





# AT THE INTERSECTION

Joining Forces to Make Communities Healthier and Fairer of Active Transportation and Equity





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The Safe Routes to School National Partnership is a national nonprofit with a mission to advance safe walking and bicycling to and from schools, and in daily life, to improve the health and well-being of America's children, and to foster the creation of livable, sustainable communities. Begun in 2005, the National Partnership works not only on Safe Routes to School, but also more broadly to support local efforts to create healthy, equitable communities. A core area of work for the National Partnership is support for health equity for low-income communities and communities of color, identifying and overcoming the barriers to active transportation and physical activity that reduce health for many communities.

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## INTRODUCTION

Transportation is the linchpin that allows us to function in our daily lives. Whether we move by foot, bicycle, car, bus, skateboard, or wheelchair, we all need to travel to meet everyday needs. We use transportation to buy food, find housing, get to school and work, access recreational opportunities, visit friends and family, and obtain health care and government services – as well as get to literally everything else we do outside our homes.



But our society suffers from considerable inequity, and transportation is no exception. Low-income people and people of color in the United States face transportation hurdles that can mean that just accessing basic needs is time consuming, dangerous, and sometimes almost impossible. Instead of travel time allowing people to safely and conveniently get the physical activity they need while accomplishing daily objectives, travel is instead a source of stress

that undermines health. Without safe and convenient transportation, low-income families can remain trapped in poverty, unable to access the employment and educational opportunities necessary to succeed. Healthy food, safe playgrounds, high-quality schools, health care, and other services — our transportation system allows some to access these with ease, but creates significant impediments for others.

This situation is nothing new. Transportation has long been a civil rights issue in America. Segregation was commonplace on buses and other public transportation until the 1960s. During that time period, heavy federal investment in the interstate highway system led to the demolition of many low-income neighborhoods and neighborhoods of color, while facilitating white flight to the suburbs, with the effect of increasing residential segregation and disparate access to transportation by race and class. The persistent scars of urban renewal have left highways slicing through many urban neighborhoods, making it impossible to walk or bicycle to many nearby destinations. Differential investments have left some communities with rundown roads without sidewalks, while others have the latest multimodal infrastructure. The operation and construction of our transportation network reflects longstanding racial and class tensions, and the effect has been to privilege access for some over access for others. While civil rights laws now require transportation departments, transit agencies, and other service providers to consider civil rights and social equity when making decisions, these laws only go so far in addressing underlying issues. Segregation by transportation remains commonplace in many communities, especially in lowincome communities and communities of color where people are more dependent upon transit, bicycles, and their own feet to get around.

"Transportation justice is the concept that transportation infrastructure should aim to equally and equitably address the needs of all people, regardless of economic class, race, sex, age, ability or any other kind of social distinguisher."

From Beyond the Backlash: Equity and Participation in Bicycle Planning<sup>1</sup>

What to do? As our country's demographics change and we experience new challenges to creating strong and healthy communities, we urgently need to create a transportation system that is

equitable. That means a transportation system that works to get all of us to where we need to go, while also supporting healthy local communities. Initiatives like the U.S. Department of Transportation's Ladders of Opportunity pilot are looking to restore connectivity, develop workforce capacity, and support neighborhood revitalization. Local community groups and nonprofits are working to overcome the policy and infrastructure disparities that can make active transportation – another name for getting around on foot, bicycle, skateboard, or wheelchair - safer and more convenient for some than for others. Our transportation system can be one that supports our local economies, prioritizes our local streets as a community resource, lets children breathe clean air, and allows neighbors to meet and chat without the menace of nearby high speed traffic – but we will need to work together to achieve that vision.

#### **Forging Commitment**

For too long, many active transportation organizations have been largely white, and have primarily focused on improving walking and bicycling in middleand upper-income neighborhoods. Meanwhile, organizations that focus on equity and social justice have worked on many pressing issues facing lowincome communities, but their work on walking and bicycling safety has been sporadic and without a national strategy or coordination. But that is all changing. The relevance of transportation equity to the lives of low-income people has become increasingly clear, as low levels of physical activity have contributed to rising obesity and diabetes rates, combined with the mounting toll of injuries and fatalities to people walking and bicycling without other options than traveling unsafe streets. At the same time, as our country becomes more diverse, active transportation organizations are increasing in staff diversity and in their commitment to working across lines - whether community or neighborhood boundaries, or lines of racial, ethnic, class, ability, and sexual orientation. The challenges are real. It can be difficult to work in new areas, with new partners, and outside of comfort zones. But the payoffs are real too - new partners, greater effectiveness, and safer and healthier communities. More than

## What do we mean by equity?

Equity addresses the effects of power imbalances and the social, economic, and political differences that generate disparate outcomes for people in arenas like health, education, and employment. Equity recognizes that different people have different barriers to living healthy, fulfilled lives. In order to allow people to get to the same outcome, we need to understand the different barriers and opportunities that affect different groups, and craft our approaches, policies, and programs with those various challenges and needs in mind.

The key area of focus for this report will be equity as it relates to race, culture, ethnicity, and income. There are many other aspects of equity, such as gender, gender identity, sexual identity, disability, class, immigration status, religion, age, homelessness, and more – we will touch on many of these, but will not focus in on them. There are other aspects of equity as well regional equity, rural, suburban, and urban equity, and more. These also deserve scrutiny and exploration, but in this report they will be discussed only in passing.

anything, the greatest payoff is work that is more true to the larger vision of the active transportation and social equity movements: the vision of communities that are filled with the diverse people who make up America – immigrants, families, older people, kids, people of different abilities, people of different races, classes, and nationalities – who are healthy, active, engaged, vigorous, and working together.

# What Is IN THIS REPORT?



This report explores the complexities of equitable active transportation and the issues that arise at the junction of efforts to advance walking and bicycling and work to increase health, fairness, and opportunity for low-income communities and communities of color. The report sets out why equity and active transportation matter, addresses tensions that may arise when the active transportation and equity movements intersect, describes opportunities for increasing equity in the field of active transportation, and explores some of the programs and initiatives that are doing this crucial work.

The report begins in **SECTION I** with a discussion of why walking and bicycling matter for equity. While noting that some people think of walking and bicycling as a middle-class concern, this section makes the case that safe and convenient walking and bicycling are of profound importance for low-income communities and communities of color. Low-income Americans currently walk and bicycle more than upper-income Americans, and the fastest growth in bicycling is occurring among people of color. Limited transportation options for low-income individuals and families lead to restricted employment possibilities, missed doctors' appointments, low school attendance, and many other deleterious effects, and safe and convenient walking and bicycling are a significant piece of overcoming these challenges. In addition, there are many benefits of active transportation, particularly for health and air quality in low-income communities and communities of color.

**SECTION II** delves into the statistics and realities regarding transportation inequities, setting out the real-life consequences of our unsafe streets and dysfunctional systems. The section describes the higher rates of traffic-related injuries and fatalities experienced by low-income communities and communities of color. This section goes on to look at the disparities in the physical environment for walking and bicycling in such communities, and explores the range of factors that can create negative experiences for people of color and low-income people while walking and bicycling – higher crime rates in many low-income neighborhoods, racial profiling by police, slurs and harassment, and discriminatory treatment by drivers.

In **SECTION III**, we explore how the active transportation movement is working to increase its understanding of equity. We also look at the role of the equity movement, as well as the transit-focused transportation equity movement, and the increasing recognition of the relevance of active transportation to their efforts. This section notes the positive momentum of increasing collaboration, as well as the considerable need for additional partnership and learning.

We then turn to a wide range of policies and initiatives where equity and active transportation intersect. In **SECTION IV**, we explore the governmental structures that currently determine our transportation infrastructure and note the structural challenges that can make it difficult to advocate for equity or active transportation, not to mention equitable active transportation. In **SECTION V**, we survey the many issues where equity and active transportation intersect in our local communities. We begin by wrestling with the real and recurring challenges of gentrification and displacement. We then explore diverse and varied initiatives on the ground that are focused on addressing

different aspects of transportation inequity, looking at youth bicycle programs, equitable bike share programs, Safe Routes to School work, community organizing initiatives, police profiling, and more.

The report closes by summarizing some of the lessons that emerge from this survey of work across the United States. Around the country people are working in many different ways to create communities where health, equity, and active transportation options come together. We salute the work that has improved the health and safety of low-income neighborhoods and communities of color across the country, and look forward to seeing these efforts blossom further in years to come.



**SECTION I** 

# Why Does WALKING AND BICYCLING Matter for Equity Advocates?



"Walking and bicycling have a huge impact on the lives of low-income people and people of color."

Active transportation is sometimes described as a "white thing." People may characterize advocacy around walking and bicycling infrastructure as a manifestation of privilege, describe bicycle lanes as "white stripes of gentrification," or portray walking and bicycling issues as a distraction from – or, worse, competition for resources for – the real issues affecting people's lives.<sup>2,3</sup>

Such concerns arise from complex cultural, historical, and political currents. The goals, experiences, beliefs, and competing preferences and priorities that they express are worthy of discussion and engagement. But, notwithstanding the importance of those points, the reality is that walking and bicycling – and the policies that make these forms of transportation

easier or harder – have a huge impact on the lives of low-income people and people of color.

Low-income people and people of color currently walk and bicycle at rates that are similar to or higher than the rest of the population, and those rates are growing more rapidly.<sup>4,5</sup> The obstacles encountered in our car-centric society for those who do not have consistent access to a car affect these populations more profoundly, limiting access to daily needs and to upward mobility. And the health and community benefits of active transportation have the potential to significantly address some of the disparities that are deeply detrimental for many low-income communities and communities of color.

#### Who Walks and Bicycles?

In understanding why walking and bicycling matter for achieving health equity and equity of opportunity, the first thing to know is that low-income people and people of color currently engage in significant levels of walking and bicycling. Low-income people have the highest rates of walking and bicycling to work.6 The very highest rates of walking and bicycling to work are seen among those who make under \$10,000 per year, though rates remain high for those making under \$25,000 per year. For walking to work, people of mixed race and Asian Americans show the highest rates, Latinos show moderately high rates, and whites and African Americans show the lowest rates.7,8 Children from low-income households and children of color, particularly Latinos and

African Americans, are more likely to bike or walk to school than whites or higher-income students.<sup>9</sup>

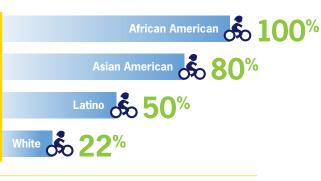
Overall bicycling rates are low in the United States, but they are on the rise, with a doubling in the number of commuters bicycling between 2000 and 2009.10 Looking at commute trips, Latinos and Native Americans have a slightly higher rate of bicycling than whites, while rates are a little lower for African Americans.11 However, growth in bicycle ridership is occurring most rapidly among African Americans and Asian Americans, with Latinos and whites following. 12 Between 2001 and 2009, bicycle trips by Latinos, African Americans, and Asian Americans grew from 16 to 23 percent of all bike trips in the United States. 13 Perhaps it should come as no surprise, then, that polls show

that people of color have a more positive view of bicyclists than whites. 14

The data that we have on bicycling trips is limited, but seem to show that the type of bicycling trip that occurs for different racial and income groups may vary, with the consequence that the data commonly collected on employmentrelated commute trips may miss many people of color.<sup>15</sup> Since commutes only account for 20 percent of trips, commute data offers a limited understanding of the travel choices of any demographic group. 16 Additionally, state and local data may vary - for example, in California, data suggest that recent immigrants, Latinos, and whites have the highest bicycling rates.<sup>17</sup> A survey in San Francisco found that although only 12 percent of low-income women owned cars, 34 percent owned bicycles. 18

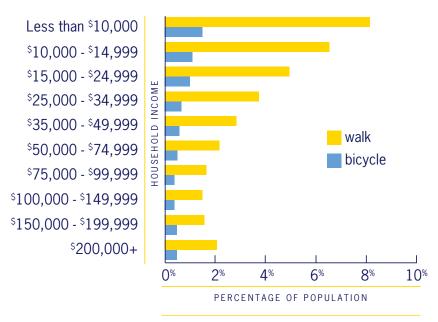
Another very significant aspect of understanding the role of walking and bicycling for transportation is the fact that these modes, particularly walking, are very common as one leg of a trip that also includes other forms of transportation. Whether people are parking cars and then walking down the street, or taking a bicycle to the train station, many trips include walking or bicycling that is not counted for data reporting purposes. When it comes to active transportation and equity, we particularly need to understand how walking and bicycling





National Household Travel Survey

## Walking & Bicycling to Work by Household Income 2008-2012



Low income Americans have the highest rates of walking and bicycling to work, and bicycling is growing most rapidly among people of color. Most transit riders are low to moderate income, and more than 60 percent walk to or from transit. The safety and convenience of walking and bicycling is vitally important for low-income people and people of color.

intersect with public transportation use. As a whole, a high percentage of public transportation users are low to moderate income, with two-thirds of riders having household incomes of less than \$50,000 per year, and 20 percent of riders having a household income of less than \$15,000 per year. <sup>19,20</sup> While the largest group of public transportation users are white, at 41 percent, African Americans make up 33 percent of public transit riders. <sup>21</sup> Asian Americans and Latinos appear to use transit in numbers that are closer to their proportion of the national population. <sup>22</sup>

Walking is the primary way that people get to and from their transit stops, with 60 percent of riders walking from their origin to their transit vehicle, and 64 percent walking to their destination once they get off transit.<sup>23</sup> Just under half of transit users have a car available when making a transit trip (45%); but more than two-thirds of transit riders' households own a car, leaving around 30 percent that do not.<sup>24</sup>

The upshot? Walking and bicycling are important transportation modes for low-income children and adults, as well as children and adults of color. These groups already use these modes for a meaningful number of trips, and the rates of use appear to be growing more rapidly than for white or upper-income Americans.

## **Damaging Effects of Limitations on Mobility**

Walking and bicycling matter for equity because they are modes that low-income people and people of color actually use. But they also matter because these same groups of people are often more dependent on these modes. Low-income individuals generally have more limited ability to own, fuel, maintain, or access a personal vehicle – and the consequences are striking.

Despite increases in rates of active transportation, the car is still the primary form of transportation in our society. From the sprawling, low-density design of many communities to decisions about resource allocation and public infrastructure, policymakers often seem to assume that everyone has a car. But in reality, there are more than 10 million households – just under 10 percent – without access to an automobile.25 The percentage is higher among Latinos, African Americans, and Asian Americans, with 20 percent of African Americans, 13 percent of Latinos, and 12 percent of Asian Americans lacking access to a car.26 Although lack of car ownership is far more frequent for low-income Americans, there are racial disparities among this population too; more than a quarter of low-income

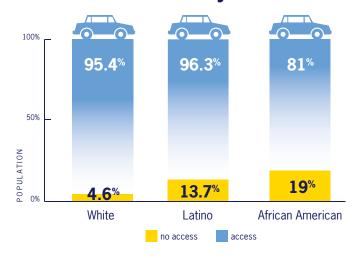
"Nationally, the United States remains a country where many forms of transportation are effectively still segregated—whites and minorities ride different kinds of transportation, resulting in an unequal ability to reach jobs, education, and a better life."

Corinne Ramey "America's Unfair Rules of the Road"<sup>35</sup>

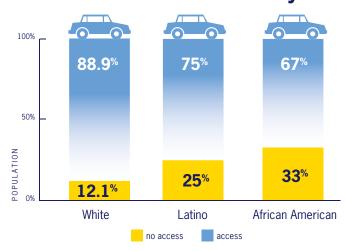
Latinos and a third of low-income African Americans lack access to a car, compared with 12 percent of low-income whites.<sup>27</sup> Age is also a factor, with children unable to drive and 20 percent of older adults not owning cars.<sup>28</sup> Without cars, many people rely on walking, bicycling, and transit to get to jobs, schools, the doctor, the grocery store, and other essential destinations – or forgo these basic necessities.

How does this affect people's lives? Lack of transportation options lead to 3.2 million American children per year

## **Access to Automobiles: All Americans by Race**

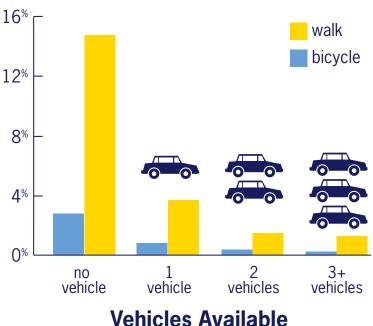


## Access to Automobiles: Low-Income Americans by Race



PolicyLink, Convergence Parntership and Prevention Institute, 2009

## Walking & Bicycling to Work by Available Vehicles 2008-2012



U.S. Census Bureau, American Community Survey

missing a scheduled health care visit or not making an appointment at all.29 In Massachusetts, nearly half of Latinos across the state routinely prioritize paying for transportation over basic necessities.30 In Boston, African Americans spend an average of 66 more hours a year commuting by bus - waiting, riding, and transferring – compared to white bus riders.31 Nearly 30 million people in the United States live in low-income areas where the nearest supermarket is more than a mile away – a long distance to carry groceries without a car.32 Nationally, lowincome neighborhoods and neighborhoods of color are fifty percent less likely to have even one recreational facility in their community than white and high-income neighborhoods.33 Children of color living in poverty with no access to a car suffer from the worst access to parks and to schools playing fields in Los Angeles County.34

But the effects may be most marked in the realm of employment. Employment is crucial to economic stability and class mobility, as well as health and well-being.<sup>36</sup> The ability to get to work affects decisions about where you work and live, what kind of job you can take, how much money you make, how much of your day is spent on your commute, and how much money you spend on transportation versus other needs like housing, educational opportunities, health care, food, and so on. New analyses show that commute time is the single strongest factor in the odds of escaping poverty.<sup>37</sup>

Approximately 15 percent of people without access to an automobile walk to work, compared to four percent for those with access to a car. 38 Around three percent of people without access to a car bicycle to work, compared with less than half a percent of people with access to a car. People with lower incomes also report walking and bicycling to work more. Among those making less than \$10,000 per year, almost eight percent walk to work and two percent bike to work, while less than two percent walk and less than a half percent bike to work among those making more than \$50,000 per year. 39

## What is transit and why are we talking about it?

This report uses "transit" to describe forms of shared transportation available for use by the general public, including buses, subways, light rail and commuter trains. Transit is often referred to as "public transit," "mass transit," or "public transportation." While most of this report is focused on the state of equity and active transportation, transit is integral to supporting walking and bicycling, and plays a key role in creating healthy and equitable communities. For trips too far to walk or bicycle alone, the bus or train is the most viable option to getting from place to place without a car. And trips using transit have an inherent active transportation component—people walk or bicycle to and from the transit stop.

# Annual Income Spent on Transportation



Low-income Households



Middle-income Households

The Leadership Conference Education Fund, April 2011

Nationally, approximately 42 percent of people earning less than \$25,000 per year rely on transit to get to work - and as discussed in more detail subsequently, most transit trips also include walking trips on one end or the other. Yet many transit systems are not robust enough to connect people to the places they need to go. As a result, a lack of viable transit options can severely limit social and economic mobility. 41 More than 60 percent of jobs today are in suburban areas where transit service is less frequent or nonexistent, which makes it especially hard for people to reach jobs without access to a car. 42 The frequency of service is also an issue, especially for trips outside of traditional work hours, as most transit routes cater to morning and evening commuters, creating particular hardship for low-wage workers who work different shifts throughout the day or night.43

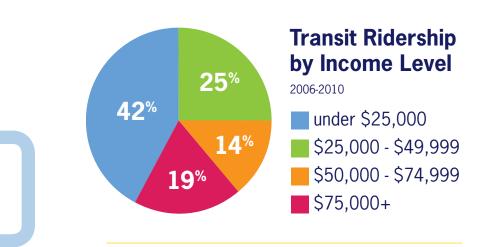
Many people must undertake extreme measures to access employment.44 In early 2015, a Detroit man made headlines for walking 21 miles to his job every day, because he was unable to afford to repair or replace his old car, and bus routes covered only part of his journey.<sup>45</sup> The story highlights the disconnect between where many low-income workers live and where there are job opportunities. Many Americans must spend hours each day on transportation – hours that could be spent working, going to school, enjoying time with their families, or taking care of their health – and many others miss out on job opportunities that could better their lives. 46

The heavy reliance by low-income people and people of color on walking, bicycling, and transit underscores the importance of making these transportation systems both robust and equitable.

"In a large, continuing study of upward mobility based at Harvard, commuting time has emerged as the single strongest factor in the odds of escaping poverty. The longer an average commute in a given county, the worse the chances of low-income families there moving up the ladder.

The relationship between transportation and social mobility is stronger than that between mobility and several other factors, like crime, elementary-school test scores or the percentage of two-parent families in a community, said Nathaniel Hendren, a Harvard economist and one of the researchers on the study."

New York Times, "Transportation Emerges as Crucial to Escaping Poverty" 40



## Importance of Active Transportation

Equitable access to active transportation matters for another set of reasons too. It matters because when people walk and bicycle to get around, there are enormous benefits to their personal health, community well-being, and the environment that we all rely upon.

## HEALTH: OBESITY, CHRONIC DISEASE, AND MENTAL HEALTH

Walking and bicycling have both physical and mental health benefits. Active transportation is an affordable way for people to be physically active, resulting in reduced risk for obesity and overweight and numerous chronic diseases. Currently, more than one-third of American adults are obese,47 and physical inactivity is one of the primary contributors to obesity. 48 Some of the leading causes of preventable death, including heart disease, stroke, type 2 diabetes, and certain types of cancer, have been linked to obesity. 49 To make matters worse, these conditions affect low-income communities and communities of color disproportionately, and have the potential to shorten lives and impair the ability to thrive and achieve. More than 38 percent of Latino youth and almost 36 percent of African American youth are obese or overweight. 50 People in low-income communities have lower activity levels and higher body mass indexes.<sup>51</sup>

Currently, fewer than 10 percent of Americans get the recommended amount of weekly activity needed to receive the substantial health benefits of physical activity.<sup>52</sup>

But walking and bicycling are ways in which people can get sufficient physical activity as part of their daily lives. For example, almost one-third of transit users get their entire recommended amount of physical activity just by walking to and from transit stops. <sup>53</sup> Conversely, people who travel by car are more sedentary, which is associated with chronic disease and premature death. <sup>54</sup> People who live in more multimodal communities exercise more and are less likely to be overweight than those who live in automobile-oriented communities. <sup>55</sup> Adults who get

#### **Active Transportation and Disability**

The topic of active transportation and equity for people with disabilities is worthy of an entire report of its own. A full 30% of people with disabilities report that transportation is a problem for them; for more than half of these individuals, transportation poses a major problem.<sup>63</sup> Moreover, people with disabilities exist within every other group of people, and so, for example, individuals of color who have a disability may experience the intersection of different challenges or other barriers unique to people of color who have disabilities. Studies of people with disabilities show that the use of public transportation is fairly low, and disability is not usually identified as the reason for low use. Instead, barriers in the pedestrian environment emerge as the most significant transportation problems encountered by people with disabilities. 64 In light of the problems with absent and inadequate pedestrian infrastructure highlighted throughout this report, it comes as no surprise to learn that people with disabilities experience substantial challenges in safely navigating these environments. As a result, the National Council on Disability has identified passage of a federal Complete Streets policy as one of its key goals in transportation policy.<sup>65</sup>

One lawsuit set forth the challenges:

[M]ore than 400,000 New Yorkers with ambulatory disabilities and more than 200,000 people with vision disabilities continue to be excluded from the pedestrian culture that is so critical to community life in New York City, because nearly all of the City's sidewalks and pedestrian routes are dangerous and difficult for people with disabilities. Dangers include corners at pedestrian crossings without curb ramps for wheelchair users or corners

with hazardous curb ramps that are broken or too steep, which often end up forcing persons using wheelchairs to modify travel plans, avoid whole areas with inaccessible streetscapes, or roll over curb ramps with barriers that threaten to topple a wheelchair. The majority of curb ramps in the City also have no required detectable warnings or contrasting features that signal to blind and low-vision pedestrians that they are about to leave the sidewalk and enter the path of vehicle traffic.<sup>66</sup>

Recommendations for addressing these challenges include ensuring that local governments are building and maintaining pedestrian facilities that provide safe access between destinations and to transit; addressing enforcement issues such as parked cars blocking sidewalks; and enforcing mandates related to the Americans with Disabilities Act. Other policy options include using all of the tools of transportation planning to encourage new and retrofitted sidewalks and crossings – zoning and subdivision codes, comprehensive plans, and transportation prioritization plans.<sup>67</sup>

"In the past, the city's philosophy has been that the communities that already bike the most deserve the most resources. That just perpetuates a vicious cycle where cycling grows fast in some neighborhood and not others. Biking leads to better physical and mental health, safer streets, more connected communities, and support for local businesses. Black communities are the ones that need those benefits the most."

Olatunji Oboi Reed, Slow Roll Chicago<sup>58</sup>



around by walking or bicycling have lower weight and blood pressure, and are less likely to become diabetic.<sup>56</sup> The same benefits appear in state-by-state statistics as well, as states with the highest levels of bicycling and walking have the lowest rates of obesity, high blood pressure, and diabetes.<sup>57</sup>

Active transportation has also been shown to provide benefits to mental health and psychological well-being. Studies in the San Francisco Bay Area found that increasing the amount of people walking and bicycling to 15 percent would reduce dementia and depression citywide by six to seven percent. 59 Another study showed that overall psychological well-being was significantly higher for commuters who walked or bicycled compared to those who commuted by car or transit; time spent driving had a negative association with psychological well-being. 60

As discussed further below, creating walkable, bikeable communities instead of automobile-dependent communities has been shown to reduce overall injuries and fatalities related to transportation.

One study showed that a pedestrian's risk of being in a collision declines 34 percent if walking and bicycling double in their community.<sup>61</sup> American cities with higher per capita bicycling rates tend to have much lower traffic fatality rates for all road users than other cities, and per capita collisions between people driving, walking, and bicycling decline as walking and bicycling increases.<sup>62</sup>

#### **COMMUNITY & ECONOMY**

Active transportation not only benefits personal health and well-being, but the social and economic health of communities. When streets are places where people can interact with one another, rather than just places for cars, they become valuable public spaces that contribute to community cohesion.

Physical improvements for walking and bicycling enhance the public realm, leading to more interaction between neighbors. <sup>68</sup> People are more likely to linger in outdoor environments that support walking and bicycling and to interact with other members of the community, encouraging residents to become engaged in community issues. <sup>69</sup> Per capita crime rates tend to decline in more compact, mixed, walkable communities, partially due to residents looking out for each other. <sup>70</sup>

At the same time, walking and bicycling can boost local economies.<sup>71,72</sup> Such local economic development is badly needed to help low-income people get and keep jobs and lift families out of

poverty, though ensuring that the benefits of multimodal infrastructure accrue to low-income residents is an important and complex effort, as discussed further below. Commercial districts often rely on walkability to attract customers. When people are able to spend less on transportation, they are able to spend more on other needs like housing and health care. And when as a society as a whole we spend less on transportation, we are able to invest in other public assets - often disparately available in rich versus poor areas – like parks. Nationally, the average annual operating cost of a bicycle is \$308, compared to \$8,220 for a car.<sup>73</sup> Roadways cost an average of about \$550 annually per capita, about half of which is funded through general taxes, meaning the cost of building and maintaining roads is on everyone, not just drivers.74 Walking and bicycling require less space and impose less wear and tear on roadways, and so cost less per mile. A typical urban parking space costs about \$500 to \$3,000 per year.<sup>75</sup> Walking doesn't require any parking and 10 to 20 bicycles can typically be stored in the space required for one automobile.76

## ENVIRONMENT AND OTHER PUBLIC HEALTH EFFECTS

Shifting from cars to walking and bicycling can go a long way in conserving energy, curbing air pollution and long term health impacts due to pollution, and reducing climate change. Half of all trips taken by Americans are three miles or less (with 40% two miles or less and 28% one mile or less), but 72 percent of trips three miles or less are taken by car, illustrating the significant potential for reducing emissions.<sup>78</sup> When just one percent of trips shift from being by car to being by active transportation, fuel consumption can be reduced by two to four percent. 79 Motor vehicle emissions represent 31 percent of total carbon dioxide, 81 percent of carbon monoxide, and 49 percent of nitrogen oxides released in the United States.80 Nitrogen oxides from traffic-related air pollution have been associated with the onset of childhood asthma, as well as exacerbating asthma symptoms.81 Active transportation is most likely to be used for short trips and can replace some of the most polluting car trips.82 Walking and bicycling produce virtually no air pollution.

More recently, there has been attention to climate change and the impacts climate change will have on national and global health. Such effects will tend to have the

largest effects on low-income people and people of color, who suffer the greatest exposure to the extreme weather events and high and low temperatures that are a feature of climate change.83 Climate change is caused in part by human activities releasing large amounts of carbon dioxide and other greenhouse gases into the atmosphere.84 Transportation emissions, largely from cars and light duty trucks, account for 27 percent of our overall greenhouse gas emissions.85 So by replacing car trips with walking and bicycling, greenhouse gas emissions can be reduced. Someone who rides a bicycle four miles to work, five days a week, avoids 2,000 pounds of carbon dioxide emissions each year.86 One study found that travel by residents in the Atlanta region's least walkable neighborhoods generated about 20 percent higher carbon dioxide emissions than travel by those who live in the most walkable neighborhoods.87

The multitude of benefits that active transportation affords to individuals, communities, and society as a whole underscores the need for equitable access to transportation options beyond the automobile.



"Equity is the superior growth model."

Angela Glover Blackwell, PolicyLink<sup>77</sup>



#### **SECTION II**

# TRANSPORTATION INEQUITIES in America

In the previous section, we described why active transportation matters for low-income people and people of color – the high use of and dependence upon these modes of travel and the public health and community benefits to be gained from further use. But those facts tell only half the story. When it comes to meeting fundamental needs like health care and education, people of color and low-income people in the United States typically fare far worse than white people and well-to-do populations. Transportation is no exception to this rule.



A variety of overlapping challenges mean that getting around by foot or bicycle is likely to be harder, more disagreeable, more dangerous, and less healthy if you are poor or a person of color. In this section, we discuss the higher rates of traffic related injuries and fatalities experienced by low-

income communities and communities of color; the disparities in the physical environment for walking and bicycling in such communities; and the different factors that can more negatively affect the experiences of people of color and low-income people while walking and bicycling.

#### Higher Rates of Injuries and Fatalities

People walking and bicycling in lowincome communities and communities of color suffer much higher injury and fatality rates than the general population. Latino and African American pedestrian fatality rates are about twice that of whites.88 Fatality rates for people bicycling are 23 percent higher for Latinos than whites, and 30 percent higher for African Americans than whites.<sup>89</sup> State and local data can show even greater disparities. In North Carolina as a whole, for example, African Americans make up 21 percent of the population, but 40 percent of all crashes. But in Wilmington, NC, African Americans represent fewer than 20 percent of the population, yet black children make up 72 percent of pedestrian crash victims.90

An analysis of 22,000 collisions in America found that pedestrian fatality rates in low-income metro areas are approximately twice that of more affluent neighborhoods.91 A study in one metropolitan region showed that the number of people on foot injured in the poorest census tracts was 6.3 times higher than in the richest census tracts.92 The story was similar for people on bicycles, with the number of injuries 3.9 times higher in poor areas than in rich ones.93 Interestingly, people riding in cars were also more vulnerable in the poorest areas - the number of injured motor vehicle occupants was 4.3 times greater in poor areas than in rich ones.94 Many cities have made pedestrian safety a priority, but their efforts rarely focus on poorer areas.95

Low-income children are at great risk from these trends. In Manhattan, a study found that of the ten intersections where the most collisions that killed or injured children walking or bicycling occurred, nine were near public housing. <sup>96</sup> The study also found that although children make up the same percent of the population in East Harlem and the Upper East Side, they comprise 43 percent of victims of car crashes with bicycles and pedestrians in East Harlem and less than 15 percent in the Upper East Side. <sup>97</sup>

"Many areas have been neglected from a transportation standpoint. We need to devote much more energy on providing safe transportation options for everyone. Walking is a basic human right."

Scott Bricker, Director of America Walks<sup>102</sup>

## People Killed While Walking by Income



Governing, August 2014

## **Children Killed While Walking**



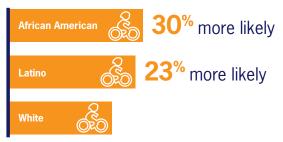
Dangerous by Design, 2011

## **People Killed While Walking**



Governing, August 2014

## **People Killed While Bicycling**



## Addressing Additional Challenges for People Who Are Homeless

Millions of Americans are homeless every day, many of them children.<sup>135</sup> By definition they are low income; they are also disproportionately people of color.<sup>136</sup> And they still need transportation. In fact, transportation is especially critical because getting to job interviews – and a job is key to escaping homelessness. And like everyone else, people who are homeless also need transportation to get to medical appointments, access government services, get children to school, and take care of everyday needs. For a homeless person, access to a bicycle can be transformative, allowing them to take control of their lives, while at the same providing all the health benefits of active transportation.

A key issue is the transportation needs of homeless students. According to the National Center on Family Homelessness, nearly 2.5 million children were homeless at some point in 2013.137 In California alone, it is estimated that there are nearly 270,000 homeless public school students. 138 These children, already stressed by the trauma of homelessness, often suffer even more, and do worse academically, if they also have to start at a new school. 139 While a federal law requires schools to provide transportation for homeless students to their "school of origin,"140 implementation is spotty and hampered by limited resources, and many parents and youth are uninformed about the law. 141 Active transportation equity activists and homeless activists can join together on these issues.

Lack of transportation is the number one barrier that homeless children and youth face in attempting to enroll in and attend school regularly.<sup>142</sup>

One particular transportation challenge facing people who are homeless is the lack of a safe place to store a bicycle. Leaving bikes outside at night, even if locked, is risky. At the same time, homeless shelters can be unsafe for bikes too because they do not usually have a secure storage place for bikes. To date, this issue has received little attention.

There are a few programs around the country that provide bicycles to people who are homeless, either as straight out donations or through "earn a bike" programs, like Freewheel Bike Program in Pinellas County, Florida (operating under the Homeless Emergency Project in Clearwater), 144 the Delta Bike Project in Mobile, Alabama, 145 and Full Cycle, a nonprofit bike shop in south Minneapolis that not only provides bicycles to youth who are homeless, but also has six-month paid internships for homeless youth that include training in bike repair and business skills (such as resume writing, interviewing, sales, customer service, and professionalism). 146

Lincoln, Nebraska has a homeless bicyclist who . . . camp[s] out at a local park . . . It's winter now, but one reason he cites for NOT going to a shelter is that he is afraid his bike will be stripped. . . it is his lifeline. He isn't going inside until he's satisfied his bike will be safe." 143

"A recent survey of homeless people shows that thirty percent of the responders identified transportation and access to transportation as a significant barrier to employment."

Bob Erlenbusch, Executive Director of the Sacramento Housing Alliance in Sacramento, CA<sup>147</sup>

Without those two wheels ... "I would not be able to keep this job ... or the apartment."

Keith Harmon homeless for over a year, Chicago<sup>148</sup>

"[One homeless] participant used his refurbished bike to spend the day filling out job applications and found work within a week."

Cycling Forward program for homeless youth ages 11-24, Seattle, WA<sup>149</sup>

# Disparities in the Physical Environment for Walking and Bicycling

Significant disparities in transportation infrastructure for walking and bicycling discourage people from using these modes and make it far less safe when they do. Transportation infrastructure is the physical built environment —the sidewalks, roads, bike lanes, train tracks, and the like — that allow people to get around. While many factors contribute to collisions involving people walking and bicycling, inadequate infrastructure plays a large role.

There is tremendous variation across the United States in terms of the type and quality of transportation infrastructure and other physical environment features are present in different communities. But when compared across income, racial, and ethnic lines, it becomes apparent that there are significant disparities in the presence of infrastructure that supports healthy active transportation. Beyond sidewalks. bike lanes, and other basic infrastructure needed for walking and bicycling, other aspects of the physical environment contribute to - or detract from - the comfort and safety of people walking and bicycling. In this subsection, we discuss disparities in infrastructure for walking and bicycling, as well as disparities in neighborhood aesthetics and air quality.

## INFRASTRUCTURE FOR WALKING

While almost 90 percent of high-income areas have sidewalks on one or both sides of the street, in low-income communities that percentage drops to 49 percent. 98 Streets with street lighting are also significantly more common in high-income areas (75%) than in low-income communities (51%). 99

A similar pattern is seen for other types of features that make streets safer and more inviting for people walking, such as traffic islands, curb bulb outs that shorten crossing distances, traffic circles, and other features that slow traffic; while much less common in all communities, these are still found almost three times as often in high-income areas compared with lowincome communities. 100 Similarly, streets with marked crosswalks are significantly more common in high-income areas (13%) than in low-income communities (7%). 101 Another factor that affects pedestrian comfort and safety is the maintenance of sidewalks and other features. In some communities, local government is responsible for maintenance of these features, and in other areas sidewalk repair is the responsibility of the adjacent

property owner. Either model may have the potential to lead to sidewalks in worse repair in low-income parts of town.

Major arterial roadways and highways are also far more concentrated in low-income areas. 103 Such high-speed roads pose far greater dangers to people walking, and are harder and less pleasant to traverse by foot or bike than smaller streets. One study showed low-income neighborhoods had twice as many intersections with major thoroughfares, requiring residents on foot to navigate high-speed, high-traffic zones. In addition, poorer neighborhoods had more four-way intersections, which lead to more injuries of people walking and driving due to the greater number of points of conflict.104 The speed and traffic volume of a street is key to its safety. Children are six times more likely to be involved in crashes on streets with high traffic volumes compared to streets with low traffic volumes. and four times more likely to be involved in crashes when crossing high-speed roads than low-speed roads. 105

"You don't see highways running through the Upper East Side of Manhattan."

Joshua Shank Eno Center for Transportation<sup>109</sup>

### **Communities with Sidewalks**

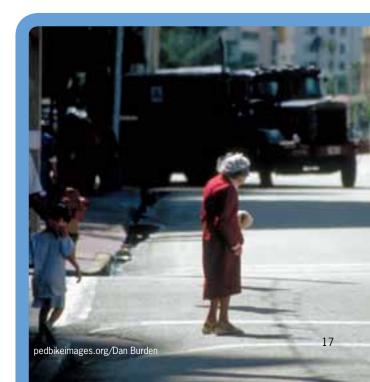
high income

90%

low income

**49**%

Bridging the Gap, Income Disparities in Street Features that Encourage Walking, 2012



## INFRASTRUCTURE FOR BICYCLING

Bicycle friendly infrastructure is also harder to find in low-income areas. In Chicago, for example, the affluent north side of the city features significant bicyclefriendly infrastructure, including protected bike lanes and bike sharing stations, while neighborhoods in the south and southwest have hardly any protected bike lanes and no bike sharing stations. 110 Similarly, in Los Angeles, data gathered by the Los Angeles County Bicycle Coalition revealed that neighborhoods with the highest percentage of people of color had a lower distribution of cycling facilities.<sup>111</sup> New York City's bicycle network "is currently most built out in the city's wealthiest neighborhoods."112 Although similar disparities are found in other cities across the country, 113 this pattern is not universal.

"[T]he number of injured pedestrians, cyclists, and motor vehicle occupants would be greatly reduced in the poorest neighborhoods if intersections in these areas were similar to those in the wealthiest neighborhoods."

Study of traffic injuries in Montreal, Canada<sup>114</sup>

## COMFORT AND ATTRACTIVENESS OF NEIGHBORHOOD ENVIRONMENT

Whether a walking or bicycling experience is pleasant, safe, and comfortable is affected by the neighborhood environment. When someone drives through a neighborhood, they pass through quickly, in a contained vehicle, without experiencing the small details. In contrast, a person walking or bicycling experiences the neighborhood differently, and is much more affected by small factors that influence their comfort and enjoyment.

Some low-income residential neighborhoods have been blighted by years of neglect, poverty, and lack of investment, compared to well-kept wealthier neighborhoods with tree-lined

# Communities with Requirements for Bike Lanes

high income 614%

Bridging the Gap, Using Local Land Use Laws to Facilitate Physical Activity, 2012

streets. Abandoned buildings and cars, litter, graffiti, and broken streetlights and windows create an environment that is unwelcoming to walking and bicycling. 115 Not only is this level of blight physically unpleasant, but it signals that "no one really cares about or regulates" the public space, contributing to safety concerns and discouraging active transportation. 116 One study of a project to clean, maintain, and create urban green space in vacant lots showed that these changes decreased stress in residents and increased physical activity, while also leading to lower levels of violent crime. 117 In fact, stress responses were lower simply in response to walking in view of a greened vacant lot.118

Other low income neighborhoods may not be blighted, but may simply lack many of the amenities that make a walking or bicycling experience actively pleasant things like regular shade trees, landscaping strips that provide a buffer between someone walking and cars passing by, attractive yards to admire, seating to stop and rest, concealed locations for garbage cans and recycling, tended pedestrian access to nearby trails, and so on. Instead, a walk in these neighborhoods may be characterized by an abundance of concrete, gaudy signs advertising unhealthy products, parking lots and shopping strips interspersed among houses, and other features that may be unpleasant for walking.

#### **AIR POLLUTION**

When low-income people and people of color do walk and bicycle for transportation, they are far more likely to be subjected to unhealthy air along the way.<sup>119</sup> Due to land costs and historical discrimination, refineries, coal plants, and other industrial facilities that spew

"Poor communities, frequently communities of color but not exclusively, suffer disproportionately [from industrial air pollution]. If you look at where our industrialized facilities end to be located, they're not in the upper middle class neighborhoods."

Carol Browner Former Secretary of the U.S. Environmental Protection Agency<sup>125</sup>

toxins into the air are often sited near poor residential areas – but rarely, if ever, near wealthy ones. Study after study has found clear correlations between income, ethnicity, and the degree of pollution in the environment.<sup>120</sup> The greater the concentration of Latinos, Asian Americans, African Americans, or poor residents in an area, the more likely that potentially dangerous compounds such as vanadium, nitrates and zinc are in the mix of fine particles they breathe.<sup>121</sup>

"Childhood asthma is rampant in Clairton [a town in Pennsylvania that is home to U.S. Steel Clairton Coke Works], but a lot of families in the hardscrabble town don't have medical coverage. In some homes, the whole family shares a single inhaler."

Tom Hoffman Western Pennsylvania Director, Clean Water Action<sup>130</sup> In fact, African Americans are 79 percent more likely than whites to live in neighborhoods where industrial air pollution poses high health dangers, <sup>122</sup> and are three times more likely to die from asthma than whites. <sup>123</sup> Living in a majority white neighborhood is associated with lower air pollution exposures, whereas Latino communities had the highest air pollution exposure levels. <sup>124</sup>

"Evidence suggests that not only do people get hospitalized but they die at higher rates in areas with significant air pollution."

Dr. John Brofman Director of Respiratory Intensive Care at MacNeal Hospital, Berwyn, Illinois, 131

Areas along major roads and highways are also exposed to higher levels of pollution. Traffic-related pollution most affects those within about 300 to 500 meters of a major road or highway. 126 Studies have shown that people of color are also more likely to live within close proximity (150 meters) to major highways, putting them at higher risk of exposure to traffic-related pollution and resulting in higher rates of respiratory and cardiovascular diseases. 127 A study in Portland showed that small detours of one block to lower-volume roadways significantly reduce pollution concentrations. 128

Further, the polluted air that low-income people and people of color are more likely to breathe, when they do walk and bicycle for transportation, takes a heavy toll on their health. Exposure to unhealthy air is linked to asthma, bronchitis, and cancer, and worsens existing lung and heart disease, all of which disproportionately affects poor people and people of color. 129

"People do not want to walk because they fear for their safety. They see drugs, gangs, dogs."

Community Leader<sup>138</sup>

## Disparate Experiences Discourage Walking and Bicycling

In addition to the inequities described above, residents of low-income communities and communities of color often have negative experiences which discourage walking and bicycling. In this section, we describe some of the factors that can inequitably affect the experience of walking and bicycling: crime, racial profiling, harassment, slurs, micro aggressions, and discriminatory treatment by drivers, all of which are most likely to affect low-income people and people of color, potentially discouraging them from walking and bicycling or making those activities stressful, unpleasant, or dangerous.



#### **HIGHER CRIME RATES**

High rates of crime are a challenge in some low-income neighborhoods and communities of color. High levels of crime and violence not only make it more dangerous for residents to walk places and be physically active outside, but fear of crime is also a significant obstacle to using active transportation.<sup>132</sup>

One analysis found that "people restricted their physical activity and outdoor time due to violence and fear of violence, causing people to walk and bike less frequently."133 Not surprisingly, people who described their neighborhood as "not at all safe" were three times more likely to be physically inactive during leisure time than those who described their neighborhood as "extremely safe." 134 In another study, 31 of 32 mothers in a high crime area would not let their 9-13 year old daughters go outside after school for play or physical activity because of fear of unpredictable drug and gang-related violence. 135 In some cases, children's fear of crime even causes them to skip going to school as well as to miss other opportunities to participate in other events and activities, 136 which can affect students' educational achievement, participation, social engagement, and stress levels. The psychological impact of living in a community with high levels of crime and violence can also lead to depression and stress that is also linked to lower levels of physical activity. 137

"Modesto Sanchez told lawmakers of the Massachusetts Legislature about the day he and his friend rode their bikes down the street on which Sanchez lived, only to be stopped and frisked within minutes by Boston police officers. One officer asserted, 'People in your hood ride bikes to shoot people.' Modesto, who was 16 years old at the time, and his friend were found to be doing nothing wrong. Embarrassed, shocked, and hurt, Modesto asked for an explanation. The officer responded, 'We had to stop you. You look suspicious."

Nusrat Choudhury
"People in Your Hood Ride Bikes to Shoot People"
149

#### RACIAL PROFILING

People of color are also at higher risk of getting harassed by law enforcement while bicycling or walking than their white counterparts. Like the experience of "driving while black," people of color are similarly targeted by police for "bicycling while black" or "walking while black." 139 Stop and frisk policies are centered around police officers' stops of people walking. Many or most incidents of racial profiling and police brutality begin while someone is walking or bicycling, although the interference with transportation is rarely highlighted if and when the incident becomes public.

Stories of being stopped and harassed abound.140 New York City's extensive and controversial stop and frisk program, the subject of court orders, involved more stops of black youth and men (168,000) in 2011 than the total city population of black men in that age range (158,000).141 In Chicago, in the summer of 2014, police made more than 250,000 stops that did not lead to arrest – making stops at a rates four times as often per capita as New York at the height of its stop and frisk policies. 142 A full 72 percent of stops were of African Americans, though they constitute only 32 percent of the city's population. The stops are most likely in communities of color, but are particularly likely to target African Americans in white neighborhoods.

Although not addressed in many analyses of racial profiling, youth and adults of color on bicycles are frequently singled out for particular attention by stop and frisk practices. Bicycle laws, such as registration requirements, sidewalk riding prohibitions, and helmet laws, are often discriminatorily enforced. For example, in Tampa, Florida, 80 percent of bicycle tickets given by police are to African Americans, who make up 25 percent of the population.<sup>143</sup> Officers are encouraged to use these minor violations as an excuse to stop and search anyone they can in low-income black neighborhoods, even though 80 percent of the stops identify no criminal activity. In white neighborhoods, few tickets are given for bicycling infractions, and when tickets are given, it is often to individuals who are black. A similar situation exists.



"[Stop and frisk] reduces your self-confidence. It's no different than getting robbed. Getting put up against a wall, it's no different than someone stealing your stuff. It can be traumatizing. For the police, they let you go, it's no harm, no foul. But it can make children feel the community has given up on their chance to be successful."

Gemar Mills Principal of Malcolm X Shabazz High School, Newark, New Jersey<sup>150</sup>

in Fort Lauderdale, Florida, where an investigation found that 86 percent of tickets given for riding an unregistered bike were given to African Americans (who make up 31 percent of the population), while hardly any such tickets were issued in predominantly white or touristy sections of the city. 144 Not only were people of color targeted for ticketing but in some incidents their bikes were confiscated, leaving them stranded. 145

Such patterns are found throughout the United States. In New York City, a study showed that 12 of the 15 neighborhoods with the most citations for riding on sidewalks were predominantly Latino or African American, while 14 of the 15 with the fewest were primarily white. 146 In Dallas, Texas, an analysis showed that, excluding downtown, 96 percent of citations under a bicycle helmet law took place in census tracts with majority population of color.<sup>147</sup> In 2006, a federal appeals court found enough evidence to go to trial in a case alleging that police were discriminatorily seizing the bicycles of black teens and targeting them for harassment when they rode through the white Detroit suburb of Eastpointe.148

## HARASSMENT, SLURS, AND MICRO AGGRESSIONS

Racial micro aggressions are brief verbal or nonverbal communications that convey racial slights or hostility (intentionally or not) to a person of color.<sup>151</sup> Many people of color experience such indignities while walking and bicycling. Examples include white pedestrians crossing the street to avoid walking by a person of color,<sup>152</sup> white pedestrians markedly ignoring a person when passing on the sidewalk, and similar encounters. 153 Lawrence Otis Graham, an African American lawyer and father, recently wrote about the effects on his 15-year-old son of having two adult white men in a car stop him and call him a racial slur while he was walking by himself in a leafy suburb near his boarding school. 154 His son was frightened and hurt, but white school administrators minimized the incident, characterizing it as an unfortunate onetime event that should simply be forgotten. Yet the longer-term effects on the teen meant he no longer made eye contact with others when out walking, did not want to walk anywhere unaccompanied, and felt "vulnerable and resentful" whenever he had to walk somewhere by himself. Whether an isolated incident or a regular occurrence, this type of experience can create a hostile environment for walking and bicycling.

#### The Consequences of Inadequate Infrastructure

A heartbreaking news story in 2011 involved Raquel Nelson, a mother of three in Atlanta, Georgia, who was prosecuted for jaywalking and vehicular homicide after her 4-year-old son A.J. was struck by a car and killed when they were crossing the street. A.J.'s death occurred when the family was hit by an intoxicated hit and run driver while they were crossing a large arterial. <sup>106</sup> The family had just gotten off the bus after a grocery shopping trip. Although their apartment building was directly across the street from the bus stop, the nearest crosswalk was three-tenths of a mile away, requiring an additional walk of more than half a mile with groceries and small children. Instead, like everyone else who had gotten off

the bus, they crossed to the median to wait for a break in the traffic. Her son pulled out of her hand to cross when others ran ahead and was hit by an oncoming car.

Poor urban planning and a failure to provide for the needs of public transit riders caused A.J.'s death. But prosecutors charged and convicted Nelson of vehicular homicide for jaywalking. Nelson, an African American college student and working mother, was convicted by an entirely white jury without a single member who had ever relied on public transit for transportation.<sup>107</sup> After a national outcry and appeals, most of the charges were eventually dropped.<sup>108</sup>

## DISCRIMINATORY TREATMENT BY DRIVERS

The effects of conscious and unconscious prejudice affect the safety and convenience of pedestrians of color in other ways as well. One small study sought to understand whether discriminatory treatment by drivers might bear some responsibility for higher pedestrian injury and fatality rates for people of color. 156 Researchers found that there were significant differences in driver behavior to white and black pedestrians, with twice as many cars passing African Americans in crosswalks without stopping, and a 32 percent longer wait time. Further research is warranted, not only to better understand whether the same results are seen in different environments and regions, but also to explore whether similar behavior affects pedestrians who appear to be poor or homeless. Street infrastructure that signals more aggressively to drivers that stopping for pedestrians is not optional may assist in overcoming discriminatory treatment, but will likely only diminish it rather than remove it.

"I've walked down the block from where I live and had a white woman cross the street and go to the other side and continue up."

22-year-old African American female participant in micro aggressions study<sup>155</sup>

#### **Effects of Transportation Inequities**

The overall effects of the transportation inequities set out here are to discourage poor people and people of color from using active transportation. People are less inclined to walk and bicycle if there is little or no pedestrian- and bicycle-friendly infrastructure, the traffic is intimidating, they are worried about crime and micro aggressions or about harassment from officers, the air is polluted, and many destinations are located far away.<sup>132</sup>

At the same time, the United States has experienced an enormous increase in obesity, with low-income people and Latinos and African Americans suffering the highest rates. <sup>158</sup> Obesity is linked to many serious diseases, including hypertension, multiple cancers, and type 2 diabetes. And children of color suffer the highest obesity rates of all, constituting "ground zero" of the obesity epidemic. <sup>159</sup> The need to act in support of active transportation and equity is clear.

# State of the Movements: ACTIVE TRANSPORTATION AND EQUITY

In light of the clear need for a strong focus on the intersection of equity and active transportation, one might imagine that there would be a robust movement working to address these issues. But in fact, equity in active transportation has been low on the radar of both the national active transportation movement and the equity world. This is not to say that there has not been related advocacy – indeed, local community groups have wrestled and advocated around these issues for decades – but the work has been only sporadically recognized by the larger movements.





"Transportation is back as a major civil rights issue. Today's focus is not on getting a seat at the front of the bus but on making sure the bus takes us where we need to go."

Angela Glover Blackwell, PolicyLink<sup>178</sup>

In recent times, national active transportation organizations have shown increased attention to equity, with a new focus on health equity, the need for improved transportation in low-income communities, and the need for increased internal diversity and reform. But this emerging trend comes after decades of bicycling and walking advocacy from a middle class lens – advocacy stemming from the real challenges related to limited safe options

for enjoying bicycling and walking for recreation or as a transportation preference, but not from the experience of low-income communities walking and bicycling in unsafe conditions through pure necessity. One positive trend is the increased number and influence of bicycling and walking advocates of color. But struggles over direction, power, and priorities within the active transportation movement remain.

At the same time, there is a growing interest in the topic of transportation equity within the social justice and equity movements – but the focus of this interest to date has been less on active transportation than on transit justice. Such transportation equity efforts have seen many victories over the years. One key initiative is the Transportation Equity Network, a national network of more than 400 organizations in 41 states advocating for public transit that links low-income communities to jobs and opportunities; equitable systems of distributing transportation funding; and economic growth through transportation employment opportunities.<sup>175</sup> The similarly named Transportation Equity Caucus unites a long list of partner organizations that stand together on core equity demands

at the federal level, in both the functioning of the U.S. Department of Transportation and in the federal transportation bill. <sup>176</sup>

Currently, there is increased interest by transit justice advocates and equity advocates more broadly in active transportation and equity. In 2014, both the NAACP and the National Organization of Black Elected and Legislative Women (NOBEL-Women) passed national resolutions committing to the importance of active transportation and equity, and spelling out specific action steps.

Joint initiatives are helping to build trust and ensure that equity and active transportation are prioritized within both movements. Excellent initial steps have been taken, but much work remains to be done.

"We didn't come into this because we were interested in transit... [We were] interested in serving the most vulnerable people of L.A. County. We want to make sure the transit build out increases opportunity — more housing, more jobs, and a healthier environment — for low-income residents."

Ann Sewill, California Community Foundation<sup>177</sup>

#### **Platform of the Transportation Equity Network**

- 1. Economic growth for all through increased access to transportation-related jobs
- 2. Access to opportunity through increased funding for mass transit
- 3. Accountability in government through increased community input into local and state planning and funding processes
- 4. Sustainable development through smart and equitable growth
- The Transportation Equity Network Platform<sup>179</sup>

#### **Transportation Equity Caucus Principles**

- 1. Create affordable transportation options for all people
- 2. Ensure fair access to quality jobs, workforce development, and contracting opportunities in the transportation industry
- 3. Promote healthy, safe, and inclusive communities
- 4. Invest equitably and focus on results
- Transportation Equity Caucus, Statement of Principles<sup>180</sup>

## Integrating Equity into Bicycle Advocacy

The League of American Bicyclists (the League) has developed a report called **Integrating Equity** into Bicycle Advocacy, which reports on an organizational equity assessment and their internal efforts to increase their commitment to equity, diversity, and inclusion. The report provides a look into one organization's internal processes around changing its culture. One important aspect of this work has been the creation of an Equity Advisory Council, with members with deep experience working with women, youth, and communities of color to promote bicycling, which has advised the League on how to improve the equity orientation of its programs and structure.

In a parallel effort, the League also produced a report on The New

Movement: Bike Equity Today, which discusses the growing diversity in the local bicycling movement and showcases bicycle advocacy community leaders and professionals from a variety of racial and economic backgrounds as they discuss challenging experiences, areas of inspiration, and their rightful place in the movement.

**SECTION IV** 

# TRANSPORTATION PLANNING, POLICIES, AND INVESTMENTS:

# How We Got Here and How to Get Where We Want to Go

America needs a transportation system that supports health and encourages physical activity, supports access to employment and educational opportunities, and ensures that everyone can get where they need to go safely and conveniently – not only by car, but also by walking, bicycling, and taking public transportation. But to get there from here will require large-scale changes in transportation investment at the federal and state level, as well as smaller steps focused on equitable development and land use and infrastructure improvements to increase safety and equity in communities across the United States.



The good news is that there are people working across the country to make this vision a reality. In the next two sections, we explore the governmental structures that currently determine our transportation infrastructure, and the many initiatives focused on addressing different aspects of transportation inequity.

In this section, we review the laws and policy structures at the federal, state, regional, and local level that steer and shape our transportation and land use systems. Agencies and lawmakers make critical decisions regarding how transportation funding is spent, what types of transportation investments take

place, and which communities benefit. Government policies – laws and regulations, transportation plans, and bicycle/pedestrian/multimodal plans – play an important role in guiding such decisions. One key aspect of achieving transportation equity is getting transportation projects and funding channeled to communities that need it the most. We explore how current policies have created the uneven and inequitable landscape we see today, how communities are incorporating equity considerations into their transportation policies, and where such policies provide avenues to advance active transportation equity.

#### Federal and State Transportation Investments

The federal transportation bill, which is generally reauthorized every two to six years, provides the majority of transportation funding in the United States. For most of the twentieth century, transportation investments were largely determined at the state and federal level, with the federal and state highway systems as prime goals. 156 Together with other federal and state policies, these investments had a series of intended and unintended effects: to prioritize travel by cars over public transit, walking, or bicycling; to encourage white and middle class flight from central cities; to divide urban communities, particularly African American communities, by building freeways through them; and to support and prioritize the growth of auto-dependent suburbs. Although these federal investments supported America's economy and connected communities from coast to coast, they played a large role in discouraging walking and bicycling and contributing to residential segregation by race and class.

Today, some of the emphasis of federal transportation investments has changed. Over the past ten 10-20 years, federal transportation bills have provided a larger role for regional decision making, resulting in more local control, and have dedicated small but crucial investments toward walking and bicycling. Now, some decisions about which communities receive transportation investments from the federal transportation bill are split between state departments of transportation and regional metropolitan planning organizations (MPOs). Approximately 1.5 percent of federal transportation funding goes to support sidewalks, bicycle lanes, trails, and other aspects of active transportation – a small percentage in light of the percent of trips made by walking and bicycling, but very valuable.

"Those in power make decisions about transportation planning, resulting in ill-planned bus routes, transportation more likely to benefit those with cars than those without, and bleak environmental costs. In some cities, roads continue to pull apart neighborhoods, prioritizing commuters over communities."

Corinne Ramey "America's Unfair Rules of the Road" 157



#### Past Isn't Past in Baltimore

In Baltimore, the repercussions of eminent domain, freeway expansion, gentrification, foreclosures, and the dismantling of public housing have eliminated safe and healthy mobility for many underserved communities and cut them off from the ability to meet their basic needs. This was no accident or oversight. In 1944, Robert Moses, a dominant national voice on the planning and build out of urban expressways, was talking about slums and the poor people of color who inhabited them when he said, "The more of them that are wiped out the healthier Baltimore will be in the long run."158 From 1951 to 1971, 80 to 90 percent of the 25,000 families displaced in Baltimore to build new highways, schools and housing projects were black. 159 Today, many of those same communities no longer have direct access to job corridors or activity centers, and one in four school aged children and one in four African Americans in the city live in a food desert.

## The Transportation Alternatives Program

In 2012, Congress passed the federal transportation bill known as the Moving Ahead for Progress in the 21st Century Act (MAP-21). This bill combined funding for existing major active transportation programs (Safe Routes to School, Transportation Enhancements, and Recreational Trails) into the new Transportation Alternatives Program (TAP), and cut funding by 30 percent to the total combined program.<sup>160</sup> MAP-21 also gave states the option to transfer up to half of the funds to highway purposes. In addition, under MAP-21, states or communities must provide a 20 percent match for Transportation Alternative Program funds, creating a new barrier for low-income communities.

The Safe Routes to School National Partnership has a variety of resources on how to use TAP funds and how to overcome the equity barriers:

- Using the Transportation Alternatives
   Program of MAP-21 to Impact Your
   Local Community: An overview of how local communities can access TAP funds.
- •Integrating Safe Routes to School into the Transportation Alternatives Program: Reducing Barriers for Disadvantaged Communities: An analysis and case studies detailing how states have assisted local communities in overcoming the barriers generated by the match requirement.
- Overcoming Obstacles in Underserved Communities: A short overview of approaches that state DOTs have taken to overcome equity hurdles to low-income communities accessing federal transportation dollars for Safe Routes to School.

Every few years there is a policy debate on the next federal transportation bill, and along with it a philosophical debate about what modes should be prioritized. In recent years, walking, bicycling, and transit have received greater prominence in these conversations, but voices for these can be drowned out by the focus on America's "crumbling infrastructure" and lack of funding to fix many of our roads, bridges, airports, and other transportation networks. 161 The American Society of Civil Engineers gave the United States infrastructure network a D+ grade in its 2013 report card. 162 Many state and federal discussions of transportation funding center around fixing highways and bridges first - projects with big dollar signs. In some cases, proposals eliminate money for pedestrian and bicycle projects entirely. By one estimate, in 2010, Americans spent 4.8 billion hours stuck in traffic, wasting 1.9 billion gallons of fuel, for a total cost of \$101 billion. 163 But active transportation facilities are less costly than many larger construction projects, and can help reduce congestion on roads and bridges by shifting many drivers to other modes.

Many advocates have called for overall infrastructure investments to address longstanding social equity issues in our communities, and acknowledge changes in demographics and transportation

"As the country witnesses the emergence of a new racial and ethnic majority, equity—long a matter of social justice and morality—is now also an economic imperative. The nation can only achieve and sustain growth and prosperity by integrating all into the economy, including those who have too often been left behind."

PolicyLink, "America's Tomorrow: Equity Is the Superior Growth Model" 165

preferences. A PolicyLink report describing equity as the "superior growth model" encouraged a focus on infrastructure investments that provide job opportunities for low-income workers and benefit to disadvantaged communities, to ensure that we are lifting people out of poverty while also creating greater access to economic opportunity. <sup>164</sup> Because many low-income and economically disadvantaged populations rely on active or public transportation to get around, greater investment in these modes supports an equity growth model.

Approaches to increasing the equitable investment of transportation funds can target federal funds, state funds, or both. One approach is to set aside a percentage of a larger pot to be dedicated to lowincome or high-needs communities. In 2013, California enacted a law creating an Active Transportation Program from state and federal funding. The law expressly requires that 25 percent of funds must benefit disadvantaged communities. 166 For a project to count toward the disadvantaged communities funding requirement, the "project must clearly demonstrate a direct, meaningful, and assured benefit to a [disadvantaged] community."167 Proposed projects are also scored and evaluated using criteria that expressly address equity concerns. 168



## **Regional Transportation Planning**

Metropolitan planning organizations (MPOs) develop and adopt policy for federal transportation spending within their region, including spending on active transportation. MPOs are regional government entities that are charged by the federal government with transportation planning for urbanized areas with populations of more than 50,000 residents. MPOs often also undertake regional-level planning for housing, job centers, and transportation linkages between the two. Because MPOs directly control funding for many transportation projects, and can play a large role in how our communities are shaped, it behooves us to ensure equity considerations are at the core of their decision-making process.

## INSTITUTIONAL BIASES IN METROPOLITAN PLANNING ORGANIZATION STRUCTURE

To a large extent, transportation policy is determined and implemented by government agencies. But whether because of institutional priorities, representational structures, or other causes, these entities can have a built-in bias against prioritizing the real needs of low-income communities. MPOs, which exercise control over significant federal funds and transportation projects, are a case in point.

An analysis by the Brookings Institution explains how MPO board composition has tended to create an "inherent bias" in the regional MPO planning and funding processes; the way that boards are often structured means they are commonly dominated by suburban communities with a strong preference for road and freeway expansion. <sup>169</sup>

How does this occur? MPOs can take different forms, based on state determinations. Decision making generally occurs through boards of directors, usually consisting of elected and appointed officials from the city and county governments in the region, as well as state officials and transit providers. Many MPO boards consist of representatives from each local government within the MPO borders.

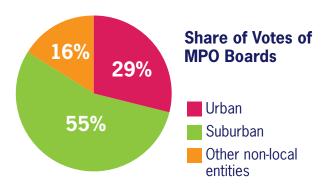
Without adequate measures to ensure that voting is proportional to population, the effect of this is to provide a greater voice for suburban residents.

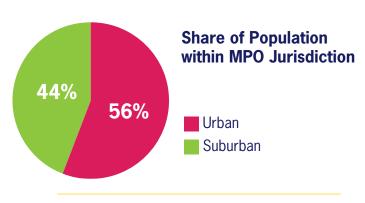
The 2006 Brookings analysis of the 50 largest metropolitan areas showed that, relative to the populations of the MPO jurisdictions, suburban communities and white residents experienced considerable over-representation in MPO votes. 170 On average, only 29 percent of board votes represented urban jurisdictions, despite the fact that 56 percent of residents within the MPO regions lived in the urban jurisdictions – while the majority of votes (55 percent) represented suburban jurisdictions.<sup>171</sup> In addition, more than 88 percent of MPO voting members were white.<sup>172</sup> Because urban areas, where low-income residents and people of color are typically concentrated, are underrepresented on these boards,

their interests have seen lesser play in the transportation planning decisions that MPOs are responsible for making. Suburban MPO board constituents tend to be more affluent and white, and thus have different transportation concerns and priorities than low-income urban constituents. <sup>173</sup> Particularly in light of the resource-constrained environment and high demand for transportation dollars all around, this distribution of voting power has led to suburban freeway expansions and vehicle investments winning out.

Low-income populations and people of color are not usually fully represented in other government entities setting transportation policy – from local transportation commissions to state transportation departments and legislatures. These inherent biases inevitably affect transportation policies and exacerbate transportation inequities.

## Who Has a Say in Transportation Policy?





Brookings Institution, 2006

## EQUITY AND METROPOLITAN PLANNING ORGANIZATIONS

Under Title VI of the 1964 Civil Rights Act, MPOs cannot discriminate on the basis of race, color and national origin in programs that receive federal funds. 174 MPO policies and plans, including long-range 20-30 year transportation plans, which are typically updated every four to five years, provide an important opportunity to address equity issues at the federal level, particularly since a non-discrimination analysis is already required by law. Unfortunately, lax enforcement and vague guidance mean that Title VI requirements are limited in effect, 175 and funding of active transportation typically represents a tiny fraction of overall spending.176

Some MPOs, most notably in the Boston, Chicago, San Diego, and San Francisco metropolitan areas, are taking equity concerns more seriously.<sup>177</sup> The Metropolitan Transportation Commission (MTC), for example, which serves the nine-county San Francisco Bay area, works with a diverse Regional Equity Working Group to integrate equity concerns into many aspects of its transportation plan. This has involved considerations such as setting performance targets with equity in mind, outreach initiatives, and a community-based transportation planning process. 178 While imperfect, this type of effort creates opportunity for discussion, prioritization, and change.

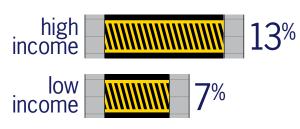
## FUNDING AND REGIONAL PLANNING WITH AN EQUITY LENS

With the MAP-21 transportation bill came greater responsibility for MPOs in regards to planning and funding active transportation improvements. Under MAP-21, each state was required to allocate 50 percent of its Transportation Alternative Program (TAP) funds to MPOs. MPOs serving a population of at least 200,000 must coordinate a competitive grant process for the TAP funds. This requirement offers an opportunity to better integrate active transportation needs into the regional transportation planning and funding processes and pushes decisions around smaller projects like improvements for walking and bicycling to a more local level, where community members have more opportunities for direct input. Each MPO determines its own priorities and process for selecting which active transportation projects receive funds, so scoring criteria can include equity considerations. For example, the Knoxville MPO awards additional points to projects and programs that serve communities of concern – places with a high concentration of people meeting certain characteristics, including older adults, those living in households with no motor vehicles, people with disabilities, racial minorities, and people living in poverty. 179

As described earlier in this report, many transportation challenges arise from the distances between housing and jobs and the lack of transportation between them. These challenges don't stop at city or county boundaries; regional coordination and planning is needed to grapple with issues such as transit networks, jobs-housing balance, and regional improvements for active transportation, such as commuter bikeways that cross city and county lines. In some states, like California, MPOs not only plan for transportation, but also engage in planning regarding the location of housing and job centers, as they are all intertwined. Ways in which MPOs can support local cities and counties in increasing active transportation include developing regional Safe Routes to School strategic plans, coordinating larger projects such as bikeways that connect housing in one area with employment centers in another, sharing best practices, and providing technical assistance to local transportation departments. It is important that MPOs are held accountable for seeking out community input and considering the diverse needs of all community members in these regional planning efforts.



## Communities with Marked Crosswalks



Bridging the Gap, Income Disparities in Street Features that Encourage Walking, 2012

### **City and County Policy**

How our towns, cities, and rural areas look on the ground is influenced by many factors – development decisions, federal and state transportation investments, economic and demographic factors, even topography – but the law, policies, plans, and practices of towns, cities, and counties play a dominant role in what our streets look like and who can travel safely on them. Communities can adopt general policies that prioritize equity throughout their municipal activities. One example is seen in a 2014 executive order in King County, Washington, which required development of an Equity and Social Justice Strategic Innovation Priority Plan. 180 King County's first Equity and Social Justice Annual Report, issued in November 2014, included an analysis of "Access to Safe and Efficient Transportation."181 In addition to standalone policies, incorporating equity into specific transportation-related policies is also crucial.

#### COMPREHENSIVE PLANNING AND BICYCLE AND PEDESTRIAN PLANNING

A good starting place for encouraging investments in equitable active transportation is through a community's comprehensive planning process. 182 Although such processes can be slow, imperfect, and may feel divorced from implementation, they are often the underpinning of transportation and land use decisions that can have wide-ranging, long-term effects. Comprehensive planning processes frequently include pedestrian, bicycle, or multimodal master plans, which can be key to ensuring that pedestrian and bicycling needs are part of policy

Integrating Safe Walking
and Bicycling from the National
Partnership and National Center
for Safe Routes to School contains
more information on how to integrate
walking and bicycling to school into
comprehensive planning.

discussions about future infrastructure investments. Making sure that equity is built into each component of these plans is crucial.

How does comprehensive planning advance equity and active transportation? First, these plans often include a public outreach component, where community members are invited to public meetings to address their concerns about walking, bicycling, and transportation needs, and asked for input on where they would place new facilities. Second, these plans require dedicated staff and hired consultants to

perform data analysis and other technical work to understand current mobility and forecast how greater investments in walking and bicycling may improve or hinder overall community mobility. Particularly with direction and advocacy, such analyses can provide key insights in local and regional transportation equity issues. Third, these plans often end with recommendations and an evaluation section, which can be used to measure progress and identify funding sources. Such plans can also be used to hold government accountable if there is a lack of implementation.

#### **Equity in the Seattle Bicycle Plan**

The City of Seattle put equity front and center in its 2014 Master Bicycle Plan. Equity is one of five goals set out in the plan, and is defined as providing "equal bicycling access for all through public engagement, program delivery, and capital investment."183 The Bicycle Plan explains: "This goal emphasizes the importance of making investments throughout the city and connecting every neighborhood. It also promotes the idea that people in every neighborhood should have a voice in helping to design their communities' best bicycle facilities."184

To help achieve this goal, the Bicycle Plan includes an equity analysis that highlights the existing uneven distribution of bicycle facilities throughout the city<sup>185</sup> and develops a connected bicycle network that serves all areas of Seattle, emphasizing areas that have a high density of historically

underserved populations and relatively low levels of bicycle facilities. 186

Most importantly, project selection criteria are weighted in favor of projects that (1) serve "populations that are historically underserved, including areas with a higher percentage of minority populations, households below poverty, people under 18, people over 65, and households without access to an automobile," and (2) provide "a health benefit for people in areas with the greatest reported health needs, represented by obesity rates, physical activity rates (self-Specifically, projects that address equity get 20 extra points (the other four goals earn between five and 40 points each). 188 Finally, the Bicycle Plan expressly includes equity in its performance measure targets, setting a benchmark of "[z]ero areas of city lacking bicycle facilities by 2030."189

#### Active Transportation Equity: A Scan of Existing Master Plans

Advocacy Advance's Active

Transportation Equity: A Scan of

Existing Master Plans looked at
bicycle and pedestrian master plans
from 38 communities to understand
how they defined and measured
equity. 190 The project surveyed
the plans for explicit mentions of
equity, including the word "equity"
along with several associated
terms describing race, family
characteristics, and income.

Equity was mentioned in approximately half of the plans. Even where the term was found, it was often undefined or left vague in the plans. When equity was defined, there was little information about the process that created the definition.

The report also looked at equityrelated performance measures within these plans, since performance measures define how success for a stated goal will be judged and tracked. The report found that equity-related performance measures were mostly related to infrastructure in areas identified as high-priority within the plans. The report concluded with a discussion of tools that can be used for community outreach and data collection related to equity objectives for bicycle and pedestrian master plans.

## Road Type Affects Kids on Foot Hit by Cars

Traffic Volume





Low Traffic Volume

National Highway Traffic Safety Administration, 2012

Finally, a plan provides documentation of a commitment to improve equity and walking and bicycling in a community. It fits together with other plans for the community and signals that equitable active transportation is an essential ingredient to community well-being.

Although working to improve comprehensive plans and multimodal plans is a worthwhile effort, there are certainly shortcomings to existing processes. Many plans are aspirational, with recommendations and performance measures that are largely abstract and not required to actually materialize. Some multimodal plans sit as standalone plans, separate from formal planning documents like the comprehensive plan or capital improvement plan, where actual funding sources are identified and policies can ensure investments include active transportation. Moreover, although a planning department may create the plan, public works departments or parks and recreation departments may be responsible for aspects of implementation, and they may not be as receptive to the ideas in the plan. In terms of community engagement, while almost all planning processes include public meetings and planning board hearings, the format, location, and scheduling for these meetings often limits participation to a select few who have the time and passion to provide input. Most meetings provide a general overview of the planning process and an opportunity to provide feedback on specific documents, but very little chance for community members to interact with agency staff or provide direct input on community priorities early in the process. Many plans include a public comment period, but there is often no responsibility to incorporate community concerns, which can result in investment decisions

that perform well in a technical analysis but have real-world adverse effects on the community.

Creating enforceable active transportation plans that are responsive to the community is essential, and many communities are working toward these goals. Historically, these policies have not expressly considered whether transportation investments and projects are being equitably distributed. When policies fail to recognize and address equity issues, even jurisdictions that embrace active transportation can inadvertently reinforce existing transportation inequities. The case study of Portland, Oregon (in this section) illustrates how easily this can happen. While Portland invested heavily in bicycle infrastructure, the policies guiding its decisions did not require the city to consider whether its investments were equitably benefitting all residents. Instead, the city relied on criteria that, while objectively neutral and reasonable, had the effect of strongly favoring affluent, predominantly white neighborhoods and leaving other areas of Portland behind.

Recognizing this, Portland, and some other local, county, and state jurisdictions, have started to expressly address equity considerations in their active transportation policies, through goals, specific equity criteria for project selection, and requiring that high needs areas receive a guaranteed percentage of investments. Ideally, these policies are developed with the full input and involvement of the community. The best plans are those that involve the community from day one, and that address equity throughout the data analysis and recommendations in both an integrated fashion and also as a standalone consideration.

## **Case Study:**

## Rectifying Inequities in Bicycle Transportation in Portland, Oregon

Portland, Oregon, is well known for embracing bicycling and walking and has invested tremendously in active transportation. Its experience over the last 20 years, however, shows that without conscious attention to addressing transportation inequities, new programs and initiatives can reinforce or worsen existing inequities.

When Portland adopted its first Bicycle Master Plan in 1996, it prioritized projects that would improve connectivity, serve a high volume of people bicycling, and serve intensive land uses (e.g. commercial areas). It also prioritized projects that could be completed economically because they could be incorporated into roadway investments. While reasonable priorities, these criteria had the effect of concentrating new bike infrastructure projects downtown and in the densely populated, compact neighborhoods to the north, where it was easier to achieve connectivity, serve a high volume of bicycles, and complete projects economically. But these neighborhoods were whiter and more affluent. In contrast, the neighborhood of East Portland, which was predominantly low income with more residents of color, did not fit the bike plan priorities. East Portland's more suburban layout and many gravel streets meant that connectivity and economical projects were more challenging. Existing bike lanes were disconnected and mostly located on heavy arterial highways, which was discouraging to people who might have considered bicycling. Without a focus on equity, disparities grew larger instead of smaller, and East Portland was left behind.

To rectify this problem, Portland is now actively working to make equity a priority going forward. It engaged the community in developing an East Portland Action

Plan and an active transportation strategy called East Portland in Motion, which brought visibility and attention to transportation equity issues. Portland also updated its Bicycle Plan to call for a network of family friendly bikeways within a quarter mile of every city resident that would allow 25 percent of all trips to be made by bicycle. 191 Portland is also updating its Transportation System Plan (TSP) as part of an update of its Comprehensive Plan, which governs Portland's overall vision for growth through 2035. Expected to be adopted in 2015, the TSP sets out priorities for funding transportation projects for the next 20 years. Although the current TSP includes references to equity, equity

is not currently built into decisionmaking processes. With the updates, a stakeholder workgroup recommended that health equity criteria be included in the TSP, along with a framework to score projects based on their impacts on vulnerable populations. 192 The result: Portland's updated draft TSP calls for establishing transportation project selection criteria that will advance equity along with other goals. 193 Portland's draft Comprehensive Plan also identifies equity as one of four guiding principles and integrates equity into other elements of Portland's Comprehensive Plan, many of which affect transportation. 194 Portland is expected to finalize the updated TSP and Comprehensive Plan in 2015.



## ZONING, LAND USE, AND COMPLETE STREETS POLICIES

Many other local laws and policies also affect the equity and safety of walking and bicycling. Key aspects include Complete Streets policies, zoning and subdivision codes, design guidelines manuals, parks plans, and other internal policies.

What is a Complete Streets policy? The core of a Complete Streets policy is that it requires that when a street is built or renovated, it is made complete - safe and convenient for travel on foot, bicycle, car, by children, older adults, people with disabilities, and so on. To date, more than 700 towns, cities, counties, MPOs, and states have adopted Complete Streets policies. 195 These policies are an important step in transforming our current system of designing streets mostly for cars into a system where streets are designed and built for everyone. In order for Complete Streets policies to play a role in addressing and remedying inequities in active transportation, it is

important that such policies be adopted by both low-income and higher-income communities. This may pose a problem, since low-income communities are often slower to update codes and laws because they are understaffed and under-resourced. Thus, state and regional policies that support and encourage the adoption of Complete Streets policies can play a role in addressing inequity. In addition, in jurisdictions that contain both wellto-do and low-income neighborhoods, inequities in infrastructure maintenance and investments may result in a Complete Streets policy exacerbating active transportation disparities. This could occur if the inadequate facilities in the rich part of town gradually get fixed, while those in the poor part of town do not, or get fixed at a much slower rate. To ensure improvements to active transportation equity in this regard, we need to encourage adoption of Complete Streets policies in low-income communities; assess whether such policies have any negative effects on equity in practice; and work to encourage equitable investments of transportation resources.

"Zoning is a policy tool with tremendous potential to address a broad swath of public health problems at the community level."

Lauren M. Rossen and Keshia M. Pollack "Making the Connection Between Zoning and Health Disparities" <sup>198</sup>

Zoning and subdivision codes are another important part of ensuring walkable and bikeable streets. These codes set out requirements for the design of future development. As a result, code language that requires features that support bicycling and walking can create a major shift in the way roads are built and maintained. However, lower-income communities are less likely than upperincome communities to have zoning codes, subdivision codes, and other land use laws that require pedestrian or bicycle friendly improvements - and in fact, may have codes that are actively negative for walking and bicycling.

#### Village of Walthill, Nebraska

Sitting on the Omaha Reservation, the Village of Walthill has a population of just 780 residents, 80 percent of whom are Native American. Many children in the village walk to school, and safety was a primary concern. Working with technical assistance from the Safe Routes to School National Partnership, the village successfully established a Complete Streets ordinance. Walthill followed up on the ordinance by submitting an application for safety funding for walking and bicycling improvements, and is continuing to put the building blocks in place for healthy community design.

#### Sodus, New York

A community of less than 1,800 people, Sodus sits midway between Rochester and Syracuse. With no community center, the school has become the primary gathering place for community residents, and accessibility is a priority. But many streets on the way to school have no sidewalks; in other areas, sidewalks are cracked and dangerous. Wanting to see improvements through adoption of a Complete Streets policy, Jay Roscup, Project Director for the 21st Century Community Learning Center, and Sandra Hamilton from the Village Planning Board brought together stakeholders and

built a coalition in three months. The goal of this process was to "change the way residents of Sodus view their community and change the expectations the community ha[d] for infrastructure development." The coalition worked to successfully pass a sustainable, binding Complete Streets resolution. Their success shows how a small group of concerned citizens could make a big impact on how their community will be constructed going forward.

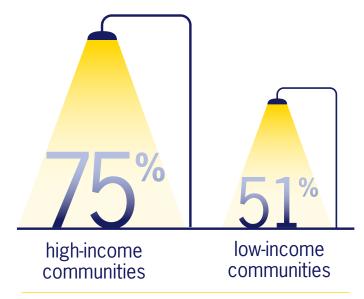
Of high-income communities, 91 percent have land use laws that require pedestrian oriented infrastructure such as sidewalks, crosswalks, and so on. 196 But only 58 percent of low-income communities have such requirements. In looking at requirements for bike lanes, 14 percent of higher-income communities have these, but only 5 percent of low-income communities do. 197 The lower rate of adoption and revision of land use policies in low-income communities is one of the factors that leads to more inadequate and unsafe facilities for walking and bicycling.

Communities also need other policies, such as Safe Routes to School policies and other institutionalized directives, that prioritize walking and bicycling and make it an essential part of transportation planning. As with the zoning policies described above, such policies are likely to exist differentially in low-income versus upper-income communities. In addition, such policies need to dig into local conditions and needs, actively addressing equity wherever relevant.

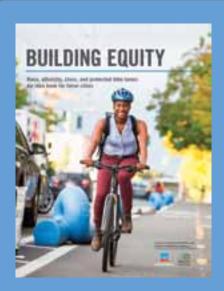
For more details about how zoning and subdivision codes can support active transportation, see these ChangeLab Solutions resources:

- **Pedestrian Friendly Code Directory**: Provides explanations and examples of different code components that support walking and public transportation.
- Move this Way: Making Neighborhoods More Walkable and Bikeable: Lays out the design needs of people walking and bicycling, common barriers in zoning and subdivision codes, the implications for health disparities, and strategies to overcome these challenges.

## Who Has Streets with Lighting?



Bridging the Gap, Income Disparities in Street Features that Encourage Walking, 2012



PeopleForBikes recently released a report on how to use protected bike lanes to advance equity. The report profiles local advocates who are working toward protected bike lanes in communities of color for reasons that include reducing asthma. increasing access to healthy food, and reinvigorating neighborhoods. The report also highlights national survey data from 2014 showing that African Americans and Latinos bicycle for both transportation and recreation at similar or slightly higher rates than white Americans, and that protected bicycle lanes would encourage riding by people of color.

PeopleForBikes Building Equity: Race, Ethnicity, Class, and Protected Bike Lanes: An Idea Book for Fairer Cities.<sup>19</sup>

## Equity Atlases: Using Data and Maps to Understand Transportation Equity Issues

A specific kind of data visualization tool known as an equity atlas can help in analyzing and advocating around transportation equity issues. Equity atlas reports map out the existing inventory of transportation options, housing, jobs, schools, and other community amenities, allowing assessment of which neighborhoods are rich in resources and where there are gaps in goods and services. Another type of data visualization tool is known as opportunity mapping. Opportunity mapping aggregates different dimensions of equity into summary scores, which identify areas of high and low opportunity.

For equity atlases, the key component is also mapping, but without collapsing different measures into single scores. Equity atlas mapping usually occurs at the regional scale, with the transportation network as a core component. Equity atlases provide data that shows how communities are connected by transit and other transportation modes, and highlight where regions are falling short in providing access to opportunity for low-income populations. In particular, the tool provides a way to visualize the spatial relationship between seemingly disparate issues like affordable housing and good jobs.

#### AN EQUITY ATLAS CAN:

## **1.** Bring Together Stakeholders.

By visually mapping the relationships between different issues, stakeholders can better see, for example, how preschool facilities are laid out in a region and how they do and don't intersect with where people work. An equity atlas can help bring together regional stakeholders by showing them how working together would better leverage their resources and capacity. For example, the **Denver** Regional Equity Atlas served as the call to action for forming Mile High **Connects**, a collaborative of nonprofits, funders, and financial institutions working to ensure that the region's \$7.8 billion investment in **expanding** the transit system improves access to opportunity for all. All of these groups had been working on social equity issues for years, but the Equity Atlas helped them see how their work intersected.

**2. Drive Advocacy.** An equity atlas can bring crucial attention to equity issues. In many cases, an equity atlas helps identify communities vulnerable to displacement or gentrification because of new real estate and infrastructure investments. For example, in Los Angeles, the **LA THRIVES** collaborative is using

their equity atlas to make the case for greater investment in affordable housing near transit by highlighting spatial disparities in existing affordable housing stock. Advocates have also been able to identify where existing policies such as rent control ordinances need to be better enforced. Similarly, Atlanta's Transit-Oriented Development (TOD) **Collaborative** is using its equity atlas to call out the region's jobs-housing divide. In Atlanta, most low-income workers live in the western and southern parts of the city, far away from the region's jobs in the downtown and northern parts. By mapping job access disparity, the TOD Collaborative is using the equity atlas as a tool to convince local leaders to prioritize

affordable housing and community investment near MARTA stations so that low-income workers can live closer to the region's jobs.

**3. Steer Investment.** Lastly, the data and maps contained in an equity atlas can help decision makers adjust their activities and investments. In Denver, creating an equity atlas has helped investors in the **Transit-Oriented Development (TOD) Fund** identify sites near transit for affordable housing investments, highlight gaps in **existing small business and neighborhood incentive programs**, and promote the use of a fund for sites near transit stations that are within food deserts.

#### **Links to Equity Atlases:**

Denver: <a href="www.denverregionalequityatlas.org">www.denverregionalequityatlas.org</a>
Los Angeles: <a href="www.losangelesequityatlas.org">www.losangelesequityatlas.org</a>

Portland: www.equityatlas.org

Atlanta: www.atlantaequityatlas.com

New York: <a href="http://prattcenter.net/research/transportation-equity-atlas">http://prattcenter.net/research/transportation-equity-atlas</a>

National Equity Atlas: <a href="http://nationalequityatlas.org/">http://nationalequityatlas.org/</a>

#### **SECTION V**

# STATE OF THE COUNTRY Working Toward Transportation Equity and Justice

The previous section detailed many of the governmental policies that affect active transportation and equity, some functioning to advance equitable walking and bicycling, and others as obstacles. In this section, we turn our attention to the work on the ground. We look at advocates and initiatives that are wrestling with challenges and embracing opportunities related to equity and active transportation. Around the country, people are working in many different ways to create communities where health, equity, and active transportation options come together.



### **Gentrification and Active Transportation**

A core topic related to active transportation and equity involves gentrification and displacement – the concern that new walkable neighborhoods, bicycle lanes, and transit-oriented development will lead to displacement of existing residents in low- to moderate-income neighborhoods. Will new bike lanes or even improved sidewalks make neighborhoods desirable to upper-income demographics, leading to significant changes to the

community? Will the housing opportunities created by new developments be affordable to everyone who wants to live there, including long-time residents?

This issue often comes to the fore around new bike lanes. Many low-income communities perceive a bike lane as a symbol of gentrification, not as a tangible benefit to the neighborhood. This can come as a surprise to active transportation advocates, who see safety improvements and health benefits for local residents.

## Gentrification and Displacement

The terms "gentrification" and "displacement" are often used interchangeably, but they can be distinguished as two different but related events that occur in communities as they become more attractive places to live. Gentrification refers to the process of communities changing socially and economically, typically with new residents and businesses moving into areas that were economically depressed or were home to industrial or other land uses incompatible with residential living.<sup>202</sup> This can cause the culture of a community to change, leading some older residents to no longer feel at home. Displacement is the physical relocation of existing residents often because rents and the overall cost of living increases as these communities become more popular. In some cases, old apartment buildings and businesses are bought out by developers and converted into higher-rent units or storefronts, which forces existing residents out. Gentrification can cause displacement, but there is considerable debate about whether displacement occurs in all circumstances of gentrification.<sup>203</sup>

Gentrification and displacement are products of large economic and social forces. After decades of neglect and disinvestment in urban areas, the new resurgence of urban living has drawn in development dollars, political interests, and a shifting kaleidoscope of interests. Mayors and young professionals see the economic growth, vibrant city life, and development activity as a sign of improvement. But from the perspective of local residents who have lived in underinvested areas, street infrastructure improvements can indicate rising rents and displacement. Bike lanes and improvements to sidewalks and crosswalks often signal that the community has gotten the attention of elected officials and developers as a "hot" neighborhood worth investing more public dollars in, and so current residents don't see these features as a socially valuable investment intended to benefit them. But residents' concerns about displacement are coupled with a desire to see and direct meaningful investments in their neighborhoods. Low-income residents want to see their communities flourish. Active transportation advocacy may not be driving displacement – but street infrastructure investments are a factor in a larger struggle for control over neighborhoods.

Gentrification and displacement also arise in conjunction with transit improvements. For the first time in decades, many regions are investing in upgrading their public transportation systems with modern technology like light rail and bus rapid transit. Transit investments can provide a significant boost to economic development and revitalize urban neighborhoods through what is known

as "transit-oriented development" or TOD. Compact, mixed-use development creates an environment where walking and bicycling are safe and convenient ways to get around, which results in a greater demand for it. Yet transit and TOD can also have negative effects on surrounding neighborhoods, especially low-income communities. Greater demand for living in these neighborhoods can lead to the displacement of existing low-income residents and small businesses as rents increase, and low-income residents can experience other negative effects such as the elimination of bus routes that overlap with new transit lines and the shifting of resources away from communities farther from transit.

So what can be done? Real community engagement can go a long way toward avoiding a negative reaction to new active transportation investments. People want to see improvements that relate to the problems they experience in their neighborhoods, and they want to feel like the improvements are intended to benefit them. By bringing planning processes to churches, community centers, schools, senior centers, and street corners, planners and active transportation advocates can work with community members to develop proposals that meet local needs. In addition, active transportation proponents need to be involved in local communities and engage with concerns articulated by the community, particularly around affordable housing efforts. For those working in the space of equity and active transportation, affordable housing and anti-displacement efforts are a core part of the work.

#### **Debates over Gentrification's Effects**

A recent Slate article claimed that gentrification was a "myth," that it typically bypasses low-income neighborhoods with a high concentration of poverty, and that it generally leaves residents better off than they were before.<sup>204</sup> The article created an intense debate online, demonstrating how sensitive the issue has become for many communities.<sup>205</sup> An article in The Atlantic focusing on the economic revitalization of Minneapolis<sup>206</sup> was countered a few days later in the same publication, with the rebuttal claiming the city's gentrification only benefited a certain slice of the population.<sup>207</sup>

### Top-down Culture of Transportation Planning Is at Odds with Community Engagement

When active transportation and equity concerns collide, a frustration often arises over the failure to engage with the community around planned facilities. The cultural clashes that occur here are exacerbated by a larger challenge with transportation and community planning – their non-inclusive, top-down, highly technical nature. Transportation planning occurs through complex, multilayered, multijurisdictional processes – just understanding who a decision maker is can be a challenge, much less navigating the circuitous pathways to figure out how to weigh in and influence decisions.

Sometimes community members feel excluded from public input processes – but it is worth emphasizing that the

public at large, including active transportation advocates, is excluded from these processes, or often included in inconvenient and cursory ways. This is not to say that professional advocates don't have a leg up over community members – the ability to attend daytime meetings and devote time to mastering complex processes and jargon, as well as the benefits of class, race, and professional privilege certainly go a long way to helping to influence outcomes – but these advantages still interact with processes that are often deeply exclusive at their core. Working to demand creative, innovative, community-centered engagement processes will benefit active transportation and equity stakeholders along with the community at large.

## **Equity on the Route to School**

Since 1969, the number of students walking to school has dramatically declined as communities became less friendly to walking and bicycling, and parents became more concerned about stranger danger.<sup>208</sup> In addition to the health benefits of walking and bicycling to school,<sup>209</sup> students who are physically active and those with a healthy weight perform better academically, and have lower rates of stress, sleep problems, and depression. <sup>210,211</sup>

Safe Routes to School initiatives make it safer to walk and bike to school by funding new and improved sidewalks, crosswalks, bike lanes, and other pedestrian and bicycle infrastructure near schools. Safe Routes to School programs also support activities that encourage walking and bicycling to school, like supervised "walking school buses" and "bike trains" that make it safe and convenient for students to get physical activity on the way to school.<sup>212</sup>

Since federal funding for Safe Routes to School began in 2005,<sup>213</sup> there have been more than 17,000 Safe Routes to School initiatives funded around the country, and recent studies show conclusively that Safe Routes to School programs and infrastructure improvements not only decrease traffic injuries, but are also effective in getting more kids walking and bicycling to school.<sup>214</sup>

While Safe Routes to School programs are important everywhere, the most compelling need is in low-income communities and communities of color.

Safe Routes to School National Partnership offers a **Low-Income Resource Guide** for volunteers and professionals implementing Safe Routes to School in low-income schools and communities.

Low income children and Latino and African American children have the highest obesity rates of any population group, and experience the most dangerous pedestrian and bicycle infrastructure, which discourages walking and biking and contributes to disproportionately high pedestrian and bicycling injury rates. 215,216 Moreover, many low-income students have no choice but to walk to school through hazardous traffic conditions, meaning they experience greater exposure to the dangers of unsafe routes to school. An analysis of Safe Routes to School funding under the 2005 federal transportation bill shows that low-income students and schools appear to be getting a proportionate share of federal Safe Routes to School resources. Of schools that benefitted from federal Safe Routes to School standalone funding, 69 percent are Title I schools (schools with the highest percentage of low-income students), which is significantly more than the 57 percent of schools nationally that are Title I.217 In addition, 47 percent of students enrolled at schools receiving Safe Routes to School funds were eligible to receive free and reduced price meals, which is very close to national figures.<sup>218</sup>

The Safe Routes to School National Partnership's factsheet on **Overcoming Obstacles in Underserved Communities** describes a variety of effective approaches that state departments of transportation have taken to overcoming the hurdles that low-income communities experience in trying to access Safe Routes to School funding and to Safe Routes to School and implementation opportunities.

Despite those indications of funds getting to low-income communities, the greater need in those communities, and unmet need generally, means that it is important to ensure that Safe Routes to School funding and programs prioritize underserved areas. At the state level, California has taken the lead with legislation creating an Active Transportation Program (ATP), which requires that 25 percent of all funds in the ATP benefit low-income communities.<sup>219</sup> In the first cycle of the ATP. California also dedicated a percentage of funds for Safe Routes to School program.<sup>220</sup> California, as well as some other states, also provides technical application assistance to lowincome communities seeking Safe Routes to School funds but lacking access to the planners, engineers, and other resources necessary to develop and implement Safe Routes to School proposals.<sup>221</sup> Such assistance is critical to ensuring that low-income communities are equitably represented in Safe Routes to School

At the local level, cities and towns can adopt Safe Routes to School policies that prioritize equity, as the City of Portland did. Portland's Safe Routes to School policy sets two goals, to be achieved by 2035: first, that 75 percent of all elementary school students will receive biking and walking education, and second, that 75 percent of all elementary school students will travel to school by foot or bike.<sup>222</sup> The policy explains that while the Safe Routes to School "program is committed to achieving the goals in all schools ... [it] is especially committed to meeting the goals in schools with high percentages of students and families that have the highest risk of having inequitable access to transportation, including people of color, [and] people experiencing poverty."223 The policy goes on to incorporate equity considerations into all phases of the Safe Routes to School program, including strongly weighting the criteria used for

project selection to favor schools which are predominantly attended by low-income students of color or recent immigrants.<sup>224</sup> grants.

### CHRONIC ABSENTEEISM AND SAFE ROUTES TO SCHOOL

Lack of transportation can also pose a barrier to education. Transportation obstacles pose a key factor in chronic absenteeism, which is defined as missing 10 percent or more of the school year, whether for excused or unexcused absences. 225,226 Children who miss a significant amount of school fall behind on learning, with long lasting effects on academic achievement, graduation rates, economic success, and health.<sup>227</sup> Compared to more affluent students, children who are in poverty are 25 percent more likely to miss three or more days of school per month.228 Students who walk and bicycle to school have higher levels of physical fitness and are healthier than others,<sup>229</sup> while children who are overweight or obese have higher rates of school absenteeism.230 When students have poor attendance, it can cost schools money and can translate into lower academic achievement.231 Safe Routes to School programs can help deal with chronic absenteeism. Walking school buses are one technique that has been employed to great success to address these problems.

#### **SCHOOL SITING**

School siting is another area where equity and active transportation intersect in complex ways. The location of schools is integral to the success of Safe Routes to School initiatives. In addition, school siting has enormous impacts on neighborhood vitality - the proximity of a school affects housing prices, desirability, and community cohesion. But schools have also been a contentious zone of difficult community and political fights - over desegregation, school closings, privatization, and more – and so the seemingly simple notion that it is desirable for students to live near enough to school that they can walk or bicycle is not so simple after all.

How does school siting affect Safe Routes to School? As discussed above, in order for most students to walk or bicycle to school, they must attend a school located within one to two miles of their home. Parents report that the biggest factor that prevents their children from walking or bicycling to school is distance from school.<sup>232</sup> But in recent years, there has been a trend toward locating schools on the outskirts of towns, due to a perceived need for large schools with sizeable playing fields, outdated state reimbursement policies, sprawling development approaches, and consideration of one-time land costs.<sup>233</sup> As a result, today, two-thirds of schools are located far from where children live. 234



Schools sited near where children live not only helps kids walk and bicycle to school, but can also support children's physical activity and community wellbeing after school hours by providing a convenient location for play, athletic activities, community meetings, and emergency centers, with shared use agreements promoting good uses of nearby amenities.<sup>235</sup>

In an added twist, economic and political pressures to close schools are having negative effects not only on walkability, but also the welfare of students of color.<sup>236</sup> Analyses have shown that school closures disproportionately affect schools with high percentages of low-income students and students of color.<sup>237</sup> When a lowperforming school closes, students are not likely to be transferred to betterperforming schools where they will learn and thrive; rather, they are commonly transferred to schools with similar or worse academic records. In addition. they now must travel further, sometimes through hostile gang territory, while their neighborhoods lose the community center offered by the local school.238

At the same time, high levels of neighborhood segregation and uneven investments in local schools mean that without a more nuanced approach ensuring equity in school siting, walkable neighborhood schools have the potential to increase school segregation and exacerbate educational inequity. Digging into this challenge, advocates have concluded that walkability and diversity in schools are compatible outcomes, with advocacy for the following three joint demands:

- Investing in quality public education for all children in all communities;
- Engaging in community and school planning to prioritize health and walkability;
- Integrating neighborhoods economically and racially by diversifying housing options while protecting existing residents.<sup>240</sup>

Once again, one of the key lessons is that in order to promote active transportation while supporting equitable outcomes, advocates must embrace the larger goals of potential partners, supporting strategies and advocacy around quality education as well as residential diversity.

### **Walking School Buses Improve Attendance**

Why would the kids who lived closest to school – all within one mile – have the highest rates of chronic absenteeism? The answer became clear when health workers realized that Providence School District in Rhode Island doesn't provide school bus service to families living within one mile of school. Transportation was an obstacle to attendance for many of these children – they couldn't take the bus and many did not have a family car, and their parents often worked morning shifts and weren't available to walk or drive them to school. The students lived close enough to walk to school, but families weren't comfortable letting their elementary kids walk alone.

Staff at Providence Children's Initiative (PCI), a program of Family Service of Rhode Island, came up with the idea of starting a walking school bus program with volunteer adult chaperones to accompany the kids to school. The first step was reaching out to the families to explain the idea and get them on board. PCI

got little response to flyers sent home with the students announcing the walking school buses. Then they tried calling homes, but many of the numbers were out of order. Finally, they went door-to-door. After visiting with the families and explaining the walking school bus program, PCI found that there was solid support for starting a program that would allow students to walk to school safely.



The first walking school bus started in September 2012, and the program has since expanded to two schools, four routes, and 30 kids who walk to and from school every day. Since the program started, 100 percent of participating students have improved their attendance at school.

"The kids love it. Our volunteers are on a consistent schedule so the students can get to know them, and they also get to meet local 'celebrities' who walk with them sometimes, such as the Providence Police, the State Police, and even the Governor. Plus, with recess time getting cut, walking to school gives them a chance to get more exercise and be outside," said Allyson Trenteseaux, program and policy coordinator at PCI.

The program is so successful that there is now a waitlist of students who want to participate. The only thing holding PCI back from adding more routes is a shortage of volunteers.

### **Community Organizing**

Many initiatives that address equity and active transportation begin as community organizing or service programs, with the focus on improving walking and bicycling conditions for low-income residents emerging organically out of the work. For example, in 2013, the Asian Pacific Islander Obesity Prevention Alliance (APIOPA) launched Bike to China, a program to promote physical activity among Asian Pacific Islander youth in Los Angeles. High school students from Chinatown bicycled 5,000 miles in one summer, roughly the distance from Los Angeles to China, while studying how the built environment affects physical activity. The students led public officials on tours of their communities and gave recommendations for safer routes for Chinatown residents to walk and bicycle. In 2014, APIOPA added a Bike to Japan program with Little Tokyo high school students. APIOPA then went on to conduct multilingual surveys, finding that Chinatown has one of the highest populations of elderly residents in greater Los Angeles, with almost 20 percent of

Chinatown residents being older than 60 years old. Of those surveyed, the majority of older adults used walking as their primary mode of transportation, emphasizing the importance of making streets in Chinatown safe for walking for residents of all ages.

"In our community, violence prevention is a priority, the high unemployment rate is a priority, and things that take away from those priorities are considered frivolous. But a comprehensive bike strategy that connects people allows people to shop locally and live healthier lives, and contributes to our communities being safer and more economically viable."

Olatunji Oboi Reed Slow Roll Chicago<sup>246</sup>



For other community organizing initiatives, the active transportation element is built in from the start. Slow Roll Chicago is an example of this type of organization. A nonprofit organization in Chicago, Slow Roll Chicago was "[i]nspired by the energy, diversity, and spirit of the Slow Roll Detroit rides."241 As Slow Roll Chicago's website explains: "Jamal Julien and Olatunji Oboi Reed founded Slow Roll Chicago in September of 2014. They explicitly set out to use the movement and bicycles as vehicles for social change."242 The organization has a three-fold strategy: hosting community bike rides; providing youth and family activities; and engaging in bicycle equity advocacy. Shortly after their founding, Slow Roll Chicago and four other black-led, Southside-based bicycling organizations sent an open letter to City of Chicago Mayor's Bicycle Advisory Council pointing out the inequitable distribution of bicycling infrastructure, education, and resources in Chicago, and requesting seven specific steps to redress these inequities.<sup>243,244</sup> In response, Chicago Department of Transportation Commissioner Rebekah Scheinfeld acknowledged that more effort needs to be made to promote bicycling in communities that don't already have high ridership, and promised that equity would be strongly considered in prioritizing future projects.<sup>245</sup> Slow Roll Chicago's state and local advocacy continues on behalf of African American and low-income communities in Chicago specifically and Illinois more generally.

### **Tour de Dreams**

The Tour de Dreams, now in its seventh year, is a 540 mile bicycle ride in California undertaken each summer in support of undocumented college students. Since 2009, students from California's colleges and universities have come together each summer to ride from UC Berkeley to UCLA to demand educational and civil rights access for undocumented students. The ride raises awareness about the goals, dreams, and obstacles encountered by undocumented students, and also raises money for tuition.<sup>247</sup> The students who initiated the ride turned to the bicycle as a way to speak out because many of them were undocumented and, in the words of Evelyn Martinez, an organizer of this year's tour, "They didn't have a way to get around the community... Rather than breaking the law and driving [without a license], or standing on corners and waiting for buses, they decided to take their mobility into their own hands and ride bicycles."<sup>248</sup> The ride serves as a fundraiser, political action, and embrace of access and mobility.<sup>249</sup>

"It is representative of the power and potential we all have to be self-sufficient, to move freely, without fear."

Tour de Dreams rider Irene O'Connell<sup>250</sup>

#### PARENTS WORKING TO CHANGE GARDEN GROVE, CALIFORNIA

In Garden Grove, California, where 28 percent of the population is Vietnamese and 37 percent is Latino, parents are leading the charge to make sure their children, friends and neighbors have safe places to walk – a campaign they did not originally plan on taking on. In 2012, an initiative to address pedestrian access and connectivity emerged out of two parentled efforts to improve the health of their children and communities.

The initiative first started with Champion Moms, a group of "promotoras" providing classes in nutrition and physical activity under the Network for a Healthy California Champions for Change program. (Promotoras are Latino community members who receive specialized training to provide basic health education in the community without being a professional health care worker.) As these women were educating their neighbors on how to buy and cook healthy food and how to get the recommended amount of daily exercise, they repeatedly heard concerns about lighting, traffic speeds, and sidewalk maintenance that were discouraging people from walking in their neighborhood.

At the same time, local university students working on a neighborhood revitalization project approached a parent group from one of the elementary schools to better understand the dynamics of the local neighborhood. The parent group was primarily made up of Vietnamese residents and functioned like a parent teacher organization, building bridges between Vietnamese parents and the school administration and supporting children's education. The parent group talked about community ties and culture, but also spoke up about a dangerous street their children had to cross in order to get to the school campus.

In response to the issues, the promotoras asked the local public health department to conduct a walk audit as they sought to better understand the process for making changes to the streets and sidewalks. The students and parents from both groups successfully gathered signatures for a petition and presented their ideas to the city public works department, working with the department to develop a new crosswalk and traffic signal that will allow more children to walk and bicycle to school safely.

# The National Active Transportation Diversity Task Force

The Safe Routes to School National Partnership has convened a National Active Transportation Diversity Task Force since 2012. This task force, composed of organizations focused on active living, health equity, and racial justice, among others, has forged new partnerships and commitment, explored many of the issues laid out in this report, and ignited a national conversation on equity and active transportation.



### Native Kids Ride Bikes: Integrating Urban Experiences with the Teachings of the Elders

Artist and Michigan State assistant professor Dylan Miner uses bicycles as the canvas for his community art project Anishnaabensag Biimskowebshkigewag: Native Kids Ride Bikes, exploring the intersection of transportation, experiences of urban Native American youth, and sacred Anishinaabeg teachings.<sup>262</sup> Bicycles become the linkage between youth and the elders. with relevancy to both previous and current generations of Native Americans, Local Native American middle and high school students worked with Michigan State University students and Native American artists to construct seven lowrider bicycles that signify the seven sacred teachings of the elders. Miner created the project after returning from a residency program at the Smithsonian Institution's National Museum of the American Indian where he explored indigenous culture and the bicycle as a sustainable means of transportation. Miner says, "By envisioning the bicycle from an Indigenous perspective, this project redirects the discourse on sustainable transportation and has a positive influence on Native health when more youth ride bicycles."263

## Bike Ownership and Repair Programs

Another way to provide low-income residents with access to a bike is through programs that collect donated bicycles and then give them to residents (along with a helmet and other supplies) in exchange for completing a bike safety or maintenance class, helping to refurbish the bike, or volunteering.

Such "earn a bike" programs are usually run by nonprofit bicycling organizations such as the Community Cycling Center, in Portland, Oregon, which provides low-income adults with a bike in exchange for completing a bike safety and maintenance training course, 251 and FreeRide! in Pittsburgh, Pennsylvania, in which participants receive a free bike in exchange for repairing it and volunteering hours. 252,253 Local governments can also get involved in such programs. One example is Boston's "Roll It Forward" program, which offers donated, refurbished bicycles to lowincome and homeless people in exchange for attending a bicycle safety educational workshop.<sup>254</sup> San Francisco recently amended its code to require the San Francisco Police Department to turn over recovered bicycles to the city's Department of Human Services, which facilitates community bike builds, where community members refurbish the recovered bicycles for low-income residents.<sup>255</sup>

Obtaining a bike, however, is just the first step. The ability to maintain and repair bikes is often an underappreciated barrier to active transportation in low-income communities and communities of color.<sup>256</sup> Many low-income areas do not even have a bicycle repair shop. Without access to affordable repairs, bikes can become useless. Even a flat tire can become an insurmountable barrier. In some locations, organizations have stepped in to meet



this need, but much more is needed. One example is the Boston Bicyclists Union which operates a "Bike to Market" program which provides free or low-cost bike repairs in low-income neighborhoods. Other Boston area groups, such as the Commonwheels Bicycle Co-Op, Rozzie Bikes, and the Yawkey Bike Club have also organized free bike repair stations.<sup>257</sup> In the San Francisco Bay Area, an innovative BikeMobile program hosts free bicycle repair clinics at schools, libraries, recreation centers, and community events, focusing on low-income areas.<sup>258</sup> However, the program, funded by the Metropolitan Transportation Commission, the Solano Transportation Commission, and Safe Routes to School, is set to expire in June 2015.259

In a rarer model, the City of Albuquerque's Parks and Recreation Department operates a community bicycle shop that provides skills and safety classes and also bicycle maintenance and repair. <sup>260</sup> Build-a-bike classes are focused on youth, and teach bike mechanics as well as safety. Earn-a-bike classes are for adults. They cost \$10, and require adults to complete a safety and maintenance class. In return, they get a refurbished bicycle, helmet, and lock. The program works with local high schools to provide work/study opportunities.

"Sometimes having a bike doesn't help the parents because it costs a lot to get it repaired."

Participant in barriers to bicycling focus group held by Community Cycling Center, Portland, Oregon<sup>261</sup>

### BICYCLE PROGRAMS FOR YOUTH

Bike programs designed specifically for youth in underserved areas not only introduce them to a healthy form of active transportation, but also empower them with opportunities to develop self-confidence and self-sufficiency. In addition to these immediate benefits, people who start bicycling when they are young are more likely to continue using active transportation as an adult.



"There's a lot that you can do with the bicycle, using it as a tool to teach people... When we're working with youth, we say it's all about the bike... But in reality it's not [just] about the bike. It's about everything else. It's all the other life lessons and skills that can be obtained by using the bicycle."

Katie Lupo Co-Founder of Gearin-Up which runs Earn a Bike programs and other bicycle-related job training programs for youth in Washington, D.C.<sup>271</sup>

Typically operated by nonprofits, youth bike programs in underserved communities are growing around the country. Some are operated as bike clubs. The Major Taylor Project bike club, for example, operated by Cascade Bicycle Club in Seattle, Washington, operates after school bike clubs in multiple schools where students go on weekly rides, participate in community building projects, and learn about bike safety, nutrition, map-reading, route design, stretching, and the impact of bicycling in their communities. Students can also participate in an eight-week "earn a bike" class that teaches bike mechanic skills. 264

Cycles of Change, in Oakland, California follows a similar model.<sup>265</sup>

Other youth programs operate out of a community bike repair shop and also offer training and employment opportunities. Gearin' Up Bicycles in Washington, D.C., for example, offers six- to eight-week classes in which children ages eight and older refurbish and earn a bike. Teens can also get hands-on training in bike mechanics and customer service leading to potential employment at Gearin' Up Bicycles or other bike stores.<sup>266</sup> Still other programs may be focused around a short-term project. In some cases, informal programs involve a few people in the community simply reaching out to youth to organize rides, like Eastside Riders Bike Club in Los Angeles.267

The Youth Bike Summit is an annual three-day conference that brings together participants from different backgrounds to "network, learn, and explore how the bicycle is a catalyst for positive social change." The summit, co-organized by youth, is a diverse and inclusive space that brings together hundreds of young people to turn learning and discussion into actions that benefit their health and empowerment.

Youth-oriented bike programs make an important contribution to active transportation equity and more are needed in low-income areas and communities of color. The job opportunities are meaningful, with an analysis by the U.S. Bureau of Labor Statistics finding that "bicycle repairer" is among the top 85 growing occupations and projecting 2,700 additional jobs for bike mechanics by 2022 – an increase of about 25 percent from 2012.<sup>269</sup>

"Now we do the Youth Leadership Retreat every year. We pull five or six students from each [bike] club so we have 20 to 25 students for the weekend. We talk about leadership, personal power, race, diversity, food justice, equity, social justice. We always relate it back to the bike and how the bike affects each of those areas."

Ed Ewing Director of Diversity and Inclusion, Cascade Bicycle Club, & Co-Founder of the Major Taylor Project, a program that uses bicycling to empower underserved youths in the Seattle area.<sup>272</sup> Bike Works Seattle, a nonprofit with youth and adult oriented programming, provides a two-week unit on physics concepts, demonstrated through bicycles, for local high schools each year.<sup>270</sup>

### **Jack and Jill of America**

Jack and Jill of America is a membership organization formed during the Great Depression with the goal of instilling values and developing leadership skills for African American children. The organization holds a biennial teen leadership summit aimed at supporting leadership building, volunteer service, and civic duty. At the 2014 summit, one of the tasks combined community service with a challenge called "Build a Bike" with teens working in teams to put together youth bikes to be donated to local low-income children. As a National Active Transportation Diversity Task Force Member, Jack and Jill reached out to the Safe Routes to School National Partnership to partner and expand the premise of the Build a Bike from just a leadership activity into an opportunity to talk about health and safety. Youth and parents were provided with information and training materials on bicycling in their communities and regional leaders were empowered to talk about health and accessibility issues in their states back home.

## **Changing the Culture of Recreational Bicycling**

It is not uncommon to hear negative stereotypes about bicycling in communities of color. Some view bicycling as a leisure activity for the well-to-do while others dismiss it as a mode of last resort for the poor, to be avoided if at all possible. Others may not even think about bicycling as an option because they don't see other people who look like them riding bicycles. Sometimes women feel they will be unsafe or conspicuous on a bicycle. And many are not aware of how bicycling can help improve their health and community.

Around the country a number of grassroots ridership groups, organized by people of color, for people of color, have formed to encourage members of their community to ride bicycles and to make bicycling more visible. In addition to leading rides, many groups also using bicycling as vehicle for raising broader health, equity, and other community issues; some also take on an advocacy role. A Red, Bike and Green chapter in Atlanta, GA, for example, helped successfully lobby for a fairer distribution of bike lanes and more equitable funding provisions in pending bike legislation.<sup>273</sup>

Sometimes such groups create communities and rides that are only for members of the specified group; other times they join larger more diverse rides with a core constituency. Either way, these groups are redefining people's image of what it means to be a bicyclist in the United States.

### The New Movement: Bike Equity Today

Read profiles of many of the biking groups organized by and for people of color in the League of American Bicyclists' **The New Movement: Bike Equity Today**, an October 2014 report.

#### **Slow Roll Detroit**

Slow Roll Detroit is a weekly Monday night community-based group bicycle ride. Started in 2011, Slow Roll has grown to be one of the world's largest weekly bike rides, averaging around 2,000 riders, and last season had up to 4,000 people participating in some rides. Slow Roll has a welcoming, parade-like atmosphere, with a highly diverse community of all races, backgrounds, men and women, all ages, Millennials to Baby Boomers, families and kids, Detroiters and suburbanites alike. Slow Roll Detroit has created real change in Detroit by building a movement and sense of community, with bicycling as the forum that brings it all together.<sup>274</sup>



### **Selected Bicycling Groups for Riders of Color**

Black Women Bike

**Fast Side Riders** 

Local Spokes: Lower East Side and Chinatown Bicycling Coalition

Los Ryderz

Major Taylor Bicycling Clubs

Bikesanas del Valle

Ovarian Psyco-Cycles

Red, Bike and Green

Richmond Spokes

Slow Roll Detroit

Slow Roll Chicago

The National Brotherhood

of Cyclists

### Addressing Crime, Fear of Crime, and Racial Profiling

Crime and fear of crime create an environment that is hostile to walking and bicycling and detrimental to community well-being. Traditionally, crime has been considered primarily a safety issue for law enforcement to address. In recent years, however, there has been increasing recognition that crime is not just a safety issue; addressing crime is also a critical to public health and to successfully promoting healthy living, healthy eating, and active transportation efforts. Nor can crime be effectively addressed by police alone. Thus, community leaders are bringing together advocates, researchers, nonprofit and government agencies, and other stakeholders from many sectors. These stakeholders are coming together to take a comprehensive approach to crime an approach that supplements traditional enforcement measures with prevention measures that aim to reduce the likelihood of crime happening in the first place.<sup>275</sup>

The Safe Routes to School National Partnership has produced a **report** on violence prevention and Safe Routes to School efforts. The report, Taking Back the Streets and Sidewalks: How Safe Routes to School and Community Safety Initiatives Can Overcome Violence and Crime, catalogues how Safe Routes to School programs have been structured to protect children from crime and decrease violence in communities, discusses related and more distant violence prevention initiatives, and highlights opportunities for greater partnership between safe routes proponents and violence prevention advocates.

"Advocates in the field of healthy eating and active living have pivotal roles to play—recognizing the impact of violence, raising their voices to broaden advocacy efforts, and undertaking cross-cutting strategies to help eliminate the causes of violence and chronic disease."

Prevention Institute<sup>276</sup>

Such a strategy involves engaging government agencies, youth, schools, businesses, and others to create opportunities to build community, provide alternatives to crime, and develop a more positive physical environment. 277,278

This type of holistic approach, along with progressive police initiatives such as community policing, not only reduces violence but also helps achieve transportation equity by creating safer places for low-income people to walk and bicycle.

Making neighborhoods safer directly supports the use of active transportation; conversely, active transportation programs and infrastructure also improve safety. Everything from bike paths and bike parking to traffic calming measures and better sidewalks helps get more people out and about, and thus helps create a safer environment – especially when the infrastructure is designed with crime reduction in mind.<sup>279</sup>

Addressing racial profiling and police brutality are also crucial objectives related to equity and crime prevention. As discussed in the opening sections of this report, people of color and low-income individuals are exposed to racial profiling by police as well as vigilantes while walking and bicycling. Addressing this reality requires a multipronged approach that takes on unfair policing practices, community habits that contribute to profiling, and the potential complacency of white active transportation proponents. One arena for collaboration is in advocacy for the removal of unnecessary laws imposing requirements on bicycling. Because local bicycling restrictions vary widely and often are not based on sound evidence of safety or other benefits, such laws can discourage bicycling or impose unnecessary barriers, while also giving police an ever-present excuse to stop riders of color. Avoiding the imposition of burdensome or unnecessary laws on bicycling - not to mention other unnecessary laws – may assist in reducing racial profiling of riders of color. The Detroit-based story in the sidebar provides an example of how and why to work on such issues.

"One of the things we created, and are launching as a non-profit right now, is a bike depot in a low-income community...It's had a big impact [in] improving the feeling of safety on the street. It has also gotten more people out volunteering, working with kids, as well as bicycling in the community. It helped balance things out—people feel safer."

From Prevention Institute's Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living<sup>280</sup>

#### **Joining Together to Remove Barriers**

In 2009, the Detroit Greenways Coalition and other active transportation advocates partnered with the Detroit Coalition Against Police Brutality to get the city council to repeal an ordinance requiring city-issued licenses to ride bicycles. but had not been enforced. Then, police indicated that they intended to start enforcing the requirement as a tool to combat drug dealing. As the police began ticketing unlicensed riders, despite the fact that bicycle licenses weren't even yet available, many in Detroit were concerned that the ordinance was simply providing an excuse for stopping and harassing young men of color.

At the same time, active transportation advocates also objected to the ordinance, because they saw it as placing an unnecessary barrier to use of active transportation. As Todd Scott, executive director of the Greenways Coalition explained, "The major reason for us was we are trying to reduce the barriers to people for riding bikes – we want to get them in people's hands." The two organizations teamed up to successfully demand that City Council repeal the law, despite opposition by the police department. Todd Scott said, "We had organized a protest ride, but since City Council removed the ban, it turned into a celebration ride."

The partnership gave momentum to the active transportation advocates, who went on to get a multimodal plan passed by the City Council. The **Greenways Coalition and Coalition** Against Police Brutality have continued to partner, with the Greenways Coalition hosting a group bike ride and discussion about policing on Belle Isle State Park for the Coalition Against Police Brutality, Detroit bike clubs, and the regional and statewide chief of state parks. The groups continue to work on removing outdated bicycle ordinances, and are working with youth to get laws that restrict bicycling for young people off the books.



Ron Scott, the city's most prominent Detroit Police watchdog, had purchased a bicycle as part of his opposition to the licensing requirement, and has now become an avid bike rider and bicycle advocate, too.<sup>305</sup>

### **Bike Share Programs**

Bike share programs provide new opportunities to use a bike to easily get around to jobs, doctors' appointments, and errands without having to own, maintain, or store a bike. When bike share stations are strategically coordinated with public transit, they can greatly ease the challenges of completing the first or last leg of a longer trip or commute, making even more destinations accessible by transit. Since 2010, when Washington D.C., Denver, and Minneapolis started the first large-scale bike share programs in the United States, they have been growing in popularity, and dozens of additional cities have followed suit.282

For low-income people, bike share programs have a lot of apparent potential. The ability to afford a bicycle and to keep it maintained and in good condition can be a serious obstacle to bicycling – as can finding room to securely store a bike.<sup>283</sup>

The recent wave of bike share programs, however, have ended up primarily serving male, affluent, white riders, and thus have reinforced transportation inequities instead of mitigating them. As has been amply documented, there are significant barriers preventing low-income riders and riders of color from being able to take advantage of bike sharing. First, it is common to see few bike stations located in low-income areas: instead, stations are sited in more affluent areas or tourist-oriented areas that will produce the most revenue to help ensure financial viability. In addition, the cost of using the bike share program, along with credit card or bank account requirements, also excludes many people from benefiting from the system.<sup>284</sup> Moreover, most bike

share programs roll out with little or no outreach to underserved neighborhoods to develop community support.

The glaring inequities in bike share programs have garnered significant media attention, and many bike share programs are now actively trying to reduce these barriers through a range of different strategies, including siting more stations in low-income areas, providing discounted memberships and alternatives to credit card and bank account requirements, and doing community outreach.<sup>285</sup> Bublr, the bike share program in Milwaukee, Wisconsin, is offering a new, simplified, and less expensive fee system that is designed to make it more affordable for residents of all income levels.<sup>286</sup> These efforts need to be encouraged and strengthened in order to effectively overcome existing barriers.

Philadelphia is leading the way with its new bike share program, named Indego, launched in April 2015. Using combined public and private funding, Indego was deliberately designed to be the most equitable bike share program in the country from inception, and if successful, will serve as a model for others. Fully one-third of its 60 bike share stations are located in low-income neighborhoods.<sup>288</sup> It will also have a cash option available to any resident; no credit card or bank account required. Community involvement was also a priority: focus groups were held with low-income residents to identify barriers, residents were asked for input on station locations, neighborhood "ambassadors" were hired to introduce the program, and low-income students and artists created murals highlighting the new bike stations.289

### Better Bike Share Partnership

Members of the Better Bike Share Partnership (BBSP) that collaborated on Indego are also continuing to work on bike share equity issues around the country. One member, for example, The **National Association of City** Transportation Officials (NACTO), is collecting and disseminating best practices on bike share, including equity strategies. Another member, PeopleForBikes, is providing grant money to different communities to develop and implement strategies underserved areas. PeopleForBikes is also funding a "storytelling effort" to better communicate the ongoing challenges and achievements of grantees in real time through blogs, articles, images, and videos.<sup>291</sup> These efforts should continue the momentum to make bike share programs live up to their potential to significantly contribute to an equitable active transportation



"The rates of low-income ridership of all bikeshare programs around the world is pitifully low. So we can only do better."

Caroline Samponaro
Transportation Alternatives, New York<sup>287</sup>

"Our bike share [program] will be accessible to underserved communities from day one."

Carniesha Fenwick-Kwashie Grant Manager of the Mayor's Fund for Philadelphia<sup>290</sup>

### An Abundance of Unattractive, Dangerous Bus Stops

Streetsblog's "sorriest bus stop" contest received many entries.

Submissions showed bus stops with no sidewalk leading up to them, on highways, on busy arterial streets, interfering with bicycle lanes, with no markers, without safe crossings, snowed in, and more.<sup>295</sup> The award winner featured a bus stop on a four lane divided highway with nothing more than a sign to mark it – no sidewalk, no bench, no set back from the highway, no way to cross the highway. The sign sat near a drainage ditch in an empty field, with no street in sight.<sup>296</sup>

As many communities consider new transit options, active transportation advocates can play an integral role in addressing first and last mile connections, especially in low-income neighborhoods where transit use is high and the path to the nearest stop is frequently unsafe. This work provides an opportunity to bring nontraditional partners such as public health, environmental justice and social justice stakeholders into transportation planning conversations, as it is a natural place where these sectors' work intersects and everyone can see a benefit from greater access to the transit system.

### **Key Role for Public Transit**

Most of this report has focused on the state of equity and the active transportation movement. But public transportation is integral to supporting walking and bicycling, and plays a key role in creating healthy and equitable communities. Nationally, transit ridership is highest among low-income households, and many endure long commutes via transit to get to work or other destinations because of gaps in the network. Because many of the issues that transit justice advocates are working on overlap with equity issues in active transportation, and because transit and walking and bicycling are closely linked forms of transportation, there are great opportunities for collaborative efforts.

### INVESTING IN TRANSIT NECESSITATES GREATER INVESTMENTS IN WALKING AND BICYCLING

The success of transit is largely dependent on how easily people can access it. Research studies regularly find that providing easy pedestrian and bicycle access to stations will encourage higher transit ridership, especially at employment centers where people are less inclined to walk long distances.<sup>292</sup> Thus, many transit agencies and local planning departments focus on "first and last mile" connections to the transit network. Yet many have struggled to invest in the infrastructure necessary to create safe walking and bicycling conditions. One challenge arises because most transit agencies do not have authority over the land surrounding their stations, requiring coordination

with local public works and planning departments, which can be a difficult and rocky process. LA Metro recently published a First and Final Mile Strategic Plan with recommendations on how to connect transit riders to their origins and destinations via walking and bicycling. The report acknowledges the limited role of Metro in implementing the recommended improvements.<sup>293</sup> Denver's Mile High Connects coalition has also made it a priority to advocate for first and last mile connections to Denver's growing mass transit network, as well as make sure that bus riders are not left behind by new rail investments.294

# EQUITABLE DEVELOPMENT, TRANSIT, AND ACTIVE TRANSPORTATION

At a broader level, the importance of supporting neighborhoods while preventing displacement has given rise to a movement around equitable development. The goal of equitable development is to make sure that communities get the investment, infrastructure, and resources they need, but in ways that ensure that everyone benefits. Equitable development is often framed as a solution to the problems of gentrification and displacement.

A key component of equitable development is mixed-income housing located in close proximity to transit stations, usually within a half-mile. There is a major shortage of affordable housing across the United States, and because many low-income households take transit, walk or bike, they can save money on transportation costs by living in places





with multiple transportation options. But market forces often don't provide affordable housing near transit stations without federal grants or tax subsidies to developers. And the rising popularity of living in walkable neighborhoods or near transit creates market conditions that can displace existing residents.<sup>298</sup>

Along the Gold Line in Los Angeles, community work on the ground counteracted threats of displacement to preserve affordable housing. The Gold Line opened up a connection across the LA River to Boyle Heights, making the neighborhood more popular for downtown workers and others who desired close proximity to downtown LA. In addition, the City of Los Angeles then made plans to revitalize the LA River by creating new bike trails. But the larger changes afoot meant that the neighborhood saw these plans as a threat rather than an amenity.<sup>299</sup> Community stakeholders have worked to preserve affordable housing and build new units as the neighborhood undergoes changes and sees improvements to its infrastructure.300 The Alliance for Community Transit in Los Angeles recently published a paper with recommendations for preserving affordable housing in South Los Angeles and other low-income communities and communities of color along planned transit lines, using lessons from the Gold Line. 301

In the Twin Cities region, advocates along the Green Line (formerly the Central Corridor) mobilized to protect residents and small businesses along the light rail route from displacement, both during and after construction, as the neighborhood

"Equitable development is an approach to creating healthy, vibrant[] communities of opportunity. Equitable outcomes come about when smart, intentional strategies are put in place to ensure that everyone can participate in and benefit from decisions that shape their neighborhoods and regions."

became more desirable due to its role in relieving the market pressures of the two downtowns it connects, Minneapolis and St. Paul. <sup>302</sup> They created an Investment Framework Plan <sup>303</sup> and a health impact assessment <sup>304</sup> to address their concerns and spell out how to address them over time.

Communities have had varied success with equitable development, and it remains a significant policy challenge. Funding for affordable housing is limited and subsidy programs are always on the chopping block in state and federal budgets. Yet safe walking and bicycling are an integral component of equitable development, given the high proportion of people at lower incomes who walk and bicycle. Furthermore, while many transportation investments take a long time to come to fruition, they are intricately planned and regulated by government agencies, and most of these processes provide regular opportunities for input. It is important for walking and bicycling advocates to be at the table with other advocates fighting for affordable housing, transit, economic development, and other equity concerns that will make our communities safer and more livable places.

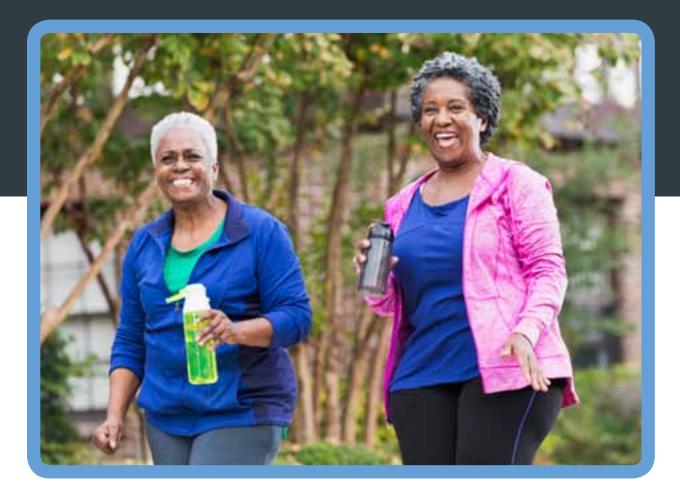
### Affordable Housing and Sustainable Communities Program

One recent success in funding equitable development has been California's Affordable Housing and Sustainable Communities program.305 The program's funding comes from the California capand-trade revenue, and the first round of grants will be awarded in mid-2015. Grants can be used to fund affordable housing development near transit stops/ stations, infrastructure to support the affordable housing projects, public transit access, pedestrian or bicycle network improvements, and associated active transportation and transit ridership programs.

### **Additional Resources on Equitable Development**

- PolicyLink, Equitable Development
   Toolkit: A resource for tools and solutions to address issues that arise with transportation investments and equity concerns
- Center for Transit-Oriented
   Development, Mixed-Income
   Transit-Oriented Development
   Action Guide: Provides a great
   source of information on potential
   solutions to gentrification and
   displacement issues. The website
   features dozens of tools that can
   be used to create and preserve
   affordable housing and mixed-income
   housing and to prevent displacement.
- In addition, it provides links to case studies from all types of communities that have been successful in addressing displacement and creating new affordable housing opportunities near transit.
- ChangeLab Solutions, <u>Preserving</u>,
   <u>Protecting</u>, <u>and Expanding</u>
   <u>Affordable Housing</u>: <u>A Policy</u>
   <u>Toolkit for Public Health</u>
- Enterprise Community Partners,
   Preserving Affordable Housing
   Near Transit
- Principles of Equitable
   Development

### **CONCLUSION**



Transportation is a fundamental aspect of everyday life. The transportation inequities spelled out in this report are not just a matter of convenience. Rather, they have serious and far-reaching impacts on the safety, health, and quality of life of millions of children and adults in our country. Because the dominant orientation of our transportation system is getting well-to-do people around by car, there are serious challenges we must overcome if we are to successfully address these disparities.

Increasing the safety and convenience of walking and bicycling will reduce air pollution and asthma rates, address climate change, and support friendlier streets and neighborhood cohesion – but for low-income families without a car, it will require decades of focused effort and enormous investments for walking, bicycling and transit to truly provide equitable access to active transportation. At the same time, millions of low-income Americans are walking and bicycling in unsafe conditions right now.

This report reviews a wide array of challenges and opportunities to improving active transportation while increasing the equity of our transportation system. Key lessons include the following:

- Advocates and agency staff must support real, meaningful community engagement for both governmental and organizational decision making, projects, and programs. Governmental institutions tend to have a top-down approach, but including people in the decisions that affect them is key to understanding needs, avoiding unintended consequences, and acting in ways that are respectful of community knowledge and expertise. Don't rely on inviting the community to come to you – go to them. Engage communities early in the process, bring questions to communities and make sure that there are real benefits for those communities in participating in events and feedback sessions. Be aware of why the community may feel distrust towards government and others, and work to create a basis for trust and joint efforts.
- One of the key recurring lessons of work in this arena is that in order to promote active transportation while supporting equitable outcomes, active transportation advocates need to embrace the larger goals of potential partners. Don't ignore or dismiss fears around gentrification, school siting, and police brutality take these concerns seriously, own them, and be part of the solution. This engagement is part of realizing a vision of a vibrant, healthy, equitable society where everyone

- can thrive. Active transportation advocates can act as real allies on strategies and advocacy around quality education, affordable housing, residential diversity, and more. This work won't be a distraction instead, it will bring new partners and collaborators who will, in turn, support core active transportation concerns.
- In light of the considerable concerns around gentrification and displacement, it is worth emphasizing this persistent reality: for those who are working in the space of equity and active transportation, affordable housing and anti-displacement efforts need to be a fundamental part of the work.
- Active transportation proponents and agency personnel should prioritize learning, growth, and capacity building with regard to equity work. Both as a personal matter and in their professional roles, there may be need for exploration of implicit biases, privileges, and historical roles to help ensure that stakeholders are ready to engage non-defensively and openly with equity partners.
- Advocates and community stakeholders play an important role in ensuring equitable development in our neighborhoods. By understanding

- how market forces work in relation to walking, bicycling, and transit investments, communities can proactively plan for and advocate for community needs. Transportation planning is deeply esoteric it is important to have community organizations and experts who can analyze proposals and policies and translate them for local residents, and then translate community demands back into technical lingo and policy provisions.
- Work in this area requires the creation of deep and lasting collaborations, coalitions, and partnership. This will require people to take actions, engage with issues, and create relationships that may not be familiar and comfortable but the work will be better for it.
- Equity is the touchstone for this work. In initial planning, equity must be a key goal as initiatives and approaches are developed; work should be evaluated midstream to ensure that it is focused on identified needs, community voice, and other key considerations of equity. In the end, the results of these efforts should be assessed to see whether in fact they advanced equity, and as new initiatives are developed once more, they should incorporate the lessons learned.

Demands for both equity and active transportation are growing louder every day. This report lays out why there is great need for work at this intersection, identifies the policies and practices that such work can influence, and highlights the inspiring efforts already under way.

We look forward to supporting, participating in, and learning from future initiatives to make our streets safer for low-income communities and communities of color. Safe and effective transportation options are not a nicety for low-income families, but a necessity.

#### **Endnotes**

Many of these resources can be found in our library of resources on the Safe Routes to School National Partnership's website at www.saferoutespartnership.org

- Max Applebaum, Andrew Camp, Conor Clarke et al., Beyond the Backlash: Equity and Participation in Bicycle Planning: Executive Summary (May 2011) at v, http://www.hunter.cuny.edu/ccpd/repository/ files/es\_beyond-the-backlash-2011.pdf.
- Paul M. Davis, "Are Bike Lanes Expressways to Gentrification?" Shareable, August 30, 2011, http://www.shareable.net/blog/are-bike-lanesexpressways-to-gentrification.
- <sup>3</sup> April Streeter, "Fixing Urban Biking's White Bias, Part II," Good, 12/29/10, <a href="http://magazine.good.is/articles/fixing-urban-biking-s-white-bias-part-ii">http://magazine.good.is/articles/fixing-urban-biking-s-white-bias-part-ii</a>.
- Brian McKenzie, "Modes Less Traveled—Bicycling and Walking to Work in the United States: 2008– 2012," American Community Survey Reports, 2014, http://www.census.gov/prod/2014pubs/acs-25. pdf.
- League of American Bicyclists, "The New Majority, Pedaling Towards Equity," <a href="https://www.ssti.us/wp/wp-content/uploads/2013/06/Sierra-+-LAB-bike-equity\_report-May-2013.pdf">http://www.ssti.us/wp/wp-content/uploads/2013/06/Sierra-+-LAB-bike-equity\_report-May-2013.pdf</a>.
- Tanya Snyder, "Low-Income Americans Walk and Bike to Work the Most," Streetsblog, May 8, 2014, http://usa.streetsblog.org/2014/05/08/low-income-americans-walk-and-bike-to-work-the-most/.
- Brian McKenzie, "Modes Less Traveled—Bicycling and Walking to Work in the United States: 2008– 2012," American Community Survey Reports, 2014, http://www.census.gov/prod/2014pubs/acs-25.pdf.
- In this report, we use the term "African American" to refer to individuals who identify as black. Most of the statistical references exclude Latino blacks from the data reflecting population trends for African Americans. Likewise, the term "white" generally does not include white Latinos. We also use the term "Latino" to describe people whose family origins are from Mexico or Central or Southern America rather than the term "Hispanic."
- McDonald, N., "Critical factors for active transportation to school among low-income and minority students: Evidence from the 2001 National Household Travel Survey," American Journal of Preventive Medicine, 34, 341-3, 2008.
- John Pucher, Ralph Buehler, Mark Seinen, "Bicycling Renaissance in North America? An Update and Re-appraisal of Cycling Trends and Policies," Transportation Research Part A 45 (2011): 459 and Figure 4, http://policy.rutgers.edu/faculty/pucher/ TRA960\_01April2011.pdf.
- League of American Bicyclists, "The New Majority, Pedaling Towards Equity," http://www.ssti.us/wp/ wp-content/uploads/2013/06/Sierra+-LAB-bikeequity\_report-May-2013.pdf.
- 12 Ibid.
- 13 Ibid.
- 14 Ibid.
- Alliance for Biking and Walking,
  "Benchmarking Report," 2012 http://www.
  peoplepoweredmovement.org/site/index.php/site/
  memberservices/2012 benchmarking report/;
  Pucher, J., and J. Renne, "Socioeconomics of
  Urban Travel: Evidence from the 2001 NHTS,"
  Transportation Quarterly, 57, 49-77, 2003; Van
  Lenthe et al., in Krizek, K., et al., Walking and
  Cycling International Literature Review, 2005.
- Tanya Snyder, "Low-Income Americans Walk and Bike to Work the Most," Streetsblog, May 8, 2014, http://usa.streetsblog.org/2014/05/08/low-income-americans-walk-and-bike-to-work-the-most.
- Nancy McGruckin, "Walking and Biking in California: Analysis of the CA-NHTS," Institute of Transportation Studies, University of California, Davis (2012): 25, Table 13, http://publications.its.ucdavis.edu/ publication\_detail.php?id=1661.

- <sup>18</sup> Mary Brown, "Why Aren't Women on Wheels?" San Francisco Bicycle Coalition, <a href="http://www.sfbike.org/?women\_mb">http://www.sfbike.org/?women\_mb</a>.
- John Neff & Larry Pham, "A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys," 2007, American Public Transportation Association, http://www.apta.com/resources/statistics/ Documents/transit\_passenger\_characteristics\_ text\_5\_29\_2007.pdf.
- Mike Maciag, "Public Transportation's Demographic Divide," Governing, February 25, 2014, <a href="http://www.governing.com/topics/transportation-infrastructure/gov-public-transportation-riders-demographic-divide-for-cities.html">http://www.gov-public-transportation-riders-demographic-divide-for-cities.html</a>.
- John Neff & Larry Pham, "A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys," 2007, American Public Transportation Association, http://www.apta.com/resources/statistics/ Documents/transit\_passenger\_characteristics text\_5\_29\_2007.pdf.
- John Neff & Larry Pham, "A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys," 2007, American Public Transportation Association, http://www.apta.com/resources/statistics/ Documents/transit\_passenger\_characteristics\_ text\_5\_29\_2007.pdf.
- <sup>23</sup> John Neff & Larry Pham, "A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys," 2007, American Public Transportation Association, <a href="http://www.apta.com/resources/statistics/">http://www.apta.com/resources/statistics/</a> Documents/transit passenger characteristics text 5 29 2007.pdf.
- <sup>24</sup> John Neff & Larry Pham, "A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys," 2007, American Public Transportation Association, http://www.apta.com/resources/statistics/ Documents/transit\_passenger\_characteristics\_ text\_5\_29\_2007.pdf.
- <sup>25</sup> Commuting in America 2013: The National Report on Commuting Patterns and Trends, 2013, American Association of State Highway and Transportation Officials, <a href="http://traveltrends.transportation.org/Documents/B7">http://traveltrends.transportation.org/Documents/B7</a> Vehicle%20 and%20Transit%20Availability CA07-4 web.pdf.
- 26 Ibid.
- <sup>27</sup> Judith Bell & Larry Cohen, "The Transportation Prescription: Bold New Ideas for Healthy, Equitable Transportation Reform in America," PolicyLink, Convergence Partnership and Prevention Institute, 2009 (Statistics republished from Steven Raphael and Alan Berube, "Socioeconomic Differences in Household Automobile Ownership Rates: Implications for Evacuation Policy," paper prepared for the Berkeley Symposium on "Real Estate, Catastrophic Risk, and Public Policy," March 23, 2006.
- <sup>28</sup> Linda Bailey, "Aging Americans: Stranded Without Options," Surface Transportation Policy Project, April 2004, <a href="https://www.transact.org/report.asp?id=232">www.transact.org/report.asp?id=232</a>.
- <sup>29</sup> Irwin Redlener et al., "The Growing Health Care Access Crisis for American Children: One in Four at Risk," The Children's Health Fund, 2007, <a href="http://www.childrenshealthfund.org/sites/default/files/WhitePaper-May2007-FINAL.pdf">http://www.childrenshealthfund.org/sites/default/files/WhitePaper-May2007-FINAL.pdf</a>.
- Stephanie Pollack, Liz Williams, Russ Lopez, and Ivette Luna, "The Toll of Transportation," Northeastern University, Dukakis Center for Urban & Regional Policy, November 2013. http://www. northeastern.edu/dukakiscenter/wp-content/ uploads/2013/11/The-Toll-of-Transportation-Final-Report.pdf.

#### Endnotes

- 31 Eric Moskowitz, "Wide Racial Gap Exists on Speed of Boston-area Commutes," Boston.com, November 24, 2012. <a href="http://www.boston.com/news/local/massachusetts/2012/11/24/wide-racial-gap-exists-speed-boston-area-commutes/oW7hHJ0IFWluX6eQI15QPL/story.html">http://www.boston.com/news/local/massachusetts/2012/11/24/wide-racial-gap-exists-speed-boston-area-commutes/oW7hHJ0IFWluX6eQI15QPL/story.html</a>.
- 32 M. Ver Ploeg, et al., Access to Affordable and Nutritious Food: Updated Estimates of Distance to Supermarkets Using 2010 Data, United States Department of Agriculture, Economic Research Service, 2012.
- <sup>33</sup> Gordon-Larsen, P., Nelson, M., Page, P. & Popkin, B. 2006. Inequality in the Built Environment Underlies Key Health Disparities in Physical Activity and Obesity. Pediatrics. 117(2): 417.
- <sup>34</sup> The City Project, HEALTHY PARKS, SCHOOLS AND COMMUNITIES: Mapping Green Access and Equity for Southern California, 2011.
- <sup>35</sup> Corinne Ramey, "America's Unfair Rules of the Road," Slate, 2/27/15, http://www.slate.com/ articles/news and politics/politics/2015/02/ america s transportation system discriminates against minorities and poor.single.html.
- Mikayla Bouchard, "Transportation Emerges as Crucial to Escaping Poverty," New York Times, May 7, 2015, http://www.nytimes.com/2015/05/07/ upshot/transportation-emerges-as-crucialto-escaping-poverty.html?smid=pl-share& r=1&abt=0002&abg=1.
- Mikayla Bouchard, "Transportation Emerges as Crucial to Escaping Poverty," New York Times, May 7, 2015, http://www.nytimes.com/2015/05/07/upshot/transportation-emerges-as-crucial-to-escaping-poverty.html?smid=pl-share&r=1&abt=0002&abg=1.
- <sup>38</sup> American Community Survey, Modes Less Traveled-Bicycling and Walking to Work in the U.S., 2008-2012, http://www.census.gov/prod/2014pubs/acs-25.pdf; see also Streetsblog, May 8, 2014: http://usa.streetsblog.org/2014/05/08/low-income-americans-walk-and-bike-to-work-the-most/.
- <sup>39</sup> American Community Survey, Modes Less Traveled-Bicycling and Walking to Work in the U.S., 2008-2012, <a href="http://www.census.gov/prod/2014pubs/acs-25.pdf">http://www.census.gov/prod/2014pubs/acs-25.pdf</a>; see also Streetsblog, May 8, 2014: <a href="http://usa.streetsblog.org/2014/05/08/low-income-americans-walk-and-bike-to-work-the-most/">http://usa.streetsblog.org/2014/05/08/low-income-americans-walk-and-bike-to-work-the-most/</a>.
- Mikayla Bouchard, "Transportation Emerges as Crucial to Escaping Poverty," New York Times, May 7, 2015, http://www.nytimes.com/2015/05/07/ upshot/transportation-emerges-as-crucialto-escaping-poverty.html?smid=pl-share& r=1&abt=0002&abg=1.
- <sup>41</sup> The Leadership Conference Education Fund, 2011. Where We Need to Go: A Civil Rights Roadmap to Transportation Equity, http://www.protectcivilrights.org/pdf/docs/transportation/52846576-Where-We-Need-to-Go-A-Civil-Rights-Roadmap-for-Transportation-Equity.pdf.
- <sup>42</sup> Adie Tomer, Elizabeth Kneebone, Robert Puentes, and Alan Berube, "Missed Opportunity: Transit and Jobs in Metropolitan America," Brookings Institute, 2011, http://www.brookings.edu/~/ media/research/files/reports/2011/5/12-jobs-andtransit/0512 jobs transit.pdf.
- <sup>43</sup> Dukakis Center for Urban and Regional Policy, Stephanie Pollack. Maintaining Diversity In America's Transit-Rich Neighborhoods. 2010 – <a href="http://nuweb9.neu.edu/dukakiscenter/wp-content/uploads/TRN-Equity-final.pdf">http://nuweb9.neu.edu/dukakiscenter/wp-content/uploads/TRN-Equity-final.pdf</a>.
- <sup>44</sup> Angie Schmitt, "Man Walks 21 Miles to Commute Each Day Because of Detroit's Awful Transit," Streetsblog, February 3, 2015, <a href="https://usa.streetsblog.org/2015/02/03/man-walks-21-miles-for-work-each-day-because-of-detroits-terrible-transit/">https://usa.streetsblog.org/2015/02/03/man-walks-21-miles-for-work-each-day-because-of-detroits-terrible-transit/</a>

- <sup>45</sup> Detroit Free Press, January 31, 2015, <a href="http://www.freep.com/story/news/local/michigan/oakland/2015/01/31/detroit-commuting-troy-rochester-hills-smart-ddot-ubs-banker-woodward-buses-transit/22660785/">http://www.freep.com/story/news/story
- Mikayla Bouchard, "Transportation Emerges as Crucial to Escaping Poverty," New York Times, May 7, 2015, http://www.nytimes.com/2015/05/07/ upshot/transportation-emerges-as-crucialto-escaping-poverty.html?smid=pl-share& r=1&abt=0002&abg=1.
- <sup>47</sup> Centers for Disease Control, "Adult Obesity Facts," <u>http://www.cdc.gov/obesity/data/adult.html</u>.
- <sup>48</sup> Mayo Clinic, Diseases and Conditions: Obesity, http://www.mayoclinic.org/diseases-conditions/ obesity/basics/causes/con-20014834.
- <sup>49</sup> Centers for Disease Control, "Adult Obesity Facts," http://www.cdc.gov/obesity/data/adult.html.
- Cynthia L. Ogden, PhD et al., "Prevalence of High Body Mass Index in U.S. Children and Adolescents, 2007-2008," Journal of the American Medical Association, 303(3): 242-249, doi:10.1001/ jama.2009.2012.
- <sup>51</sup> Katie M. Heinrich et al., "How Does the Built Environment Relate to Body Mass Index and Obesity Prevalence Among Public Housing Residents? Journal of Health Promotion. 2008, 22(3):187-194.
- <sup>52</sup> Laura Sandt et al., "Leveraging the Health Benefits of Active Transportation: Creating an Actionable Agenda for Transportation Professionals," TR News, May-June 2012, http://onlinepubs.trb.org/ onlinepubs/trnews/trnews280.pdf.
- Laura Sandt et al., "Leveraging the Health Benefits of Active Transportation: Creating an Actionable Agenda for Transportation Professionals," TR News, May-June 2012, http://onlinepubs.trb.org/ onlinepubs/trnews/trnews280.pdf.
- Laura Sandt et al., "Leveraging the Health Benefits of Active Transportation: Creating an Actionable Agenda for Transportation Professionals," TR News, May-June 2012, http://onlinepubs.trb.org/ onlinepubs/trnews/trnews280.pdf.
- 55 Todd Litman, Evaluating Transportation Benefits and Costs, Victoria Transport Policy Institute, February 2015, http://www.vtpi.org/nmt-tdm.pdf.
- Penny Gordon-Larsen et al., "Active Commuting and Cardiovascular Disease Risk: The CARDIA Study," Archives of Internal Medicine 169, no. 13 (2009): 1216-1223, http://archinte.jamanetwork.com/ article.aspx?articleid=773531#qundefined.
- <sup>57</sup> Alliance, "Benchmarking Report," <a href="http://www.peoplepoweredmovement.org/site/index.php/site/memberservices/2012\_benchmarking\_report/;">http://www.peoplepoweredmovement.org/site/index.php/site/memberservices/2012\_benchmarking\_report/;</a>;
  Pucher, J., and J. Renne, "Socioeconomics of Urban Travel: Evidence from the 2001 NHTS,"
  Transportation Quarterly, 57, 49-77, 2003; Van Lenthe et al., in Krizek, K., et al., Walking and Cycling International Literature Review, 2005.
- John Greenfield, "Advocates Request a Fair Share of Bike Resources for Black Communities," Streetsblog Chicago, 12/19/14, http://chi.streetsblog. org/2014/12/19/advocates-request-a-fair-share-of-bike-resources-for-black-communities/.
- <sup>59</sup> California Department of Public Health, Health and Environmental Benefits of Active Transportation and Complete Streets, <a href="http://sgc.ca.gov/docs/funding/Health">http://sgc.ca.gov/docs/funding/Health</a> and <a href="https://spc.ca.gov/docs/funding/Health">Environmental Benfits</a> of Active Transportation and <a href="https://soc.org/complete-streets-12.23.pdf">Complete Streets 12.23.pdf</a>.
- Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, <a href="http://www.vtpi.org/nmt-tdm.pdf">http://www.vtpi.org/nmt-tdm.pdf</a>.
- <sup>61</sup> Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, <a href="http://www.vtpi.org/nmt-tdm.pdf">http://www.vtpi.org/nmt-tdm.pdf</a>.

- Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, http://www.vtpi.org/nmt-tdm.pdf.
- <sup>63</sup> Institute of Medicine (U.S.) Committee on Disability in America; Field MJ, Jette AM, editors. The Future of Disability in America. National Academies Press 2007. Sandra Rosenbloom, "Transportation Patterns and Problems of People with Disabilities." http://www.ncbi.nlm.nih.gov/books/NBK11420/.
- Institute of Medicine (U.S.) Committee on Disability in America; Field MJ, Jette AM, editors. The Future of Disability in America. National Academies Press 2007. Sandra Rosenbloom, "Transportation Patterns and Problems of People with Disabilities." <a href="http://www.ncbi.nlm.nih.gov/books/NBK11420/">http://www.ncbi.nlm.nih.gov/books/NBK11420/</a>.
- National Council on Disability, "Transportation Update: Where We've Gone and What We've Learned," 2015, <a href="http://www.ncd.gov/publications/2015/05042015/">http://www.ncd.gov/publications/2015/05042015/</a>.
- National Council on Disability, "Transportation Update: Where We've Gone and What We've Learned," 2015, <a href="http://www.ncd.gov/publications/2015/05042015/">http://www.ncd.gov/publications/2015/05042015/</a>.
- <sup>67</sup> Institute of Medicine (U.S.) Committee on Disability in America; Field MJ, Jette AM, editors. The Future of Disability in America. National Academies Press 2007. Sandra Rosenbloom, "Transportation Patterns and Problems of People with Disabilities." http://www.ncbi.nlm.nih.gov/books/NBK11420/.
- <sup>68</sup> Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, <a href="http://www.vtpi.org/nmt-tdm.pdf">http://www.vtpi.org/nmt-tdm.pdf</a>.
- <sup>69</sup> Laura Sandt et al., "Leveraging the Health Benefits of Active Transportation: Creating an Actionable Agenda for Transportation Professionals," TR News, May-June 2012.
- Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, <a href="http://www.vtpi.org/nmt-tdm.pdf">http://www.vtpi.org/nmt-tdm.pdf</a>.
- 71 Smart Growth America, "Complete Streets Stimulate Local Economy," <u>http://www.smartgrowthamerica.org/documents/cs/factsheets/cs-economic.pdf</u>.
- Darren Flusche, "Bicycling Means Business: The Economic Benefits of Bicycle Infrastructure," 2012, Advocacy Advance, <a href="http://www.advocacyadvance.org/site\_images/content/Final\_Econ\_Update%28small%29.pdf">http://www.advocacyadvance.org/site\_images/content/Final\_Econ\_Update%28small%29.pdf</a>.
- <sup>73</sup> http://www.seattle.gov/transportation/docs/bmp/ apr14/SBMP\_21March\_FINAL\_full%20doc.pdf (citing Bureau of Transportation Statistics. Pocket Guide to Transportation. 2009.).
- <sup>74</sup> Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, http://www.vtpi.org/nmt-tdm.pdf..
- <sup>75</sup> Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, <a href="http://www.vtpi.org/nrmt-tdm.pdf">http://www.vtpi.org/nrmt-tdm.pdf</a> (including annualized land, construction and operating costs).
- <sup>76</sup> Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, <a href="http://www.vtpi.org/nmt-tdm.pdf">http://www.vtpi.org/nmt-tdm.pdf</a>.
- <sup>77</sup> Angela Glover Blackwell, "Equity is the superior growth model," 2/20/14, <a href="http://redf.org/equity-superior-growth-model-angela-glover-blackwell-policylink/">http://redf.org/equity-superior-growth-model-angela-glover-blackwell-policylink/</a>.
- <sup>78</sup> Darren Flusche, "National Household Travel Survey Short Trips Analysis," 2010, <a href="https://www.bikeleague.org/content/national-household-travel-survey-short-trips-analysis">https://www.bikeleague.org/content/national-household-travel-survey-short-trips-analysis</a>.

- <sup>79</sup> Todd Litman, "Evaluating Transportation Benefits and Costs," Victoria Transport Policy Institute, February 2015, <a href="http://www.vtpi.org/nmt-tdm.pdf">http://www.vtpi.org/nmt-tdm.pdf</a>.
- Redestrian and Bicycle Information Center, Environmental Benefits of Walking and Bicycling, http://www.pedbikeinfo.org/data/factsheet environmental.cfm.
- <sup>81</sup> Michael Jerrett et al., Traffic-Related Air Pollution and Asthma Onset in Children: A Prospective Cohort Study with Individual Exposure Measurement, 2008, <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2569108/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2569108/</a>.
- 82 Pedestrian and Bicycle Information Center, Environmental Benefits of Walking and Bicycling, http://www.pedbikeinfo.org/data/factsheet\_ environmental.cfm.
- 83 Seth Shonkoff et al., "Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature," California Climate Change Center, 2009, <a href="http://www.energy.ca.gov/2009publications/CEC-500-2009-038/CEC-500-2009-038-D.PDF">http://www.energy.ca.gov/2009publications/CEC-500-2009-038/CEC-500-2009-038-D.PDF</a>.
- 84 U.S. EPA, Climate Change: Basic Information, http://www.epa.gov/climatechange/basics/.
- 85 U.S. EPA, Sources of Greenhouse Gas Emissions, http://www.epa.gov/climatechange/ghgemissions/ sources.html.
- <sup>86</sup> Pedestrian and Bicycle Information Center, Environmental Benefits of Walking and Bicycling, <a href="http://www.pedbikeinfo.org/data/factsheet\_environmental.cfm">http://www.pedbikeinfo.org/data/factsheet\_environmental.cfm</a>.
- 87 Ibid
- 88 M. Maciag, Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods, Governing (August 2014), http://www.governing. com/topics/public-justice-safety/gov-pedestriandeaths-analysis.html.
- 89 League of American Bicyclists, "The New Majority, Pedaling Towards Equity," http://www.ssti.us/wp/ wp-content/uploads/2013/06/Sierra-+-LAB-bikeequity\_report-May-2013.pdf.
- 90 Safe Routes to School National Partnership, "Safe Routes to School State Network Project: Building a Culture of Health through Active Transportation," 2014, http://saferoutespartnership.org/sites/ default/files/pdf/State-Network-Project-Building-A-Culture-of-Health-through-Active-Transportation-web. pdf.
- M. Maciag, Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods, Governing (August 2014), <a href="https://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html">https://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html</a>.
- Patrick Morency, Lise Gauvin, Céline Plante, et al., Neighborhood Social Inequalities in Road Traffic Injuries: The Influence of Traffic Volume and Road Design, Am J Public Health, 102(6): 1112–1119 (June 2012), <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3483951/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3483951/</a>.
- Patrick Morency, Lise Gauvin, Céline Plante, et al., Neighborhood Social Inequalities in Road Traffic Injuries: The Influence of Traffic Volume and Road Design, Am J Public Health, 102(6): 1112–1119 (June 2012), <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3483951/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3483951/</a>.
- Patrick Morency, Lise Gauvin, Céline Plante, et al., Neighborhood Social Inequalities in Road Traffic Injuries: The Influence of Traffic Volume and Road Design, Am J Public Health, 102(6): 1112–1119 (June 2012), http://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3483951/.

- <sup>95</sup> M. Maciag, Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods, Governing (August 2014), <a href="http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html">http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html</a>.
- Transportation Alternatives, "Child Crashes: An Unequal Burden," 2012, http://transalt.org/sites/ default/files/news/reports/2012/Child Crashes An Unequal Burden.pdf.
- <sup>97</sup> Transportation Alternatives, "Child Crashes: An Unequal Burden," 2012, http://transalt.org/sites/ default/files/news/reports/2012/Child Crashes An Unequal Burden.pdf.
- <sup>98</sup> K. Gibbs, S. Slater, N. Nicholson, et al., Income Disparities in Street Features that Encourage Walking – A BTG Research Brief. Chicago, IL: Bridging the Gap Program, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago (2012), <a href="https://www.bridgingthegapresearch.org/asset/02fpi3/btg\_street\_walkability\_FINAL\_03-09-12.pdf">https://www.bridgingthegapresearch.org/asset/02fpi3/btg\_street\_walkability\_FINAL\_03-09-12.pdf</a>.
- 99 Ibid.
- 100 lbid.
- <sup>101</sup> Ibid.
- M. Maciag, Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods, Governing (August 2014), http://www.governing. com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html.
- <sup>103</sup> Sara Fecht, Accident-Zone: Poorer Neighborhoods Have Less-Safe Road Designs, Scientific American (May 3, 2012 http://www.scientificamerican.com/ article/accident-zone-poorer-neighborhoods/; Patrick Morency, Lise Gauvin, Céline Plante, et al., Neighborhood Social Inequalities in Road Traffic Injuries: The Influence of Traffic Volume and Road Design, Am J Public Health, 102(6): 1112–1119 (June 2012), http://www.ncbi.nlm.nih.gov/pmc/ articles/PMC3483951/.
- <sup>104</sup> Sara Fecht, Accident-Zone: Poorer Neighborhoods Have Less-Safe Road Designs, Scientific American (May 3, 2012), Available at <a href="http://www.scientificamerican.com/article/accident-zone-poorer-neighborhoods/">http://www.scientificamerican.com/article/accident-zone-poorer-neighborhoods/</a>.
- <sup>105</sup> Karsch, H. M., Hedlund, J. H., Tison, J., & Leaf, W. A. (2012, June). Review of Studies on Pedestrian and Bicyclist Safety, 1991-2007. (Report No. DOT HS 811 614). Washington, DC: National Highway Traffic Safety Administration, http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCAQFjAA&url=http%3A%2F%2Fwww.nhtsa.gov%2Fstaticfiles%2Fnt%2Fpdf%2F811614.pdf&ei=m8bkVJ0cze-gBMmogbA0&usg=AFQjCNEe7z2GYdbTZ0SG4oAhmPrC0FSZcw&sig2=NYw4l oiFuqpxVEjoybkHg&bvm=bv.85970519,d.cGU.
- Greg Bluestein, "Raquel Nelson Fights Murder Charges In Son's Jaywalking Death In Georgia," Huffington Post, 4/17/12, http://www. huffingtonpost.com/2012/04/17/raquel-nelsonjaywalking-death-charges-georgia n 1432177.html.
- <sup>107</sup> Radley Balko, "Grieving Mother Faces 36 Months In Jail For Jaywalking After Son Is Killed By Hit-And-Run Driver," Huffington Post, 7/21/11, <a href="https://www.huffingtonpost.com/radley-balko/raquel-nelson-jail-for-jaywalking\_b\_905925.html">https://www.huffingtonpost.com/radley-balko/raquel-nelson-jail-for-jaywalking\_b\_905925.html</a>.
- <sup>108</sup> Angie Schmitt, "Raquel Nelson Finally Cleared of Homicide Charges, Pleads to Jaywalking," StreetsBlog, 5/14/13, <a href="http://streetsblog.net/2013/06/14/raquel-nelson-finally-cleared-of-homicide-charges-pleads-to-jaywalking/">http://streetsblog.net/2013/06/14/raquel-nelson-finally-cleared-of-homicide-charges-pleads-to-jaywalking/</a>.
- <sup>109</sup> M. Maciag, Pedestrians Dying at Disproportionate Rates in America's Poorer Neighborhoods, Governing (August 2014), <a href="http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html">http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html</a>.

- <sup>110</sup> John Greenfield, Why Don't the South and West Sides Have a Fair Share of Bike Facilities? Streetsblog Chicago (Dec. 23, 2014), <a href="http://chi.streetsblog.org/tag/shawn-conley/">http://chi.streetsblog.org/tag/shawn-conley/</a>.
- <sup>111</sup> The New Majority: Bicycling Towards Equity, League of American Bicyclists and Sierra Club (2013) Available at: <a href="http://www.bikeleague.org/sites/default/files/equity-report.pdf">http://www.bikeleague.org/sites/default/files/equity-report.pdf</a>.
- <sup>112</sup> Max Applebaum, Andrew Camp, Conor Clarke et al., Beyond the Backlash: Equity and Participation in Bicycle Planning: Executive Summary (May 2011) at v, <a href="http://www.hunter.cuny.edu/ccpd/repository/files/es\_beyond-the-backlash-2011.pdf">http://www.hunter.cuny.edu/ccpd/repository/files/es\_beyond-the-backlash-2011.pdf</a>.
- <sup>113</sup> Kyle Minaulli, St. Paul Bicycle Plan Widens its Scope, The Line (October 15, 2014), <a href="http://www.thelinemedia.com/devnews/stpaulbikeplan101502014.aspx">http://www.thelinemedia.com/devnews/stpaulbikeplan101502014.aspx</a>.
- <sup>114</sup> Patrick Morency, Lise Gauvin, Céline Plante, et al., Neighborhood Social Inequalities in Road Traffic Injuries: The Influence of Traffic Volume and Road Design, Am J Public Health, 102(6): 1112–1119 (June 2012), <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3483951/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3483951/</a>.
- <sup>115</sup> Salinas Comprehensive Strategy for Communitywide Violence Reduction 2013-2018 at 17, Available online: <a href="http://www.future-futuro.org/sites/default/files/resources/SalinasSWP\_2013-2018.pdf">http://www.future-futuro.org/sites/default/files/resources/SalinasSWP\_2013-2018.pdf</a>.
- <sup>116</sup> L. Cohen, R. Davis, V. Lee, et al., Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living, Prevention Institution, at 9 (quoting Loukaitou-Sideris A. Is it safe to walk?: Neighborhood safety and security considerations and their effects on walking. Journal of Planning Literature. 2006;20(3):219-32). Available at: <a href="http://www.nmpha.org/Resources/Documents/Addressing%20the%20Intersection%20of%20violence%20and%20healthy%20eating.pdf">http://www.nmpha.org/Resources/Documents/Addressing%20the%20Intersection%20of%20violence%20and%20healthy%20eating.pdf</a>.
- <sup>117</sup> Charles C. Branas, Rose A. Cheney, John M. MacDonald, Vicky W. Tam, Tara D. Jackson, and Thomas R. Ten Have, "A Difference-in-Differences Analysis of Health, Safety, and Greening Vacant Urban Space," Am. J. Epidemiol. (2011) doi: 10.1093/aje/kwr273.
- <sup>118</sup> Eugenia C. South, Michelle C. Kondo, Rose A. Cheney, and Charles C. Branas. "Neighborhood Blight, Stress, and Health: A Walking Trial of Urban Greening and Ambulatory Heart Rate," American Journal of Public Health: May 2015, Vol. 105, No. 5, pp. 909-913. doi: 10.2105/AJPH.2014.302526.
- <sup>119</sup> Centers for Disease Control, "Residential Proximity to Major Highways — United States, 2010," <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a8.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a8.htm</a>.
- Miranda R. Jones, Ana V. Diez-Roux, Anjum Hajat, et al., Race/Ethnicity, Residential Segregation, and Exposure to Ambient Air Pollution: The Multi-Ethnic Study of Atherosclerosis (MESA), American Journal of Public Health (Nov. 2014) Vol. 104, No. 11, pp. 2130-2137; David Pace, Minorities Suffer Most from Industrial Pollution: Associated Press (Dec. 14,2005), www.nbcnews.com/id/10452037/ns/us news-environment/t/minorities-suffermost-industrial-pollution/; Cheryl Katz, Unequal exposures: People in poor, non-white neighborhoods breathe more hazardous particles, Environmental Health News (Nov. 1, 2012), <a href="https://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures">https://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures</a>; Fact Sheet: Health Disparities in Unhealthy Air Quality (Based on CDC Health Disparities and Inequalities Report –United States, 2011), U.S. Dep't. of Health and Human Services, <a href="https://www.cdc.gov/minorityhealth/CHDIR/2011/FactSheets/AirQuality.pdf">https://www.cdc.gov/minorityhealth/CHDIR/2011/FactSheets/AirQuality.pdf</a>.
- <sup>121</sup> Cheryl Katz, Unequal exposures: People in poor, non-white neighborhoods breathe more hazardous particles, Environmental Health News (Nov. 1, 2012) at 1, <a href="http://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures">http://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures</a>

- <sup>122</sup> David Pace, Minorities Suffer Most from Industrial Pollution: Associated Press (Dec. 14, 2005), <a href="http://www.nbcnews.com/id/10452037/ns/us\_news-environment/t/minorities-suffer-most-industrial-pollution/">http://www.nbcnews.com/id/10452037/ns/us\_news-environment/t/minorities-suffer-most-industrial-pollution/</a>.
- <sup>123</sup> Holly Mead, Lara Cartwright-Smith, Karen Jones, et al., Racial and Ethnic Disparities in U.S. Health Care: A Chartbook, Wake Forest University School of Medicine (March 2008), <a href="http://www.commonwealthfund.org/usr">http://www.commonwealthfund.org/usr</a> doc/mead racialethnicdisparities chartbook 1111.pdf.
- <sup>124</sup> Miranda R. Jones, et al., "Race/Ethnicity, Residential Segregation, and Exposure to Ambient Air Pollution: The Multi-Ethnic Study of Atherosclerosis (MESA)," American Journal of Public Health November 2014: Vol. 104, No. 11, pp. 2130-2137. doi: 10.2105/ AJPH.2014.302135.
- David Pace, Minorities Suffer Most from Industrial Pollution: Associated Press (Dec. 14, 2005), <a href="http://www.nbcnews.com/id/10452037/ns/us\_news-environment/t/minorities-suffer-most-industrial-pollution/">http://www.nbcnews.com/id/10452037/ns/us\_news-environment/t/minorities-suffer-most-industrial-pollution/</a>.
- <sup>126</sup> Health Effects Institute, New HEI Report on Exposure to Traffic Finds Evidence of Health Effects on Children Near Major Roads, and Continuing Data Gaps, 2010, <a href="http://pubs.healtheffects.org/getfile.php?u=551">http://pubs.healtheffects.org/getfile.php?u=551</a>.
- <sup>127</sup> Centers for Disease Control, "Residential Proximity to Major Highways — United States, 2010," <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a8.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a8.htm</a>.
- <sup>128</sup> James Pankow, Miguel Figliozzi and Alexander Bigazzi (2014), Evaluation of Bicyclists Exposure to Traffic-Related Air Pollution along Distinct Facility Types, Transportation Research And Education Center (TREC) at Portland State University, <a href="http://ppms.otrec.us/media/project\_files/NITC-RR-560.pdf">http://ppms.otrec.us/media/project\_files/NITC-RR-560.pdf</a>.
- <sup>129</sup> Cheryl Katz, Unequal exposures: People in poor, non-white neighborhoods breathe more hazardous particles, Environmental Health News (Nov. 1, 2012), <a href="http://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures">http://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures</a>.
- <sup>130</sup> Cheryl Katz, Unequal exposures: People in poor, non-white neighborhoods breathe more hazardous particles, Environmental Health News (Nov. 1, 2012) at 1, <a href="http://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures">http://www.environmentalhealthnews.org/ehs/news/2012/unequal-exposures</a>.
- http://www.nbcnews.com/id/10452037/ns/us\_news-environment/t/minorities-suffer-most-industrial-pollution/#.V09kWuFShS0.
- Jennifer Swanson, Arnelle Ramirez, Kipling Galllion, Increasing out of School and Out of Class Physical Activity among Latino Children, Salud America! (July 2013) at 6-7, http://www.communitycommons.org/wp-content/uploads/2013/08/Active-Play-Research-Review.pdf; Dan Reed, Poor bike/ped links push Metro commuters to park-and-rides, Greater Greater Washington (Sept. 4, 2013), http://greatergreaterwashington.org/post/20056/poor-bike-ped-links-push-metro-commuters-to-park-and-rides/; Virginia Lee, Leslie Mikkelsen, Janani Srikantharajah, et al., Strategies for Enhancing the Built Environment to Support Healthy Eating and Active Living, Healthy Eating Active Living Convergence Partnership (2008), http://www.calendow.org/uploadedfiles/publications/publications stories/builtenvironment.pdf.
- <sup>133</sup> J. Williams, K. Pasch, C. Collins, Eds., Advances in Communication Research to Reduce Childhood Obesity, Springer (2013), Chptr. 18 at 339; Low Income Populations and Physical Activity, Active Living By Design, University of North Carolina School of Public Health, <a href="http://www.bms.com/documents/together-on-diabetes/2012-Summit-Atlanta/Physical-Activity-for-Low-Income-Populations-The-Health-Trust.pdf">http://www.bms.com/documents/together-on-diabetes/2012-Summit-Atlanta/Physical-Activity-for-Low-Income-Populations-The-Health-Trust.pdf</a>; Dorothy Pekmezi, Brooke Barbara, Jamie Bodenlos, et al., Promoting Physical Activity in Low Income African Americans: Project LAPS, Journal of Health Disparities Research and Practice, Vol. 3 (2)(Fall 2009).

- <sup>134</sup> J. Williams, supra, at 389-90.
- <sup>135</sup> How Many People Experience Homeless, National Coalition for the Homeless (July 2009), <a href="http://www.nationalhomeless.org/factsheets/How\_Many.html">http://www.nationalhomeless.org/factsheets/How\_Many.html</a>.
- <sup>136</sup> Facts and Figures: The Homeless, NOW on PBS (June 26, 2009), <a href="http://www.pbs.org/now/shows/526/homeless-facts.html">http://www.pbs.org/now/shows/526/homeless-facts.html</a>.
- <sup>137</sup> American's Youngest Outcasts, A Report Card on Child Homelessness, American Institutes for Research (Nov. 2014), <a href="http://www.homelesschildrenamerica.org/mediadocs/280.pdf">http://www.homelesschildrenamerica.org/mediadocs/280.pdf</a>.
- <sup>138</sup> Bohnia Lee, Thousands of School Children Homeless in Fresno County, The Fresno Bee (Sept. 10, 2014), <a href="https://www.fresnobee.com/welcome-page/?shf=/2014/09/10/4116464">https://www.fresnobee.com/welcome-page/?shf=/2014/09/10/4116464</a> thousands-of-school-children-homeless.html.
- <sup>139</sup> Transporting Children and Youth Experiencing Homelessness, National Center for Homeless Education (2014), <a href="http://center.serve.org/nche/downloads/briefs/transportation.pdf">http://center.serve.org/nche/downloads/briefs/transportation.pdf</a>.
- <sup>140</sup> McKinney-Vento Homeless Assistance Act (Subtitle VII-B), 42 U.S.C. §§ 11431-11435 (2001).
- <sup>141</sup> Education Barriers for Homeless Youth, National Network for Youth, <a href="https://www.nn4youth.org/wp-content/uploads/lssueBrief\_Education.pdf">https://www.nn4youth.org/wp-content/uploads/lssueBrief\_Education.pdf</a>.
- <sup>142</sup> See Education For Homeless Children And Youth Program Title VII-B Of The McKinney-Vento Homeless Assistance Act, As Amended By The No Child Left Behind Act Of 2001: Non-Regulatory Guidance, U.S. Dep't. Of Education (July 2004), <a href="https://www2.ed.gov/programs/homeless/guidance.pdf">https://www2.ed.gov/programs/homeless/guidance.pdf</a>.
- <sup>143</sup> Priscilla Handy, Comment on Tom Foculoro, Bicycle Paper: 'Cycling Forward' empowers homeless youth with bike fixing skills (April 10, 2012), <a href="https://www.seattlebikeblog.com/2012/04/10/bicycle-paper-cycling-forward-empowers-homeless-youth-with-bike-fixing-skills/">https://www.seattlebikeblog.com/2012/04/10/bicycle-paper-cycling-forward-empowers-homeless-youth-with-bike-fixing-skills/</a>.
- 144 Freewheel Bike Program, <u>http://www.ethep.org/?page=freewheel\_bike</u>.
- <sup>145</sup> Delta Bike Project, <a href="http://www.deltabikeproject.org/">http://www.deltabikeproject.org/</a>.
- <sup>146</sup> Full Cycle, <a href="http://fullcyclebikeshop.org/about-us/">http://fullcyclebikeshop.org/about-us/</a>.
- <sup>147</sup> Sandra Hamameh, Wheels to Work: A Unique Transportation/Employment Program Drives to End Homelessness in Sacramento, Legal Services of Northern California, Race Equity Project, <a href="http://equity.lsnc.net/%E2%80%9Cwheels-to-work%E2%80%9D-a-unique-transportationemployment-program-drives-to-end-homelessness-in-sacramento/">http://equity.lsnc.net/%E2%80%9D-a-unique-transportationemployment-program-drives-to-end-homelessness-in-sacramento/</a>.
- <sup>148</sup> Denise Crosby, Bikes put homeless on road to opportunity, The Chicago Tribune (March 27, 2015), http://www.chicagotribune.com/suburbs/aurorabeacon-news/news/ct-abn-crosby-bikes-st-0330-20150330-story.html.
- <sup>149</sup> Christine Soja, Cycling Forward Helps Youth Ride On, BicyclePaper.Com, <a href="http://bicyclepaper.com/articles/370-Cycling-Forward-Helps-Youth-Ride-On.">http://bicyclepaper.com/articles/370-Cycling-Forward-Helps-Youth-Ride-On.</a>
- <sup>150</sup> Transportation Equity Network, <a href="http://www.transportationequity.org/">http://www.transportationequity.org/</a>.
- <sup>151</sup> Transportation Equity Caucus, <a href="http://equitycaucus.org/PolicyPriorities">http://equitycaucus.org/PolicyPriorities</a>.
- 152 Funders' Network for Smart Growth and Livable Communities, The Hardest Road: Philanthropic Approaches to the Evolving Field of Transportation Equity, <a href="http://www.fundersnetwork.org/files/learn/TFN">http://www.fundersnetwork.org/files/learn/TFN</a> HardestRoad Print LowRes.pdf.
- <sup>153</sup> The Leadership Conference Education Fund, 2011. Where We Need to Go: A Civil Rights Roadmap to Transportation Equity <a href="https://www.protectcivilrights.org/pdf/docs/transportation/52846576-Where-We-Need-to-Go-A-Civil-Rights-Roadmap-for-Transportation-Equity.pdf">https://www.protectcivilrights.org/pdf</a>

- 154 Transportation Equity Network, "What We Want: The TEN Platform," <a href="http://www.transportationequity.org/what-we-do/background.html">http://www.transportationequity.org/what-we-do/background.html</a>.
- 155 Transportation Equity Caucus, "Statement of Principles," <a href="http://equitycaucus.org/About/StatementofPrinciples">http://equitycaucus.org/About/StatementofPrinciples</a>.
- <sup>156</sup> Brookings Institution, 2006. An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards. <a href="http://www.brookings.edu/~/media/research/files/reports/2006/6/01transportation%20">http://www.brookings.edu/~/media/research/files/reports/2006/6/01transportation%20</a> <a href="mailto:sanchez/20060124">sanchez/20060124</a> mpos.pdf.
- <sup>157</sup> Corinne Ramey, "America's Unfair Rules of the Road," Slate, 2/27/15, <a href="http://www.slate.com/articles/news">http://www.slate.com/articles/news</a> and politics/politics/2015/02/ america s transportation system discriminates against minorities and poor.single.html.
- <sup>158</sup> Raymond A. Mohl, "The Interstates and the Cities: Highways, Housing, and the Freeway Revolt," <a href="http://www.prrac.org/pdf/mohl.pdf">http://www.prrac.org/pdf/mohl.pdf</a>.
- <sup>159</sup> Emily Badger, "The long, painful and repetitive history of how Baltimore became Baltimore," The Washington Post, 4/29/2015, <a href="http://www.washingtonpost.com/blogs/wonkblog/wp/2015/04/29/the-long-painful-and-repetitive-history-of-how-baltimore-became-baltimore/">http://www.washingtonpost.com/blogs/wonkblog/wp/2015/04/29/the-long-painful-and-repetitive-history-of-how-baltimore-became-baltimore/</a>.
- <sup>160</sup> Safe Routes to School National Partnership, "Integrating Safe Routes to School into the Transportation Alternatives Program: Reducing Barriers for Disadvantaged Communities," <a href="http://saferoutespartnership.org/sites/default/files/pdf/srts\_brief\_TAP\_MatchingBrief.pdf">http://srts\_brief\_TAP\_MatchingBrief.pdf</a>.
- <sup>161</sup> See, for instance, The Hill, March 2, 2015. "On infrastructure, we can't wait any longer" <u>http://thehill.com/blogs/pundits-blog/transportation/234273-on-infrastructure-we-cantwait-any-longer</u>
- <sup>162</sup> American Society of Civil Engineers, 2013. America's Infrastructure Report Card. <a href="http://www.infrastructurereportcard.org/">http://www.infrastructurereportcard.org/</a>. See also Washington Post, March 19, 2013. "U.S. Infrastructure Gets D+ in Annual Report."
- <sup>163</sup> Brookings Institution, 2013. Crumbling Infrastructure Has Real and Enduring Costs. <a href="http://www.brookings.edu/blogs/up-front/posts/2013/01/23-crumbling-infrastructure-galston">http://www.brookings.edu/blogs/up-front/posts/2013/01/23-crumbling-infrastructure-galston</a>.
- <sup>164</sup> PolicyLink, 2012. Equity is the Superior Growth Model: <a href="http://www.policylink.org/find-resources/library/americas-tomorrow-equity-is-the-superior-growth-model-summary">http://www.policylink.org/find-resources/library/americas-tomorrow-equity-is-the-superior-growth-model-summary.</a>
- <sup>165</sup> Sarah Treuhaft, Angela Glover Blackwell, and Manuel Pastor, "America's Tomorrow: Equity Is the Superior Growth Model: Summary," PolicyLink, <a href="http://www.policylink.org/sites/default/files/SUMMIT\_FRAMING\_SUMMARY\_WEB.PDF">http://www.policylink.org/sites/default/files/SUMMIT\_FRAMING\_SUMMARY\_WEB.PDF</a>.
- <sup>166</sup> Cal.Str. & H.Code § 2380 (2013). The implementing regulations define "disadvantaged community" as (1) a community that has a median household income is less than 80% of the statewide median, (2) an area identified as among the most disadvantaged 25% based on a state environmental health screening tool, or (3) an area in which at least 75% of public school students are eligible to receive free or reduced-price meals under the National School Lunch Program. See 2015 Active Transportation Guidelines (March 26, 2015) at 8-9. Available at: <a href="http://www.catc.ca.gov/programs/ATP/2015/2015">http://www.catc.ca.gov/programs/ATP/2015/2015</a> ATP Guideline 032615
  rev 0312.pdf.
- <sup>167</sup> 2015 Active Transportation Guideliens (March 26, 2015) at 8, <a href="http://www.catc.ca.gov/programs/ATP/2015/2015">http://www.catc.ca.gov/programs/ATP/2015/2015</a> ATP Guideline 032615 <a href="mailto:rev-0312.pdf">rev-0312.pdf</a>.
- <sup>168</sup> ld. at 14.

#### Endnotes

- <sup>169</sup> Brookings Institution, "An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards," 2006, <a href="http://www.brookings.edu/~/media/research/files/reports/2006/6/01 transportation%20">http://www.brookings.edu/~/media/research/files/reports/2006/6/01 transportation%20</a> sanchez/20060124 mpos.pdf.
- <sup>170</sup> Brookings Institution, "An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards," 2006, http:// www.brookings.edu/~/media/research/ files/reports/2006/6/01transportation%20 sanchez/20060124\_mpos.pdf.
- <sup>171</sup> Brookings Institution, "An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards," 2006, http:// www.brookings.edu/~/media/research/ files/reports/2006/6/01 transportation%20 sanchez/20060124\_mpos.pdf.
- <sup>172</sup> Thomas W. Sanchez, "An Equity Analysis of Transportation Funding," Race and Regionalism 15:1 (Fall 2008). http://www.urbanhabitat.org/ node.2812 Cited in All Aboard at 8. Brookings Institution, "An Inherent Bias? Geographic and Racial-Ethnic Patterns of Metropolitan Planning Organization Boards," 2006, http:// www.brookings.edu/~/media/research/ files/reports/2006/6/01transportation%20 sanchez/20060124 mpos.pdf.
- 174 42 U.S.C §§ 2000d 2000d-7.
- <sup>175</sup> K. Manaugh, M. Badami, A. El-Geneidy, Integrating social equity into urban transportation planning: A critical evaluation of equity objectives and measures in transportation plans in North America," Transport Policy (published online 25 Nov. 2014), <a href="https://www.sciencedirect.com/science/article/pii/S0967070X14002145">https://www.sciencedirect.com/science/article/pii/S0967070X14002145</a>; A. Karner, D. Niemeier, Civil rights guidance and equity analysis methods for regional transportation plans: a critical review of literature and practice,"Journal of Transport Geography 33 (2013) at 128. Available at: <a href="http://www.ssti.us/wp/wp-content/uploads/2014/02/2013-karner-civil+rights+guidance+critical+review.pdf">http://www.ssti.us/wp/wp-content/uploads/2014/02/2013-karner-civil+rights+guidance+critical+review.pdf</a>.
- $^{176}\,\underline{\text{http://equitycaucus.org/About/StatementofPrinciples}}.$
- <sup>177</sup> Manaugh, supra.
- <sup>179</sup> Knoxville Regional Transportation Planning Organization, <a href="http://www.knoxtrans.org">http://www.knoxtrans.org</a>.
- <sup>180</sup> King County, Advancing Equity and Social Justice through development of a Strategic Innovation Priority Plan and Executive department actions, ACO 9-2 (10/4/14) http://www.kingcounty.gov/operations/ policies/executive/administrationaeo/aco92aeo. aspx
- <sup>181</sup> Equity and Social Justice Annual Report, <a href="http://www.kingcounty.gov/elected/executive/equity-social-justice.aspx">http://www.kingcounty.gov/elected/executive/equity-social-justice.aspx</a>.
- <sup>182</sup> For more information on ways to incorporate active transportation and Safe Routes to School into comprehensive plans, see the National Partnership's report on Integrating Safe Walking and Bicycling to School into Comprehensive Planning <a href="https://saferoutespartnership.org/sites/default/files/pdf/SRTS">https://saferoutespartnership.org/sites/default/files/pdf/SRTS</a> brief IntegratingCompPlan-FINAL.pdf.
- <sup>183</sup> Seattle Bicycle Plan at 28 (2010), <a href="http://www.seattle.gov/transportation/docs/bmp/apr14/SBMP\_21March\_FINAL\_full%20doc.pdf">http://www.seattle.gov/transportation/docs/bmp/apr14/SBMP\_21March\_FINAL\_full%20doc.pdf</a>.
- <sup>184</sup> Id. at 28.
- 185 ld.at 18-22.

- 186 lbid.
- <sup>187</sup> ld.at 105.
- <sup>188</sup> Seattle Bicycle Master Plan: Implementation Plan (2015-2019), <a href="http://www.seattle.gov/transportation/docs/bmp/BMPImplementationPlanMarch2015.pdf">http://www.seattle.gov/transportation/docs/bmp/BMPImplementationPlanMarch2015.pdf</a>.
- <sup>189</sup> Seattle Bicycle Master Plan at 113.
- <sup>190</sup> Advocacy Advance, Active Transportation Equity: A Scan of Existing Master Plans, 2015, <a href="http://www.advocacyadvance.org/docs/ActiveTransportationEquityScan.pdf">http://www.advocacyadvance.org/docs/ActiveTransportationEquityScan.pdf</a>.
- <sup>191</sup> Portland Bicycle Plan for 2030 (March 2010), https://www.portlandoregon.gov/transportation/ article/289122
- <sup>192</sup> Health Equity and the Transportation System Plan: Recommendations for the City of Portland (March 2012), <a href="ftp://ftp02.portlandoregon.gov/PBOT/Sara%20Schooley/Health\_TSP\_report\_031312.pdf">ftp://ftp02.portlandoregon.gov/PBOT/Sara%20Schooley/Health\_TSP\_report\_031312.pdf</a>.
- <sup>193</sup> 2035 Comprehensive Proposed Draft, City of Portland (July 2014) at 157 (Policy 9.58), <a href="https://www.portlandoregon.gov/bps/article/497457">https://www.portlandoregon.gov/bps/article/497457</a>.
- 194 ld. passim.
- <sup>195</sup> National Complete Streets Coalition, <a href="http://www.smartgrowthamerica.org/complete-streets">http://www.smartgrowthamerica.org/complete-streets</a>.
- <sup>196</sup> Bridging the Gap, "Using Local Land Use Laws to Facilitate Physical Activity," Research Brief March 2012, <a href="http://www.bridgingthegapresearch.org/asset/5q86hg/btg">http://www.bridgingthegapresearch.org/asset/5q86hg/btg</a> land use pa FINAL 03-09-12. pdf.
- <sup>197</sup> Bridging the Gap, "Using Local Land Use Laws to Facilitate Physical Activity," Research Brief March 2012, <a href="http://www.bridgingthegapresearch.org/asset/5q86hg/btg-land-use-pa-FINAL-03-09-12.pdf">http://www.bridgingthegapresearch.org/asset/5q86hg/btg-land-use-pa-FINAL-03-09-12.pdf</a>.
- <sup>198</sup> Lauren M. Rossen and Keshia M. Pollack, "Making the Connection Between Zoning and Health Disparities," ENVIRONMENTAL JUSTICE Volume 5, Number 3, 2012, <a href="https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/pdf/research/clf-reports/zoning%20-health%20disparities%20Rossen%20Pollack.pdf.</a>
- <sup>199</sup> People for Bikes, Building Equity: Race, Ethnicity, Class, and Protected Bike Lanes: An Idea Book for Fairer Cities <a href="https://www.dropbox.com/s/12wxv9pz9utrien/EquityReport2015.pdf?dl=0">https://www.dropbox.com/s/12wxv9pz9utrien/EquityReport2015.pdf?dl=0</a>.
- <sup>200</sup> Bill Sadler, Putting Equity on the Map. Living Cities, April 2014. <a href="https://www.livingcities.org/blog/540-putting-equity-on-the-map-measuring-access-to-opportunity-with-an-equity-atlas">https://www.livingcities.org/blog/540-putting-equity-on-the-map-measuring-access-to-opportunity-with-an-equity-atlas</a>.
- <sup>201</sup> Kirwan Institute for the Study of Race and Ethnicity, http://kirwaninstitute.osu.edu/opportunitycommunities/mapping/.
- <sup>202</sup> Causa Justa, 2014. Development without Displacement: Resisting Gentrification in the Bay Area. <a href="http://www.liberationink.org/content/development-without-displacement-resisting-gentrification-bay-area">http://www.liberationink.org/content/development-without-displacement-resisting-gentrification-bay-area</a>
- <sup>203</sup> Washington City Paper, February 20, 2015. The "Gentrification Myth" Myth. <a href="http://www.washingtoncitypaper.com/blogs/">http://www.washingtoncitypaper.com/blogs/</a> housingcomplex/2015/02/20/the-gentrification-myth-myth/
- <sup>204</sup> Slate, January 2015. "The Myth of Gentrification." http://www.slate.com/articles/news and politics/politics/2015/01/the gentrification myth it s rare and not as bad for the poor as people. single.html.
- <sup>205</sup> See, for instance, Grist, February 5, 2015. "Who Says Gentrification is a Myth?" <a href="http://grist.org/cities/who-says-gentrification-is-a-myth/">http://grist.org/cities/who-says-gentrification-is-a-myth/</a>.

- <sup>206</sup> The Atlantic, February 16, 2015. "The Miracle of Minneapolis" <a href="http://www.theatlantic.com/magazine/archive/2015/03/the-miracle-of-minneapolis/384975/">http://www.theatlantic.com/magazine/archive/2015/03/the-miracle-of-minneapolis/384975/</a>.
- <sup>207</sup> The Atlantic, February 21, 2015. "Minneapolis's White Lie" <a href="http://www.theatlantic.com/business/archive/2015/02/minneapoliss-white-lie/385702/.</a>
- <sup>208</sup> Safe Routes to School National Partnership, "What is Safe Routes to School? Background and Statistics," www.saferoutespartnership.org/sites/ default/files/pdf/What-is-SRST-factsheet-REVISED-06-14-11-w-footnotes.pdf.
- Physical Activity and Health, Centers for Disease Control and Prevention, <a href="http://www.cdc.gov/physicalactivity/everyone/health/index.html?scid=cs\_284">http://www.cdc.gov/physicalactivity/everyone/health/index.html?scid=cs\_284</a>; The Importance of 60 Minutes or More of Daily Physical Activity, Surgeon General's Perspectives, Public Health Reports (Sept.—Oct. 2013), Vol. 128, <a href="http://www.publichealthreports.org/issueopen.cfm?articleID=3002">http://otalealthreports.org/issueopen.cfm?articleID=3002</a>; Getting the Wheels Rolling Toolky Create Bicycle Friendly Communities (Aug. 2013) at 16, <a href="http://changelabsolutions.org/sites/default/files/Getting">http://changelabsolutions.org/sites/default/files/Getting the Wheels Rolling Toolkit-FINAL\_20130823\_0.pdf</a>; I. Lee, E. Shiroma, F. Lobelo et al. Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. Lancet (2012) 380:219-29, <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3645500/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3645500/</a>.
- 210 Shore, Stuart, Michael Sachs, Jeffrey Lidicker, et al., Decreased scholastic achievement In overweight middle school students, Obesity 16 (2008): 7, 1535-1538; Dann Vinther, Children Who Walk to School Concentrate Better," Science Nordic, Nov. 30, 2012, <a href="http://sciencenordic.com/children-who-walk-school-conentrate-better">http://sciencenordic.com/children-who-walk-school-conentrate-better</a>.
- 211 "Exercise for Children," MedlinePlus, National Institutes of Health, last updated Sept. 19, 2012, http://www.nlm.nih.gov/medlineplus/exerciseforchildren.html; "Changing Diet and Exercise for Kids," American Psychological Association, http://www.apa.org/topics/children/healthy-eating.aspx; Rothon C., et al., "Physical activity and depressive symptoms in adolescents: a prospective study," BMC Medicine 8 (2010): 32, http://www.biomedcentral.com/1741-7015/8/32
- 212 Safe Routes to School National Partnership, <a href="http://saferoutespartnership.org/national/policy-background">http://saferoutespartnership.org/national/policy-background</a>.
- 213 Safe Routes to School National Partnership, <a href="http://saferoutespartnership.org/national/policy-background">http://saferoutespartnership.org/national/policy-background</a>.
- <sup>214</sup> Noreen C. McDonald, Ruth L. Steiner, Chanam Lee, et al., (2014) "Impact of the Safe Routes to School Program on Walking and Bicycling," Journal of the American Planning Association, 80:2, 153-167, <a href="https://planning.unc.edu/people/faculty/noreenmcdonald/McDonald\_etal\_JAPA\_SRTSEvaluation.pdf">https://planning.unc.edu/people/faculty/noreenmcdonald/McDonald\_etal\_JAPA\_SRTSEvaluation.pdf</a>. Turner L, Slater S, Chaloupka FJ, "Elementary School Participation in Safe Routes to School Programming is Associated with Higher Rates of Student Active Travel to School - A BTG Research Brief, "Bridging the Gap, (2014).
- <sup>215</sup> Bridging the Gap, "Research Brief: Income Disparities in Street Features that Encourage Walking." March 2012, <a href="http://www.bridgingthegapresearch.org/">http://www.bridgingthegapresearch.org/</a> asset/02fpi3/
  <a href="https://btg.street\_walkability\_FINAL\_03-09-12.pdf">https://btg.street\_walkability\_FINAL\_03-09-12.pdf</a>; Sara Fecht, Accident-Zone: Poorer Neighborhoods have Less-Safe Road Designs, Scientific American (May 3, 2012), <a href="http://www.scientificamerican.com/">http://www.scientificamerican.com/</a> article/accident-zone-poorer-neighborhoods/.

- <sup>216</sup> Jennifer Swanson, Arnelle Ramirez, Kipling Galllion, Increasing out of School and Out of Class Physical Activity among Latino Children, Salud America! (July 2013) at 6-7, <a href="http://www.communitycommons.org/wp-content/uploads/2013/08/Active-Play-Research-Review.pdf">http://www.communitycommons.org/wp-content/uploads/2013/08/Active-Play-Research-Review.pdf</a>; Virginia Lee, Leslie Mikkelsen, Janani Srikantharajah, et al., Strategies for Enhancing the Built Environment to Support Healthy Eating and Active Living, Healthy Eating Active Living Convergence Partnership (2008), <a href="http://www.calendow.org/uploadedfiles/publications/publications/">http://www.calendow.org/uploadedfiles/publications/</a> publications stories/builtenvironment.pdf
- <sup>217</sup> Safe Routes to School National Partnership, "Integrating Safe Routes to School into the Transportation Alternatives Program: Reducing Barriers for Disadvantaged Communities," <a href="http://saferoutespartnership.org/sites/default/files/pdf/srts-brief-TAP\_MatchingBrief.pdf">http://saferoutespartnership.org/sites/default/files/pdf/srts-brief-TAP\_MatchingBrief.pdf</a>.
- <sup>218</sup> Safe Routes to School National Partnership, "Integrating Safe Routes to School into the Transportation Alternatives Program: Reducing Barriers for Disadvantaged Communities," <a href="http://saferoutespartnership.org/sites/default/files/pdf/srts-brief-TAP-MatchingBrief.pdf">http://saferoutespartnership.org/sites/default/files/pdf/srts-brief-TAP-MatchingBrief.pdf</a>
- <sup>219</sup> California Transportation Commission, 2015 Active Transportation Program Guidelines, <a href="http://www.catc.ca.gov/programs/ATP/2015/Final%20Adopted%202015%20ATP%20Guidelines.pdf">http://www.catc.ca.gov/programs/ATP/2015/Final%20Adopted%202015%20ATP%20Guidelines.pdf</a>.
- <sup>220</sup> California Transportation Commission, 2014 Active Transportation Program Guidelines, <a href="http://www.catc.ca.gov/programs/ATP/2014">http://www.catc.ca.gov/programs/ATP/2014</a> ATP Guidelines adopted 032014.pdf.
- <sup>221</sup> Safe Routes to School National Partnership, "Addressing the Needs of Low-Income Communities: Best Practices from and for State SRTS Programs," 2009, <a href="http://saferoutespartnership.org/state/state-resources/addressing-the-needs-of-low-income-communities">http://saferoutespartnership.org/state/state-resources/addressing-the-needs-of-low-income-communities</a>.
- 222 City of Portland Safe Routes to School Policy (March 2012) at ii, <a href="http://www.portlandoregon.gov/transportation/article/373691">http://www.portlandoregon.gov/transportation/article/373691</a>.
- <sup>223</sup> lbid.
- <sup>224</sup> ld. at 25.
- <sup>225</sup> Chang, Hedy and Romero, Mariajose, "Present, Engaged and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades," National Center for Children in Poverty, 2008, <a href="http://www.nccp.org/publications/pdf/text">http://www.nccp.org/publications/pdf/text</a> 837.pdf.
- <sup>226</sup> UC Davis Center for Regional Change, "Factors Influencing School Attendance for Chronically Absent Students in the Sacramento City Unified School District (SCUSD)," Chronic Absenteeism Issue Brief Series, July 2014, <a href="http://explore.regionalchange.ucdavis.edu/ourwork/publications/chronic-absence-scusd/factors-influencing-school-attendance-for-chronically-absent-students-in-the-sacramento-city-unified-school-district-scusd.">http://explore.regionalchange.ucdavis.edu/ourwork/publications/chronic-absence-scusd/factors-influencing-school-attendance-for-chronically-absent-students-in-the-sacramento-city-unified-school-district-scusd.</a>
- <sup>227</sup> Chang, Hedy and Romero, Mariajose, "Present, Engaged and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades," National Center for Children in Poverty, 2008, <a href="http://www.nccp.org/publications/pdf/text.837.pdf">http://www.nccp.org/publications/pdf/text.837.pdf</a>.
- Ready, Douglas. "Socioeconomic Disadvantage, School Attendance, and Early Cognitive Development: The Differential Effects of School Exposure." Sociology of Education 2010 83(271), http://www.attendancecounts.org/wordpress/wp-content/uploads/2010/04/Ready-2010-2.pdf.

- <sup>229</sup> Davison, Kirsten K., Werder, Jessica L. and Lawson, Catherine T. "Children's Active Commuting to School: Current Knowledge and Future Directions." Preventing Chronic Disease. 5.3 (2008): A100; Mendoza JA, Watson K, Nguyen N, Cerin E, Baranowski T, Nicklas TA. "Active Commuting to School and Association with Physical Activity and Adiposity among U.S. Youth." J. Phys Act Health. 8.4 (2011): 488-49; Cooper AR, LB Andersen, N Wedderkopp, AS Page, and K Froberg. "Physical activity levels of children who walk, cycle or are driven to school." American Journal of Preventive Medicine 29 (2005): 3, 179-184.
- <sup>230</sup> Geier AB, Foster GD, Womble LG, McLaughlin J, Borradaile KE, Nachmani J, Sherman S, Kumanyika S, Shults J., "The relationship between relative weight and school attendance among elementary schoolchildren." Obesity. August 2007;15(8):2157-61.
- <sup>231</sup> Balfanz, Robert, and Vaughan Byrnes, "The Importance of Being in School: A Report on Absenteeism in the Nation's Public Schools," 2012, p. 24, <a href="http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport\_May16.pdf">http://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport\_May16.pdf</a>.
- <sup>232</sup> Martin S., Lee S., and Lowry R., "National Prevalence and Correlates of Walking and Bicycling to School," American Journal of Preventive Medicine, 33(2): 98-105, 2007.
- <sup>233</sup> Salvesen D., Good Schools Good Neighborhoods, CURS Report No. 2003.03, Center for Urban and Regional Studies, University of North Carolina at Chapel Hill, 2003, <a href="http://curs.unc.edu/curs-pdf-downloads/recentlyreleased/goodschoolsreport.pdf">http://curs.unc.edu/curs-pdf-downloads/recentlyreleased/goodschoolsreport.pdf</a>; see also Kuhlman R, Helping Johnny Walk to School: Policy Recommendations for Removing Barriers to Community-Centered Schools, <a href="https://www.preservationnation.org/issues/historic-schools/helping-johnny-walk-to-school.pdf">https://www.preservationnation.org/issues/historic-schools/helping-johnny-walk-to-school.pdf</a>.
- <sup>234</sup> U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. KidsWalk: Then and Now – Barriers and Solutions. 2008. Available at: <a href="https://www.cdc.gov/nccdphp/dnpa/kidswalk/then\_and\_now.htm">www.cdc.gov/nccdphp/dnpa/kidswalk/then\_and\_now.htm</a>.
- PolicyLink, Safe Routes to School National Partnership, and ChangeLab Solutions, "Maximizing Walkability, Diversity, and Educational Equity in U.S Schools," http://www.policylink.org/sites/ default/files/WALKBILITYANDDIVERSITY FINAL AUGUST62013.pdf (discussing benefits and barriers to smart school siting, and providing an action agenda for overcoming the tension between walkability and diversity in school locations).
- <sup>236</sup> National Opportunity to Learn Campaign, "The Color of School Closures," 2013, <a href="http://www.otlcampaign.org/blog/2013/04/05/color-school-closures">http://www.otlcampaign.org/blog/2013/04/05/color-school-closures</a>.
- <sup>237</sup> National Opportunity to Learn Campaign, "The Color of School Closures," 2013, <a href="http://www.otlcampaign.org/blog/2013/04/05/color-school-closures">http://www.otlcampaign.org/blog/2013/04/05/color-school-closures</a>.
- <sup>238</sup> Marisa de la Torre and Julia Gwynne, "When Schools Close: Effects on Displaced Students in Chicago Public Schools," Consortium on Chicago School Research, University of Chicago, 2009, <a href="http://csr.uchicago.edu/sites/default/files/publications/CCSRSchoolClosings-Final.pdf">http://csr.uchicago.edu/sites/default/files/publications/CCSRSchoolClosings-Final.pdf</a>.
- <sup>239</sup> PolicyLink, ChangeLab Solutions and Safe Routes to School National Partnership, "Maximizing Walkability, Diversity and Equity in U.S. Schools," 2013, <a href="http://www.saferoutespartnership.org/sites/default/files/pdf/Lib\_of\_Res/WalkbilityandDiversity\_final\_ad.pdf">http://www.saferoutespartnership.org/sites/default/files/pdf/Lib\_of\_Res/WalkbilityandDiversity\_final\_ad.pdf</a>.
- <sup>240</sup> PolicyLink, ChangeLab Solutions and Safe Routes to School National Partnership, "Maximizing Walkability, Diversity and Equity in U.S. Schools," 2013, <a href="https://www.saferoutespartnership.org/sites/default/files/pdf/Lib of Res/WalkbilityandDiversity final ad.pdf">https://www.saferoutespartnership.org/sites/default/files/pdf/Lib of Res/WalkbilityandDiversity final ad.pdf</a>.
- <sup>241</sup> Slow Roll Chicago, website, About Slow Roll Chicago, http://www.slowrollchicago.org/about/.

- <sup>242</sup> Slow Roll Chicago, website, About Slow Roll Chicago, http://www.slowrollchicago.org/about/.
- <sup>243</sup> Rachel Cromidas, Group urges infrastructure parity on South, West sides, Redeye, (Jan. 18, 2015), http://www.redeyechicago.com/news/redeyeunfriendly-bike-lanes-south-west-sides-20150119story.html#page=1; Michael Anderson, Black Chicago bike advocates call for protected lanes to spread south and west, PeopleforBikes (Dec. 12. 2014), http://www.peopleforbikes.org/blog/entry/ black-chicago-bike-advocates-call-for-protected-lanesto-spread-south-and-w.
- <sup>244</sup> An Open Letter, "12.10.14 Black Bicycle Organizations Presentation to the City of Chicago Mayor's Bicycle Advisory Council," <a href="https://drive.google.com/file/d/0B8t0k7">https://drive.google.com/file/d/0B8t0k7</a> <a href="https://drive.google.com/file/d/0B8t0k7">upXv5anZzeVpfbXBFY1JiOWUySW9TZ2Fpdk</a> <a href="https://dxiden.google.com/file/d/0B8t0k7">xUaEg0/view.</a>
- <sup>245</sup> John Greenfield, "Advocates Request a Fair Share of Bike Resources for Black Communities," Streetsblog Chicago, 12/19/14, http://chi.streetsblog. org/2014/12/19/advocates-request-a-fair-share-ofbike-resources-for-black-communities/.
- <sup>246</sup> Rachel Cromidas, Group urges infrastructure parity on South, West sides, Redeye, (Jan. 18, 2015), <a href="http://www.redeyechicago.com/news/redeye-unfriendly-bike-lanes-south-west-sides-20150119-story.html#page=1">http://www.redeyechicago.com/news/redeye-unfriendly-bike-lanes-south-west-sides-20150119-story.html#page=1</a>.
- <sup>247</sup> Tour de Dreams, Facebook page, <a href="https://www.facebook.com/tourdedreams">https://www.facebook.com/tourdedreams</a>.
- <sup>248</sup> "Dream Riders," Good Tlmes, August 7, 2013, http://www.gtweekly.com/index.php/santa-cruznews/36-santa-cruz-business-news/4984-dreamriders.html.
- <sup>249</sup> Tour de Dreams, Facebook page, <a href="https://www.facebook.com/tourdedreams">https://www.facebook.com/tourdedreams</a>.
- 250 "Dream Riders," Good Tlmes, August 7, 2013, http://www.gtweekly.com/index.php/santa-cruznews/36-santa-cruz-business-news/4984-dreamriders.html.
- 251 Community Cycling Center, <a href="http://www.communitycyclingcenter.org/index.php/programs-for-adults/">http://www.communitycyclingcenter.org/index.php/programs-for-adults/</a>
- <sup>252</sup> Free Ride, "Adult Earn a Bike," <a href="http://freeridepgh.org/programs/adult-earn-a-bike/">http://freeridepgh.org/programs/adult-earn-a-bike/</a>
- <sup>253</sup> Profiles of "earn a bike" programs can also be found in The New Movement: Bike Equity Today, League of American Bicyclists (Oct. 2014) at 41-43, <a href="http://bikeleague.org/sites/default/files/The\_New\_Movement\_Report\_Web.pdf">http://bikeleague.org/sites/default/files/The\_New\_Movement\_Report\_Web.pdf</a>.
- <sup>254</sup> Boston Bikes, <a href="http://www.bostonbikes.org/programs/roll-it-forward/overview">http://www.bostonbikes.org/programs/roll-it-forward/overview</a>
- <sup>255</sup> Elizabeth Brotherton-Bunch, Victory for Biking in San Francisco Underserved Neighborhoods (March 19, 2014), http://www.preventobesity.net/inside-trackmarch-20-c.
- <sup>256</sup> Understanding Barriers to Bicycling Project, Community Cycling Center (July 2012) at 15, <a href="http://www.communitycyclingcenter.org/wp-content/uploads/2012/07/Understanding-Barriers-Final-Report.pdf">http://www.communitycyclingcenter.org/wp-content/uploads/2012/07/Understanding-Barriers-Final-Report.pdf</a>
- <sup>257</sup> See <a href="http://www.bostonbikes.org/programs/bike-to-market/">http://www.bostonbikes.org/programs/bike-to-market/</a>
- <sup>258</sup> See <a href="http://www.bayareabikemobile.org/about-the-bikemobile/">http://www.bayareabikemobile.org/about-the-bikemobile/</a>
- <sup>259</sup> See http://localmotionca.com/bikemobile.html; http://www.bayareabikemobile.org/about-the-bikemobile/
- <sup>260</sup> City of Albuquerque, Esperanza Community Bike Shop, <a href="http://www.cabq.gov/parksandrecreation/recreation/bike/esperanza-community-bike-shop">http://www.cabq.gov/parksandrecreation/ recreation/bike/esperanza-community-bike-shop</a>.

- <sup>261</sup> Understanding Barriers to Bicycling Project, Community Cycling Center (July 2012) at 15, Available online: <a href="http://www.communitycyclingcenter.org/wp-content/uploads/2012/07/Understanding-Barriers-Final-Report.pdf">http://www.communitycyclingcenter.org/wp-content/uploads/2012/07/Understanding-Barriers-Final-Report.pdf</a>
- <sup>262</sup> Dylan Miner, Exhibition: Anishnaabensag Biimskowebshkigewag: Native Kids Ride Bikes, http://uima.uiowa.edu/native-kids-ride-bikes/.
- <sup>263</sup> Dylan Miner, Exhibition: Anishnaabensag Biimskowebshkigewag: Native Kids Ride Bikes, <a href="http://uima.uiowa.edu/native-kids-ride-bikes/">http://uima.uiowa.edu/native-kids-ride-bikes/</a>.
- <sup>264</sup> See http://www.cascade.org/learn/major-taylor-project; Ed Ewing: Race, Equity, and Empowerment by Bike, The Bicycle Story (June 26, 2014), <a href="http://www.thebicyclestory.com/2014/06/ed-ewing/#more-849">http://www.thebicyclestory.com/2014/06/ed-ewing/#more-849</a>. Other bike clubs named after Major Taylor, an African American, who became a world champion bicyclist in 1889, operate in other cities around the country, including Denver, CO, New York, and Chicago, Ill.
- <sup>265</sup> Cycles of Change, <a href="http://www.cyclesofchange.org/">http://www.cyclesofchange.org/</a> programs/bike-clubs/
- <sup>266</sup> Gearin' Up Bicycles, <a href="http://gearinupbicycles.org/">http://gearinupbicycles.org/</a> index.html
- <sup>267</sup> The New Movement: Bike Equity Today, League of American Bicyclists, 2014, at 15, <a href="http://bikeleague.org/sites/default/files/The\_New\_Movement\_Report\_Web.pdf">http://bikeleague.org/sites/default/files/The\_New\_Movement\_Report\_Web.pdf</a>.
- <sup>268</sup> Youth Bike Summit, About the Youth Bike Summit, <a href="http://youthbikesummit.org/youth-bike-summit-2014/about-the-youth-bike-summit/">http://youth-bike-summit/</a>.
- <sup>269</sup> Wogan, J.B., "Can Cities Change the Face of Biking," Governing, March 24, 2014, <a href="http://www.governing.com/topics/urban/gov-can-cities-change-face-biking.html">http://www.governing.com/topics/urban/gov-can-cities-change-face-biking.html</a>.
- <sup>270</sup> Wogan, J.B., "Can Cities Change the Face of Biking," Governing, March 24, 2014, http://www.governing. com/topics/urban/gov-can-cities-change-face-biking. html.
- <sup>271</sup> Sarah Ann Hughes, Gearin' Up Aims To Bring Job Opportunities With Used Bikes To Trinidad, dcist (April 30, 2014), <a href="http://dcist.com/2014/04/used-bike-non-profit-to-set-up-shop.php">http://dcist.com/2014/04/used-bike-non-profit-to-set-up-shop.php</a>.
- <sup>272</sup> Ed Ewing: Race, Equity, and Empowerment by Bike, The Bicycle Story (June 26, 2014), http://www.thebicyclestory.com/2014/06/edewing/#more-849.
- <sup>273</sup> The New Majority: Pedaling Towards Equity, League of American Bicyclists and Sierra Club (May 2013), <a href="https://bikeleague.org/sites/default/files/equity-report.pdf">http://bikeleague.org/sites/default/files/equity-report.pdf</a>.
- 274 Slow Roll Detroit, <a href="http://www.slowroll.bike/">http://www.slowroll.bike/</a>; Mike MacKool, Detroit Bike City, email communications with author, May 8, 2015.
- <sup>275</sup> Robert Wood Johnson Foundation Conference Report, The Role of Community Safety in Obesity Prevention: Exploring How Exposure to Crime and Violence Affect Physical Activity and Healthy Eating: A Summary for Practitioners (Sept. 22-23, 2011), http://www.rwjf.org/content/dam/farm/reports/ program results reports/2013/rwjf403167; Larry Cohen, Rachel Davis, Virginia Lee, et al., Addressing the Intersection: Preventing Violence and Prooting Healthy Eating and Active Living (May 2010), <a href="https://www.preventioninstitute.org/component/jlibrary/article/id-267/127.html">https://www.preventioninstitute.org/component/jlibrary/article/id-267/127.html</a>.
- <sup>276</sup> Larry Cohen, Rachel Davis, Virginia Lee, et al., Addressing the Intersection: Preventing Violence and Prooting Healthy Eating and Active Living (May 2010) at 5, <a href="http://www.preventioninstitute.org/component/jlibrary/article/id-267/127.html">http://www.preventioninstitute.org/component/jlibrary/article/id-267/127.html</a>.

- <sup>277</sup> Lori Dorfman & Lawrene Wallack, "Moving from Them to Us: Challenges in Reframing Violence Among Youth," Berkeley Media Studies Group, 2009.
- <sup>278</sup> Davis, R.A. & Tsao, B. (2014). Multi-Sector Partnerships for Preventing Violence: A Guide for Using Collaboration Multiplier to Improve Safety Outcomes for Young People, Communities and Cities. Prevention Institute. <a href="http://www.preventioninstitute.org/component/jlibrary/article/id-359/127.html">http://www.preventioninstitute.org/component/jlibrary/article/id-359/127.html</a>.
- <sup>279</sup> Larry Cohen, Rachel Davis, Virginia Lee, et al., Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living (May 2010) at 16, <a href="http://www.preventioninstitute.org/component/library/article/id-267/127.html">http://www.preventioninstitute.org/component/library/article/id-267/127.html</a>.
- <sup>280</sup> Larry Cohen, Rachel Davis, Virginia Lee, et al., Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living (May 2010) at 19, <a href="http://www.preventioninstitute.org/component/ilibrary/article/id-267/127.html">http://www.preventioninstitute.org/component/ilibrary/article/id-267/127.html</a>.
- 281 "Committee votes to drop bike license fines." <a href="http://www.m-bike.org/blog/2008/07/28/committee-votes-to-drop-bike-license-fines/">http://www.m-bike.org/blog/2008/07/28/committee-votes-to-drop-bike-license-fines/</a>.
- <sup>282</sup> ChangeLab Solutions, Getting the Wheels Rolling: A Guide to Using Policy to Create Bicycle Friendly Communities (Aug. 2013) at 82, <a href="http://changelabsolutions.org/bike-policies">http://changelabsolutions.org/bike-policies</a>.
- <sup>283</sup> Understanding Barriers to Bicycling Project, Community Cycling Center (July 2012), Available online: <a href="http://www.communitycyclingcenter.org/wp-content/uploads/2012/07/Understanding-Barriers-Final-Report.pdf">http://www.communitycyclingcenter.org/wp-content/uploads/2012/07/Understanding-Barriers-Final-Report.pdf</a>.
- <sup>284</sup> Michael Kodransky and Gabriel Lewenstein, Connecting Low-Income People to Opportunity with Shared Mobility (Dec. 2014), Institute for Transportation & Development Policy, Available at https://www.itdp.org/wp-content/ uploads/2014/10/Can-Shared-Mobility-Help-Low-Income-People-Access-Opportunity-pdf; ChangeLab Solutions, Getting the Wheels Rolling: A Guide to Using Policy to Create Bicycle Friendly Communities at 83 (Aug. 2013), http://changelabsolutions.org/ bike-policies.
- <sup>285</sup> Michael Kodransky and Gabriel Lewenstein, Connecting Low-Income People to Opportunity with Shared Mobility (Dec. 2014), Institute for Transportation & Development Policy, Available at <a href="https://www.itdp.org/wp-content/uploads/2014/10/Can-Shared-Mobility-Help-Low-Income-People-Access-Opportunity-pdf">https://www.itdp.org/wp-content/uploads/2014/10/Can-Shared-Mobility-Help-Low-Income-People-Access-Opportunity-pdf</a>;
- <sup>286</sup> April Corbin, Bublr bike share to offer single-ride and monthly pass only, PeopleforBikes (March 13, 2015), http://www.peopleforbikes.org/blog/entry/ bublr-bike-share-will-offer-single-ride-and-monthlypass-only.
- <sup>287</sup> NPR Morning Edition, Shifting Gears to Make Bike-Sharing More Accessible (Dec. 12, 2013), <a href="https://www.npr.org/blogs/codeswitch/2013/12/12/243215574/shifting-gears-to-make-bike-sharing-more-accessible">https://www.npr.org/blogs/codeswitch/2013/12/12/243215574/shifting-gears-to-make-bike-sharing-more-accessible</a>.
- <sup>288</sup> Making Bike Share Reflect Philly, PlanPhilly (Dec. 2, 2014), http://planphilly.com/ eyesonthestreet/2014/12/02/making-bike-sharereflect-philly; http://www.rideindego.com/.
- <sup>289</sup> Anita Hamilton, Has Philadelphia Made a Bike Share that Can Get the Entire City Biking? Fast Company (March 30, 2015), <a href="http://www.fastcoexist.com/3044431/world-changing-ideas/has-philadelphia-made-a-bike-share-that-canget-the-entire-city-biking; Samantha Wittchen, Joy Ride: Philadelphia's bike share is coming this spring, Keystone Edge (March 12, 2015), <a href="http://www.keystoneedge.com/features/bikeshareindegophiladelphia031215.aspx;">http://www.keystoneedge.com/features/bikeshareindegophiladelphia031215.aspx;</a>; Bicycle Coalition Hiring Bike Share Ambassadors in Several West Philly Neighborhoods, West Philly Local. Com (Feb. 10, 2015), <a href="https://www.westphillylocal.com/2015/02/10/bicycle-coalition-hiring-bike-share-ambassadors-in-several-west-philly-neighborhoods/">https://www.westphillylocal.com/2015/02/10/bicycle-coalition-hiring-bike-share-ambassadors-in-several-west-philly-neighborhoods/</a>.

- <sup>290</sup> Anita Hamilton, Has Philadelphia Made a Bike Share that Can Get the Entire City Biking? Fast Company (March 30, 2015), <a href="http://www.fastcoexist.com/3044431/world-changing-ideas/has-philadelphia-made-a-bike-share-that-can-get-the-entire-city-biking">http://www.fastcoexist.com/3044431/world-changing-ideas/has-philadelphia-made-a-bike-share-that-can-get-the-entire-city-biking</a>.
- <sup>291</sup> April Corbin, Better Bike Share Partnership Aims to Increase Equity and Access in Bike Share (Jan. 22, 2015), http://nacto.org/2015/01/22/betterbike-share-partnership-aims-to-increase-equity-andaccess-in-bike-share/.
- <sup>292</sup> Cervero, Lund, Willson. "Travel Characteristics of TOD in California," January 2004.
- <sup>293</sup> LA Metro, First and Last Mile Strategic Plan. <a href="http://media.metro.net/docs/First\_Last\_Mile\_Strategic\_Plan.pdf">http://media.metro.net/docs/First\_Last\_Mile\_Strategic\_Plan.pdf</a>.
- <sup>294</sup> Mile High Connects website (2015), Available at http://milehighconnects.org/projects/improve-firstand-last-mile-connections-in-neighborhoods-and-jobcenters/.
- <sup>295</sup> Angie Schmitt, "It's Time to Vote for the Sorriest Bus Stop in America," <a href="http://usa.streetsblog.org/2015/02/06/its-time-to-vote-for-the-sorriest-bus-stop-in-america/">http://usa.streetsblog.org/2015/02/05/its-time-to-vote-for-the-sorriest-bus-stop-in-america/</a>; see also Streetsblog, January 27, 2015. <a href="http://usa.streetsblog.org/2015/01/27/help-streetsblog-find-the-sorriest-bus-stop-in-america/">http://usa.streetsblog-find-the-sorriest-bus-stop-in-america/</a>.
- <sup>296</sup> Angie Schmitt, "St. Louis Stunner Runs Away With the Vote for America's Sorriest Bus Stop," Streetsblog, 2/13/15, <a href="https://usa.streetsblog.org/2015/02/13/st-louis-stunner-runs-away-with-the-vote-for-americas-sorriest-bus-stop/">https://usa.streetsblog.org/2015/02/13/st-louis-stunner-runs-away-with-the-vote-for-americas-sorriest-bus-stop/</a>.
- <sup>297</sup> PolicyLink, Equitable Development Toolkit, http://www.policylink.org/equity-tools/equitabledevelopment-toolkit/about-toolkit.
- <sup>298</sup> The Leadership Conference Education Fund, 2011. Getting Home: Transportation Equity and Access to Affordable Housing <a href="http://www.civilrightsdocs.info/pdf/docs/transportation/getting-home-july21.pdf">http://www.civilrightsdocs.info/pdf/docs/transportation/getting-home-july21.pdf</a>.
- <sup>299</sup> KCET, June 2014. "Mayor Garcetti Addresses Gentrification Concerns Along L.A. River" <a href="http://www.kcet.org/socal/departures/lariver/confluence/river-notes/mayor-garcetti-addresses-gentrification-concerns-along-la-river.html">http://www.kcet.org/socal/departures/lariver/confluence/river-notes/mayor-garcetti-addresses-gentrification-concerns-along-la-river.html</a>.
- 300 Referenced in CTOD, Rails to Real Estate.
- 301 Alliance for Community Transit, 2015. Transit for All: Achieving Equity in Transit-Oriented Development. http://www.allianceforcommunitytransit.org/wp-content/uploads/2015/02/ACT-LA-Transit-for-All-Achieving-Equity-in-Transit-Oriented-Development.pdf.
- 302 Referenced in CTOD, Rails to Real Estate.
- 303 Center for Transit-Oriented Development, 2010. Central Corridor Investment Framework. <a href="http://www.funderscollaborative.org/partners/investment-framework-group/our-strategy">http://www.funderscollaborative.org/partners/investment-framework-group/our-strategy</a>
- 304 PolicyLink and ISAIAH, 2012. Healthy Corridor for All: A Community Health Impact Assessment for Transit-Oriented Policy in Saint Paul, Minnesota. http://isaiahmn.org/2012/01/healthy-corridor-forall/.
- 305 Strategic Growth Council, Affordable Housing Sustainable Communities Program. Guidelines available at <a href="http://sgc.ca.gov/s\_ahscprogram.php">http://sgc.ca.gov/s\_ahscprogram.php</a>



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