

We're going to the movies!



Credit: BFA / Warner Bros

Alien Film

Rom-Com





Preview

Scene 1: Workforce Flashback

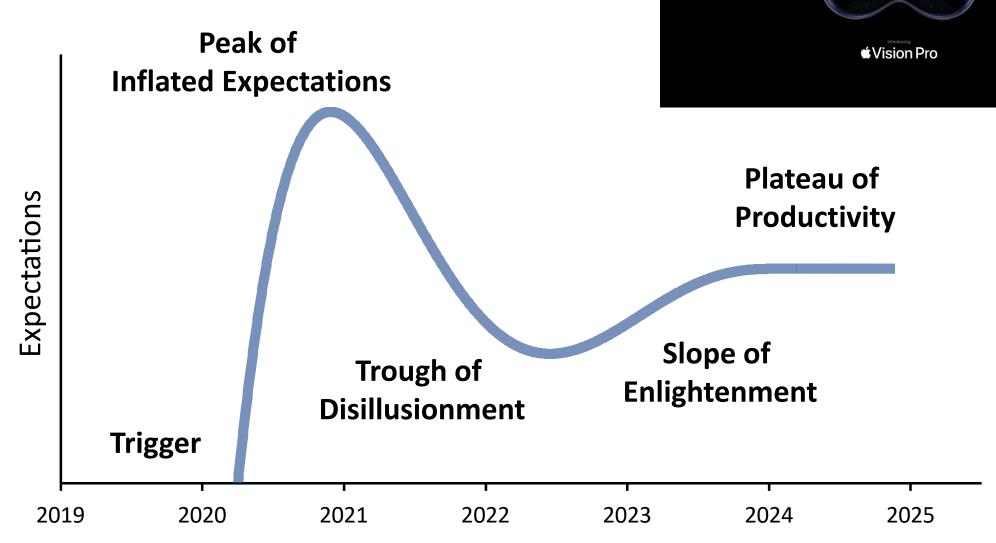
Scene 2: Workforce Myth Busting

Scene 3: Something Must Die

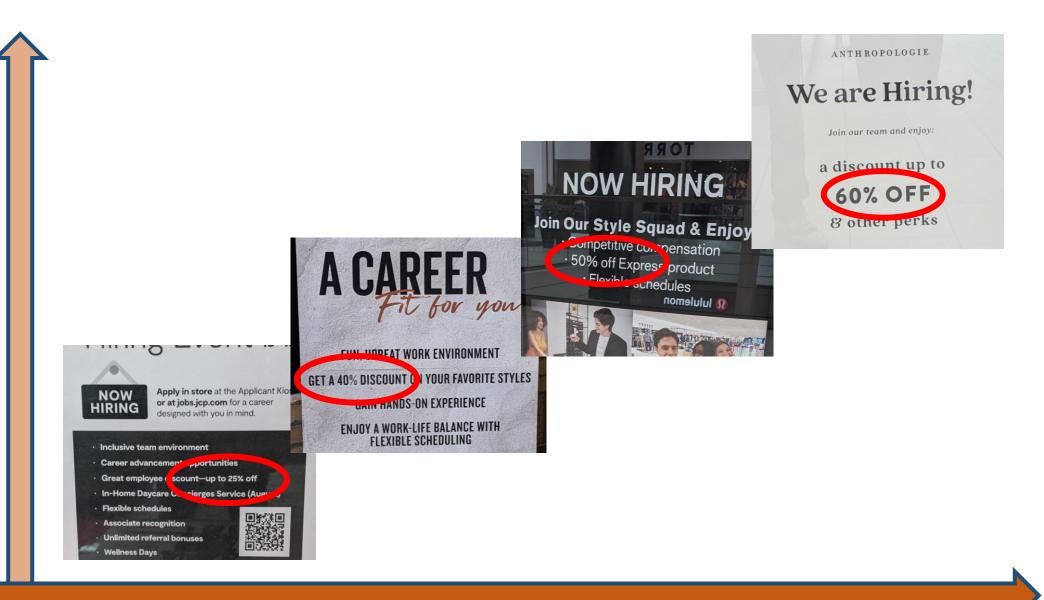
Scene 4: The New Workforce Norm

Scene 5: Failure is Still Not an Option

Gartner Hype Cycle



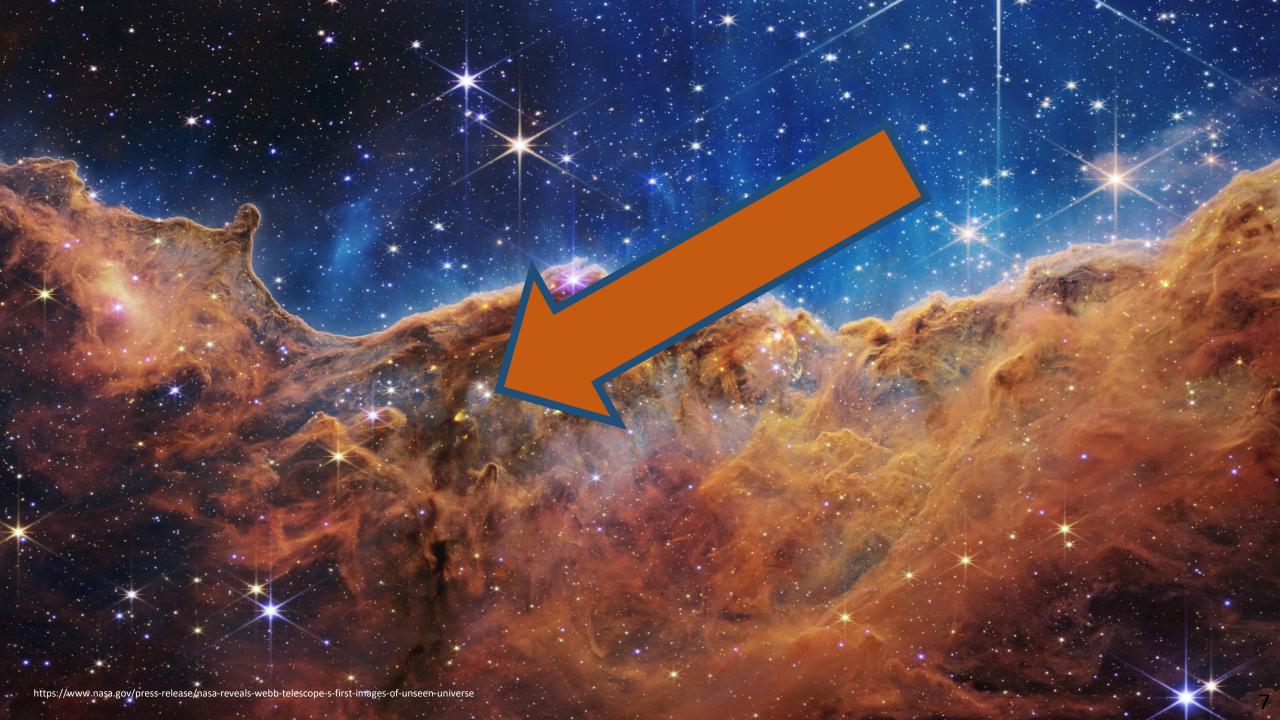
https://www.apple.com/apple-vision-pro/?







TIME



Midwest Workforce Challenges and Solutions

A Midwest Docudrama

shown at the

2024 RSAI Annual Meeting

Written by

RON COX

© 2024 Midwest Workforce Strategies, LLC



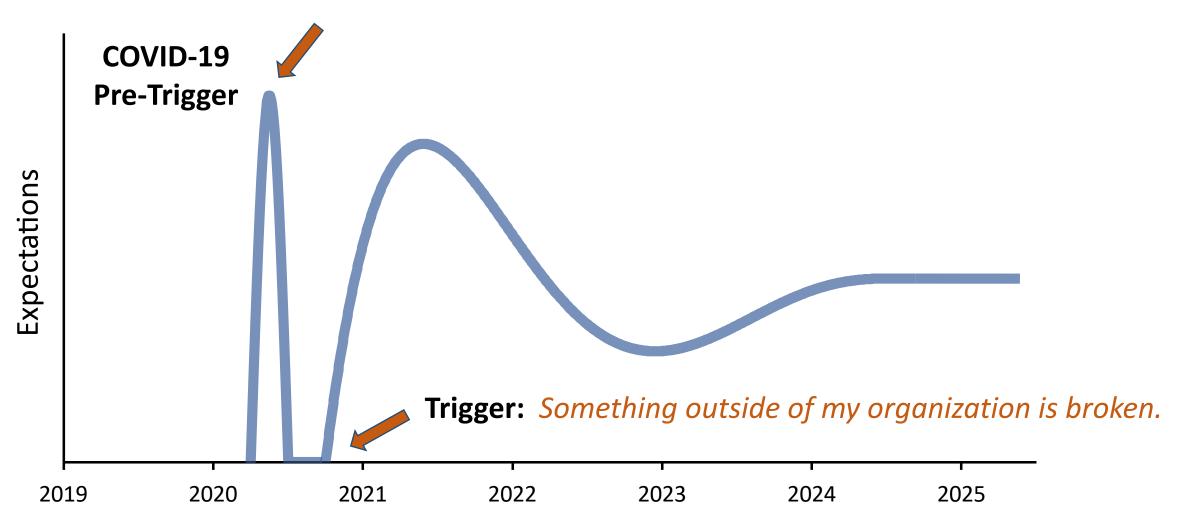
I'm trying to free your mind, Neo.

But I can only show you the door.

You're the one that has to walk through it.

- Morpheus

Workforce Hype Cycle



Dedication

To my first mentor, who showed me what I could see if I would turn 90 degrees.

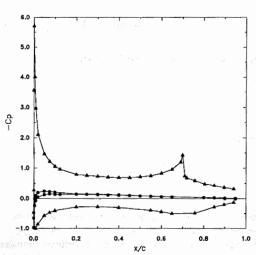


Figure 2. Trailing-edge flap on a NACA 0006 airfoil (M=0.15, α =0.1°, R_o=4.5x10⁶, δ _{TEF}=0°/20°).²

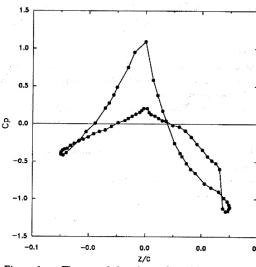


Figure 1. Thrust and drag loops for a NACA0012 airfoil (M=0.8, α =2.3°, R_e =9x10⁶).¹

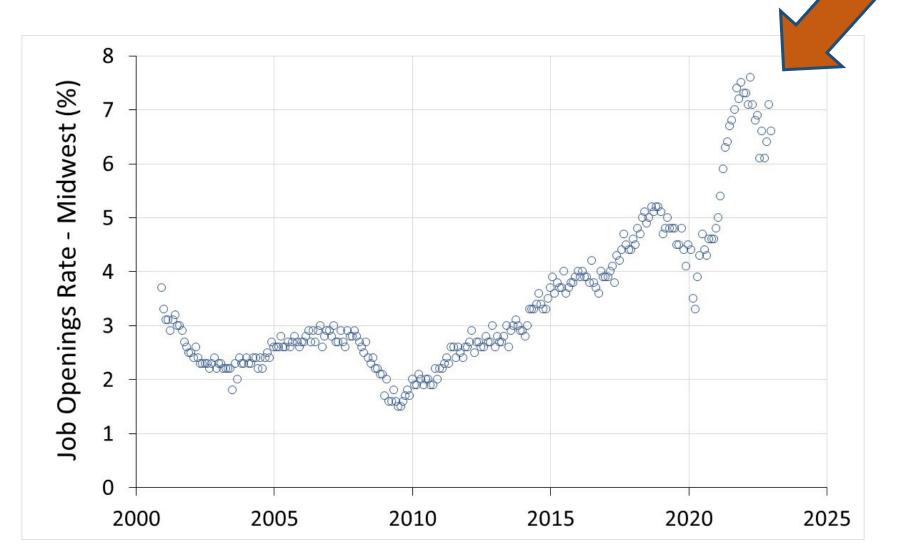
Introduction

"It was the best of times,



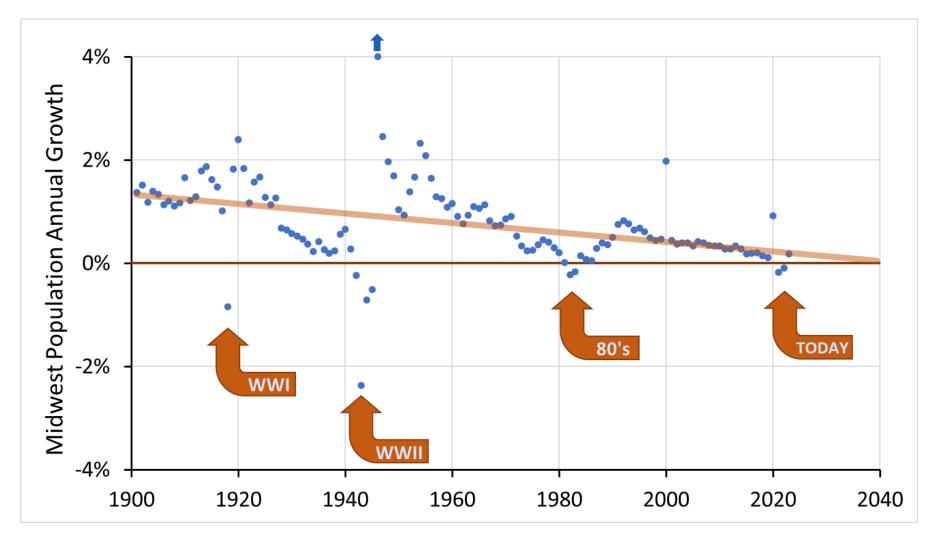
Charles Dickens, A Tale of Two Cities, www.cdc.gov

Job Openings



Data source: www.stlouisfed.org

It was the worst of times ...



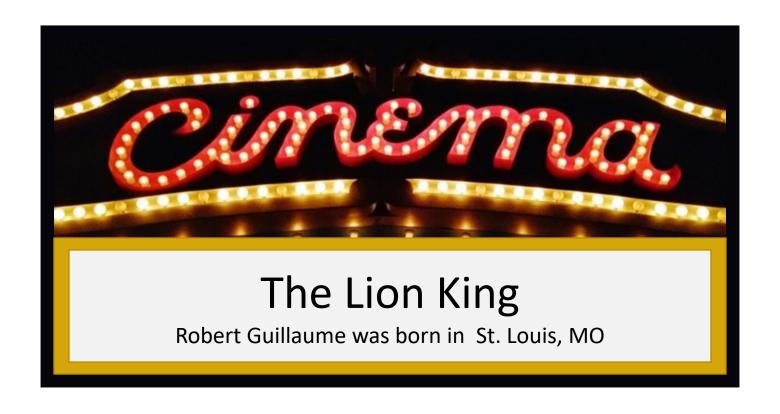
Charles Dickens, A Tale of Two Cities

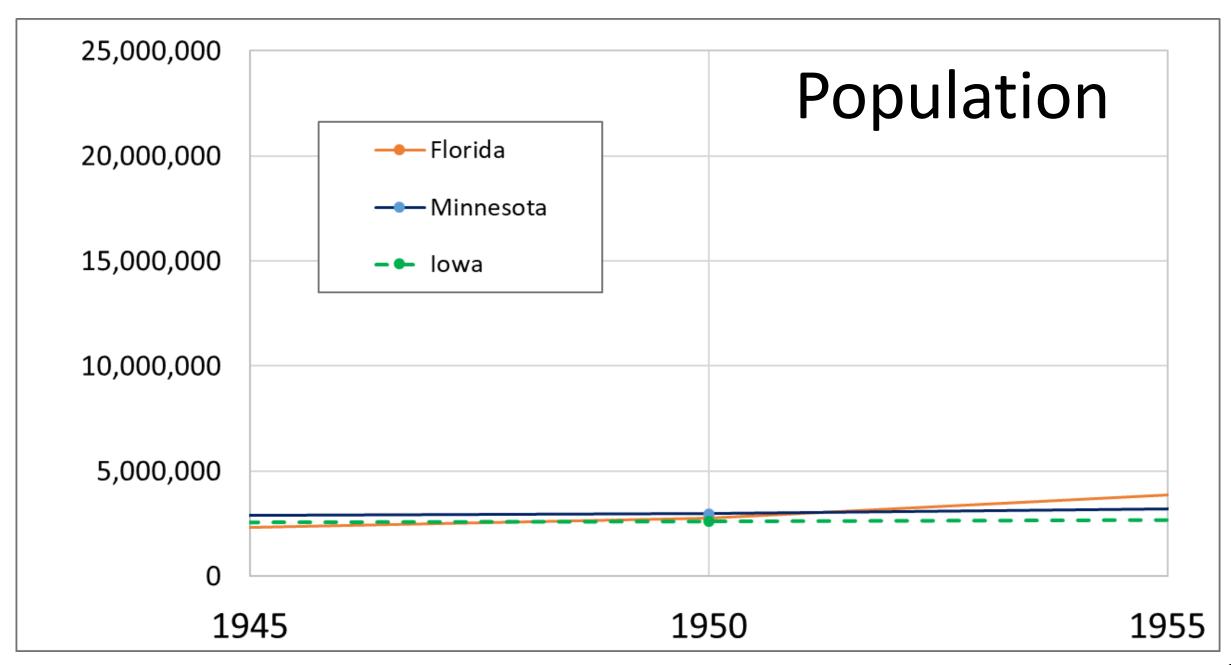


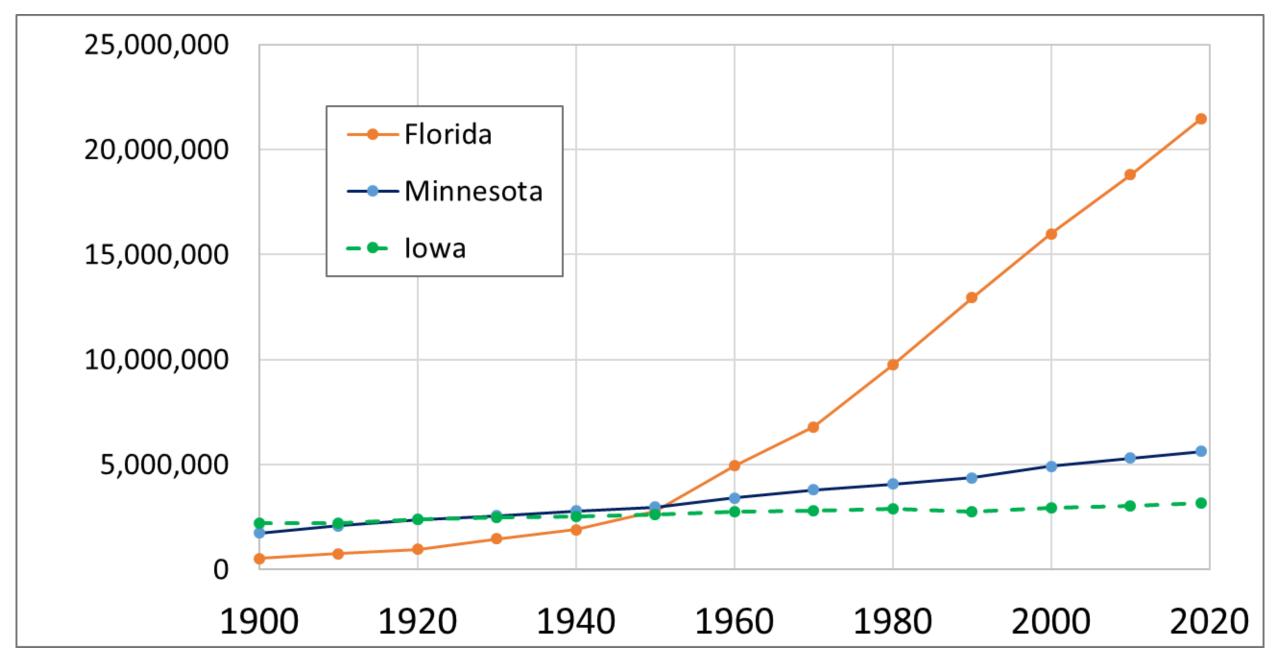
... It really was the worst of times!

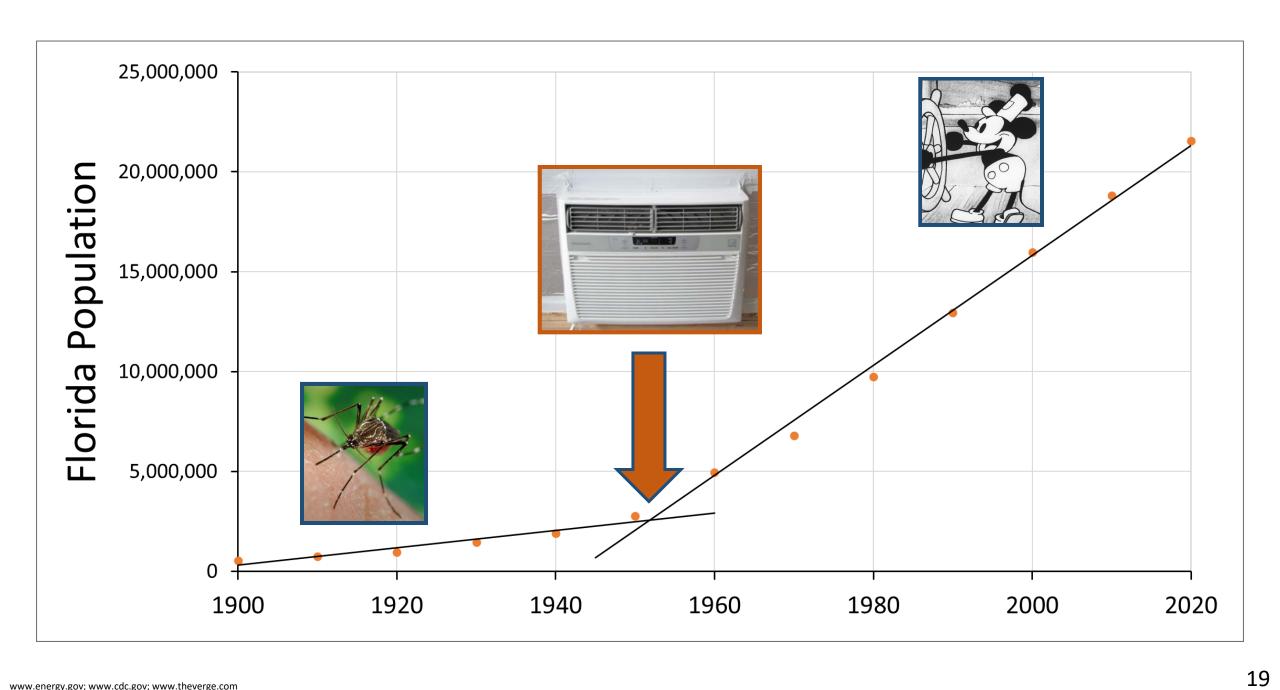
"Oh yes, the past can hurt. But you can either run from it, or learn from it."

- Rafiki



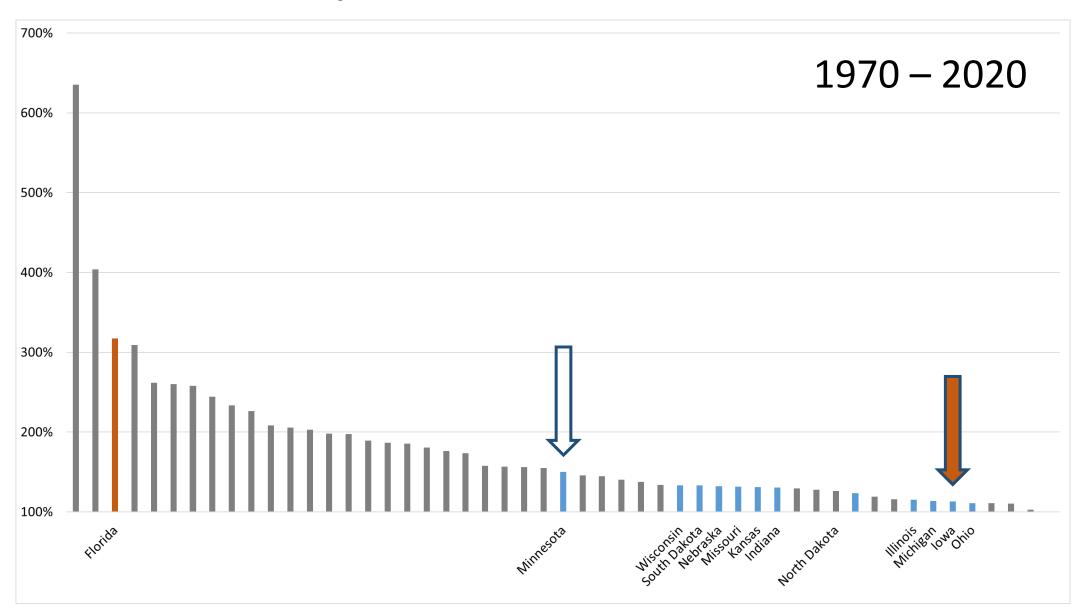








50 Years of Population Growth



What's going on with Labor?

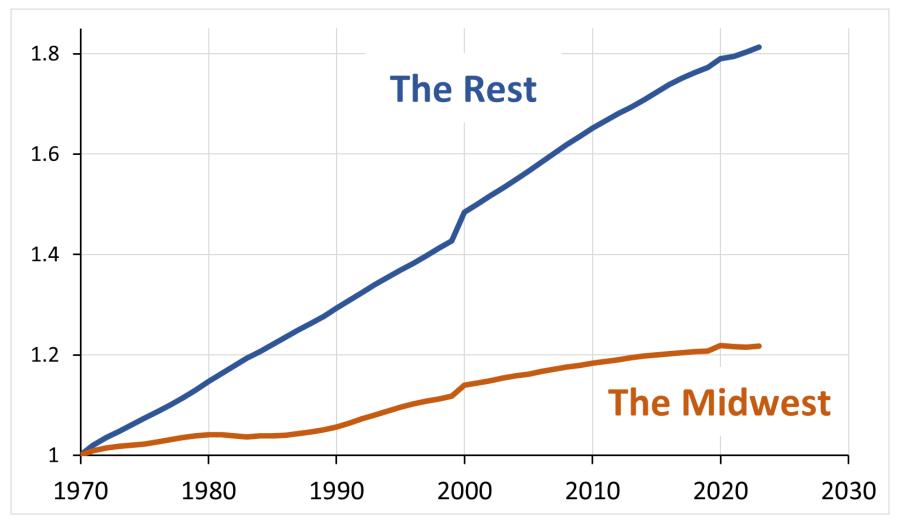
L1: Population

L2: Unemployment

L3: Labor Force Participation Rate

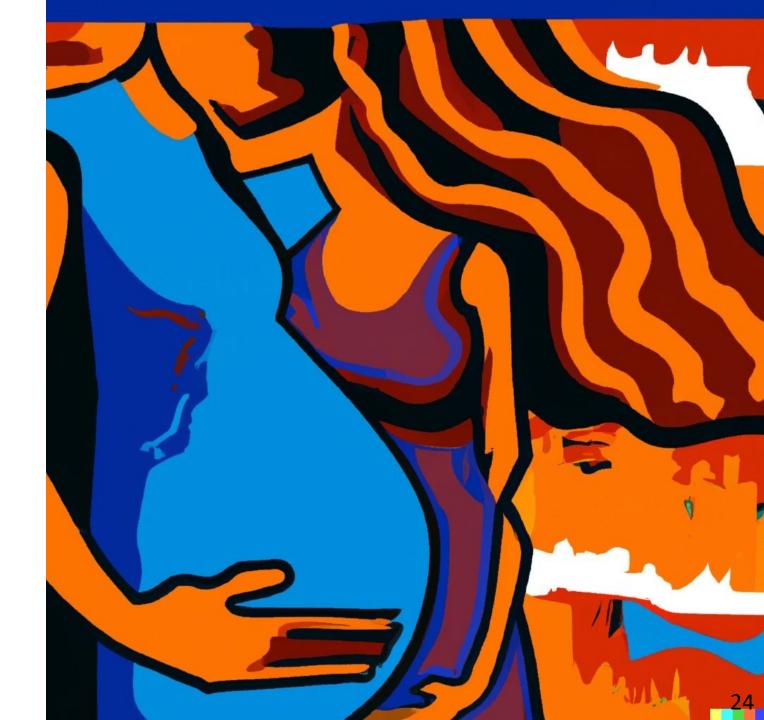
L4: Workforce Patches

P1: Slow Population Growth

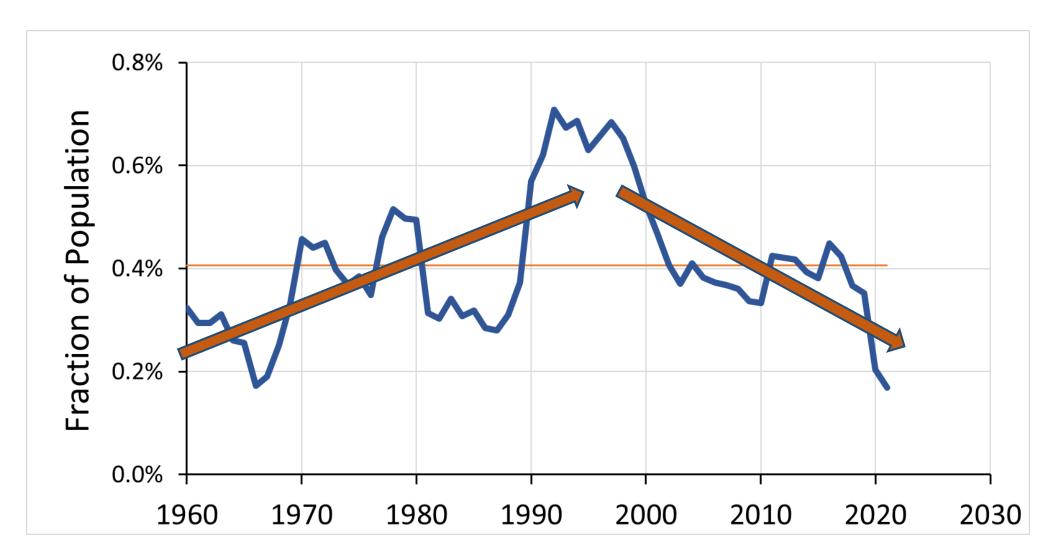


Data source: www.stlouisfed.org.

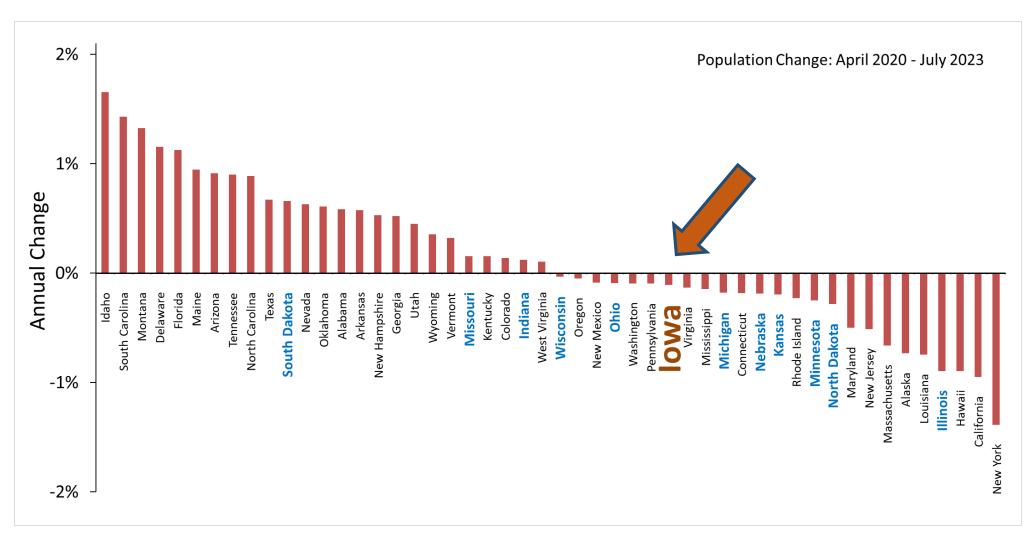
L1.A: Babies



L1.B: U.S. Net Migration Decline

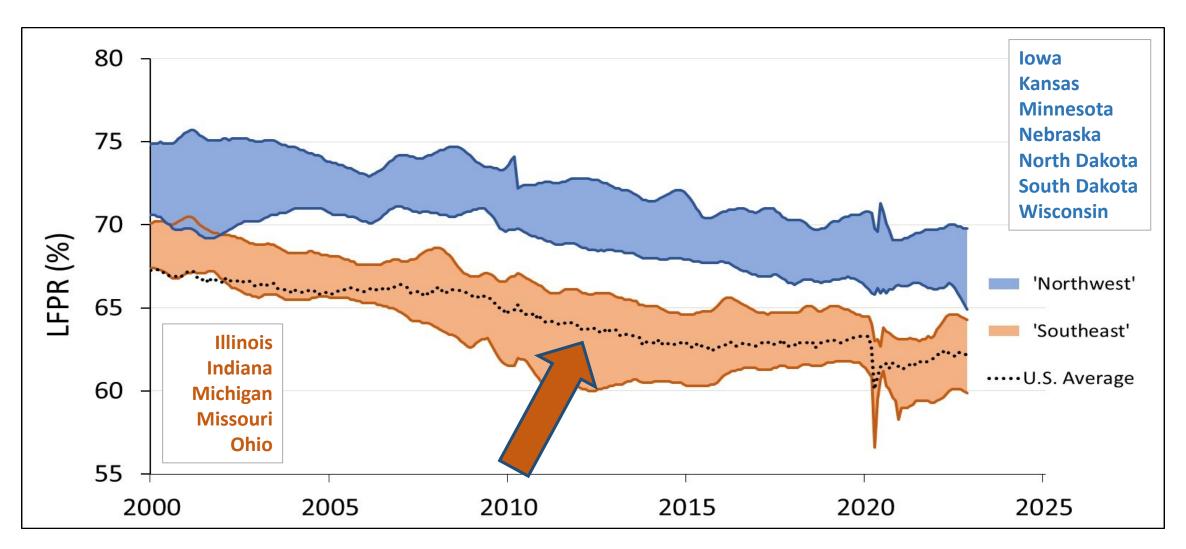


L1.C: Domestic Out-Migration



26

L2: High Labor Force Participation Rate



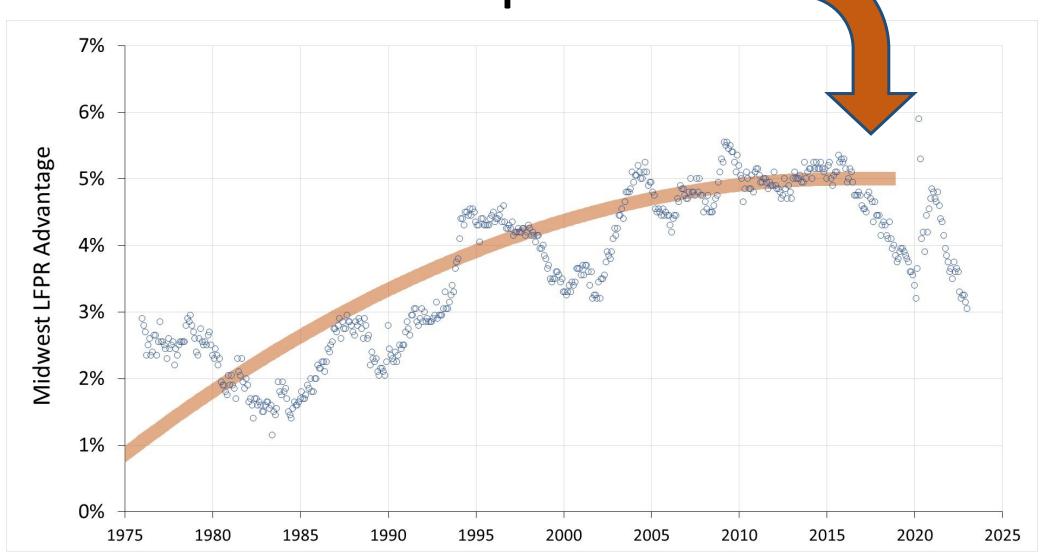
27

L3: Low Unemployment

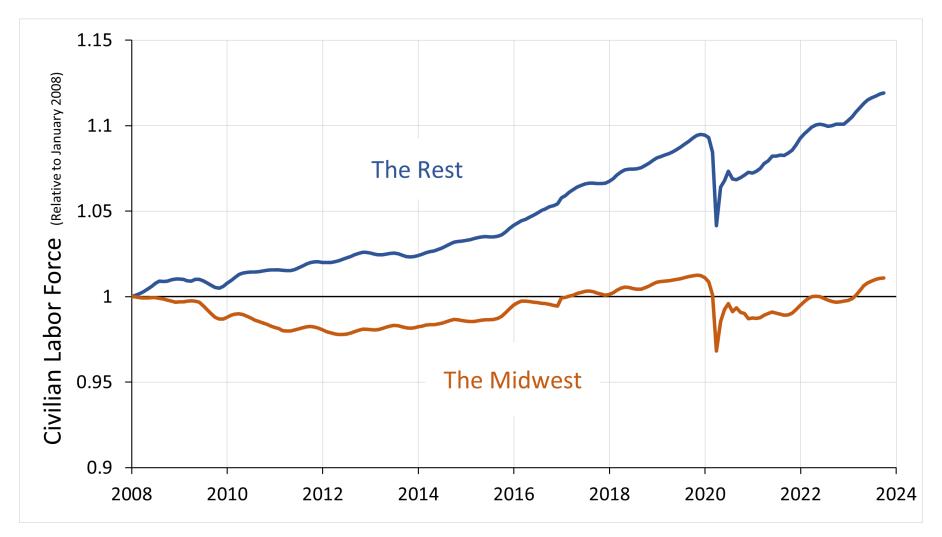
1	Nebraska	3.2%
2	North Dakota	3.3%
3	South Dakota	3.4%
4	lowa	4.0%
5	Vermont	4.3%
6	New Hampshire	4.3%
7	Utah	4.3%
8	Virginia	4.4%
9	Minnesota	4.5%
10	Hawaii	4.5%
11	Wyoming	4.6%
12	Kansas	4.7%
13	Oklahoma	4.8%
14	Colorado	4.9%
15	Delaware	5.0%
16	Wisconsin	5.0%



L4: We are out of patches



The Result?



Data source: www.stlouisfed.org

"Ghost of the Future, I fear you more than any spectre I have seen."

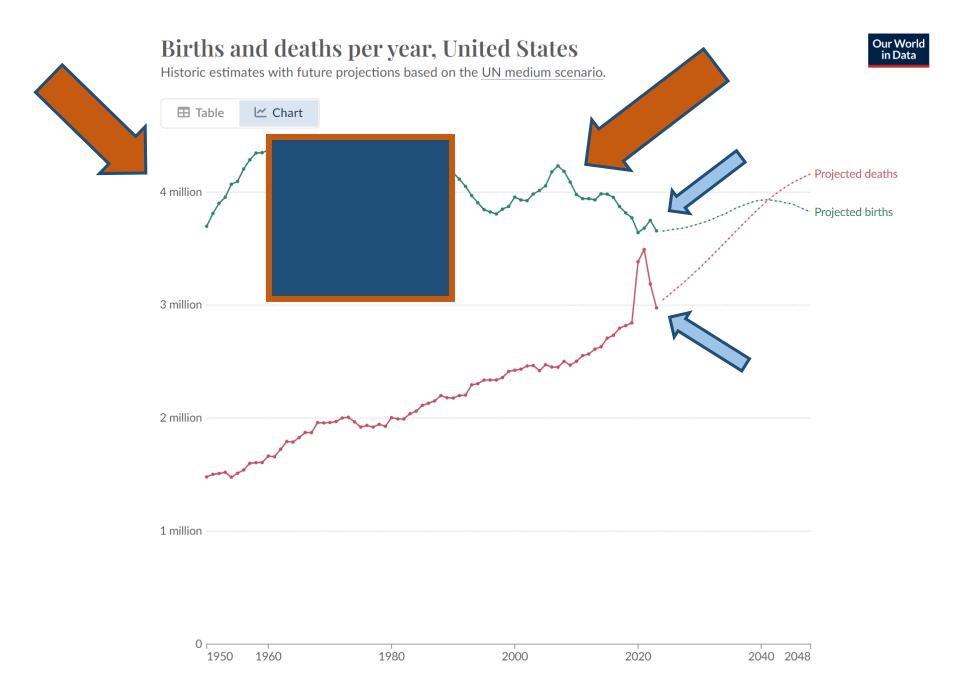
- Jim Carrey



It gets worse.
It gets much worse...

L1.A: Babies

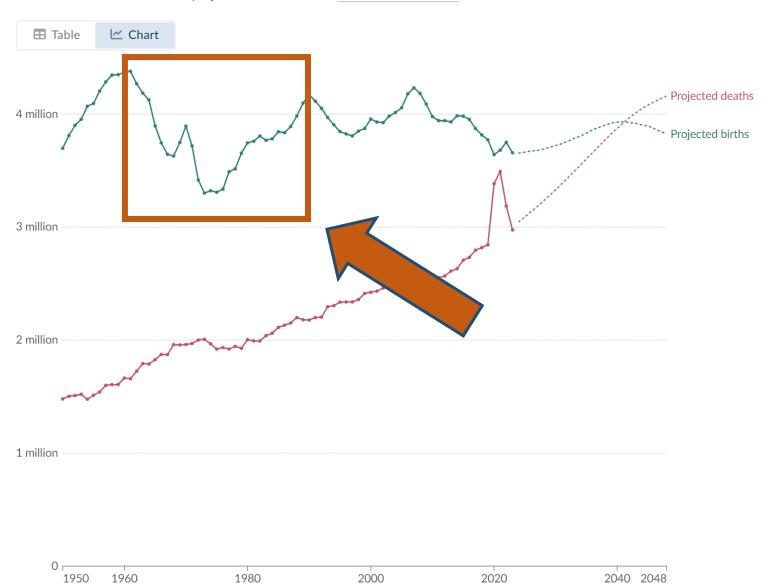




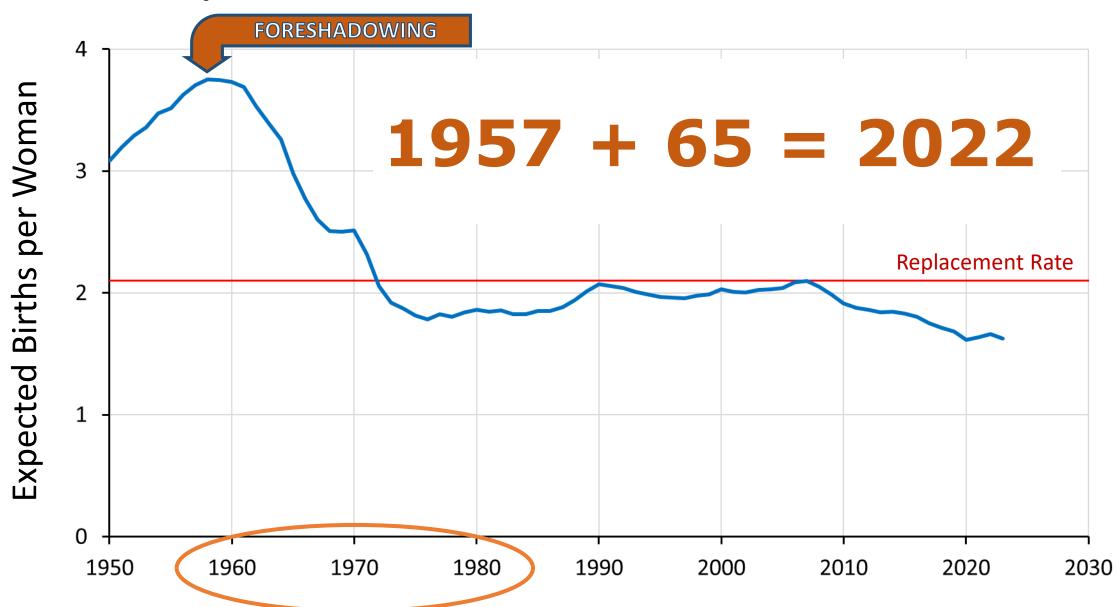
Births and deaths per year, United States



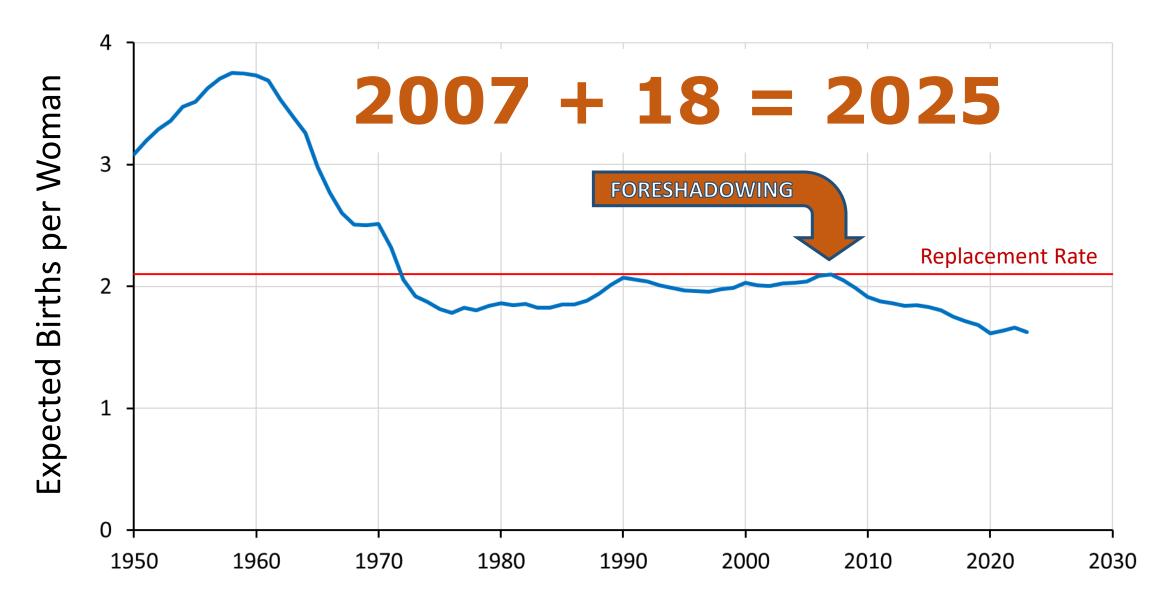
Historic estimates with future projections based on the UN medium scenario.



Births per Woman

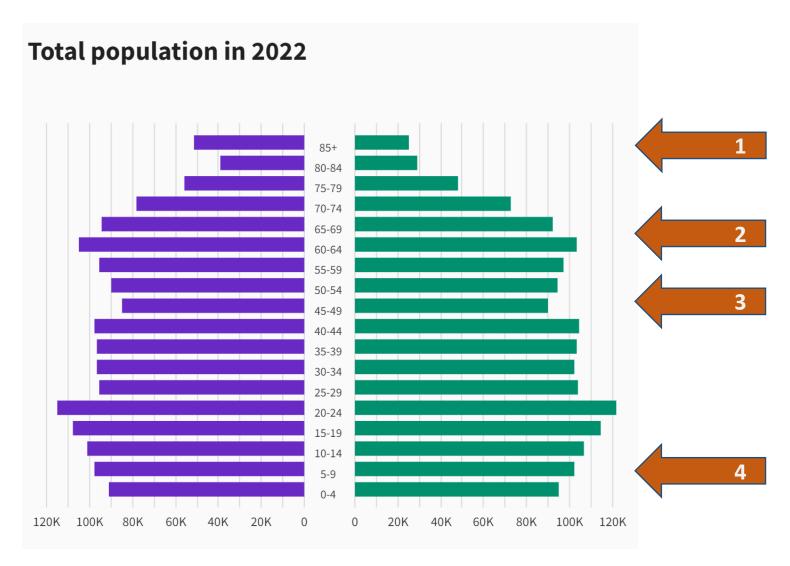


35

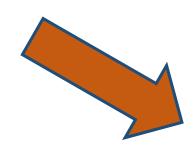


36

Iowa



The Workforce Villain is Alive and Well.





Source: OpenAl

"No one has ever done anything like this.

- Trinity

"That's why it's going to work."

- Neo



A Turn 90° Look at Workforce



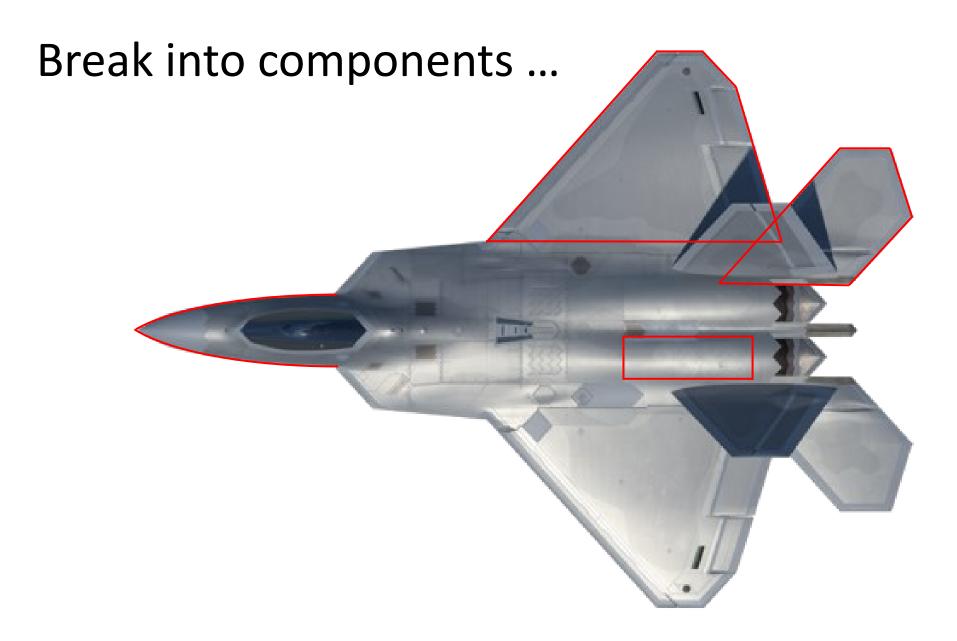
Source: OpenAl

"I'm going to have to science the s*** out of this."

- Matt Damon

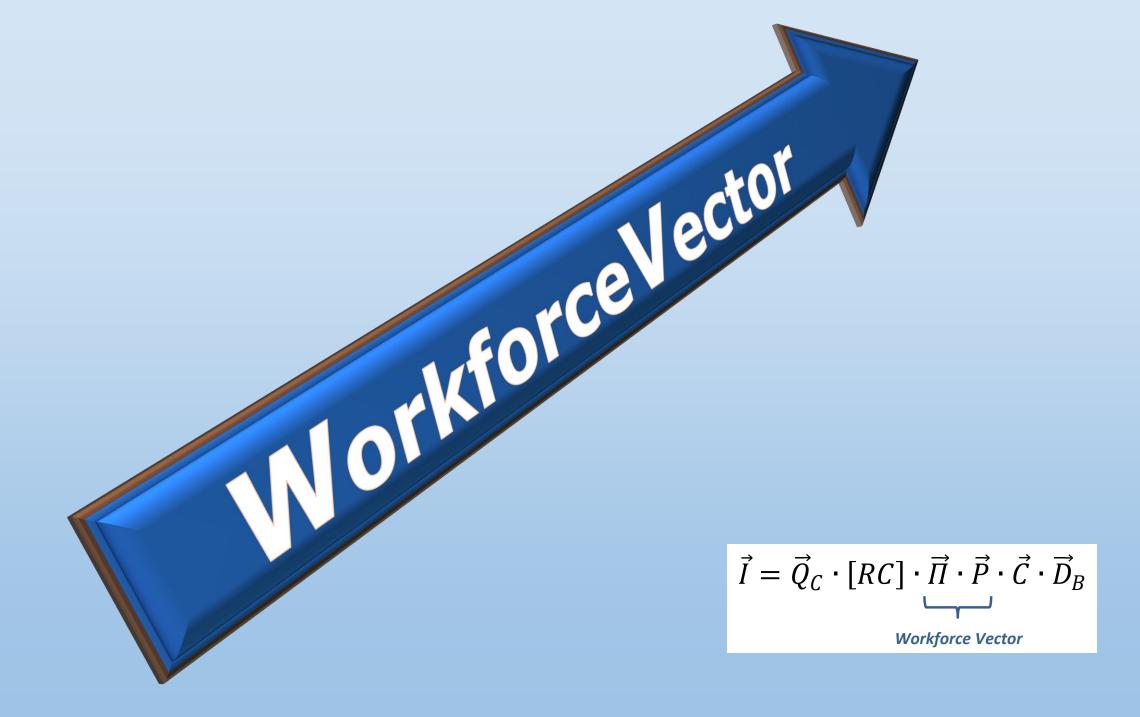






Break Workforce into ~40 Elements

Employee Output	Retention	Not in the Labor Force	Employed Elsewhere	Future Employees
1.1 Continuous Improvement	2.1 Employee Retention	3.1 Students 14-15	4.1 In-commuters	5.1 Apprenticeships
1.2 Automation - Other	2.2 Layoffs	3.2 Non-students 16-19	4.2 Out-commuters	5.2 Internships
1.3 Automation - Robotics	2.3 Out-migration	3.3 Students 16-19	4.3 Remote Workers	5.3 Youth Programs
		3.4 Females 20-54		
		3.5 Males 20-54	4.4 In-state Migration	
		3.6 Individuals 55-74	4.5 Out-of-state Migration	
			4.6 International Migration	
		3.7 Females with Children <6	4.7 Refugees	
		3.8 Foreign Born – Naturalized Citizen		
		3.9 Foreign Born – Not a U.S. Citizen	4.8 Contract/ Temp Workers	
		3.10 Individuals with a Disability	4.9 Part-time to FT Employees	
		3.11 Individuals Experiencing Homelessness	4.10 Poaching	
		3.12 Individuals with Income < Poverty Level	4.11 Second-job Employees	
		3.13 Individuals Recently Incarcerated	4.12 Self-employed Individuals	
		3.14 Latinos		
		3.15 Part-time Employees		
		3.16 Unemployed*		
		3.17 Veterans		
		3.18 Volunteers		



Laser-Focused Workforce Strategies

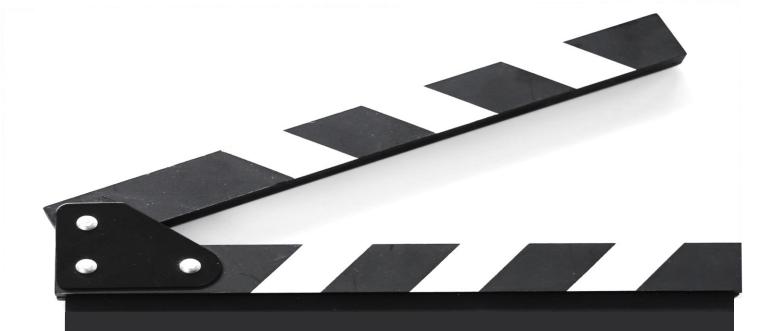
Minnesota locations will offer newcomers on-the-job training, wages of \$16 to \$22 an hour, health benefits, English language classes, foot-washing stations, quiet rooms that can be used to pray, and floating holidays so employees can choose when they need to take off.

"You take the blue pill ... [you] believe whatever you want to believe.

You take the red pill ... I show you how deep the rabbit hole goes."

- Morpheus





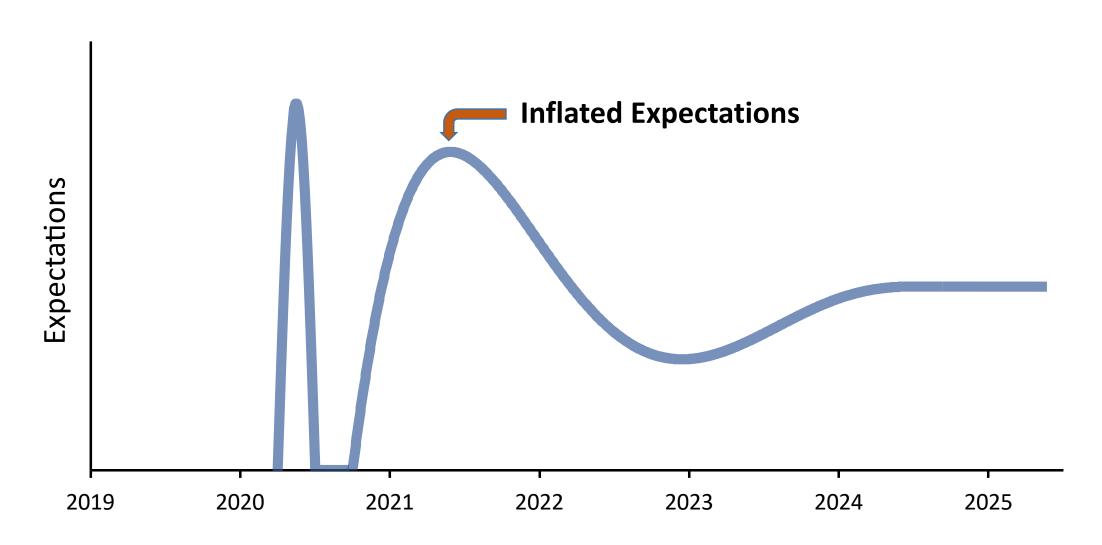
Scene 2: Inflated Expectations

Workforce Myth Busting

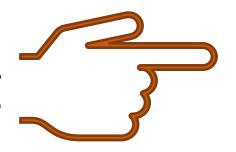
"You can't handle the truth."

- Jack Nicholson

Workforce Hype Cycle

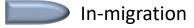


Hype, Quick Fixes, & Finger Pointing



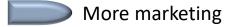




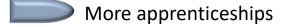


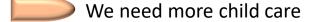












Increase in COVID deaths

Hire more 14-15-year-olds

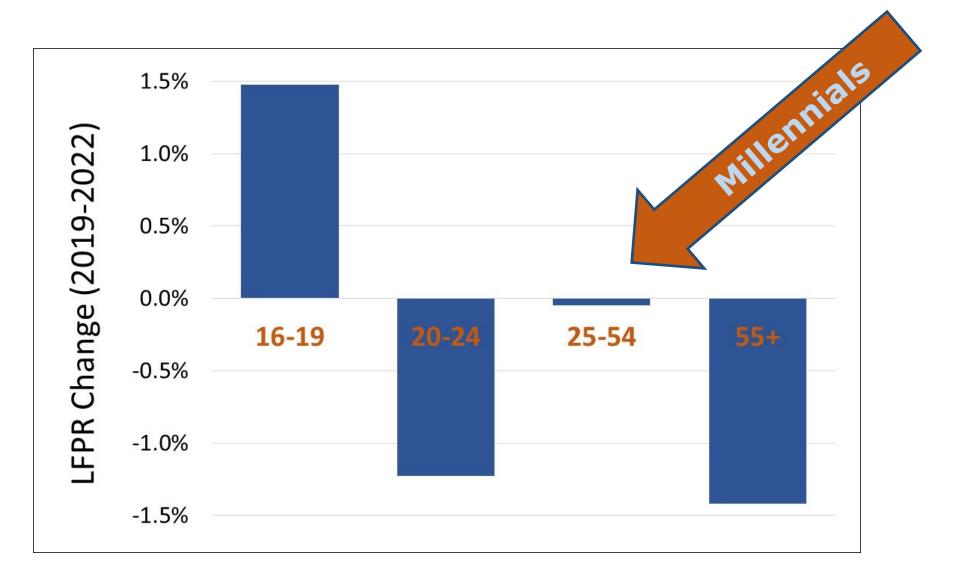
Fewer kids going to college

Cut unemployment benefits

Increase in company start-ups

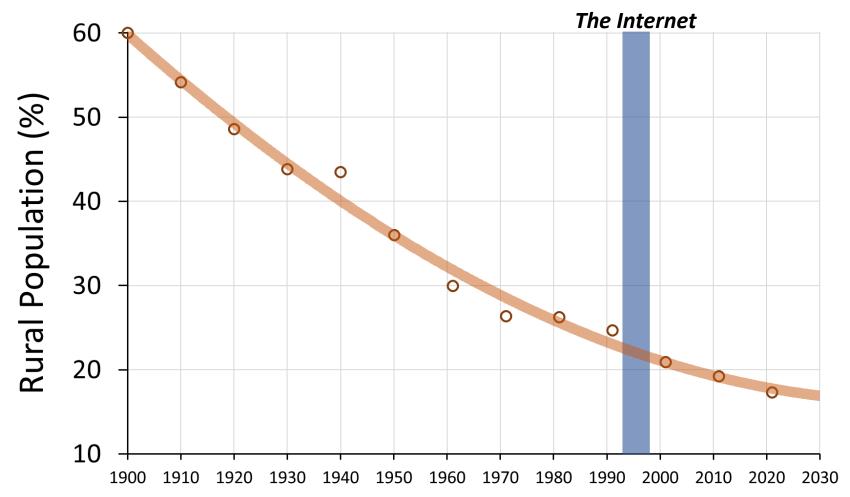
It's the Democrats, it's the Republicans, and many more ...

It's the Millennials!

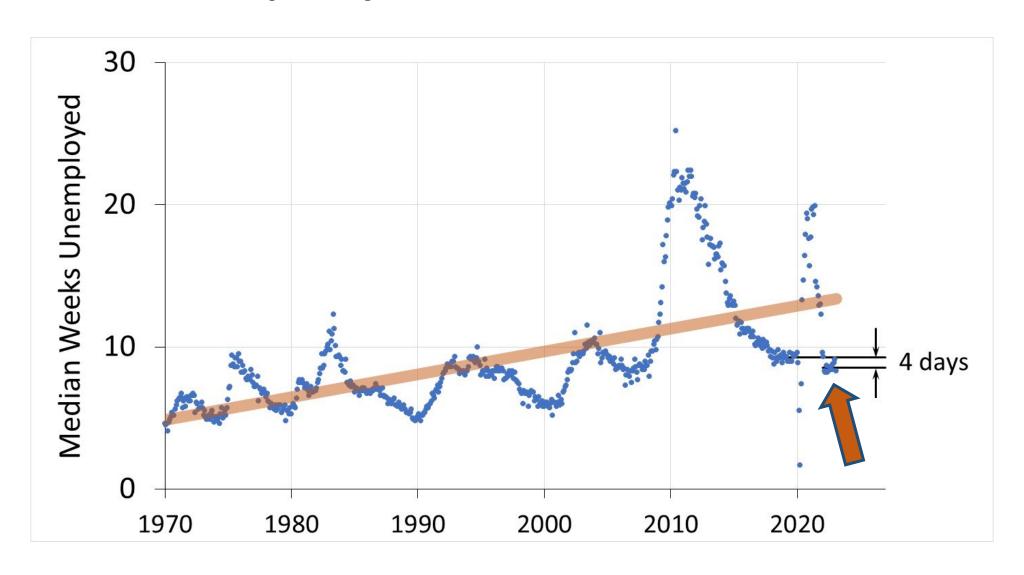


We need rural Internet!

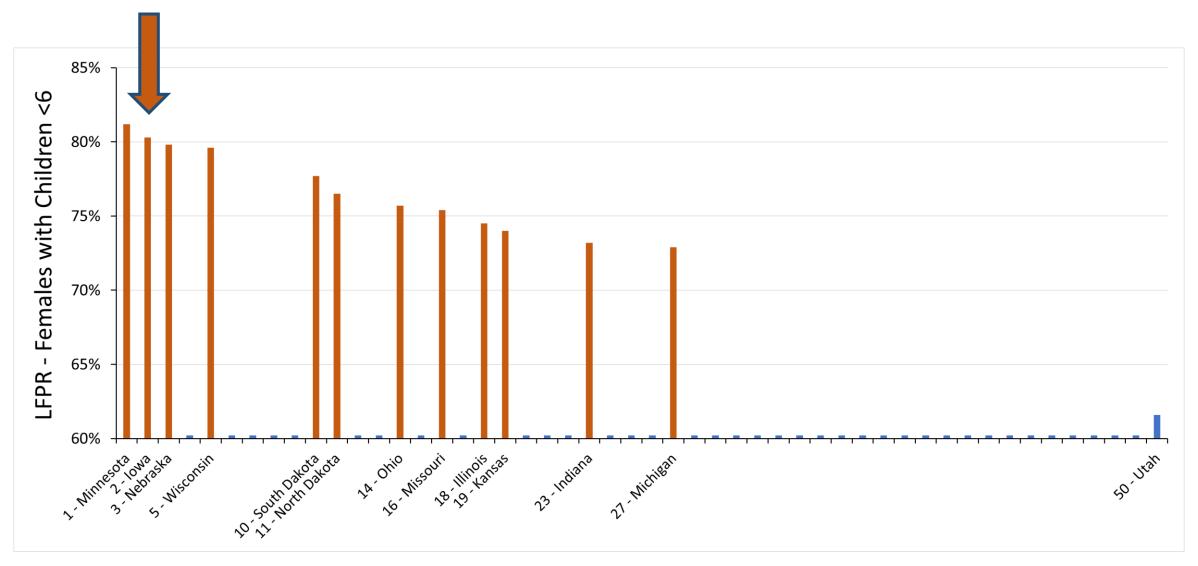




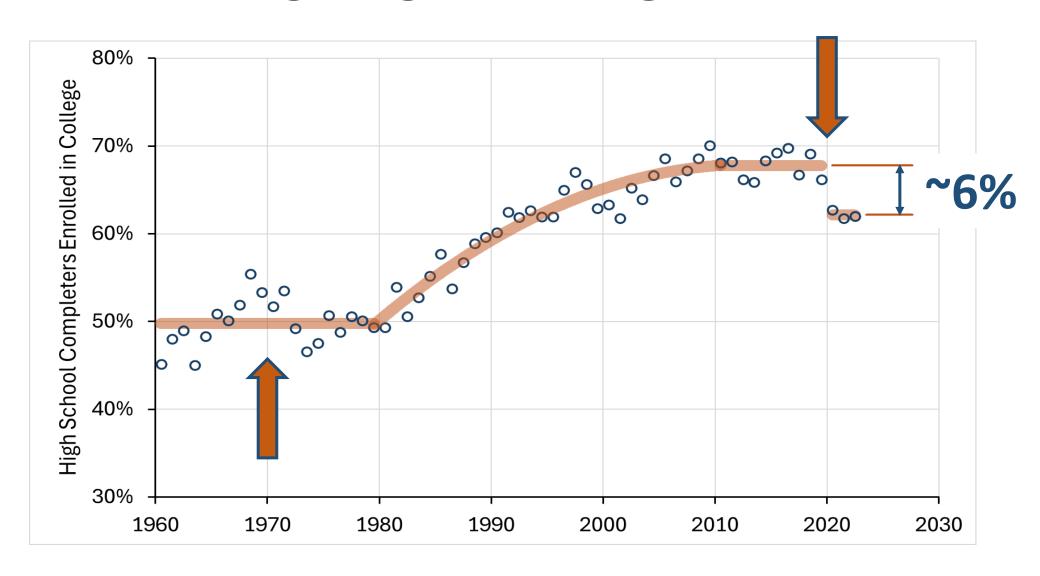
Cut Unemployment!



We need more child care!



Fewer kids going to college will solve it!

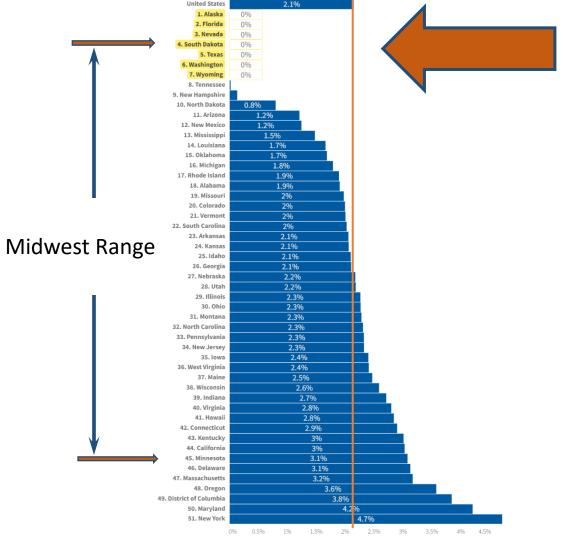


"This money is for the year's assessment of Saint Helen of the Blessed Shroud Orphanage ..."

- John Belushi



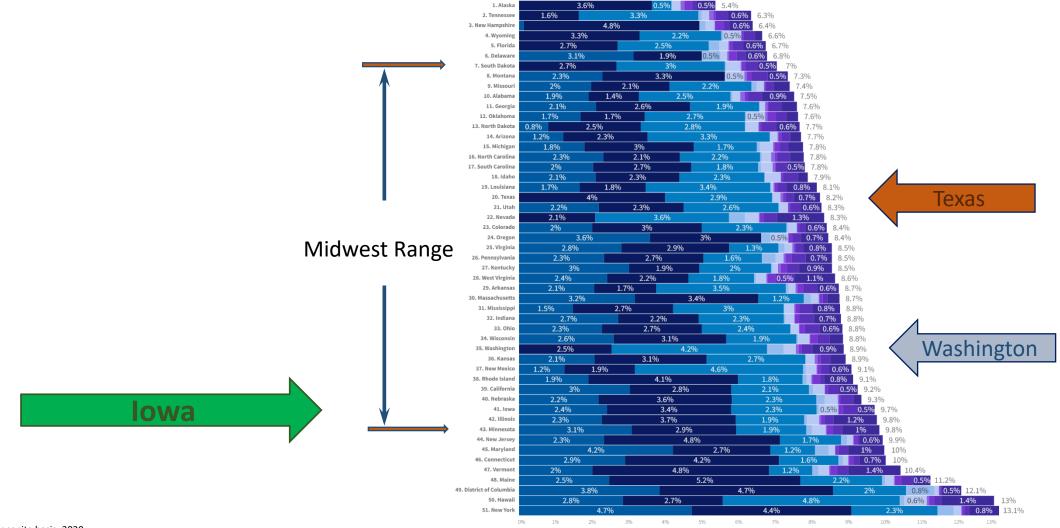
Income Taxes / Annual Income



58

www.usafacts.org; per capita basis; 2020

Most Taxes (Income, Property, Sales, License, ...)

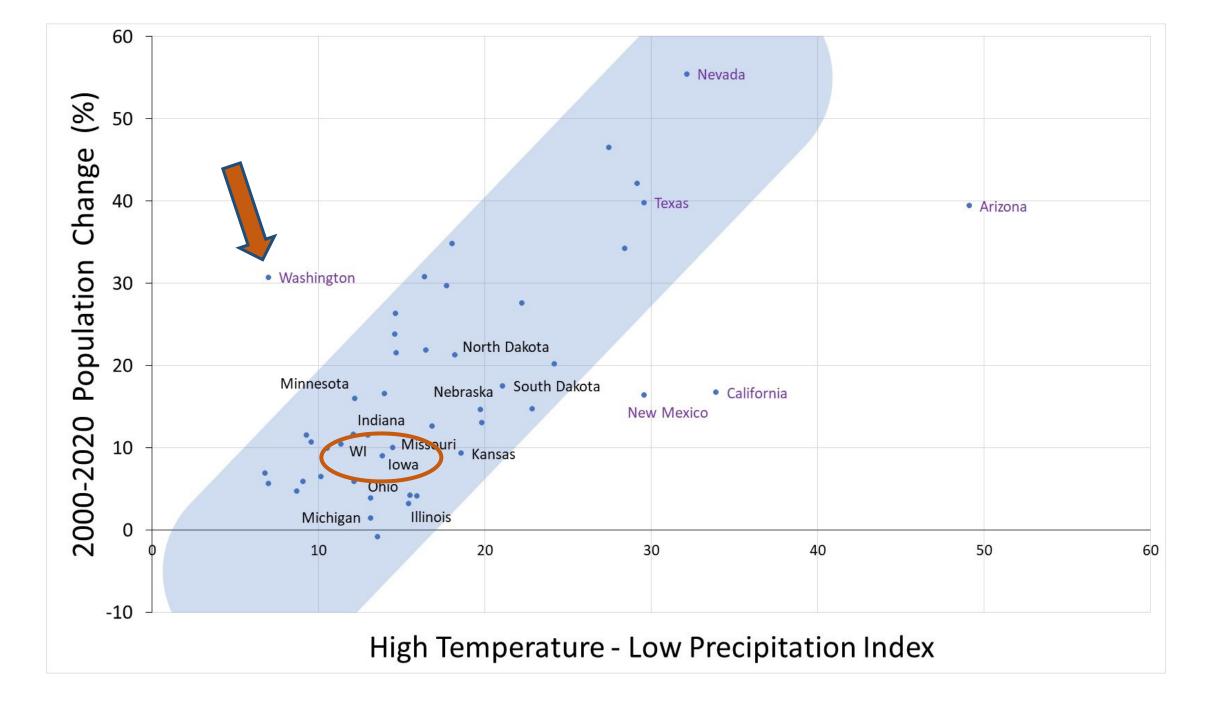


www.usafacts.org; per capita basis; 2020

"It's the Weather, Stupid... and the economy."



Based on the quote by James Carville.



"A hundred and eighty-seven dollars?"

- Tom Hanks

"Yeah. They really screw you, don't they?"

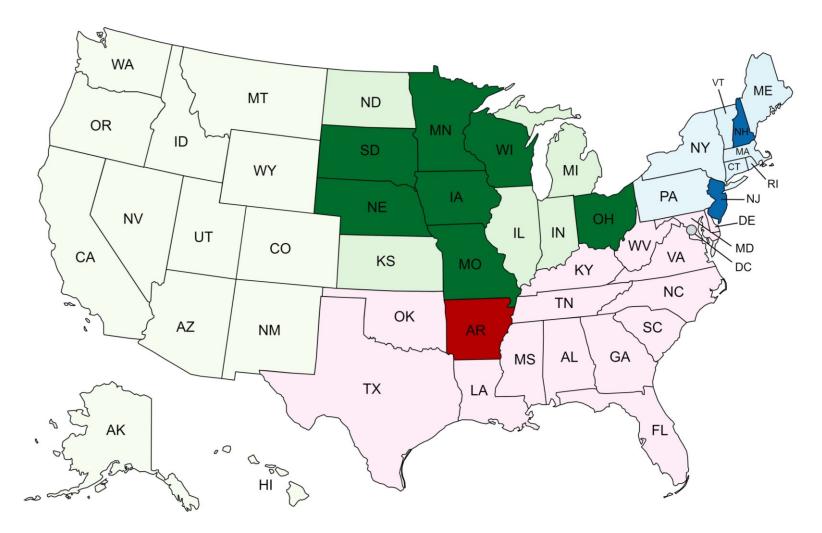
- Jon Lovitz



In the News...

- · "Indiana Republican who employs hundreds of teens wants to roll back child labor laws"
 - "Iowa governor signs bill loosening child labor laws"
- · "Minnesota push to relax child labor laws"
- "[Missouri] Senate bill would drop work permit requirement for children"
- "Bill creating lower minimum wage for children advances in Nebraska Legislature"
- "North Dakota lawmakers propose permit system for minors in construction jobs"
- "Bill to extend working hours for Ohio teens reintroduced by lawmakers"
- "[South Dakota Congressman] Johnson introduces TEENS Act to Increase Youth Workforce Participation"
- "14-year-olds could serve alcohol under a new Wisconsin bill"

We've found new workers!



https://www.epi.org/publication/child-labor-laws-under-attack/; www.mapchart.net

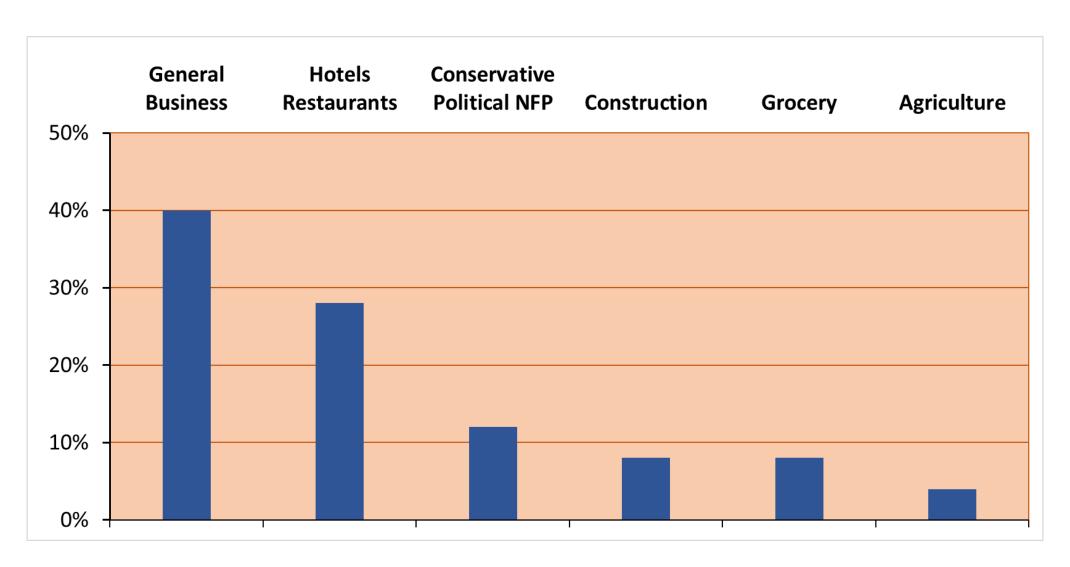
14-15-Year-Old Math

3.3	14-15 = 2 years	Population 16-		100
1.2	16-19 37%	LFPR	16+ 63%	63
0.7	60%	14-15 LFPR Adj.	N/A	63
0.6	83%	Employment Rate	94%	59
0.2	<u>~10 hrs</u> 40 hrs	FTE	34.5 hrs 40 hrs	51
1		Per 300 FTE		299



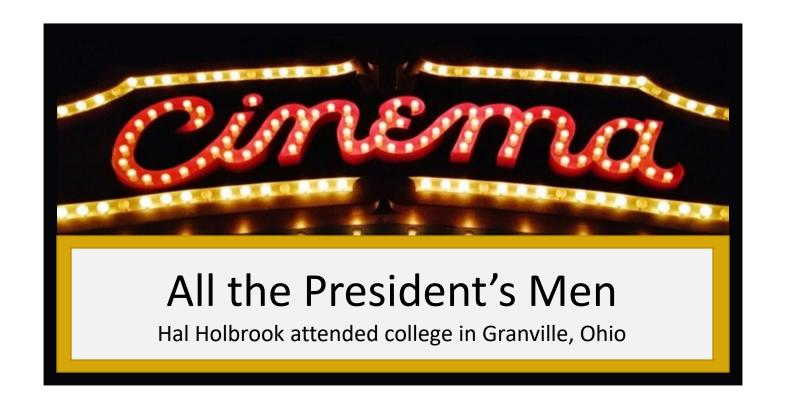


Who is pushing?



"Follow the money."

- Hal Holbrook



Government Hype

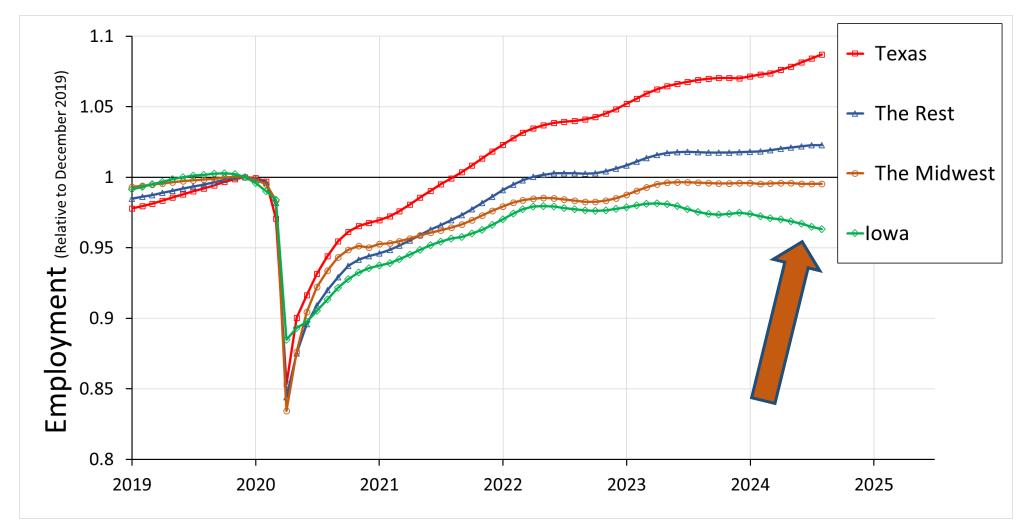
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		3.17 Veterans		
		3.18 Volunteers		

https://www.aphis.usda.gov/livestock-poultry-disease/swine; www.flaticon.com

Employment versus Jobs

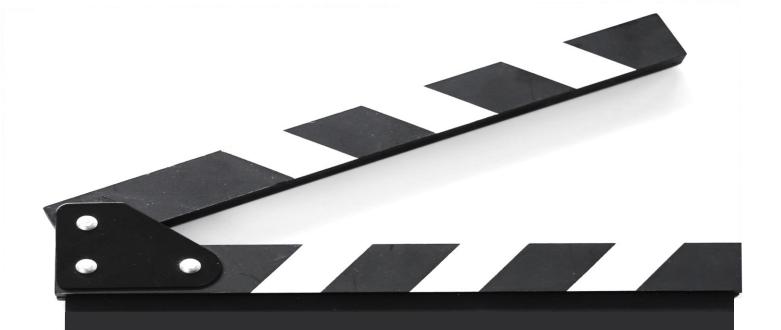
Iowa now has more jobs than before the COVID-19 pandemic. Jesse Dougherty with *Iowa Workforce Development* says Iowa added 4,500 jobs last month.

The Result?



71

Data source: www.stlouisfed.org



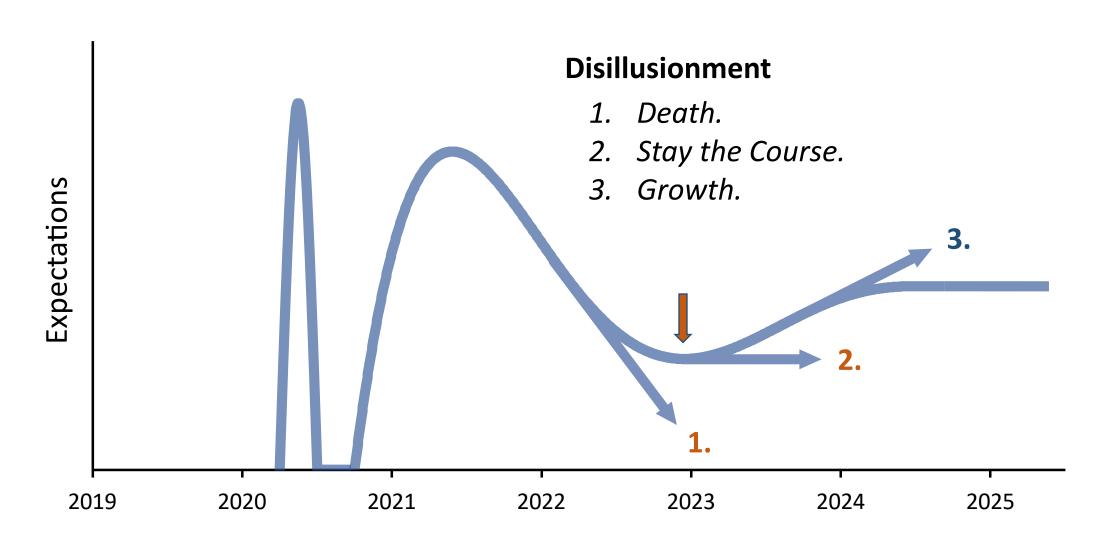
Scene 3: Disillusionment

Something Must Die

"You hear that Mr. Anderson?
It is the sound of your death.
Goodbye, Mr. Anderson."

- Agent Smith

Workforce Hype Cycle





"Bring out your dead. Nine Pence."

- Eric Idle

"I'm not dead!"

- John Young

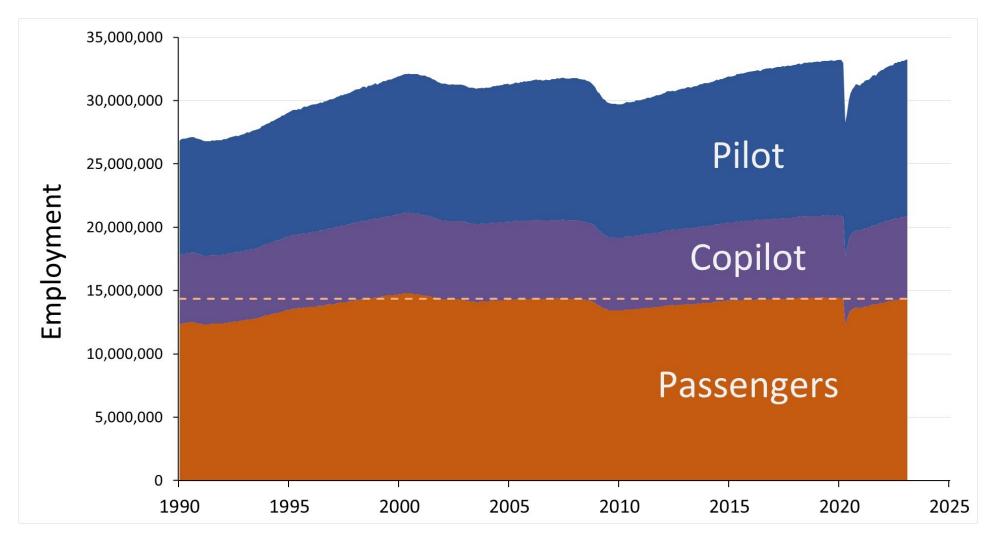
"Well, he will be soon. He's very ill."

- Not Credited





Midwest Employees



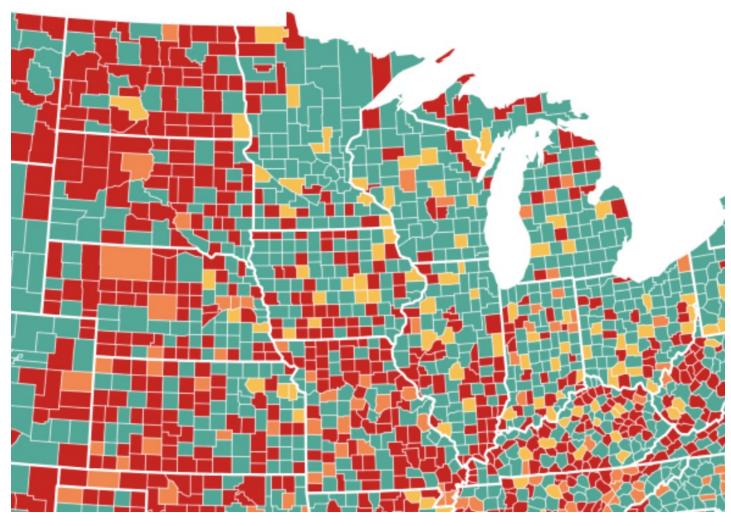
Data source: www.stlouisfed.org

Which Communities?

- Crops vs. Forests/Lakes
- Attractiveness to Retirees
- Labor Availability



Maternity Care Deserts





Most Impacted Industries?

- Healthcare and Social Assistance
- Accommodation
- Food Services
- Education
- Logistics
- Janitorial Services (*)





"What did you do today?"

- Andie MacDowell

"Oh, same old same old."

- Bill Murray



- 'We're Hiring' Reloaded





- Tweaking Internal Policies

Air Force, Space Force raise max enlistment age to 42

- Waning interest
- Strong job market
- Changes in tattoo and past drug use policies

- Permanent Signage



































- Contract Out



"Oh... people will come, Ray. People will most definitely come."

- James Earl Jones

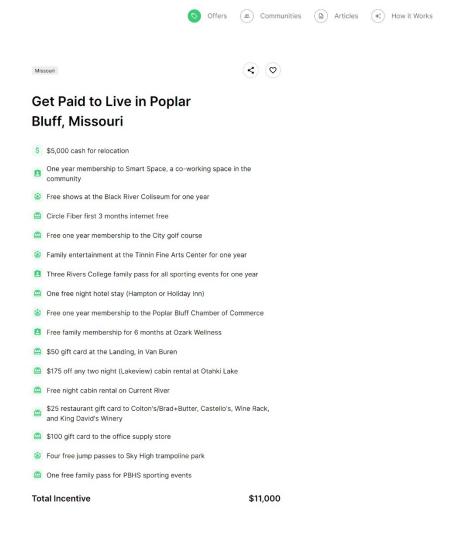


- Marketing: Migration, Return Migration





⊙ MakeMyMove



More Marketing...







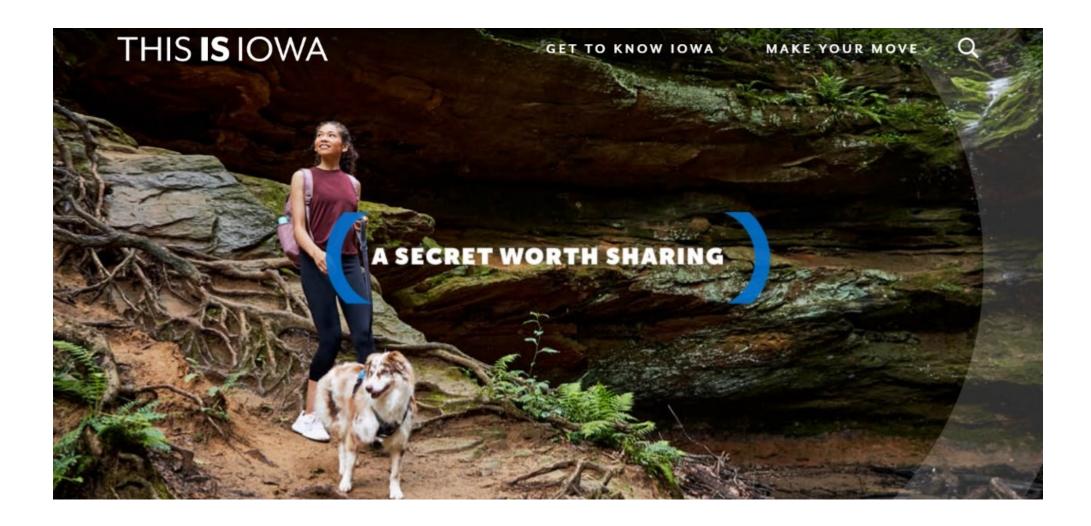








2021



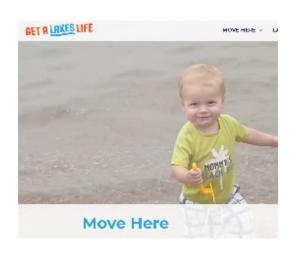
www.iowa.gov

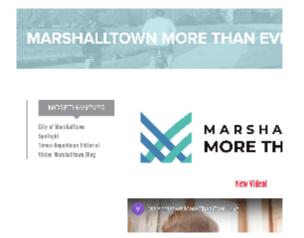
2023



www.iowa.gov

And More Marketing...





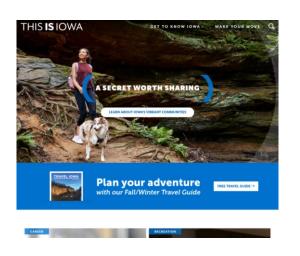








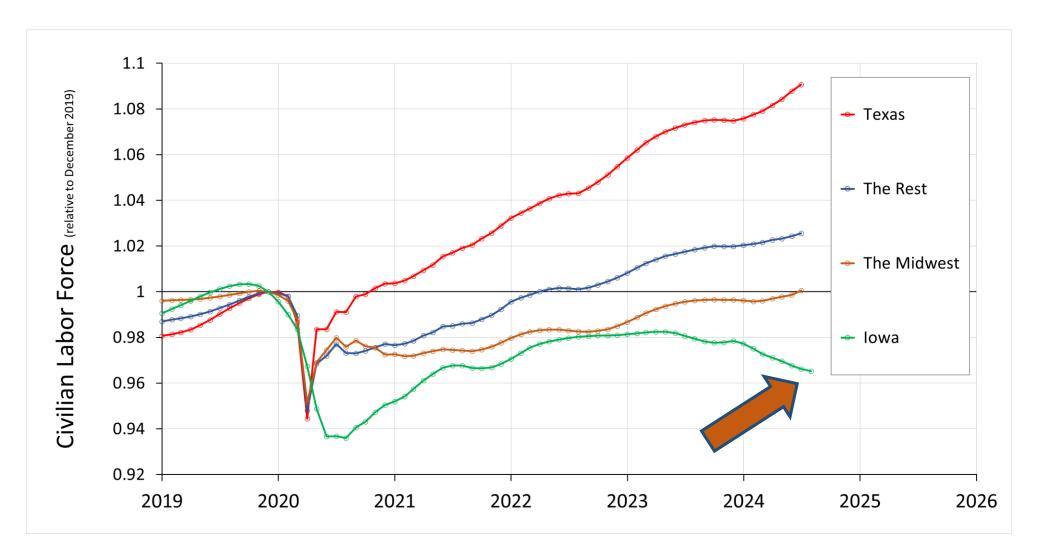
No other place but here...







The Result?



Data source: www.stlouisfed.org; Data scaled relative to December 2019.



The New Workforce Norm

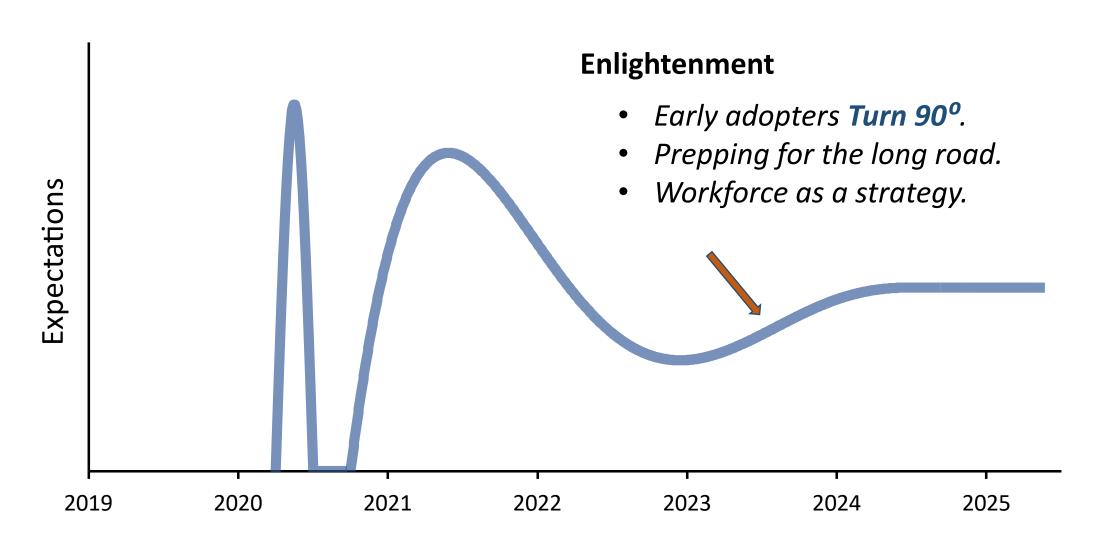
"Remember, all I'm offering is the truth, nothing more."

- Morpheus

[Neo takes the red pill.]

Midwest Workforce Strategies

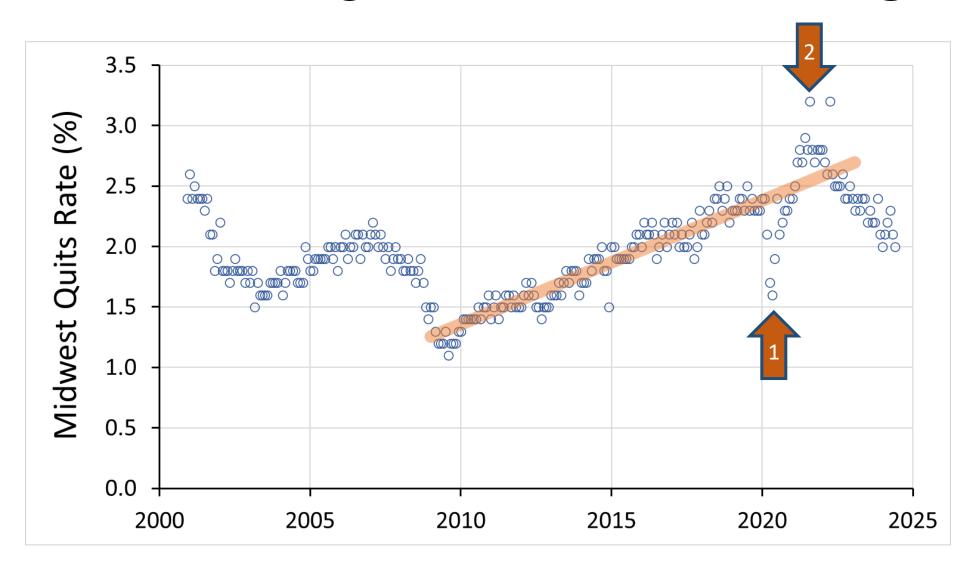
Workforce Hype Cycle



"I ain't working here no more." - Johnny Paycheck

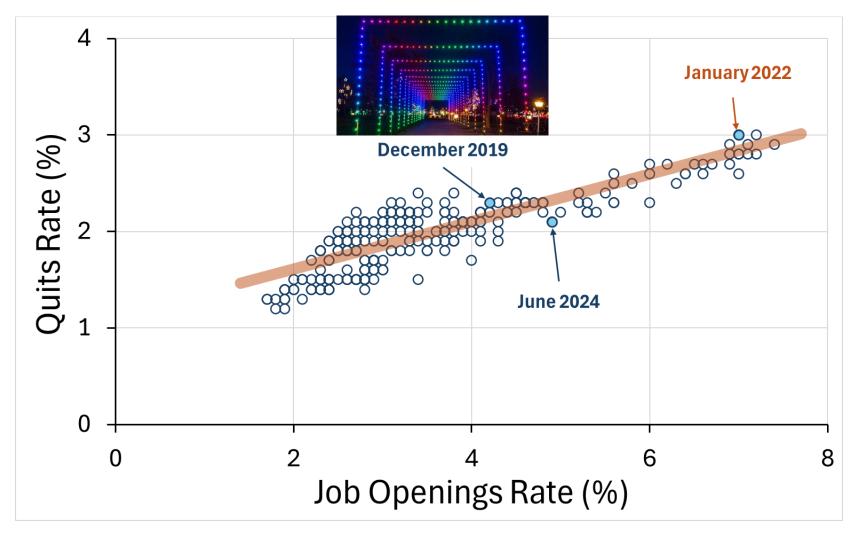


The 'Great Resignation' wasn't that great.



98

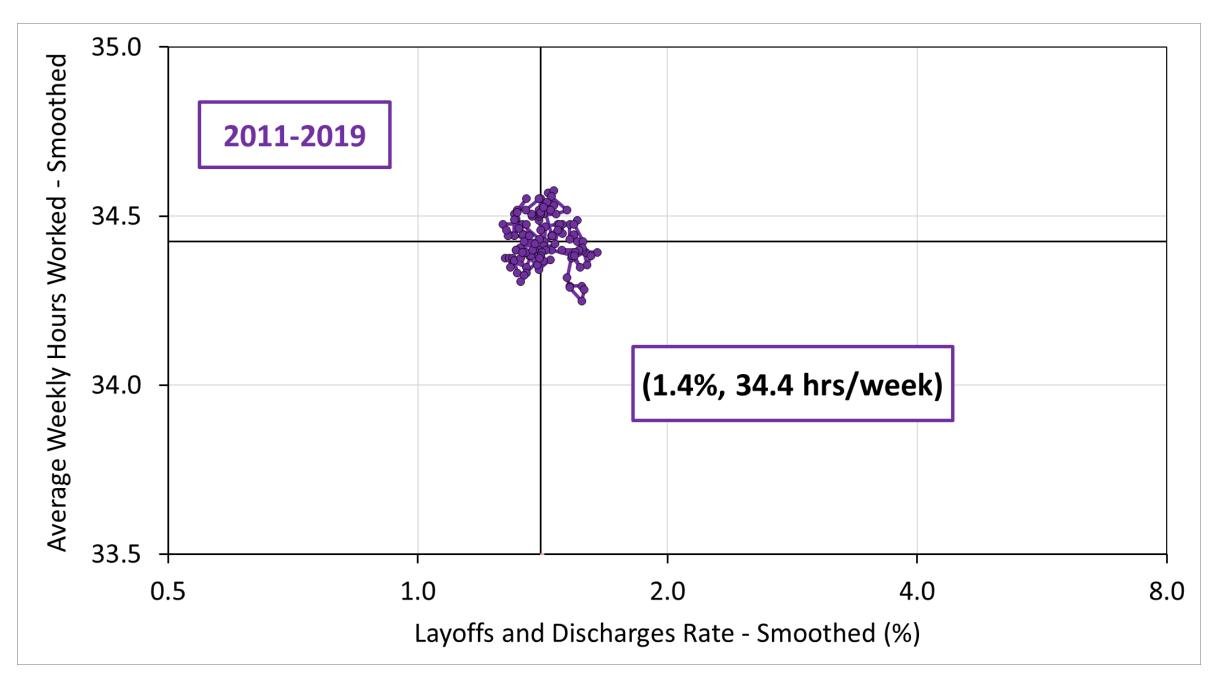
ECON 101

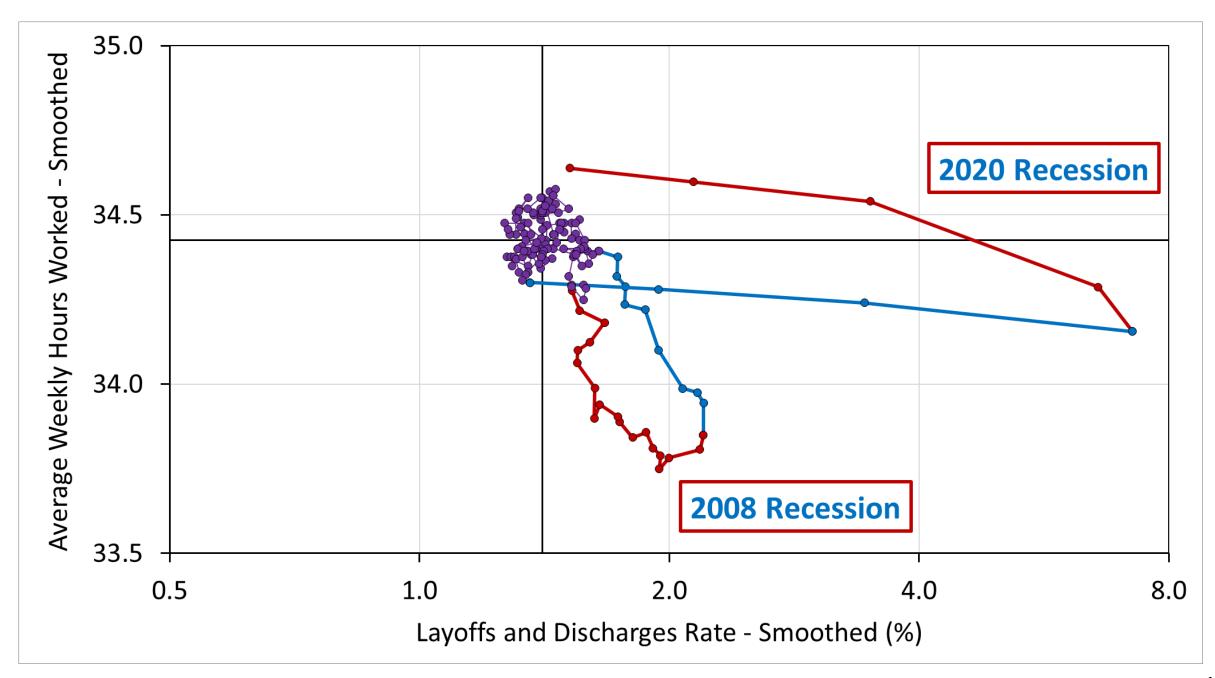


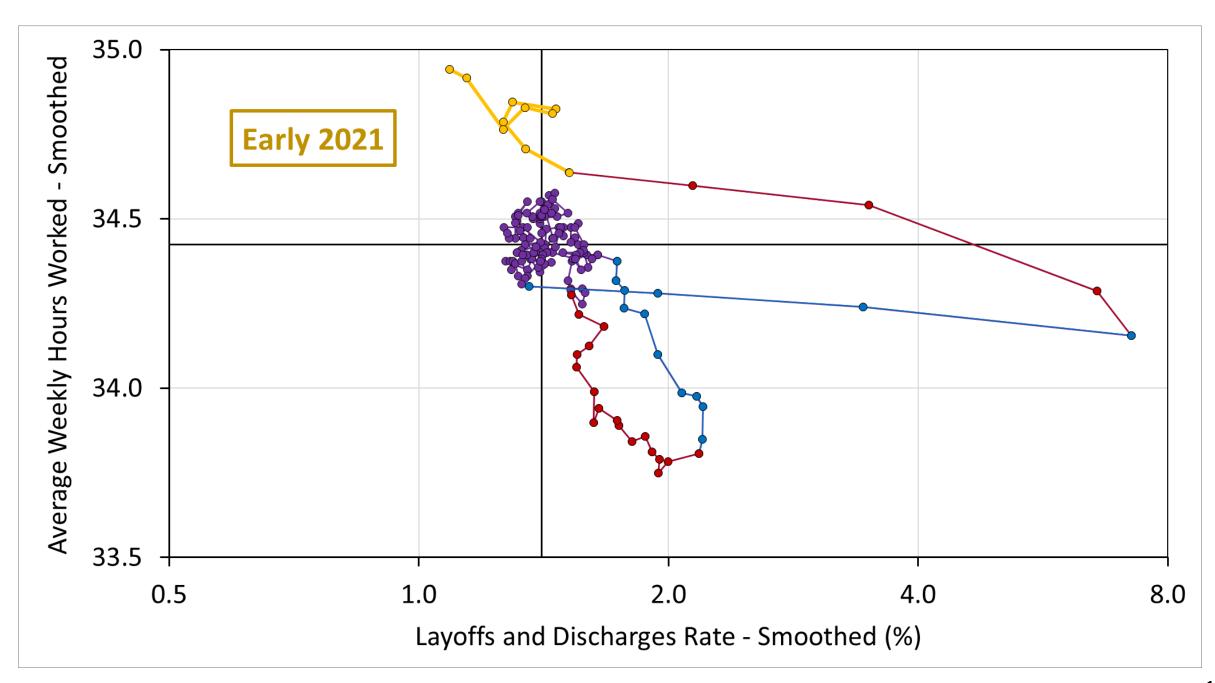
"My Precious."

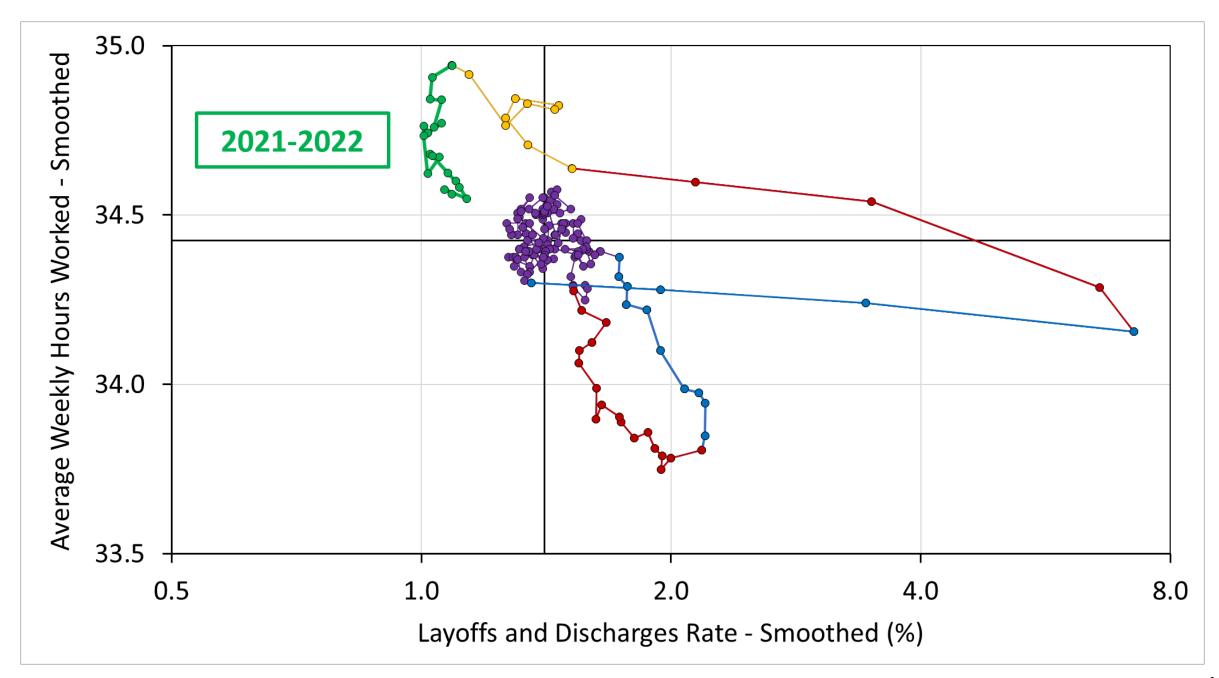
- Smeagol

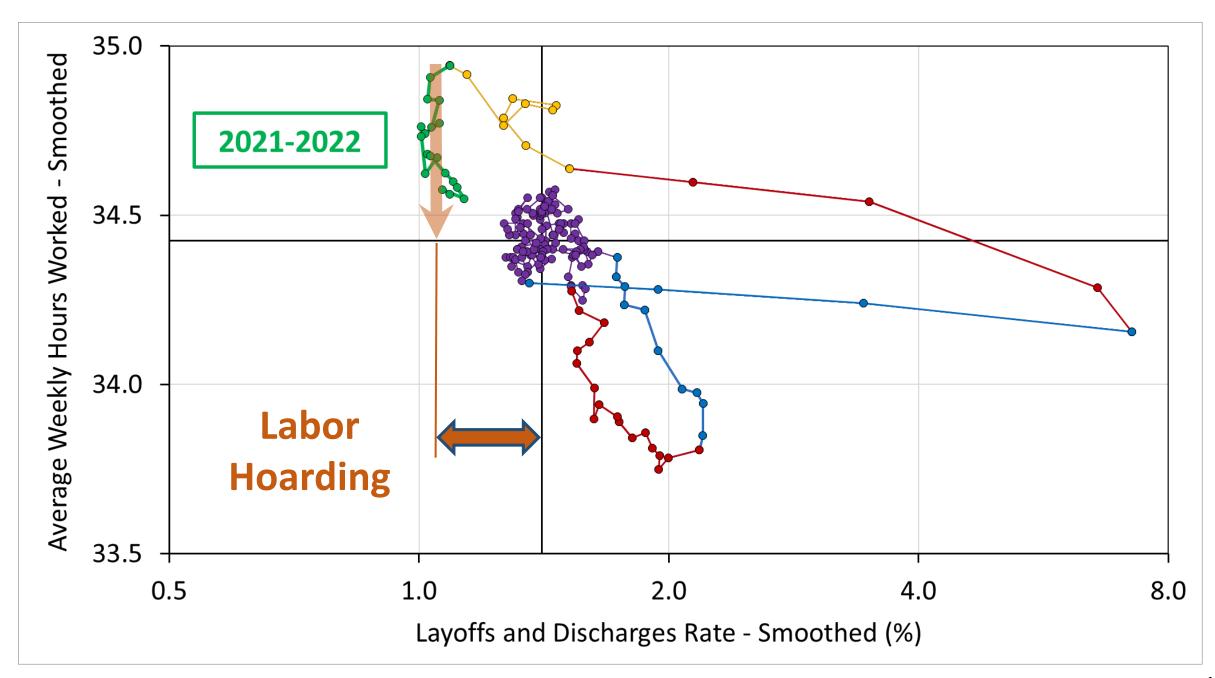


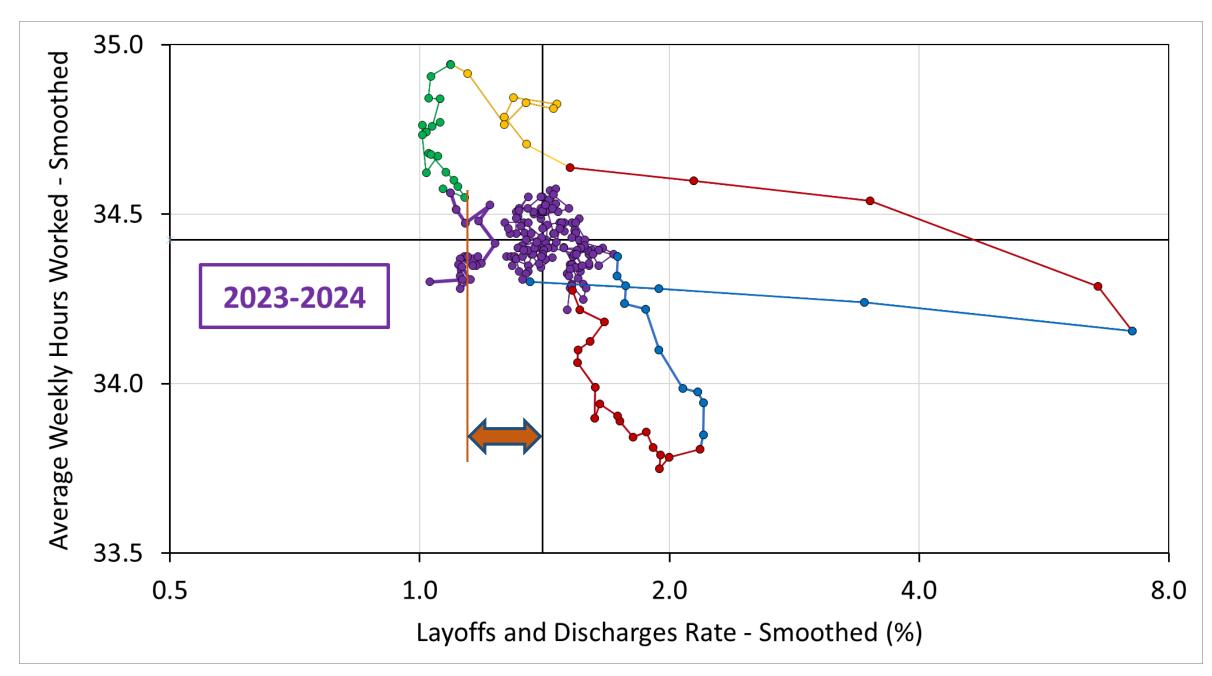




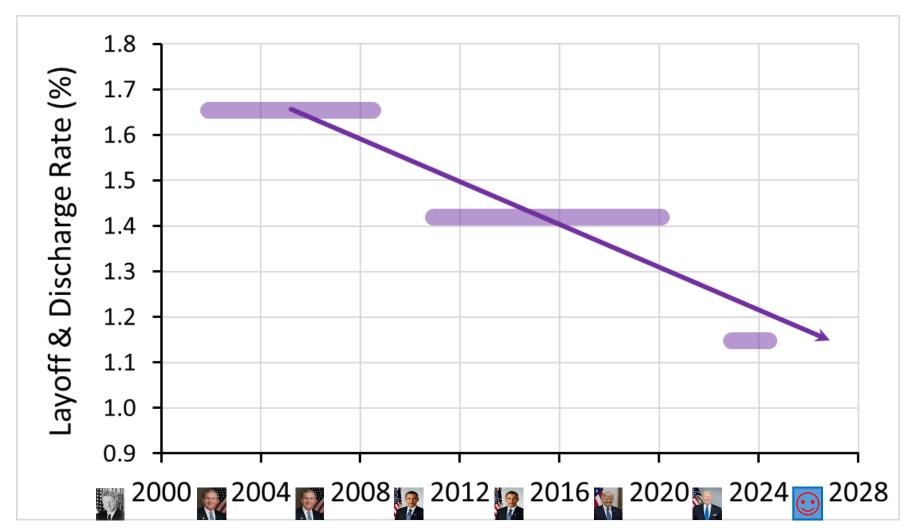








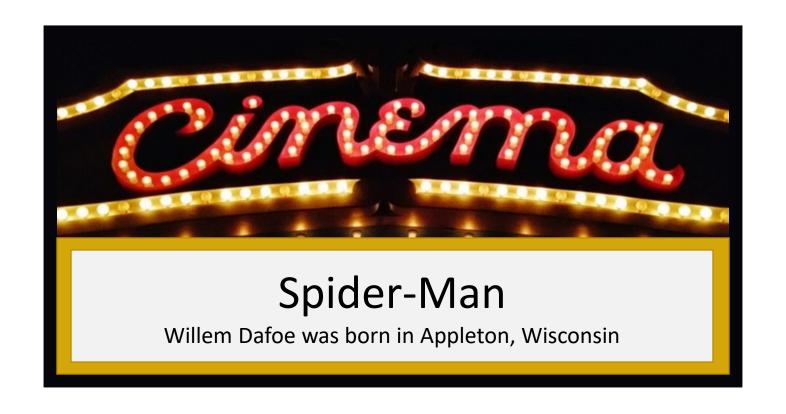
Where are we headed?



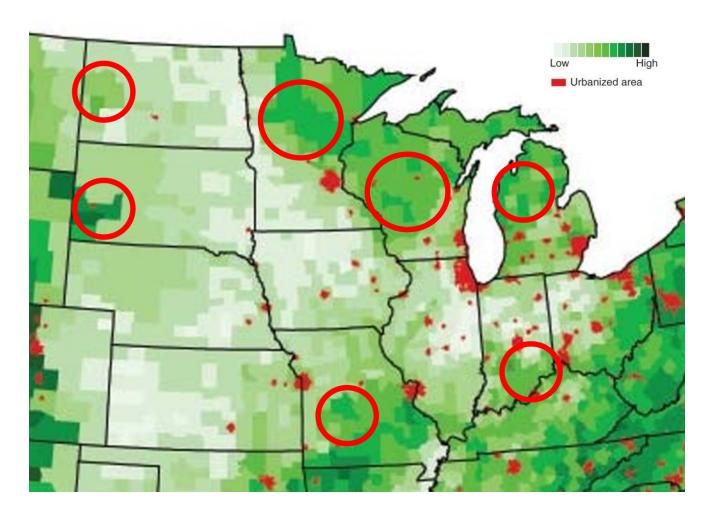
107

"But let me assure you, this, like any other story worth telling, is all about a girl."

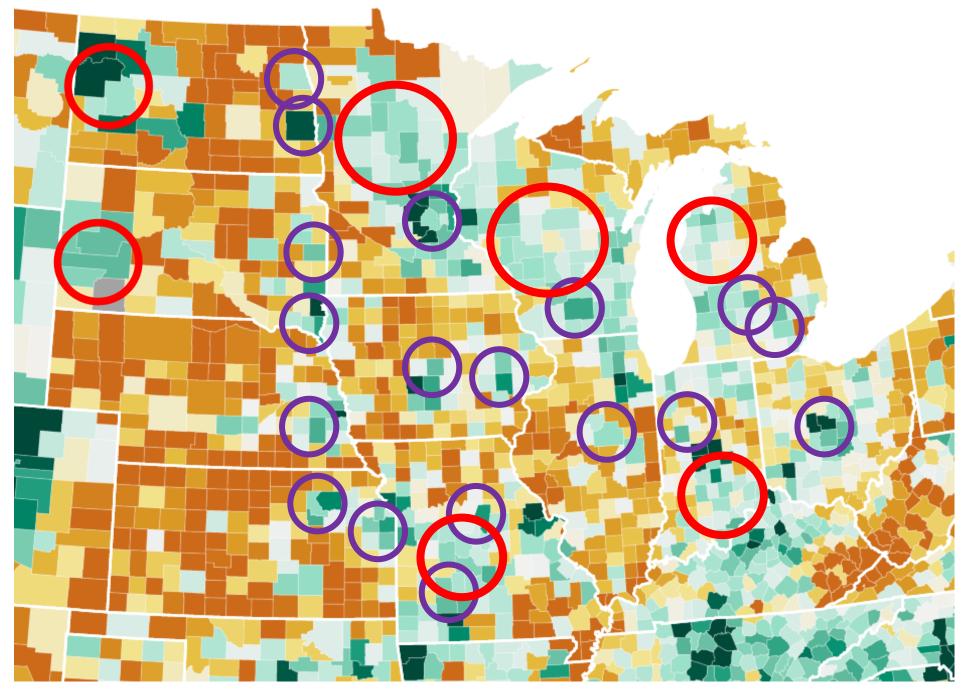
- Tobey Maguire



County Landscape Score



USDA report; Nonmetropolitan Outmigration Counties; David McGranahan et al.



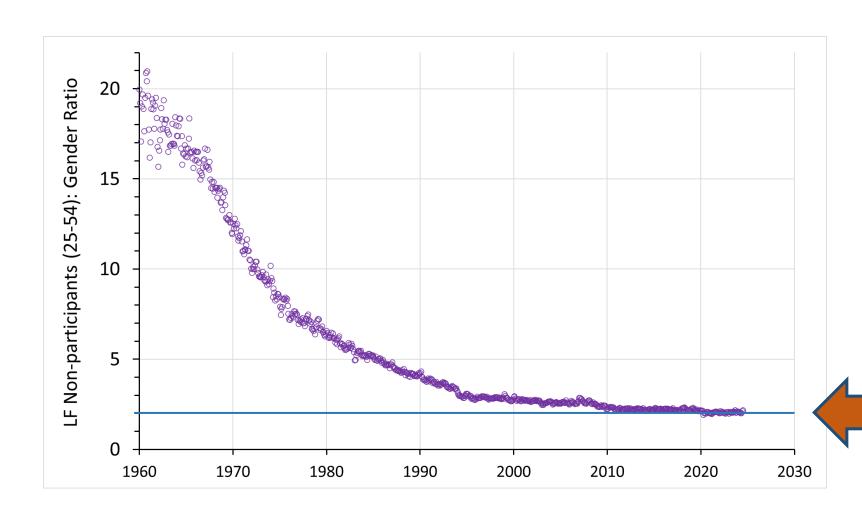


 $\tt 111$



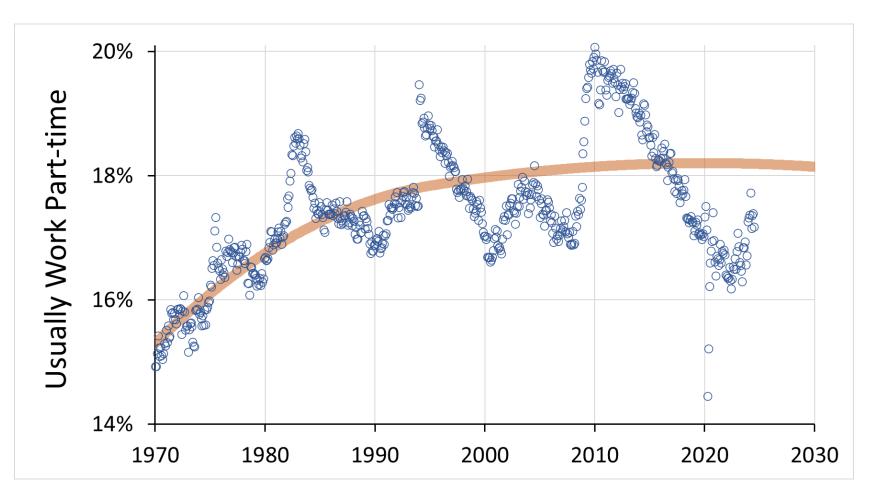
https://coffeesarang.cafe/f/were-hiring

Females

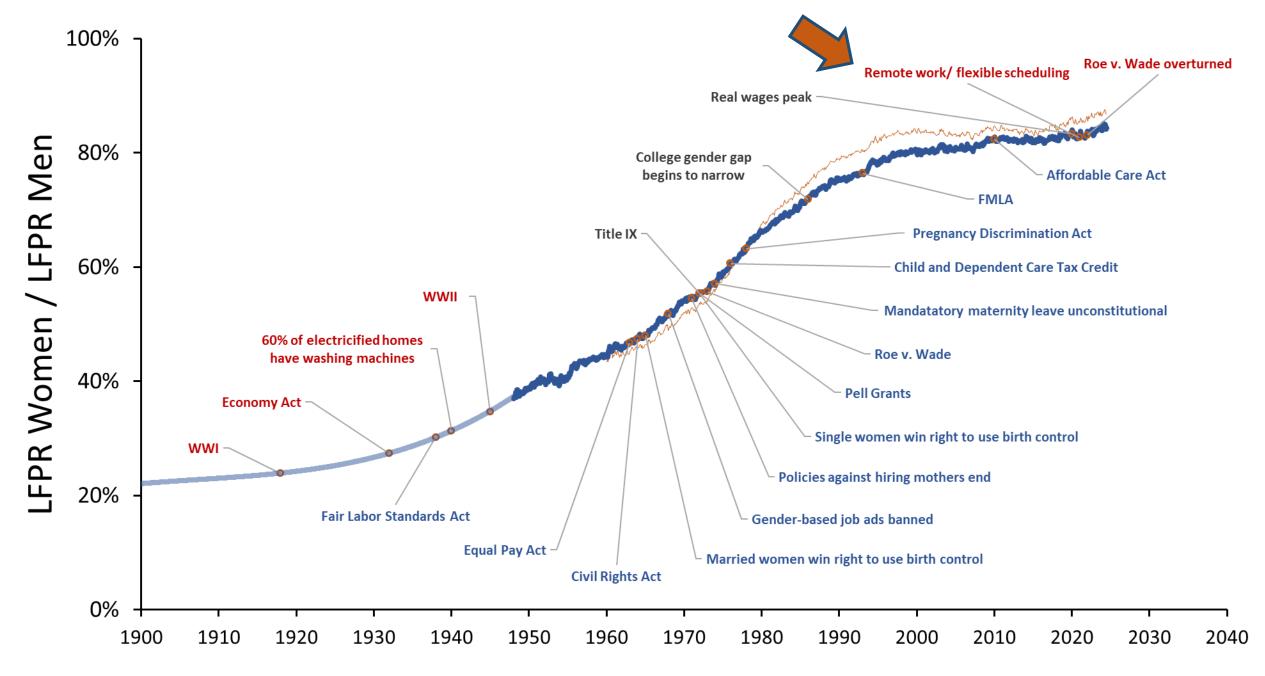




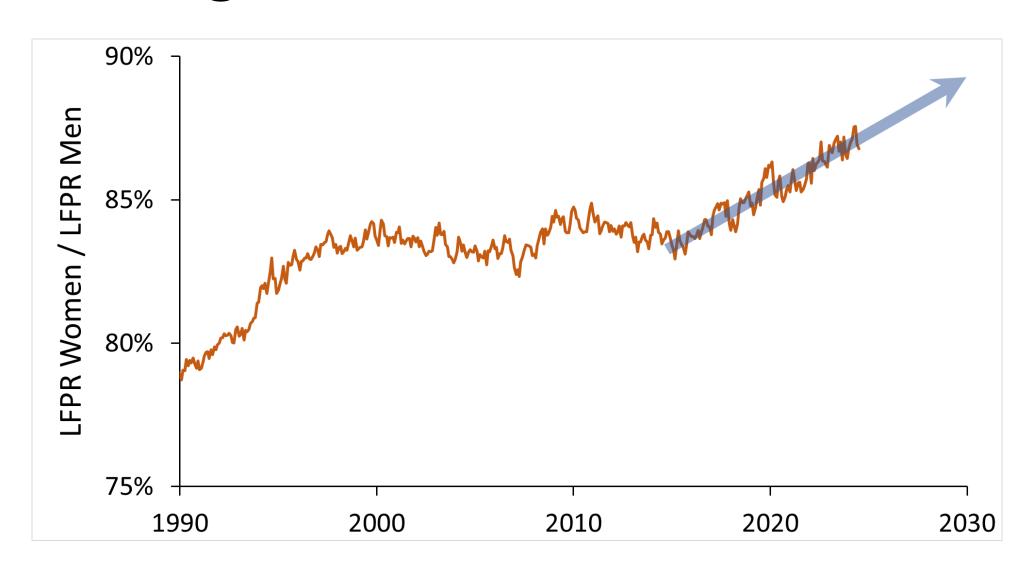
Part-Time Employees







Prime Age: 25-54 Years Old



Root Causes

Operations

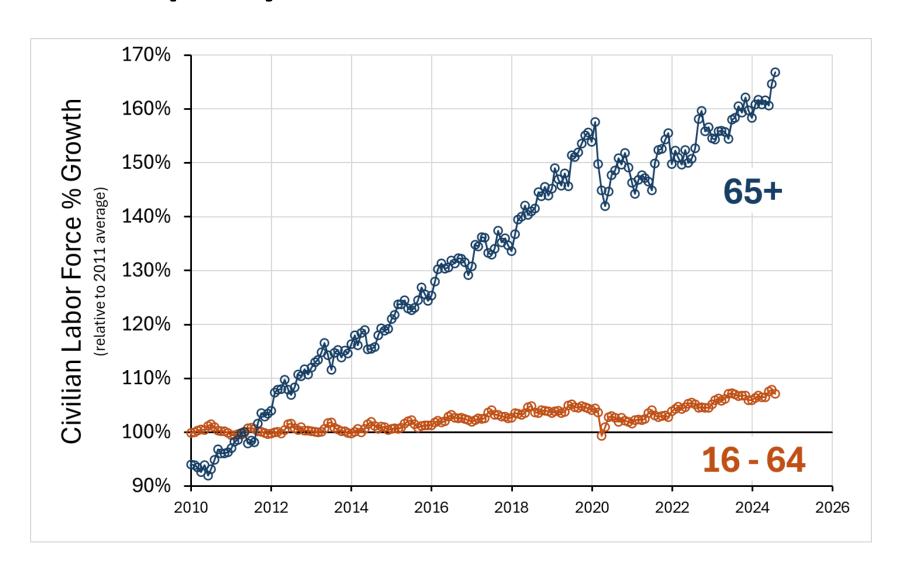
Manager

HR Manager

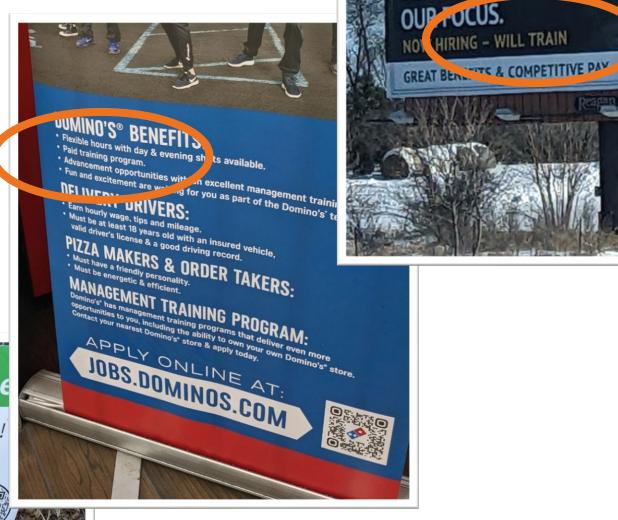
- Accommodations
- 2. Amenities
- 3. Child/ Family Care
- 4. Communication
- 5. Culture/Family
- 6. Diversity/ Equity/ Inclusion
- 7. Expertise/Learning/Training
- 8. Housing
- 9. Job Opportunity/ Job Fit/ Economic Vitality
- 10. Job Security
- Load/ Staff Leveling
- 12. Management/Supervisor
- 13. Network
- 14. Operational Excellence/Safety
- 15. Partnerships
- 16. Policy Restrictions External
- L7. Policy Restrictions Internal
- 18. Project Management
- 19. Project Selection/ Scope
- 20. Program/ Staffing Cost
- 21. Settlement/Transition Services
- 22. Transportation
- 23. Wages and Benefits
- 24. Work Schedule/Location
- 25. Targeted Marketing/Engagement *

Credit: BFA / Warner Bros

- 65+ Employees



- Training



YOUR CAREER, YOUR FUTURE.





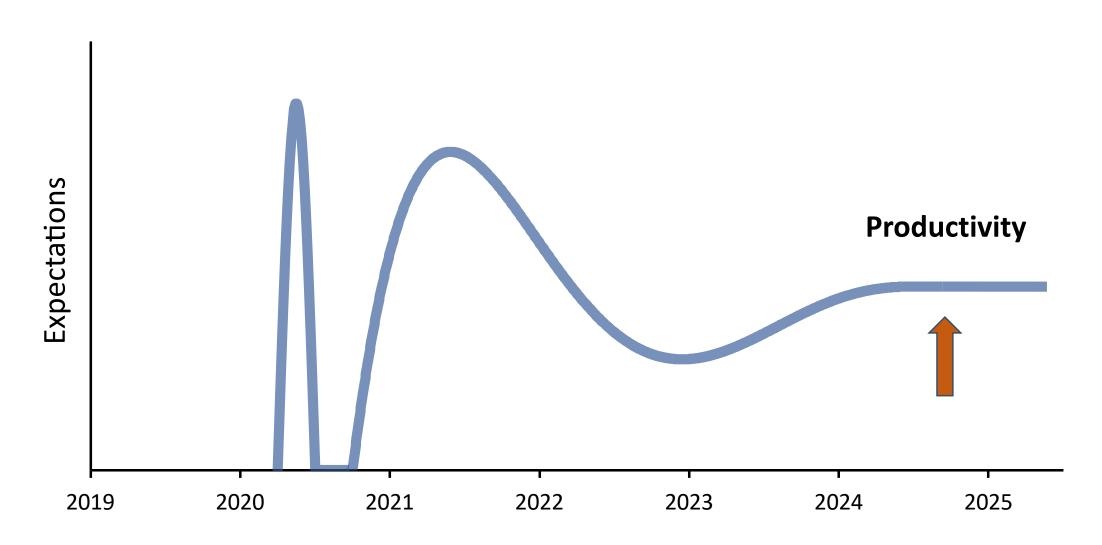
Scene 5: Productivity

Failure is STILL not an option.

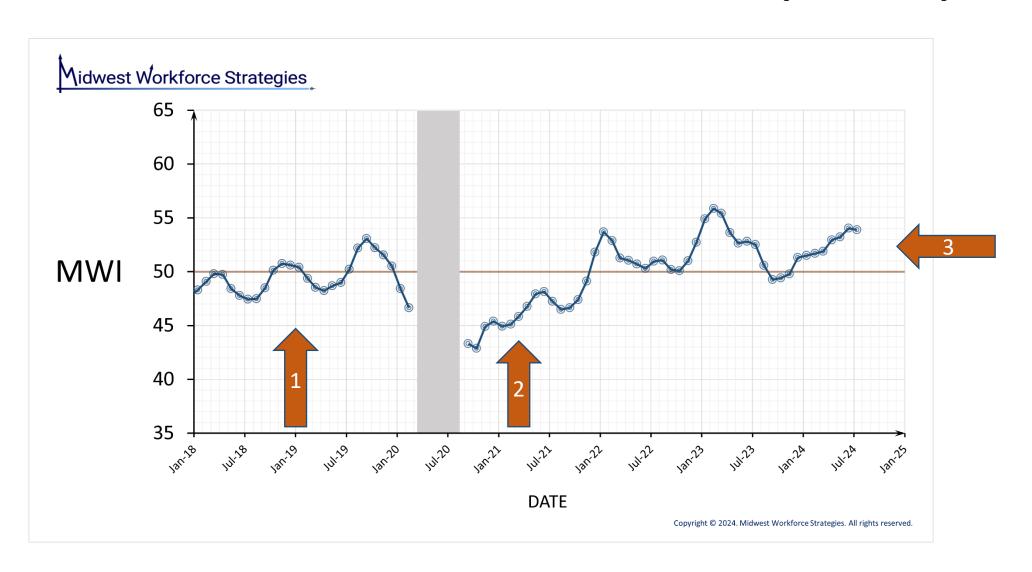
"Houston, we have a problem."

- Tom Hanks

Workforce Hype Cycle



Midwest Workforce Index (MWI)



"Never send a human to do a machine's job."

- Agent Smith







- ... has agreed to acquire Alert Innovation, a robotics automation company ...
- ... one of the outcomes is roles that require less physical labor ...



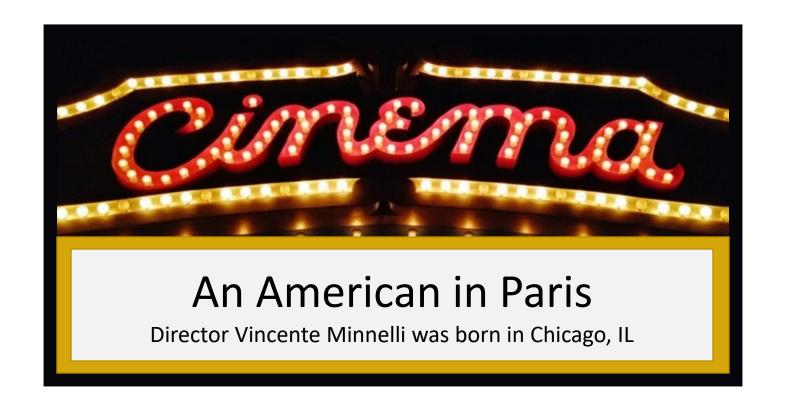
vw.corporate.walmart.com

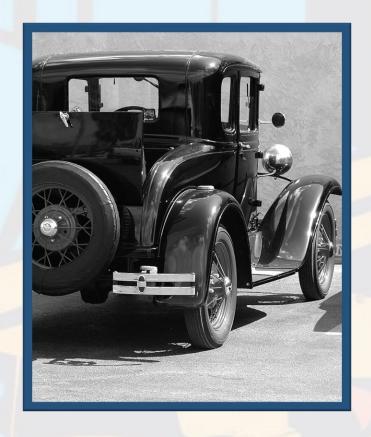
The Future of Fast Food is Now

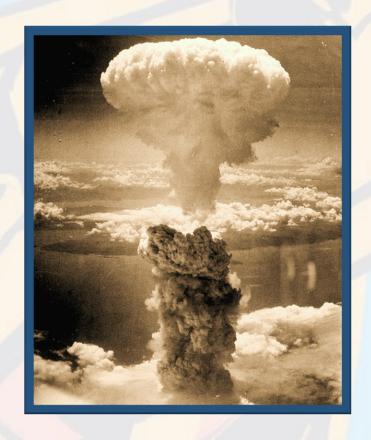


"Civilization has a natural resistance to improving itself."

- Gene Kelly



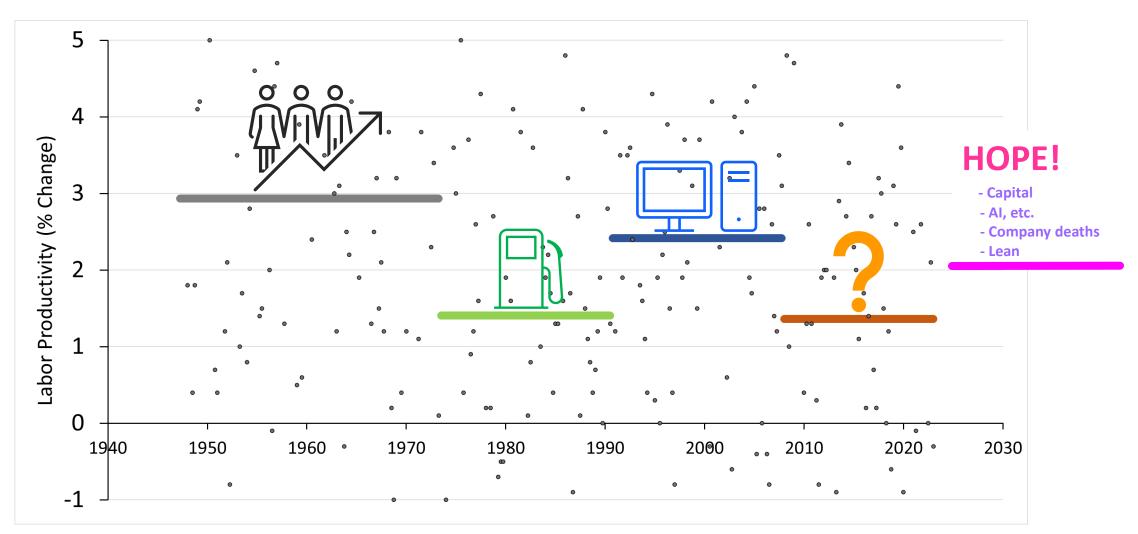




- 1. Japan
- 2. Japan
- 3. Japan
- 4. Japan
- 5. South Korea
- 6. USA
- 7. USA
- 8. Japan
- 9. USA
- 10. Germany

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Change in Labor Productivity



Continuous Improvement Root Causes

- Management
- Culture
- Expertise / Training
- Load Leveling
- Project Management
- Project Selection / Scope

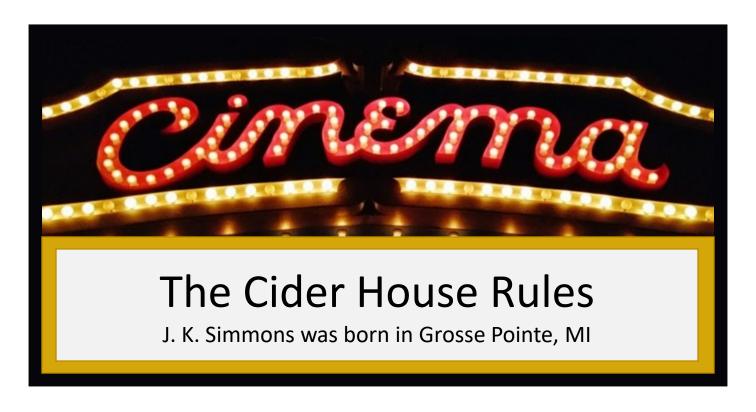
129

"What's an immigrant?"

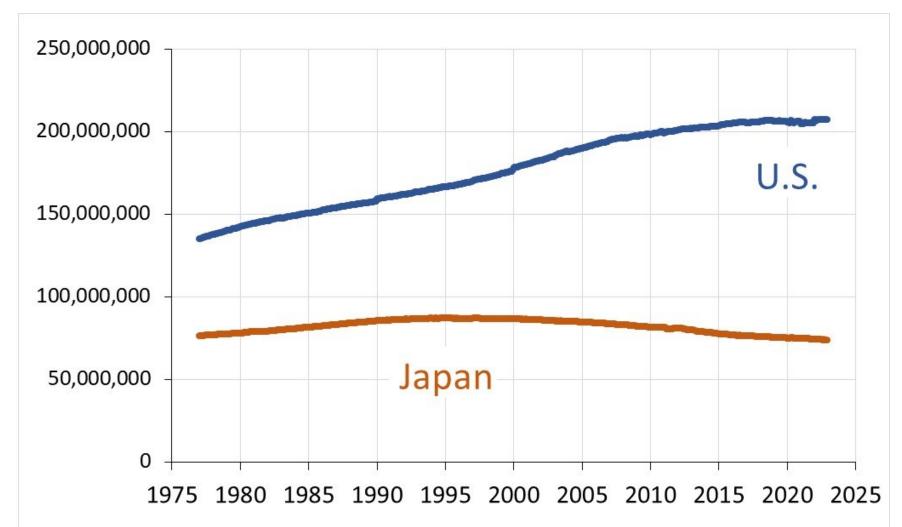
- Fuzzy

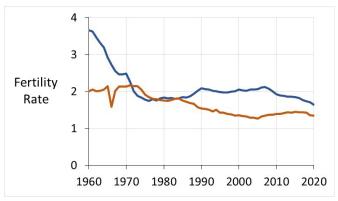
"Someone not from Maine."

- Michael Caine

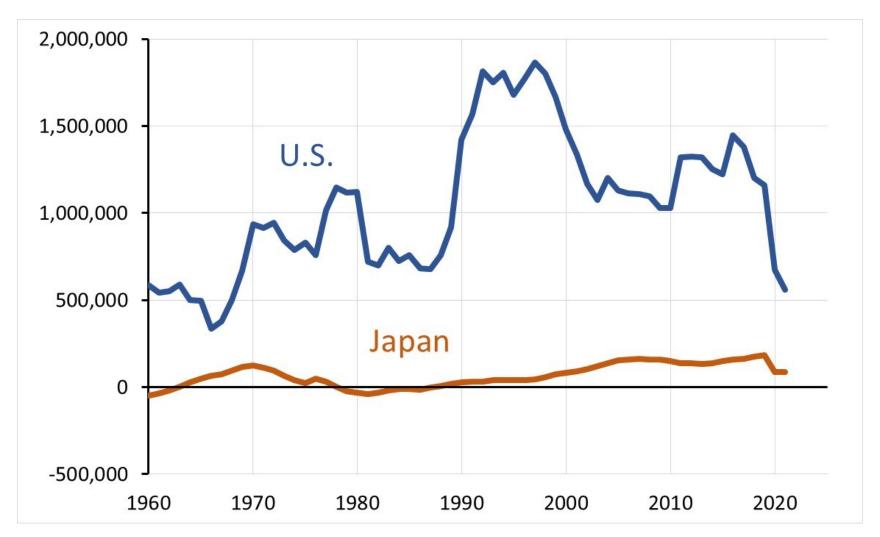


Working Age Population (15-64)



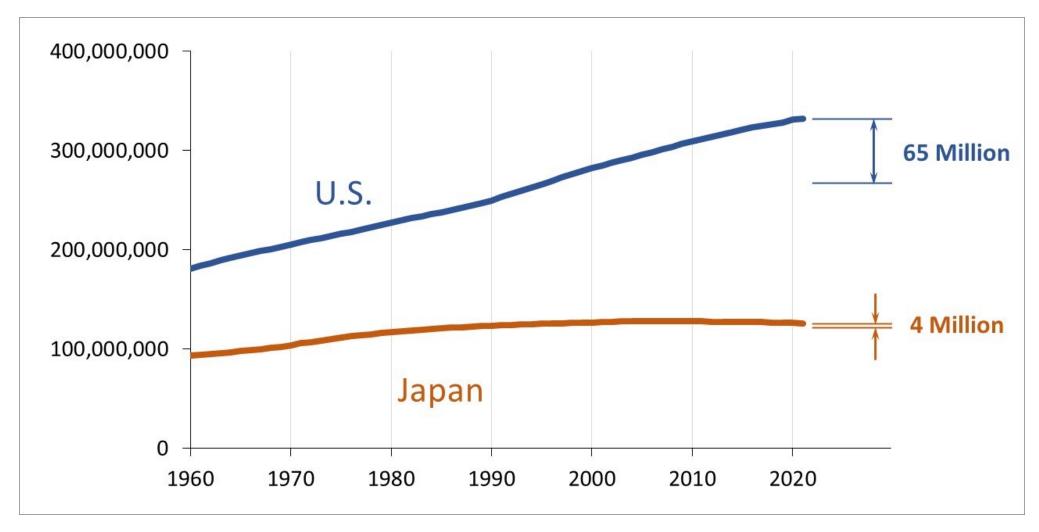


Net Migration

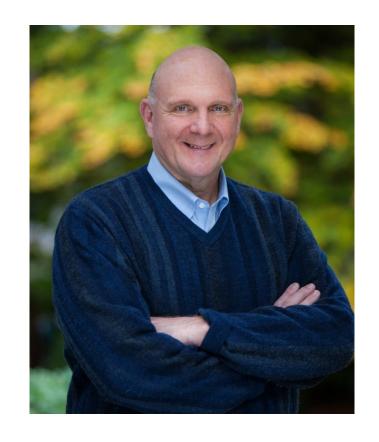


Data from https://data.worldbank.org/indicator/

Population & Immigration (if nobody dies;)



Data from https://data.worldbank.org/indicator/



"Now I'm going to admit to being confused."

- Steve Ballmer

www.usafacts.org

Regardless of who you vote for ...

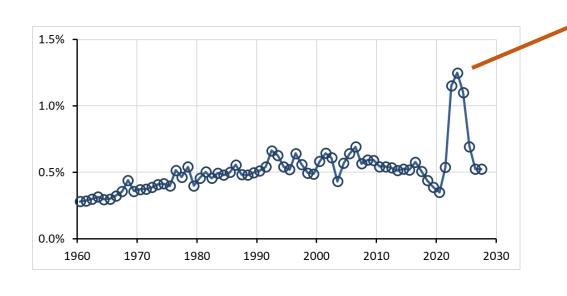




... there will be fewer new people.

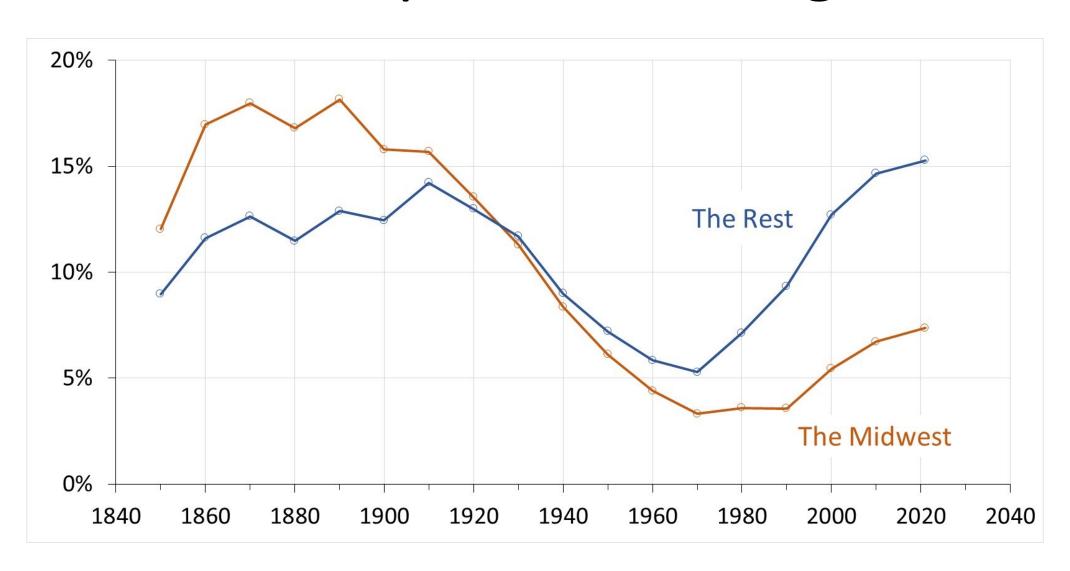
https://www.loc.gov/

ECON 102



- Labor
- Wages
- Inflation
- Restaurants, Construction, ...
- Skills
- Housing, schools, ...

Fraction of Population Foreign-born



"Get busy living or get busy dying."

- Tim Robbins

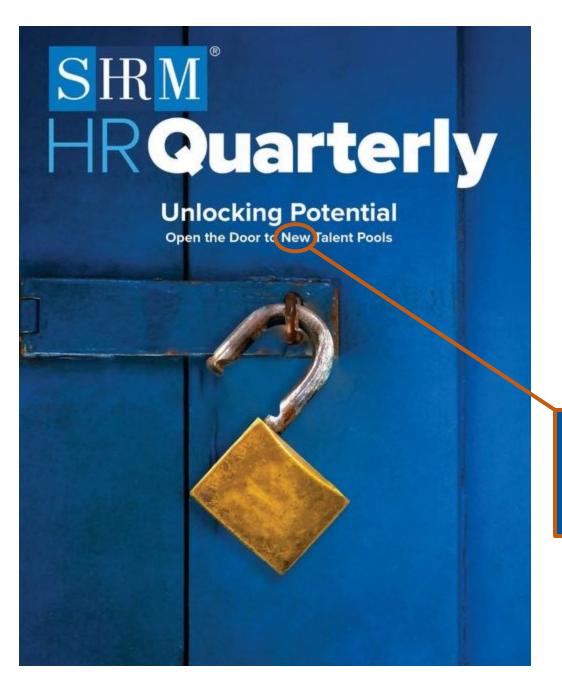




Break Workforce into ~40 Elements

Employee Output	Retention	Not in the Labor Force	Employed Elsewhere	Future Employees
1.1 Continuous Improvement	2.1 Employee Retention	3.1 Students 14-15	4.1 In-commuters	5.1 Apprenticeships
1.2 Automation - Other	2.2 Layoffs	3.2 Non-students 16-19	4.2 Out-commuters	5.2 Internships
1.3 Automation - Robotics	2.3 Out-migration	3.3 Students 16-19	4.3 Remote Workers	5.3 Youth Programs
		3.4 Females 20-54		
		3.5 Males 20-54	4.4 In-state Migration	
		3.6 Individuals 55-74	4.5 Out-of-state Migration	
			4.6 International Migration	
		3.7 Females with Children <6	4.7 Refugees	
		3.8 Foreign Born – Naturalized Citizen		
		3.9 Foreign Born – Not a U.S. Citizen	4.8 Contract/ Temp Workers	
		3.10 Individuals with a Disability	4.9 Part-time to FT Employees	
		3.11 Individuals Experiencing Homelessness	4.10 Poaching	
		3.12 Individuals with Income < Poverty Level	4.11 Second-job Employees	
		3.13 Individuals Recently Incarcerated	4.12 Self-employed Individuals	
		3.14 Latinos		
		3.15 Part-time Employees		
		3.16 Unemployed*		
		3.17 Veterans		
		3.18 Volunteers		

Fall 2024

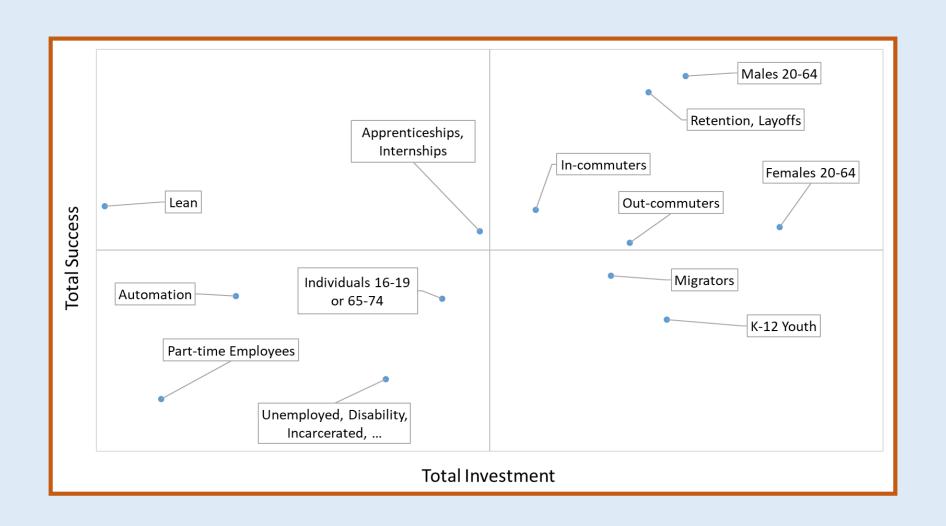


- Workers with Disabilities
- Individuals with Criminal Histories
- Veterans and Military Spouses
- Disadvantaged Young People

www.shrm.org 141

$$\vec{I} = \vec{Q}_C \cdot [RC] \cdot \vec{\Pi} \cdot \vec{P} \cdot \vec{C} \cdot \vec{D}_B$$

#1 - Vision

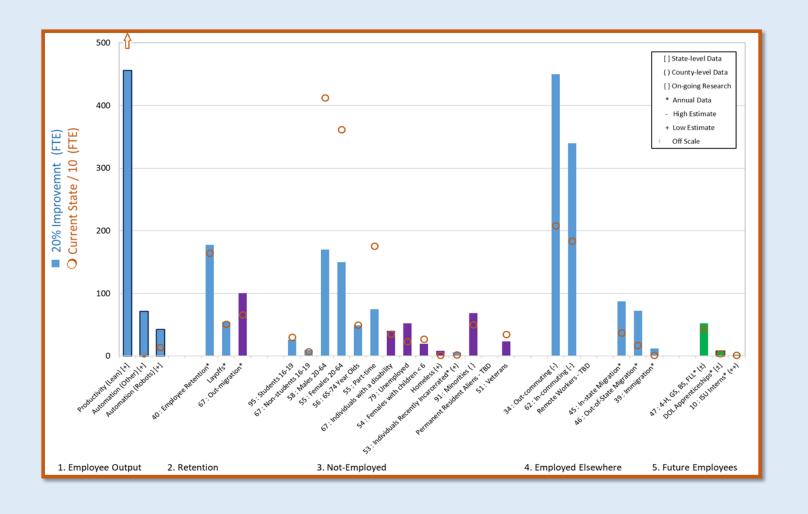


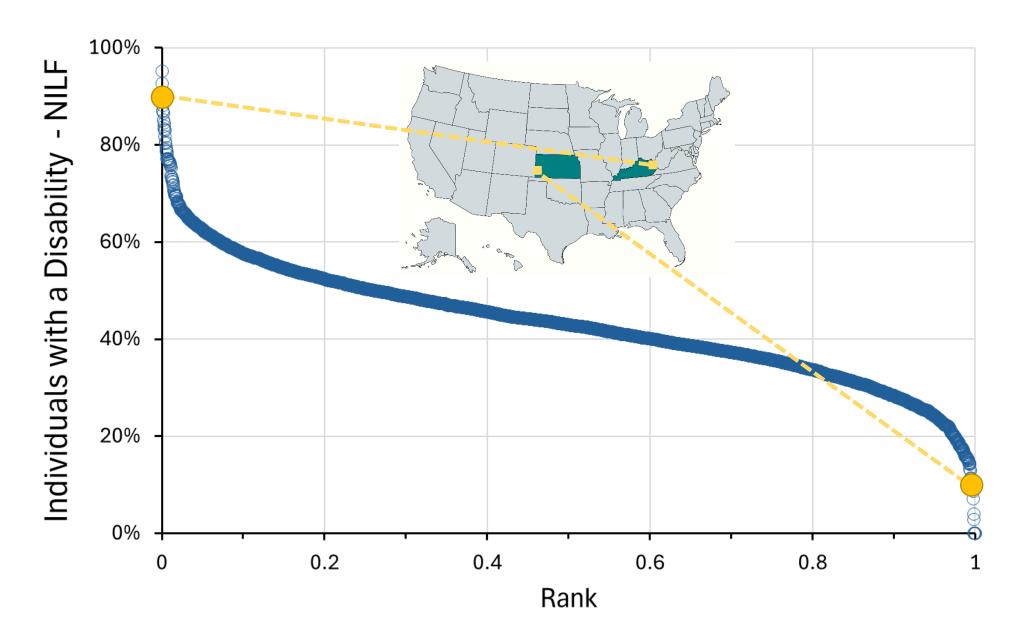
What is your Workforce Vision?



$$\vec{I} = \vec{Q}_C \cdot [RC] \cdot \vec{\Pi} \cdot \vec{P} \cdot \vec{C} \cdot \vec{D}_B$$

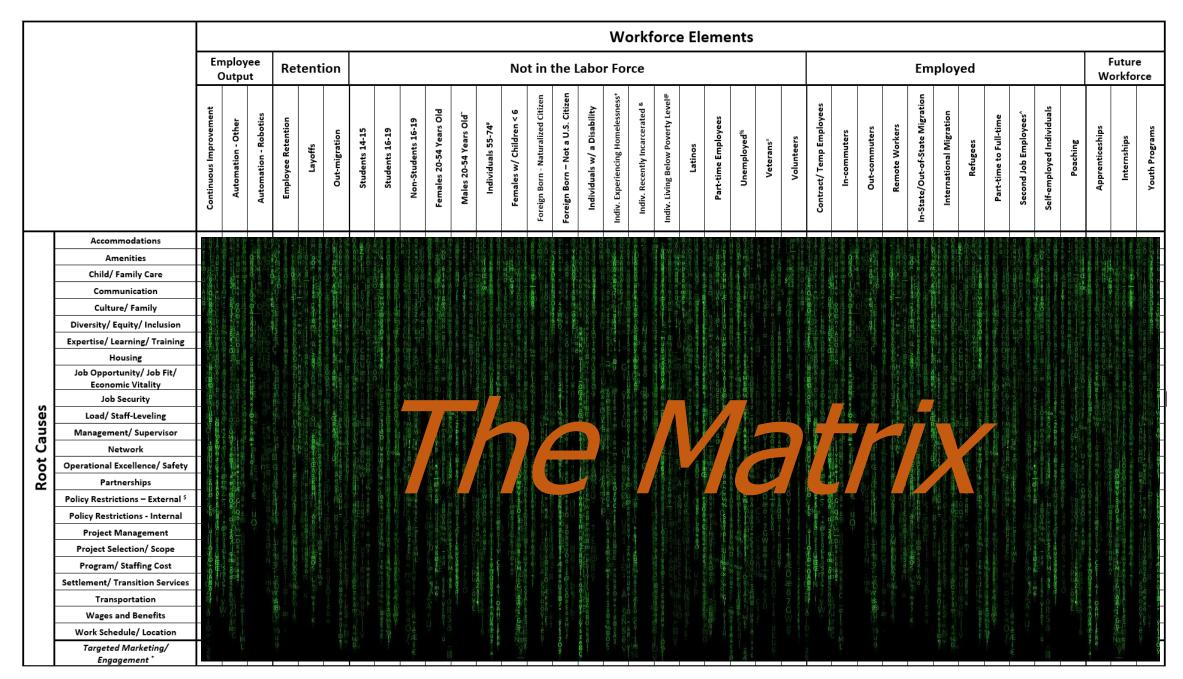
#2 – Strategy: Customer



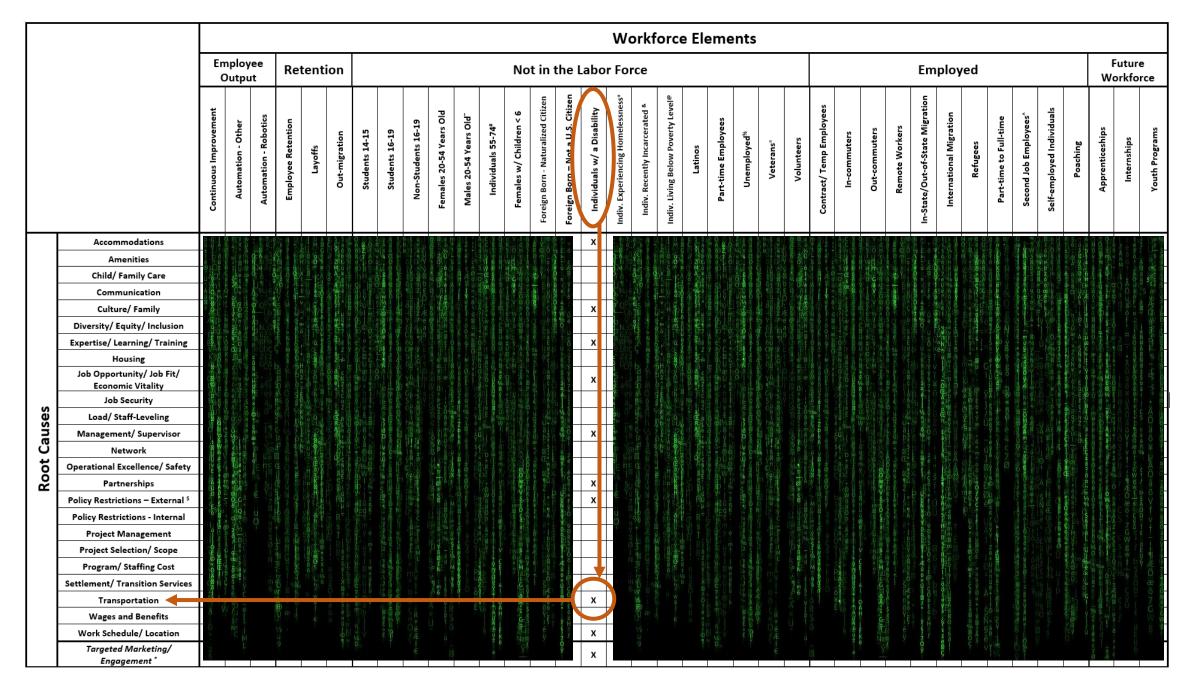


$$\vec{I} = \vec{Q}_C \cdot [RC] \cdot \vec{\Pi} \cdot \vec{P} \cdot \vec{C} \cdot \vec{D}_B$$

#3 - Strategy: Value Proposition



https://pixabay.com/images/search/matrix/



https://pixabay.com/images/search/matrix/

$$\vec{I} = \vec{Q}_C \cdot [RC] \cdot \vec{\Pi} \cdot \vec{P} \cdot \vec{C} \cdot \vec{D}_B$$

#4 – Operational Excellence

- + Baldrige Performance Excellence
- + Lean Continuous Improvement
- + Most Loved Workplace ®
- + Theory of Constraints
- + Employers of Choice ®
- + Great Place to Work®
- + Best Places to Work
- + Balanced Scorecard
- + Top Employers ®
- + Workhuman ®
- + Six Sigma
- + ISO
- + ...

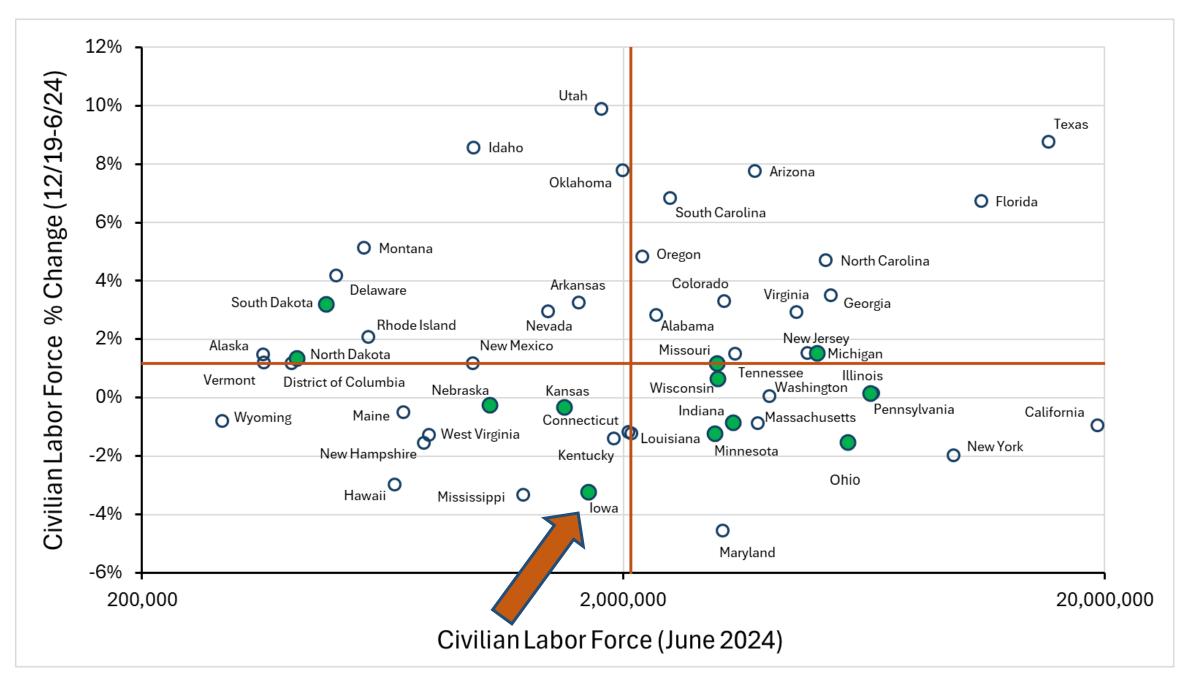
"I don't know the future.

I didn't come here to tell you how this is going to end.

I came here to tell you how it's going to begin."

- Neo





May 4, 2023, Minnesota Star Tribune

- In its surge to hire 1,000 workers in three years, window maker Andersen Corp. tried hard to counter tight labor market trends by making its workplace more inclusive.
- The company provided workers with onsite English classes, prayer rooms and foot baths.
 It made work hours more flexible, such as adding pick-your-own holidays. And it started to recruit at multicultural events.
- Its **latest efforts target the hard-of-hearing and deaf population** in Minnesota, after discovering that it had a cluster of 13 workers sprinkled across its factories in Bayport, Cottage Grove and Dubuque, Iowa.
- The discovery launched the Bayport-based company into overdrive. Today it is
 installing new communication technologies, hiring accessibility
 coaches and sign language interpreters, and actively recruiting deaf job
 candidates for the first time.

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Are You Ready to *Turn 90°*?

Roll the Credits

Credit: BFA / Warner Bros

"Remember, all I'm offering is the truth, nothing more."

- Morpheus

[Neo takes the red pill.]

Call to ActionWorkforce Strategy Officer

Learn more at www.MidwestWorkforce.com .

Connect on Linked in .

Contact me at Ron.Cox@MidwestWorkforce.com.

https://brand.linkedin.com/downloads



"What'd I do wrong?"

- Hilary Swank

"Okay, you did two things wrong.
One is you asked a question, and
two is you asked another question."

- Clint Eastwood

Bio

Ron Cox Ron.Cox@MidwestWorkforce.com 515-715-6438



- Iowa State University Aerospace Engineering B.S., Ph.D.
- Former
 - designer of fighters
 - designer of algorithms
 - designer of cooling towers, factory processes, supplier development, ...
 - Professor
 - Center Director
 - Associate Dean
 - Assistant Vice President
- Currently
 - Principal, Midwest Workforce Strategies