



October 2022

KENTUCKY

LABOR FORCE UPDATE

Economic Mobility in Kentucky from 2010 to 2019

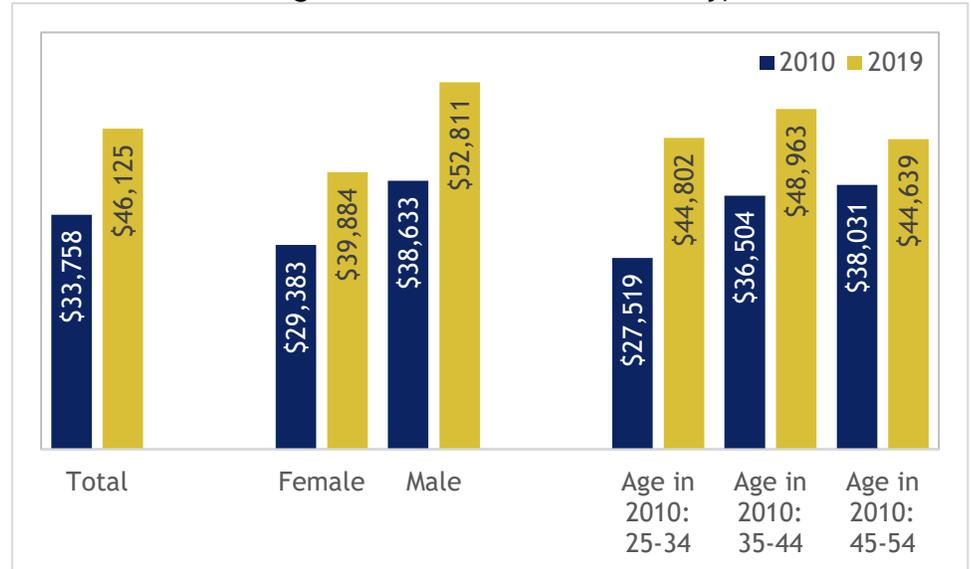
Economic mobility describes how economic well-being, typically measured by some form of income, changes over time. Using data from the Kentucky Longitudinal Data System (KLDS) this month's *Labor Force Update* examines the economic mobility of Kentucky workers who were between the ages of 25 and 54 in 2010, so called prime age workers. The 2010 earnings for these workers were compared to their respective earnings in 2019 to determine their economic mobility and identify factors and characteristics associated with both upward mobility and decline. Changes in economic mobility can be absolute or relative. Absolute mobility refers to gains and losses in individual income. Relative mobility looks at how an individual's income rank changes relative to other individuals over time.

There were approximately 769,000 Kentucky prime age workers with qualifying earnings in 2010 and 2019.¹ This cohort of workers were slightly more male (50.8 percent) than female (49.2 percent) and fairly evenly divided by age group: 25-34 years old in 2010 (32.9 percent), 35-44 years old (34.9 percent), and 45-54 years old (32.2 percent). Seven percent of these select workers received a postsecondary credential during this timeframe.

Absolute Mobility

Between 2010 and 2019, median total earnings of the selected cohort increased 36.6 percent from \$33,758 in 2010 to \$46,125 in 2019. Median total earnings increased at similar rates for men and women, but median total earnings for women in 2010 were 24 percent lower than the median for males. Younger workers had lower earnings than older workers in 2010. The youngest workers in this group, those between 25 and 34 in 2010, experienced the largest gain in median earnings, 62.8 percent increase by 2019, though their earnings were still below the overall median.

Median Annual Earnings of Select Workers in Kentucky, 2010 and 2019



Note: Includes workers between the ages of 25 and 54 in 2010 with total annual earnings of at least \$3,000 in both 2010 and 2019. Earnings are not adjusted for inflation.

More than 608,000 prime age workers experienced an increase in wages (79 percent of the cohort), absolute upward mobility, between 2010 and 2019. The remaining workers either experienced no change in annual earnings (0.1 percent of the cohort) or absolute downward mobility (20.8 percent, nearly 160,000 workers).

¹ Only those workers with total annual job earnings of at least \$3,000 in both 2010 and 2019 are included.

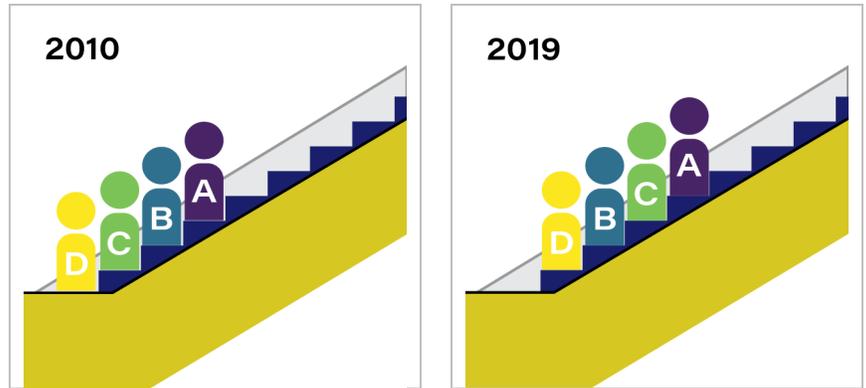


Economic Mobility in Kentucky from 2010 to 2019

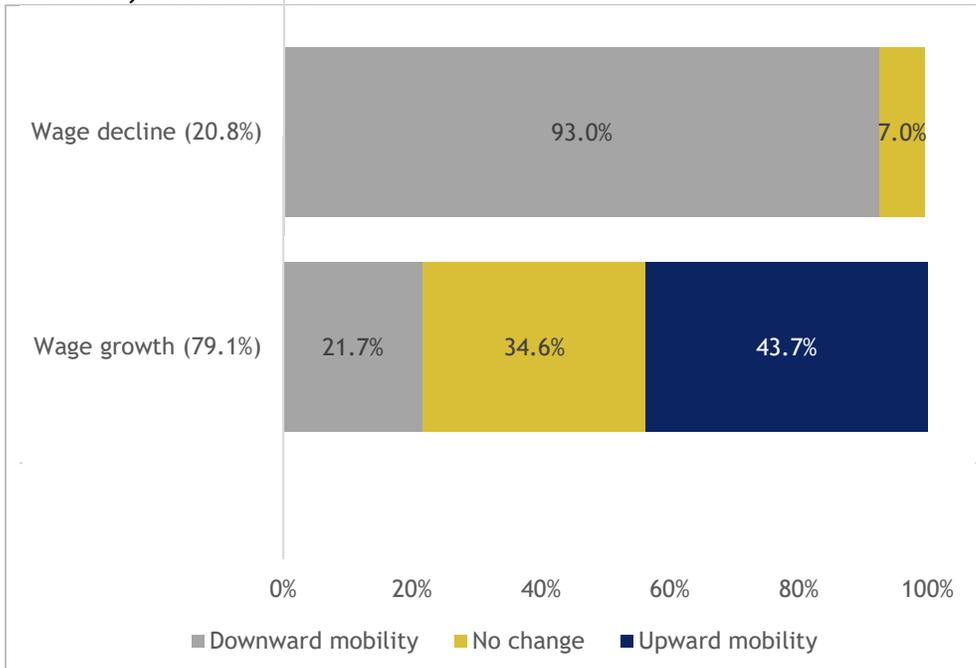
Relative Mobility

One method used to examine relative economic mobility is to rank the workers by decile according to their wages in both years. A change in decile from 2010 to 2019 indicates relative economic mobility. However, since the number of workers is constant, in order for one worker to move up, another worker must move down.

An escalator is often used to describe relative mobility. Let's say four people get on an escalator at different times. However, some people stand and some people walk past others allowing people to switch places from their original order. Their order at the exit of the escalator will be different than when they got on. In the illustration, people get on the escalator in 2010 based on the annual earnings in the order of A B C D. When they get off the escalator in 2019 based on their annual earnings, the order has changed since Person C moved past Person B. Person C experienced relative upward mobility while person B experienced relative downward mobility.



Change in Total Annual Earnings and Mobility of Select Kentucky Workers, 2010 to 2019



A change in wages (a measure of absolute mobility) is not necessarily predictive of a change in decile (a measure of relative mobility). Nearly 21 percent of workers had fewer total earnings in 2019 than in 2010. Nearly all of these workers also experienced relative downward mobility, dropping to a lower decile. While the majority of workers who had an increase in total earnings from 2010 to 2019 (79.1 percent of all select workers), not all moved up to a higher decile. In fact, one-fifth of prime age workers with wage growth experienced downward relative mobility (21.7 percent), one-third saw no change (34.6 percent), and the remaining share experienced upward mobility (43.7 percent). An increase in total earnings, while positive (absolute upward mobility), will have to be greater than another worker's increase in order to pass them on the mobility escalator and move up a decile (relative upward mobility).

Note: Includes workers between the ages of 25 and 54 in 2010 with total annual earnings of at least \$3,000 in both 2010 and 2019. Earnings are not adjusted for inflation.

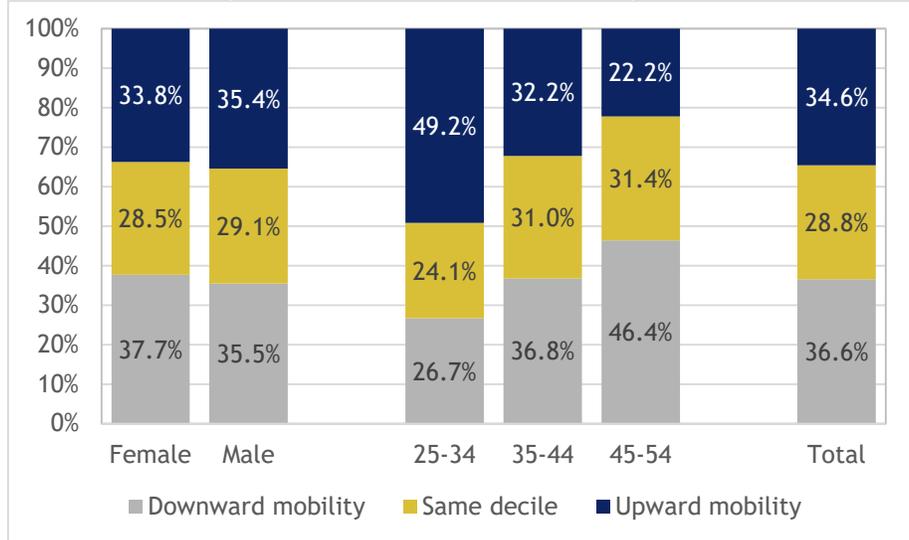
mobility), will have to be greater than another worker's increase in order to pass them on the mobility escalator and move up a decile (relative upward mobility).



Economic Mobility in Kentucky from 2010 to 2019

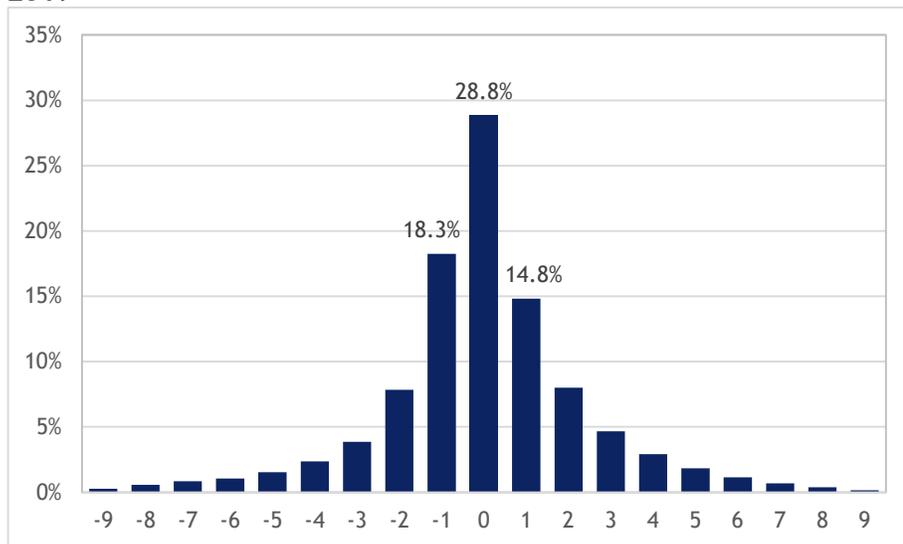
Between 2010 and 2019, more than one-third of prime age workers with annual wages of at least \$3,000 experienced upward mobility of at least one decile (34.6 percent). However, a larger share of workers experienced downward mobility (36.6 percent) of a decile or more. More than one-quarter of prime age workers stayed in the same decile from 2010 to 2019 (28.8 percent). A larger share of women experienced downward relative mobility than men and workers between the ages of 25-34 in 2010 had more relative upward mobility than the other age groups (49.2 percent compared to 32.2 percent for 35-44 year olds and 22.2 percent for those between 45 and 54 in 2010). Among those who experienced no mobility with regard to their decile, the majority did see an absolute increase in wages. However, some were in the tenth decile and could not move up. Others did not experience enough of a change in total earnings to move up a decile relative to the increased earnings of other workers.

Economic Mobility of Select Workers in Kentucky, 2010 to 2019



Note: Includes workers between the ages of 25 and 54 in 2010 with total annual earnings of at least \$3,000 in both 2010 and 2019. Earnings are not adjusted for inflation.

Change in Earnings Decile Among Select Workers in Kentucky, 2010 to 2019



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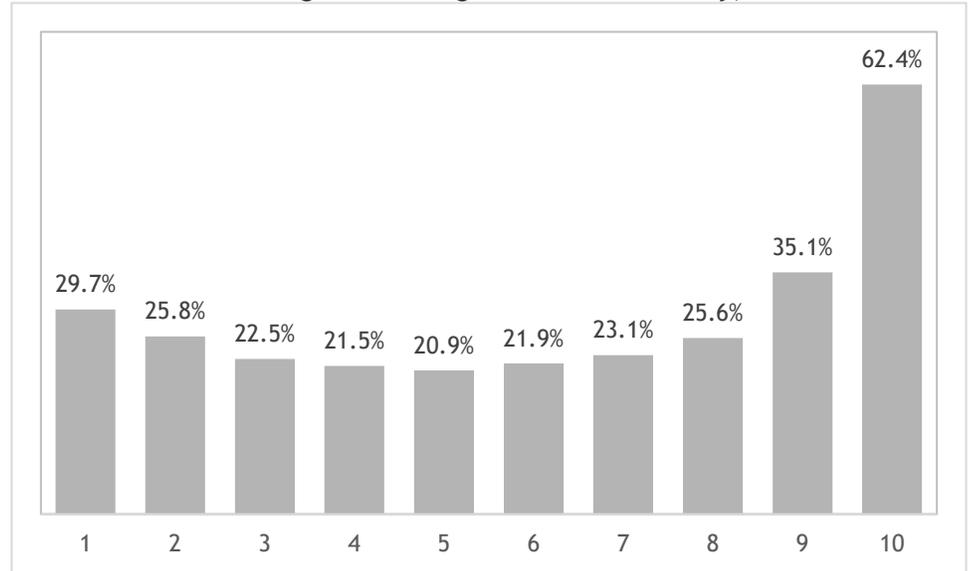
Continuing to look at deciles, economic mobility ranged from workers in the cohort moving from the bottom decile in 2010 to the top in 2019 (+9 deciles). The opposite also occurred with workers dropping from the top in 2010 to the bottom in 2019 (-9 deciles). Nearly a third of workers (28.8 percent) experienced no change in decile. Of those workers who did experience relative mobility, the largest share moved one decile between 2010 and 2019, either upward (14.8 percent) or downward (18.3 percent). Nearly 78 percent of prime age workers stayed within two deciles of their 2010 decile in 2019. (This includes the 28.8 percent of workers who stayed in the same decile.)



Economic Mobility in Kentucky from 2010 to 2019

The following chart shows the decile of the 28.8 percent of workers who did not change decile between 2010 and 2019. Among all workers in the lowest decile in 2010, 29.7 percent remained in the first decile in 2019. That compares to 62.4 percent of workers in the tenth decile over time and 35.1 percent of workers in the ninth decile.

Workers with No Change in Earnings Decile in Kentucky, 2010 to 2019

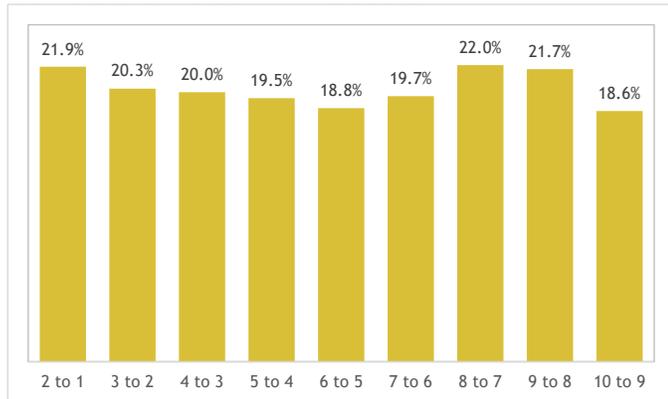


Note: Includes workers between the ages of 25 and 54 in 2010 with total annual earnings of at least \$3,000 in both 2010 and 2019. Earnings are not adjusted for inflation.

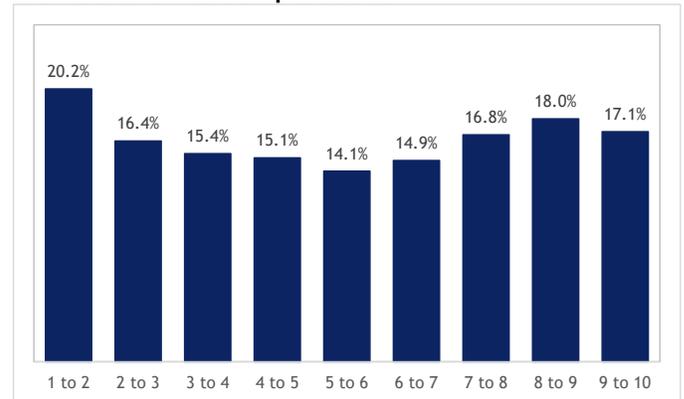
The following charts show workers who moved down one decile (18.3 percent of all workers) or up one decile (14.8 percent of all workers) from 2010 to 2019 by decile. Among workers in the second decile in 2010, 21.9 percent fell to the first decile in 2019. At the same time, 20.2 percent of workers in the first decile moved to the second decile in this timeframe.

2010 Decile of Workers Who Moved Up (blue) or Down (gold) a Decile by 2019

Workers who moved down a decile



Workers who moved up a decile



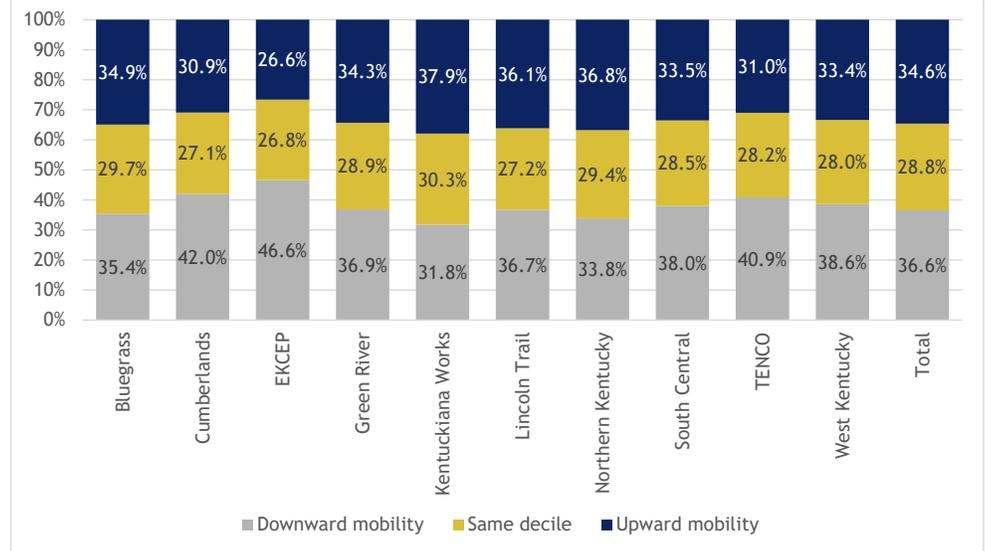
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Economic Mobility in Kentucky from 2010 to 2019

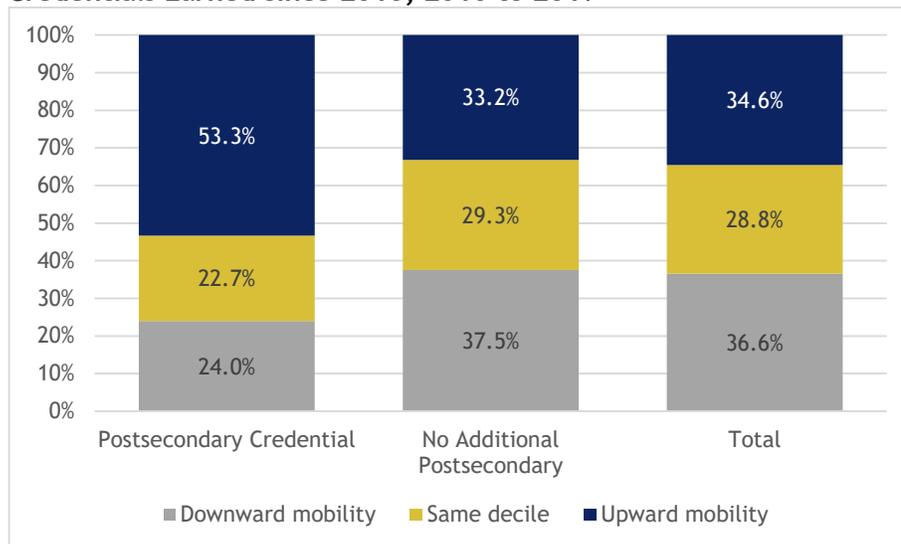
Place of residence also matters. Residents of the larger Local Workforce Areas (LWAs) were more likely to experience upward mobility than those in smaller LWAs. They were also less likely to experience downward mobility as these LWAs had higher rates of workers staying within the same decile than the overall group. For example, in Northern Kentucky, 36.8 percent of workers experienced upward mobility, two percentage points higher than the overall average. Their rate of staying in the same decile (29.4 percent) was also higher which means that fewer workers in Northern Kentucky experienced downward mobility (33.8 percent compared to 36.6 percent overall). The LWA with the lowest upward mobility was EKCEP at 26.6 percent. Workers in this LWA experienced the highest rate of downward mobility and the lowest share of workers staying in the same decile (26.8 percent).

Economic Mobility Among Select Workers in Kentucky LWAs, 2010 to 2019



Note: Includes workers between the ages of 25 and 54 in 2010 with total annual earnings of at least \$3,000 in both 2010 and 2019. Earnings are not adjusted for inflation.

Economic Mobility of Select Kentucky Workers with Postsecondary Credentials Earned since 2010, 2010 to 2019



Note: Includes workers between the ages of 25 and 54 in 2010 with total annual earnings of at least \$3,000 in both 2010 and 2019. Earnings are not adjusted for inflation.

Education may also play a role. From 2010 to 2019, nearly 54,000 prime age workers, 7 percent of the workers in this cohort, earned a postsecondary credential. More than half of these credential earners (53.3 percent) experienced upward relative mobility between 2010 and 2019. By contrast, only a third (33.2 percent) of those with no additional postsecondary credential experienced upward economic mobility.

There are many factors that may affect economic mobility. Moving forward, data in the KLDS will allow for exploration of additional characteristics that may be associated with economic mobility



Coming Soon!

The KYSTATS Labor Market Information (LMI) Branch will be releasing several products in the coming weeks. As with all other data products produced by the LMI, these datasets can be downloaded from our [website](#).

- ◆ **2022 Employment and Wages by Occupation**

KYSTATS Occupational Employment and Wage Statistics (OEWS) program, in cooperation with the United States Bureau of Labor Statistics (BLS), produces statewide occupational employment and wage estimates annually for more than 700 unique occupations. KYSTATS also utilizes OEWS data to generate sub-state level estimates for Kentucky's Local Workforce Areas. These estimates are produced from a comprehensive survey of Kentucky employers, utilizing a rolling three-year data collection window.

- ◆ **LWA Employment Projections, 2020-2030**

With funding and support from the United States Employment and Training Administration (ETA), KYSTATS produces estimates of how occupations are expected to change over time. This includes the number of job openings expected to be generated from economic growth, workers exiting the workforce, or workers transferring to new occupations. Estimates are produced statewide and for the ten LWAs.



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Kentucky Labor Force Update

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