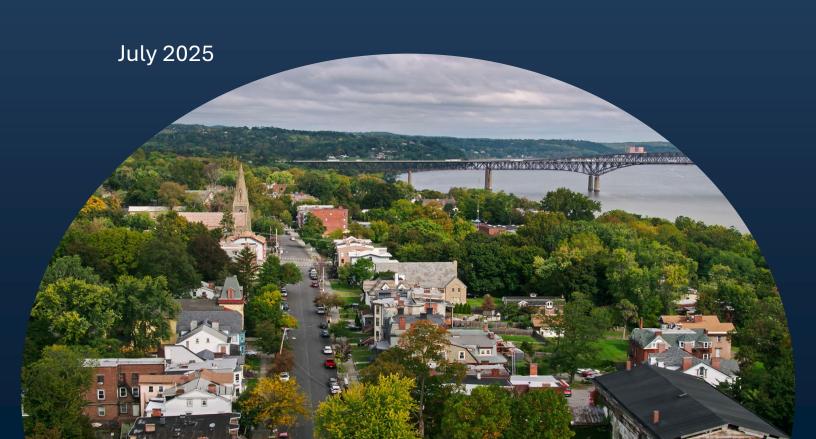
2025-2030 Comprehensive Economic Development Strategy



Appendix. CEDS Data



Appendix. CEDS Data

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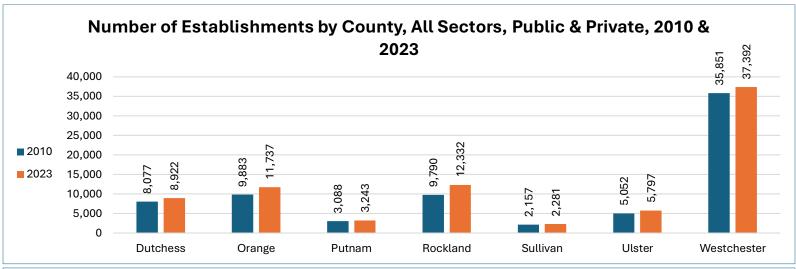
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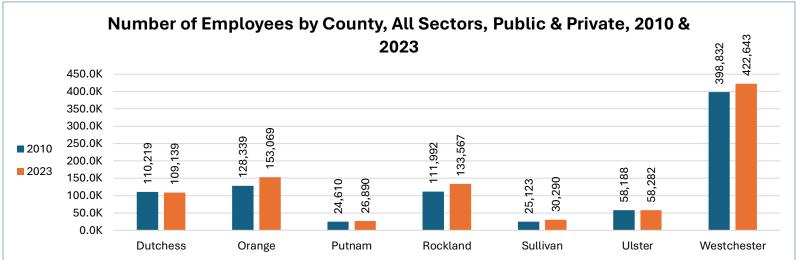
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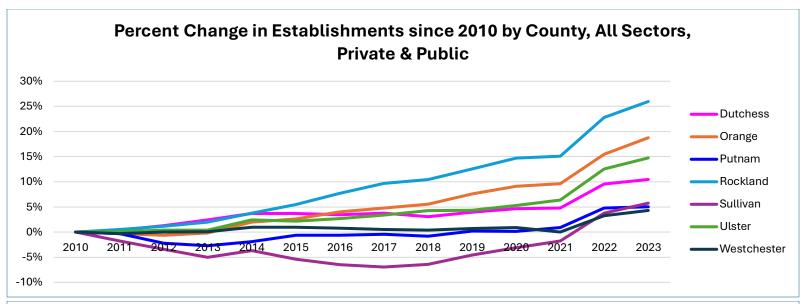
- The raw datasets from which this Appendix was developed can be made available upon request. Requests may be sent to ccastillo@hudsonvalleyrc.org.
- The following terms are used interchangeably in this Appendix:
 - o "Finance" = "Financial Activities"
 - o "Trade, Transport, & Utility" = "Trade, Transportation, & Utilities"
- For the development of GDP line graphs, data for specific sectors may not have been available from the data source, Bureau of Economic Analysis. Missing data appears as "(D)" in applicable tables. The linear interpolation method was used to develop line graphs in these situations.

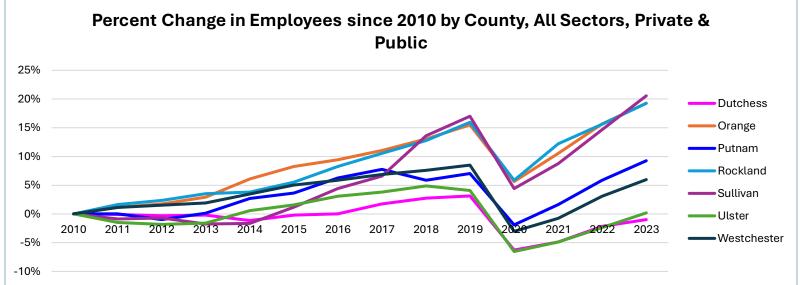
Region-Wide Sectoral Data

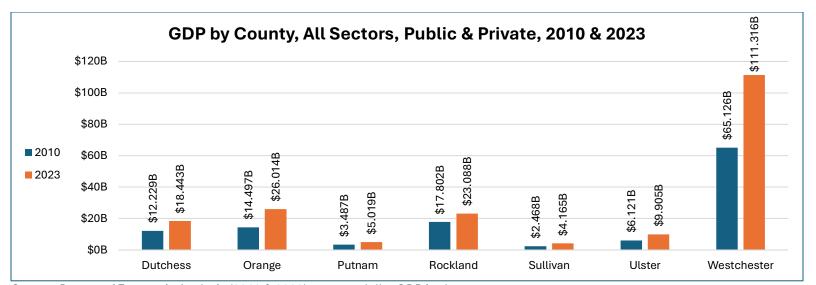
All Establishments (Public & Private)



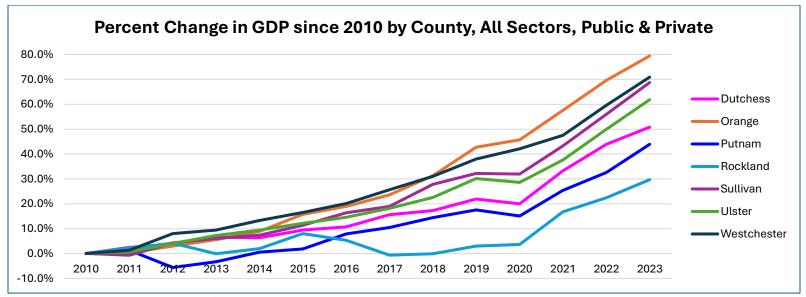








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.

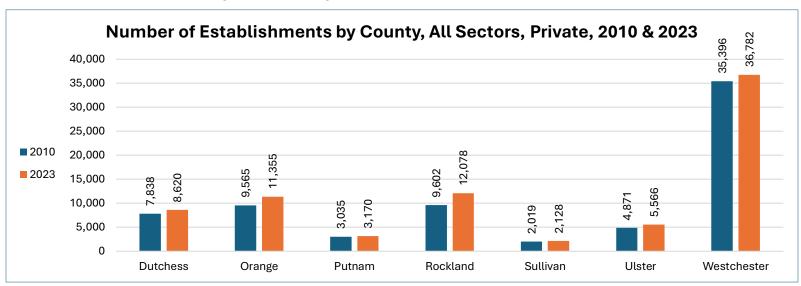


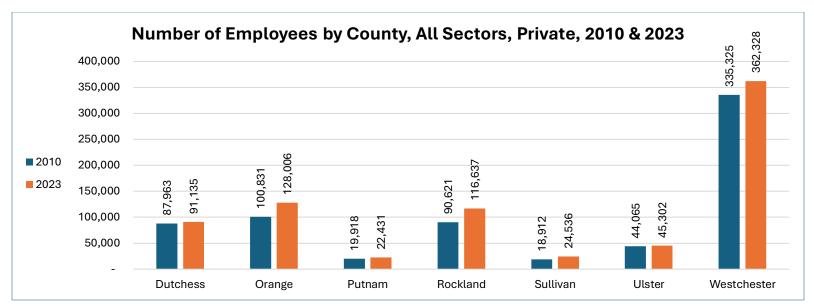
Source: Bureau of Economic Analysis (2010-2023).

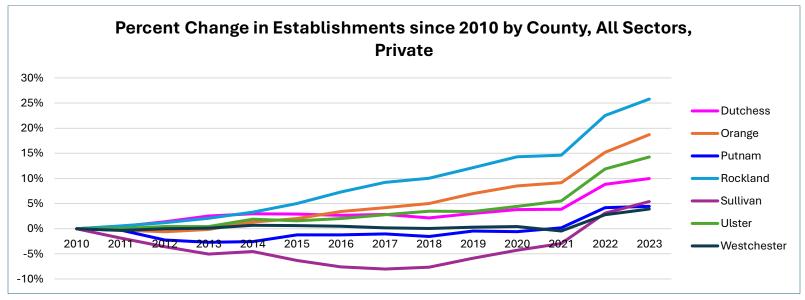
The first pair of graphs above show the total number of all establishments and employees by county in the Mid-Hudson Region in 2010 and in 2023. The second pair of graphs show the percentage change since 2010 of the number of all establishments and employees. The

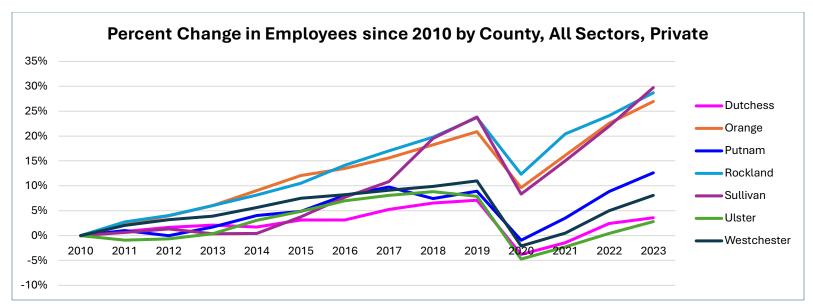
third pair of graphs above show the total GDP in 2010 and 2023, and the percentage change in GDP since 2010, by county. Although many of the counties had seen a loss or were near flat for the better part of the graph, many counties saw a bounce after the pandemic. In almost all counties, there was an increase in the number of employees. Although all counties have shown signs of recovery since the pandemic, not all have recovered to pre-pandemic levels. In terms of GDP, all counties have improved since the pandemic. In most cases, while the number of establishments showed moderate growth, with smaller growth in number of employees, the increase in GDP was significant during this period.

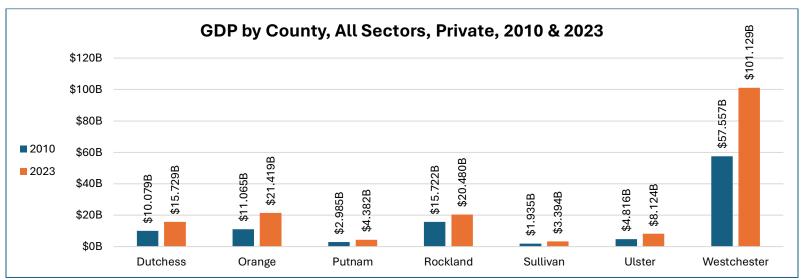
Private Establishments (All Sectors)



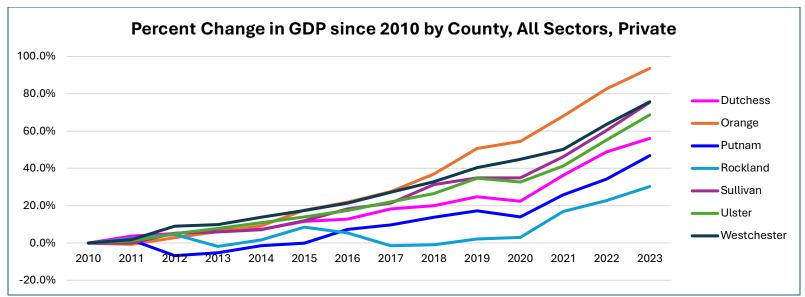








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.

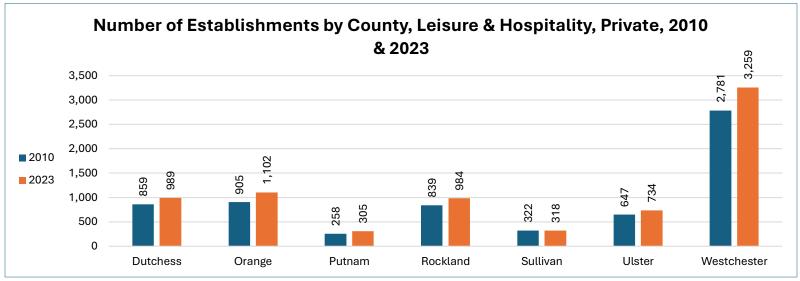


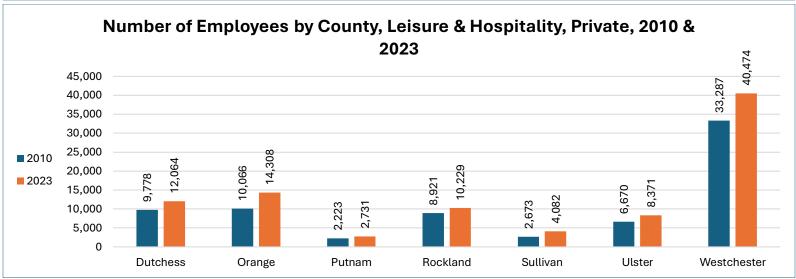
Source: Bureau of Economic Analysis (2010-2023).

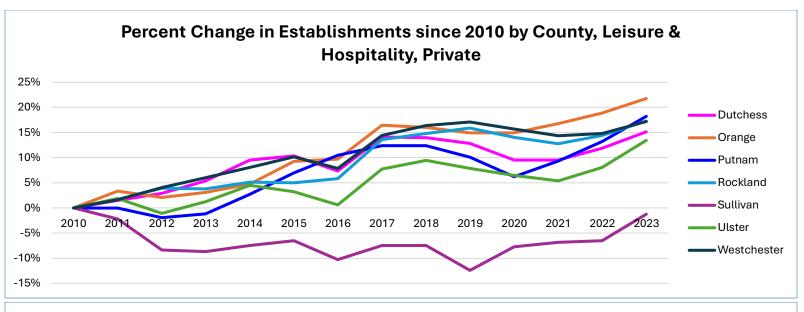
The first pair of graphs above show the total number of private establishments and employees by county in the Mid-Hudson Region in 2010 and in 2023. The second pair of graphs show the percentage change in the number of private establishments and employees since 2010. The third pair of graphs above show the total GDP of private sectors in 2010 and 2023 and percentage change in private sectors' GDP since 2010, by county. Since 2010, all counties have shown an increase in the number of establishments, employees, and GDP. Although the number of establishments remained largely flat across the counties during the pandemic, the employment dropped. Since the pandemic, some of the counties have returned to pre-pandemic levels. GDP showed slow growth before the pandemic, and outpaced the growth in establishments and employees, but all counties have shown large GDP gains since 2020.

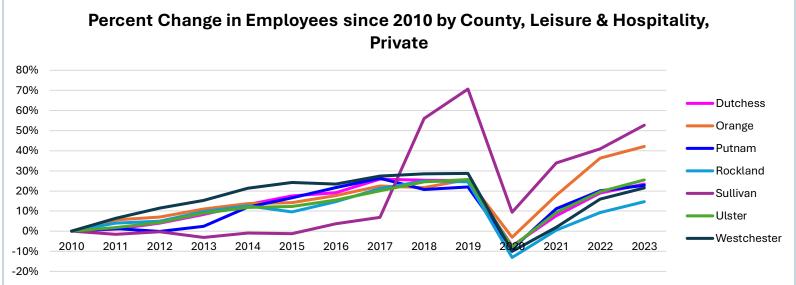
Leisure & Hospitality

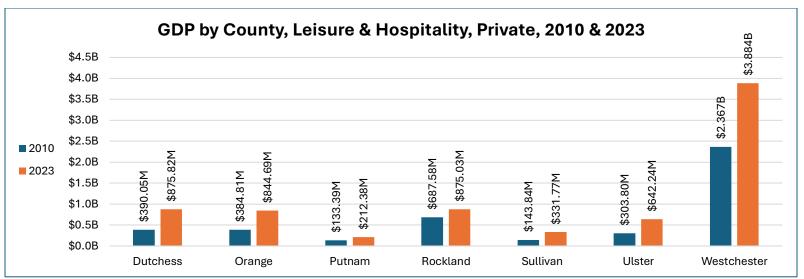
Major NAICS codes: 71: Arts, entertainment, and recreation; 72: Accommodation and food services



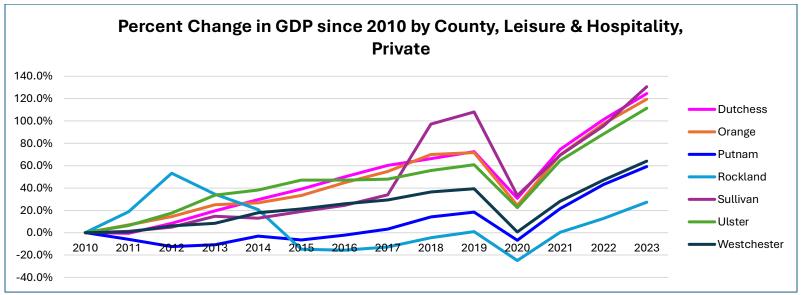








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



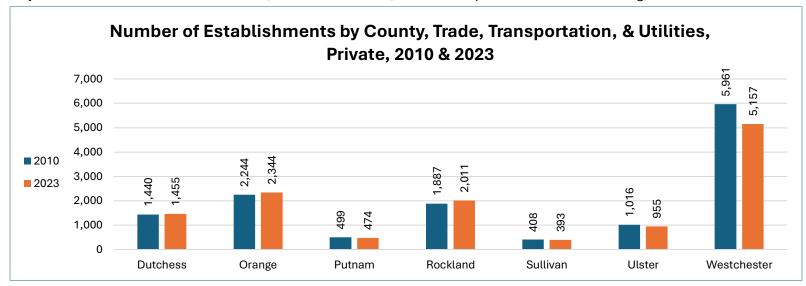
Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

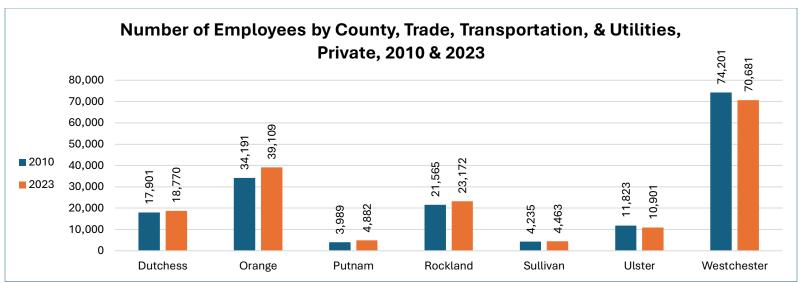
The first pair of graphs show the total number of Leisure & Hospitality establishments and employees by county in the Mid-Hudson Region in 2010 and in 2023. The second pair of graphs show the percentage change in Leisure & Hospitality establishments and employees since

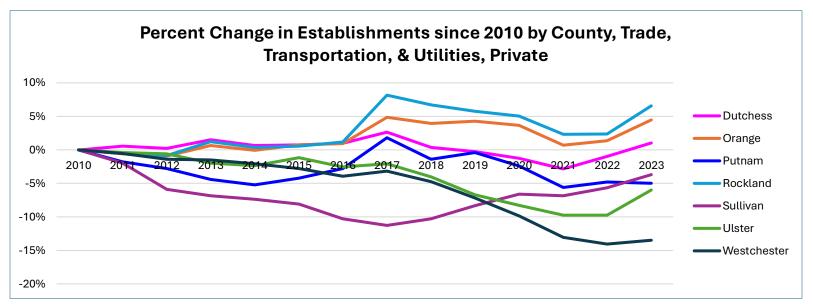
2010. The third pair of graphs above show the total GDP of the private Leisure & Hospitality sector in 2010 and 2023 and the percentage change in private Leisure & Hospitality sectors' GDP since 2010, by county. Since 2010, all counties have shown an increase in the number of establishments. Many of the counties experienced a growth in establishments and employees in the years running up to the pandemic. A notable exception in Sullivan County's establishments, which were still down 1.2% as of 2023. The drop in employment was much steeper for this sector, but numbers returned to normal quickly. While Sullivan County's establishments are down, their Leisure & Hospitality employment saw a steep rise in 2018, most likely due to the opening of Resorts World Catskills. Although every county saw GDP decreases in the sector during the pandemic, all have exceeded pre-pandemic GDP.

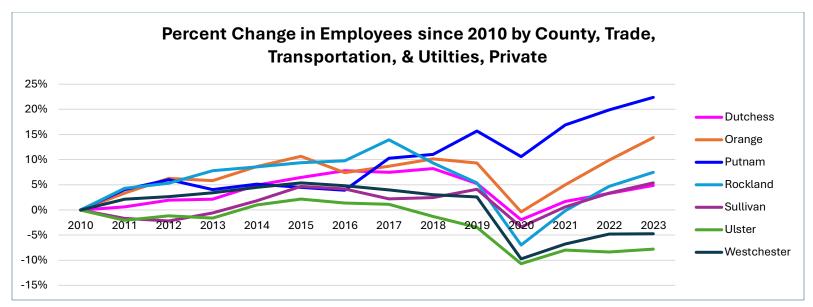
Trade, Transportation, & Utilities

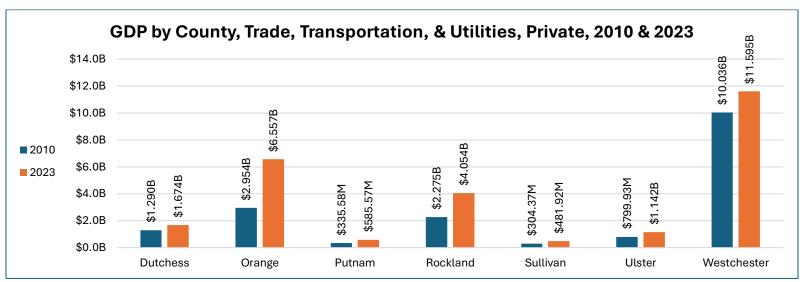
Major NAICS Codes: 42: Wholesale trade; 44-45: Retail trade; 48-49: Transportation and warehousing; 22: Utilities



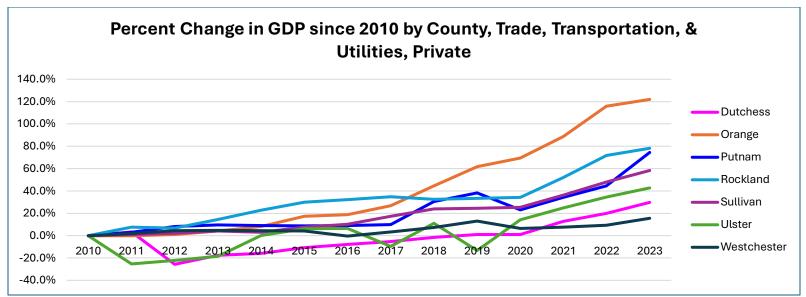








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.

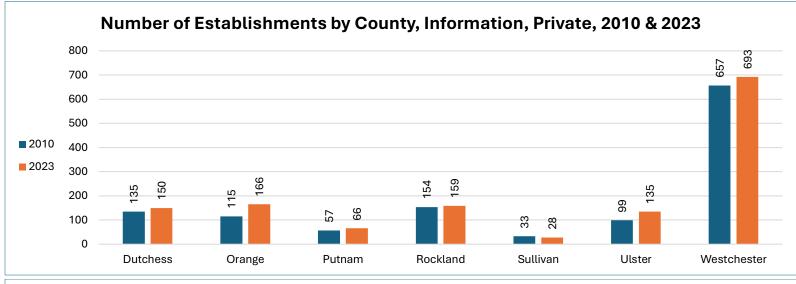


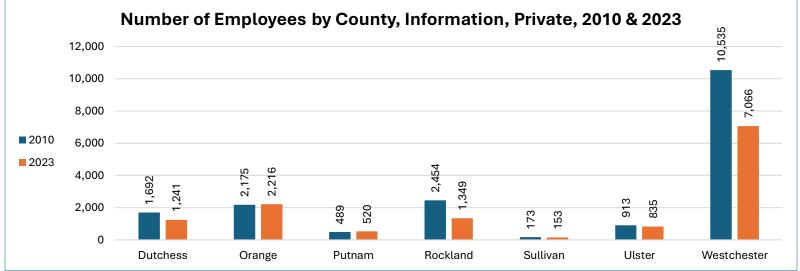
Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

The first pair of graphs show the total number of Trade, Transportation, & Utilities establishments and employees by county in the Mid-Hudson Region in 2010 and in 2023. The second pair of graphs show the percentage change in establishments and employees since 2010. The third pair of graphs above show the sector's total GDP in 2010 and 2023 and the percentage change in sectors' GDP since 2010, by county. Four of the seven counties experienced a decrease in establishments since 2010 but five of seven experienced an increase in the number of employees. Despite most counties showing a decrease in establishments, the GDP for the sector has gone up since 2010 in all counties.

Information

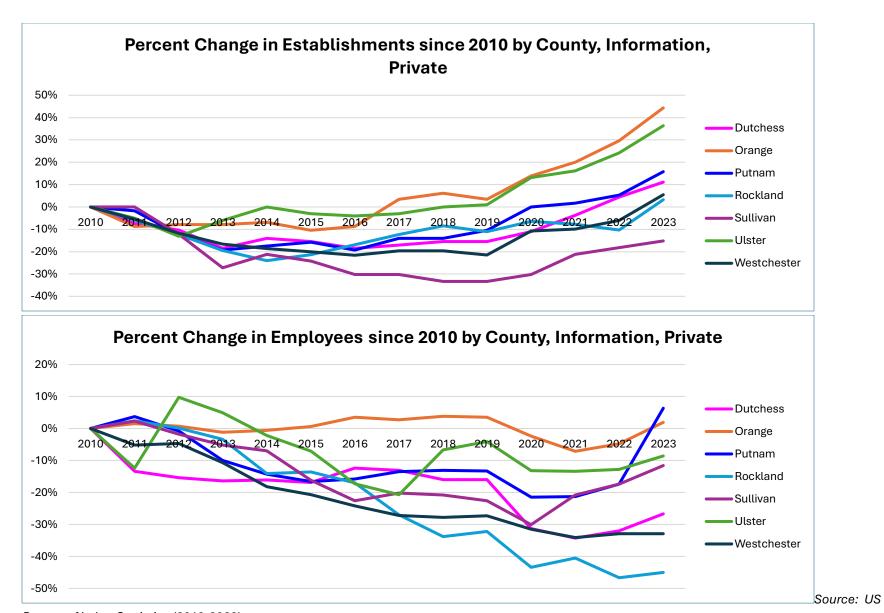
Major NAICS Codes: 51: Information



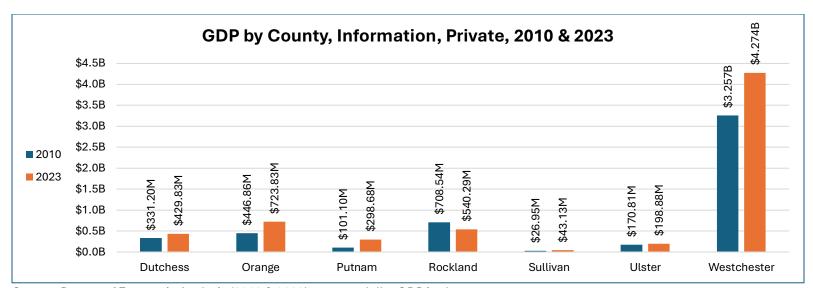


Source: US

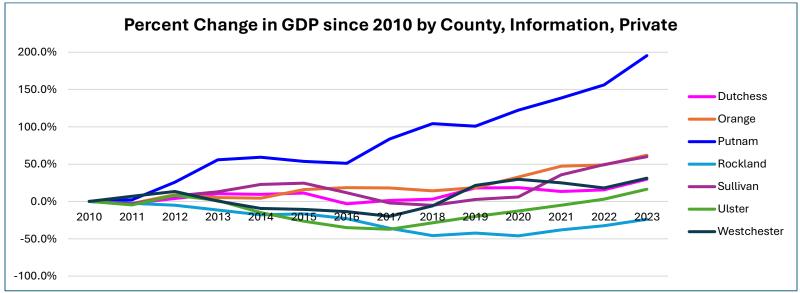
Bureau of Labor Statistics (2010 & 2023).



Bureau of Labor Statistics (2010-2023).



Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

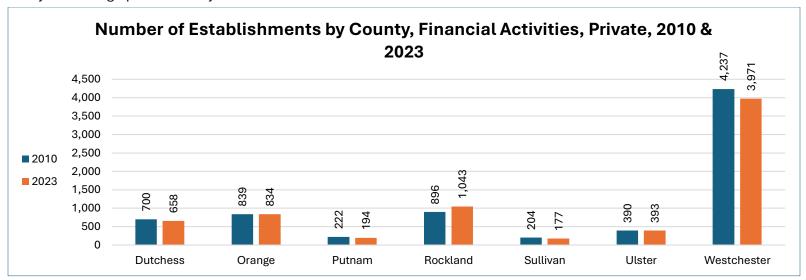
The first pair of graphs above show the total number of Information establishments and employees by county in the Mid-Hudson Region in 2010 and in 2023. The main components of the Information sector are publishing industries, motion picture and sound recording

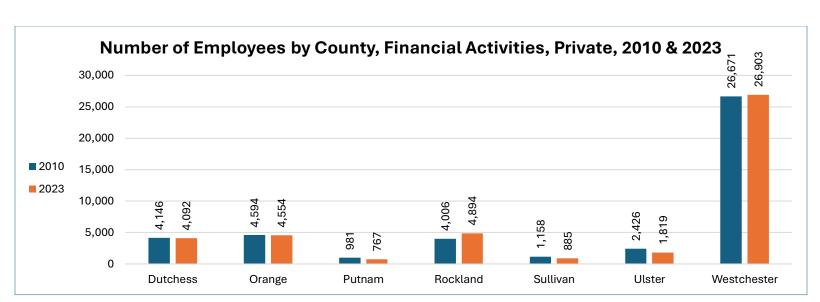
industries, broadcasting, telecommunications, web search and information services industries. The second pair of graphs show the percent change in Information establishments and employees. The third pair of graphs above show the total GDP of the private Information sector in 2010 and 2023 and the percentage change in private Information sectors' GDP since 2010, by county. Before the pandemic, many of the counties were experiencing losses in the information sector. Although many of the counties have been able to grow the number of establishments since 2010, the number of employees for most counties has decreased since 2010 by as much as 45%. Although Putnam's Information sector GDP increased by the largest percentage since 2010, Westchester's Information sector GDP increase since 2010 was greater than the other counties combined.

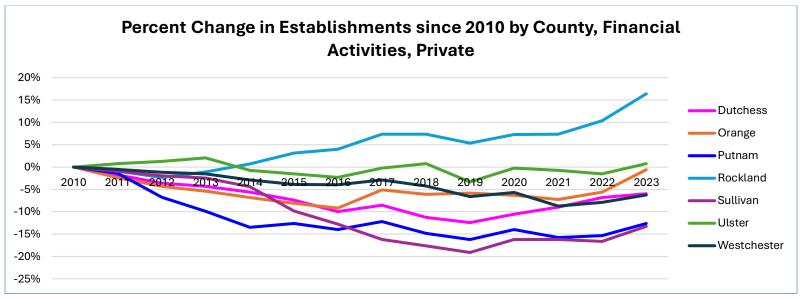
Financial Activities

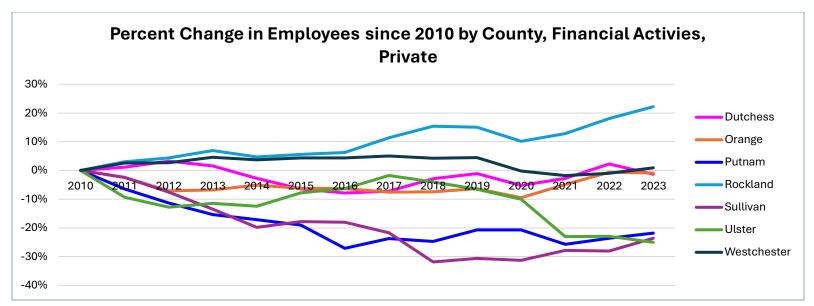
Major NAICS Codes: 52: Finance and insurance; 53: Real estate and rental and leasing

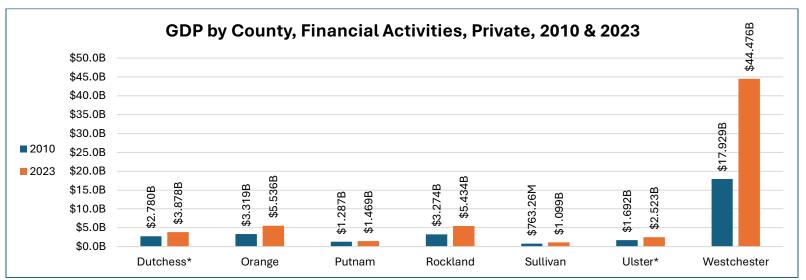
Note: The "Financial Activities" and "Trade, Transportation, & Utilities" sectors are also referred to as "Finance" and "Trade, Transport, & Utility" in some graphs for brevity.



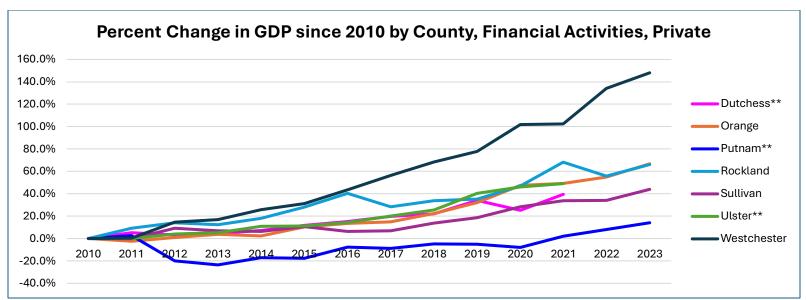








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

The first pair of graphs above show the total number of Financial Activities establishments and employees by county in the Mid-Hudson Region in 2010 and in 2023. The second pair of graphs show the percentage change in establishments and employees since 2010. The third pair of graphs above show the total sector GDP in 2010 and 2023 and the percentage change in GDP since 2010, by county. For much of the timespan, many of the counties struggled to retain gains, with five of the seven counties decreasing the number of financial establishments and employees, with one county in each category being just shy of a 1% increase. The exception to this is Rockland County, which increased its establishments and employees by 15% and 20% respectively.

^{*} In the top GDP graph, Dutchess and Ulster Counties' data is from 2021, not 2023. A complete breakdown of the sector is provided in the table below.

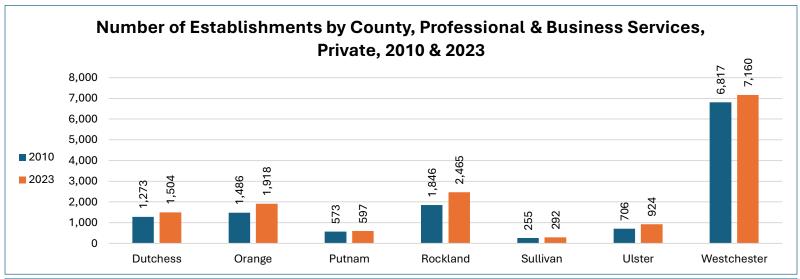
**In the bottom graph, Dutchess and Ulster Counties' lines stop at 2021; Putnam's 2022 data was unavailable; the linear interpolation method was used to develop the line graphs. A complete breakdown of the sector is provided on the table below.

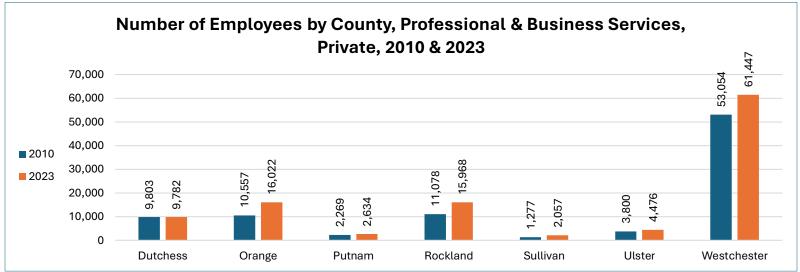
County	Sector (bolded) & Subsectors	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Dutchess	Financial Activities	\$2.78B	\$2.93B	\$2.87B	\$2.91B	\$2.98B	\$3.11B	\$3.20B	\$3.33B	\$3.40B	\$3.73B	\$3.48B	\$3.88B	\$1.13B	\$1.12B
	Finance and insurance	\$604.3M	\$586.7M	\$640.0M	\$599.9M	\$689.3M	\$760.6M	\$828.0M	\$865.9M	\$924.8M	\$992.1M	\$1.04B	\$1.12B	\$1.13B	\$1.12B
	Real estate and rental and leasing	\$2.18B	\$2.34B	\$2.23B	\$2.31B	\$2.29B	\$2.34B	\$2.37B	\$2.46B	\$2.47B	\$2.74B	\$2.44B	\$2.76B	(D)	(D)
Putnam	Financial Activities	\$1.29B	\$1.32B	\$1.03B	\$984.3M	\$1.07B	\$1.06B	\$1.19B	\$1.17B	\$1.22B	\$1.22B	\$1.19B	\$1.31B	\$307.4M	\$1.47B
	Finance and insurance	\$445.1M	\$375.0M	\$241.6M	\$222.6M	\$241.6M	\$258.9M	\$262.0M	\$270.9M	\$281.4M	\$296.4M	\$304.6M	\$303.7M	\$307.4M	\$327.6M
	Real estate and rental and leasing	\$842.3M	\$947.5M	\$787.8M	\$761.7M	\$827.6M	\$800.0M	\$926.7M	\$903.9M	\$943.4M	\$926.4M	\$881.9M	\$1.01B	(D)	\$1.14B
Ulster	Financial Activities	\$1.69B	\$1.69B	\$1.76B	\$1.78B	\$1.88B	\$1.88B	\$1.94B	\$2.03B	\$2.12B	\$2.38B	\$2.47B	\$2.52B	\$791.1M	\$850.8M
	Finance and insurance	\$407.0M	\$383.4M	\$443.9M	\$434.8M	\$504.2M	\$502.8M	\$575.9M	\$604.5M	\$627.5M	\$774.6M	\$904.9M	\$899.6M	\$791.1M	\$850.8M
	Real estate and rental and leasing	\$1.29B	\$1.31B	\$1.32B	\$1.35B	\$1.38B	\$1.38B	\$1.36B	\$1.43B	\$1.50B	\$1.60B	\$1.57B	\$1.62B	(D)	(D)

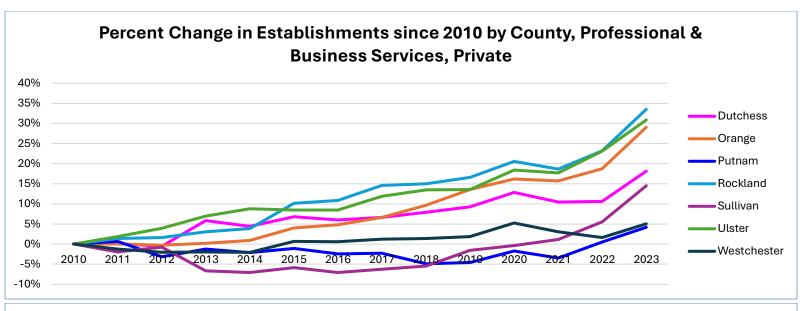
⁽D) indicates the data was not available to avoid the disclosure of confidential information. Subsectors are parts of the sector, which add up to the sector's total.

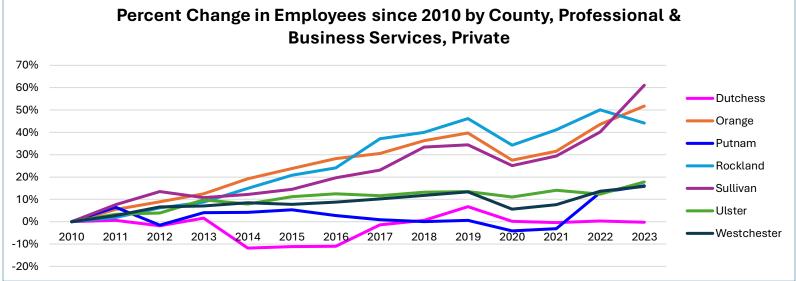
Professional & Business Services

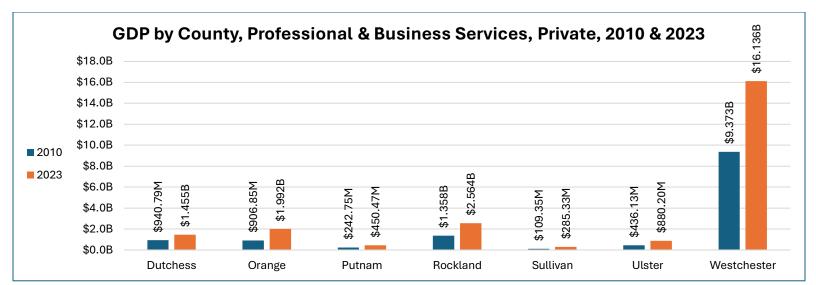
Major NAICS Codes: 54: Professional, scientific, and technical services; 55: Management of companies and enterprises



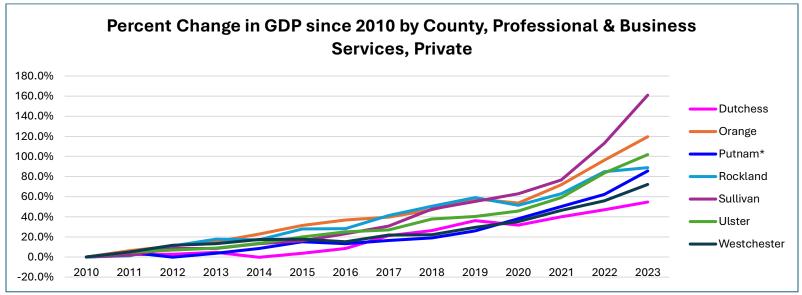








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

*In the bottom graph, Putnam County's missing 2014, 2020, and 2021 data was incorporated into the line graph using the linear interpolation method. A complete breakdown of the sector is provided in the table below.

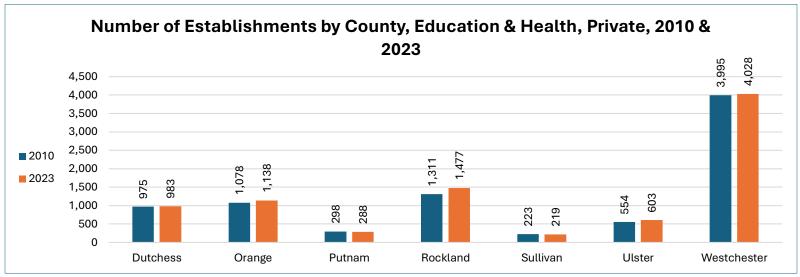
The first pair of graphs above show the total amount of Professional & Business Services establishments and employees each county had in 2010 and 2023. The second pair of graphs show the percentage change in the number of establishments and employees since 2010. The third pair of graphs above show the total sector GDP in 2010 and 2023 and the percentage change in sectors' GDP since 2010, by county. Since 2010, the number of establishments and employees has increased, save for Dutchess County that shrunk its Professional & Business Services workforce by 21 fewer people than in 2010. The number of employees went down during the pandemic and the number of establishments went down the year after the pandemic started. Professional & Business Services GDP saw increases across the board. Sullivan had the largest percent increase since 2010 and Westchester had the largest increase in GDP since 2010.

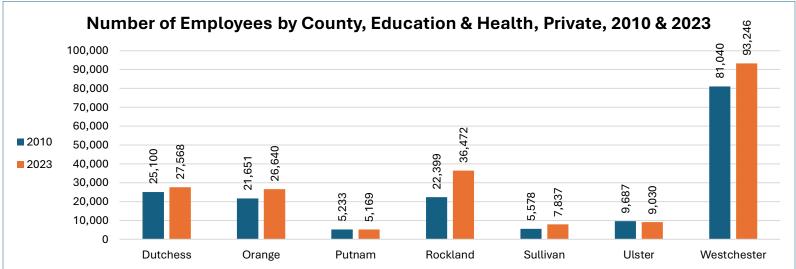
County	Sector (bolded) & Subsectors	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Putnam	Professional & Business Services	\$242.7M	\$253.7M	\$242.3M	\$251.8M	\$83.9M	\$279.8M	\$274.7M	\$282.4M	\$288.8M	\$305.8M	\$188.4M	\$206.2M	\$394.3M	\$450.5M
	Professional, scientific, and technical services	\$157.1M	\$165.9M	\$161.1M	\$161.5M	(D)	\$180.9M	\$180.6M	\$187.3M	\$188.5M	\$189.2M	\$188.4M	\$206.2M	\$248.4M	\$274.4M
	Management of companies and enterprises	\$3.0M	\$3.4M	\$1.9M	\$6.6M	(D)	\$12.5M	\$10.0M	\$8.8M	(D)	\$12.1M	(D)	(D)	\$20.0M	\$43.0M
	Administrative and support, and waste management and remediation services	\$82.6M	\$84.5M	\$79.3M	\$83.8M	\$83.9M	\$86.5M	\$84.2M	\$86.2M	(D)	\$104.5M	(D)	(D)	\$125.8M	\$133.0M

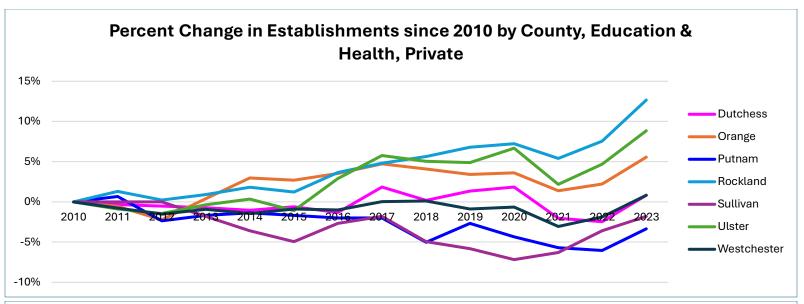
⁽D) indicates the data was not available to avoid the disclosure of confidential information. Subsectors are parts of the sector, which add up to the sector's total.

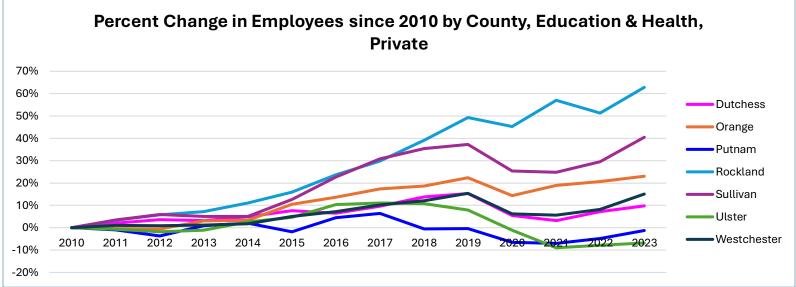
Education & Health

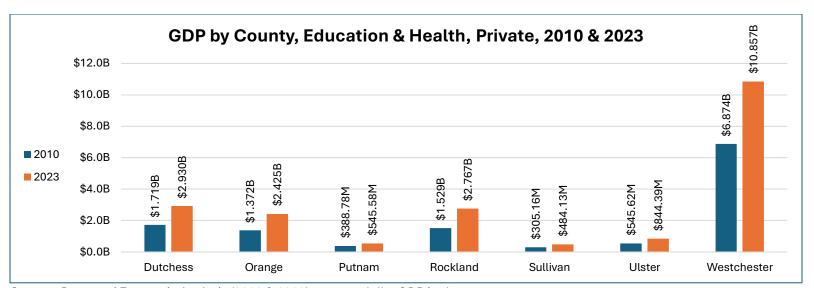
Major NAICS Codes: 61: Educational services; 62: Health care and social assistance



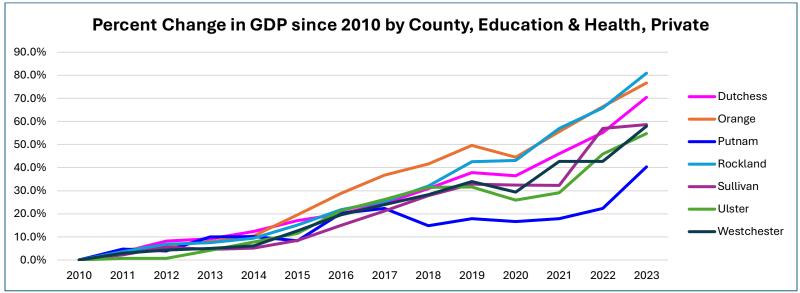








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



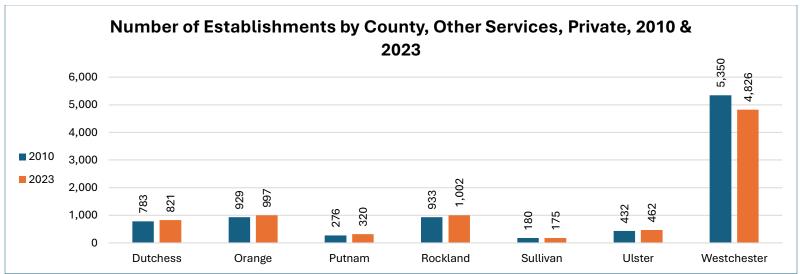
Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

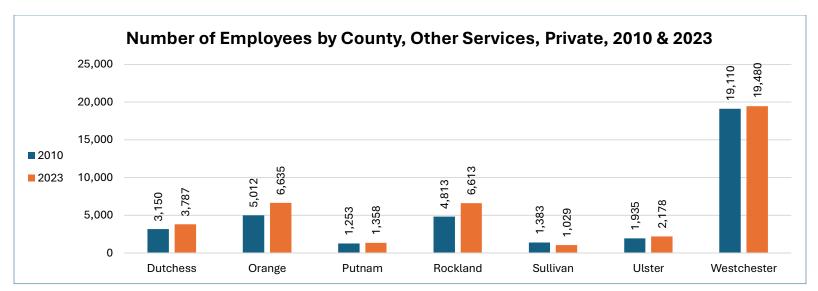
The first pair of graphs above show the number of Education & Health establishments and employees for the Mid-Hudson Region's counties. The second pair show the percentage change in establishments and employees since 2010. The third pair of graphs above show

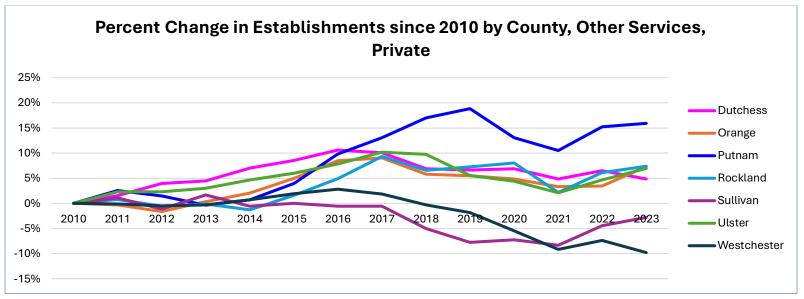
the total sector GDP in 2010 and 2023 and the percentage change in sectors' GDP since 2010, by county. Early on, many of the counties were mostly flat in terms of establishments and employee numbers clustered together in their gains early on with all counties positive as of 2014. As time goes on, there is a variance in the performance of counties for employees. All counties saw losses during the pandemic, and not all of the counties recovered in this sector. However, in terms of the sector's GDP, all the counties have seen increases since 2010 and since the pandemic.

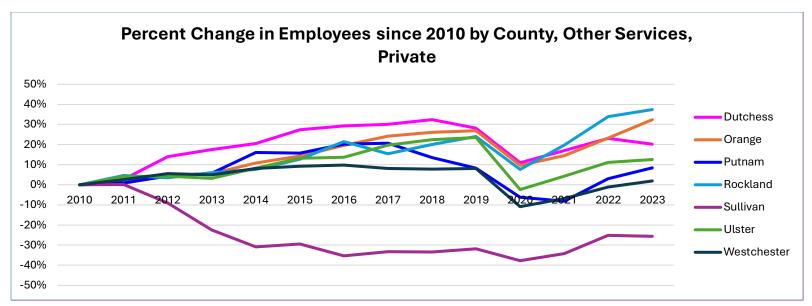
Other Services

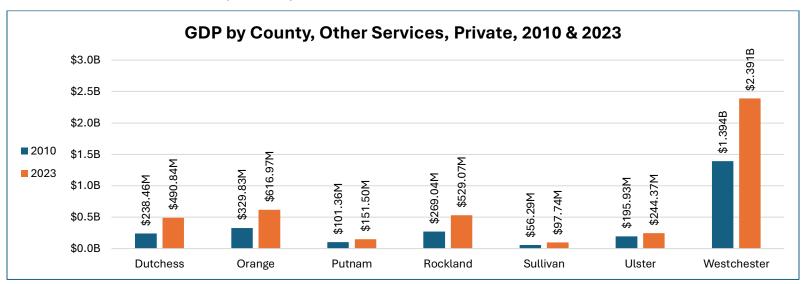
Major NAICS Codes: 81: Other services (except public administration)



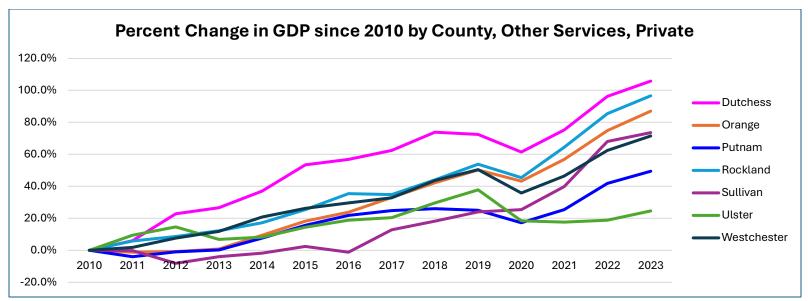








Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



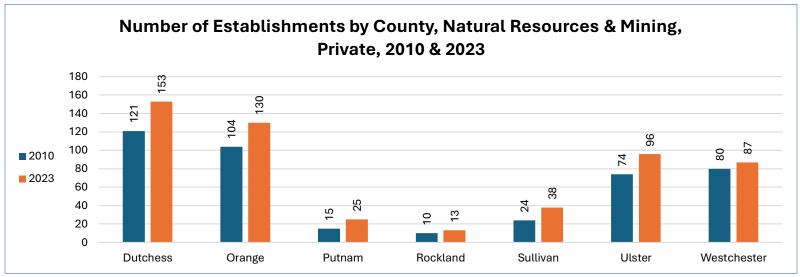
Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

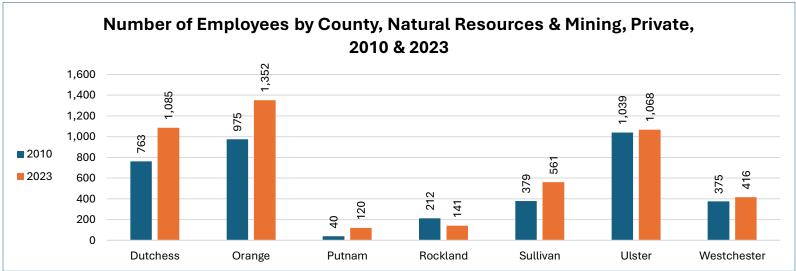
The first pair of graphs above show the number of Other Services¹ establishments and employees for the Mid-Hudson Region's counties. The second pair show the percentage change in establishments and employees since 2010. The third pair of graphs above show the total sector GDP in 2010 and 2023, and percentage change in sectors' GDP since 2010, by county. Five of the seven counties increased the number of establishments since 2010 hovering around 5% by 2023. Two counties however decreased the number of establishments before 2020 and have not gotten back to 2010 numbers. In terms of employees, almost all counties gained employees. Sullivan, despite almost returning to 0% since 2010 in terms of establishments, saw a decrease in Other Services employees of over 25%. All of the counties since 2010 saw increases in this sector's GDP, with Dutchess more than doubling its Other Services' GDP from 2010.

¹ The Other Services (except Public Administration) sector comprises establishments engaged in providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, and providing drycleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services. Source: https://www.bls.gov/iag/tgs/iag81.htm.

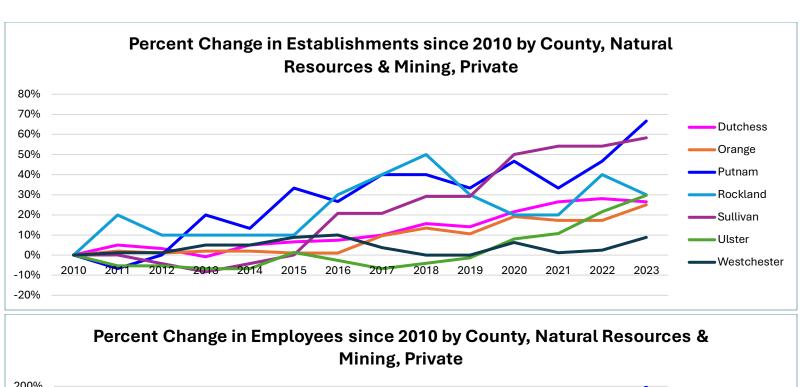
Natural Resources & Mining

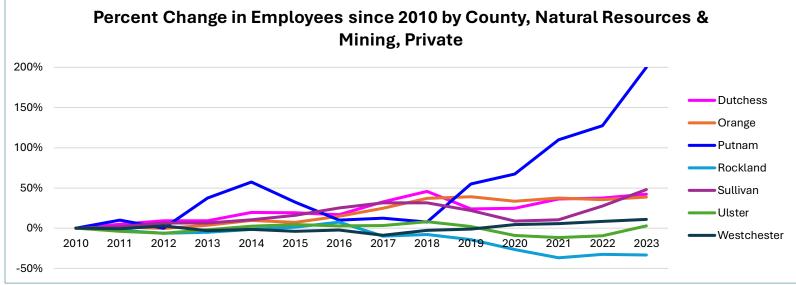
Major NAICS Codes: 11: Agriculture, forestry, fishing, and hunting; 21: Mining, quarrying, and oil and gas extraction



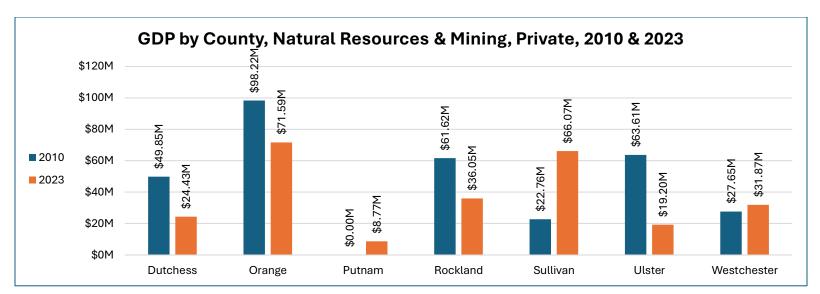


Source: US Bureau of Labor Statistics (2010 & 2023).

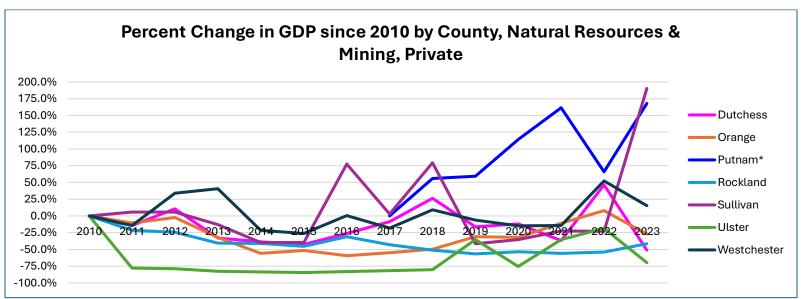




Source: US Bureau of Labor Statistics (2010-2023).



Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



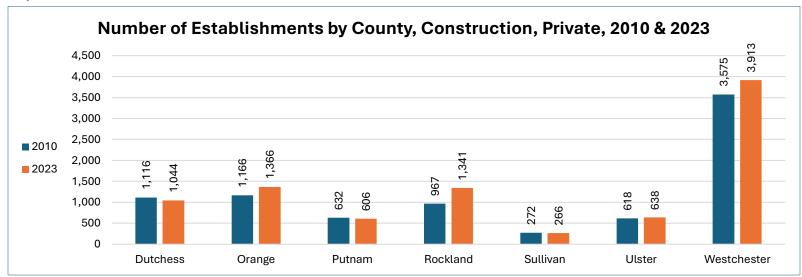
Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP is shown.

^{*}The data did not show any GDP for Putnam County in this sector before 2017; 2017 is used as the baseline instead of 2010.

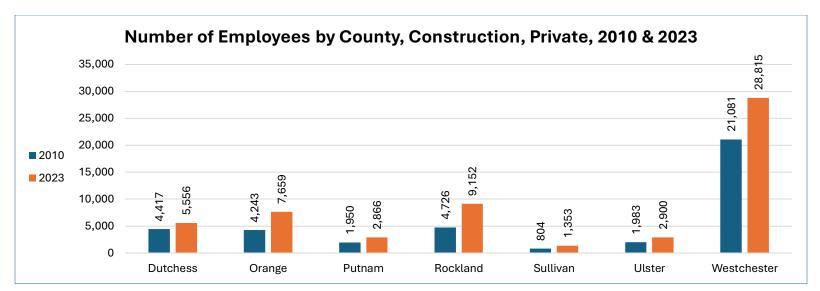
The first pair of graphs above show the number of Natural Resources & Mining establishments and employees for the Mid-Hudson Region's counties. The second pair show the percentage change in establishments and employees since 2010. The third pair of graphs above show the total sector GDP in 2010 and 2023, and percentage change in sectors' GDP since 2010, by county. Although Putnam has had an increase of 200% since 2010 of employees and a 66% increase in the number of establishments, they still have fewer establishments and employees than most, if not all, of the other counties. Many of the other counties have larger gains in terms of raw numbers instead of percentage than Putnam. In this timeframe, the only County to experience job loss in this sector was Rockland. Although GDP for the sector in the Region has decreased since 2010, the sector is the smallest and makes up less than half a percent of the Region's total GDP.

Construction

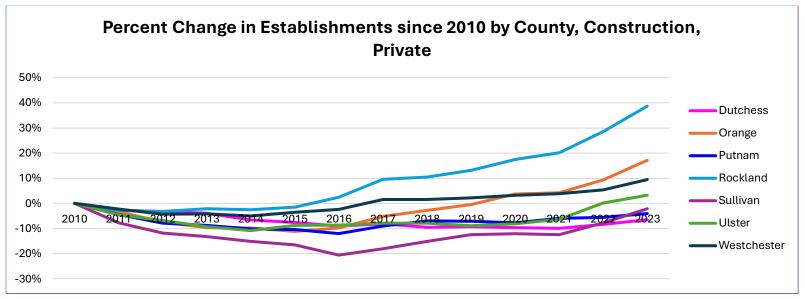
Major NAICS Codes: 23: Construction



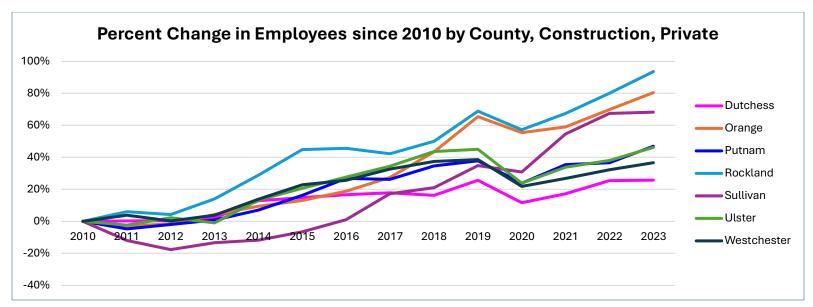
Source: US Bureau of Labor Statistics (2010 & 2023).



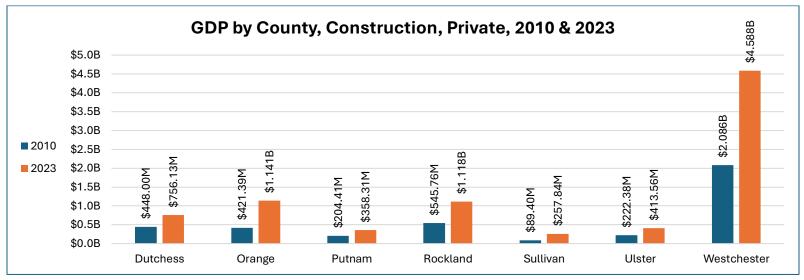
Source: US Bureau of Labor Statistics (2010 & 2023).



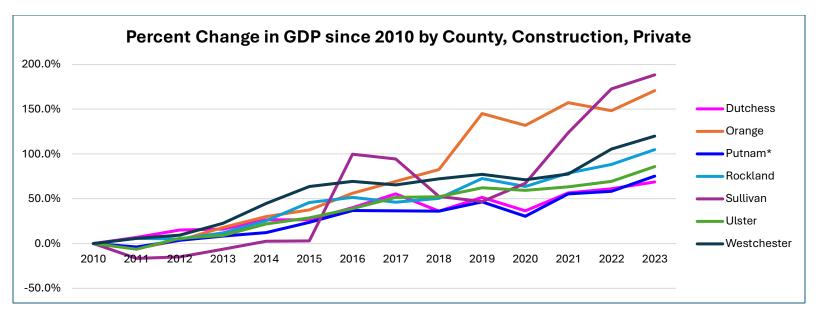
Source: US Bureau of Labor Statistics (2010-2023).



Source: US Bureau of Labor Statistics (2010-2023).



Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

*In the bottom graph, Putnam County's missing 2017 data was incorporated into the line graph using the linear interpolation method. A complete breakdown of the sector is provided on the table below.

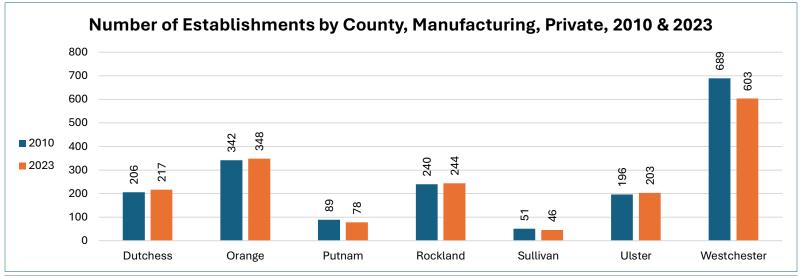
The first pair of graphs above show the number of Construction establishments and employees for the Mid-Hudson Region's counties. The second pair show the percentage change in establishments and employees since 2010. The third pair of graphs above show the total sector GDP in 2010 and 2023, and percentage change in sectors' GDP since 2010, by county. Across the seven counties, the number of employees rose by at least 20% since 2010 with Rockland nearly doubling in size. However, many counties saw decreases in establishments since 2010, but each county decreased by less than 10%. Rockland also led growth in establishments since 2010. All counties have seen GDP growth since 2010 despite Construction GDP slowing in nearly all counties in 2020.

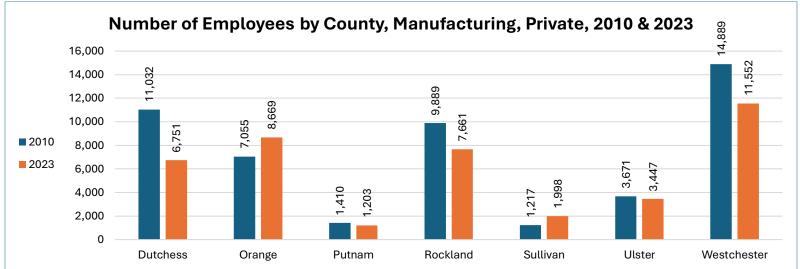
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Putnam	\$204.4M	\$196.5M	\$212.0M	\$221.5M	\$229.3M	\$253.1M	\$280.1M	(D)	\$278.2M	\$299.3M	\$266.3M	\$317.5M	\$323.4M	\$358.3M

(D) indicates the data was not available to avoid the disclosure of confidential information. Construction has no subsectors.

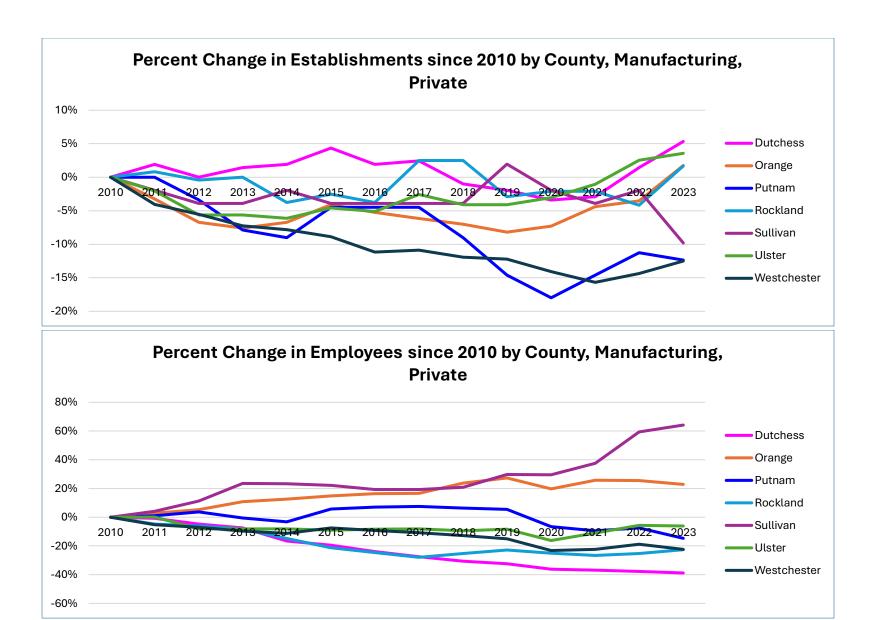
Manufacturing

Major NAICS Codes: 31-33 (Manufacturing)

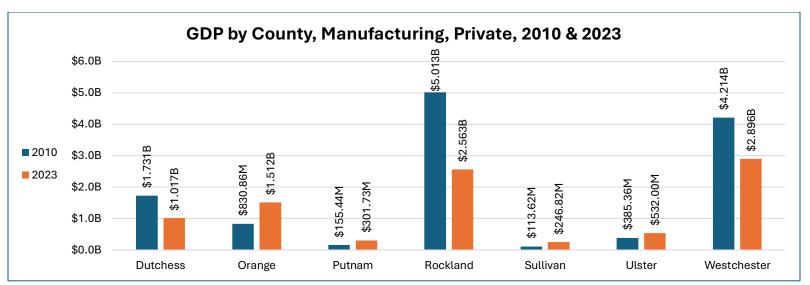




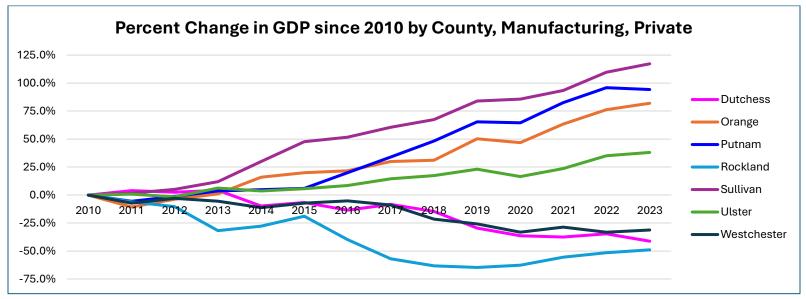
Source: US Bureau of Labor Statistics (2010 & 2023).



Source: US Bureau of Labor Statistics (2010-2023).



Source: Bureau of Economic Analysis (2010 & 2023); current-dollar GDP is shown.



Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

*In the bottom graph, Putnam County's missing 2014, 2016, and 2017 data was incorporated using the linear interpolation method. A complete breakdown of the sector is provided on the table below.

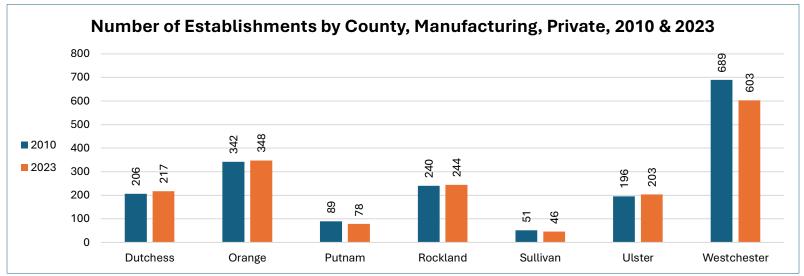
The first pair of graphs above show the number of Manufacturing establishments and employees for the Mid-Hudson Region's counties. The second pair show the percentage change in establishments and employees since 2010. The third pair of graphs above show the total sector GDP in 2010 and 2023, and the percentage change in sectors' GDP since 2010, by county. Sullivan saw an increase in employees by over 60%, but saw a decrease in establishments by almost 10%. Five counties saw decreases in employees, but four counties saw increases in establishments. The counties with the largest Manufacturing GDP have all seen decreases since 2010. The other counties saw steady growth despite the pandemic.

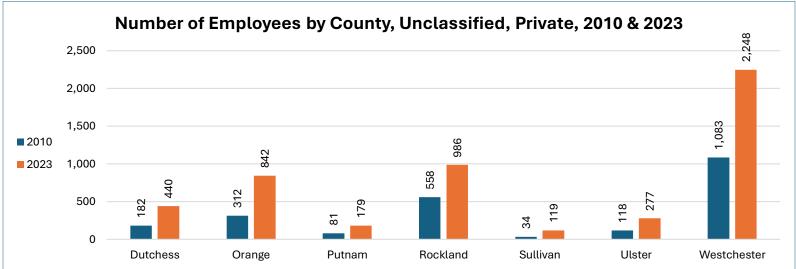
County	Sector (bolded) & Subsectors	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	Manufacturing	\$155.4M	\$146.7M	\$153.7M	\$161.1M	(D)	\$164.5M	(D)	(D)	\$230.2M	\$256.9M	\$255.7M	\$283.8M	\$304.5M	\$301.7M
Putnam	Durable goods manufacturing	\$104.6M	\$117.5M	\$132.7M	\$131.0M	(D)	\$129.9M	(D)	(D)	\$153.1M	\$154.1M	\$142.0M	\$140.5M	\$160.5M	\$156.4M
Putilalii	Nondurable goods manufacturing	\$50.9M	\$29.2M	\$20.9M	\$30.1M	(D)	\$34.6M	(D)	(D)	\$77.1M	\$102.8M	\$113.6M	\$143.3M	\$143.9M	\$145.3M

⁽D) indicates the data was not available to avoid the disclosure of confidential information. Subsectors are parts of the sector, which add up to the sector's total.

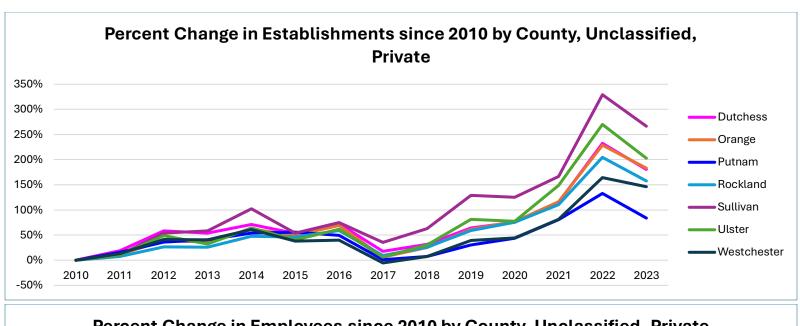
Unclassified

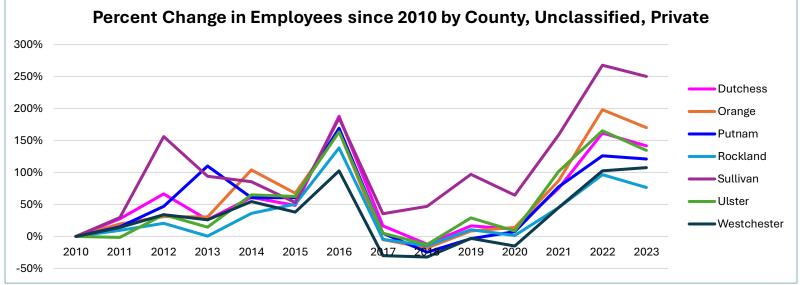
Major NAICS Codes: 999999 (This NAICS code is mostly used for newer businesses that have not yet determined their NAICS code.)





Source: US Bureau of Labor Statistics (2010 & 2023).





Source: US Bureau of Labor Statistics (2010-2023).

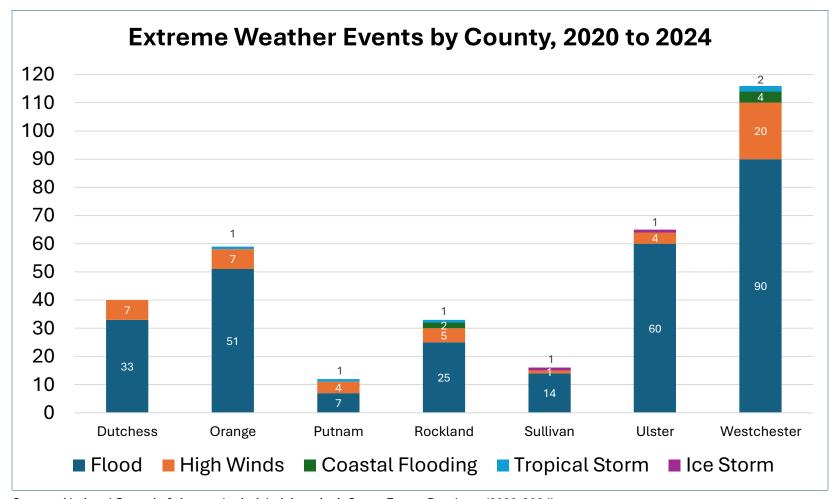
The first pair of graphs above show the number of Unclassified establishments and employees for the Mid-Hudson Region's counties. The second pair show the percentage change in establishments and employees since 2010. As noted above, Unclassified establishments

tend to be newer that do not have the NAICS code determined yet. When they are, they are added into their proper sector data. This data still shows how many new businesses are being born in each county. As a quirk of the sector, frequently the number of establishments outnumber the number of employees in any given year or county. As a Region, there was only one year where employees of Unclassified establishments outnumbered the establishments, caused by a high outlier in Rockland County. GDP graphs were not developed for the Unclassified categorization since the Bureau of Economic Analysis does not have an Unclassified category.

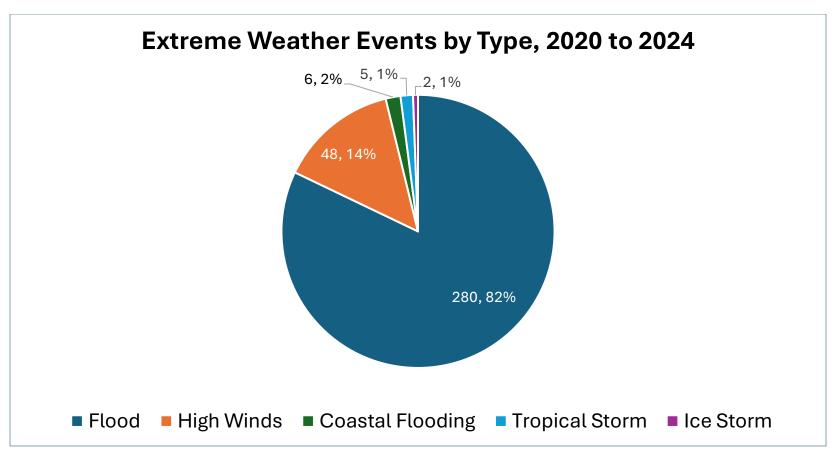
Extreme Weather Risks

Public input relevant to this section appears in the Resilience section of Appendix. Public Input. It was provided by Commenter #3.

Extreme Weather



Source: National Oceanic & Atmospheric Administration's Storm Events Database (2020-2024).



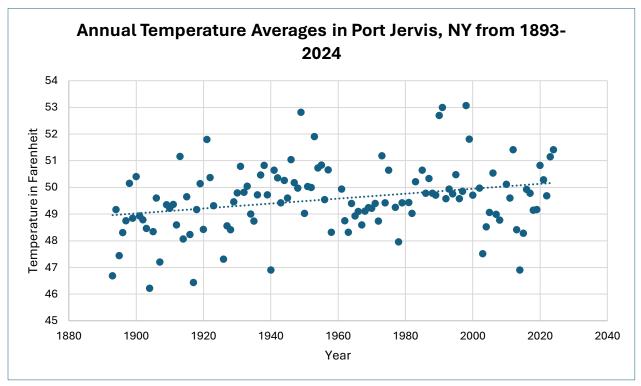
Source: National Oceanic & Atmospheric Administration's Storm Events Database (2020-2024).

Note: Both graphs contain flood and flash flood data contained within the data group "Flood."

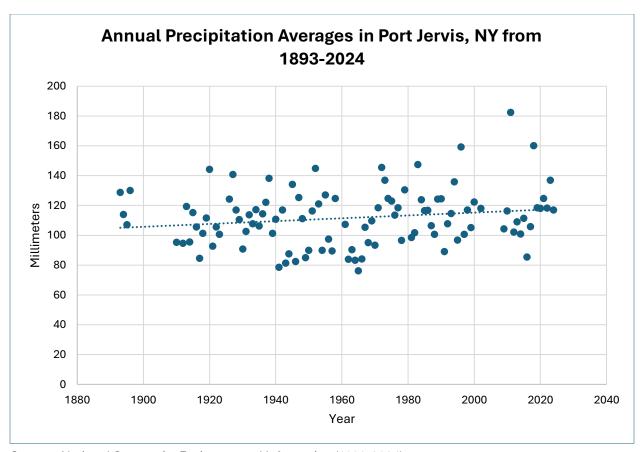
The first graph shows the number of extreme weather events in each county by how many events happen. For almost all counties, the most frequent event that occurred was floods. Westchester had the most events occur throughout 2020-2024 with 116. Sullivan County, which is the second largest of the seven counties in terms of square miles, had the fewest events at 16.

The second graph shows the split of how many events occurred in the Region. Floods make up 82% of all events in the Region between 2020-2024. High winds made up 14% of all events.

Precipitation



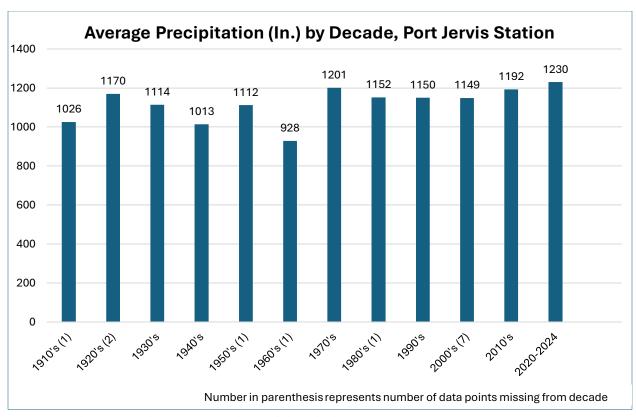
Source: National Centers for Environmental Information (1893-2024).



Source: National Centers for Environmental Information (1893-2024).

The above scatterplots show the increasing overall average annual temperature and precipitation in Port Jervis, NY from 1893 to 2024. This has implications for managing heat- and flood-related risks. These findings are observed across the Northeast and at weather stations throughout New York.² The Port Jervis weather station was selected due to the completeness of the data.

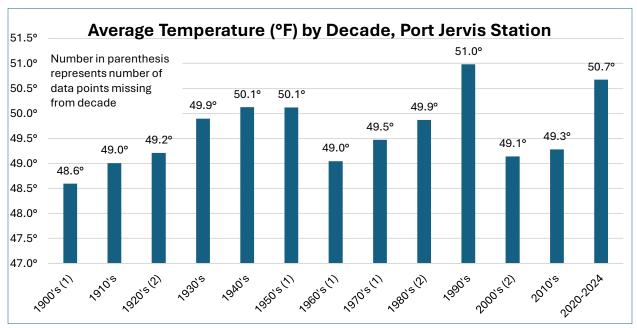
² Horton, R., D. Bader, C. Rosenzweig, A. DeGaetano, and W.Solecki. 2014. Climate Change in New York State: Updating the 2011 ClimAID Climate Risk Information. New York State Energy Research and Development Authority (NYSERDA), Albany, New York.



Source: National Oceanic & Atmospheric Administration's Storm Events Database (1910-2024).

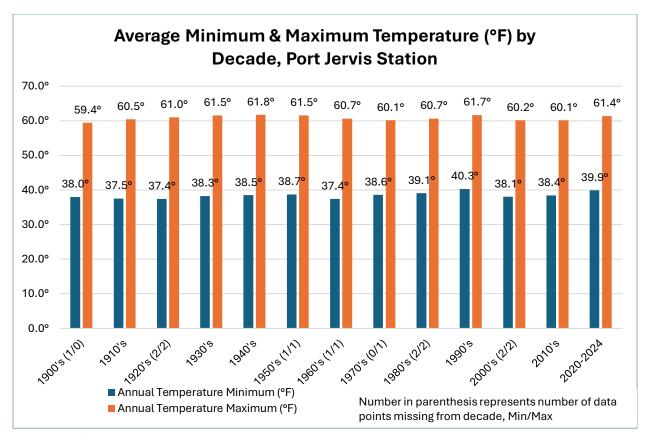
The graph above shows the average precipitation by decade for the Port Jervis Station for 1900-2024. Currently through 2024, the 2020's have had more precipitation than any other decade, increasing by over 200 inches since the 1900's. This has implications for managing flood-related risks.

Temperature



Source: National Oceanic & Atmospheric Administration's Storm Events Database (1900-2024).

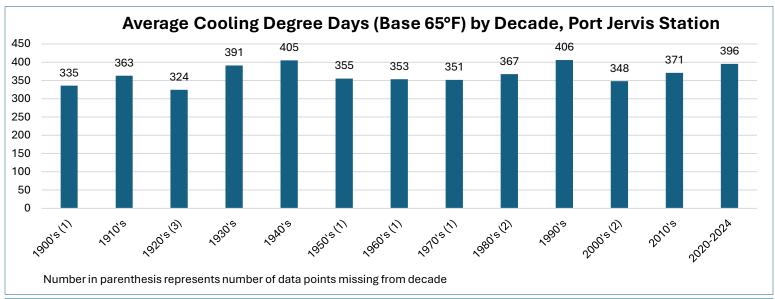
The graph above shows the average decadal temperature for the Port Jervis Station from 1900-2024. The data is average by decade to account for outliers in any given year. Since the 1900s the average temperature increased by 0.7 degrees compared to 2010s data and by 2.1 degrees compared to the data collected so far this decade. This has implications for managing heat-related risks.

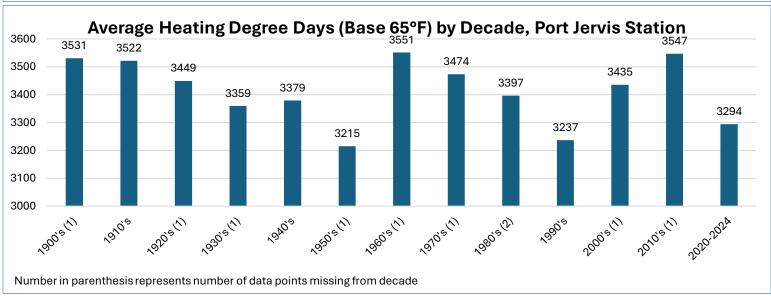


Source: National Oceanic & Atmospheric Administration's Storm Events Database (1900-2024).

The graph above shows the decadal average minimum and maximum temperatures from 1900-2024. Since the 1900's, the average decadal minimum temperature has increased by 1.9 degrees, and the average decadal maximum temperature has increased by 2.0 degrees compared to data collected for the 2020's. Although the current decade is hotter than the 1900's, it is not the hottest on record. The 1990's had the highest average in minimum temperatures and the 1940's had the highest average in maximum temperatures. This has implications for managing heat-related risks.

Heating & Cooling Degree Days





Source: National Oceanic & Atmospheric Administration's Storm Events Database (1900-2024).

The graphs above show the average number of cooling degree days and heating degree days (base of 65°F) for the Port Jervis Station between 1900-2024. The Region, with its average temperature hovering between 48 and 51 degrees, historically has had more heating degree days than cooling. However, the number of heating degree days has decreased from over 3,500 to just under 3,300, and the number of cooling degree days has increased from 335 to 396. Background on Degree Days is provided below.

Background on Degree Days:

Degree days are calculated by finding the difference between the average temperature and the base temperature (65°F in this case). By subtracting the smaller of the two numbers from the larger, you either calculate the number heating or cooling degree days for that day. By calculating this every day, you get the sum of both for the year. Cooling degree days are calculated when the average temperature is higher than the base, as one would need to cool the temperature down to get to the base. Heating degree days are calculated when the average temperature is lower than the base, as one would need to heat the temperature up to get to the base.

Any singular day can have multiple heating degree days or cooling degree days. As an example, assume the average temperatures for two days were measured as 35°F and 95°F, both 30° from the 65°F base. In both cases, the number of degree days for each day the measurement was taken would be 30: 95° - 65° = 30 cooling days, or 65° - 35° = 30 heating days

When determining whether to use heating or cooling degree days, ask yourself if you would need the average temperature to use a heater to get to 65°F (heating), or use an air-conditioner to get to 65° (cooling).

Community Resilience

COMMUNITY RESILIENCE RATINGS (2023)						
	Distressed Population					
	% (+-)	Population				
Dutchess	17.6% (+- 2.5%)	284,948				
Orange	18.2% (+- 2.3%)	401,223				
Putnam	14.6% (+- 2.9%)	97,378				
Rockland	24.1% (+- 2.9%)	338,966				
Sullivan	21.7% (+- 3.2%)	77,209				
Ulster	21.0% (+- 2.7%)	176,010				
Westchester	21.3% (+- 2.5%)	977,381				
Source: US Census (2023).						

The table above shows the distressed populations as determined by the US Census for each of the counties. An explanation of the Community Resilience Estimates is provided below as well an explanation of their measures. The important measure they focus on is "vulnerable populations" which is defined as someone who is experiencing 3 of the 10 social distress components listed below.

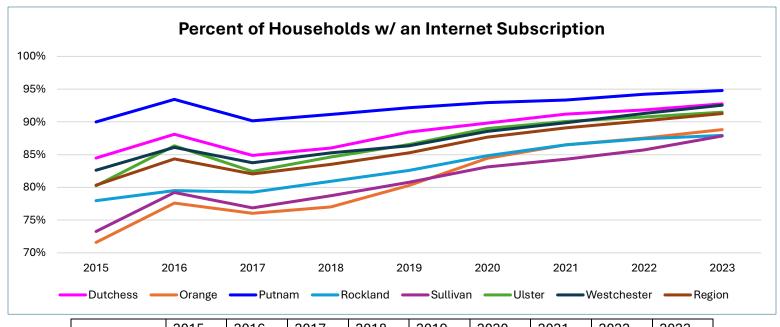
The Community Resilience Estimates (CRE) program measures the social distress of areas to disasters using ten resilience-related components of social distress. Based on U.S. Census Bureau microdata and small area modeling techniques, the CRE classifies people by the number of components: low (zero components), moderate (one to two components), and high (three or more components).

Individual and household characteristics from the 2023 American Community Survey were modeled in combination with data from the Population Estimates Program to create the CRE.

Components of social distress from the 2023 ACS include: income to poverty ratio; single or zero caregiver household; crowding; communication barrier; households without full-time, year-round employment; disability; no health insurance; aged 65 and over; no vehicle access; no broadband internet access.

Infrastructure

Internet

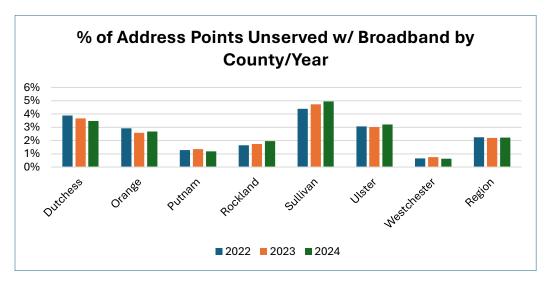


	2015	2016	2017	2018	2019	2020	2021	2022	2023
Dutchess	84.5%	88.1%	84.9%	86.0%	88.4%	89.8%	91.2%	91.8%	92.8%
Orange	71.6%	77.6%	76.0%	77.0%	80.3%	84.4%	86.5%	87.5%	88.8%
Putnam	90.0%	93.4%	90.2%	91.1%	92.2%	93.0%	93.4%	94.2%	94.8%
Rockland	78.0%	79.5%	79.2%	80.9%	82.6%	84.8%	86.5%	87.4%	87.9%
Sullivan	73.3%	79.2%	76.9%	78.7%	80.8%	83.1%	84.3%	85.7%	87.9%
Ulster	80.2%	86.3%	82.4%	84.7%	86.5%	89.0%	90.1%	90.8%	91.5%
Westchester	82.6%	86.1%	83.7%	85.3%	86.4%	88.6%	89.9%	91.3%	92.6%
Region	80.3%	84.4%	82.1%	83.5%	85.3%	87.7%	89.1%	90.2%	91.3%
		• •			0.15 00.10			/aa./= aa.a	- 1

Source: American Community Survey 1-Year Estimates (2015-2016) and 5-Year Estimates (2017-2023).

The graph above shows the percentage of households within the counties that have some form of internet subscription. As time goes on across all counties, the percentage of households that had an internet subscription increased. The largest increases came from Orange (17.2% increase), Sullivan (14.6 pp increase), and Ulster (11.2 pp increase) with the Region increasing by 11% since 2015. These across-the-board increases show the increasing necessity of the internet as a utility.

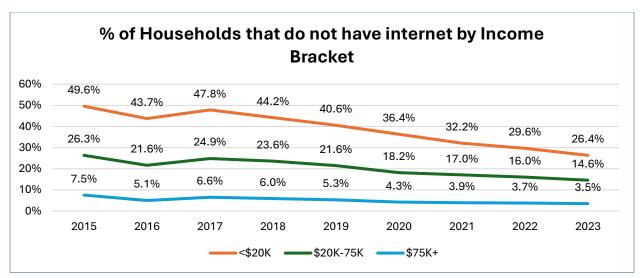
Note: The data in 2015 and 2016 are based on ACS 1-year estimates whereas the rest are based on ACS 5-year estimates.



% Address Points Unserved								
	2022	2023	2024					
Dutchess	3.89%	3.67%	3.47%					
Orange	2.93%	2.59%	2.69%					
Putnam	1.27%	1.34%	1.17%					
Rockland	1.65%	1.73%	1.96%					
Sullivan	4.39%	4.72%	4.96%					
Ulster	3.06%	3.01%	3.20%					
Westchester	0.66%	0.75%	0.64%					
Region	2.24%	2.20%	2.21%					
Source: New York State Broadband Maps								
(2022-2024).								

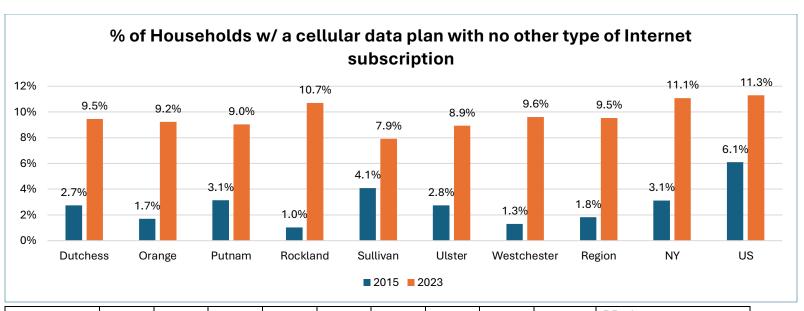
The graph above shows the percentage of address points unserved by each county and the Region for the span of 2022-2024. The number of address points unserved in the Region has gone down slightly over the past three years. However, counties like Rockland, Sullivan and Ulster have seen increases in the number of address points unserved with broadband. This could in part be due to the increased awareness of this issue and concerted effort to ensure the addresses unserved are accurate as a first step to make sure broadband is available to all.

The data above is from a newer survey with data dating back only to 2022.



Source: American Community Survey 1-Year Estimates (2015-2016) and 5-Year Estimates (2017-2023).

The graph above shows the percentage of households that have no internet access separated by income. In 2015, the percentage of households without internet access was much higher than in 2023, with almost half of households in the lowest income bracket not having internet access. As time went on, the percentage of households with no internet access decreased across all income brackets, with each decreasing by about 50%.



	2015	2016	2017	2018	2019	2020	2021	2022	2023	PP change 2015-2023
Dutchess	2.75%	5.55%	3.39%	4.21%	5.90%	7.44%	8.12%	8.64%	9.45%	+6.70%
Orange	1.70%	6.24%	3.17%	4.22%	5.42%	7.31%	7.68%	8.70%	9.24%	+7.54%
Putnam	3.15%	9.95%	5.24%	6.28%	7.44%	8.38%	8.12%	8.25%	9.04%	+5.90%
Rockland	1.04%	6.46%	3.79%	4.94%	6.47%	8.61%	9.53%	9.97%	10.71%	+9.67%
Sullivan	4.09%	7.20%	5.02%	4.93%	5.67%	6.25%	6.47%	7.04%	7.93%	+3.83%
Ulster	2.75%	7.12%	4.20%	5.24%	6.03%	7.32%	7.74%	8.49%	8.93%	+6.18%
Westchester	1.30%	7.13%	3.61%	4.95%	6.59%	8.23%	8.75%	9.11%	9.61%	+8.32%
Region	1.82%	6.82%	3.70%	4.82%	6.26%	7.89%	8.40%	8.93%	9.52%	+7.70%
Source: Americ	Source: American Community Survey 1-Year Estimates (2015-2016) and 5-Year Estimates (2017-2023).									

Note: The data in 2015 and 2016 are based on ACS 1-year estimates whereas the rest are based on ACS 5-year estimates.

Note: 2015 data was phrased as "Mobile broadband alone or with dialup" whereas 2016 on was "Cellular data plan with no other type of Internet subscription."

The graph above shows the percentage of households that have a cellular data plan and no other type of internet subscription for the years 2015 and 2023. As technology has evolved more people across the Region have been more frequently only paying for cellular plans. In 2015, the Region was under 2% of households but has now ballooned to 9.5% of households. While counterintuitive compared to the decrease in households without internet subscriptions, this shows how transformational smartphone technology has become in the last decade.

Wastewater Treatment Plant Age Data

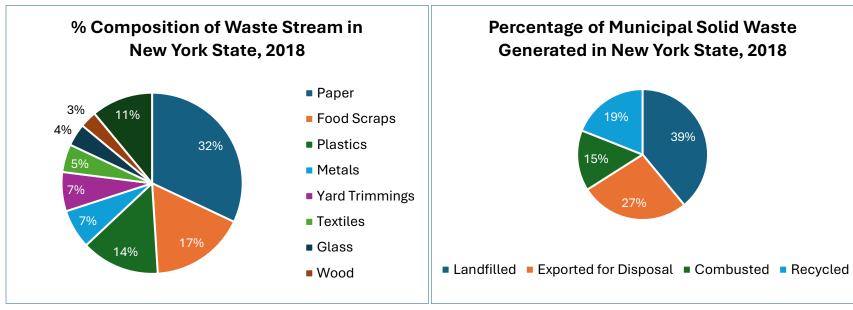
Public input was provided on wastewater infrastructure needs. It was provided by Commentor #5 and appears in the Water section of Appendix. Public Input. Public input on drinking water was also provided by Commentor #5 and appears in this same section of Appendix. Public Input. The incorporation of Commentor #5's public input into the CEDS is noted in the Water section.

County	Average Year Built	Average Age in 2024
Dutchess	1969	55
Orange	1968	56
Putnam	1977	47
Rockland	1963	62
Sullivan	1967	57
Ulster	1968	57
Westchester	1962	62
Mid-Hudson Region	1968	56

Source: New York State Department of Environmental Conservation: "Current Descriptive Data of Municipal Wastewater Treatment Plants" (2019).

The table shows the average age for wastewater treatment facilities in the Region. Many of the facilities are older and the average age of facilities is over 50 in all but in one county. For the Region, the average age of a facility is 56.

Waste

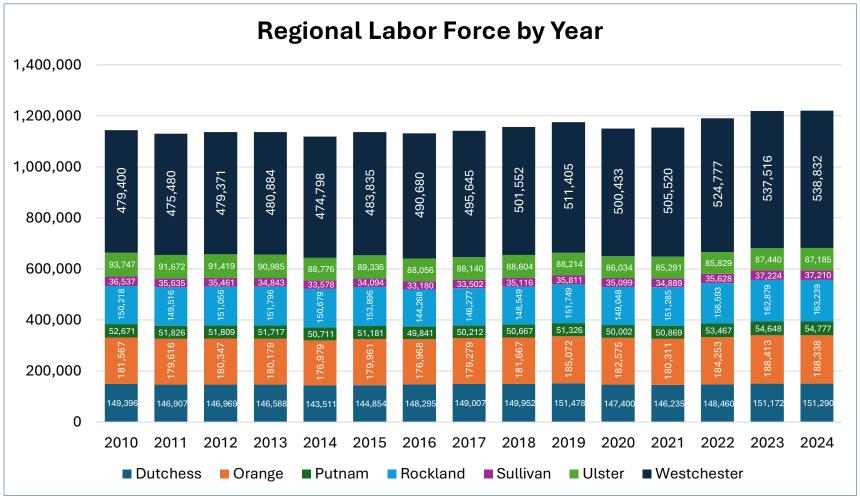


Source: NYS Department of Environmental Conservation (2018).

The graph above shows the composition of the waste stream for the State. Paper (32%) and food scraps (17%) make up almost half of the waste in New York. Among other significant contributors are plastics (14%), metals (7%), yard trimmings (7%) and textiles (5%).

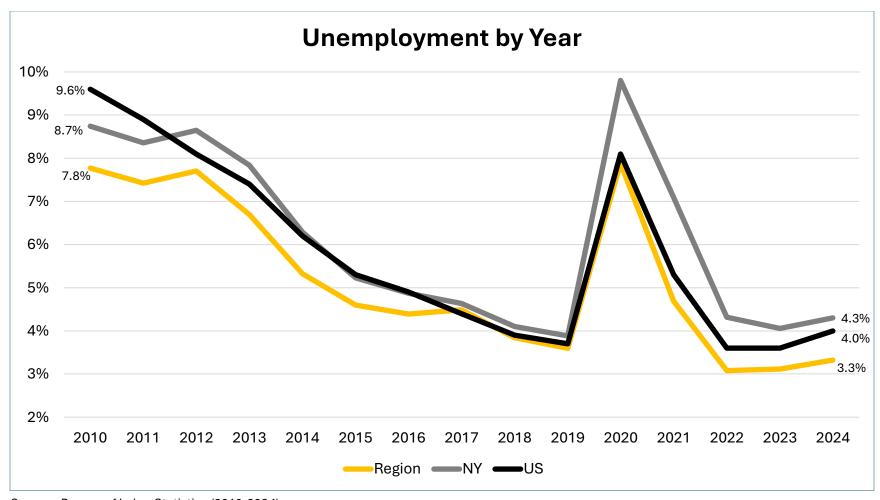
The graph above shows the ways that municipal solid waste was disposed of in the Region as of 2018. The majority of waste was landfilled in NY or exported to other states. Westchester and Dutchess County both have incinerators, and the majority of their waste is incinerated.

Economic and Labor Data



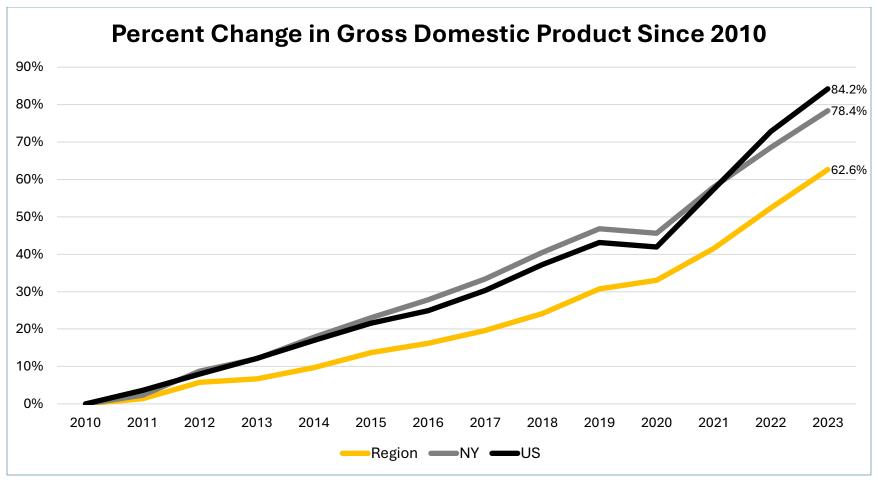
Source: Bureau of Labor Statistics (2010-2024).

The graph above shows the labor force count for each year divided by county. The Region's labor force increased from 2010 to 2024 by just over 77K. Every county saw increases in their labor force except for Ulster.



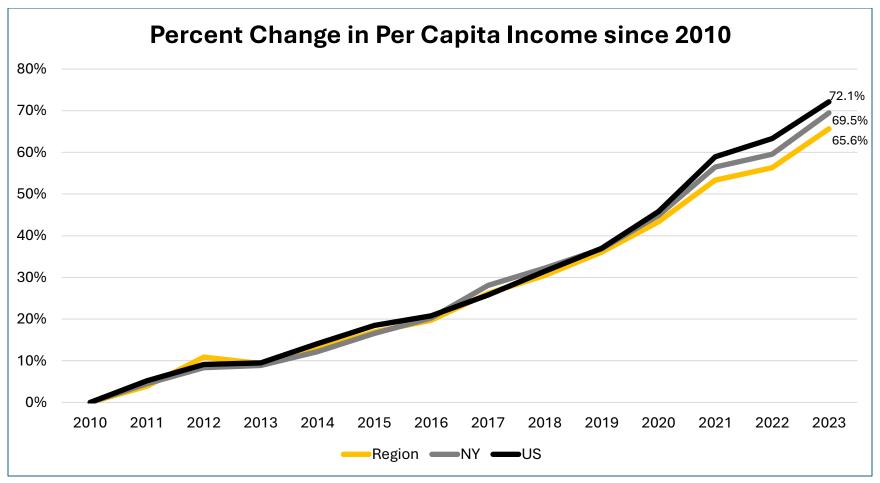
Source: Bureau of Labor Statistics (2010-2024).

The graph above shows the unemployment rate for the Region, State, and country since 2010. Throughout almost the entire timespan, the Region's unemployment rate was below the counties. For the entire timespan, the Region's unemployment rate was lower than the State's.



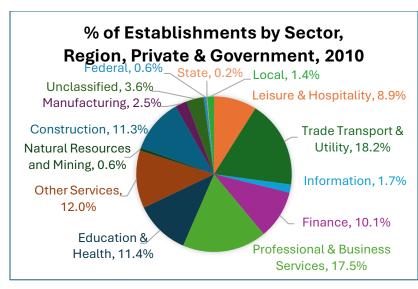
Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

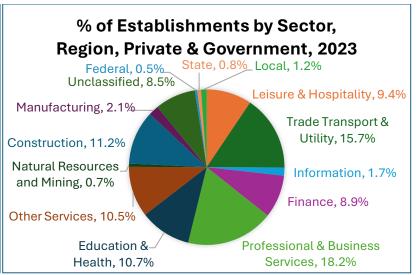
This graph shows the percentage change in GDP for the Region, State, and country since 2010. The Region's GDP increased by 63% since 2010, which is both below the State (78%) and the country (84%).

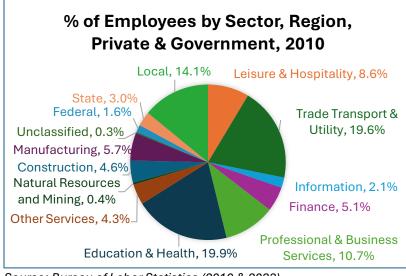


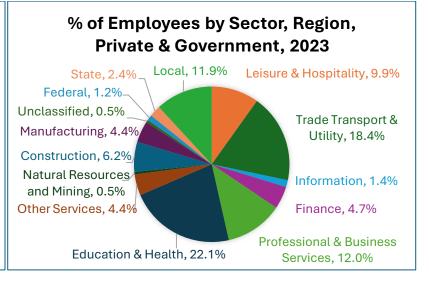
Source: Bureau of Economic Analysis (2010-2024); based on current-dollar GDP.

The graph above shows the percentage change in per capita income since 2010. Although the Region is not as high as the State or the country since 2010, its growth has been almost in line with theirs since 2010.

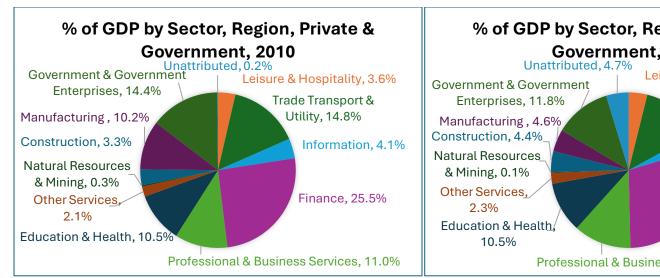


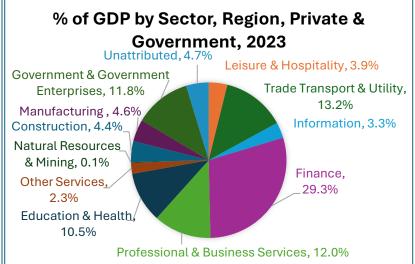






Source: Bureau of Labor Statistics (2010 & 2023).

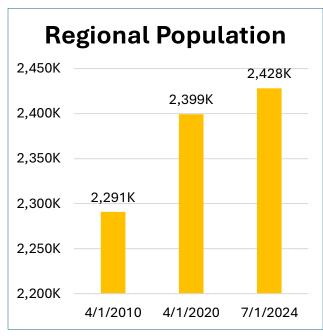


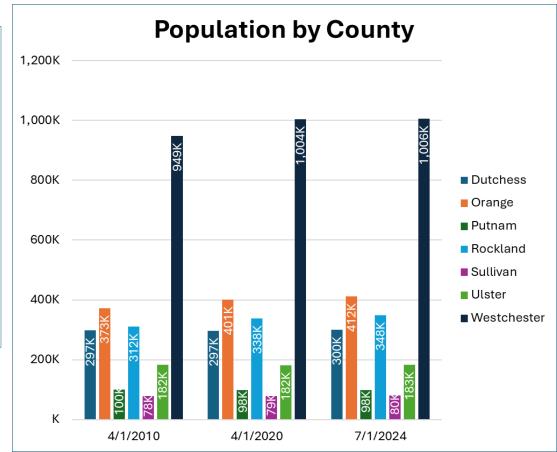


Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.

The pie charts above show the Region's 2010 and 2023 data for the percentage of establishments, employees, and GDP, broken out by sector. The Leisure & Hospitality and Professional & Business Services sectors increased across all three measures in percentage points from 2010. Some sectors experienced growth in some measures and decreases in others. For example, the Financial Activities sector decreased in establishment and employee share, but grew its GDP share by almost four percentage points. About 5% of 2023 GDP is Unattributed as certain points of data from the Bureau of Economic Analysis are not disclosed due to confidentiality concerns.

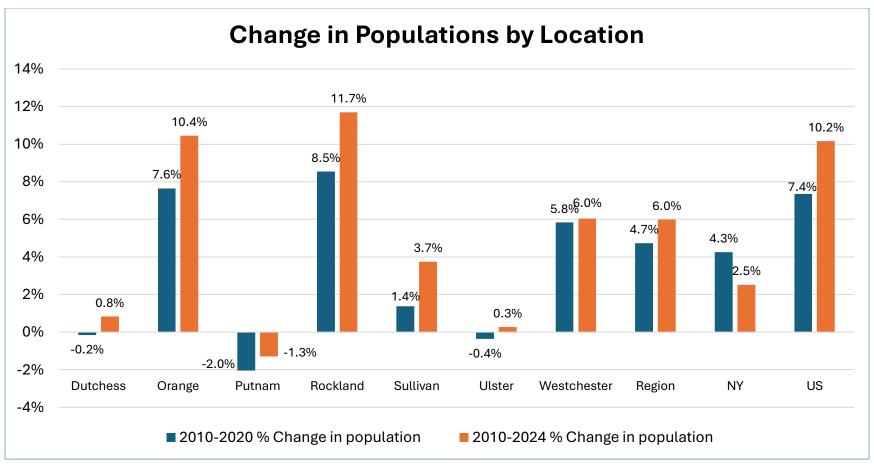
Demographic Data Population





Source: US Census (2010, 2020, & 2024).

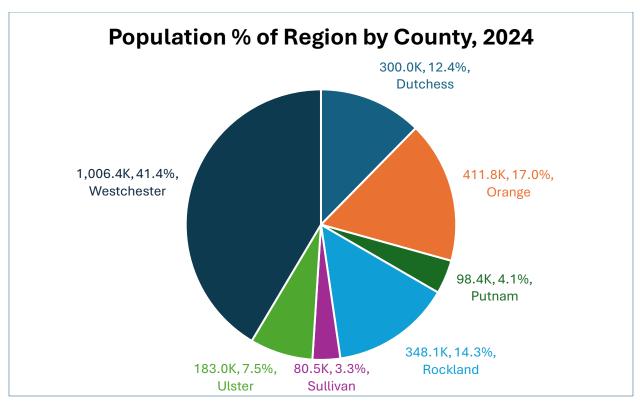
These graphs show the population in 2010, 2020, and 2024 by Region and by county. The population saw an increase of 4.7%, to 2.40M people, from 2010 to 2020. By 2024, that had increased to 2.42M people, a 5.9% increase since 2010.



Source: US Census (2010, 2020, & 2024).

This graph shows the percentage change in population from 2010-2020 and 2010-2024 for the counties of the Mid-Hudson Region, the Region, the State, and the country. The Region outpaced the State in both timeframes but was under the country's rate of growth in both timeframes. Since 2010, all counties except Putnam increased in population. Rockland experienced the largest growth at 12%.

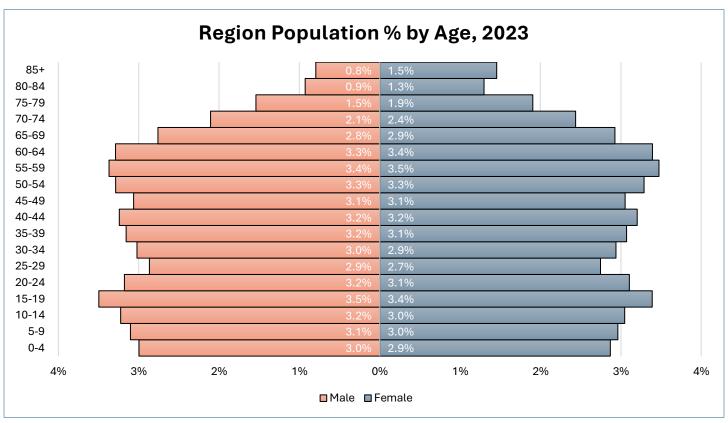
The graph above shows the population of the counties of the Mid-Hudson Region with data from the US Census Bureau. Many of the counties saw large growths in population, such as Rockland (11.7% increase since 2010), Orange (10.4%), and Westchester (6.0%). Dutchess and Ulster saw decreases in their population going into 2020 but have since recovered those losses increasing their populations since 2010. Putnam is the only county that has experienced population loss since 2010.



Source: US Census (2024).

The pie charts above show the population of the counties as a percentage of the Region in 2024.

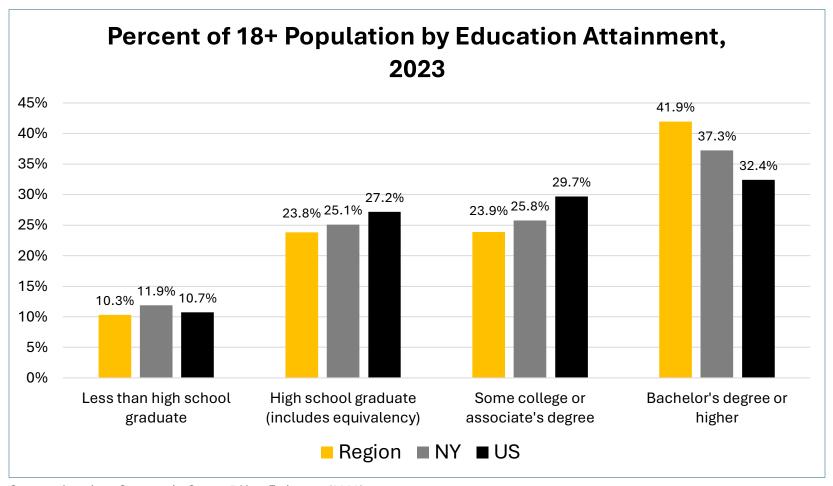
Population by Age



Source: US Census (2023).

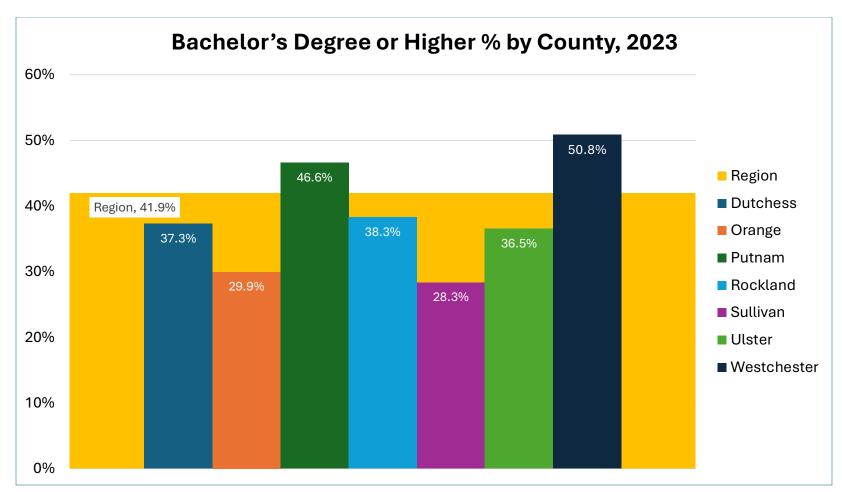
The graph above breaks down the percentage of the population that falls into 5-year brackets for age and split between male and female for 2023. Females make up 50.6% of the population in the Region. Over 63% of the population falls between the working ages of 15-64 and both 0-14 and 65+ make up about 18% of the population. As the female population skews older than the male population, it follows that the female population have a higher median age than the male population.

Population by Educational Attainment



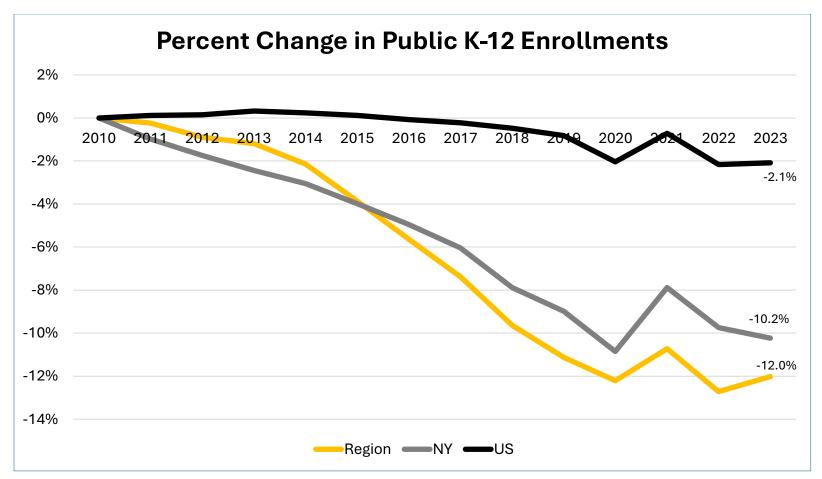
Source: American Community Survey 5-Year Estimates (2023).

This graph shows educational attainment of the 18 and older population for the Region, State, and country for 2023. The Region has a higher percentage of the population that has a bachelor's degree or higher than the State and the country.



Source: American Community Survey 5-Year Estimates (2023).

This graph shows the Mid-Hudson Region counties population percentage that has a bachelor's degree or higher. The Region's 41.9% is bolstered by Westchester, as it has 50.8% and is the most populated county in the Region.

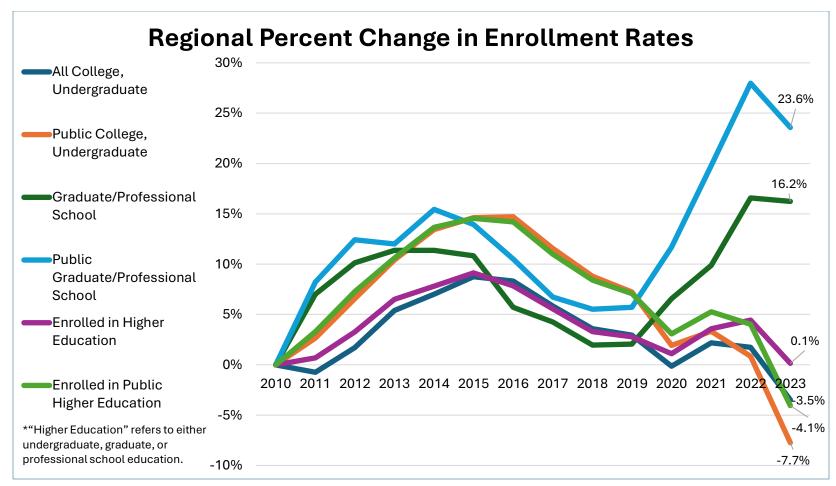


Source: American Community Survey 5-Year Estimates (2010-2023).

The graph above shows the percentage change in the number of enrollments in public K-12 education. While the country saw some minimal losses since 2010, both the State and the Region saw large decreases in enrollments, with the State decreasing 10% and the Region decreasing 12%. Although the issue of low birth rates is a global issue, the Region's birth rate since 2010 has only decreased by 1.6% in 2022 compared to the State's decrease of 16% and the country's decrease of 16%. The Congressional Budget Office projects that the US's birth rate will fall below the death rate as early as 2032³. Without a change in course, the only increases in population will come from immigration.

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³ "The Demographic Outlook: 2025-2055" Congressional Budget Office; January 2025.



Source: American Community Survey 5-Year Estimates (2010-2023).

The graph above shows the enrollment rates for higher education in the Region since 2010. Overall, the enrollment rate in higher education has remained flat since 2010, but that belies some stark trends within the data. Enrollment in higher education from public institutions and in college (both overall and public enrollment) decreased since 2010. Enrollment in graduate or professional schools has increased significantly since 2010 – mostly since 2019 – growing by 16% overall and by almost 24% in public graduate or professional school.

Commuting Patterns 2016-2020

Commuting Patterns 2016-2020											
County	Workforce	Live & Work in County	Commute In	Commute Out	Net Inflow/Outflow	% Commuting Out	Avg. Time	Top Destinations (% of Commuters/% of Workforce)			
Dutchess	143,623	93,959	25,368	49,664	-24,296	35%	32.8	1) Westchester County (30.3% / 10.5%) 2) New York County (15.0% / 5.2%) 3) Putnam County (12.1% / 4.2%) 4) Orange County (11.6% / 4.0%)			
Orange	175,734	117,798	34,971	57,936	-22,965	33%	33.3	1) New York County (18.4% / 6.1%) 2) Rockland County (15.4% / 5.1%) 3) Westchester County (12.0% / 3.9%) 4) Bergen County, NJ (10.1% / 3.3%)			
Putnam	49,590	16,322	13,525	33,268	-19,743	67%	39.3	1) Westchester County (58.8% / 39.4%) 2) New York County (14.1% / 9.5%) 3) Western Connecticut (7.9% / 5.3%) 4) Bronx County (6.3% / 4.2%)			
Rockland	142,968	88,217	32,043	54,751	-22,708	38%	31.8	1) New York County (25.5% / 9.7%) 2) Westchester County (22.9% / 8.7%) 3) Bergen County, NJ (18.1% / 6.9%) 4) Bronx County (9.2% / 3.5%)			
Sullivan	32,051	21,582	5,206	10,469	-5,263	33%	30.6	1) Orange County (55.4% / 18.1%) 2) Ulster County (9.0% / 2.9%) 3) New York County (7.9% / 2.6%) 4) Rockland County (5.0% / 1.6%)			
Ulster	83,539	56,234	13,285	27,305	-14,020	33%	28.4	1) Dutchess County (34.1% / 11.1%) 2) Orange County (33.8% / 11.1%) 3) New York County (7.7% / 2.5%) 4) Westchester County (3.8% / 1.2%)			
Westchester	469,568	294,788	157,125	174,780	-17,655	37%	34.6	1) New York County (52.6% / 19.6%) 2) Bronx County (18.9% / 7.1%) 3) Western Connecticut (8.5% / 3.1%) 4) Queens County (3.5% / 1.3%)			
Explanations	Working population living in county and working anywhere	Total population living AND working in county	Total working population living elsewhere BUT working in county	-	Difference between "Commute In" population and "Commute Out" population	Percentage of working population that is "Commuting Out"	time for workers to get to	The top 4 destinations outside the county where the "Commute Out" population goes to work. In parenthesis are 1) the percent of the "Commute Out" population that work in those locations and 2) the percent of the "Total Workforce" population that work in those locations			

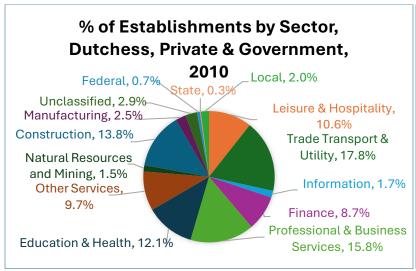
Source: NY Department of Labor with Census data from the American Community Survey 2016-2020.

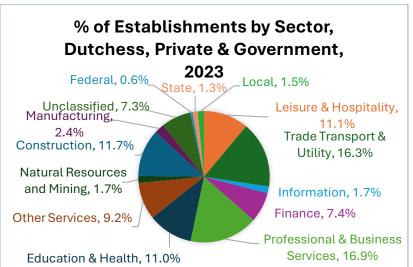
The table above shows commuter data for the counties of the Mid-Hudson Region. Each of the counties has about one third of their working population commute outside of their counties except for Putnam that has over double that rate. Counties like Putnam, Sullivan, and Westchester send more than half of their working population to one destination. Dutchess, Rockland and Ulster send over 45% of their working populations to two destinations. All the counties experience a net outflow of workers.

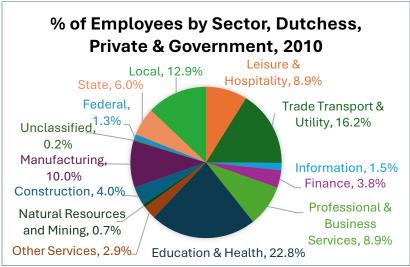
Data by County

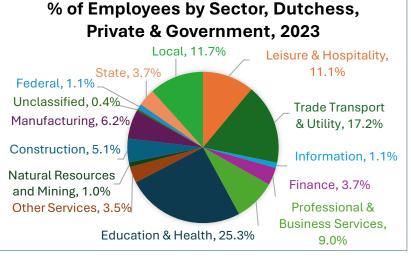
Dutchess

Sectoral Data

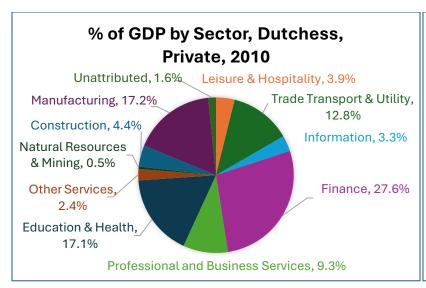


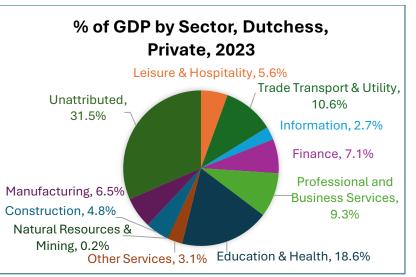






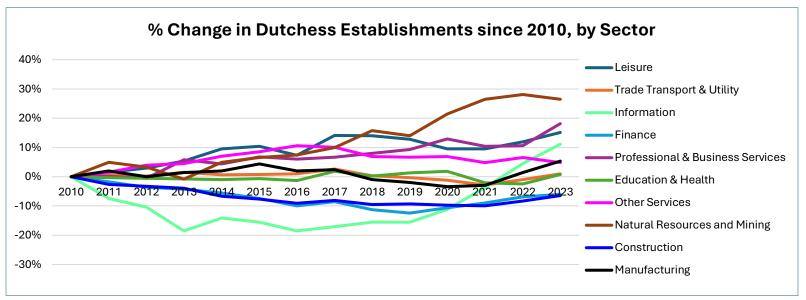
Source: Bureau of Labor Statistics (2010 & 2023). Note: The Trade, Transportation, & Utilities sector has been shortened in this section.



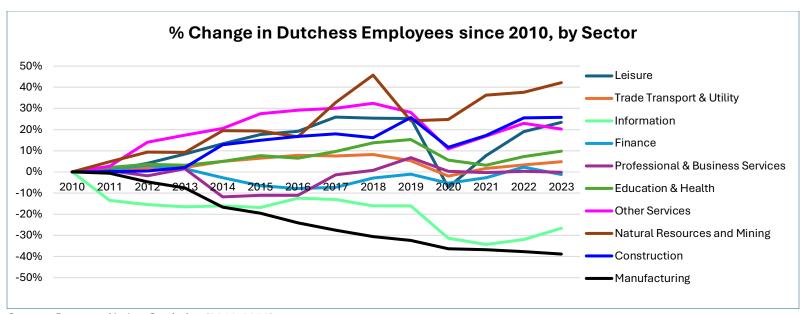


Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.

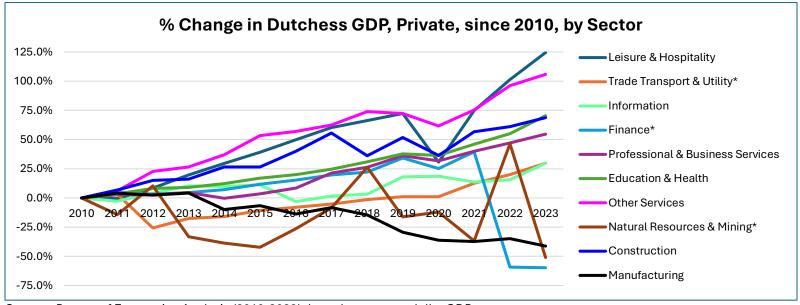
Note: Since some data is confidential at the sector level, but included at higher aggregates, there is a portion of a county's GDP that is not attributed to its sector. This portion is shown in "Unattributed". A table is provided below for the sectors and subsectors.



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Economica Analysis (2010-2023); based on current-dollar GDP.

*The Financial Activities, Natural Resources & Mining, and Trade, Transportation, & Utilities sectors each have subsector data missing that affect the appearance of the graph. As seen in the % GDP by Sector, Private, 2023 pie chart above, almost a third of the GDP is unattributed to any sector or subsector. Tables providing more detail appear in the <u>"Financial Activities"</u> section and below for Natural Resources & Mining and Trade, Transportation, & Utilities.

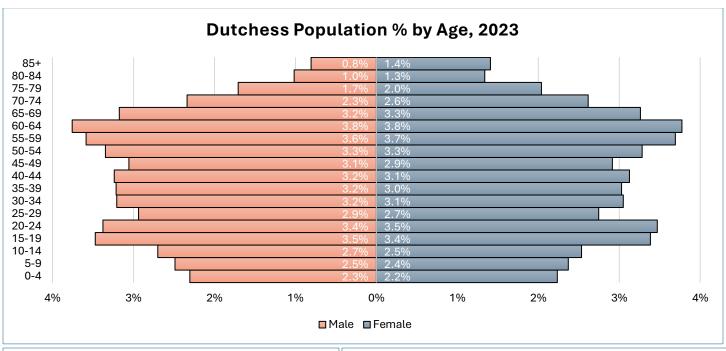
The **pie charts** above show the percentage of establishments, employees, and GDP divided between the private sector and government for the years 2010 and 2023 in Dutchess County. The largest gain in terms of percentage was Unclassified establishments. As those are typically reclassified later, it can be viewed as a boon that there are many new businesses being generated in the area. Despite the large increase in share on the establishments side, employees only increased marginally as newer businesses tend to have fewer employees. Education & Health increased its share of employees by 2.5% since 2010, but saw a decline in establishments by 1%. Although there are three sectors that have decreased in GDP since 2010, the graph is misleading due to missing data. The sectors of Natural Resources & Mining and Financial Activities each have subsectors that were unreported in 2023 (refer to the note below the graph for more information). However, the Manufacturing sector saw a consistent decrease in GDP since 2010. The sector's decrease in percentage of GDP of 11% is due to both the decrease in Manufacturing GDP and the increase in other sectors' GDP.

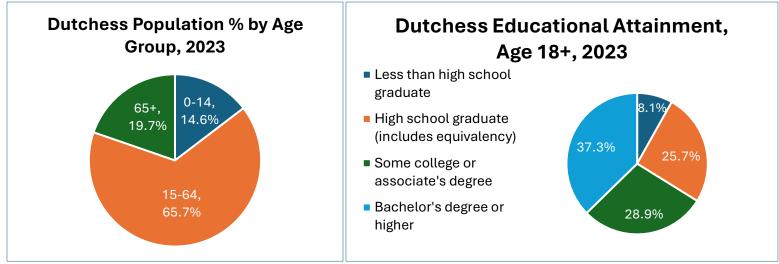
The **line graphs** below show the percentage change in the number of establishments, employees, and GDP for each sector since 2010. Many of the sectors grew in Dutchess since 2010. Natural Resources & Mining saw increases in employment above 40% and in establishments, increasing by over 25%. The two sectors that saw decreases in establishments (Construction and Financial Activities) saw either an increase in employees (Construction, 28%) or were flat (Financial Activities, just below 0%). The two sectors that saw significant losses in employees (Information and Manufacturing, -27% and -40%, respectively) both saw increases in the number of establishments (16% and 8%, respectively). Manufacturing employment losses are a larger concern based on the larger number of jobs there were to start with. Manufacturing went from making up 10% of jobs in the County to just above 6%. Many sectors saw decreases in GDP in response to the pandemic. Although Leisure & Hospitality saw a sharp decline in 2020, the sector has recovered and improved upon pre-pandemic levels.

Sectors (bolded) & Subsectors	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Trade, Transportation, & Utilities	\$1.29B	\$1.33B	\$958.4M	\$1.06B	\$1.08B	\$1.15B	\$1.19B	\$1.22B	\$1.27B	\$1.30B	\$1.30B	\$1.45B	\$1.55B	\$1.67B
Utilities	\$88.4M	\$89.8M	\$93.2M	(D)										
Wholesale trade	\$349.8M	\$367.5M	(D)											
Retail trade	\$851.3M	\$875.8M	\$865.2M	\$917.7M	\$935.3M	\$990.8M	\$1.02B	\$1.04B	\$1.06B	\$1.12B	\$1.12B	\$1.25B	\$1.32B	\$1.44B
Transportation and warehousing	(D)	(D)	(D)	\$143.8M	\$148.3M	\$159.5M	\$166.5M	\$181.4M	\$207.8M	\$187.2M	\$181.3M	\$204.6M	\$223.8M	\$228.8M
Natural Resources & Mining	\$0.0M	\$3.3M	\$5.1M	\$5.2M	\$7.0M	\$8.6M	\$5.4M	\$8.8M						
Agriculture, forestry, fishing and hunting	(D)	\$3.2M	\$4.9M	\$2.1M	\$2.8M	\$2.9M	\$5.4M	\$6.6M						
Mining, quarrying, and oil and gas extraction	\$0.0M	\$0.1M	\$0.2M	\$3.2M	\$4.2M	\$5.6M	(D)	\$2.1M						

⁽D) indicates the data was not available to avoid the disclosure of confidential information. Subsectors are parts of the sector, which add up to the sector's total.

Demographic Data

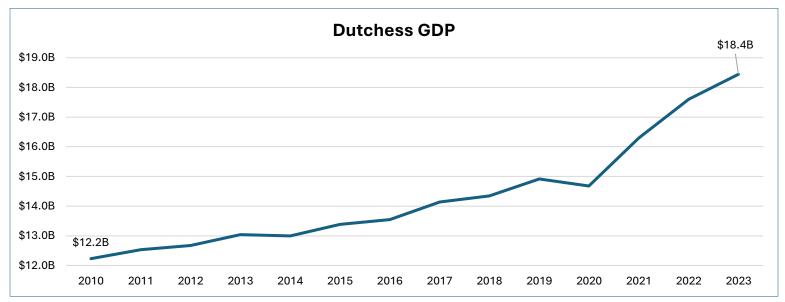




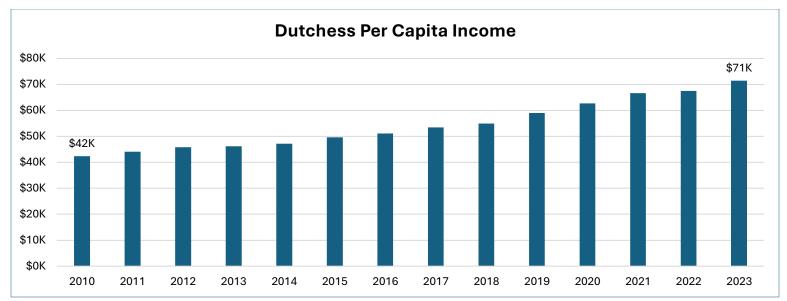
Sources: top chart – US Census (2023); bottom charts – American Community Survey 5-Year Estimate (2023).

The graphs above show the age and educational attainment for Dutchess County. The two most populous 5-year age brackets are 60-64 and 55-59 but the next two are 15-19 and 20-24. Almost 38% of the population have a bachelor's degree or higher.

Economic and Labor Data



Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

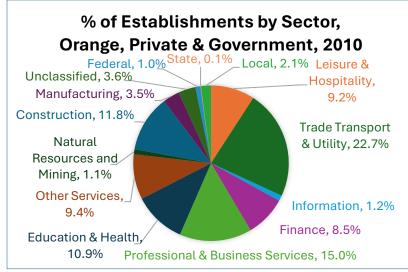


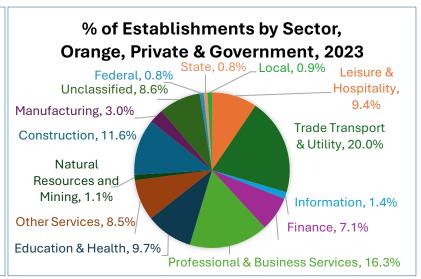
Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

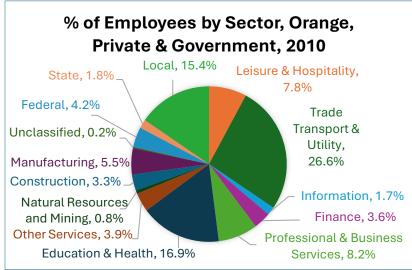
The above graphs show the GDP and per capita income of Dutchess County. Besides the year the pandemic started, Dutchess County's GDP has risen every year since 2010, increasing in total by over 50%. Similarly, the per capita income for Dutchess rose every year, including the pandemic, by over 65% since 2010.

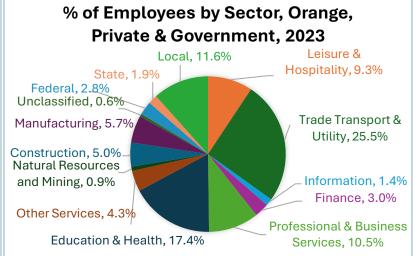
Orange

Sectoral Data

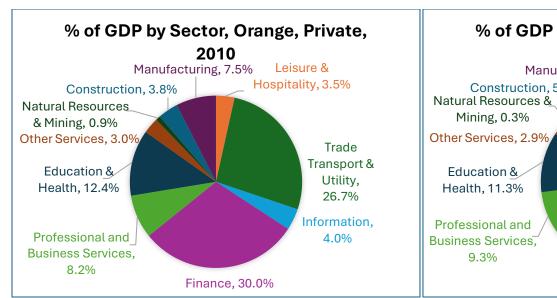


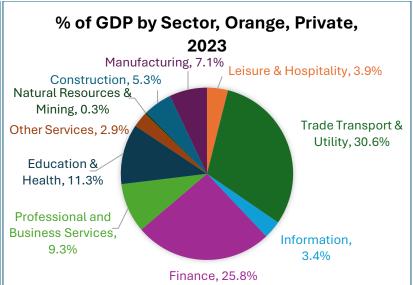




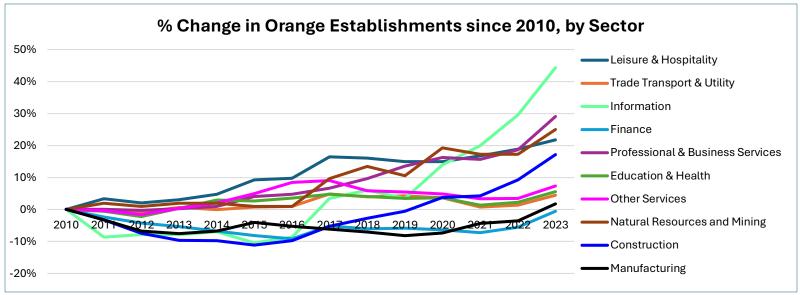


Source: Bureau of Labor Statistics (2010 & 2023).

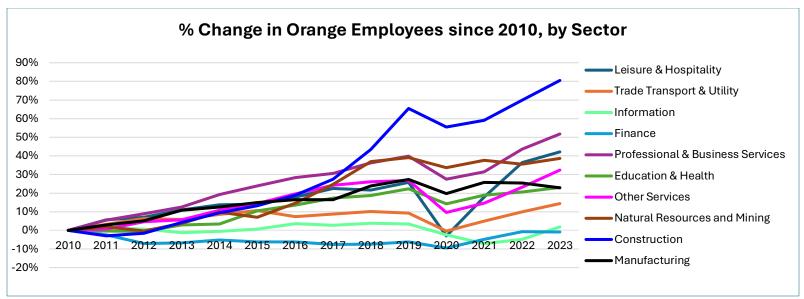




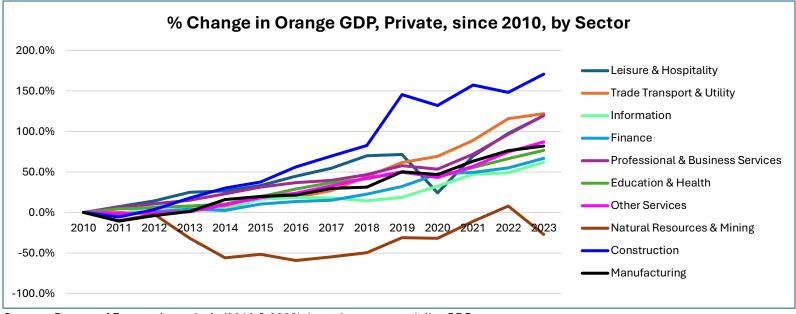
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Labor Statistics (2010-2023).

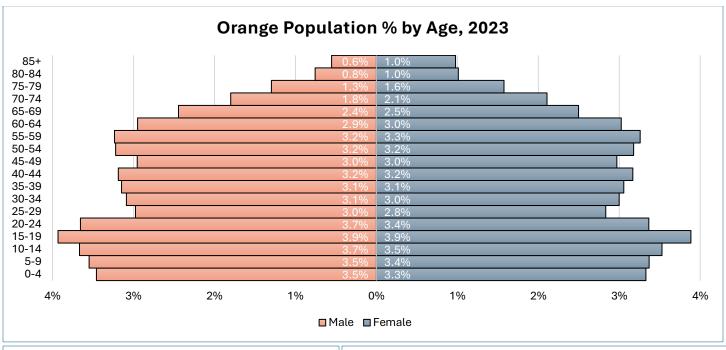


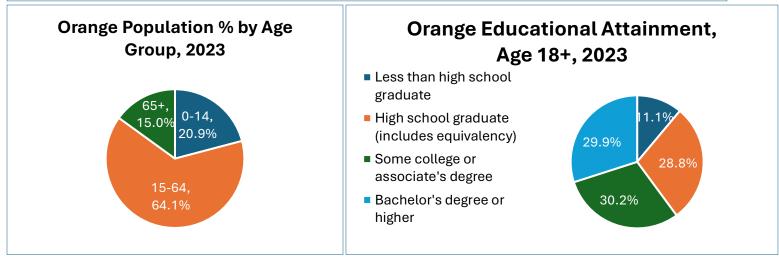
Source: Bureau of Economic analysis (2010 & 2023); based on current-dollar GDP.

The **pie charts** above show the percentage of establishments and employees divided between the private sector and government for the years 2010 and 2023 in Orange County. The largest gain in terms of percentage was Unclassified establishments. As those are typically reclassified later, it can be viewed as a benefit that there are many new businesses being generated in the area, but there isn't more that can be derived from it besides looking at employee data. Despite the large increase in share of establishments, the employees only increased by about half a percentage point as newer businesses tend to have fewer employees. The next higher percentage point gains for both employees and establishments for a sector was Professional & Business Services. Financial Activities and Trade, Transportation, & Utilities make up the largest percentages of GDP in the County. The Financial Activities percentage decreased by nearly five points and Trade, Transport, & Utilities increased from 26.7% to 30.6%.

The **line graphs** show the percentage change in the number of establishments and employees for each sector since 2010 in Orange County. Interestingly, the sectors that saw the largest gains since 2010 in establishments (Information, 44%) and employees (Construction, 81%) saw much modest gains in the other category (Information employees increased by 2%; Construction establishments increased 17%). Sectors like Professional & Business Services, Natural Resources & Mining, and Leisure & Hospitality saw the largest increases in employees since 2010. The Construction; Trade, Transportation, & Utilities; and Professional & Business Services sectors saw the largest increases in GDP. The only sector to decrease in GDP since 2010 was Natural Resources & Mining, but Orange County still has the largest GDP in this sector out of all the counties.

Demographic Data

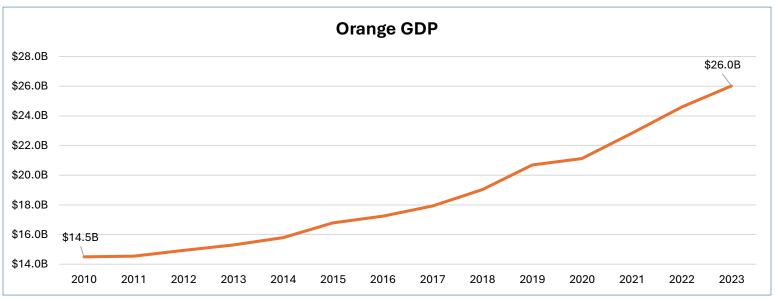




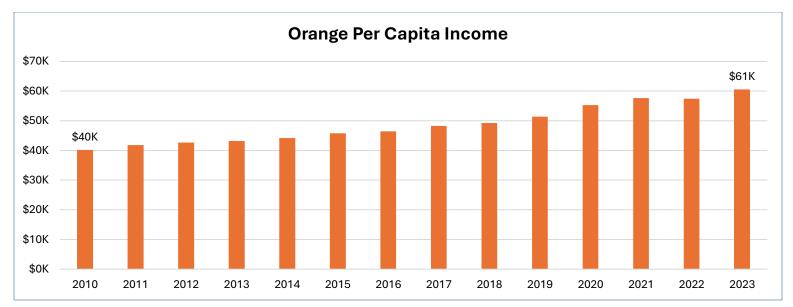
Sources: top chart - US Census (2023); bottom charts - American Community Survey 5-Year Estimate (2023).

The graphs above show the age and educational attainment for Orange County. Orange county skews younger as over 20% of the county is 14 or younger and three of the five most populous 5-year age brackets are 0-4 (5th most populous), 5-9 (4th), and 10-14 (2nd). Almost 30% of the population has a bachelor's degree or higher.

Economic and Labor Data



Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

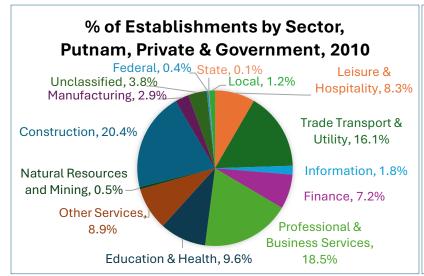


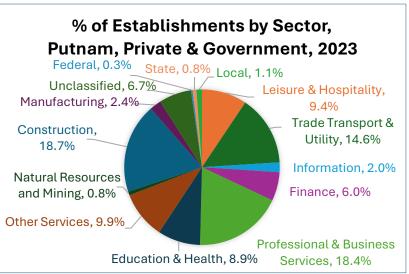
Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

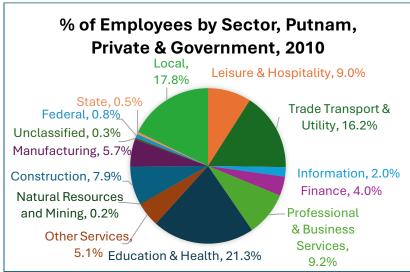
The above graphs show the GDP and per capita income of Orange County. The GDP for the county has only increased since 2010, even throughout the pandemic, increasing by almost 80%. Similarly, the per capita income has increased since 2010 except for a slight dip from 2021 to 2022. Since 2010, it has increased by about 50%.

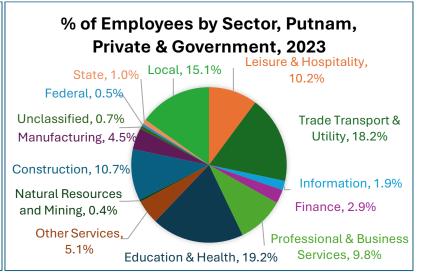
Putnam

Sectoral Data

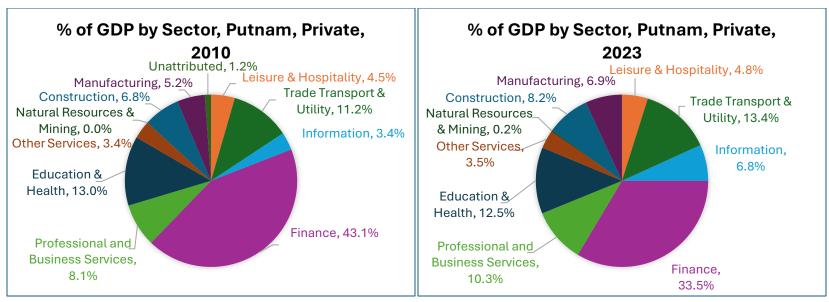




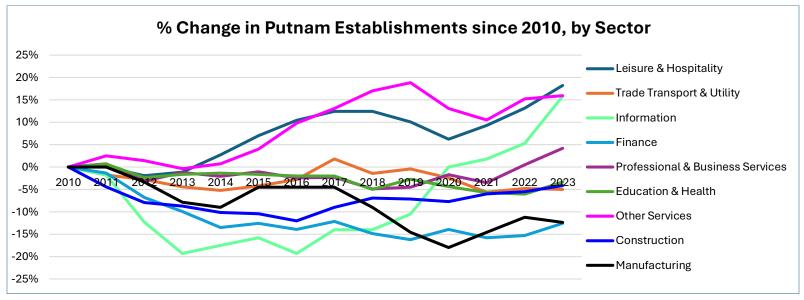




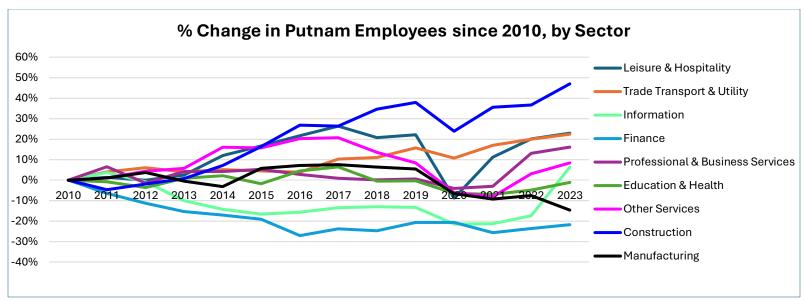
Source: Bureau of Labor Statistics (2010 & 2023)



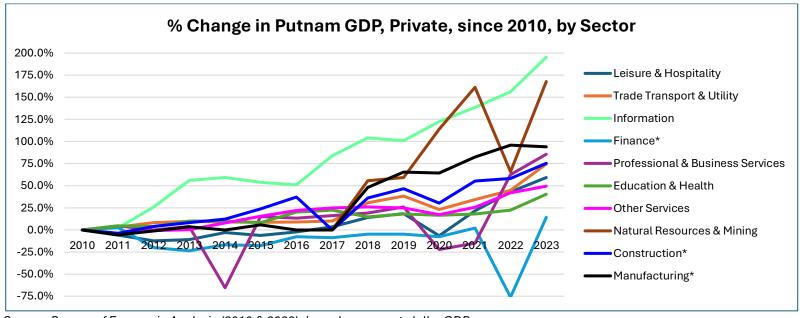
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.

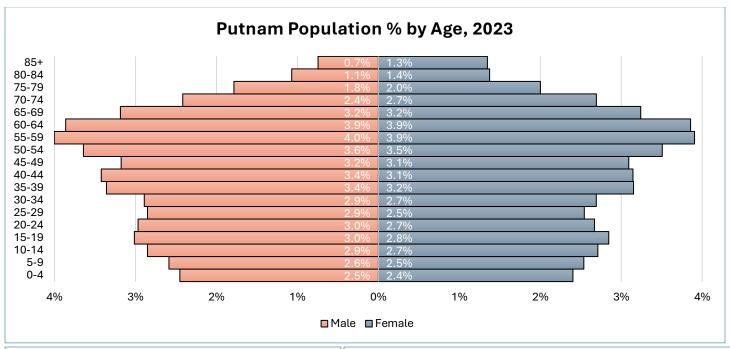
NOTE: The establishment and employee **line graphs** have had "Natural Resource & Mining" removed for a better reading of the charts. This sector increased by 67% in establishments since 2010 and by 200% in employees since 2010. To review all years of that data on a graph, please refer to "Natural Resources & Mining" of the "Establishments & Employment Data by Sector" section.

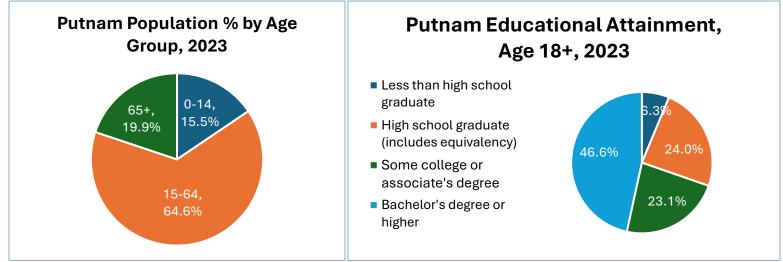
*The Financial Activities, Construction, and Manufacturing sectors each have subsector data missing that affect the appearance of the "% Change in GDP" graph. The table has been provided in the <u>"Financial Activities"</u> section, the <u>"Construction"</u> section, and the <u>"Manufacturing"</u> section of the Sectoral Data section above.

The **pie charts** above show the percentage of establishments and employees for the years 2010 and 2023 in Putnam County. The largest gain in terms of percentage was Unclassified establishments. As those are typically reclassified later, it can be viewed as an advantage that there are many new businesses being generated in the area, but there isn't more that can be derived from it besides looking at employee data. Despite the large increase in share in establishments, the employees only increased by about a third of a percentage point as newer businesses tend to have fewer employees. The next highest gain in establishments was Leisure & Hospitality, which gained one percentage point since 2010. The largest gain for employees was Construction, which increased by approximately 2.75%. The Financial Activities sector's percentage of county GDP shrunk by almost 10% since 2010 despite the sector increasing in GDP in the same timeframe. Other sectors that have increased in percentage points in GDP since 2010 are Information (3.4% increase), Professional & Business Services, and Trade, Transportation, & Utilities (2.1% increase each).

The **line graphs** show the percentage change in the number of establishments and employees for each sector since 2010 in Putnam County. The "large" gains made by the Natural Resources & Mining sector are easy to misinterpret without raw data: The number of employees increased from 40 to 120 and the number of establishments increased from 15 to 25. Excluding that, Construction (47%), Leisure & Hospitality (23%), and Trade, Transportation, & Utilities (22%) saw the largest increase in establishments. The largest increase in employees were in Leisure & Hospitality (18%), Information (16%), and Other Services (16%). All sectors saw increases to their GDP compared to 2010 with the largest increases coming from Information, Natural Resources & Mining, and Manufacturing.

Demographic Data

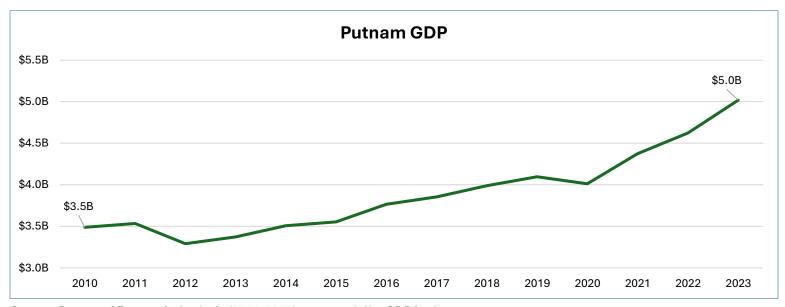




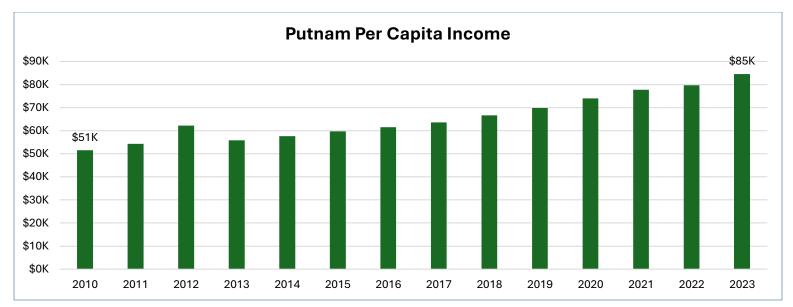
Sources: top chart - US Census (2023); bottom charts - American Community Survey 5-Year Estimate (2023).

The graphs above show the age and educational attainment for Putnam County. The area skews older as the seven largest 5-year age brackets are all between the ages of 35 and 69. Almost 47% of the population has a bachelor's degree or higher.

Economic and Labor Data



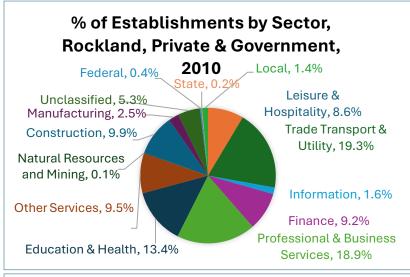
Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

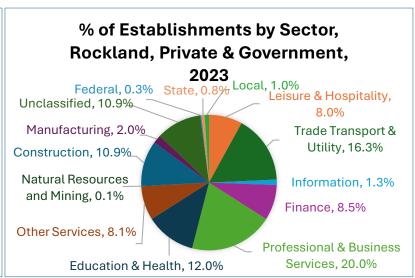


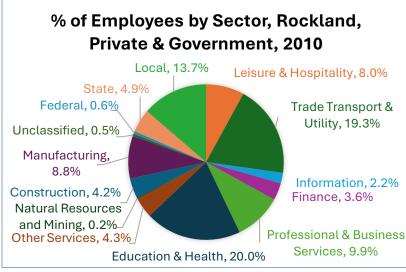
Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

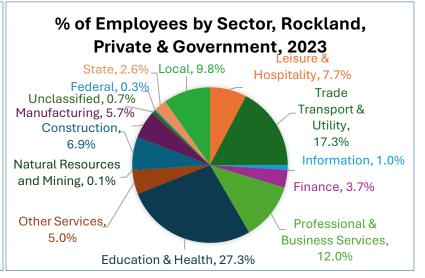
The above graphs show the GDP and per capita income of Putnam County. The County experienced a downturn in GDP in 2012 and in per capita income in 2013. The GDP decreased below 2010's numbers, but the per capita income decreased by a larger percentage. Since then, both have experienced consistent growth, with the GDP is up almost 80% since 2010 and the per capita income increasing by 64%.

Rockland Sectoral Data

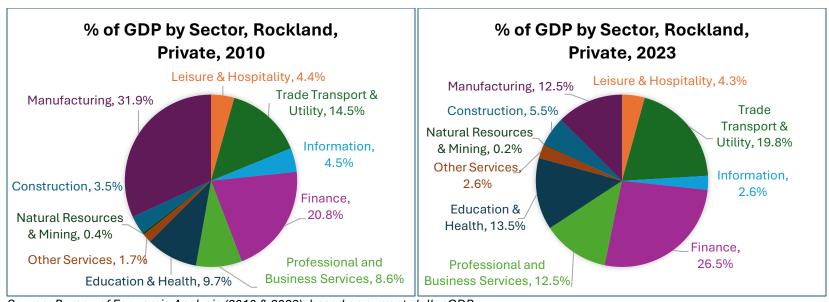




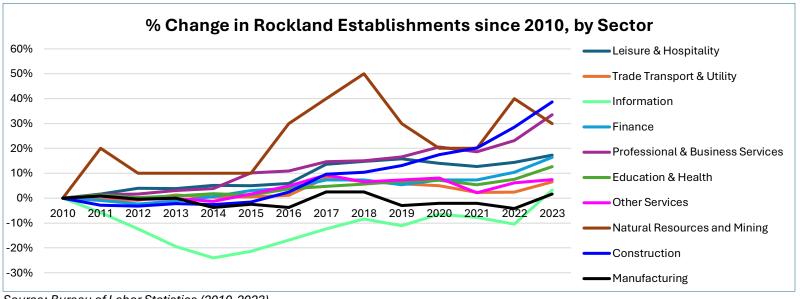




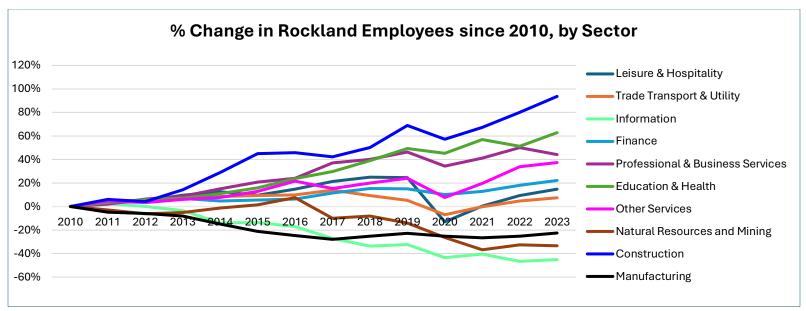
Source: Bureau of Labor Statistics (2010 & 2023).



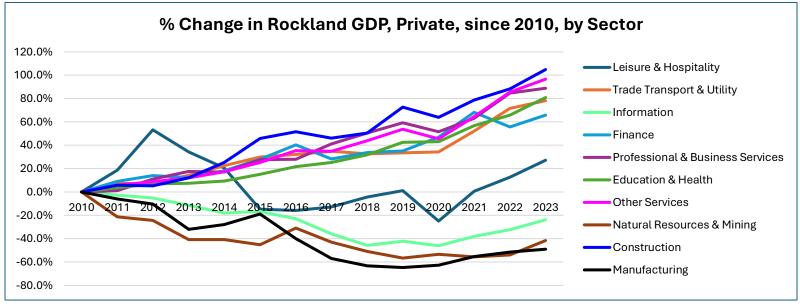
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Labor Statistics (2010-2023).

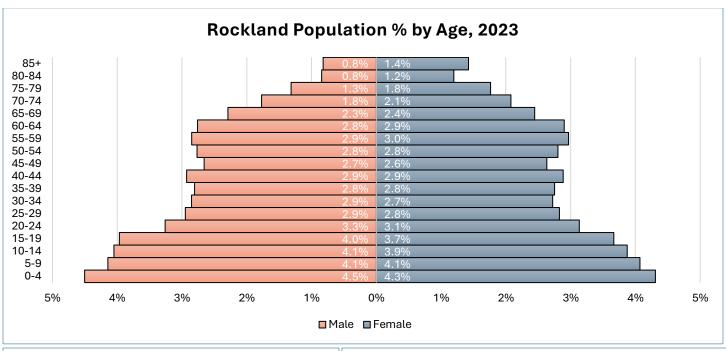


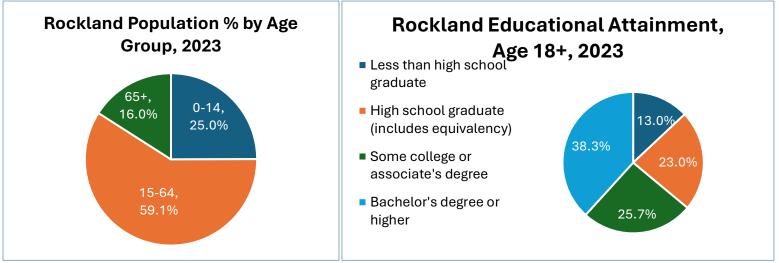
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.

The **pie charts** above show the percentage of establishments, employees, and GDP divided between the private sector and government for the years 2010 and 2023 in Rockland County. The largest gain in terms of percentage was Unclassified establishments. As those are typically reclassified later, it can be viewed as an advantage that there are many new businesses being generated in the area. Despite the large increase in share in establishments, employees only increased by about a quarter of a percentage point as newer businesses tend to have fewer employees. The next highest gain in establishments was Professional & Business Services with a 1% increase. Professional & Business Services gained two percentage points in employees, but was dwarfed by Education & Health, which saw a 7%+ increase. GDP increased the most in terms of percentage points in Financial Activities, with the biggest decrease coming from Manufacturing.

The **line graphs** show the percentage change in the number of establishments, employees, and GDP for each sector since 2010 in Rockland County. The largest gains in all three graphs were made in the Construction sector, which saw establishments increase by almost 40%, employees almost doubling since 2010, and GDP increasing by over 100%. The three sectors that all saw decreases in employees since 2010 (Information, Natural Resources & Mining, and Manufacturing) all saw increases in establishments and decreases in GDP in the same time frame. Those first two sectors, in number of establishments, were both below 2010 numbers until 2023. Natural Resources & Mining saw huge growth in establishments from 2015 to 2018 and was third in terms of growth since 2010.

Demographic Data

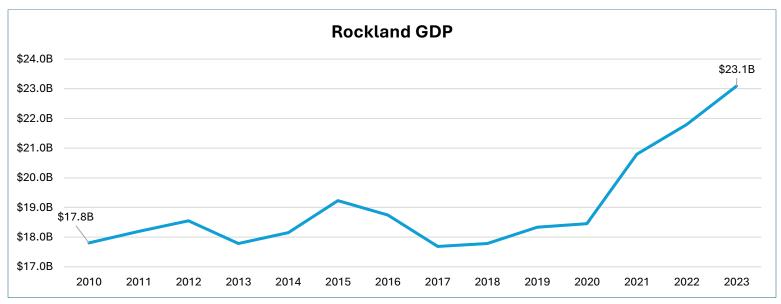




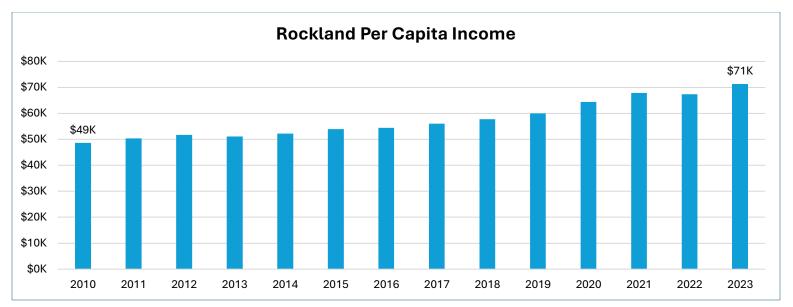
Sources: top chart - US Census (2023); bottom charts - American Community Survey 5-Year Estimate (2023).

The graphs above show the age and educational attainment for Rockland County. The County skews younger as the most populous five 5-year age brackets are from 0-24. With 25% of its population below 15, it has the highest concentration of young people in the Region. Over 38% of the county's residents have a bachelor's degree or higher.

Economic and Labor Data



Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

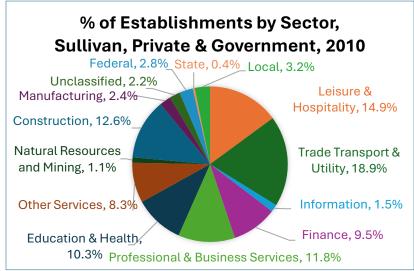


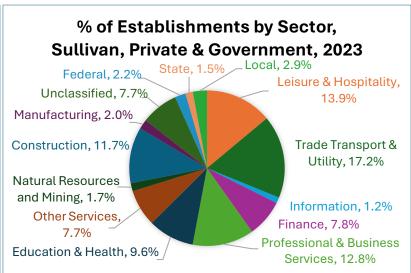
Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

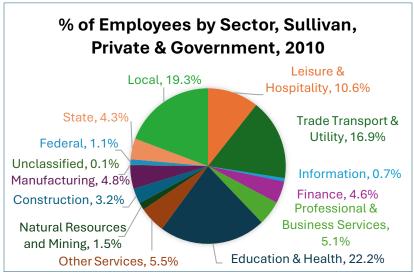
The above graphs show the GDP and per capita income of Rockland County. The GDP of Rockland had its ups and downs during the 2010s, with three years having a smaller GDP than 2010's number. However, since 2017 the County has only increased its GDP with the largest gains happening since the pandemic. The per capita income has experienced two dips since 2010: in 2013 and 2022. However, since 2010, it has increased by 47%.

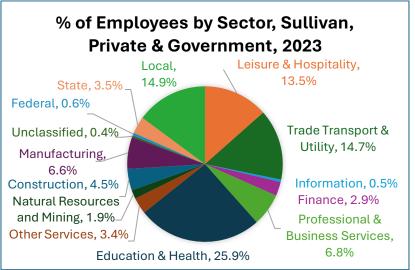
Sullivan

Sectoral Data

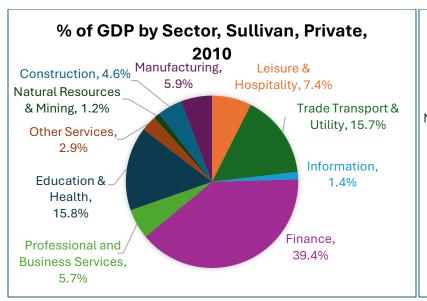


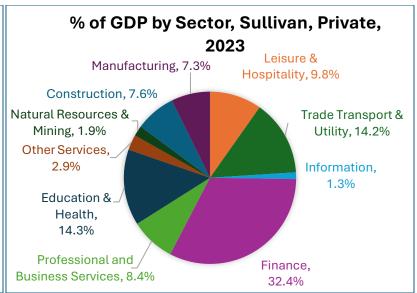




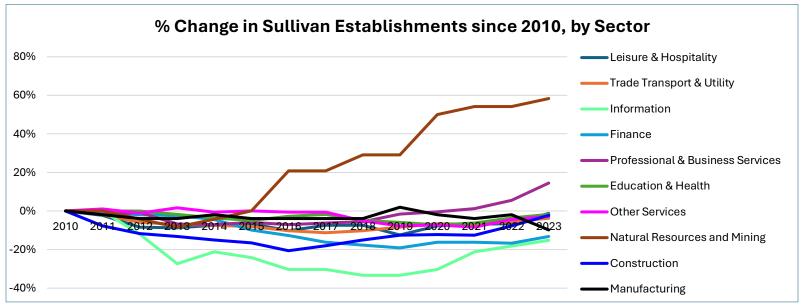


Source: Bureau of Labor Statistics (2010 & 2023).

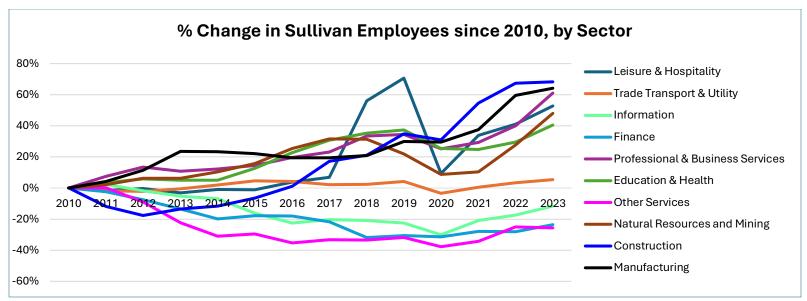




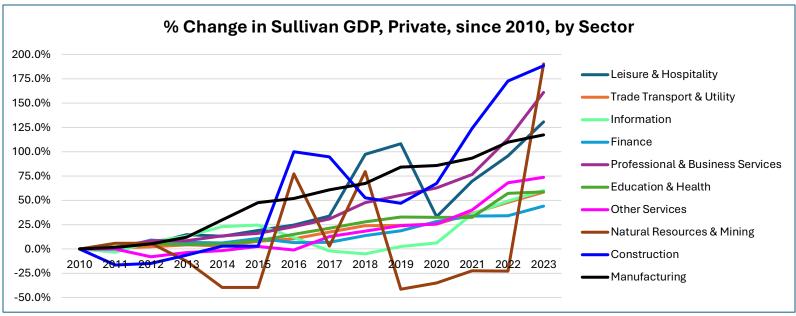
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Labor Statistics (2010-2023).

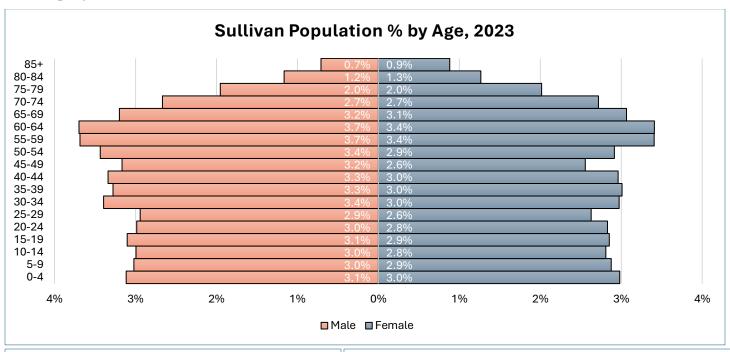


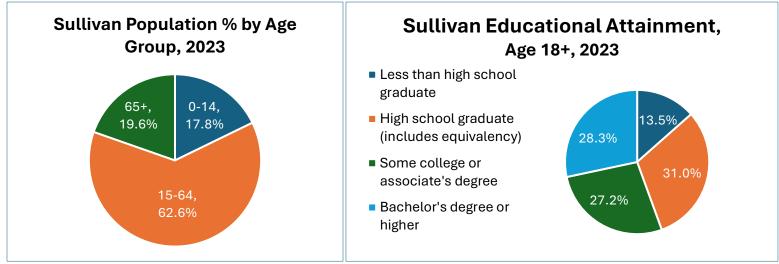
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.

The **pie charts** above show the percentage of establishments and employees divided between the private sector and government for the years 2010 and 2023 in Sullivan County. The largest gain in terms of percentage was Unclassified establishments. As those are typically reclassified later, it can be viewed as an advantage that there are many new businesses being generated in the area. Despite the large increase in share in establishments, employees only increased by approximately quarter of a percentage point as newer businesses tend to have fewer employees. The next highest gain in establishments was State governments. The largest gain in employee percentage points was seen in the Education & Health and Leisure & Hospitality sectors. In terms of GDP, the biggest gain was in Construction (3% increase) and the biggest loss was in Financial Activities (7.1% decrease)

The **line graphs** show the percentage change in the number of establishments and employees for each sector since 2010 in Sullivan County. The only sectors that saw an increase in the number of establishments were Natural Resources & Mining and Professional & Business Services. Both saw increases in employment as well. There were three sectors that experienced decreases in employees since 2010: Information, Financial Activities, and Other Services. Six of the ten sectors experienced increases in employees greater than 40% compared to 2010. GDP was sporadic throughout the timeframe, with multiple sectors seeing big dips. The biggest gain since 2010 was in the Natural Resources & Mining sector. None of the sectors have decreased overall since 2010.

Demographic Data

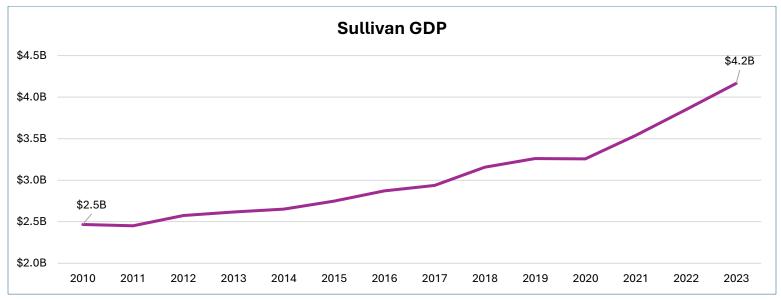




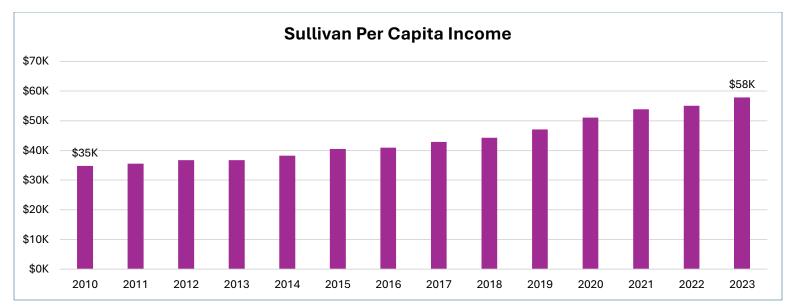
Sources: top chart - US Census (2023); bottom charts - American Community Survey 5-Year Estimate (2023).

The graphs above show the age and educational attainment for Sullivan County. The five largest 5-year age brackets all fall between the ages of 35-64 (the 45-49 age bracket being outcast). Sullivan is the county with the largest disparity when it comes to sex of the population. For Sullivan, females make up 48.2% of the population. The next highest had a female population of 48.7% and the rest were within 1% of 50/50. Over 28% of Sullivan County's population has a bachelor's degree or higher.

Economic and Labor Data



Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

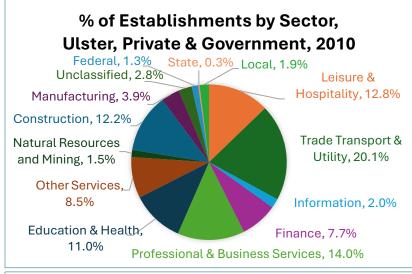


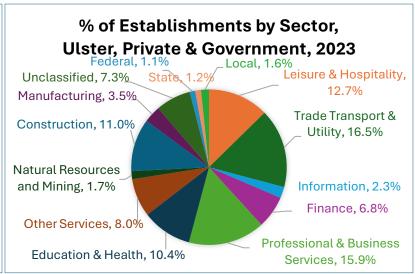
Source: Bureau of Economic Analysis (2010-2023); based on current-dollar GDP.

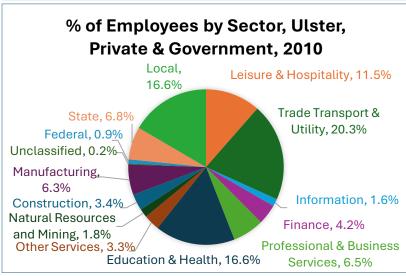
The above graphs show the GDP and per capita income of Sullivan County. Sullivan saw small decreases to the GDP in 2011 and 2020 but overall has had a consistent growth since 2010. It has increased by 69% since 2010. The per capita income was not affected by the downturns of the GDP and has only experienced increases since 2010. Since 2010 it has increased by 66%.

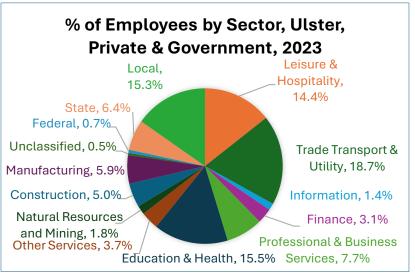
Ulster

Sectoral Data

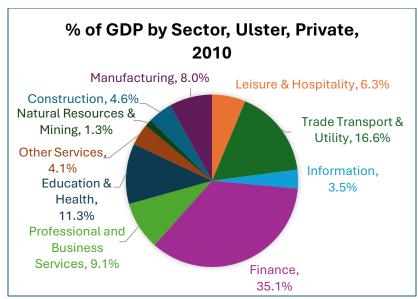


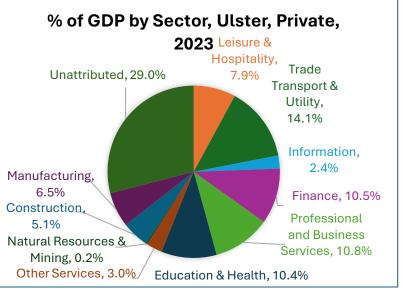




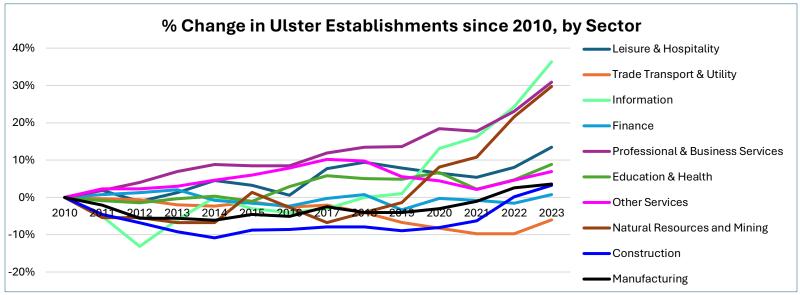


Source: Bureau of Labor Statistics (2010 & 2023).

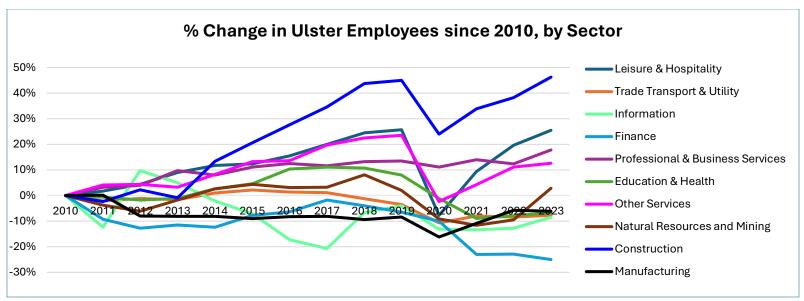




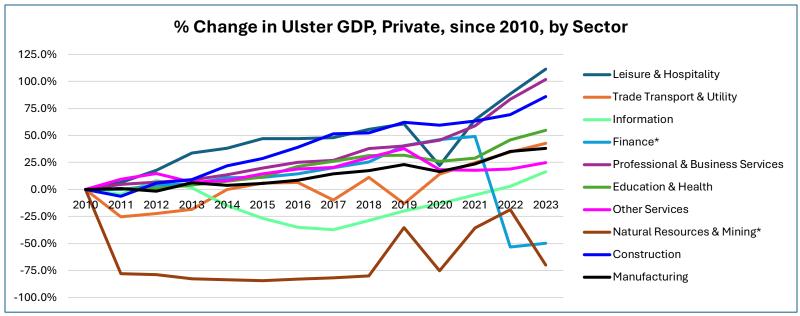
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.

*The Financial Activities and Natural Resources & Mining sectors each have missing subsector data that affect the appearance of the graph. A table has been provided in the <u>"Financial Activities"</u> section; the Natural Resources & Mining data can be found below.

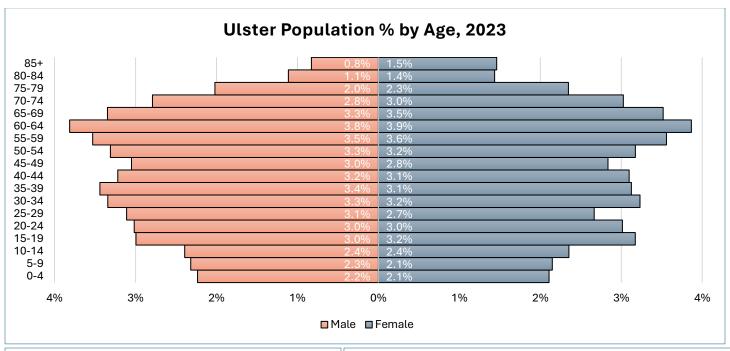
The **pie charts** above show the percentage of establishments and employees divided between the private sector and government for the years 2010 and 2023 in Ulster County. The largest gain in terms of percentage was Unclassified establishments. As those are typically reclassified later, it can be viewed as an advantage that there are many new businesses being generated in the area. Despite the large increase in share in Unclassified establishments, employees only increased by approximately a quarter of a percentage point as newer businesses tend to have fewer employees. The next largest gain in establishments was Professional & Business Services, gaining almost 2%. For employees, the largest gain came from Leisure & Hospitality, gaining almost 3%. A large part of the GDP data is unknown as over a quarter of Ulster's GDP falls into the Unattributed category, though likely it is from the Financial Activities sector as subsector data is missing (see the note below the graph for more details). However, we can still see that Leisure & Hospitality and Professional & Business Services both increased since 2010 in terms of percentage points.

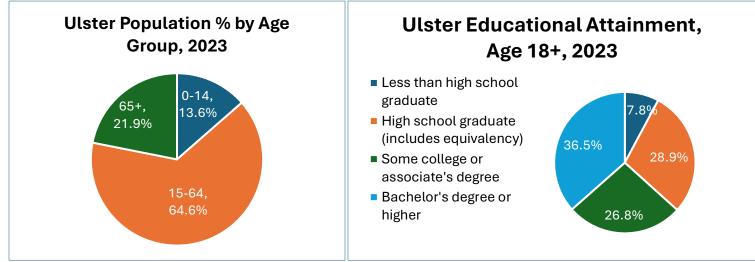
The **line graphs** show the percentage change in the number of establishments and employees for each sector since 2010 in Ulster County. The sectors with the largest increases in establishments were Information (+36%), Professional & Business Services (+31%), and Natural Resources & Mining (+30%). Professional & Business Services was the only sector of those three that showed high growth in terms of employee gains (+18%; Information -9%; Natural Resources & Mining +3%), which represented the third largest growth in employees since 2010. The two largest increases in employees since 2010 came from the Construction and the Leisure & Hospitality sectors. Since 2010, all sectors have increased in GDP (except for Financial Activities and Natural Resources & Mining per the aforementioned explanation). Both Leisure & Hospitality and Professional & Business Services increased by over 100% over the past 13 years.

Sector (bolded) & Subsectors	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Natural Resources & Mining	\$63.6M	\$14.0M	\$13.4M	\$11.1M	\$10.4M	\$9.9M	\$10.9M	\$11.7M	\$12.6M	\$41.3M	\$15.7M	\$41.0M	\$51.7M	\$19.2M
Agriculture, forestry, fishing and hunting	\$45.8M	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	\$26.4M	(D)	\$41.0M	\$51.7M	\$19.2M
Mining, quarrying, and oil and gas extraction	\$17.8M	\$14.0M	\$13.4M	\$11.1M	\$10.4M	\$9.9M	\$10.9M	\$11.7M	\$12.6M	\$14.8M	\$15.7M	(D)	(D)	(D)

⁽D) indicates the data was not available to avoid the disclosure of confidential information. Subsectors are parts of the sector, which add up to the sector's total.

Demographic Data

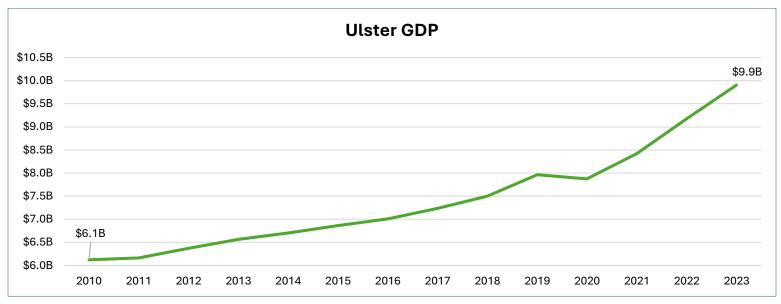




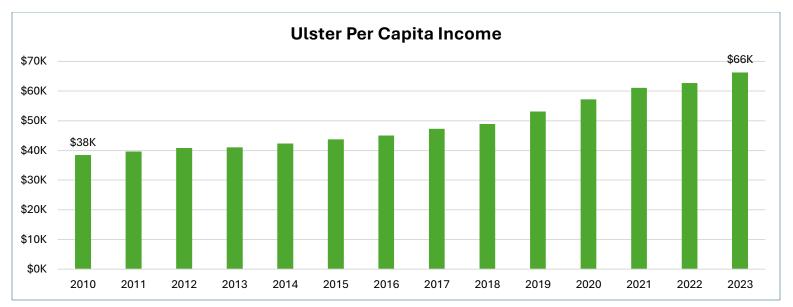
Sources: top chart – US Census (2023); bottom charts – American Community Survey 5-Year Estimate (2023).

The graphs above show the age and educational attainment for Ulster County. The top three 5-year age brackets all fell within the range of 55-69. It has the smallest population between the ages of 0-14 at 13.6% and the most 65+ population at almost 22%. More than 36% of the population have a bachelor's degree or higher.

Economic and Labor Data



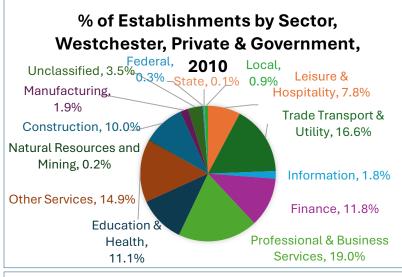
Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

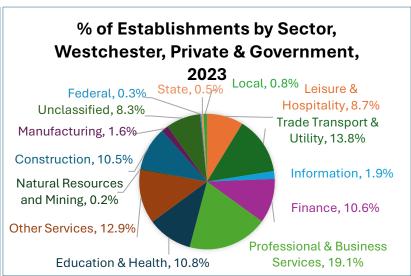


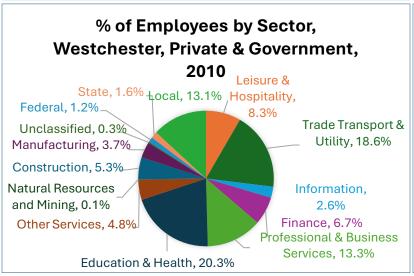
Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

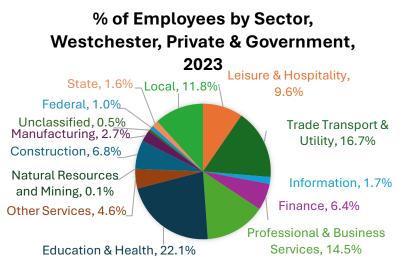
The above graphs show the GDP and per capita income of Ulster County. The GDP was experiencing consistent growth until 2020 when it had a dip. However, since 2020, the County increased GDP by a higher percentage from 2019 to 2023 than it did from 2010 to 2019, using 2010 as a base. Overall, it has increased 62% since 2010. The per capita income has only experienced increases since 2010. Since then, it has grown by 73%.

Westchester Sectoral Data

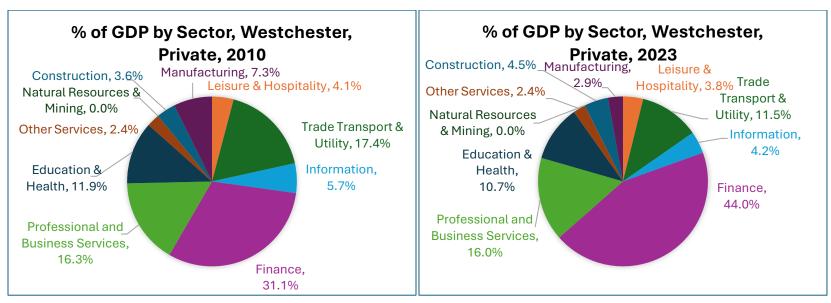




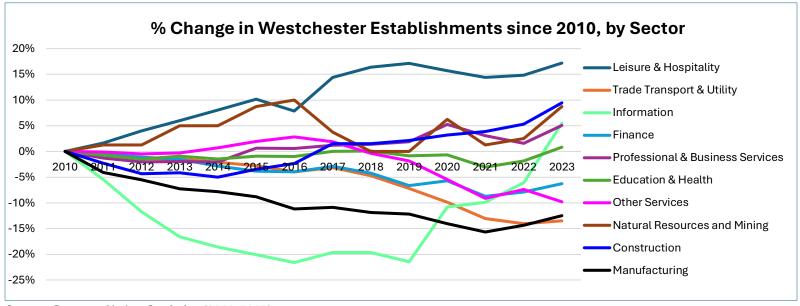




Source: Bureau of Labor Statistics (2010 & 2023).



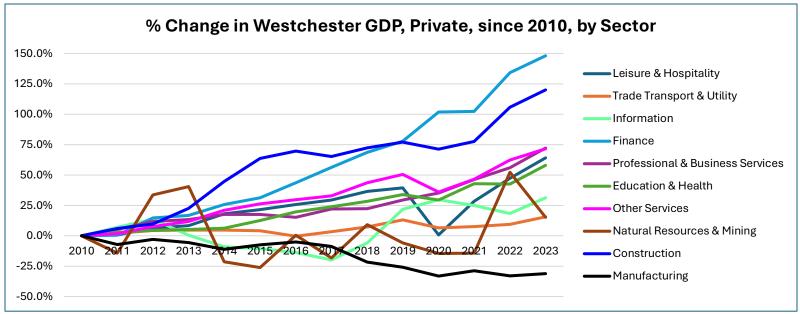
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.



Source: Bureau of Labor Statistics (2010-2023).



Source: Bureau of Labor Statistics (2010-2023).

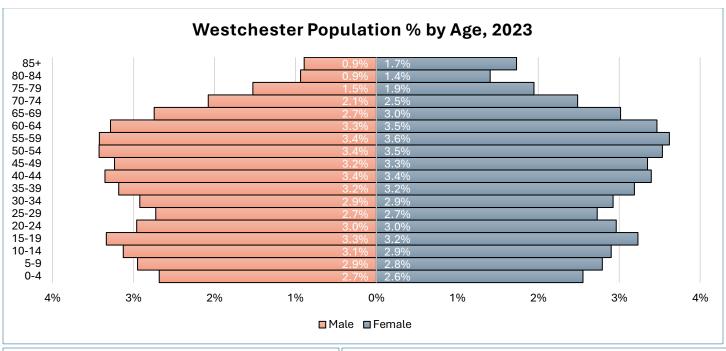


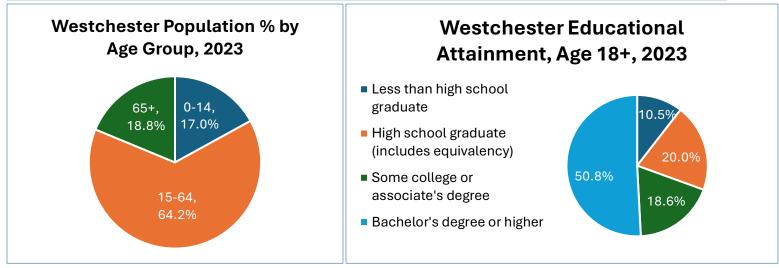
Source: Bureau of Economic Analysis (2010 & 2023); based on current-dollar GDP.

The **pie charts** above show the percentage of establishments and employees divided between the private sector and government for the years 2010 and 2023 in Westchester County. The largest gain in terms of percentage was Unclassified establishments. As those are typically reclassified later, it can be viewed as an advantage that there are many new businesses being generated in the area. Despite the large increase in share in establishments, employees only increased by about a quarter of a percentage point as newer businesses tend to have fewer employees. The next largest increase in percentage points for establishments came from Leisure & Hospitality at 1%, and Construction with half a percentage point. In terms of employees, Education & Health, Construction, Professional & Business Services each gained between one and two percentage points since 2010. The biggest sector gain in terms of percentage points of GDP was Financial Activities, growing 13%. Construction was second, increasing by only 1%, but more than doubling its GDP since 2010.

The **line graphs** show the percentage change in the number of establishments and employees for each sector since 2010 in Westchester County. The largest gain in terms of percentage was Unclassified establishments. The two largest increases in establishments since 2010 came from the Leisure & Hospitality sector (+17%) and the Construction sector (+9%). The two largest increases in employment were, inversely, from the Construction sector (+37%) and the Leisure & Hospitality sector (+22%). Two sectors that saw decreases in both establishments and employees since 2010 were Manufacturing (establishments -12%; employees -22%) and Trade, Transportation, and Utilities (establishments -13%; employees-5%). Financial Activities as a sector increased its GDP by over 100% since 2010 and makes up almost half of Westchester's GDP.

Demographic Data

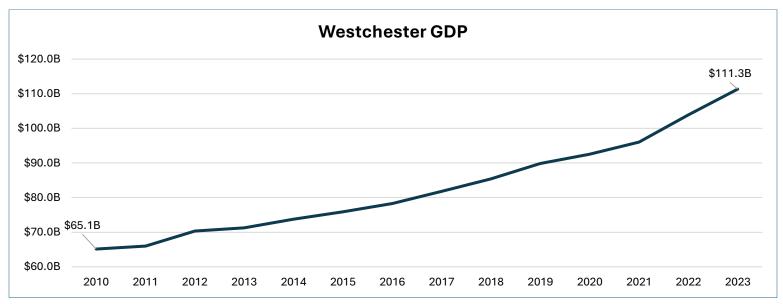




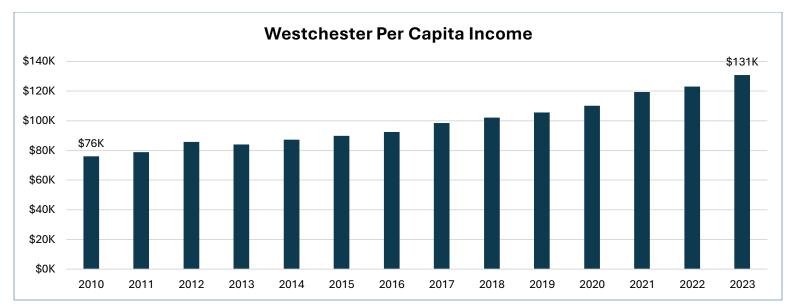
Sources: top chart - US Census (2023); bottom charts - American Community Survey 5-Year Estimate (2023).

The graphs above show the age and educational attainment for Westchester County. The top five 5-year age brackets all fell between the ages of 40-64. The disparity in sex between females and males between ages 0-14 is largest in Westchester with males outnumber females by half a percentage point

Economic and Labor Data



Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.



Source: Bureau of Economic Analysis (2010-2023); current-dollar GDP is shown.

The above graphs show the GDP and per capita income of Westchester County. The GDP for Westchester has only increased since 2010. Since 2010, the GDP for the county increased 71%. The per capita income for Westchester has almost always increased, save for 2013, and since 2010 has increased by 72%.