Yardi® Matrix

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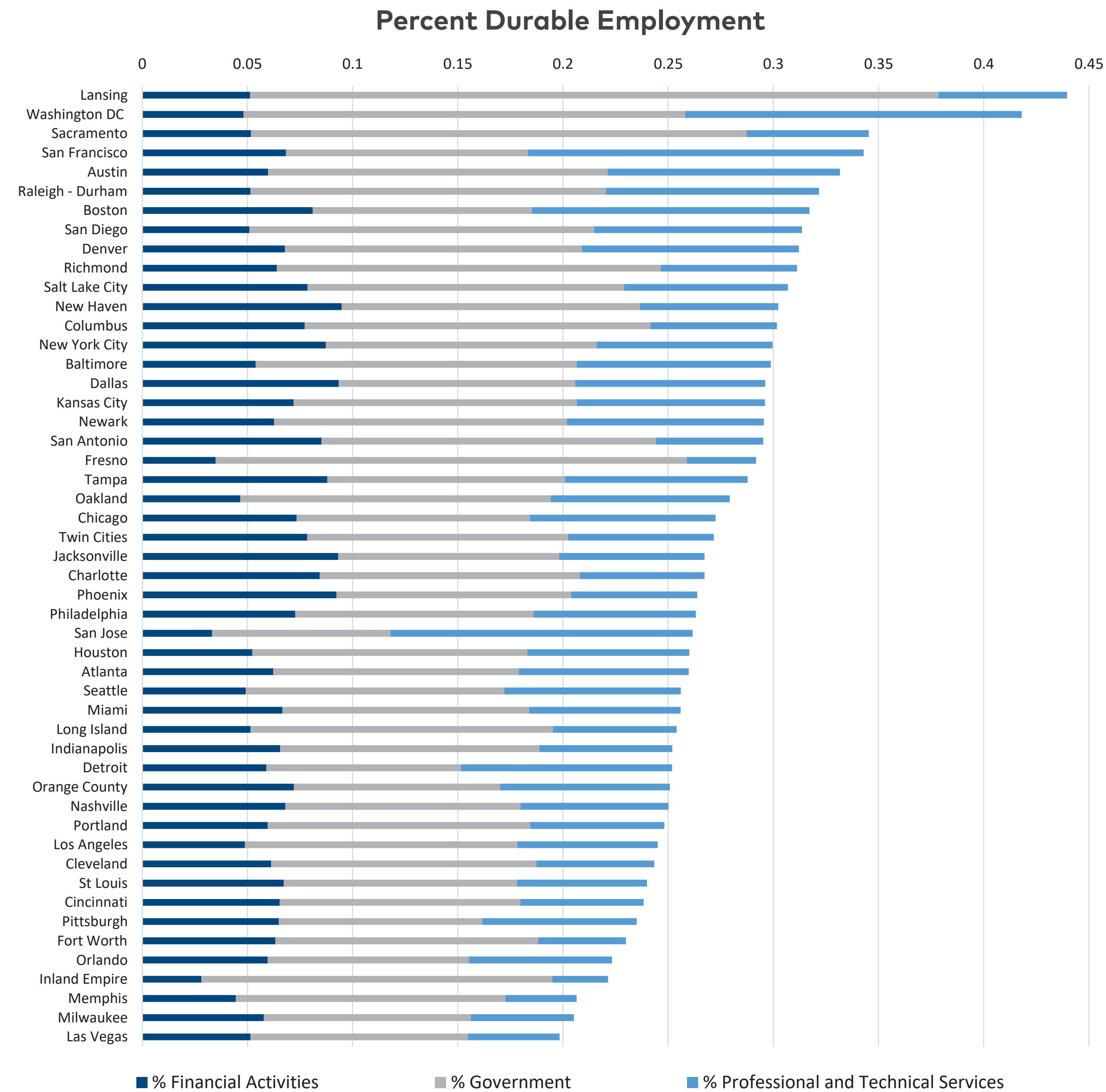
Finding Durable Employment Sectors During a Pandemic

The Covid-19 pandemic has led to an almost unimaginable loss of jobs in the U.S. Since social distancing measures were implemented in March, 36.5 million workers have filed for unemployment, nearly one-quarter of the workforce. The U.S. unemployment rate climbed in April to 14.7%, the worst since the Great Depression, and some economists forecast it will rise to 25% by its peak.

Unlike past recessions, job losses have not been spread across the economy. Layoffs and furloughs have been concentrated in segments most affected by shelter-in-place orders: retail, travel and entertainment establishments, and jobs in which social distancing is difficult. Between February and April, leisure and hospitality jobs contracted by a jaw-dropping 48.1%, or 8.1 million workers. Other hard-hit segments include other services (-21.9%), a category that includes personal services and repairs, retail trade (-13.7%) and construction (-12.7%).

The number of lost jobs has been higher among hourly low-wage workers in service jobs than for professional and salaried workers who can work from home. On a proportional basis, job categories that shed the fewest jobs over



Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

the last three months are financial activities (-2.8%), government (-4.3%) and wholesale trade (-6.2%). Another segment that lost relatively few jobs was professional and technical services (-5.3%), which includes computer systems design services (-3.8%).

Last month, Yardi Matrix studied which metros had the highest concentrations in the most at-risk job segments. Here we look at which metros have concentrations in three employment segments that have lost the fewest jobs to date—which we call "Durable Employment Sectors." These Durable sectors—government, finance, and professional and technical services—encompass a combined 23.5 million jobs in the top 50 metros, or 28% of the total 84 million jobs in those areas.

Metros With Durable Jobs

Metros with the highest percentage of durable jobs generally are home to a government capital, state university and/or strong presence of knowledge-based industries. Metros that have the most exposure to our Durable categories are Lansing, Mich. (44.0%), Washington, D.C. (41.8%) and Sacramento (34.5%), all of which include federal or state government capitals. The Lansing/Ann Arbor metro also is home to the University of Michigan and Michigan State University.

Washington has for decades been among the most consistently performing U.S. metro for commercial real estate because of the stability afforded by being the capital of the U.S. government. The presence of government-related industries that include lobbying, legal, trade groups, foundations, think tanks, etc., gives the metro an employment base that is extremely stable. Sacramento, meanwhile, is the capital of the country's largest state economy. Other metros that were near the top of the list include San Francisco (34.3%), Austin (33.2%), Raleigh-Durham (32.2%) and Boston (31.7%), all of which have high concentrations of finance and/or technology employment.

Metros with the lowest concentrations include Las Vegas (19.8%), Milwaukee (20.5%), Memphis (20.6%), the Inland Empire (22.1%) and Orlando (22.3%), which have few government jobs and employment concentrated in service industries or manufacturing. Las Vegas and Orlando, centers of tourism, have suffered among the highest job losses as the pandemic has ground travel to a near halt. Milwaukee has high concentrations of jobs in trade and transportation and manufacturing, sectors that have had layoffs of more than 10% nationally in recent months. Trade and transportation is the largest employment category in the Inland Empire and Memphis. The Inland Empire, home to warehouses and logistics facilities that accept goods from ports in Southern California, has relatively few jobs in office-using sectors.

Top 10 Markets % Durable Employment	
Lansing	44.0%
Washington DC	41.8%
Sacramento	34.5%
San Francisco	34.3%
Austin	33.2%
Raleigh–Durham	32.2%
Boston	31.7%
San Diego	31.4%
Denver	31.2%
Richmond	31.1%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Bottom 10 Markets % Durable Employment	
Cleveland	24.3%
St Louis	24.0%
Cincinnati	23.8%
Pittsburgh	23.5%
Fort Worth	23.0%
Orlando	22.3%
Inland Empire	22.1%
Memphis	20.6%
Milwaukee	20.5%
Las Vegas	19.8%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Top 10 Markets Total Durable Employment	
New York City	2,190,451
Washington DC	1,418,871
Los Angeles	1,134,674
Chicago	1,040,075
Houston	837,446
Dallas	813,550
Philadelphia	789,154
Atlanta	748,476
Boston	609,700
Phoenix	585,924

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

The "core" six real estate metros were distributed throughout the ranking of Durable employment. Washington (2nd), San Francisco (4th) and Boston (7th) were among the top metros; New York City (14th) and Chicago (23rd) ranked in the middle; and Los Angeles (40th) fared relatively poorly. New York, at 2.2 million, had the most Durable jobs, while three other metros had at least 1 million: Washington (1.4 million), Los Angeles (1.1 million) and Chicago (1.0 million).

The distribution of core markets in Durable employment categories was less uniform than in the previous study of at-risk job sectors, in which the largest six all ranked among the metros with the most favorable characteristics and most job diversity. In part, that's because none of New York, Chicago and Los Angeles have large concentrations of government workers, which is the largest Durable sector. Los Angeles has a large proportion of jobs in health services and entertainment, which had fared poorly during the downturn.

Financial Activities

Financial activities—which encompasses industries such as banking, securities, insurance and real estate—represents 8.6 million jobs in the U.S., or 5.8% of all jobs as of February. Roughly two-thirds (33) of our top 50 metros are above the national average, which reflects the concentration of financial jobs in urban centers. Metros with the highest percentage of jobs in the sector are New Haven, Conn. (9.5%), Dallas (9.3%), Jacksonville (9.3%), Phoenix (9.2%) and Tampa (8.8%). New Haven's small economy is home to a state university and regional banks. Dallas' rapidly growing economy includes an array of financial, insurance and banking firms.

Metros such as Jacksonville, Phoenix, Tampa and Salt Lake City might seem out of place on a list of financial industry job centers, especially ahead of New York City and regional banking centers including Charlotte and Denver, but they

Financial Activities Top 10 Markets % Employment	
New Haven	9.5%
Dallas	9.3%
Jacksonville	9.3%
Phoenix	9.2%
Tampa	8.8%
New York City	8.7%
San Antonio	8.5%
Charlotte	8.4%
Boston	8.1%
Salt Lake City	7.9%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Financial Activities Bottom 10 Markets % Employment	
Lansing	5.1%
San Diego	5.1%
Seattle	4.9%
Los Angeles	4.9%
Washington DC	4.8%
Oakland	4.7%
Memphis	4.4%
Fresno	3.5%
San Jose	3.3%
Inland Empire	2.8%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Financial Activities Top 10 Markets Total Employment	
New York City	637,866
Chicago	280,015
Dallas	256,598
Los Angeles	225,660
Philadelphia	218,175
Phoenix	204,903
Atlanta	179,367
Houston	168,492
Washington DC	163,099
Twin Cities	159,244

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

reflect the growing trend of financial firms outsourcing low-cost labor positions to secondary and tertiary markets. Conversely, metros such as San Francisco and New York remain centers of private equity and banking, but the high cost of office space and housing has prompted many firms to move jobs such as call centers and back offices to lower-cost locations. At 637,000, New York City still has by far the most financial activities jobs, followed by Chicago (280,000), Dallas (256,000), Los Angeles (225,000), Philadelphia (218,000) and Phoenix (205,000).

Five of the eight metros with less than 5% of jobs in financial activities are in California: the Inland Empire (2.8%), San Jose (3.3%), Fresno (3.5%), Oakland (4.7%) and Los Angeles (4.8%). Other metros ranking near the bottom in this category include Memphis (4.4%), Washington, D.C. (4.8%) and Seattle (4.9%). For the most part, metros with a low percentage of financial activities jobs have high concentrations in other job sectors. For example, San Jose and Seattle are technology industry centers, central California (Fresno) is a hub of agriculture, Washington is a center of government and Los Angeles is concentrated in media and entertainment.

Professional and Technical Services

Professional and technical services (PTS) encompass 9.2 million jobs—including computer systems design, legal, accounting, architectural, engineering and scientific research—that represented 6.4% of the U.S. workforce as of February. Some 32 of our top 50 metros rank above the national average, as with the finance category, due to the concentration of knowledge-based workers in large metros.

PTS comprises 10% or more of total employment in eight metros, led by Washington, D.C., and San Francisco (each 16.0%), San Jose (14.4%), Boston (13.2%) and Austin (11.0%). Metros with the highest number of PTS jobs are New York

Professional and Technical Services Top 10 Markets % Employment	
Washington DC	16.0%
San Francisco	16.0%
San Jose	14.4%
Boston	13.2%
Austin	11.0%
Denver	10.3%
Raleigh–Durham	10.1%
Detroit	10.0%
San Diego	9.9%
Newark	9.4%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Professional and Technical Services Bottom 10 Markets % Employment	
Cincinnati	5.9%
Sacramento	5.8%
Cleveland	5.6%
San Antonio	5.1%
Milwaukee	4.9%
Las Vegas	4.3%
Fort Worth	4.2%
Memphis	3.4%
Fresno	3.3%
Inland Empire	2.6%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Professional and Technical Services Top 10 Markets Total Employment	
New York City	611,581
Washington DC	543,159
Chicago	337,151
Los Angeles	308,515
Boston	253,800
Dallas	248,209
Houston	247,888
Atlanta	233,009
Philadelphia	231,401
San Francisco	225,083

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

City (611,000), Washington, D.C. (543,000), Chicago (337,000), Los Angeles (308,000) and Boston (254,000).

The metros at the top of this job segment have top-tier universities and concentrations of companies that produce technology, biotechnology and scientific research. Although Washington is known for government, its largest job sector is professional and business services, which includes management consulting, legal and accounting.

Although not a precise match, metros with large PTS segments tend to be "new economy" centers. It might be surprising to see high concentrations of PTS jobs in metros such as Detroit (10.0%), Newark/Northern New Jersey (9.4%), Baltimore (9.2%) and Kansas City (9.0%). Detroit and Baltimore are older cities that are trying hard to become knowledge-industry corridors through efforts including public-private partnerships. Kansas City—which has roughly twice the national average of jobs such as lawyers, financial sales agents and financial analysts—is along with Chicago unique among Midwest metros for being in the top half of the PTS segment. Indianapolis, St. Louis, Columbus, Cincinnati, Cleveland and Milwaukee are all in the bottom third of the ranking.

Six metros have less than 5.0% of their workforce in PTS, including the Inland Empire (2.6%), Fresno (3.3%), Memphis (3.4%), Fort Worth (4.2%), Las Vegas (4.3%) and Milwaukee (4.9%).

Government

Local, state and federal government employed 21.7 million, or 14.9% of all workers, as of February. Local governments employ almost two-thirds of those workers, including 7.6 million in education. States employ 5.0 million, including 2.3 million in education. The federal government's 2.9 million workforce includes 600,000 in the U.S. Postal Service.

Government Top 10 Markets % Employment	
Lansing	32.7%
Sacramento	23.6%
Fresno	22.4%
Washington DC	21.0%
Richmond	18.2%
Raleigh–Durham	16.9%
Inland Empire	16.7%
Columbus	16.4%
San Diego	16.4%
Austin	16.2%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Government Bottom 10 Markets % Employment	
Chicago	11.1%
Jacksonville	10.5%
Boston	10.4%
Las Vegas	10.3%
Milwaukee	9.8%
Orange County	9.8%
Pittsburgh	9.7%
Orlando	9.5%
Detroit	9.2%
San Jose	8.5%

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Government Top 10 Markets Total Employment	
New York City	941,005
Washington DC	712,613
Los Angeles	600,500
Chicago	422,909
Houston	421,066
Philadelphia	339,578
Atlanta	336,099
Dallas	308,743
Richmond	272,914
Inland Empire	258,509

Sources: U.S. Bureau of Labor Statistics and Yardi Matrix

Government is typically among the most stable job categories, but the impact of the pandemic will put state and local governments to the test. The federal government can run a deficit, but states and municipalities cannot. Many state governments depend on sales and income taxes for revenue, and those sources are shrinking as jobs dry up and people shelter at home and avoid buying all but necessities.

A recent study by the Center on Budget and Policy Priorities, a Washington think tank, found that state government shortfalls in the fiscal year that starts in the second half of 2020 could total $500 billion. Moody's Analytics looked at three recession scenarios and concluded that state tax revenues would contract by somewhere between 18% and 23% of fiscal 2019 general fund revenues through the end of state fiscal year 2021. Moody's found that only five states had enough reserves to absorb the revenue lost in a severe shock. Under a moderate recession scenario, 12 states had enough reserves to absorb the lost revenue and 33 would have gaps of 5% or more, including 21 with a gap of 10% or more.

What that means is that potentially hundreds of thousands or more of the 18.9 million state and local government workers in the U.S. could lose jobs unless something is done to fill the gap in income by the end of the year. Democrats in the House of Representatives are working on legislation in which the federal government would provide $915 billion to states and municipalities, but Senate Majority Leader Mitch McConnell (R-Ky.) and President Donald Trump have expressed opposition to the plan.

Four of our top 50 metros have more than 20% of employment in government: Lansing/Ann Arbor, Mich. (32.7%), Sacramento (23.6%), Fresno (22.4%) and Washington, D.C. (21.0%). Meanwhile, six metros have less than 10% of workers employed by government, led by San Jose (8.5%), Detroit (9.2%) and Orlando (9.5%).

Conclusion

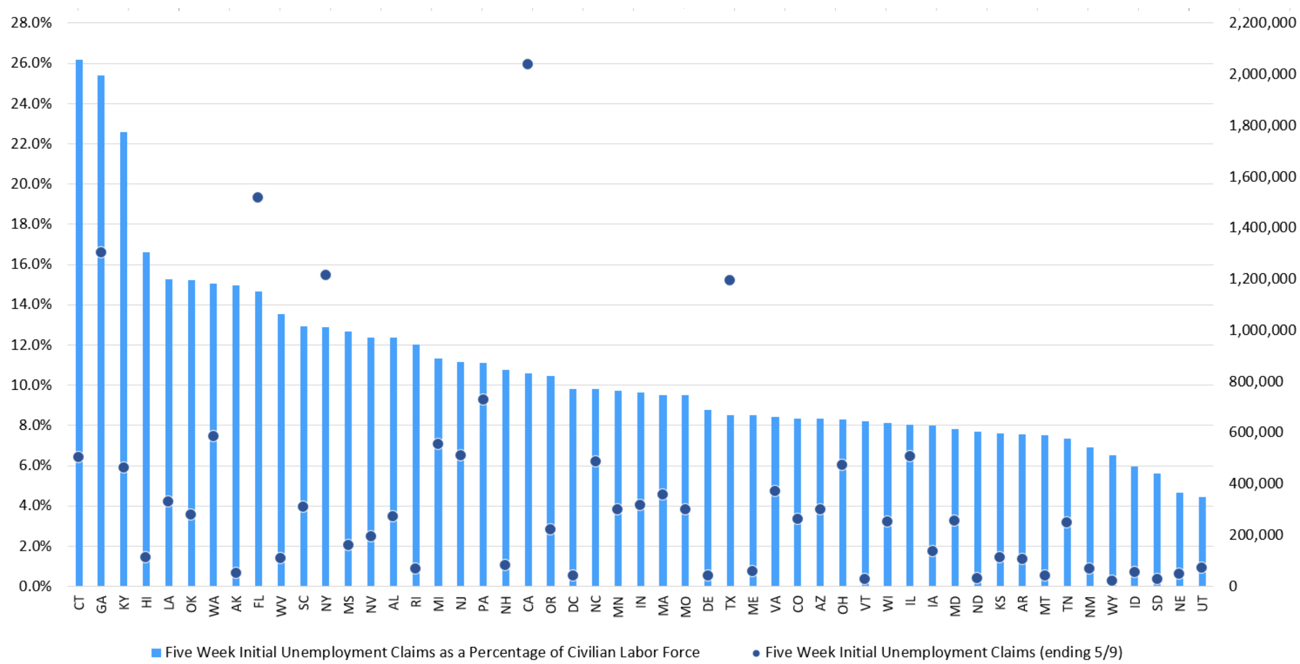
The goal of this study was to determine metros' exposure to the job segments that have performed the best at the outset of the pandemic. The upshot is that having a base of government jobs (including state universities) and/or concentrations of knowledge-based industries including (but not limited to) finance and technology should help metros weather the downturn.

Questions remain about the economy in coming quarters. Our study was based on jobs lost through April, and the composition of job losses may evolve. For example, government has lost relatively few jobs so far, but we could see massive layoffs of state employees if the federal government doesn't provide aid to states. And the job picture could change rapidly as states begin to reopen. Most unemployment claims have been filed by furloughed workers that are subject to callbacks as the economies of those states reopen.

Another question is the trajectory of the economy in the face of an unprecedented event. Whether the recovery will be shaped like a "V," a "U," a "W," an "L" or even a "swoosh" is subject to much debate. There is no similar event in modern history to which to compare, and the spread of the virus is even harder to guess, so the final chapter on job losses for this pandemic has not been written. Plus, there are issues of behavior. Will people decide to leave cities for areas with more open space? How willing will people be to venture out in public before they have confidence that they won't get infected? All those questions are to be determined.

—Paul Fiorilla, Director of Research

Job Loss by State



Source: U.S. Bureau of Labor Statistics, Department of Labor and Yardi Matrix

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