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Erie & Crisis:

Region Faces Unique Opportunity to Reimagine Itself

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FOREWORD

Open any newspaper, browse news websites and social platforms, or turn on the television to any news channel at any given point during the day and you will find that COVID-19 continues to dominate discussion globally. What you will also find is that information and updates are changing more often than not from minute-to-minute rather than week-to-week – so much so that it makes it almost impossible for leaders to make rational and sustainable decisions in real time.

How can decisions be made when we do not know what is on the other side of the mountain? Is COVID-19 beatable, or is it here to stay, like HIV? Will a vaccine take six months, a year, or longer?

No one seems to know these answers for certain.

When facing these kinds of difficult decisions, we must draw back to not only understand but, as John Quincy Adams said, "to embrace… that who we are is who we were."

That means we need to look at past experiences to inform the present and the uncertain future.

This essay, written by members of the Jefferson's team, including Scholars-in-Residence Drs. Judith Lynch and Andrew Roth, is an attempt to look at COVID-19 through the lens of past experiences and make recommendations for the future. It starts with an explanation of the COVID-19 at national, state, and local levels. It follows with an in-depth look at how America has dealt with pandemics of the past and explores how Erie confronted crises in the past.

The essay concludes by making the case that "a crisis is a terrible thing to waste," as Stanford University economist Paul Romer has put it. Erie's leadership needs to come together in an entrepreneurial spirit rather than retreat, holding out hope that the state and federal governments will come to save us and any other metro area failing to take its destiny into its own hands.

As always, the purpose of any Jefferson Educational Society Essay is to start a conversation and not be the conclusion of one. I hope you find it informative, and if you have any questions or concerns please do not hesitate to contact us at any point. Although we may not be at our beloved headquarters, we are all working to serve our role as Erie's think-tank for community progress.

F. Ferati

Ferki Ferati, Ed.D., Editor

Jefferson President Dr. Ferki Ferati

On the Cover:

Photographs are, from left: Frances Perkins, FDR's Secretary of Labor and the nation's first female Cabinet Secretary (principal architect of FDR's New Deal); George Washington statue; an iconic photograph from the 1918 Flu Epidemic; and Franklin Delano Roosevelt statue. Credits include: https://francesperkinscenter.org/life-new/ - photo from the Frances Perkins Center; George Washington: "Washington" by marc. flores is licensed under CC by 2.0; Spanish Flu: https://www.history.com/news/spanish-flu-second-wave-resurgence; and FDR: by elpresidente408 licensed under CC BY-NC-ND 2.0.

Erie and Crisis:

Region Faces Unique Opportunity to Reimagine Itself

At 58,365 on April 28, 2020, the death toll from COVID-19 in the United States surpassed the number of Americans killed in the Vietnam War. Those deaths from COVID-19 occurred less than three months from the first reported case; the Vietnam War lasted nearly two decades.

Complicating matters, between 20 to 30 percent of death certificates issued in the U.S. before the coronavirus pandemic hit were wrong. Coupled with a dearth of testing kits with significant lag in reporting results, the picture of the health crisis is blurry at best and woefully incomplete at worst. As of May 18, more than 154 million people tested positive for the virus in the United States, with 90,694 dead.

Nationally, the hardest hit area remains New York City with more than 193,000 cases (a population twice as large as the city of Erie) and 15,786 fatalities.

New York State's total reported positive cases (350,000) are more than 2.5 times the second-highest state, New Jersey (146,000) and more than four times higher than the third- and fourth-highest states, Illinois (94,191) and Massachusetts (86,010). Pennsylvania is sixth at 62,234, with 4,418 dead. The United States also leads in the number of total positive cases globally, topping the next four countries combined.

On the same day it was reported that more Americans died from COVID-19 than names etched in a granite memorial snaking through the National Mall, Erie County, Pennsylvania reported a total of 84 positive cases, 1,700 negative cases, and two deaths. The higher concentration of outbreak centered in Philadelphia and its surrounding counties in the east. Allegheny County, home to the Keystone State's second largest city, Pittsburgh, has had 10 percent of the city of Philadelphia's numbers alone.

Despite early calls from the scientific community to flatten the curve of rising virus numbers by practicing social distancing, the number of reported cases in the United States continued to climb rapidly through the beginning of April. New data coming in towards the end of that month suggest the United States may have begun to flatten the curve, but arguments are being made that a long, hard fight remains ahead in the public health crisis. Yet, some regions and metros seem to be faring better than others – Erie County, among them.

But while Erie, at the time of reporting, seems to be weathering the public health crisis far better than other regions of the commonwealth and country, it has not been immune to the economic blows dealt by the pandemic. On March 16, Pennsylvania Gov. Tom Wolf effectively ordered all non-essential businesses to close and telework if able. Just three days later, the order extended to all non-life-sustaining businesses, forcing the closure of many more businesses.

According to the Erie Leading Index (ELI) Report released Friday, May 1 by the Economic Research Institute of Erie, Erie's economy pre-crisis was trending slightly upwards, continuing the trend closing out 2019. As the report stated:

"Alas, February will be remembered as the month of calm before the full force of the pandemic began to batter both the national and the local economy. We are only beginning to see the initial economic effects of the pandemic, and there are likely to be ongoing adverse effects in the upcoming months."

This reveals the correlation between the decline in the state of the economy and increase of social distancing measures to abate the virus' further spread. Noting the anticipation that the numbers reported by the Bureau of Labor and Statistics in May to indicate April's economy will show a picture still incomplete but more reflective of the crisis' impact, the authors of the report note that the most significant job loss from February through March was experienced in the leisure and hospitality sector, mirroring the national impact. Erie lost 200 jobs, a 1.5 percent decrease, while the nation saw a 2.7 percent hit during February and March.

Critical to note: "In contrast, over the past 10 years, employment in this sector increased between February and March, on average, by 31,000 in the U.S. and by 16 in Erie," according to the report.

On April 29, the Brookings Institution's Metropolitan Policy Program released the Metro Economic Tracker, an interactive dashboard designed to illustrate the impact of the COVID-19 on metros' economies. According to Brookings Senior Fellow and Deputy Director Alan Berube's findings, while the crisis led to job losses nationwide, larger metros were hit the hardest.

"From February to March 2020, the 191 metro areas tracked in this analysis (those with populations of at least 250,000) shed a combined 591,000 jobs – about 84 percent of the national total," Berube writes. "While that was only 0.5 percent of the total number of jobs in these metro areas, it represented the tip of the iceberg of employment losses that began to rapidly accumulate in late March as government-mandated business closures swept the nation."

Of this loss, more than half was concentrated in the set of "very large metro areas" (those with populations greater than 1 million), accounting for the loss of 318,000 jobs.

"While these March data reflect the early warning signs of a looming economic crisis, forthcoming data from late March and early April – when most states enacted more widespread shutdowns – will show the fuller extent of the economic devastation metropolitan communities are now experiencing," Berube writes.

According to Brookings, Erie County, Pennsylvania – the metropolitan statistical area – reported an unemployment rate of 5 percent in January. A slight uptick to 5.1 came in February, followed by a more significant jump to 6.5 in March. This would seem to confirm the correlation between economic decline and social distancing and shelter-in-place orders put in place to mitigate the health risks of the virus's spread.

Erie's job-loss rate places it 66th among mid-sized metros, according to Brookings. Overall, the Erie metro ranks 150th out of the 191 total metros in unemployment rate change (1 = best performance).

Further, Erie experienced a -0.2 percent change in the number of jobs from January through March. There, Erie ranks 38th among mid-sized metros and 78th overall (1 = best performance)*.

** Best available numbers are from March 2020. New local numbers will be released in June, at which time the Jefferson will issue an update.*

These findings are in line with unemployment rates. Again, it is seen that measures taken for the good of the health of the country conversely impact the economic well-being as a whole and at the local levels.

In late April, serious discussions of how to reopen economies began. States are developing their plans in a variety of ways, ranging from plans being criticized for moving too quickly and in violation of White House benchmarks, seemingly risking public health, to those moving too slowly and further jeopardizing the bounce-back ability of businesses that have either had to shutter completely or reduce operations significantly.

In Pennsylvania, Gov. Tom Wolf announced a three-step plan to reopen the commonwealth's economy. More details became available Friday, May 1, as the administration reported 24 counties out of 67 were to be classified as "Yellow" in the three-phase system, with "Red" imposing the most severe restrictions and "Green" the least.

In short, Yellow softened social restrictions and allows for the reopening of certain businesses under health department guidelines of how to perform operations in adapted circumstances. Notably, in-person retail will be allowed in the Yellow phase; however, the state notes that curbside and delivery purchases are preferred.

Entertainment businesses, such as theaters and casinos, will remain closed, as will health and wellness facilities and personal care services, such as gyms, spas, hair salons, nail salons, and other businesses that provide massage therapy, according to the state's announcement.

Socially, gatherings with fewer individuals than 25 will be allowed.

Photo from www.brookings.edu/blog/the-avenue/2020/04/29/which-city-economies-did-covid-19-damage-first/

RED PHASE

WORK & CONGREGATE SETTING RESTRICTIONS

- Life Sustaining Businesses Only
- Congregate Care and Prison Restrictions in Place
- Schools (for in-person instruction) and Most Child Care Facilities Closed

SOCIAL RESTRICTIONS

- Stay at Home Orders in Place
- Large Gatherings Prohibited
- Restaurants and Bars Limited to Carry-Out and Delivery Only
- Only Travel for Life-Sustaining Purposes Encouraged

- Reiterate and reinforce safety guidance for businesses, workers, individuals, facilities, update if necessary
- Monitor public health indicators, adjust orders and restrictions as necessary

GREEN PHASE

WORK & CONGREGATE SETTING RESTRICTIONS

- All Businesses Must Follow CDC and PA Department of Health Guidelines

SOCIAL RESTRICTIONS

- Aggressive Mitigation Lifted
- All Individuals Must Follow CDC and PA Department of Health Guidelines

- Monitor public health indicators, adjust orders and restrictions as necessary

YELLOW PHASE

WORK & CONGREGATE SETTING RESTRICTIONS

- Telework Must Continue Where Feasible
- Businesses with In-Person Operations Must Follow Business and Building Safety Orders
- Child Care Open Complying with Guidance
- Congregate Care and Prison Restrictions in Place
- Schools Remain Closed for In-Person Instruction

SOCIAL RESTRICTIONS

- Stay at Home Order Lifted for Aggressive Mitigation
- Large Gatherings of More Than 25 Prohibited
- In-Person Retail Allowable, Curbside and Delivery Preferable
- Indoor Recreation, Health and Wellness Facilities and Personal Care Services (such as gyms, spas, hair salons, nail salons and other entities that provide massage therapy), and all Entertainment (such as casinos, theaters) Remain Closed
- Restaurants and Bars Limited to Carry-Out and Delivery Only

- All businesses must follow CDC and DOH guidance for social distancing and cleaning
- Monitor public health indicators, adjust orders and restrictions as necessary

Images from www.governor.pa.gov/process-to-reopen-pennsylvania/

Language such as reopen, restart, and resume implies a returning to market conditions pre-crisis, the world as we knew it. No doubt, the COVID-19 crisis' total impact will be measured certainly not in weeks, more likely in months, and potentially in years, and history has much to teach us as we envision our emergence from this crisis by studying others, such as the 2008 Recession, the Great Depression, the Spanish Flu, 1793 Yellow fever, and others.

Erie, like any other metro, must study its history. Knowing how it acted during and reacted to crises of the past will inform best practices and guide policy decisions. Too, Erie, like any other metro, would be wise to observe other metros that led as examples in times of crises.

But rather than planning how to return to how things were pre-crisis, cities, towns, and metros have the opportunity to plan for how things will – or should/could – be. That is, why shape tomorrow like yesterday when it will indelibly be molded by today's furnace?

The COVID-19 crisis has revealed nationwide inequities. From disproportionate underinvestment in minority communities and businesses to gapping digital divides – found in urban poverty and remote rural outliers lacking infrastructure to disproportionately funded health care systems and more – disparities ignored for decades have been thrust into the cultural conscious.

Unemployment and job rates offer solid insight to the overall wellness of an economic ecosystem but the picture is granular. This crisis presents an opportunity to better benchmark and analyze local and state economies to better know how to have responses fit to purpose.

The country has the opportunity to have important conversations, not to the tone of making our tomorrows as great as our yesterdays but rather how to make our future better for all. Locally, these conversations must play out, too. That will seemingly be easier in places winning the public health crisis and fortunate enough to focus more attention and energy on planning the path not to economic recovery but to economic progress.

As much as Erie serves as a proxy for the nation in exposing the economic hardships of Main Street businesses, the backs upon which renaissances in legacy cities have been built, Erie has the opportunity to serve as the canary in the coal mine in creating a thoughtful, well-informed response to emerging from the COVID-19 crisis better prepared for the future.

While larger metros have been hit harder by the crisis, they bring with them greater resources to respond. Smaller metros, like Erie, are not blessed with the same public and private capital, or economic ecosystems to spur growth. When it comes to the development of 21st century jobs rooted in technology, the concentration remains along the country's coasts. As reported, 90 percent of innovation sector jobs remain relegated to Seattle, Boston, San Francisco, San Diego, and San Jose, Calif.

Another particularly challenging part of experiencing this pandemic is that we know neither how nor *when* it will end. Natural disasters, for instance, are often isolated in both time and space. That is, a troupe of tornadoes rips through the heartland overnight. The fallout is limited geographically, as is the span of destruction. Resources can thus be targeted, and towns and cities rebuilt.

Unlike a tornado, this crisis has left infrastructure intact, yet crippled the economy and remains open-ended. We do not know what lies ahead in this pandemic – how and when the phased-in reopening of our economy will occur based on viral spread and the direction of public health, economic, and government leaders. Fortunately, our residents, public officials, health community, and essential workers have been up to the challenge thus far. Our residents' willingness to stay home, social distance, and wear masks; businesses' leadership to realign physical layouts and practices in the name of safety; and Erie County government's preparedness and contact tracing, in particular, have clearly saved lives. Next, regardless of the timing, our economy will fully reopen. And when it does, the central question will remain: How well will we be prepared to reimagine, not just reopen, Erie and the Erie region?

In short, now is the moment of reckoning. It is the time to unify and plan in ways we never before attempted. It is true that we have done a better job of organizing, planning, and carrying out our priorities in the past few years. Specific successes include the Erie County Gaming Revenue Authority and County Council's swift action to create the COVID-19 Response Fund, including providing additional money for the Erie County Health Department and a $100,000 infusion into local food pantries, homeless shelters, and child- and elder-care centers, as well as creating zero-interest loan programs for small businesses and civic institutions affected by the pandemic. Government-led creations of comprehensive plans, Erie Insurance's launching of the Erie Downtown Development Corporation, and support by the Erie Community Foundation and Erie Regional Chamber and Growth Partnership are also solid examples. But make no mistake, this moment is the clarion call for establishing a better public-private joining of the minds to set goals and establish steps to achieve those goals because our future is staring us in the face.

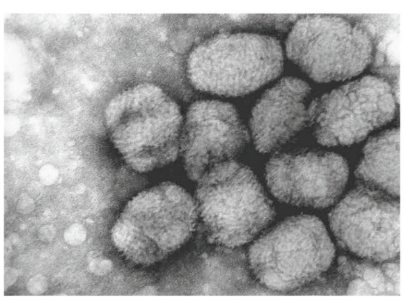
This is the time to think and act regionally. Creatively. Boldly. Compassionately. Wisely. Other cities and metros are in the same situation, of course, but those that plan as one body will be the real economic survivors in a post-pandemic world. All historical evidence points to that.

The purpose of this essay is to call for unity and planning, but it is also to help all of us see and appreciate how Americans – and people of the Erie region – emerged from health and economic crises in the past, again and again. Who, when, and how did they do it? What must we learn from their mistakes and their successes?

There is nothing grandiose about these ideas. It is up to all of us – workers, governments, authorities, businesses large and small, nonprofits, civic leadership groups, neighborhoods – to commit ourselves to creating a better Erie region.

America Faces Unique Shutdown But We're No Strangers to Crisis

While it is true that America is engulfed in a pandemic and mostly shuttered economy, these are not unprecedented times in terms of crisis. America has experienced numerous pandemics and recessions. Examining how our ancestors dealt with these threats to their physical and economic well-being can provide valuable lessons about how to both constrain COVID-19 and how to rebuild our economy once the viral threat has been constrained.



Smallpox took many Native American Lives – photo from pixnio.com/science/microscopy-images/smallpox-variola-major/transmission-electron-micrograph-of-smallpox-viruses

Regarding constraining a pandemic, early Americans instinctively understood that quarantining, social distancing, contact tracing, and sheltering-in-place were the most effective tools, even if practiced inconsistently. Smallpox caused America's earliest pandemics. [1] A very contagious disease, smallpox had a death rate of approximately 30 percent. [2] Colonial America was plagued by frequent outbreaks of smallpox, but the most devastating were those that decimated the Native American population in 1633-34 when more than 70 percent of the population died. [3] The outbreak between 1775-1782 threatened the Continental Army and the success of the American Revolution. [4] Smallpox was finally contained by Edward Jenner's development of "a vaccine from cow pox, which helps the body become immune to smallpox without causing the disease." [5] George Washington, in an act of creative leadership, deployed Jenner's technique to inoculate the Continental Army. [6]

Philadelphia, America's largest city and the nation's capital in the summer of 1793, suffered an epidemic of yellow fever. An estimated 5,000 Philadelphians died, representing 10 percent of the city's 50,000 population. An infectious viral disease, yellow fever is spread by the bite of a female mosquito. At the time, the cause was not understood. To protect themselves from the disease, Philadelphians almost instinctively adopted social distancing, quarantining and fleeing from the city. In its aftermath, Philadelphians adopted what we would today call public-private partnerships to redesign their city to protect it against yellow fever. Improved sanitary systems were developed as well as hospitals, isolation hospitals, and orphanages. Most importantly, Philadelphians led by Benjamin Latrobe, believing incorrectly that polluted water was the fever's cause, reinvented their water supply system to create "the first water system in the United States." [7]

Nineteenth century America suffered from three waves of cholera between 1832 and 1866 and repeated waves of scarlet fever. Cholera, an infection of the intestine, caused two to six Americans per day to die during the outbreak. Quarantining the sick was the only effective preventative. Today, cholera is controlled by a vaccine invented in 1896 by Wilhelm Kolle. A bacterial infection, scarlet fever primarily affected children. There is no vaccine for scarlet fever; it is treated with antibiotics. Although there is some debate about how it was brought under control, recent scholarship points to improvements in public health policies and practices. Scarlet fever is spread by close contact with an infected person. Hence, the best preventative is social distancing and isolating the already sick. [8][9]

Typhoid fever, Spanish Flu, diphtheria, polio, and measles all were scourges that at different times ravaged 20th century America. Polio, a viral disease, spread throughout the country from 1916 to its peak in 1952 with 57,879 cases and 3,145 deaths. [10] It also left an estimated additional 20,000 with a permanent disability. Since there is no cure for polio, its prevention, before the Salk vaccine, was almost entirely a result of quarantine and social distancing, since polio spreads from direct contact with an infected person. Diphtheria peaked in

1921 with 206,000 cases, but after the licensing of a vaccine in the mid-1920s, it has all but disappeared in the United States.

"Typhoid Mary" is only of relevance to us today because she was an asymptomatic carrier of the typhoid fever virus. Her real name was Mary Mallon. A cook for wealthy families, she unwittingly passed on the disease to the family and guests, which then resulted in its spread throughout New York City due to what epidemiologists call community spread. She exhibited no symptoms and almost certainly did not know she was infected. [11] Regarding COVID-19, Mary Mallon's case underscores the importance of wide testing to determine who is carrying a disease. In Mary's case, it was only the investigative work of a public health official and a sanitary engineer that solved the puzzle. Today, typhoid fever can be prevented by vaccine and treated with antibiotics. [12]

The 20th century's deadliest pandemic was the Spanish Flu of 1918. The name likely is a misnomer resulting from the fact that the flu erupted in the waning months of World War I and combatant nations suppressed reporting it. Spain, which was not involved in World War I, more openly reported its comparatively mild experience. For their transparency, the Spanish earned the dubious honor of having the flu erroneously labeled the "Spanish Flu." Its origin is a matter of some debate between those who suspect an American origin in Army bases in Kansas and those who note its earlier appearance in Europe. Regardless, it lasted from January 1918 until December 1920 with its deadliest wave being the second wave in the autumn and early winter of 1918-19. Globally, it infected an estimated 500 million people; death estimates range from a low of 17 million to 50 million with some accounts suggesting it could have been as high as 100 million. [13]

In the United States, the impact was devastating – the deadliest pandemic in American history with an estimated 675,000 dead. [14] For a simple arithmetic comparison of the Spanish Flu's lethality, the total American population in 1918 was 103.3 million; thus, the Spanish Flu's mortality rate was 0.006, or 6/10ths of a percent. A similar pandemic in 2020 would kill 1.98 million Americans, or the rough equivalent of every man, woman and child in 20 cities the size of Erie! Its impact in Erie was equally devastating. As noted in a Jefferson Educational Society article in March 2020, the flu came late to Erie in fall 1918, but its impact was quick and deadly. More than 500 Erieites died. Erie leaders, however, learning from Philadelphia and Pittsburgh's experience, quickly adopted cutting-edge best practices of social isolation, social distancing and quarantining. They closed the public schools, theaters, bowling alleys, taverns, and canceled all large public gatherings. Local officials also established a triage hospital at the Elks Club building. [15]

This was in stark contrast to Philadelphia. Philadelphia and New York were the two worst hit American cities during the pandemic. Aware of the re-emerging pandemic in Philadelphia, a health commissioner – a political appointee with no previous public health experience – refused to cancel the September 28 Liberty Loan Parade. Liberty Loans were government bonds sold to support the American effort in World War I. Boston had previously refused to cancel its parade on September 3 and, by September 23, reported that its hospitals were "taxed to their limits." In St. Louis, however, City Health Commissioner Dr. Max C. Starkloff made a different decision. Using emerging knowledge of how a viral pandemic spread, he canceled the St. Louis parade. [16]

The results between St. Louis and Philadelphia couldn't provide a better contrast. After Philadelphia held its parade with 200,000 in attendance, "within three days, every bed in Philadelphia's 31 hospitals was occupied. Within a week, 45,000 were infected and the entire city shut down." In St. Louis, the death rate was one-eighth or 12 percent of Philadelphia's. [17]

What lessons does a brief survey of American pandemics offer 21st century America's coping with COVID-19? When considering the economic consequences, there are two. First, just as in Erie's Spanish Flu experience, St. Louis' experience canceling its parade or with George Washington and the Continental Army coping with smallpox, leadership counts. Erie had it, St. Louis had it, the Continental Army had it; Philadelphia did not and paid with lives. Secondly, in the absence of a vaccine, the only effective tools are quarantining, sheltering at home, closing public spaces, and social distancing. This is not news. "Quarantine" comes from the Italian and means to isolate or set aside for 40 days. Its origin is from 14th century Venice when "ships arriving from infected ports were required to sit at anchor for 40 days before landing." [18] As American states continue to reopen, they need to be mindful not only of the economic consequences of their decisions, but also the moral and ethical implications of placing citizens' lives in harm's way.

Regarding economics, financial downturns, recessions and depressions, according to Victor Zarnowitz, there have been at least 47 "recessions" in American history. [19] Writing in 1996, Zarnowitz missed the post-9/11 and '08 downturns, not to mention 2020's COVID-19 economic crisis. So, the count, including COVID-19, is at least 50. The current COVID-19 driven economic downturn is not the first caused by a pandemic. The Spanish Flu cited earlier was followed immediately by a Post-World War I recession and the "mini" depression of 1920-21. The St. Louis Federal Reserve, in a 2007 report about the flu's effects, asserts that disentangling the relative causal values of World War I and the flu pandemic to the ensuing economic maladies is probably impossible because of a lack of economic data [20].

Regarding America's history of financial ups and downs, some quick definitions are in order. First, a recession is "a macroeconomic term that refers to a significant decline in general economic activity in a designated region. It had been typically recognized as two consecutive quarters of economic decline, as reflected by GDP in conjunction with monthly indicators such as a rise in unemployment. However, the National Bureau of Economic Research (NBER), which officially declares recessions, points out the two consecutive quarters of decline in real GDP are no longer how recessions are defined. The NBER defines a recession as a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales." [21] A depression "is a severe and prolonged downturn in economic activity. In economics, a depression is commonly defined as an extreme recession that lasts three or more years or which leads to a decline in real gross domestic product (GDP) of at least 10 percent in a given year." Depressions are rare and tend to be accompanied by high unemployment and low inflation. [22] A financial crisis "sees asset prices in a steep decline in value, businesses and consumers unable to pay their debts, and financial institutions experiencing liquidity shortages. A financial crisis is often associated with a panic or a bank run during which investors sell off assets or withdraw money from savings accounts because they fear that the value of those assets will drop if they remain in a financial institution. Other situations that may be labeled a financial crisis include the bursting of a speculative financial bubble, a stock market crash, a sovereign default, or a currency crisis. A financial crisis may be limited to banks or spread throughout a single economy, the economy of a region, or economies worldwide." [23]

With that terminology in mind, what is the history of America's economic and financial highs and lows? How did the country manage its recovery from each? Predating the U.S. Constitution, they begin with the Panic of 1785, which ended the post-Revolution prosperity indirectly leading to the Annapolis Convention and calls for a stronger federal government. [24] Arguably, America's first depression resulted from President Thomas Jefferson's disastrous Embargo Act of 1807 aimed at Britain and France during the Napoleonic Wars. The resulting Depression of 1807 ended in 1810 with an expansion of currency. [25] A corollary to this was the founding of the Second Bank of the United States in 1816 to handle the young nation's currency needs. The next 20 years were characterized by a series of recessions, at least one major depression (1815-1821 following the War of 1812) and several financial panics, most notably the Panic of 1837 whose recovery was finally fueled by the expanded money supply generated by the California Gold Rush of the late 1840s. [26]

These early- to mid-19th century expansions and contractions highlight the ongoing debate about the role of the federal government in guiding the economy. They are "ongoing" because the debate is as old as Jefferson and Alexander Hamilton squabbling about the first Bank of the United States and as recent as last night's news reporting legislative debates about another COVID-19 relief bill. Whether examining history or current events, there were/are two dynamics in play, variations of which in some form characterize the response to all economic reversals and recoveries down to the present.

The first was the convoluted question of banking and whether there is a need for a central bank to regulate the money supply and manage credit. This is a complicated topic. It begins with Hamilton and the creation of the first Bank of the United States, proceeds to the controversy involving the Second Bank of the United States and its expiration during the Andrew Jackson administration in the 1830s. The absence of a central bank during the remainder of the 19th century was characterized by multiple financial panics culminating in the Financial Panic of 1907 and the banking system's rescue by J.P. Morgan, who convinced other bankers to join him in pledging their private funds to prevent the banking system's collapse. [27] Recognizing that leaving the nation's financial system to the mercy of private interests would not be in the national interest led directly to the founding of the Federal Reserve System in 1913 during the Woodrow Wilson administration. [28] The Federal Reserve System is perhaps the ultimate example of a public-private partnership as it still governs United States monetary policy and through the system's management of interest rates, the country's credit markets.

Although its structure is complicated and beyond the scope of this essay, the United States Federal Reserve system has both public and private components. Established by Congress, the Federal Reserve guides monetary policy with responsibility for maximizing employment, stabilizing prices, and moderating long-term interest rates. [28] Governed by a presidentially appointed board of governors, the Fed has 12 regional Federal Reserve Banks to oversee privately owned commercial banks. Monetary policy is guided by the Federal

Federal Reserve Logo – photo from federalreserve.gov

Open Market Committee and various other advisory councils. [29] "Since neither the executive branch nor Congress gets a direct say in its decision-making," as Juliet Lapidos noted in Slate magazine, the Federal Reserve is "an independent entity within the government." [30] As Lapidos notes, it developed that way because "in the run-up to its creation, conservatives (mostly from big cities in the Northeast) favored a privately run central bank, whereas progressives (William Jennings Bryan types) called for a public, government-operated reserve. The result of these competing opinions is our hybrid, quasi-public system. It is isolated from partisan politics – board members serve 14-year terms – but it serves the public interest since it is ultimately accountable to the legislature." [31] This public-private partnership has overseen United States monetary policy for the past century.

Its hybrid nature, however, is very much in the American grain, a fact often forgotten in the post-Barry Goldwater-Ronald Reagan political climate of the last 60 years. Looking backward, one can see its roots in banking's tangled American history and in the federal government's on-again, off-again attitude towards its role in stimulating the American economy. As long ago as 19th century Whigs and Henry Clay's "American System," there has been conflict about the federal government's role in economic activity. Clay's "American System" saw the federal government's role as encouraging economic growth through a combination of protective tariffs, a national bank (jointly owned by private stockholders and the federal government) and federal subsidies for transportation projects, such as roads, canals and, later, railroads. [32] The ghost or skeleton of that plan, highly contentious in its time, can still be seen in 21st century debates about tariffs, monetary policy – note the similarity of Clay's proposal almost 80 years before the Federal Reserve enactment in 1913 – and infrastructure funding.

The tug-of-war between private interests and the need for strong governmental action characterizes American reaction to each economic downturn of the 20th and early 21st centuries. Beginning with President Herbert Hoover's ideological opposition to governmental intervention in the economy at the beginning of the Great Depression of the 1930s to President Franklin Roosevelt's direct use of federal regulatory and fiscal tools to break the Depression and stimulate the economy [33], one sees the ongoing American dilemma concerning government's economic role. This continued throughout the 20th century's multiple recessions, when monetary policy was the tactic of choice to counter the Recession of 1958, the Recession of 1969-70, and the Recession of 1980, among others.

Although it was a key feature of Roosevelt's New Deal reaction to the Great Depression and a regular feature of government policy during much of the second half of the 20th century, direct governmental intervention (through the use of fiscal stimulus, sometimes referred to as Keynesian economics or demand-side economics) was not deployed to counter a specific recession. In the 1950s and early 1960s, the Dwight Eisenhower and John F. Kennedy administrations deployed demand side stimulus through both the building of the Interstate Highway System and to fund the space race. However, it can be argued that the first direct use of demand side stimulus to counter the effects of a specific economic downturn was in response to the Recession of 2008. Often forgotten in a politically divided country is that the $700 billion Troubled Asset Relief Program (T.A.R.P.) was signed into law by President George W. Bush, a Republican, to be followed by the $787 billion American Recovery and Reinvestment Act of 2009 (ARRA), which was signed into law by President Barack Obama, a Democrat. [34][35] In our times, these were important, though rare, examples of bipartisan thinking.

As the nation continues to grapple with how to reopen the economy and begin repairing the economic damage done by nearly two months of self-imposed isolation and economic shutdown, policymakers can take away many lessons from America's history of pandemics and economic reversals. They boil down to: a) we are all in this together, b) leadership counts on multiple levels, and c) government's role in the economy is not so much a question of "either-or" but of "both-and."

While it is tempting to say that the need for Americans to learn or re-learn "we are all in this together" is too big a topic for an essay exploring how Erie can best recover from COVID-19's economic ravages, it is critical to remind ourselves of that fundamental truism. Viruses are indifferent to ethnicity, race, religion, economic status, gender, sexual orientation, and political affiliation. They are parasitic opportunists anchoring in the first available host. While it is apparently true that COVID-19 is most lethal to the elderly, and most acutely elderly members of minority communities, the virus strikes where it will. Our mission is to be prepared to strike back.

Local Reaction to Financial Crises Uneven Over the Decades

How have the Erie region and nation reacted to historic fiscal crises? The culture of the times when the crises took place has a great deal to do with answering that question, especially in the decades before the Great Depression of the 1930s. No true financial safety net existed before the Great Depression. Aid, whether from a crisis or natural disaster, was typically provided by charitable groups, often organized by the wives of industrial leaders, and the results varied widely. Local and state governments often offered modest help at such times, but not consistently, and they were often limited to selling bonds, before the New Deal programs of the Great Depression.

Not counting the War of 1812, Erie's first serious crisis arose from the Civil War. Despite rapid growth related to the oil boom (1859) and the sudden rise of railroads, Erie faced a banking crisis until newly elected Mayor Orange Noble (1867) moved swiftly. Noble, who acquired instant wealth when his own oil well struck "black gold" in May 1863, assumed the city's Civil War debt through the bank he controlled when other banks refused to honor it, according to John Miller's "History of Erie County (1911)." "When Erie County money made up the bulk of the circulating money in the area and had fallen to 15 percent of below par and was quickly depreciating," wrote Miller, "Noble announced Erie County as par funds. He backed his decision by buying $160,000 of the dollars ... and used his banking ventures to provide a ready source of liquid capital."

Noble's heroic act was both singular and rare. In a few short years, the Panic of 1873, known as the Great Depression long before the 1930s crisis of the same name, stemmed from the collapse of the northern railroad boom after the Civil War. Coupled with the plummeting silver market, bank failures were rampant, and the panic spread throughout Europe and North America through 1877. It was preceded by the Black Friday Panic of 1869, Chicago Fire of 1871, Boston Fire of 1872, and the Equine Flu Influenza of 1872.

Again, some singular acts of kindness, and opportunism, are noteworthy. A former Erie mayor and businessman, Prescott Metcalf, contacted the owners of the Burdett Organ Company, which had been burned out in the Chicago Fire, and convinced them to move to Erie by offering to build them an organ factory. The owners and most of the workers agreed and moved into their new plant in Erie about six months later.

Twenty years later, Erie and the nation were in crisis once again as the Panic of 1893 brought nationwide bank failures and a stock market collapse after the country's two largest employers, the National Cordage Company (ropes, thread, string) and the Philadelphia and Reading Railroad collapsed from railroad overbuilding and shaky financing. Its effects lingered through 1897 and marked the first financial panic to prompt major political change, principally the election of William McKinley.

Yet the reaction in Erie, which had not been hard hit by the Panic of 1893, was prideful, almost to the point of arrogance, as it credited its varied manufacturing base for shielding the local economy from damage. As described in "Nelson's Biographical Dictionary and Historical Reference Book of Erie County (1896)," "The manufacturers of the city are of unusual variety, so that it is next to impossible for a depression or panic to occur that will seriously affect every interest. It was a matter of common remark during the late financial revulsion that Erie was less embarrassed or injured than any city of its size in the land."

Later, in describing the labor market, it remarked, "That labor is remuneratively rewarded is proven by the fact that strikes of any magnitude are unknown. Labor and capital work mutually together. The seeds of communism or anarchy do not take root in Erie." It would be just a few more years for the rise of socialism to take hold and sporadic examples of labor unrest culminating with the 16-month Molders Strike in Erie factories from late 1912 to early 1914.

Erie would soon be harshly affected by three more major crises – the Mill Creek Flood of 1915, World War I, and the Spanish Flu Epidemic of 1918 – and several attempts to squelch socialist speakers, a local socialist newspaper, and a socialist political party that succeeded in electing several City Council members before transforming into a labor rather than political movement.

But for all the economic, political, and cultural distress prompted by its earlier financial crises, none could compare to the calamity of the Great Depression of the 1930s. After the 1929 stock market crash, the financial collapse of most banks in America, unemployment of 30 to 35 percent, widespread bankruptcies, and drought, the Depression reached its peak in 1933. Still, one in five Americans would remain unemployed through 1939.

The story in Erie was much the same. Erie city government's first response came in the final year of the Joe Williams administration (1931) as his Erie Civic Employment Committee asked the city to observe a preferential hiring

list for city residents for any job openings citywide. Most companies complied, but jobs were scarce. Most reforms took place under new Mayor James Rossiter. The city adopted a law that created a Bureau of Charities to have power over all city charities subject to control of City Council. Rossiter would lead the bureau, and its powers and duties were set by five unpaid members appointed yearly by the mayor. Monthly reports and expenditures were made to City Council.

City bonds sold at 4 percent interest created a fund of $70,000 that was distributed to local charities. The bureau also supported Mulligan Hall in the old Park Presbyterian Annex on South Park Row next to City Hall. Designed to provide one nutritious meal daily – a meat stew, bread, and coffee – Mulligan Hall served 2.5 million meals over a two-year period before closing its doors for lack of funds on July 22, 1933. Community groups, bakeries, groceries, and labor unions pitched in to help but no true reform took place until President Franklin Roosevelt's Works Progress Administration, Civilian Conservation Corps, and other New Deal programs were introduced. Erie city government workers took severe pay cuts as city government sustained a 25 percent loss in revenue because so many residents could not afford to pay their taxes. At the same time, the city was required to contribute a share of funds to qualify for various WPA programs.

Under Rossiter's successor, Mayor Charles Barber, Erie did embrace WPA programs, enabling construction of the McBride Viaduct, the Erie County Tuberculosis Hospital, seed money for Port Erie Airport which eventually became Erie International Airport, and the extension of the city's storm sewer system. The city's qualifying dollars for these projects largely came from a $75,000 settlement it received from a historic dispute with the Water Commission dating to its founding more than six decades earlier.

The CCC and WPA also contributed significantly to Presque Isle State Park. Eugene Ware, author of "A History of Presque Isle as told through conversation with the park's legendary hermit, Joe Root" (2013), provided the following information about the contribution of the New Deal programs: Old records show that Erie County had two Civilian Conservation camps, one of which was on Presque Isle. The Corps planned, cleared, and laid out many of the park's hiking trails. One group of CCC men cleared brush in two or three areas of the park and planted pine and maple trees over one spring and summer.

The WPA followed the CCC to Presque Isle, and its workers were assigned to build many structures on the park. Because Presque Isle had an abundance of good wood, much of it hardwood, the WPA chose to use it for the projects. The first two projects were sawmills. With the wood, the WPA built two storage buildings, three cabins on the Waterworks ponds, including a large fireplace, 30 or more docks on Presque Isle Bay and Misery Bay, two bathhouses, a large boat livery office, and a repair and storage building on the Lagoons, plus hundreds of picnic tables.

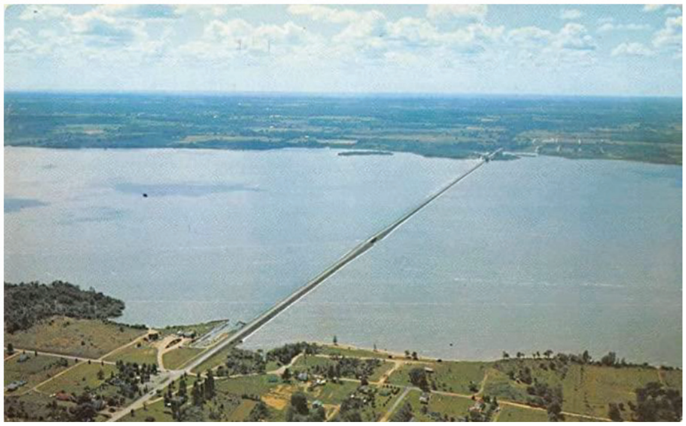
Erie County Historical Society records reveal that nearly a dozen artists and writers were assigned to the WPA camps in this area. Along with their works, the artists produced sketches of what they thought might be improvements on Presque Isle. One of the WPA artists was Henry Kreis, who created a mural called "American Youth," which hangs in the Erie County Courthouse (Gene Ware in letter to Judy Lynch, 2015).

Similarly, construction of Pymatuning Dam and Lake produced one of the largest publicly funded recreation areas in Pennsylvania, Pymatuning State Park. It was completed with a combination of state and federal dollars in 1934 and through the assistance of the Civilian Conservation Corps, which existed from 1933 to 1942. Although a small part of the project was intended for flood control, its most important purpose was to turn the largely swampy, quicksand- and mosquito-infested area into healthy, usable recreational space.

The project began slowly. In 1917, the Pennsylvania Legislature approved a $400,000 budget under the condition that land in Ohio, adjacent to the Pennsylvania area, be purchased by the private sector. By 1931, the Pymatuning Land Company had formed, raised the funds, and purchased the needed Ohio properties. Subsequently, the Commonwealth of Pennsylvania approved a $1.5 million appropriation to complete the project. In 1931, during the Depression, 7,000 men began work on the dam. The project was completed in 1934, with a total cost of $3,717,739. The lake formed by the dam holds 64.3 billion gallons of water, covers 17,088 acres, stretches more than 17 miles, and at its widest point is 1.6 miles across. It has 70 miles of shoreline and reaches a maximum depth of 35 feet.

An interesting story about Pymatuning State Park is described in the August 5, 2008, Erie Times-News article, "Legacy of Work," written by Lisa Thompson. The story is about the Pymatuning legacy of the New Deal, Civilian Conservation Corps (CCC), signed into law by President Franklin D. Roosevelt on March 31, 1933. The CCC was popularly called "Roosevelt's tree army." During the height of the Depression more than 3 million men, ages 18 to 25, served six-month stints in the CCC. They were put to work planting trees, fighting fires, and building parks.

In 1934, an all-African American company of CCC workers, one of about 150 all-black units in the nation, set up camp at the edge of Pymatuning Dam in Westford, southwest of Linesville in Crawford County. Many of the men came from



Pymatuning Causeway – photo from
www.dcnr.pa.gov/StateParks/FindAPark/PymatuningStatePark/Pages/default.aspx

Philadelphia, Erie, and Pittsburgh. Housed in military-style camps operated by the U.S. Army, the CCC men were paid $30 a week, ate three meals a day, fielded a baseball team, and learned educational and vocational skills.

The CCC workers at Pymatuning built roads, drainage ditches, sewers, parking lots, picnic tables and shelters, and made other improvements around the recently built reservoir and dam. The Westford Camp closed in 1938, but the Corps left an indelible mark. The men of the CCC enriched the area for the succeeding generations who continue to use the rich natural environment of the park that the CCC helped create. Perhaps the greatest impacts were on the men themselves and the nation that was proud to support them.

The Pymatuning project led to the creation of two state parks, one on the Ohio side of the lake and the other in Pennsylvania. More than 500,000 people a year enjoy the 2-mile-long causeway bridge that spans the middle of the lake, connecting the towns of Espyville on the Pennsylvania side of the lake and Andover on the Ohio side. Visitors stop to feed and ogle the ravenous carp that swarm along the spillway.

Ultimately, as the Wall Street Journal pointed out in its April 26, 2020 edition, the Great Depression produced a bigger social safety net, led by the creation of Social Security, and many new government programs never before seen in the United States. Likewise, World War II led to the "creation of a unified Defense Department, and the Cold War spawned an interstate highway system." Another crisis, the 9/11 terrorist attacks, "produced new consolidated agencies to handle homeland security and national intelligence, and the 2008 financial meltdown led to a broad range of new actions by the Federal Reserve that are being replicated and expanded now." (A brief history of the Erie region's economy is in Appendix 2).

What's next for confronting the coronavirus COVID-19 pandemic of 2020, and whether it prompts major political and cultural change as past crises have, is just beginning to unfold.

RECOMMENDATIONS

LEADERSHIP:

Just as leadership is important in confronting the virus' spread, creative, risk-tolerant leadership is necessary to restart, rebuild, and re-energize the nation's and Erie's economies. It requires leadership from both the private and public sectors. Specifically, a blending of private and public leadership is required to accomplish community goals.

America was not built only by rugged individualists; America was not built only by government. It was built by both. Many of America's greatest successes were the result of a mixed economy of private enterprise and strategic government support: the Erie Canal; the railroads; the Homestead Act (in which the federal government gave away land); the military-industrial complex after World War II; the Defense Department's creation of the ARPAnet, which led to the Internet; the construction of the Interstate Highway System fueling mid- and late-20th century America's economic expansion.

Erie learned these lessons long ago from political leaders who had the vision to create a greater Erie and the wit to embrace partnerships with Erie entrepreneurs like Rufus and Charles Reed, William L. Scott, Ernst and Otto Behrend, Matthew Griswold, H.O. Hirt, John Zurn, and numerous others. Contemporary initiatives like the Erie Entrepreneurs – Innovation Collaborative and the Erie Downtown Development Corporation speak directly to that history and the power of public-private collaboration.

This pandemic cries out for leadership on every level. That means governments working with other governments – and with authorities, and civic action groups, and nonprofits with other nonprofits; companies with labor, and so forth – no matter how strained, or partisan, these relationships may have been in the past. Sometimes leadership means stepping forward and taking charge. Sometimes leadership means giving others support by not second-guessing their ideas and efforts. Sometimes leadership means accepting a role within a larger plan. But leadership always means working for unity and collaboratively for a common cause. In this case, it is for our very survival as a vibrant community.

LOCAL INFRASTRUCTURE BOND FUND:

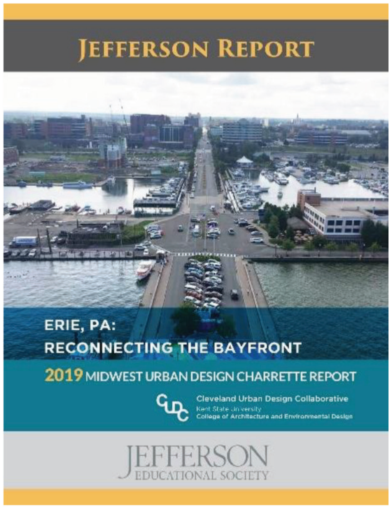
With the nation facing a likely protracted deep recession or depression, will the Erie region be able to wait for traditional help from the state or federal governments to come to the rescue? Waiting for the cavalry is probably a very bad idea. What if we didn't wait?

Bond funds are not new to the nation or to Erie. It is how Erie funded the Mill Creek Tube as a response to the Mill Creek Flood. It is how the nation in part funded World War I and World War II. It is how Erie raised money to feed the hungry during the Great Depression. What if we created a massive local bond fund to tackle some of our greatest infrastructure challenges – a fund not in the tens of millions of dollars, but in the hundreds of millions?

Who could back such a bold idea? County government? City government? A county, city, state authority. Or a combination of those? All good questions; all with answers worth pursuing. But its mission would be clear: to leverage other dollars and to fund major improvements. If such a fund existed, it could set definitive projects, and manage and hire workers to tackle our greatest infrastructure challenges. It would empower workers, including those displaced in the upheaval of the pandemic.

What kinds of projects could it fund?

- Projects to integrate the bayfront with the downtown and neighborhoods above the bluff;
- Major neighborhood improvements;
- Invest in high-speed internet south of Interstate 90;
- Pursue connections to Presque Isle State Park;
- Support iconic projects such as Erie's three historic forts;
- Plan for the Future of Work.



Charette Report from the Cleveland Urban Design Collaborative to enhance the Erie Bayfront – photo from JESerie.org

There is no shortage of worthy ideas that could benefit from such a fund. Planners Charles Buki, Bruce Katz, former Pittsburgh Mayor Tom Murphy, the Urban Land Institute, and others have advanced well-researched and tested ideas that could be goals.

Specifically, the Cleveland Urban Design Collaborative's ideas to reconnect and enhance the bayfront would merit targeted funding, as well as some projects emanating from the work of the Erie Downtown Development Corporation. Following are more specific examples.

CITY NEIGHBORHOOD REFORMS:

As a matter of neighborhood reform, we recommend further embracing and acting upon the conclusions of Erie Refocused, the city's comprehensive plan and community decision-making guide produced by planner Chares Buki and the czb, LLC planning firm in 2016.

It identifies 17 planning areas throughout the city of Erie. While some neighborhoods have a sense of identity and history, others do not. Regardless, outlining these 17 areas provides a pathway to addressing infrastructure concerns and other challenges found within, while also studying and modeling successes.

The report underscores the importance of understanding the imbalance of the city's housing's supply and demand as seen in data. It identified 4,700 vacant housing units in the city; 1,900 abandoned housing units; and 9,500 residential properties with signs of moderate to severe distress.

To achieve the plan's aims, such as housing, by about 2026, it could cost more than $600 million – "a level of investment exceedingly unlikely to materialize." So, it urged the community to set priorities. "Therefore, this comprehensive plan must also be about priorities — about how to invest, where to invest, and at what levels to achieve these two central tasks," it read. "It is a plan that is, by necessity and design, about tradeoffs that reflect the community's vision, its core values, and the willingness of stakeholders to live by those values."

CZB's conclusions are as true today as they were in 2016. Given Erie's documented blight and infrastructure needs, this is clearly the time to act as we shape our future city. With the interest rate on bonds at or near zero percent, a bond initiative through a public-private partnership could be secured to match funding raised to date in the spirit of Erie Refocused. We are in year four of czb's 10-year projection. Let's act. (A full treatment of the comprehensive plan is in Appendix 1).

BROADBAND:

As city infrastructure projects are pursued, so, too, should a nagging deficiency in rural Erie County: broadband. Large areas of Erie County and the Erie region lack high-speed internet service. With only an estimated 25 percent coverage south of Interstate 90 in Erie County, broadband needs to be extended as soon as possible. This is as much an economic imperative as a communications need. We agree with Erie County government efforts that this should be a priority.

PLANNING FOR THE FUTURE OF WORK:

While the deployment of broadband technology infrastructure is needed throughout Erie County to provide equitable internet access and narrow the digital divide, access to high-speed internet does currently exist and should not be underscored by the need to expand. Of note, Velocity Network, Erie's locally owned and operated Internet Service Provider, has been deploying broadband and fiber internet throughout the region to both businesses and homes, and Erie County is home to national providers, as well.

Because of both the presence of high speed internet with the call to expand its footprint and the city of Erie's large supply of affordable and available housing stock and land as outlined in Erie Refocused, Erie leaders should plan for the Future of Work, chiefly the worker's location in the Future of Work.

While gig-economy jobs have been largely concentrated to the coasts, a seismic shift may be underway with a recent announcement from the chief executive of tech giants Twitter and Square, a mobile payments company. Amid the COVID-19 crisis, as many workers have been working from home due to social distancing implications, Twitter and Square CEO Jack Dorsey announced that employees may continue working from home indefinitely. He cited the reduction of commute times, pollution levels, and company operational costs, as well as the increase of morale. Others are taking note and evaluating the need to have employees in physical locations.

The recognition of the overconcentration of workers in San Francisco's bay area and the challenges that it brings, including inflated housing costs, pre-dates the pandemic. In late 2019, Doug Ludlow, CEO of the start-up MainStreet, announced his company would begin offering $10,000 to prospective Bay Area workers to work remotely.

"My vision and goal is you'd never have to leave your hometown to get a great job," Ludlow told KTVU Fox 2's Jesse Gary. Said Gary, "The collaborative combination could infuse rural America with economic growth."

While companies such as MainStreet are offering to pay employees to relocate, locations were working to attract remote workers before the pandemic hit. The State of Vermont, in January 2019, began offering its "Remote Worker Grant Program," which incentivizes individuals to move to Vermont while working remotely for their company that is not based in the Green Mountain State. A year later, Vermont introduced its "New Worker Relocation Grant Program" to provide "assistance to individuals who move to Vermont to work full time for in-state employers."

As both companies and workers explore the Future of Work and the benefits of remote work, local leaders should strategically plan to attract both out-of-state and in-state remote workers, highlighting regional assets and amenities, including, but not limited to, affordable housing, fresh-water beaches in the summer, nearby ski resorts in the winter, the Lake Erie Ale Trail, and high-speed internet.

COMMUNITY COLLEGE:

Erie County needs and deserves a community college with a standalone building for many reasons. While the economic impact from the COVID-19 crisis continues to exact its toll, a record 30-plus-million Americans have filed for unemployment. As a country, we arrived at that number in early May, with the Bureau of Labor and Statistics reporting a nationwide unemployment rate of 14.7 percent. The climb upwards correlated with the implementation of public health safety measures, such as social distancing, put in place in mid-March.

"This unprecedented economic pain will likely result in a permanently altered employment landscape for many people," writes Iris Palmer, Senior Advisor for Higher Education and Workforce, Education Policy Program at New America. "Once social distancing eases, people will need access to high-quality retraining to connect them to good jobs," she adds. "The federal government should support the creation of more of these training programs. And now there is a plan to do just that."

On May 1, the chairman of the House Committee on Education and Labor Chairman and the ranking member of the Senate Committee on Health, Education, Labor, and Pensions introduced the Relaunching America's Workforce Act (RAWA), a stimulus bill that authorizes $15 billion for the nation's public workforce system. Featured in the proposed bill is the Community College and Industry Partnership Grants.

RAWA takes the lessons learned – what worked and what could be improved upon – from the Trade Adjustment Assistance Community College and Career Training (TAACCCT), which was passed as a workforce development initiative after the Great Recession of 2008. Two billion dollars went to the retraining of workers displaced by the Great Recession through community college education.

According to New America, "students who participated in these programs were twice as likely to complete a program or earn a credential and 30 percent more likely to have positive labor market outcomes than comparison students." As millions of Americans now find themselves without work – and the potential prospect that the work they previously did may not be available or exist when the economy stabilizes – retraining initiatives will be key to putting workers back to work as the country moves forward.

Whether this bill – or an amended or new one – passes, lawmakers in the nation's capital have before recognized the critical role skills-based retraining and education have played in moving an economy forward. They again are recognizing that importance.

For these reasons, Erie needs a community college now more than ever, as its economy is not immune from the impact of the COVID-19 crisis striking nationwide. It may not need a campus, but it certainly needs a classic physical classroom building because of the nature of its work. With an emphasis on teaching vocational skills and a bridge to undergraduate learning, it also needs sophisticated remote-learning capability.

This issue, as rightly pointed out by underserved communities, is also a matter of justice. In addition to addressing opportunity for members of the community, our region's tax dollars have supported the other 14 community colleges in Pennsylvania for decades, yet our region does not have a community college that is in any way similar to those others. Having one is essential to our economic and educational growth, without question. Erie employers have cried out for a community college for years, and their cries must be answered. Empower Erie's dedication to achieving a community college deserves recognition and support. It is no coincidence that every nationally acclaimed urban, political, and educational expert appearing at the Jefferson Global Summit speaker series in the last decade has expressed shock that Erie does not have a traditional community college. It needs and deserves one.

LEARNING FROM OTHERS:

Two cities similar in population to Erie emerged from the 2008 Great Recession as success stories – Lincoln, Nebraska and Fort Wayne, Indiana.

Lincoln, with a metro population of 287,000, earned its recession-proof distinction because it was able to maintain stable property tax revenue throughout the crisis and aftermath. Its fortunes were boosted altogether four years later, in 2012, when two people arrived on the scene. Attracted by the community's low housing prices, cost of living, passionate entrepreneurial investors, and a supportive university system, they founded Bulu Box, a monthly service providing premium health products. From this initial startup, many other startups followed, making the Lincoln area an unlikely, yet successful tech leader. The Lincoln area is now known as "Silicon Prairie," a play on the well-known "Silicon Valley," and home to many new companies such as Bulu Box and Hudl, a sports video analyst service used for all sports ranging from local to professional. Others credited for the success were an aggressive task force created by the Nebraska Legislature, Nebraska's Department of Economic Development, numerous private donors (both foundations and individuals), USDA Rural Development grants, and the Nebraska Investment Finance Authority.

Fort Wayne, with a metro population of more than 250,000, experienced significant financial hardship beginning in the 1980s as the loss of industry hit, coupled with urban blight, and led to huge losses in manufacturing jobs. General Electric's Broadway Works was a key casualty. The factory's productivity and jobs ebbed and flowed until cratering in the 1980s. The massive factory campus closed in the early 2000s, leaving lost jobs and a million square feet of floor abandoned, moldy, and blighted. This downfall in the city was only worsened during the 2008 recession as more people lost their jobs and Fort Wayne struggled to keep its population in the city. While Fort Wayne's rating on the Brookings' Metro Monitor from 2008-2020 might not seem significant, with many of its rankings on the middle ground, Fort Wayne's recovery is still in the earliest stages, yet significant changes are being made. Electric Works, a major city project of diversified uses involving many of Fort Wayne's government and civic leaders, is a positive example of how the city is pulling together to make a positive recovery economically following the losses from 1980 to today.

The Allen County-Fort Wayne Capital Improvement Board approved a bond of up to $45 million for Electric Works in November 2018, capping nearly a year of examination and

***Arial photo of the Electric Works campus in Fort Wayne, Indiana** – photo from [fortwayneelectricworks.com]*

debate over a public financing commitment totaling $65 million, according published reports. Although the project has faced delays, and now the effects of a global pandemic, the mission remains to turn the former GE property into a $400 million, 30-acre mixed-use complex featuring apartments, retail space, and office space, as well as a food hall, an innovation center, and co-working environments. (A full treatment of the Lincoln and Fort Wayne accomplishments is in Appendix 3).

DARE TO IMAGINE:

Two of the more remarkable 19th and 20th century achievements in Erie were initiated by audacious Roman Catholic leaders. In 1870, when Erie had a population of 19,646, Bishop Tobias Mullen was labeled a near-quack when he secured the blocks of stone that once lined the bottom of the Erie Extension Canal to build the foundation for a great church on the outskirts of town. Twenty years later, St. Peter Cathedral at West 10th and Sassafras Streets, was completed, serving as the spiritual headquarters for 13 counties comprising the Erie Catholic Diocese.

A half-century later, in 1933, Monsignor Joseph J. "Doc" Wehrle hit his own boiling point at the height of the Great Depression. "There were 36 graduates of Cathedral Prep School in 1933, and only two of them were financially able to plan for college," wrote Erie writer and historian Ed Wellejus in his 2004 "Historic Erie County," so Wehrle summoned his vision. He started Cathedral College, creating it under the Villa Maria College charter. That first class had 56 students, six faculty members, a total budget of $6,725.63, and ended the year with a profit of $1.37. Today it is Gannon University.

While the founding of many Erie businesses and institutions may have featured a bit less drama, scores of them emerged in times of economic instability and turmoil. The city itself took monumental steps at various times of crisis, such as when Mayor Orange Noble and a Water Commission led by industrialist William L. Scott built Erie's first major water works in 1868: a pumping station, water intake pipes, and a 260-foot-high standpipe at the foot of Chestnut Street – the tallest tower of brick in the world at the time. It took engineers, the Noble administration, the rival commission, the work of Erie's Select and Common Councils, the state assemblymen and federal legislators who sought and attained changes in the law, the workers of Erie City Iron Works, and Erie's entrepreneurial spirit to make it all happen. And five years later, they did it again, building a 27-foot deep reservoir "on the high ground of the first ridge" – the Sigsbee Reservoir at West 26th Street between Chestnut and Cherry Streets.

Vision. This horrible pandemic has given us much more than misery and disruption. It has given us opportunity.

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END NOTES

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APPENDIX 1

It's time to pursue Erie Neighborhood Reforms

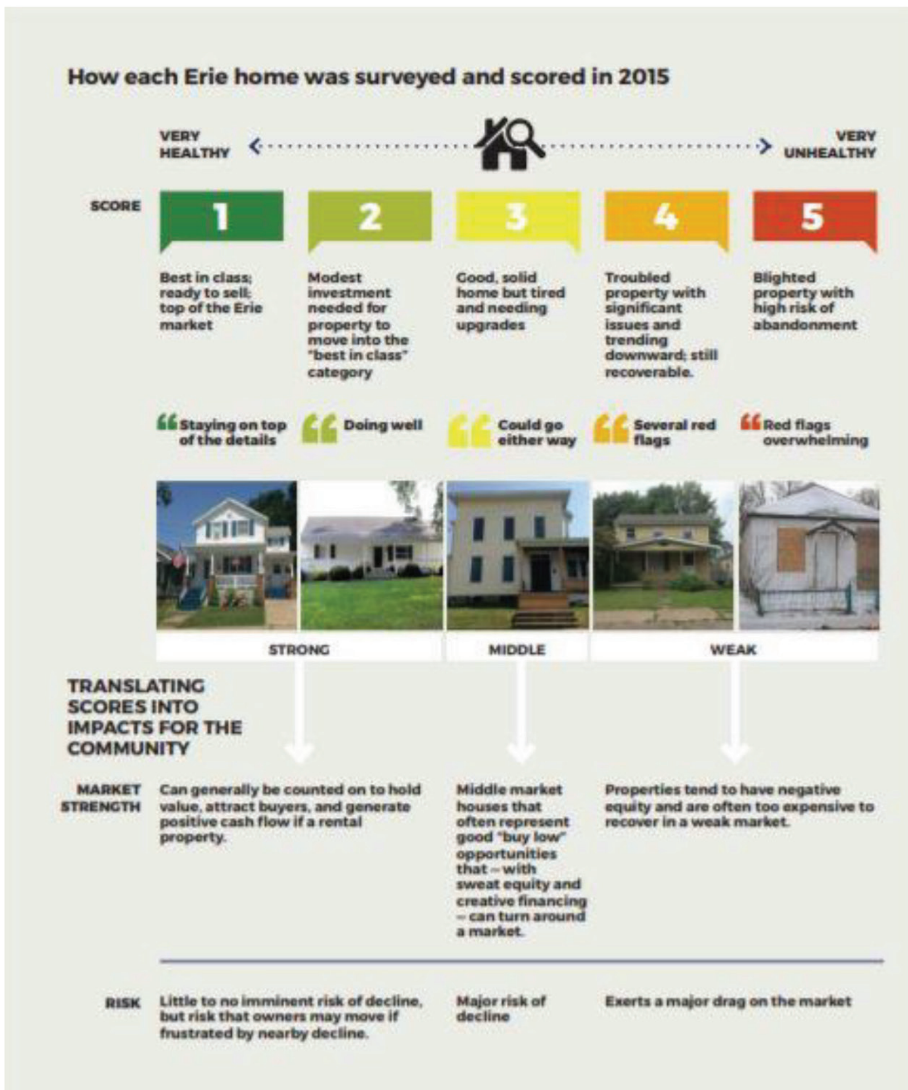
We recommend further embracing the conclusions of Erie Refocused, the city's comprehensive plan, which identifies 17 planning areas throughout the city of Erie. While some neighborhoods have a sense of identity and history, others do not. Regardless, outlining these 17 areas provides a pathway to addressing concerns and challenges found within them, while also studying and modeling successes.

It is important to understand the imbalance of supply and demand revealed in 2016 through the numbers, as reflected in the report. Within the city, the report identified 4,700 vacant housing units; 1,900 abandoned housing units; and 9,500 residential properties with signs of moderate to severe distress.

Erie Refocused, which was delivered to the city of Erie in March 2016 by the czb, LLC planning firm, ranks each neighborhood on a range from 1 to 5 (1 = very healthy; 5 = very unhealthy) and translates scores into impact for the community. Further, the planners provide demographic breakdowns that compare residential areas.

Key to the integrity of the report, Erie Refocused honed in on the imbalance of supply and demand in terms of Erie's housing stock and population. According to its authors, "This comprehensive plan provides a decision-making framework to guide public and private sector investments in a direction that will achieve two aims en route to realizing the outcomes identified by this plan:

- Stabilizing prices and rents by bringing supply of and demand for private real estate and supportive public infrastructure into equilibrium.
- Turning Erie into a community of choice in the region by improving the quality and appeal of its remaining supply and by taking advantage of the city's outstanding assets – making the city's housing, streets, parks, and economic opportunities highly desirable.



The Erie Refocused ranking system –Photo from Erie Refocused Comprehensive Plan emerge2040.org/wp- content/uploads/2016/10/Erie-Refocused-2016.pdf

Too, it is worth noting the overall trends of populations when it comes to the size of the city of Erie compared to that outside of the city. At the time of Erie Refocused's publication, a reported 101,786 residents lived in the city of Erie. Outside of the city, 178,780 residents populated the county's other 37 municipalities.

While both population in the city and outside of the city had been growing since the turn of the 20th century, the city of Erie reached its peak population, nearing 140,000, in the late 1960s and has been declining since. For perspective, the report notes that 37,000 fewer residents live in Erie since its peak population.

Prior to the late 1960s, the population in the city exceeded that of those outside of it. However, the population outside of the city trends upwards past 1970 while the city continues to lose population. According to the report, areas outside of the city have experienced 60 percent growth in population since the '60s. Overall, since the 1980s, minus one slight decline offset by one slight increase, the total population of Erie County has remained roughly the same around 280,000.

Lastly, there are 33 percent fewer middle- and upper-income households compared to 1969.

According to the report, the proportionality of those living in poverty, minority representation in population, and those without college education are greater in areas classified as highly distressed; distressed; and transitional, at-risk. Conversely, areas that are designated as stable, at-risk or healthy featuring lower rates of minority population and poverty but higher rates of educational attainment.

In highly distressed neighborhoods, minorities make up 57 percent of the population. This represents the only classification on communities in which the minority is the majority. However, in distressed neighborhoods, the minority population represents 30 percent of the overall population and 33 percent of the overall population in transitional, at-risk. The minority community represents just 14 percent of the overall population in stable, at-risk neighborhoods and just half that, 7 percent, in the healthy neighborhoods.

While the data the report offers on poverty does not mirror the numbers when it comes to the minority community, it is similar. Just 5 percent of the overall population living in the healthy neighborhoods live in poverty, while 43 percent living in highly distressed neighborhoods live below the poverty line. The percentages shift from 37 to 25 to 16 when transitioning from distressed to transitional, at-risk, to stable, at-risk.

Tax delinquency, percentage of residencies with code violations, and vacancy follow these trends. Homeowner rates trend in the opposite direction, with the fewest number of homeowners living in the highly distressed neighborhoods and the greatest percentage of homeowners living in healthy communities. Of note, 51 percent of the population in the city of Erie own their own homes.

Additionally, Erie Refocused notes the quality of housing stock across the classifications. In the highly distressed neighborhoods, 78 percent of the housing stock is moderately or severely distressed with just 6 percent in good or excellent condition. While not a mirrored inverse, the numbers shift to 66 percent good or excellent condition with just 6 percent moderately or severely distressed.

Suffice it to say, disparities exist in the city of Erie and are clearly revealed through the lens of Erie Refocused by examining the wellness of neighborhoods. The report lays out ways to strengthen strong areas while lifting up those in distress through public policy.

The authors of the report estimated that to achieve the abovementioned two aims over the decade since delivering the report, "in a way that revitalizes every section of the city," would bear a price tag exceeding $600 million, "a level of investment exceedingly unlikely to materialize."

In tempering realistic expectations, the authors added: "Therefore, this comprehensive plan must also be about priorities – about how to invest, where to invest, and at what levels to achieve these two central tasks. It is a plan that is, by necessity and design, about tradeoffs that reflect the community's vision, its core values, and the willingness of stakeholders to live by those values."

However, with the interest rate on bonds at or near zero percent, a bond initiative through a public-private partnership could be secured to match funding raised to date in the spirit of Erie Refocused to precipitate the implementation of the plan in full rather than in parts or phases extending beyond the six years remaining on the decade-long timeline.

APPENDIX 2

A short history of Erie's Economy before and after 2008

An economic crisis cannot be examined from a single point in time. Rather, the Great Recession in 2008 and how it affected the economy nationally and locally should be seen in the context of what happened in various industries and in the finance sector in the decades leading up to it. It is also important to highlight some of the prevalent market mechanisms and how they impacted the local economy.

A brief historical review of Erie's economy begins with its founding as a military outpost in 1795 and development in the 1800s as an important port and manufacturing center, known as "the Boiler and Engine Capital of the World." Diversified industry sustained the local economy through World War II and beyond, though the war response brought large defense contracts to Hammermill Paper Company, General Electric, and Lord Corporation.

The first manufacturing decline or rather a post-WWII contraction was marked by labor conflicts in the 1950s and by rising economic challenges that can be attributed to growing competition among regions and states along the Great Lakes and elsewhere. Just like its southern big steel manufacturing cousin Pittsburgh, Erie suffered from the loss of indigenous industries. In Erie's case, manufacturing, especially in metalworking, declined as General Electric and other major employers in search of cost savings moved their operations to southern states with lower wages. In transportation, Erie's relatively shallow port before preparation for the opening of the St. Lawrence Seaway saw a decline in traffic for coal, iron, and ore due to competition from better equipped and geographically advantageous ports in Ohio and on the East Coast. Consequently, Erie's railroad ore and iron dock closed in the 1960s, just as the city reached its historic peak in population (138,440 in the 1960 census). Commercial fishing also declined after blue pike disappeared in the 1950s and other popular species became victims of overfishing. [36]

Simultaneously with the first stage of economic decline came the first move to the suburbs, spurred by individualized transportation by car and the opening of the Erie region's sections of interstate highways I-90 (in 1960) and I-79 (1976). The move of retail out of the downtown increasingly stripped the city of tax resources vital to keep its downtown vibrant.

The race for economic development, downtown preservation, and resources was won by the suburbs when the new iconic Millcreek Mall was opened in 1974. Anecdotal interpretation compares aerial photos of the mall with the shape of a gun directed against downtown. Erie's creation of the Transitway Mall, which closed State Street from 10th Street to Perry Square, and Central Mall near West 18th and Peach Streets attempted to counter the loss of downtown shopping, but both proved to be failed experiments.

The companies that contributed heavily to Erie's mainstay growth – GE, Hammermill, Zurn Industries, American Sterilizer Company, Lord, Erie Forge, Riley Stoker, and others – dominated employment throughout the 1980s and created a considerable secondary supplier market dotted with local firms and services. New industries emerged as technology and material science advanced with computers and plastics. Economically, the 1970s marked the start of slower productivity growth and increasing operational and capital costs in several key sectors. By the mid-'70s, fiscal stimulus packages were passed and deregulation efforts were made as a way out of inflation and to boost the economy. A climate of government deregulation was established and enforced in the transportation sector (Airline Deregulation Act, 1978), and in savings and loan associations and banks. The dawn of a new supply-side economic philosophy called Reaganomics took hold and brought about fiscally expansive economic policies and tax cuts by up to 25 percent. It resulted in a sharp drop in inflation, greater investments and GDP growth, but also sharp cuts in social programs, widening income inequality, and the onset of persistent fiscal debt and large trade deficits.

America had fully entered a free-trade, open-markets, post-industrial service economy, in which strong consumerism coupled with a credit card boom covered up stagnating wages and earnings for much of the workforce. The 1990s were basically a continuation of neo-liberal economic policies in an increasingly globalized economy leading to a decade of strong economic expansion. The sharp rise of the stock market in the 1990s in the wake of numerous initial public offerings of high-tech and "dot-com" companies was considered remarkable. Manufacturing centers like Erie were clearly at a disadvantage transitioning to a service economy because the local economy still relied on labor-intensive industries requiring capital investment. [37]

The new millennium began with a number of economic blows to the Erie community, most notably the loss of Erie's papermaking giant. Hammermill had been purchased in 1988 for $1.08 billion by International Paper, which promised to retain its former competitor as a distinct corporation for at least five years. The exemplary story of Hammermill, once an innovative industry leader before it became the target of a corporate raider, also paralleled the fate of many companies across America struggling with technological advance, competition, and a general wave of consolidation and sell-offs of the late 20th century: "In 1977, (Mr. McClelland) said the company's officers tried to look at the company through the eyes of the investment community and realized it was at the lower end of the paper industry in terms of return on investment" (Hammermill President W. Craig McClelland in an interview with the New York Times, August 14, 1986). [38] Because of investing in productivity savings and shedding low profitable assets, Hammermill's stocks still rose enough to make it an attractive company. New York-based International Paper was regarded as saving Hammermill from a hostile takeover by a California investor (represented by Shearson Lehman Brothers Inc., infamous for triggering a global financial market meltdown in 2008), according to the Chicago Tribune (August 12, 1986: "Hammermill Rescued by International Paper"). [39] However, "the rescue" was short-lived. Customer service and operations moved to Memphis, Tenn. shortly afterward and International Paper closed the 103-year-old plant in May 2002, leaving 760 workers jobless.

GE's Erie Works and later GE Transportation, which once had 18,000 employees at its Lawrence Park plant, downsized to 4,500 by 2015, when it began a series of layoffs and job shifts to Fort Worth, Texas that ultimately left it with about 1,500 workers before selling the locomotive plant to Wabtech in 2019. While Erie's manufacturing base produced $14.3 billion in sales in 2019, it has experienced a continual decline for several decades. By 2005, service jobs exceeded 30 percent of employment, compared to 20 percent for manufacturing.

Erie's economic landscape in 2008 looked already much more like it does today, however the city's tax base did not recover in equal terms. In 2018, it was stated that in many former manufacturing centers the loss of manufacturing jobs was followed by the exodus of white-collar jobs (University of California Berkeley economist Enrico Moretti in the Erie Times-News, March 11, 2018). [41] The Great Recession of 2008 certainly affected the Erie economy in many ways and is described in detail in the next section of this essay. Overall, the bigger impact was and still is the exodus, or "brain drain," of higher-paying white-collar jobs and college graduates to metropolitan areas with more opportunities. This migration yet again gained momentum after 2008 in a region that had already lost much of its manufacturing base.

Erie, it seems, was not as hard hit, because it had already suffered much prior to 2008. In a city that does struggle with an image to be less attractive for young entrepreneurs, some businesses weathered the economic fallout of the Great Recession and used the ingenuity, adaptability, and an increasing demand by local businesses to deliver customized IT solutions to their advantage. Such a "survival champion" is VNET, a company founded in 1990 by Joel Deuterman. After 2008, VNET turned its focus away from less profitable divisions to focus solely on IT solutions, fiber ring and other fiber-related services. [42]

As pointed out by James Fallows in an article in The Atlantic after visiting Erie for a week in August 2016, Deuterman's decision to move his high-tech company from the suburbs to a vacant building in downtown is an example of what Erie needs to make it an attractive city for working, living, and leisure. [43] Others have followed suit during this Renaissance, such as coworking space Radius Cowork and Video producer MenajErie, mostly carried by young entrepreneurs making a conscious effort to open their business after college instead of moving out.

Back in 2015, the Jefferson published the essay, "Erie's Advanced Industries," by Jim Wertz and Perry Wood in which the authors state that 27 of the 50 advanced industries in the United States are located in Erie. Advanced industries must meet two criteria: R&D spending per worker must fall in the 80th percentile of industries or higher, and occupations require a high degree of STEM knowledge.

These industries have developed alongside the traditional big employers like General Electric, but as the major companies' output, employment, and trade have shrunk over the years, advanced industries have become the cornerstone of Erie's post-recession economy and rival or surpass the national output average of advanced industries.

For Erie to again establish a strong foothold in manufacturing and spur the growth of small- and mid-sized firms in the advanced industry sector, the authors recommended coupling the strength of the region's premier firms with long-term public private partnerships based on a clear commitment to innovation and skill building. While Erie's manufacturing base still hovers around 15 percent, it is those survivors and new spirits that have contributed much to taking the rust off a city that used to represent the heart of the Rust Belt.

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APPENDIX 3

What happened in the 2008 World Recession?

From December 2007 to June 2009, the United States suffered its largest economic crisis since the 1930s Great Depression. The economic impact of this Great Recession was felt for a number of years, particularly in terms of job recovery and a financial rebound around the world. The primary cause of the downfall was the subprime mortgage crisis and the collapse of various financial schemes associated with it.

In the early 2000s, the housing market was thriving as housing prices continued to rise and more and more Americans sought the "American Dream" of which home ownership was an integral aspect. As the demand for houses rose, so did their prices, and the result sparked a rise in new mortgages.

Typically, a bank, acting as the original lender, sells a mortgage to a third party. Mortgage-backed securities were created when large financial institutions began to bundle thousands of individual mortgages and sell shares of that pool to investors. Investors sought these securities because they looked very safe as home prices continued to rise between 1990 and 2006, perhaps not coincidentally during the time of an economic boom. The investments excellent ratings from credit rating agencies, which was true, but only if the people who took out the mortgages had good credit. Investors who wanted low-risk, high-profit investments began pouring money into the U.S. housing markets thinking they could get a great return from interest rates, further improving the economic boom of the time.

To meet the demand of investors, banks began to offer mortgages to those with poorer credit, imposing higher interest rates and often at variable rather than fixed-year terms. Some lenders also used predatory practices such as not verifying a borrower's income or inflating property values to justify higher loans. A subprime mortgage is a loan issued to a borrower with a lower credit rating compared to a typical borrower with a higher credit rating. While this seems risky to all parties in retrospect, many financial institutions offered and many people sought these subprime mortgages because they could use the loan for the house and its equity for other items as well. Conceivably, if a borrower defaulted, the bank still owned a valuable house. When the new subprime mortgage plans came out, credit companies could still point to historical data showing that mortgage debt was a good investment, and not necessarily related to a borrower's credit status.

The Downfall

Many property owners defaulted, unable to pay their mortgages for many reasons including lost wages, higher payments, or otherwise falling out of line with their household income. While bank foreclosures put more houses back on the market, buyers were few. As supply rose, demand fell, the price of homes dropped, and investors stopped investing in real estate since they could no longer turn a profit. The "housing bubble" had burst. As prices fell, many homeowners suddenly held mortgages for amounts far more than their home's market value, leading to more defaults.

Like a house of cards, one downfall led to another: Many financial institutions lost money since the foreclosed homes were no longer worth what they used to be. Big financial institutions stopped buying subprime mortgages and subprime lenders held bad loans, prompting many big lenders to declare bankruptcy. This particularly affected big investors who initially poured money into the mortgage-backed securities because they started losing money on their investments. Many major financial players declared bankruptcy and many others were forced into mergers or lobbying for government bailouts. As panic set in, trading and the stock market froze, then crashed. Thus, the recession began.

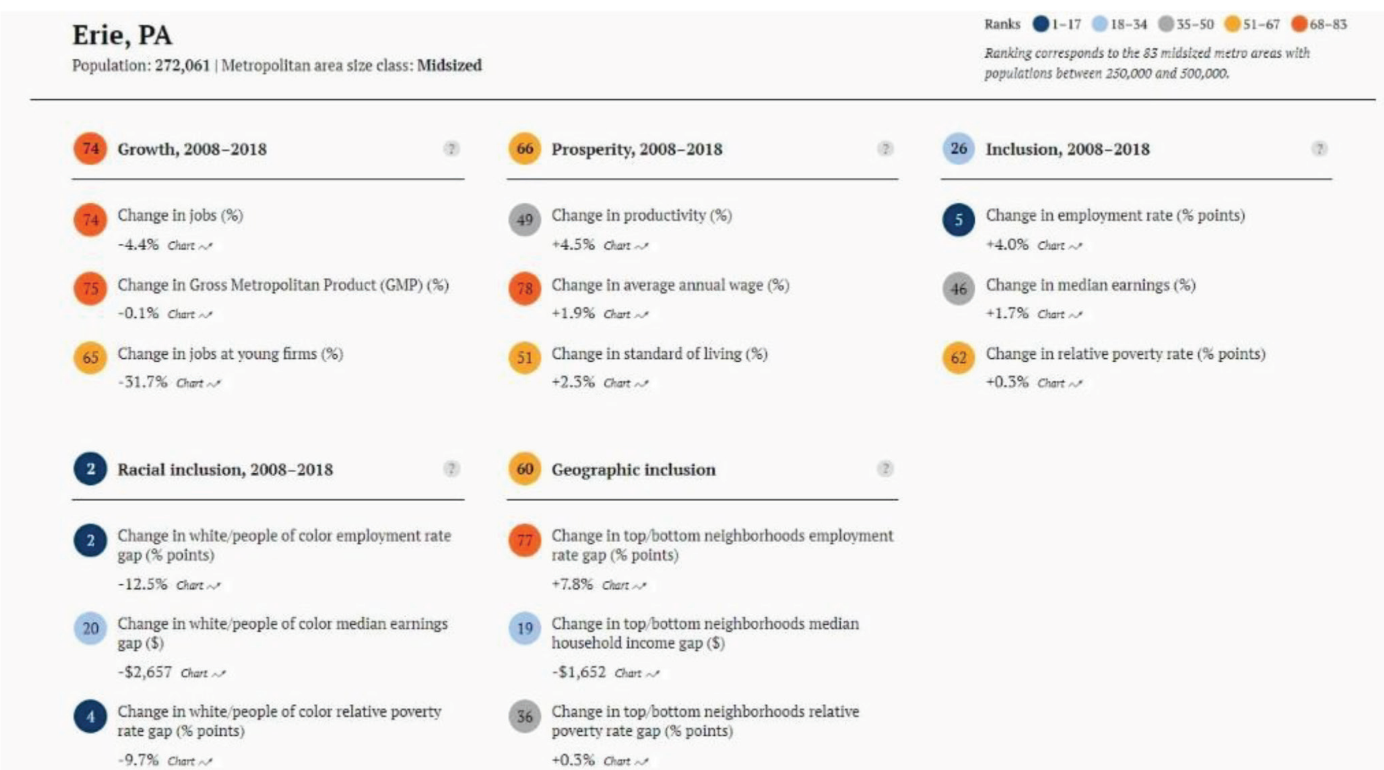
America's consumer economy suffered as people spent less money in stores and businesses, further damaging the economy. Lending tightened, leaving many businesses in crisis. In 2008, the American government stepped in to bail out financial institutions. More than 8 million Americans lost their jobs during the Great Recession and more than 2.5 million businesses closed. It quickly became a global crisis.

The Recovery

The Federal Reserve offered to make emergency loans to banks to ensure that the financially sound banks would not collapse amid the panic. The government enacted the Troubled Assets Relief Program (T.A.R.P.) to loan $250 billion to stabilize banks. It was later expanded to help auto companies, AIG, and some homeowners. The average American suffered significant loss, and Congress and the Barack Obama administration passed a much larger stimulus package in January 2009, pumping in $800 billion to help stabilize the economy. Those seemingly huge numbers are a fraction of what Congress, the Trump administration, and the Federal Reserve have already appropriated or pledged amid the COVID-19 pandemic.

Stories of Success after 2008

To initially gauge "success stories" of cities after the 2008 Great Recession, the Brookings Institution created "Metro Monitor 2020," as cited earlier. As described by Brookings, "Metro Monitor 2020 tracks the inclusive economic growth performance of the 192 largest U.S. metro areas, which together are home to 77 percent of the nation's population and contribute 85 percent of the nation's GDP." This year's edition of the Metro Monitor analyzes two time periods: from 2008 to 2018, which indicates how metro areas have fared since the onset of the Great Recession; and from 2017 to 2018, the latest year of data available across all indicators. With an expanded set of metro areas, Metro Monitor 2020 for the first time categorizes metro areas into three classes based on size: very large metro areas (populations over 1 million, 53 total), large metro areas (populations between 500,000 and 1 million, 56 total), and midsized metro areas (populations between 250,000 and 500,000, 83 total). Metro areas are ranked on their performance in the five Metro Monitor dimensions within their size class.



Erie County is considered a midsized metro area with a population of 272,061. As shown by the capture from the Metro Monitor, Erie County's weakest categories are growth, ranked 74th of 83 cities; prosperity at 66th of 83; and geographic inclusion at 60th of 83. Yet, Erie is ranked second best for racial inclusion and 26th of 83 for inclusion, despite various studies in the past two years that argue essentially the opposite. Below is a further description of these categories.

Growth indicators measure change in the size of a metropolitan area economy's level of entrepreneurial activity. Growth creates new opportunities for individuals and can help a metropolitan economy become more efficient. Entrepreneurship plays a critical role in growth, creating new jobs and new output; entrepreneurial activity can also indicate investors' confidence in future growth and prosperity.

Prosperity indicators capture change in the average wealth and income produced by an economy. When a metropolitan area grows by increasing the productivity of its workers, through innovation or by upgrading workers' skills, for example, the value of those worker's labor rises. As the value of the labor rises, so can wages. Increases in productivity and wages are what ultimately improve living standards for workers and families.

Inclusion indicators measure how the benefits of growth and prosperity in a metropolitan economy-specifically, changes in employment and income-are distributed among individuals. Inclusive growth enables more people to invest in their fields and to purchase more goods and services. Thus, inclusive growth can increase human capital and raise aggregate demand, boosting prosperity and growth.

Geographic inclusion indicators measure change in the gap between the most advanced (top 20%) and least advantaged (bottom 20%) of census tracts in each metropolitan area, for each of three underlying inclusion indicators: employment rate, median household income, and relative poverty rate.

Racial inclusion indicators measure the gap between the non-Hispanic white population and people of color on indicators of inclusion: median income, employment rate, and relative income property.

Other midsized metro areas were compared to Erie to evaluate which cities fared better, according to the Metro Monitor (see chart below). Of those listed, Lincoln, Nebraska and Fort Wayne, Indiana were determined to be "successful" locations, from which it was determined what businesses and economic sectors they invested in after the recession. These cities stand as examples of success stories and should be considered to determine whether Erie can follow the precedents of these cities and whether it is appropriate to pursue similar actions amid the COVID-19 crisis.

Location	Population	Growth	Prosperity	Inclusion	Racial Inclusion	Geographic Inclusion
Erie, Pennsylvania	272,061	74	66	26	2	60
Lynchburg, Virginia	263,353	66	69	46	30	23
Lincoln, Nebraska	334,590	8	16	13	64	4
Peoria, Illinois	403,217	79	44	28	3	33
Rockford, Illinois	337,658	73	22	48	10	41
Evansville, Indiana/Kentucky	314,672	58	61	15	11	34
Cedar Rapids, Iowa	272,295	52	13	49	75	10
Salisbury, Maryland/Delaware	409,979	38	36	71	7	46
Flint, Michigan	406,892	43	9	1	38	71
Reno, Nevada	469,764	25	56	30	14	1
Utica-Rome, New York	291,410	59	8	5	1	52
York-Hannover, Pennsylvania	448,273	55	64	62	48	38
Spartanburg, South Carolina	313,888	5	55	9	71	17
Fort Wayne, Indiana	409,425	45	7	64	32	40

Yellow = Positive - 1-17, Red = Negative - 51-83

Lincoln, NE

Population: 334,590 | Metropolitan area size class: **Midsized**

Ranks 1–17 18–34 35–50 51–67 68–83

Ranking corresponds to the 83 midsized metro areas with populations between 250,000 and 500,000.

8 Growth, 2008–2018

- 35 Change in jobs (%) — +8.6% Chart
- 12 Change in Gross Metropolitan Product (GMP) (%) — +22.5% Chart
- 5 Change in jobs at young firms (%) — +2.9% Chart

16 Prosperity, 2008–2018

- 11 Change in productivity (%) — +12.7% Chart
- 19 Change in average annual wage (%) — +9.7% Chart
- 28 Change in standard of living (%) — +8.5% Chart

13 Inclusion, 2008–2018

- 26 Change in employment rate (% points) — +0.0% Chart
- 14 Change in median earnings (%) — +12.7% Chart
- 38 Change in relative poverty rate (% points) — -1.6% Chart

64 Racial inclusion, 2008–2018

- 51 Change in white/people of color employment rate gap (% points) — +0.4% Chart
- 55 Change in white/people of color median earnings gap ($) — +$2,294 Chart
- 70 Change in white/people of color relative poverty rate gap (% points) — +4.9% Chart

4 Geographic inclusion

- 32 Change in top/bottom neighborhoods employment rate gap (% points) — -7.4% Chart
- 15 Change in top/bottom neighborhoods median household income gap ($) — -$2,178 Chart
- 1 Change in top/bottom neighborhoods relative poverty rate gap (% points) — -6.4% Chart

Fort Wayne, IN

Population: 409,425 | Metropolitan area size class: **Midsized**

Ranks 1–17 18–34 35–50 51–67 68–83

Ranking corresponds to the 83 midsized metro areas with populations between 250,000 and 500,000.

45 Growth, 2008–2018

- 48 Change in jobs (%) — +4.2% Chart
- 15 Change in Gross Metropolitan Product (GMP) (%) — +20.7% Chart
- 61 Change in jobs at young firms (%) — -30.0% Chart

7 Prosperity, 2008–2018

- 4 Change in productivity (%) — +15.8% Chart
- 36 Change in average annual wage (%) — +7.7% Chart
- 8 Change in standard of living (%) — +13.3% Chart

64 Inclusion, 2008–2018

- 24 Change in employment rate (% points) — +0.3% Chart
- 82 Change in median earnings (%) — -11.6% Chart
- 49 Change in relative poverty rate (% points) — -1.1% Chart

32 Racial inclusion, 2008–2018

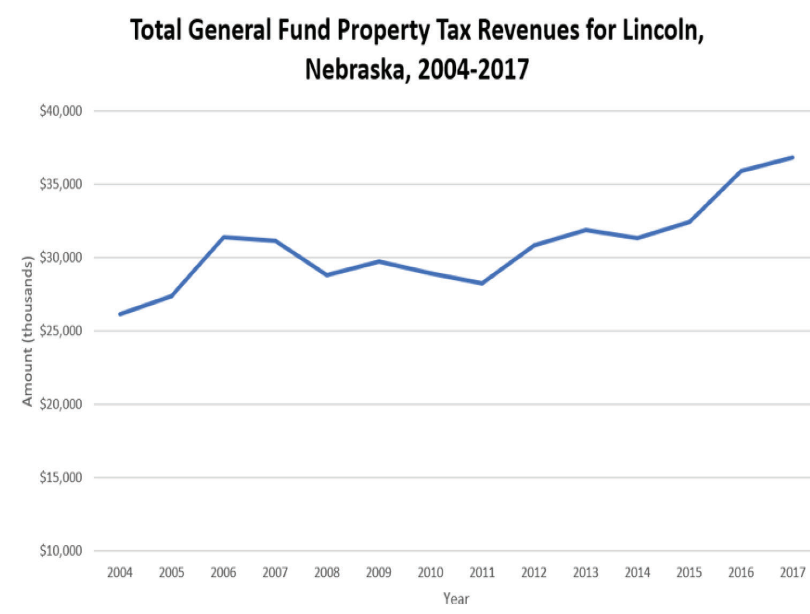
- 13 Change in white/people of color employment rate gap (% points) — -5.7% Chart
- 38 Change in white/people of color median earnings gap ($) — +$100 Chart
- 61 Change in white/people of color relative poverty rate gap (% points) — +2.5% Chart

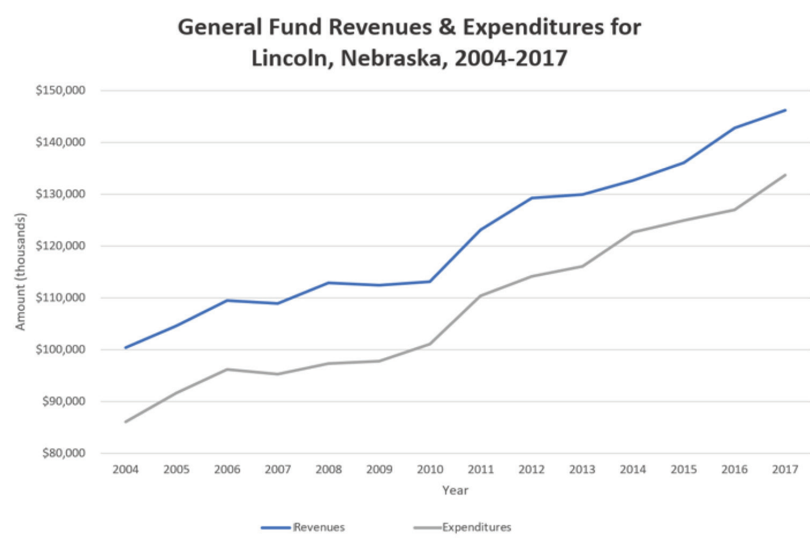
40 Geographic inclusion

- 54 Change in top/bottom neighborhoods employment rate gap (% points) — -1.5% Chart
- 45 Change in top/bottom neighborhoods median household income gap ($) — +$1,002 Chart
- 29 Change in top/bottom neighborhoods relative poverty rate gap (% points) — -0.5% Chart

Lincoln, Nebraska

The city of Lincoln was chosen because of its top marks from the Brookings Metro Marker, its comparable size to Erie, and its consideration as being "recession proof," as seen during the city's tremendous recent growth. Lincoln's success stems from a combination of surviving the 2008 recession essentially unscathed as well as being a top destination in what is known as "Silicon Prairie."





Survival During the Great Recession

Lincoln earned its recession-proof distinction because it was able to maintain a stable stream of property tax revenue throughout the crisis and aftermath. Home prices remained steady during the crisis and began increasing again well before other cities. Since property taxes from residential and commercial property are the top source of revenue for cities, nearly a third of their overall revenues, this quick recovery was a sign that Lincoln will continue to do well fiscally even in the face of another recession.

One potential contributing factor has been Lincoln's tax and expenditure limits (TELs) to slow or halt the growth of its tax rate. A TEL is a restriction imposed by a state government on a municipality to limit the amount it can tax or spend. Lincoln has also maintained a stable surplus between its revenues and expenditures. Overall, these factors improved the economic stability of the city before, during, and after the Great Recession.

Economic Growth

Lincoln was economically stable coming out of the Great Recession but showed seemingly little potential for growth and innovation. That is until 2012, when a couple new to Lincoln, attracted by the community's low housing prices, passionate entrepreneurial investors, and a supportive university system, founded Bulu Box, a monthly service providing premium health products. From this initial startup, many other startups followed suit in Lincoln, making this area an unlikely, yet enormously successful tech leader. The Lincoln area is now known as "Silicon Prairie," a play on the well-known "Silicon Valley," and home to many new companies such as Bulu Box and Hudl, a sports video analyst service used for all sports ranging from local to professional.

Lincoln has become an increasingly attractive location to startup companies in recent years, but what is the cause for this draw? In addition to a low cost of living, an overall friendly and helpful climate, university support, availability of affordable tech-focused co-working spaces, and a reasonably short commute from the suburbs to the city, the Nebraska Legislature created an effective task force to support innovation and entrepreneurial activities. The body is supported by the Nebraska Department of Economic Development (NDED), numerous private donors (both foundations and individuals), USDA Rural Development Grants, and the Nebraska Investment Finance Authority (NIFA).

Additionally, the Nebraska Angels, a nonprofit aiming to make it easier for startups to find investment dollars and for angel investors to make funding requests, has been around since 2006 to help provide structure around angel investing. The Business Innovation Act programs, including the Seed Innovation Fund, Nebraska Prototype Grant, as well as Academic R&D and SBIR matching grants, are also critical to the entrepreneurial ecosystem, allowing ease for those wishing to begin startup companies in Lincoln.

Despite these numerous successes, Lincoln is still experiencing significant "brain drain," as much of its millennial population that attends the local universities is still driven to bigger cities. Lincoln also lacks diversity in leadership positions in startups, say its critics.

Fort Wayne, Indiana

Fort Wayne, with a population of more than 250,000, experienced significant financial hardship beginning in the 1980s as the loss of industry hit, coupled with urban blight, and led to huge losses in manufacturing jobs. General Electric's Broadway Works was a key casualty. The factory's productivity and jobs ebbed and flowed until cratering in the 1980s. The massive factory campus closed in the early 2000s, leaving lost jobs and a million square feet of floor abandoned, moldy, and blighted. This downfall in the city was only worsened during the 2008 recession as more people lost their jobs and Fort Wayne struggled to keep its population in the city. While Fort Wayne's rating on the Brookings' Metro Monitor from 2008-2020 might not seem significant, with many of its rankings on the middle ground, Fort Wayne's recovery is still in the earliest stages, yet significant changes are being made. Electric Works, a major city project of diversified uses involving many of Fort Wayne's government and civic leaders, is a positive example of how the city is pulling together to make a positive recovery economically following the losses from 1980 to today.

Electric Works

With its name aptly decided as an ode to the former General Electric Plant, the Electric Works campus has excited those who live in and around Fort Wayne as it presents itself as an opportunity for innovation, culture, and community that will be easily be integrated into the city around other downtown projects. The Allen County-Fort Wayne Capital Improvement Board approved a bond of up to $45 million for Electric Works in November 2018, capping nearly a year of examination and debate over a public financing commitment totaling $65 million, according to the recently closed Fort Wayne News-Sentinel. Although the project has faced delays, and now the effects of a global pandemic, the project intends to turn the former GE property into a 30-acre mixed-use complex featuring apartments, retail space, and office space, as well as a food hall, an innovation center, coworking environments, and a space for placemaking bodies. As quoted from the Electric Works website, "The vision of redevelopment for the General Electric Campus is to create a mixed-use district of innovation, energy, and culture, infused with the inventive history of Fort Wayne."

Over a 20-year period, the $440 million development is expected to bring in more than $100 million to local businesses. Fort Wayne and local governments is supplying the $45 million in tax-exempt bonds backed by the county's 1 percent food and beverage tax. Federal, state, and private funding make up the other $20 million. As noted by James Fallows and Deborah Fallows in their "Our Town" series in The Atlantic:

> The funding of this project is an epitome of 'public-private partnership' – a phrase that, as I've noted before, is seen in Washington as a euphemism for 'payoffs' or 'log-rolling,' but at the local level appears to be a key ingredient in getting things done. Some of the money is private investment; some is municipal bonds; some is federal and state tax incentives; some comes from a community foundation; some comes from elsewhere.

The Fort Wayne project and others like it seek to create the trendy live-work-play developments that have grown popular in bigger cities. The hope is the new development can lure young, educated workers who may not be able to afford to live in other more expensive cities like San Francisco and New York, to come and work in Fort Wayne where, similar to Lincoln, housing prices are significantly cheaper.

Other Significant Projects

Aside from the GE renovation, many other projects are taking place in Fort Wayne. These projects are recognized as a beacon of hope, similar to that of the Electric Works project, as Fort Wayne attempts to pull itself up from its bootstraps and once again become successful and self-sustaining. It is important to note that Fort Wayne has focused the strategy of remaining a stable city from industrial jobs, for which it was once known, to instead infrastructure projects ensuring the longevity of the city. As listed in Bradly Company's blog, a commercial real estate company in Fort Wayne, some of the top recent projects as of 2017 include:

1. The Skyline Tower: The $40 million Skyline Tower project, developed by Great Lakes Capital, is the final piece of an overall downtown development initiative featuring Ash Skyline Plaza. The tower project includes apartments, office space, and a Ruth's Chris Steakhouse committing to anchor ground-level retail space.
2. A $20 million riverfront initiative project along St. Mary's River. Highlights of the plans include a promenade, park pavilion, event lawn, urban bioswale, interactive sculptures, urban riverfront terraces, educational water features, an elevated boardwalk, a dock, and a children's play area.
3. A proposed $105 million three-level sports arena could be coming to downtown Fort Wayne. The structure is described as a multi-use facility with the capability of housing trade shows and other types of events in addition to sporting events. The arena would also be connected to the Grand Wayne Convention Center, increasing overall event capacity in the city.
4. The $1.2 billion expansion of Fort Wayne's General Motors plant is the largest proposed investment at the Fort Wayne site, and one of the largest commitments to any of its facilities nationwide. The expansion is intended to add 1.6 million square feet, increasing the footprint of the complex by 50 percent.

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