

# Rural Migration News

## Blog 238

SEPTEMBER 2021

### Occupational Mobility

The US is the land of opportunity, but how much mobility is there from low- to high-wage occupations? Less than 10 percent of US workers in the top income quintile had fathers who were in the bottom quintile, which is about half of the 20 percent average for upward mobility from the bottom to the top income quintiles between fathers and sons in OECD countries.

Intra-generational mobility has also declined in the US, so that a rising share of workers who begin their working lives in low-wage occupations remain in such occupations.

Worker mobility can be visualized as buildings with high-wage occupations on the top floors and low-wage occupations on the bottom floors. Workers enter the labor market on a particular floor, and analysis determines whether they move up escalators and elevators to higher wage occupations or floors or move across walkways and skyways to other occupations that have similar median wages. If the buildings ascend a hill, the question is how many workers who begin in occupations that are on the ground floor of low buildings on flat land can

ascend up the hill to higher-wage occupations on higher floors of buildings higher up on the hill.

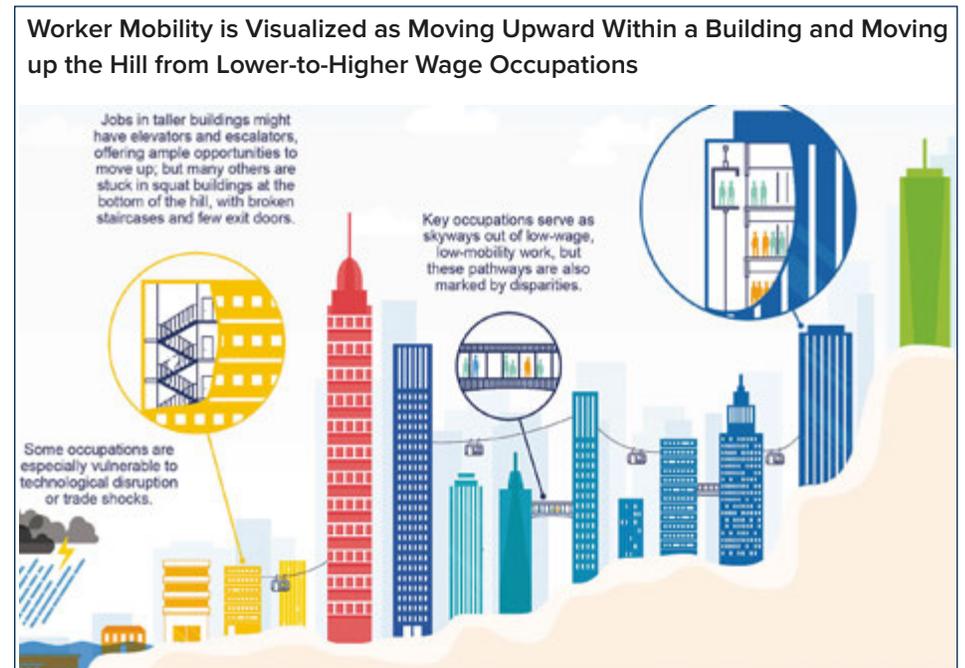
The Brookings study of occupational mobility used Current Population Survey data that tracked workers between 2003 and 2019. The analysis was based on 228,000 occupational transitions among 8.2 million workers. Half of the 228,000 CPS workers who changed occupations made an upward transition to an occupation with a higher median

wage and half made a downward transition. Some 428 occupations in 130 industries were studied, including 15 “sandpits” in which workers appear to be trapped in low-wage occupations.

An example illustrates the methodology. The average worker in an occupation whose median wage is \$12 an hour and who changes to an occupation where the median wage is \$15 experiences upward mobility. Retail sales persons, where median wages are \$12 an hour, have high upward mobility because 65 percent of those who changed occupations over the past two decades moved into new occupations where the median wage was at least \$15 an hour. Personal care aids, by contrast, had little upward mobility because only 35 percent of those who changed occupations entered an occupation whose median wage was at least \$15 an hour.

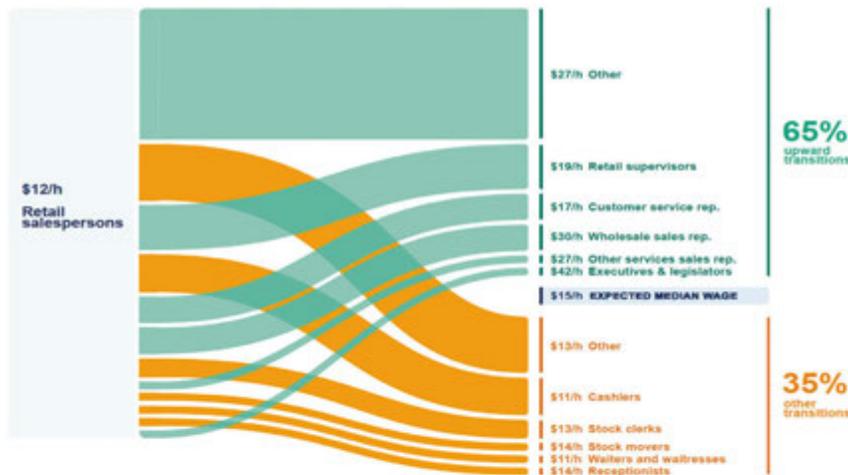
#### Mobility

It is hard for workers in low-wage occupations to move to higher wage occupations. Only 43 percent of workers in low-wage occupations moved to a higher wage occupation

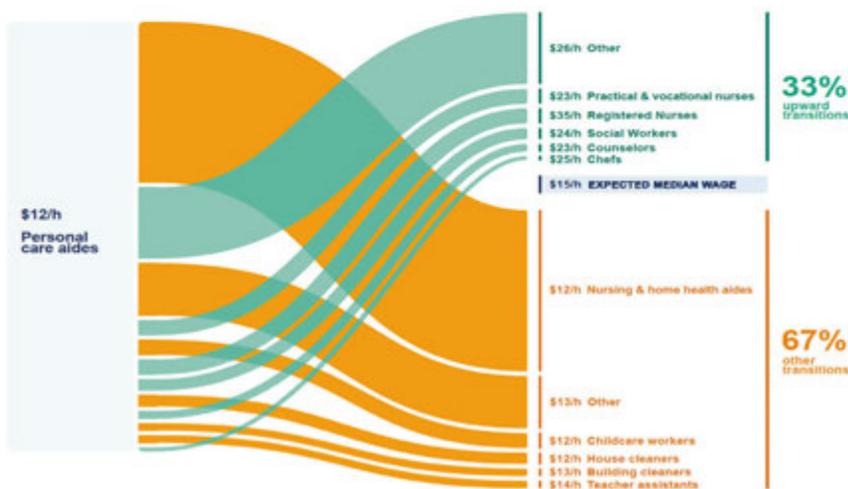


## 65% of Retail Sales Persons Who Changed Occupations Experienced Upward Mobility, but Only 33% of Personal Care Aides

### a. Retail salespersons: High upward mobility



### b. Personal care aides: Low upward mobility



in a 10-year period, and the probability of moving to a higher wage occupation falls the longer a worker is in a low-wage occupation. One reason is that there are ever fewer stepping-stone occupations that allow low-wage workers to move to higher wage occupations.

The analysis distinguished sandpit from skyway occupations. Sandpit occupations such as assemblers involve movement between similar occupations, while skyway occupations such as professional services enable workers to move from lower to higher wage occupations.

Many low-wage occupations offer little upward mobility. Hospitality had

the lowest median annual wage and the lowest rate of upward mobility, while professional services and utilities offered high median wages and high upward mobility. Agriculture was closer to hospitality, with 41 percent of occupational changes resulting in movement to occupations that offered higher median wages.

### Networks

The CPS data allow analysis of how workers move between occupations, answering questions such as whether construction laborers move up to become carpenters or roofers. The size of each node or occupation reflects employment in 2019, and the distance between nodes

reflects how often workers make the transition from one occupation to another. For example, construction laborers are more likely to move up to carpenters and HVAC technicians than personal care aides are to become registered nurses.

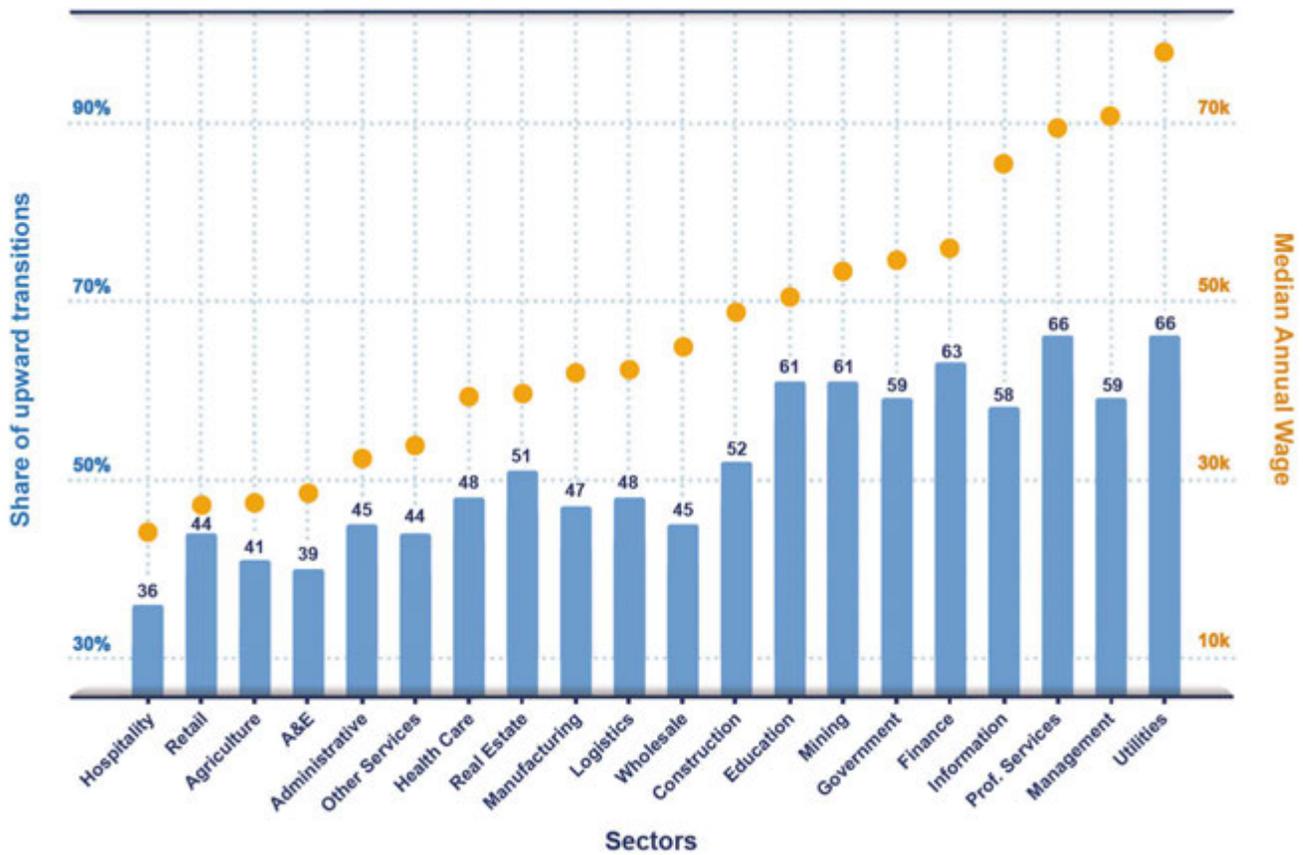
Occupations can be clustered based on 2019 employment and movements within related occupations. Male-dominated occupations such as agriculture are in the upper left in the figure below, while female-dominated occupations such as health care are in the lower right. Workers who change occupations are four times more likely to remain within an occupational cluster than to move to a different cluster.

The Brookings analysis of 15 occupational clusters differs from the BLS Standard Occupational Classification (SOC) system, which groups occupations into 23 groups. Farming, fishing, and forestry occupations are in group 45, and the largest employment in the group is 45-2092, Farmworkers and Laborers, Crop, Nursery, and Greenhouse.

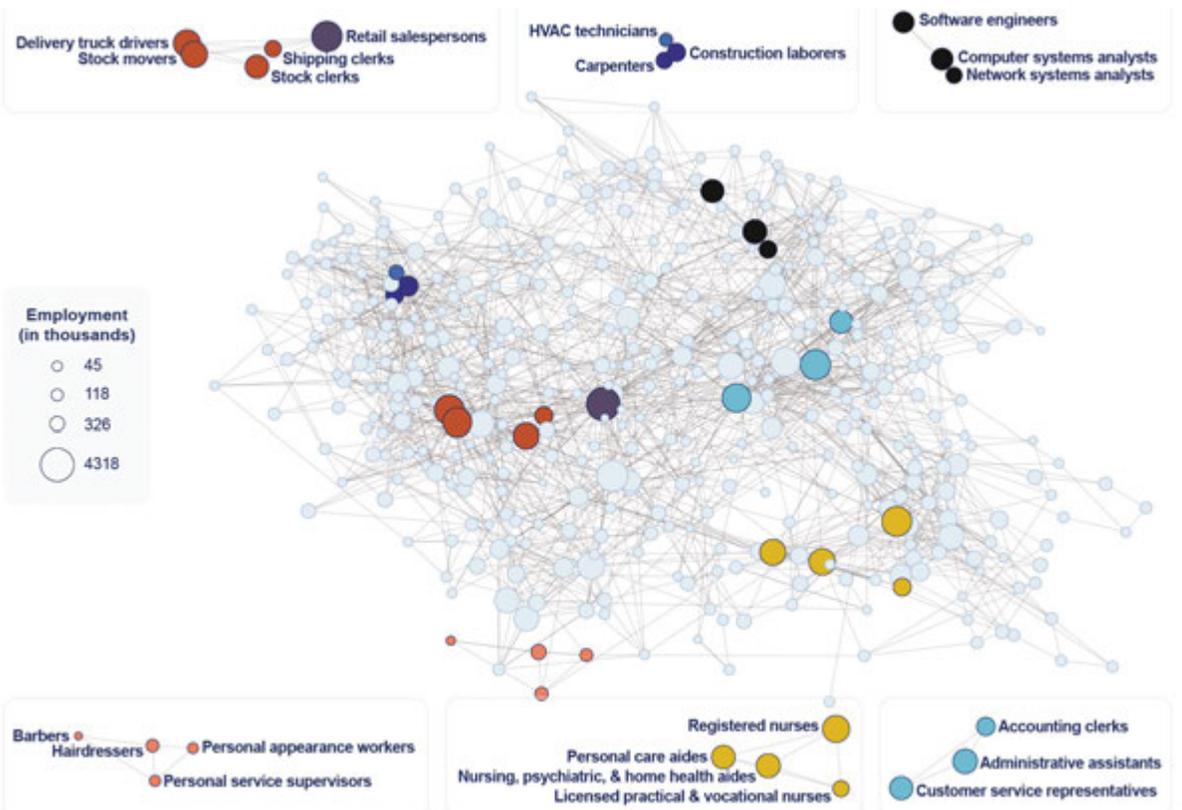
### Sandpits

The key finding of the analysis is that some occupations are sticky, allowing little upward mobility. Food service is an example of the 111 occupations in the low-wage and low-mobility sandpit, where the median wage was less than \$15 in 2019 and only 38 percent of food service workers who made an occupational change raised their hourly earnings, including 15 percent who raised their wages within the cluster. Young workers in the sandpit, such as youth who work in agriculture or food service, are likely to move up if they get more education, but workers over 40 in sandpit occupations find it hard to achieve upward mobility.

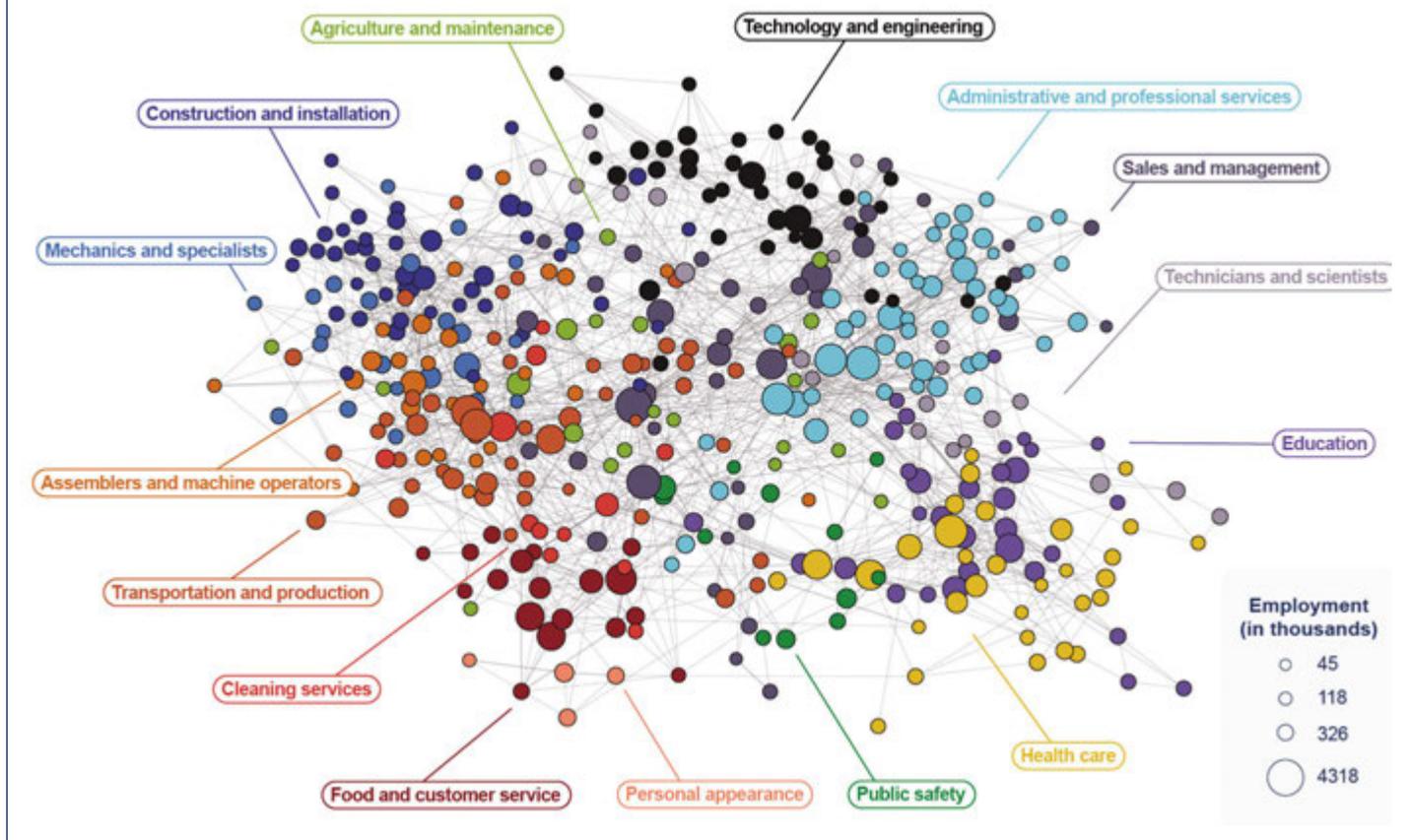
## Most Workers in Low-Wage Occupations Who Changed Occupations Did Not Achieve Significantly Higher Earnings



## The Size of Occupations Reflects 2019 Employment, and the Distance Between Occupations Measures the Share of Workers Who Change to that Occupation



## Related Occupations Can be Grouped Into 15 Clusters



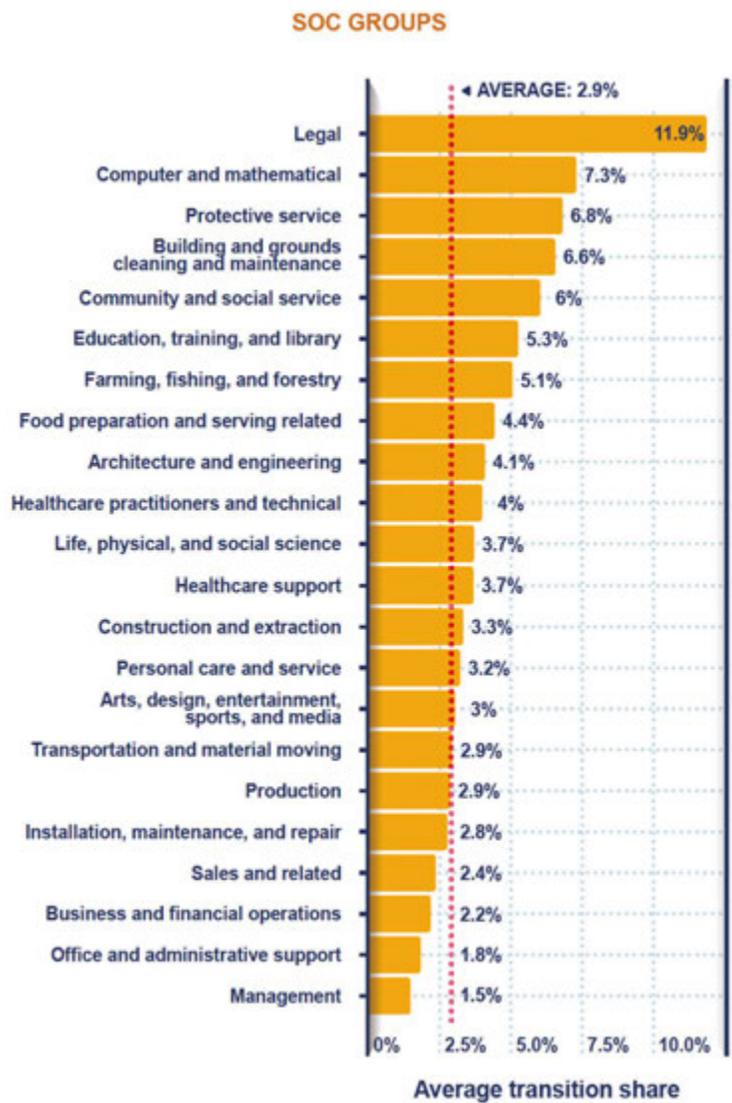
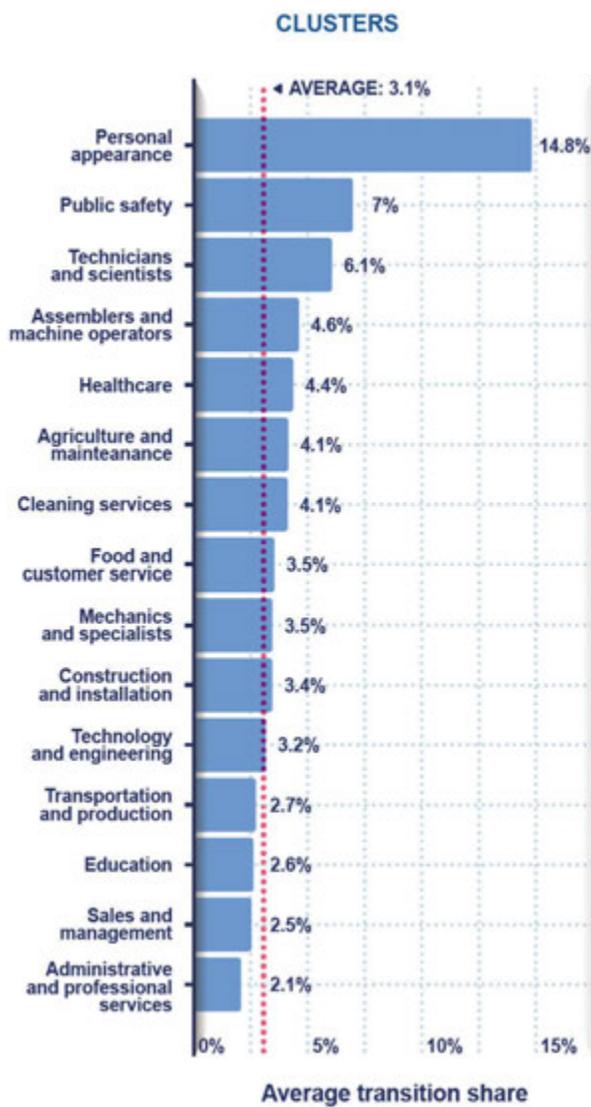
Brookings grouped agriculture with maintenance occupations, and reported that these two occupations had average employment of 3.1 million in 2019 and a median wage of \$19 an hour. Half of the workers in this cluster who changed occupations moved up, and eight percent moved up within their cluster, as when a crop worker became an equipment operator, putting agriculture in the average wage and average mobility cluster.

Table A1.3 reported that there were 60,000 workers with farm, fishing and forestry occupations among the 8.1 million workers in the sample, including 1,800 or 3.1 percent who changed occupations between 2003 and 2019. Of these 1,800 workers who changed occupations, 48 percent made upward transitions to new occupations that had higher median wages.

## Policy

The analysts reviewed proposals to increase the mobility of low-wage workers, from raising the minimum wage to ensuring that workers are able to move their health care and pension benefits with them as they change employers. They urged wage subsidies to encourage employers to hire low-skill workers, and federal spending on infrastructure to increase employment in occupations that permit upward mobility.

About 3% of Persons who Changed Occupations Between 2003 and 2019  
 Moved Between Occupational Clusters or SOC Groups



**References**

Escobari, Marcela, Ian Seyal, and Carlos Daboin Contreras. 2021. Moving up: Promoting workers' upward mobility using network analysis. Brookings. Available at:

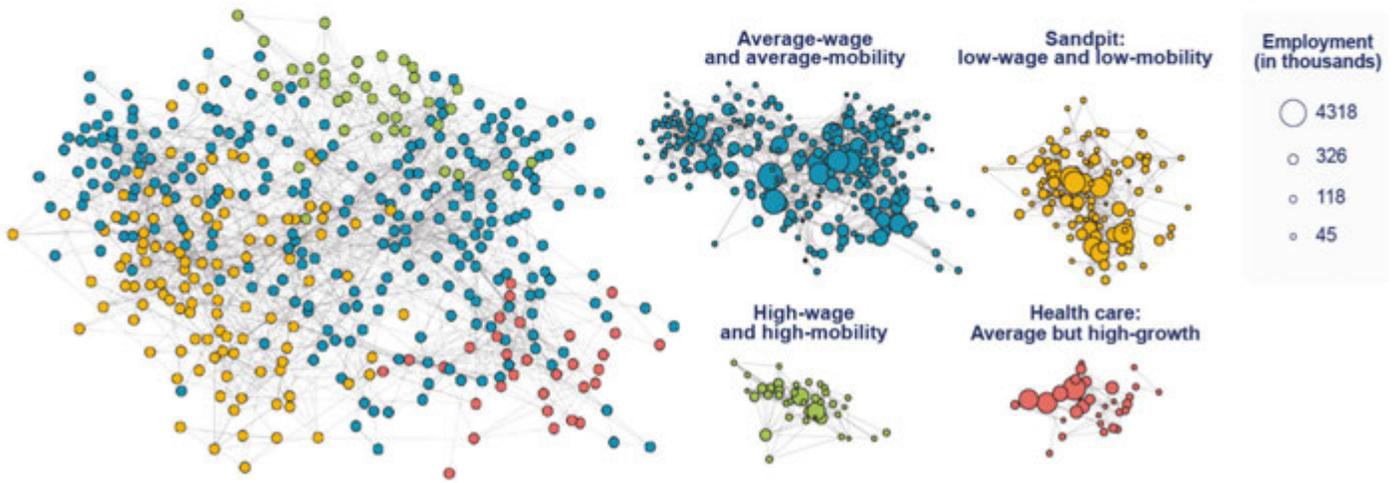
<https://www.brookings.edu/research/moving-up-promoting-workers-upward-mobility-in-a-time-of-change/>

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Employment in High-Wage and High-Mobility Occupations is 1/4 of Employment in Low-Wage and Low-Mobility Occupations

Network regions	Number of workers	Share of U.S. employment	Projected growth (2019-2029)	Median hourly wage	Share of upward transitions	Share of internal upward transitions
● High-wage and high-mobility	8.5m	6.0%	8.5%	\$43	70.6%	50.7%
● Average-wage and average-mobility	81.4m	57.3%	2.2%	\$22	51.5%	42.3%
● Health care	14.6m	10.3%	12.0%	\$23	43.4%	25.2%
● Sandpit (low-wage and low-mobility)	37.5m	26.4%	2.2%	\$15	38.1%	14.7%



48% of the 1,800 Agricultural Workers Who Changed Occupations between 2003 and 2009 Moved to a Higher-Wage Occupation

