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Gwen Ross

Director of Workforce Development Initiatives



pennsylvania

DEPARTMENT OF COMMUNITY
& ECONOMIC DEVELOPMENT

Richard Hobbs

CEO



iTEC Announcement and Panel Discussion



**Industrial Training & Education
Consortium of the Lehigh Valley**

Panel discussion:

- **Moderator: President & CEO Manufacturers Resource Center, Richard Hobbs**
- **Morton Rasmussen – Corporate VP, Operations HR, B. Braun Medical Inc.**
- **Ayesha Herrera – Director, HR, OraSure Technologies, Inc.**
- **Karianne Gelinas – VP, Regional Partnerships & Talent Strategies, LVEDC**
- **Matthew Allen – Director of Careers & Education, German American Chamber**



iTEC

Industrial Training & Education
Consortium of the Lehigh Valley

Shawn Furman

Advanced Manufacturing Technology Strategy Manager



AI and HR Trends in Manufacturing

Manufacturers
Resource Center



Lehigh Valley Manufacturing Forum – Artificial Intelligence October 3, 2023

Artificial Intelligence in Manufacturing



Shawn Furman | AMT Strategy Manager



Shawn.furman@mrcpa.org



610-737-2529



[linkedin.com/in/shawn-furman-7206302/](https://www.linkedin.com/in/shawn-furman-7206302/)

Artificial Intelligence (AI)



Use AI as a Tool!



Artificial Intelligence is a **tool** to compliment jobs from the front office to the shop floor



What AI is and isn't

Science – Computer Science & Statistics



Magic – won't pull a rabbit out of a hat



Numbers Cruncher – Analyze lots of data quicker than we can



Replacement worker...



Generative AI vs. Predictive AI

Generative AI

- Content Creation
 - Text, image, and audio creation
 - Relies on a large dataset as a reference to create content
 - ChatGPT, DALL-E, Chatbots

Predictive AI

- Forecasting
 - Uses data to predict trends or events
 - Relies on a large dataset to make accurate predictions
 - Rockwell Automation, Siemens, Aveva, Andritz

Applying AI to Manufacturing

- Content creation



- Demand Planning



- Operations Improvement



- If you collect data, use it!

Build your AI Strategy

- Ideation sessions with team



- Start Simple



- Explore Resources



- Commit



Ethics and AI

- ❏ Content creation is from someone else's original work or ideas
- ❏ Don't copy and paste
- ❏ Proofread Content
- ❏ Validate Data



Questions?

Gina Kormanik

**Director of Community Planning
at Workforce Board Lehigh Valley**



Workforce Update



WORKFORCE BOARD

LEHIGH VALLEY

WORKFORCE DATA UPDATE

Greater Lehigh Valley Chamber of Commerce
Manufacturing Forum
October 3, 2023

LEHIGH VALLEY WORKFORCE DATA UPDATE

Industry (NAICS)	Employment	Employment %	Avg Annual Wages
1. Health Care and Social Assistance	59,978	19.0%	\$70,445
2. Transportation and Warehousing	38,828	12.3%	\$54,656
3. Manufacturing	36,206	11.5%	\$76,696
4. Retail Trade	31,578	10.0%	\$35,567

Economy (LV) ^{1,2}		Unemployment Statistics (LV) - (August 2023)		Demographics (LV) ⁹		CWIA QCEW Annual Averages (2022)			
Total Nominal GDP (\$B) - 2021	Graph 43.9	Labor Force (in thousands) ⁶	362	Total Population Est. (2022)	695	Industry (NAICS) ¹²	Employment	Employment %	Avg Annual Wages
Lehigh County	26.4	Employed (in thousands) ⁶	348	Lehigh County (in thousands)	376	62-Health Care and Social Assistance	59,978	19.0%	70,445
Northampton County	17.5	Unemployed (in thousands) ⁶	14.4	Northampton County (in thousands)	319	48-49-Transportation and Warehousing	38,828	12.3%	54,656
				Labor Force Participation Rate (2023)	62.8%	31-33-Manufacturing	36,206	11.5%	76,696
Total Real GDP (\$B) - 2021	Graph 36.8	Unemployment Rates - (Seasonally Adjusted)⁶		Workforce Age (LV) (2022 Q4)		44-45-Retail Trade	31,578	10.0%	35,567
Lehigh County	22.5	Lehigh Valley - (August 2023)	Graph 4.0%	14-18	3%	61-Educational Services	24,733	7.8%	59,107
Northampton County	14.3	Month over Month Change	0.7%	19-21	5%	72-Accommodation and Food Services	23,500	7.5%	25,855
Year over Year % Change (Real GDP) ^{2,3}	6.3%	Pennsylvania - (August 2023)	3.5%	22-24	6%	56-Administrative and Waste Services	19,864	6.3%	46,921
		U.S. - (August 2023)	3.8%	25-34	22%	54-Professional and Technical Services	13,243	4.2%	90,304
Targeted Industry Sectors (LV)		Metropolitan Statistical Area (MSA) - August 2023)	3.9%	35-44	20%	42-Wholesale Trade	11,553	3.7%	87,556
Health Care & Social Assistance				45-54	19%	23-Construction	11,513	3.7%	74,065
Transportation & Warehousing				55-64	18%	81-Other Services, Ex. Public Admin	8,733	2.8%	39,353
Manufacturing		Unemployment Continued Claims⁷ L	Graph	65-99	7%	92-Public Administration	7,451	2.4%	65,390
Professional & Technical Services		Lehigh County (WE 9/09/23)	3,325			55-Management of Companies and Enterprises	7,177	2.3%	152,119
Finance & Insurance		Northampton County (WE 9/09/23)	1,884	Workforce Race (LV) (2022 Q4)		52-Finance and Insurance	7,137	2.3%	93,579
		Total Lehigh Valley (WE 9/09/23)	5,169	White Alone	82%	71-Arts, Entertainment, and Recreation	5,356	1.7%	26,076
Employers (LV) - 2022				Black or African American Alone	11%	51-Information	3,208	1.0%	75,180
Establishments (in thousands) ^{3,4}	16.0	Workforce Education Attainment (LV) - (2022 Q4)¹⁰		American Indian or Alaska Native Alone	1%	53-Real Estate and Rental and Leasing	2,954	0.9%	59,781
Total Employees (in thousands) ⁴	315	Less than high school	12%	Asian Alone	4%	22-Utilities	1,288	0.4%	100,739
Avg Employees per Establishment	20	High school or equivalent, no college	24%	Native Hawaiian or Other Pacific Islander Alone	0%	11-Agriculture, Forestry, Fishing & Hunting	N/A	N/A	N/A
Avg Hourly Wage - 2022	Detail 27.49	Some college or Associate degree	27%	Two or More Race Groups	2%	21-Mining, Quarrying, and Oil and Gas Extraction	N/A	N/A	N/A
Year over Year Hourly Wage % Change	6.7%	Bachelor's degree or advanced degree	23%						
		Educational attainment not available	14%	Hispanic/Latino	17%				
Top Occupations by Job Postings (LV) - (Aug-23)				Not Hispanic/Latino	83%				
1.Registered Nurses		Education System (LV)⁸		Female	50.1%				
2.Retail Salesperson		School Districts (2021-2022)	17	Male	49.9%				
3.Sales Representative Wholesale/Manufacturing		Charter Schools (2021-2022)	12						
4.Laborers and Freight, Material Movers		Career and Technical Schools (2021-2022)	3	Workforce Commuting (2020)	11	Commuter Out, Live in LV	99,986		
5.First-Line Supervisors of Retail Sales Workers		Community Colleges / 4-Year Institutes	13	Commuter In, Live Outside LV	101,646	Work and Live in LV	186,093		
		PreK-12 Student Enrollments (In Thousands) (2021-2022)	Graph 101						
Online Job Postings (LV) - (In thousands)⁵		High School Graduates (In Thousands) (2020-2021)	Graph 7.2						
Aug-23	13.2	4-Year Graduation Rate % (2020-2021)	90%						
Aug-22	17.2	College Bound Students (In Thousands) (2020-2021)	4.8						
YoY Percentage Change	23.1%	% College Bound of High School Graduates (2020-2021)	Graph 67%						



Our mission is to ensure an employer demand-driven world class workforce system aligned with economic development, education and the community.

Legend:

- Favorable Change
- No Change
- Unfavorable Change

2020-2030 Lehigh Valley Industry Employment Long-Term Projections

NAICS	Industry Title	Employment		Change		Avg Annual Change
		2020	2030	Level	Percent	
31-33	Manufacturing	32,710	33,500	790	2.4%	79
3111	Animal Food Manufacturing	1,010	1,100	90	8.9%	9
337	Furniture & Related Product Mfg.	870	940	70	8.0%	7
3250A1	*Chemical Manufacturing (3251, 3252, 3253, & 3259)	1,690	1,820	130	7.7%	13
325	Chemical Manufacturing	3,050	3,240	190	6.2%	19
3320A1	Fabricated Metal Product Mfg. (3321, 3322, 3325, 3326, & 3329)	1,110	1,170	60	5.4%	6
3327	Machine Shops & Threaded Products	740	780	40	5.4%	4
327	Nonmetallic Mineral Product Mfg.	1,710	1,800	90	5.3%	9
332	Fabricated Metal Product Manufacturing	3,130	3,280	150	4.8%	15
321	Wood Product Manufacturing	670	700	30	4.5%	3
3254	Pharmaceutical & Medicine Manufacturing	970	1,010	40	4.1%	4
3330A1	Machinery Mfg. (3331, 3332, 3334, & 3339)	1,690	1,760	70	4.1%	7
3320A2	Fabricated Metal Product Mfg. (3323 & 3324)	1,020	1,060	40	3.9%	4
333	Machinery Manufacturing	2,050	2,110	60	2.9%	6
312	Beverage & Tobacco Product Manufacturing	2,310	2,360	50	2.2%	5
3121	Beverage Manufacturing	2,310	2,360	50	2.2%	5
339	Miscellaneous Manufacturing	3,660	3,700	40	1.1%	4

INCREASING EMPLOYMENT 

***Basic Chemical Manufacturing, Synthetic Rubber, Fertilizer, Soap, Cleaning Compound**

Lehigh Valley Industry Employment Long-Term Projections

NAICS	Industry Title	Employment		Change		Avg Annual Change
		2020	2030	Level	Percent	
3113	Sugar/Confectionery Product Manufacturing	600	600	0	0.0%	0
3115	Dairy Product Manufacturing	30	30	0	0.0%	0
3116	Animal Slaughtering & Processing	130	130	0	0.0%	0
314	Textile Product Mills	130	130	0	0.0%	0
3159	Accessories & Other Apparel Mfg.	20	20	0	0.0%	0
3212	Veneer & Engineered Wood Products	70	70	0	0.0%	0
322	Paper Manufacturing	1,180	1,180	0	0.0%	0
3222	Converted Paper Product Manufacturing	1,180	1,180	0	0.0%	0
323	Printing & Related Support Activities	580	580	0	0.0%	0
3231	Printing & Related Support Activities	580	580	0	0.0%	0
3333	Commercial & Service Industry Machinery	40	40	0	0.0%	0
3336	Turbine & Power Transmission Equipment	170	170	0	0.0%	0
3344	Semiconductor & Electronic Components	700	700	0	0.0%	0
3351	Electric Lighting Equipment Mfg.	60	60	0	0.0%	0
3359	Other Electrical Equipment & Components	290	290	0	0.0%	0
3369	Other Transportation Equipment Mfg.	10	10	0	0.0%	0

UNCHANGED EMPLOYMENT 

2020-2030 Lehigh Valley Industry Employment Long-Term Projections

NAICS	Industry Title	Employment		Change		Avg Annual Change
		2020	2030	Level	Percent	
326	Plastics & Rubber Products Manufacturing	2,590	2,530	-60	-2.3%	-6
311	Food Manufacturing	3,160	3,070	-90	-2.8%	-9
3335	Metalworking Machinery Manufacturing	160	150	-10	-6.2%	-1
334	Computer & Electronic Product Mfg.	1,120	1,050	-70	-6.2%	-7
315	Apparel Manufacturing	580	510	-70	-12.1%	-7
3152	Cut & Sew Apparel Manufacturing	560	490	-70	-12.5%	-7

DECREASING EMPLOYMENT 

Impact of Automation, Robotics, and Technology

2020-2030 Lehigh Valley Occupational Employment Long-Term Projections – Production Jobs

SOC Code	Occupational Title	Employment Outlook			Annual Demand			
		Estimated 2020	Projected 2030	Percent Change	Due to Growth	Due to Exits	Due to Transfers	Total Demand
51-0000	Production Occupations	23,110	23,000	-0.5%	-11	868	1,628	2,485
51-7000	Woodworkers	610	680	11.5%	7	24	43	74
51-1000	Supervisors - Production Workers	1,710	1,790	4.7%	9	53	118	180
51-5100	Printing Workers	280	290	3.6%	0	11	20	31
51-4000	Metal Workers & Plastic Workers	4,050	4,160	2.7%	11	132	285	428
51-6000	Textile, Apparel & Furnishings Workers	1,150	1,170	1.7%	2	70	71	143
51-8000	Plant & System Operators	670	670	0.0%	-1	21	45	65
51-9000	Other Production Occupations	7,530	7,480	-0.7%	-5	281	551	827
51-3000	Food Processing Workers	1,320	1,310	-0.8%	0	64	98	162
51-2000	Assemblers & Fabricators	5,790	5,470	-5.5%	-32	212	398	578

PENNSYLVANIA OCCUPATIONAL WAGES

LEHIGH VALLEY WORKFORCE DEVELOPMENT AREA

(Published May 2023)

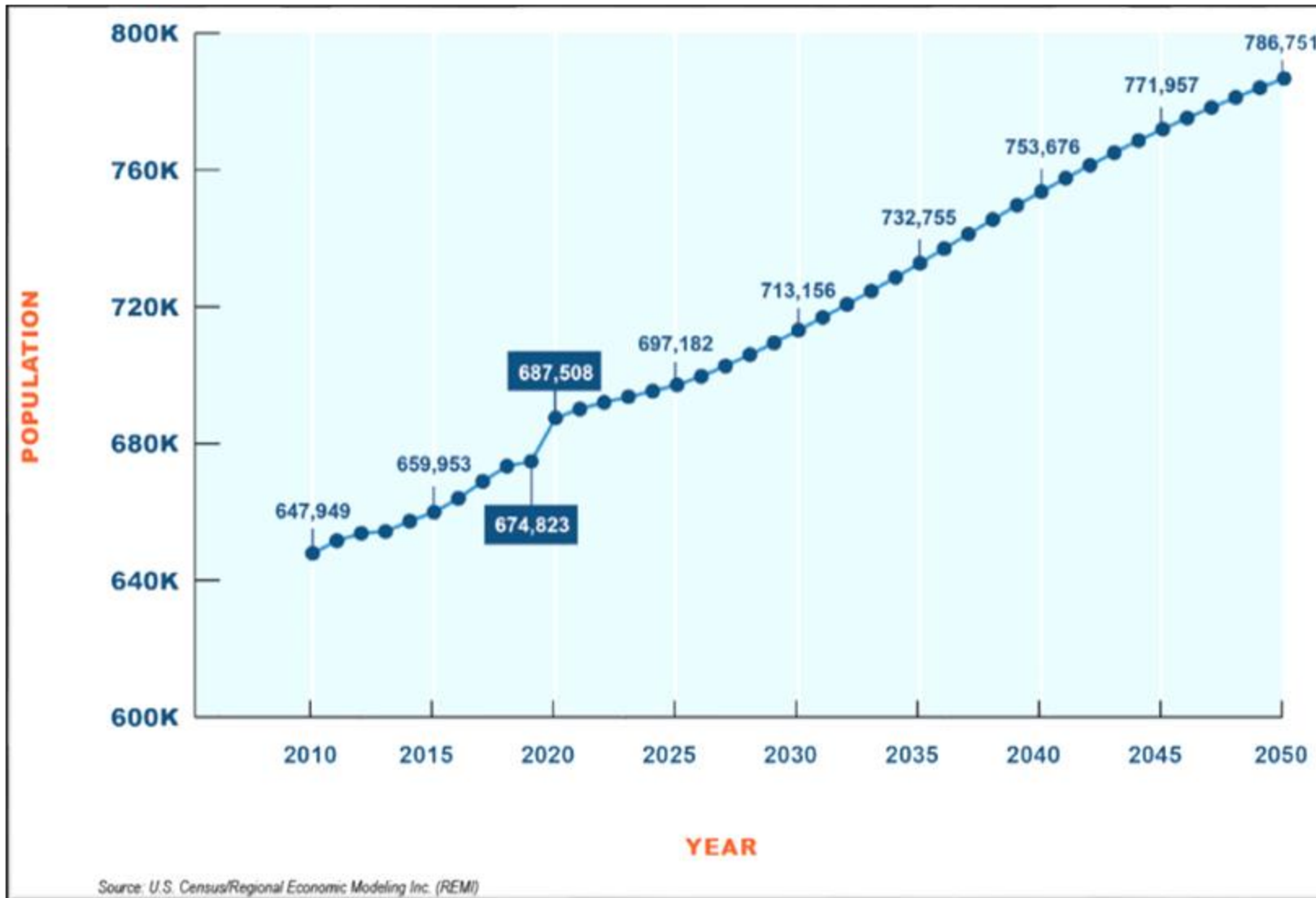


SOC Code	Occupational Title	Educ. Level	Average Hourly Wage (\$)	Average Annual Wage (\$)	Median Annual Wage (\$)	Entry Annual Wage (\$)	Experienced Annual Wage (\$)	Mid Range Annual Wage (\$)		
51-0000	Production Occupations	#	22.83	47,490	45,390	33,010	54,720	36,500	to	56,610
11-3051	Industrial Production Managers	BD+	52.99	110,220	100,890	71,560	129,550	81,390	to	129,930
53-7062	Laborers & Freight, Stock & Material Movers	ST OJT	19.79	41,170	38,720	32,500	45,500	35,860	to	46,230
51-9199	Production Workers, Other	MT OJT	19.50	40,550	38,140	32,410	44,620	34,710	to	43,780
51-9195	Molders, Shapers & Casters	LT OJT	20.94	43,560	39,910	34,830	47,930	37,930	to	48,210
51-9198	Helpers--Production Workers	ST OJT	17.85	37,130	36,690	30,440	40,470	32,970	to	39,020
51-1011	Supervisors - Production & Operating Workers	WK EXP	33.33	69,330	66,340	48,130	79,930	56,020	to	80,610
43-5061	Production, Planning & Expediting Clerks	MT OJT	24.99	51,980	50,220	34,820	60,560	39,150	to	61,260
41-4011	Sales Representatives, Technical & Scientific Products	BD+	50.57	105,190	80,620	49,700	132,940	56,900	to	125,280
41-4012	Sales Representatives	MT OJT	38.31	79,690	70,830	43,240	97,920	49,570	to	98,610
27-1021	Commercial & Industrial Designers	BD	36.53	75,980	78,370	54,720	86,610	61,350	to	89,790
25-1194	Vocational Education Teachers, Postsecondary	BD+	30.49	63,420	56,340	40,070	75,090	44,290	to	71,130
17-3026	Industrial Engineering Technicians	AD	29.57	61,520	53,600	41,070	71,740	45,580	to	70,720
17-2141	Mechanical Engineers	BD	54.43	113,210	102,070	71,030	134,300	78,420	to	138,730
17-2131	Materials Engineers	BD	42.82	89,070	73,880	58,520	104,350	62,290	to	110,980
17-2112	Industrial Engineers	BD	45.98	95,640	90,200	66,000	110,460	76,230	to	109,260
17-2071	Electrical Engineers	BD	53.29	110,850	102,590	71,100	130,730	80,340	to	133,500

Lehigh Valley Population Projections 2010 - 2050

By 2050
population
will grow by
nearly
100,000

In 2020
population
increased by **11,000**



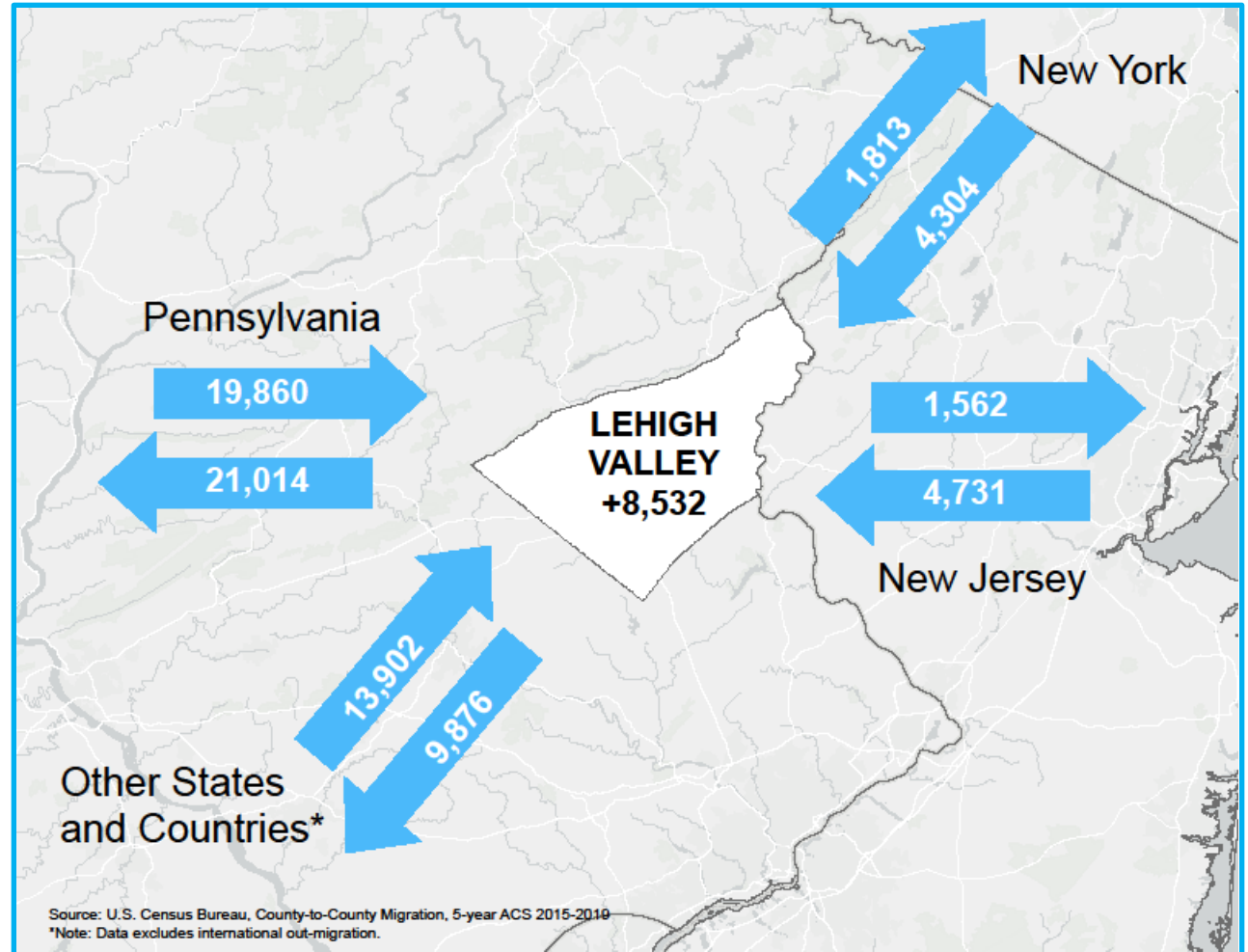
Source:
Lehigh Valley Planning Commission

Population Growth - Migration

Representative of a single year (e.g. 2017)

Most people are coming from

- 1. Other countries**
- 2. Other States**
- 3. Specifically NJ/NY**

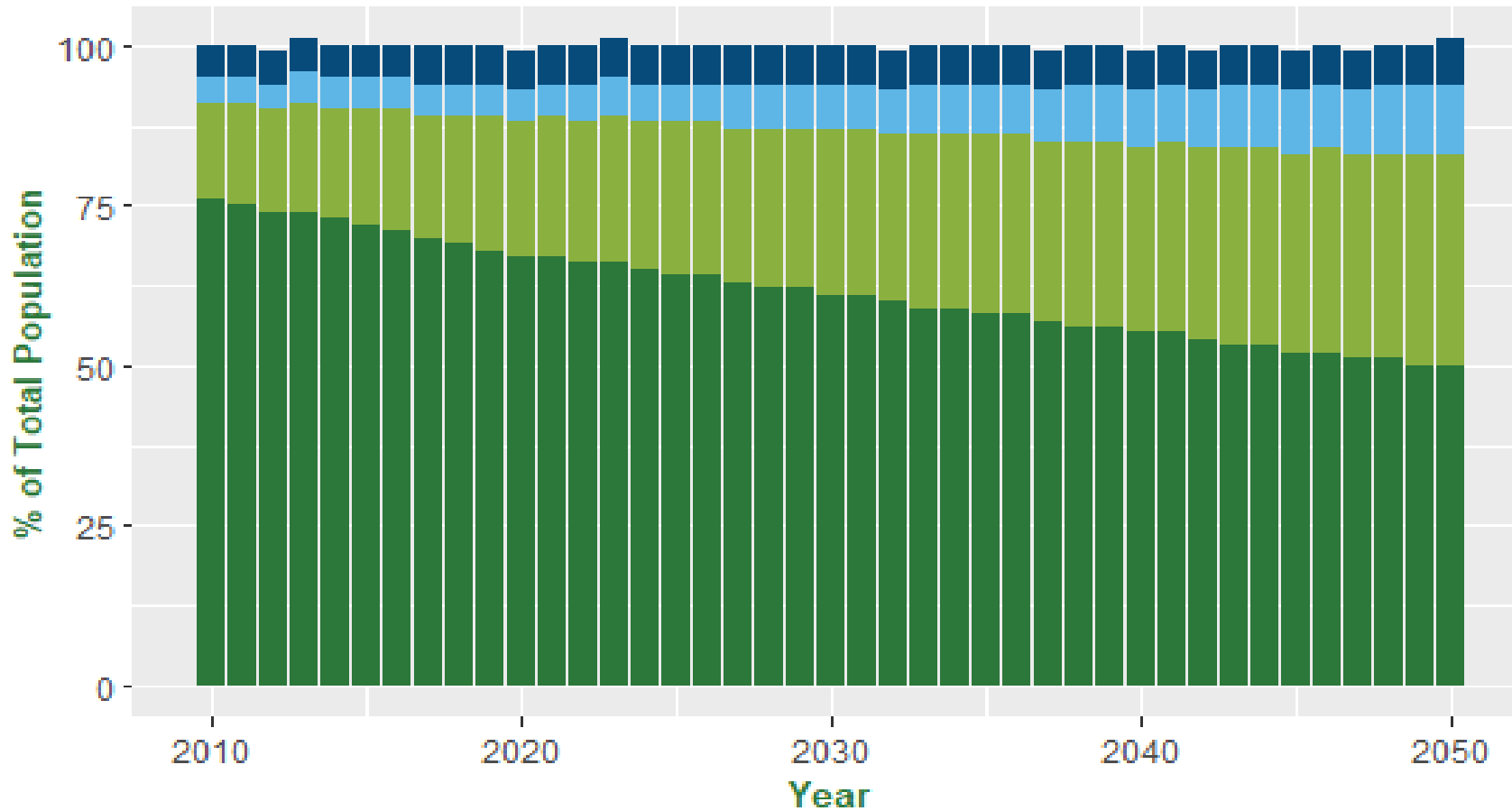


Source:
Lehigh Valley Planning Commission

Lehigh Valley Race/Ethnicity Composition

2010 - 2050

Black Non-Hispanic Other Non-Hispanic Hispanic White Non-Hispanic



Source: U.S. Census / Regional Economic Modeling Inc. (REMI)

- % of Hispanics rose from 15% to 21% in the last ten years.
- Projected to rise to a third of total population by 2050.
- By 2050, White Non-Hispanics will become a minority, going from 67% in 2020 to less than 50% in 2050.

Source: Lehigh Valley Planning Commission



GetWORKERS
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- * Job & Labor Market Data
- * Job Recruiters & Job Leads
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WORKFORCE
SYSTEM!

WE ARE THE
JOB
MATCHMAKERS!



**WORKFORCE
BOARD**

LEHIGH VALLEY

Gina Kormanik
Workforce Board Lehigh Valley
610-841-1006
Gkormanik@workforcelv.org

Don Cunningham

CEO

Lehigh Valley

ECONOMIC DEVELOPMENT

**Manufacturing Success and Trends
in the Lehigh Valley**

Lehigh Valley

ECONOMIC DEVELOPMENT



Top 15%

of U.S. Manufacturing Markets

GDP by Industry Sector

\$8.4B

Manufacturing

\$6.9B

Health Care & Education

\$3.7B

Wholesale Trade

\$3B

Information

\$8.1B

Finance, Insurance & Real Estate

\$5.9B

Professional & Business
Services

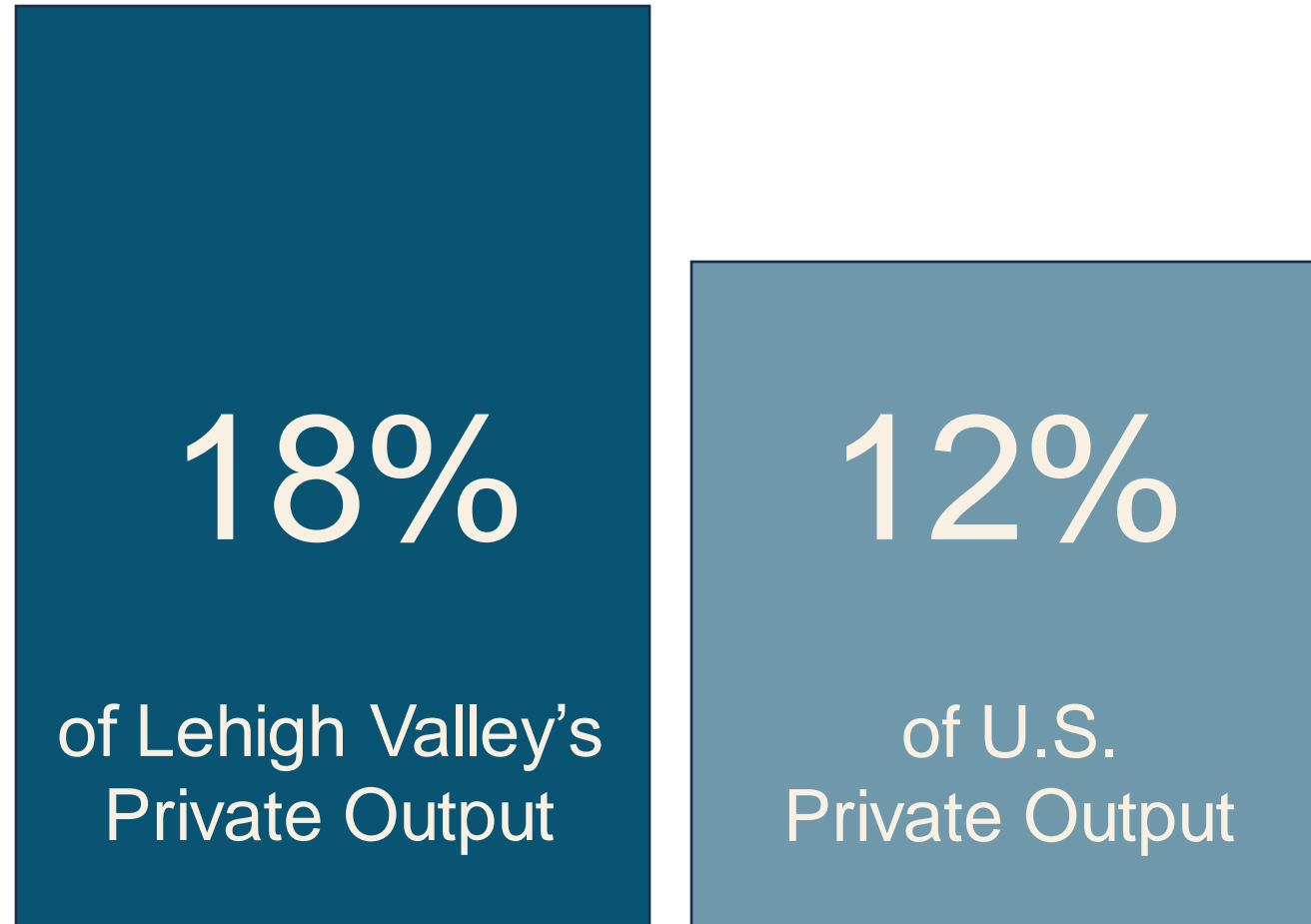
\$3B

Retail Trade

\$2.7B

Transportation

GDP by Manufacturing



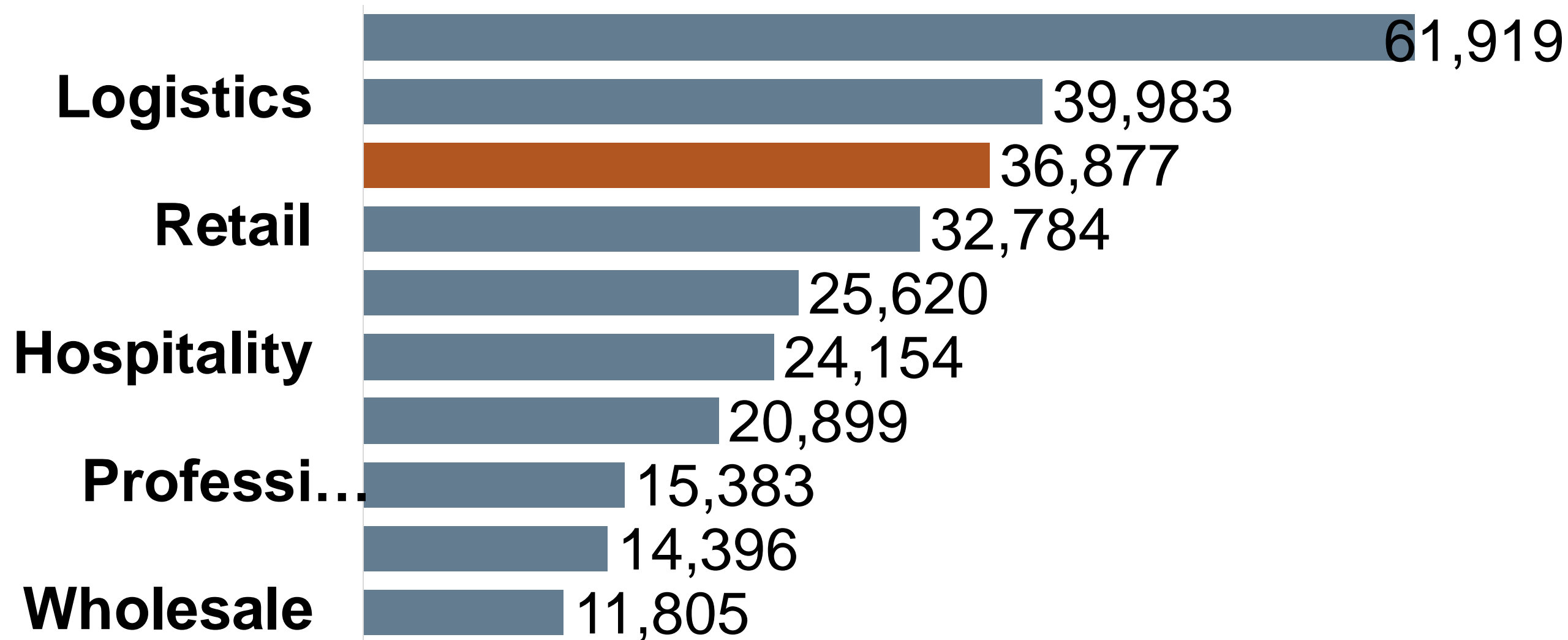
750
Manufacturers

37,000

Lehigh Valley Manufacturing Jobs

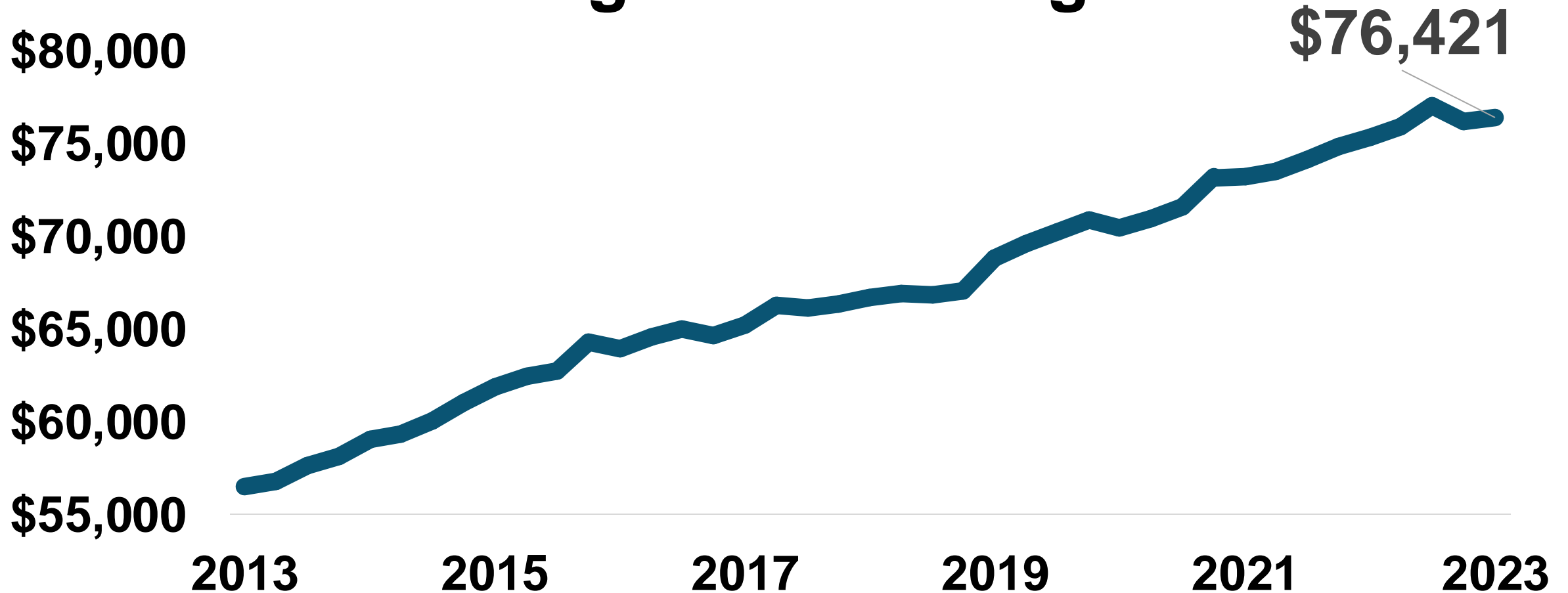
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Employment by Industry



Manufacturing Wages Over Time

Average Annual Wages



Why Do Manufacturers Come Here?

Lehigh Valley

ECONOMIC DEVELOPMENT

Access to population

Access to markets

Skilled workforce

Existing educational pipeline

Manufacturing heritage



What Do We Make Here?

Lehigh Valley

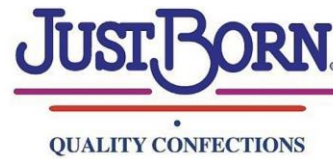
ECONOMIC DEVELOPMENT



Contributes \$4.7 Billion to Manufacturing GDP



6,800 Jobs, Largest Manufacturing Employment Sector



6,700 Jobs at 170 Lehigh Valley Locations



1,500 Jobs; Annual Wages 2X the Lehigh Valley Average



3,500 Jobs; Employment 2X the Typical U.S. Region



Chemical Manufacturing

3,500 Jobs; Contributes \$2 Billion to Manufacturing GDP



Consumer Product Manufacturing

4,800 Jobs, Employment 3X the Typical U.S. Region



Building Supplies Manufacturing

1,800 Jobs, \$62,000 Average Annual Wages

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Companies Supporting U.S. Military & National Defense

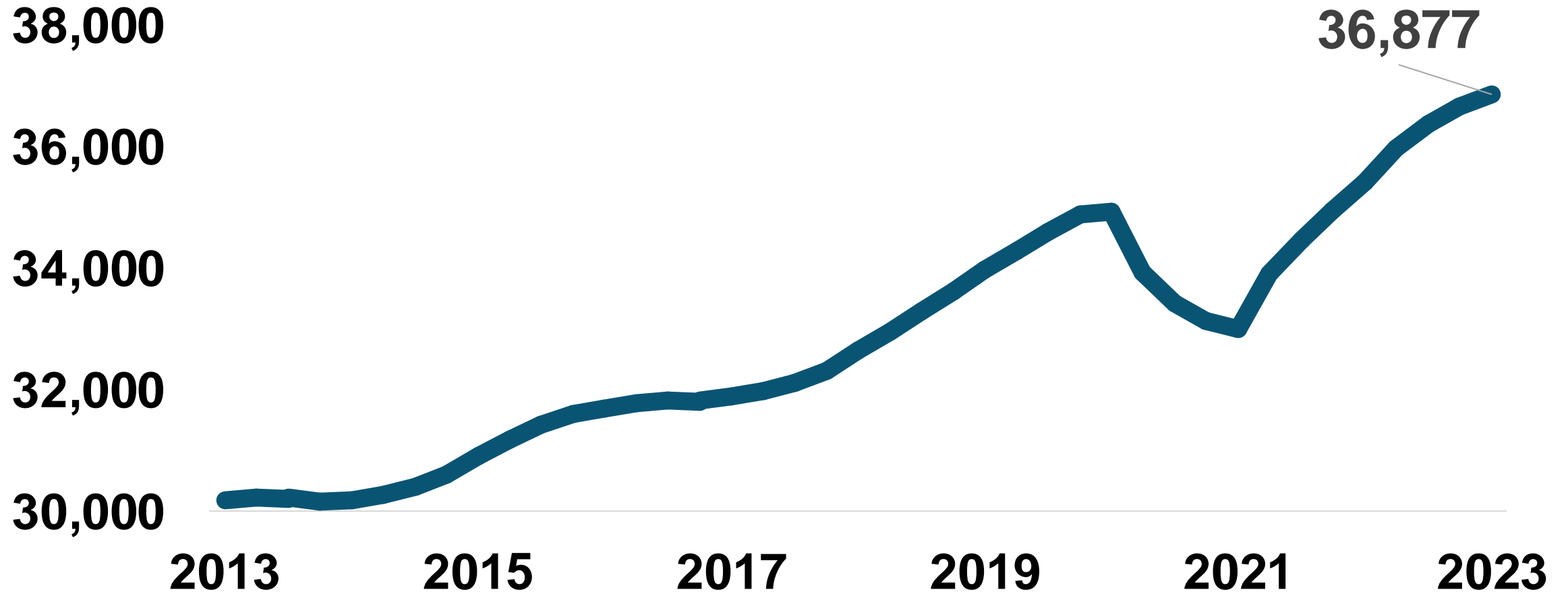


60

Manufacturing Projects

Manufacturing Jobs Increasing

Employment



B. Braun Medical

Hanover Township

Medical device manufacturer

310,000 SF

200 new jobs

\$200 million investment



iDeal Semiconductor

Lehigh Valley

ECONOMIC DEVELOPMENT

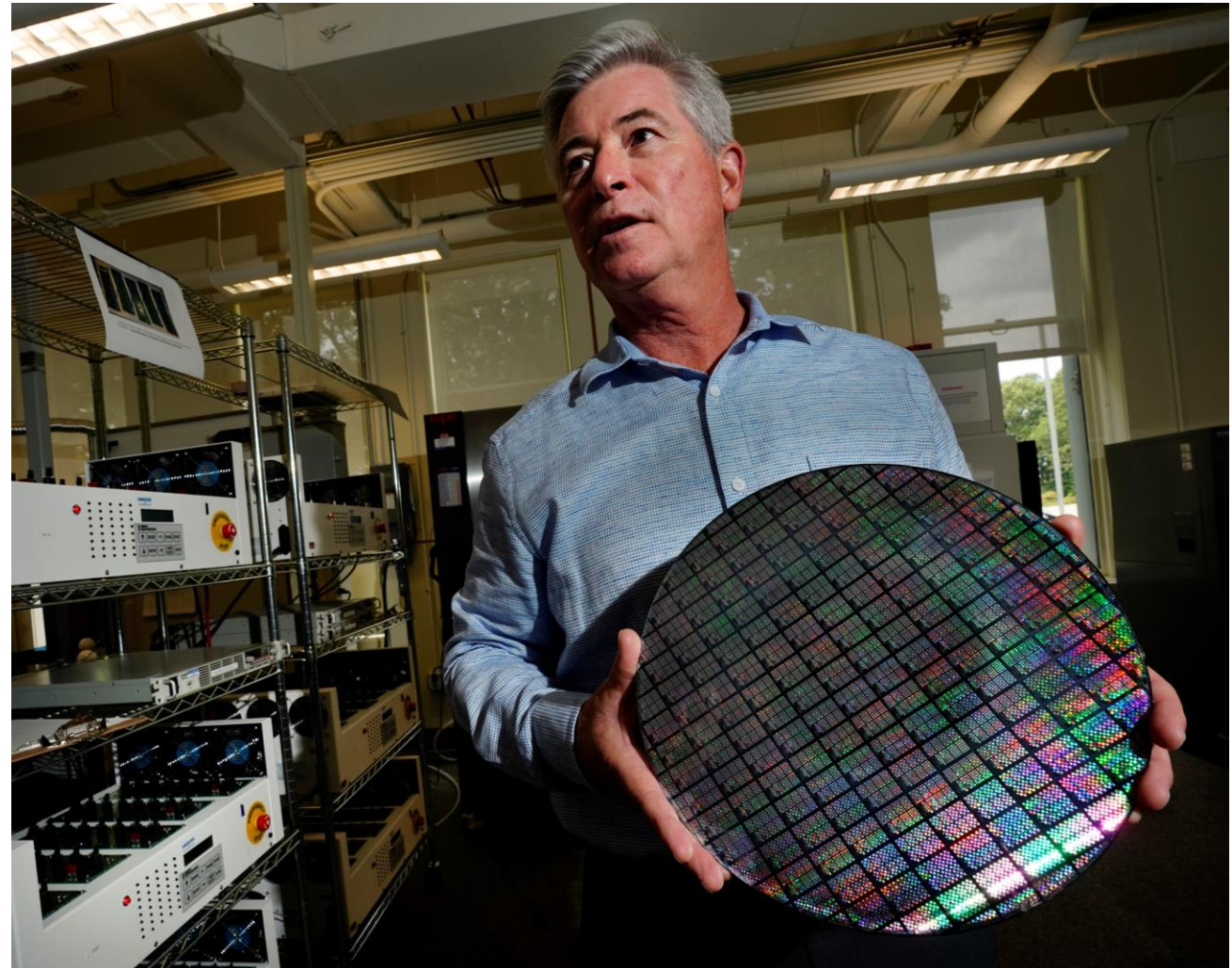
Bethlehem City

Semiconductor R&D facility

15,000 SF

63 new jobs

\$3.4 million investment



Travaglini

Allentown City

Italian food processing

equipment manufacturer

6,000 SF

7 new jobs



Easy Signs

Upper Macungie Township

Australian Manufacturer

72,000 SF

130 new jobs

3 million investment



Foreign Direct Investment - 2022

40%

of Prospects
were
international
companies

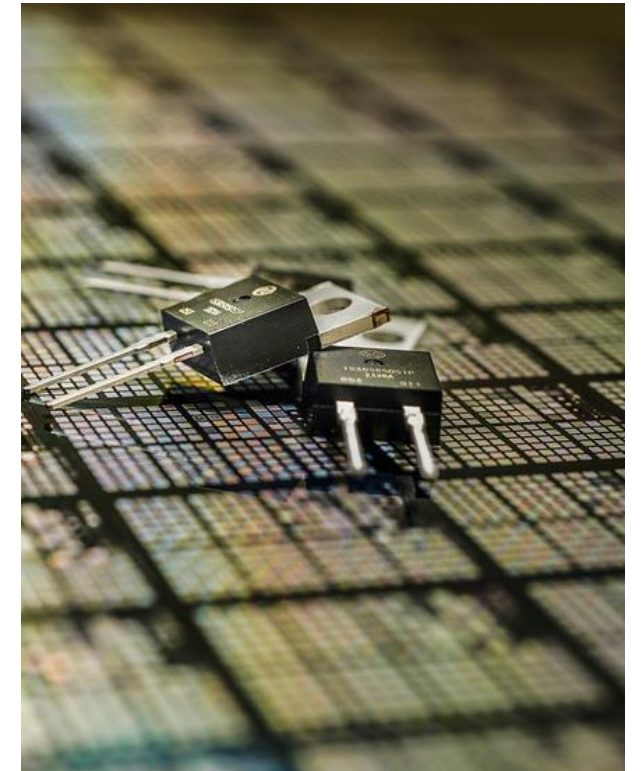
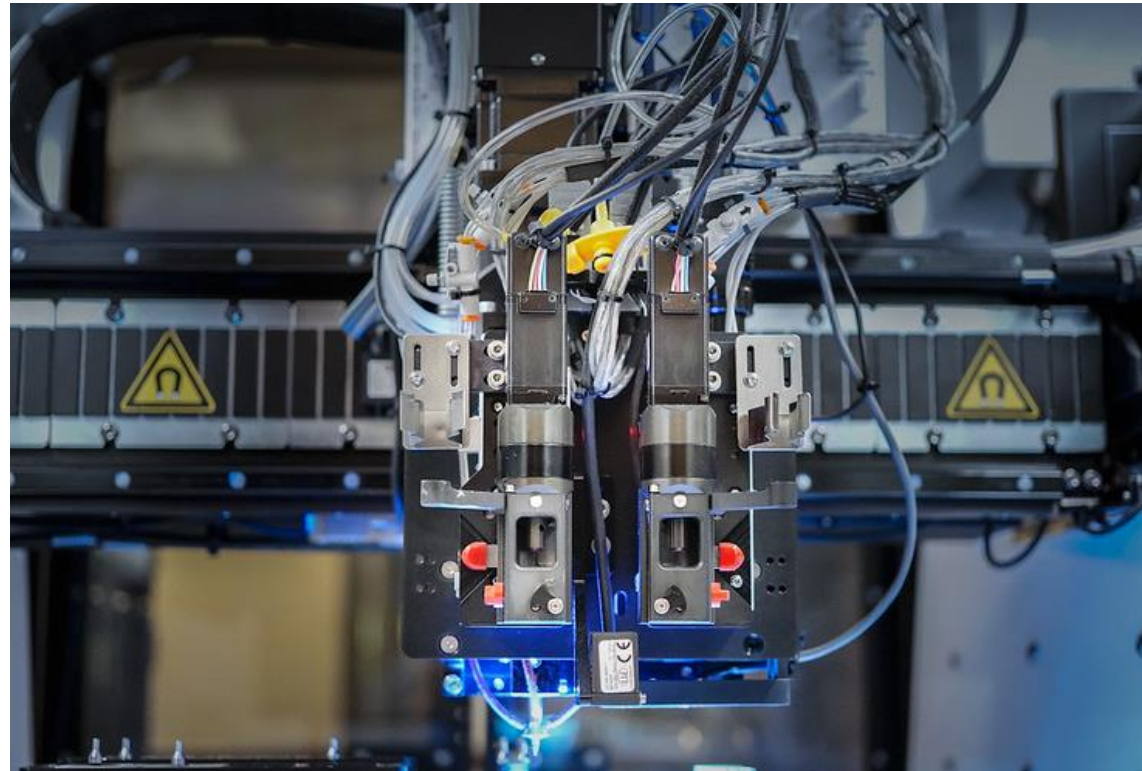
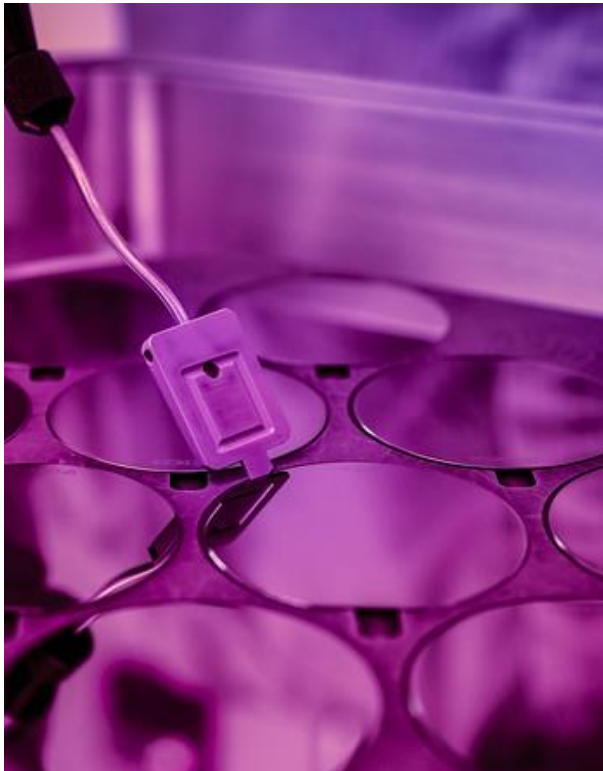
2 Mil

SF developed
by international
companies

80

International
companies in
Lehigh Valley

Applied to be named as 1 of 20 regional
Technology & Innovation Hubs in the U.S.A.



Fall Signature Event

Lehigh Valley's Technology Sector Yesterday, Today and Tomorrow

November 8th

4:00 PM – 6:00 PM

Iacocca Hall

Lehigh University Mountaintop Campus



Lehigh Valley

ECONOMIC DEVELOPMENT

Lin Erickson

Director & CEO



DA VINCI
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Da Vinci Science Center Video

Emily Gunther

Managing Principal



**2023 Manufacturing Tax and
Efficiency Insights**



We'll get you there.

2023 Manufacturing Tax and Efficiency Insights

Emily Gunther, CPA

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National and International Reach

8,500+

PEOPLE

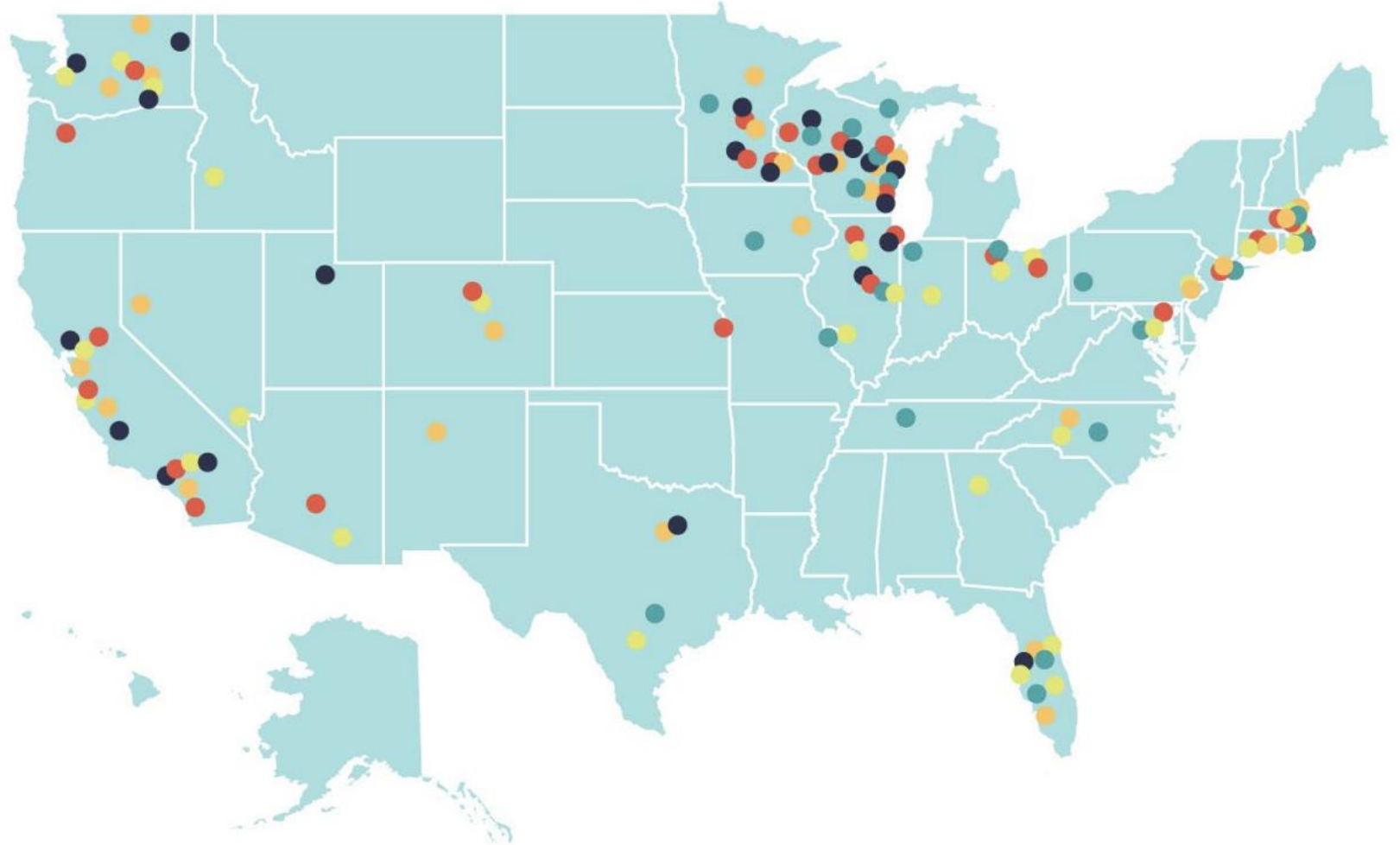
130

NEARLY 130 U.S. LOCATIONS

AN INDEPENDENT
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We Know Manufacturing



700+
PROFESSIONALS



CLIENTS IN ALL
50
STATES



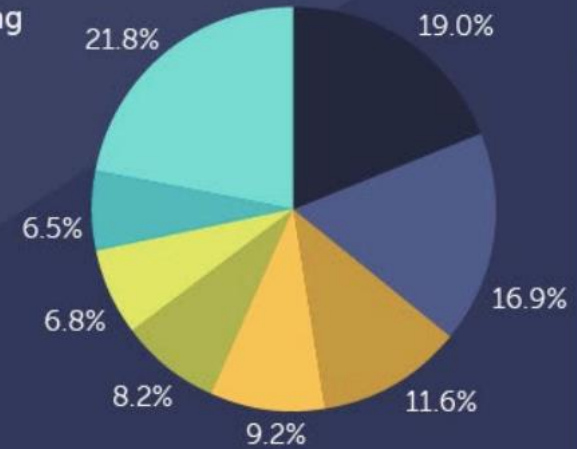
10,300+
M&D CLIENTS



ASSURANCE, TAX,
OUTSOURCING, WEALTH
ADVISORY, DIGITAL,
CONSULTING, AND M&A

We understand your industry

- Metalforming and machining
- Distribution
- Food processing and distribution
- Life science
- Power, energy and infrastructure
- Printing
- Rubber, plastics, and chemical
- Other manufacturers



MANUFACTURING AND DISTRIBUTION IS A FOCUS AT CLA



Tax Credits – 2023-2024 Tax Year

For hiring and employees

Employee Retention
Tax Credit

WOTC
(Work Opportunity
Tax Credit)

OJT/Apprenticeships

PA New Jobs
Creation - EDGE



Tax Credits – 2023-2024 Tax Year

Operational incentives

R&D Tax
Credits

ESG Credits

Energy
Efficiency –
179D

Cost
Segregation
Studies



Tax Credits – 2023-2024 Tax Year

Global Tax Incentives and Planning

Things to consider if you are doing business globally

- Managing the tax implications of global expansion
- Understanding the tax impact of foreign investment
- Dealing with repatriation of foreign earnings
- Avoiding double taxation and taking advantage of foreign tax credits
- Developing tax-compliant transfer pricing policies
- Reducing the value-added tax (VAT)
- Availing FDII (deduction for exporting products outside of the USA)



Looking Ahead

Leveraging your data through AI – Digital Transformation

Supply chain
efficiencies

Distribution
streamlining

Shop floor
efficiencies

Streamline your
back-office and
financial functions to
mitigate profit-leak





Emily Gunther, CPA
Managing Principal

emily.gunther@CLAconnect.com

267-419-1149

CLA exists to
create opportunities —
for our clients, our people,
and our communities.

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Dr. Stephen Tang

Former President and CEO



OraSure Technologies, Inc.

**“The Next Normal” Winning
Strategies for Manufacturers**

**“Next Normal”
Winning
Strategies for
Manufacturers**



A TEST FOR OUR TIME

Crisis Leadership
in the Next Normal



STEPHEN S. TANG









Matt Thorstensen
@MattThorstensen

This whole Ever Given situation is great meme material.



8:00 AM · Mar 25, 2021 · Twitter for Android



Ms Ever Given
@ever__given

best meme so far #SuezBLOCKED #suez #EVERGIVEN



10:29 PM · Mar 25, 2021 · Twitter for Android





SWAB.



SWIRL.



SEE.



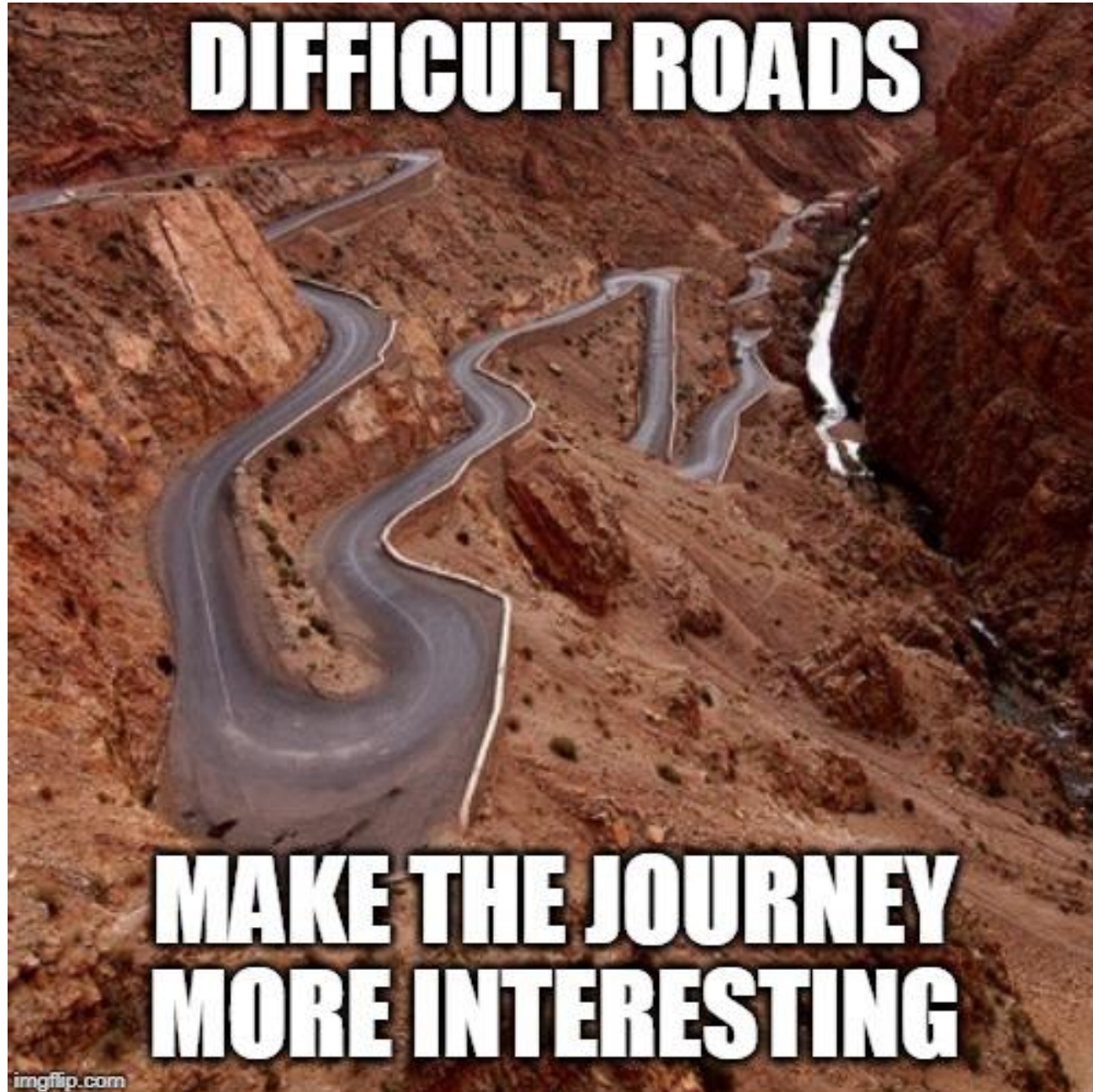


OraSure Technologies, Inc.



Nasdaq

DIFFICULT ROADS



**MAKE THE JOURNEY
MORE INTERESTING**



**Next Normal
Uncertainties**

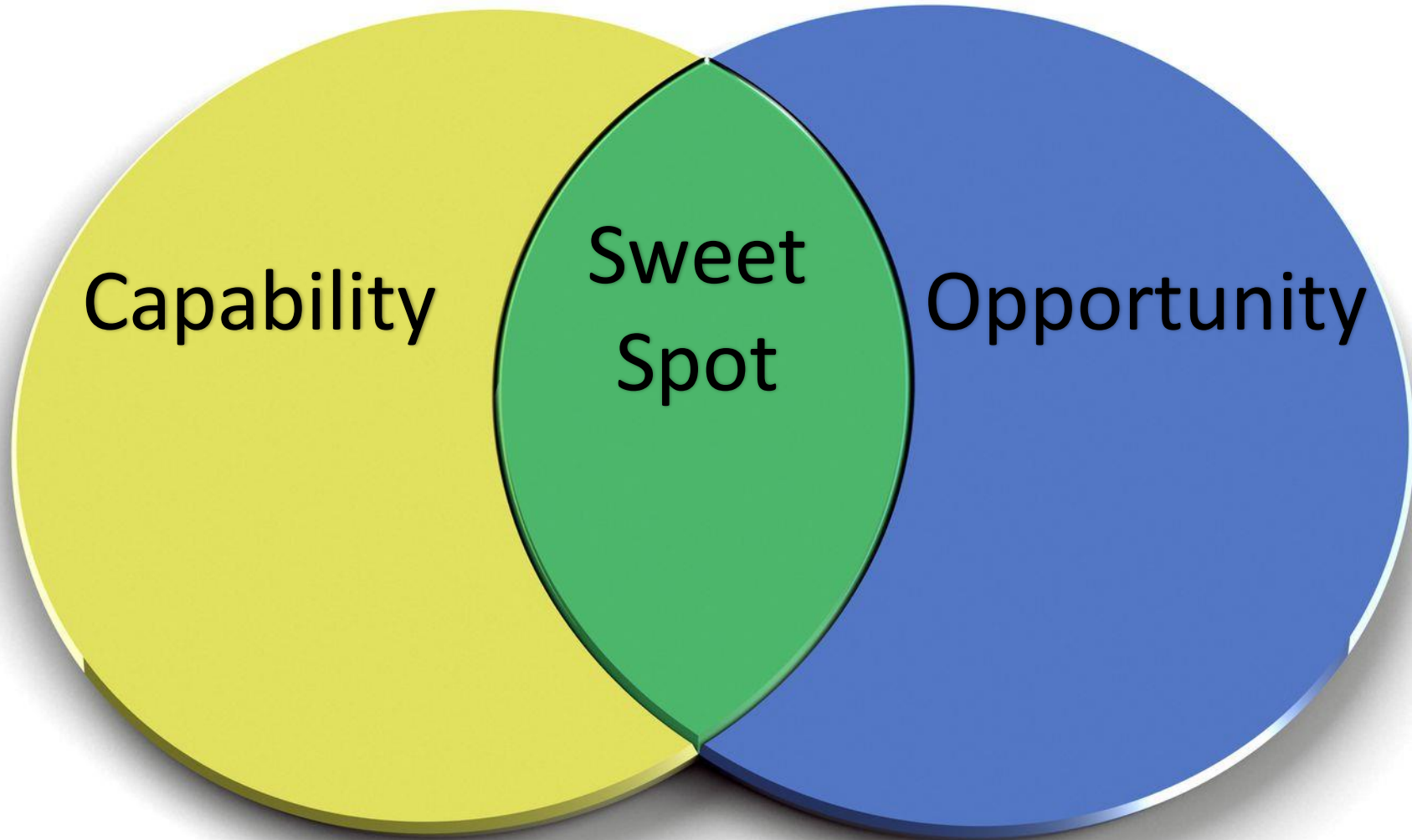
Next Normal Leadership



Occam's Razor

The simplest explanation is usually the correct one.

Strategy

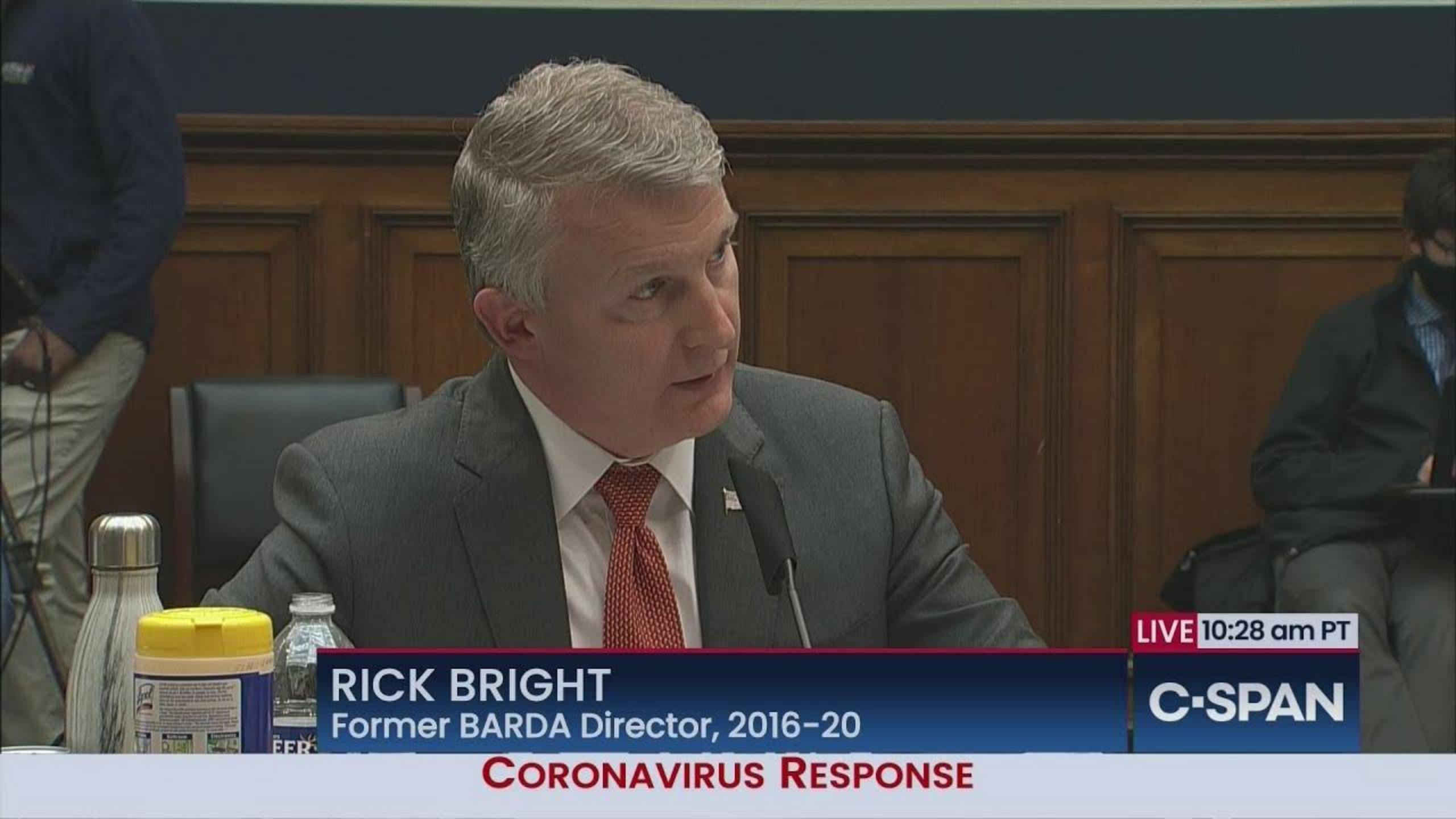


**EVERYBODY
HAS A PLAN
UNTIL THEY GET
PUNCHED
IN THE MOUTH**



White





LIVE 10:28 am PT

RICK BRIGHT
Former BARDA Director, 2016-20

C-SPAN

CORONAVIRUS RESPONSE



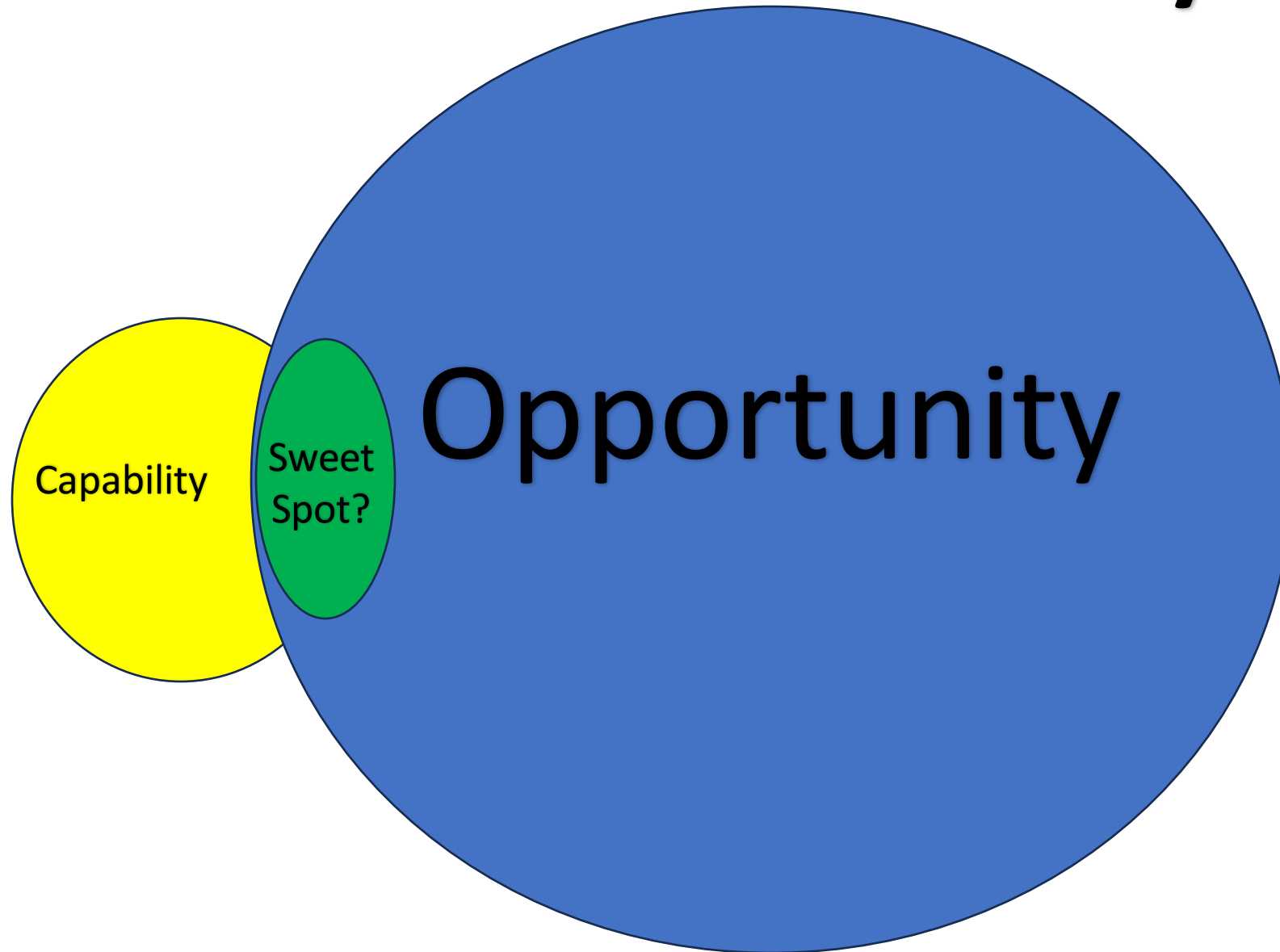
National Covid-19 Testing Action Plan

Pragmatic steps to reopen our workplaces and our communities





OraSure's Reality







Oprah Daily Rates IntelliSwab® as the
“Easiest Home COVID Test to Use.”



WHAT
WE
ARE

LEAP OF FAITH

WHAT
WE WANT
TO BE

MAKE THE JUMP.

Required Leadership Skills

Visionary

Empathetic

Relationship Builder

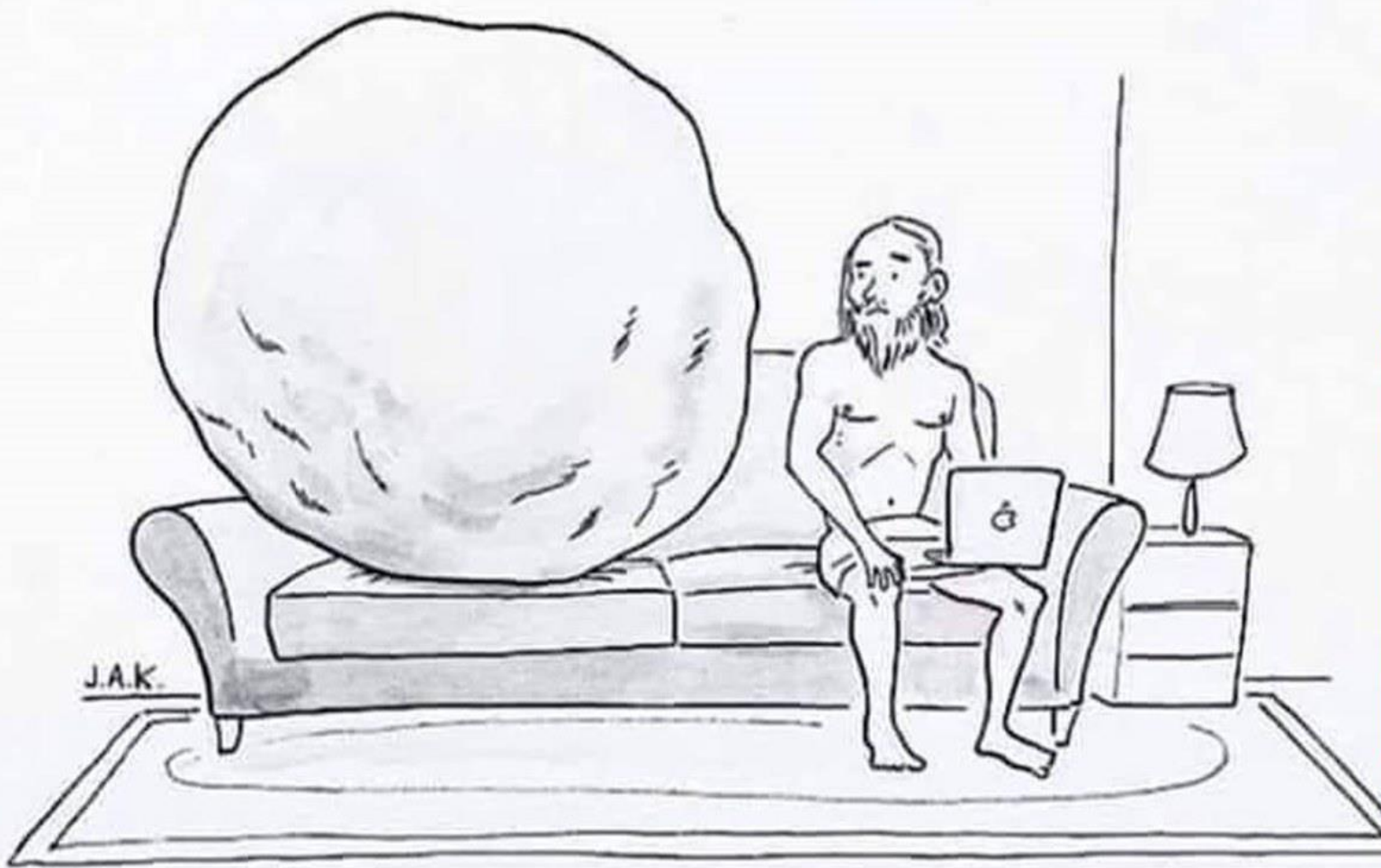
Adaptable

Foster Teamwork

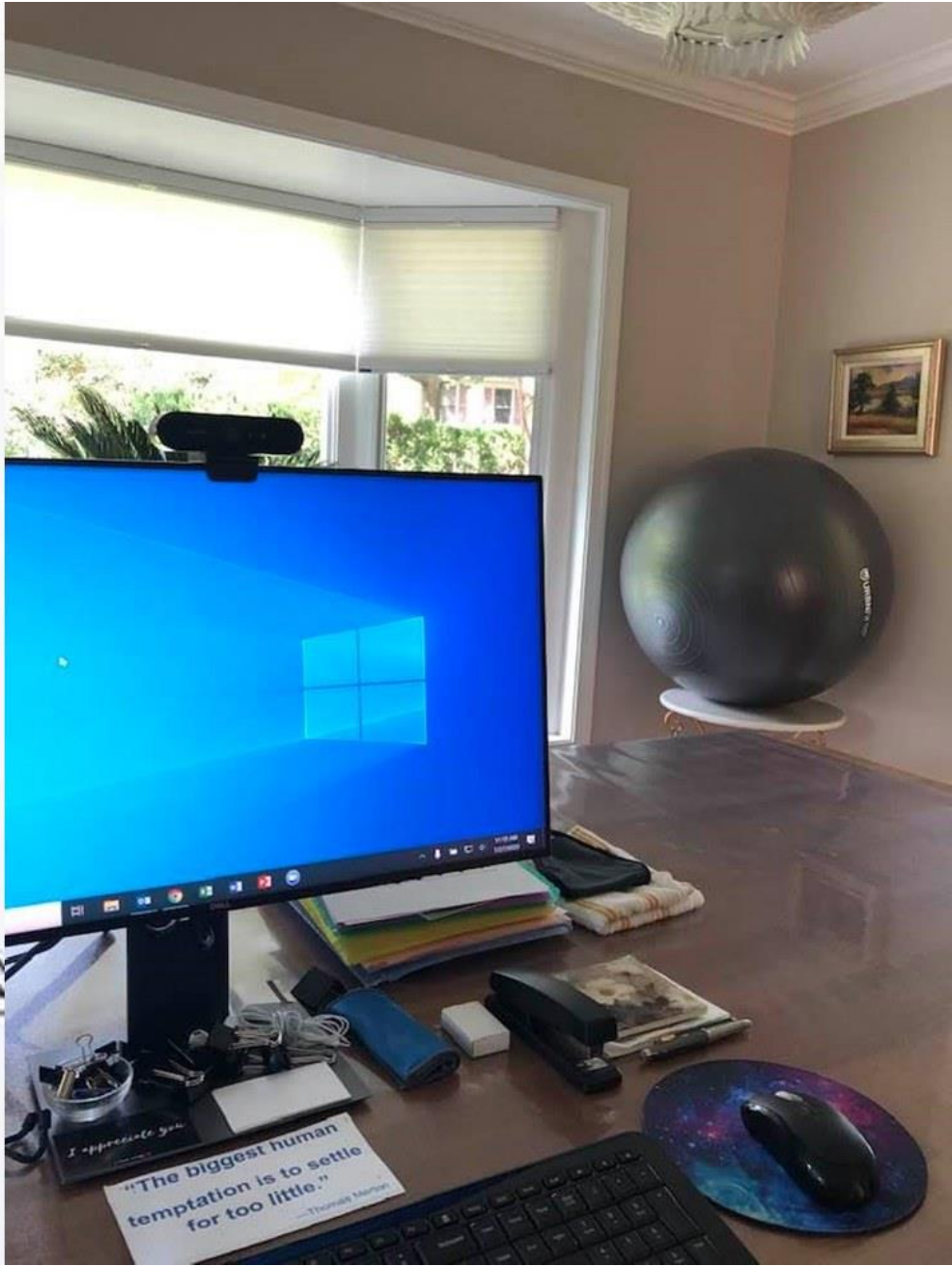
Translator

...like Pastors and Ancient Dragomen





SISYPHUS WORKS FROM HOME





LEHIGH
UNIVERSITY

LEHIGH
UNIVERSITY



LE



LEHIGH
UNIVERSITY

LEHIGH
UNIVERSITY

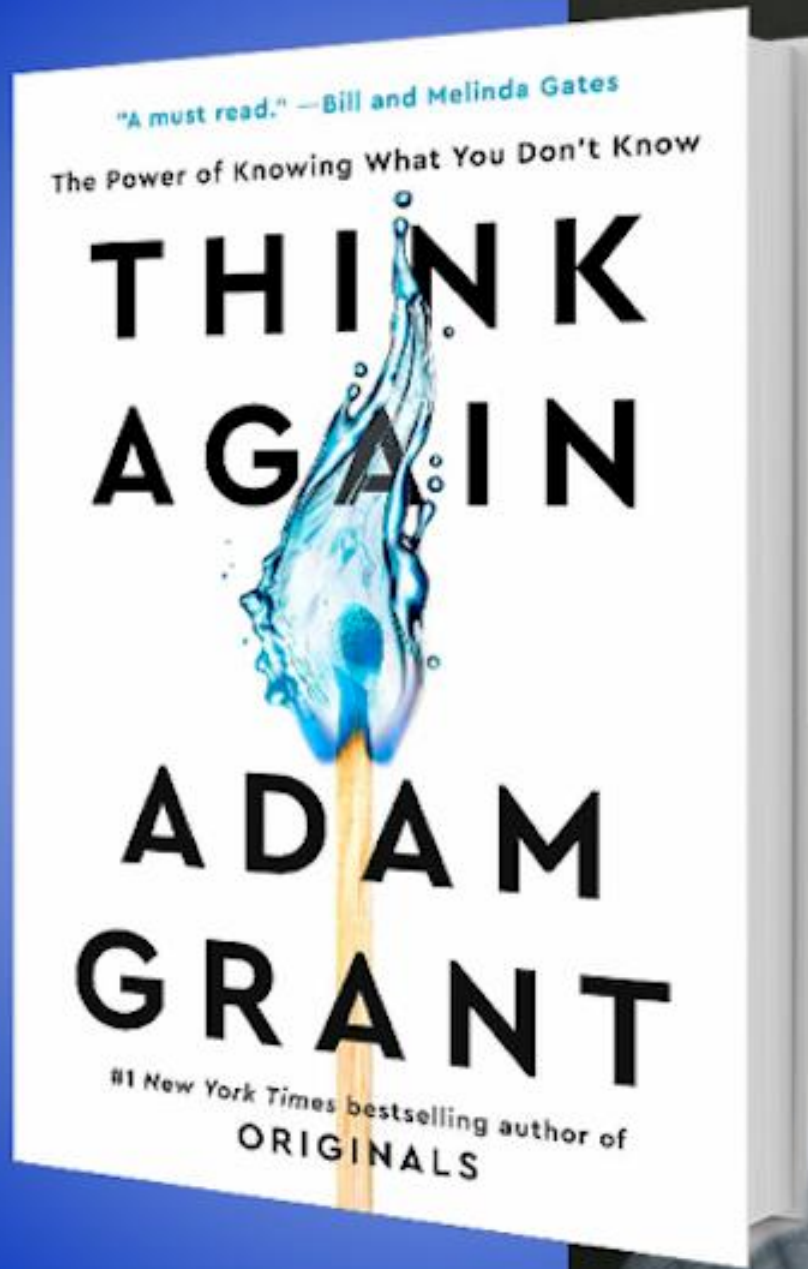


L
U



LEHIGH
UNIVERSITY





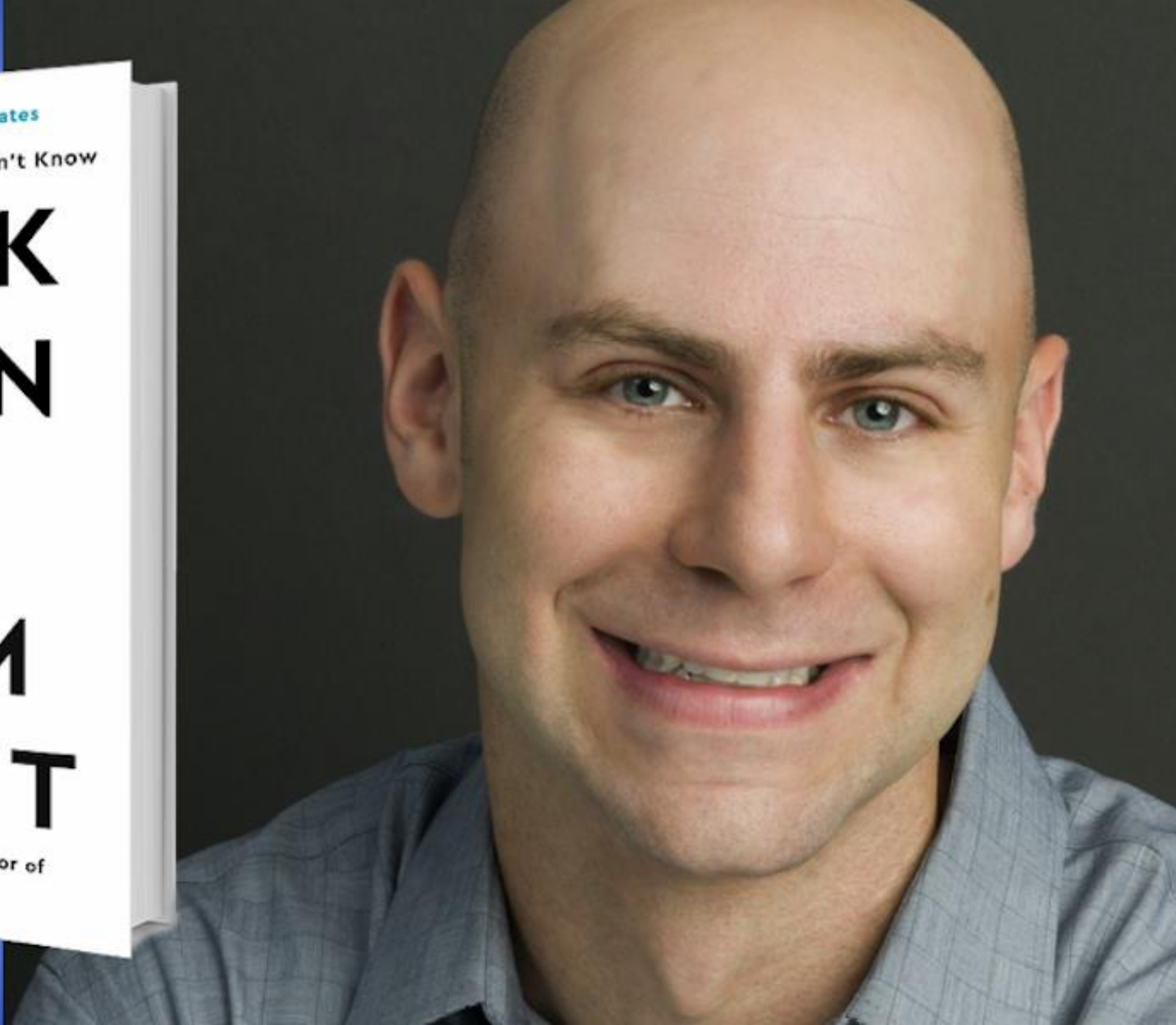
"A must read." —Bill and Melinda Gates

The Power of Knowing What You Don't Know

THINK AGAIN

ADAM GRANT

#1 New York Times bestselling author of
ORIGINALS



InteliSwab[®]

COVID-19 *RAPID TEST*

available at **amazon**





InteliSwab[®]
COVID-19 *RAPID TEST*

InteliSwab ranked
**#1 STANDOUT
PRODUCT**
out of 2227 products
reviewed by HRG*

See what makes
InteliSwab outstanding

* Future 50 annual ranking, published in Drug Store News





Tweet



Sheryl Crow ✓
@SherylCrow



Thanks for this, Nina. Exactly how I feel. ❤️



Just now · 🌐

A plea from a touring professional:

If you want to come to a show. Please get vaccinated. If you have a reason to not get vaccinated, don't come to a show. We are begging you. All of us were out of work for 18 months. Now we wake up every day on the road and get our noses swabbed, wear masks, stay away from everyone on our days off to keep YOU safe. It is just a concert to you, but do you understand that there are at least 30 people behind the scenes who are risking their well being because they love live music as much as you do? One single person that tests positive on our crew cancels everything. Your joyful Friday night is our livelihood, and tomorrow is not guaranteed. Last weekend in Michigan I had at least ten people come up to my face and yell at me "YOU DONT NEED THAT MASK!". Guess what? If I get covid, you will not see the show. For the love of god, think about that. The unemployment ran out. We have no Union. Nothing. If shows stop again, you will never see them again.



5:23 PM · 8/14/21 · [Twitter for iPhone](#)

196 Retweets **11** Quote Tweets **937** Likes



OraSure's Pandemic Transformation

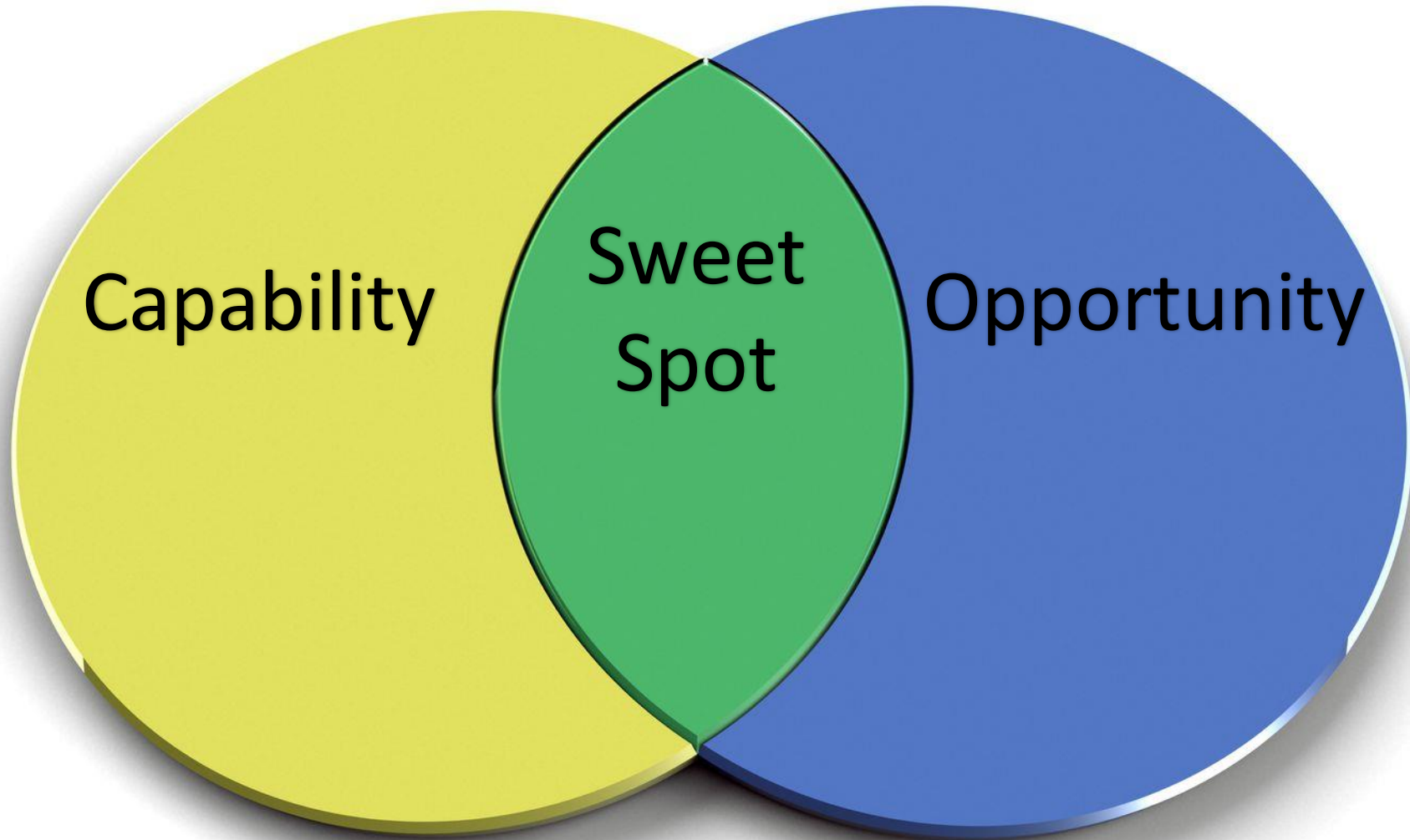
- **\$600,000 BARDA innovation grant → \$600 million InteliSwab orders**
- **Manufacturing capacity increased by 6X**
- **400 employees → 1,000 employees**
- **More FDA-authorized products launches than in the previous 20 years**
- **Record topline revenue in 2021, 2022, and 2023**

$$\text{Trust} = \frac{\text{Credibility} \times \text{Intimacy}}{\text{Risk}}$$

HOW TO BECOME AN **EMPLOYER OF CHOICE**



Strategy, Trust, and Hope



satisfaction,
but feeling
of uselessness

joy and fullness,
but no wealth

what you
love doing

passion

mission

what
you are
good at

ikigai

what
the
world
needs

profession

vocation

what you can
be paid for

comfortable, but
feeling of emptiness

excitement, but
sense of uncertainty



My Manifesto:

**Lead Whole People
Wholeheartedly**

Learn more about:

- **Crisis Leadership**
- **Next Normal**
- **Leading in the Hybrid Workplace**
- **Wholehearted Leadership**

"...a must-read for anyone looking to lead with empathy and courage in a time of crisis."

Vincent A. Forlenza, Retired Chairman, BD (Becton, Dickinson and Company)

"...an extraordinary leader who inspires business leaders to lead wholeheartedly."

Eric Schurenberg, Editor in Chief, Amplify Publishing Group, Former CEO and

Editor in Chief, *Inc.* and *Fast Company*

A TEST FOR OUR TIME

Crisis Leadership
in the Next Normal



STEPHEN S. TANG

**Connect with me
on LinkedIn.**

**Visit my website at
www.tang.ceo.**

Congresswoman Susan Wild



Congressional Update

Congresswoman Wild Video

Paige Nicholas

Vice President, Major Events



Prize Time!



WIND CREEK®
BETHLEHEM

OVERNIGHT STAY, DINNER FOR 2 IN THE CHOPHOUSE AND A COUPLES SPA EXPERIENCE AT THE WIND CREEK BETHLEHEM!

Diane Lewis
VP Manufacturing Solutions
& Center Operations

Manufacturers
Resource Center



Kitchen Magic Video

2023

Manufacturer of the Year



KITCHEN REMODELING EXPERTS

**Manager of Continuous Improvement and
Compliance – James Mayers**



ANNUAL MEETING

THURSDAY, NOVEMBER 9, 2023

WIND CREEK EVENT CENTER

Thank you for Attending 2023 Manufacturing Forum

