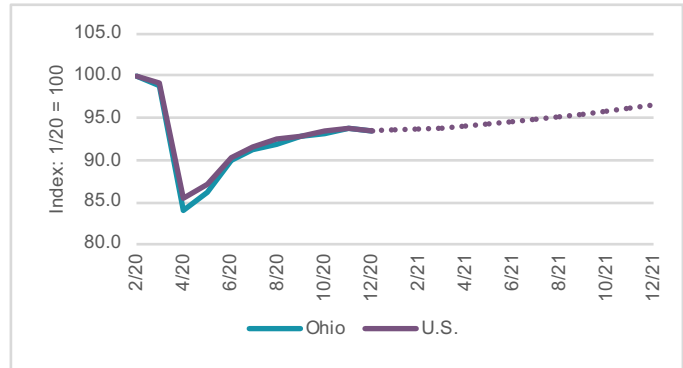


Employment and Unemployment

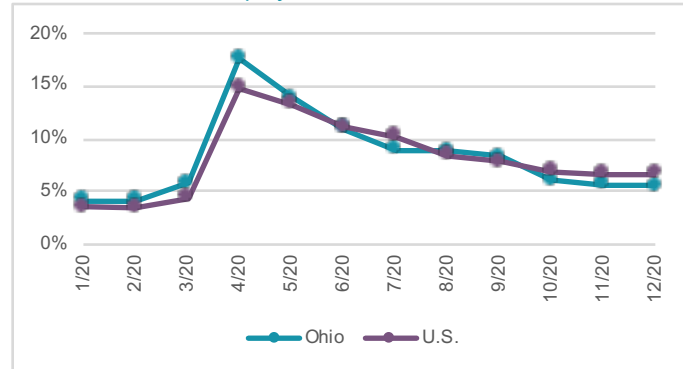
- **This first issue of *Ohio Economic Update* will review the economy since the February 2020 peak.** Future issues will focus more closely on the most recent quarter.
- **Ohio employment changes have kept pace with the U.S. average.** The chart to the right is plotted on an index basis to compare Ohio and U.S. employment changes since the beginning of the year. Ohio's greater-than-average loss in March and April has been offset to a greater degree since then. The state's net employment loss since its February peak is 6.4%, marginally less than the 6.5% U.S. net loss.
Employment totals for 2019 and 2020 are preliminary. Revised totals will be issued in March.
- **Recovery from springtime shutdown has slowed.** Ohio lost 895,100 jobs (16%) in the March and April shutdown. Nationally, the loss was 22.2 million (14.5%).
The initial rapid recovery of jobs has slowed significantly. During the fourth quarter, Ohio employment increased 50,200 (1%), while U.S. employment increased 808,000 (0.6%). Both Ohio and U.S. employment suffered small losses in December, their first since April.
- **Unemployment rate declines have slowed.** The Ohio unemployment rate was 5.5% in December, well below the U.S. rate of 6.7%. But labor force (the unemployment rate denominator) has increased only 0.2%. U.S. labor force increased 2.6%. This was the cause of the higher U.S. rate.
- **Job growth is expected to increase through 2021 as vaccinations become widespread.** The Philadelphia Federal Reserve's first quarter Survey of Professional Forecasters expects first quarter 2021 job growth to average 141,000 jobs per month, but the pace of growth will increase to an average of 566,000 per month by the fourth quarter.

Payroll Employment Change, Including U.S. Forecast



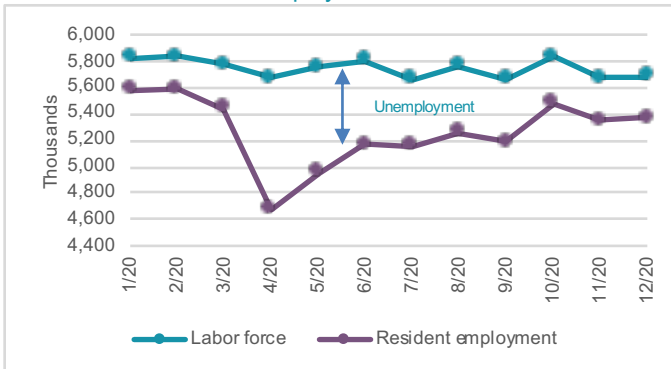
Source: U.S. Bureau of Labor Statistics, Philadelphia Federal Reserve.

Ohio and U.S. Unemployment Rates



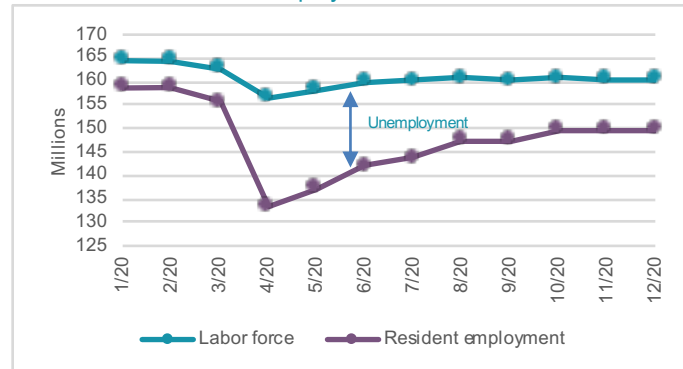
Source: Labor Force Statistics, U.S. Bureau of Labor Statistics.

Ohio Labor Force and Employment



Source: Local Area Unemployment Statistics, U.S. Bureau of Labor Statistics.

U.S. Labor Force and Employment

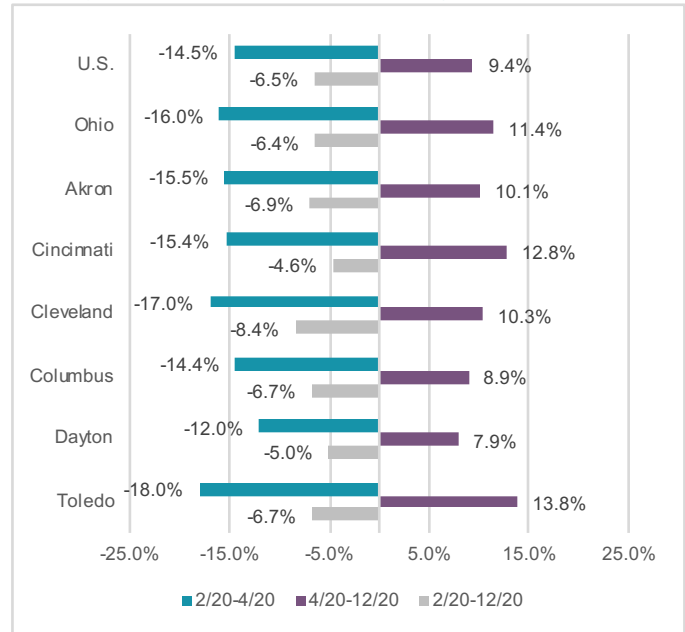


Source: Current Population Statistics, U.S. Bureau of Labor Statistics.

Employment Changes by Region and Sector

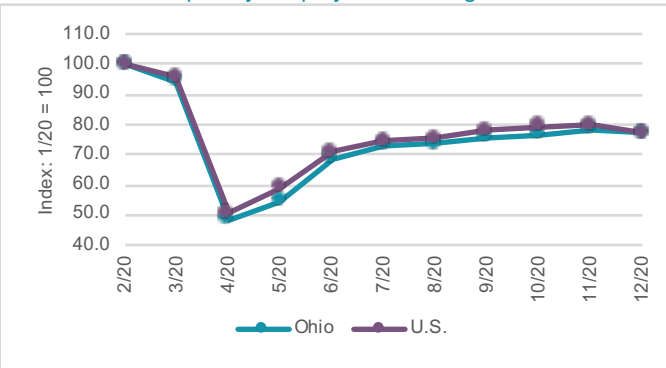
- **Like Ohio, most large metros lost more jobs than average in the spring, but have gained more in later months.** The chart to the right shows the decline in March and April 2020, the gain through December, and the net decline for all months. That net decline is less than the national average in Cincinnati and Dayton, and worst in Cleveland.
- **Leisure and hospitality has borne the brunt of the employment decline.** One-half of leisure jobs vanished in March and April, and employment remains down 23% nationally and in Ohio.
- **Manufacturing's springtime losses were greater than average, but the recovery has been greater.** As a result, the Ohio net loss has narrowed to 4.7%, versus 4.2% nationally.
- **Results are mixed for three key office-using sectors.** Business services are off 5.2% since February, versus 4% nationally, Healthcare is off 2.7%, compared to the 4.1% average. Finance employment declined only modestly in the spring. Employment is flat in Ohio and up 0.1% nationally.
- **Government employment is declining.** Ohio's net loss is 6.8%, compared to the 5.9% national average.
- **Ohio retail has almost completely recovered.** Jobs are off 0.4%, much less than the 2.6% average.
- **Ohio real estate employment suffered above-average losses and recovery has been weak.** Employment is off 10.1%. The U.S. net loss has been 5.5%.

Employment Loss, Gain and Net Change

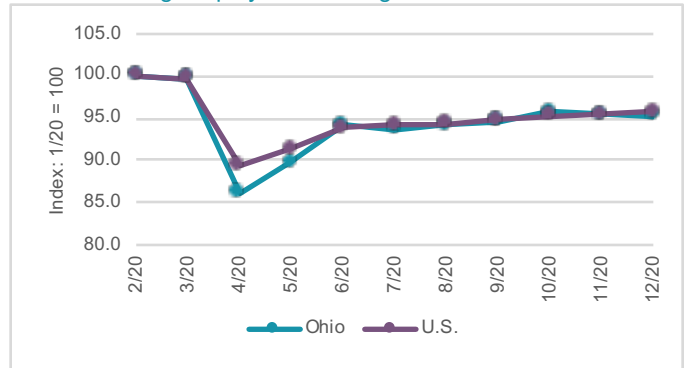


Source: Current Employment Statistics, U.S. Bureau of Labor Statistics.

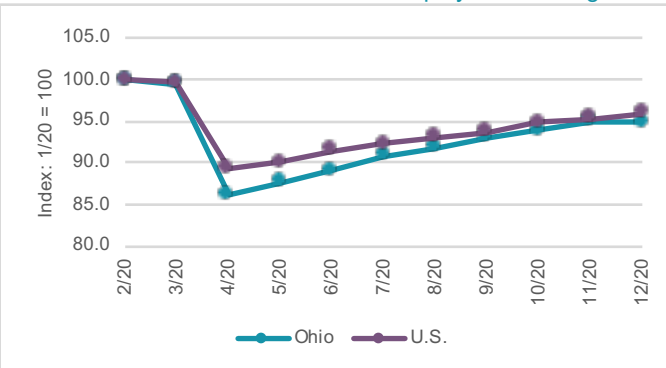
Leisure and Hospitality Employment Change



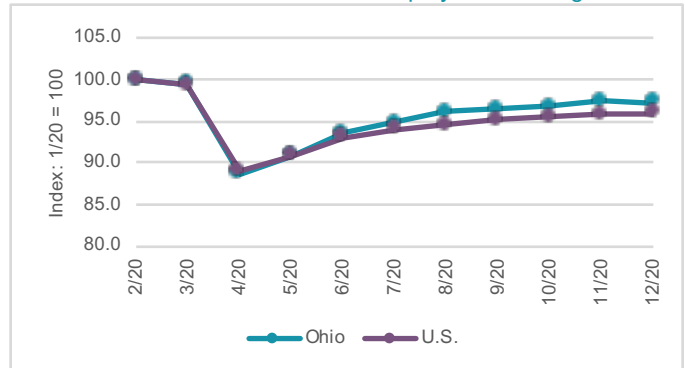
Manufacturing Employment Change



Professional & Business Services Employment Change

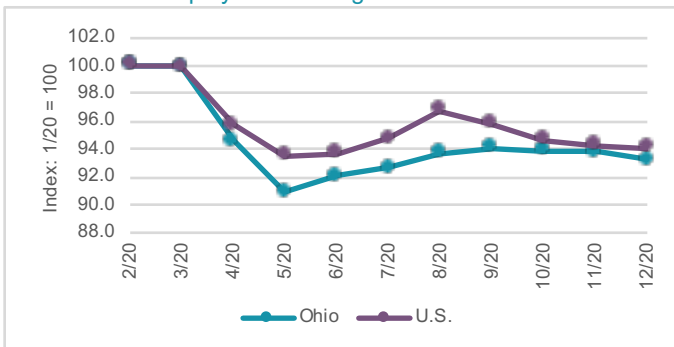


Healthcare & Social Assistance Employment Change

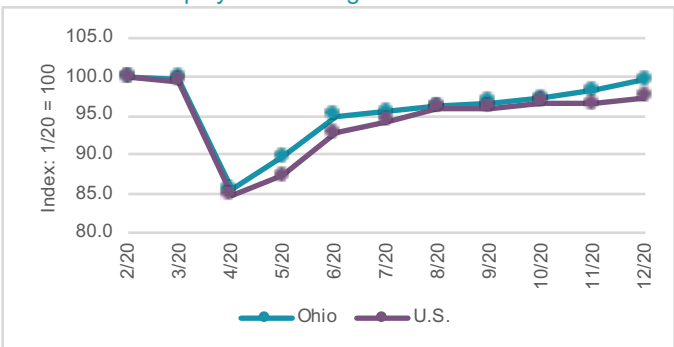


Source: Current Employment Statistics, U.S. Bureau of Labor Statistics.

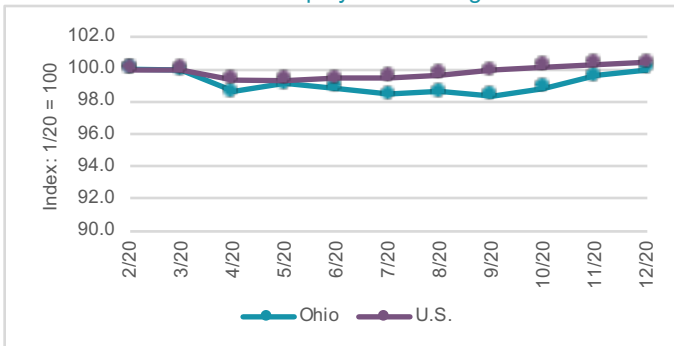
Government Employment Change



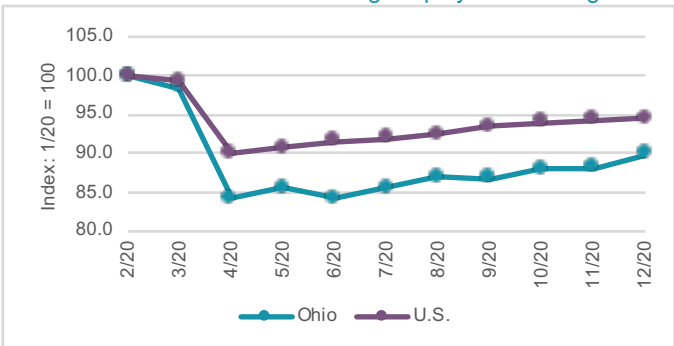
Retail Trade Employment Change



Finance and Insurance Employment Change



Real Estate and Rental & Leasing Employment Change

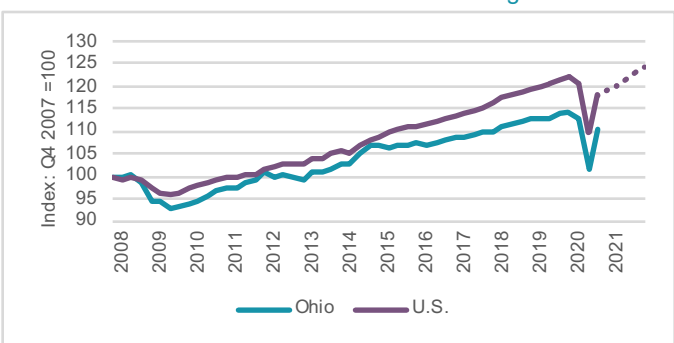


Source: Current Employment Statistics, U.S. Bureau of Labor Statistics.

Broad Economic Indicators

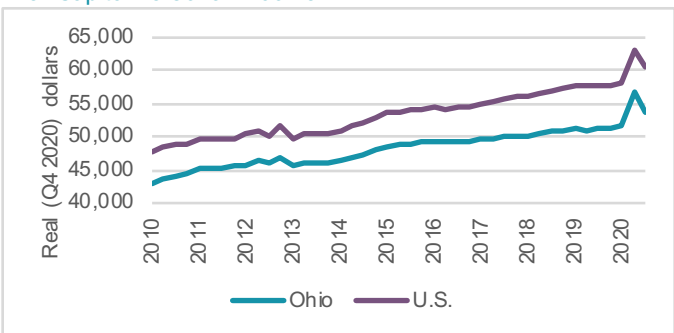
- **U.S. gross domestic product (GDP) declined by a record amount in the first and second quarter of 2020.** These two quarters saw a total decline of 10.1%. (The reported 31.4% second quarter decline was annualized.) Sharp increases since then have made back 76% of the loss. The Philadelphia Fed survey forecasts continuing strong growth through 2021, implying that GDP will be back to pre-pandemic levels by the third quarter.
- **Ohio GDP underperformed in the 2007-09 recession and in the expansion that followed, but has performed better recently.** Ohio GDP estimates are available through the third quarter. They show a pattern similar to employment: a sharper decline and a sharper comeback. The first and second quarter drop totaled \$67 billion (10.8%) but the third quarter gain was 8.2% in Ohio and 7.5% in the U.S. It remains to be seen whether this stronger-than-average performance continues.
- **Ohio per-capita personal income generally runs 10% to 11% less than the U.S. average.** The year-over-year increase for the first three quarters of 2020 averaged an unusually high 5.4% in Ohio and 5.2% nationwide. The spike in the second quarter of 2020 is due to the stimulus payments.
- **Fourth quarter inflation was 1.2%, its lowest level since 2016.** The Philadelphia Fed survey predicts inflation of 2.5% in the first quarter, but then a moderation to 2.1% to 2.2% for the remainder of 2021.
- **Consumer sentiment shows some improvement after collapsing last spring.** Sentiment is unusually higher among Midwestern consumers, but more improvement is needed for full recovery.

U.S. and Ohio Gross Domestic Product Change



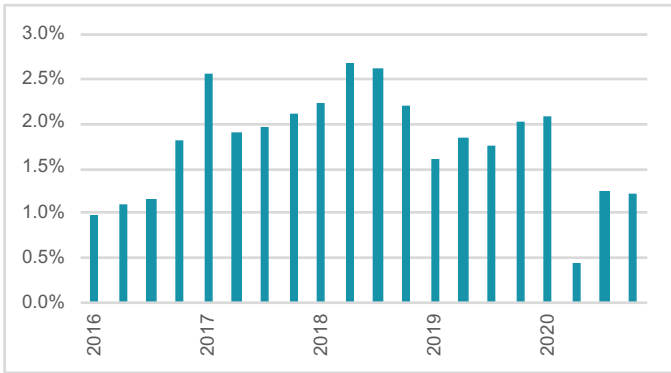
Source: U.S. Bureau of Economic Analysis.

Per-Capita Personal Income



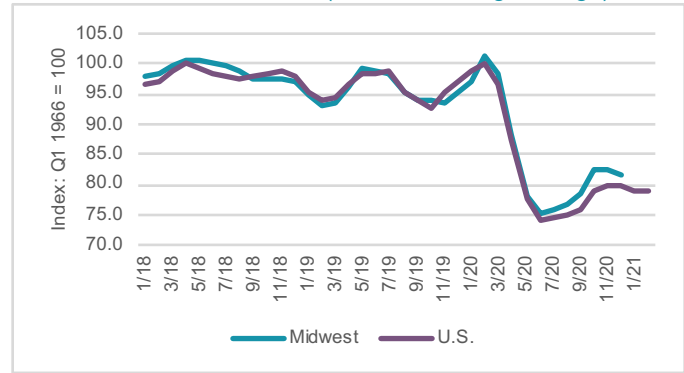
Source: U.S. Bureau of Economic Analysis.

Year-over-Year Consumer Price Inflation



Source: Consumer Price Index, U.S. Bureau of Labor Statistics

Consumer Sentiment Index (3-month moving average)

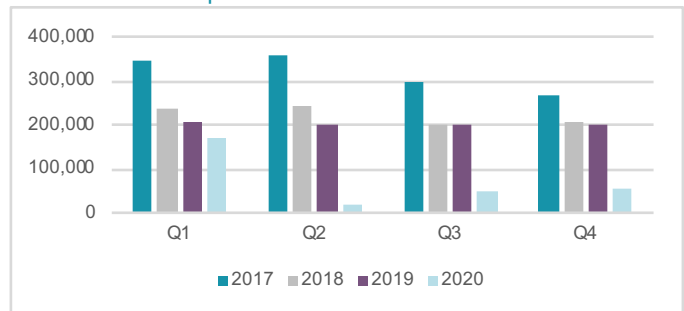


Source: Survey Research Center, University of Michigan.

Passengers at Primary Regional Airports

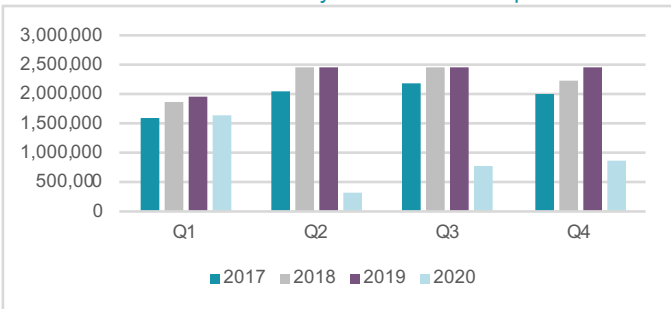
- **All airports suffered historic passenger declines in 2020.** Declines began in March, affecting all four quarters of the year. The year-over-year declines in April were 95% to 96% at all airports. By December, the declines had lessened to between 59% and 74%. The decline in 2020 for all airports totaled 62%.
- **Air traffic was generally increasing prior to 2020.** Total passenger volume at all airports increased 6.8% in 2018 and 3.7% in 2019. There was a shift in northeastern Ohio traffic from Akron-Canton to Cleveland, but total traffic at the two airports also increased prior to 2020.

Akron-Canton Airport



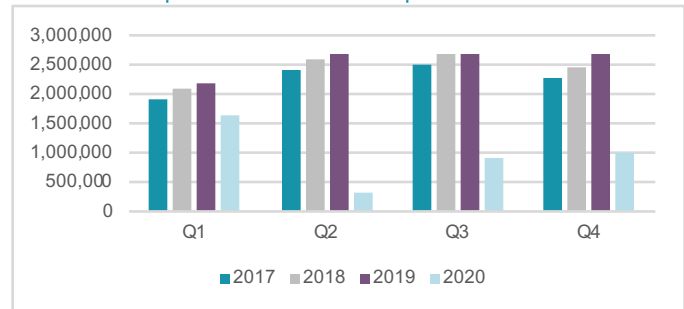
Source: Akron-Canton Airport.

Cincinnati-Northern Kentucky International Airport



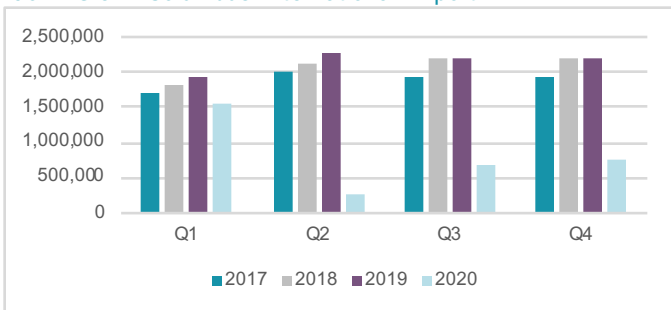
Source: Cincinnati-Northern Kentucky International Airport.

Cleveland Hopkins International Airport



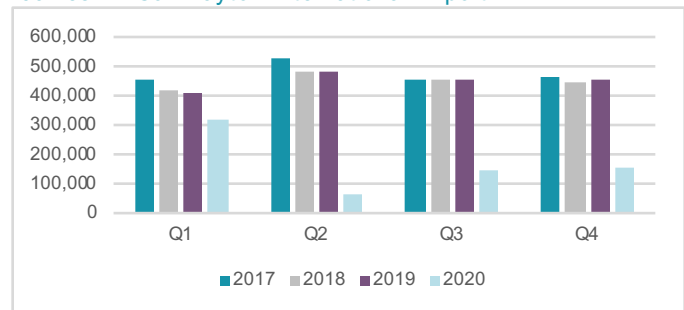
Source: Cleveland Airport System.

John Glenn Columbus International Airport



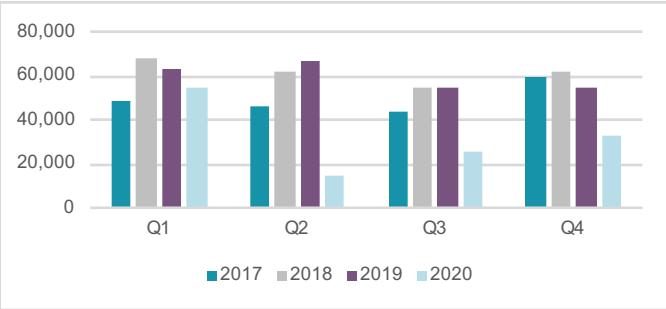
Source: Columbus Regional Airport Authority.

James M. Cox Dayton International Airport



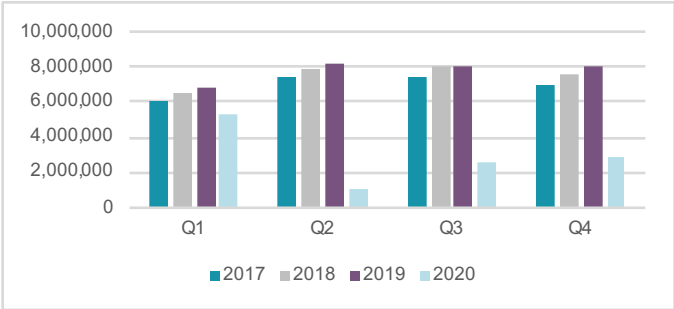
Source: Dayton International Airport.

Eugene F. Kranz Toledo Express Airport



Source: Toledo-Lucas County Port Authority.

Six Airport Total

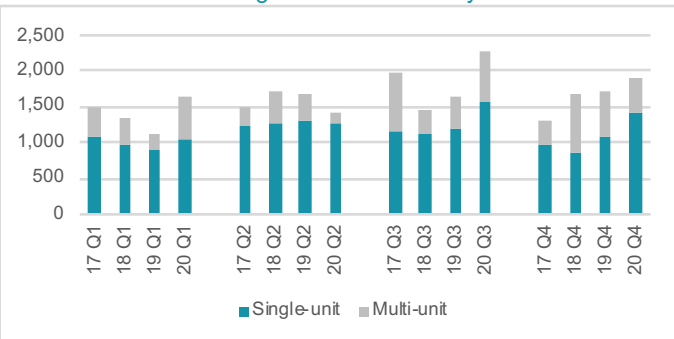


Residential Real Estate

- **Housing permit activity declined in most metro areas in 2020.** Statewide permits were off 13.1% compared to a 4.3% national decline. Declines were close to the statewide average in the Cleveland, Columbus, and Dayton MSAs. Akron suffered a 23% decline. Cincinnati's 9.9% decline was less than the state average. Toledo outperformed both the state and the U.S. with a 0.5% decline.
- **Columbus building permits have featured an unusually high percentage of units in multi-unit structures and account for a far larger-than-average share of Ohio permit activity.** Multi-unit permits accounted for 52% of total units permitted in 2020. The U.S. average was 38%. The Columbus MSA accounts for less than 20% of Ohio's population, but 38% of Ohio's 2020 building permits. The Columbus MSA's permitted units in multi-unit structures were 59% of these units statewide.
- **The Federal Housing Finance Authority's House Price Index indicates that appreciation in Ohio and its large MSAs over the past six years closely tracked the U.S. average.** This index is based on repeat sales of the same houses, so it is not affected by changes in buyer characteristics. U.S. appreciation since the first quarter of 2015 was 33%. Ohio homes appreciated 32%. The largest deviations from this average were Toledo at 28%, Akron at 29%, and Columbus at 42%.

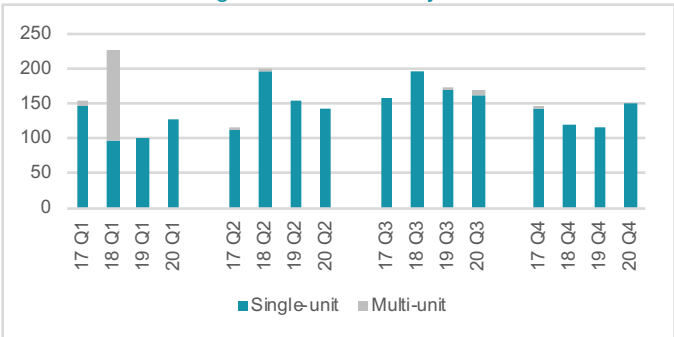
Source: U.S. Census Bureau

Cincinnati MSA Housing Units Permitted by Quarter



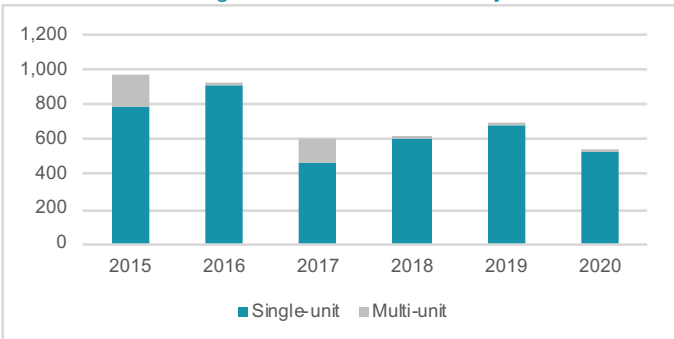
Source: U.S. Census Bureau

Akron MSA Housing Units Permitted by Quarter



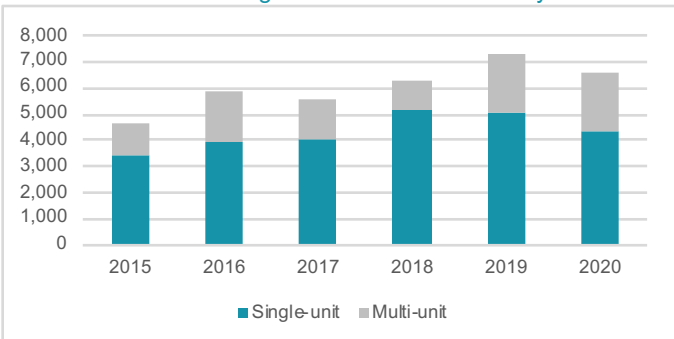
Source: U.S. Census Bureau

Akron MSA Housing Units Permitted Annually



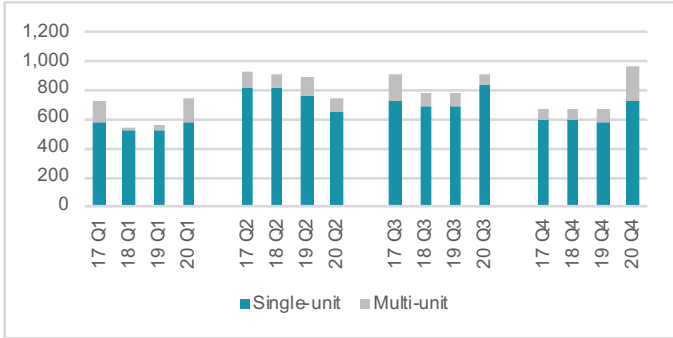
Source: U.S. Census Bureau

Cincinnati MSA Housing Units Permitted Annually



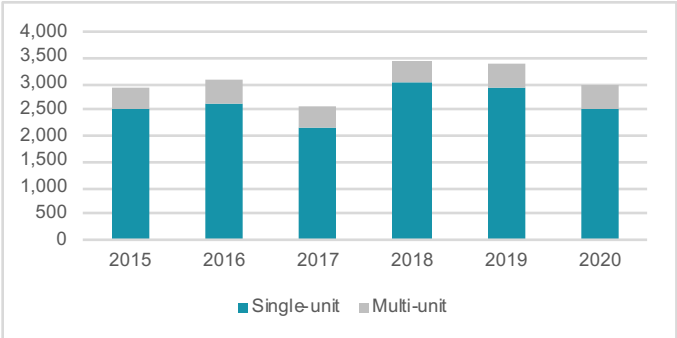
Source: U.S. Census Bureau

Cleveland MSA Housing Units Permitted by Quarter



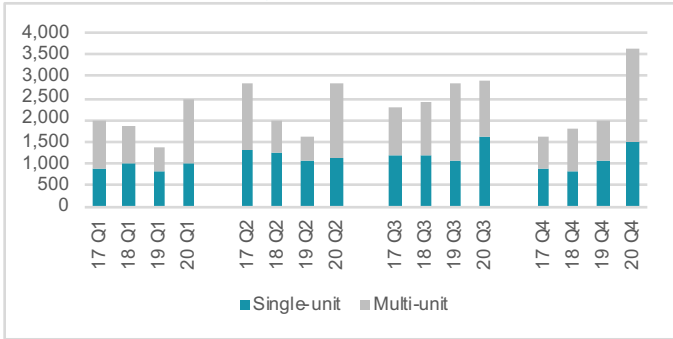
Source: U.S. Census Bureau

Cleveland MSA Housing Units Permitted Annually



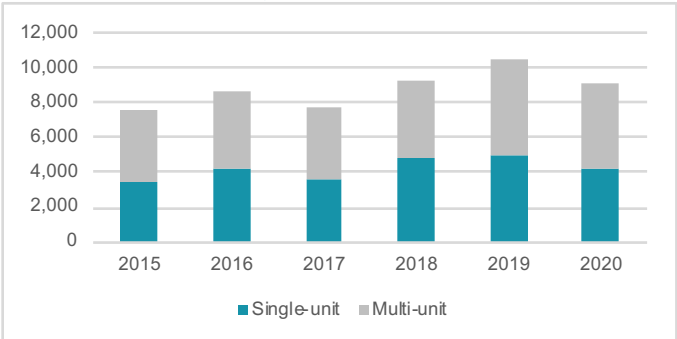
Source: U.S. Census Bureau

Columbus MSA Housing Units Permitted by Quarter



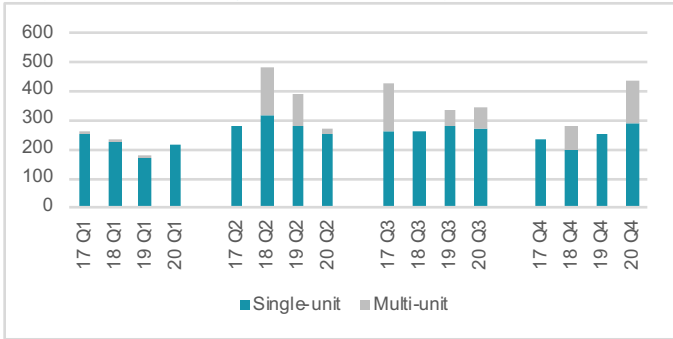
Source: U.S. Census Bureau

Columbus MSA Housing Units Permitted Annually



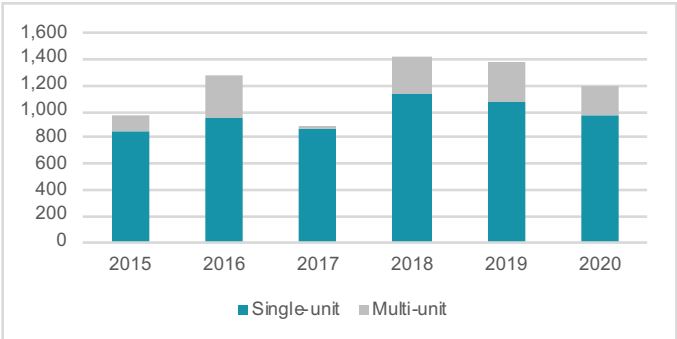
Source: U.S. Census Bureau

Dayton MSA Housing Units Permitted by Quarter



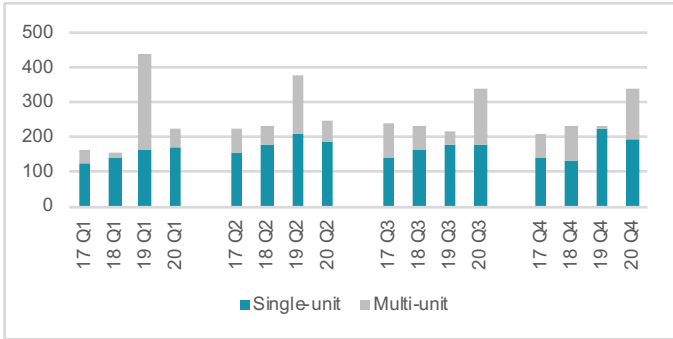
Source: U.S. Census Bureau

Dayton MSA Housing Units Permitted Annually



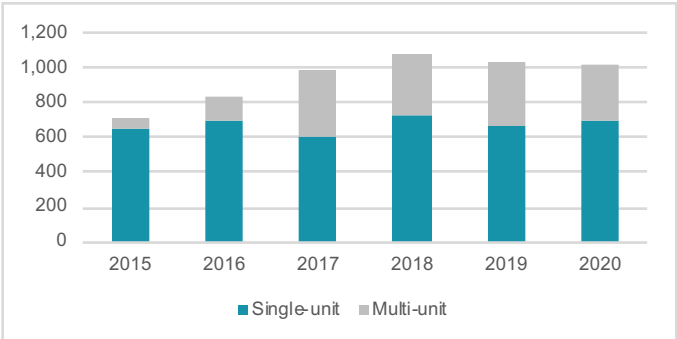
Source: U.S. Census Bureau

Toledo MSA Housing Units Permitted by Quarter



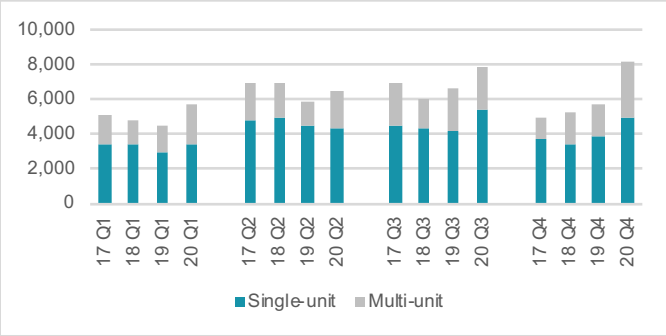
Source: U.S. Census Bureau

Toledo MSA Housing Units Permitted Annually



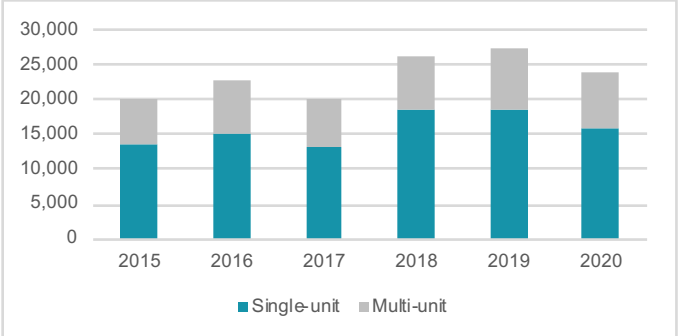
Source: U.S. Census Bureau

Ohio Housing Units Permitted by Quarter



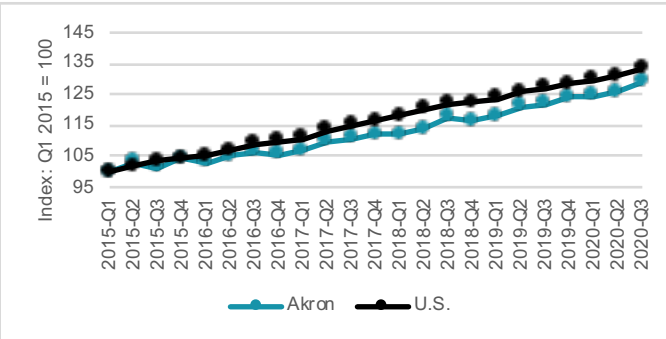
Source: U.S. Census Bureau

Ohio Housing Units Permitted Annually



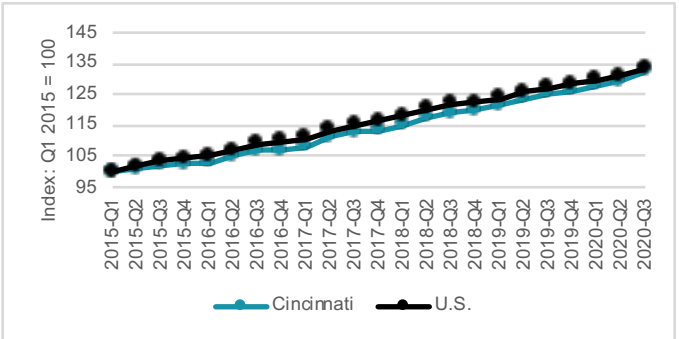
Source: U.S. Census Bureau

Akron MSA and U.S. FHFA House Price Index



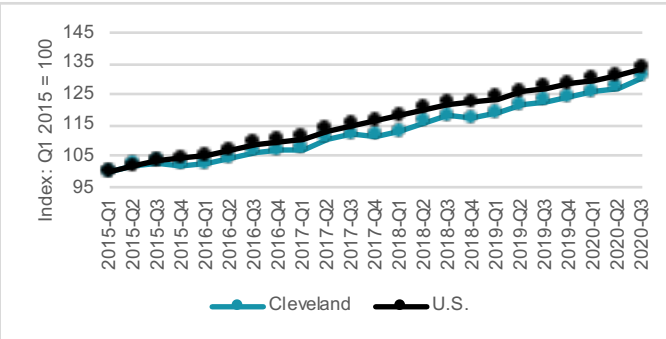
Source: Federal Housing Finance Agency.

Cincinnati MSA and U.S. FHFA House Price Index



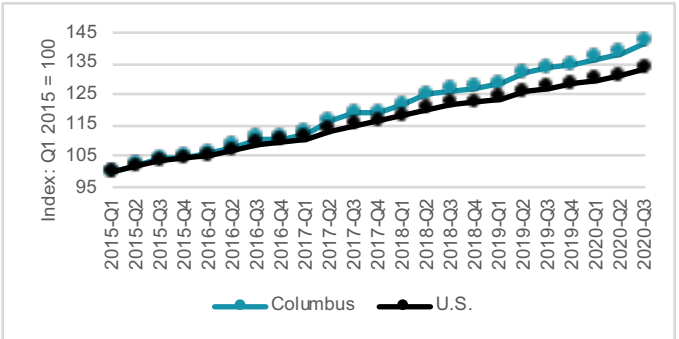
Source: Federal Housing Finance Agency.

Cleveland MSA and U.S. FHFA House Price Index



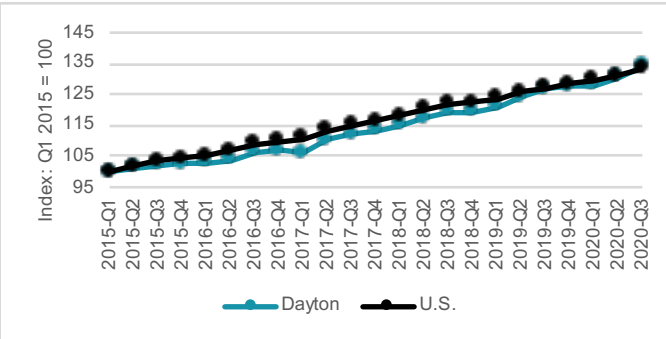
Source: Federal Housing Finance Agency.

Columbus MSA and U.S. FHFA House Price Index



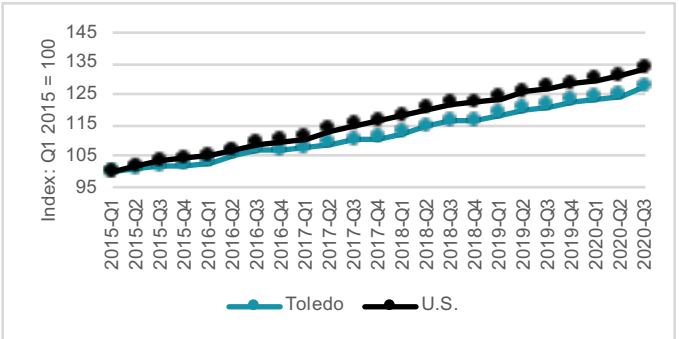
Source: Federal Housing Finance Agency.

Dayton MSA and U.S. FHFA House Price Index



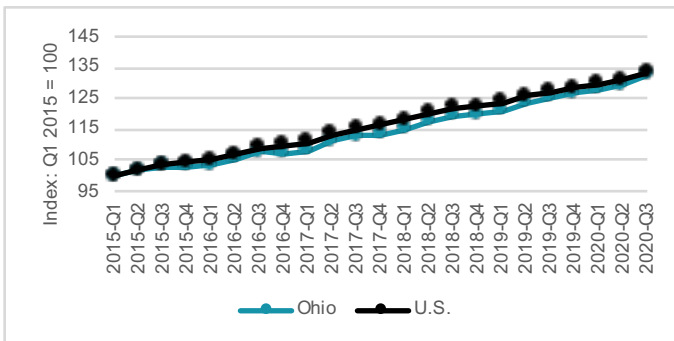
Source: Federal Housing Finance Agency.

Toledo MSA and U.S. FHFA House Price Index



Source: Federal Housing Finance Agency.

Ohio and U.S. FHFA House Price Index

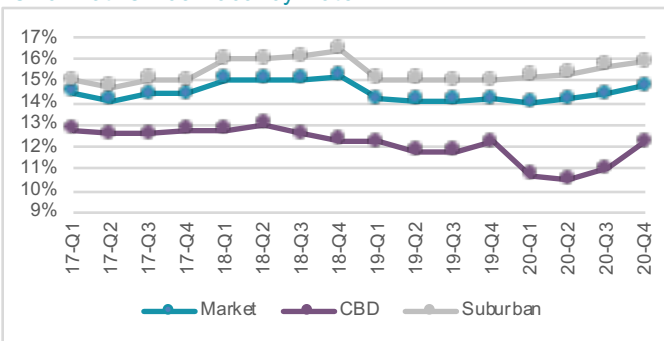


Source: Federal Housing Finance Agency.

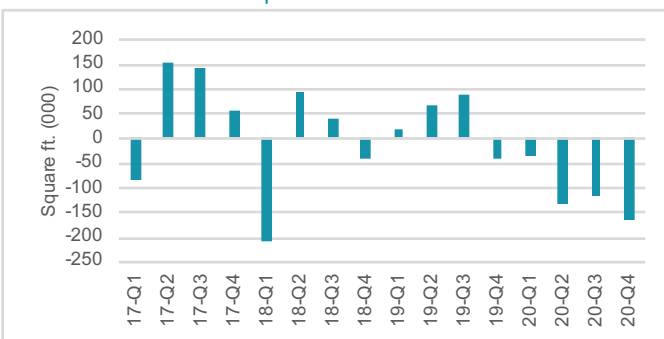
Ohio Office Real Estate Markets

- Office market conditions have worsened in all major Ohio markets, except Dayton. This is a function of both COVID-driven economic weakness and uncertainty surrounding the future of working from home.
- Cincinnati office absorption has steadily worsened over the past year. The cumulative negative absorption of 485,700 square feet has offset the previous three years of net positive absorption. Market vacancy rates have risen 0.9 percentage points over the past year, and inflation-adjusted rents have declined 1.3%, to \$23.69 per square foot.
- Cleveland rents have been choppy recently. Colliers International presented combined statistics for the Cleveland and Akron-Canton markets prior to 2019. Recent increases in vacancy have hit both markets, but the trend has been worse in the Akron market.
- Columbus office vacancy has soared, both downtown and in the suburbs. Although vacancy remains lower than elsewhere, the rate has risen 2.5 points over the past year. Absorption has turned sharply negative, reaching nearly 1 million square feet in the fourth quarter. Rents have been bucking the downward trend in the CBD, which includes the Short North, given the desirability of the new construction there and in the Arena District.
- Although the Dayton office vacancy rate is higher than elsewhere, it has held steady, especially in the suburbs. Rents are holding on to 2019 gains, and in contrast to the other markets, absorption has remained positive. These results are driven by the area's large national defense focus driven by Wright-Patterson Air Force Base.

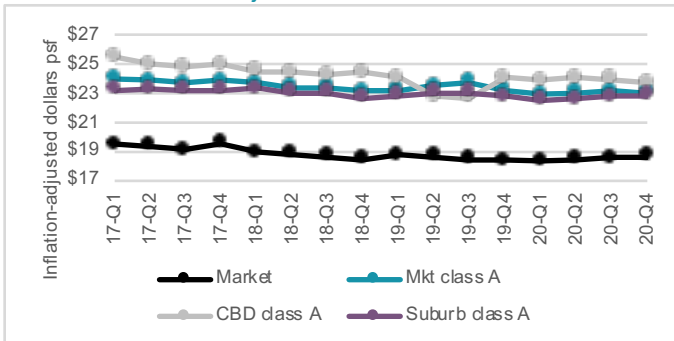
Cincinnati Office Vacancy Rate



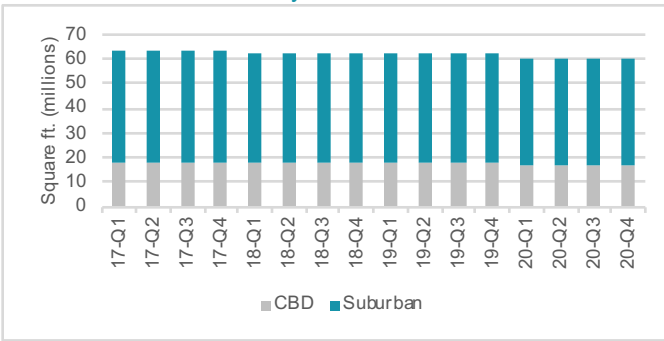
Cincinnati Office Absorption



Cincinnati Inflation-Adjusted Office Rent

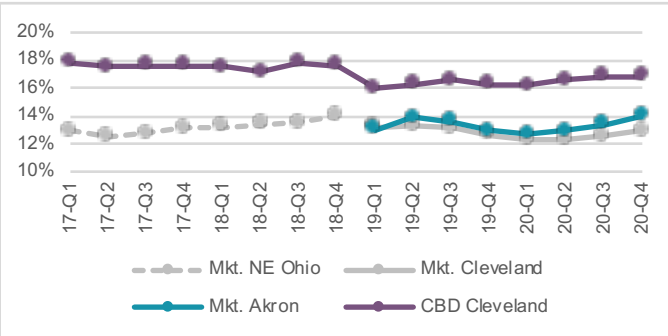


Cincinnati Office Inventory



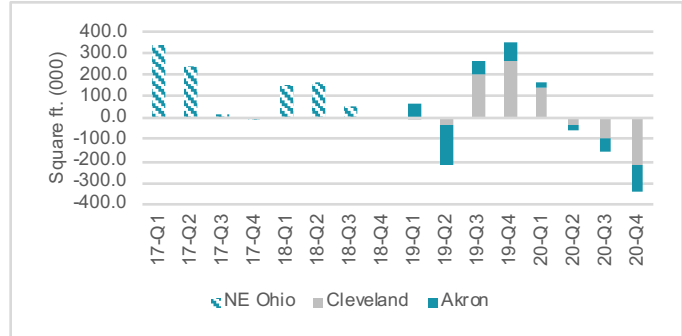
Source: Colliers International

Cleveland/Northeast Ohio Office Vacancy Rate



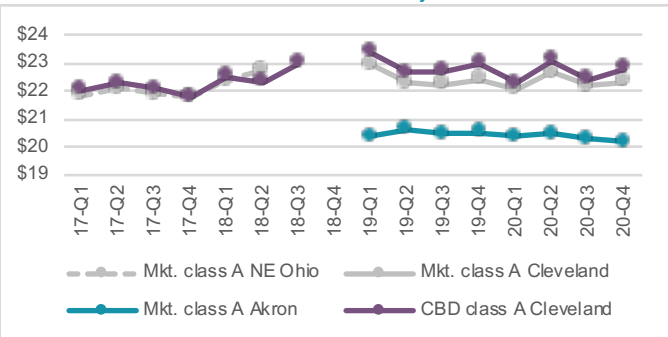
Source: Colliers International

Cleveland/Northeast Ohio Office Absorption



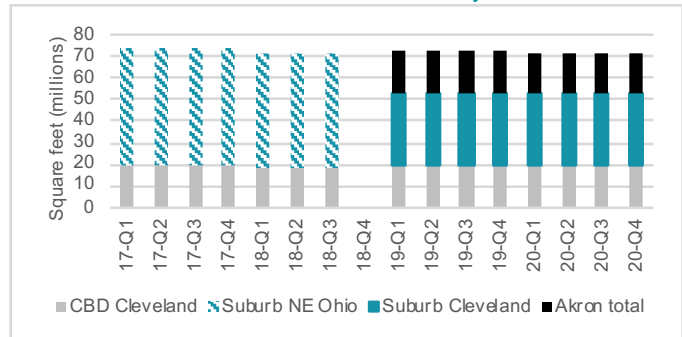
Source: Colliers International

Cleveland/Northeast Ohio Inflation-Adjusted Office Rent



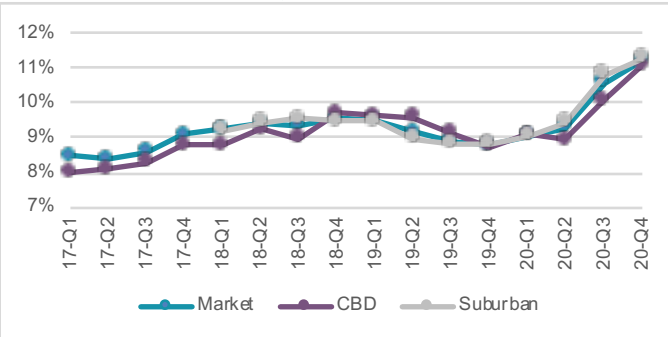
Source: Colliers International

Cleveland/Northeast Ohio Office Inventory



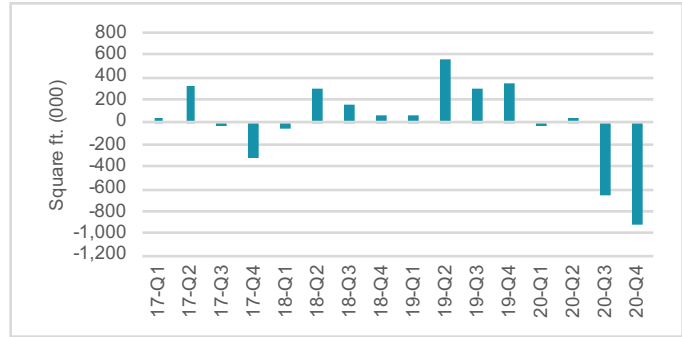
Source: Colliers International

Columbus Office Vacancy Rate



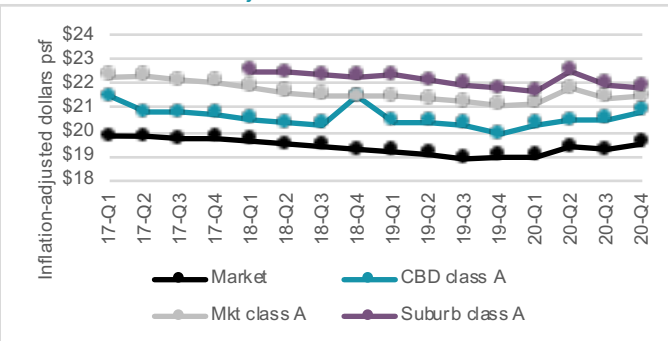
Source: Colliers International

Columbus Office Absorption



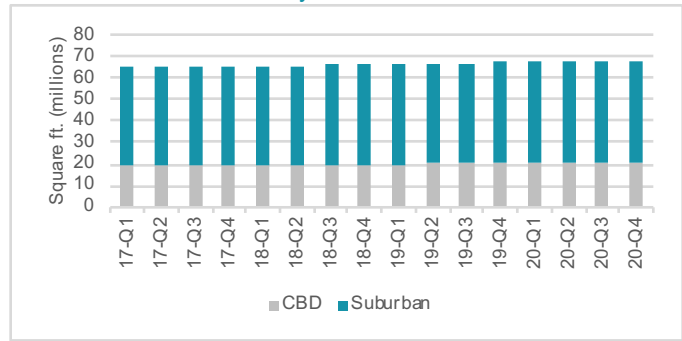
Source: Colliers International

Columbus Inflation-Adjusted Office Rent



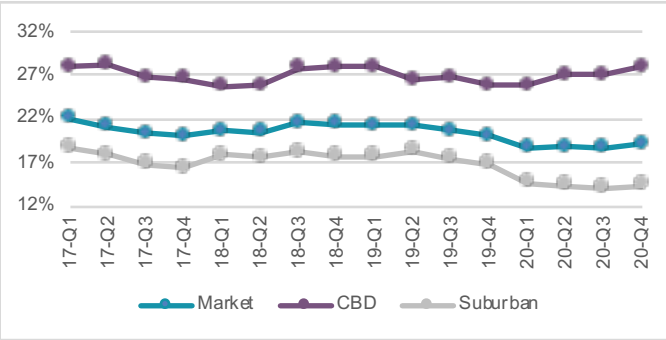
Source: Colliers International

Columbus Office Inventory



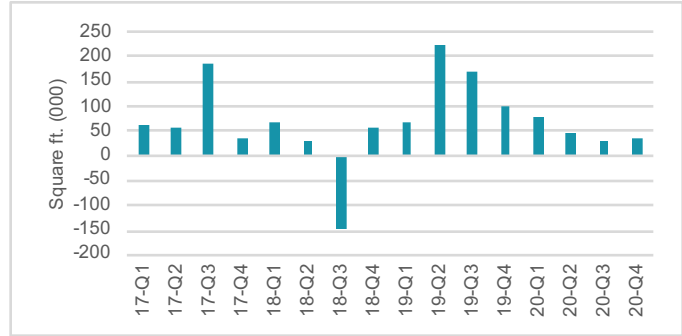
Source: Colliers International

Dayton Office Vacancy Rate



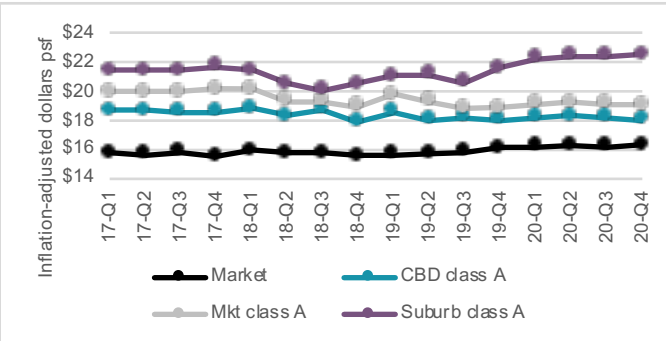
Source: Colliers International

Dayton Office Absorption



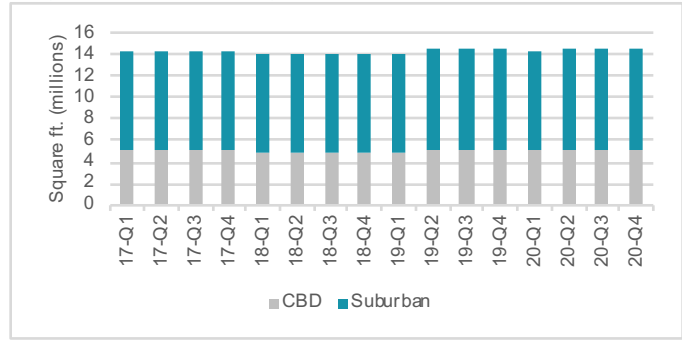
Source: Colliers International

Dayton Inflation-Adjusted Office Rent



Source: Colliers International

Dayton Office Inventory

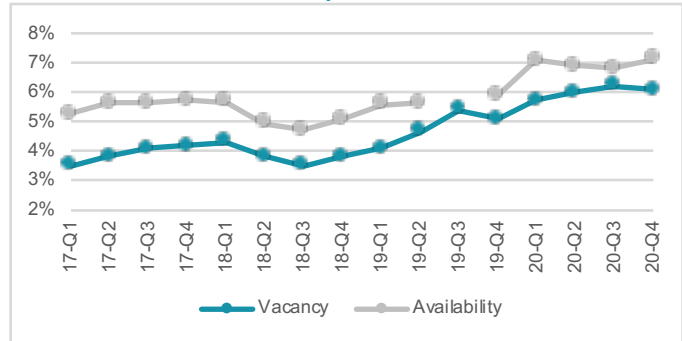


Source: Colliers International

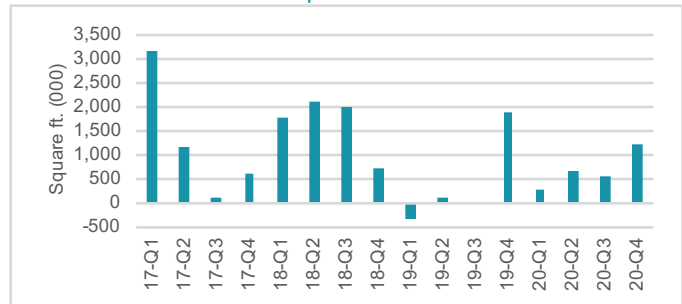
Ohio Industrial Real Estate Markets

- Major Ohio industrial real estate markets are generally healthier than office markets. The pandemic-driven acceleration of online shopping benefits the state's robust distribution sector.
- Cincinnati vacancy rates have been gradually rising in the face of a steadily growing inventory. Absorption remains positive, though, and rents are keeping pace with inflation.
- Northeast Ohio industrial vacancy has been gradually trending downward as absorption has accelerated. Rents, however, have been steadily declining. Adjusted for inflation, the fourth quarter average of \$4.05 per square foot was down more than 6% from its level two years earlier.
- Absorption in the Columbus industrial market has been very strong. In only one quarter since mid-2017 has quarterly net absorption totaled less than 1 million square feet. The average over that period has been just above 2 million. The steadily growing inventory has kept the vacancy rate low and stable. Inflation-adjusted rents are coming off an increase in late 2019 and early 2020, but are still up 7.6% from their mid-2018 level.
- Dayton's industrial vacancy rate has fallen 1.5 percentage points since the third quarter of 2019. The market has seen little growth in square footage and absorption has generally been positive. Rents are stable. The sharp decline in inventory at the beginning of 2018 was apparently a result of Colliers International cleaning up their database.

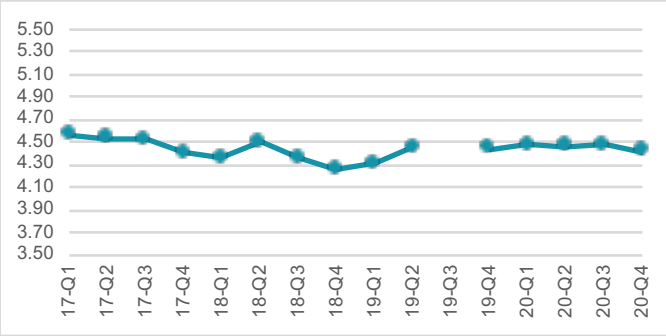
Cincinnati Industrial Vacancy Rate



Cincinnati Industrial Absorption

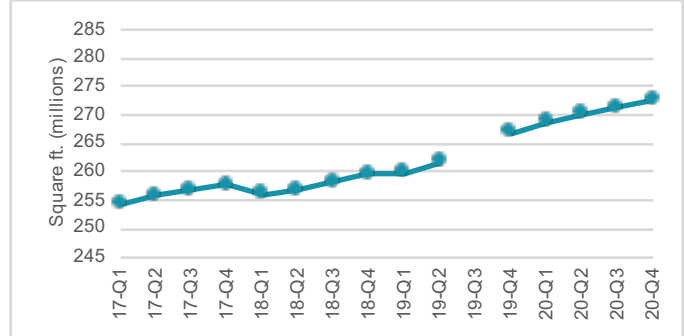


Cincinnati Inflation-Adjusted Industrial Rent



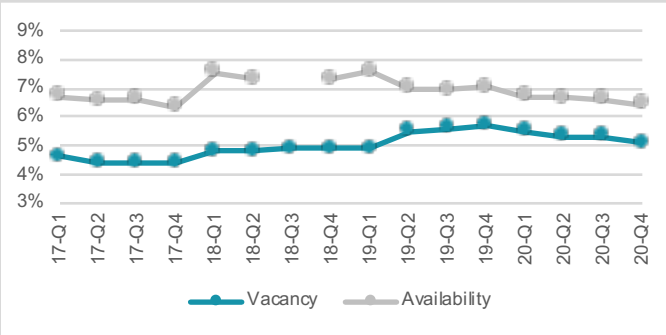
Source: Colliers International

Cincinnati Industrial Inventory



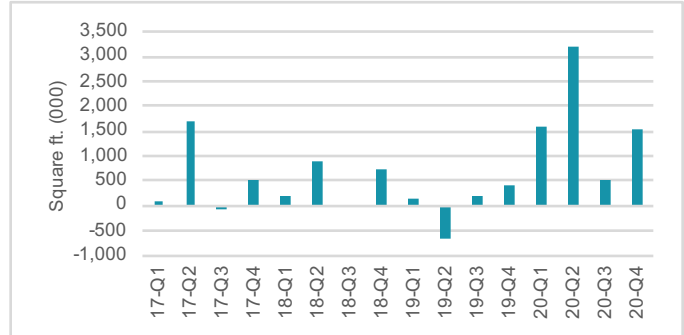
Source: Colliers International

Northeast Ohio Industrial Vacancy Rate



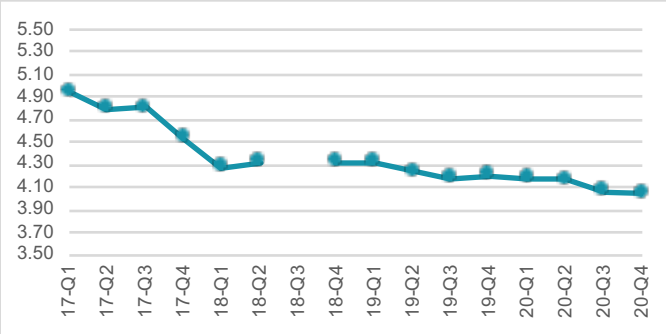
Source: Colliers International

Northeast Ohio Industrial Absorption



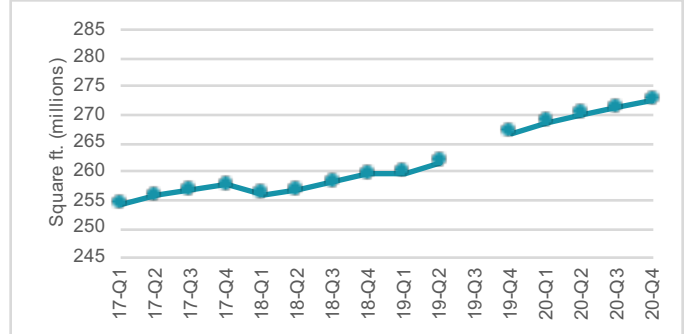
Source: Colliers International

Northeast Ohio Inflation-Adjusted Industrial Rent



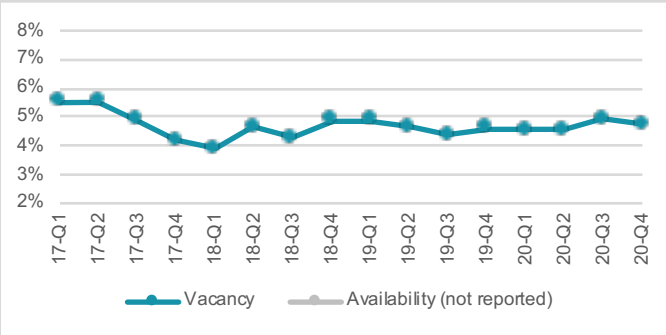
Source: Colliers International

Northeast Ohio Industrial Inventory



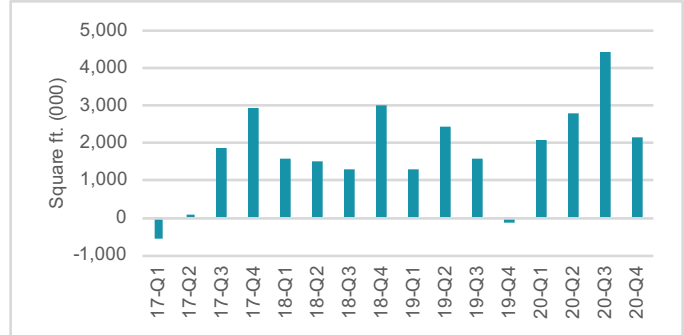
Source: Colliers International

Columbus Industrial Vacancy Rate



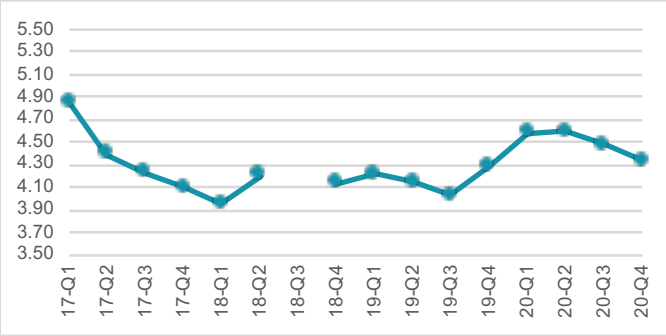
Source: Colliers International

Columbus Industrial Absorption



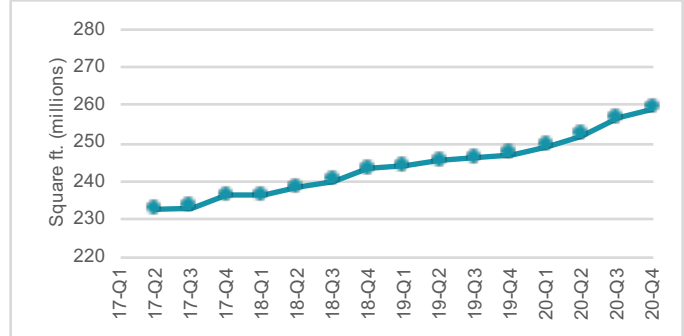
Source: Colliers International

Columbus Inflation-Adjusted Industrial Rent



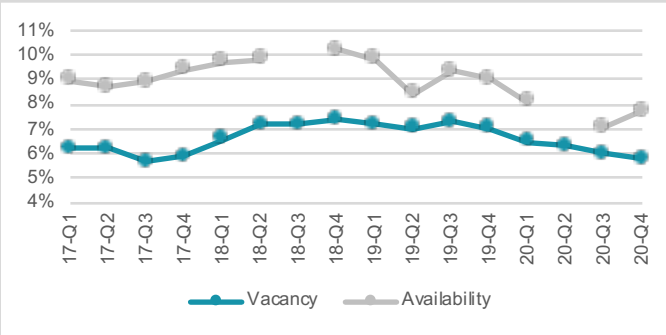
Source: Colliers International

Columbus Industrial Inventory



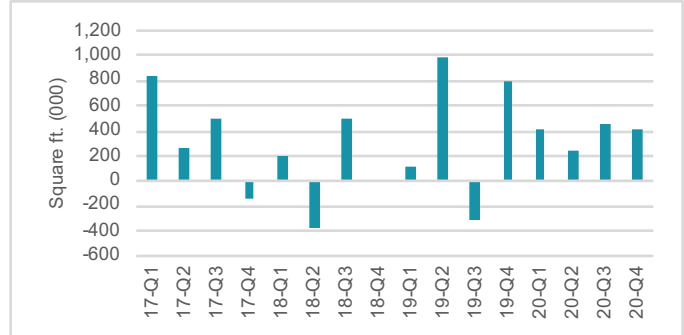
Source: Colliers International

Dayton Industrial Vacancy Rate



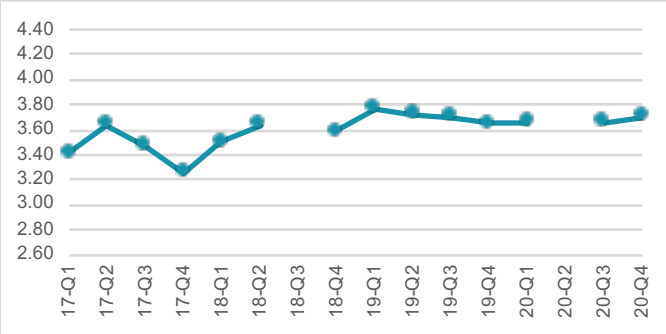
Source: Colliers International

Dayton Industrial Absorption



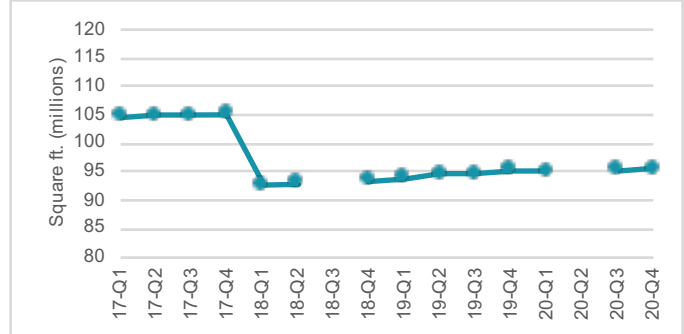
Source: Colliers International

Dayton Inflation-Adjusted Industrial Rent



Source: Colliers International

Dayton Industrial Inventory



Source: Colliers International