

RESEARCH REPORT

# Boosting Upward Mobility

**Metrics to Inform Local Action**

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# Mobility Metrics Working Group

## Members

The Bill and Melinda Gates Foundation commissioned the Urban Institute to convene the Mobility Metrics Working Group to develop a concise set of practical indicators of mobility from poverty that have wide credibility for application by policymakers, practitioners, and researchers. These indicators connect longer-term mobility outcomes to measures that can be tracked in the short and medium term and embody the comprehensive definition of economic and social mobility developed by the US Partnership on Mobility from Poverty.

The Mobility Metrics Working Group consists of 11 academic experts representing a range of perspectives. The scholars in the working group collectively span multiple fields, including economics, sociology, political science, and psychology, and they represent diverse backgrounds and views with respect to race, geography, policy domains, and political ideology. All members bring a deep understanding of what measures can reliably and accurately represent key dimensions of mobility as well as how these measures can be successfully implemented in diverse communities.



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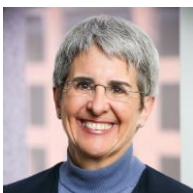
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# Executive Summary

Local leaders can create and bolster conditions that substantially boost upward mobility and narrow racial and ethnic inequities for children, youth, and adults. To build public will and achieve meaningful progress, communities need actionable metrics they can use to assess current conditions and monitor their progress. Based on the deliberations of a scholarly working group, this report provides a concise set of evidence-based metrics to monitor progress in the short to intermediate term on key local drivers of mobility from poverty. These metrics can help communities establish priorities, set targets, catalyze action, change policies and practices, and monitor their progress over time. The metrics will be refined through both ongoing scholarship and on-the-ground testing.

## Mobility from Poverty

The promise that anyone, with talent and hard work, can advance their position in society is etched deeply into the idea of America and the opportunities it offers.<sup>1</sup> But recent decades have cast doubt on that promise as rates of economic mobility in the United States have stagnated. The poorest adults are unlikely to rise to the middle of the income distribution, much less to the top (Acs and Zimmerman 2008; Bradbury 2016). And children growing up in families living in poverty are far more likely to experience poverty as adults than are children raised in households not living in poverty (Acs, Elliott, and Kalish 2016; Ratcliffe and McKernan 2010; Wagmiller and Adelman 2009).

To better understand this challenge and to explore potential solutions, the [US Partnership on Mobility from Poverty](#) was launched by the Bill and Melinda Gates Foundation and hosted by the Urban Institute. The Partnership, which completed its work in spring 2018, gathered insights from research, practice, and people who have experienced poverty to answer the urgent question of what it would take to dramatically increase mobility from poverty in the US. As part of its work, the Partnership developed an expansive definition of mobility from poverty that goes beyond economic success. The Partnership argued that economic success alone “does not fully capture people’s experiences with poverty” (Ellwood and Patel 2018, 2). Mobility from poverty also requires autonomy and power—the ability to exercise control over one’s personal circumstances and to influence policies and practices that affect one’s life—and a sense of belonging—being valued by one’s community (Acs et al. 2018).

More specifically, the Partnership contends that the three dimensions “are mutually reinforcing, and progress in one domain can lead to improvements in others. For example, someone who finds a



higher-paying job may experience a growing sense of autonomy and feel he or she has attained higher social status.... On the other hand, failure to make progress in one dimension could undermine progress in others. For example, a job providing little more than a paycheck with little control over how and when work is done may reduce someone's sense of control [and] create difficulties with participating in family and community life" (Acs et al. 2018, 18).

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*"Poverty is not just about a lack of money. It's about a lack of power."*

*—John A. Powell, director of the Haas Institute for a Fair and Inclusive Society and member of the US Partnership on Mobility from Poverty*

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Building on this holistic definition, the Partnership offered a strategic framework and a series of concrete proposals for substantially boosting mobility from poverty. Their proposals include ambitious, evidence-based policies, programs, and initiatives that would change prevailing narratives about poverty and the people who experience poverty; create access to good jobs; ensure that the zip code where a person lives does not determine their destiny; provide support to individuals and families that empowers them; and transform the use of data to drive local, state, and federal action (Ellwood and Patel 2018).

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*"We feel a sense of dignity when our own lives produce value for ourselves and others. Put simply, to feel dignified, one must be needed by other."*

*—Arthur Brooks, former president of the American Enterprise Institute and member of the US Partnership on Mobility from Poverty*

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## The Power of Metrics

Increasingly, communities across the country aspire to create the conditions that boost the long-term mobility of their residents, especially those experiencing poverty. Creating the conditions that boost mobility from poverty demands political will and sustained commitment to action, and metrics can play an important role in both motivating and shaping local action. They can provide an essential tool for

organizing, advocacy, and implementation. They can help local leaders raise the visibility of critical barriers to mobility from poverty, bring key stakeholders to a common table, help people with widely differing perspectives agree on objective data, enable local leaders to set priorities for policy change and investment, and support accountability across sectors and actors.

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**BOX 1**

**Promoting Mobility in Charlotte, NC**

Comparing one community's metrics to those of other places can motivate cross-sector partnerships and galvanize action. One example specific to promoting mobility is Charlotte, NC. When Chetty, Hendren, Klein, and Saez released their groundbreaking 2014 study on communities that promote upward mobility, Charlotte ranked last among the 50 largest US cities, and Mecklenburg ranked 99th out of the 100 largest counties. This led the city and county to develop a large-scale partnership called "[Leading on Opportunity](#)" that focuses leaders across sectors on strategies to increase mobility.

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Policies that increase mobility from poverty often do not bear fruit immediately; rather, they pay off over decades, through the course of people's lives or even through their children's lives. Therefore, measuring success requires patient attention to long-term trends. But local leaders need more than long-term metrics of mobility from poverty. Relying solely on measures of long-term outcomes does not provide sufficient transparency and accountability or the ability to learn and adapt in a timely manner.

Moreover, no single factor determines people's mobility over the long term. Focusing on only one or two outcomes can leave critical drivers unattended, and progress achieved through one driver can be undermined by the neglect of others. To make meaningful progress, communities need metrics that assess current conditions and monitor their short- and medium-term progress across the full range of driving factors.

Many of these factors are structural, meaning they reflect community conditions rather than the characteristics or circumstances of individual residents. For example, high levels of violence in the communities where families experiencing poverty live inflict lasting damage to children's physical and mental health, undermining their ability to succeed in school, community, and work. In contrast, communities with abundant living-wage jobs support residents' economic success as well as their autonomy and sense of belonging.

People of color in particular face longstanding structural barriers that perpetuate inequities and block upward mobility. To tackle these barriers and narrow equity gaps, local leaders need metrics that reveal differences in conditions and trends for people of different races and ethnicities and for different neighborhoods.

Local leaders need metrics that reflect these structural conditions in order to assess how well their city or county supports mobility from poverty for its residents, as opposed to tracking individuals' advancement over time.

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## BOX 2

### Promoting Mobility in Louisville, KY

In 2010, political, civic, and philanthropic leaders of **Greater Louisville** established a public-private partnership called **55,000 Degrees** with the explicit goal of adding 40,000 bachelor's degrees and 15,000 associate's degrees by 2020. This ambitious target emerged from analysis highlighting the central role of education in attracting new jobs and improving quality of life for residents. The partnership established a **dashboard** to monitor progress on a short list of community indicators, high-school indicators, college transition indicators, and postsecondary indicators. By 2019, the city had increased the number of degrees by 39,000, short of their original goal but still a substantial accomplishment.<sup>a</sup> Among the factors contributing to their progress, they credit the value of multiple stakeholders working together toward a common goal, crossing sectors and breaking down silos between institutions, and how data collected and shared improved the way they were able to work collectively. As they transition to the next phase of work, they acknowledge key lessons learned, including that need to tackle barriers to college success that start far earlier than high school and the courage required for policy and practice reforms that will close equity gaps.

<sup>a</sup> Mary Gwen Wheeler, "A Look Back and a Look Ahead: Lessons learned from an Education Movement," 55,000 Degrees, accessed January 27, 2020.

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Strategies will vary, of course, in light of local circumstances. But two examples illustrate how metrics can help communities take action and achieve collective goals that would not otherwise have seemed possible.

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### BOX 3

#### Promoting Mobility in Kansas City, MO

Bloomberg Philanthropy's What Works Cities program awarded **Kansas City** gold certification for their successful efforts to use data to improve policy and program decisionmaking.<sup>a</sup> **KCStat** provides the backbone for the city's performance metrics and accountability system, tracking progress across seven city-wide goals.<sup>b</sup> The mayor and city manager moderate a monthly meeting where staff present current performance data as the basis for a rigorous discussion about actions needed to achieve specific objectives under each goal. For example, in 2018 the city set a target of 5 percent or less of children with elevated lead levels. Thanks to increased collaboration across city departments and a new rental inspection ordinance, as of 2020 KCStat indicates the city is achieving this goal. The data presented during monthly meetings are also published on a regularly updated dashboard, which provides additional transparency and allows residents to track progress against specific objectives.

<sup>a</sup>"Kansas City, Louisville, and Washington DC, Level UP," What Works Cities Certification, accessed January 27, 2020.

<sup>b</sup>"Citywide Business Plan Progress Report," City of Kansas City, Missouri, accessed January 27, 2020.

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## Mobility Metrics Working Group

In early 2019, the Urban Institute formed a Working Group composed of distinguished scholars representing relevant disciplines to develop a concise but comprehensive set of evidence-based metrics to track progress on mobility. Specifically, the Working Group was charged to

develop a concise set of practical metrics of mobility that have wide credibility for application by policymakers, practitioners, and researchers. These metrics will reflect a clear theory of change that connects longer-term mobility outcomes to measures that can be tracked in the short- and medium-term. The metrics chosen will embody the comprehensive definition of economic and social mobility developed by the US Partnership on Mobility from Poverty.<sup>2</sup>

The Working Group consisted of 11 scholars with expertise in economics, sociology, political science, and psychology and with diverse perspectives with respect to race, geography, policy domains, and political ideology. Urban Institute senior vice president Margery Turner chaired the Working Group with support from a team of Urban Institute staff.

The Working Group systematically reviewed various factors that influence mobility from poverty for adults, families, and children. They applied rigorous criteria to reach consensus on metrics that are supported by strong evidence of predictive relationships to mobility and that can be influenced by local and state policies. The members convened for three full-day working sessions over nine months and provided structured input between meetings to achieve consensus on the most current evidence about key drivers of

mobility, about how best to reflect the Partnership's holistic definition of mobility from poverty, and about the best available metrics for monitoring short- to medium-term progress by city or county.

In conjunction with the deliberations of the Working Group, the Urban Institute held a robust series of discussion sessions and webinars with policymakers, researchers, and practitioners. “Stakeholder vetting labs” were conducted in San Francisco, New Orleans, Chicago, and Cleveland in partnership with local organizations. And webinars reached a wide audience of stakeholders, including representatives from city and county governments and from community foundations. These sessions explored the relevance and value of a preliminary set of metrics to local changemakers. They generated important insights about how the metrics could be applied to inform local advocacy, planning, action, and accountability. These insights were incorporated into the final set of metrics and will inform future work to support communities in applying the metrics locally.

## Framework for Boosting Mobility

Because local conditions so profoundly shape opportunities for people to achieve mobility from poverty, the Working Group focused on developing a framework for local action: three interconnected dimensions of mobility, three key drivers, and 25 evidence-based predictors of mobility from poverty.

The framework begins with the **three-part definition of mobility from poverty** advanced by the Partnership. Specifically, meaningful and sustainable mobility from poverty encompasses three dimensions:

- **Economic success:** Rising income and assets are widely recognized as essential to mobility from poverty.
- **Power and autonomy:** Mobility also requires control over one's life, the ability to make choices, and the collective capacity to influence larger policies and actions that affect one's future.
- **Being valued in community:** Feeling the respect, dignity, and sense of belonging that come from contributing to one's community is an essential element of mobility from poverty.

This constitutes a normative definition of mobility from poverty in which the three dimensions are interconnected and mutually reinforcing. To date, most research and systematic measurement have focused on economic success. Less scholarship has focused on rigorously measuring people's power and autonomy and their sense of being valued in community, and far less is known about how to advance

these outcomes. Moreover, further scholarship is required to build knowledge about how the three dimensions relate to each other over the short and long term.

Mobility from poverty is often viewed as a matter of individual ability and effort. But people experiencing poverty face multiple barriers that impede their efforts to achieve economic success, power and autonomy, and belonging. For people of color, structural barriers include long-standing patterns of racism, discrimination, and disinvestment that block access to safe and healthy environments, quality education, and family-sustaining work, as well as present-day forces of economic dislocation and exclusion that undermine people's best efforts to advance and opportunities for their children to thrive. **Three key drivers** propel individuals and families up and out of poverty over the course of their lives. All three contribute to a person's economic success, their power and autonomy, and their sense of belonging and value to community:

- **Strong and healthy families:** A secure and stable home environment provides the essential foundation for children's healthy development and for the educational and economic success of children, adolescents, and adults, along with an accompanying sense of accomplishment and empowerment.
- **Supportive communities:** Safe and inclusive communities play a central role in shaping families' well-being, their social networks and supports, and their children's chances to thrive and succeed.
- **Opportunities to learn and earn:** Education, from pre-K through postsecondary as well as adult education and workforce development, provides a crucial avenue to economic and social mobility, and for most people in the US today, work constitutes the most important means of economic security and advancement.

Both scholars and practitioners recognize the importance of these three drivers. And they align with the US Partnership's focus on strategies that provide support that empowers individuals and families, ensure that zip code does not determine a person's destiny, and expand access to family-sustaining jobs.

For each of the three mobility drivers, the Working Group identified **key predictors** that collectively are strongly associated with long-term economic success, power and autonomy, and belonging and that can be influenced by state and local policies. (See the report section Boosting Upward Mobility: A Supporting Framework for details about the alternatives considered by the Working Group and the research evidence upon which the selection of predictors was based.) Ongoing scholarship is needed to systematically quantify the magnitude of each predictor's impact on long-term outcomes (within and

across generations), to fully understand the causal mechanisms through which predictors affect outcomes, to explore how these mechanisms may differ for different groups of people or in different community contexts, and to assess the effectiveness of policy levers through which communities can influence these predictors.

Local efforts to boost mobility from poverty must recognize that people move into and out of homes, neighborhoods, cities, and counties. Individuals and families experiencing poverty sometimes choose to move when they achieve economic success, and they can sometimes be displaced because of changes in local policy and market conditions. Local strategies aimed at boosting mobility from poverty should focus on actions that improve outcomes and options for all residents experiencing poverty (newcomers as well as long-term members of the community) rather than actions that replace those residents with more affluent people.

For each predictor, the Working Group selected a metric that can be used to compare and monitor a community's performance over time. See the section *Monitoring Local Progress: Measurement Challenges* for details about the criteria used to select metrics, and see *Tracking Local Progress: Key Predictors and Metrics* for a discussion of the strengths and weaknesses of those selected.

Disparities between racial and ethnic groups and between neighborhoods within a city or county are critical to understanding and addressing barriers to mobility. Therefore, the Working Group prioritized metrics that can help pinpoint disparities that warrant priority for intervention.

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#### BOX 4

##### Criteria for Recommending Metrics

- Valid measures of the predictors
- Repeated at regular intervals
- Available for cities and counties nationwide
- Consistently collected and calculated
- Available for important subgroups and subareas
- Not overly sensitive to residential moves in and out of jurisdictions

The optimal data for measuring key predictors are not always available for the relevant geographic units; at the needed frequency, recency, and reliability; or with sufficient coverage of demographic groups, and they are not always properly adjusted for changes over time in jurisdictions' demographic compositions. To the greatest extent possible, the Working Group selected well-established metrics that can be constructed from national data sources or from widely available state and local administrative data. But for some predictors, new data collection will be required to produce useful metrics because potentially powerful predictors are not currently reflected in widely available data sources. See the full list of predictors and metrics in table 1 on pages 3 to 8.

These metrics are not perfect. But together, they provide valuable information about how well conditions in a community support residents' upward mobility. Over time, as data sources improve and as new research identifies more precisely the linkage between various predictors and mobility from poverty, they can be refined to more effectively guide policy.

## Using Metrics to Boost Mobility from Poverty

Communities can use these metrics to catalyze and guide actions to increase mobility from poverty among residents. Civic and community leaders, policymakers, and on-the-ground practitioners can

- **compare** their community's metrics to peer communities to assess the extent of the local mobility challenge and build public support for tackling it;
- **prioritize** those metrics where the community's focused attention and action will have the greatest impact;
- **highlight interconnections** among predictors from multiple policy domains to recruit partners and identify the roles different local (and state) actors can play;
- **set targets** for improving local mobility metrics and narrowing racial and ethnic disparities as part of a strategy for meaningful changes in local (and state) investments, policies, and practices; and
- **monitor** the metrics over time to assess their community's progress and hold local stakeholders accountable.

Local leaders have the capacity to “move the needle” on all the metrics if they make mobility from poverty a priority. Specific solutions will of course vary depending upon local context, institutional capacities, and political constraints. The focus here on local strategies is not intended to suggest that all



barriers to mobility from poverty can be overcome locally. Federal policies such as the earned income tax credit and economic policies that expand employment play essential roles. But locally controlled policies and investments can create conditions that boost rather than block residents' upward mobility. For example, communities can

- **expand affordable housing** by reforming zoning and building regulations so the private sector can build more housing at lower costs, establishing housing trust funds and using the proceeds to help finance affordable housing production and preservation, enacting rent stabilization or property tax abatements that moderate housing costs for current residents, and maximizing the effectiveness of federal housing subsidies that are managed locally;
- **increase people's sense of belonging** by using human-centered design principles for programs delivering services to people experiencing poverty; prioritizing equity roles in government and inclusivity in resident engagement processes; and training government staff to engage with service recipients in ways that respect their dignity, counter stereotypes and stigma, and foster inclusion rather than exclusion;
- **reduce overly punitive policing** by investing in community-driven safety interventions that do not rely on policing, reducing the intensity of enforcement and sanctioning for low-level offenses, minimizing the use of stop and frisk, reforming school discipline policies to reduce the possibility that students are arrested, and eliminating or reducing fees and fines;
- **increase political participation** by scheduling local elections during state or national elections to raise turnout, improving the information on ballots, electing district-level representatives instead of city-wide ones to strengthen representativeness, and improving access to political participation and understanding about local policies and elected officials; and
- **increase access to living-wage jobs** by recognizing and rewarding "high-road" employers, implementing workforce development strategies to help residents build skills and qualify for higher-paying jobs, raising the local minimum wage or passing living-wage ordinances that apply to firms doing business with local government, and taking actions to reduce the cost of living for lower-income residents.

Rigorous research demonstrates that programs and policies being implemented across the US can "move the needle" on mobility from poverty. For example, the Nurse-Family Partnership home-visiting program and the Educare early childhood learning program boost outcomes of both young children and their parents. The positive youth development program, YouthBuild, provides older teens and young adults with career training that helps them get and keep jobs, while the City University of New York's

Accelerated Study in Associate Programs helps young adults complete community college degree programs quickly and qualify for careers. Neighborhood mobility programs like Moving to Opportunity and its present-day successors enable families to live in safe, well-resourced neighborhoods that support their children’s life chances. And conditional cash transfer programs such as Family Rewards have provided flexible cash resources that adults and families use to chart their course out of poverty (Bogle et al. 2020). These examples demonstrate the potential of interventions that attend to all three dimensions of mobility from poverty: economic success, autonomy and power, and belonging and being valued.

Communities that use these metrics to develop and monitor local strategies are likely to be more successful than those not guided by metrics or guided by a plethora of metrics unsupported by evidence. Local policymakers and practitioners who have learned about the mobility metrics through vetting labs and webinars have expressed enthusiasm for applying them locally, engaging with community members about their interpretation and implications for action, developing locally relevant implementation strategies, and capitalizing on the metrics to drive collaborative action.

## Next Steps

Much remains to be learned about the mobility metrics, how well they capture the range of factors that influence long-term mobility, and how communities can effectively apply them to catalyze action and drive change. We welcome informed debate about the framework introduced here and anticipate that over the coming years, ongoing scholarship will strengthen the selection of key predictors and metrics. Further, a next phase of the work will “beta test” the mobility metrics with a small number of cities and counties across the US. This on-the-ground experience will yield additional insights about how the metrics can be strengthened, how they can help build public will, and what institutional infrastructure is needed to effectively implement them and integrate them into local government decisionmaking so they help drive the changes necessary to boost mobility from poverty over the long haul.

# Introduction and Approach

The Mobility Metrics Working Group first met in March 2019 to begin advising on the selection of a concise set of metrics that could indicate success in increasing mobility from poverty at the local level. The research team at the Urban Institute provided the Working Group with an initial framework for guiding metric selection that would

- incorporate all three dimensions of mobility;
- provide relevant and actionable measures to local policy makers and stakeholders; and
- reflect stages of the life course from infancy to adulthood, recognizing that directing policy and measuring change would have different impacts depending on life stage.

During their first in-person meeting, the Working Group members discussed the three mobility dimensions, considered theoretical frameworks that could help select and contextualize metrics and potential end users for the metrics, and started to suggest important mobility-related outcomes and metrics for each stage of the life course. After the first meeting, the Working Group recommended a list of over 170 predictors of mobility from poverty that were relevant across the life course and represent a wide range of policy areas, such as housing, education, health, community and neighborhoods, employment, and civic and political life. We labeled these initial recommendations “predictors,” given that most were at a conceptual level (e.g., residential segregation, access to jobs) rather than specific metrics from particular data sources that operationalize these concepts.

In April 2019, the Working Group members provided input on the initial list of predictors, using their individual and collective expertise to prioritize them according to their relevance and importance, the availability of data at the local level for them, their practicality to local decisionmakers, and their robustness to residential turnover. Each Working Group member recommended predictors they believed were most important for indicating mobility, with agreement between many of the members on the importance of certain predictors. The Urban Institute research team reviewed the relevant research on a list of 47 predictors that were most often recommended by the Working Group and that still represented a range of policy areas and relevance to different life stages. Urban produced literature summaries that specified the strength of the evidence connecting each predictor to upward mobility and highlighted the preferred data sources and metrics used by the field.

The Working Group reviewed these literature summaries ahead of their second in-person meeting in July 2019. Informed by the summaries, they discussed and ranked the remaining predictors into tiers, with the top tier containing 23. Working Group members debated the prioritization of predictors within each policy area to identify which ones were the strongest and most compelling indicators of mobility and came

to a broad agreement on which predictors should be in each tier. The Working Group also advised on a set of criteria for selecting metrics, which are discussed later in this paper.

In the months following the July 2019 meeting, the Urban team began evaluating potential data sources and metrics for each of the top-tier predictors while also seeking feedback on them through a series of half-day “vetting labs” with local stakeholders in four cities across the country: San Francisco, New Orleans, Chicago, and Cleveland. Although each lab provided us with community-specific feedback, some general themes emerged:

- The goal of the project—to apply a concise set of metrics to determine progress in advancing mobility that could also be used to build partnerships, set priorities, and direct policy—resonated with participants.
- Participants wanted not just a national tool but rather resources and information that could be incorporated into local efforts and adapted to ensure local buy-in and resonance.
- Participants consistently highlighted some components and metrics they thought were missing from the top tier: measures of transportation access, food insecurity, public and environmental health, climate change, and a more explicit mention of structural barriers, especially structural racism.

The Working Group reviewed the materials on potential metrics and the feedback from the vetting labs and spent their last meeting in November 2019 advising on a final set of predictors and an associated set of metrics. We incorporated feedback from the vetting labs into these final predictors, adding measures for air quality, transit trips, and transportation costs and highlighting measures of racial residential and school segregation.

After the final meeting, the Working Group members reviewed the final predictors and metrics one last time, coming to a general agreement on the set of predictors. One predictor, family stability, garnered significant debate and disagreement both within the Working Group and through the vetting process. This is described further in the next section.

The metrics proposed in this report account for the complex interplay of drivers that contribute to or inhibit mobility, enabling local leaders and stakeholders to better understand their community’s strengths and weaknesses and prioritize accordingly. This report provides a framework for understanding the key drivers and predictors that promote mobility, highlights measurement challenges and considerations for the development of actionable metrics, and presents a concise set of the best available metrics to represent critical mobility predictors. The complete set of drivers, predictors, and metrics is summarized in table 1. We close with a discussion of implementation considerations and next steps, including a process for further testing and a vision for a Mobility Metrics Dashboard that would help communities around the country take action to better support their residents’ upward mobility.

TABLE 1

**Predictors and Metrics Summary**

Full list of predictors and metrics including explanations for each

Domain	Predictor	Predictor explanation	Metric	Metric explanation
<b>Driver: Strong and Healthy Families</b>				
<b>Financial well-being</b>	Income	Families need a base level of income to meet basic needs and costs related to working. Higher incomes are associated with higher academic achievement and educational attainment, better physical and mental health, and fewer behavioral problems in children.	Household income at 20th, 50th, and 80th percentiles	This set of measures reflects financial resources available to low-, middle-, and high-income households as well as the extent of income inequality.
	Financial security	Savings can help families weather destabilizing events like a period of unemployment or unexpected expenses. Children from wealthier families tend to have better academic, health, and behavioral outcomes than children from low- or no-wealth families.	Share of households with debt in collections	Households with overdue debt typically have few assets or negative wealth.
<b>Housing</b>	Affordable housing	Children, adolescents, and adults all need the security of a decent house or apartment that they (or their parents) can afford, where family budgets are not stretched too thin to pay for other basic needs like nutritious food, health care, and educational opportunities.	Ratio of affordable and available housing units to households with low- and very low-income levels	Housing is considered “affordable” when monthly costs fall at or below 30 percent of a household’s income. These ratios reflect the availability (or shortage) of housing affordable to those with low incomes.
	Housing instability and homelessness	Housing instability and homelessness contribute to unemployment and financial insecurity and undermine both physical and emotional health. They also represent extreme manifestations of powerlessness and loss of belonging.	Number of public-school children who are ever homeless during the school year	This measure, which includes students experiencing doubling up and shelter stays, reflects high levels of housing instability in a community.

Domain	Predictor	Predictor explanation	Metric	Metric explanation
Family	Family structure and stability	Family structure and stability shape the environment where children spend their formative years. Family instability is associated with poorer outcomes among young children, including lower cognitive test scores and more behavioral problems.	Share of children in various family living arrangements	The share of children living in each of six mutually exclusive categories (which sum to 100 percent): two married biological/adoptive parents; one biological/adoptive parent and that parent's current spouse/partner; one biological/adoptive parent and at least one other adult; one biological/adoptive parent; at least two adults, but no parent; all other.
Health	Overall health	Good health helps people surmount life's challenges and excel in school and on the job. When people's health is compromised, their overall well-being and their personal autonomy are compromised.	Share of adults who rate their own and their children's health as good or excellent <sup>a</sup>	Self-rated health is a five-point Likert scale from poor to excellent. It provides a strong and validated measure that is correlated with food security and other health problems, including mortality.
	Access to and utilization of health services	Access to and utilization of health services is key to both preventive care and treatment of health conditions. Lack of regular medical care can compromise one's short- and long-term health and have negative effects on later life outcomes.	Health Professional Shortage Area ranking for primary care providers	This metric captures a shortage of primary care providers in a geography, relative to population.
	Neonatal health	Poor childhood health has short-term effects on educational attainment and can negatively affect adult health, which can in turn influence employment opportunities and wages. Caring for a child with chronic health or developmental conditions can also limit parents' work and earnings.	Share of low-weight births	Children with low birth weight (less than 5lb 8oz) face elevated risks for other health problems, including infant mortality.

Domain	Predictor	Predictor explanation	Metric	Metric explanation
<b>Driver: Supportive Communities</b>				
<b>Local governance</b>	Political participation	A key source of power at both individual and community levels stems from exercising political influence over decisions affecting the community. Some research suggests that people who participate in politics feel more empowered and have higher life satisfaction and that children whose parents are politically engaged are more likely to become politically active themselves as they grow up.	Share of the voting-eligible population who turn out to vote	Voter turnout provides a well-established and broadly available reflection of political engagement.
	Descriptive representation among local officials	People may feel more able to exercise power when the demographic characteristics of elected officials matches their constituents. Research has found that Black individuals who are represented by Black elected officials are more likely to be interested in and to vote in an election and to feel they have a say in what government does.	Ratio of the share of local elected officials of a racial or ethnic group to the share of residents of the same racial or ethnic group	This metric is widely used by political scientists to reflect the extent to which groups are represented by their communities' elected leadership.
<b>Neighborhoods</b>	Economic inclusion	Economic segregation limits families' choices about where to live; blocks access to opportunities; and creates neighborhoods of concentrated poverty and distress, which undermine long-term educational, employment, and earnings outcomes for children.	Share of residents experiencing poverty living in high-poverty neighborhoods	High-poverty neighborhoods are defined as census tracts in which over 40 percent of the residents are living in poverty.
	Racial diversity	Neighborhoods that are segregated by race and ethnicity perpetuate exclusion and prevent people of different races and ethnicities from building the social ties that foster mutual respect, dignity, and belonging.	Neighborhood exposure index, or share of a person's neighbors who are people of other races and ethnicities	Calculated for the average person in each racial or ethnic group, exposure indices reflect the racial and ethnic diversity of neighborhoods in which white people and people of color live.

Domain	Predictor	Predictor explanation	Metric	Metric explanation
Neighborhoods	Belongingness	A person's sense of belonging is associated with better health outcomes and negatively associated with emotional distress, suicide, mental illness, and depression. A sense of belonging in school contributes to positive academic outcomes, low absenteeism, higher completion rates, positive attitudes toward learning, and higher academic self-efficacy, and to less disruptive behavior, emotional distress, and risky behavior.	Inclusion of Other in the Self scale <sup>a</sup>	This metric provides a validated single-item scale that measures how close the respondent feels with others in their community.
	Social capital	The resources provided by one's social network include social supports from close relations and access to information and other resources from extended relationships. Research finds positive relationships between social capital and education, child well-being, lower crime, health, tolerance, happiness, and economic and civic equality.	Selected questions from the Social Capital Community Benchmark Survey <sup>a</sup>	This survey measures the resources provided by a person's social networks, including both close relations and extended relations.
	Transportation access	Without accessible transportation options, families can struggle to accomplish daily activities and be forced to trade expensive commutes for other needs and goods. Limited transportation access can also restrict opportunities for work and education.	Transit trips index	This index reflects annual transit trips, where a higher score often reflects better access to public transportation.
Low transportation cost index			This index reflects local transportation costs as a percent of renters' incomes. It accounts for both transit and cars.	
Environmental quality	Environmental hazards can place people at higher risk of health complications (such as asthma) that impose costs and may undermine school or work performance.	Air quality index	This index includes five measures of pollution: ground-level ozone, particle pollution, carbon monoxide, sulfur dioxide, and nitrogen dioxide. Values are categorized into a six-point scale from good to hazardous.	



Domain	Predictor	Predictor explanation	Metric	Metric explanation
Safety	Exposure to trauma	Early exposure to trauma undermines brain development, socioemotional development, ability to develop secure attachments, emotion regulation, sense of agency, and self-efficacy. Exposure in childhood and adolescence can result in impaired cognitive development, language development, and overall academic achievement.	Adverse Childhood Experiences scale <sup>a</sup>	This scale measures childhood exposure to different types of trauma such as psychological, physical, or sexual abuse.
	Exposure to crime	Exposure to crime, even if one is not a direct victim, is associated with elevated levels of stress, depression, and anxiety in both youth and adults. Teens who are exposed to higher levels of violent crime are more likely to engage in criminal activity themselves.	Rates of reported violent crime and property crime	This metric accounts for both violent and property crime that is reported by law enforcement to the Federal Bureau of Investigation.
	Overly punitive policing	Exposure to overly punitive policing can undermine a sense of control and belonging in a community, and a criminal conviction can limit future economic opportunities. High incarceration rates in a community are associated with lower income mobility.	Rate of juvenile justice arrests	High rates of juvenile arrests provide a strong indicator of overall system involvement and overpolicing.
<b>Driver: Opportunities to Learn and Earn</b>				
Education	Access to preschool	High enrollment in quality preschool is associated with higher shares of a community's children being prepared to start school ready to learn, with the cognitive and social skills required to succeed in an academic setting and beyond. Children without preschool experience may struggle in the early school years and ultimately attain less education.	Share of children enrolled in nursery school or preschool	This metric captures parent-reported enrollment of three- and four-year-old children in nursery school or preschool.
Education	Effective public education	School quality influences children's cognitive and social development. Attending lower-quality schools reduces a child's chances of attending and succeeding at postsecondary institutions.	Average per-grade change in English Language Arts achievement, between third and eighth grades	This metric uses state assessments for English language arts from third through eighth grade to measure the impact or quality of the school a child attends.

Domain	Predictor	Predictor explanation	Metric	Metric explanation
	Student poverty concentration	Attending schools that serve high concentrations of students experiencing poverty affect children's long-term mobility prospects. Low-income children and children of color achieve better academic outcomes when they attend more economically and racially diverse schools.	Share of students attending high-poverty schools, by student race or ethnicity	This metric reflects the extent to which students of color attend schools with larger concentrations of classmates experiencing poverty than schools white students attend.
	College readiness	Having a high-school degree and the requisite skills to enroll in and benefit from a two- or four-year college program means that individuals are prepared to build the skills that lead to sustained success in the labor market.	Share of 19- and 20-year-olds with a high-school degree	High school completion provides a widely used measure of basic educational attainment and readiness for postsecondary education.
Work	Employment	People experiencing periods of unemployment suffer a loss of income in the short term and potentially lower earnings once they find a new job. A job loss and the struggle to find work contributes to a rise in depressive symptoms and anxiety as well as losses in self-esteem, life satisfaction, and sense of control. A parent's job loss can also affect their children, whose academic performance and behaviors suffer.	Employment to population ratio for adults ages 25 to 54	This is a common metric for measuring employment levels among prime-age workers.
	Access to jobs paying a living wage	Living-wage jobs provide opportunities for work that enable people to meet their families' financial needs, supporting both economic success and feelings of dignity and autonomy.	Ratio of pay on the average job to the cost of living	This measure reflects the supply of jobs in a community that pay enough to meet basic family needs, using location-adjusted cost-of-living estimates.

**Note:**

<sup>a</sup> Metric for the predictor requires new data collection at the local level.

# Boosting Upward Mobility: A Supporting Framework

Because mobility from poverty poses complex and multifaceted challenges, the Working Group developed a framework for local action. This framework, which is described in the Executive Summary, includes three drivers that propel individuals and families up and out of poverty and that each contribute to a person's economic success, their power and autonomy, and their sense of belonging and being valued by community. The key mobility predictors are organized within each driver. This section presents the rationale and supporting evidence for the selected predictors, briefly discussing other, related predictors that were considered but ultimately not chosen. The predictors were chosen not only because of strong evidence of their relationship to mobility but also because they can be influenced by local leaders. Throughout this section, predictors that were included in the final set are **bolded**; those that were considered but not included are *italicized*.

## Strong and Healthy Families

A secure and stable home environment provides the essential foundation for the healthy development of children and for adults to thrive in their jobs and their communities. The core elements of strong and healthy families include having adequate financial resources, stable housing and living arrangements, and good physical health. These elements both promote and reflect the economic security, autonomy, and dignity that come from being part of a stable community and providing a safe and steady home environment for one's children. Stable housing and living arrangements remove a major source of stress in families' lives, contributing to their sense of security and allowing them to form social bonds in their communities. Finally, good physical health for adults and children is essential for them to be productive at work and school and to feel like valued contributors to society.

### Financial Well-Being

Financial well-being is a marker of economic success in itself, affords adults a modicum of control and autonomy over their lives, and allows parents to invest in the well-being of their children. Rising incomes reflect upward economic mobility and can facilitate greater financial well-being. In contrast, people with low or irregular incomes and insufficient savings are less able to weather life's inevitable challenges and disruptions, leading to instability and stress that can undermine effective decisionmaking and contribute to feelings of powerlessness (Haushofer and Fehr 2014; Mullainathan and Shafir 2013).

Children benefit over the short and long term from growing up in families with higher levels of income and wealth. One of the strongest predictors of economic success in adulthood is the number of years lived in poverty as a child (Chetty, Hendren, and Katz 2016). Parents' financial security can help create the stable home environment children need to thrive, gain access to a safe and opportunity-rich neighborhood, pay for quality health care, and enhance educational opportunities from prekindergarten through college. Thus, financial security not only reflects but contributes to upward mobility for adults and their children.

## FINANCIAL WELL-BEING PREDICTORS CONSIDERED

### **Income**

### **Financial security**

*Food insecurity*

*Wealth*

*Access to banks and/or financial services*

The two predictors recommended by the Working Group succinctly capture essential elements of financial well-being as they relate to mobility from poverty. **Income** provides a strong indication of a family's material well-being. Families need a certain base level of income to meet their basic needs for food, clothing, shelter, health care, and any costs related to sustaining a job. Further, children raised in higher-income households demonstrate higher academic achievement and educational attainment, better physical and mental health, and fewer behavioral problems than their peers from lower-income households (Duncan and Brooks-Gunn 1997; Duncan, Magnuson, and Votruba-Drzal 2017). **Financial security** extends beyond income and reflects the overall ability of a household to meet its current and future obligations and withstand potential financial shocks (CFPB 2017); this often means savings. Research finds that even a modest amount of savings can help buffer a short period of being unemployed or help face a medical emergency (McKernan et al. 2016). Financial security can also include access to credit, debt loads, and financial management (Board of Governors of the Federal Reserve System 2018).

The Working Group considered several other measures of financial well-being, but they all are closely related to the two recommended predictors. Local stakeholders in our vetting labs consistently flagged *food insecurity* as an important condition affecting mobility from poverty. The Working Group advised that food insecurity is largely correlated with income and that improvements in household income and financial well-being would likely lead to decreases in food insecurity. Similarly, the Working Group considered *wealth*, because substantial wealth allows families to invest in education or share resources. However, the complicated and detailed nature of capturing individual assets and debts make wealth difficult to measure, and few subnational data sources on wealth exist. And given that the

distribution of wealth in the United States leaves many lower-income families holding little or negative wealth, measures of financial security other than an accounting of assets may be more insightful for families moving up from poverty. The Working Group also considered *access to banks and/or financial services*, such as having a bank account. Although increasing access to banks and financial services could be a mechanism to improve financial well-being, increasing access itself is not as strong a predictor as greater financial security or higher income.

## Secure and Stable Housing

Secure, affordable housing provides a foundation for family stability and for longer-term educational and economic success (Galvez et al. 2017). Children, adolescents, and adults all need the security of a decent house or apartment that they (or their parents) can afford, where they do not face the disruption of eviction or involuntary moves (Brennan and Greene 2018; Routhier 2019) and their family budgets are not stretched too thin to pay for other basic needs such as nutritious food, health care, and educational opportunities (Brennan, Reed, and Sturtevant 2014; Pollack, Griffin, and Lynch 2010; Scally and Gonzalez 2018). Further, children and adults without stable, affordable housing may feel powerless and devalued by or excluded from the larger community (Vandemark 2007).

### SECURE AND STABLE HOUSING PREDICTORS CONSIDERED

#### Affordable housing

#### Housing instability and homelessness

*Rent burden*

*Eviction*

The availability of **affordable housing** for households with low or moderate incomes is an important precondition for families to achieve housing stability and to be able to move out of poverty. In contrast, **housing instability and homelessness** undercut families' prospects for upward mobility. Homelessness is an extreme manifestation of powerlessness and loss of belonging. It both reflects and contributes to unemployment and financial insecurity (Warren 2018), disrupts children's education (Miller 2011), and undermines both physical and emotional health (Oppenheimer, Nurius, and Green 2016).

The Working Group also considered both rent burden and evictions as possible predictors of mobility from poverty. The Working Group chose to focus on availability of affordable housing rather than on *rent burden* because rent burden—typically defined as households paying over 30 percent of their income toward rent—centers the measures on the household, which is more sensitive to the transition of residents in and out of the jurisdiction. The percentage of residents who are rent burdened may decrease because of displacement by higher-income residents; the availability of affordable

housing supply instead focuses on the units themselves relative to those who need them. Although the Working Group strongly considered *eviction* because it represents a disruption in housing at a clearly specified time, group members were concerned about the availability of data. Data on eviction are only just now becoming readily available for analysis and only in limited jurisdictions.

## Family Stability

Family life during childhood is a strong predictor of later-life economic outcomes (Duncan, Kalil, and Ziol-Guest 2018). Growing up with the continuous presence of loving and supportive parental figures can help children through critical developmental years. Conversely, the lack of a stable or supportive home environment can be detrimental for children, negatively affecting educational performance, behavioral health, and the formation of social and peer networks. This can influence a child's trajectory in educational attainment and later economic success in adulthood (Sun and Li 2011). Although the strength of the effect is declining over time, families with two married parents have the strongest prospects for economic security and stability (Brown 2010).

### FAMILY STABILITY PREDICTORS CONSIDERED

#### Family structure and stability

##### *Attachment to care providers*

The Working Group determined that **family structure and stability** is a strong predictor of mobility from poverty. Research finds that growing up in a household with two married parents is a powerful predictor of intergenerational upward mobility (Chetty et al. 2014). However, considerable debate exists among researchers and experts, including within the Working Group, about whether two married parents reflect demographic reality for many households or whether other structures may provide equally effective stability and support. In addition, the Working Group was more interested in the concept of family stability over structure, but measures of stability were not widely available. Despite this debate, the Working Group consistently acknowledged the importance of family structure and stability on child well-being and mobility. Further, the security of a stable, long-term relationship with a partner contributes to the security and mobility of adults.

The Working Group also considered children's *attachment to care providers* as an indicator of family stability but found the evidence connecting attachment to mobility much less robust than the evidence on stability.

## Health

Healthy individuals form the foundation of strong and healthy families. Individual chronic or other serious health concerns can constrain not only that person's time, energy, and resources, but also those of the household as a whole (Wilson and Cleary 1995). Good and stable health helps people surmount life's challenges, excel in school and on the job, and fully participate in their communities. Conversely, poor health and debilitating health conditions rob individuals of a sense of control over their lives and potentially the sense of dignity that comes from being able to fully participate in society.

### HEALTH PREDICTORS CONSIDERED

#### Access to and utilization of health services

#### Neonatal health

#### Overall health

*Health insurance coverage*

*Maternal prenatal/postnatal health*

*Life expectancy*

*Nutrition*

The Working Group focused on access to health services, neonatal health, and overall health as the strongest health-related predictors of upward mobility. **Access to and utilization of health services** can help ensure children receive basic care through critical formative years and obtain needed prescriptions (Tillotson et al. 2012) and that adults can obtain tests needed to screen for early detection of diseases that enhance the likelihood of effective treatment (Ettner 1996). People with health conditions who cannot access needed care experience stress that further compromises their health (Neri and Kroll 2003). Further, strong evidence demonstrates that **neonatal health** has lasting effects throughout the life course. Poor childhood health has short-term effects on educational attainment (Conley and Bennett 2000; Haas 2006) and long-term negative effects on adult physical health (Case and Paxson 2006) and mental health (Matthewson et al. 2017), which in turn can affect employment opportunities and wages. Research also shows that self-rated health provides an accurate measure of a person's **overall health**, and it is a strong predictor of later-life outcomes (Idler and Beyamini 1997).

The Working Group considered several other health-related predictors of mobility. For example, the group considered using *health insurance coverage* but advised that insurance coverage was largely governed at the federal and state levels; access to care was more amenable to local action. The Working Group also determined that the research connecting child health and mobility was more robust than the research connecting *maternal health/postnatal health* (Currie and Rossin-Slater 2015). Similarly, the Working Group determined that a measure of overall health correlates with and is a strong substitute for multiple other measures of health, such as *nutrition* and *life expectancy*. Moreover, life expectancy is a long-term outcome of health and other conditions and therefore would not provide an effective short- to medium-term metric for local action.

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# Supportive Communities

Safe and inclusive communities play a central role in shaping families' well-being, their social networks and supports, and their children's chances to thrive and succeed. Being part of a supportive community conveys both a sense of social inclusion and belonging and a sense of control over one's circumstances. Further, neighborhood characteristics such as access to transportation and integrated social networks can promote economic success. In contrast, challenges in the immediate physical and social environment, such as lack of safety, limited access to transportation, and having public officials who are

not looking out for the best interest of all residents can undermine people's access to economic opportunity and may be socially isolating and disempowering. These challenges can also make it difficult for residents to look forward to and make plans for a promising future.

## Local Governance

A local government that is attentive to the needs of all of its citizens and a citizenry deeply engaged in community-wide decisionmaking are hallmarks of a community that supports its residents' upward mobility. A responsive local government empowers its citizens by ensuring their concerns are addressed, and as result, residents feel valued in and by their larger communities. And by allocating local resources equitably, local government can help ensure all residents have good prospects for economic success.

### LOCAL GOVERNANCE PREDICTORS CONSIDERED

#### Political participation

##### Descriptive representation among local officials

*Voting for the winning candidate*

*Politically engaged parents*

**Political participation** takes many forms, such as whether voting-eligible individuals vote in elections, and political participation correlates strongly with key measures of well-being. For example, people living in states with low voter turnout are far more likely to report being in fair or poor health than people in states with high voter turnout (Blakely, Kennedy and Kawachi 2001). Other research found that individuals reporting greater political participation scored higher on self-rated indices of empowerment, representing personality, cognitive, and motivational aspects (Zimmerman and Rappaport 1988). Similarly, having local elected officials whose demographic characteristics (i.e., gender, race, ethnicity, and/or sexual orientation) broadly reflect those of their constituents (**descriptive representation among local officials**) correlates with greater feelings of political influence and engagement among otherwise underrepresented demographic groups. Research demonstrates that Black individuals who are represented by Black elected officials in Congress are more likely to be interested in and to vote in a House election and to disagree with the notion that they do not have a say in what government does (Fowler, Merolla, and Sellers 2012; Gleason and Stout 2014).

The Working Group also considered predictors such as the share of a community (or subgroups within it) that *voted for winning candidates*, but the measurement of that is challenging. Similarly, the Working Group determined that growing up with *politically engaged parents* or in households where political discussions were frequent could be a useful predictor of the power and autonomy dimension of

mobility but advised that data collection requirements to measure this were too great when weighed against its utility as a predictor.

## Neighborhoods

The place people live is also the place where their children experience critical stages of socioemotional and physical development, where social ties form, and where people access resources and life opportunities. Feelings of belonging in one's community and social circles, being able to feel safe and trust one's neighbors, and having equitable access to local resources are all key aspects of a safe and inclusive community. Neighborhood environment plays a central role in shaping families' well-being, their social networks and supports, and their children's chances to thrive and succeed.

### NEIGHBORHOOD PREDICTORS CONSIDERED

**Economic inclusion**

**Racial diversity**

**Belongingness**

**Social capital**

**Transportation access**

**Environmental quality**

*Involvement in community/membership organizations*

*Involvement in teams, clubs or extracurricular activities*

*Peer effects*

The Working Group identified a rich set of neighborhood characteristics that predict residents' mobility from poverty. Limited levels of both **economic inclusion** and **racial diversity** curtail families' choices about where to live, block access to neighborhoods with better opportunities, and create areas of concentrated poverty and distress. Segregation also perpetuates exclusion and prevents people of different classes, races, and ethnicities from building the social ties that foster mutual respect, dignity, and belonging. Economically segregated areas of concentrated poverty are associated with an increase in teenage pregnancy, male joblessness, single motherhood, and dropping out of high school (Massey, Gross, and Shibuya 1994). An increase in economic segregation exacerbates differences in educational attainment between high- and low-income children (Mayer 2002). Racial and economic segregation can negatively affect people at all stages of the life course and impact belonging and economic dimensions of mobility from poverty.

**Belongingness** reflects a person's sense that they are valued within a group. Research shows that a sense of belonging is associated with improved physical and mental health outcomes and reduced emotional distress, suicide, mental illness, and depression (Allen and Bowles 2012). A sense of belonging

in school contributes to positive academic outcomes; low absenteeism; higher completion rates; positive attitudes toward learning; higher academic self-efficacy; and reductions in disruptive behavior, emotional distress, and other risky behaviors (Acs et al. 2018; Allen and Bowles 2012; Walton and Wilson 2018).

**Social capital** measures the resources provided by social networks, including day-to-day supports provided by close relations as well as access to information and broader resources provided by extended relationships. Research demonstrates a positive relationship between social capital and education, child well-being, lower crime rates, health, tolerance, happiness, and economic and civic equality (Putnam 2000).

Without adequate **transportation access**, families can struggle to accomplish daily activities and be forced to trade expensive commutes for other needs and goods. In a 2002 nationwide survey, an estimated 3.6 million Americans cited inadequate transportation as a reason they missed nonemergency medical appointments (Wallace et al. 2005). Limited transportation access can also restrict opportunities for work and education. Evidence suggests that living in proximity to a bus or subway stop or having frequent transit services is associated with lower levels of unemployment (Sanchez 1999), and limited access to public transit is associated with higher levels of unemployment (Kaufman et al. 2015). More access to public transit reduces the likelihood of a household being on public assistance (Sanchez, Shen, and Peng 2004). Evidence indicates that living in neighborhoods far from jobs and without affordable transportation options undermines employment and economic success (Fan et al. 2019; Kain 1968, 2004).

Living in communities with poor **environmental quality**—including hazardous wastes and other toxins, ambient and indoor air pollutants, poor water quality, and high levels of ambient noise—can place people at higher risk of health complications that impose costs and may undermine school or work performance. (Evans and Kantrowitz 2002). Exposure to hazardous environmental conditions can have negative implications for the health of residents, especially those who are more susceptible, such as children and elderly people.

The Working Group also considered other neighborhood characteristics that predict mobility from poverty but found them to be less strongly related to mobility, harder to measure, or highly correlated with the chosen predictors. For example, the group considered the level of *involvement in community/membership organizations* as well as *involvement in teams, clubs, or extracurricular activities*. However, validated measures of belongingness are more strongly related to mobility and are easier to construct than measures capturing involvement in the community or organized groups. Similarly, the

Working Group considered *peer effects* but concluded that social capital was a stronger predictor of mobility, particularly because social capital allows for capturing aspects of both the bonding elements of friends and networks, as well as *bridging* social capital, which connects people to broader sets of resources (Chetty et al. 2014; Patulny and Svendsen 2007).

## Safety

Living in an environment where one feels safe allows people to have more control over their day-to-day lives and the freedom and motivation to plan for the future. Growing up facing child maltreatment in the home or in a violent neighborhood can have lasting negative effects on mental health, cognitive skills, behavioral health, and socioemotional development. When the social institutions designed to protect communities act in ways that undermine them, community members can be disillusioned and distrustful. For example, fear of an overly punitive police force, especially disproportionate policing of disadvantaged groups, can lead residents to feel like their lives are devalued, unstable, and at risk.

### SAFETY PREDICTORS

**Exposure to trauma**

**Exposure to crime**

**Overly punitive policing**

*Stressful life experiences*

*Exposure to violence*

*Discrimination*

*Disciplinary action*

**Exposure to trauma, crime, and overly punitive policing** are all strong predictors of mobility.

Experiencing trauma can have significant negative consequences that persist long after the trauma has ended. Early exposure to trauma undermines brain development, socioemotional development, ability to develop secure attachments, emotion regulation, sense of agency, and self-efficacy (Romano et al. 2015). Decades of empirical research indicates that children and adolescents exposed to trauma exhibit impairments in cognitive development, language development, and overall academic achievement (Veltman and Browne 2001). Children who had experienced physical trauma in the first five years of their lives were absent from school almost twice as many days and were suspended from school more than twice as many times as adolescents who had not experienced physical trauma (Lansford et al. 2002). Children who have been exposed to trauma, particularly multiple traumas, are at risk for developing emotional and behavioral problems, such as depression, anxiety, dissociation, post-traumatic stress disorder, low self-esteem, hopelessness, withdrawn behaviors, and impaired peer relationships (Staudt 2001). The effects of trauma on adults can range from subtle to destructive and

can manifest in diminished cognitive ability as well as worsening physical and mental health (US Department of Health and Human Services 2014). More broadly, “community trauma” affects social groups or neighborhoods long subjected to interpersonal violence, structural violence, and historical harms. Community and systems trauma, like individual trauma, affects cognitive decisionmaking that can lead to reduced civic engagement and weakened social networks and social cohesion (Gapen et al. 2011) and adversely influences how individuals view themselves, their capabilities, and their social status (Walton and Wilson 2018; Prentice 2012).

**Exposure to crime**, even for those who are not direct victims, is associated with elevated levels of stress, depression, and anxiety in both youth and adults and lower test scores for students (Curry, Latkin, and Davey-Rothwell 2008; Kelly 2010; Sharkey et al. 2014). Adolescents exposed to gang violence displayed increased anxiety and post-traumatic stress (Kelly 2010). Teens who are exposed to higher levels of violent crime are more likely to engage in criminal activity themselves (Kling, Ludwig, and Katz 2005).

Although policing helps keep residents safe, **overly punitive policing** can undermine a sense of control and belonging in a community, and a criminal conviction can limit future economic opportunities. Increased police visibility increases the fear of crime and decreases confidence in the police to control crime (Hauser and Kleck 2017). Concentrated police presence, surveillance, and extensive enforcement of minor violations of the law are common in neighborhoods with higher levels of reported crime, and these in turn result in greater exposure to police contact and arrest for people living in those neighborhoods and a greater resultant possibility of their incarceration. This type of contact has immediate negative effects for youth. Juvenile arrests and police stops of juveniles are risk factors for criminal behavior and for further and deeper involvement in the justice system (Del Toro et al. 2019; Liberman, Kirk, and Kim 2014). Deeper involvement in the justice system in turn leads to increasingly negative effects on socioeconomic status and is a mechanism for downward mobility (Dennison and Demuth 2018). At the community level, incarceration rates are associated with lower income mobility (Manduca and Sampson 2019). This is in part because of intergenerational effects; parental incarceration adversely affects the transition to adulthood on multiple dimensions (Mears and Siennick 2015). Finally, many residents in heavily policed neighborhoods have low levels of trust in the police, believe that race and ethnicity affects their treatment of people, and do not believe police are responsive to the concerns and most pressing issues facing their communities (La Vigne, Fontaine and Dwivedi 2017).

The Working Group considered other elements of safety but again found their association with mobility was weaker than predictors they ultimately recommended. For example, *stressful life experiences* are not as strongly associated with mobility from poverty as exposure to trauma. Similarly,

trauma is a more inclusive predictor of mobility than *exposure to violence* specifically, and trauma has the more direct influence on life circumstances. The Working Group also considered including *disciplinary action* or *discrimination* alongside overly punitive policing. However, given data and measurement concerns along with the assessment that overly punitive policing was more amenable to local policy actions, the Working Group focused on policing as a predictor of mobility from poverty.

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# Opportunities to Learn and Earn

Education and work provide the foundation for economic and social mobility in the US. A solid education enables individuals to find meaningful and lucrative work. And a secure and well-paying job not only provides individuals and their families with adequate income to meet their needs but also confers dignity.

## Education

Education—from prekindergarten through postsecondary—provides a crucial avenue to economic and social mobility. Adults with four-year college degrees earn far more than those with high school degrees or less schooling. Even without a four-year degree, postsecondary credentials can significantly elevate adults’ economic position (Baum, Ma, and Payea 2013). The path to postsecondary education begins early in a child’s life. High-quality preschool programs boost academic achievement, ultimately increasing a child’s chances of graduating from high school and advancing to higher levels of education. The quality of the elementary and high schools that children and teens attend also influence their academic progress, college enrollment, and adult success (McCoy et al. 2017). Elementary and high schools also provide a network of friends and peers and a social identity to students. They gain opportunities within and outside the classroom to learn and demonstrate cognitive, artistic, and athletic skills, potentially leading to greater self-esteem, confidence, and autonomy (Grusky, Hall, and Markus 2019).

### EDUCATION PREDICTORS CONSIDERED

**Access to preschool**

**Effective public education**

**Student poverty concentration**

**College readiness**

*Per pupil expenditures*

*Engagement with school*

*Math skills*

*Literacy*

*College access*

*Post-secondary education*

*Training completion*

The four predictors recommended by the Working Group capture key stages in children’s cognitive and socioemotional development. Those who have access to preschool (particularly those who can attend high-quality preschools) are better prepared than otherwise similar children to start school ready to learn the cognitive and social skills required to succeed in an academic setting and beyond. Children without preschool experience may struggle in the early school years and ultimately attain less education (Camilli et al. 2010; Yoshikawa et al. 2013). Once in school, children’s cognitive and social development are supported by **effective public education** and quality schools (Baker 2017). Attending lower-quality schools reduces a child’s chances of attending and succeeding at postsecondary institutions. **Student poverty concentration**, or economic segregation, within schools adversely affects the academic achievement of students, particularly children of color from lower-income families (Johnson 2019). Long-standing patterns of neighborhood and school segregation mean the average Black student

attends a school with a much larger share of students of color and students from families experiencing poverty than the average white student.<sup>3</sup> The high-poverty schools attended by Black students tend to lack the educational resources available in low-poverty schools, such as highly qualified and experienced teachers, low student-to-teacher ratios, college prerequisite and advanced placement courses, and extracurricular activities.<sup>4</sup> Finally, **college readiness**, including having a high school degree and the requisite skills to enroll in and benefit from a two- or four-year college program, indicates that individuals are prepared to build the type of skills that lead to sustained success in the labor market (Chingos 2018).

Other education-related predictors of mobility are either largely captured by the four selected predictors, difficult to consistently measure at the local level, or are not as strongly correlated with mobility as the selected predictors. For example, the selected measure of school quality will reflect changes in reading scores between the third and eighth grades, which are strongly related to *literacy*. Parent *engagement with schools* is related to parents' socioeconomic status, and no standard measure for engagement is available. The effects of training programs vary by program, economic sector, and target population; thus, a generic measure of *training completion* or of earning an associate's degree is not strongly and consistently linked to mobility (Taylor, Fry, and Oates 2014).

Measuring *postsecondary education* presents challenges with respect to residential mobility and whether that attainment can be attributed to local efforts; many students who grew up in an area may attend college elsewhere, while many of the people who hold higher degrees may have moved from elsewhere. Similarly, spending on schools at the district or county level may not capture disparities in spending within the jurisdiction, and the correlation between spending and other measures of school quality is modest. Furthermore, school spending could be under limited local control in places where allocation formulas are set by the state.

## Work

For most people in the US today, work constitutes the most important source of income and economic security. Fewer than 3 percent of people who usually work full-time and were in the labor force for more than half the year had incomes below the federal poverty level in 2017.<sup>5</sup> Moreover, steady work enables a person to build skills and experience so they can advance to higher-paying jobs, building both income and wealth. Parents' work is a crucial determinant of children's work orientations (Dekas and Baker 2014). Adolescents who work may gain important experience and connections that contribute to their longer-term success (Mortimer 2010; Mroz and Savage 2006). Pathways into employment and

into better-paying jobs matter for adults as well, whether they are transitioning careers or just entering the domestic workforce after moving from abroad. Jobs can contribute to one's sense of personal autonomy and power and provide feelings of accomplishment and pride; they can also lead to an increasing sense of dignity associated with feeling that you are contributing to society.

## WORK PREDICTORS CONSIDERED

### **Employment**

#### **Access to jobs paying a living wage**

*Work ethic/effort*

*Number of hours worked/work stability*

*Jobs mismatch*

*Criminal records*

People experiencing periods of unemployment suffer a loss of income in the short term and potentially lower earnings once they find a new job (Couch and Placzek 2010). A job loss and associated unemployment and a struggle to find work contribute to a rise in depressive symptoms and anxiety as well as losses in self-esteem, life satisfaction, and sense of control. Those who become unemployed are also less likely to be socially engaged than those with jobs (Riumallo-Herl et al. 2014). Further, parental job loss and the attendant stress it brings spills over onto children, whose academic performance and behaviors suffer (Brand 2015). People who have become so discouraged that they stop looking for work are jobless but no longer technically unemployed. As such, **employment** is a critical driver of mobility from poverty.

Even if most community members are working, the jobs they hold may not pay them enough to escape poverty or offer prospects for advancement. Ideally, work should be both financially and personally rewarding while allowing workers to meet their family needs; in other words, they need **access to jobs paying a living wage**. Although many different attributes of a job can contribute to mobility, jobs that offer higher earnings tend to also offer employer benefits such as paid time off and health and pension benefits, and workers in better-paying jobs tend to have more stable employment (Boushey 2008). Further, children in families with higher-earning parents tend to be in better health and on better developmental trajectories than children with lower-earning parents (Ruhm 2000). Earnings that equal or exceed the cost of a family's basic needs for food, clothing, shelter, child care, health, and transportation are an important threshold for predicting economic and social mobility.

Other considered predictors of better opportunities to earn are harder to measure, harder for policymakers to act on, and do not capture the relationship between work and mobility as well as the two recommended predictors at the community level. For example, although having community members with a strong *work ethic/effort* may well be a precursor to upward mobility, devising policies and practices to promote it is difficult. The *number of hours worked/work stability* do not account for

worker preference, because some workers may prefer working fewer hours, for instance to care for family or to pursue education. Having a *mismatch* between the skills of a jurisdiction’s workforce and its employers may be addressed through skill building, which is covered by other predictors in our suite (see “educational outcomes”). And although individuals with *criminal records* do have a harder time finding work than those without such records, they are a narrow swath of most city and county populations, and the broader predictor of employment better captures mobility at the community level.

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# Monitoring Local Progress: Measurement Challenges

Measuring how well a local community supports its residents' mobility from poverty requires clearly defined metrics that succinctly and reliably reflect the 25 predictors of upward mobility. Defining and selecting metrics that are useful to local leaders poses several challenges of measurement and interpretation.

First, each metric should clearly identify its unit of analysis. Units of analysis could be individuals, families or households, or particular structural characteristics of a place. The most common approach for measuring socioeconomic mobility focuses on individual- or family-level characteristics, such as wages and income. These individual- or family-level metrics can be computed for a whole city or county or for every neighborhood within the city or county. For example, a census-tract poverty rate reports the number of families living in poverty as a share of all families living in that tract. In some cases, a metric represents some structural aspect of a place, such as the built environment, the presence of health care providers, or air pollution levels. These characteristics are less commonly considered when monitoring mobility progress, and they may be difficult to change without major investments in collective and political resources. Structural characteristics also may not change quickly or steadily, making it challenging to determine when to best measure progress. Each metric should clearly identify the unit of analysis so that initiatives and policies can be effectively directed.

To use metrics effectively, local policymakers will need to be mindful of the broader context for changes in the metrics. Changes may directly result from local efforts to strengthen mobility, but they could also arise from resident turnover, a generally improving economy, or a change in state or national policy. For instance, increases in resident incomes could be caused by local gains in resident education, skills, and employment; from the arrival of new, high-income residents; or from an improved national economy and tighter labor market. Similar considerations apply for measures with many complicated inputs. Improvements in neonatal health could be driven by better prenatal counseling and education, improved health care access, better access to healthy food, or resident turnover. To gain insight from changes over time in individual metrics, local analysts and interpreters should consider the possible mechanisms contributing to the changes and whether those mechanisms can and should be supported, continued, and replicated.

Clearly understanding both the concepts the metrics are capturing and the particulars of who and what the metrics are measuring will provide local leaders with the information they need to monitor progress and support pathways that provide residents the best chance of upward mobility. Being able to interpret and explain why metrics are changing is key to using them responsibly and effectively.

Given the focus on local action and monitoring, the ideal set of measures would share the following characteristics:

1. **Valid**, accurately measuring the concepts, indicators, or outcomes of interest
2. **Widely available**, preferably drawing upon existing and accessible data for communities nationwide
3. **Repeated at regular intervals** and without too long a lag, both to allow for effective monitoring and to signal potential effects of policy interventions
4. **Geographically mindful**, available at geographic units where local leaders are able to effect change (neighborhood, city, or county) and robust to measurement swings driven by resident turnover
5. **Consistent** over time and across geographies to ensure meaningful tracking and clear comparison within and across localities
6. **Inclusive of important subgroups**, in recognition that average mobility trends may not sufficiently represent trends by race and ethnicity, gender, age, citizenship, and prior incarceration status (among others factors), and that knowing how those trends vary is important to ensuring expansive and effective mobility from poverty for all residents

Although these represent the goals for the ideal set of mobility metrics, many of the predictors of mobility from poverty identified by the Working Group and discussed in this report do not have metrics that meet all six of these criteria. We discuss the important considerations and possible trade-offs given limitations in the data. We also prioritize the criteria into two categories: essential (characteristics that every metric must have) and important.

Metrics that are **valid** accurately reflect the concepts, indicators, and outcomes they purport to measure, and they consistently capture the concept both within the measure itself and across time and different subgroups. However, even valid metrics may not perfectly capture all the facets of a particular predictor of mobility from poverty.

**Example:** Work is fundamental to mobility. One potential metric for work at the community level is the employment-to-population ratio. The prime-age employment to population ratio is a *valid*

metric insofar as it accurately measures the percentage of people ages 25 to 54 who are employed. The employment to population ratio is validated and calibrated by the Bureau of Labor Statistics, and its collection and methodology are well understood and trusted by experts. Changes over time or differences from place to place are meaningful. However, the employment-to-population ratio does not capture all the aspects of work as a contributor to mobility. Although the measure tracks the share of people who are employed, it does not distinguish between those voluntarily out of the labor force and those who would rather be working, or those working part-time who would rather be working full time.

Having valid measures is fundamental to measuring mobility from poverty. No matter the metric, it must accurately capture or represent the predictor, because local leaders and stakeholders cannot develop effective policy based on measures that are inaccurate or that they cannot trust. Therefore, it is **essential** that every mobility metric is valid.

Ideally, the metrics used would be **widely available**, drawing upon existing data that are readily accessible or can be easily obtained. Widely available measures ease both data collection and analysis and give analysts and policy influencers more time to respond to results. They also support meaningful comparisons between communities. Data from public sources, such as federal or state agencies, likely also have the benefit of being more reliable. And if the data are unavailable widely and publicly, metrics may still be collected by local agencies and offices to inform efforts aimed at boosting mobility from poverty.

**Example of widely available data:** Annual earnings and income data are collected by several sources (e.g., the American Community Survey, or ACS, and the Current Population Survey), and basic statistics for earnings are available for nearly everyone with reported income, covering a wide and deep range of geographies, and easily accessible.

**Example of existing, but limited or restricted data:** A subset of statistics about criminal and police activity are compiled and reported to the Federal Bureau of Investigation's (FBI's) Uniform Crime Reporting database. However, local police departments often collect and report internally on a wider array of measures and indicators. If regulations allow and the privacy of sensitive information is maintained, local leaders may be able to use these local data to inform aspects of mobility metrics.

Some important predictors of mobility from poverty are not captured in readily available data and, in some cases, no widely available data exist. In these cases, collecting new data locally may be necessary to effectively measure a predictor. Therefore, having widely available and accessible data to construct a metric is an **important** measurement consideration.

To be useful in monitoring progress, mobility metrics should be measured at **regular and repeated intervals** and without too long a lag. A survey that was conducted once provides no way to monitor progress, nor does a survey that is collected too infrequently. For instance, the most precise population count data are collected during the decennial Census, but 10 years is too long to wait in most cases to



see if an implemented policy was successful or if a change is needed. In some cases, data may be available monthly (e.g., unemployment) or annually (e.g., income), but for data that are not available or collected that frequently, a metric-appropriate period of regular follow-up will need to be determined.

**Example:** Most measures of economic success and progress—income, the poverty rate, employment participation—are measured by federal government sources, and estimates are updated annually for most geographies (or monthly in the case of employment participation). These federal measures are available repeatedly over time at consistent intervals in order to monitor progress.

Having metrics that can allow for clear trend data through repeated follow-ups is **essential** for improving mobility from poverty, though the regularity of those follow-ups is contingent upon data availability and the timeline for actionable change.

Strong candidates for metrics should also be **geographically mindful**. Local leaders need access to data that are not only meaningful to their context but that are also within their power to change. And they need metrics that can reveal disparities across geographies within their city or county, suggesting that data need to be available at those relevant units of analysis: counties, cities and towns, neighborhoods, and school systems. Geographically mindful metrics also need to account for resident change and turnover. A metric signaling improvement and increasing mobility from poverty may be caused by more economically advantaged or socially privileged people moving into a place rather than by real improvement among the original residents. The best metrics would be able to distinguish and identify which group is driving the change in results.

**Example:** Literacy and English Language Arts test scores are a key indicator for understanding and monitoring educational opportunity for youth in any given place. State- or county-level test score data may be valid and widely available and are likely of interest to a superintendent, but not directly relevant to improving literacy in their own district. Superintendents need district- and school-level data to influence and track changes. But if the district recently redrew enrollment boundaries, or if the number of students has been steadily rising or falling, average scores of literacy mastery could also rise or fall without a single individual student seeing improvement.

Ideally, mobility metrics would be available at all geographies down to the smallest relevant level (e.g., neighborhood or school), but in balancing the other criteria, especially availability, many measures will only be available by city or county. Stakeholders tracking and analyzing the data will need to consider whether higher levels of aggregation are sufficient. As for accounting for resident change, local leaders will need to be mindful of other data points (such as population change) and, when possible, benchmark their results to other geographies, such as the neighborhood district or the surrounding county or metro area. Having measures across different subgroups (discussed in more detail later in this section) can also help identify which residents' circumstances are driving mobility trends. Given the local focus on

increasing mobility from poverty coupled with the reality of the impact of residential turnover, it is **important** that measures of mobility from poverty be available at local and actionable geographies and that they can allow for disentangling change in the metric from change in the population of residents.

**Consistency** over time and across places enables the mobility metrics to reliably monitor progress and allows for meaningful comparisons across communities. Consistent measures capture the same concepts using the same terms for similar populations and samples. Many metrics, such as the unemployment rate, meet this criterion, making interpretation and comparison straightforward. Some measures, such as literacy and English–Language Arts test scores, attempt to cover the same concept across time and place, but the measure, interpretation, and population can vary in ways that make direct comparison challenging. Furthermore, measures and samples can also change over time to reflect knowledge updates, different policy concerns, or budgetary constraints. Having consistent measures will simplify progress monitoring and allow for clearer interpretations of changes in the value of metrics over time.

**Example:** Measures of residential segregation consider the distribution of different racial groups across a city or a region. Though different measures of residential segregation are regularly employed (e.g., dissimilarity, exposure, isolation), each is calculated by using a specific formula based on how one group geographically relates to another. Because the measures are calculated using these widely adopted formulas, each measure of residential segregation retains a consistent interpretation across different geographies and going both forward or backward in time.

This an **important** criterion for strong mobility metrics. Data availability (both in how broadly the data are available and how regularly they are collected) constrains the ability to be consistent in all cases, but consistency within a place over time is arguably a higher priority than consistency between places.

Finally, average trends for any mobility metric may obscure **subgroup differences** that must be addressed to drive meaningful change and ensure mobility is inclusive for all residents. For instance, men typically have higher incomes and wages than women. People of color are much more likely to have negative interactions with the criminal justice system and to have been formerly incarcerated. Children from poor neighborhoods who move to better neighborhoods before they turn 13 are more likely to be upwardly mobile as adults than children who moved after age 13 (Chetty et al. 2017). Policy interventions will likely not affect all subgroups similarly, and some subgroups need focused policy attention given disparities and structural disadvantages.

**Example:** Studies show children born to Black women tend to have lower birth weights than children born to white women (Collins et al. 2004; David and Collins 1997). And recent research finds that socioeconomic factors do not explain differences in preterm birth between higher-educated and higher-income Black and white women (Braveman et al. 2015). Racial differences

seem to suggest something distinctive about the experiences of Black women while pregnant and the neonatal health for their children. Therefore, attempts to address and improve the share of babies born with low birth weight should address subgroup differences, be cognizant of factors and conditions underlying those differences, and potentially even target policy interventions to those groups who stand to benefit the most.

Again, data availability may not support detailed breakdowns for all metrics. Even for data that are widely available for the total population of a city or county, more detailed data by race, gender, ethnicity, and age may not be publicly available or even collected. Where data for subgroups are unavailable, local leaders will need to be mindful of their localities' demographics and should consider whether they would expect differences by subgroup. Because of the availability concerns, this is an **important** metric criterion.

These six criteria were all considered by the Working Group when identifying metrics to measure local predictors of mobility from poverty. They essentially determine whether the metrics provide all the information needed to effectively monitor progress: how well do the measures capture the intended predictor, how accurate is the information, and how broad is the coverage? Although no metric perfectly meets all the criteria, the Working Group consistently strove to recommend metrics that maximize the number of criteria met, prioritizing those deemed essential.

# Tracking Local Progress: Key Predictors and Metrics

We have identified the most fundamental factors driving mobility that local leaders can influence in the short and medium term and that research indicates will pay off through improved outcomes in the short, medium, and long term. Below, we discuss those predictors within the context of our framework and recommend metrics to measure them, balancing the importance of the predictors for mobility with the richness and availability of data.

## Strong and Healthy Families

### Financial Well-Being

#### PREDICTOR: INCOME

##### *Metric: Household income at the 20th, 50th, and 80th percentiles*

Household income is a standard measure of financial well-being. The Working Group recommended the metrics at these three levels to track how and for whom incomes are changing in a given place as well as whether incomes are rising across the board or more so for those with higher incomes. To identify income percentiles, all households are ranked by income from lowest to highest. The income level at the threshold between the poorest 20 percent of households and the richest 80 percent is the 20th percentile. Similarly, the threshold between the poorest and richest halves is the 50th percentile (or median), and threshold between the poorest 80 percent and richest 20 percent is the 80th percentile.

**Validity:** These are well-established and frequently used measures to assess the financial well-being of families by several federal agencies and many scholars.

**Availability:** Data on household income are available annually from the Census Bureau's ACS.

**Frequency:** The data are collected annually. For subgroup analyses for less populated areas, it may be necessary to pool several years of data to obtain reliable estimates.

**Geography:** Data are available at the county and metro levels.

**Consistency:** Income data in the ACS are measured the same way across all geographies in the same year. The measure is fairly consistent over time but there could be changes in the phrasing and sequence of income source questions that may affect comparisons over time. When such changes have occurred in other federal surveys, such as the Current Population Survey, the Census Bureau provides bridge year data so users can assess the effects of survey changes.

**Subgroups:** The data can be broken down by race or ethnicity, gender, and other demographic factors. For less populous areas and for certain demographic groups, several years of data may need to be pooled to provide reliable estimates.

**Limitations:** The purchasing power of any particular level of income will vary based on the local cost of living. Also, because household sizes differ, the same income may be stretched across larger average households in some places relative to others. Like all metrics based on the characteristics of people living in an area, it can change because of residential mobility.

**Alternatives:** Among measures of income, the Working Group initially considered a metric of median and bottom quartile incomes but decided to include a higher income percentile to better identify income inequality. Research shows not only that incomes have been rising more rapidly for those at the higher end of the income distribution but also that increasing income inequality contributes to lower rates of upward mobility (Chetty et al. 2017). The Working Group also examined using wages for this predictor but preferred income because of its increased precision at lower levels of geography and standard interpretation without the need for additional qualifiers such as hours worked per week.

## PREDICTOR: FINANCIAL SECURITY

### ***Metric: Share of households with debt in collections***

The measure accounts for the share of households in an area with debt that has progressed from being past due to being in collections.

**Validity:** Families without other accessible financial resources may need to take out debt not only to pay for housing or education but also to pay for daily necessities such as food or utilities. The inability to pay back debts can signal current or near-term financial insecurity, particularly for families with lower incomes. Those households likely have few assets and as such may have negative wealth. Though not a standard measure, this metric has been used by researchers to distinguish between “good” debts (e.g. mortgages paid on time every month) and “bad” debts (Braga et al. 2016; Ratcliffe et al. 2014).

**Availability:** Drawn directly from credit reports, the credit bureau data are national and uniform across the country. The data are restricted and are not accessible directly from credit bureaus but are made available publicly on the Urban Institute website.<sup>6</sup>

**Frequency:** These data can be updated annually.

**Geography:** The share of households with debt in collections can be computed by zip code or county

**Consistency:** The share of households with debt in collections can be measured consistently for all geographies. The measure is likely to remain consistent over time, unless the credit bureaus change the way overdue debt is captured in credit reporting.

**Subgroups:** Because the metric aggregates to a geography, the data cannot be broken down by demographic characteristics but can be used in combination with the ACS to identify the racial or ethnic composition of neighborhoods (zip codes) with more or less debt in collections (e.g., in Cook County, Illinois, neighborhoods with residents that are majority people of color have nearly three times the amount of debt in collections as do neighborhoods with majority white residents).<sup>7</sup>

**Limitations:** Aside from the limitations related to geography and subgroup analysis, these data do not capture “credit invisible” households without a credit record. And as a measure of financial well-being, even if few households have debt in collections, many may still have too little wealth or savings to be primed for upward mobility. This measure is somewhat sensitive to resident turnover. If a large number of residents without overdue debt move into a county or zip code, or if a large number of residents with overdue debt move out, this measure could shift without any in-household change in debt management.

**Alternatives:** The Working Group acknowledged the potential benefits of a measure of assets, savings, and/or wealth as part of financial security, but these measures are unavailable at the local level in most places, and even where available (e.g., National Asset Scorecard for Communities of Color),<sup>8</sup> the data are not regularly updated.

## Housing

### PREDICTOR: AFFORDABLE HOUSING

**Metric:** *Ratio of affordable and available housing units to households with low- and very low-income levels*

This metric reports the number of available housing units affordable for households with low- (below 80 percent of area median income, or AMI) and very low incomes (below 50 percent of AMI) relative to the

number of households with these income levels. Housing units are defined as affordable if the monthly costs do not exceed 30 percent of a household's income. For this metric, the stock of available housing units includes both vacant and occupied units and both rental and homeowner units. A unit is considered available for households at a given level of income if its monthly cost is affordable at that income level—regardless of the income of the current occupant.

**Validity:** Affordable housing ratios of this type are widely applied in studies of local housing market conditions and trends (Getsinger et al. 2017; Turner et al. 2019). Both the income categories and the affordability standard are well established and accepted in both research and policy.

**Availability:** These ratios can be constructed using data from the ACS and income categories defined by the US Department of Housing and Urban Development, both of which are publicly available nationwide.

**Frequency:** These ratios can be updated annually.

**Geography:** Affordable housing ratios can be computed by city or county. For less populous areas, it may be necessary to pool multiple years of data and report moving averages.

**Consistency:** Affordable housing ratios can be computed consistently for all counties and cities over time. Because the income categories are calculated relative to AMI, the affordability metric appropriately reflects local economic conditions.

**Subgroups:** Because these ratios focus on the characteristics of the housing stock, stratifying by demographic subgroups is not relevant. However, housing units in each affordability category can be stratified by size (number of bedrooms) and tenure (owned or rented).

**Limitations:** These shares do not reflect the quality of the available and affordable housing units. Units counted as available and affordable for households with low or very low incomes may be poor quality or too small to meet household needs. This metric is somewhat sensitive to patterns of residential mobility. For example, if the number of households with very low incomes were to decline (because of out-migration), this metric would show improvement even if no additional affordable units were produced.

**Alternatives:** The Working Group also considered average housing cost burden and the share of households with unaffordable housing costs (above 30 percent of their income). These metrics are more sensitive to changes in a jurisdiction's population. The Working Group decided that the recommended metric better reflects structural conditions of housing availability at the local level.

## PREDICTOR: HOUSING INSTABILITY AND HOMELESSNESS

### ***Metric: Number of public school children who are ever homeless during the school year***

This metric identifies the number of children (age 3 through 12th grade) who are enrolled in public schools and whose primary nighttime residence at any time during a school year was a shelter, transitional housing, or awaiting foster care placement; unsheltered (e.g., a car, park, campground, temporary trailer, or abandoned building); a hotel or motel because of the lack of alternative adequate accommodations; or in housing of other people because of loss of housing, economic hardship, or a similar reason.

**Validity:** Data are reported by school administrators and generally verified by local liaisons and state coordinators. This is a direct and well-established measure of homelessness for children that results from and reflects housing instability among families and unaccompanied children. The definition of homelessness used for this measure extends beyond literal homelessness to effectively include the full range of circumstances in which a family does not have a stable home of their own.

**Availability:** The US Department of Education requires every local education agency to collect and report these data.

**Frequency:** This measure is produced annually.

**Geography:** The boundaries of local education agencies can be crosswalked to the city and county levels.

**Consistency:** This measure is consistently defined, collected, and reported for all local education agencies nationwide.

**Subgroups:** This metric can be disaggregated based on students' disability status and whether they are enrolled in English-as-a-second-language courses.

**Limitations:** This measure does not include homeless adults who are childless, and it does not capture homelessness among children who do not enroll in public school. Further, it could show improvement if the families of homeless children move to a neighboring jurisdiction or if policies “push” them out. This metric is quite sensitive to patterns of residential mobility if large numbers of families with very low incomes flow into or out of a local education agency's boundary.

**Alternatives:** The Working Group also considered several other metrics for housing instability. The number of people experiencing homelessness on a given day—collected through point-in-time counts and available from the US Department of Housing and Urban Development—is a common and well-



known measure of homelessness, but data on this metric are collected by continuums of care, which can consist of a city or one or more counties, and rural areas can be collapsed into a “balance of state” that covers a vast area. The geographic areas of continuums of care do not align with census-based geographies, making point-in-time counts difficult to align with other relevant geographies. The incidence of eviction was also considered, but eviction data are not yet available nationally at the local level nor are they consistently updated. Measures of overcrowding (e.g., more than one person per room) do not reliably reflect housing instability, and such “doubling up” is not consistently measured for a broad population. Other common measures of housing instability, such as being behind on rent or mortgage, being forced to move, or moving for cost reasons, lack the geographic coverage and specificity needed to examine changes over time at the local level.

## Family Stability

### PREDICTOR: FAMILY STRUCTURE AND STABILITY

#### ***Metric: Share of children in various family living arrangements***

The Working Group advised considering the share of children living in each of six different living arrangements (that sum to 100 percent): two married biological or adoptive parents; one biological or adoptive parent and that parent’s current spouse or partner; one biological or adoptive parent and at least one other adult; one biological or adoptive parent; at least two adults, but no parent; and all other.

**Validity:** Children’s living arrangements are recorded in household rosters used in several federal datasets.

**Availability:** Data on living arrangements are available annually from the Census Bureau’s American Community Survey.

**Frequency:** The data are collected annually. For subgroup analyses for less populated areas, it may be necessary to pool several years of data to obtain reliable estimates.

**Geography:** Data are available at the county and metro levels.

**Consistency:** Data on children’s living arrangements in the ACS are measured the same way across all geographies in the same year. The measure is consistent over time.

**Subgroups:** The data can be broken down by race or ethnicity, gender, and other demographic factors. For less populous areas and for certain demographic groups, several years of data may need to be pooled to provide reliable estimates.

**Limitations:** A large body of evidence suggests that both the presence and relationship of parents directly relates to children’s mobility (Chetty et al. 2014; McLanahan and Percheski 2008; Osborne and McLanahan 2007). Ideally, the metric would directly reflect the continuous presence of loving adults in a child’s life. But data to construct such a measure are not consistently available at the city or county level. We recommended a metric detailing children’s living arrangements. Further, research shows that the influence of growing up in a single-parent household on later economic outcomes has been diminishing over the past few decades (Musick and Mare 2004), and some research suggests that the strength of the relationship between married parents and child outcomes is much stronger for white children than for children of color (Cross 2019). Like all metrics based on the characteristics of people living in an area, it can change because of residential mobility.

**Alternatives:** The Working Group members consistently agreed that a measure of adults regularly present and active in a child’s life (as measured by who is in the household) was important to include, but they remain in debate on the best way to measure that presence. Some argued that the share of children in married two-parent families would be the best measure of stability, but others felt that was too narrow an indicator of stability for all social and community contexts. The provided metric reflects and attempts to incorporate their respective concerns.

## Health

### PREDICTOR: OVERALL HEALTH

**Metric:** *Share of adults who rate their own and their children’s health as good or excellent*

This metric is measured through one question that asks “How would you rate your health?” and has respondents answer along a five-point Likert scale of “very poor,” “poor,” “fair,” “good,” and “excellent” (Eriksson, Undén, and Elofsson 2001). The share of people who respond “good” or “excellent” constitutes this metric.

**Validity:** Asking people to rate their own health provides one of the most reliable measures of mortality and remains a significant predictor even after controlling for other demonstrated health-related issues and socioeconomic status (DeSalvo et al. 2006; Garbarski 2014; Herman et al. 2014; Idler and

Benyamini 1997). Though the research focuses on mortality rather than mobility, we argue that good health is a condition that supports autonomy and promotes mobility.

**Availability:** This information is not widely enough available in existing data sources to provide coverage at the local level across many geographies.

**Frequency:** The frequency of how often the measure would be collected would depend upon local data collection efforts, but we recommend regular follow-up data collection at least every two years.

**Geography:** The level of geography that the measure would represent (e.g., county, city, or zip code) would depend on the sampling frame, stratification, and the number of people ultimately surveyed to obtain sufficient power for the survey.

**Consistency:** Self-rated health can be consistently defined and determined over time. The degree of consistency in this measure across different places will vary with the extensiveness of the survey design and number of people surveyed in each place. Ideally, the measure could be consistent across some base level of geography (such as the city or county), but some places would likely have more extensive coverage of self-rated health.

**Subgroups:** Like geography, the range of subgroups represented and the ability to compare subgroups (e.g., age, race or ethnicity, and gender) would depend on the sampling frame, stratification, and the number of people surveyed.

**Limitations:** A primary limitation is that these data will need to be collected directly by communities. Communities will need to identify through which vehicles data can be gathered. Further, this metric can be sensitive to residential mobility if the same people cannot be followed over time. A community transitioning out residents of poorer health in favor of those who are healthier may appear to be improving the overall health of the community. Therefore, it is important to collect these data along with demographic characteristics to ensure improved health is felt by people of all races and socioeconomic backgrounds.

**Alternatives:** The Working Group explored other metrics that approximate overall health, such as life expectancy and nutrition. Self-rated health proved to be a better measure not only because of its correlation with nutrition and access to healthy food and several other health measures but also because of the compelling evidence for its strength as a measure in the public health literature.

## PREDICTOR: ACCESS TO AND UTILIZATION OF HEALTH SERVICES

### **Metric: Health professionals shortage area (HPSA) ranking for primary care providers**

This metric denotes that an area has a shortage of primary care providers based on four elements: weighted population-to-provider ratio, share of individuals with incomes below 100 percent of the federal poverty level, infant health index, and travel time or distance to the nearest source of nondesignated accessible care. The Division of Policy and Shortage Designation through the US Department of Health and Human Services calculates a score between 0 to 25 for primary care HPSAs, where the higher the score, the greater the shortage. The facility can get up to 10 points for the population-to-provider ratio, up to 5 for the share of the population with incomes below 100 percent of the federal poverty level, up to 5 for the infant health index (based on infant mortality rate or low birth weight rate), and up to 5 for travel time to the nearest source of care.<sup>9</sup>

**Validity:** This metric is defined and established by the US Department of Health and Human Services.

**Availability:** Data for this metric are nationally available by state and county through the US Department of Health and Human Services.

**Frequency:** Different data elements are updated at different intervals, but overall, this metric can be refreshed every two years.

**Geography:** HPSAs are available by state, county, or service area. Although data are not available at the neighborhood level, individual addresses can be assessed and therefore could be used to derive a value for the neighborhood. Data are available for urban and rural areas.

**Consistency:** HPSA status can be measured the same way over time and across geographies.

**Subgroups:** This metric can be calculated separately for low-income populations.

**Limitations:** Even though HPSA status is a characteristic of the local area, some elements used to determine the designation are based on the characteristics of the local population; as such, changing residential mobility patterns may influence this metric.

**Alternatives:** The HPSA measures access to health services but not utilization of health services. The Working Group considered using the rate of preventive screening exams as potential measure of utilization, but obtaining these data would require access to electronic health records, which would likely be infeasible to obtain at the local level for geographies across the country. The research team found no other reliable measures of health services utilization with data available at the local level.

## PREDICTOR: NEONATAL HEALTH

### **Metric:** *Share of low-weight births*

A child born weighing less than 5 pounds 8 ounces (<2,500 grams) is considered to have a low birthweight. Children born below that threshold are at elevated risk for health conditions and infant mortality. This metric looks at the share of low-birthweight babies out of all births.

**Validity:** This metric is the standard currently used by the Centers for Disease Control and Prevention as part of their national assessment on health among infants.

**Availability:** Data on the share of children born with low birthweights are nationally available through the National Center for Health Statistics.

**Frequency:** Data are updated annually.

**Geography:** City-level estimates are available through public-use microdata files provided by the National Center for Health Statistics as well as through other data collection efforts, such as the [Kids Count Data Center](#) or the [Wonder system](#).

**Consistency:** Medical advances have improved the outcomes for low-birthweight babies, implying this metric may change in the future. However, this has been consistently used over decades as metric for neonatal health.

**Subgroups:** The share of children born with low birthweights can be broken out by race or ethnicity and mother's age.

**Limitations:** Data are not readily available at lower levels of geography, such as neighborhoods, where disparities by race and socioeconomic status within a city are most notable. Large movements of women with risky pregnancies moving in or out of a jurisdiction could influence this metric.

**Alternatives:** Beside low birthweight, the Working Group considered both the infant mortality rate and measures of maternal prenatal and postnatal care. They concluded that at the community level, the share of children born with low birthweights was more strongly associated with mobility from poverty than the infant mortality rate. Further, relative to low birthweight, the metrics for maternal prenatal and postnatal care, such as doctor's visits, receipt of prenatal counseling, breastfeeding services, and prenatal vitamin use, suffer from more measurement error and a weaker body of evidence tying them to later-life mobility.

# Supportive Communities

## Local Governance

### PREDICTOR: POLITICAL PARTICIPATION

#### **Metric:** *Share of the voting-eligible population who turn out to vote*

This metric measures the share of the voting-eligible population that voted in the most recent local elections.

**Validity:** This metric is well established. Scholars of political science have used this metric in articles published in peer-reviewed journals.

**Availability:** Data are reported out by local governments and are available to the public.

**Frequency:** Data are available at election cycles.

**Geography:** Data are broadly available even below the city and county levels, at the electoral district level.

**Consistency:** Voter turnout is measured consistently over time and geography, but the values can be volatile from year to year, with higher turnouts in years involving a presidential election, so comparison over time should account for that.

**Subgroups:** Voter turnout by race or ethnicity within a jurisdiction can be measured using different methods depending on the demographic balance of the jurisdiction. For diverse or integrated communities, ecological inference or rows by column inference is preferred (King, Rosen, and Tanner 2004; Barreto et al 2019). For less diverse or highly segregated communities, homogenous precinct analysis is preferred (Hajnal and Trounstine 2005). Each is based on the census-defined racial and ethnic characteristics of the jurisdiction.

**Limitations:** Residential mobility can impact this metric, so it is important to interpret changes in voter turnout in the context of demographic shifts in the jurisdiction. In local communities with higher rates of immigrants, voter turnout can inaccurately reflect a community's political participation. Communities with a population of immigrants who are not registered to vote may consider additional local data to better assess political participation and civic engagement.

**Alternatives:** The Working Group also considered self-reported measures of political participation, such as working in a political party or conducting some campaigning activity in the past 12 months. However, voter turnout more directly measures the predictor and has more readily available data.

## PREDICTOR: DESCRIPTIVE REPRESENTATION AMONG LOCAL OFFICIALS

**Metric:** *Ratio of the share of local elected officials of a racial or ethnic group to the share of residents represented by those officials of the same racial or ethnic group*

This metric measures the ratio of the share of the city council or county board from specific racial and ethnic groups and the share of city or county residents from those racial or ethnic groups.

**Validity:** Scholars of political science have used this metric in articles published in peer-reviewed journals.

**Availability:** The elements of this metric are available but will need to be combined. Data on the racial or ethnic characteristics of city council or county boards are released publicly by local governments. The racial and ethnic composition of residents in those districts can be calculated using data from the ACS.

**Frequency:** This metric can be updated as frequently as elections occur.

**Geography:** This can be calculated at the city or county level.

**Consistency:** This metric can be calculated the same way over time.

**Subgroups:** This metric accounts for race within its definition. This is also feasible to calculate for other subgroups.

**Limitations:** Although the movement of people in and out of the jurisdiction can influence this metric, it is likely to be far more sensitive to shifts in the composition of elected officials in the short term.

**Alternatives:** Because this metric aligns so well with the predictor, the Working Group did not seriously consider other metrics.

## Neighborhoods

### PREDICTOR: ECONOMIC INCLUSION

**Metric:** *Share of residents experiencing poverty living in high-poverty neighborhoods*

This metric measures the share of a city's or county's residents experiencing poverty who live in high-poverty neighborhoods (measured by census tract). A high-poverty neighborhood is one in which over 40 percent of the residents are experiencing poverty.

**Validity:** Measures of poverty concentration have been widely used to measure the extent and severity of economic exclusion and isolation. The more concentrated and separate people in poverty are from

better-resourced neighbors, the more isolated they are from the larger community and the social and economic resources and opportunities it can provide.

**Availability:** Data required to compute poverty concentration are available annually from the Census Bureau's American Community Survey.

**Frequency:** This measure can be computed annually.

**Geography:** This measure can be computed for all cities and counties nationwide, although for less populous jurisdictions, it may be necessary to pool data from multiple years of the ACS and report moving averages. Because this metric reflects the structural conditions facing a city or county's residents, changes in the metric possibly caused by people moving into or out of a jurisdiction do represent changes to those structural conditions.

**Consistency:** Poverty concentration can be consistently defined and calculated for all cities and counties over time.

**Subgroups:** This metric can be disaggregated separately by race or ethnicity and gender, although in some cases it may be necessary to pool data from multiple years of the ACS and report moving averages.

**Limitations:** This measure can be sensitive to the overall poverty rate of a city or county. Therefore, changes in poverty concentrations need to be assessed with reference to the city or county's overall poverty rate.

**Alternatives:** The Working Group considered other measures of segregation, such as the dissimilarity index, isolation index, exposure index, and variance ratio index, all of which can be applied to an economic context. However, compared with the poverty concentration metric, these are more challenging to calculate and to interpret for a broad audience.

#### PREDICTOR: RACIAL DIVERSITY

**Metric:** *Neighborhood exposure index, or the share of a person's neighbors who are people of other races and ethnicities*

This metric is constructed separately for each racial or ethnic group and reports the average share of that group's neighbors who are members of other racial or ethnic groups. For example, the exposure index would report the share of people who are Black and Latinx in the census tract of the average white person, the share of people who are white and Latinx in the census tract of the average Black person, and the share of people who are Black and white in the census tract of the average Latinx



person. Higher values of the index indicate more neighborhood diversity and more day-to-day exposure of people to neighbors of different races and ethnicities.

**Validity:** The exposure index is one of several widely used measures of residential segregation or inclusion. It effectively captures the multiracial or multiethnic diversity of American communities today and reflects the experience of individuals of all races and ethnicities, and it provides a comprehensive picture of neighborhood racial and ethnic composition.

**Availability:** Data required to compute neighborhood exposure indexes are available annually from the ACS.

**Frequency:** Exposure indexes can be computed annually.

**Geography:** The data are collected annually. For subgroup analyses for less populated areas, it may be necessary to pool several years of data to obtain reliable estimates. Because this metric reflects the structural conditions facing a city or county's residents, changes in the metric that may be caused by people moving into or out of a jurisdiction do represent changes to those structural conditions.

**Consistency:** Exposure indexes can be consistently defined and calculated for all cities and counties over time.

**Subgroups:** This metric is by definition disaggregated by race or ethnicity.

**Limitations:** This measure can be sensitive to the overall racial or ethnic composition of a city or county. Therefore, changes in exposure indexes need to be assessed with reference to the city or county's overall racial or ethnic composition. Further, although this index can be constructed annually, it may take many years to observe appreciable changes.

**Alternatives:** The Working Group considered several other measures that have been widely used in analyses of residential segregation, including the social isolation index; the index of dissimilarity; the neighborhood segregation index; and isolating different dimensions of segregation, such as clustering, centralization, and concentration. However, these measures focus on the extent of separation between two racial or ethnic groups (white people versus Black people, for example, or white people versus all other groups), while the exposure index provides the simplest and most direct reflection of neighborhood inclusion in a multiracial or multiethnic context.

## PREDICTOR: BELONGINGNESS

### **Metric: *Inclusion of Other in the Self scale***

This metric is a single-item survey developed by Aron, Aron, and Smollan (1992) that measures how connected the respondent feels with another person or group (e.g., family, neighborhood, school, or community organization). Respondents see seven pairs of circles that range from just touching to almost completely overlapping (1 = no overlap; 2 = little overlap; 3 = some overlap; 4 = equal overlap; 5 = strong overlap; 6 = very strong overlap; 7 = most overlap). One circle in each pair is identified as “self” and the second circle in each pair is labeled “other.” Respondents choose one of the seven pairs to answer the question, “Which picture best describes your relationship with [this person/group]?” The researcher identifies what the person or group for the “other” is being represented. This survey is easily understood by respondents and takes less than one minute to administer (Gachter, Starmer, and Tufano 2015). This metric would require new data collection at the local level.

**Validity:** Researchers have used the scale to measure belonging with a host of different populations, including 5-year-olds (Cameron et al. 2006), teens, adults, people with low incomes, and formerly incarcerated individuals (Folk et al. 2016; Mashek, Cannaday, and Tangney 2007). In the example of formerly incarcerated individuals, those who felt more belonging in their communities experienced greater residential stability and community readjustment and lower rates of recidivism than less connected individuals (Folk et al 2016).

**Availability:** This information is not available widely enough in existing data sources to provide coverage at the local level across many geographies.

**Frequency:** The frequency of how often the measure would be collected would depend upon local data collection efforts, but we recommend regular follow-up data collection at least every two years.

**Geography:** The level of geography that the measure would represent (e.g., county, city, or zip code) would depend on the sampling frame, stratification, and the number of people ultimately surveyed to obtain sufficient power for the survey.

**Consistency:** The degree of consistency in this measure across different places will vary with the extensiveness of the survey design and number of people surveyed in each place. Ideally, the measure could be consistent across some base level of geography (such as the city or county), but some places would likely have more extensive coverage of residents who have taken the survey.

**Subgroups:** Like geography, the range of subgroups represented and the ability to compare subgroups (e.g., people of color and white people; married and single people; people with children and those without) would depend on the sampling frame, stratification, and the number of people surveyed.

**Limitations:** The key limitation is the need for local partners to collect representative data. Original data collection may also make benchmarking against other places challenging, depending on the scale and representativeness of data collection in other places. If there is considerable residential turnover in a jurisdiction, this metric might change even if there is no change among those who had been living there.

**Alternatives:** The Working Group considered other metrics to measure belongingness, including the Sense of Social Fit Scale (Walton and Cohen 2007), Belonging Uncertainty Scale (Walton and Cohen 2007), and UCLA Loneliness Scale (Russell 1996). However, the Inclusion of Other in the Self scale had the fewest items, could be used in the widest age range, and had been validated for a low-income population. This metric would be somewhat sensitive to residential turnover.

#### **PREDICTOR: SOCIAL CAPITAL**

##### ***Metric: Selected questions from the Social Capital Community Benchmark Survey***

This survey measures the resources provided by a person's social networks, including both close relations and extended relations, and our metric will use a few items from this survey. The development of the survey builds on the work of Robert D. Putnam (2000) and the strategies for civic revitalization outlined in a report by the Saguaro Seminar (Putnam and Feldstein 2004). The survey collects information on the relative strengths and areas for improvement in communities' civic behavior (Helliwell and Putnam 2004). The metric for social capital is a selection of seven questions from the Social Capital Benchmark Survey covering participation in community organizations, religious attendance, number and racial diversity of friends, engagement with neighborhoods, and the ability to find information on new jobs. These questions provide indicators of generalized social capital, bonding social capital, and bridging social capital at the individual level. No widely available data on social capital exist at the local level, so this metric would require new data collection.

**Validity:** Measures of social capital have repeatedly been shown to be associated with individual and community well-being and upward mobility (Chetty et al. 2014; Kim, Subramanian, and Kawachi 2006; Putnam 2000; Sampson, Morenoff, and Earls 1999).<sup>10</sup> However, no standard measure or set of measures exist to capture the relationship between social capital and mobility. To capture both bonding and bridging social capital, we use set of questions largely drawn from the Social Capital Community Benchmark Survey, developed by Putnam and the Saguaro Seminar at the Harvard Kennedy School.<sup>11</sup>

Though the survey and larger blocks of questions from the survey have been used in peer-reviewed studies before, the smaller subset of questions for this metric has not yet been validated. We anticipate using the initial round of data collection to validate this metric for widespread use and to refine and revise as necessary.

**Availability:** This information is not widely enough available in existing data sources to provide coverage at the local level across many geographies. To ease data collection, we have attempted to minimize the number of questions needed to measure each of the indicators of social capital (e.g., generalized social capital and bridging and bonding social capital).

**Frequency:** The frequency of how often the measure would be collected would depend upon local data collection efforts, but we recommend regular follow-up data collection at least every two years.

**Geography:** The level of geography that the measure would represent (e.g., county, city, or zip code) would depend on the sampling frame, stratification, and the number of people ultimately surveyed to obtain sufficient power for the survey.

**Consistency:** The degree of consistency in this measure across different places will vary with the extensiveness of the survey design and number of people surveyed in each place. Ideally, the measure could be consistent across some base level of geography (such as the city or county), but some places would likely have more extensive coverage of residents who have taken the survey.

**Subgroups:** Like geography, the range of subgroups represented and the ability to compare subgroups (people of color and white people; married and single people; people with children and those without) would depend on the sampling frame, stratification, and the number of people surveyed.

**Limitations:** The key limitation is the need for local partners to collect representative data. Additional limitations include the need to further validate this particular set of questions. Original data collection may also make benchmarking against other places challenging depending on the scale and representativeness of data collection in other places.

**Alternatives:** The Social Capital Community Benchmark Survey was preferred over the Social Capital Index as developed by the US Senate Joint Economic Committee and the social cohesion and trust subscale of the Collective Efficacy Scale because of its ability to capture indicators of both bonding and bridging social capital. Bonding social capital can be beneficial in the form of strong support systems and in enforcing social control within a group, but it also has the potential for negative effects when the tight bonds lead to destructive behavior, such as with gangs or terrorist groups (Patulny and Svendsen 2007). Bridging social capital—or connections across heterogeneous groups—can bring benefits particular to

mobility, such as help in finding new jobs and improved health (Almedom 2005; Granovetter 1973; Kim, Subramanian, and Kawachi 2006). The Working Group considered a variety of other metrics to measure social capital, including response rates to the census, participation in civic organizations, and rates of volunteering, but settled on questions from the Benchmark Survey because of its more regular usage and flexibility for capturing different aspects of social capital.

## **PREDICTOR: TRANSPORTATION ACCESS**

### ***Metric: Transit trips index***

This metric reflects the number of public transit trips taken annually by a three-person single-parent family with income at 50 percent of the AMI for renters. This number is percentile ranked nationally into an index with values ranging from 0 to 100. Higher scores reflect better access to public transportation.

**Validity:** This metric was designed in partnership with the US Department of Transportation and has been used by the US Department of Housing and Urban Development in community efforts to affirmatively further fair housing. Several scholars have also used this metric and data in published in peer-reviewed journals. Although other arrangements of family composition, income, and housing status are possible in constructing this index and are available in the data, these characteristics were intended to more closely characterize a lower-income household in the community and are the most validated of other household combinations.

**Availability:** The estimates come from the location affordability index, which is publicly available.

**Frequency:** The location affordability index data are updated every three years.

**Geography:** This can be measured at the census tract or neighborhood level.

**Consistency:** This metric can be calculated the same way over time.

**Subgroups:** This metric is based on a lower-income population, notably single-parent families earning half the local AMI among renters.

**Limitations:** This metric cannot alone capture the concept of transportation access. This must be used in partnership with the low transportation cost index to cover geographies that may not have an extensive public transportation system, such as rural areas.

**Alternatives:** The Working Group considered instead using a measure of the share of workers whose commute time is less than 15 minutes, a metric also used by Chetty and colleagues (2018). However,

this metric only covers a small share of the population because so few people now have such a short commute. This metric performs especially poorly for people using public transportation, who more often take more than 15 minutes for their commute. The ACS offers many categories of commute times, but no other ones have been validated.

***Metric: Low transportation cost index***

This index reflects local transportation costs as a share of renters' incomes. It accounts for both transit and cars. This index is based on estimates of transportation costs for a three-person, single-parent family with income at 50 percent of the median income for renters for the region (i.e., a core-based statistical area). Although other arrangements of family composition, income, and housing status are possible in constructing this index, these characteristics were intended to more closely characterize a lower-income household in the community. Values are inverted and percentile ranked nationally, with values ranging from 0 to 100. The higher the value, the lower the cost of transportation in that neighborhood.

**Validity:** This metric was designed in partnership with the US Department of Transportation and has been used by the US Department of Housing and Urban Development in community efforts to affirmatively further fair housing. Several scholars have also used this metric and data in articles in peer-reviewed journals.

**Availability:** The estimates come from the location affordability index, which are publicly available.

**Frequency:** The location affordability index data are updated every three years.

**Geography:** This can be measured at the census tract or neighborhood level.

**Consistency:** This metric can be calculated the same way over time.

**Subgroups:** This metric is based on a lower-income population, notably single-parent families earning half the local AMI among renters.

**Limitations:** Transportation costs may be low for a variety of reasons, including greater access to public transportation and the density of homes, services, and jobs in the neighborhood and surrounding community. It is important not to consider this metric alone but rather in combination with the transit trips index to more fully measure the concept of transportation access.

**Alternatives:** The Working Group determined that two metrics of transportation access were necessary to accommodate the different transportation infrastructures that are in urban versus rural areas. The

Group also considered the transportation security index (Gould-Werth, Griffin, and Murphy 2018), but it would require original data collection, and only an 18-question version has been validated. The 3-question version of the transportation security index, once validated, may be a viable metric in the future.

## **PREDICTOR: ENVIRONMENTAL QUALITY**

### ***Metric: Air quality index***

The air quality index, or AQI, is an index for reporting daily air quality. It tells how clean or polluted the air is and what associated health effects might be a concern in the community. The AQI includes five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, the Environmental Protection Agency has established national air quality standards to protect public health. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in the US. Values range from 0 to 500 and are categorized into a six-point scale: good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy, and hazardous.

**Validity:** Environmental Protection Agency scientists and researchers link levels of air pollutants to health effects that can manifest within a few hours or days after breathing polluted air. Levels of air pollution are measured from thousands of air quality monitors.

**Consistency:** Levels of air pollutants can be consistently measured over time and space.

**Availability:** Air quality systems data are produced by the US Environmental Protection Agency and are publicly available.

**Frequency:** Air quality data are updated daily.

**Geography:** AQI can be measured at the county level.

**Subgroups:** This metric is available for urban, rural, and suburban areas.

**Limitations:** Data are not readily available at lower levels of geography, such as neighborhoods, where disparities by race and socioeconomic status within a county are most notable. The Working Group would prefer if these data were at lower levels of geography such that air quality indicators could be matched to neighborhoods by different characteristics, such as racial or ethnic composition or concentrated poverty.

**Alternatives:** The Working Group also considered the health hazard index as a metric for environmental quality, but the data source (National Air Toxics Assessment) has a long lag in reporting and is not updated as frequently as the AQI.

## Safety

### PREDICTOR: EXPOSURE TO TRAUMA

#### **Metric: Adverse Childhood Experiences scale**

The Adverse Childhood Experiences (ACE) scale is a survey-based scale comprising 17 items that measure childhood exposure to trauma such as psychological, physical, or sexual abuse; neglect; mental illness; domestic violence; divorce; and having a parent in prison (Felitti et al. 1998). Each question relates to an experience growing up during the first 18 years of life and solicits a “yes” or “no” response. The number of “yes” answers for each question determines the score, with values from 0 to 17. Higher scores on this scale mean that the respondent has gone through more types of childhood trauma. To construct this metric, community leaders would need to collect data locally.

**Validity:** A significant body of research finds that that higher ACE scores, indicating more childhood trauma, correlate with several outcomes related to lower mobility. Higher ACE scores are associated with poor performance at work and financial problems as adults (Anda et al. 2004), as well as higher rates of chronic disease, depression, and lower health-related quality of life as adults (Anda et al. 2002; Corso et al. 2008; Felitti et al. 1998). The metric may be most useful as an indicator of need for trauma-informed care at the community level.

**Availability:** This information is not available widely enough in existing data sources to provide coverage at the local level across many geographies.

**Frequency:** The frequency of how often the measure would be collected would depend upon local data collection efforts, but we recommend regular follow-up data collection at least every two years.

**Geography:** The level of geography that the measure would represent (e.g., county, city, or zip code) would depend on the sampling frame, stratification, and the number of people ultimately surveyed to obtain sufficient power for the survey.

**Consistency:** The degree of consistency in this measure across different places will vary with the extensiveness of the survey design and number of people surveyed in each place. Ideally, the measure



would be consistent across some base level of geography (such as the city or county), but some places would likely have more extensive coverage of residents who have completed the ACE scale.

**Subgroups:** Like geography, the range of subgroups represented and the ability to compare subgroups (people of color and white people; married and single people; people with children and those without) would depend on the sampling frame, stratification, and the number of people surveyed.

**Limitations:** The key limitation is the need for local partners to collect representative data. Original data collection may also make benchmarking against other places challenging, depending on the scale and representativeness of data collection in other places. This metric may be sensitive to residential mobility because those reporting experiences of trauma in the past may have lived in a different jurisdiction at the time.

**Alternatives:** The Working Group considered several other metrics, including rates of reported acts of child maltreatment (e.g., neglect, physical abuse, or sexual abuse) based on administrative data as well as other survey-dependent scales, such as questions about exposure to violence from the Community Experiences Questionnaire (Schwartz and Proctor 2000) and the Cleveland Child Abuse Potential Scale (Ezzo and Young 2012). The Working Group determined that reports of child maltreatment are too biased to accurately reflect actual experiences. Compared to the other scales, the ACE was the most widely used and validated with the fewest items required.

#### **PREDICTOR: EXPOSURE TO CRIME**

##### ***Metric: Rates of reported violent crime and property crime***

The FBI's Uniform Crime Reporting (UCR) Program provides standard, well-defined measure of crime.<sup>12</sup> Reported crimes are captured for four "index" violent felonies (murder or nonnegligent manslaughter, rape, robbery, and aggravated assault) and four index property felonies (burglary, larceny-theft, motor vehicle theft, and arson).

**Validity:** The UCR statistics are the most widely used way to measure and compare reported crime across jurisdictions. The FBI provides definitions for each of the criminal offenses in the index, and a most police departments in the United States report the data on those offenses to the FBI through a standardized reporting system.<sup>13</sup> The purpose of the FBI's UCR Program is to provide a common language transcending the varying local and state laws. Although there are potential issues with how different departments might classify offenses, UCR is considered the most standardized source.

**Availability:** The data are available for most jurisdictions across the United States. If a jurisdiction is not included in UCR, local officials may be able to obtain the relevant and comparable data directly from

their police departments. Data are publicly available for cities with population greater than 10,000 and counties with populations greater than 25,000. For smaller jurisdictions, the FBI collects the data, but access to the data is restricted.

**Frequency:** Data are, at minimum, reported annually, but they are not broken out by demographic group. Note that the data are reported by policing agencies and would need to be aggregated up to the county level.

**Geography:** The UCR data are available at the city and county level, given the availability noted above.

**Consistency:** The data are consistent across the jurisdictions that provide data to the FBI, because the FBI establishes the definitions of the crimes included in the index. Data may be accumulated and compiled differently at the local level.

**Subgroups:** The data include demographic information—age, race, and gender—for those arrested, and for the victims and offenders of homicides only (not for the other crimes in the index).

**Limitations:** Reporting is not mandatory, and although most jurisdictions provide data, UCR does not capture the universe of reported index crimes across the United States. UCR measures crime reported to the police, so unreported crime is not captured in these data. An FBI analysis estimated that up to half of violent crime goes unreported to the local police (Langton and Berzofsky 2012), and research finds that some neighborhoods are less likely to report violent crime, especially where trust of police is low (Desmond, Papachristos, and Kirk 2016; Goudriaan, Wittebrood, and Nieuwbeerta 2006). As a place-based measure, reported crime is affected by mobility in and out of the jurisdiction. Crime rates are based on the number of incidents per 100,000 residents. If the number of residents increases, the crime rate could go down without any change in the number of reported incidents. Also, crime tends to be concentrated in certain areas. Similarly, if new residents are moving to places where crime rates were already low, the populations and areas experiencing the most crime may also not see any change even if city-wide rates decrease. Relatedly, UCR does not provide data on crime at the neighborhood level, so it cannot track changes in crime or compare different places within a jurisdiction.

**Alternatives:** The Working Group also considered self-reported victimization to measure exposure to crime. Although it is widely understood that a large proportion of crimes go unreported, self-reported victimization is only available at the national level through the National Crime Victimization Survey and would therefore require local jurisdictions to administer the survey to gain local-level data. Jurisdictions could also consider supplementing UCR data with local data to improve relevance to local policymaking.

## PREDICTOR: EXPOSURE TO OVERLY PUNITIVE POLICING

### **Metric: Rate of juvenile justice arrests**

The FBI's UCR Program also provides statistics on the number of arrests of people under age 18. Because individuals can be arrested multiple times, the data reports the number of arrests and not individuals. The metric is for juvenile arrest for any crime, but the data can be broken down by offense type. Arrest rates can be calculated using population data from the ACS.

**Validity:** Although arrest behavior of the total population may be confounded by many factors, arrests among juvenile offenders can be more closely tied to overly punitive policing behavior. Research finds that juveniles are more likely to be arrested than adult suspects, after controlling for suspect race, gender, seriousness of offense, and amount of evidence (Brown, Novak, and Frank 2009). Research also finds large and disruptive impacts on adult outcomes; juvenile detention is associated with lower educational attainment, lower rates of employment, and higher rates of criminal offending and incarceration as an adult (Aizer and Doyle 2015).

**Availability:** Arrest data are available in jurisdictions that report to UCR and are available through the FBI's Crime Data Explorer tool. The data are available for most jurisdictions across the United States (see the **exposure to crime** metric for more detail).

**Frequency:** Juvenile arrest data is available annually through FBI Crime Data Explorer. Arrest data before 2014 can be found on the Bureau of Justice Statistics Arrest Data tool.

**Geography:** The UCR data are available at the city and county level, for cities with population greater than 10,000 and for counties with population greater than 25,000.

**Consistency:** The data are consistent across the jurisdictions that provide data to the FBI, because the FBI establishes the definitions of the crimes included in the index. Data may be accumulated and compiled differently at the local level.

**Subgroups:** This metric necessarily measures people within a particular age group but also provides data on age subgroups (e.g. 10–12, 13–15, and 16–17) as well as by race or ethnicity and gender.

**Limitations:** Reporting to UCR is not mandatory, and although most jurisdictions provide data, UCR does not capture the universe of reported index crimes across the United States. These data also do not capture any punitive interactions with school resource officers that do not get elevated to the level of arrest (such as being temporarily detained or being removed or suspended from school). As a place-based measure, reported crime is affected by mobility in and out of the jurisdiction, and because the

measure is a rate, large increases or declines in the number of juveniles in an area could also affect the metric.

**Alternatives:** The Working Group considered several metrics to measure overly punitive policing, including community trust in law enforcement, adult incarceration rates, arrest rates, and police stop rates. However, rates of juvenile arrests were not only publicly available but were also more likely to occur within juveniles' jurisdiction of residence (because data on stops would likely include stops for people who reside elsewhere). The age of arrest is an important consideration because being arrested as a juvenile occurs during such an influential stage of life that it has high predictive power of being repeated in adulthood, along with other negative life outcomes (Aizer and Doyle 2015).

## Opportunities to Learn and Earn

### Education

#### PREDICTOR: ACCESS TO PRESCHOOL

**Metric:** *Share of children enrolled in nursery school or preschool*

This metric measures the share of a jurisdiction's three- to four-year old children who are enrolled in nursery or preschool.

**Validity:** Federal agencies such as the National Center for Education Statistics use household survey data to ascertain nursery and preschool enrollment.

**Availability:** Enrollment data are available annually from the ACS.

**Frequency:** The data are collected annually. For subgroup analyses for less populated areas, it may be necessary to pool multiple years of data to obtain reliable estimates.

**Geography:** Data are available at the county and metro levels.

**Consistency:** Information pertaining to nursery and preschool enrollment in the ACS is measured the same way across all geographies in the same year. Changes to the ACS in the future could influence comparisons over time.

**Subgroups:** The data can be broken down by race or ethnicity, gender, and other demographic factors. For less populous areas and for certain demographic groups, several years of data may need to be pooled to provide reliable estimates.

**Limitations:** This metric can change over time if fertility patterns change or if families with young children who move out of or into the jurisdiction have very different propensities for enrolling their children in preschools than parents with young children who remain in the jurisdiction. Because ACS data do not capture the quality of preschool, enrollment figures may overstate exposure to the kinds of programs most likely to improve short-term academic outcomes and long-term outcomes such as mobility from poverty.

**Alternatives:** The Working Group considered measuring enrollment in high-quality preschool programs but feared that obtaining reliable and consistent measures of quality across jurisdiction would prove infeasible. Other metrics considered included enrollment in state or local prekindergarten or Head Start. That metric is nationally available but not standardized, and reporting varies across states and localities. Although Head Start data collection is standardized nationally, it occurs at the grantee level; grantees may operate one or more programs within and across community and state lines.

#### **PREDICTOR: EFFECTIVE PUBLIC EDUCATION**

**Metric:** *Average per grade change in English Language Arts achievement between third and eighth grades*

This metric reports the average annual improvement in English (reading comprehension, written expression) observed between the third and eighth grades for each jurisdiction.

**Validity:** The state assessments are well defined and validated but vary by state. The Stanford Education Data Archive has standardized these to be nationally comparable. Higher rates of improvement in English indicate more effective public education, which improves the upward mobility of children from less advantaged backgrounds.

**Availability:** Test data are available from the Stanford Education Data Archive and EDFacts.

**Frequency:** The data are collected annually.

**Geography:** Data are available at the school district and county levels.

**Consistency:** Tests of student progress vary from state to state and can change over time if states modify their tests. The Stanford Education Data Archive has standardized these to be nationally comparable.

**Subgroups:** The Stanford Education Data Archive has adjusted scores by race or ethnicity and gender, and ED Facts reports proficiency levels based on raw data by race or ethnicity, gender, disability status, limited English proficiency status, homeless status, migrant status, and economically disadvantaged status.

**Limitations:** Literacy performance reported in “levels” is sensitive to movement in and out of a community over time. States vary in the literacy components included in their state assessments, the rigor of their assessments, and their assessment exemptions.

**Alternatives:** The Working Group also considered several other metrics including per pupil expenditures, chronic absenteeism, and adjusted cohort graduation rates to measure school quality. Per pupil expenditures equates the resources available to students with school quality based on the well-established finding that resources per pupil is correlated with student achievement (Ladd and Loeb 2013). However, money is an imperfect indicator of quality, because certain districts may have higher costs than others, and some may spend money on activities that are better connected to student achievement and well-being than others. Like many school quality metrics that depend on school-based reporting, chronic absenteeism is “gameable.” For example, misleading measures can result from excluding suspensions or excused absences, from decisions about how to deal with students who miss individual classes but not entire days, or from simple measurement or reporting error. And graduation rates are subject to errors, inadvertent or deliberate, in determining the number of students who could graduate (the denominator for computing graduation rates). For example, failure to distinguish between students who transfer (or other exclusions) and who drop out can bias the numbers.

## PREDICTOR: STUDENT POVERTY CONCENTRATION

**Metric:** *Share of students attending high-poverty schools, by student race or ethnicity*

This set of metrics is constructed separately for each racial or ethnic group and reports the share of students attending schools in which over 40 percent of the student body receives free or reduced-price meals.

**Validity:** This set of metrics captures the interaction of economic and racial segregation of schools and therefore reveals whether (and to what degree) students of color are more likely than white students to attend schools with large concentrations of classmates experiencing poverty. Higher concentrations of students experiencing poverty are associated with worse achievement for all the students in a school.

**Availability:** This set of metrics can be constructed using information from the National Center for Education Statistics Common Core of Data. Those data come from an annual census of schools

reporting total enrollment by race across each grade including a measure of “economic disadvantage” for students based on their eligibility for free or reduced-price school meals, which is used as a proxy for poverty.

**Frequency:** These metrics can be computed annually.

**Geography:** These metrics can be computed at the school district, city, and county levels. Because this metric reflects the structural conditions facing a city or county’s students, changes in the metric that may result from people moving into or out of a jurisdiction may represent changes to those structural conditions.

**Consistency:** These metrics can be consistently defined and calculated for all cities and counties.

**Subgroups:** These metrics are by definition disaggregated by race or ethnicity.

**Limitations:** Some school districts convey eligibility to free and reduced-price school meals using community eligibility standards that can apply to clusters of schools as well as entire districts. For example, if a cluster of schools serve a set of low-income neighborhoods, and across the schools, 40 percent or more of the students qualify for free and reduced-price meals, the district can provide meals to all students at all schools in the cluster even if one of the schools wouldn’t meet the threshold on its own. Consequently, this metric may overstate student poverty exposure in those districts. Fortunately, the data sources for this metric allow us to identify the districts using this approach, and findings can be interpreted with this in mind. Further, this measure can be sensitive to the overall racial and ethnic composition of a district, city, or county and its overall poverty rate. Therefore, changes in this metric need to be assessed with reference to the area’s overall racial or ethnic composition. Further, although this metric can be constructed annually, it may take many years to observe appreciable changes.

**Alternatives:** The Working Group also considered other student segregation indices that focus either on income (people with income above or below the federal poverty level) or on race or ethnicity, but they concluded that this set of metrics effectively homes in on differences in economic segregation by race and ethnicity.

## PREDICTOR: COLLEGE READINESS

**Metric:** *Share of 19- and 20-year-olds with a high school degree*

This metric is the ratio of the number 19- and 20-year olds with a high school degree in a given jurisdiction to the total number of 19- and 20-year olds in the jurisdiction.

**Validity:** Earning a high school degree is an important prerequisite for pursuing additional schooling, and although not all high school graduates are ready to enroll in college, high school completion is a well-understood and widely used measure of educational attainment. Data on educational attainment are collected in a variety of federal surveys.

**Availability:** Data on educational attainment are available annually from the ACS.

**Frequency:** The data are collected annually. For subgroup analyses for less populated areas, it may be necessary to pool multiple years of data to obtain reliable estimates.

**Geography:** Data are available at the county and metro levels.

**Consistency:** Information pertaining to educational attainment in general and on high school graduation, in particular, is measured the same way across all geographies in the same year in the ACS. Changes to the ACS in the future could influence comparisons over time.

**Subgroups:** The data can be broken down by race or ethnicity, gender, and other demographic factors. For less populous areas and for certain demographic groups, several years of data may need to be pooled to provide reliable estimates.

**Limitations:** Young adults moving in and out of an area can influence this measure.

**Alternatives:** The Working Group also considered more specific measures of college readiness beyond simply earning a high school degree, including 11th grade academic assessments and student grade point averages, but not all states assess academic achievement in 11th grade, and approaches to grading vary considerably even within districts. As such, the Working Group settled on this very broad metric for both its relevance and consistency.

## Work

### PREDICTOR: EMPLOYMENT

**Metric:** *Employment-to-population ratio for adults ages 25 to 54*

This metric is the ratio of the number of employed adults ages 25 to 54 in a given jurisdiction to the total number of adults in that age range living there.

**Validity:** Employment captures what share of adults in a jurisdiction are engaging in work for pay. The employment-to-population ratio (EP) is a standard labor market metric reported monthly by the Bureau



of Labor Statistics (BLS) and based on the Current Population Survey. The Working Group recommends applying the methodology used to compute the EP to similar data collected in the ACS.

**Availability:** Data on employment are available from the ACS.

**Frequency:** The data are collected annually. For subgroup analyses for less populated areas, it may be necessary to pool multiple years of data to obtain reliable estimates.

**Geography:** Data are available at the county and metro levels.

**Consistency:** Information on employment and age is measured the same way across all geographies in the same year in the ACS. It is highly unlikely that the ACS will change how it captures employment in the future.

**Subgroups:** The data can be broken down by race or ethnicity, gender, and other demographic factors. For less populous areas and for certain demographic groups, several years of data may need to be pooled to provide reliable estimates.

**Limitations:** The BLS reports the official EP monthly for those age 16 and up as well those age 20 and up. As such, the BLS-reported measure could be lower for jurisdictions that have many young adults attending college rather than working as well as for those that have many retirees. Consequently, for our purposes, we recommend computing the EP for adults ages 25 to 54 using data from the ACS rather than relying on BLS reports. Even when using ACS data, the EP can drop if unemployed people leave an area or if working people move in.

**Alternatives:** The Working Group also considered the official unemployment rate, which is the ratio of all unemployed people to all people in the labor force (to be considered “in the labor force,” a person must either be working or actively looking for work). The group also considered an alternative version of the unemployment rate that includes individuals who are marginally attached to work and the labor force. The unemployment rate, however measured, can rise for “good” reasons (at least in the short term) if people enter the labor force in large numbers because they feel their chances of finding work are rising.

#### **PREDICTOR: ACCESS TO JOBS PAYING A LIVING WAGE**

**Metric: *Ratio of pay on the average job to the cost of living***

This metric shows what a “typical” job pays relative to the cost of living in a particular area. The metric is computed by dividing the average earnings from the median job in an area by the cost of meeting a family of four’s basic expenses in that area.

**Validity:** Jurisdictions in which typical jobs pay a greater share of the local cost of living provide more opportunities for their residents to move out of poverty. Employer reported data on wages paid are a reliable indicator of what jobs pay, and our metric is based on data collected and disseminated by the BLS. Data on what it costs to meet basic expenses requires detailed studies of the cost of food, clothing, shelter, health care, and work-related expenses for each jurisdiction. We rely on the work of well-regarded scholars at the Massachusetts Institute of Technology (MIT) to obtain estimates of the local cost of living.

**Availability:** Data on wages are available quarterly from the BLS's Quarterly Census of Employment and Wages, and estimates of the cost of meeting a family's basic needs, referred to a living wage, are available annually from MIT.

**Frequency:** The composite data can be computed annually.

**Geography:** Data on wages are available for the 365 largest counties in the US at the county and metro levels. About 75 percent of the US population lives in the 365 largest counties. Data on living wages are available by county.

**Consistency:** Information on weekly wages is collected in a consistent fashion by the BLS. MIT uses a consistent methodology to compute living wages by county.

**Subgroups:** The data cannot be broken down into subgroups because they describe jobs rather than the people in them.

**Limitations:** The measure can only be computed for the 365 largest counties and cannot be broken down into subgroups. The measure relies on MIT's computations of "living wages."

**Alternatives:** The Working Group debated trying to measure access to "good" jobs but concluded that the attributes of a good job may vary depending on the needs of the individual. For example, a night shift might be desirable for some workers. Furthermore, a focus on good jobs could downplay the importance of career pathways, where the path to get to good job may require experience in less-desirable jobs. Also, obtaining consistent data on job attributes such as nonwage benefits, promotion opportunities, and work scheduling practices is challenging, and such data likely could not be gathered for all industries and occupations.

# Planning and Assessing Local Action: Using the Mobility Metrics

Because they encompass a broad set of local conditions critical to increasing long-term mobility, the suite of mobility metrics provide a powerful tool to help local decisionmakers, especially city and county leaders, prioritize policy areas in need of attention and assess progress over time in creating conditions that support rather than undermine residents' mobility from poverty. The Working Group recommended the predictors and metrics both on the strength of evidence linking them to upward mobility and on their relevance to local action: by focusing on locally appropriate strategies to improve results on the metrics over the short and intermediate term, decisionmakers can boost long-term upward mobility for residents of their communities.

Nevertheless, much remains to be learned about the mobility metrics, how well they capture the range of factors that influence long-term mobility, and how communities could most effectively apply them to catalyze action and drive change. We welcome informed debate about the framework introduced here and anticipate that over the coming years, ongoing scholarship will strengthen the selection of key predictors and metrics.

A next phase of work will “beta test” the mobility metrics with a small number of cities and counties across the US. Through a technical assistance partnership with participating governments, researchers will calculate the community's mobility metrics, plan and conduct surveys for metrics that require new data collection, work with community stakeholders to prioritize action areas, and assemble evidence to help identify policy options, interventions, and investments that can move the needle on improving outcomes. Throughout this process, researchers will assess how the metrics can be integrated into local government decisions, including with existing metrics-focused and performance management efforts. Based on lessons learned from the beta testing process, Urban will refine the mobility metrics and develop an implementation guide to help a larger cohort of communities apply the metrics as part of a formal pilot and evaluation.

## Policy and Program Levers

Although metrics can inform and guide decisions, making real change will depend on local leaders carefully assessing the unique needs, challenges, and assets of their communities to understand what

conditions contribute to the level and trend in those metrics, develop a strategy with key stakeholders and mobilize to take action, and implement policies and programs to improve outcomes. Depending on a community's political context and the particular policy domains in need of attention, the coalition and strategies needed might vary significantly: advocates, the business community, local foundations, social service nonprofits, and community organizations will all likely need seats at the table to enact sustainable change. Many of the mobility predictors are influenced by several levels of government policy; by the private, nonprofit, and philanthropic sectors; and by broader economic and social conditions. But in each case, local leaders have tools that can improve outcomes for their residents.

Below, we illustrate some of the policy tools and levers available to local governments to improve results for several of the mobility predictors, which were recommended to represent a range of mobility dimensions and drivers. Links in the text provide specific examples of places using particular strategies.

## Affordable Housing

Many American cities are experiencing growing **housing affordability** crises. In analyzing its mobility trends, a city might see that the *share of affordable and available housing units to households with low and very low income levels* is declining sharply, even compared with peer communities. This may also lead to increased **housing instability and homelessness** as measured by the *number of public school children who are ever homeless during the school year*.

Housing policy is complex, and funding and policy levers for improving affordability are split across the federal, state, and local levels. Moreover, strategies to improve housing affordability depend heavily on local market and political conditions. When considering options, local leaders should assess key contexts for their community. To increase access to housing affordability, policy and program levers that city leaders might consider include the following:

- **Reform local zoning and building codes.** Communities can work to reform zoning and building codes to shorten the timeline for delivering new housing, allow or encourage more multifamily and small-lot housing,<sup>14</sup> reduce parking requirements,<sup>15</sup> and reduce the cost of building new housing.
- **Establish housing trust funds.** [Housing trust funds](#) can increase dedicated local resources that can be allocated flexibly to support housing affordability, allowing near-term results in preserving existing affordable units, supporting owner rehab of homes, and providing

emergency rental assistance for families, while filling financing gaps for new construction to reduce the crisis in the future.

- **Create interagency councils.** Interagency councils can be developed that use data-driven strategies to align federal, state, and local resources and powers to preserve affordable rental housing, especially in neighborhoods that are connected to services that support residents' mobility (Schwartz et al. 2016).
- **Review rental assistance priorities.** The local housing authority can be charged with [reviewing rental assistance priorities](#) to ensure more families are both served and connected with upward mobility programs.
- **Develop local vouchers and rent subsidies.** [These subsidies](#) can reduce the waiting list for federal Housing Choice Vouchers. Such a program might also include housing search support and landlord outreach to help households access high-opportunity neighborhoods. This could be an activity financed through the housing trust fund.
- **Enact property tax abatements.** Communities offer property tax abatements<sup>16</sup> for developers that dedicate a certain percentage of units for low- or moderate-income households, including voucher holders.
- **Consider rent control or stabilization.** Rent control or stabilization policies<sup>17</sup> could reduce the risk of displacement for residents in hot housing markets by limiting how much a landlord can increase rent annually.

As the city takes action to increase housing affordability, keep in mind that broader structural barriers can prevent low-income people from accessing and staying in affordable housing. In particular, housing discrimination and long-standing patterns of segregation often inhibit access to neighborhoods of opportunity, and gentrification in hot real estate markets can push out residents with lower incomes. Therefore, the city should monitor the **racial diversity and economic inclusion** mobility predictors along with the affordable housing predictors. The city must take care to analyze housing affordability at the neighborhood level to ensure that its housing policies do not undermine progress on other key predictors of upward mobility.

## Exposure to Overly Punitive Policing

Striking the balance between actively intervening to reduce crime and increase community safety and minimizing the burdens of **overly punitive policing** on community residents (as described earlier in this

report in *Boosting Upward Mobility: A Supporting Framework*) is challenging. The best way of doing so will depend on the local practices and context, which local leaders should assess carefully in partnership with residents. To reduce the incidence and consequences of overly punitive policing, policy and program levers that city leaders might consider include the following:

- **Invest in nonpolice safety interventions.** Responding to real safety challenges with less punitive policing requires developing alternative capacity for meeting community safety needs. An example of this kind of capacity is the [Los Angeles Mayor’s Office of Gang Reduction and Youth Development](#), which delivers prevention and intervention services in traditionally high-violence areas of the city, with clearly specified criteria for its service levels, detailed program models for contract providers to follow, and a common data system for tracking services. It also provides community-based intervention workers with training and support to engage youth in ways that law enforcement and justice practitioners cannot. Other nonpolice ways of improving safety could include enriching spaces for youth (such as community recreation centers), repurposing youth prisons (Love et al. 2018), and expanding positive youth development programs (Heller et al. 2015).
- **Moderate responses to low-level offenses.** Communities around the country are developing ways to reduce the intensity of enforcement and sanctioning for low-level offenses, thereby reducing their negative impacts on youth and adults. This can include [decriminalizing](#) certain forms of conduct,<sup>18</sup> or reclassifying offenses, as California did with the passage of Proposition 47, which made several drug possession and larceny felonies into misdemeanors, with minimal crime impacts (Bird et al. 2018).
- **Minimize the use of stop and frisk.** New York City radically scaled back its use of this tactic, greatly lowering police stops of youth of color and reducing risk of arrest and other negative outcomes (NYCLU 2019). Crime rates in New York City continued to fall following this change in practice. The practice of stop and frisk alone has a negative impact on the behaviors and attitudes of youth (Johnson 2015) and has been rife with discrimination based on race and location (i.e., public housing; see Goel, Rao, and Shroff 2016).
- **Ensure school discipline policies minimize the possibility of arrest.** School discipline can be the trigger for juvenile arrests, either from arrests occurring directly in schools or through zero-tolerance approaches that increase expulsions, which increase the risk of justice involvement. Localities can commit to reducing their use of arrest in schools<sup>19</sup> in order to reduce the number of youth detained and arrested<sup>20</sup> for misbehavior at schools and reduce the use of out-of-school suspensions and expulsions to reduce the chances of youth running afoul of the justice system.

- **Eliminate or reduce fees and fines.** Involvement in the juvenile and adult justice systems can lead to the imposition of financial obligations, which can be burdensome and destabilizing, particularly given the intersection of justice involvement and poverty. Local leaders can consider following the lead of San Francisco County,<sup>21</sup> which abolished all justice fees imposed at the county’s discretion.

As a city moves to address overly punitive policing, it is important to acknowledge and address systemic factors that contribute to differential burdens. Long-standing patterns of **racial and economic segregation and discrimination** impede mobility while also affecting who is exposed to both lower levels of safety and greater likelihood of potentially harmful contact with the justice system.

### Access to Living-Wage Jobs

For employment to serve as a stepping stone for upward mobility, jobs have to pay enough for families to meet their basic needs for food, clothing, shelter, health care, and work-related expenses. The pay level that allows workers to meet those needs is known as the living wage, and it varies by location. The more *jobs paying a living wage* there are in a community, the more likely it is for people to find employment that lifts them out of poverty and conveys the dignity associated with supporting themselves and their families. Adequately paying jobs can improve **residential stability**, nutritional intake, and **health** with the associated and reinforcing benefits of greater upward mobility.

Local policymakers can avail themselves of a host of options for increasing their residents’ access to living-wage jobs:

- **Recognize “high-road” employers.** High-road employers offer competitive wages along with nonwage benefits, opportunities for advancement, and secure work schedules (Osterman 2017). Cities and counties can encourage employers to take the high road by creating local awards programs to recognize firms with employee-supporting business practices.<sup>22</sup>
- **Implement workforce development strategies.** Jurisdictions can take steps to attract higher-wage employers by adopting workforce development strategies to ensure that those employers can find workers with the skills and certifications they need, such as workforce development partnerships in [Detroit](#) and [Wisconsin](#) (Armstrong 2018).
- **Increase the local minimum wage.** Recent experiences<sup>23</sup> with minimum wage increases in San Francisco,<sup>24</sup> Seattle,<sup>25</sup> and elsewhere suggest that they lead to higher earnings among minimum-wage workers and workers just a bit higher up on the wage scale, without substantial negative effects on employment levels.

- **Pass living-wage ordinances.** These policies<sup>26</sup> require firms doing business with a city or county to certify that their lowest-paid workers earn a living wage. Although those ordinances do not apply to all workers in a jurisdiction, they raise the wages of some workers and put upward pressure on the wages that all employers in the area must pay to attract and retain workers.
- **Reduce the cost of living for lower-income residents.** Strategies can include expanding the availability of affordable housing, reducing the cost of child care through expanded prekindergarten programs<sup>27</sup> and subsidized before- and after-school care,<sup>28</sup> and subsidizing public transportation or even making it free for some or all residents.<sup>29</sup>

## Belongingness

Local governments typically do not have a department or staff dedicated to promoting belongingness. But policymakers and program managers can reexamine and recalibrate how they deliver, manage, and assess essential services to individuals, families, and neighborhoods stigmatized by poverty to promote dignity and belonging. Strategies that facilitate belongingness can be relatively low cost, easy to implement, and highly effective. For example, research on how programs treat low income-workers seeking to claim their earned income tax credit benefits found that making simple changes in how they delivered the service, such as the demeanor of the staff and the location and layout of the of the tax preparation office, can lead to more people using the service and receiving a tax benefit (Edin, Shaefer, and Tach 2017). Further research shows that similar approaches of incorporating low-income people in the policy or program design and implementation can contribute to other positive community behaviors, such as increases in voting participation (Edin, Shaefer, and Tach 2017).

Below are a few strategies and examples where local governments have shifted how they work with people experiencing poverty and provide social services to help facilitate dignity and enhance feelings of belongingness:

- **Create inclusive and empowering narratives.** Communicating with respect, using culturally resonant narratives, and using the vehicles and mediums commonly available and used by people in poverty can reduce negative impacts and harmful stigma associated with people experiencing poverty.
- **Incorporate perspectives of people in poverty.** Local governments should include people receiving the support and services in the design and development of the policy or program and the methods and techniques for civic engagement, building on the practices of human-centered design.



- **Provide awareness and humility training.** Offer or require training for the leaders and staff who work with people in poverty. These programs often focus on developing listening and questioning skills with humility for what is not known. Program trainers should include people with a deep awareness and experience with the sources and circumstances of poverty.
- **Institutionalize practices that facilitate dignity.** Take formal actions to institutionalize these and other practices by establishing commissions, ordinances, executive orders, and coordinator positions that can coordinate, manage, train, and hold organizational staff accountable.
- **Measure the success of these efforts.** Establish standards and measures that can assess the effectiveness of these new policies and practices, iterate on these practices and policies with input from the community, and help hold leaders and staff accountable.

For example, the City of **San Francisco** selects locations close to where its homeless population live for various events, such as its public and nonprofit service provider “pop-up” as part of its [Project Homeless Connect](#) initiative. Goods and services are offered at no charge, including various medical services and screenings and personal care services such as haircuts, legal aid, and counseling. In **Seattle** the city reengineered how they engage and meet with the public so these activities were more responsive and accountable to the diverse communities and neighborhoods that constitute the city.<sup>30</sup> The city trained agencies on more inclusive and equitable resident engagement, required the Department of Neighborhoods to help departments develop community involvement plans, and established a citywide framework for community engagement (including the creation of the [Seattle Community Involvement Commission](#)). Seattle also centralized the delivery of communication and engagement by hiring a public involvement plan specialist who coordinates public engagement meetings and practices across multiple departments. And the City of **Evanston, Illinois**, created an Equity and Empowerment Department with a full-time coordinator to convene working groups, develop curricula, and train city staff on communication and engagement around structural racism.<sup>31</sup> Note that without an entity or formal vehicle to monitor, assess, and evaluate, many well-meaning policies and practices can inadvertently convey devaluing messages about how people are seen and their place in society, even when program staff are individually welcoming and inclusive.

Focusing on concepts of social connections and belongingness throughout the entire policy process—from design and adoption to implementation and evaluation—can help overcome the exclusion and barriers that people associated with marginalized groups can experience as part of the delivery of municipal and social services. When successful, policies should promote feelings of inclusion, efficacy, and dignity for individuals and communities.

## Political Participation

For power to serve as a stepping stone for upward mobility, residents need to be able to advocate for themselves in the places where they live and have enough influence to change circumstances to reflect their needs and desires. Power and autonomy can be exercised in many ways, such as volunteering in the community, working with and for nonprofits, or advocating on behalf of policy change, but the most widely available method is voting. And voting is most effective when leaders are responsive and accountable to the needs of the community. When the full diversity of the community is represented, the needs and concerns of underrepresented groups and people living in poverty are more likely to be acknowledged and addressed. When considering options, local stakeholders should assess state and local political and legal considerations. To increase individual and collective access to power, policy levers that local leaders might consider include the following:

- **Hold concurrent elections to increase turnout.** Turnout in local elections not only tends to be lower than for statewide or national elections, but who shows up at the polls tends to be less representative of local populations. In 2015, the State of California [passed SB 415](#), which mandates that communities hold local elections on the same dates as statewide elections in places with relatively lower local turnout. Early evidence suggests the change both increased turnout and increased the number of elected officials from underrepresented groups.<sup>32</sup>
- **Improve the information voters receive on ballots.** Often, names and party affiliation are the only information provided on the ballot when people vote in local elections, and for primary elections at all levels, party is not a useful signifier of policy differences as the candidates frequently have the same party affiliation. Absent more information, voters tend to discriminate against people of color based on name (Crowder-Meyer, Gadarian, and Trounstine 2020). Providing even a small amount of information on the ballot itself, such as a candidate's education or current occupation, is enough to eliminate the bias based on presumed demographics name (Crowder-Meyer, Gadarian, and Trounstine 2020).
- **Strengthen representativeness in local government through district elections.** Citywide elections can disadvantage underrepresented residents in places that are segregated or where underrepresented groups are a minority of the population. Changing from citywide to district or ward elections can strengthen resident voice and improve representativeness of city government (Crowder-Meyer, Gadarian, and Trounstine 2015; Trounstine and Valdinì 2008). In 2013, Seattle changed from citywide elections to district elections in part to make the council more accessible to wider body of residents.<sup>33</sup> And by 2015, the council has elected its first Latina councilwoman, who has since become [council president](#).

- **Reduce barriers to participation.** Many additional barriers can discourage residents from becoming engaged in local governance, including registration rules, access to polling places, and residents feeling ill-equipped and ill-informed to weigh in on local matters. On-site registration, early voting, and conveniently placed polling places with hours that can accommodate work and school schedules can all aid turnout.

As cities and localities move to increase resident power and political engagement, it is important to acknowledge the local and regional context and history of access to the voting booth. People of color have historically been denied access to voting, and although most Americans now have the right to vote, many are disenfranchised because of their experience in the criminal justice system. Furthermore, immigrants who are not yet citizens largely do not have the right to vote in any election, and local leaders should be thoughtful about ways to engage them and incorporate their needs as residents in their communities.

## A Mobility Metrics Dashboard

If future phases of work piloting the mobility metrics demonstrate their effectiveness in improving short- and intermediate-term predictors of mobility, a long-term expansion of this effort might include a national dashboard that allows communities around the country to access and explore their metrics through a clear, user-friendly website. We envision that local leaders would use the dashboard in three primary ways:

- **To compare themselves to other places and set priorities.** Equipped with evidence about their community's current metrics and recent trends, leaders could compare themselves with other communities for each metric. This comparison would allow leaders to prioritize domains where they lag relative to peer communities identified through criteria such as region, size, economic conditions, and demographics. By knowing which peers are doing better at promoting particular mobility outcomes, they could ask critical questions: what domains of action should we prioritize? What are other communities doing that we aren't? What can we learn from the policies and programs they use? Communities would also be able to compare themselves with state and national values for each metric. These comparisons to broader trendlines would help leaders understand whether changes in their community are specific to them or driven by broader macroeconomic forces.

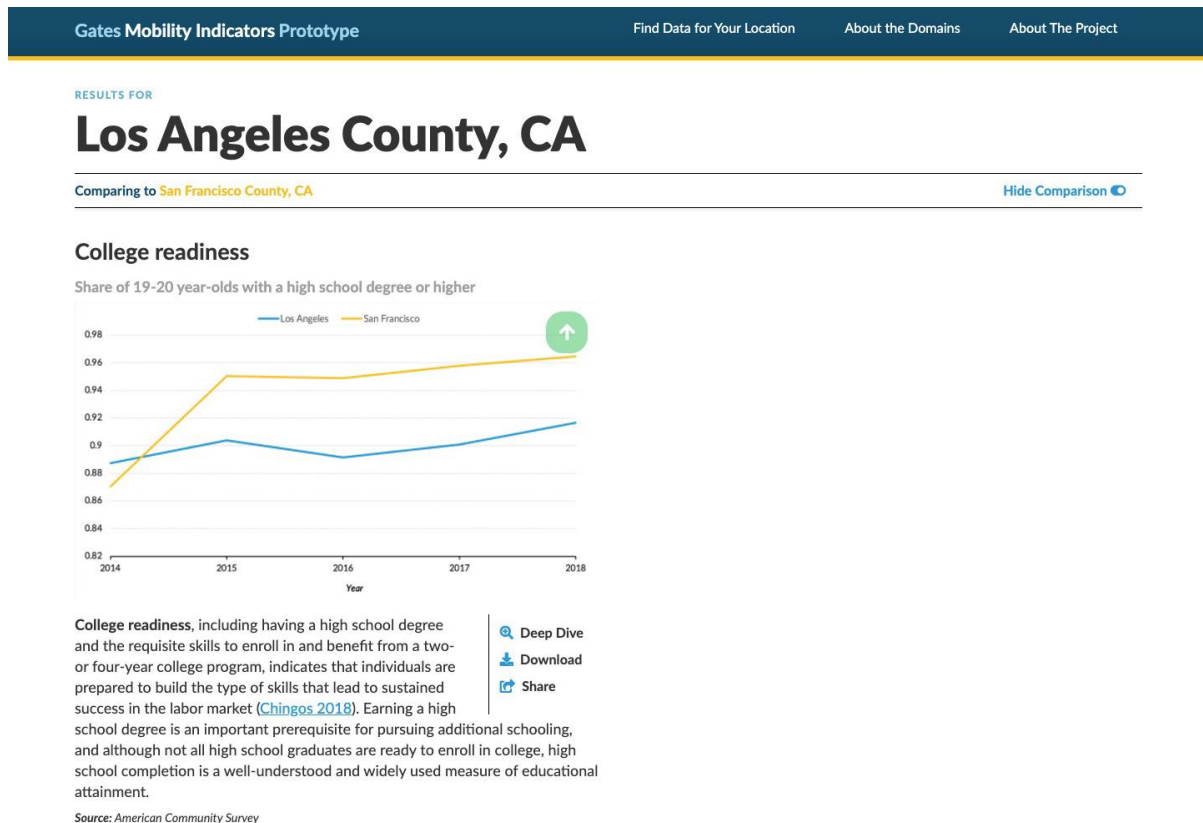
FIGURE 1  
Dashboard Prototype



- To assess their progress over time.** Each metric could include a trend line for how it has changed over recent years; the specific number of years would depend on data availability for the particular metric. By seeing which metrics are improving, worsening, or stagnating, leaders would better understand areas of strength and weakness in how their communities facilitate the outcomes that foster mobility from poverty. And because the descriptions for each predictor would discuss policy and program levers known to improve the outcome,

decisionmakers would have an initial sense of the tools they might use to improve their trajectory. As noted throughout this report, the dashboard would need to include careful warnings that users should take care to understand the context for changes in metrics over time, which could reflect actions by community institutions as well as by individual residents and can also be affected by changes in composition from residential movement in and out of communities.

**FIGURE 2**  
**Dashboard Prototype**



- **To dig deeper into outcomes for different demographic groups or geographic subareas.** Community-level indicators only tell part of the story. To understand how their communities are promoting mobility, leaders must be able to see how outcomes vary by race or ethnicity, gender, age, and geographic subareas. This would enable leaders to recognize and address inequities and variations in how different groups experience mobility. Depending on the data

available, certain metrics would include deep-dive breakouts by demographic subgroups and by smaller geographies.

By presenting all dimensions, predictors, and metrics collectively in a tool for local decisionmakers, the dashboard would reinforce the importance of the complete set of metrics to comprehensively represent mobility as defined by the Partnership. Although some metrics, particularly those measuring power, autonomy, and belonging, may be harder to track than others, they reflect important drivers of mobility that should be addressed by local actors. Choosing only the metrics of greatest interest, the ones that are easiest to measure, or the ones that are politically easier to discuss and advance will not fully address long-term mobility for a city's residents.

Although most metrics would be populated nationally based on available data, the dashboard would also include instructions for how communities can collect and submit information for the metrics requiring original survey data. This original data collection will be a key consideration for implementation of the mobility metrics because it requires significant resources and a local partner with technical knowledge of survey methodology and administration.

Some communities, including those already using metrics to plan and make decisions, might also choose to add to the suite of mobility metrics developed here. And the dashboard could include mechanisms for supplementing the core set of mobility metrics with supplemental metrics of importance locally.

In summary, local leaders can create and bolster conditions that substantially boost upward mobility for children, youth, and adults. To build public will and achieve meaningful progress, communities need actionable metrics they can use to assess current conditions and monitor their progress. Based on the deliberations of our scholarly Working Group, this report provides a concise set of evidence-based metrics to monitor progress in the short to intermediate term on key local drivers of mobility from poverty. Data alone cannot boost mobility from poverty, but these metrics can help local leaders establish priorities, set targets, catalyze action, change policies and practices, and assess their progress over time. The metrics will be refined through both ongoing scholarship and on-the-ground testing.

# Appendix: Survey Questions

Four predictors use metrics that require new data collection. The survey questions for those metrics are presented here.

## PREDICTOR: OVERALL HEALTH

**Metric:** *Share of adults who rate their and their children’s health as good or excellent*

This metric is measured through one simple, reliable, and frequently used question that asks “How would you rate your health?” and has respondents answer along a five-point Likert scale of “very poor,” “poor,” “fair,” “good,” and “excellent” (Eriksson, Undén, and Elofsson 2001). The share of people who respond “good” or “excellent” constitutes this metric.

## PREDICTOR: BELONGINGNESS

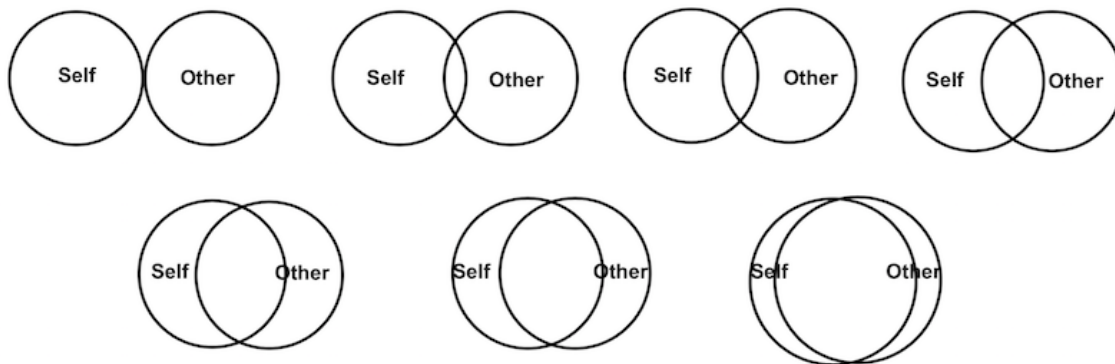
**Metric:** *Inclusion of Other in the Self scale*

The Inclusion of Other in the Self scale shows respondents seven pairs of circles that range from just touching to almost completely overlapping (figure A.1). One circle in each pair is identified as “self” and the second circle in each pair is labeled “other.” Respondents choose one of the seven pairs to answer the question, “Which picture best describes your relationship with [this person/group]?” The researcher identifies what the person/group for the “other” is being represented. The other group can vary by age category, such as peers at school for adolescents and coworkers for adults.

FIGURE A1

### Inclusion of Other in the Self (IOS) Image

*Image used for the IOS scale*



Source: “Inclusion of Other in the Self (IOS) Scale,” Stanford SPARQtools, accessed January 24, 2020, <http://sparqtools.org/mobility-measure/inclusion-of-other-in-the-self-ios-scale/#all-survey-questions>.

## PREDICTOR: SOCIAL CAPITAL

### **Metric: Social Capital Community Benchmark Survey**

The 2000 Social Capital Community Benchmark Survey is a widely recognized survey and resource for measuring social capital (Aguilera 2002; Helliwell and Putnam 2004; Kim and Kawachi 2006).<sup>34</sup>

However, when researchers use questions from the survey, they typically use a large array. Given that new data collection would be necessary, researchers and analysts collecting this data at the local level would need to minimize the number of questions used. The following is a selection of questions pulled from the Social Capital Community Benchmark Survey that draw upon the most important elements of generalized social capital, bonding social capital, and bridging social capital.

#### *Generalized Social Capital*

- Participation in local organizations
  - » [Q33]: Have you been involved in the past 12 months with this kind of group?
    - » Count responding “yes” to participation in the following organizations: church or religious group; adult sports league, a youth organization; parents’ organization (PTO); veteran’s group, block association, organization for senior citizens; charitable or social welfare organization; service or fraternal organization; ethnic or civil rights organization; local chapters of labor union; public interest or political group; literary, art, music or dancing group; garden club or hobby group; or any other kind of local club or organization.
- Religious attendance
  - » [Q31]: How often do you attend religious services?
- Public safety
  - » [39D]: Thinking about your own life, is public safety an obstacle or barrier that make it difficult for your to be as involved in your community as you would like?

#### *Bonding Social Capital*

- Number of friends
  - » [Q53]: About how many close friends do you have these days?
- Reliance on neighbors



- » [Q52]: In the past two years, have you worked with others to get people in your immediate neighborhood to work together to fix or improve something?

#### *Bridging Social Capital*

- Weak ties (Note: this question is not found in the 2000 Social Capital Community Benchmark Survey but is a well-understood measure of the benefits of bridging social capital [Granovetter 1995]).
  - » How many people could you turn to or ask to help you find a new job?

#### *Racial Diversity of Friends*

- » [56G]: How many times in the past 12 months have you been in the home of friend of a different race or had them in your home?

### **PREDICTOR: EXPOSURE TO TRAUMA**

#### ***Metric: Adverse Childhood Experiences scale***

The ACE Scale was developed by Felitti and colleagues (1998) and includes the following 17 questions (as part of 7 broader questions):

1. While you were growing up during your first 18 years of life, did a parent or other adult in the household
  - a. Often or very often swear at, insult, or put you down?
  - b. Often or very often act in a way that made you afraid that you would be physically hurt?
2. While you were growing up during your first 18 years of life, did a parent or other adult in the household
  - c. Often or very often push, grab, shove, or slap you?
  - d. Often or very often hit you so hard that you had marks or were injured?
3. While you were growing up during your first 18 years of life, did an adult or person at least five years older ever
  - e. Touch or fondle you in a sexual way?
  - f. Have you touch their body in a sexual way?
  - g. Attempt oral, anal, or vaginal intercourse with you?
  - h. Actually have oral, anal, or vaginal intercourse with you?

4. While you were growing up during your first 18 years of life, did you
  - i. Live with anyone who was a problem drinker or alcoholic?
  - j. Live with anyone who used street drugs?
  
5. While you were growing up during your first 18 years of life,
  - k. Was a household member depressed or mentally ill?
  - l. Did a household member attempt suicide?
  
6. While you were growing up during your first 18 years of life, was your mother (or stepmother)
  - m. Sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at her?
  - n. Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?
  - o. Ever repeatedly hit over at least a few minutes?
  - p. Ever threatened with, or hurt by, a knife or gun?
  
7. While you were growing up during your first 18 years of life,
  - q. Did a household member go to prison?

# Notes

- <sup>1</sup> Lawrence R. Samuel, “The Psychology of the American Dream: Why Do We Believe So Fervently in the American Dream?” *Psychology Today* (blog), October 7, 2016, <https://www.psychologytoday.com/us/blog/psychology-yesterday/201610/the-psychology-the-american-dream>.
- <sup>2</sup> From an unpublished Mobility Metrics Working Group charter.
- <sup>3</sup> Monarrez, Tomas, Christina Baird, Dan Wood, Elizabeth Forney, Alexandra Tilsley, and Allison Feldman, “Segregated Neighborhoods, Segregated Schools?” Urban Institute, November 28, 2018, <https://www.urban.org/features/segregated-neighborhoods-segregated-schools>.
- <sup>4</sup> Reed Jordan, “High-Poverty Schools Undermine Education for Children of Color,” *Urban Wire* (blog), Urban Institute, May 19, 2015, <https://www.urban.org/urban-wire/high-poverty-schools-undermine-education-children-color>.
- <sup>5</sup> “A profile of the working poor, 2017,” US Bureau of Labor Statistics, accessed January 27, 2020, <https://www.bls.gov/opub/reports/working-poor/2017/home.htm>.
- <sup>6</sup> “Debt in America: An Interactive Map,” Urban Institute, last updated December 17, 2019, [https://apps.urban.org/features/debt-interactive-map/?type=overall&variable=pct\\_debt\\_collections](https://apps.urban.org/features/debt-interactive-map/?type=overall&variable=pct_debt_collections).
- <sup>7</sup> “Debt in America: An Interactive Map,” Urban Institute, accessed January 29, 2020, [https://apps.urban.org/features/debt-interactive-map/?type=overall&variable=pct\\_debt\\_collections&state=17&county=17031](https://apps.urban.org/features/debt-interactive-map/?type=overall&variable=pct_debt_collections&state=17&county=17031).
- <sup>8</sup> See “National Asset Scorecard for Communities of Color,” Rhodes Information Initiative at Duke University, accessed March 27, 2020, <https://bigdata.duke.edu/projects/national-asset-scorecard-communities-color>, as well as reports on the Color of Wealth from the different cities, such as the *Color of Wealth in the Nation’s Capital* (Kijakazi et al. 2016).
- <sup>9</sup> For HPSA scoring details, see “Shortage Designation Scoring Criteria,” Health Resources and Services Administration, accessed March 12, 2020, <https://bhw.hrsa.gov/shortage-designation/hpsa-process#scoreautohpsa>.
- <sup>10</sup> See also Xavier de Souza Briggs, “Bridging Networks, Social Capital, and Racial Segregation in America,” Faculty Research Working Paper RWP02-11, Harvard University John F. Kennedy School of Government, January 2003.
- <sup>11</sup> See documentation for the survey at “2000 Social Capital Community Benchmark Survey,” Cornell University Roper Center for Public Opinion Research, accessed March 27, 2020, <https://ropercenter.cornell.edu/featured-collections/2000-social-capital-community-benchmark-survey>.
- <sup>12</sup> “Uniform Crime Reporting (UCR) Program,” FBI Criminal Justice Information Services, accessed January 29, 2020, <https://www.fbi.gov/services/cjis/ucr/>.
- <sup>13</sup> See “Uniform Crime Reporting (UCR) Program,” FBI, accessed March 27, 2020, <https://www.fbi.gov/services/cjis/ucr>.
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