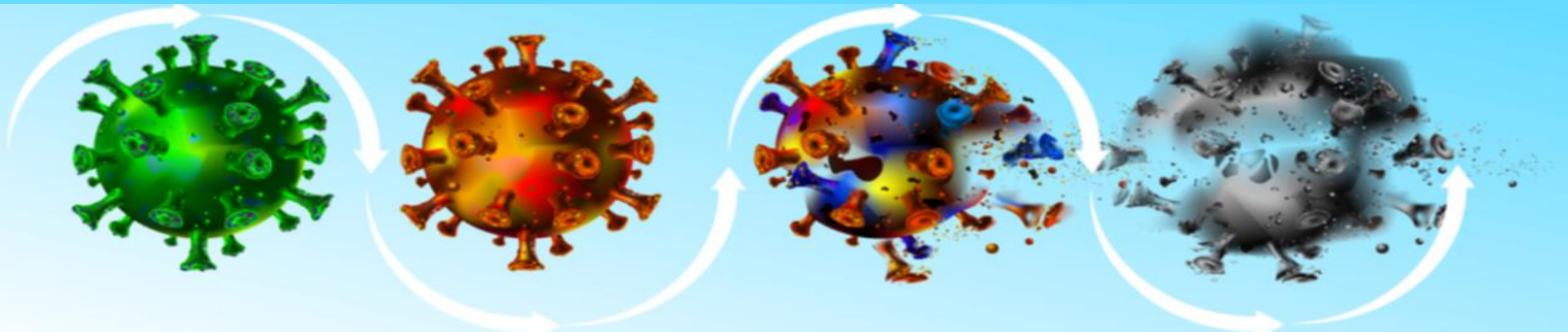


Ag Trends

Then and Now of Various Ag Sectors



2019 Was a Tumultuous Year for Farmers

- U.S. farmers lost their fourth largest export market after China officially cancelled all purchases of U.S. agricultural products, a retaliatory move following President Donald Trump's pledge to slap 10% tariffs on \$300 billion of Chinese imports.



Body Blow to Those Struggling

- Zippy Duvall, president of the American Farm Bureau Federation, said China's exit is a "body blow to thousands of farmers and ranchers who are already struggling to get by."



More than 100,000 Farms Lost

- The nation lost more than 100,000 farms between 2011 and 2018; 12,000 of those between 2017 and 2018 alone.



Farm Debt at an All-Time High

- Farm debt, at \$416 billion, is at an all-time high. More than half of all farmers have lost money every year since 2013, and lost more than \$1,644 this year. Farm loan delinquencies are rising.



Record Flooding and Droughts

- China's exit piles on to a devastating year for farmers, who've struggled through record flooding and droughts that destroyed crop yields, and trade war escalations that have lowered prices and profits this year.



Exports Dropped by More Than Half

- Agriculture exports to China dropped by more than half last year. In 2017, China imported \$19.5 billion in agricultural goods, making it the second-largest buyer overall for American farmers. In 2018, that dropped to [\\$9.2 billion](#) as the trade war escalated, according to the United States Department of Agriculture.



The Decline Continues

- This year, China's agricultural imports from the U.S are down roughly 20%, and U.S. grain, dairy and livestock farmers have seen their revenue evaporate as a result. Over the last 6 years, farm income has dropped 45% from \$123.4 billion in 2013 to \$63 billion last year, according to the USDA.



Impacts of Trade War

- The U.S. currently leverages 25% tariffs on \$250 billion in Chinese goods, while China tariffs on U.S. imports are currently at \$110 billion. China will also consider imposing tariffs on U.S. agricultural imports it has already purchased.

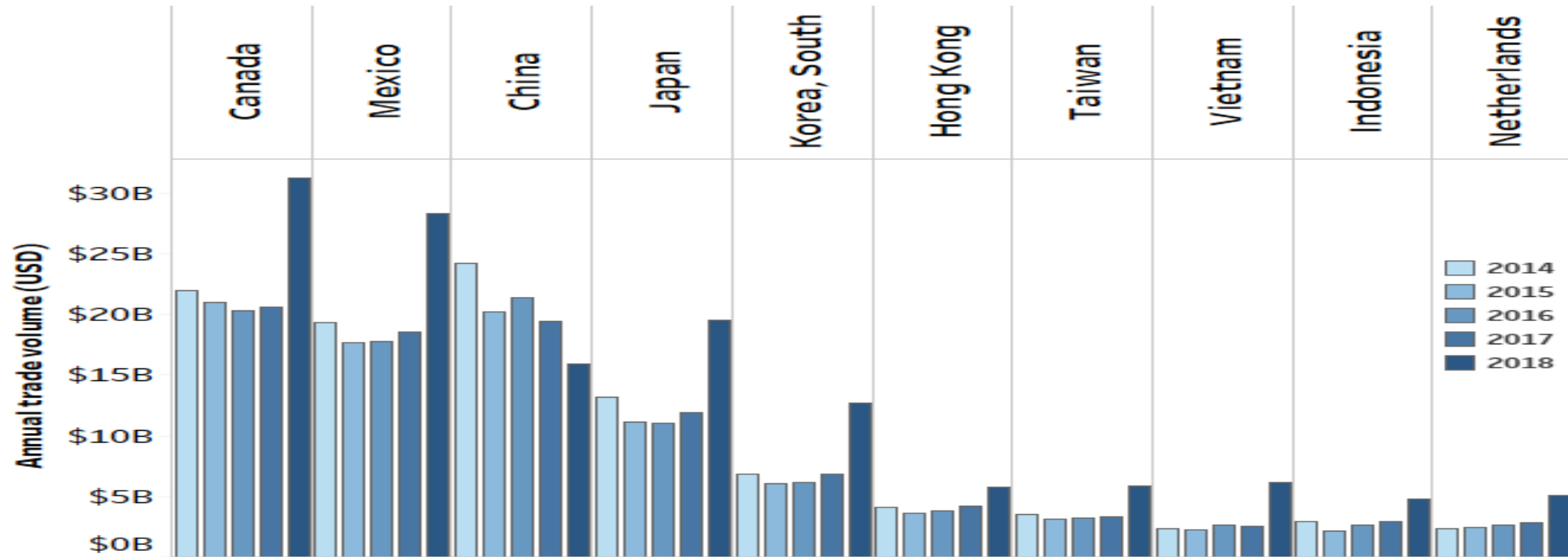


Phase 1 is Being Initiated Currently with China

- China agreed to purchase an additional \$200 billion in U.S. goods over the next two years as part of the “phase one” trade deal.
- The additional purchases will come on top of the 2017 U.S. export numbers.
- The deal stipulates that Beijing will buy \$77 billion in additional goods and services in 2020 and \$123 billion in 2021 to meet the total \$200 billion. China bought \$186 billion of U.S. goods and services in 2017.

Trade Export Numbers

US farm exports



SOURCE: USDA



It's Official: Mexico Is No. 1 U.S. Trade Partner For First Time, Despite Overall U.S. Trade Decline



Ken Roberts Contributor

Policy

Two decades of analyzing trade data and how policy affects it, publishing annual port-based publications, producing weekly videos, speaking nationally and hosting events.

- Mexico is the top U.S. trade partner for the first time, according to U.S. Census data released this morning.
- At the same time, overall U.S. trade fell for the fourth time in the last six years.
- Mexico's trade with the United States totaled \$614.5 billion in 2019, a 0.48% increase over its 2018 total in a year when U.S. trade declined 1.5% to end up at \$4.14 trillion.
- Canada finished as the second-ranked trade partner for the fifth straight year.

Rank	Country	Total trade
1	Mexico	\$ 614.50
2	Canada	\$ 612.12
3	China	\$ 558.87
4	Japan	\$ 218.29
5	Germany	\$ 187.76
6	South Korea	\$ 134.41
7	United Kingdom	\$ 132.34
8	France	\$ 95.22
9	India	\$ 92.08
10	Taiwan	\$ 85.48
11	Netherlands	\$ 81.00
12	Italy	\$ 80.95
13	Vietnam	\$ 77.56
14	Brazil	\$ 73.94
15	Ireland	\$ 70.80
16	Switzerland	\$ 62.50
17	Singapore	\$ 57.93
18	Belgium	\$ 54.94
19	Malaysia	\$ 53.69
20	Thailand	\$ 46.77

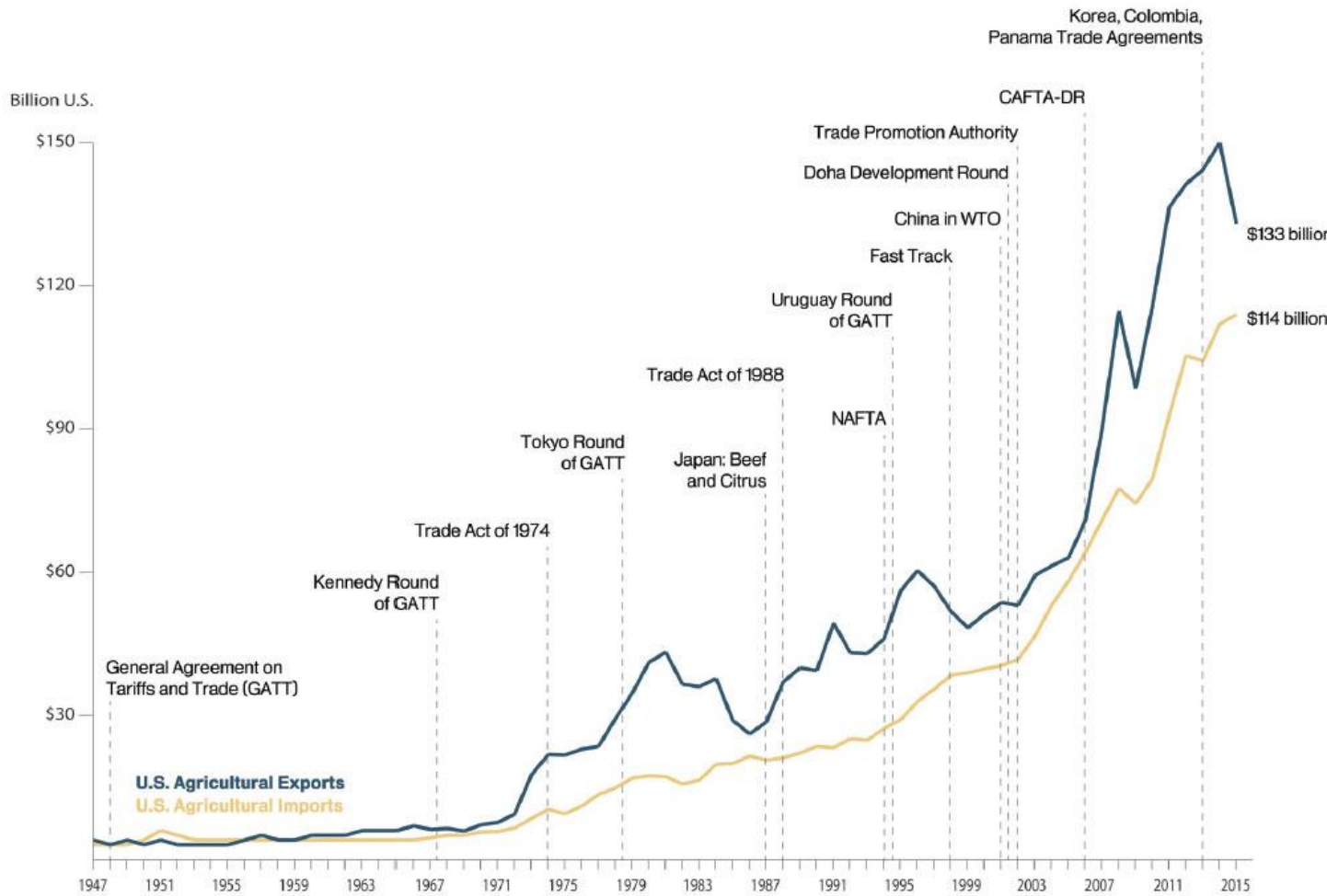
The top 20 trade partners in 2019, with totals in billions. ustradenmbers.com

Stand Behind The Policies

- Trump's overall approval rating is 79% among farmers, according to a [Farm Pulse survey](#) taken in 2019. And a record-high number of farmers, some 78%, said the trade war will ultimately benefit U.S. agriculture, according to a July survey from Purdue Center for Commercial Agriculture. More than 75% of rural farmers voted for Trump in the 2016 election.



China's Retaliatory Tariffs on Select U.S. Agricultural Products



US Trade Agreements, 1947-2015.

Source: USDA, Foreign Agricultural Service (<https://www.fas.usda.gov/sites/default/files/2016-06/trade-agreements-create-opportunities.jpg>).

Products Subject to China's Retaliatory Tariffs	Retaliatory Tariff Imposed by China	U.S. Tariffs that China Is Responding To***
Cotton	50%	301
Pork*	25% and 25%	232 and 301
Apples	40%	232
Cherries	40%	232
Cheese	25%	301
Ginseng	25%	232
Seafood**	25%	301
Sorghum	25%	301
Soybeans	25%	301
Whiskey	25%	301

* Does not include all pork product exports to China, and not all pork products exports to China are subject to both retaliatory tariffs.

** Includes more than 150 varieties of seafood and seafood products, but not all U.S. seafood exports.

*** "232" refers to tariffs under Section 232 of the Trade Expansion Act of 1962 and "301" refers to Section 301 of the Trade Act of 1974.

SOURCES: Congressional Research Service, American Farm Bureau Federation, and U.S. Trade Representative.

<https://agriflifeextension.tamu.edu/wp-content/uploads/2020/08/us-trade-agreements.jpg>

Hospitable as the Asteroid Belt

- In 2019, the farm belt felt about as hospitable as the asteroid belt. Record rainfall turned fields to sludge and made it nigh on impossible to plant corn and soybeans until long after the typical window had passed. President Trump's long-running trade war cut off farmers' access to China's enormous market. Across the farm sector, commodity prices remained in the doldrums.



Government Assistance

- Without government assistance, U.S. farm income would have fallen about \$5 billion from its already-low 2018 level. So the \$14.5 billion in bailout funding announced so far represents a substantial reversal of fortune. About three-quarters of the funding already has been distributed.

Farmers Got Billions From Taxpayers In 2019, And Hardly Anyone Objected

December 31, 2019 · 4:13 PM ET
Heard on All Things Considered



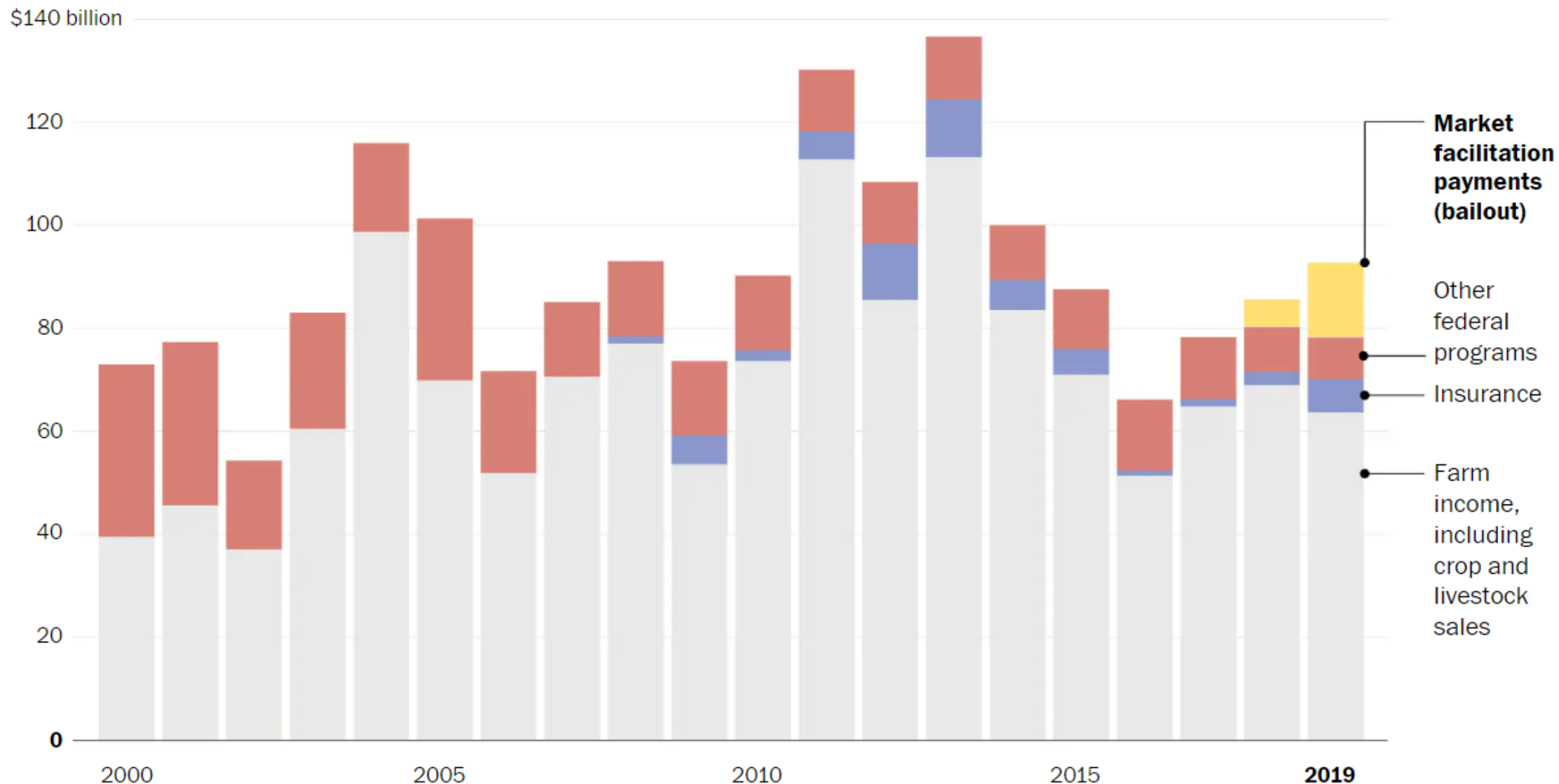
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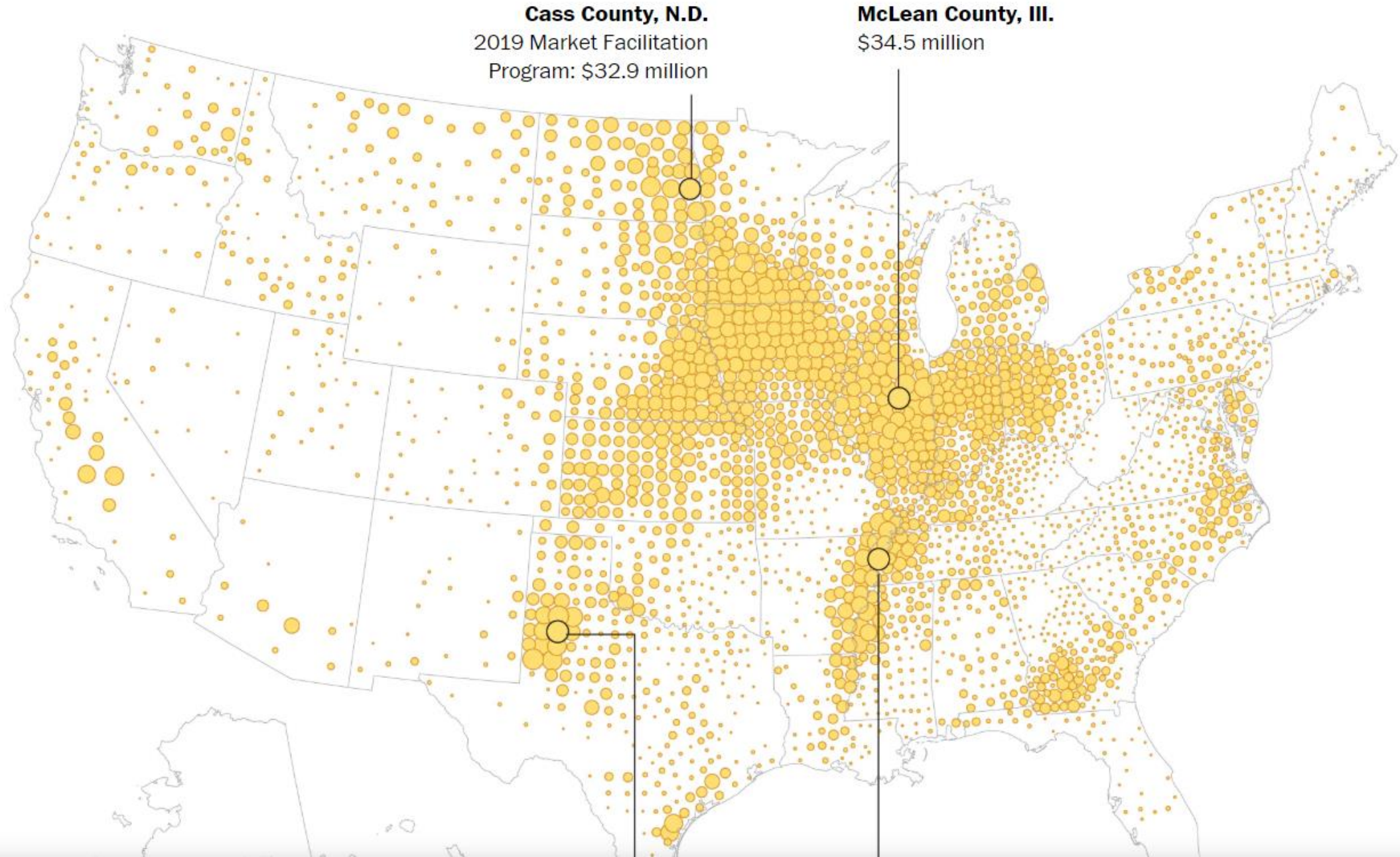
U.S. farm-sector profit, adjusted for inflation

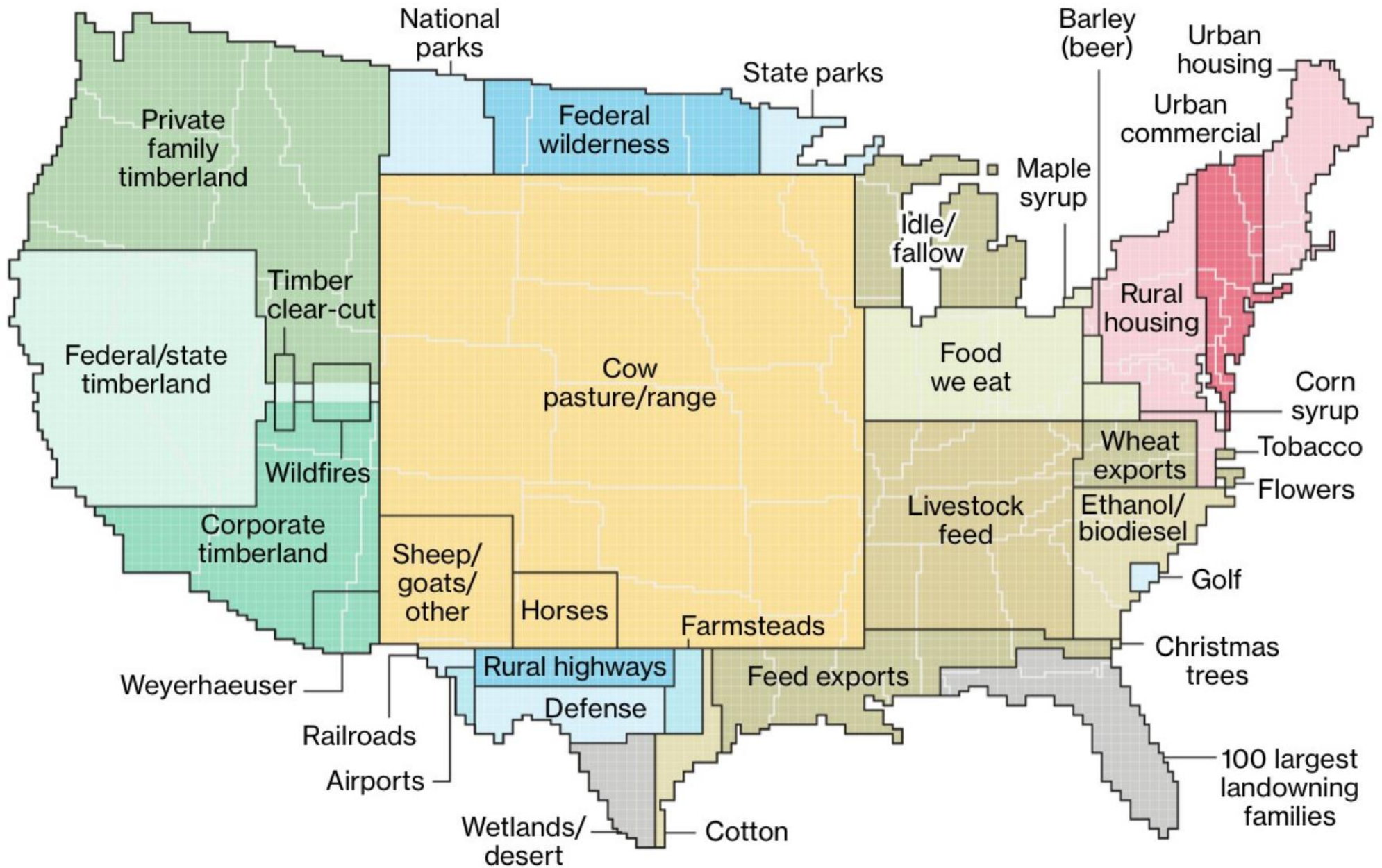


Note: Insurance payouts are net of insurance premiums; data for insurance isn't available before 2008.

Source: Agriculture Department's Economic Research Service

Payments to farmers in 2019





70% of Farm Households = High Level of Risk

- [According to 2018 data](#), more than 70 percent of farm households had a high level of financial risk in 2018. But of those that qualify as very large (median income \$756,000), only 25 percent fit into that same category.



Sharp Rise in Bankruptcies

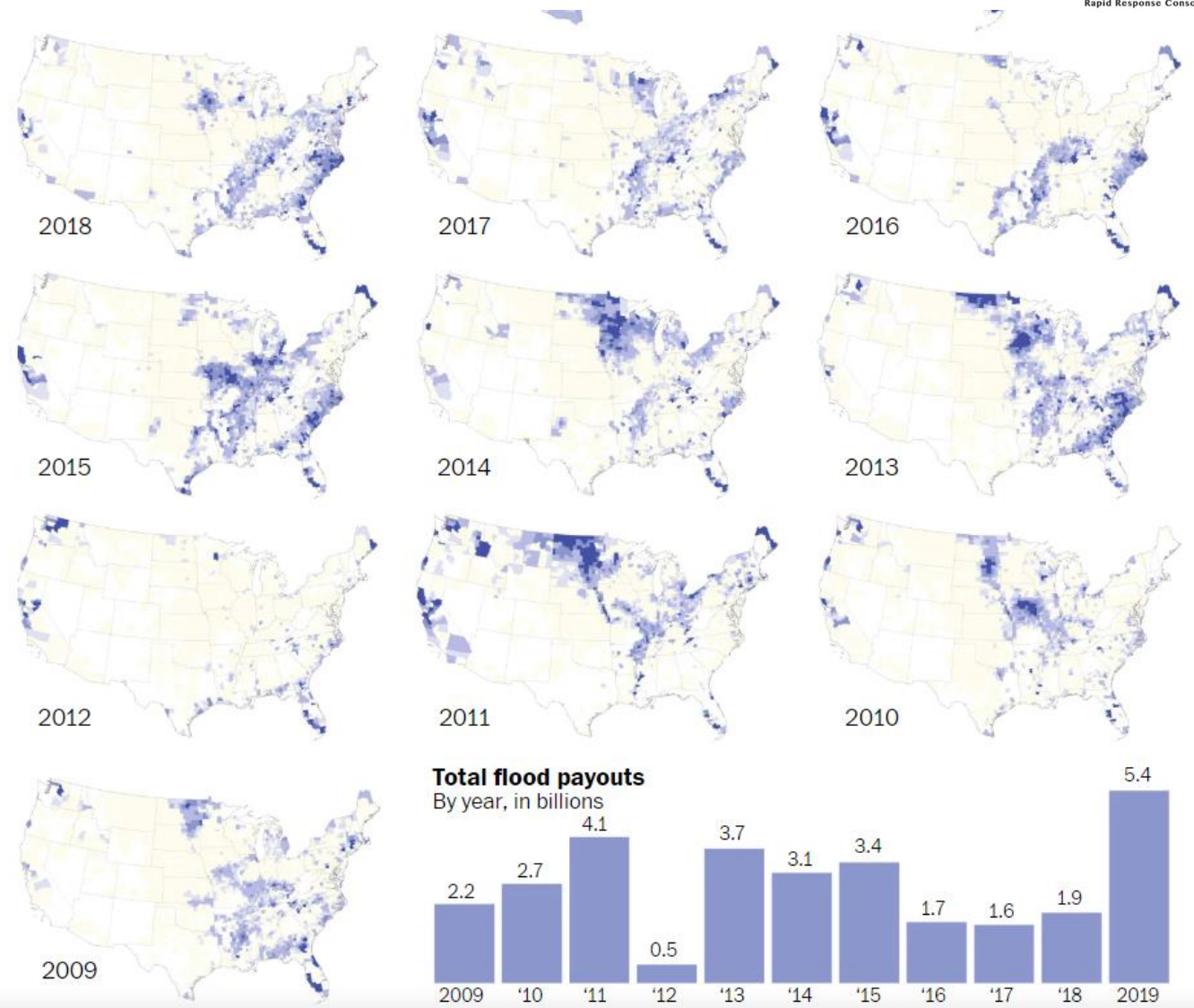
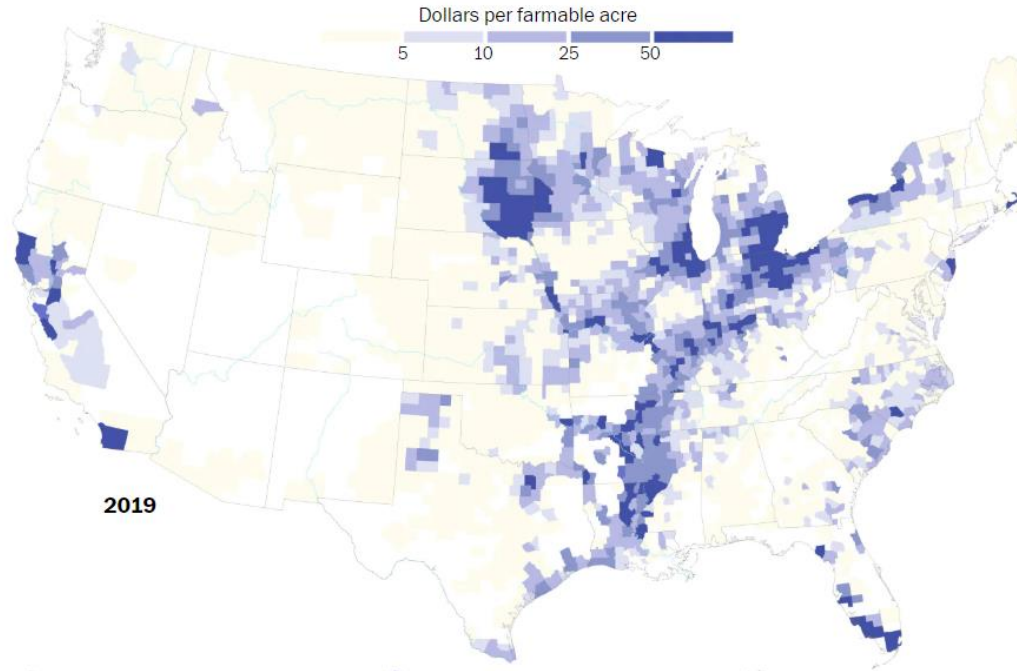
- Indeed, the past two years have been marked by a sharp [rise in bankruptcies](#) in the nation's deepest farm country. A quarter of the nation's farms sit in super-agriculture-dependent areas — places where more than 1 in 7 people live on farms. Among them, the rate of farm-specific bankruptcies (Chapter 12) has more than tripled since 2015.



Farm Debts

- Overall, the growth in farm debts has outstripped farmers' stagnant equity stakes, leaving them at higher risk of insolvency than they have seen at any point since the end of the Great Recession. It's compounded by an unwelcome mix of lackluster prices for corn and soybeans on the open market and low yields caused by extreme weather.

Crop insurance payouts from flood or excessive rain damage



2013 Best Year In Recent Memory

- Even with help from the federal government, U.S. farm profits are only two-thirds of the inflation-adjusted \$136.6 billion farmers pocketed in 2013, the best year in recent memory. This year's total is almost directly in line with average profits since 2000, adjusted for inflation. The bailout alone can't make up for the collective hammering farmers took from four straight subpar years.

Recent Headline in 2019

- While the Prices of Fresh Fruits and Vegetables Have Increased for Consumers, the Prices that Farmers Receive for their Produce Has Not Kept Up - And Even Gone Down in Some Cases; The USDA Has Failed to Conduct a Full Review of the Fresh Fruit and Vegetable Market for Decades and Structural Changes Since Then Have Left Many Farmers Facing Uncertainty and Low Prices

Recent Headline in 2019

- *“Our New York farmers are facing a produce-pricing crisis. Throughout the state, fresh fruit and vegetable growers are hurting because the prices they get for their produce have stayed flat, and in some cases have even gone down, while the middlemen who move the produce from farmers to grocery stores and grocery store shoppers have seen the prices for the same produce increase,”* said **Senator Gillibrand, a member of the Senate Agriculture Committee.** *“Despite this, the USDA has not reviewed the fruit and vegetable industry in decades. We need to understand what is causing these unfair prices for our farmers, and I am calling on the USDA to complete a top-to-bottom review of the fruit and vegetable industry so that we can help New York’s farmers better price their produce and plan for their future.”*

Recent Headline in 2019- Low Prices

- The persistently low prices that farmers receive for their fruits and vegetables have led to the loss of small family farms, and in the last five years alone, New York lost 11,000 acres of vegetable production. The USDA has failed to conduct a full review of the fresh fruit and vegetable market for decades, and Gillibrand's push for a new study of this industry would help identify which factors contribute to unfair prices for farmers and increase transparency in the market. Gillibrand is also calling for the USDA to use new technology to improve farm sales reporting to ensure that data is updated in real time, increasing transparency for farmers and allowing them to see if the prices they receive are fair.

Delay the USMCA? Business Leaders Call for Postponing Implementation of the 'New NAFTA'

Monday, April 6, 2020

The **United States–Mexico–Canada Agreement** (USMCA) was signed by U.S. President Donald Trump, former Mexican President Enrique Peña Nieto, and Canadian Prime Minister Justin Trudeau on November 30, 2018. The USMCA was designed to update and replace the North American Free Trade Agreement (NAFTA). Canada was the last of the three signatories to ratify the deal.

On March 13, 2020, the Parliament of Canada quickly ratified the USMCA before taking a three-week break to address the COVID-19 crisis. With Canada's ratification, it appeared that the new trade deal would be implemented, marking a **significant shift in cross-border trade**. The United States proposed an implementation date of June 1, 2020, and U.S. Trade Representative Robert Lighthizer sent Congress notice of the proposed date in early March 2020.

Amid the unfolding COVID-19 public health crisis, business groups have requested a delay in the implementation of the USMCA, raising concerns about having to adapt to the new rules during a global pandemic. In particular, there has been a strong push from the automotive industry and its representative groups to delay implementation because of the difficulties faced by companies adjusting to new rules and regulations in the current environment.

However, there is still pressure in the United States to implement the USMCA before the November 2020 elections. The Trump administration appears motivated to bring the deal into force on June 1, 2020.

USMCA

- Delay in ratification, cause for concern on how to implement the new rules and regulations in current COVID-19 Situation

California farmers increasingly turning to mechanization due to labor shortages, says survey

PUBLISHED WED, MAY 1 2019-7:49 AM EDT

Jeff Daniels @JEFFDANIELSCA

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FARM LABOR SHORTAGE

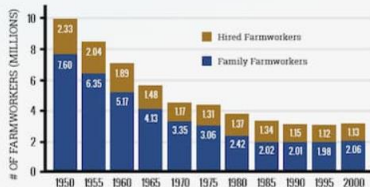
THE LARGE SCALE IMPACT OF WORKER SHORTAGE ON THE NATION'S AGRICULTURE INDUSTRY AND GLOBAL FOOD SUPPLY.



Take a deeper look into the historical trends, current challenges, and future expectations to help increase awareness of what industry experts call the "farm labor crisis".

THE SHRINKAGE U.S. AGRICULTURAL WORKFORCE

FAMILY & HIRED FARMWORKERS ON U.S. FARMS



52%
DECLINE OF HIRED FARMWORKERS

73%
DECLINE OF FAMILY FARMWORKERS

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How the stocker sector is changing
APR 01, 2020

MIDDAY Midwest Digest, April 17, 2020

Can we solve the ag labor shortage?

Finding enough qualified labor in agriculture is going to get lots tougher, unless folks take deliberate, creative action. First in a series that looks at fixing the ag labor shortage.

Wes Ishmael | Aug 05, 2019



Los Angeles Times

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OPINION

Op-Ed: America has a farm labor shortage. We need a better guest worker program



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1/18, 2019 OPINION

Agriculture needs solution to its worker shortage

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AGRICULTURE & THE WEST

A "Climate of Fear" Accelerates Existing Labor Shortages on California's Farms

SEP 11 2019

POSTED IN: ... & THE WEST BLOG

As field hands rethink traveling to the U.S., some farmers have been forced to watch their produce rot in the fields. Many others are cutting back acreage.

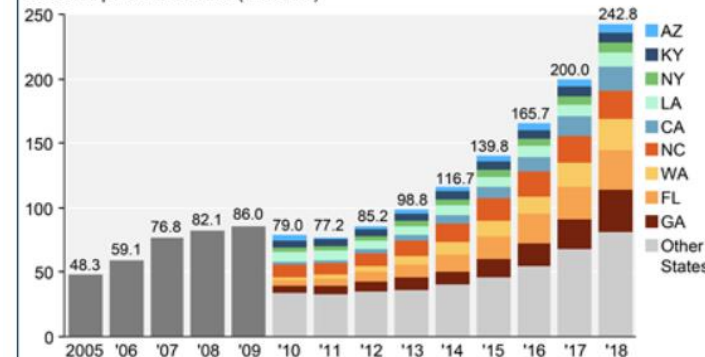
Viewpoints / The Zipline
July 10, 2019



Another Year of Farm Labor Shortages

H-2A positions certified by State, fiscal 2005-18

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 fiscal 2010; Arkansas met this threshold, but lacked data for 2015-18. Dark grey bars represent aggregates where individual State-level data are not identified.
Source: USDA, Economic Research Service using data from U.S. Department of Labor, Office of Foreign Labor Certification (OFLC).



Balanced Reporting. Trusted Insights.
Friday, April 12, 2020



POLITICS FARM HANDS ENERGY FOOD LABOR CAMPAIGN 2020 RURAL TRADE ENVIRONMENT INNOVATION

Check out the Healthy Hives 2020 projects!

Home » California leads fight to fix national farm labor shortage

LABOR WEST

California leads fight to fix national farm labor shortage


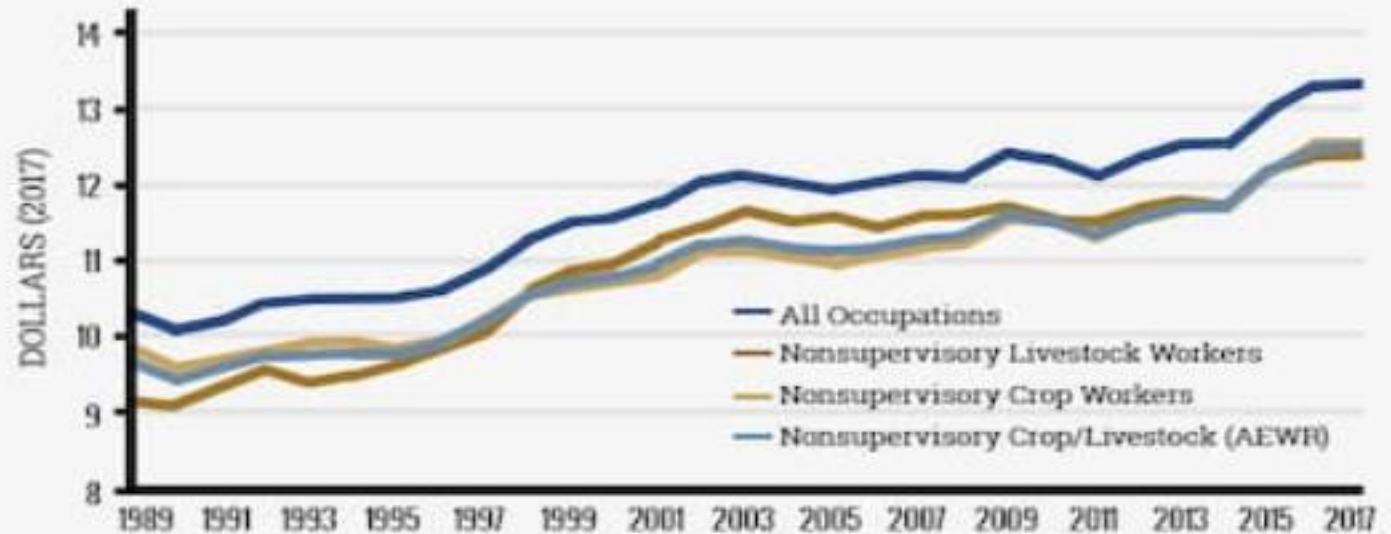
05/08/19 8:53 AM By Jonathan H. Hirsch

KEYWORDS BRIAN LITTLE CALIFORNIA FARM LABOR FIELD WORKERS H-2A JAME CASTANEDA JAME JOHANSSON

7%
DECLINE IN
HIRED WORKERS

8%
INCREASE IN
FARM LABOR WAGES

REAL HOURLY WAGES FOR HIRED FARMWORKERS, ALL AGRICULTURAL WORKERS, AND AEW



Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, Farm Labor Survey
Nonfarm wages from Bureau of Labor Statistics, Current Employment Statistics

CONTRIBUTING FACTORS

CONTRIBUTING FACTORS

A COMMON PERCEPTION HAS BEEN THAT IMMIGRATION POLICIES ARE AT THE CENTER OF THE LABOR CRISIS. OTHER FACTORS INCLUDE:



Declining interest in agriculture



Inefficient agriculture labor programs



Declining birthrates in Mexico



Aging farm operators

FARMERS ARE INCREASINGLY TURNING TO FOREIGN LABOR RESOURCES LIKE THE H2-A PROGRAM TO FILL THEIR POSITIONS ON THEIR FARM.

59.4

AVERAGE AGE OF PRINCIPAL OPERATORS

PRODUCERS AGES 35 & YOUNGER ACCOUNT FOR

9%

OF FARMERS

EXPERTS BELIEVE THAT THE DECLINING INTEREST IN AGRICULTURE AMONG YOUNGER GENERATIONS IS PRIMARILY DRIVEN BY THESE FACTORS:



High real estate & land prices



Steep upfront investment cost for machinery & technology



Volatile commodity pricing



Unpredictable weather changes



Unequal work-life balance



Heavy physical demand



AG AMERICA
LENDING

IMMIGRANTS ACCOUNT FOR



U.S. Population



Total U.S. Workforce



Agriculture Labor Force

DIFFERENCE BETWEEN H-2A & H-2B:

H-2A

TEMPORARY AGRICULTURE WORKERS

H-2B

TEMPORARY WORKERS OUTSIDE OF THE AG INDUSTRY

DESPITE HAVING MORE THAN DOUBLED IN THE LAST DECADE, THE H-2A PROGRAM IS UNDERUTILIZED BY MOST FARM WORKERS BECAUSE OF ITS MANY INEFFICIENCIES THAT OFTEN CREATE MORE CHALLENGES THAN SOLUTIONS FOR FARMERS.



Non-immigrants can be hired for periods ranging from 1 month to a max of 1 year.

Beyond a year, they must apply for a long-term extension, 2-year max within a 3-year period.

Once they've reached the limit, they're forced to wait 3-months before reapplying for a H-2A visa

Across the nation, farms of all sizes and specialties have started implementing advanced agriculture technology to cope with the lack of available labor. Agritech has exploded, offering farmers access to several new smart farming technologies.

However, the pressure is still high to make major operational changes to accommodate the rising expenses & lower number of workers.



"WE'VE SHIFTED AWAY FROM THE MOST LABOR-INTENSIVE CROPS—SO THINGS LIKE VINE-RIPE TOMATOES, WE NO LONGER GROW ANYMORE"

-Tom Deardorff, California Grower

FARM OPERATORS HAVE BEGUN USING THESE STRATEGIES TO COPE WITH THE GROWING LABOR DEMAND:



Integrating ag technology to reduce some of the physical burden on their current farmworkers



Adopting crops that are easier to manage and require fewer laborers



Scaling back farm operation



Leasing a portion of their land



Many farmers feel that the labor shortage is impart due to decades of poor political decisions and lack of industry support. **In order to improve the industry, immigration reform and restructuring of the H-2A guest worker program will be necessary to create a more productive and effective system for farmers.**

Changes in Eating Habits

Fake Meat vs. Real Meat

Millennials are gobbling down plant-based burgers, prompting meat producers to question the health benefits of “ultra-processed imitations.”



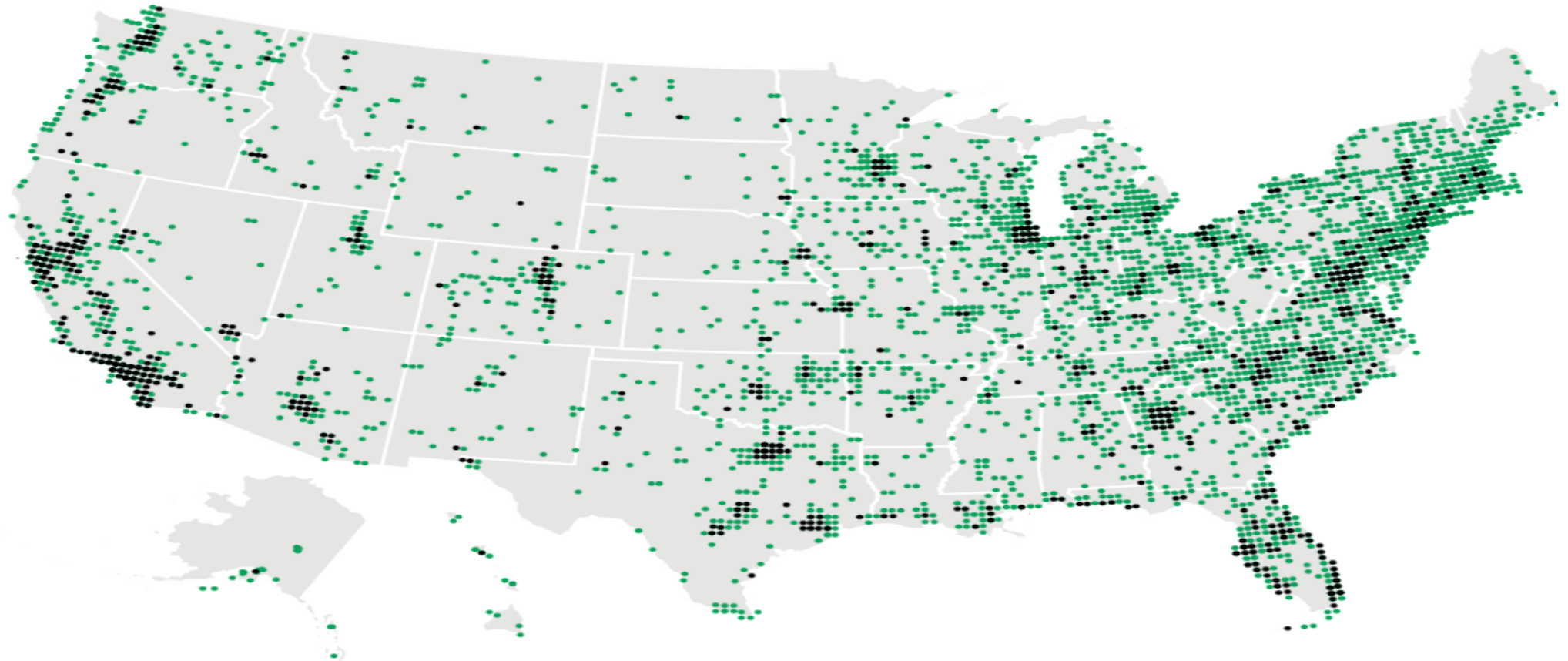
Plant-based foods like the Impossible Burger are designed to look, taste, even bleed like real meat. Con Poulos for The New York Times. Food Stylist: Simon Andrews.

Alternative Meat Industry

- The alternative meat industry is worth \$800 million and accounts for 2% of packaged meat sales, which counts Beyond Meat and Impossible Foods as two of its top contenders.
- **Beyond Meat** shares have skyrocketed more than 500% since the IPO in May 2019. This puts their company's current value at about \$10 billion. **Impossible Foods** recently raised another \$300 million of funding.
- **Beyond Meat and Impossible Foods products are sold in more than 30,000 locations** across the country, and the list of restaurants and grocery chains responding to consumer demand is growing daily.

Where can you find Beyond Meat?

● 5 or less ● Greater than 5



Beyond Meat Store Locations in the USA

Each grid point covers 10-mile radius with atleast one store



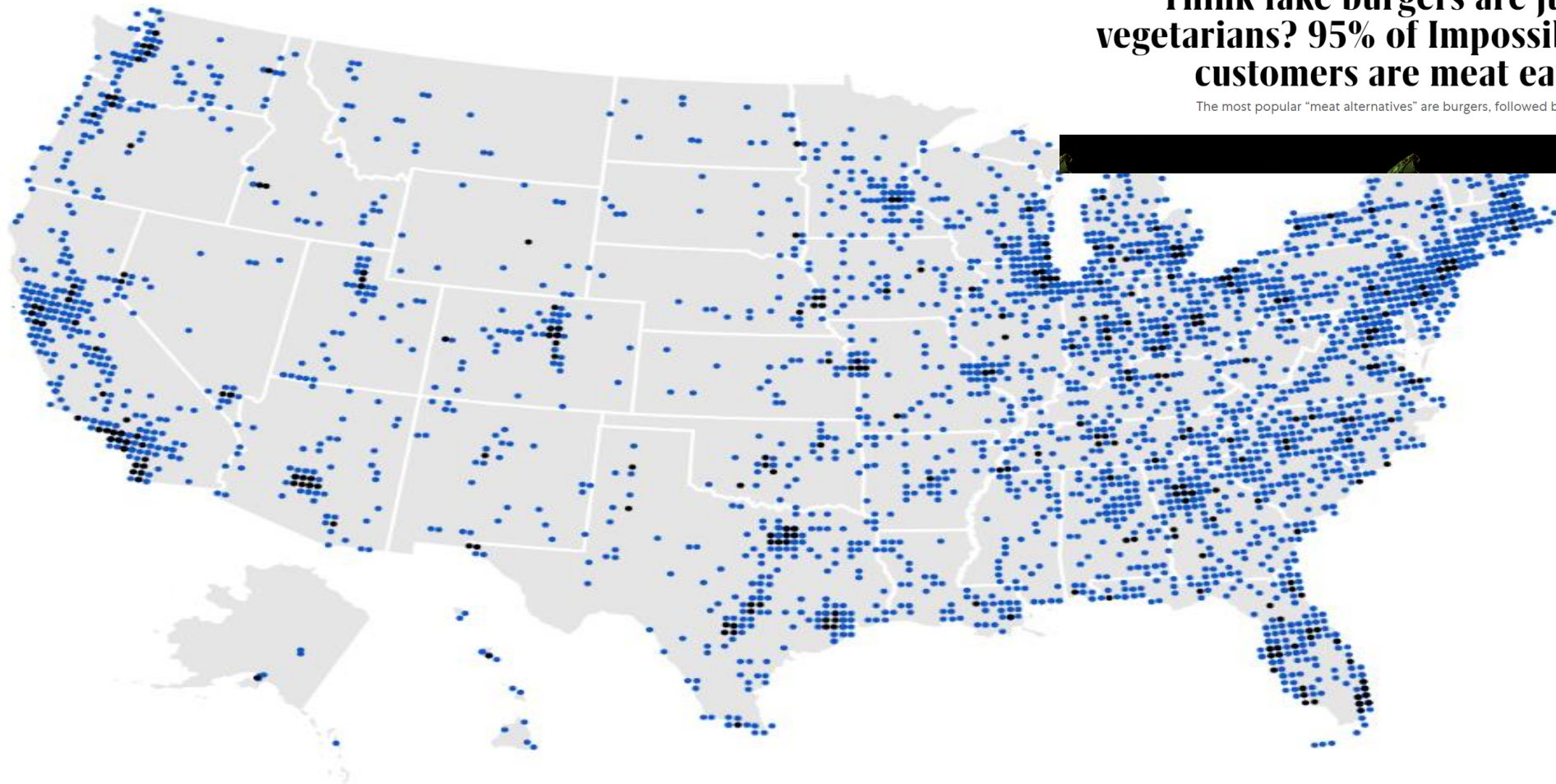
Where can you find Impossible Foods?

● 5 or less ● Greater than 5

09-18-19

Think fake burgers are just for vegetarians? 95% of Impossible Foods' customers are meat eaters

The most popular "meat alternatives" are burgers, followed by nuggets



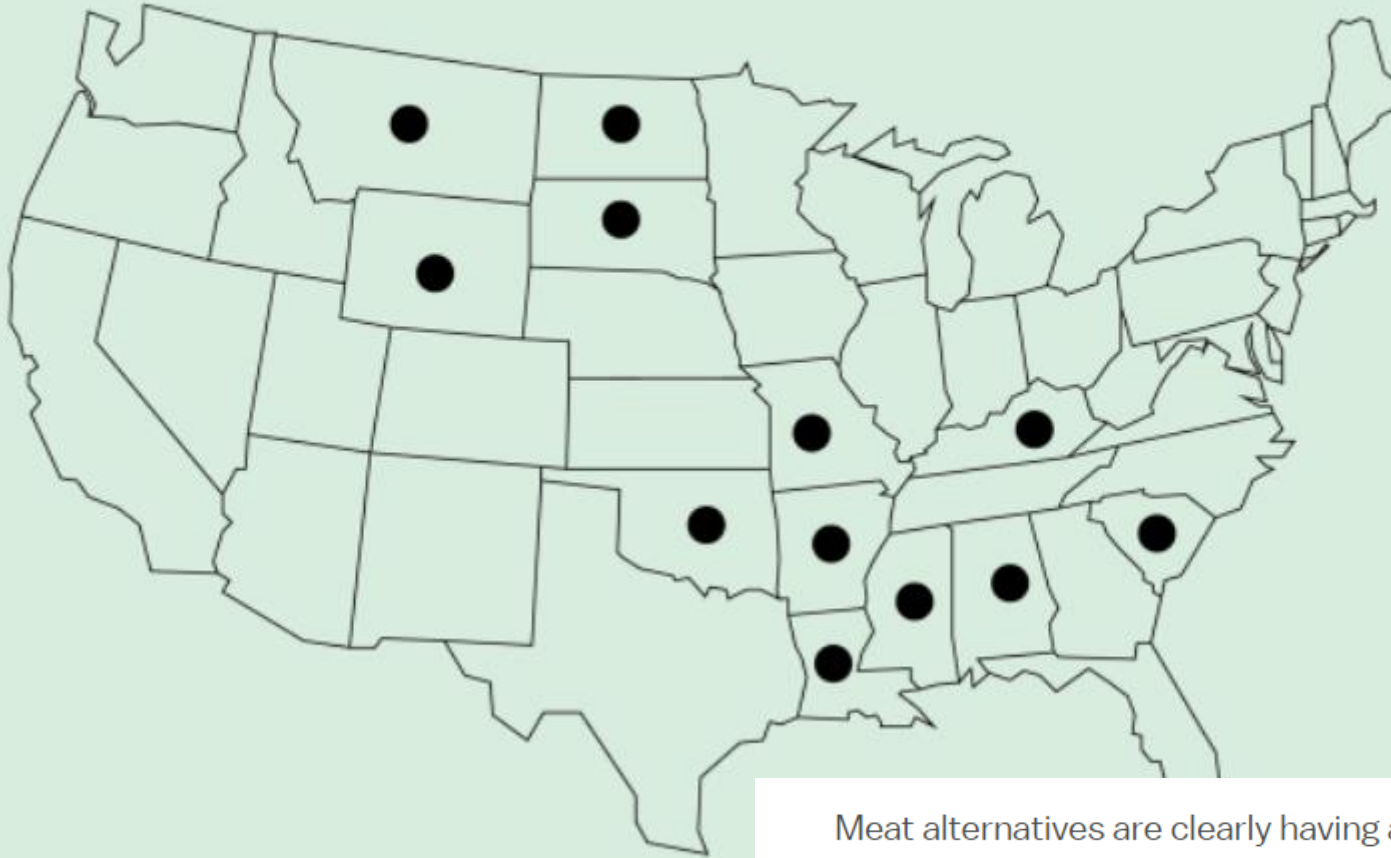
IMPOSSIBLE **Impossible Foods Store Locations in the USA**



[source](#)

Political Pushback

In response to pressure from the agriculture industry, 12 states have passed laws limiting the use of the word meat on packaging for plant-based alternatives:



[source](#)

09-18-19

Think fake burgers are just for vegetarians? 95% of Impossible Foods' customers are meat eaters

The most popular "meat alternatives" are burgers, followed by nuggets

businesswire
A BERKSHIRE HATHAWAY COMPANY

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Impossible Burger Becomes No. 1 Item Sold at Grocery Stores

- After its highly anticipated retail debut, Impossible Burger remains the No. 1 item sold at grocery stores on the East and West coasts
- Award-winning, plant-based meat from Impossible Foods outsold all ground beef from cows; Impossible Burger outsold the next most popular single product by more than 6X in Southern California
- Impossible Burger will debut in additional retail outlets as the food tech startup increases production and beefs up its sales team -- starting with tech industry veteran Dan Greene, who joins today as new SVP of US Sales

October 01, 2019 06:35 AM Eastern Daylight Time

REDWOOD CITY, Calif.—(BUSINESS WIRE)—Impossible Burger debuted on store shelves earlier this month, immediately becoming the No. 1 product sold at some of America's favorite grocery stores -- and remaining the top performer ever since.

"No one could have predicted this level of pent-up demand for Impossible Burger"

[Tweet this](#)

Impossible Burger is the award-winning, plant-based meat sold in more than 17,000 restaurants nationwide. The flagship product from Impossible Foods made its worldwide debut in grocery stores Sept. 20 at all outlets of Gelson's Markets in Southern California.

Since its Sept. 20 debut, Impossible Burger has remained the No. 1 packaged item at Gelson's 27-unit chain. Since its launch, Gelson's has sold more Impossible Burger than all types of ground beef from cows, based on both revenue and total number of pounds sold.

Meat alternatives are clearly having a moment — and it's offering us a glimpse into a different future for meat. Every year, more than 9 billion animals in the US are raised and killed on factory farms. Our factory farm system has contributed to a range of problems, from **increasing antibiotic resistance** to the **climate crisis**. Proponents of meat alternatives say these meatless meats could help change that equation.

Lab-grown meat and the fight over what it can be called, explained

Several products are getting closer to market. Missouri now says they can't be sold as "meat."

By Tamar Haspel | Updated Aug 31, 2018, 12:28pm EDT

f   SHARE



We don't yet know if consumers would buy a cheeseburger made in a vat. | Shutterstock

- The lab-grown startups and their supporters believe that their products can one day make cows, pigs, and chickens — and even fish — obsolete. Memphis Meats, Just, Finless Foods, SuperMeat (in Israel), and Mosa Meat (in the Netherlands) are a few of the companies working on it. Nonprofits like the Good Food Institute and New Harvest are working to help fund them.
- And they have a compelling argument. If you *could* grow enough meat in a lab to satisfy at least some of the world's meat demand, and if you could solve all the problems of animal welfare and environmental impact while you're at it, why on earth wouldn't you?

Is fungi-based protein the future of fake meat?



Photo: Emery Foods

01.16.2020 By Sam Danley



KANSAS CITY – The future of meat substitutes may not involve plants. While food manufacturers race to bring new soy, wheat and pea-based products to market, a handful of start-ups have been hard at work developing a new kind of meat alternative from fungi.

Two companies in the emerging space are gearing up to launch their first products this year. Emery Foods, Boulder, Colo., is working with culinary experts to perfect its steak alternative, which will

How it's made

Fungi-based meats are created mostly in the laboratory in a process that almost completely bypasses agriculture. The key component is mycelium, the vegetative part of a fungus consisting of branching, thread-like fibers.

Both companies cultivate their own mycelium in large tanks, adding sugar and other nutrients to help it grow. Once harvested, it is cut and flavored to resemble meat.

The process takes less time and uses less resources than conventional plant-based meat, said Tyler Huggins, co-founder and chief executive officer at Emery Foods.

“It’s all about how much protein you can produce based on the amount of resources you put in,” he said. “We have a higher conversion efficiency of raw input into protein than we’ve seen in any other natural system out there.”



WIRED VIDEOS



That's because this stuff was grown from cells in a lab.

SCIENCE

Lab-Grown Meat is Coming, Whether You Like it or Not

Food scientists and startups are trying to make meat more ethically appealing by growing it -- cell by cell -- in a lab instead of on a farm. Even some vegans support so-called "clean" meat. But can lab grown meat overcome the dreaded "yuck factor?"

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 - Will lab-grown meat cut the mustard? 20 Feb 12



Lab-grown meat: The future of food?

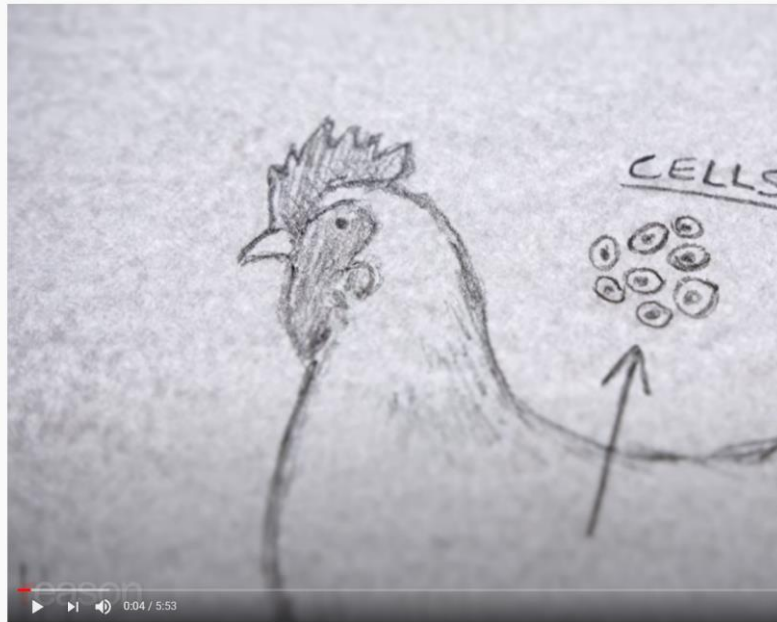
More and more companies are beginning to produce meat in labs as a way to combat such issues as greenhouse gases emissions, overfishing and animal welfare concerns.

BBC Click finds out more.

See more at [Click's website](#) and [@BBCClick](#).

07 Jul 2017

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Lab-Grown Meat Is Coming to Your Supermarket. Ranchers Are Fighting Back.

742,702 views • Apr 26, 2018

Cattlemen's Association petitioned the USDA to declare that "meat" and "beef" exclude not "slaughtered in the traditional manner."



Is lab-grown meat the future? | Sunday Times News

8,236 views • Feb 28, 2019

The Times and The Sunday Times 40.4K subscribers

Meat cultured from stem cells allows mass production of food without relying on traditional farming methods. The Sunday Times explores the pros and cons of this scientific development.

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HOW LAB-GROWN MEAT COULD SOLVE SHORTAGES, SAFETY ISSUES

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Yahoo! Finance

Lab-grown meat could solve shortages, safety issues

Duration: 06:33 3 days ago

Coronavirus pandemic shows the U.S. food supply chain is due for an upgrade, experts say

Published: April 20, 2020 at 8:21 a.m. ET

By Tonya Garcia and William Watts

14

Empty shelves at grocers don't signal a food shortage, but rather that the supply chain is too rigid



- Grocery store shoppers are being met with empty store shelves, not because there is a shortage of food, but because the nation's food supply chain is struggling to cope with either stockpiling by consumers, or a slump in demand from restaurants, and illness among workers due to the COVID-19 pandemic.
- Dairy farmers have been forced to dump milk in manure pits or otherwise dispose of it due to a precipitous drop in demand from schools, restaurants and other food service providers.
- At the same time, grocery stores have limited sales in an attempt to stave off hoarding and keep milk on the shelves.
- Around the country, beef, pork and chicken plants have closed since the beginning of the month as workers came down with COVID-19.
- With restaurants and schools closed, food-service demand has evaporated. Making the change from processing and packaging items for foodservice clients to preparing food for retail sales has proven to be a long and difficult process for food producers and manufacturers.
- "I think supply chain will look fundamentally different coming out of this," said Mark Allen, chief executive of The International Foodservice Distributors Association (IFDA).



Farm To Table: The Coronavirus And America's Food Supply Chain

April 15, 2020

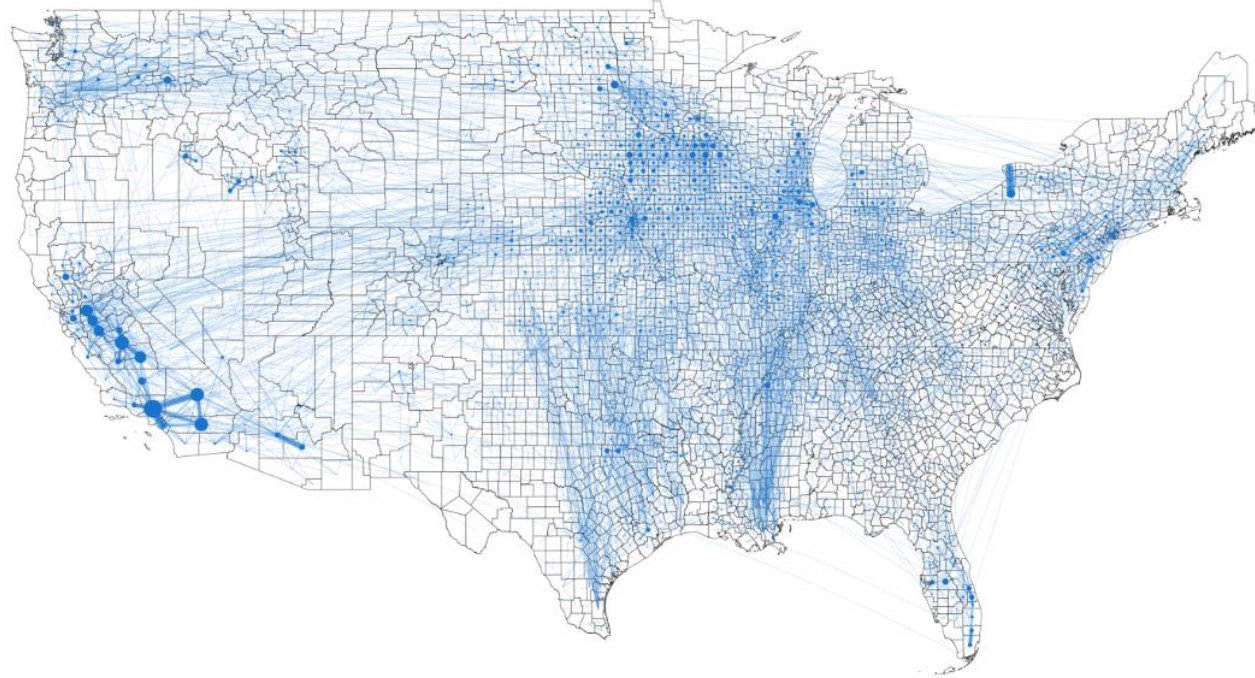
By [Grace Tatter](#) and [Meghna Chakrabarti](#)



Donated supplies wait for distribution at the Capital Area Food Bank on April 1, 2020 in Washington, DC. (ALEX EDELMAN/AFP via Getty Images)

Could the coronavirus pandemic disrupt the food supply chain? We look at how food gets to your store and where the supply line is vulnerable.

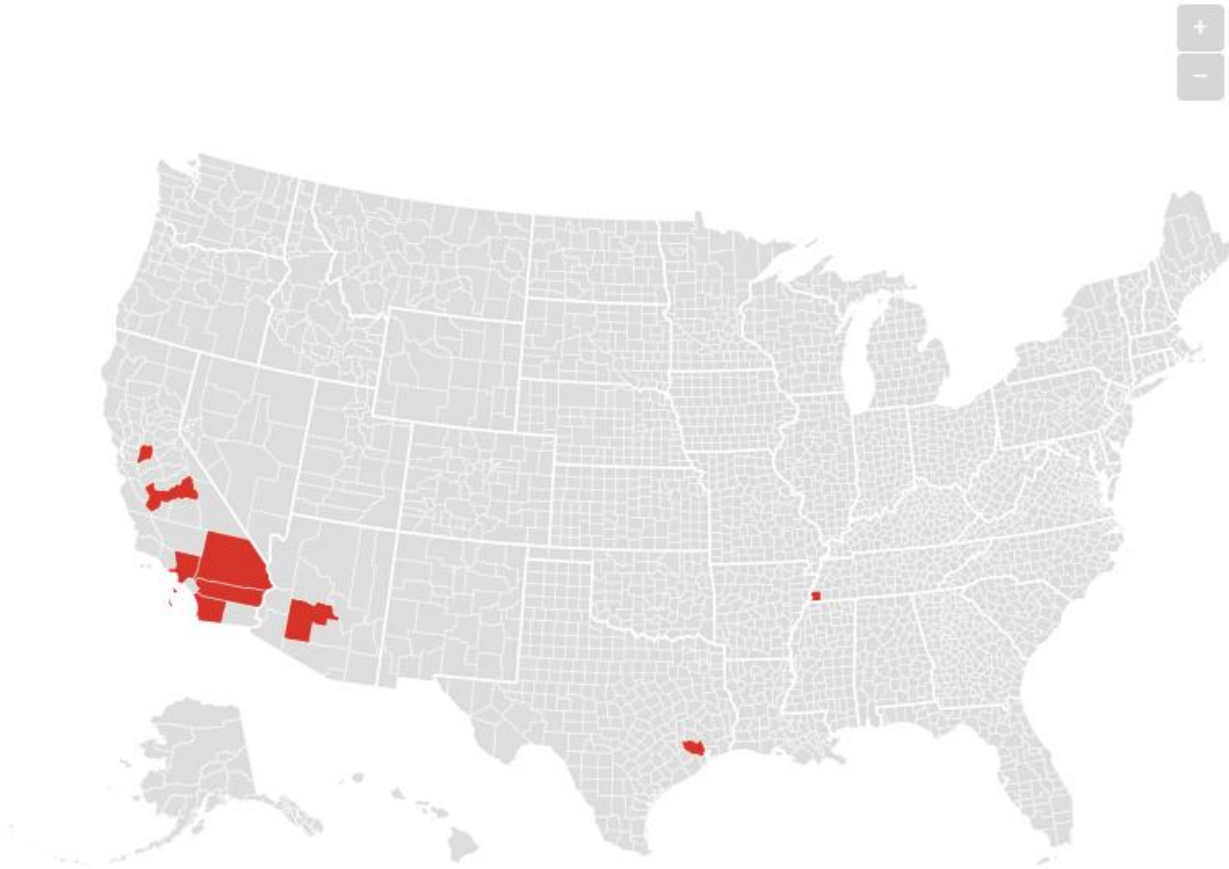
<https://www.wbur.org/onpoint/2020/04/15/coronavirus-food-grocery-supply-chain>



This map, courtesy of "Food flows between counties in the United States," shows America's food supply chain. The

Core counties for the US food supply

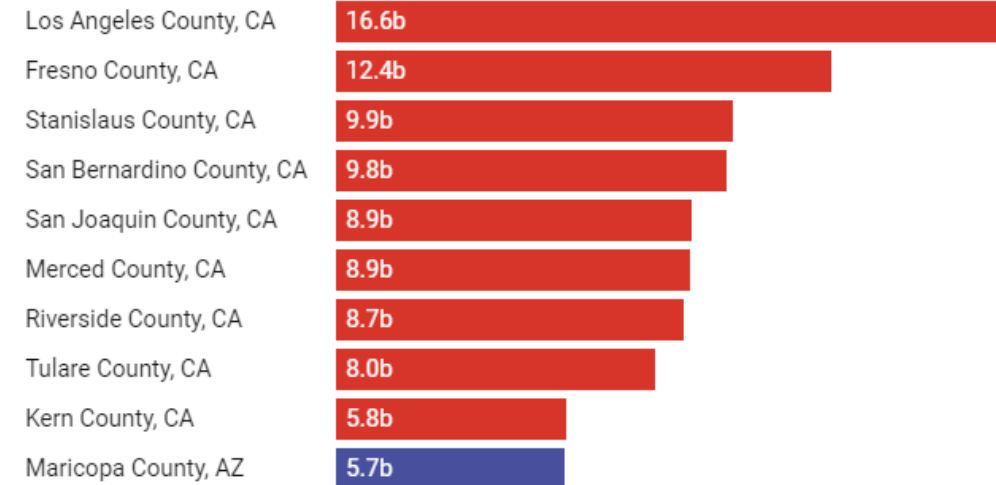
A study showed that these nine counties – mostly in California – are most central to the overall structure of the food supply network. A disruption to any of these counties may have ripple effects for the food supply chain of the entire country.



Who ships and receives the most food, kilograms per year

In 2012, Los Angeles County both shipped (outflows) and received (inflows) more kilograms of food than any other U.S. county. Other **California** counties ranked highly in both categories.

Outflow



Inflow

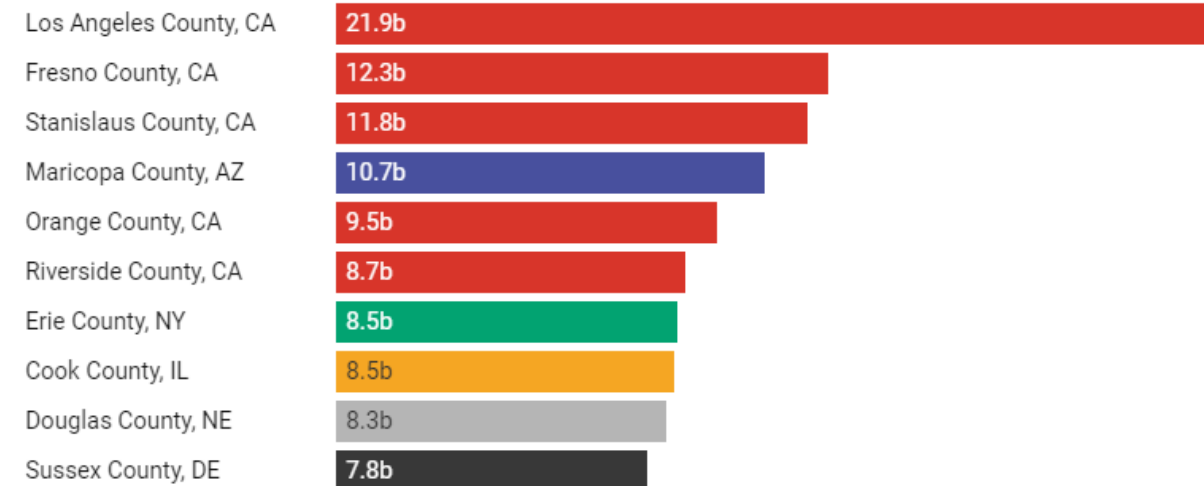


Chart: The Conversation, CC-BY-ND • Source: [Environmental Research Letters \(2019\)](#) • [Get the data](#)

Challenges in the Meat Processing Industry

Meat processing plants are closing due to coronavirus outbreaks, potentially leading to beef shortfalls

by Laura Reiley, Washington Post, Updated: April 16, 2020



THE CORONAVIRUS CRISIS

U.S. Meat Supply Is 'Perilously Close' To A Shortage, CEO Warns

April 13, 2020 · 10:53 AM ET



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Focus on Wor

COMMENTARY - AGRICULTURE INDUSTRY

Farmworkers deemed 'essential' but are left unprotected during coronavirus pandemic

BY MÓNICA RAMÍREZ AND MEENA HARRIS

April 3, 2020 3:00 PM CDT



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'Essential' but Unprotected, Farmworkers Live in Fear of Covid-19 but Keep Working

Already at high risk of disease and early death, workers are especially prone to respiratory illnesses, setting them up for the worst ravages of the coronavirus.



BY EVELYN NIEVES

APR 3, 2020



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LETTER TO LAWMAKERS: PROTECT FARMWORKERS DURING COVID-19

APRIL 1, 2020



The New York Civil Liberties Union joined Worker Justice Center of New York and other partners in calling on Governor Cuomo, Majority Leader Stewart-Cousins, and Speaker Heastie to ensure that farmworkers are protected during the coronavirus pandemic.

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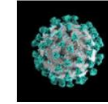
Spring

VALLEY VOICES

COVID-19 in the Central Valley: Let's not forget immigrant farm workers

BY MYRNA MARTINEZ NATERAS AND ROBIN MARIA DELUGAN

APRIL 03, 2020 06:30 AM, UPDATED APRIL 01, 2020 05:46 PM



SPECIAL SERIES
The Coronavirus Crisis



White House Seeks To Lower Farmworker Pay To Help Agriculture Industry

April 10, 2020 · 5:39 PM ET

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USDA releases temporary H-2A rule to hire farm workers

AGDAILY Reporters on April 16, 2020



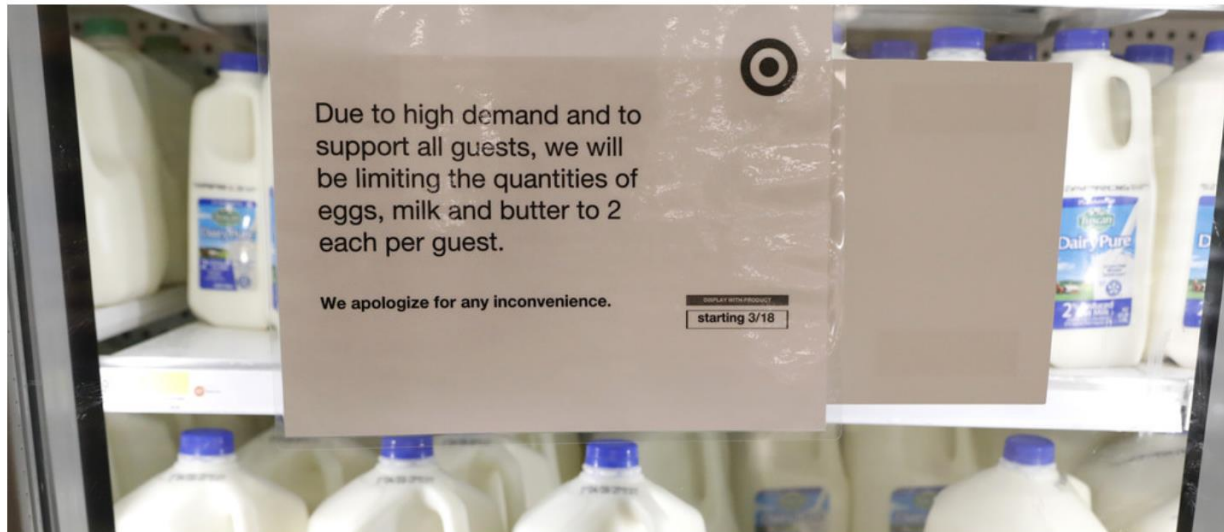
The [Department of Homeland Security](#), with the support of the USDA, has released a temporary final rule to change certain H-2A requirements to help U.S. agricultural employers avoid disruptions in lawful agricultural-related employment, protect the nation's food supply chain, and lessen impacts from the coronavirus public health emergency. These temporary flexibilities will not weaken or eliminate protections for U.S. workers.

Under this temporary final rule, an H-2A petitioner with a valid temporary labor certification who is concerned that workers will be unable to enter the country due to travel restrictions can start employing certain foreign workers who are currently in H-2A status in the United States immediately after United States Citizenship and Immigration Services receives the H-2A petition, but no earlier than the start date of employment listed on the petition. To take advantage of this time-limited change in regulatory requirements, the H-2A worker seeking to change employers must already be in the United States and in valid H-2A status. Additionally, USCIS is temporarily amending its regulations to protect the country's food supply chain by allowing H-2A workers to stay beyond the three-year maximum allowable period of stay in the United States. These temporary changes will encourage and facilitate the continued lawful employment of foreign temporary and seasonal agricultural workers during the COVID-19 national emergency. Agricultural employers should utilize this streamlined process if they are concerned with their ability to bring in the temporary workers who were previously authorized to work for the employer in H-2A classification. At no point is it acceptable for employers to hire illegal aliens.

“This Administration has determined that continued agricultural employment, currently threatened by the COVID-19 pandemic, is vital to maintaining and securing the country's critical food supply chain. The temporary changes announced by USCIS provide the needed stability during this unprecedented crisis,” said Acting Secretary of Homeland Security Chad F. Wolf.

Dumping Milk During the Pandemic

U.S. dairy farmers dump milk as pandemic upends food markets



Despite high demand, thousands of gallons of milk is going to waste.

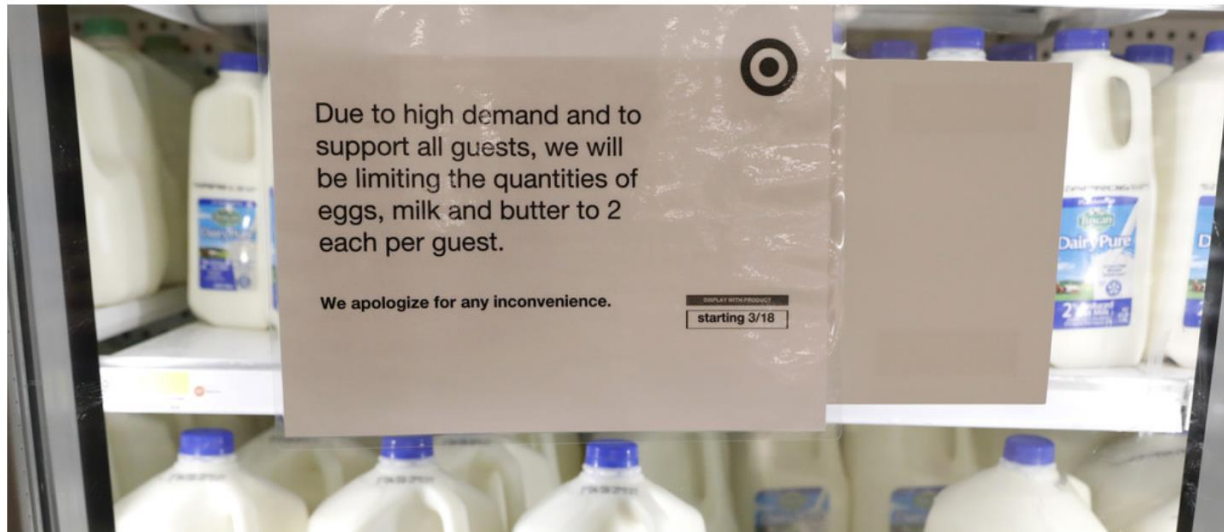
Image: REUTERS/Brendan McDermid

- The disruption to supply chains due to coronavirus is causing tonnes of fresh produce to be wasted in the U.S.
- Despite food shortages and high demand for dairy produce, the Dairy Farmers of America has had to ask farmers to dump their milk.
- The disruption to supply chains means that farmers are unable to get their produce to market.
- The short shelf life and perishable nature of dairy products, means the effects of coronavirus have hit them harder, and faster, than other agricultural industries.

Dairy farmer Jason Leedle felt his stomach churn when he got the call on Tuesday evening. “We need you to start dumping your milk,” said his contact from Dairy Farmers of America (DFA), the largest U.S. dairy cooperative.

Dairy Continues to Struggle

U.S. dairy farmers dump milk as pandemic upends food markets



Despite high demand, thousands of gallons of milk is going to waste.

Image: REUTERS/Brendan McDermid

The dairy industry's woes signal broader problems in the global food supply chain, according to farmers, agricultural economists and food distributors. The dairy business got hit harder and earlier than other agricultural commodities because the products are highly perishable - milk can't be frozen, like meat, or stuck in a silo, like grain.

Other food sectors, however, are also seeing disruptions worldwide as travel restrictions are limiting the workforce needed to plant, harvest and distribute fruits and vegetables, and a shortage of refrigerated containers and truck drivers have slowed the shipment of staples such as meat and grains in some places.

Dairy Continues to Struggle



The situation has been highly emotional for the dairy farmer involved.

Image: VIA REUTERS

Dairy cooperatives oversee milk marketing for all of their members and handle shipping logistics. Leedle said he will be paid for the milk he and other farmers are dumping, but the payments for all cooperative members will take a hit from the lost revenues.

Land O'Lakes Inc., another cooperative, has also warned its members they may have to dump milk. Another cooperative, Wisconsin-based Foremost Farms USA, was even more grim.

“Now is the time to consider a little extra culling of your herds,” the cooperative said in a March 17 letter to members. “We believe the ability to pick up and process your milk could be compromised.”

Dairy Struggles



The situation has been highly emotional for the dairy farmer involved.

Image: VIA REUTERS

Another major problem: The sudden shift in demand from restaurants - now closing en masse - to grocery stores creates severe logistical challenges. Suppliers struggle to make the shift from wholesale packaging for restaurants to preparing retail products for stores. “About half of U.S. consumers’ food budget was spent on restaurants, and we’ve shut that spigot off,” said Matt Gould, editor at trade publication Dairy & Food Market Analyst.

It would take millions of dollars, for instance, to install new equipment to switch a plant from making one type of cheese - such as barrel cheese used to make processed slices for fast-food restaurants - to producing cheddar wedges for grocers, said dairy analysts. Even switching from bagging 10 lb bulk bags of shredded cheddar for food service to 8 oz bags for retail stores would require costly new packaging robots and labeling machinery.

WHAT 'S NEXT?

A Few Resources IRRC Has

COVID-19 Pandemic- ID&R Related Resources



This page has been created to help keep recruiters up to date on COVID-19 Resources and New Articles.

CDC Resources

in Multiple Languages about COVID-19- these resources can be shared with families.

National Farmworker Health

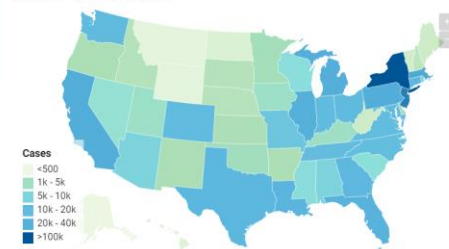
Resources for Farmworkers about COVID-19

Interactive COVID-19 Tracker by the New York Times

Coronavirus Education Materials in Indigenous Languages, Dialects and Spanish

Recent Ag Trends Email updates related to COVID-19
April Newsletter- includes webinar information and resources to help provide services to students as well as interactive websites recruiters can share.

COVID-19 in the U.S.



Map: LiveScience - Source: JHU - Embed - Created with Datawrapper

Updated 4-20-20

Agriculture Related Articles

The Fresno Bee: Is protecting farmworkers a national security issue? Fresno-area farmers say yes

Protecting farmworkers during a health crisis is an issue of national security, according to farmers, industry advocates and public health professors who say outbreaks on the industry's front lines could jeopardize the nation's food supply chain.

Eater Seattle: Farmworkers Unions Sue Washington State Over Lack of Adequate COVID-19 Protections

Upcoming Webinars



Archived Webinars

To Migrate or Not- Summary of IRRC Lit Review from 2017

Recording: Hemp Production Update Presentation Files

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Please Mark Your Calendar!

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We have space for 500 people on each webinar always record our webinars and will archive them serve let us know!

Ag Trends Before and After

During this webinar we will share some interesting cover what was happening right before COVID-19 some farm worker updates also. Keeping up with happening with various agriculture commodities : agribusiness are facing.

Tue, Apr 21, 2020 8:00 (PST) 9:00 (M

IRRC Training Toolkit