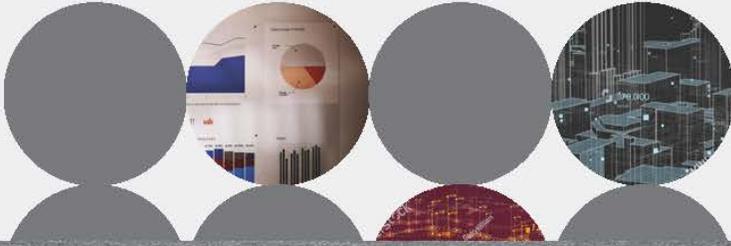
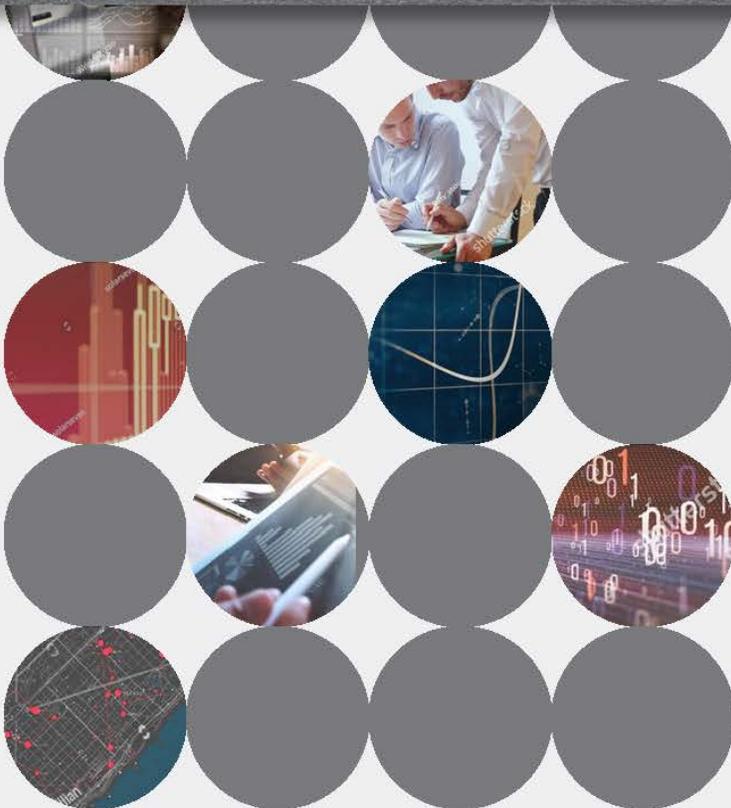


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THE INSTITUTE FOR PUBLIC POLICY & ECONOMIC DEVELOPMENT



Real Estate & Economic Development in a Post-COVID World

April 2021

The Institute

Turning Information into Insight

The Institute is a non-profit economic and social innovation research and policy organization dedicated to empowering business and community leaders with research based strategies for informed decision making. We conduct independent, non-biased research to identify the opportunities, issues and challenges unique to the region and to find innovative solutions to help solve the problems facing our communities. The Institute also offers a wide array of research, consulting and support services to help organizations boost productivity, increase profitability and be successful in their missions. The Institute is a partnership of 13 colleges and universities and the business community. The Institute has served clients in a number of states including the federal government.

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Introduction

COVID-19 has accelerated several major economic changes, including:

- Increasing use of telework across many industry sectors
- Increased emphasis of e-commerce and a growing logistics industry
- Automation and adoption of new technologies across all industry sectors
- Rising residential real estate market activity amid signs of migration out of larger cities.

This report explores how trends that have emerged or accelerated during the pandemic are impacting real estate markets (commercial and residential) as well as economic development in Northeastern Pennsylvania. How the region responds to these economic shifts will impact Northeastern Pennsylvania's economic competitiveness as a post-pandemic economy comes into view.

Trends in Commercial Real Estate Markets

The COVID-19 pandemic has brought about a transformation of the commercial real estate (CRE) market. Emerging trends indicate that commercial entities in a post-Covid-19 world will place greater emphasis on touchless technology and remote employment, while significantly altering traditional office layouts to accommodate safety needs. A fast but uneven economic recovery brings promise to certain industries while challenging others. The stagnation of the economy has left many commercial tenants struggling to pay rent and many property owners unable to pay make payments of building loans, increasing foreclosures across the country. Trends such as these allow a glimpse into the post-pandemic world. Nonetheless, it is difficult to say with certainty in 2021 how much businesses and consumers will revert to pre-pandemic trends, namely how many workers who currently telecommute will continue to do so full-time, work remotely part-time, or return to the office full-time.

Industries such as innovation, logistics, data centers, and science are expected to recover rapidly. Others such as retail, hospitality, and commodity industries are expected to continue to struggle (Natsis, 2020). Furthermore, some real estate lawyers expect loan defaults and foreclosure cases to be more widespread, and as of December 2020, believe that the CRE market could get "uglier" before it improves (Goldstein, 2020). Delinquency rates on large commercial loans have more doubled in late 2020, and hospitality and retail industries account for 82 percent of the most seriously delinquent commercial loans (Goldstein, 2020). These industries have been previously identified by The Institute as two of the most highly disrupted industries in Northeastern Pennsylvania (The Institute, 2020).

The Changing Role of Technology

The pandemic has shifted many individuals from their in-person workplaces to entirely remote positions. A report from the National Bureau of Economic Research confirms this point; approximately half the individuals surveyed had switched to remote positions (Brynjolfsson et al., 2020). Additional surveys have suggested that many employees enjoy working from home. For instance, 80 percent of respondents to an IBM survey indicated that they would like to continue to work away from the office at least occasionally, and 58 percent noted that they would prefer their jobs to be entirely remote (Press, 2020). While in-person employment will not end entirely, some companies are opting to hybridize their employment systems through coordination of in-office work and remote work (Borland, 2020). Hybrid

employment models may not necessarily lead to smaller office spaces, but will likely result in different office settings that promote safe collaboration (Borland, 2020). Due to more remote employment and online shopping, there may be less demand for commercial real estate in the coming months and years (La Monica, 2020).

Newfound reliance on touchless technology is another important factor to consider in a post-pandemic world. It has the potential to revolutionize traditional office settings (Natsis, 2020). Employers of the future understand that the COVID-19 and other illnesses are unpredictable; by automating and improving systems such as lighting, air conditioning, sinks, and toilets, they will be better equipped to limit exposure to pathogens and promote hygienic work-environments. Already in development before the pandemic, the desire to bring employees back into the workplace has rapidly increased interest in such technology (Natsis, 2020).

Long-term Implications for the Commercial Real Estate Market

There are vast implications for the office market in a post-pandemic world. Changing attitudes about traditional office settings will result in differing office environments that promote adequate distancing and complement increases in remote employment. The shift toward remote work is perhaps to be the most prominent change in future work environments; facilitated by the rise of communication technologies, the workplace and the home has somewhat merged (Kniffin et al., 2020). A McKinsey research survey found that 80 percent of employees working from home enjoyed doing so. Forty-one percent of those surveyed reported higher work productivity, and 28 percent said they were just as productive as when they worked in the office setting (Boland et al., 2020). This shift comes with some risks, namely the inability for managers to judge productivity without face-to-face interaction, but will be more commonplace in the post-pandemic world (Kniffin et al., 2020).

Of course, the pandemic has prompted changes to teamwork as well, with virtual collaboration and new management systems as administrators learn how to effectively facilitate operations. Ultimately, the workplace of the future looks entirely different from the workplace before the Covid-19 pandemic. The CRE market will rebound, but significant uncertainty remains around how many workers will return to full-time face-to-face work, and the rate at which vaccine distribution allows for an end to mitigation measures.

Nationwide City-Level Findings

New York City's office market has been ravaged by the Covid-19 pandemic. By mid-August, only eight percent of employees had returned to their Manhattan offices following the initial onset (Lash, 2020). In a survey conducted by the Partnership for New York City in early 2021, at that time only ten percent of office workers had returned to the workplace, and only 45 percent of office employees are expected to return to the workplace by September 2021, down from a previous survey in October 2020. More than half of employers expected that office employees will work remotely at least part of the time going forward (Partnership for New York City, 2021).

Office space in New York City is plentiful, yet the city's high population density makes returning to pre-pandemic normalcy nearly impossible (Lash, 2020). With thousands of office workers functioning remotely, increased social distancing standards, and quarantines, businesses that relied on the daily

pedestrian traffic to pay their bills are buckling under the lack of business and high rent costs (Bereitschaft and Scheller, 2020). The pandemic has also resulted in a reduced demand for housing; people are opting to move out of the city and away from the real or perceived risks posed by living in such a populous area during the height of the Covid-19 pandemic – which will have more profound effects on commercial real estate the longer such circumstances persist (Liu and Su, 2020).

Patterns of remote work have been similar in other cities. Throughout 2020, many Los Angeles businesses continued to maintain remote employment instead of returning to the office (Vincent, 2020). Many decision-makers also opted not to act on future space needs due to the unpredictability of the market (Vincent, 2020). In the third quarter, leasing reduction was almost equal to the drop in occupancy caused by the 2009 recession and office occupancy fell by roughly 2.7 million square feet (Vincent, 2020). The short-term outlook for Los Angeles’s office market is grim – large tech companies are expected to reduce office space due to the unforeseen success of remote employment, and white-collar firms are expected to “block off space” in Los Angeles’s commercial real estate market (Madans, 2020). In the long-term, the effectiveness of remote work may result in managers reevaluating their spaces and choosing smaller offices, resulting in a drag on the office market in the post-Covid years (Madans, 2020).

By mid-July, real estate brokers in Austin, Texas reported significantly slowed leasing activity but an uptick in subleasing activity (Novak, 2020). The average occupancy rate for Class A offices in the city fell to 88.7 percent, and the average cost of a Class A space grew from \$43.73 per square foot to \$44.86 per square foot (Novak, 2020). One of the factors promoting Austin’s office market outlook is the fact that many large companies are considering relocation to the city in the coming years (Neely, 2020). With millions of feet of new office space currently under construction, Austin has the potential to benefit in the long-term should these large companies opt to move when the pandemic subsides (Neely, 2020).

Philadelphia’s office market is weathering the virus to a better extent than New York City and Los Angeles but still has not reached peak performance. Unlike New York City, Philadelphia does not have many largely-vacant blocks and office buildings, and rental rates have reached an all-time high (Williams, 2020). They are not struggling with payments as much as their counterparts in other cities, with most reporting collection rates of 95 percent or above (Williams, 2020). Office market activities slowed significantly in the second quarter of 2020, but some new leases and small-scale expansions were still signed in the suburbs and Central Business District (Denight, 2020). Furthermore, leased office space in the suburbs is expected to repopulate faster than in the center city due to the increased space and lower population densities (Denight, 2020). In any case, tenants in Philadelphia are unable to make long-term predictions about their office spaces given the unpredictability of the future, and are under increasing pressure to accommodate the health and safety needs of their employees when considering future investments (Williams, 2020).

Regional Impact of Telework

Comprehensive, local data is not available on the percentage of jobs or businesses that are operating remotely. However, a survey of businesses in Northeastern Pennsylvania conducted by The Institute in

spring 2020, during more restrictive phases of the statewide shutdown, found that three fourths of those surveyed had at least some employees telecommuting.

It is unknown to what degree many businesses will include telework on a permanent or semi-permanent basis. While some businesses will likely embrace remote work and reduce their physical office footprint accordingly, others may seek to resume pre-pandemic face-to-face work environments as soon as it is safe to do so. Still others may adopt hybrid practices, which may or may not impact their workspace needs. A late 2020 McKinsey survey of 800 executives worldwide found that nearly forty percent expect remote employees to work two or more days per week away from the office after the pandemic, nearly twice the share as seen in pre-pandemic surveys. However, a much smaller share expect remote employees to telecommute three days or more per week, suggesting this hybrid approach may be common (McKinsey, 2020).

The degree to which telework continues to see long-term use after the vaccine is fully rolled out should be a primary factor in shaping the state of the market for office space nationwide. While the percentage of jobs that were done remotely during the pandemic that will convert to permanently remote is unknown, variations across industry groups are certain. Telework is most frequently associated with a higher wage, educated, white collar workforce. Separate sets of estimates published by McKinsey and the National Bureau for Economic Research showed that industries like finance and insurance, management, information, and professional and technical services have the highest shares of employees who can

complete their work from home. The estimates from McKinsey are generally lower, as they reflect only the “effective potential” – the share of employees that can work remotely without productivity loss. The greatest gap between the two is in education, where remote teaching has been demonstrated as feasible but in-person education widely acknowledged as more desirable.

Regional data on jobs by industry were combined with the effective potential estimates above, in order

Share of Jobs That Can Be Done Remotely - by Industry Sector		
Industry Description	Dingel & Neiman, NBER	McKinsey & Company
Agriculture, Forestry, Fishing and Hunting	8%	7%
Mining, Quarrying, and Oil and Gas Extraction	25%	19%
Utilities	37%	31%
Construction	19%	15%
Manufacturing	22%	19%
Wholesale Trade	52%	41%
Retail Trade	14%	18%
Transportation and Warehousing	19%	18%
Information	72%	58%
Finance and Insurance	76%	76%
Real Estate and Rental and Leasing	42%	32%
Professional, Scientific, and Technical Services	80%	62%
Management of Companies and Enterprises	79%	68%
Administrative, Support, Waste Management	31%	31%
Educational Services	83%	33%
Health Care and Social Assistance	25%	20%
Arts, Entertainment, and Recreation	30%	19%
Accommodation and Food Services	4%	8%

Figures from McKinsey & Company reflect "effective potential" share without productivity loss, not the theoretical maximum

to determine how many jobs in the region could potentially be done remotely given an area’s mix of industry sectors.

In Lackawanna and Luzerne Counties, nearly 58,000 jobs are projected to have the potential for telework, representing 28 percent of Lackawanna County employment and 26 percent in Luzerne County. Ten neighboring counties (Bradford, Carbon, Columbia, Monroe, Pike, Schuylkill, Sullivan, Susquehanna, Wayne, and Wyoming) had lower rates of telework, ranging from 22 percent to 26 percent, and 23 percent overall.

Potential Teleworkable Jobs in Northeastern Pennsylvania			
	Lackawanna	Luzerne	10 Neighboring Counties
Total Jobs in Analysis	86,108	130,092	197,652
Potential Teleworkable	23,689	34,169	45,506
Percent Teleworkable	28%	26%	23%

Variations were also seen at the ZIP code level. The highest shares of potentially teleworkable jobs were found in the following ZIP codes:

- 18507 Moosic: 47%
- 18701 Downtown Wilkes-Barre: 41%
- 18706 Hanover Township & Surrounding Area: 37%
- 18503 Downtown Scranton: 35%

Geographic differences in the share of in-person jobs that will be permanently effected by telework will also impact other jobs and industries beyond those being performed remotely. In areas with high concentrations of heavily teleworked jobs, services catering to workers like restaurants, gasoline stations, coffee shops, and personal service businesses will be affected by long-term changes in demand corresponding to the level of these jobs that remain remote fully or partially.

For the region’s downtowns, the implications are particularly notable, where fewer workers in offices has brought about a drop in foot traffic on the cities’ sidewalks. While increased adoption of telework will certainly shape the demand for office space, market conditions could weaken for some retail, restaurant, and service space as well, particularly in downtowns reliant on daytime office workers for economic activity and around business parks.

Residential Real Estate & Migration Impacts

The pandemic has also spurred significant shifts in where workers live. Largely driven by decreasing need to live in close proximity to one's employment, workers could choose to live in smaller cities, suburbs, or rural areas to take advantage of lower costs of living. Financial hardships of residents of expensive coastal metro areas is also a driver of this migration.

An analysis of rental cost data showed rising rents in markets with lower pre-pandemic rent levels, and decreasing rents in more expensive markets. In New York City, average rent for a 1-bedroom apartment fell by 18 percent since February 2020. The nearby Newark, New Jersey market, which is more affordable, saw a 20 percent increase in that time, demonstrating that migrations of this type may be relatively short in distance. In another example, the markets in San Francisco, Oakland, and San Jose, California, among the most expensive in the country, all saw declines in rents of at least ten percent, while the more affordable market of Sacramento, also in Northern California, saw a ten percent increase in rents since the pandemic. Philadelphia, a mid-priced market, saw a four percent decline in 1-bedroom rents on average (Zumper, 2021).

The analysis similarly found that 75 percent of residents in counties with median annual income below \$65,000 saw increasing rents since February 2020, while 60 percent of residents of counties with median annual income above \$100,000 saw rents decrease. This indicates that housing demand, a proxy of pandemic migration, is flowing from higher income markets lower income ones (Zumper, 2021).

Northeastern Pennsylvania's housing market has historically been relatively affordable, with housing costs below the statewide average and well below expensive markets like New York City. The region's median household income is also below the national average, around \$54,000 per year in both counties, compared with over \$63,000 statewide and over \$65,000 nationwide, according to U.S. Census Bureau 2019 American Community Survey estimates.

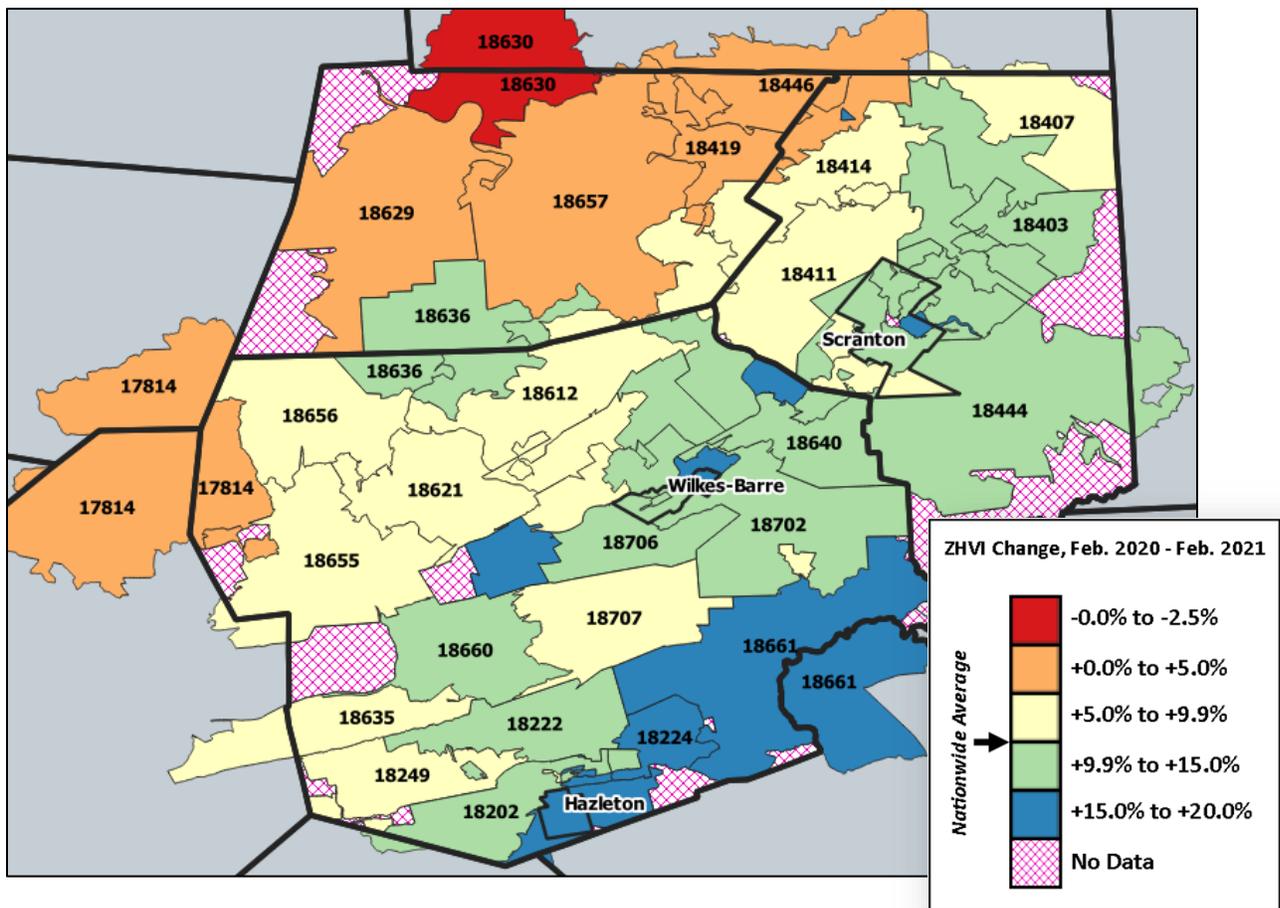
Based on these trends, it is expected that Northeastern Pennsylvania has seen increased rents amid an inflow of residents from larger and more expensive metro areas since the beginning of the pandemic. Further, anecdotal evidence from around the region has suggested that residential real estate market activity is high for both rental and owner-occupied housing. The Zillow Observed Rental Index (ZORI), a seasonally-adjusted measure of rental housing cost, increased nationwide by less than one percent between February 2020 and February 2021, despite averaging 3.5 percent annual growth per year in the previous five years. Regionally, rental cost growth was nearly six percent during the most recent year, outpacing the 4.4 percent annual growth seen in the previous five years.

More detailed regional data was available for owner-occupied homes (including single family homes, townhouses, condominiums, and other owner-occupied housing types) in the form of the ZHVI, Zillow Home Value Index. Home values nationwide grew by nearly ten percent between February 2020 and February 2021, twice the average rate of the previous five years. Regionally, the difference was far more pronounced – a 13 percent growth in home values compared with 2.6 percent per year over the previous five years.

ZORI (Rental Cost) Increase	Feb. 2020 - Feb. 2021	Annual Average, Prior 5 Years
Scranton/Wilkes-Barre/Hazleton Metro Area	5.8%	4.4%
Nationwide	0.5%	3.5%

ZHVI (Home Value) Increase	Feb. 2020 - Feb. 2021	Annual Average, Prior 5 Years
Scranton/Wilkes-Barre/Hazleton Metro Area	13.1%	2.6%
Nationwide	9.9%	5.4%

At the ZIP code level within the three-county Metro Area, most localities had home price increases that was near or higher than the nationwide home price increase between February 2020 and February 2021. The ZIP codes where local rates of home value increase most significantly outpaced the national average were largely along the Interstate 81 corridor and in the southern part of Luzerne County. The only ZIP codes where less than five percent increases in the ZHVI were seen in from 2020 to 2021 were in the rural areas in the Northwestern part of the region, particularly Wyoming County. This pattern is consistent with migration from larger metro areas, which could be expected to first follow transportation corridors like Interstate highways.



Whether this increase will be sustained is a long-term question to monitor. It is possible that some workers who have relocated to regions like Northeastern Pennsylvania will return to the larger, more expensive cities they came from, especially if some employers recall their employees to partial or full in-person work. Nonetheless, Lackawanna and Luzerne Counties appear to be on the receiving end of the pandemic-related wave of migration that has been called the “Great Reshuffle.” However, detailed data on the exact number of new residents entering the region and from what regions from which they are relocating, will not be available from government sources for some time.

A potentially growing population in the region would also be meaningful to the regional economy’s workforce needs. Prior to the pandemic, unemployment rates were low across the region and some businesses reported difficulties filling open positions. While existing workforce development efforts will be necessary to encourage labor force participation and equip workers with the necessary skills and training to meet market needs, permanent migration into the area would provide a helpful new source of workers. However, there is not yet data on the education levels and job skills of those that migrated into or out of the region during the pandemic, so the readiness of new residents to fill open positions is uncertain.

Remote Workforce Attraction

The Institute’s Education and Workforce Development Task Force project focuses on talent attraction and retention. The study includes remote workforce attraction as a topic and a recommendation. The region is well-positioned with a low cost of living and other regional characteristics to attract a newly remote workforce – the region’s relatively low housing costs could be especially helpful, in addition to the close proximity to major metropolitan areas. The region could consider implementing talent incentives for remote workers, modeled after programs like Tulsa Remote, the Savannah Technology Workforce Incentive, and Life Works Here (Arkansas). The region, however, must work together on the messaging and strategies – a fragmented approach will not be successful.

In order to attract remote workforce and retain skilled workers in the region, there must be a strong regional marketing campaign that bridges the needs of all stakeholders. Housing, diversity and inclusion, and strong quality of life factors need to be emphasized. Social media is an important avenue for this campaign.

Industry Growth Trends

Over the past five years, the two count region has seen a total employment decline of over 9,800 jobs, an average annual change of -0.8 percent, with much of this job change occurring in 2020 as a result of the COVID-19 pandemic. Several industries, however, have continued to experience employment growth. In particular, transportation and warehousing has added over 4,100 jobs in the last five years. This single industry group is responsible for negating nearly one-third of the net negative job decline across other industry groups. It also employs over 23,400 workers in the county, making it the third largest industry by employment size after Health Care & Social Assistance and Manufacturing. No other industry in the region saw comparable growth in both raw and percentage increase during the time period analyzed.

5-Year Broad Industry Trends: Lackawanna & Luzerne Counties				
NAICS	Industry	Current Employment	2015-2020 Employment Change	Annual Percent Change
48	Transportation and Warehousing	23,402	4,108	3.9%
62	Health Care and Social Assistance	45,895	1,090	0.5%
31	Manufacturing	25,561	572	0.5%
52	Finance and Insurance	10,532	272	0.5%
11	Agriculture, Forestry, Fishing and Hunting	595	41	1.4%
23	Construction	10,225	-39	-0.1%
53	Real Estate and Rental and Leasing	2,258	-46	-0.4%
55	Management of Companies and Enterprises	2,738	-175	-1.2%
	Mining, Quarrying, and Oil and Gas			
21	Extraction	362	-182	-7.8%
22	Utilities	2,348	-326	-2.6%
92	Public Administration	8,615	-338	-0.8%
	Other Services (except Public			
81	Administration)	8,664	-499	-1.1%
71	Arts, Entertainment, and Recreation	2,650	-567	-3.8%
51	Information	3,865	-786	-3.6%
42	Wholesale Trade	8,974	-998	-2.1%
	Administrative and Support and Waste			
56	Management and Remediation Services	15,380	-1,202	-1.5%
61	Educational Services	18,102	-1,227	-1.3%
	Professional, Scientific, and Technical			
54	Services	7,248	-1,618	-4.0%
44	Retail Trade	27,425	-3,639	-2.5%
72	Accommodation and Food Services	15,960	-4,272	-4.6%
	Total - All Industries	240,800	-9,830	-0.8%

Data Source: Chmura Economics via JobsEQ

Within the Transportation & Warehousing sector, the vast majority of employment growth, and over half of total employment, are classified as General Warehousing & Storage, a category that includes distribution centers and similar warehouse operations. This type of business has added an estimated 4,108 jobs in the county in the past five years. Several related industries focused on ground transportation have also added jobs, including couriers and express delivery services and local general freight trucking. Other components of the transportation and warehousing industry group accounted for a net negative job change and a relatively small share of industry employment, emphasizing that the county's economic strength lies largely in the warehousing and distribution industry cluster present along the Interstate 80 and 81 corridors.

5-Year Transportation & Warehousing Industry Trends: Lackawanna & Luzerne Counties				
NAICS	Industry	Current Employment	2015-2020 Employment Change	Annual Percent Change
48	Transportation and Warehousing	23,402	4,108	3.9%
49311	General Warehousing and Storage	13,300	3,730	6.8%
48412	General Freight Trucking, Long-Distance	2,300	-28	-0.2%
49211	Couriers and Express Delivery Services	1,253	309	5.8%
49111	Postal Service	1,170	38	0.7%
48541	School and Employee Bus Transportation	1,114	-34	-0.6%
48411	General Freight Trucking, Local	1,018	300	7.2%
48851	Freight Transportation Arrangement	474	-48	-1.9%
49312	Refrigerated Warehousing and Storage	435	-97	-3.9%
48422	Specialized Freight (except Used Goods) Truc	413	-16	-0.8%
	All Other Transportation & Warehousing	1,924	-39	-0.4%

Data Source: Chmura Economics via JobsEQ

As e-commerce has continued to grow and innovate during the pandemic, this industry is also well-positioned to play an important role in the region's economic resilience and recovery in 2021 and beyond. Recent published reports and anecdotal evidence from the business and economic development community further corroborates the continued interest in the development of distribution centers and similar operations in the area. Nationwide, many retailers expanded e-commerce offerings during the pandemic, and industry experts have forecast much of this shift to become permanent even as brick-and-mortar retail reopens (Evans, 2021).

There are several factors driving this industry's strength in the region that will affect future growth trajectories. Firms in this sector typically need access to ground transportation infrastructure, particularly close access to Interstate highways. Another competitive advantage is plentiful and affordable greenfield land, as distribution centers are space-intensive. In these two areas, the region is well-equipped for future growth, with several planned or existing business parks offering large lots and the possibility of developing new ones elsewhere along the region's highways.

While specialized training is not often required for many positions in the industry, an available workforce is also necessary for continued industry growth. The ability to train and recruit more specialized workers, such as supply chain managers, operations managers, IT professionals, and equipment maintenance professionals, will be critical.

Economic Competitiveness

Other considerations will affect the region's economic competitiveness in the post-pandemic economy. With an increase in remote work in many industries that is likely to be at least partially sustained as well as increasing industrial automation, technology infrastructure will be an important economic development asset.

Residential broadband internet is widely available in the two county region. Over 97 percent of Luzerne County's population has access to at least three broadband providers. In Lackawanna County, 89 percent of the population has access to at least three broadband providers. In both counties, 100 percent have access to speeds of at least 25 Mbps from at least one provider. Speeds of 100 Mbps are widely available in both counties, though 1000 Mbps internet is not yet widely available in either county.

The emerging generation of wireless internet, 5G, is widely available in small and large cities nationwide. In Lackawanna and Luzerne Counties, 5G service is available in many areas according to service maps of AT&T, T-Mobile, and Verizon. Rural counties in Pennsylvania, particularly in the Northern Tier, currently have more limited availability of 5G service. A more advanced form of 5G technology, mmWave, is not yet available in the region. AT&T's version, 5G+, is only available in limited venues in several large cities, and Verizon's Ultra Wideband is similarly only available in certain areas of select cities, the nearest of which are Philadelphia and New York City.

Transportation infrastructure is another necessary component of economic competitiveness, particularly for the highly transportation-focused e-commerce sector. Ensuring that developable land is well connected to the Interstate Highway system is key, as is funding necessary highway maintenance projects. Varied transportation infrastructure, including mass transit, is also important in connecting workforce with jobs in this industry group, which tend to be located outside large population centers.

Summary, Conclusions & Recommendations

The future of work is likely more workers spending less time in face-to-face workplaces, whether fully remote or in a hybrid format. Employers will have to offer hybrid or remote work to more effectively compete for workers. While the share of workers who can feasibly work remotely who will actually do so permanently is difficult to predict in early 2021. Nonetheless, there will be impacts on demand for office space as well as impacts on businesses that rely on office workers. These impacts will likely be greatest in areas with the highest concentration of teleworkable jobs, which tend to be concentrated disproportionately in higher wage, higher education white collar industries such as finance and insurance, information, management, and professional services. Thus, it is likely that any prolonged dip in demand for office space will be correlated with some degree of decline in other commercial real estate, particularly space suited restaurants, coffee shops, gasoline stations, and personal service businesses.

However, there are strong signs the region is on the receiving end of a "Great Reshuffling" wave of migration spurred by the pandemic. This trend, if sustained, could help address regional workforce needs as well as boost housing prices and real estate transaction volumes.

Targeted intervention will be needed for communities that are hard hit by loss of economic activity due to remote work. State and federal economic development and urban revitalization programs already in existence should be sustained, and expanded where necessary. In urban downtowns, refocusing of

economic development strategies will be necessary to shift focus away from attraction of office tenants and toward providing housing options to new residents migrating into the area.

As e-commerce has continued to grow and innovate during the pandemic, this industry is also well-positioned to play an important role in the region's economic resilience and recovery in 2021 and beyond. There are several factors driving this industry's strength in the region that will affect future growth trajectories, particularly continued investment in transportation infrastructure and ensuring adequate supply of land is ready for development.

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