Employment

RESEARCH AND STATISTICS

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At a Glance

New York State had 8,834,600 total nonfarm jobs in November 2020, including 7,385,800 private sector jobs, after seasonal adjustment. The state's seasonally adjusted private sector job count increased by 0.5% in October-November 2020, while the nation's job count increased by 0.3% over this period. From November 2019 to November 2020, the number of private sector jobs decreased by 11.2% in the state and by 6.1% in the nation (not seasonally adjusted).

In November 2020, New York State's seasonally adjusted unemployment rate decreased from 9.2% to 8.4%. The comparable rate for the nation in November 2020 was 6.7%.

New York State's seasonally adjusted labor force participation rate increased from 58.0% in October to 58.6% in November 2020.

Change in Nonfarm Jobs

November 2019 - November 2020 (Data not seasonally adjusted, net change in thousands)

	Net	%
Total Nonfarm Jobs	-978.8	-9.9
Private Sector	-937.7	-11.2
Goods-producing	-72.3	-8.5
Nat. res. & mining	-0.8	-14.5
Construction	-27.2	-6.7
Manufacturing	-44.3	-10.1
Durable gds.	-23.0	-9.1
Nondurable gds.	-21.3	-11.5
Service-providing	-906.5	-10.0
Trade, trans. & util.	-158.4	-10.0
Wholesale trade	-32.1	-9.9
Retail trade	-89.5	-9.6
Trans., wrhs. & util.	-36.8	-11.5
Information	-11.5	-4.0
Financial activities	-40.6	-5.6
Prof. & bus. svcs.	-132.1	-9.5
Educ. & health svcs.	-141.0	-6.4
Leisure & hospitality	-325.6	-34.4
Other services	-56.2	-13.4
Government	-41.1	-2.7

Alternative economic indicators gain in popularity....

Pandemic Spurs Demand for High-frequency, Real-time Economic Data

"'The depth of the downturn induced by COVID-19 has put a premium on swift intelligence."

The Economist, July 23, 2020

"Non-standard, high-frequency data... [has] become very important...in the work that we do."

> Federal Reserve Chair Jerome Powell, July 29, 2020

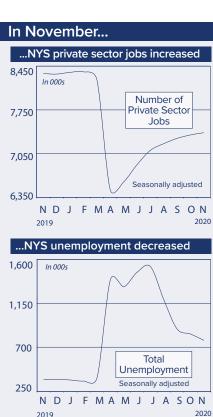
The sudden onset of the global COVID-19 pandemic in the first quarter of 2020 revealed a major shortcoming in most traditional economic data. It is slow and infrequent. Many indicators only appear monthly or quarterly, which is too few and far between when the economy deteriorates rapidly. Moreover, there is a considerable time lag to receive these measures. As a result, policymakers were virtually "flying blind" about the nearterm economic impact of the coronavirus during the early days of the pandemic.

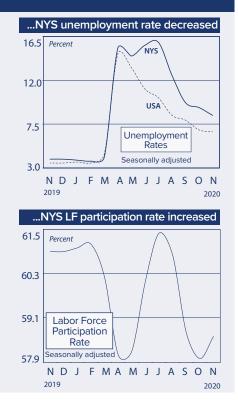
In response, many analysts have turned to "high-frequency" (e.g., daily or weekly) indicators to get a "real-time" snapshot of the economy. Private companies generate most of these non-traditional indicators. The recent rise of data analytics propelled an increased emphasis on these "alternative measures." Here, we look at some of the non-traditional economic indicators that gained in popularity during the COVID-19 pandemic.

Mobility

If you are among the 81% of U.S. adults who own a smartphone, an app on your device likely sends data (e.g., latitude and longitude) about its whereabouts throughout the day (and night) to multiple digital marketers. These companies are

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JANUARY 2021

Focus on New York City

Spotlight on New York City's Tech Landscape by Elena Volovelsky, Labor Market Analyst, New York City

With 2020 now in the rearview mirror, some of the changes that occurred last year are poised to become permanent features of New York City's labor market. The pandemic accelerated certain economic trends that were already underway. For example, many brick-and-mortar retailers were already struggling, and COVID-19 induced many shoppers to go online. As a result, technologies enabling and supporting online shopping, remote work and distance learning were rapidly adopted.

A Big Year for New Ideas

2020 was a successful year for NYC tech startups, as many companies seized new opportunities despite tightened financial standards. According to data from the National Venture Capital Association, companies in New York City raised \$13 billion from investors through the end of September, across a total of 1,070 deals. That places 2020 ahead of 2018, and not far behind the record-setting year of 2019.

As distance learning, remote work and Zoom conferences became commonplace, companies focused on areas like cloud computing, financial technology, cyber security and collaboration thrived. Manhattan-based Attentive, a startup that connects retailers with their customer base via text messaging, finalized a deal for \$230 million in new investments. They are now valued at more than \$2 billion. Attentive grew its staff to about 450 in 2020, and the company plans to increase staffing to 1,000 by the end of this year. Attentive was recognized by *Forbes* as one of "America's Best Startup Employers" in 2020.

Another successful startup, digital mortgage lender Better.com, also expanded. Better. com helps streamline the mortgage process for potential homebuyers, while charging lower fees than a traditional mortgage broker. Over the past year. Better.com's funded loan volume increased more than four-fold. The company raised \$200 million in additional capital last November and plans to expand in three states, including New York. Earlier in 2020, the e-lender signed a hiring pledge aimed at helping laid-off hospitality workers, citing the "consumer-centric mindset" required in both the hospitality and loan origination industries. Better.com plans to hire up to 1,000 people in the next two years and to become a publicly traded company by the middle of 2022.

Data Privacy Concerns Grow

A recent survey by McKinsey & Co. of 1,000 North American consumers found that they are becoming increasingly concerned with the collection, storing and sharing of their personal information. The survey revealed that financial and healthcare institutions are trusted by about half of all respondents, while all other industries are trusted by less than 20% of respondents. Most survey respondents also said that they would not do business with a company if they had concerns about its security practices. The lack of trust is understandable considering the recent history of high-profile consumer data breaches. Even consumers who were not directly affected by privacy breaches in the past are paying attention to the way companies respond to them.



"2020 was a successful year for NYC tech startups, as many companies seized new opportunities."

As personal data becomes increasingly important for businesses, so does the need for businesses to understand that data. Another New York City-based startup -BigID – helps its clients learn about the data they collect in order to protect against security breaches and adhere to privacy laws. The firm's software uses artificial intelligence and automation to organize customer data and to ensure companies' compliance with local and federal laws. The company recently completed a round of additional financing, bringing its valuation to \$1 billion. In 2021, BigID plans to expand the range of services its software offers and hire additional staff for its headquarters in New York City.

Summing Up

The pandemic shook big tech in early 2020. Dozens of previously thriving companies laid off or furloughed thousands of workers. Industry giants like Google announced indefinite hiring freezes and the re-thinking of expansion plans. However, many technology companies have benefitted from the new "work from home" economy. New York City-based tech startups are entering the new year with confidence that could hardly have been anticipated just a few months ago.

Alternative Data... from page 1

part of a growing industry; the *New York Times* reports that at least 75 companies receive tracking data from smartphone apps. Both Google and Apple publish daily mobility data on their websites.

Firms combine data from millions of smartphone users. Then they "anonymize" it to protect the privacy of individuals. They sell the data to various customers, including analysts who gauge the impact of the COVID-19 pandemic on the economy.

Researchers at the Federal Reserve Bank of Dallas (FRB-D) use daily smartphone data, collected from between 16 million to 20 million devices by the firm SafeGraph, to construct their Mobility and Engagement Index (MEI). The MEI combines seven different location measures, including the fraction of devices that leave home in a day and the average time spent at locations far from home. FRB-D staff aggregate county-level MEIs to metro area, state and national levels. To learn more, see www.dallasfed.org/research/mei.

The MEI is particularly well-suited to measure economic activity when new restrictions are imposed or relaxed. It also gives us a realtime view of how eager consumers are to leave their homes and engage in commerce. Researchers expect mobility measures, like the MEI, will be among the post-pandemic economy's most closely watched indicators.

Labor Market

Homebase is a free scheduling tool used by 60,000 firms and a million hourly employees in the U.S. It compiles daily data on the number of hourly workers hired by small businesses, including the workers' locations and hours worked. Research by the Federal Reserve Bank of St. Louis found that daily data from Homebase helped to track U.S. nonfarm employment in real time. Data are available for metro areas, states and the U.S.

Online job vacancies, a measure of labor demand, are a second type of real-time labor market indicator that is gaining attention. The Conference Board®-Burning Glass® Help

Unemployment Rates in New York State

Data Not Seasonally Adjusted

	NOV	NOV		NOV '19	NOV		NOV	NOV
	'19	'20			'20		'19	'20
New York State	3.6	8.1	Hudson Valley	3.6	5.4	Finger Lakes	3.9	5.5
Capital	3.5	4.8	Dutchess	3.4	5.0	Genesee	3.8	4.6
Albany	3.4	5.0	Orange	3.7	5.4	Livingston	3.8	4.4
Columbia	2.9	4.0	Putnam	3.6	4.8	Monroe	4.0	6.0
Greene	4.3	5.4	Rockland	3.4	5.3	Ontario	3.6	4.6
Rensselaer	3.5	4.7	Sullivan	3.9	5.8	Orleans	4.4	5.4
Saratoga	3.1	4.2	Ulster	3.5	5.0	Seneca	3.6	4.9
Schenectady	3.6	5.7	Westchester	3.6	5.8	Wayne	3.7	4.8
Warren	4.6	5.4	Mohawk Valley	4.2	5.5	Wyoming	4.0	4.7
Washington	3.8	4.6	Fulton	4.7	5.9	Yates	3.6	4.1
Central New York	4.0	5.5	Herkimer	4.5	6.2	Western New York	4.3	5.9
Cayuga	3.9	4.8	Montgomery	4.7	6.1	Allegany	5.2	5.2
Cortland	4.6	5.1	Oneida	4.0	5.4	Cattaraugus	4.8	5.6
Madison	3.9	4.7	Otsego	3.9	4.9	Chautauqua	4.5	6.3
Onondaga	3.7	5.6	Schoharie	3.8	4.7	Erie	4.1	5.9
Oswego	5.1	5.8	North Country	4.9	5.0	Niagara	4.7	6.0
Southern Tier	4.0	5.1	Clinton	4.0	4.6	Long Island	3.4	5.4
Broome	4.4	5.6	Essex	4.6	5.0	Nassau	3.4	5.5
Chemung	3.9	6.1	Franklin	4.6	5.0	Suffolk	3.5	5.3
Chenango	4.1	4.6	Hamilton	7.2	5.7	New York City	3.4	11.8
Delaware	4.3	4.7	Jefferson	5.9	5.3	Bronx	4.7	16.0
Schuyler	4.4	5.5	Lewis	4.8	4.9	Kings	3.5	12.1
Steuben	4.3	5.3	St. Lawrence	5.0	4.9	New York	3.0	9.3
Tioga	3.8	4.7				Queens	2.9	11.6
Tompkins	3.3	4.0				Richmond	3.2	9.8

Alternative Data... from page 2

Wanted OnLine® (HWOL) series measures changes over time in advertised online job vacancies across the U.S. In a typical month, it has more than 5 million active job postings (total ads) available in the U.S., with 1.7 million new postings every month. They collect ads in real time from about 22,000 job boards that are consistently scraped and included in the HWOL universe. Larger job boards tend to be scraped more frequently than smaller boards.

Consumers

Consumers account for about 70% of U.S. GDP. Thus, small drops in what people spend can have an outsized impact on the overall economy. Data from Affinity Solutions, a marketing consultant, and Opportunity Insights, a Harvard University-based team funded by the Gates Foundation, capture nearly 10% of debit and credit card spending in the U.S. In turn, they publish daily data on total consumer spending.

They also break it into six major spending categories: arts, entertainment and recreation; grocery; health care; restaurants and hotels; retail; and transportation. They can provide consumer spending data on a more granular basis (e.g., by income group) for states, counties and metro areas. For more information, see www.tracktherecovery.org/.

The restaurant booking site OpenTable offers a view of consumer activity at restaurants.

They publish data on the year-over-year change in the number of seated diners at a sample of restaurants on their network. Aneta Markowska, chief financial economist with Jefferies Group, considers OpenTable to be one of the main sources of alternative, high-frequency data (along with Google mobility and Homebase jobs data).

Economic Index

Oxford Economics (OE), a UK-based economics consulting group, has developed a U.S. Recovery Tracker (RT), which combines multiple high-frequency economic indicators into one index. OE's U.S. RT index includes 23 variables spanning six dimensions of the economy: health, demand, employment, production, mobility and financial markets. Each economic dimension is equally weighted in the calculation of the U.S. Recovery Tracker.

OE scales weekly data in the RT from a baseline that sets data for January 31, 2020 equal to 100. After bottoming at 47.6 in early April, the OE U.S. RT climbed steadily until the early fall.

After peaking at 83.5 in early October, the value of the U.S. RT fell, reaching 74.6 in the last week of 2020. According to Oren Klachkin, Lead U.S. Economist at Oxford Economics, shifting health conditions and subsequent changes to virus containment

measures were largely responsible for the U.S. RT's downward trend during the fourth quarter of 2020.

Conclusion

The steep, sharp drop in U.S. economic activity in early 2020 focused attention on the lack of timeliness of many traditional indicators. To help fill this data void, analysts turned to novel high-frequency, real-time measures, largely developed by private companies. To get a clear picture of emerging economic trends, it will be critical to look at as many alternative data sources as possible. Finally, as noted by Jed Kolko, chief economist at Indeed.com, the key is to use alternative indicators as a complement to official government data, rather than as a substitute.

by Kevin Jack

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OFFICIAL BUSINESS

Regional Analysts' Corner

CAPITAL

Kevin Alexander — 518-242-8245

Over the past year, the Capital Region's private sector job count fell by 43,900, or 9.8%, to 404,400 in November 2020. Losses were greatest in leisure and hospitality (-16,500), educational and health services (-8,200), trade, transportation and utilities (-7,300), professional and business services (-3,900), manufacturing (-3,300), other services (-2,200) and natural resources, mining and construction (-1,200).

CENTRAL NY

Karen Knapik-Scalzo — 315-479-3391

The number of private sector jobs in the Syracuse metro area declined by 30,600, or 11.5%, to 235,200 in the year ending November 2020. Job losses were greatest in trade, transportation and utilities (-9,000), educational and health services (-5,600), leisure and hospitality (-5,000), professional and business services (-4,800), manufacturing (-2,600), natural resources, mining and construction (-1,500) and other services (-1,400).

FINGER LAKES

Tammy Marino — 585-258-8870

For the year ending November 2020, the private sector job count in the Rochester metro area fell by 44,800, or 9.6%, to 419,500. Job losses were greatest in leisure and hospitality (-12,800), trade, transportation and utilities (-11,500), educational and health services (-7,100), manufacturing (-7,000), professional and business services (-2,100), other services (-2,000) and financial activities (-1,800).

HUDSON VALLEY John Nelson — 914-997-8798

For the 12-month period ending November 2020, private sector jobs in the Hudson Valley decreased by 73,700, or 9.0%, to 749,200. Job losses were greatest in leisure and hospitality (-29,700), trade, transportation and utilities (-10,300), professional and business services (-8,700), educational and health services (-8,600), other services (-6,800), manufacturing (-4,000) and financial activities (-2,900).

LONG ISLAND Shital Patel — 516-934-8533

For the year ending November 2020, the number of private sector jobs on Long Island declined by 102,700, or 8.8%, to 1,060,600. The largest losses occurred in leisure and hospitality (-35,800), educational and health services (-23,600), trade, transportation and utilities (-15,000), professional and business services (-10,000), manufacturing (-8,300), natural resources, mining and construction (-4,800) and other services (-3,900).

MOHAWK VALLEY Brion Acton — 315-793-2282

For the 12-month period ending November 2020, the private sector job count in the Mohawk Valley fell by 13,900, or 9.4%, to 134,600. Job losses were centered in educational and health services (-4,000), leisure and hospitality (-3,700), trade, transportation and utilities (-2,400), manufacturing (-1,200), natural resources, mining and construction (-900), professional and business services (-900) and other services (-800).

NEW YORK CITY Elena Volovelsky – 718-613-3971

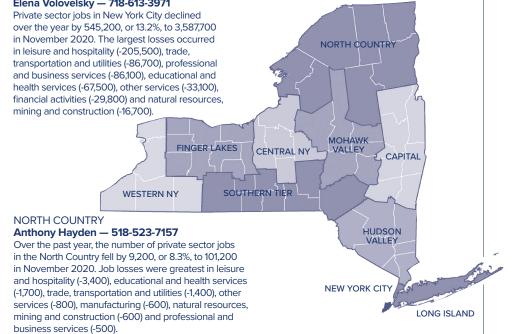


Private sector jobs in the Southern Tier declined over the year by 15,700, or 6.9%, to 210,600 in November 2020. Employment losses were greatest in leisure and hospitality (-4,400), educational and health services (-3,200), trade, transportation and utilities (-2,400), natural resources, mining and construction (-1,600), professional and business services (-1,400), manufacturing (-1,200) and other services (-1,000).

WESTERN NY

Timothy Glass — 716-851-2742

Over the past year, private sector jobs in the Buffalo-Niagara Falls metro area declined by 40,200, or 8.4%, to 439,600 in November 2020. Job gains were focused in manufacturing (+1,100). Losses were centered in leisure and hospitality (-13,000), trade, transportation and utilities (-11,900), educational and health services (-7,400), professional and business services (-4,400), other services (-2,500) and financial activities (-1,800).



Division of Research and Statistics, New York State Department of Labor