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Digital Job Growth in the Mountain West, 2002-2020

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DIGITAL JOB GROWTH IN THE MOUNTAIN WEST, 2002-2020

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PURPOSE:

This fact sheet examines data from the Brookings Institution report, "As the Digitalization of Work Expands, Place-based Solutions Can Bridge the Gaps,"[1] which explores information on digital job growth in the U.S. The original report contains the digitalization scores of each state from 2002 to 2020 as well as scores for specific occupations. This fact sheet focuses on the digital job growth for each state in the Mountain West (Arizona, Colorado, Nevada, New Mexico, and Utah) and their metros.

ABOUT THE DATA:

The original report offers data for 50 states and Washington D.C. as well as major metro areas. For each state and metro area, the average digitalization score is displayed for the years 2002, 2010, and 2020. In order to produce this metric, authors reviewed data from the Occupation Information Network (O*NET), which is funded by the Department of Labor's Employment and Training Administration. Information from the Occupational Employment Statistics data from the Bureau of Labor Statistics is also included.

Occupation-specific digital scores are compiled from the O*NET survey data. The survey originally collected information about the knowledge, skills, tools and technology, education and training, work context, and work activities required for jobs. The two metrics: "knowledge- computer and electronics" and "work activity- interacting with computers" measure the level of digital skills required in the workplace. The knowledge metric focused on the overall knowledge of computers and electronics required by the job, while the work activity metric focused on the centrality of computers to the overall work activity of the job. The original scores for each metric are compiled on different scales, so the authors converted both ratings to a standardized score ranging from 1 to 100. The weighted sum of both variables produced a digitalization score for each state, metro area, and occupation. The more digitally intense the occupations, the higher the score with a maximum possible digitalization score of 100.

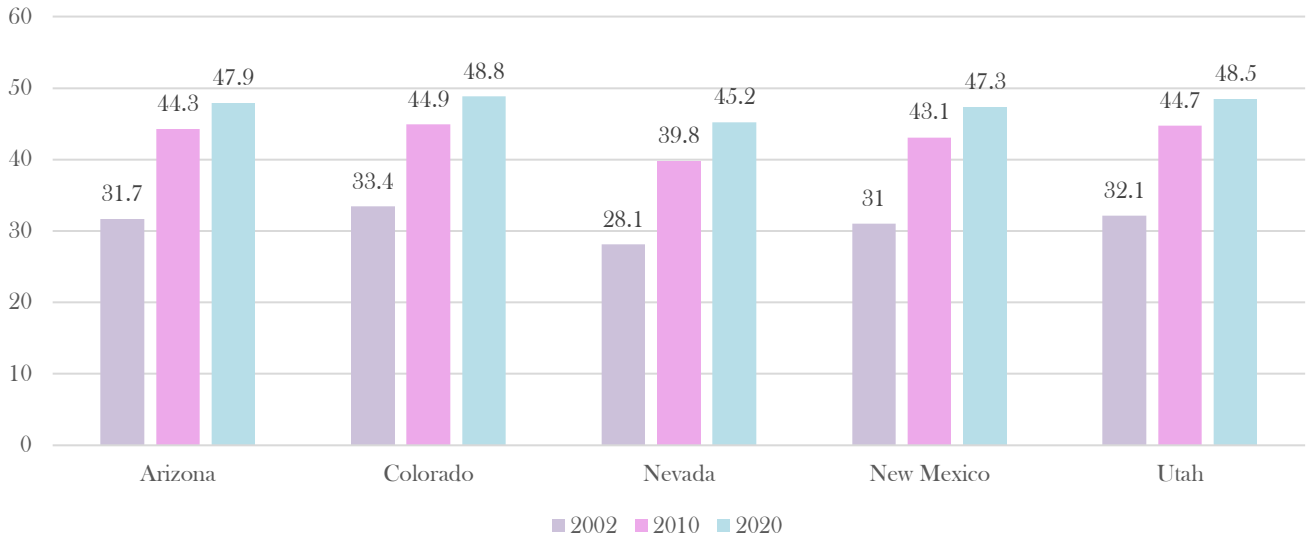
KEY FINDINGS:

1. All five Mountain West states experienced an improvement in their digitalization scores between 2002 and 2020; among Mountain West states, Colorado (48.8) achieved the highest score in 2020.
2. Among Mountain West states, Nevada had the lowest digitalization score in all three years measured (2002, 2010, and 2020).
3. By 2020, Boulder, Colorado (52.5) earned the highest metro digitalization score in the Mountain West.; the metro reporting the lowest digitalization score was Yuma, Arizona (22.6).
4. The only metro in the Mountain West to experience a decline in its digitalization score from 2002 (25.5) to 2020 (22.6) was Yuma, Arizona.
5. Except for Yuma, Arizona (22.6) all Mountain West metro areas had a digitalization score above 44.0.

[1] "As the Digitalization of Work Expands, Place-based Solutions Can Bridge the Gaps." *Brookings Institution.* (2017). www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/#interactive

Figure 1 displays the average digitalization score for each Mountain West state in 2002, 2010, and 2020. Colorado (48.8) had the highest digitalization score in 2020, while Nevada (45.2) had the lowest. Among Mountain West states, Nevada had the lowest digitalization score in all three years measured (2002, 2010, and 2020). All five states experienced an increase in their digitalization scores over this period.

Figure 1: Average Digitalization Score, Mountain West States, 2002, 2010, and 2020



* Adapted from "As the Digitalization of Work Expands, Place-based Solutions Can Bridge the Gaps". *Brookings Institution.* (2017). /www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/#interactive

Table 1 displays Arizona metros and their average digitalization scores in 2002, 2010, and 2020. The metro with the highest digitalization score in 2020 was Sierra Vista-Douglas (49.1). The metro with the most improved digitalization score was Lake Havasu City-Kingman with a difference of 22.5 points from 2002 (21.9) to 2020 (44.4). The only Arizona metro to experience a decline was Yuma, which had the lowest digitalization score in 2020 (22.6). Yuma is the only Mountain West metro to experience a decline during this period.

Table 1: Arizona Metros Average Digitalization Score, 2002, 2010, and 2020

Metropolitan Statistical Area	2002	2010	2020
Flagstaff	31.1	42.5	46.4
Lake Havasu City-Kingman	21.9	41.5	44.4
Phoenix-Mesa-Chandler	32.0	44.7	48.2
Prescott Valley- Prescott	28.7	41.5	45.1
Sierra Vista-Douglas	34.7	47.0	49.1
Tucson	32.7	44.8	48.1
Yuma	25.5	39.0	22.6

* Adapted from "As the Digitalization of Work Expands, Place-based Solutions Can Bridge the Gaps". *Brookings Institution.* (2017). www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/#interactive

Table 2 displays Colorado metros and their average digitalization scores in 2002, 2010, and 2020. The metro with the highest digitalization score in 2020 was Boulder (52.5). The metro with the most improved digitalization score was Greeley with a difference of 16.9 points from 2002 (27.4) to 2020 (44.3). The metro with the lowest digitalization score in 2020 was Greeley (44.3). All seven Colorado metros experienced an increase in their digitalization score over this period.

Table 2: Colorado Metros Average Digitalization Score, 2002, 2010, and 2020

Metropolitan Statistical Area	2002	2010	2020
Boulder	38.4	48.6	52.5
Colorado Springs	35.0	46.7	49.5
Denver-Aurora-Lakewood	34.3	45.6	49.6
Fort Collins	33.4	44.9	48.6
Grand Junction	29.9	41.8	46.1
Greeley	27.4	39.6	44.3
Pueblo	30.6	42.9	46.3

* Adapted from "As the Digitalization of Work Expands, Place-based Solutions Can Bridge the Gaps". *Brookings Institution.* (2017). www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/#interactive

Table 3 displays the metro areas in Nevada and their average digitalization scores in 2002, 2010, and 2020. The metro with the highest digitalization score in 2020 was Carson City (49.5). The metro with the most improved digitalization score was Las Vegas-Henderson-Paradise with a difference of 17.5 points from 2002 (27.5) to 2020 (45.0). All three Nevada metros experienced an increase in their digitalization score over this period.

Table 3: Nevada Metros Average Digitalization Score, 2002, 2010, and 2020

Metropolitan Statistical Area	2002	2010	2020
Carson City	33.7	45.7	49.5
Las Vegas-Henderson-Paradise	27.5	39.5	45.0
Reno	29.9	42.1	45.9

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Table 4 displays New Mexico metros and their average digitalization scores in 2002, 2010, and 2020. The metro with the highest digitalization score in 2020 was Albuquerque (48.7). The metro with the most improved digitalization score was Farmington with a difference of 17.4 points from 2002 (27.5) to 2020 (44.9). All four New Mexico metros experienced an increase in their digitalization score over this period.

Table 4: New Mexico Metros Average Digitalization Score, 2002, 2010, and 2020

Metropolitan Statistical Area	2002	2010	2020
Albuquerque	32.6	44.5	48.7
Farmington	27.5	39.7	44.9
Las Cruces	31.0	33.4	46.3
Santa Fe	31.9	43.5	47.4

* Adapted from "As the Digitalization of Work Expands, Place-based Solutions Can Bridge the Gaps". *Brookings Institution.* (2017). www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/#interactive

Table 5 displays Utah metros and their average digitalization scores in 2002, 2010, and 2020. The metro with the highest digitalization score in 2020 was Salt Lake City (49.7). The metro with the most improved digitalization score was Logan with a difference of 16.9 points from 2002 (30.2) to 2020 (47.1). All five Utah metros experienced an increase in their digitalization score over this period.

Table 5: Utah Metros Average Digitalization Score, 2002, 2010, and 2020

Metropolitan Statistical Area	2002	2010	2020
Logan	30.2	43.2	47.1
Ogden-Clearfield	30.7	43.3	47.5
Provo-Orem	32.9	46.0	49.0
St. George	28.3	41.2	44.9
Salt Lake City	33.5	46.0	49.7

* Adapted from "As the Digitalization of Work Expands, Place-based Solutions Can Bridge the Gaps". *Brookings Institution.* (2017). www.brookings.edu/research/as-the-digitalization-of-work-expands-place-based-solutions-can-bridge-the-gaps/#interactive