

UCLA

Reports

Title

Access to Opportunities Primer

Permalink

<https://escholarship.org/uc/item/98g9d5p4>

Authors

Bhusal, Samikchhya
Blumenberg, Evelyn
Brozen, Madeline

Publication Date

2021-01-25



Access to Opportunities Primer

January 2021

UCLA Lewis Center
for Regional Policy Studies

UCLA

Institute of
Transportation Studies



Table of Contents

Introduction	4
Definitions.....	4
Essential Destinations.....	5
Determinants of Access.....	8
Improvement Strategies.....	12
Change Over Time.....	13
Access vs. Mobility.....	14
Measurement Approaches.....	14
Related Concepts.....	16
Measurements in Practice.....	17
Where can I learn more?.....	18



determine access. Access is also shaped by history, intersectional identities, race, gender, nativity, age, disability status, and personal preferences and attitudes. We explore more about how access is determined later in this document.

Why is access important?

Geography, history, and where people live shape access to opportunity. Historically, housing policy segregated people and communities of color, leading to lasting disparities in where people could and do live. Led at first by white flight, the process of suburbanization now disperses many destinations — education, jobs, health care, and more. In contrast, rising housing prices in and near downtown areas puts housing cost and displacement pressure on people of color and pushes low-income families out to suburban areas. These areas are less well-served by quality transit service, meaning that those who face transportation disadvantage face greater hardship in suburban environments.

When destinations and services are close to home, accessing opportunities can be relatively easy. Most people, however, do not live near their workplaces or other frequented destinations. For some people, this distance is by choice. People choose to live further away from job centers for various reasons, like better school quality or larger housing. But for many others, especially low-income people of color, the distance between where they live and where they need to go is a constraint; it is not by choice or preference. They live where they can afford, where public transportation is available, or where they were historically allowed to live.

Transportation access is the mechanism by which people overcome the physical distances between where they live and where they need to go. Except for traveling for recreation, people rarely travel just to travel. People travel because they need to engage in and perform other activities — such as go to work, get medical care, go shopping, and see friends and family. Reliable transportation access allows people to access these various essential activities. If opportunities exist, but people do not have the transportation to get there, it is almost as if these opportunities do not exist.

What types of destinations are essential?

The role of transportation access plays out in many different ways. Improved transportation access enhances individuals’ ability to reach jobs, healthy food, schools, childcare, and health care. Consider, for example, access to food. When families cannot get to supermarkets because of transportation barriers, they may not be able to access nutritious food. Left with few alternatives, families may be forced to buy low-quality food from corner markets or fast-food restaurants.

Transportation access and employment further play out in terms of employer attitudes or perceptions. Employers may also screen job applicants with questions about whether they have a driver’s license, a vehicle, or access to reliable transportation even when job duties do not require driving (see **Figure 2**). Employers may be more likely to hire an applicant who owns an automobile regardless of the duties of the job. Some jobs — like driving for Uber or Lyft — require the use of a car. Other jobs — for example, home maintenance workers, home health aides — can require frequent travel to different places at different times, which is more easily accomplished by automobile than by public transit.

OUTBACK STEAKHOUSE HOURLY OUTBACKER EMPLOYMENT APPLICATION

Last Name		First Name		Middle Initial	Today's Date
Street/P.O. Box		Apt. #	City		State ZIP Code
Day Phone No.		Evening Phone No.		Social Security Number	Expected Hourly Pay Rate
Do you have reliable transportation to and from work during our hours of operation? <input type="radio"/> Yes <input type="radio"/> No		Are you applying for a full-time or part-time position? <input type="radio"/> Full-Time <input type="radio"/> Part-Time		How many hours per week do you want to work? Minimum _____ Maximum _____	
Position Applying For:					
<input type="radio"/> Server		<input type="radio"/> Host/Hostess		<input type="radio"/> Kitchen Prep	
<input type="radio"/> Bartender		<input type="radio"/> Cook/Line Cook		<input type="radio"/> Dishwasher <input type="radio"/> Busser	

Figure 2.
Example job application with screening question about transportation access

Finally, automobiles may improve job retention by helping workers consistently get to work on time. In contrast, reliance on public transit can be difficult for workers since employers may be intolerant of unexpected delays, which often occur. People may even potentially lose positions or be ineligible for promotions if they fail to consistently arrive at work on time. Public transit schedules, especially during overnight and mid-day hours, may not be well-matched to workers’ needs.

Health Care and Education

Lack of transportation is a well-documented barrier to healthcare access. When people do not have the transportation resources to get to doctor’s appointments, the results lead to missed appointments, delayed care, and missed medications, all of which can further compound negative health effects. Due to the spatial arrangement of health care providers, transportation access is a social determinant of health. Neighborhoods with existing transportation disparities also can be areas that are medically underserved, underscoring the critical importance of travel in accessing healthcare.

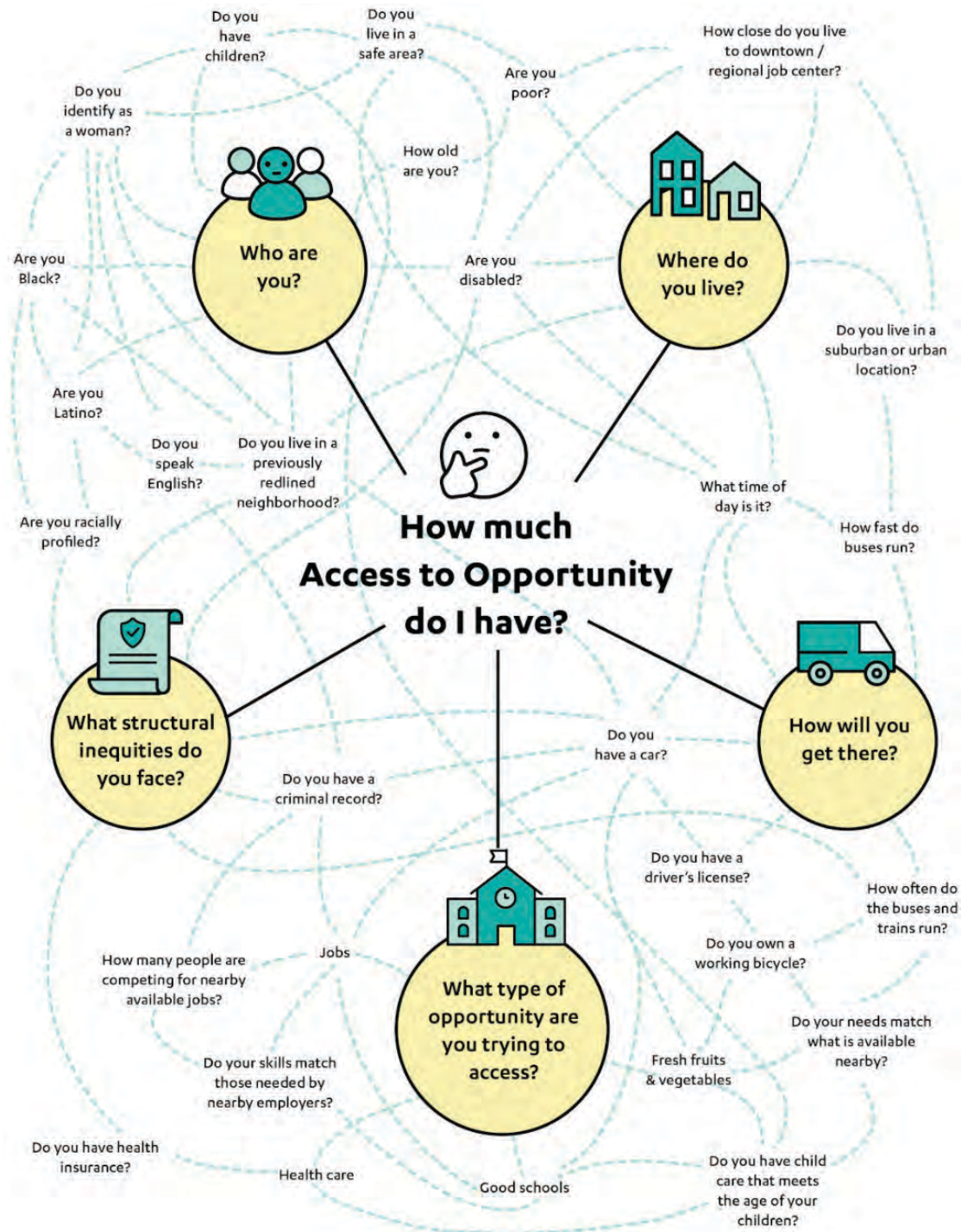


Figure 3. Schematic illustrating the connected determinants of access to opportunity

Like race and ethnicity, household income also creates access barriers. For example, transit availability does little to improve access to jobs for people who cannot afford transit fares. Additionally, income is positively associated with automobile ownership; consequently, low-income households have significantly lower automobile ownership rates than higher-income households. In Los Angeles County, low-income people have the least amount of access to automobiles in their household. Black people, recent immigrants, and older adults also have less access to cars than other population groups (see **Figure 4**). Moreover, low-income households tend to own older and less reliable vehicles than those of higher-income households, once again limiting their reliable access to opportunities.

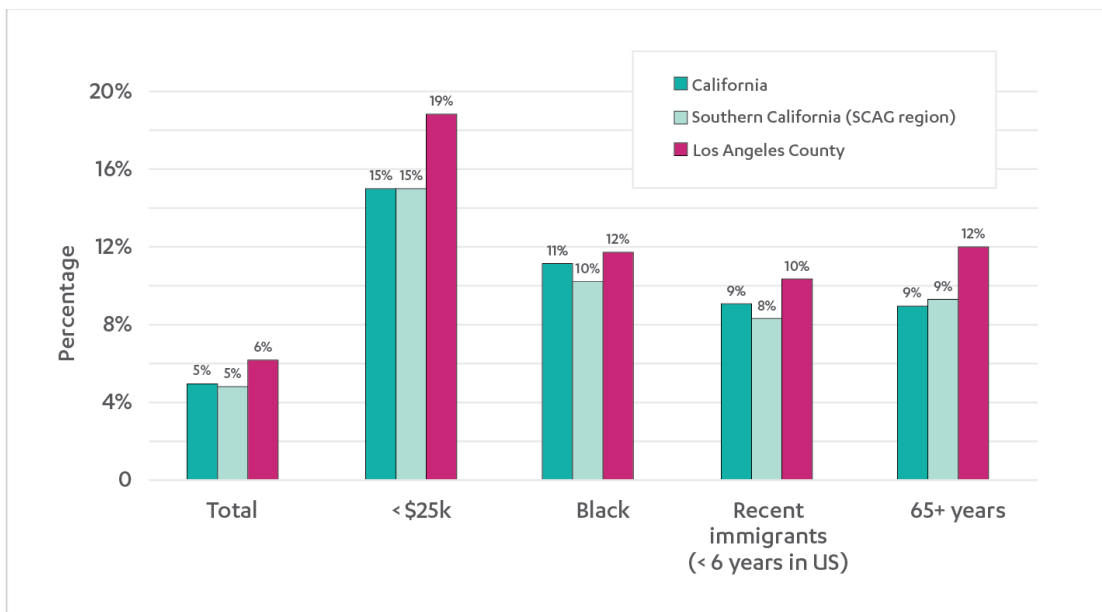


Figure 4. People in zero-vehicle households by region. Source: 2014-2018 American Community Survey, 5-year sample

Gender, age, and physical ability further determine accessibility. For example, frequent and reliable subway service may not be accessible to riders if they face physical barriers like unreliable elevators or fear sexual harassment. For older adults, small physical barriers, such as stepping down to the street if the bus does not pull up next to the curb, can impede access.

Public Policy and Planning

Public policies — such as zoning, land use, housing, criminal justice — influence all of the above factors and, in turn, determine individual and household access to opportunities. For example,

Traffic congestion is often used as a reason to restrict new development on the assumption that new development in built-up areas will make congestion worse. New residential or commercial development also positively contributes to increased access for people who will live there, in the case of residential development, or for those who already live there in other cases. Take affordable housing development, for example. Even in a congested area, people who live there gain access to proximate destinations and have greater accessibility compared to lower levels of access in other neighborhoods with fewer nearby destinations and lower levels of congestion.

Are elements of access changing over time?

Many of the underlying factors that affect access to opportunities are changing over time. How much these changes affect accessibility overall, however, is an ongoing debate among researchers. We know that congestion in American cities is increasing.

During the COVID-19 pandemic, accessibility has changed in several ways. Some people, mostly professional workers, are experiencing increased access to jobs, as they are mainly working from home. Delivery services and telemedicine are also making errands like grocery shopping and medical visits more accessible. At the same time, however, public transit service levels are being reduced due to lower funding levels and service demand, resulting in decreased accessibility for those who rely on public transit and who work in sectors that are not working from home.

Outside of the pandemic, poverty and the suburbanization of jobs have shifted activity toward outlying areas where accessibility for households without cars is limited. For those who can afford cars, suburban access can be a boon, especially if suburban areas have quality schools or parks, but access can be much lower for those without cars.

New transit investments in many cities may increase access to destinations for some households who do not have reliable access to cars, as long as those activities are well matched to these new services. But this outcome is not guaranteed. New rail transit services connecting downtown areas with affluent suburbs may increase job access for some car owners in the suburbs. But they may do little to help those with limited vehicle access reach needed destinations. Moreover, if new transit investments displace households due to rising rents, accessibility benefits may be diminished.

Finally, the transportation field is experiencing a technological revolution. Access to opportunities for some may be enhanced by new services such as rideshare, carshare, and micromobility options like e-scooters and shared bikes. For others, such as those who lack bank accounts or smartphones and cannot use them, these new services may exacerbate access gaps, increasing options for those who already have numerous options. These new services may pose additional

accessibility indicators, such as the project’s contribution to the ease of reaching destinations, for project scoring.

In addition, the Southern California Association of Governments (SCAG) is using a variety of performance measures for accessibility in its Regional Transportation Plan 2016-2040. SCAG’s regional transportation plan merged mobility and accessibility into a singular outcome with multiple measures in recent efforts. Accessibility measures used by SCAG include travel time to work, person delay per capita, and mode-share for work trips among others. Like SCAG and the MTC, the San Diego Association of Governments is using travel time as an indicator of accessibility.

The following are some general types of access measurements:

- **Cumulative opportunities measures:** These measures count the cumulative number of opportunities that can be reached within a given travel time or a specific distance from an individual’s location.
- **Gravity-based measures:** These measures count the number of available opportunities from an individual’s location, but closer opportunities are considered to offer greater accessibility than distant ones. The underlying concept is that the attraction of available opportunities decreases with the increase in travel impedance. For example, all things being equal, one would generally prefer to visit a grocery store that’s within 0.5 miles from their home than to visit a grocery store that is 5 miles from home.
- **Utility-based measures:** These measures focus on assigning utility to each destination and selecting the choice that maximizes utility. The utility-based approach captures the variation in the desirability of a range of travel choices and destination attractiveness based on the socioeconomic characteristics of individuals and households.
- **Constraints-based measures:** Constraints-based measures consider the space-time constraints that individuals face in their daily movements. Individuals’ space-time constraints are primarily determined by some fixed activities they perform daily, such as going to work or school. Based on the location and timing of these fixed activities, they sort other flexible activities, such as going to the grocery store, to a restaurant, or to the cinema. Constraints-based measures take into account these constraints and identify the feasible set of opportunities within an individual’s reach.

In any approach, data availability is always a concern. As a potential way to overcome this barrier, some third-party platforms, including [Redfin Real Estate](#) and [Sugar Access](#), have developed access calculations. These proprietary datasets are opportunities for local governments to purchase accessibility information rather than creating their own accessibility measure.

Also, researchers have similarly developed access measures. This includes work from the University of Southern California to develop [a measure](#) to link transit ridership, job access measures, and transportation policies. Similarly, at the University of Texas, Austin, researchers are

Increasing access to opportunity is also appearing as a tenet in some long-range transportation plans. The Los Angeles County Metropolitan Transportation Authority recently incorporated access to opportunity as one of the many goals included in their long-range transportation plan. The strategies toward this goal include:

- Build affordable housing near transit.
- Reduce household expenses on transportation.
- Advance equity through institutional transformation.
- Invest in regional workforce.
- Expand opportunities for small businesses.
- Maximize local investments.

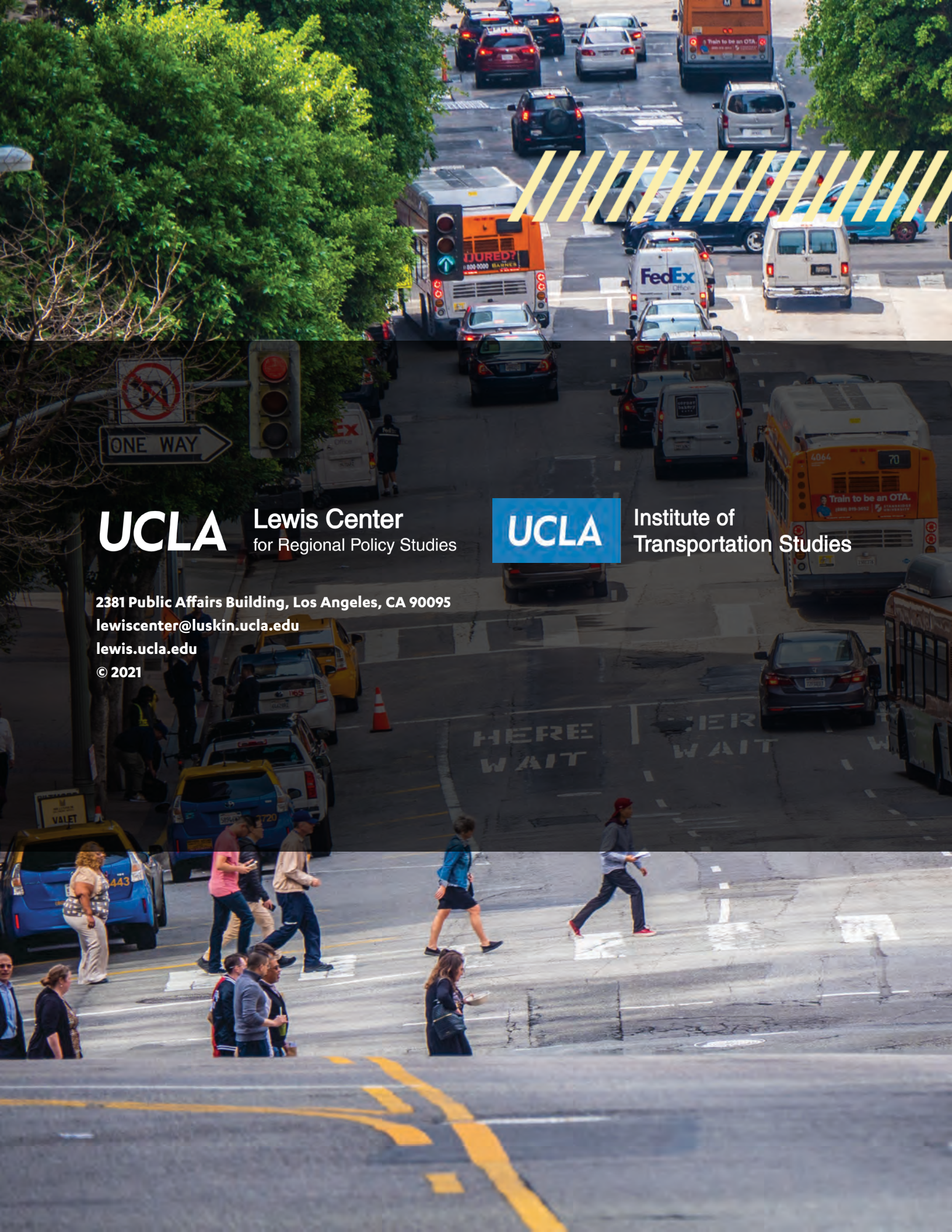
LA Metro’s plan to increase access to opportunities is a step in the right direction. However, absent from these long-range goals are broader considerations of access, as outlined in this explainer. For example, improved ADA access and reduced wait times on transit are not addressed in the long-range transportation plan. The aforementioned gaps are not unique to Los Angeles. Most transportation agencies operate with a narrow understanding of access. Given that transportation agencies do not always have jurisdiction over land use, their engagement in institutionalizing access remains limited. To fully incorporate accessibility improvements, transportation agencies will need support from city and state partners.

What other organizations are working on this?

Research institutes and universities outside of UCLA are working on understanding access to opportunities:

- [Accessibility Observatory at the University of Minnesota](#)
- [Governor’s Institute on Community Design](#)
- [Metropolitan Housing and Communities Policy Center at the Urban Institute](#)
- [Mobilizing Justice at the University of Toronto](#)
- [Moving to Access at Brookings Institute](#)
- [Sugar Access at Citilabs](#)

If your organization is also working on research related to access to opportunities, let us know. We would love to connect.



UCLA Lewis Center
for Regional Policy Studies

UCLA Institute of
Transportation Studies

2381 Public Affairs Building, Los Angeles, CA 90095
lewiscenter@luskin.ucla.edu
lewis.ucla.edu
© 2021