We're living through a crisis like nothing we've ever faced. COVID-19 struck quickly and paralyzed a country that was woefully underprepared for a global pandemic. Fortunately, our digital age provides us with volumes of accessible data that are being used by public health experts to shape our evolving response to the spread of the virus. But understanding the virus is just one part of responding to these challenging times. How quickly will day-to-day activity in Massachusetts resume, and what safety procedures will that take? Will we return to a society with rampant inequality and social divisions, or will we use this disruption of business as usual as an opportunity to redesign our systems so that they deliver better for everyone? To support planning for an inclusive recovery, we need to analyze other important metrics related to things like racial equity, housing stability, economic hardship and transportation.

That's where this project comes in. We're scanning the best available data sources to analyze how our communities have changed since the onset of the COVID-19 crisis in early March. (Since public health experts are covering the dynamics of the virus spread, we focus here mostly on non-virus-related areas.) We're looking at non-traditional sources like call volumes to the state's 211 social service call center and road traffic through Mass Pike toll gantries. None of them are perfect, and there's a lot of other data we wish we had. But taken together these sources paint a picture of how much our day-to-day lives have been altered across a few key domains, which we cover in this initial project launch:

- EQUITY ANALYSIS OF COVID-19 SPREAD BY CITY/TOWN (Updated 6/15/2020)
- HOUSING (Updated 6/15/2020)
- ECONOMIC IMPACTS (Updated 6/15/2020)
- DEMAND FOR SOCIAL ASSISTANCE PROGRAMS (Updated 6/15/2020)
- TRANSPORTATION AND MOBILITY PATTERNS (Updated 6/15/2020)
- CENSUS 2020 RESPONSE RATES (Updated 6/15/2020)

Boston Indicators is leading this research project in partnership with the Center for Housing Data at the Massachusetts Housing Partnership (MHP, leading the Housing section) and with contributions from the Economic and Public Policy Research team at the UMass Donahue Institute (contributing to the Equity Analysis of COVID-19 Spread by City/Town section).

Several themes have emerged from this first round of research. In places, these early themes also lead to big questions about how we as a Commonwealth will respond in the coming months and years, and we've flagged some of those below. We're eager to track these as we continue developing this project.

• The public health and economic dynamics of the crisis have exacerbated underlying inequities, with those already among society's most vulnerable hit hardest. In addition to disproportionately affecting those with pre-existing medical conditions (e.g., the elderly), the virus has been especially widespread in places like Chelsea, Lynn and Everett. These communities have more crowding in homes, larger communities of color and larger low-income communities than nearby cities and towns. They also have higher shares of frontline workers (e.g., nurses and grocery store clerks), who risk infection every day by providing essential services. Many of these cities are also "environmental justice" communities, which for years have suffered from worse air quality than their neighbors, a

- setting that appears to lead residents who do get infected to experience more severe symptoms.
- Weekly unemployment claims since early March have far outpaced any previous weekly levels on record. The largest job losses have been in sectors that paid lower wages even before the crisis hit (e.g., food service and retail), where people worked in face-to-face settings and could not as easily work remotely. This economic hardship has led to dramatic increases in people seeking public supports like the Supplemental Nutrition Assistance Program (SNAP) and Temporary Aid for Families with Dependent Children (TAFDC). Will state and federal government act further to help ensure that as we ramp back up, our recovery is as quick and equitable as possible?
- Massachusetts is among a handful of states that have shown a remarkable level of adherence to social distancing guidelines. While shelter-in-place orders continue, no one is eating at restaurants, MBTA ridership and road traffic are way down, and those who do not have to work on the frontlines are largely staying at home. This is as it should be. But what will these data look like when social activity is allowed to gradually phase back up? Will road traffic swell or will we follow safety procedures successful elsewhere in the world, allowing a full return to public transit before too long? How quickly will people feel comfortable patronizing our region's rich performing arts venues?
- Short-term housing responses have helped avoid an immediate wave of evictions and foreclosures in our housing market, but big threats linger on the horizon if housing assistance programs do not continue until the economy is on more solid footing. Will rents decline as the economic recession deepens, or will they stay relatively high if production of new housing grinds to a halt?

This is an ongoing research project that we plan to update regularly. We'll refresh charts and graphs with new data as they become available, we'll adjust the accompanying analysis as new trends emerge, and we'll add new sources of data as we find them useful. We know this initial launch includes only some of the relevant data points we need for understanding this crisis. As things progress, we'd love to hear from you about what information and data we might consider adding. We're all trying to figure this out together.