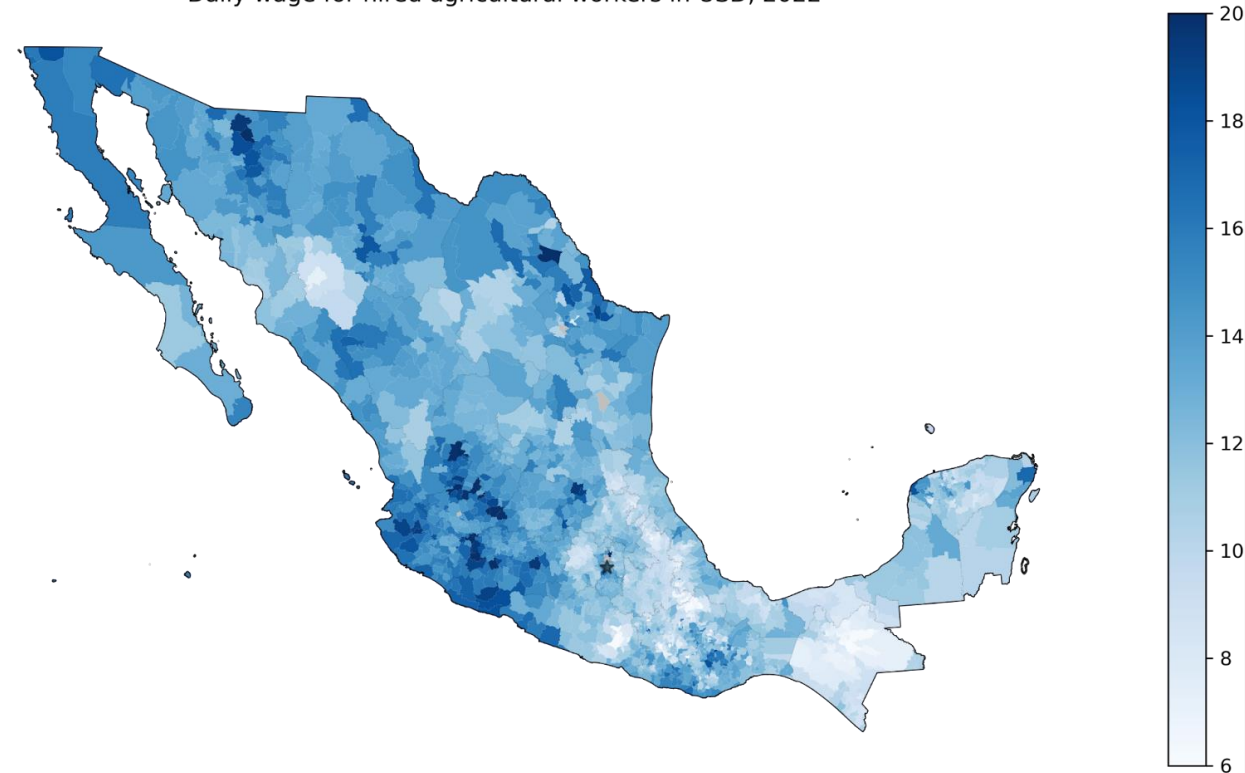
# What trends in MX have implications for US?

And one upside: Workers can earn more in the US

FY 2022 Adverse Effect Wage Rates



Daily wage for hired agricultural workers in USD, 2022

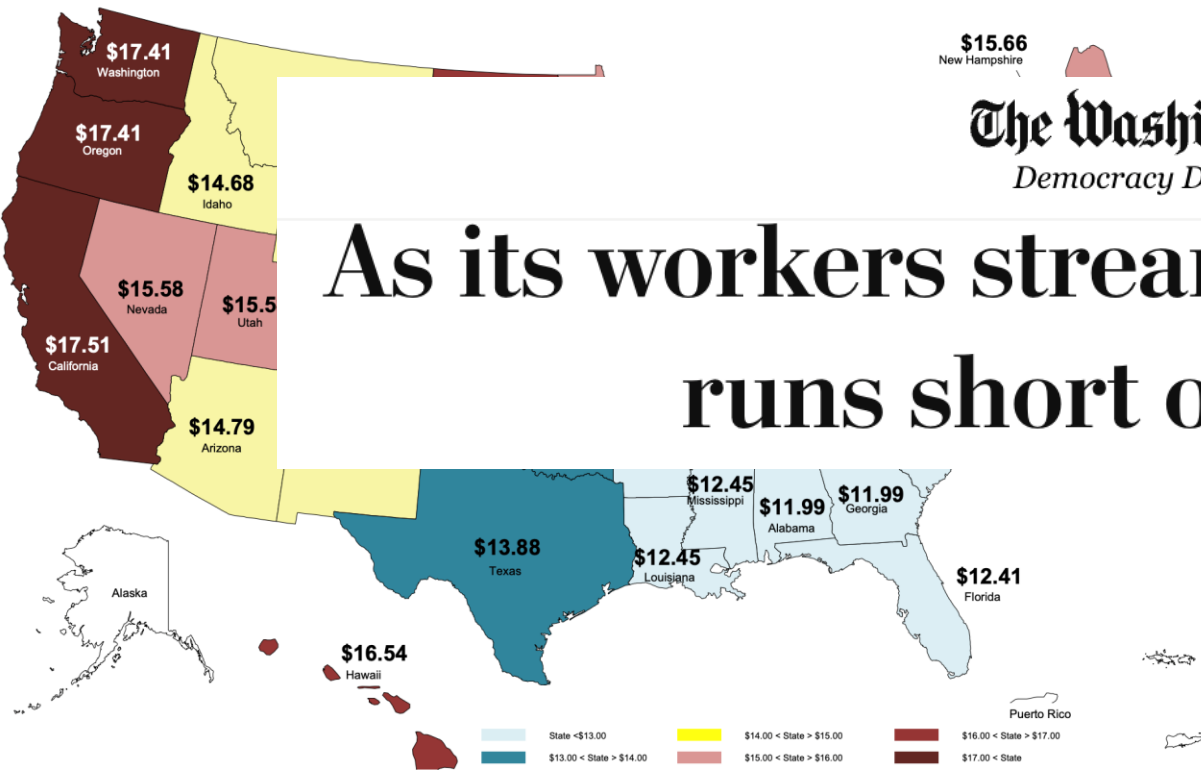


# What trends in MX have implications for US?

And one upside: Workers can earn more in the US

FY 2022 Adverse Effect Wage Rates

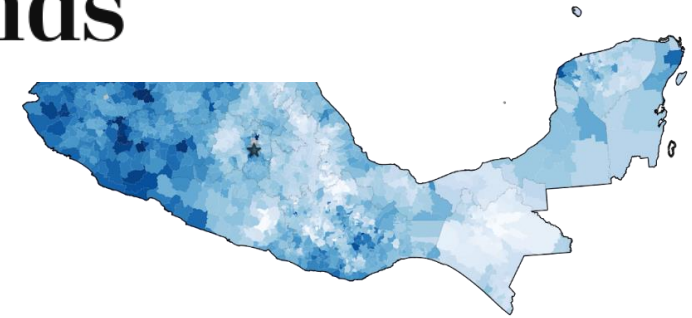
Daily wage for hired agricultural workers in USD, 2022



\$15.66  
New Hampshire

**The Washington Post**  
*Democracy Dies in Darkness*

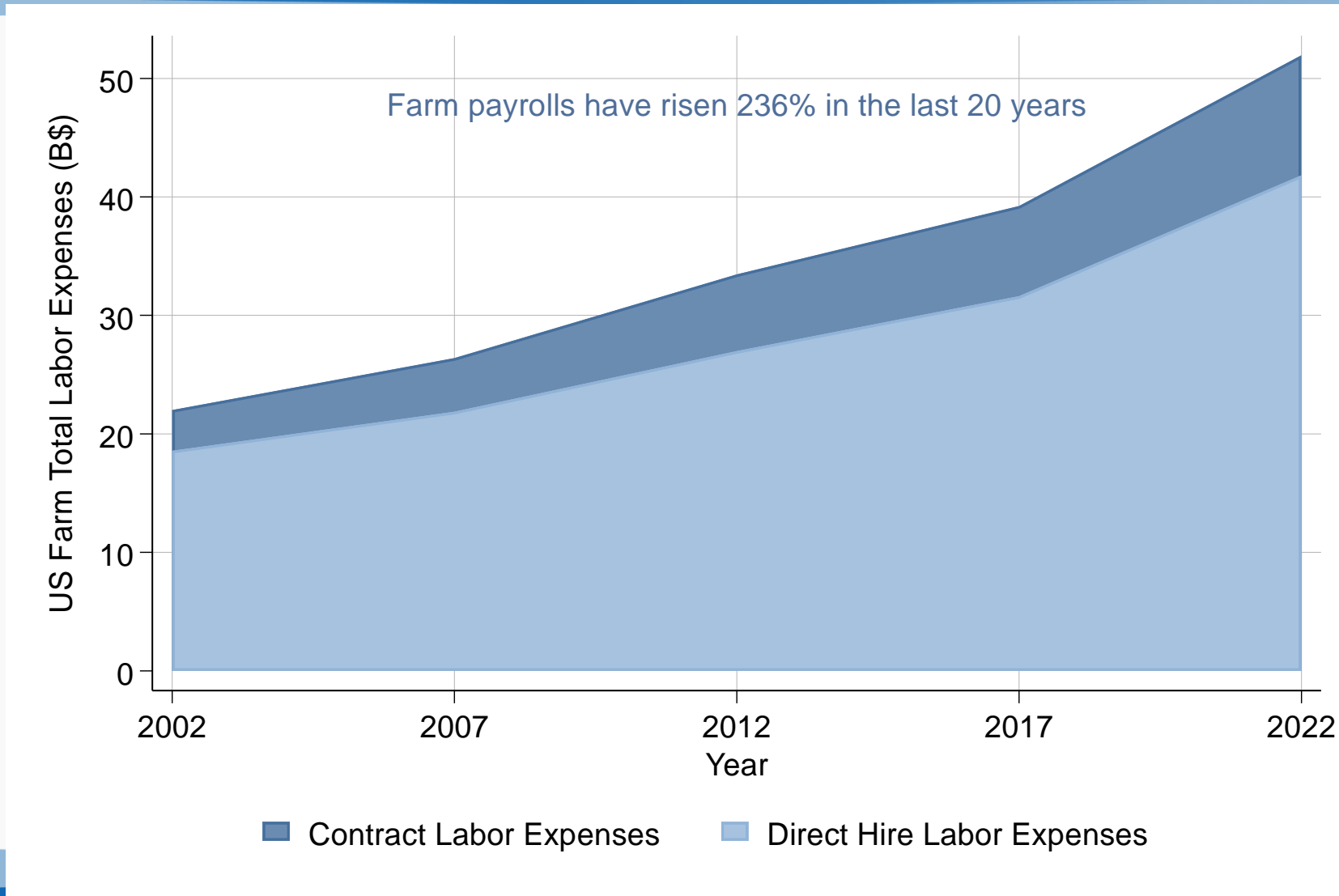
## As its workers stream to the U.S., Mexico runs short of farmhands





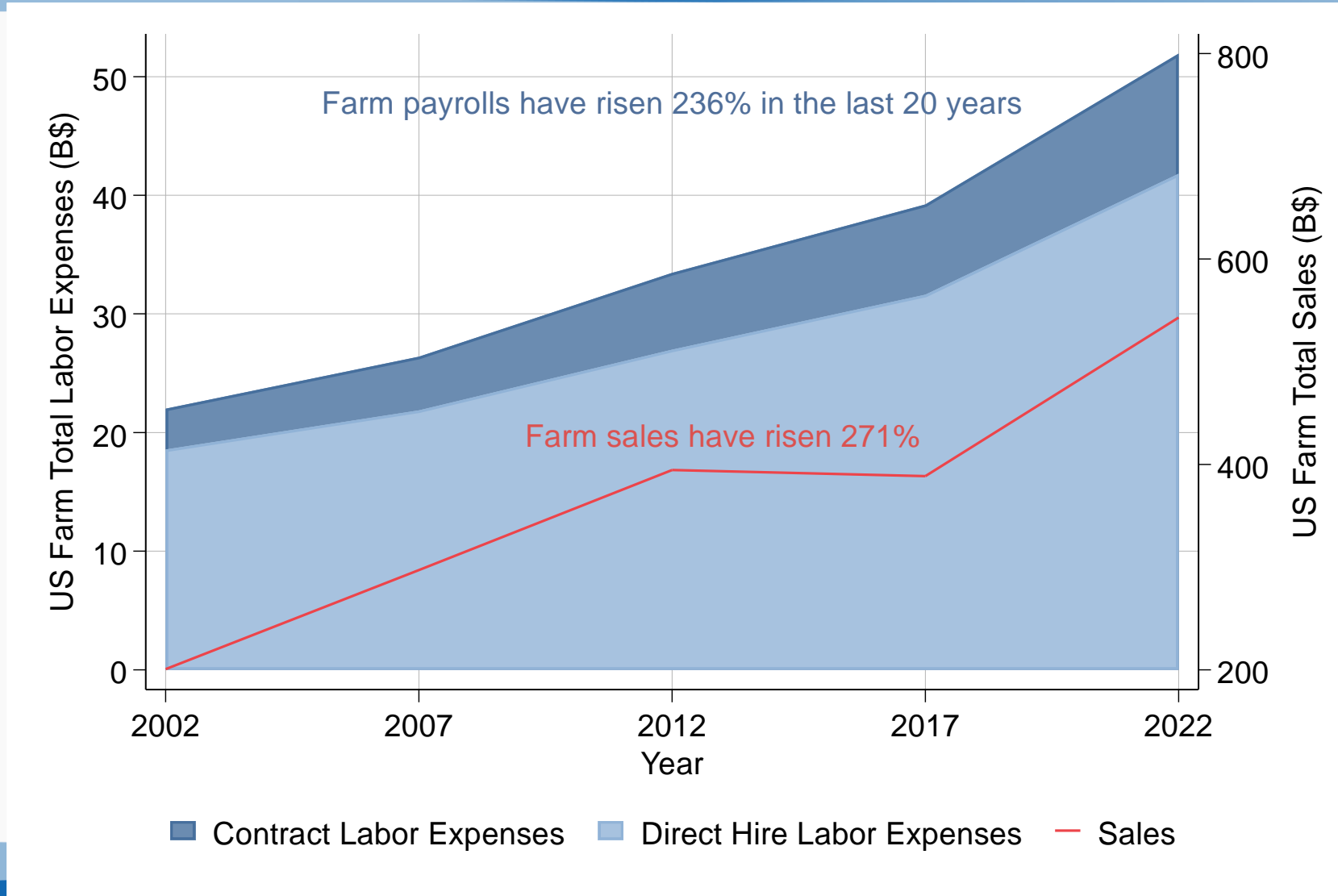
# Is this a positive for US farms?

US farm payrolls have more than doubled in last 20 years



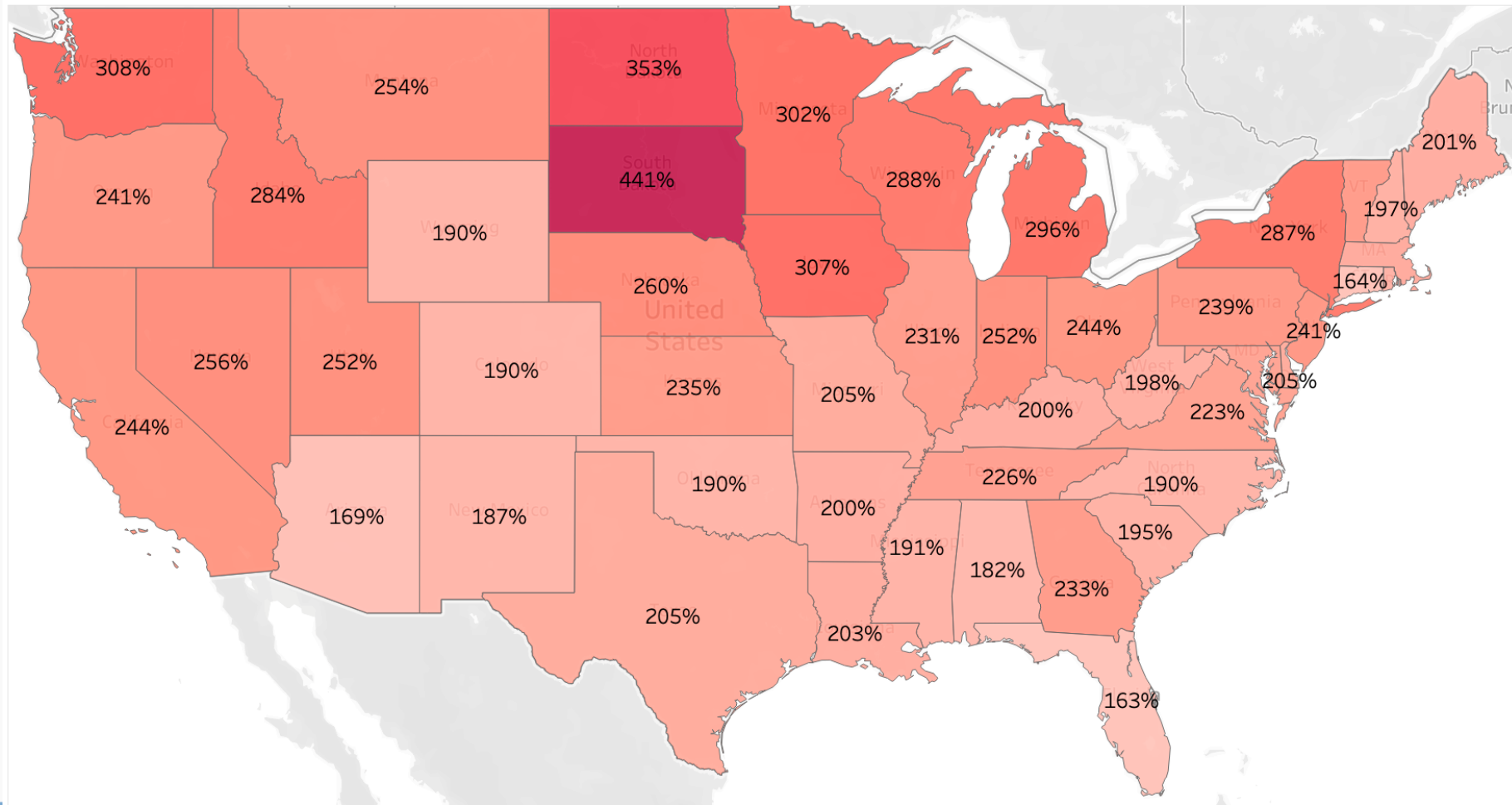
# Is this a positive for US farms?

US farm sales increased by more – the average farm is better off



# Is this a positive for US farms? It depends... on where

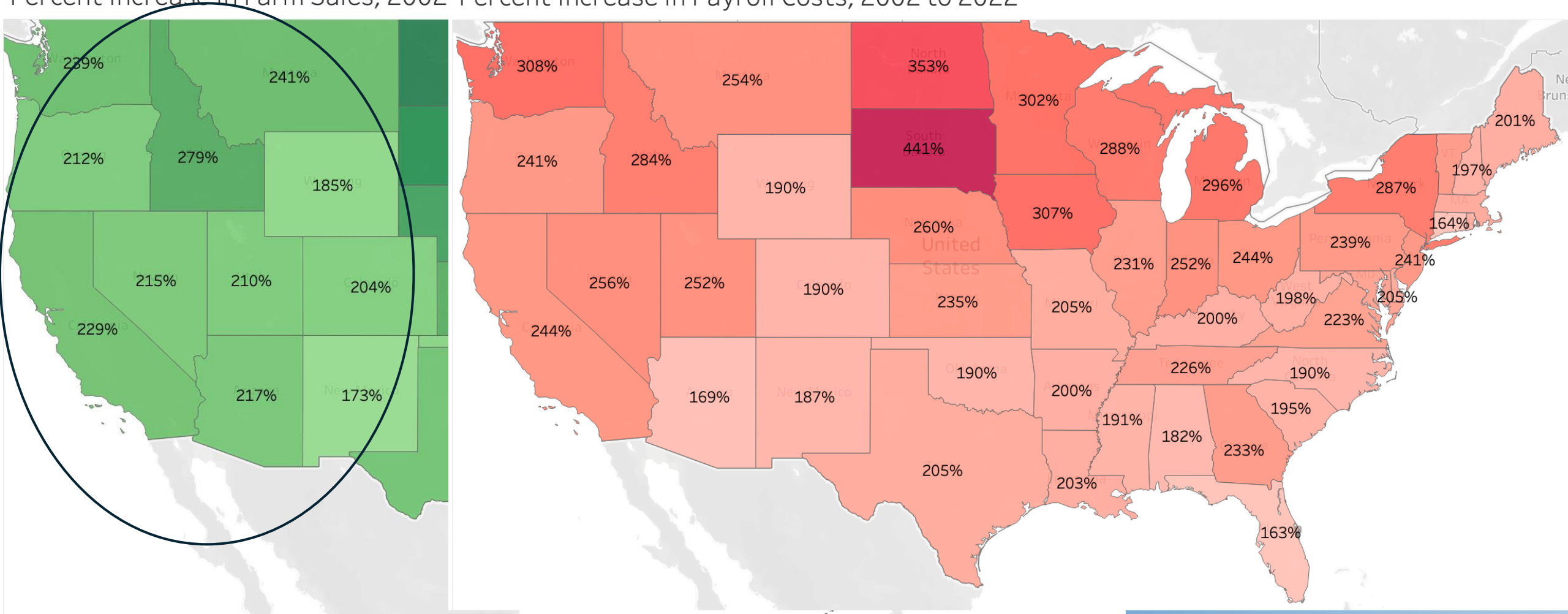
Percent Increase in Payroll Costs, 2002 to 2022





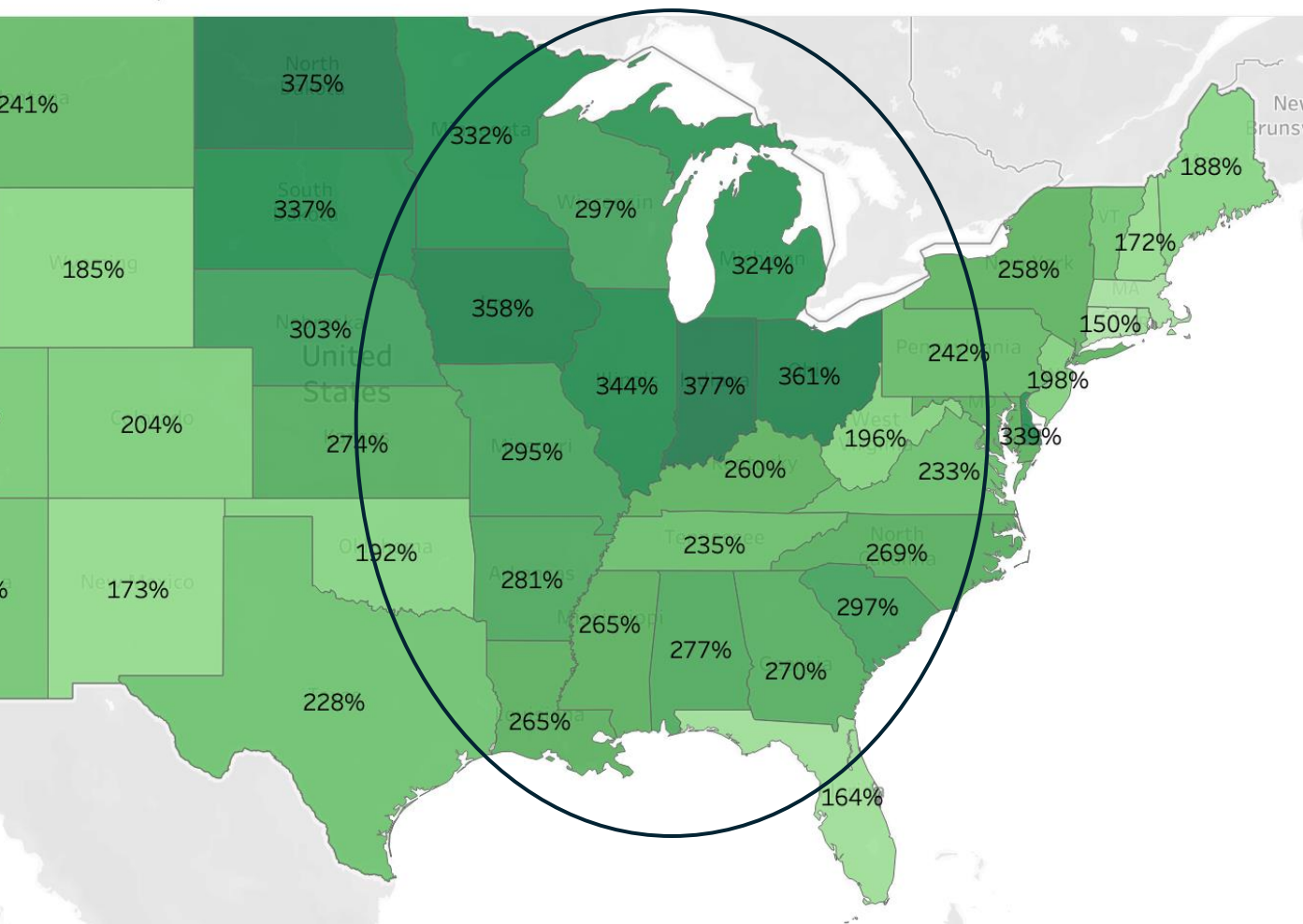
# Growth in Payroll Costs has Outpaced Growth in Revenues in Most Western States

Percent Increase in Farm Sales, 2002    Percent Increase in Payroll Costs, 2002 to 2022

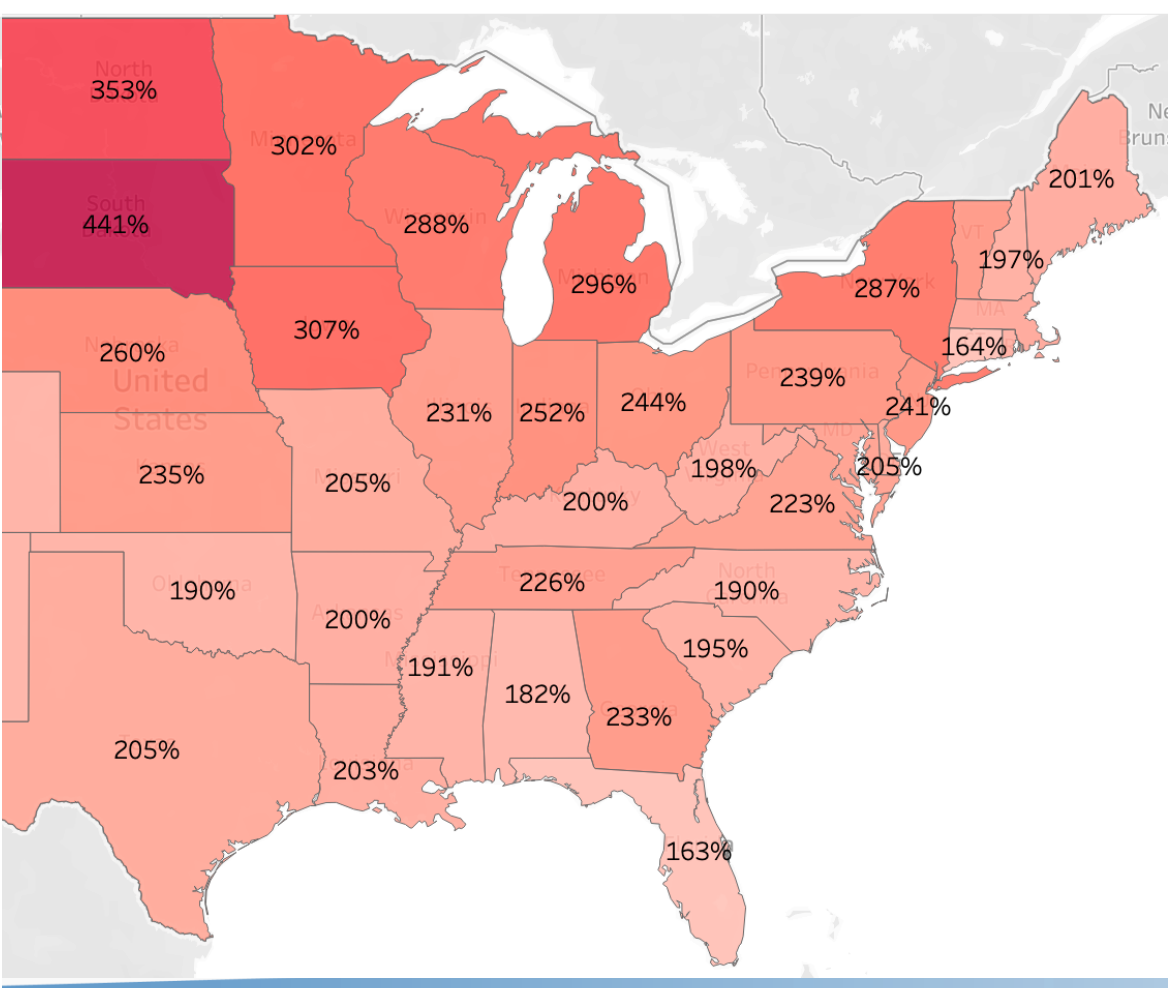


# But Growth in Payroll Costs has been Slower than Revenue Growth in Many Central States

Farm Sales, 2002 to 2022

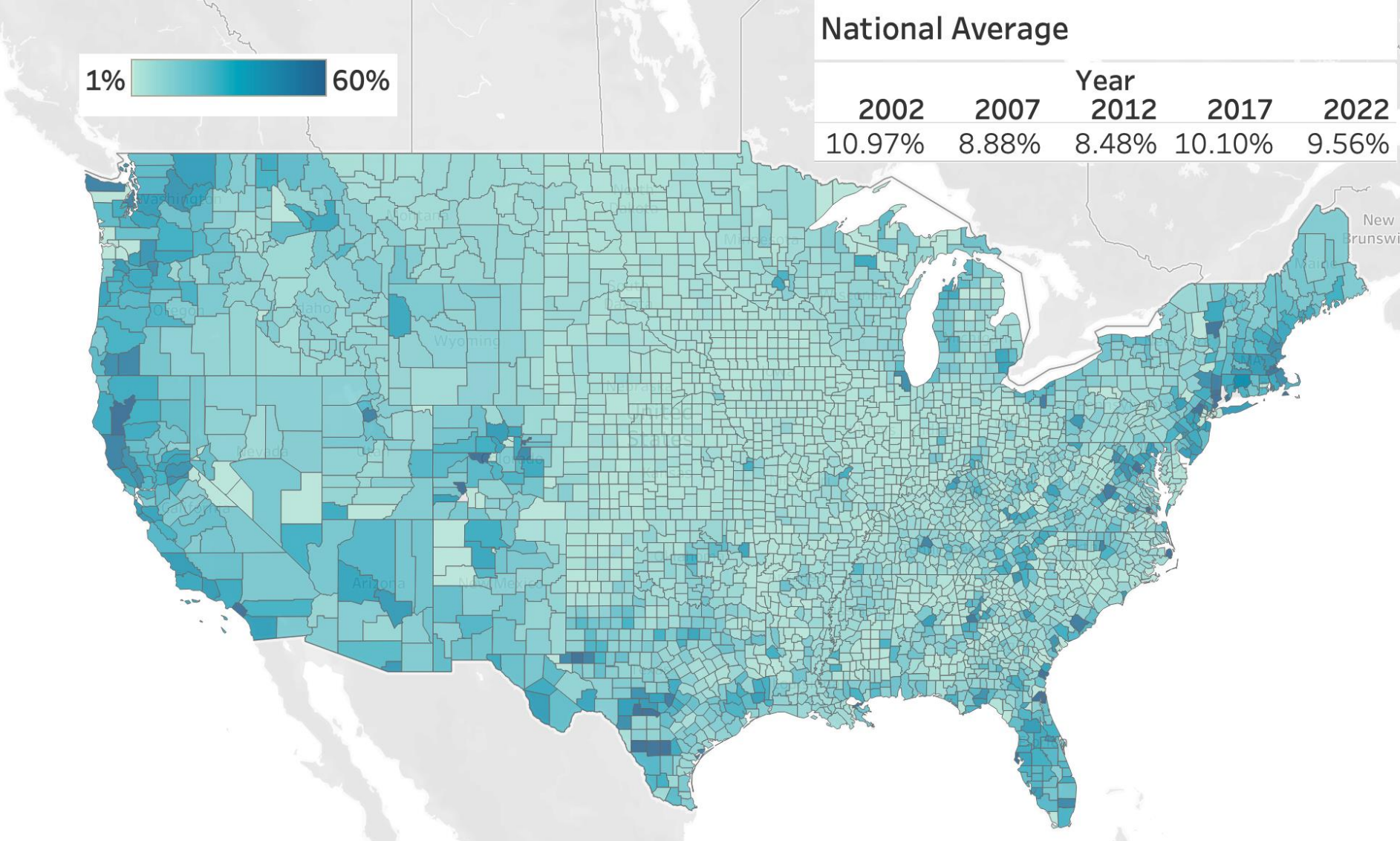


2002 to 2022





# What is the payroll share of farm sales today? (2022)





# Is this a positive for US farms? It depends... on crop

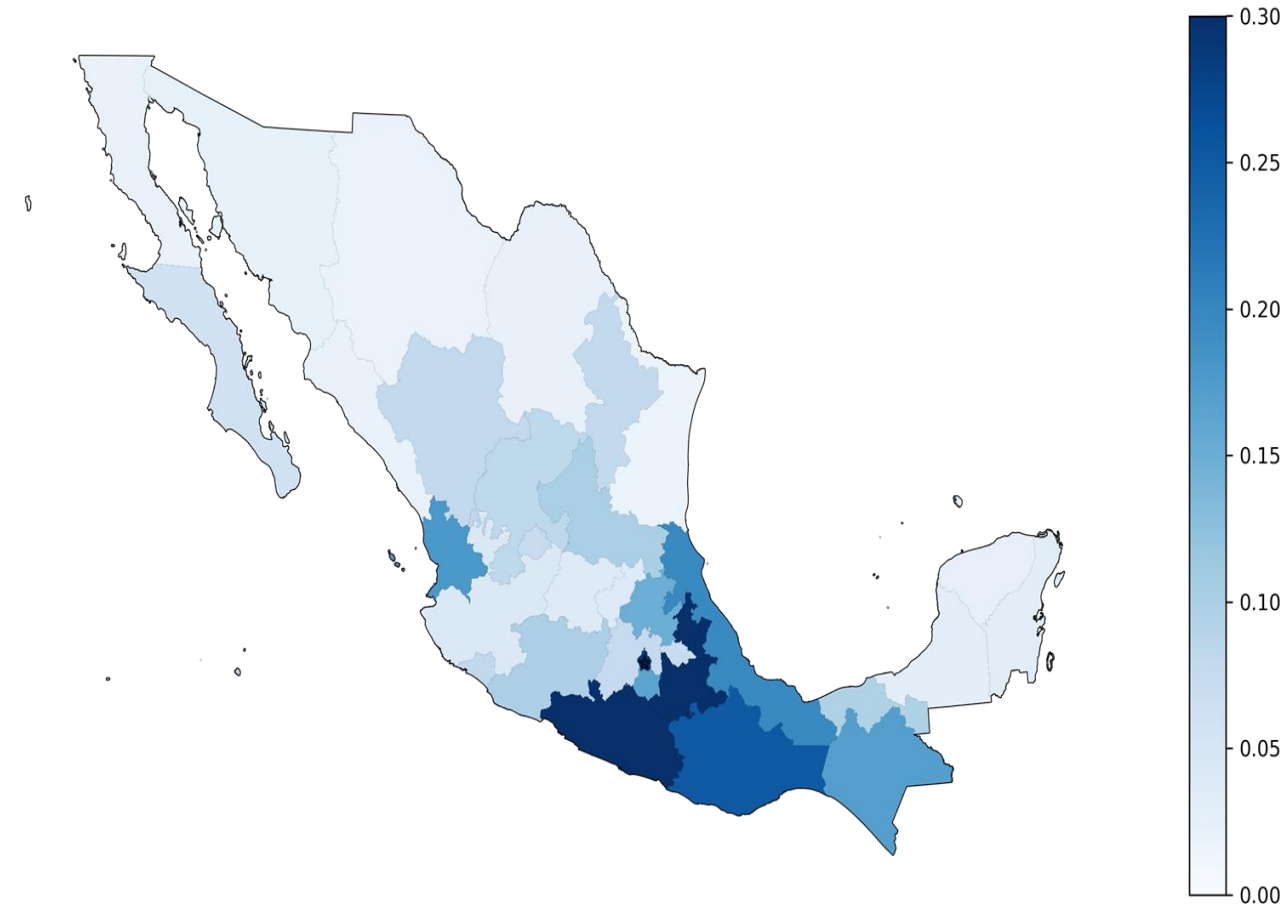
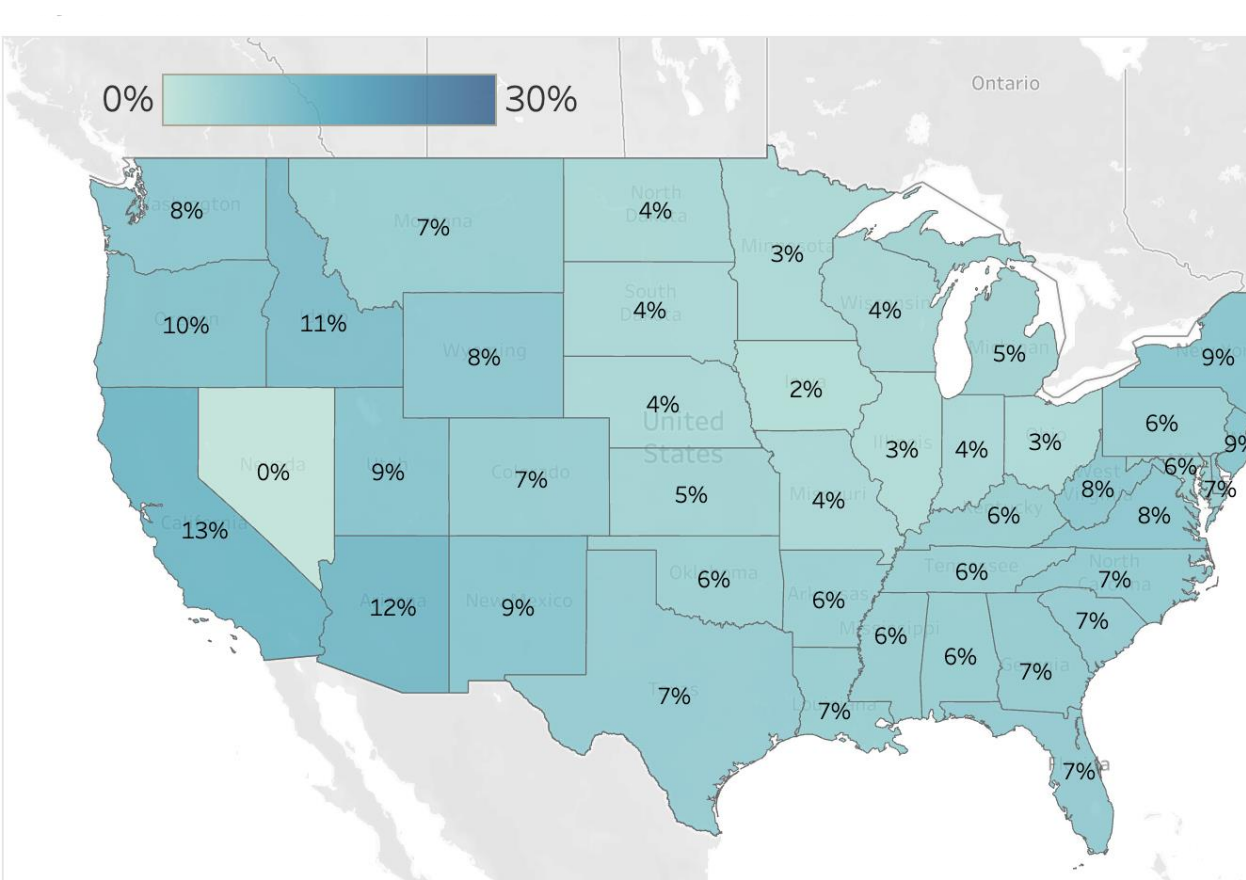
Payroll % of total farm sales is **lower** in the US than MX for oilseed and grains  
**higher** for fruit & tree nut

Sector	2022 Payroll Share of Farm Sales		
	U.S. all workers	MX jornaleros only*	MX all workers (estimated)
Oilseed and Grain	4.2%	8.0%	26%
Vegetable and Melon	22.2%	4.5%	15%
Fruit and Tree Nut	36.0%	4.5%	15%
Other Crop	14.2%	5.0%	17%

# Is this a positive for US farms?

It depends... mostly on crop

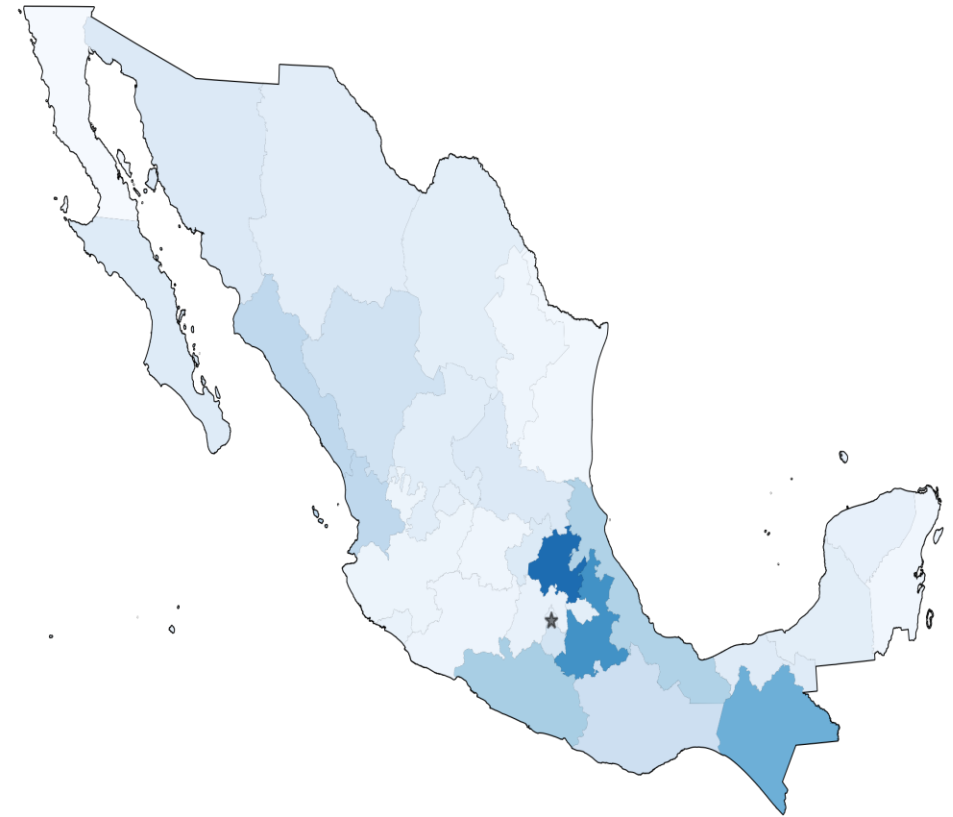
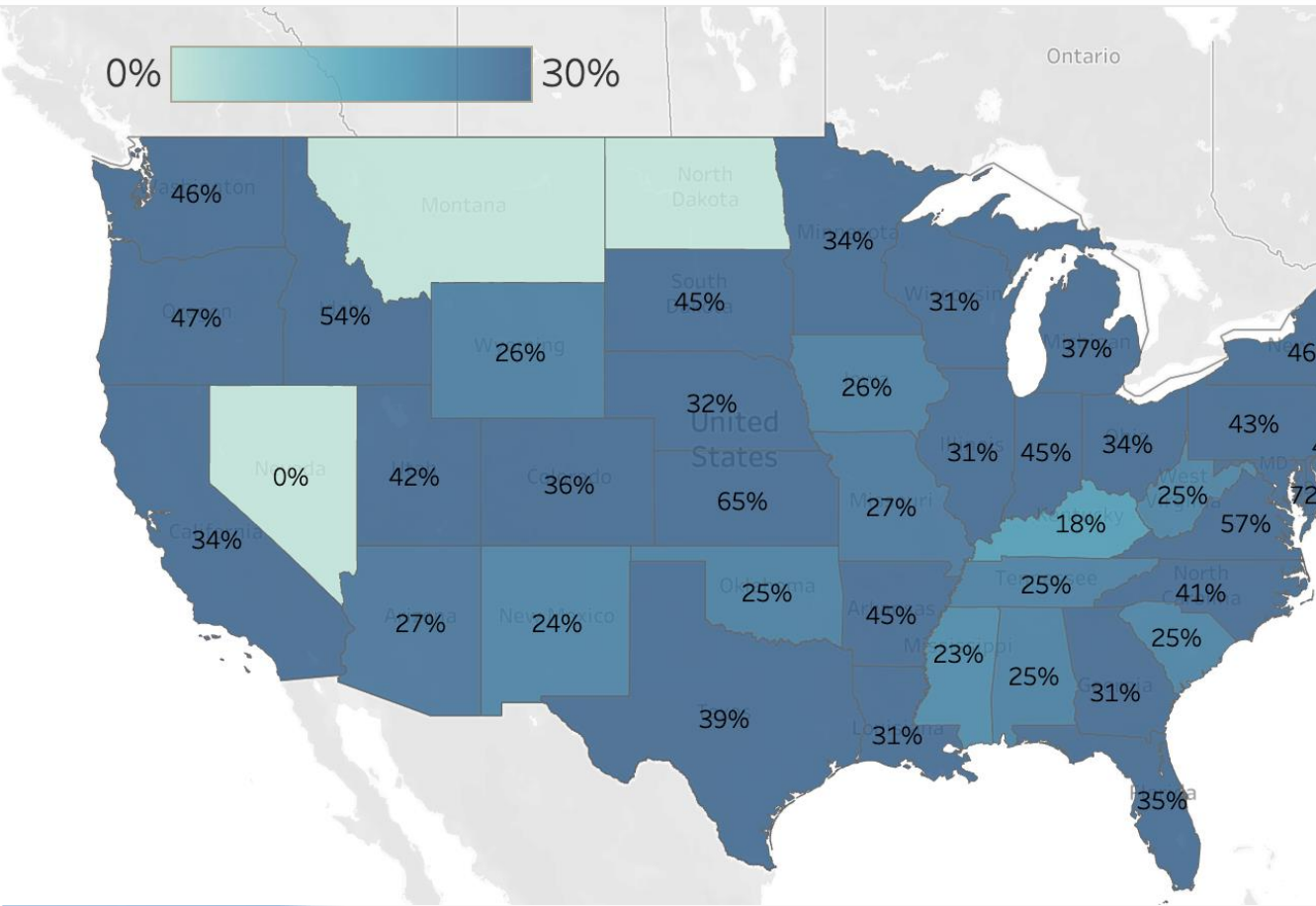
Payroll % of total farm sales is **lower** in the US than MX for oilseed and grains



# Is this a positive for US farms?

It depends... mostly on crop

Payroll % of total farm sales is **MUCH higher** in the US than MX for fruit/nut





# Will rising labor costs continue?

Yes... Minimum Wages, H-2A, Other Policies, Worker Shortages

**State minimum wages are rising**

**H-2A wages are rising and reliance on H-2A is growing**

**Other policies:**

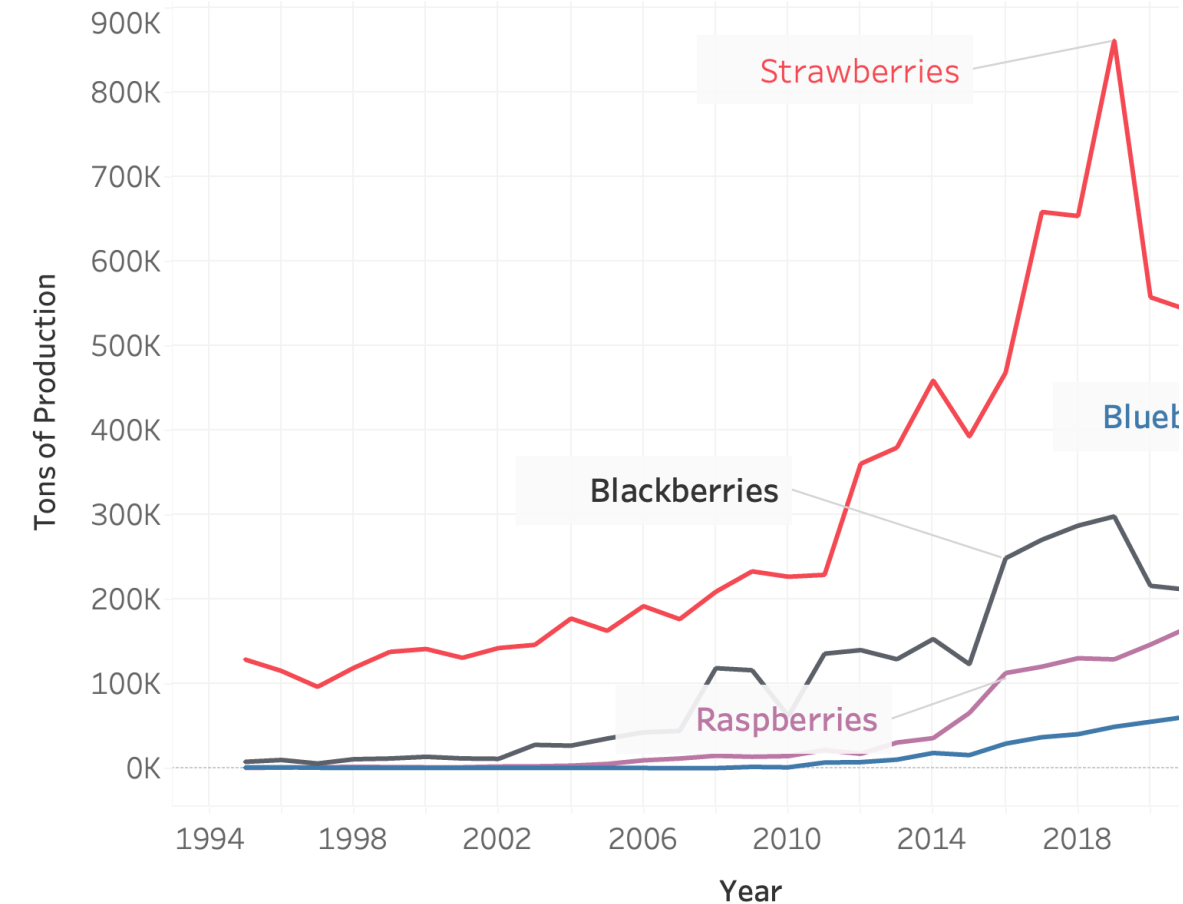
- Overtime (AB 1066)
- Union laws (AB 2183 & AB 113)
- Frequently changing and complex legal employment environment leading many to rely on farm labor contractors (20-40% overhead)

**Domestic worker shortages will also drive-up wages**

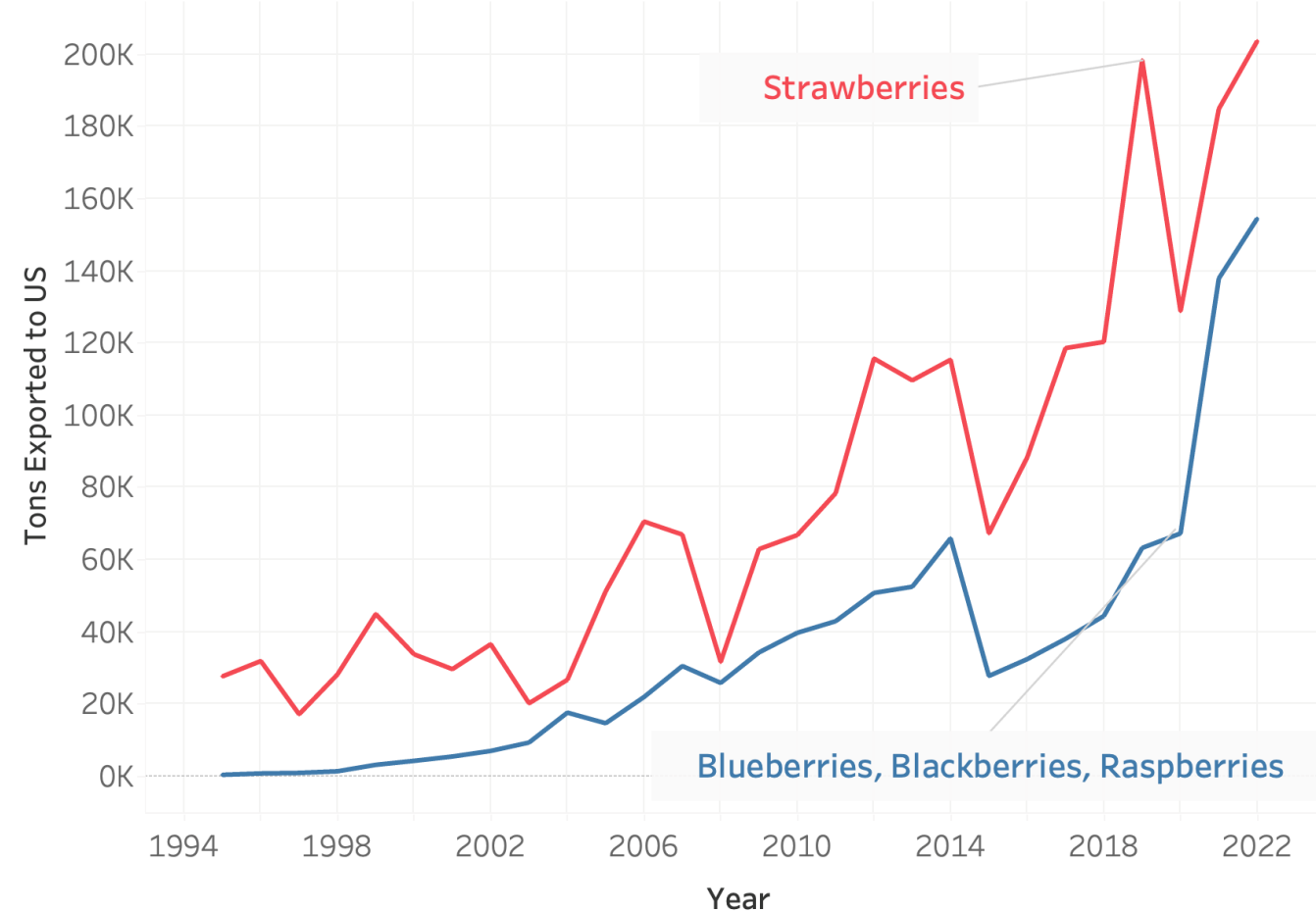
- To recruit enough workers and compete with other industries, employers will continue offering wages well beyond legal minimums

# Is there any evidence of moving production to Mexico? – Yes, esp. for berries

Mexico Berry Production

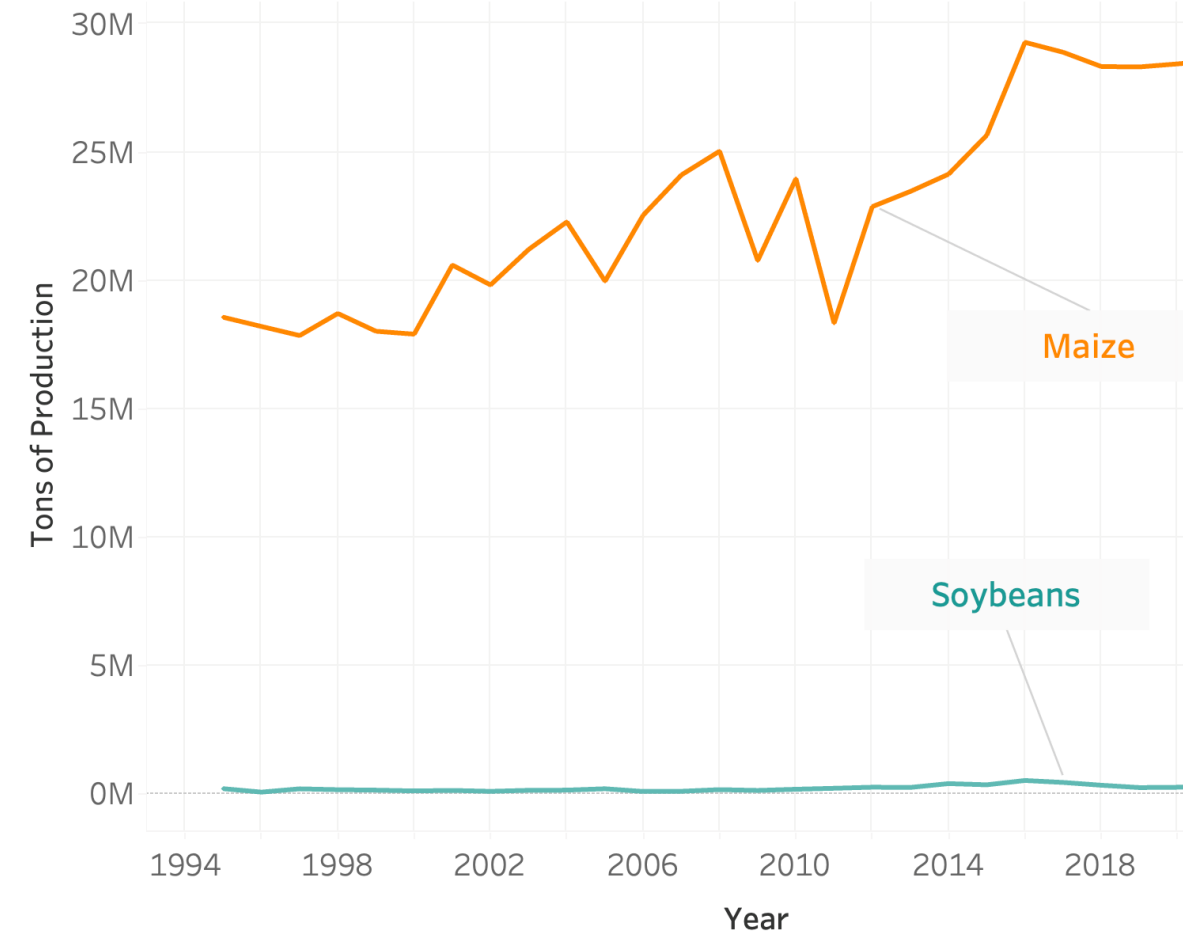


Mexico Berry Exports to the US

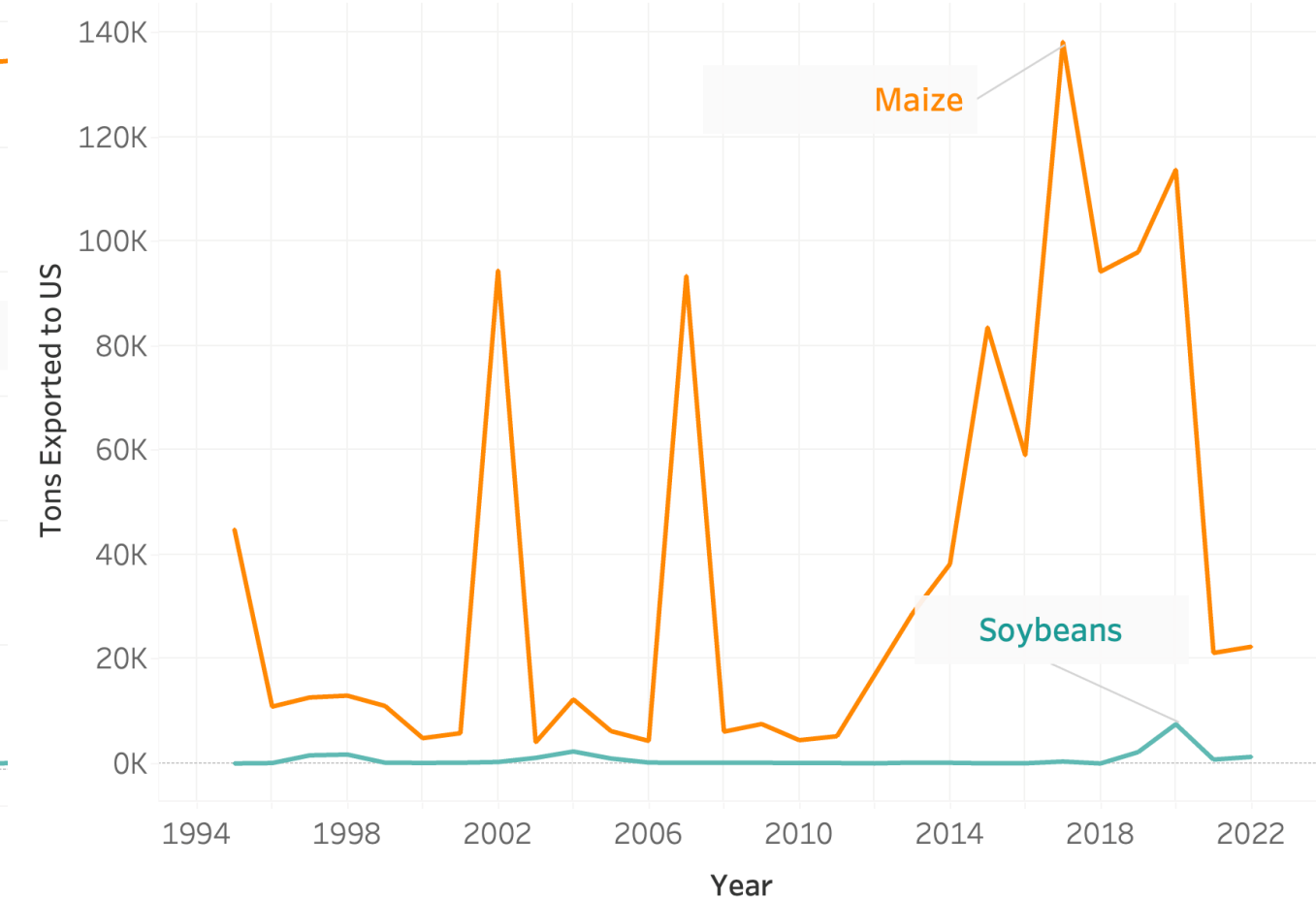


# Is there any evidence of moving production to Mexico? – Not for crops we have an advantage in

Mexico Maize and Soybean Production



Mexico Maize and Soybean Exports to the US





# What is the outlook?

**Employees will continue to be harder to find and more expensive**

**US farm employers will have to find ways to...**

- Recruit new workers (immigration reform, H-2A, change ag jobs)
- Increase productivity (machine-assist)
- Replace workers (automation)
- Cut other costs (mechanization, AI)
- **Increase revenues** (value-added products, retailers)

**Thank you!**

Alexandra Hill

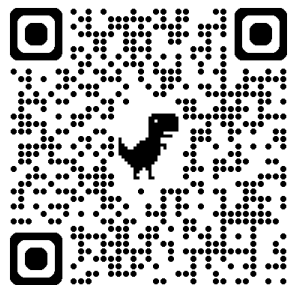
[alihill@berkeley.edu](mailto:alihill@berkeley.edu)

[www.alexandraehill.com](http://www.alexandraehill.com)

**Read More**



**Explore the Data**







# THANK YOU

**Support our Mission**

**Become a Friend of Farm  
Foundation today!**

**[farmfoundation.org/friends](https://farmfoundation.org/friends)**

**#FarmFoundationForum**





# SAVE THE DATE FOR OUR DECEMBER FORUM

**Tax Year 2025: Potential Impacts  
and Opportunities for Farmers  
and the Agriculture Sector.**



**December 12, 2024  
9 – 11 am CST**



**Livestream via Zoom**



