

> As state and local government leaders look to lead their communities to recovery, they must have timely, actionable intelligence on the drivers of business viability. Aggregated, granular, consumer spending and business revenue data, such as the data analyzed in this piece, can provide the missing link to help target vulnerable industries and keep communities open for business.



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Comparing spending habits year-over-year

Unlike other economic shocks in recent history, the COVID-19 pandemic not only affected the magnitude of consumer spending, but more significantly, dramatically changed the way American consumers spend.

In normal times, absent of intervening factors like a global public health crisis, consumer spending and business revenue tend to track closely together. Because small businesses depend on consumer spending as their main source of revenue, small businesses tend to do well when consumer spending is healthy and, conversely, tend to decrease when consumer spending declines. The gap between consumer spending and small business revenue in 2020 is striking. It indicates a massive re-sorting of the way American consumers spend and it shows an existential threat to the way small businesses operate in every American community.

Accommodations and food services, burdened by lockdowns and social distancing regulations, suffered. The table below indicates the declines in spending at the restaurants, cafes, and hotels that give life to American cities, which stands in contrast with increased spending on general merchandise stores. Through home delivery and curbside service, general merchandise stores' revenue thrived in 2020.

Industry Cluster	2020 Spend (January–October)	2019 Spend (January–October)	Percent Change
Grocery and Food Stores	19.2	16.4	17%
Miscellaneous	16.6	14.3	16%
Accommodations and Food Services	11.9	15.4	-23%
Transportation and Warehousing	6.2	9.9	-37%
Finance and Insurance	8.0	7.0	15%
Motor Vehicles	6.3	6.2	2%
Other Services	5.7	6.5	-13%
Home Improvement Centers	5.2	4.2	26%
General Merchandise Stores	4.5	4.5	1%
Health Care and Social Assistance	4.1	4.5	-7%
Professional	4.3	4.0	7%
Apparel and Accessories	3.8	4.5	-15%
Total	95.9	97.4	-1%

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Going into 2021 and beyond, this data needs to be closely tracked, combined, and leveraged as a collective to produce the critical insights necessary to drive holistic recovery strategies. This approach represents a paradigm shift from the age-old practice of looking at disparate data in isolation. For example, by combining multiple data points from consumer spending and small business data, state and local government policymakers can better interpret the signals and better inform their recovery actions.

Place matters to business recovery

National data show a gap in consumer spending and small business revenue; however, place matters in how this gap is experienced. State and local leaders need to understand the dynamics of these gaps within the context of their economies.

Take, for example, New Orleans, where millions of tourists flock each year to enjoy its world-renowned restaurants, theaters, and music clubs. With far fewer tourists in 2020, New Orleans small businesses experienced revenue declines of 13% year-over-year. Meanwhile, local resident spending decreased 10%. Compare that to Charlotte-Mecklenburg County, a county that relies more on its robust financial services and health care industries than its tourism industry. Small business revenue there remained flat, while consumer spending declined by 6% for Charlotte residents.

The gap between consumer spending and small business revenue in two American communities

New Orleans (Orleans Parish), Louisiana

- Major industries: Tourism, hospitality
- Small business revenue declined 13% year-over-year in 2020
- Local resident spending decreased 10%

Charlotte-Mecklenburg County, North Carolina

- Major industries: Finance, health care
- Small business revenue remained flat
- Local resident spending decreased 6%

SOURCE: Affinity Solutions, an aggregator of purchasing data

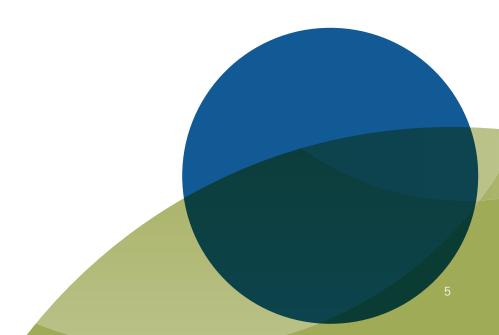
Why the consumption-business revenue gap matters

Leading economists at the Federal Reserve and global financial services firms take advantage of aggregated consumption and business revenue data to understand and forecast the economy. Business revenue and consumer spending data is critical for three distinct reasons:

- Local consumer spending and small business revenue are closely related. Local consumer spending is the single biggest generator of revenue for small businesses that anchor U.S. communities. Without this revenue source, small businesses will fail. Indeed, data from Harvard's Opportunity Insights shows that the share of small businesses open declined 29% relative to January 2020. Therefore, a nuanced understanding of spending and business revenue data at a granular level is critical to navigate the business community's recovery in local communities and account for geographic and industry variations.
- Small businesses are important sources of employment. According to the U.S. Small Business Administration, small businesses make up 47.1 percent of private-sector employment, or 60.6 million U.S. jobs. While consumer spending

can quickly change in size and shape due to a shock like the COVID-19 pandemic, the labor market is far slower to adapt. The jobs sustained by small businesses are vital in anchoring local labor markets and will be slow to rebound if small businesses close. But not all labor markets are created equally. To keep jobs afloat and retain residents, state and local government leaders need to understand the dynamics of their business environment and the patterns of the local consumers that support them.

Small businesses are important sources of revenue. Many state and local governments depend on sales taxes, payroll taxes, and business license fees as a core source of revenue. Sales taxes, for example, are collected at the merchant location, which means that if local consumers are substituting their expenditures at local businesses for online retailers, then those tax dollars will be lost. Given how central these revenue sources are to state and local government finances, government executives cannot afford to not have a good understanding of the data on local consumption and business revenue data.



Economic data solutions for government

If business revenue and consumer spending are key measures for small business health then in turn, they are the leading indicators to manage economic recovery from the COVID-19 pandemic. For government leaders, having granular visibility to this data is crucial to track and plan economic recovery. Revenue and consumer spending data is only available from data aggregators outside of government data systems.

Tyler's Economic Intelligence solution gives government leaders a single, comprehensive view of the critical commercial economic data that is central to economic recovery. Tyler Technologies established partnerships with data aggregators to develop a turnkey, data-driven solution for recovery. Tyler's Economic Intelligence solution uses authoritative business data to provide decision support models, built-in spatial analysis, and broad visibility that puts recovery indicators within easy reach.

The consumer spending data is anonymized and aggregated, and it is now available to state and local governments to give visibility into budget forecasting, revenue, and economic activity. Economic Intelligence provides a view of the leading indicator data to support decision-makers as they plan to revive businesses, restore revenue, stimulate investment, protect jobs, and continue to support social programs.



To learn

more about Tyler's Economic Intelligence solution, visit our website at tylertech.com/economicintelligence.

About Tyler Technologies, Inc.

Tyler Technologies (NYSE: TYL) provides integrated software and technology services to the public sector. Tyler's end-to-end solutions empower local, state, and federal government entities to operate more efficiently and connect more transparently with their constituents and with each other.

By connecting data and processes across disparate systems, Tyler's solutions are transforming how clients gain actionable insights that solve problems in their communities. Tyler has more than 37,000 successful installations across more than 12,000 sites, with clients in all 50 states, Canada, the Caribbean, Australia, and other international locations.

Tyler was named to Government Technology's GovTech 100 list five times and has been recognized three times on Forbes' "Most Innovative Growth Companies" list. More information about Tyler Technologies, an S&P 500 company headquartered in Plano, Texas, can be found at **tylertech.com**.