

May 2020

Economic Consequences of Coronavirus: Telework

Key Takeaways

- Metro areas with industries that had more flexibly working from home in the past may suffer less of an economic impact during stay-at-home orders and therefore face less pressure to re-open before it may be safe to do so. For example, the San Jose-Sunnyvale-Santa Clara, CA metropolitan area may better withstand the economic downturn caused by the shutdown since more than thirty percent of the people working there are employed in industries that historically have been afforded the flexibility to work from home.
- Metro areas with industries that have not worked from home in the past and with occupations that have certain physical capital requirements may face pressure to re-open sooner. For example, the Dalton, GA metropolitan area may find it more difficult to endure the economic downturn caused by the shutdown since more than fifty percent of the people working there are employed in industries that historically have not been able to work from home.

Due to the spread of COVID-19 and the shelter-in-place orders that were instituted throughout the United States to help reduce the spread of COVID-19, business activity has been deeply affected. This can be seen by the most current unemployment claims figures [here](#) and [here](#). Businesses that are less dependent on the economy “re-opening” to function can sustain with employees working from home longer and will feel less pressure to open before the curve truly flattens. Certain industries are more prepared for a work-from-home business model because they already had employees working remotely before, or they were able to more easily transition their employees to work from home. Because some industries are better suited to this transition, there are labor market areas with a higher concentration of businesses that might have adapted more readily to shelter-in-place orders and will be less likely to re-open their brick and mortar workplaces.

Using the 2014-2018 American Community Survey (ACS) data set from the Bureau of Labor Statistics¹, it is possible to understand which industries already have job functions that work from home. Industries such as Specialized Design Services, Direct Selling Establishments, and Independent Artists and Performers, are among those that have exhibited over 20 percent of their employed population working from home as can be seen in Figure 1. This flexibility is also seen for specific occupations such as Photography, Web Development, Editing, and Graphic Design in Figure 2 below.²

FIGURE 1

INDUSTRIES MOST LIKELY TO WORK FROM HOME

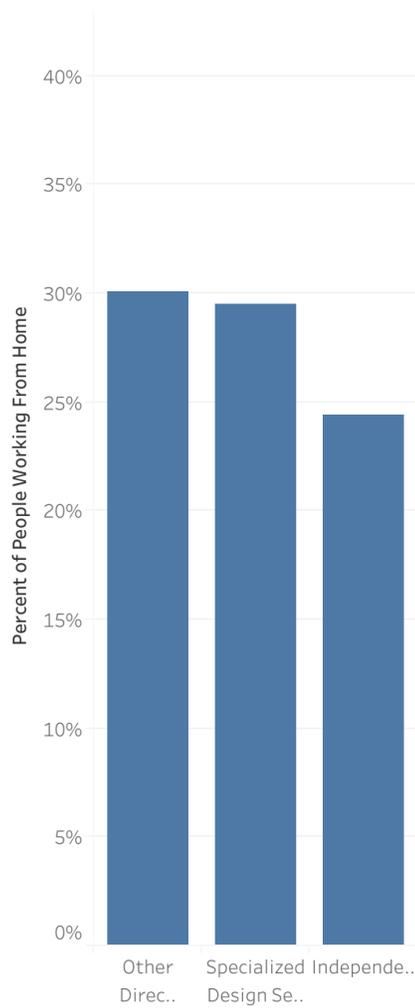
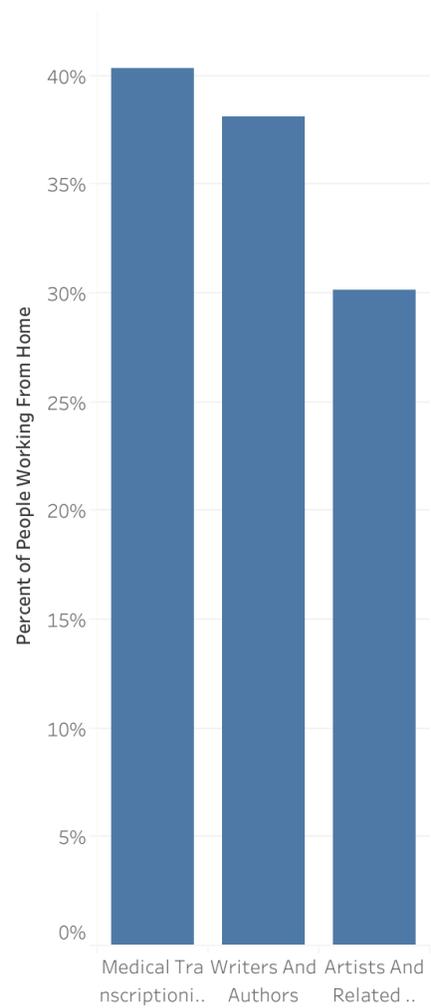


FIGURE 2

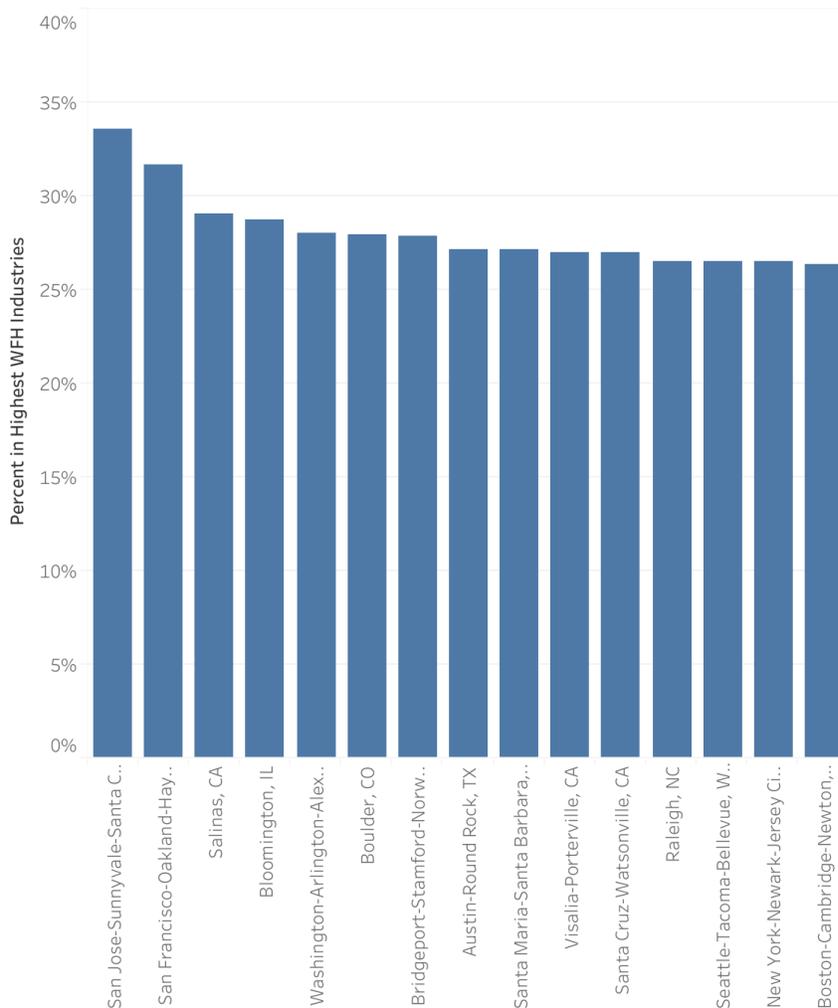
OCCUPATIONS MOST LIKELY TO WORK FROM HOME



Focusing on the percentage of employees working from home, out of the working population in metro areas across the United States, several regions have anywhere from seven to twelve percent of employees working from home. For example, the Boulder, CO metro area exhibits 11.18 percent of their employed population working from home and continuously is cited as one of the most prominent places for remote work due to the prominence of IT and research industries³. Recognizing the industries and occupations that progressed to working from home in the past decade gives insight to what regions will have less economic instability if shelter-in-place continues into the summer. Similarly, the top 15 metropolitan areas in Figure 3 below all have a relatively large share of employees in industries that tend to work from home. Labor market areas with higher shares of employees in these industries may feel less pressure to re-open due to their opportunities for telework flexibility.

Figure 3

Metro Areas With Highest Percentage of People In Most Likely Work-From-Home (WFH) Industries



In contrast, there are industries and occupations that have fewer opportunities for a work-from-home business model, due to requirements of the role. The reasons for this difficulty could include the physical capital required, an assembly line in place, human interactions needed, or the mechanisms involved. According to the ACS, some of the occupations where the employees work at home the least include boilermakers, machine assemblers, and packagers. In general, industries such as General Merchandise Stores, Warehousing, and Coal Mining, are least likely to have employees who work from home. These occupations and industries can be seen in Figure 4 and Figure 5 below, respectively.

FIGURE 4

INDUSTRIES LEAST LIKELY TO WORK FROM HOME

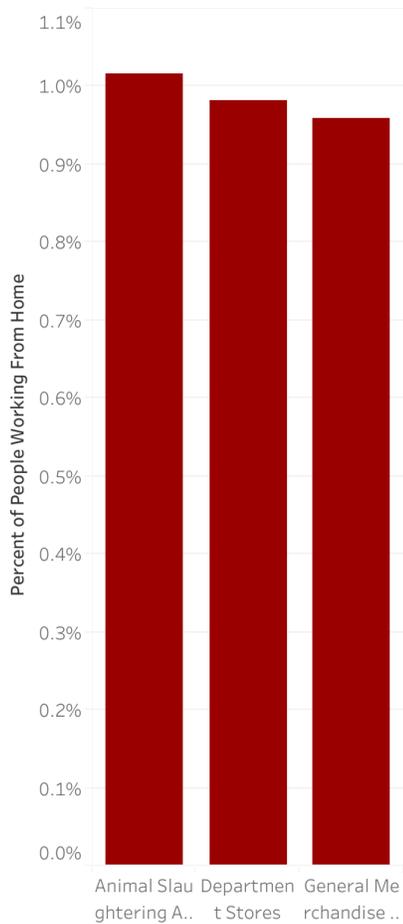
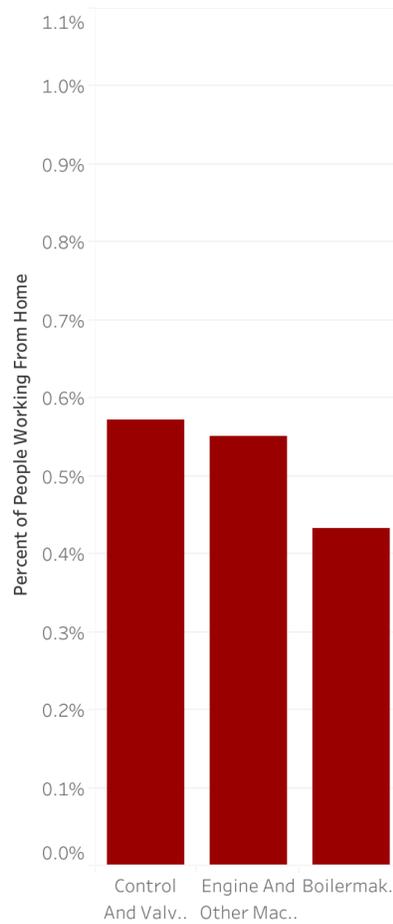


FIGURE 5

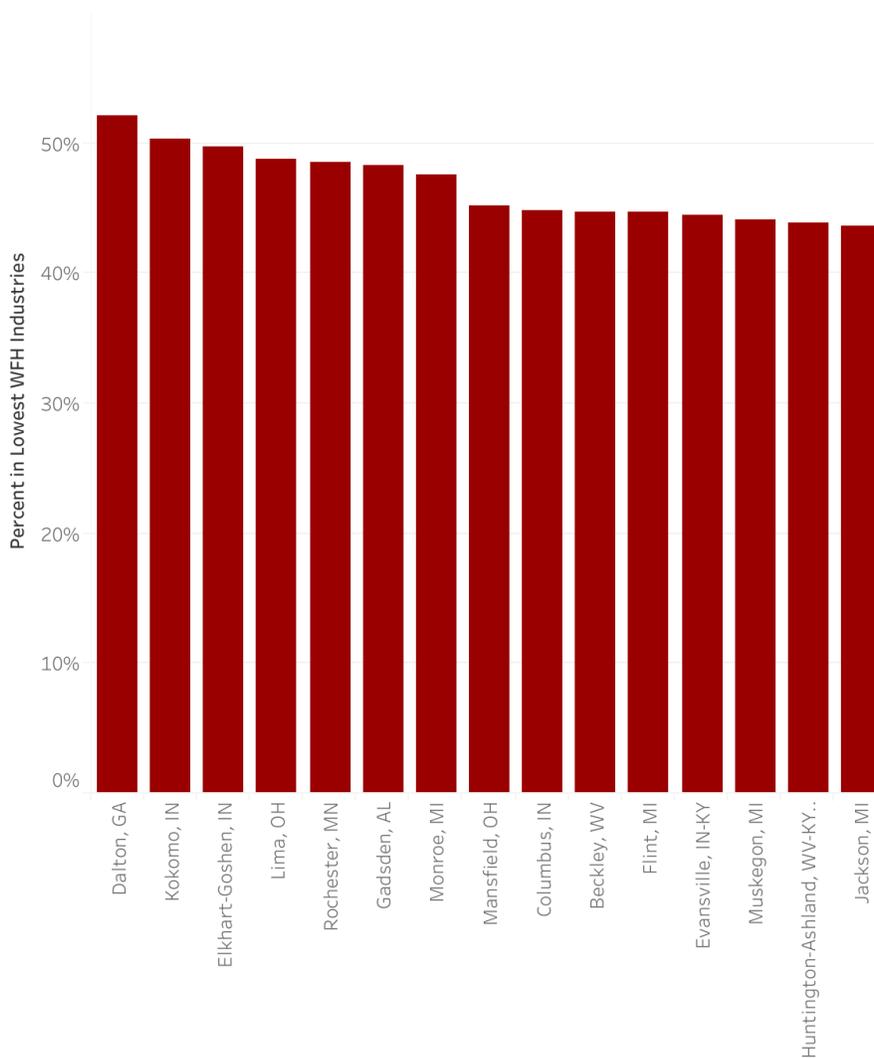
OCCUPATIONS LEAST LIKELY TO WORK FROM HOME



In contrast to the labor market areas that may benefit from large populations already working from home, there are areas that may suffer from the inability of employers to transition to remote and teleworking models. Metropolitan areas that have the fewest employees in work-from-home industries are found in Figure 6.

Figure 6

Metro Areas With Highest Percent of People In Least Likely Work-From-Home (WFH) Industries



During this unprecedented downturn, some of the positions described above cannot be done remotely but have been deemed essential. Even for jobs that are considered essential, some individuals might find it difficult to work and comply with suggested social distancing guidelines. Workers in industries with few opportunities for telework comprise a relatively large percentage of some smaller metropolitan areas. In these metro areas the inability to work from home for a high percentage of residents will likely create pressure to re-open facilities. For example, in Figure 6 above, Elkhart-Goshen, Indiana, is one of the areas with the highest percentage of employees in industries that have traditionally been unable to work from home. A primary industry in Elkhart-Goshen is a recreational vehicle (RV) manufacturing center and since RV's cannot be produced while working from home, the Elkhart-Goshen economy is suffering from shelter-in-place orders. This may lead to more pressure on the local government to re-open and remove the shelter-in-place order. Many of the other small metropolitan areas in Figure 6 are also manufacturing hubs and most employees in the area cannot do their work from home and may also want to re-open their local economies before other cities follow suit.⁴

Shelter-in-place orders have affected metropolitan areas differently based on the types of businesses prevalent in the area. In cities where many employees are afforded the flexibility of working from home, the local economy is more likely to withstand prolonged shelter-in-place orders. However, if the majority of employees in a metropolitan area are unable to effectively work from home, there will be more pressure on local leaders to re-open their communities and local economies.

Notes

1. U.S. Census Bureau (2018). *Selected housing characteristics, 2014-2018 American Community Survey 5-year estimates*. Retrieved from <https://data.census.gov/mdat/?#/search?ds=ACSPUMS5Y2018>
2. When analyzing industries and occupations most and least likely to have flexibility in working from home, government industries and occupations are omitted. Additionally, the Travel Agent occupation which exhibited high flexibility in remote work in the past has been omitted from the top three occupations working from home.
3. Boulder Economic Council. (2020). *Key Industries and Companies*. Retrieved from <http://bouldereconomiccouncil.org/boulder-economy/key-industries-companies/>.
4. Similar to how Elkhart-Goshen is known for being an RV manufacturing center, Dalton, GA is known for carpet manufacturing, and Kokomo, IN and Flint, MI are known for automobile manufacturing.

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