

WHERE WE STAND

Where We Stand tracks the health of the St. Louis region compared to 34 peer MSAs.¹ The peer regions are our domestic competition and provide a consistent yardstick to gauge “Where We Stand.”

This update introduces new data on three measures of social mobility and discusses some of the community characteristics that are correlated with upward mobility.

6th Edition, Update 7

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SOCIAL MOBILITY

The term “social mobility” refers to the idea that individuals can achieve a high standard of living, regardless of the circumstances into which they were born. The notion that even a poor child can work hard and get rich (or at least reach the middle class) has long had a hold on the American imagination, although numerous studies have documented that the United States has a far lower level of social mobility than most of the other wealthy nations around the world.

Data released by the Equality of Opportunity Project at Harvard University shows that there is a geography of social mobility—the odds of rising from the bottom of

the economic ladder to somewhere near the top are influenced by where one grows up.

This *Where We Stand Update* finds that the St. Louis region has low social mobility compared to its peers. Children who grew up in St. Louis are less likely than their peers in other large metropolitan regions to achieve higher levels of income as adults. Research finds similar characteristics and policies among communities that tend to have higher levels of mobility. The St. Louis region could look to these regions for ideas on how to create more opportunity for upward economic mobility.

Measuring Mobility²

This update relies on data compiled by the Equality of Opportunity Project. A team led by Harvard Economist Raj Chetty obtained permission to examine individual tax returns filed over a 30 year period. The data was compiled in the following manner in order to examine the economic mobility of people in the United States.

- The team selected individuals who were born in 1980 or 1981.
- Income tax returns of the parents of those children were then analyzed for 1996, the year the children were 16. Based on the 1996 returns, the children were ranked based on their parents’ income (Parent Family Income) and divided into 100 equal sized groups (percentiles). For example, a child whose parents’ income falls into the 25th group among the 100 equal size groups is at the 25th percentile. Such a family would be in the bottom quarter of the income distribution.
- Next, the children’s tax returns for the year 2010 were obtained (when the children are about 30 years old), and the children were ranked according to income (Child Family Income) in the same way—into 100 groups, or percentiles. This allowed the researchers to compare the earnings of 30 year olds with the earnings of their parents about 15 years earlier.
- The income tax information was geocoded to a level that the researchers call the “commuting zone.” Commuting zones do not correspond precisely to Metropolitan Statistical Areas (MSA), although the larger zones approximate the MSAs in which they are located. The child’s residence in 1996 was used as the unit of analysis, under the assumption that in most cases, residence at age 16 represents the place in which a child was raised. This allows an analysis of how the place in which one grows up affects economic outcomes later in life.

¹ MSAs (Metropolitan Statistical Areas) are geographic entities delineated by the Office of Management and Budget (OMB). MSAs are areas with “at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.”

² The Equality of Opportunity research team released two sets of data. This update uses the data from Version 1.0 (released July 22, 2013), which reports statistics using the 1980-81 birth cohorts. Version 2.0 (released January 17, 2014) reports statistics using the 1980-82 birth cohorts. The project’s data and related reports can be found at <http://www.equality-of-opportunity.org/>

Where We Stand

The Harvard researchers generated dozens of metrics to assess intergenerational mobility. This update presents the three primary metrics.

Absolute Mobility: This measure is an estimate of the expected earnings of a young adult in 2010, relative to other young adults of the same age, whose parents' income was at the 25th percentile in 1996. Thus, the measure shows what children who were born in 1980 or 1981 and grew up in households that earned about \$30,000 (the 25th percentile) could be expected to earn as young adults (in 2010, at age 30).

Map 1 shows levels of absolute social mobility by commuting zone. The lowest rates of social mobility are concentrated in the south. There are also several Midwestern cities, including St. Louis, Chicago, Milwaukee, Indianapolis, Columbus, Cincinnati and Cleveland that land in the lowest tier for social mobility. Native American reservations in Arizona and South Dakota are also conspicuously low on social mobility. The areas with the highest social mobility are in the Great Plains and the Rocky Mountains.

The Absolute Mobility Table shows how the 35 peer commuting zones compare on this measure of social mobility. Zones closer to the top of this chart enjoy higher levels of social mobility. The three most mobile zones were Salt Lake City, Pittsburgh, and Boston. The areas with the lowest levels of social mobility were all in the South: Memphis, Charlotte and Atlanta.

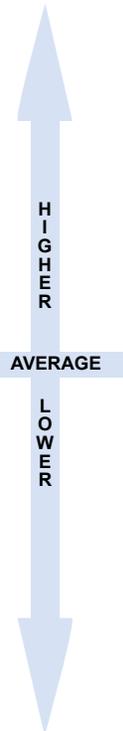
By this measure, St. Louis ranks 25th out of the 35 peer commuting zones. St. Louis ranks fairly close to other rustbelt cities such as Cleveland and Milwaukee.

In St. Louis, a child raised at the 25th percentile would be expected to be at about the 38th percentile at age 30. This means that on average, a child that was born in St. Louis in 1980 and whose parents' income was at the 25th percentile in 1996, could be expected to be at the 38th percentile among their peers at age 30.

Comparatively, a child that grew up in Salt Lake City in a family whose income fell at the same 25th percentile could expect to rank about eight points higher on the income distribution than a child that grew up at the same income level in St. Louis (46.4 in Salt Lake City compared to 38.6 in St. Louis).

ABSOLUTE MOBILITY Expected Child Income Percentile for Parents with Low Incomes

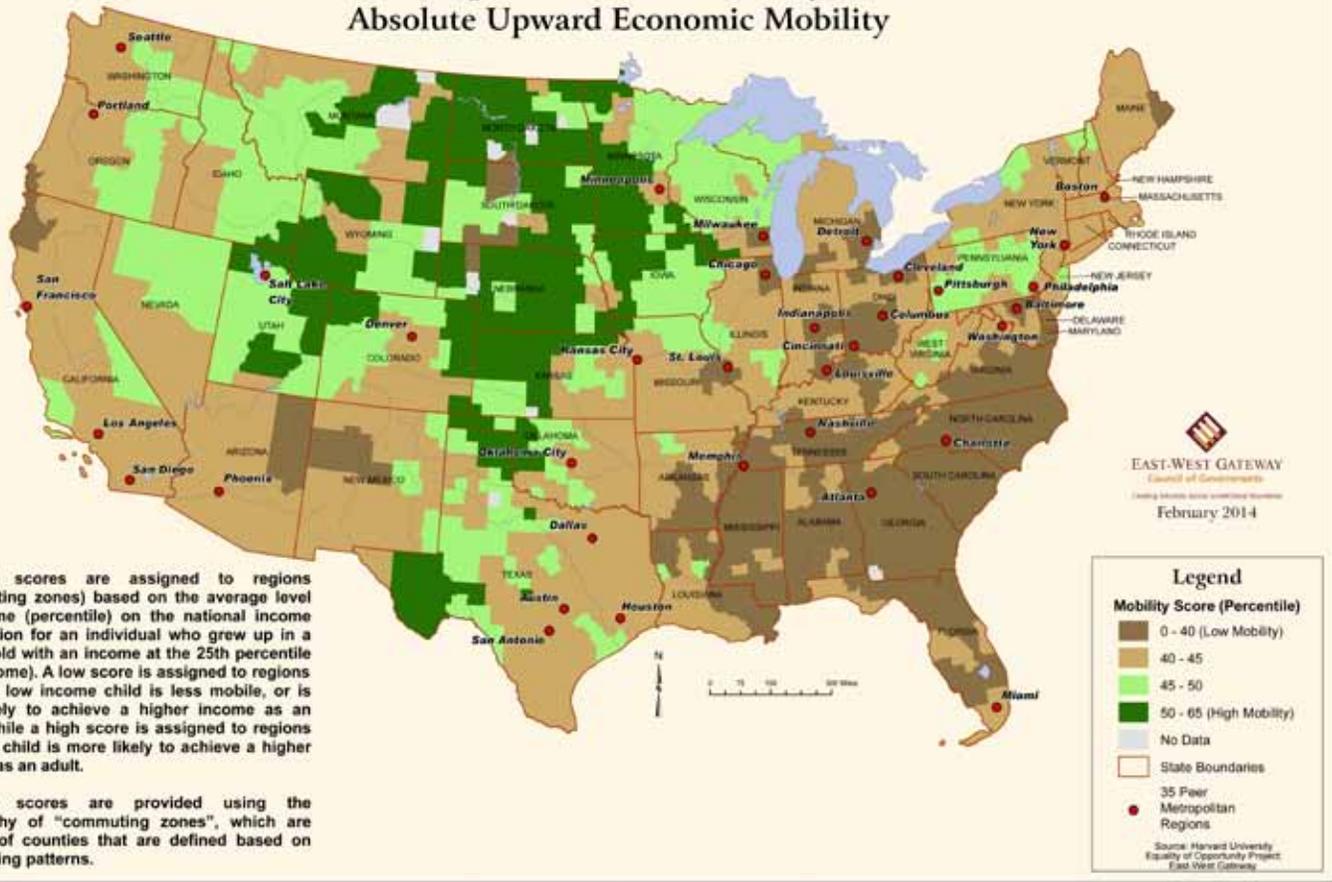
| | | |
|----------------|------------------|-------------|
| 1 | Salt Lake City | 46.4 |
| 2 | Pittsburgh | 45.0 |
| 3 | Boston | 44.8 |
| 4 | Minneapolis | 44.5 |
| 5 | San Francisco | 44.5 |
| 6 | San Diego | 44.3 |
| 7 | New York | 44.2 |
| 8 | Los Angeles | 43.6 |
| 9 | Seattle | 43.5 |
| 10 | Washington DC | 43.5 |
| 11 | Houston | 42.4 |
| 12 | Miami | 42.2 |
| 13 | Denver | 42.0 |
| 14 | Portland | 41.9 |
| 15 | Oklahoma City | 41.9 |
| 16 | Philadelphia | 41.6 |
| 17 | San Antonio | 41.1 |
| 18 | Phoenix | 41.1 |
| Average | | 40.8 |
| 19 | Austin | 40.4 |
| 20 | Dallas | 40.4 |
| 21 | Kansas City | 40.2 |
| 22 | Chicago | 39.6 |
| 23 | Milwaukee | 39.6 |
| 24 | Baltimore | 39.2 |
| 25 | St. Louis | 38.6 |
| 26 | Cleveland | 38.3 |
| 27 | Louisville | 38.2 |
| 28 | Nashville | 38.1 |
| 29 | Cincinnati | 38.0 |
| 30 | Columbus | 37.7 |
| 31 | Detroit | 37.3 |
| 32 | Indianapolis | 37.3 |
| 33 | Atlanta | 36.6 |
| 34 | Charlotte | 36.1 |
| 35 | Memphis | 34.4 |



Source: Equality of Opportunity Project

Map 1: Social Mobility

Absolute Upward Economic Mobility



Mobility scores are assigned to regions (commuting zones) based on the average level of income (percentile) on the national income distribution for an individual who grew up in a household with an income at the 25th percentile (low income). A low score is assigned to regions where a low income child is less mobile, or is less likely to achieve a higher income as an adult, while a high score is assigned to regions where a child is more likely to achieve a higher income as an adult.

Mobility scores are provided using the geography of "commuting zones", which are groups of counties that are defined based on commuting patterns.

Probability that Child Family Income at age 30 will be in the following percentage of earners on the national income distribution:

- Top 20% of Earners
- 60 to 80% of Earners
- 40 to 60% of Earners
- 20 to 40% of Earners
- Bottom 20% of Earners

For example:

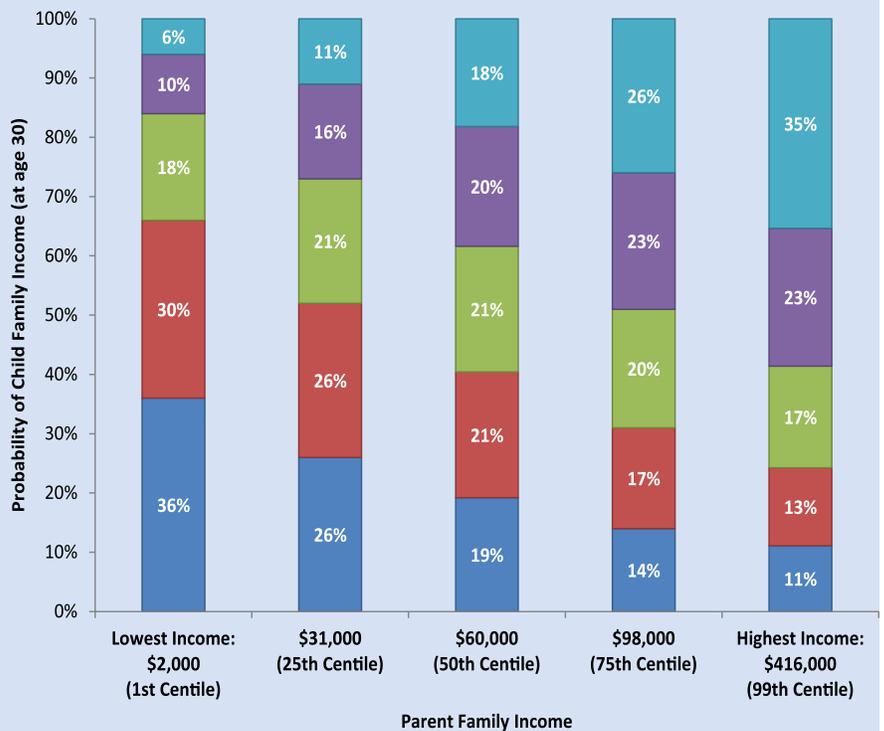
A child who grew up in a household with an income of \$2,000 has a 36 percent chance of being in the bottom 20 percent of earners when they are 30 years old.

A child who grew up in a household with an income of \$416,000 has a 35 percent chance of being in the top 20 percent of earners when they are 30 years old.

Note: Economic mobility is based on household income only. Household wealth and assets are not included. Therefore, social mobility may be overstated.

Economic Mobility, St. Louis Region

Probability of Child Family Income Level at age 30 for Children whose Parents Earned Various Incomes (Parent Family Income)



Relative Mobility: Relative mobility compares the income of adults (at age 30) who grew up in the poorest families to the income of those who grew up in the richest families (based on the parent income in 1996). Thus, relative mobility measures how much of a difference there is between the adult income of people who were raised in the richest one percent and those who were raised in the poorest one percent of families. For this measure, a lower number indicates a higher level of social mobility; the gap between the adult incomes of the poorest and richest children is smaller.

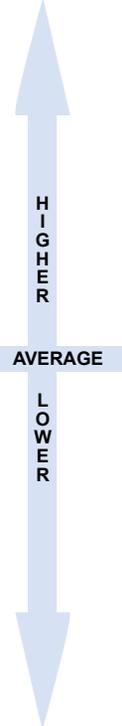
A lower number could indicate a downward mobility for the richest one percent and/or upward mobility for the poorest. It is best to review this measure with the other measures of social mobility.

The Relative Mobility Table shows how the 35 peer commuting zones compare on this measure of social mobility. The four most mobile areas were all in the West: Los Angeles, San Diego, San Francisco and Salt Lake City. St. Louis was among the five least mobile areas by this measure, along with Milwaukee, Cincinnati, Memphis and Baltimore.

In the St. Louis region, children that grew up in the poorest families are expected to rank 40.5 percentiles lower than children who grew up in the richest families (out of the 100 groups, the poorest children can expect to fall into a group that is 40 percentile points lower than the richest). This is twice as large of a gap as is seen in Los Angeles. Therefore, in St. Louis, children who grew up in low income families can expect to remain far apart in income from those who grew up in the richest families.

RELATIVE MOBILITY
Difference in the Child Family
Income Percentile Rank for Richest
and Poorest Children

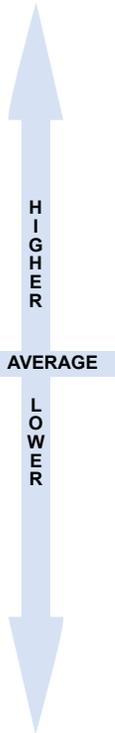
| | | |
|----------------|------------------|-------------|
| 1 | Milwaukee | 41.9 |
| 2 | Cincinnati | 41.3 |
| 3 | Memphis | 40.9 |
| 4 | Baltimore | 40.6 |
| 5 | St. Louis | 40.5 |
| 6 | Columbus | 39.3 |
| 7 | Indianapolis | 39.1 |
| 8 | Cleveland | 39.0 |
| 9 | Charlotte | 38.9 |
| 10 | Chicago | 38.4 |
| 11 | Philadelphia | 37.8 |
| 12 | Louisville | 37.3 |
| 13 | Kansas City | 35.9 |
| 14 | Atlanta | 35.4 |
| 15 | Pittsburgh | 35.4 |
| 16 | Detroit | 35.0 |
| 17 | Nashville | 34.9 |
| 18 | Dallas | 33.8 |
| 19 | Oklahoma City | 33.6 |
| Average | | 33.5 |
| 20 | Minneapolis | 32.5 |
| 21 | Washington DC | 32.3 |
| 22 | New York | 32.0 |
| 23 | Houston | 31.8 |
| 24 | Austin | 31.5 |
| 25 | Boston | 31.2 |
| 26 | San Antonio | 30.9 |
| 27 | Denver | 29.1 |
| 28 | Phoenix | 27.5 |
| 29 | Seattle | 26.5 |
| 30 | Portland | 26.2 |
| 31 | Miami | 25.5 |
| 32 | Salt Lake City | 24.9 |
| 33 | San Francisco | 24.2 |
| 34 | San Diego | 23.4 |
| 35 | Los Angeles | 22.5 |



Source: Equality of Opportunity Project

FIRST QUINTILE TO FIFTH QUINTILE
Probability that Child with Parent Income in the First Quintile will Reach the Fifth Quintile

| | | |
|----------------|------------------|------------|
| 1 | Salt Lake City | 11.5 |
| 2 | San Francisco | 11.2 |
| 3 | Seattle | 10.4 |
| 4 | San Diego | 10.4 |
| 5 | Pittsburgh | 10.3 |
| 6 | Boston | 9.8 |
| 7 | New York | 9.7 |
| 8 | Los Angeles | 9.6 |
| 9 | Washington DC | 9.5 |
| 10 | Minneapolis | 9.0 |
| 11 | Portland | 8.9 |
| 12 | Oklahoma City | 8.8 |
| 13 | Houston | 8.4 |
| 14 | Denver | 8.3 |
| 15 | Phoenix | 7.8 |
| 16 | Philadelphia | 7.7 |
| 17 | Miami | 7.4 |
| Average | | 7.4 |
| 18 | Kansas City | 6.9 |
| 19 | Austin | 6.9 |
| 20 | San Antonio | 6.6 |
| 21 | Baltimore | 6.5 |
| 22 | Dallas | 6.4 |
| 23 | Nashville | 6.2 |
| 24 | Louisville | 6.2 |
| 25 | Chicago | 6.1 |
| 26 | St. Louis | 5.6 |
| 27 | Milwaukee | 5.6 |
| 28 | Cincinnati | 5.5 |
| 29 | Cleveland | 5.2 |
| 30 | Detroit | 5.1 |
| 31 | Columbus | 5.1 |
| 32 | Indianapolis | 4.8 |
| 33 | Charlotte | 4.3 |
| 34 | Atlanta | 4.0 |
| 35 | Memphis | 2.6 |



Source: Equality of Opportunity Project

First Quintile to Fifth Quintile of the Income Distribution: The third measure assesses the probability that a child who was in the lowest 20 percent of income earners in 1996 would reach the highest 20 percent by 2010. The average probability for the 35 peers (7.4 percent) is about the same as is for the United States as a whole (7.5 percent).³ By this measure, Salt Lake City is still the most mobile city, with three Pacific Coast regions also in the top four. Memphis, Atlanta and Charlotte again rank as the least mobile cities. St. Louis ranks 26 out of 35 on this measure, between Chicago and Milwaukee.

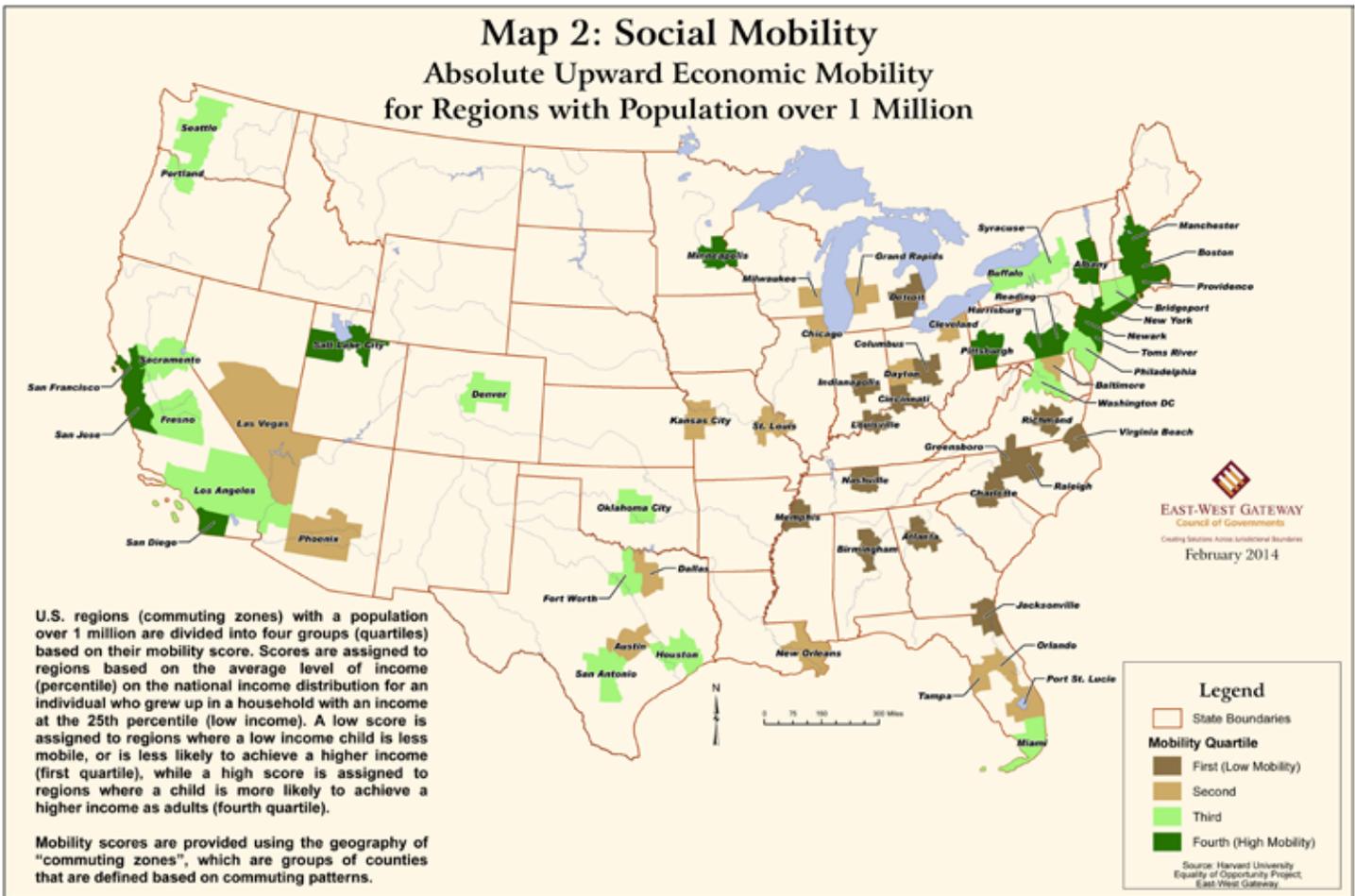
In St. Louis, a child who grew up in a low income family (the lowest fifth/quintile of earners) has about a 5.6 percent chance of being among the top income earners at age 30. A child that grew up in Salt Lake City or San Francisco is twice as likely to accomplish this movement on the income distribution (11.5 and 11.2 percent, respectively) and a child in Memphis is half as likely to do so (2.6 percent).

Although this measure indicates there is some social mobility, the Equality of Opportunity Project found that about a third of children in the United States will remain in the bottom fifth of the income distribution (33.7 percent) and about a third will remain in the top fifth (36.5 percent).⁴

3 Chetty, Raj, et al., *Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States*, National Bureau of Economic Research, January 2014.

4 Chetty, 2014.

Map 2: Social Mobility Absolute Upward Economic Mobility for Regions with Population over 1 Million



Characteristics of Regions with a Population over 1 Million:

Regions Grouped based on Level of Social Mobility (Absolute Upward Economic Mobility Score)

| | Regions with Low Mobility (1st Quartile) | 2nd Quartile | 3rd Quartile | Regions with High Mobility (4th Quartile) |
|-----------------------------------------|------------------------------------------------|--------------|--------------|-------------------------------------------------|
| Demographic Variables | | | | |
| Population | 1,734,599 | 2,384,739 | 3,667,853 | 3,096,745 |
| Percent Black | 21.5% | 14.1% | 9.8% | 6.1% |
| Net Migration per Resident | 0.0062 | 0.0083 | -0.0001 | -0.0049 |
| Percent Foreign-born | 5.0% | 9.3% | 14.4% | 13.2% |
| Teen Birth Rate | 11.7% | 10.8% | 9.8% | 7.9% |
| Policy-Related Variables | | | | |
| Education Spending per Student per Year | \$5,883 | \$6,258 | \$6,707 | \$7,543 |
| Monthly TANF Assistance per Family of 3 | \$293 | \$341 | \$442 | \$521 |
| Percent of Commuters by Car | 92.7% | 90.3% | 88.6% | 84.9% |
| Housing Segregation | 0.47 | 0.48 | 0.34 | 0.26 |
| Union Membership | 7.5% | 10.2% | 13.5% | 16.0% |
| Economic Variables | | | | |
| Per capita Income | \$40,131 | \$41,872 | \$40,563 | \$44,688 |
| Unemployment Rate (1990) | 4.6% | 5.5% | 5.5% | 5.0% |
| Unemployment (2010) | 9.8% | 9.9% | 9.7% | 8.8% |
| Poverty Rate | 12.1% | 12.1% | 12.3% | 9.0% |
| Number of Commuting Zones | 15 | 16 | 16 | 15 |

Note: Data represents the average for the regions (commuting zones) in each quartile. For example, the average population of the 15 regions in the 1st quartile is 1,734,599.
 Source: Equality of Opportunity Project; calculations made by East-West Gateway

The Geography of Mobility

The Harvard researchers found considerable variation in the level of economic mobility among areas in United States and observed what characteristics were common among areas with high upward mobility. The most significant and robust results indicate that regions with high upward mobility tend to have less residential segregation, less income inequality, better primary schools, greater social capital (larger proportions of religious individuals and greater participation in civic organizations), and greater family stability.^{5,6,7}

To gain a greater understanding of the characteristics and policies of regions that are peers to St. Louis, this Where We Stand Update uses the Harvard dataset with two variations. First, the Update includes only regions with a population over one million. Second, regions' participation in the following two programs was added to the dataset: (1) the level of assistance for Temporary Assistance for Needy Families (TANF) and (2) participation in labor unions. Both of these programs have the intended goal of helping low and middle income families achieve self-sufficiency and improve their economic well-being.

To compare characteristics of high mobility regions with low mobility regions, the 62 commuting zones with a population greater than one million were divided into four equal groups (quartiles) according to the level of absolute intergenerational mobility. There are 15 or 16 regions in each of the quartiles (See Map 2). The regions in the first quartile have the lowest mobility scores (shown in dark brown on the map). Children who grew up in low income families in these regions are the least likely to achieve a higher income. The regions in the second and third quartiles have higher mobility scores and those in the fourth quartile (dark green) have the highest scores. Demographic, economic and policy-related variables were then calculated for each quartile. The Characteristics of Regions Table provides the average data for the commuting zones in each quartile for each of the variables.

Demographic Variables:

- Areas with higher levels of mobility tended to be larger. The average size of commuting zones in the two most mobile groups exceeded three million. The average size of zones in the lower mobility quartiles was less than 2.5 million.
- The number of African Americans, expressed as a percent of total population, decreases as social mobility increases. This suggests that African Americans are disproportionately concentrated in areas with relatively low levels of social mobility.⁸
- Areas with low levels of social mobility tend to have positive net migration, while areas with more mobility tend to lose persons to migration.
- In spite of the above finding, areas with more mobility also have more individuals who were born in other countries.
- The teen birth rate, like race, is a good predictor of social mobility. Areas with high levels of mobility tend to have lower teen birth rates.

Policy-Related Variables:

This group of variables includes indicators that are partly shaped by public policies. Some variables, such as level of segregation and number of car commuters are also shaped by other factors.

- Higher levels of education spending are strongly associated with higher levels of social mobility.
- Assistance levels in the Temporary Assistance for Needy Families (TANF) are also good predictors of mobility. More generous welfare payments are associated with higher levels of social mobility.
- Reliance on cars for commuting is negatively associated with mobility. Areas with more non-car commuters tend to have higher levels of mobility.

5 The effect of single parent families appears to be indirect with children of married parents having lower rates of upward mobility if they live in communities with more single parents.

6 Chetty, 2014.

7 Additionally, mobility and local tax rates (presumed to be used primarily to fund public schools) as well as shorter commute times were correlated but not as robust. The following characteristics were observed but were not found to be significantly correlated with mobility: local labor market conditions, migration, and access to higher education.

8 Race is highly correlated with social mobility: Regions with more African Americans tend to show far lower levels of mobility. For commuting zones with a population over one million, the Percent Black variable, by itself, accounts for nearly half (48 percent) of the variation in social mobility. But the Harvard researchers point out that the picture is more complicated than that, noting that areas with low mobility show similarly poor results for both blacks and whites. It appears, then, that the effect of race is indirect or at the community level. Further, they found that areas with large African American populations tend to be more highly segregated by income and race and there is a strong relationship (negative correlation) between measures of segregation and upward mobility.

- Racial segregation, as measured by the isolation index, is negatively associated with mobility. Areas with more integrated housing patterns also have higher levels of social mobility.
- A higher percentage of workers represented by labor unions is correlated with social mobility.

Economic Variables:

- The quartile with the highest level of social mobility also had the highest per capita income. However, there was no apparent relationship between income and mobility for the other three quartiles.
- There is not a consistent relationship between mobility and either unemployment rates or poverty rates.

Conclusion

The research suggests that policies aimed at enhancing the standard of living for low-income families tend to improve the life chances of children born into those families. However, caution should be used in interpreting the results.

Expanding housing opportunities for low-income minorities, spending on education and social assistance, and increasing the jobs accessible by alternative modes of transportation may increase rates of social mobility. In addition, it may be that a policy-environment favorable to labor unions increases wage levels for low-skill workers, including those not represented by unions.

While the research finds relationships between these social programs and higher levels of mobility, caution should be used in ascribing causality to these results, particularly for policy-related variables. Some policy variables, such as unionization and TANF levels were highly correlated with each other. This makes it difficult to tease out the relative importance of each variable. In addition, it may be that some policy variables only serve as proxies for other contributing factors. For example, unionization rates tend to be lower in the South than in the rest of the country. It is possible, then, that the association between unionization and mobility reflects some other unobserved aspect of social conditions in the South. To give another example, it may be that TANF benefits are correlated with other social programs, and that these programs, rather than TANF, account for improved life chances for poor children.

Further, there appears to be a tradeoff between social mobility and population growth. The research finds higher rates of social mobility in regions that are losing population and regions with higher growth rates are among the regions with the lowest upward mobility. Since population growth is often associated with a healthy economy, these can be conflicting regional goals.

The results of this research provide the St. Louis region with topics worthy of regional discussion. The region ranks relatively low on all three measures of economic prospects of children in low-income families. Should greater social mobility be a goal for the region? What policy options would contribute to this goal?



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