



PART 1

Life Experiences that Power Lifetime Income

MARCH 2024

About Mobility Experiences

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Economic mobility, an often-cited measure for economic progress, has been stunted in the United States for decades according to absolute measures.

In the 1940s, ninety percent of all children would grow up to be better off financially than their parents. By the 1980s, less than 50 percent could say the same.¹

Declining economic mobility is a reflection of the mounting barriers that impede individuals from advancing their income and wealth. The outsized impact of these barriers on particular segments of the population — especially on particular class, geographic, and racial groups — fuels inequities that accentuate the economic disparities we see today. Within the context of these systemic barriers, specific life experiences will determine who gains or loses the power to advance economically. These life experiences span from birth through adulthood, with a wide range of magnitude of impact.

The 2024 *Mobility Experiences* research emerges from research that included a meta-analysis of over 230 peer-reviewed studies exploring the impact of programs and life experiences on incomes, a survey of over 4,000 people across the United States, and in-depth interviews to gather detailed insights from Americans earning low and middle incomes.

The research is divided into three reports that shed new light on:

1. *Life experiences* that contribute to advancing economic mobility within one's lifetime, measured by lifetime income, and the *degree of impact* of each life experience;

2. The perceptions of Americans, particularly those who earn within low- and middle-income brackets, as to the importance of each of these life experiences, including comparison of general societal beliefs, lived experiences, and quantitative findings;
3. The flow of investment of public and philanthropic dollars into these life experiences and the common features of programs that have succeeded in enabling greater economic mobility.

By providing a holistic and nuanced understanding of the experiences that impact economic mobility, and the degree to which these experiences are understood and resourced, this report serves as a tool for:

- Alignment of funders, government and civic leaders, policymakers, service providers, and community groups around a broad, evidence-based, economic mobility agenda;
- Greater, and more effective, mobilization of investment toward these life experiences;
- Narrative change efforts targeting prevailing misperceptions of economic mobility's drivers.

Acknowledgments

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Thank you to the individuals who participated in this research for their valuable personal insights and experiences with economic mobility. We also thank the researchers, funders, and implementers across the country whose work and research on economic mobility have contributed to this report.

The findings and conclusions contained within are those of the authors and do not necessarily reflect the positions or policies of the Bill & Melinda Gates Foundation or other participating organizations.

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The insights in this report are derived from inputs of over 4,000 people in the US and over 230 researchers who led the studies referenced herein. These inputs were aggregated, analyzed, and expanded upon with particularly sustained input from Camber Collective and the Bill & Melinda Gates Foundation. Further input on the structure and focus of the report was provided by a consultative panel of organizations from the economic mobility field.

KEY CONTRIBUTORS INCLUDE:

- Bill & Melinda Gates Foundation
- McKinsey & Company
- Ballmer Group
- Blue Meridian Partners
- The James Irvine Foundation
- Urban Institute
- The Institute on Race, Power and Political Economy at The New School
- Brookings
- Frontline Solutions

Executive Summary

Economic mobility in the United States has been stunted by wealth and wage inequalities and structural barriers that limit access to opportunity for millions of Americans.

Promoting economic mobility for all is not only critical to protecting the lives and livelihoods of Americans but also to supporting economic growth and maintaining democratic stability. This report offers insights into 28 “mobility experiences” in one’s life that have significant impact on lifetime income—and as a result—economic mobility.ⁱ These experiences can occur throughout a person’s lifetime and span thematic areas that have significant influence on intragenerational mobility, as outlined below:



Mobility Experiences by Thematic Areas



CAREER PROGRESSION

- Avoiding involuntary unemployment
- Obtaining a first full-time job that offers opportunity for advancement
- Receiving job or skills training



COMMUNITY INTERACTIONS

- Accessing stable, affordable housing
- Living in a high mobility neighborhood
- Avoiding interactions with the criminal justice system
- Having reliable and affordable access to physical and digital infrastructure (including transit & internet)

ⁱ Mobility experiences are defined as life events that, according to evidence, can demonstrably affect an individual’s economic situation over time.



EDUCATION

- Accessing extracurriculars during adolescence (including sports, clubs, work)
- Accessing pre-K and other early childhood development opportunities
- Avoiding repeated school disciplinary actions
- Completing high school education
- Graduating with a degree in a high-paying field of study
- Pursuing / completing postsecondary education



FINANCIAL WELL-BEING

- Accessing non-wage employment-based benefits (including healthcare, retirement)
- Accessing public benefits and programs
- Experiencing financial inclusion (including financial education & access)
- Having manageable student debt
- Owning a business



PHYSICAL AND MENTAL HEALTH

- Accessing care for mental and physical health conditions
- Accessing pre- and post-natal care
- Being born within a healthy birth weight
- Having access to adequate nutrition and a balanced diet in childhood
- Having low exposure to traumatic experiences (including ACEs)



SOCIAL AND FAMILIAL RELATIONSHIPS

- Having strong social and professional networks
- Living with a working adult partner (including cohabitation, marriage)
- Not having to provide unpaid care for adult family members
- Not having to provide unpaid care for children
- Receiving mentorship during adolescence

Results

HIGH POTENTIAL

Three experiences in particular had the strongest academic evidence of **high potential** for impact on lifetime income.

1. Pursuing or completing a postsecondary education;
2. Graduating with a degree in a high-paying field of study; and
3. Obtaining a first full-time job that offers opportunity for advancement.

The second report of this series will highlight experiences that demonstrate high potential for impact based on the lived experiences of people across the United States. These findings will complement the insights in this report by identifying what matters most to Americans as they reflect on their individual economic mobility journeys.

Aims

These results provide valuable insights into how stakeholders can prioritize opportunities to influence economic mobility for people across the United States.

Structural factors are a critical component of who has access to these key mobility experiences. This report also explores the ways in which structural racism and socioeconomic and gender inequities impact economic mobility and drive deepened income and wealth inequalities in the United States.

As the first installment in the three-part series, this report aims to:

- Align stakeholders around a comprehensive inventory of life experiences that matter for improving economic mobility outcomes.
- Provide a robust quantified assessment of the impact of different life experiences on income.

This knowledge can inform efforts to shift harmful narratives around poverty and support the mobilization of coordinated capital to increase access to and navigation of life experiences that advance economic mobility across the country.

Table of Contents

1. Introduction: The Economic Mobility Imperative	8
2. Mobility Experiences that Shape Economic Outcomes.	14
Section 2.1: Defining Mobility Experiences	14
Section 2.2: Assessing the Relative Impact of Mobility Experiences	18
Section 2.3: Understanding the Role of Structural Factors	31
3. Conclusion	39
Appendix: Mobility Experience Data	41
Technical Appendix.	54
Mobility Experiences that Shape Economic Outcomes.	54
Articles Included in Exhibit 2.3: Analysis of Academic Evidence	57



1 Introduction: The Economic Mobility Imperative

Economic Mobility

Economic mobilityⁱⁱ — an often-cited measure for economic progress — has been declining in the United States for decades. In the US, among children born in the 1940s, 93 percent of those born in the 50th income percentile could expect to out-earn their parents. For children born in the 1980s, this figure declined to only 45 percent (Exhibit 1.1).² Similarly, the ability to move up the economic ladder within one's own lifetime is also limited. Low-income earners rarely become high-income earners as adults; over half of adults in the lowest-income quintile remain there ten years later, and less than 4 percent move to the highest income quintile (Exhibit 1.2).³ The US is no longer the land of economic opportunity that it once was, and for historically marginalized communities, one could argue it never was. Limited individual economic mobility impedes nationwide economic growth, exacerbates inequality, and inhibits individuals from reaching their full potential. This is particularly true for those who earn below the federal poverty line. Today, the chance

ii Economic mobility refers to the ability of an individual, family, or societal group to change their economic standing, often measured by changes in income or wealth, as well as their power and autonomy, and being valued in one's community. Mobility can be upward or downward and can be intergenerational — earning more or less than one's parents — or intragenerational — changing one's economic standing during one's lifetime.

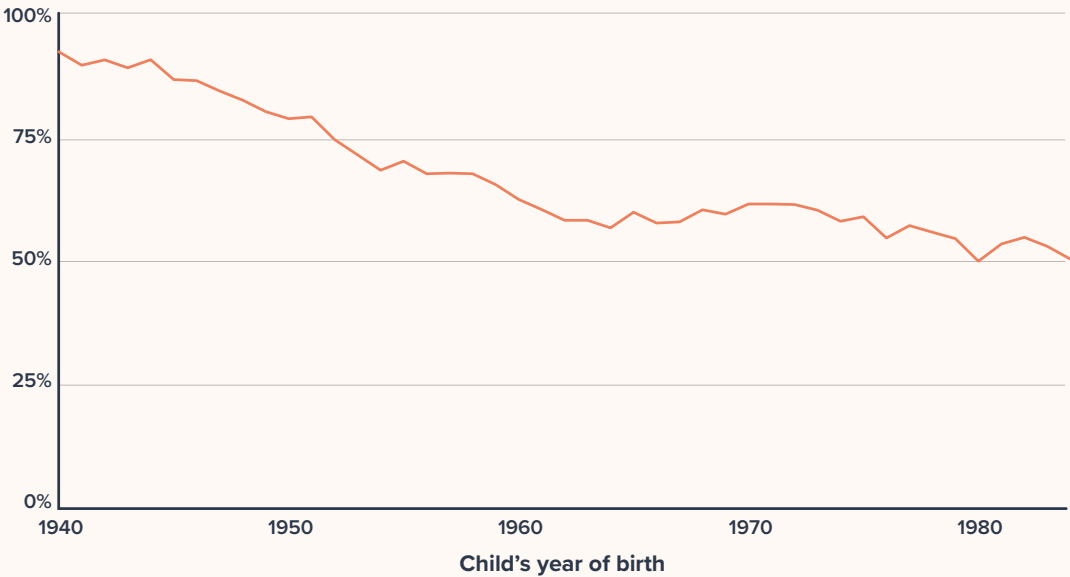


“ Growing up, being really impoverished, you don't think about the future that much. You are in the mindset of, ‘Where's my next meal? Am I going to have a place to live next month? Are we going to have Christmas?’ There were birthdays that went by with no cake or presents. Growing up in this poor mentality sticks with you, and it's not always the money; sometimes it's the mindset. Growing up poor trained me to not think about the future.”

— Michelle, age 35, OH
(Lived Experiences Research 2021)

Exhibit 1.1 Absolute intergenerational mobility in the United States

Percent of children earning more than their parents

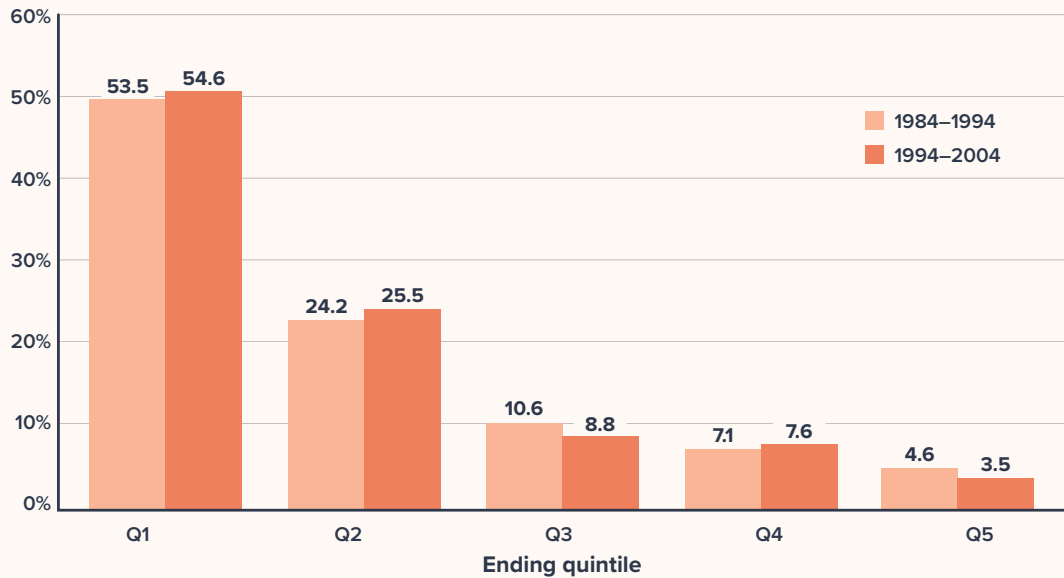


Note: Absolute intergenerational mobility refers to the ability to attain a higher income bracket than their parents did.

Source: Richard V. Reeves and Eleanor Krause, “Raj Chetty in 14 charts: Big findings on opportunity and mobility we should all know,” Brookings Institute, January 11, 2018

Exhibit 1.2 Relative intragenerational mobility in the United States

Ending quintile of people in the bottom income quintile ten years earlier

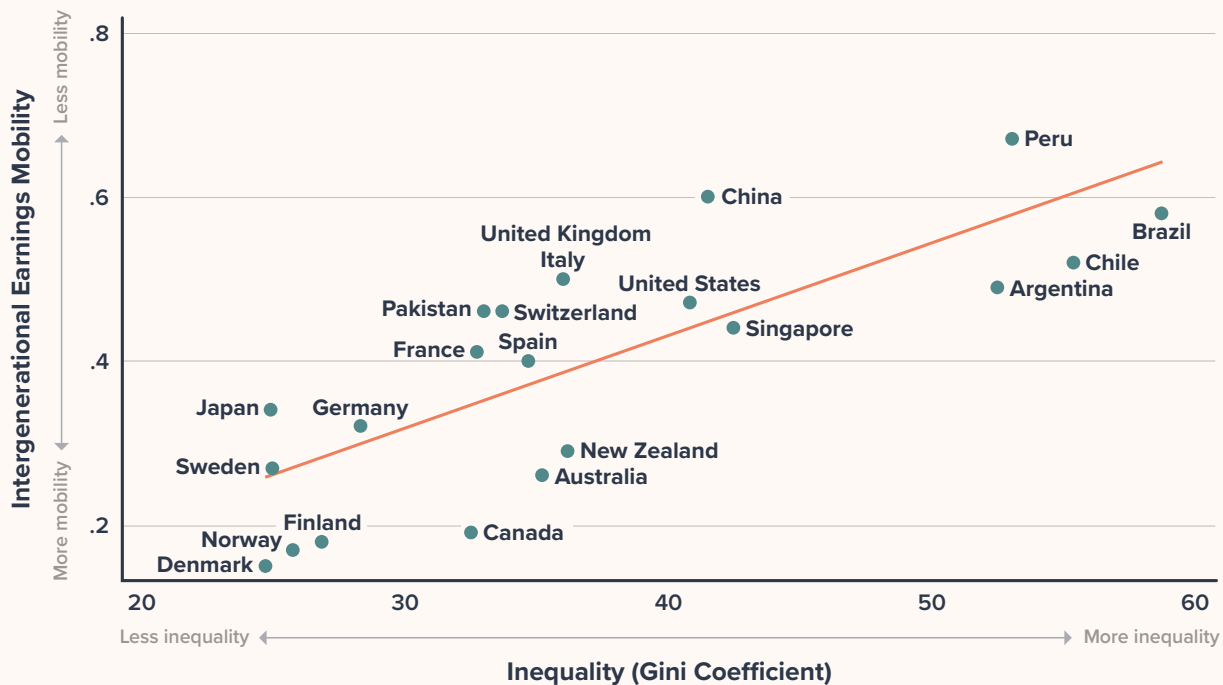


Note: Relative intragenerational mobility refers to the ability to move up in economic position in one’s lifetime relative to one’s peers.

Source: Acs, Gregory, and Seth Zimmerman. “U.S. Intragenerational Economic Mobility From 1984 to 2004.” Economic Mobility Project, 2008.)

Exhibit 1.3 The Great Gatsby Curve

Percent of children earning more than their parents



Source: Miles Corak, Inequality from generation to generation: The United States in comparison, Graduate School of Public and International Affairs, University of Ottawa, January 2012

of someone being born into poverty in the US and moving to the top quintile of earners is just five percent.^{iii,4}

DIVERGENT WAGES

The decline in economic mobility is driven by several factors, including increasingly divergent wages across the population. Investment in and attainment of job-related skills is becoming more stratified by family income, disadvantaging individuals who earn lower incomes in a job market where wages are disproportionately higher for more educated workers.⁵ Continued erosion of unionization and collective bargaining has depressed wage growth among middle-wage

earners, with little impact on those earning high wages.⁶ Increases in economic productivity since the 1970s have not led to proportional increases in wages for the bottom 80 percent of workers, concentrating income benefits at the top and contributing to overall inequality in economic growth.⁷ The effects of rising income inequality and declining economic mobility continue to compound — the farther the “rungs” of the “mobility ladder” are from each other, the harder they are to climb.

iii Refers to being born into the bottom quintile or bottom 20 percent of earners.

WHY DOES THIS MATTER?

Declining economic mobility prevents individuals from reaching their full potential and perpetuates and deepens nationwide inequality across demographic lines. Research shows that inequality and mobility are not only related but often exacerbate one another, as demonstrated by the “Great Gatsby Curve,” which highlights the negative relationship between income inequality and intergenerational earnings mobility (Exhibit 1.3).^{8,9} In general, countries with higher income inequality have less intergenerational mobility, meaning that children from poor families are less likely to improve their economic status compared to their parents.^{iv,v}

If allowed to continue unchecked, declines in economic mobility threaten to worsen inequality and impede economic growth, democratic stability, and widespread prosperity.^{10,11} Income inequality is likely to beget greater income inequality due to the continued concentration of wealth in high-earning households, which may dampen collective economic growth, as households with higher incomes generally save more and spend less. High rates of income inequality have also been shown to fuel social discontent, increasing sociopolitical instability and threatening democratic systems.¹² Most importantly, however, declines in economic mobility have particularly profound impacts on individuals who are earn low wages, excluding them from opportunities to improve their quality of life and exacerbating day-to-day economic hardships and stress.

“ I lived in a predominantly Hispanic and white neighborhood with some Black families. Looking around, I didn’t see many people becoming successful. And the people that I did see becoming successful were not people of color.”

—Derrick, age 33, California
(Lived Experiences Research 2021)

STRUCTURAL FACTORS

Economic mobility is heavily influenced by structural factors embedded in our society — many of which erect disproportionate barriers to upward mobility for certain populations, including individuals who are female and/or BIPOC and those who earn low incomes. Structural factors refer to obstacles that impede or prevent individuals from accessing or navigating mobility experiences, ultimately inhibiting mobility outcomes. Structural factors include limited access to wealth and other resources, disparities in decision-making power, and the effects of discrimination, among others. These factors influence who has access to opportunities for economic advancement (e.g., obtaining a high-quality job), as well as who is likely to evade experiences with negative impacts on mobility (e.g., dropping out of high school).

One widely recognized — and often underestimated — structural force that drives disparities in economic mobility is disparities in wealth.

iv Income inequality in the “Great Gatsby Curve” is measured by the Gini coefficient, which represents income and wealth inequality within a nation or a social group. The lower the Gini coefficient, the more equality there is, where all individuals have the same income. The higher the Gini coefficient, the more inequality there is, where one person in a large group has all income or consumption, and others have none.

v Intergenerational mobility is measured in the “Great Gatsby Curve” as intergenerational earnings mobility, which is an economic measure of the intergenerational persistence of the relationship between the earnings of parents and of their adult children. The higher the metric, the greater the likelihood that parental income will predict their children’s income.

Access to wealth can enable participation in life experiences such as completing a post-secondary degree, which can in turn increase economic mobility and income.¹³ Racial disparities in wealth in the United States are stark. In 2019, the median wealth of the average Black or Hispanic family accounted for less than 15 percent of the median wealth of an average white family.¹⁴ These racial disparities exist even across higher-income families, as the median net worth of Black families in the top 10 percent by income is only 20 percent that of equivalent white families, highlighting the disproportionate obstacles to mobility faced by People of Color.^{15,16}

Neighborhoods are another critical structural factor that influences economic mobility. For children growing up in poverty, the location where they grow up is a major predictor of their economic mobility later in life. In Memphis, for example, just

2.8 percent of children born in the bottom income quintile will reach the top quintile.¹⁷ Research from Opportunity Insights has found that high mobility neighborhoods share common features, such as less income inequality, better primary schools, and greater family stability.¹⁸

The following sections will share the findings from research that identifies the life experiences found to have significant impact on lifetime income. Section 2.3 will dive deeper into the ways in which structural factors impact an individual's ability to access and navigate life experiences that contribute to economic mobility. Reviving the United States as the land of opportunity is crucial to spurring economic growth, mitigating sociopolitical instability, and ensuring that Americans are equipped to lead the lives to which they aspire.



“ Being Black in my community limited my opportunities to get a job. Employers have a bias against young Black people because they think we’ll commit a crime.”

—Patrice, 27, South Carolina
(*Lived Experiences Research 2021*)

Approach



DRAWING ON THE DEPTH OF ACADEMIC RESEARCH

This report produces a first-of-its-kind ranking of the life experiences that are most influential on economic mobility in the United States. It draws on over 230 research articles published between 1990 and 2022 from top ranked journals in economics and econometrics, education, health policy, sociology & political science, and urban studies, supplemented with publications by leading thought leaders, data from statistical agencies, and expert insights identified through interviews with field experts from think-tanks, higher-education institutions, racial justice organizations, philanthropies, and non-profits. With these data, a meta-analysis was conducted to identify the impact that key life experiences have on intragenerational economic mobility, as measured by their impact on lifetime income. The relative impact of each life experience on lifetime income was then calculated. For additional information on the research methodology and literature review, see the Technical Appendix.



CENTERING LIVED EXPERIENCE EXPERTISE

Throughout this report, there are direct quotes from Americans. Recognizing the critical, but often overlooked, perspective that can be gained from lived experiences, this research conducted a survey of 4,000+ people across the United States and nearly 20 hours of interviews with Americans to learn about their perceptions and needs as they relate to economic mobility. Research participants were representative of the US across age, race, and gender, with an oversampling of participants with a household income of less than 200 percent of the federal poverty level. The expertise and insights provided by these real-life perspectives contributed to the identification of the top 28 mobility experiences and have profoundly deepened this research. **Part two of this report series will dive into the insights drawn from the perspectives of these Americans.**

2 Mobility Experiences that Shape Economic Outcomes

Section 2.1: Defining Mobility Experiences

In recent years, declining rates of economic mobility and opportunity in the United States have garnered attention from leaders in nearly every sector — from philanthropic donors and nonprofits to policymakers and business executives.

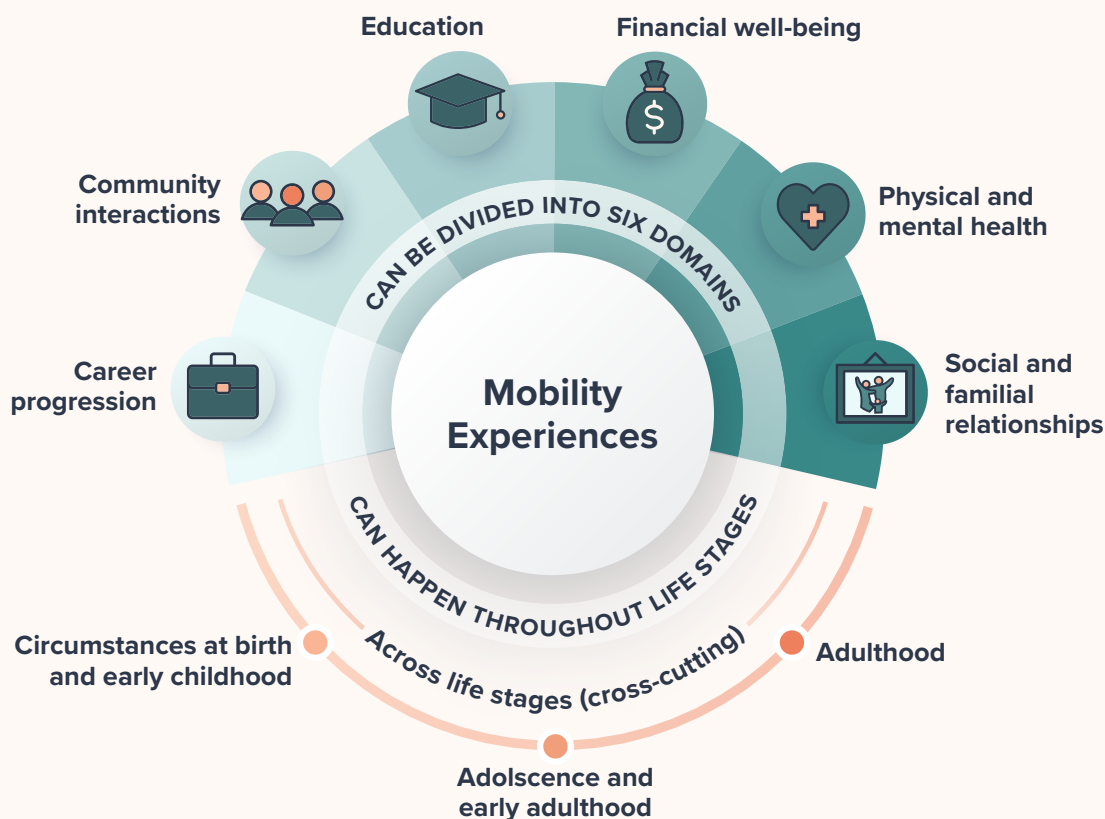
Mounting attention on improving economic mobility is encouraging, given its potential to catalyze collaboration and cross-sector efforts that can address the many complex facets of economic mobility. Effectively translating interest and goodwill into impact requires broad agreement on what is important for promoting economic mobility, which can enable stakeholders to collaborate and act, yielding tangible benefits for millions of Americans.



“I was the poor kid, the scholarship kid. My parents struggled to find jobs. I grew up with wealthy kids around me. As an adult, I am in a better economic position. Now, I have a stable job and an apartment in NYC, but I worry it will slip away.”

— Ana, age 29, New York
(Lived Experiences Research 2021)

Exhibit 2.1 Mobility Experiences Happen Throughout Stages of Life



Mobility Experiences

This research aspires to help develop a common language and fact base for the field by identifying a comprehensive set of “mobility experiences,” which are **defined as life events that, according to evidence, can demonstrably affect an individual’s economic situation over time.** These experiences occur over the course of a lifetime — whether it be at a single point in time or throughout phases of life — and span a variety of domains, including health, education, career progression, financial wellbeing, community interactions, and social and familial relationships (Exhibit 2.1). Evidence suggests that these experiences influence a key measure of economic mobility: an individual’s lifetime income.

Lifetime Income

In this report, “lifetime income” refers to an individual’s total income throughout their time in the labor force, which is estimated at roughly 40 years.¹⁹ Measuring lifetime income — as opposed to snapshot measures such as annual income or wages — allows us to estimate the impact of a mobility experience over several decades, making it a helpful metric for assessing the relative effects of different mobility experiences on longer-term economic mobility outcomes. While an incomplete measure, this research examined impacts on lifetime income as a proxy for mobility, since income data is more readily available and more relevant to mobility within an individual’s own lifetime than are other outcomes, such

as wealth. Understanding the impact of mobility experiences on other important measures of mobility, including wealth, power, autonomy, and being valued in one's community, presents opportunities for future research.

Identifying Key Experiences

Using academic research from hundreds of scholars, the **research identified mobility experiences that occur throughout a person's lifetime and span thematic areas that have significant influence on intragenerational mobility** (Exhibit 2.2).

The key mobility experiences identified in this report are experiences with substantial evidence of impact on intragenerational economic mobility outcomes. Since this report focuses on identifying experiences that directly affect lifetime

income, important life events and experiences that indirectly influence income — such as civic engagement and participation — have not been explicitly included. Moreover, while the identified set of experiences may influence mobility across generations, our research concentrated on identifying moments with a demonstrable impact on income during an individual's own lifetime, primarily to help stakeholders take action to increase opportunities for individuals today. As you engage with this research, an important consideration is the ways in which structural factors such as racism, gender bias, discrimination, and wealth inequality exert significant influence on who can access and benefit from mobility experiences, resulting in divergent outcomes for individuals who are female and/or BIPOC and/or those who earn low wages.

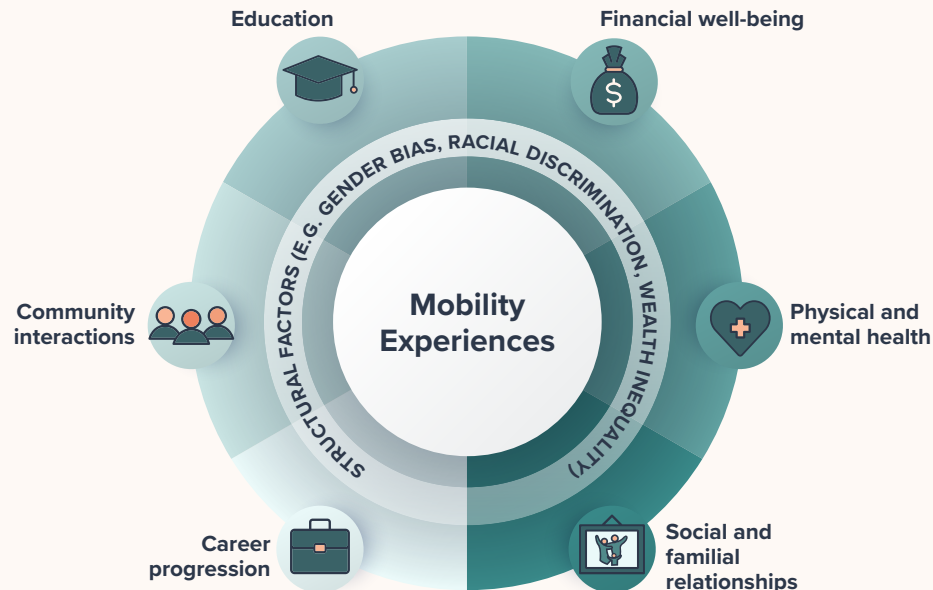
Our Aim

Our aim is that stakeholders across sectors will use these findings to inform their activities to support economic mobility, including the sources of insight they consult, where and how they invest (such as research and/or interventions), how they collaborate with other practitioners, and how they shift narratives about poverty. This attempt at building a comprehensive set of mobility experiences may also help the field to align more closely on shared goals and outcomes, and to work more closely to improve the economic realities of millions of Americans.



Exhibit 2.2 Life Experiences That Exert Outsized Impact on Economic Mobility

Mobility experiences occur across life stages and are influenced by an array of structural factors



CAREER PROGRESSION

- Avoiding involuntary unemployment
- Obtaining a first full-time job that offers opportunity for advancement
- Receiving job or skills training



FINANCIAL WELL-BEING

- Accessing non-wage employment-based benefits (including healthcare, retirement)
- Accessing public benefits and programs
- Experiencing financial inclusion (including financial education & access)
- Having manageable student debt
- Owning a business



COMMUNITY INTERACTIONS

- Accessing stable, affordable housing
- Avoiding interactions with the criminal justice system
- Living in a high mobility neighborhood
- Having reliable and affordable access to physical and digital infrastructure (incl. transit & internet)



PHYSICAL AND MENTAL HEALTH

- Accessing care for mental and physical health conditions
- Accessing pre- and post-natal care
- Being born within a healthy birth weight
- Having access to adequate nutrition and a balanced diet in childhood
- Having low exposure to traumatic experiences (including ACEs)



EDUCATION

- Accessing extracurriculars during adolescence (including sports, clubs, work)
- Accessing pre-K and other early childhood development opportunities
- Avoiding repeated school disciplinary actions
- Completing high school education
- Graduating with a degree in a high-paying field of study
- Pursuing/completing postsecondary education



SOCIAL AND FAMILIAL RELATIONSHIPS

- Having strong social and professional networks
- Living with a working adult partner (including cohabitation, marriage)
- Not having to provide unpaid care for adult family members
- Not having to provide unpaid care for children
- Receiving mentorship during adolescence



Section 2.2: Assessing the Relative Impact of Mobility Experiences

Our research sought to understand how each experience impacts lifetime income.

While there is substantial evidence of each mobility experience's absolute impact, assessing each experience's relative impact in comparison to other experiences is more difficult (Exhibit 2.3). This difficulty can be attributed to widespread variation in study design, sample size, starting salary, geography, duration of impact, and year of publication. Moreover, the compounding and overlapping nature of mobility experiences makes it difficult to quantify interlocking relationships, and the role of structural factors and importance of

intervention quality means that outcomes associated with a given experience can vary drastically.

Despite these challenges, this report aims to provide a view of the relative impact of mobility experiences in the hopes that it can: 1) catalyze additional research, 2) generate a constructive dialogue of key inputs to economic mobility across the field, and 3) support coordination and collaboration across stakeholders including governments, philanthropists, practitioners, and the private sector.

Outsized Effect

While all 28 mobility experiences examined have significant impacts on income, the literature reviewed suggests that select experiences have an outsized effect on lifetime income (Exhibit 2.3). This includes pursuing/completing postsecondary education, graduating with a degree in a high-paying field of study, and obtaining a first full-time job that offers opportunity for advancement. The mean impact on lifetime income across academic studies for these experiences exceeds 20 percent. This value refers to the estimated impact of undergoing a mobility experience on an individual's earnings over their time in the labor force. Some early-in-life experiences may impact individuals throughout their time in the labor force (e.g., completing high school), while others may have a shorter estimated impact (e.g., not having to provide unpaid care for adult family members, which affects individuals for an average of 16 years). The high reported influence of these experiences on earnings may be due to their occurrence later in life, as well as their direct relationship to labor force participation and employment. These results are encouraging, as they highlight opportunities for stakeholders to influence an individual's mobility well into adulthood, for example, through jobs or skills training.

Range of Impact

The range of impact reported by academic studies illustrates the importance of quality in maximizing the impact of each experience. One example that illustrates this phenomenon is accessing pre-K and other early childhood development opportunities. Some studies show that high-quality pre-K can have positive effects on future earnings, including a study citing a 1 to 3.5 percent increase. Lived experience insights also

Pursuing/completing postsecondary education, graduating with a degree in a high-paying field of study, and obtaining a first full-time job that offers opportunity for advancement are mobility experiences that have an outsized effect on lifetime income.

suggest a positive impact, with one respondent stating, *"My kids are few months ahead of peers due to pre-k,"* (Lived Experience Research 2021). However, others say that low-quality pre-K can actually have detrimental effects.²⁰ A study on nearly 3,000 pre-K participants whose families earn low wages in Tennessee found that by sixth grade, they had lower academic performance, were more likely to be absent, and were more likely to experience disciplinary actions than non-participants.²¹ This finding may be attributed to several factors, including an emphasis on basic skills rather than play and the amount of time spent transitioning students between classrooms.²² These examples highlight the importance of context and quality when thinking about potential interventions to increase economic mobility. We will discuss interventions in more detail in the third installment of this report series.

Completion of Experiences

Completion of experiences is also important for mitigating negative effects on economic mobility outcomes. For example, pursuing postsecondary education is generally associated with improving one's earnings in the labor market, but research shows that taking on excessive debt to pay for education and not finishing a degree can nega-

tively affect economic mobility. From mid-2014 to mid-2016, 3.9 million undergraduates with federal student loan debt dropped out of college.²³ Multiple interviewees alluded to the negative impact of this phenomenon during interviews, stating: **“student loans have slowed down my economic wheels,”** and **“my student loans have a negative impact on my economic situation and mean that I have to work multiple jobs, which I don’t think would have happened if I finished my degree”** (Lived Experiences Research 2021).

Individuals who are BIPOC or earn low wages may be at even higher risk of missing out on the benefits of certain mobility experiences given the presence of structural factors that make it difficult to navigate experiences. For example, Black students are more likely to enroll in two-year, for-profit schools—often due to predatory marketing techniques—the students of which are more likely to default on their loans.²⁴ This correlates with a higher chance of loan default; 60 percent of Black students who attended a for-profit college in 2004 defaulted on student loans by 2016, compared to 35 percent of white students.^{25,26} The risk of taking on student debt without capturing the additional earnings associated with completing a degree could harm one’s ability to move up the economic ladder.

Muted Effect

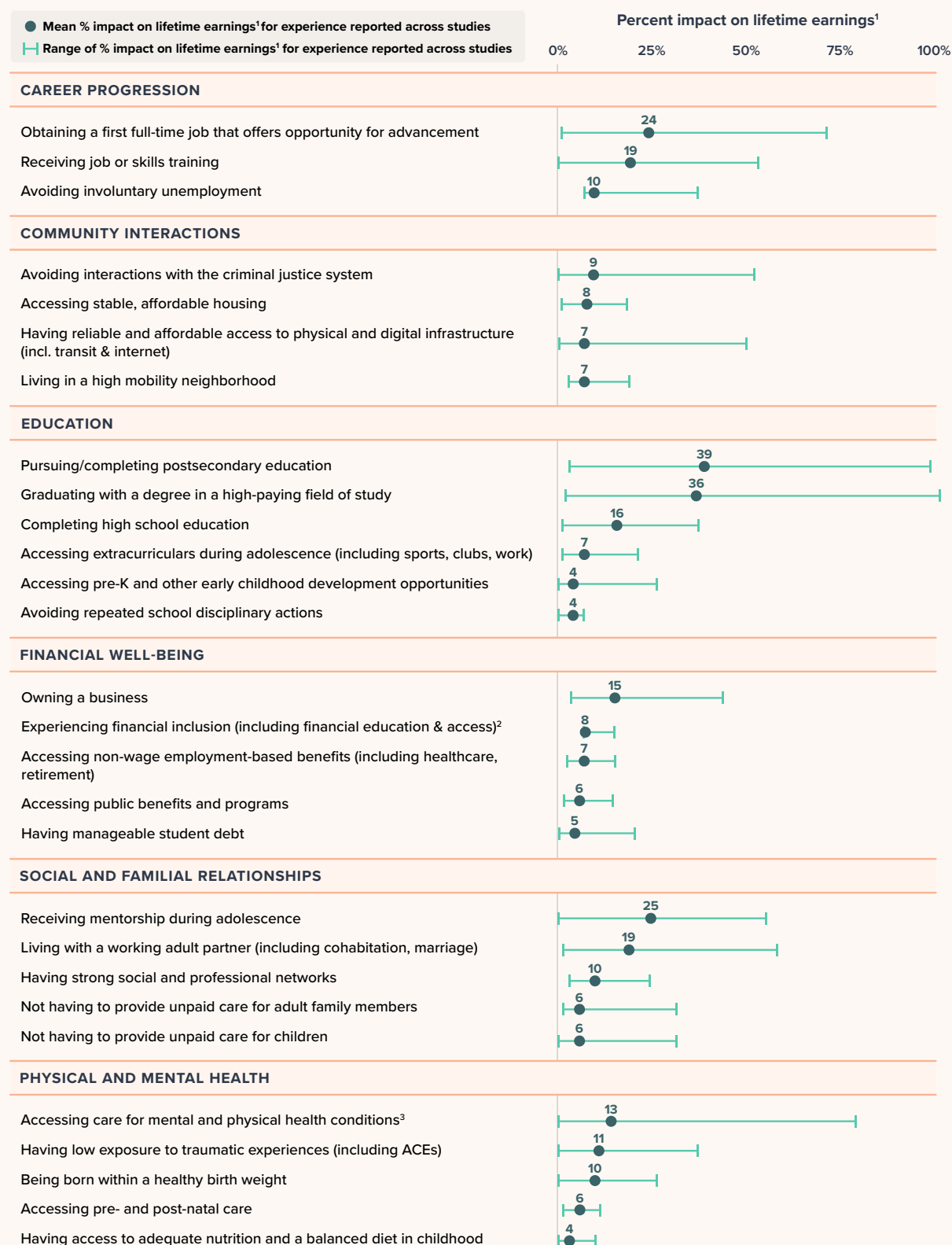
Some mobility experiences have not been extensively studied in the academic domain, and studies so far have shown relatively muted impacts on income, highlighting opportunities for further research. These experiences include experiencing repeated school disciplinary actions, having access to adequate nutrition and a balanced diet in childhood, and accessing pre-K and other early

childhood development opportunities. Based on existing evidence, these earlier-in-life experiences seem to have less direct, measured impact on lifetime income. A key driving factor for this — and where additional research is needed — is the limited longitudinal evidence on income for some of these experiences. The research of many academics^{vi} indicates that early childhood is a critical time and has meaningful implications on outcomes later in life, such as educational attainment, but further longitudinal research is needed.



vi Select scholars studying early childhood related experiences include James Heckman, William Gormley, Diane Whitmore Schanzenbach

Exhibit 2.3 Academic Evidence: Estimated Impact of Mobility Experiences On Lifetime Earnings



1. Impact on lifetime earnings refers to the estimated impact of undergoing a mobility experience on an individual's earnings over their time in the labor force. The estimated total time spent in the labor force for each individual is 40 years. Some early-in-life experiences may impact individuals throughout their time in the labor force (e.g., completing high school), while others may have a shorter estimated impact (e.g., not having to provide unpaid care for adult family members, which affects individuals for an average of 16 years); impact numbers are based on analysis of 200+ academic studies that measured the impacts of experiences on individual income (171), education (11), and employment outcomes (32) to compare relative impact across experiences, via methods including, among others: randomized controlled trials, regression analysis, quasi-experimental analysis, cohort-level random assignment, and natural experiments.

2. Based analysis of <3 academic studies.

3. Physical and mental health are grouped together due to limited academic evidence on the independent effects of mental health versus physical health on income.

Details on critical mobility experiences

Below is more detail on each critical mobility experience and its effect on economic mobility and outcomes.



CAREER PROGRESSION

AVOIDING INVOLUNTARY UNEMPLOYMENT

Experiencing involuntary unemployment has long-term effects on income losses. For instance, a study found that workers who have lost a job earn 30 percent less 10 years after the loss when compared to workers who have never lost a job.²⁷ This has a particularly detrimental effect on workers who earn low wages, as they may experience longer bouts of unemployment than workers who earn high wages, further exacerbating income gaps.²⁸ Involuntary unemployment also negatively affects physical and mental health outcomes, as individuals may lose health-related employment benefits and experience more stress.^{29,30}

OBTAINING A FIRST FULL-TIME JOB THAT OFFERS OPPORTUNITY FOR ADVANCEMENT

Obtaining a high-paying first job impacts more than just short-term earnings; according to empirical evidence, it can affect an individual's future income as well. One study finds that starting wages affect wage differentials in the long term, and about 60 percent of the differential is still present four years later.³¹ Other studies have determined that larger firms have more opportunities for advancement within the firm, as well as a wider professional network for those seeking to move to other jobs, further boosting lifetime income.³²

RECEIVING JOB OR SKILLS TRAINING

Receiving job or skills training can improve earnings once individuals become employed, but do not necessarily increase rates of employment. According to research, the efficacy of job training programs varies widely. Structured reskilling programs, such as Year Up and Work Advance, have been found to increase participants' earnings by up to 40 percent in the year after training (compared to non-participants' incomes).^{33,34} However, survey data indicates that the employment rates of Year Up graduates are identical to non-participants' rates 18 months later.





COMMUNITY INTERACTIONS

ACCESSING STABLE, AFFORDABLE HOUSING

Having access to stable and affordable housing beginning in childhood has long-term effects on income. A study found that additional years of public housing and voucher-assisted housing increase adult earnings by 4.9 percent and 4.7 percent, respectively, for females and by 5.1 percent and 2.6 percent for males. Accessing stable, affordable housing via homeownership can also improve mobility outcomes, particularly related to wealth-building, but access to homeownership has historically been uneven across racial groups due to practices such as redlining. One study finds that, more recently, rates of homeownership among the Black population have declined, with a 5 percent decrease from 2006 to 2016 compared to just a 1 percent drop for white families.³⁵ This trend can be attributed to lenders' denying Black home loan applicants at an 80 percent higher rate than white applicants.³⁶

AVOIDING INTERACTIONS WITH THE CRIMINAL JUSTICE SYSTEM

Having negative interactions with the criminal justice system has a significant impact on employment and earnings. Individuals who have been incarcerated are 3 to 10 percent less likely to be employed than those without a criminal record.³⁷ Furthermore, individuals with criminal convictions or prison sentences are likely to have lower-than-average earnings once they leave prison. Lifetime income losses for this population are between \$267,000 and \$511,500, depending on the individual's race.³⁸ Those who are arrested but not charged with a crime also face negative economic consequences. Getting arrested as a minor has negative consequences on earnings,

causing a lifetime reduction of \$6,000, and defendants who are detained pre-trial lose \$29,001 in lifetime income.^{39,40}

LIVING IN A HIGH-MOBILITY NEIGHBORHOOD

Living in a high-income neighborhood is a strong determinant of future outcomes, especially for children. Studies have found that children who are born in low-mobility and/or disadvantaged neighborhoods and who then move to higher-mobility and/or advantaged neighborhoods earn 8 to 14 percent more than those who do not make such transitions.^{41,42} Given the outsized role that a local community plays in determining economic opportunity, living in a high-mobility or high-income neighborhood often helps individuals reap the benefits of other mobility experiences, including accessing high-quality jobs close to home and living near grocery stores and financial institutions, where adequate nutrition and inclusive financial services are readily available.

HAVING RELIABLE AND AFFORDABLE ACCESS TO PHYSICAL AND DIGITAL INFRASTRUCTURE (INCLUDING TRANSIT AND INTERNET SERVICES)

Access to physical and digital infrastructure is a strong determinant of success for workers. Employees who have access to reliable transportation and internet service earn 7 to 8 percent more than those without these advantages.^{43,44} The impact of access to adequate infrastructure was laid bare by the pandemic, when digital connectivity was a pre-requisite to participation in remote work and schooling.



EDUCATION

ACCESSING EXTRACURRICULAR ACTIVITIES DURING ADOLESCENCE (INCLUDING SCHOOL, CLUBS, AND/OR WORK)

Accessing and participating in extracurricular activities such as clubs, sports, and part-time jobs in high school and/or college can positively affect future earnings by 3.8 to 4.5 percent.^{45,46,47} Extracurricular activities help adolescents to develop the “people skills” needed to become successful adults and employees in the labor force, and they often lead to additional opportunities for advancement.⁴⁸

ACCESSING PRE-K AND OTHER EARLY CHILDHOOD DEVELOPMENT OPPORTUNITIES

The benefits of preschool attendance on long-term earnings are hotly debated. Over one dozen studies have found that participation in high-quality early childhood development programs is associated with increased annual income later in life.⁴⁹ Much of this benefit is linked to strong teacher involvement with students and curricula that focus on children’s behavioral development, suggesting that the quality of pre-K programs plays an essential role.⁵⁰ On the other hand, recent studies have suggested that pre-K has a more muted — or even a potentially negative — impact on long-term earnings. One such study, which looked at nearly 3,000 pre-K participants whose families earn low wages in Tennessee, found that by sixth grade, participants had lower academic performance, were more likely to be absent, and were more likely to experience disciplinary action than non-participants.⁵¹ Black and Hispanic children are also more likely to end up in low-quality pre-K than white children.⁵² Variation in the perceived importance of pre-K is reflected in our survey and interview results, where re-

sponses were mixed.⁶ One respondent noted, “*I think [pre-K] had a pretty big impact. It helped me socialize with other kids... [and] my mom started working part-time.*” But another interviewee stated, “*I don’t know if pre-K had an impact. I wasn’t getting what I needed at home, so maybe being in pre-K helped, but I probably could’ve gotten the same development from Kindergarten one year later,*” (Lived Experiences Research 2021).

AVOIDING REPEATED SCHOOL DISCIPLINARY ACTIONS

Schools’ disciplinary actions often have negative impacts on young adults that far outlast the classroom. That negative impact disproportionately affects Black and Latinx communities and affects future earnings;⁵³ research shows that suspended or expelled students earn approximately \$1,600 less than non-disciplined counterparts at age 26.⁵⁴ These findings are substantiated by other academic studies of the effects of school discipline on economic mobility. Some of these effects may stem from delayed entry into the workforce after having to repeat grades due to multiple suspensions.^{55,56,57} Students who are repeatedly suspended or expelled are likely to enter the workforce late, at a collective estimated cost of \$175 million, with Black and Latino boys bearing a disproportionate portion of this cost.⁵⁸

COMPLETING HIGH SCHOOL EDUCATION OR AN EQUIVALENT CREDENTIAL

High school education is imperative, but its impact on income varies significantly, depending on the quality of teachers and schools. Studies show that at a population level, high school diploma-holders earn over 40 percent more than those without high school diplomas.⁵⁹ However,

the economic benefits are not distributed evenly across the population, due to widespread variation in the effectiveness of teachers. For instance, an assessment of school district data for 2.5 million third- through eighth-graders shows that instruction by “value-add” teachers — teachers who most improve students’ test scores over the course of an academic year — can boost students’ later earnings by more than \$250,000.⁶⁰ Moreover, white students graduate at a rate that is 7 to 15 percent higher than their Hispanic, Black, and American Indian/Alaskan Native classmates.⁶¹ This may be attributed to a differences in school quality, with Black students being 40 percent more likely to attend high-poverty schools, while white students are five times more likely to attend low-poverty schools.⁶²

GRADUATING WITH A DEGREE IN A HIGH-PAYING FIELD OF STUDY

Choosing a field of study can have strong implications for future income; the earnings gap between some majors is as large as the earnings gap between college graduates and non-graduates.⁶³ Using data from the US Census Bureau’s American Community Survey, one study compares income premiums from an engineering degree (125 percent) to premiums from psychology and social work majors (40 percent). The study found a college major premium of 85 percent — roughly the same as the traditional college wage premium. Other evidence shows that students with education degrees earn only 3 to 25 percent more than those without college degrees, while STEM majors earn 80 to 140 percent more than their non-graduate peers.^{64,65,66} However, Black and Hispanic students are underrepresented in STEM majors; their share of STEM-related bachelor’s degrees is 3 percent less than their overall share of all bachelor’s degrees.⁶⁷

PURSUING/COMPLETING POSTSECONDARY EDUCATION

Attending college and completing a postsecondary education significantly boost lifetime income. Consistent with conventional observations, recent studies find that, for the roughly 44 percent of Americans ages 25 and older who graduate with an associate’s degree or higher, college and professional programs positively affect earnings.⁶⁸ Those with a bachelor’s degree in any subject earn about \$32,000 more than those with just a high school diploma.⁶⁹ These gains are not distributed evenly, as first-generation college students are more than twice as likely to drop out of college than students whose parents have a bachelor’s degree, often due to a lack of guidance compared to their peers.⁷⁰





FINANCIAL WELLBEING

ACCESSING NON-WAGE EMPLOYMENT-BASED BENEFITS (INCLUDING HEALTHCARE AND RETIREMENT BENEFITS)

Accessing non-wage employment benefits increases productivity and satisfaction, which may translate to higher earnings. Employees with benefits such as healthcare and retirement contributions report higher satisfaction at work and tend to be more productive, which may lead to increased earnings.⁷¹ This phenomenon is observed in an analysis of access to employer-provided health insurance, which can increase earnings by both men and women.⁷² However, it should be noted that some studies suggest that employees — particularly women — may accept salaries up to 20 percent lower in exchange for health benefits, a tendency that may nullify any net increases in earnings.⁷³

ACCESSING PUBLIC BENEFITS AND PROGRAMS

Social benefit programs enhance economic mobility among groups who earn low wages. Studies show that access to social benefit programs — including SNAP and voucher-assisted housing — during childhood has positive effects on earnings in adulthood.⁷⁴ Additionally, benefits provide a sense of security for recipients; having unemployment insurance benefits, for example, seems to improve workers' ability to find higher-quality jobs.⁷⁵ Similarly, a study found that SNAP mitigates household food insecurity by 12.8 percentage points, decreases the likelihood that households will fall behind on their nonfood essential expenses (including housing by 7.2 percentage points and utilities by 15.3 percentage points), and reduces the risk of medical hardship by 8.5 percentage points.⁷⁶

EXPERIENCING FINANCIAL INCLUSION (INCLUDING FINANCIAL EDUCATION AND ACCESS)

Access to financial inclusion is critical to economic mobility but is not equally available to all Americans. Access to financial markets has been shown to mitigate income inequality,⁷⁷ but low-income individuals and businesses — particularly Black and Hispanic or Latino individuals — receive less financial credit and are approved for loans less often.⁷⁸ Seventeen percent of families with income less than \$25,000 are unbanked, while less than 1 percent of families earning more than \$50,000 are unbanked.⁷⁹ These trends inhibit financial inclusion and pose extraneous costs that further limit mobility.

HAVING MANAGEABLE STUDENT DEBT

Having access to student loans is critical for many to attend college, but repaying burdensome student loans hinders economic mobility for many Americans. Studies have shown that students who take on debt to complete their degree earn about \$3,000 more per year on average, largely due to their motivation to repay student loans from increased earnings.⁸⁰ However, studies have also found that higher student debt can negatively impact academic performance and the likelihood of graduating. For instance, students with over \$10,000 in student debt have been found to be 20 percent less likely to graduate.⁸¹ Similarly, students may take out loans and still not secure high-paying jobs after graduation, resulting in a net-negative impact on earnings.^{82,83} Manageable student debt requires a balance of debt and earnings that does not hinder individuals from accumulating wealth, which is often compounded by rising costs of higher education and structural factors that limit opportunities for populations that have been marginalized.

OWNING A BUSINESS

Owning your own business is a high-risk, high-reward proposition. Studies show that, if successful, self-employed entrepreneurs with lower levels of educational attainment may earn more than their

salaried peers with similar educational backgrounds.^{84,85} However, less than 20 percent of start-ups survive for more than five years, creating a risk of negative economic mobility for failed business owners who lack back-up plans.⁸⁶



PHYSICAL AND MENTAL HEALTH

ACCESSING CARE FOR MENTAL AND PHYSICAL HEALTH CONDITIONS

Obtaining care for mental and physical health conditions (which includes access to insurance) affects health as well as economic outcomes. Individuals who earn low wages or are BIPOC often encounter higher barriers in accessing the health system, with Black and Hispanic Americans being significantly more likely to be uninsured, at 9.6 and 16.7 percent respectively, compared to 5.2 percent of non-Hispanic whites.⁸⁷ This lack of insurance causes individuals earning lower incomes with chronic behavioral and physical health conditions to spend more on their care than do their counterparts earning higher incomes with similar sets of conditions.⁸⁸ Additionally, workers who are disabled or who have chronic health conditions earn between 4.7 to 34 percent less than healthy individuals — depending on geographic location and type of condition — presenting additional challenges to economic mobility.^{89,90}

ACCESSING PRE- AND POST-NATAL CARE

Accessing pre- and post-natal care is linked to positive economic outcomes for both child and mother. Studies have shown that healthy intra-uterine conditions and maternal nutrition lead to better educational attainment for children in later life.⁹¹ Additionally, the risk of having adverse infant health outcomes was 31 percent

higher among depressed post-natal mothers than among non-depressed post-natal mothers.⁹² Due to multiple structural factors, including implicit bias in the healthcare system, Black and American Indian/Alaskan Native women are two to three times more likely to die from a pregnancy-related cause than white women.⁹³

BEING BORN WITH A HEALTHY BIRTHWEIGHT

A healthy birthweight is linked to positive educational and earning outcomes. Poor intra-uterine environments and low birthweights are associated with increased risk of developing chronic conditions (such as obesity, coronary artery disease, and insulin resistance) in adulthood, which may influence economic productivity and security.⁹⁴ One study found that having a healthy birthweight can boost high school educational attainment by up to 13 percent.⁹⁵ According to another study, having a healthy birth weight positively increases hourly wages by 10 percent at ages 18-26 and by 22 percent at ages 37-52.⁹⁶ Structural factors play a role in determining whether someone has a healthy birthweight, and Black infants are twice as likely to be born with a low birth weight due to higher rates of obesity and hypertension among Black mothers.⁹⁷

HAVING ACCESS TO ADEQUATE NUTRITION AND A BALANCED DIET IN CHILDHOOD

Access to adequate nutrition can improve childhood health, development, and education outcomes, which may translate into increased earnings later in life. One study found that access to nutritious school meals improved academic performance by as much as 10 percent over the course of a school year, and subsequently found an increase in adult earnings of 2 to 4 percent.⁹⁸ Additional studies have demonstrated similar linkages between access to SNAP benefits as a child and adult outcomes, including the likelihood of living in a high-quality neighborhood.⁹⁹ Studying the causal effects of childhood nutrition and school food programs is salient given questions remain as to whether better academic performance is caused by access to nutrition itself, or increased attendance is driven by the availability of free meals.

HAVING LOW EXPOSURE TO TRAUMATIC EXPERIENCES (INCLUDING ACES)

Being exposed to traumatic experiences and ACEs (adverse childhood experiences) — that is, experiencing adversity in the home or in one's community or environment during childhood, including, for example, various forms of physical and emotional abuse, household instability, or witnessing violence — has been shown to negatively affect an individual's economic outcomes later in life. Prenatal and childhood exposure to trauma, stress, illness, and nutritional disruptions can hinder earnings, employment, and educational attainment and cause earnings losses upwards of 5 percent.¹⁰⁰ School shootings, for example, have long-lasting negative effects on educational and economic outcomes, and these effects are found to be causal. By analyzing the shootings at Texas public schools between 1995 and 2016, a study found that, by age 24-26, adolescents exposed to school shootings between grades 9

and 11 had earnings that were 13.5 percent less than those of their peers.¹⁰¹ Exposure to police violence in neighborhoods has also been shown to decrease educational attainment, especially among Black and Hispanic students, who are disproportionately affected by police violence.¹⁰²





SOCIAL AND FAMILIAL RELATIONSHIPS

HAVING STRONG SOCIAL AND PROFESSIONAL NETWORKS

The nature and composition of a person's social and professional networks matter. Studies show that "people skills" are just as important as technical capabilities in the workplace. Having social capital (defined here as interacting with people during work and solving problems) correlates with greater productivity, which in turn leads to a 4 to 5 percent increase in annual wages.¹⁰³ Between 1980 and 2012, jobs requiring high levels of social interaction grew by nearly 12 percentage points as a share of the US labor force, while the share of math-intensive but less social jobs — including many STEM occupations — shrank by 3.3 percentage points over the same period. The result has been a 10 to 21 percent increase in hourly wages for those perceived to have cognitive and social skills.¹⁰⁴ Moreover, having access to social and professional networks that include high-income individuals can be critical to identifying opportunities for upward mobility, such as connections to high-paying jobs. The substantial impact of social and professional networks was recognized by interviewees, one of whom noted, *"Connecting with higher-income people helped me. Low-income people tend to have relationships with other low-income people, so it's hard to break from a low-income situation. To move up, you need to have relationships with higher-income people,"* (Lived Experiences Research 2021).

LIVING WITH A WORKING ADULT PARTNER (INCLUDING MARRIAGE AND COHABITATION)

Family transitions have significant effects on household income. One study found that the family income of children whose parents divorce and

remain divorced for at least six years falls by 40 to 45 percent.¹⁰⁵ On the other hand, marriage was found to raise household income by between 44 to 56 percent.¹⁰⁶ Additionally, cohabiting households have higher incomes than single-parent households, but lower incomes than married-parent households.¹⁰⁷

NOT HAVING TO PROVIDE UNPAID CARE FOR FAMILY MEMBERS

Individuals who must support and care for family members tend to lag in measures of economic mobility. Studies show that workers who have familial caretaking responsibilities work fewer hours than their peers, as they must dedicate hours that would normally be spent working to their care-



taking responsibilities.¹⁰⁸ This can lead to a loss in earnings of 10 to 16 percent.¹⁰⁹ Additionally, caregivers often allocate more of their earnings to healthcare-related costs, further limiting their own economic mobility opportunities.¹¹⁰

NOT HAVING TO PROVIDE UNPAID CARE FOR CHILDREN

Childcare responsibilities disproportionately fall on women, which affects their labor force participation and future earnings. Mothers are paid 71 cents for every dollar paid to fathers, which leads to a \$16,000 annual earnings difference.¹¹¹ This is often attributed to women taking lower salaries in exchange for the flexibility to care for their children.¹¹² Additionally, the timing of children matters. One study found that women who experienced their first pregnancy as adolescents earned lower incomes as adults than did women who delayed pregnancy until after the teen years.¹¹³ The impact of having to provide unpaid care on mobility and earnings was highlighted by

a female interviewee who commented, *“When I was working, it was cash-positive, extra income for the family, and we were able to save a lot during [that] period. But after I quit [to care for children], this life event...limited our ability [to pay] for extra things like entertainment,”* (Lived Experiences Research 2021).

RECEIVING MENTORSHIP DURING ADOLESCENCE

Receiving mentorship while undergoing formal education can boost future earnings. Having a “naturally occurring” mentor (such as a sports team coach, a music instructor, or a supervisor at a part-time job) as a young adult transitioning to full-time employment is linked to considerable increases in earnings — by as much as 37 percent.^{114,115} High school students with in-school mentors tend to earn better grades, stay in school longer, and make more money than their peers. Yet the lower-income students who benefit most from mentoring are often the least likely to receive it.¹¹⁶ The benefits of mentorship are most pronounced when the mentor is not a family member, as these relationships broaden a person’s network and exposure to opportunities.¹¹⁷





Section 2.3: Understanding the Role of Structural Factors

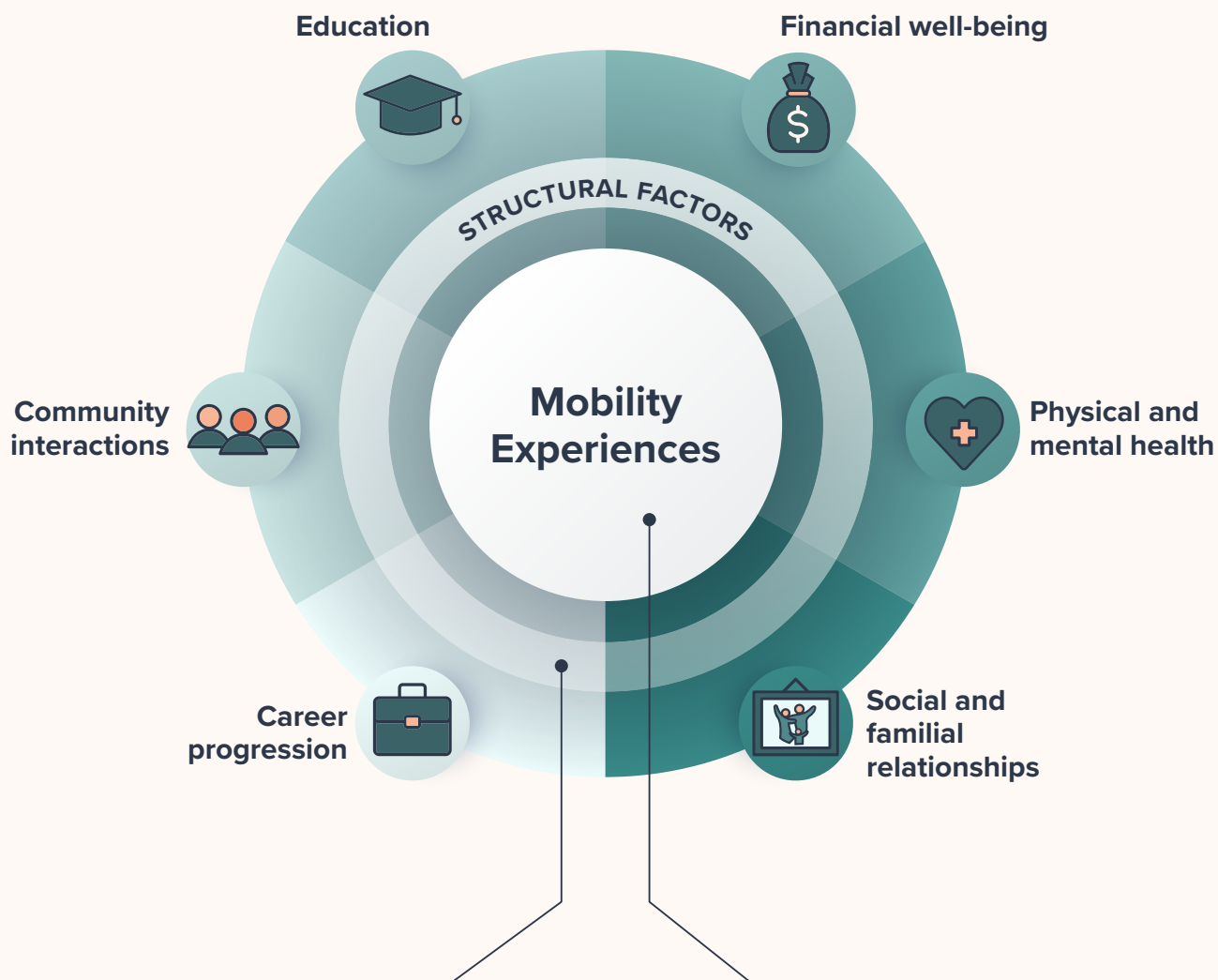
To understand how individual mobility experiences shape economic mobility over a lifetime, it is important to acknowledge that each experience is strongly influenced by compounding and interrelated structural factors.

Many different forces shape individuals' lived experiences and can affect their ability to navigate mobility experiences across stages of life and topical domains, often related to gender, race, ethnicity, and income (Exhibit 2.4). Structural factors result from entrenched historical forces, policies, and trends that have shaped society. They may include limited access to economic resources, lack of access to products and services, presence of socio-cultural bias and discrimination, and other systemic forces such as racism and inequitable power structures, all of which influence how individuals access and navigate mobility experiences.

The influence of structural factors is not distributed evenly across the population. Certain groups, particularly people who are BIPOC, face disproportionate and compounding challenges in accessing and navigating mobility experiences,

resulting in divergent economic outcomes. Taken together, the myriad of structural factors that separate individuals and communities of color from opportunities to experience positive outcomes amounts to structural racism, which is entrenched throughout institutions and experiences across domains — from healthcare and education to career progression and social relationships. Communities of color have been systematically denied equitable access to economic mobility and wealth building experiences, such as home ownership or living in safe, unpolluted neighborhoods, as a result of historic racist practices and policies, including redlining and the GI Bill, the effects of which persist today. Examples of how structural factors influence access to and participation in mobility experiences across each key domain are discussed below.

Exhibit 2.4: Structural Factors Interact with Mobility Experiences



Structural factors

Obstacles and barriers that impede individuals' ability to navigate through multiple mobility experiences, inhibiting their ability to access opportunities and reach certain mobility outcomes.

Examples: Gender bias, racial discrimination, wealth inequality

Mobility experiences

Life experiences and milestones that evidence suggests can meaningfully impact a person's economic status, power and autonomy, and being valued in one's community over time.

Examples: Completing postsecondary education, obtaining a full-time job

Career Progression

Career progression is affected by structural factors such as discrimination in the workplace and geographic disparities in the availability of job opportunities.

One study found that individuals in low- and moderate-income (LMI) communities face significantly higher barriers to finding and maintaining jobs with adequate pay. This discrepancy results in lower labor force participation overall, with 0.73 workers per resident in LMI communities and 1 worker per resident in non-LMI communities.¹¹⁸ Moreover, research demonstrates that, even when LMI communities have an increase in job opportunities, mobility may worsen for LMI residents due to an influx of college graduates who make it difficult to compete for jobs, and whose migration drives up housing costs.¹¹⁹

Even after they are employed, Black and Hispanic/Latino workers earn \$0.76 and \$0.73 for every dollar earned by a white worker¹²⁰ and are more likely to experience discrimination in the workplace, with 21 percent of Black and 16 percent of Hispanic Americans reporting that they have been treated unfairly in hiring, pay, or promotion because of their race or ethnicity, compared to just 4 percent of white adults.¹²¹ Similar pay gaps exist across gender lines, with female workers earning roughly 82 cents for every dollar earned by male workers in 2022, and roughly half of US adults report that women being treated differently by employers is a contributor to the pay gap.¹²²

“ I do think people have a preset idea of who I am because of the way I speak and my skin color. I’m not a gang member or thug. I’ve gotten jobs that I went for but they weren’t big jobs. I do think it [my race] has affected my career path.”

—Darren, age 42, Ohio
(Lived Experiences Research 2021)

Community Interactions

Community interactions encompass mobility experiences related to one's neighborhood and public institutions; examples include accessing physical and digital infrastructure; accessing stable, affordable housing; and interacting with the criminal justice system.

In many cases, these experiences can be pivotal in enabling mobility, but for many people of color, poor community interactions inhibit, rather than enable, mobility. For example, due to a higher likelihood of being stopped by police — despite committing crimes at roughly the same rates — Black and Latino populations are more likely to interact with the criminal justice system over the course of their lifetimes compared to white Americans.¹²³

Furthermore, a 2022 study of US cities found that housing discrimination is in large part responsible for steering BIPOC households into neighborhoods with limited economic opportunity and high rates of poverty.¹²⁴ Similarly, access to reliable transportation is critical for many Americans to access job opportunities and services. However, many US public transportation systems were designed to serve higher-income, white, suburban residents, further isolating economically and socially marginalized communities from opportunity. A study of the Washington, D.C. Metro transit system found that, between 2006-2008 and 2011-2013, the proportion of Black workers within rail-accessible neighborhoods declined from 32.9 percent to 24.1 percent, whereas the proportion of all other groups either increased or did not experience a statistically significant change.¹²⁵

“ In the city, there are career centers but out in the rural area, there is nothing. Having a reliable car or transportation and someone to encourage you would make a difference. A place to help someone get a certificate would be helpful. I think the city has these.”

—Neel, age 45, Oklahoma
(Lived Experiences Research 2021)

“ Even though people on the outside might not realize it, the criminal justice system does hurt people. It makes it harder to dig yourself out of the hole.”

—Inez, age 40, Texas
(Lived Experiences Research 2021)

Education

Education is affected by structural factors that are present from the pre-K to post-secondary stages.

At the early childhood and grade-school levels, longstanding disinvestment has led to inconsistent access to high-quality, well-funded public schools across the population. Good public schools are a key enabler of many mobility experiences, such as accessing extracurriculars in adolescence and completing a high school education. One analysis shows that majority-white school districts received \$23 billion more than predominantly non-white school districts in state and local funding in 2016, despite serving roughly the same number of children.¹²⁶ Additionally, Black students are 40 percent more likely to attend high-poverty schools, while white students are five times more likely to attend low-poverty schools.¹²⁷ This uneven distribution of resources across the school system means that children at high-poverty schools often have more limited access to supports such as high-quality teachers and extracurricular activities.¹²⁸

Even after overcoming significant hurdles to enroll in college, students from low-income backgrounds face financial challenges to completing postsecondary education — from a lack of ability to pay tuition and fees or the need work many hours at a job while enrolled at college. As a result, high-performing, low-income twelfth-graders' graduation rates are 23 percent lower than their higher-income peers' rates, despite a difference of just 11 percent in college enrollment rates.^{129,130}

“ I didn’t go to a good high school... There were a lot of fights...[and] not much learning. If I had a better high school, I probably would have been able to get a scholarship for college, and then a job. I think high school is a critical stage to success.”

—Derrick, age 33, California
(Lived Experiences Research 2021)

Financial Wellbeing

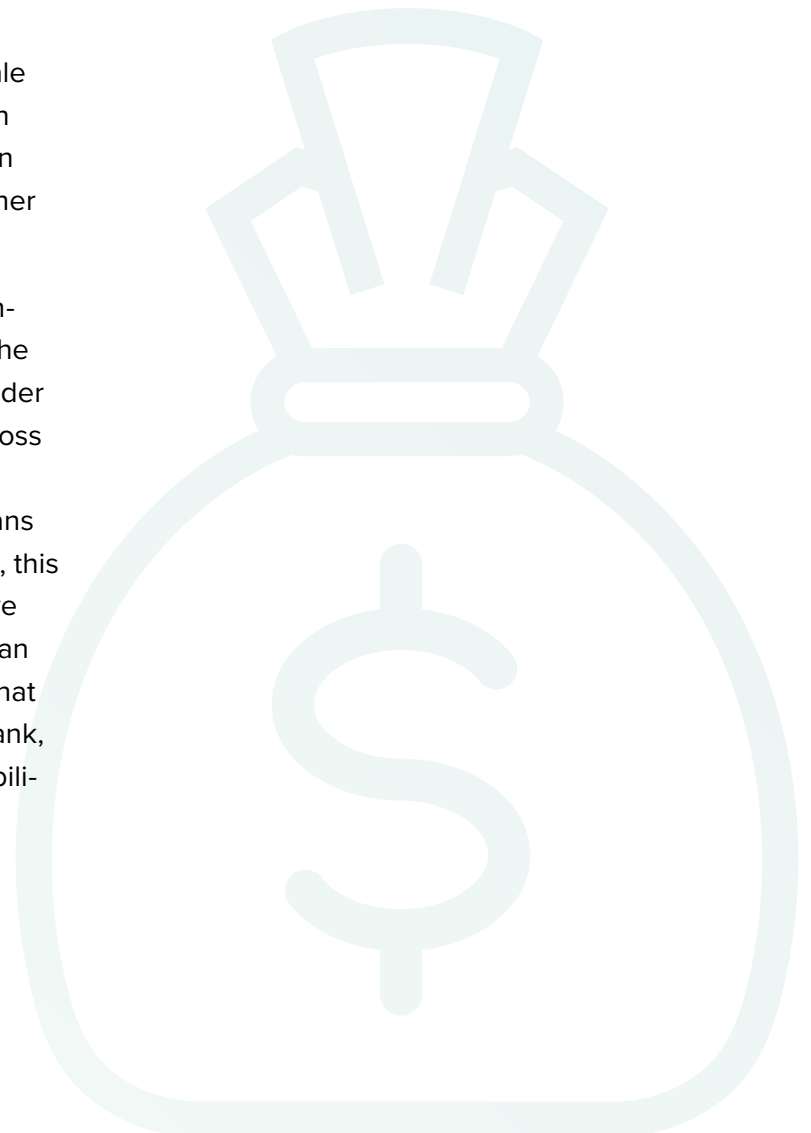
Financial wellbeing — including experiences such as financial inclusion or owning a business — is inhibited by structural factors such as inconsistent access to financial resources, uneven geographic distribution of financial institutions, and racial bias.

For instance, 13 percent of individuals who are Black are unbanked, but only 3 percent of white individuals are.¹³¹ Structural factors also drive divergent rates of business ownership, with Americans who are socially and economically marginalized significantly less likely to be able to draw on intergenerational wealth to support loan applications. Black entrepreneurs, for example, face a mere 47 percent financial approval rate.¹³² Entrepreneurs who are female are also at a business disadvantage compared to their male counterparts: one study revealed that women entrepreneurs ask for less financing than men do and receive loans at lower levels with higher interest rates.¹³³

These costs and barriers are cyclical and reinforcing and may discourage participation in the financial system, exacerbating racial and gender disparities. For instance, among firms with gross receipts under \$500,000, minority-led firms are 16 percent more likely not to apply for loans because of fear of rejection.¹³⁴ In many cases, this leads individuals to seek predatory alternative financing, such as payday loans, which have an average interest rate that is nearly 37 times that of a standard personal loan at a consumer bank, further inhibiting income generation and mobility.¹³⁵

“ We borrowed a lot — from people and on credit cards. We would use credit cards until payments from my husband’s business came in but we often had to beg and borrow from one person to pay another and put off payments. It was terrible. I wouldn’t recommend it.

—Maria, age 37, Florida
(Lived Experiences Research 2021)



Physical and Mental Health

Physical and mental health experiences from birth through adulthood are affected by structural factors including bias and historic underinvestment in communities that have been socially or economically marginalized.

Black mothers are twice as likely to receive late or no prenatal care as compared to non-Hispanic white mothers. Furthermore, Black infants are four times as likely to die from complications related to low birthweight as non-Hispanic white infants.¹³⁶ In childhood, race and socioeconomic background often influence who has access to nutritious food. Americans who earn low wages and/or are BIPOC are more likely to live in “food deserts” with few large supermarkets that offer fresh, affordable produce and other essential items, thereby inhibiting access to adequate nutrition, a key component of overall health and development.^{137,138}

In adulthood, many individuals who are socially or economically marginalized face barriers in accessing the health system. Black and Hispanic Americans are significantly more likely to be uninsured, at 9.6 and 16.7 percent respectively, than non-Hispanic whites, of whom only 5.2 percent are uninsured.¹³⁹ Even after accessing health-care, BIPOC Americans are less likely to receive high-quality mental and physical healthcare services. For instance, Black men are more likely to receive a misdiagnosis of schizophrenia for mood disorders or PTSD.¹⁴⁰ Black women continue to experience excess mortality relative to women from other racial groups, shorter life expectancies, and higher rates of maternal mortality.¹⁴¹ Together, these factors contribute to and perpetuate disparities in health outcomes and thus play a role in diverging mobility outcomes.

“ We only go to the doctor when we have no other choice. It has been suggested that I should get some things checked out, but that’s going be 100 bucks here and there and I don’t have it. Now that we’re slightly better off, thought about trying to find a public plan. I saw on TV that you can get health insurance for \$86 per month but that is still out of reach. So we just pay for care when there is a problem we can’t ignore.”

—Inez, age 40, Texas
(Lived Experiences Research 2021)

“ In 2015, I developed a series of medical conditions that prevented me from getting a job and finish training as a nurse. Poor health still limits the jobs I can get now and in the future.”

—Michelle, age 35, Ohio
(Lived Experiences Research 2021)



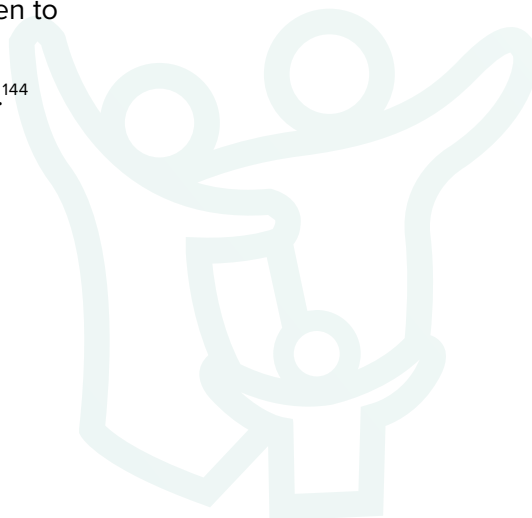
Social and Familial Relationships

Social and familial relationships are a critical influence on one's life trajectory, but structural factors such as bias, discrimination, and de facto segregation of communities by race and income mean that many BIPOC Americans and Americans earning low wages have fewer opportunities to form meaningful relationships and networks with higher-income individuals — a proven pathway to mobility.

Studies show that limited access to professional networks presents barriers to Black and Latino Americans who are seeking employment.¹⁴² A similar phenomenon has been observed among first-generation college students; one study found that they earned 12 percent less after graduation than non-first-generation students, perhaps because they lacked connections to high-income individuals who can link them to high-paying job opportunities.¹⁴³ Gender disparities have also contributed to gaps in professional networks, with one study finding that women in the US are 28 percent less likely than men to have strong online professional networks, as measured by network size and diversity.¹⁴⁴

“ I do wish I had a mentor, someone who could have helped me. You need somebody to be realistic, transparent and honest; to give you the hard truth.”

—Neel, age 45, Oklahoma
(Lived Experiences Research 2021)



3 Conclusion

Economic mobility is among the defining issues of our time. Increasing access to and participation in mobility experiences can help increase opportunities for upward mobility, improving the lives of millions.

Doing so may not only help members of the current generation realize their full potential, but also help chip away at the vast intergenerational inequalities in wealth, income, and opportunity presently affecting our nation, and for which BIPOC Americans and Americans who earn low wages bear a disproportionate burden.

Mobility Experiences Research

The Mobility Experiences research aims to establish a fact base of the experiences that contribute most to economic mobility, to equip actors in the public, private, and nonprofit spheres with a shared understanding of how life experiences impact lifetime income. Harmful narratives about poverty can begin to shift as awareness of key economic mobility drivers and the role of structural factors grows. With this knowledge, stakeholders can engage in mobilizing more capital towards effective interventions to ensure people across the United States can access and navigate the life experiences that will enable their upward economic journeys.



The Economic Mobility Research aims to establish a fact base of the experiences that contribute most to economic mobility, to equip actors in the public, private, and nonprofit spheres with a shared understanding of how life experiences impact lifetime income. Harmful narratives about poverty can begin to shift as awareness of key economic mobility drivers and the role of structural factors grows.



Three-part Series

THIS REPORT

This report is the first in a three-part series covering the impact of mobility experiences, public perception of economic mobility, and the state of the economic mobility field.

SECOND REPORT

The second report will center the lived experience expertise of Americans, covering their perceptions of economic mobility and the influence of key life experiences in their own lives.

THIRD REPORT

The third report will highlight programs and interventions that have been shown to make a difference, and shed light on the state of economic mobility funding and outstanding whitespace where further research and innovation may be particularly helpful.

Appendix: Mobility Experience Data

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Accessing care for mental and physical health conditions	14	Regression = 10 Survey = 3 Meta-analysis = 1	0–79%; 12%	Impact of having preventative care Impact of health conditions Impact of Affordable Care Act Impact of Medicaid eligibility expansion	<p>Bahn et al. (2017) found that full access to reproductive health services increases women's income by 7-16% per hour.</p> <p>De Neve (2012) found that measures of positive affect and life satisfaction in adolescence and early adulthood are positively associated with later earnings (3.3-6% increase in annual earnings).</p> <p>Kaestner et al. (2015) found that the expansion of Medicaid eligibility has a small but positive impact of 0.4% on labor supply for non-disabled adults between ages 22-64 with a high school degree or less. However, another study (Katherine et al. 2013) found that Medicaid had no significant effect on employment or earnings.</p> <p>Dillender et al. (2016) found that the ACA increases the part-time employment rate for workers in retail, accommodations and food service by 2-3%.</p> <p>Akosa et al. (2012) found that, after enactment, the ACA reduced the average number of work hours among young adults aged 19-25 by 10.11%</p> <p>Census (2019) and Meyer (2019) found that disabled workers earn 34-79% less than non-disabled workers</p> <p>Gaulke (2015) found that those with chronic illnesses have a 4.7-25.6% decline in employment</p>
Accessing extracurriculars during adolescence (incl. sports, clubs, work)	5	Regression = 2 Survey = 2 Longitudinal = 1	1–20%; 7%	Impact of participating in clubs in high school Impact of participating in sports in high school Impact of part-time job in high school	<p>Kosteas (2010) found that participating in an extracurricular club increased future weekly earnings by 1-2.1%.</p> <p>Lieberman (2015) found that participating in either an individual sport or a team sport positively affects future income by 8-11% annually.</p> <p>Costa (2010) found that both high school and college graduates earn 1-3% more in annual wages when they participate in extracurricular clubs, with the increase more pronounced for college graduates.</p> <p>Baum and Ruhm (2014) found that young adults in high school who work 20 hours per week in part-time employment during their senior year earn 20% more annually than their peers who did not work within 6-9 years after graduation.</p>

vii First non-bolded values are reported range of impact across all academic studies examined for a given experience; second bolded value is the mean of upper and lower bound divided by the estimated years of impact of an experience

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Accessing non-wage employment-based benefits incl. healthcare, retirement	3	Regression = 1 RCT = 1 Survey = 1	2–13%; 7%	Impact of having health insurance through their jobs Estimate cash-equivalent cost of healthcare	Bahn et al. (2017) found that full access to reproductive health services increases women's income by 7–16% per hour. De Neve (2012) found that measures of positive affect and life satisfaction in adolescence and early adulthood are positively associated with later earnings (3.3–6% increase in annual earnings). Kaestner et al. (2015) found that the expansion of Medicaid eligibility has a small but positive impact of 0.4% on labor supply for non-disabled adults between ages 22–64 with a high school degree or less. Dillender et al. (2016) found that, after enactment, the ACA increased part-time employment for workers in retail, accommodations and food service by 2–3%.
Accessing pre- and post-natal care	5	Regression = 5	1–10%; 6%	Impact of healthy intrauterine conditions Impact of sufficient nutrition Impact of mental health problems	Atella et al. (2020) found that in-utero stress exposure led to worse economic outcomes (3% immediate earning loss following mass layoff). Schwandt (2017) found that in-utero influenza exposure doubles prematurity and low-birth weight rates and increases postnatal mortality. Moreover, offspring with in-utero exposure earn 9% less annually than siblings who were not. Schultz-Nielsen et al. (2014) found that exposure to Ramadan while in-utero results in a lower likelihood of employment, a lower salary, and reduced labor supply by up to 10% annually.
Accessing pre-K and other early childhood dev. opportunities	11	Regression = 9 RCT = 2	0–26%; 6%	Impact of accessing early childhood development programs	Cascio and Schanzenbach (2013) found that state programs in Georgia and Oklahoma have increased preschool enrollment rates among children from lower- and higher-income families. Cascio and Schanzenbach (2013) found that high-quality pre-K attendance increases children's future income by 1.3–4% annually and by 3–25% over their lifetimes (Bartik, Timothy J., 2014). Heckman et al. (2019) found that children who participated in pre-K programs have fewer school suspensions, higher levels of education and employment, and lower levels of participation in crime than children who did not attend pre-K. Bartik et al. (2012) found that children from low-income families benefit more from high-quality pre-K than children from higher-income families do, with a 1% increase lifetime income. Gray-Lobe et al. (2021) found that attending Boston pre-K programs boosts on-time college enrollment by 18% and graduation by 6%. Also, Garces et al. (2020) found that children who participate in Head Start are significantly more likely to complete high school and attend college – by as much as 20%.

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Accessing public benefits & programs	4	Regression = 4	1–13%; 6%	Impact of voucher-assisted housing, public housing Impact of participating in conditional cash transfer program	<p>Andersson et al. (2016) found that children raised in voucher-assisted housing at some point between 1997–2005 earn 2.6–4.7% more at age of 26 than their siblings. Similarly, those raised in public housing earn 4.9–5.1% more at age of 26 than their siblings.</p> <p>Neidhöfer et al. (2019) found that individuals who spent their childhood in poverty and participated in a conditional cash transfer program attained higher educational and income levels, with about 1.2 years more schooling than their peers and an additional \$200–\$250 in income per month.</p> <p>Farooq et al. (2020) found that unemployment insurance benefits make it more likely that workers will obtain jobs that match their skills, increasing average income by 14.4%.</p>
Accessing stable, affordable housing	4	Regression = 4	3–16%; 8%	Impact of living in a home owned by parent/guardian Impact of public housing and voucher-assisted housing during childhood	<p>Harkness and Newman (2003) found that individuals who grow up in a home that is owned rather than rented attain significantly more (41%) years of schooling and earn 8% more in hourly wages.</p> <p>Andersson et al. (2016) found that children raised in voucher-assisted housing at some point between 1997–2005 earn 2.6–4.7% more at age of 26 than their siblings. Similarly, those raised in public housing earn 4.9–5.1% more at age of 26 than their siblings.</p> <p>Chyn (2016) found that children who move into higher-opportunity neighborhoods are 9% more likely to be employed and earn 16% more as adults</p>
Being born with a healthy birthweight	8	Regression = 8	0–26%; 10%	Impact of being born with healthy birth weight	<p>Behrman et al. (2004) found that healthy intrauterine nutrient intake increases children's lifetime income by up to 12%; however, Bharadwaj et al. (2015) found that this impact fades after age 50.</p> <p>Johnson et al. (2013) found that having a healthy birth weight positively increases hourly wages by 10% at ages 18–26 and by 22% at ages 37–52.</p> <p>Janet et al. (2005) found that having a low birth weight has an overall negative effect, especially on women born in poorer areas. Women born at a low birth weight and from poor areas earn about \$238 less annually than their peers.</p> <p>Black et.al (2005) found that having a healthy birth weight can boost high school educational attainment by up to 13%.</p>

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Completing high school education or equivalent credential	4	Descriptive statistics = 2 Longitudinal study = 1 Survey = 1	0–37%; 16%	Impact of education level Impact of high school diploma	In 2017, the National Center for Education Statistics found that high school diploma recipients make 23–37% more per year than those with less than a high school diploma. Betts et al. (1995) confirmed that workers’ earnings are affected by the high school they attended. However, traditional measures of school “quality” – such as class size, teachers’ salaries, and teachers’ level of education – fail to capture these differences.
Experiencing financial inclusion (incl. financial education & access)	1	Regression = 1	7–8%; 8%	Impact of increasing savings, bank penetration and financial inclusion	Miriam et al. (2014) found that increased bank penetration or greater access to financial services improves individuals’ income by 8% monthly.
Graduating with a degree in a high-paying field of study	21	Descriptive statistics = 4 RCT = 1 Regression = 15 Survey = 1	3–96%; 36%	Impact of choosing different major (i.e., STEM, education, finance, management, services industry and marketing) in college	Carnevale et al. (2013) found that the highest-earning college major earns three times more than the lowest-earning major. Burke-Smalley and Lobo. (2017) found that a college degree is beneficial, as it brings up to \$43,990 more earnings per year. Specifically, earning a bachelor’s degree in finance, management, or marketing brings \$88,918, \$57,458, or \$67,827 in additional earnings per year, respectively. But the private value of investment in college is a declining function of time-to-graduation. James (2012) found that the average boost in earnings resulting from a college degree — 85% — ranges widely, depending on the chosen field of study. Engineering majors enjoy the highest average earnings increase from a four-year degree, at 125%, while psychology and social work majors gain the lowest increase, at 40%. Carnevale et al. (2015) found that STEM majors enjoy a significant premium in annual earnings, at 33–48%. Kim et al. (2015) found a wide variance in cumulative lifetime income based on an individual’s choice of major. The lifetime income of an individual with a bachelor’s degree in STEM are 79–140% more than those of an individual with a high school diploma. Julian (2012) found that individuals in service occupations make 30% less in lifetime income than the average lifetime incomes for all occupations.

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Having access to adequate nutrition and a balanced diet in childhood	5	Regression = 5	0–7%; 4%	Impact of having sufficient nutrition in childhood	<p>Bitler (2019) found that providing access to food from in-utero through age 5 (childhood) via the Food Stamp Program (FSP) increased annual earnings by 3%.</p> <p>Bailey et al. (2020) found a 7% increase in annual labor income for both men and women due to the FSP.</p> <p>Bütikofer (2016) found that access to free school breakfasts increased years of schooling by 0.1 years and annual earnings by 2–4%.</p>
Having low exposure to traumatic experiences (including ACEs)	11	Interviews = 2 RCT = 1 Regression = 8	0–37%; 11%	Impact of being exposed to traumatic experiences in different life stages (i.e., children, teenagers, adults)	<p>Cabral et al. (2020) examined the consequences of adverse shocks/trauma and found that those exposed to school shootings in grades 9–11 earn 13.5% less annually than their peers.</p> <p>Schurer and Trajkovski (2006) examined the effects of adverse childhood experiences (ACE) on economic outcomes. Those who experience a single ACE earn 7.3% less than their peers and are more likely to depend on welfare and to live in poverty. Experiencing one additional ACE – on a scale between 0 and 6 – causes earnings to decrease by as much as 37% monthly. Specifically, experiencing neglect – as assessed by a child’s teacher at ages 7 to 11 – is measured as the link between ACEs and economic outcome.</p> <p>Savoca and Rosenheck (2018) looked at labor market outcomes for Vietnam war veterans. Those who experienced PTSD earned 16% less in hourly wages than their counterparts.</p> <p>Loughran and Heaton (2013) found that reservists who had PTSD symptoms earned 6% less than those who did not post-deployment.</p> <p>DeSimone and Sabia (2011) found that physically forced sexual trauma has a subsequent effect on labor market outcomes for young adult females. Overall, sexual victimization reduces earnings by 10%. Stress-related psychiatric illness explains 30–50% of the adverse labor–market consequences of sexual violence.</p> <p>Currie and Widom (2010) examined the effects of child abuse and neglect on economic outcomes at age 29. By adulthood, (approximately age 29), maltreated women had completed fewer years of schooling and had lower scores on IQ tests than women in a control group. In middle adulthood, maltreated women were significantly less likely to be employed, own a bank account, own stock, own a vehicle, and own a home.</p> <p>Habecker (2013) found that parental incarceration reduces a child’s odds of completing high school by 50%.</p>

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Having reliable and affordable access to physical and digital infrastructure (incl. transit & internet)	16	<p><i>RCT</i> = 4</p> <p><i>Regression</i> = 10</p> <p><i>Survey</i> = 2</p>	0–50%; 8%	<p>Impact of having access to broadband/superfast internet</p> <p>Impact of state-wide broadband penetration</p> <p>Impact of increasing broadband availability</p> <p>Impact of having access to automobiles and public transit</p>	<p>Khanal and Mishra (2013) found that access to broadband internet resulted in \$24,000–\$27,000 in additional total household income for small farms.</p> <p>Bai (2017) found that access to normal broadband internet resulted in a 0.015% increase in county-level employment nationwide; however, compared to broadband at normal speeds, faster broadband did not generate greater positive effects on employment.</p> <p>Crandall et al. (2007) found that an increase of 0.01 broadband lines per capita resulted in a 0.593% increase in annual statewide employment in 2003–2005.</p> <p>Pasha et al. (2020) found that a 1.0% increase in transit service intensity resulted in a 0.8–1.2% increase in employment within Cuyahoga County, OH between 2010–2016.</p> <p>Jayakar and Park (2013) found that a 10% increase in broadband availability resulted in a decrease of 0.7% in unemployment in 2007–2010.</p> <p>Crandall et al. (2007) found that a 1% increase in broadband penetration in a state yielded a 0.2–0.3% increase in annual employment growth in 2004–2005.</p> <p>Atasoy (2013) found that a county moving from no broadband availability to ubiquitous availability between 1999–2007 led to a 1.8% increase in employment when county- and time-fixed effects were applied.</p> <p>Shideler et al. (2007) found that broadband deployment in Kentucky increased employment by 0.14–5.32% between 2003–2005.</p> <p>Blumenberg et al (2015) found that access to automobiles and public transportation positively impacts employment and earnings by up to 19% annually, particularly for those in low-income communities.</p> <p>Smart and Klein (2020) found that access to a car is positively correlated with earnings (up to 28% increase annually), especially when there is at least one vehicle per adult in a household.</p> <p>Cervero et al. (2002) found that a household's proximity to public transit and rail can result in an annual earnings increase of up to 50%.</p> <p>DiMaggio and Bonikowski (2008) found that access and use of the internet boosts potential earnings significantly, increasing hourly wages by 8–14%.</p>

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Having strong social/professional networks	6	Regression = 5 Longitudinal study = 1	0–21%; 6%	Impact of cognitive and social skills Impact of social capital in work environments Impact of having a mentor	Deming (2017) found that individuals with higher cognitive and social skills can attain better jobs and thus higher annual wages (by 10–21%) compared to those with lower reported cognitive and social abilities. Greve et al. (2004) found that “social capital” (contributions from people we interact with during work and problem solving) is strongly correlated to productivity for firms that require team-based tasks; specifically, social capital increases annual income by up to 5% Zach C et al. (2015) found that African-American youth could achieve up to 58% increase in annual earnings during adulthood by having a mentor
Having manageable student debt	3	Regression = 2 Meta-analysis = 1	0–20%; 5%	Impact of having student loan debt	Rothstein and Rouse (2011) found that debt leads graduates to choose higher-salary jobs. The authors’ preferred specifications indicate that an additional \$10,000 in debt leads students to accept jobs that pay \$2011 more in annual wages, on average. Elliott and Lewis (2013) found that each \$1,000 increase in student debt is associated with a 3% greater likelihood that students will drop out of college. Facer found that students who are “on track” to graduate with \$10,000 or more in student debt are 20% less likely to graduate than students who are “on track” to graduate with less than \$10,000 of student debt.
Living with a working adult partner (incl. cohabitation, marriage)	3	RCT = 2 Regression = 1	1–57%; 19%	Impact of marriage status (e.g., single, divorce, remarriage) Impact of cohabiting status (versus single-parent households)	Wilmoth et al. (2002) found that older cohabiters who have never been married have, on average, 78% less net worth than those in intact families. Cohabiters who have been divorced once or widowed once have 68% less net worth than intact families. Zissimopoulos et al. (2009) found that changes in wealth are higher for married individuals than for all other individuals: at \$3,222 more than those who are remarried; \$10,142 more than divorced individuals; \$17,317 more than those who are widowed; \$11,627 more than never-married individuals; and \$17,115 more than partnered individuals. Page and Stevens (2002) found that children’s earnings are later affected by family transition. The family income of children whose parents divorce and remain divorced for at least six years falls by 40–45%.

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Living in a high economic mobility neighborhood	6	Regression = 6	1–25%; 9%	Impact of being exposed to a better county (i.e. counties with less concentrated poverty) Impact of having access to housing voucher Impact of neighborhood conditions	Chetty and Hendren (2018) found that moving to a better county (i.e., counties with less concentrated poverty, less income inequality, better schools, a larger share of two-parent families, and lower crime rates) increased mean income by 0.5% at age 26 among children born between 1980–1986 in the United States. Chetty et.al (2016) found that using an MTO (Moving to Opportunity) housing voucher (i.e., moving from high-poverty projects to low-poverty neighborhoods) before age 13 results in an average increase of \$1,624 in earnings for individuals in their mid-twenties. Vartanian (2005) found that children living in higher-economic-status neighborhoods raises the average income-to-needs ratio for adult family incomes by 9–18%. The younger the children when they begin living in these neighborhoods, the higher the increase.
Avoiding involuntary unemployment	6	Regression = 3 Survey = 2 Longitudinal study = 1	7–30%; 19%	Impact of losing a job Impact of displacement during economic downturn	Krolikowski (2017) found that workers who have lost a job earn 30% less than those who have never lost a job. Jonas et al. (2018) found that workers who involuntarily lost a job in their early career have an average 6% higher probability of reporting “fair” or “poor” health at the time of the interview. Hyslop et al. (2021) found that individuals displaced during an economic upswing lose a total of \$3.3 billion in wages, or 1.1% of GDP (net present value). In an economic downswing comparable in severity to the Global Financial Crisis, the central estimate of wage loss is about \$8.8 billion (2.8% of GDP) Hyslop et al. (2021) also found that displaced workers between ages 30–40 or 50–60 lose 2.5–3.5 years of earnings due to their displacement.
Avoiding repeated school disciplinary actions	3	Descriptive statistics = 1 Regression = 2	0–9%; 4%	Impact of school discipline Impact of in school suspension (ISS) and out school suspension (OSS)	Marchbanks et al. (2018) found that school discipline related to approximately 6,600 grade retentions per year in the state of Texas caused a 15% decline in high school graduation rate. LiCalsi et al. (2021) found that middle-school students who received an out-of-school suspension (OSS) instead of an in-school suspension (ISS) in response to a behavioral incident were 3.4% less likely to graduate on time from high school. Middle-school students who received the most severe punishment (OSS of 21+ days) were 4.5% less likely to graduate on time from high school. Marchbanks et al. (2014) found that a 24% increase in dropout rates is associated with students who are disciplined between grades 7–12.

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Avoiding interactions with the criminal justice system	14	<i>Longitudinal study = 5</i> <i>RCT = 2</i> <i>Regression = 5</i> <i>Survey = 2</i>	0–52%; 10%	Impact of prison serving time Impact of being initially detained and initially released Impact of felony conviction Impact of having criminal record Impact of being arrested/ incarcerated during adolescent	<p>Kling (1999) found that serving prison time resulted in a 0–3% decrease in employment rate.</p> <p>Dobbie, Goldin, and Yang (2018) found that, for defendants who were arrested and charged between 2006–2014, being initially detained rather than released results in a 13.1% decrease in the percentage of defendants who are employed two years after bail hearings.</p> <p>Agan and Starr (2017) found that having a felony conviction resulted in a 5.1% decrease in callback rates compared to rates for job applicants without felony convictions.</p> <p>Waldfoegel (1994) found that first-time conviction reduces employment probabilities by 5% and significantly decreases income (by as much as 30%), especially for offenders who had pre-conviction jobs that required trust, or who are sent to prison.</p> <p>Mueller-Smith (2015) found that marginal defendants who were not incarcerated were roughly five times more likely to be gainfully employed than be charged with another criminal offense if not incarcerated</p> <p>Decker, Spohn, and Hedberger (2015) found that having a criminal record (e.g., a three-year prison term for possession of cocaine with the intent to sell) did not affect the percentage of favorable responses to applications submitted during the summer of 2011.</p> <p>Smith (2018) found that those who were arrested at least once during childhood had about \$5,000 less in earnings per year as adults – an association that was about \$8,000 higher if the adults experienced multiple arrests during childhood.</p> <p>Apel (2010) also found that young adults who were incarcerated experienced a reduction in income of \$4,000 to \$5,000 per year.</p> <p>Hyla (2016) found that having been arrested as a minor reduces future income by almost \$6,000.</p>

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Not having to provide unpaid care for adult family members	9	<i>Descriptive analysis = 2</i> <i>Interviews = 1</i> <i>Longitudinal study = 1</i> <i>Meta analysis = 1</i> <i>RCT = 1</i> <i>Regression = 1</i> <i>Survey = 2</i>	0–31%; 6%	Impact of caregiving responsibility	<p>Bittman et al. (2007) found that becoming an informal caregiver results in significant loss of income. Providing care for even one calendar year can reduce earnings by as much as 30% and may have sustained effects over the caregiver's lifetime.</p> <p>Korfhage (2019) found that being a caregiver adversely affects labor market outcomes. Persistent effects include lower lifetime incomes (by 16–31%), reduced pension entitlement, and cost to the caregiver's well-being.</p> <p>Shulz and Eden (2016) found that unpaid caregiving for family members can decrease working-age adults' lifetime income by up to 19%. The cost comes from both out-of-pocket, health-related expenses and the caregiver's decreased ability to work paid labor hours.</p> <p>MetLife (2011) found that more than 10 million Americans care for their parents, which negatively affects their income, savings, and retirement preparations and reduces their lifetime income by 16%.</p> <p>Mudrazija (2019) found that the current economic cost of earnings foregone between 2013 and 2050 due to caregiving responsibilities is about \$67 billion. By mid-century, this figure will likely double to \$132–\$147 billion, fueled primarily by growth in the older disabled population and an increased share of better-educated caregivers. The average opportunity cost per caregiver will likely increase by 8–20% and per US resident by 54–72%.</p>
Not having to provide unpaid care for children	6	<i>Regression = 6</i>	0–30%; 5%	Impact of having a child Impact of timing of having children	<p>Angrist et al. (1996) found that the third child decreases the probability of mother's work by 17 percentage points (a 20–30% reduction in women's labor supply), weeks worked by 9/year, hours worked by 7/week, and family income by 3–14% over lifetime income.</p> <p>Miller (2009) found that delayed motherhood leads to higher earnings and wage rates and more hours worked; annual earnings increase by nearly 10% for each year of fertility deferment.</p> <p>Scott-Jones (1990) found that, as predicted, women who experienced their first pregnancy as adolescents earned lower incomes than women who had their first pregnancy after the teen years; specifically, women who delayed pregnancy gained approximately \$1,620 in average yearly income.</p>

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Obtaining a first full-time job that offers opportunity for advancement	4	Regression = 4	0–71%; 24%	<p>Impact of starting career at a large firm</p> <p>Impact of starting wages (state dependence in wages)</p> <p>Impact of working for different types of firm</p> <p>Impact of direct-hire placements</p>	<p>Arellano-Bover et al. (2020) found that individuals who start their career at a large firm experience long-term positive effects, including a 3-12% increase in lifetime income.</p> <p>Devereux et al. (2002) found that if two identical individuals start jobs that pay a different wage, about 60% of the wage differential is still present four years later. Approximately 50% of the wage differential is still present even for men who change employers during the four years.</p> <p>Arellano-Bover et al. (2020) found that working for different types of firms as a young person can have effects that last throughout one's career – including up to 2% more in lifetime income – and that firm size is a relevant measure that captures meaningful employer characteristics.</p> <p>Autor et al. (2016) found that direct-hire placements through the Work First job placement program are estimated to significantly increase subsequent quarterly earnings by up to \$913 over 1–2 years for half or more of all placed participants.</p>
Owning a business	8	Regression = 8	4–40%; 17%	Impact of starting one's own business/being self-employed	<p>Frid et al. (2016) found that people's wealth and liquidity significantly constrain their ability to start a business and concluded that entrepreneurial success is concentrated at the top of wealth distribution, despite evidence of entrepreneurial capability among those at the lower end of wealth distribution.</p> <p>Fairlie (2001) found that self-employed black and Hispanic men have up to 30% higher mean and median annual earnings than their minority counterparts who earn wages or salaries. In addition, self-employed Hispanic men initially earn less than wage/salary workers, but experience quicker growth rates and slightly greater earnings after 9 years.</p> <p>Fairlie (2005) found that self-employed business owners earn up to 4% more annually than wage/salary workers who are young men from disadvantaged families.</p> <p>Fairlie (2004) found that a relatively high percentage of less-educated business owners, especially men, experience either rapid earnings growth or large annual losses.</p> <p>Lofstrom (2013) found that low-skilled, self-employed women have a greater earnings disadvantage than their peers. Estimates indicate that a native-born, low-skilled, self-employed woman earns approximately 43% less than her observationally identical counterpart who earns a wage or salary.</p>

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Pursuing/ completing postsecondary education	36	Descriptive statistics = 15 Longitudinal study = 1 Meta analysis = 1 RCT = 2 Regression = 17	2–100%; 39%	Impact of obtaining/finish a bachelor's degree Impact of obtaining a certificate Impact of some college experience without finishing college	<p>Zimmerman (2014) found that admission to college yields quarterly earnings gains of 22% between 8 and 14 years after high school completion, and that these effects are most significant for males and recipients of subsidized free lunches.</p> <p>Heckman et al. (2018) found that college enrollment boosts lifetime income by 14–31%.</p> <p>Heckman et al. (2018) also found that completing some college boosts earnings by 10% when compared to earnings after obtaining only a high school diploma.</p> <p>Heckman et al. (2018) further found that obtaining a bachelor's degree leads to a 12% increase in earnings when compared to earnings after completing only some college.</p> <p>Paterson and Weeks (2014) found that bachelor's degree result in an 18–19% premium on annual wages.</p> <p>Kim et al. (2019) found that vocational degrees yielded a 17–20% earnings premium for a sample of students who graduated high school between 1972 and 1995.</p> <p>Jepsen et al. (2014) found that associate's degrees yield an earnings premium of 24–56% (compared to those with only high school diplomas); this advantage is especially significant for female workers</p> <p>Jepsen et al. (2014) also found that one-year certificates have quarterly earnings returns of 21–45% (compared to those with only high school diplomas); this benefit is especially significant for female workers.</p> <p>Jepsen et al. (2014) further found that even short-term certificates are associated with an earnings premium of 5–7% (compared to those with only high school diplomas)</p> <p>Bailey et al. (2004) found that completing an associate's degree is linked to additional earnings of 16–39%, especially for female workers compared to those with high school diplomas only.</p> <p>Bailey et al. (2004) also found that having some four-year college experience is associated with a 10–14% increase in annual earnings, even if no degree is earned.</p> <p>Clayton et al. (2017) found that individuals with bachelor's degrees earn up to \$21,000 more annually than those with high school diplomas only.</p> <p>Dadgar et al. (2015) found that earning a one-year certificate is linked to a 2–14% increase in annual earnings compared to those with high school diplomas only.</p> <p>Dadgar et al. (2015) also found that earning an associate's degree is linked to a 4–8% increase in annual earnings compared to those with high school diplomas only.</p>

MOBILITY EXPERIENCE	NO. OF STUDIES EXAMINED	BREAKDOWN OF STUDY TYPE	IMPACT SIZE ^{vii}	SCOPE OF RESEARCH	OVERVIEW (NOT-EXHAUSTIVE)
Receiving jobs or skills training	11	Descriptive statistics = 1 RCT = 6 Regression = 4	0–53%; 19%	Impact of participating in sectoral training program Impact of participating in prisoner reentry employment program Impact of receiving promotions	<p>Fein and Hamadyk (2018) found that the Year Up program generated a statistically significant increase in average earnings in the sixth and seventh quarters, when average quarterly earnings were \$1,895 higher for the treatment group (\$5,454) than for the control group (\$3,559) – a 53% increase. These effects diminished but remained substantial (about 40%) over the following year.</p> <p>Roder and Elliott (2019) found that participating in the Project Quest program in San Antonio, TX (which provides comprehensive support to low-income adults seeking post-secondary credentials and well-paying jobs in strong sectors of the local economy) leads to an 18% increase in annual earnings 9 years after random assignment.</p> <p>Walton and Cook (2020) found that the Patient Care Pathway Program, which helped low-skilled adults obtain and complete occupational training in the healthcare sector, increased enrollment in occupational training but did not increase the attainment of college credentials, employment, earnings, or family economic well-being.</p> <p>Reder (2014) found that participating in adult basic skills (ABS) programs hosted by the US Department of Labor increased lifetime wages by up to 32%.</p> <p>Duwe (2012) found that EMPLOY, a prisoner re-entry employment program, increased offenders' chances of gaining employment after their release from Minnesota prisons by 1%.</p> <p>Kirchmeyer (2002) found that men advance more financially and reap greater returns from promotions than women do. Specifically, women's income changes due to promotions fall short of men's income changes; promotions yielded a dollar value of \$11,540 for women and \$17,140 for men.</p>
Receiving mentorship during adolescence	5	Longitudinal study = 1 RCT = 1 Regression = 3	1–55%; 21%	Impact of having a natural mentor (i.e., family member) Impact of having a professional mentor (i.e., academic, career)	<p>Timpe and Lunkenheimer (2015) found that having a natural male mentor generated \$190,000 in additional lifetime income for all fatherless youth and \$458,000 for African American fatherless youth between 1994 and 2008 in the US.</p> <p>Ashtiani and Feliciano (2012) found that having mentors of all types while navigating post-secondary pathways increases the likelihood of attaining a bachelor's degree by 36% among low-income youth.</p> <p>Kraft et al. (2021) found that having a mentor can increase educational attainment by 0.66 to 0.91 years and boost annual earnings by approximately \$1,750 to \$2,700.</p> <p>Hagler and Rhodes (2018) found that youths with mentors had higher educational attainment, a higher rate of volunteerism, and more friends than their unmentored peers.</p>

Technical Appendix

Mobility Experiences that Shape Economic Outcomes

IDENTIFYING IMPACTING EXPERIENCES

To identify a universe of experiences that impact economic mobility, our study drew upon academic research and the lived experiences of Americans. In doing so, we created a compendium of 400+ academic studies that measure the impact of different life events on outcomes including earnings, health, and educational attainment. The study also conducted a survey of 4,000+ and interviewed 15+ Americans, which will be covered the second report in this series. Through parsing of academic research, survey, and interview results, we aligned on a list of roughly 30 mobility experiences with significant impact on intragenerational mobility. This list was then refined with input from key stakeholders in the economic mobility field, including philanthropists, academics, and on-the-ground practitioners.

Once an initial universe of mobility experiences was identified, we sought to understand the relative impact of each mobility experience on lifetime income. In this report, lifetime income refers to the total earnings of an individual throughout their time in the labor force, estimated at roughly 40 years.^{viii,145} We chose to measure lifetime income as it enables approximation of the impact of a mobility experience over the course of decades, making it a helpful metric for assessing the relative effects of different mobility experiences on economic mobility.

ACADEMIC LITERATURE REVIEW

To assess the relative impact of experiences on lifetime income, we narrowed our compendium to 232 academic research studies that met the following criteria:

1. Measured the impacts of experiences on either individual income (182), education (16), or employment outcomes (34)
2. Assessed the impact of US-based programs against one of the above metrics using methods including: descriptive statistics, interviews, longitudinal studies, meta-analysis, randomized control trials, regression, and surveys
3. Were published between 1990–2022
4. Appeared in a top ranked journal in economics and econometrics, education, health policy, sociology & political science, and/or urban studies, as determined by [Scimago Journal & Country Rank database](#) (journals examined include: Journal of Political Economy, American Economic Review, Journal of Economic Literature, Review of Educational Research, Journal of the Learning Sciences, Health Affairs, American Journal of Health Economics, Administrative Sciences Quarterly, American Sociological Review, and the Journal of Urban Economics)

We subsequently supplemented this compendium of articles with research from leading think-tanks and government-published statistical re-

viii The authors of this report acknowledge that individuals may spend more or less time in the labor force depending on level of educational attainment and personal factors. 40 years was chosen as a proxy for length of time spent in the labor force due to alignment with age brackets used by common data collection systems including the US Census Bureau and OECD, which commonly measure the adult population as individuals between ages 25 and 64 (adult)

ports. Adopting these criteria resulted in an initial dataset that appears in Exhibit A.2.1.

STANDARDIZING IMPACT

Subsequently, we sought to standardize the impact reported across studies to understand the relative impact of each experience on lifetime income. While it was not possible to standardize across all variables (which include study design, sample size, salary, geography, duration of impact, and year of publication), this effort prioritized standardizing studies for duration of impact and salary, utilizing the median individual earnings for both low-and-middle-income households. Steps of our calculation appear below:

1. We first calculated the mean impact on earnings for each mobility experience by averaging the reported upper and lower bounds of all academic studies examined for each experience
 - a. For studies that reported impact of an experience on earnings (e.g., a 10% increase on lifetime income), we took those numbers directly
 - b. For studies that reported impact of an experience on educational attainment/employment outcomes, we calculated the marginal impact of these experiences by multiplying the percent reported impact with the mean impact that high school educational attainment (20%), college educational attainment (39%), or avoiding involuntary employment (19%) has on earnings; For example, for a study that found that having low exposure to traumatic experiences (including ACEs) leads to a 50% increase in high school graduation rates, we would multiply 50% by the high school educational attainment impact of 20%, to achieve an overall impact on earnings of 10%
 - c. We then found the mean impact from all of the studies within that mobility experience to standardize the impacts on earnings
2. Subsequently, we identified the expected duration of impact for each mobility experience, assuming a 40-year participation in the labor force from ages 25–64. For instance, we identified that the average caregiver was 49.2 years old, so we estimated that “not having to provide unpaid care for adult family members” had an impact of 14.8 years.¹⁴⁶
3. We then standardized the mean impact for each experience by this duration of impact (i.e., 30% impact over 20 years would lead to a 15% impact over lifetime, assuming a 40-year average career)
4. To convert this percentage impact into dollar amounts, we utilized the reported median individual income in the US (\$35,805) as the average salary and applied a 3% discount rate to calculate lifetime impact
 - a. To calculate aggregate total impact across the population, which includes everyone affected by a mobility experience in a given year (e.g., for being born with a healthy birthweight, it includes all children born in a given year), we multiplied the incremental dollar impact of the mobility experience by the total population, with assumption of a \$35,805 yearly income (Fed Real Median Individual Income in the United States)
 - b. To calculate aggregate impact for the population that earns a low income, which includes the subset of individuals who earn a low income and may be affected by a mobility experience in a given year (e.g., for being born with a health birthweight, it includes all children whose households earn a low income born in a given year), we multiplied the incremental dollar impact of the mobility experience by the total low-income population, with assumption of a \$25,760 yearly income (Federal Poverty Guidelines income for an individual living below 200% of the federal poverty line).

Exhibit A.1: Total articles examined by mobility experience

Article Topic	#
Accessing care for mental and physical health conditions	14
Accessing extracurriculars during adolescence (including sports, clubs, work)	5
Accessing non-wage employment based benefits including healthcare, retirement	3
Accessing pre- and post-natal care	5
Accessing pre-K and other early childhood development opportunities	11
Accessing public benefits and programs	4
Accessing stable, affordable housing	4
Being born with a healthy birthweight	8
Completing high school education or equivalent credential	4
Experiencing financial inclusion (including financial education and access)	1
Graduating with a degree in a high-paying field of study	21
Having access to adequate nutrition and a balanced diet in childhood	5
Having low exposure to traumatic experiences (including ACEs)	11
Having reliable and affordable access to physical and digital infrastructure (including transit and internet)	16
Having strong social and professional networks	6
Having manageable student debt	3
Living in a high economic mobility neighborhood	6
Living with a working adult partner (including cohabitation, marriage)	3
Avoiding involuntary unemployment	6
Avoiding repeated school disciplinary actions	3
Avoiding interactions with the criminal justice system	14
Not having to provide unpaid care for adult family members	9
Not having to provide unpaid care for children	6
Obtaining a first full-time job that offers opportunity for advancement	4
Owning a business	8
Pursuing/completing postsecondary education	36
Receiving jobs or skills training	11
Receiving mentorship during adolescence	5

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