

Welcome to 17th ERIE Conference



Kenneth Louie



Black School of Business



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A vibrant night scene of a city skyline reflected in water, with a massive display of colorful fireworks exploding in the dark sky. The fireworks are primarily purple, pink, and white, creating a starburst effect. The city buildings are illuminated with various colors, and their lights reflect on the water's surface. The overall atmosphere is celebratory and festive.

ERIE celebrates

40th

Anniversary

in

2022



In the Beginning . . .



Researchers Discover Keys To Local Employment Trends

Two researchers from Penn State-Behrend's Economic Research Institute of Erie (ERIE) have released their latest findings about Erie-area employment trends and have unveiled an improved method of economic forecasting for small

regions similar to those in North-western Pennsylvania. Dr. James Kurze, assistant professor of economics, and Dr. Barry Weller, associate professor of economics and director of ERIE, are combining forces to interpret the current eco-

nomonic status of the Erie area and to predict future trends.

In his most recent report, "Cyclical Adjustments in Wages, Employment and Hours Worked in the Erie Economy," Kurze concludes that Erie manufacturers respond to changes in demand by hiring and firing employees, rather than by adjusting hours worked per week.

Although his study did not extend to the nonmanufacturing sector, Kurze concludes that the hiring/firing pattern may hold true across the economic board. "[I]f that's the case," says Kurze, "Employment and unemployment statistics will be good indicators of the Erie economy's well-being."

In his report, "Recent Developments in Business Forecasting: A Survey of Methods and an Illustrative Application to the Erie Economy," Weller discusses the concept of quantitative business forecasting and unveils his improved version of the Transfer Function Analysis technique.

According to Weller, the most exciting developments in the field of forecasting, an economic study which looks into the past to predict future economic trends, have occurred in the field of research called statistical time series analysis.

Transfer Function Analysis, explains Weller, is designed to provide acceptably accurate forecasts of total regional employment. Weller has tested an improved version of this forecasting technique using Erie County statistics from 1958-1982 to "predict" the employment statistics for 1983-84. The results: Transfer Function Analysis seems to be a very accurate forecasting technique for Erie County.

"The significance of these results for local business firms," says Weller, "is that there currently exists a range of forecasting techniques (like Transfer Function Analysis) which have the potential of being more accurate than those currently in use by most firms, and may have a positive effect on that all-important bottom line."



Dr. Barry Weller (L) and Dr. Jim Kurze discuss Erie's economic future.



Economic Research Institute of Erie

2001: An Economic Odyssey The Past, Present and Future of the Erie Economy

A conference designed for financial, business, industry, and government leaders

March 9, 2001
8:00 a.m.-1:00 p.m.

- Receive employment forecasts for the region
- Special keynote address
The New Political Environment in Washington by **Geoffrey Gradler**
Key aide to Senator Phil Gramm, U.S. Senate Banking Committee

To register, call 898-7149



Geoffrey Gradler
1992 Graduate of Penn State Behrend

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Erie The Behrend College

And the beat goes on . . .

Analysis of Cost-of-Living Data for Pennsylvania Counties

Kenneth K. T. Louie, Ph.D.
and James A. Kurre, Ph.D.

Economic Research Institute of Erie
Penn State Erie, The Behrend College



ERIE is a research center of the
Black School of Business at Penn State Behrend

Final Report
to the Center for Rural Pennsylvania



November 10, 2017

This project was made possible, in part, by a grant from the Center for Rural Pennsylvania, a legislative agency of the Pennsylvania General Assembly.

Special thanks to the Council for Community and Economic Research (C2ER) and especially to Mr. Erol Yildirim, Senior Vice President for New Products. They generously shared their *Cost of Living Index* data and the underlying estimating equations, without which this project would not have been possible.

Income Per Capita, 2015

10 shows the spatial patterns of income per capita across Pennsylvania counties in 2015. The counties with highest per capita incomes were those just outside of Philadelphia: Chester (\$73,803), Montgomery (66), Bucks (\$64,306), and Delaware (\$57,756). This is followed by Allegheny (\$54,090) and its adjoining counties, several counties in the southeast including Philadelphia (\$49,701), and Monroe County (\$59) in the east-central part of the state. The average per capita income across all counties was \$42,734, Forest County recording the lowest per capita income at \$25,039.

Income per capita for all urban counties was, on average, \$50,283, while it was \$39,746 on average for all rural counties.

Map 10
Income Per Capita, 2015



Income Per Capita, 2015

\$68,000
(\$58,000 - \$98,000)
(\$39,746 - \$45,746)
(\$40,746 - \$47,746)
(\$37,746 - \$73,803)
Rural County

Growth Rate of Income Per Capita, 2014-2015

11 (on the next page) shows the spatial patterns of the one-year (2014-2015) growth rate in income per capita across Pennsylvania counties. The area registering the highest income per capita growth rate (7.5%) was Washington County in the southwest. Other counties with relatively high growth rates were red in the southwestern, south-central, and eastern parts of the state. The average growth rate in income per capita across all Pennsylvania counties in 2014-2015 was 3.7 percent, with Warren County registering a negative growth rate (the only county to experience a negative growth rate during this period).

Average growth rate in income per capita across all urban counties during 2014-2015 was 3.8 percent, higher than the average rural county growth rate of 3.6 percent.

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Economic Research Institute of Erie

The Role of Foreign-Born Residents in the Economy of Erie County PA

September 2021

Principal Investigators:
Mark F. Owens, Ph.D., Research Associate
James A. Kurre, Ph.D., Director Emeritus

Economic Research Institute of Erie
Kenneth K.T. Louie, Ph.D., Director
Black School of Business
Penn State Erie, The Behrend College



ERIE is a research center of the
Black School of Business at Penn State Behrend

This report is available for download at: www.eriedata.bd.psu.edu.

Table 27: Top 15 Countries of Erie's Foreign-Born

Country of Birth	Continent	Estimate	Margin of error	90% Confidence Interval	
				Lower	Upper
China	Asia	886	288	598	1,174
India	Asia	794	196	598	990
Philippines	Asia	641	199	442	840
Germany	Europe	632	263	369	895
Poland	Americas	625	218	407	843
Canada	Asia	624	233	391	857
Ukraine	Asia	593	250	343	843
Poland and Herzegovina	Europe	543	292	251	835
Canada	Americas	499	132	277	541
Germany	Europe	400	146	252	548
India	Europe	398	281	98	647
Philippines	Asia	304	292	12	596
Germany	Asia	243	138	113	386
Poland	Americas	240	133	107	373
Ecuador	Americas	225	165	60	390

Source: Authors' calculations from ACS PLUMS data.

Map 2: Top 15 Countries of Origin for Foreign-Born in Erie



Source: Map is from Vector World Map (<https://www.vectornav.com/usa/usa.html>)

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Antonio Stello,
Business Economics, MBA



Victoria Jackson
Business Economics



Simon Nero, Business Economics, MBA



Jenna Shelton (2019-Present)
Graduate Research Assistant
Major(s): Marketing, MBA



Natalie Szalajko (2018-2019)
Graduate Research Assistant
Major(s): Business Economics;
Finance; MBA



Marissa Baker (2017-2019)
Graduate Research Assistant
Major(s): Management Information
Systems; Mathematics; MBA



Dylan Rossi (2016-2017)
Graduate Research Assistant
Major(s): Business Economics;
MBA



Alyssa Craig (2015-2016)
Graduate Research Assistant
Major(s): Psychology, MBA



Francis Skoros II (2019-Present)
Research Assistant
Major(s): Accounting;
Business Economics



Nicole Kittelberger (2019-Present)
Research Assistant
Major(s): Finance;
International Business



Michael Tyndall (2017-2018)
Research Assistant
Major(s): Business Economics;
Finance



Hannah Carlino (2017-present)
Research Assistant
Major(s): Business Economics;
Marketing



Nicholas Findley (2017-2017)
Research Assistant
Major(s): Business Economics
Finance



Tyler Alexander
Business Economics



Brittany Martinelli (2014-2015)
Graduate Research Assistant
Major(s): Business Economics;
Marketing, MBA



Dan Eiben (2013-2014)
Graduate Research Assistant
Major(s): Economics; MBA
International Business; MBA



Patrick St. Andrews (2012-2013)
Graduate Research Assistant
Major(s): Business Economics;
International Business; MBA



Travis MG Yates (2011-2012)
Graduate Research Assistant
Major(s): Business Economics;
MBA



Clay O'Dana (2010-2011)
Graduate Research Assistant
Major(s): Business Economics



Natalie Szalajko (2015-2018)
Research Assistant
Major(s): Business Economics;
Finance



Ian Richards (2016)
Research Assistant
Major(s): Business Economics;
Finance



Dylan Rossi (2016)
Research Assistant
Major(s): Business Economics



Marissa Baker (2015-2017)
Research Assistant
Major(s): Management
Information Systems; Mathematics



Tulsa Lose (2015)
Research Assistant
Major(s): Mathematics



Jeremiah Riethmiller (2009-2010)
Graduate Research Assistant
Major(s): Business Economics;
Finance; MBA



Jon Curtis (2008 -2009)
Graduate Research Assistant
Major: Economics; MBA



Ben Schlosser (2006-2008)
Graduate Research Assistant
Major: Economics; MBA



Emily Oborski (2005-06)
Graduate Research Assistant
Major: Operations Management;
MBA



Michael Hammill (2002-2005)
Graduate Research Assistant
Major: Business Economics;
MBA



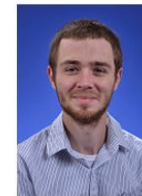
Josh McAleer (2014-2015)
Research Assistant
Major(s): International Business;
Finance



Ian Dunton (2014)
Research Assistant
Major(s): Business Economics



Theodore Wisinski (2014-2015)
Research Assistant
Major(s): Business Economics



Matthew Migdal (2014-2015)
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Natasha Terensky (2013-2014)
Research Assistant
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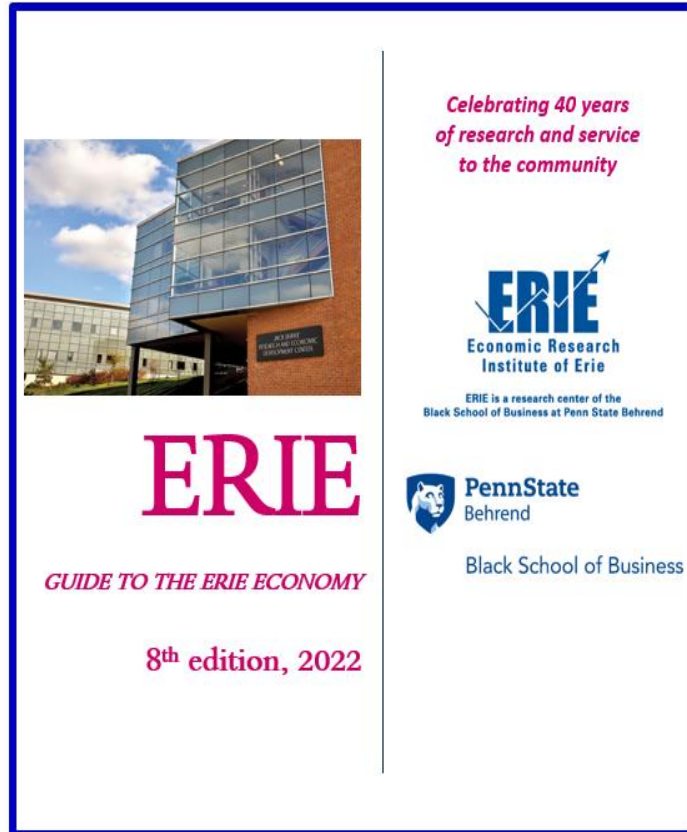
THE AMERICAN PROSPECT
IDEAS, POLITICS & POWER

The
Philadelphia
Inquirer





New Releases



ERIE Guide to the Erie Economy



ERIE Leading Index

The Erie Economy in 2022: Recent Trends and Future Prospects



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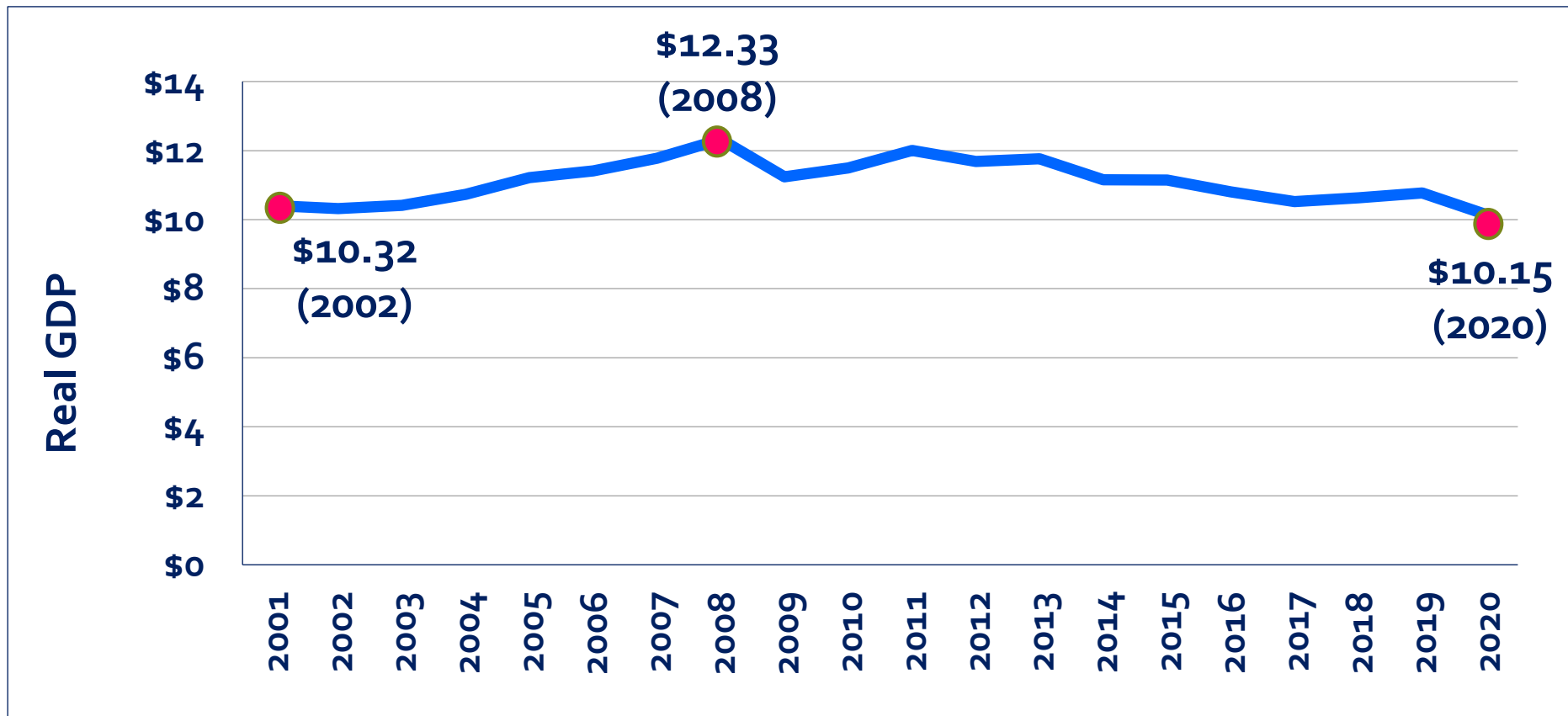


Stable but sluggish . . .



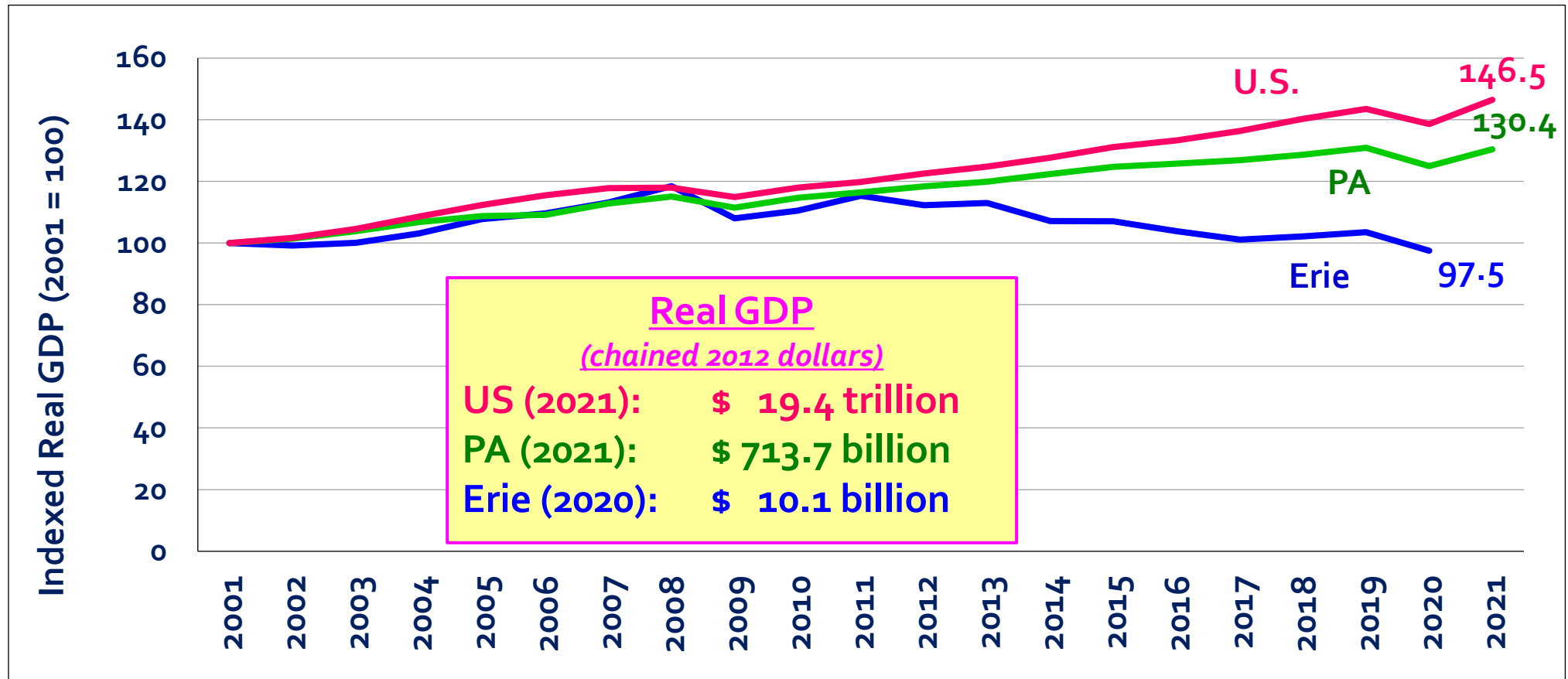
Erie Real GDP, 2001- 2020

(billions of chained 2012 dollars)



Real GDP: Erie, PA, and U.S.

Inflation-Adjusted GDP (Indexed to 2001)

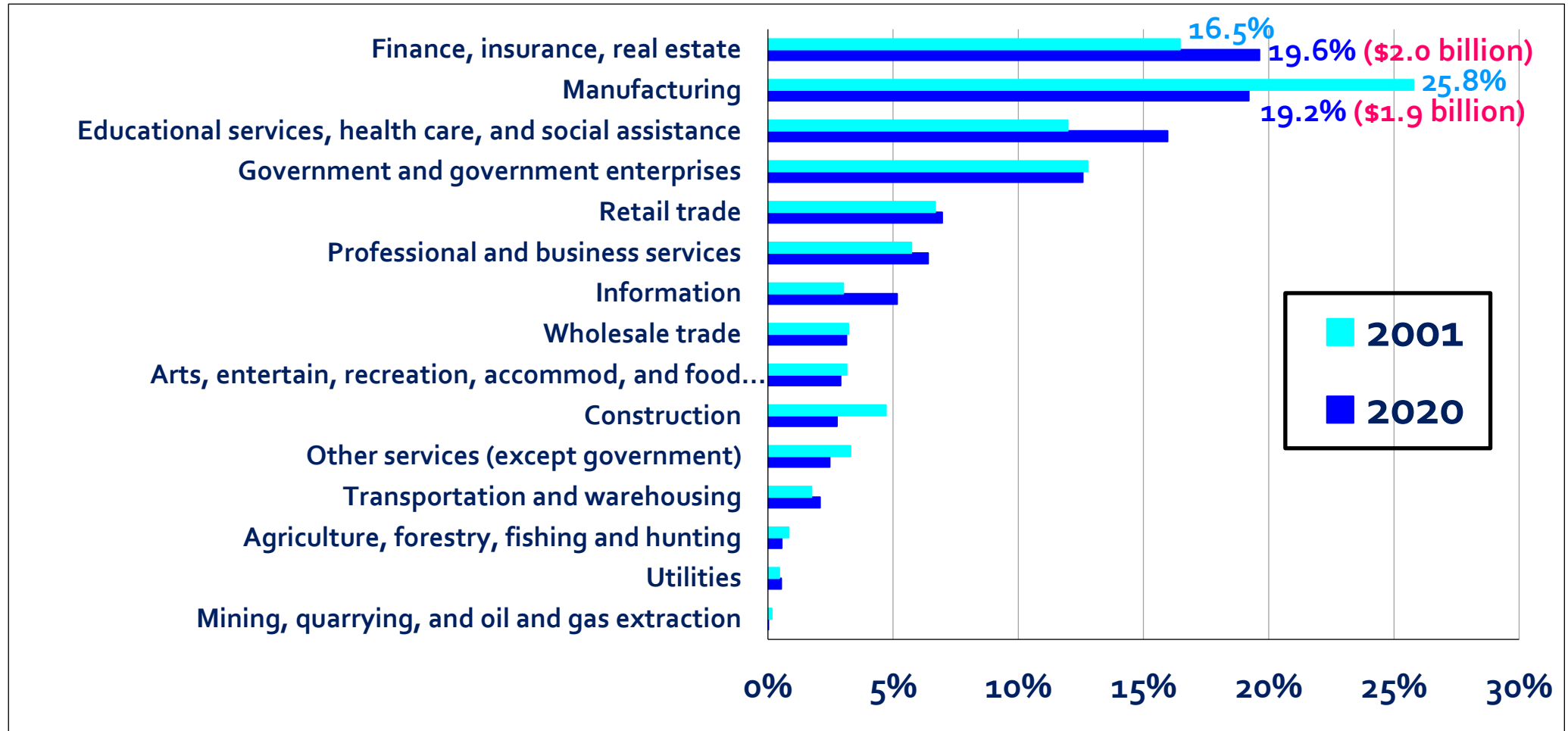




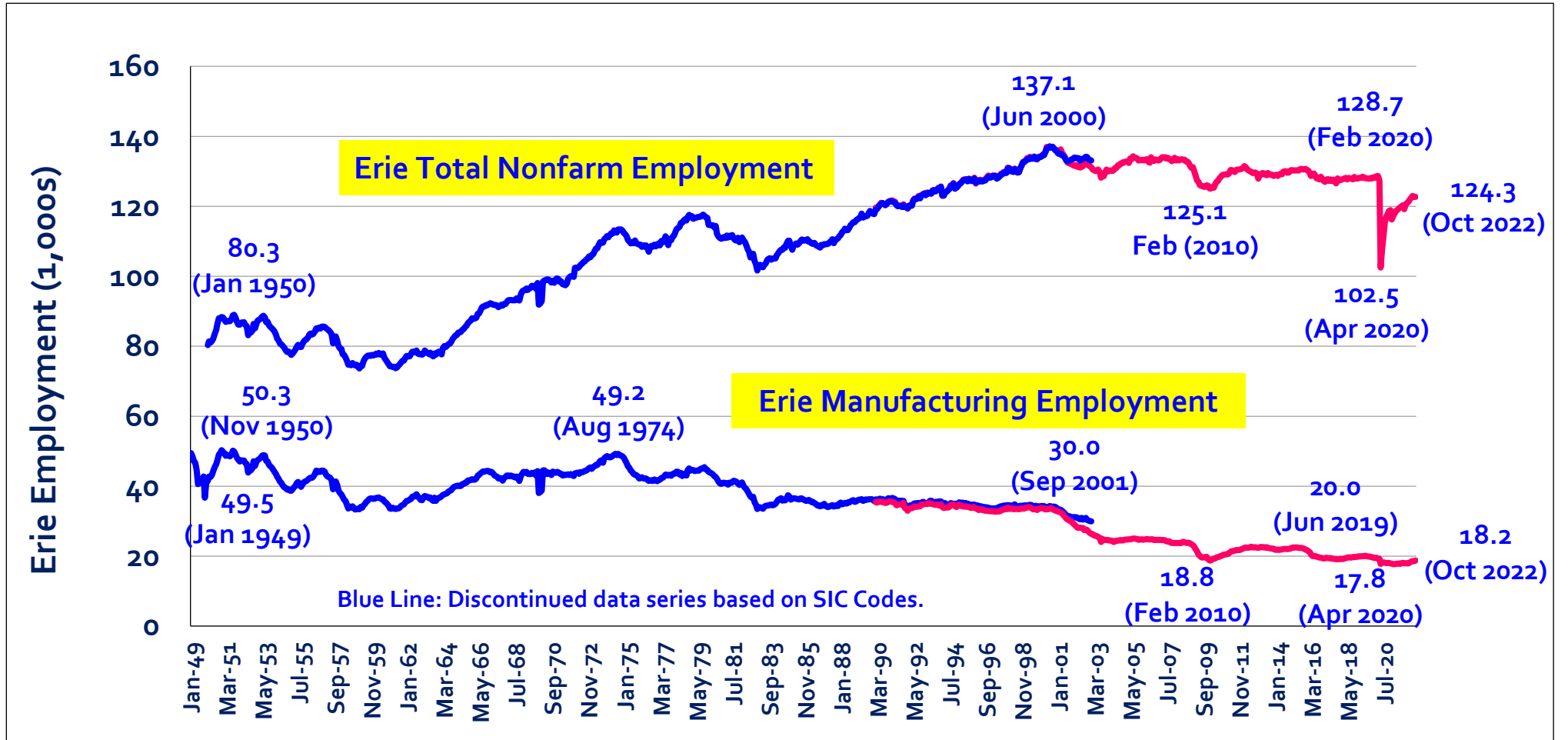
Evolution of the Erie economy . . .

Evolution of the Erie Economy

Erie Real GDP by Industry, 2001 vs 2020



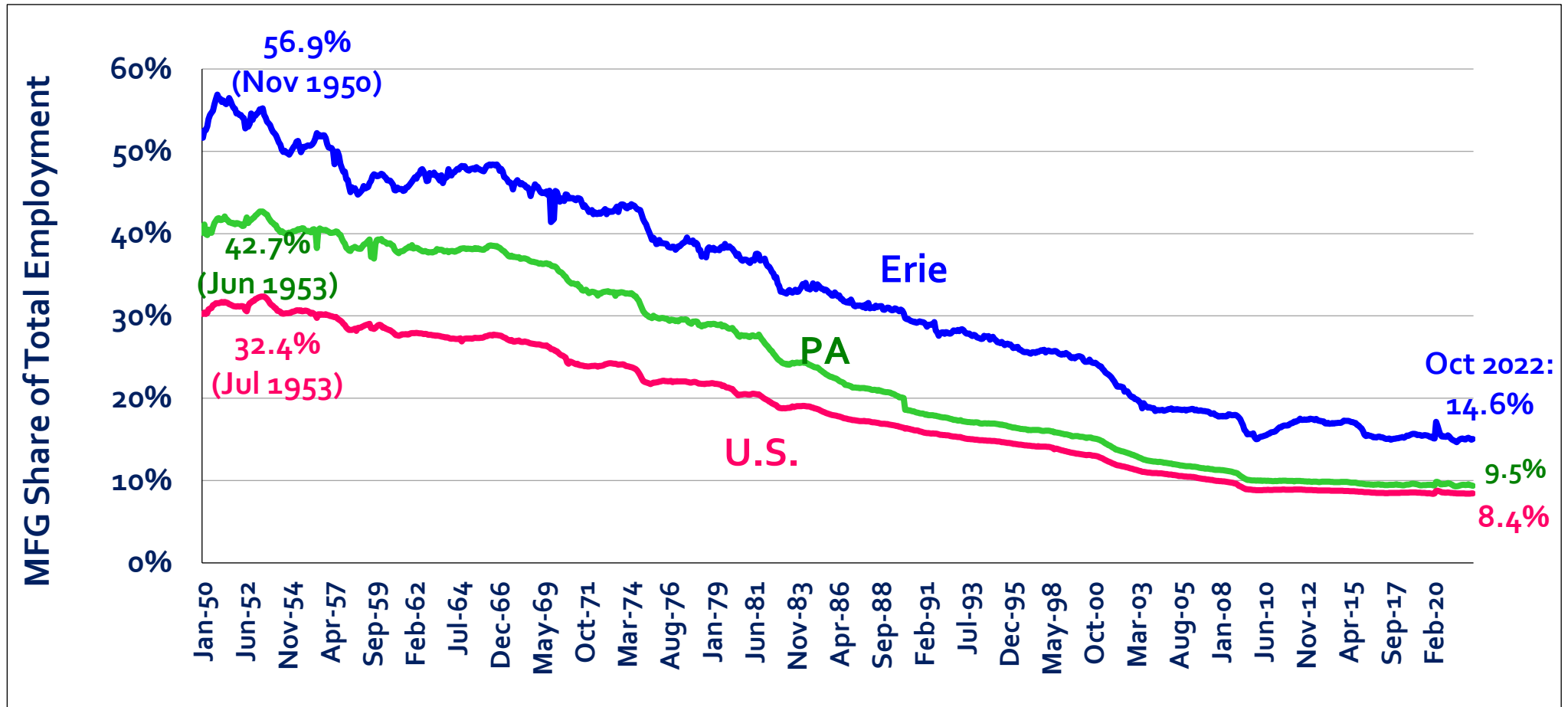
Erie Employment (1000s), 1949- 2022



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted.

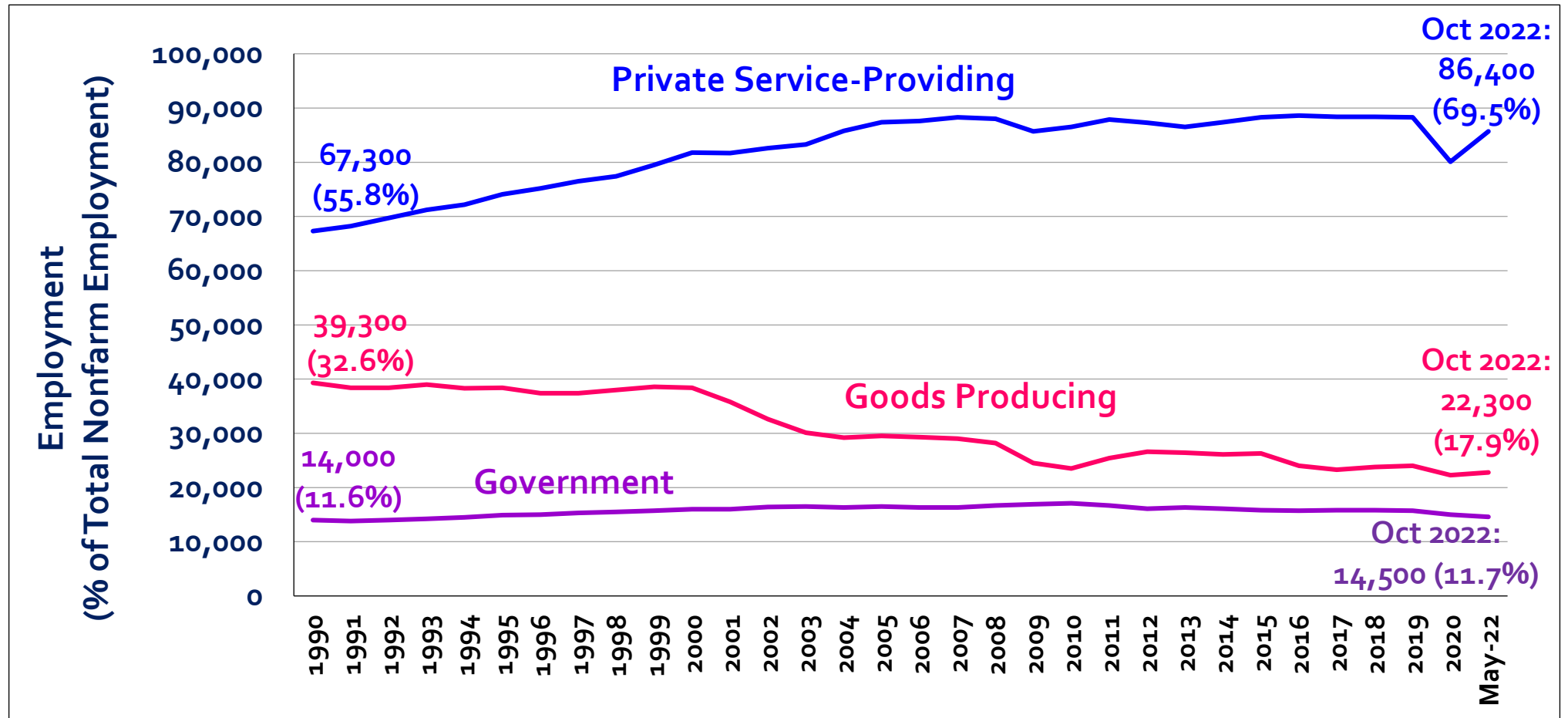
Manufacturing Share of Total Employment (%)

Erie vs PA vs U.S.



Evolution of the Erie Economy

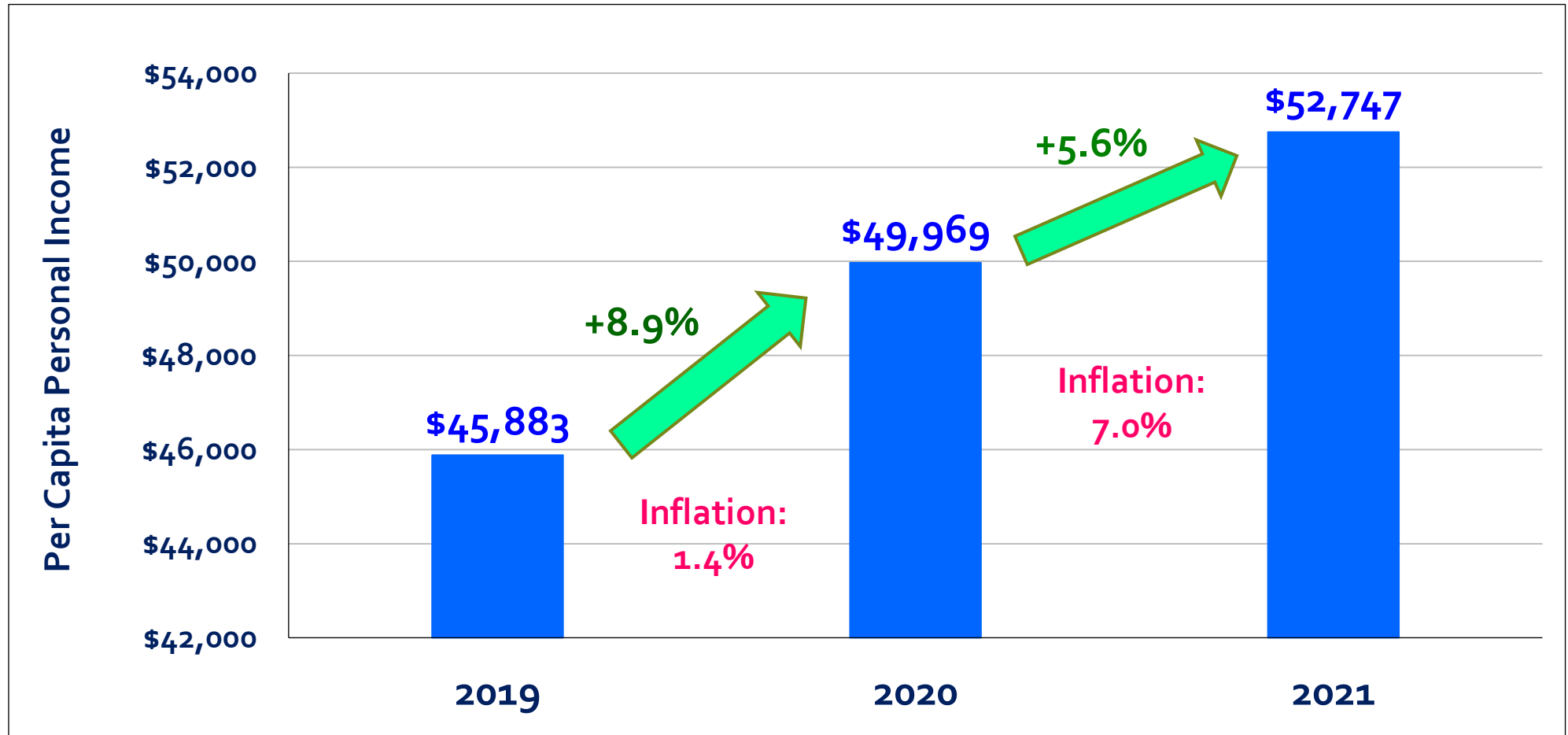
Erie Employment by Industry, 1990 - 2022





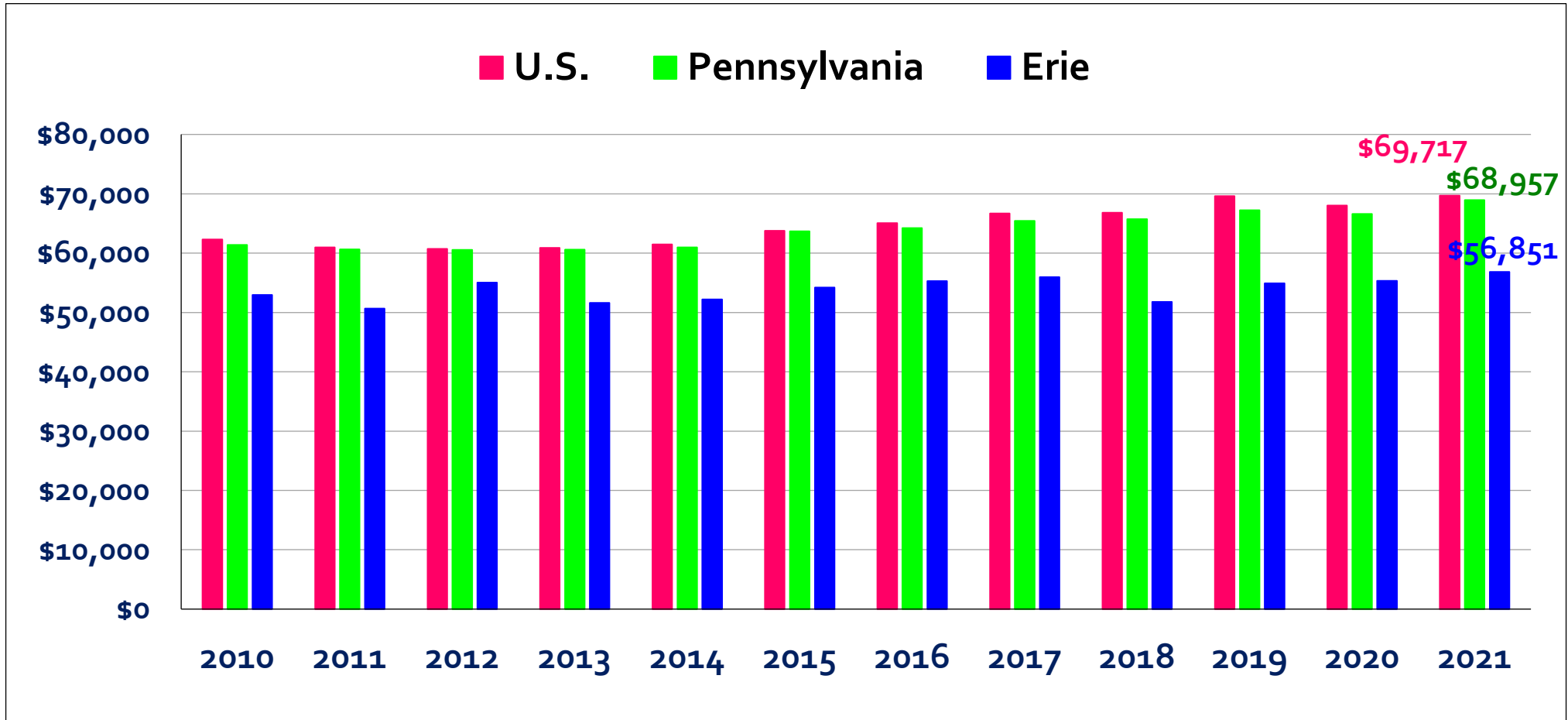
Income and earnings . . .

Per Capita Personal Income, Erie, PA



Real Median Household Income (2021 dollars)

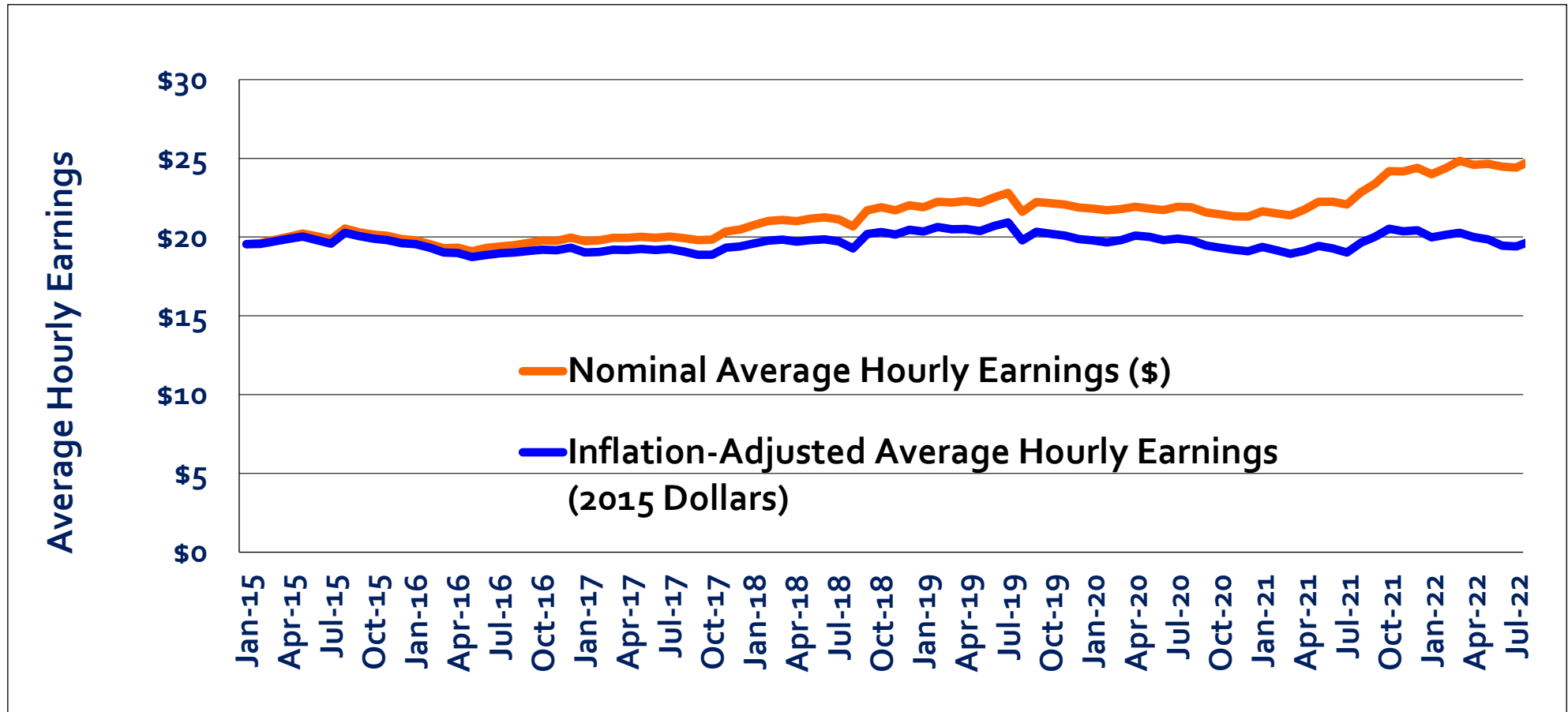
Erie vs PA vs U.S.





Average Hourly Earnings, Erie, PA

All Employees, Private Sector



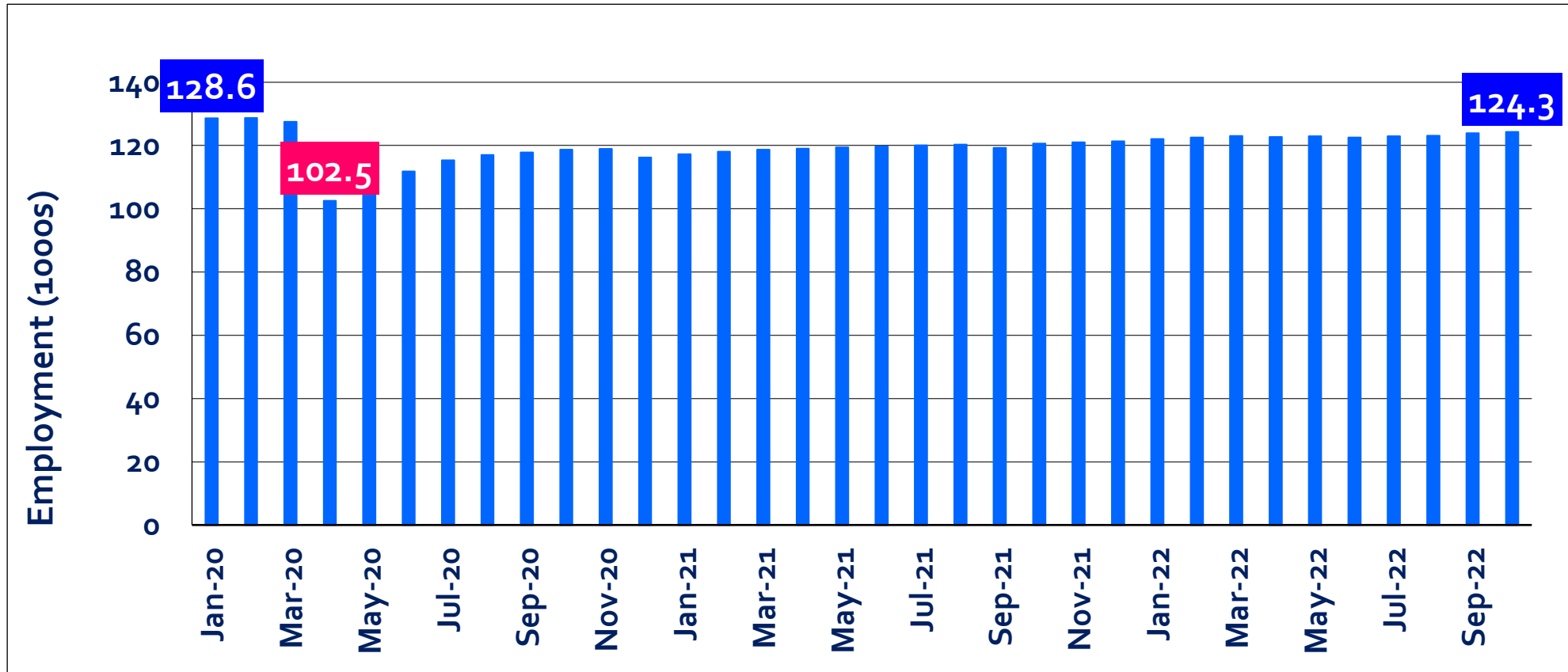


Effects of the COVID-19 pandemic . . .

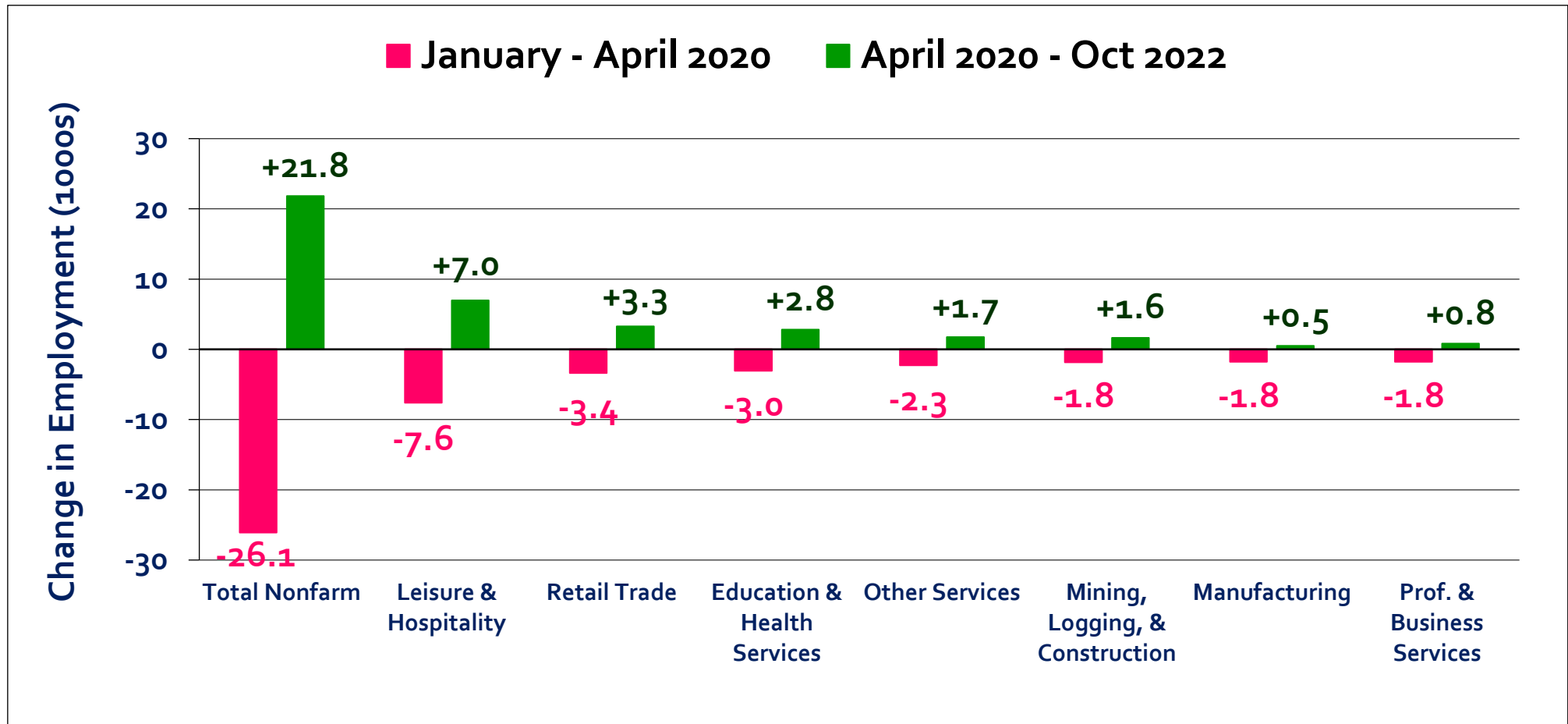


Effects of the Pandemic

Erie Total Nonfarm Employment (1000s)



Pace of Job Recovery in Erie





*Some bright spots in Erie's
economic future . . .*

Some Bright Spots in Erie's Economic Future



Secure Erie Accelerator 2020

Transforming Erie, PA
into a secure Digital
Services Destination



Some Bright Spots in Erie's Economic Future

Erie's Inclusive Growth



The Playbook invests heavily in Erie's Greater Core, but has substantial effects across the city and county

The Layers of Erie's Investment Playbook

Erie's "Greater Core"*

The initial focus of this Investment Playbook is the "Greater Core. This includes place-based investment portfolios in the downtown, along the waterfront, in the East and West Bayfronts, and along the 12th street corridor.

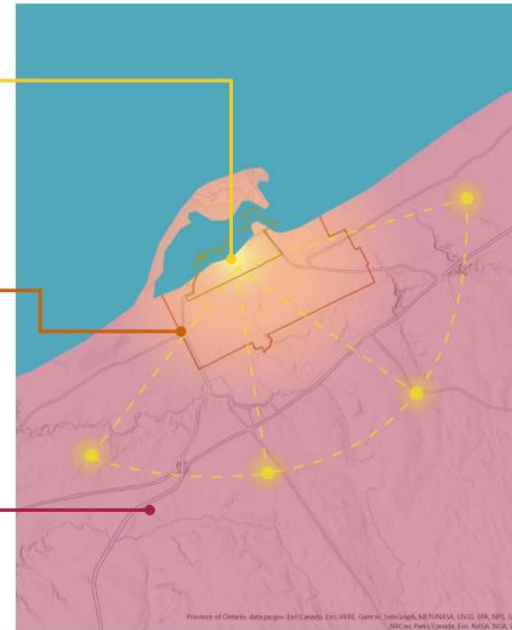
**"Greater Core" includes Downtown, East and West Bayfront, Bayfront, and 12th street corridor)

The City of Erie

Many of the place-based investments in the Playbook are new ideas that can be implemented anywhere in Erie (e.g., purchase and renew anchor buildings, create community equity districts).

Erie County and the Surrounding Region

The cross-cutting elements of the Investment Playbook (e.g., infrastructure, economic clusters, and entrepreneurship) are focused county-wide.



How the Playbook Affects the Region

1. Cross-cutting investments are county-wide

Erie cannot be successful unless the entire region succeeds. As a result, significant investment in infrastructure, entrepreneurship, and economic clusters are being made across the County.

2. Investments in the Core have broad effects

In some cases, investments in Erie's Greater Core provide the most "bang for the buck" (for example, because of existing economic activity or the placement of the waterfront). Further investment in those areas can be captured and broadened through equitable mechanisms (e.g., new homeownership programs, community equity districts).

3. The Playbook is connected to regional efforts

The entities working to implement the Playbook are connected to county- and regional efforts, ensuring county and regional stakeholders realize similar benefits.

4. Investments can be added to broaden impact

The Investment Playbook is a living document. Its current contents will shift as other investments are prioritized and completed. If there is sufficient interest in other investments, they can be added to this Playbook or used to create a separate Playbook.



Some Bright Spots in Erie's Economic Future

Erie Times-News | SUNDAY, APRIL 24, 2022 | 1B

Erie Times-News

CITY®ION

Erie EMI project gets \$4M state grant

Money designated for helping turn facility into high-tech business park

Jim Martin
Erie Times-News
USA TODAY NETWORK

The Erie County Redevelopment Authority says its plan to reinvent the former Erie Malleable Iron Co. complex could provide an important economic boost and give a new look to one of the city's key gateways.

Meanwhile, Erie County Executive Brenton Davis has called the EMI project "cockamamie."

However it's described, the initiative to build a high-tech business park just got a multi-million-dollar vote of affirmation.

The state Redevelopment Assistance Capital Program announced Friday that it will award \$4 million to the project be-

ing led by the Erie County Redevelopment Authority, which paid \$375,000 in February 2021 to purchase the crumbling remains of what had been the EMI facility on West 12th Street.

The state also announced a combined \$6.25 million for four other projects, including awards of \$500,000 for Millcreek Township's Presque Isle Gateway, \$1.75 million for an expansion of the Shearer's chip plant in Waterford, \$2.5 million for Corry and \$1.5 million to revitalize Gannon University's Hammermill Center.

The grant for Corry will support the Corry Area Technology Center and Hub, to be located in the former Corry Memorial Hospital at 612 W. Smith St. That project, led by Impact Corry, will house a high-speed fiber internet and cloud storage system to serve Corry area businesses and residents. The center also will house a technology incubator, tech-

See EMI PROJECT, Page 6B



This is a rendering, commissioned by the Erie County Redevelopment Authority, of a design for the former Erie Malleable Iron facility located on the southwest corner of West 12th and Cherry streets. PROVIDED



Some Bright Spots in Erie's Economic Future

Erie Times-News

Friday, July 29, 2022

Wabtec wins \$1 billion order



Wabtec announced Wednesday it has signed what it calls a historic deal with Union Pacific for 600 locomotive modernizations worth more than \$1 billion. CHRISTOPHER MILLETTE/ERIE TIMES-NEWS FILE

Company announces historic deal inked with Union Pacific



Thank You!

- I invite you to contact me to:
 - *share your ideas and suggestions*
 - *let us know if you need assistance with finding, analyzing, and understanding economic data or other information related to the Erie economy*
 - *discuss possible ERIE research projects you can conduct with us*

Kenneth Louie, Director

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