



Paths to New Prosperity in Industrial Regions of the West

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In both North America and Europe, historic industrial regions that remain in a difficult phase of economic restructuring have become a crucible for democracy-endangering populism. Struggling communities within these regions are fertile ground for those who seek to amplify anxieties about economic and social change and the decline of community and quality of life — characteristics that nurture nativism, nationalism, isolationism, and economic nostalgia.

Yet many communities in these regions have found paths to new economic opportunity. Building on their strengths and unique assets, these communities are navigating and advancing in the globalized, knowledge- and technology-driven economy of the 21st century. Their varied success paths illuminate how, on both sides of the Atlantic, similarly situated industrial communities can build new economic success. In so doing, these efforts can nurture optimism and hope for the future, diminishing the appeal of those fanning fears and anxieties for political gain.

Industrial Regions

The heartland industrial regions of democracies in North America and Europe occupy a key place in each country's economic, social, and cultural history. Cities in the British Midlands and North launched the Industrial Revolution, their textile mills extending Britain's global economic power. The Ruhr Valley, the coal and steel region in the west of Germany, was the engine of German industrialization, as was the Hautes de France and Grand Est for France. The

coal regions of Silesia and Małopolska in Poland helped to define the nation's economic identity for generations. In Canada, vast natural resources and agricultural products were converted in southern Ontario into processed foods, steel, automobiles, agricultural tools, and tractors.

Sharing the Great Lakes with Ontario, the American Midwest was a birthing ground of new industries. From the auto industry to steel, oil, and aviation, it became the production center of the arsenal of democracy, helping win World War II.

However, much has changed in these older industrial regions that once boasted economic might and plentiful, good-paying jobs.

In recent decades, globalization, technological change, and new competitors around the world diminished the industrial primacy of these regions, shuttering factories and leaving many once-thriving communities struggling. This transition earned the American Midwest its “Rust Belt” moniker, reflecting similar economic experiences in Ontario and Western Europe.

Communities in these older industrial regions have been looking to facilitate a difficult, sometimes painful, transition from a previous economy. For its part, the European Union (EU) has developed a policy of facilitating structural adjustment in declining regions to enhance social cohesion.¹ In Germany, the federal policy enshrined in the constitution has resulted in a more deliberate, long-term, multi-faceted adjustment strategy.² The result has led to a focus on the transition in communities such as those in the Ruhr valley, as well as efforts to economically equalize states in the former East Germany.

In France, a long-term tactic to devolve decision-making away from Paris has empowered local leaders in older industrial metros like Lyon and Strasbourg to organize new opportunity.³ In Poland and elsewhere in Europe, the EU's focus on facilitating structural economic change and divestment from fossil fuels has prompted a transition forward.⁴

The United Kingdom, Canada, and the United States are beginning to focus more attention on geographic economic divides. “Levelling up” struggling regions in the United Kingdom is now a national priority. Leaders in the United States and Canada are working to close the gaps between economically successful global cities like San Francisco, New York, and Toronto, and those communities which have felt the brunt of its downside, having navigated the shift to a knowledge-based economy less successfully. Meanwhile, public-private leadership in many (but not all) of the West's older industrial cities and regions have made progress in leveraging local assets — whatever they may be — to foster a new round of economic dynamism.

The result of these efforts suggest that these regions do not fit the monolithic stereotype of hollowed-out factory, farm, and mill towns. Many of these older communities — both large and small — have built on their industrial past and are winning in today’s globalized economy.

Such successes are clearly not universal. Many older industrial communities, having lost their anchor employers, still struggle with an ongoing population decline, crumbling community infrastructure, and a fraying civic fabric. As preliminary findings from Georgetown University’s Jeffrey Anderson demonstrate, these conditions of community decay and economic decline correlate with support for populist and nativist appeals.⁵ Residents who are struggling economically and feeling ignored, disrespected, or uneasy about a changing society are receptive to these strands of anti-democratic populism.

Fortunately, many solutions to economic decline, and its populist offspring, are right in front of us. In this paper, we highlight some of the varied paths that industrial communities have taken to find new economic success. Sharing these stories more purposefully and seeing them inspire similar action will enhance the economic and political health of our democracies.

Routes to Economic Success

Industrial communities in North America and Europe share many economic challenges, from de-population and aging infrastructure to the disappearance of good-paying, low-skill manufacturing jobs. But these regions also possess assets that can foster new economic prosperity in a changed economy. These include:

- Companies with sophisticated global competencies
- Colleges and universities that innovate and educate
- Historical, artistic, and cultural institutions with powerful legacies to build upon
- Place-based assets, such as waterfronts and parks, which enrich quality of life

As detailed in the 2020 Chicago Council on Global Affairs report, [A Vital Midwest: The Path to New Prosperity](#), and vividly demonstrated in the May 2021 [Transatlantic Symposium on Revitalizing Industrial Regions](#), industrial regions on both sides of the Atlantic are following a variety of paths toward finding economic success in a changed world.

Facing common economic challenges, communities have taken different approaches to economic revival. While some integrate various strategies as

part of their transformation effort – working across the social, economic, environmental, and cultural domains – others lean in to one or two powerful levers to drive economic change.

Some of these pathways and varied ingredients of community economic success include:

1. Innovation in Emerging Sectors

Some older industrial communities are finding success by investing in innovation, business, and job development in emerging sectors. These include “Green and Blue” sectors developing sustainable solutions in energy and water, transportation and new mobility, healthcare and biosciences, and advanced manufacturing.

2. Leveraging Colleges and Universities

Many communities build around local colleges, universities, and other research and education institutions as engines of applied research and development, innovation, and new processes and technologies. Educational institutions are also powerful actors in skill-building, as well as the development and luring of private investment.

3. Talent Retention

Building and attracting talent, including tapping the talents of a community’s entire population, as well as welcoming newcomers, has proven effective for many industrial communities.

4. Global Engagement

Civic leaders in industrial communities stress the payoffs of their communities’ global engagement, and many communities choose to lean on their historic strengths in welcoming immigrants, even as the countries of origin of those immigrants has changed.

5. Infrastructure and Building on Place-Based Assets

Industrial regions can build on their unique histories and sense of place, including natural features like waterfronts, historical and cultural assets and institutions, as well as land reclaimed from former industrial uses. Geographic advantages can be further developed with investment in modern transportation and broadband infrastructure, which support connectivity for businesses and participation in the economy for all residents.

6. Integrated, Multi-Faceted Strategies

Many older industrial regions animate multi-faceted economic development plans, emphasizing holistic approaches with a combination of strategies to stem decline and promote new vitality.

Paths to New Prosperity: Transatlantic Examples

By building on distinctive identities formed in previous eras and leveraging unique assets, a range of effective solutions can drive structural economic change for industrial communities in Europe and North America. Numerous successful examples have been cataloged in previous work on the United States Midwest, whereas this analysis extends the subject of focus to similarly situated industrial regions in Canada and Europe, demonstrating these places not only face similar challenges, but also hold the potential for sharing lessons and developing common solutions across borders.⁶

Innovation in Emerging Sectors

Leadership in the “Green and Blue” Economy

The “Green and Blue” economy – encompassing the development of sustainable clean energy and smart water technology – represents a potentially transformative opportunity for many older transatlantic industrial communities. Waterfront economies are well-positioned to promote new residential development, grow smart water-technology businesses, and provide solutions to the growing challenge of ensuring safe, clean, and plentiful water.

Equally so, transitioning to renewable energy and sustainable community building represents a favored economic transformation strategy for many restructuring regions.

For example, many communities in Germany’s Ruhr valley are guiding their economic transformation through the green revolution. Bottrop, in North-Rhine Westphalia aims to reduce carbon emissions by 50 percent in the next decade, and to serve as a prototype for other “innovation cities” in Europe.⁷ Other German cities such as Essen, Bochum, and one of the hardest hit by coal phaseout, Gelsenkirchen, are also vying to test new models of how to support sustainable business growth and technological deployment.⁸

More recently, the region of Silesia in Poland, one of the EU’s largest coal mining regions, has charted a new path away from fossil fuels.⁹ Like many other coal-producing regions, mining led to the development of various heavy industries and supported the growth of several urban centers. Although the

Polish federal government remains committed to coal, regional leaders have begun to seek and facilitate new, more environmentally friendly economic development strategies.¹⁰ The phaseout of traditional industries means some facilities have already closed, creating challenges to support residents to adapt and acquire skills and qualifications in a new economy.

To meet these challenges, Silesia is building on the existing skills of its labor force, as well as its educational and research institutions, to lay an economic development blueprint for the transformation of the region. It recently developed the “Regional Transformation Action Plan” in 2019 that includes a variety of strategies, such as reorienting vocational schools to the latest needs and establishing the KSSNON business accelerator as a regional center for creativity, innovation, and entrepreneurship.¹¹ In addition, the plan created strategic ventures such as “Innovate Silesia” and “Low-Emission Silesia” that help companies internationalize and promote investment in emission-reducing activities, and also develop specialized industrial and research centers.¹²

Transportation and New-Mobility Solutions

Experts estimated the global transportation and new mobility sector to be valued at \$8.1 trillion in 2015 and project it to nearly double that value by 2024.¹³ Not surprisingly, a large share of industrial manufacturing, both in North America and Europe, is built around the auto sector. But as preferences for personal mobility change, so must the sector and its manufacturing, design, and assembly for an automated, electric, and even multi-modal, non-automotive mobility future.

Windsor, an Ontarian industrial community across from Detroit, Michigan, first grew as a hub of the Canadian auto industry. With recent economic restructuring, downsizing in the auto industry, and the impact of more layoffs due to the Great Recession, Windsor’s Mayor, Drew Dilkens sought to chart a new course.¹⁴ His plan lays out the L.I.F.T. strategy, focusing on the location across from Detroit, infrastructure, the future economy, and workforce talent to grow and strengthen the city.¹⁵ The strategic plan focuses on stronger ties to Detroit, improved and enhanced infrastructure that supports a vibrant waterfront, strong partnerships with local educational institutions, and investments that both safeguard existing automotive sector jobs and support the future of the evolving new mobility industry.

Healthcare and Biosciences

Healthcare and biosciences represent a large share of the overall economy for North American and European countries, creating good-paying jobs and encouraging research and development. Private industry often locates near

teaching hospitals and health and life-science R&D facilities, facilitating positive spillover effects for communities.

Medical products present a growth opportunity, as well. In the United Kingdom (UK), for example, the mass purchasing of vaccines and the reshoring of personal protective equipment (PPE) during the COVID-19 pandemic – as demonstrated by Honeywell’s production of millions of protective masks – was part of larger reshoring of such production.¹⁶ This led to the proportion of PPE manufactured in the UK to rise from just 1 percent at the beginning of the pandemic to an expected 70 percent by December 2020.¹⁷ This extraordinary shift to domestic manufacturing represents just a small example of the opportunity to rebuild good jobs, businesses, and supply chains in previously left-behind places.¹⁸

Advanced Manufacturing

Given their history of designing, prototyping, manufacturing, and distributing sophisticated goods at scale, older industrial regions can be innovation and advanced manufacturing leaders. But with changes to factory floors through the integration of information technology and automation, there comes a need for labor markets to adjust to the demand for new, high-skill (and high-wage) jobs to program and run advanced equipment.

In the United Kingdom, research and development investment is beginning to drive a new future in South Yorkshire and Sheffield. The Advanced Manufacturing Research Centre (AMRC) was built as a partnership between the University of Sheffield and leading employers including Boeing, Rolls Royce, and McLaren.¹⁹ The Centre supports local suppliers via an extensive apprenticeship program and a wide range of demonstration facilities.²⁰ According to its founder, Keith Ridgeway, the Centre is developing the world’s first Advanced Manufacturing Innovation District (AMID), leveraging the University’s technical expertise and talent base to lure in new companies, their suppliers, and new public and private investments.²¹

Replicating this approach, the University of Sheffield, University of Manchester, and University of Strathclyde have jointly called on the national government to scale up the AMRC model through a series of pan-regional partnerships.²² The “Northern Powerhouse,” “Midlands Engine,” and “Western Gateway,” partnerships covering South Wales and Western England, have built on the innovation and talent at universities to support their economic strategies. The effort envisions growth of AMIDs and mini-AMIDs engaged with researchers in universities, as well as technical institutions and community colleges likely to have apprenticeship programs close to local industries. This network seeks to foster differing innovation clusters

supported by universities and research centers in towns such as Wakefield (creative industries), Mansfield (precision engineering), and Bolton (textiles).

Advanced manufacturing is also facilitated by high-speed connections to the digital economy. The German federal government is pushing the extension of mobile network coverage and high-speed internet access to small towns and rural regions to support local small- and medium-sized enterprises (SMEs), entrepreneurs, and research institutions.²³ Those investments are critical to facilitating communities' participation in building "Industry 4.0," a new wave of production that enables companies to build machine learning systems to manage data exchange, networks, and inventories up and down supply and production chains.²⁴

Leveraging Colleges and Universities

Today's knowledge economy rewards communities with the most talented and best educated workforces, meaning that industrial communities can win by creating conditions that drive ongoing education and focus on preparing their workforce for the skills of today and tomorrow. Leading universities, private and public colleges, technical institutions, and community colleges endow their regions with unique advantages to manage change.

To promote revitalization, Germany has purposefully introduced research and learning institutions into transitioning economic regions. Founded in 1961, the University of Bochum – the first German University created after World War II – was placed deliberately in the Ruhr valley to accelerate the economic transition of the region.²⁵ Likewise, the city of Duisburg benefitted from the German government's strategy of locating new research and learning institutions to bolster economic transition and development. An industrial city in the Ruhr, Duisburg became the location of one of the newer Fraunhofer Institutes dedicated to microelectronics – one of a network of 72 public- and privately-funded applied research institutions across Germany. There the Institute supports a dense network of SMEs to develop new cutting-edge processes and products.²⁶

Mobilizing research and learning institutions to aid economic transition is also at work in Małopolska, a historic coal-dependent region in southern Poland. The region, anchored by Krakow, includes 182 municipalities, and is an area highly affected by low-carbon transformation in Poland and the European Union.²⁷ Malopolska ranks eleventh among all European regions in terms of the number of coal-related jobs and is ranked as the twelfth most at risk of adverse socioeconomic effects from the energy transformation.²⁸ However, the region was the first in Poland with a dedicated plan for climate change mitigation and adaptation, which includes new regulations and limits on coal usage.²⁹ The plan strives for climate neutrality and contribution to the EU

climate goals for 2030 (a cut of at least 40% in greenhouse gas emissions compare to 1990 levels; a share of renewables of at least 32%; and at least 32.5% improvement in energy efficiency).³⁰

Future plans for Małopolska include developing a new economy through greater collaboration with the region's many scientific institutions. With 28 higher education institutions and universities and more than 100 research and development centers, Małopolska has considerable potential in terms of research and development-based activities.³¹ Moreover, in 2015 institutions based in Krakow, such as the Technical University, AGH, and Agricultural University, formed a common research consortium called InnoTechKraK, a collaboration that assists in collaboration across research and industry.³²

Manchester, once one of the world's leading industrial cities, is looking to extend its economic revival beyond the city center by working with the University of Manchester to promote job and business growth through innovation. As reported in the Financial Times:

“...universities act as magnets for young people, draw in investment, and find themselves increasingly intertwined with the corporations that hire their graduates and put their research to profitable use. Including Manchester Metropolitan and Salford universities, the city has one of the largest student populations in Europe.”³³

Once referred to as “Cottonopolis” because of its booming textile industry in the 19th century, Manchester is one of many cities in the northern United Kingdom that underwent deindustrialization. However, today it is reinventing itself as a 21st century commercial hotbed in manufacturing, life sciences, and the creative and cultural industries.

London, Ontario, and the Kitchener-Waterloo region are two traditional manufacturing hubs that have also evolved into knowledge-driven economies, in part due to two of Canada's top tier universities: Western University and Waterloo University. More than 25 years ago, faculty and researchers at Waterloo spun out Research in Motion, the company behind the Blackberry mobile phone. Recent technological innovations by companies such as auto parts maker Linamar, and projection screen manufacturer Electrohome, have contributed to the ongoing competitiveness of the traditional auto and electronics industries. Combined with a burgeoning financial services and technology industry, the region has come to be known as Canada's Silicon Valley.³⁴ Likewise, London, a traditional auto manufacturing and food processing city, has leaned on its twin anchors in Western University and a growing medical complex to grow its population and key economic sectors such as digital media and technology, health, and professional services.³⁵

Talent Retention

As technology-driven knowledge economies place a premium on skills, developing amenities where residents choose to live and work can significantly influence economic growth. Industrial communities with strategies for building, attracting, and retaining workforce talent – and maximizing the contributions of all residents – can find advantages and economic success.

An interesting model of inclusive, bottom-up growth is playing out in the UK city of Preston. A once thriving mill town of in the northwest of England, the city is often held up as an emblem of a “left behind” community. However, led by the Labour councilor Matthew Brown, Preston has embraced an ambitious reform and redevelopment plan.³⁶ Starting in 2011, Preston’s local leaders, frustrated by what they viewed as the London-centric New Labour policies of Prime Ministers Tony Blair and Gordon Brown, began their experiment now known as the “Preston model.”³⁷ The city democratized its public institutions and encouraged its public entities to reinvest in locally-sourced products and services, helping to stabilize employment.³⁸

Based on an idea similar to that of community wealth building, the Preston model aims to create a more democratic and inclusive economy, kept in the hands of the citizens.³⁹ Through creation of worker co-operatives, public enterprises, community land trusts, and public planning initiatives, the model appears to have had some success in reviving the city’s economy to date, prompting one group to herald Preston as the “most improved city” in the UK.⁴⁰

A different type of empowerment project designed to tap the talents of community members for renewal was successful in the city of Dortmund. With help from the Wuppertal Institute, Dortmund ran an initiative from 2016-2019 on sustainable urban reconstruction. The program focused on understanding how people could be empowered to shape their living environment based on their own needs and values.⁴¹ An inclusive design and implementation of a sustainable transformation process was conducted in the fields of energy, mobility, and consumption. Participants placed emphasis on projects that enabled social learning processes and those that could be continued after the project’s official termination. Following the project, a survey was conducted to examine the internal, social, and behavioral aspects of empowerment, and the initiative’s positive impact on quality of life was empirically validated.⁴²

Global Engagement

Older industrial regions were once plugged into global networks of trade, sending products abroad to far-flung markets. Today, a globally-connected population and mindset are vital in finding renewed economic prosperity.

In some older industrial and regions, communities have purposefully recruited and benefited from new immigrants, providing an important counterweight to local economic and population decline.

Hamilton, Ontario, once known as the “Steel Capital of Canada” is an example of how a welcoming local and national immigration policy can have numerous benefits. Hamilton original grew during the 20th century with the expansion of steel manufacturing and industrialization, leading to an influx of immigrants seeking work.⁴³ In the 1990s, the city faced an economic crisis caused by significant job losses in manufacturing industries. Hamilton’s leaders became concerned with declining immigration to the city and set goals to increase economic opportunity and growth through immigrant welcoming strategies. According to Global Hamilton’s Sarah Wayland, leader of immigrant welcoming efforts, many of these initiatives have been successful as Hamilton saw an influx of people from abroad.

While many residents in these regions view globalization and trade as the cause of economic dislocation and decline, evidence suggests that, on balance, trade can bring new jobs and economic benefits, demonstrating that participation in global networks and production at the community level correlate with local economic prosperity.⁴⁴ The challenge is distributing these benefits more broadly across society.

Infrastructure and Building on Place-Based Assets

In a globally competitive economy, communities put in place infrastructure that supports connectivity for businesses and full participation in the economy for residents, can find new greater success.

The European Union has long used infrastructure development as a lever to facilitate economic growth in regions undergoing economic transition.⁴⁵ The EU’s Cohesion Fund helps pay for transportation and environmental projects within member countries whose residents’ incomes are at or below 90% of the EU average.⁴⁶ Over €63 billion is spent in specific geographies that focus on developing trans-European transport networks, rail and public transport, and projects supporting energy efficiency and use of renewable energy.

As was vividly seen during the pandemic, high speed internet is now, more than ever, an essential infrastructure undergirding economic growth and facilitating participation in the economy. To spread economic growth evenly

to more people and places, the German federal government has raced to build digital backbones and high-speed internet access to all regions so that firms, entrepreneurs, and research institutions can be full participants in today's economy.⁴⁷

A variety of other natural, historical, and place-based assets can serve to underpin new economic growth in transitioning older industrial regions.

In Germany, the Zollverein Coal Mine Industrial Complex in Essen once revolutionized the coal and steel industry. As local industry declined, the Zollverein reinvented itself as a tourist and economic hub. Today, it is a UNESCO World Heritage Site, featuring a museum, conference area, and start-up incubator for technology firms. Such uses play to the region's historical strengths and support numerous SMEs through data and business-to-business solutions.⁴⁸

As heavy industry defined the landscape of many older industrial communities, longstanding damage was done to local environments. Sites of previous waterside factories leave behind brownfields and toxic waterways. Remediating these sites is vital to the economic recovery of older industrial regions.

A tale of industrial cleanup and revival is playing out in Katowice, Poland. Katowice once included the degraded site of the Wimach Chemical Apparatus Plant and the paint factory. Beginning in 2004, Wimach and City of Katowice agreed to develop the Euro-Centrum Industrial Park, creating the foundations of today's Science and Technology Park.⁴⁹ Intensive construction and modernization carried out in 2006-2008 resulted in six hectares of revitalized land, with four newly built and seven rebuilt facilities. Moreover, using new energy-saving operations, the new centerpiece of Park Euro-Centrum was an innovative energy-saving office building. Taken together this repurposing of an old industrial site now sees it a centerpiece for new research, business development, convening, and business services activity.

Integrated, Multi-Faceted Strategies

Other industrial regions have emphasized the importance of multifaceted, holistic economic development plans, using a combination of strategies rather than betting on just one initiative to reverse economic decline and generate new opportunity.

The Ruhr valley region in western Germany, sometimes called "Europe's Rust Belt," boasted more than 700,000 manufacturing jobs at its peak in the last century.⁵⁰ In the 1960s-1970s, the area saw the closing of numerous coal

mines and steel mills. In years since, a conscious restructuring from coal and steel-based specialization to a more diversified service economy has taken place. Measures to ensure a smooth transition for workers included social protection, retraining, early retirement, and other long-term strategies negotiated with key stakeholders. There have also been initiatives to regenerate the physical landscape of the energy-intensive mining sector, with industrial sites being preserved and converted into tourist attractions for those who want to experience the Ruhr's industrial history. Despite remaining coal mining being eliminated in 2018, about 500,000 to 600,000 manufacturing jobs still exist in the region, alongside two million jobs in the service sector. Emerging industries include science, logistics, research, automotive, and insurance.⁵¹ Such growth depended on a holistic transformation through enhanced social safety nets, brownfield redevelopment, and new industrial sectors.

The Path Forward

Communities in industrial regions have taken various measures to revive their economies. When approached with the necessary commitment, revitalization strategies can build on one another to enhance growth.

As these examples from North America and Europe illustrate, the transition from an older industrial to a thriving new economy has many paths. Communities across the Atlantic are building on their own unique mix of assets to respond to their particular challenges and find ways to turn the economic corner to a new era of economic vitality. As they do so, community residents are often newly optimistic, forward-looking, and less prone to embrace the siren song of nativism, nationalism, nostalgia, and retreat from the world.

The COVID-19 crisis and the path to full recovery give these countries additional reasons to work together to both rethink and rebuild the fundamentals of economic and political power. The crisis has dramatically exposed the interdependence of economies, supply chains, and even our physical health, as well as dangers of an overreliance on China and others for critical supplies and infrastructures. A coordinated and comprehensive transatlantic work and investment program to rebuild economies is particularly important to the geographies characterized by structural economic change within our democracies.

Leaders of our democracies have an urgent task to attack the root causes of right-wing populism, economic anxiety, and relative economic decline. Unless local and federal leaders focus on and accelerate economic success for people and places where residents are alienated and feeling a loss of control of their lives (buffeted by social, demographic, and economic change), these

citizens will continue to drive a polarizing populist politics that is undermining our democracies and our transnational partnerships.

After World War II, the United States, through the Marshall Plan, took action to prop up the economy in a Europe shattered by war. Now again is the time to take the models and successes we have seen in so many of our older industrial communities, share them with leaders on the ground, and support communities in creating their own success paths to turn the fortunes of older industrial regions and other still-struggling people and places.

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