

What if Cities Combined Car-Based Solutions with Transit to Improve Access to Opportunity?

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This essay is part of a five-part series that explores how city leaders can promote local economies that are inclusive of all their residents. The framing brief, "Open Cities: From Economic Exclusion to Urban Inclusion," defines economic exclusion and discusses citylevel trends across high-income countries (Greene et al. 2016). The four "What if?" essays suggest bold and innovative solutions, and they are intended to spark debate on how cities might harness new technologies, rising momentum, and new approaches to governance in order to overcome economic exclusion.

What's the Big Idea?

Public transit does not work well for many families in the United States. Outside our densest urban areas, most families live in communities where housing, employment, and other opportunities are dispersed and not easily accessible by public transit. Even at rush hour, when transit agencies usually provide the most options, bus service can be unreliable, infrequent, and unpleasant. For people who work multiple jobs or overnight shifts in these communities, and for those—mainly women—who have to balance work, child care, and elder care, mass transit almost never works. Further, transit agencies increasingly prioritize investments and service improvements that target riders who might otherwise drive, paying for these upgrades by sacrificing routes serving low-income neighborhoods. Because the "captive riders" who live there will not be able to abandon transit, there is less concern about losing

ridership from these areas with these sacrifices (Taylor and Morris 2015). These obstacles are why most households—even low-income households—have or want cars.

But cars have downsides. They are expensive to purchase. They cost thousands of dollars a year to operate, straining household budgets. And they depreciate in value. Safety is also an issue. Over 30,000 people are killed in motor vehicle crashes each year in the United States, resulting in \$44 billion in medical and work-loss costs. These problems can have especially onerous consequences for the poor. Many low-income households turn to predatory lenders for loans to purchase vehicles or take out risky title loans to provide a ready source of cash, increasing their financial vulnerability. For families living in low-income neighborhoods, the costs of driving increase further because of discriminatory practices or "redlining" in the setting of automobile insurance premiums (Ong and Stoll 2007). Low-income households also tend to own older vehicles that often break down, causing financial shocks and disrupting journeys to work. It is not surprising, therefore, that car access tends to be more tenuous for many poor families, immigrants, and people of color who transition into and out of car ownership more frequently and are less likely to own a car than are nonpoor families, the US-born, and whites (Klein and Smart, forthcoming).

Low-income households also generally own cars that are older and pollute more on average than vehicles owned by middle- and upper-income households, thus creating a significant environmental impact. And though low-income people take fewer and shorter trips than upper-income people, the growth in their numbers and their increasing need to look for housing in low-density suburbs are likely to increase the impacts of the low-income fleet. Further, many of the nation's fastest-growing metropolitan areas are low-density areas of the southeast. Though more transit and more transit-oriented development are essential in these areas, public will and funding to expand transit and increase dense, mixed-use centers have not kept up with the need.

Transportation policy for low-income households, therefore, needs to overcome the "cars versus transit" mentality that dominates discourse and move toward complementary and integrated solutions that take a pragmatic approach to cars while reducing the costs of cars on low-income people, the environment, and society. For the poor, evidence shows car access improves employment (Baum 2009, Ong 2002), wages and earnings (Gurley and Bruce 2005, Raphael and Rice 2002), and access to safe neighborhoods with good schools and environmental quality (Dawkins, Jeon, and Pendall 2015). New approaches to automobile access for low-income households would also speed the uptake of clean, reliable cars, better connect these communities with transit, and reduce vehicle-miles traveled. And, as a benefit for metropolitan areas, some ways of improving car access in moderate-density neighborhoods could reinforce transit by providing access to transit stops that are not within walking distance of people's home or work.

How Would This Work?

What if cities aligned smart automobile-based solutions and public transit to help low-income households travel to school, work, and shopping more predictably and affordably *and* with lower

emissions? We envision regional Coalitions for Equitable Transportation Access (CETAs) that would unite stakeholders to meet all these goals. Each CETA would include representatives from business groups and community groups and experts and policymakers from local governments and school districts; regional transportation planning, transit, workforce, and air-quality agencies; and the transportation research community. The coalition would aim to provide low-income families better access to opportunity through a mix of transportation strategies, including implementing various approaches to auto access to help individuals and families achieve better outcomes, sustaining regional transit systems, growing the economy, and lowering emissions.

Each CETA would study why the status quo persists in its metropolitan area and identify barriers to change. It could pilot short-term measures to improve the access of families and individuals to affordable, safe, clean transportation. Effects on accessibility and mobility would be measured using standardized indicators, with costs and benefits of each pilot approach compared with costs and benefits of other investments in transportation, social welfare, and workforce development. The coalitions would study complementarities and competition with other programs to identify potential positive or negative feedback loops and adjust accordingly. In particular, latent demand for transit could be revealed and unlocked by identifying ways in which vehicle access for portions of a trip would enable transit use for other portions. Competitive funding could be offered for implementation of programs for which the best evidence exists of cost-effectiveness.

Reduce Barriers to and Burdens of Car Ownership

CETAs could evaluate, integrate, and scale existing solutions that serve different local housing and labor markets. One important thrust of work by CETAs could be to reduce barriers to and burdens of car ownership, but doing so in a way that also benefits the environment and urban form, including the following strategies:

- Leverage car purchases to encourage financial health and improve the environment. Cars are among the most expensive items for which families save and borrow; increasing numbers of households are now risking their credit ratings and their cars by turning to predatory lenders to buy cars and taking out title loans to borrow against cars they already have. CETAs could raise awareness about the risks of such approaches and connect stakeholders to develop more effective financial coaching programs, which can raise up to 20 percentage points the likelihood of making progress toward a big purchase such as a car, according to recent Urban Institute research (Theodos et al. 2015). These programs could be connected to efforts to scrap old, polluting cars and replace them with low-emission vehicles.
- Experiment with transit-friendly pricing of insurance and registration. CETAs might consider piloting a program to link insurance and registration fees to trip distance and frequency. They might deploy these in transit-rich neighborhoods where low-income residents would use transit more if driving became marginally more expensive.

- Increase benefits and remove asset limits for owners of certain vehicles. CETAs could work to exempt cars from state asset limits for recipients of benefit programs like Temporary Assistance for Needy Families and Supplemental Nutritional Assistance Program. An additional incentive could be to raise time-limited benefits for drivers of new, clean energy vehicles on the premise that such reliable vehicles will make it easier to keep a regular work schedule.
- Reduce barriers to licensing. CETAs could make driver's education programs more universally available and affordable, reduce the incidence of license suspensions for reasons other than driver safety (Zimmerman and Fishman 2001), and encourage their state governments to allow people to get special driver's licenses if they do not demonstrate proof of legal US residency (NCSL 2015).

Shared Mobility

Efforts to reduce the barriers to and burdens of car ownership, if integrated with new *shared mobility* approaches, like car sharing and ride-on-demand services, could lead to big improvements in the efficiency, convenience, reliability, and emissions impact of the fleet of cars low-income people own. Shared mobility works best in the same moderate- to high-density neighborhoods where transit works best—thereby increasing the attractiveness for investment and viability of these neighborhoods and the transit that relies on density. Shared mobility solutions make it possible to live without a car, or with only one car instead of two or more, in these neighborhoods. CETAs could look for the best fit for different neighborhoods and purposes among shared mobility approaches, including the following:

- Person-to-person car sharing. Most low-income people who lack cars already rely on rides from friends and family, but this reliance can strain relationships (Murphy 2010). Person-to-person car sharing may be promising for low-income households because it relies on apps developed by for-profit intermediaries. This expands possible connections and eases vehicle cost burdens for low-income vehicle owners.
- Ride-on-demand services. Smartphone-based car-hailing services have exploded and expanded from expensive single-person taxicab-like services to lower-cost carpooling and fixed-route shuttle options.² Ride-on-demand services may also offer opportunities for low-income car owners to become employed as drivers.
- Car-share fleets have been around for longer than person-to-person car sharing, but fleet-based car-shares have limits for low-income households (Shaheen et al. 2015). Round-trip programs requiring that cars return to a designated space make car sharing inconvenient as a way to get to work. One-way services are still expensive and limited to cities with a high enough density of users to make them financially feasible. Local programs designed at least in part to serve low-income people in Buffalo, Chicago, and Philadelphia have all been bought by national for-profits, ending favorable pricing. But, in some circumstances, car-share fleets could be part of the solution for low-income people. Remaining nonprofits sometimes offer subsidized plans for qualified low-income people.³ And a new Los Angeles program has provided a \$1.6 million grant

funded by state greenhouse gas cap-and-trade revenues to place 100 electric and hybrid vehicles in low-income neighborhoods, with a goal of serving 7,000 households and taking 1,000 gas-powered vehicles off the street.

Provide Cars to Low-Income Households

Coalitions for Equitable Transportation Access could also investigate the cost-effectiveness and impacts of programs that directly provide cars to low-income households. A 2001 paper (Goldberg) identified six states in which statewide or local programs offered car-access grants or loans to a limited number of welfare leavers; such programs were mainly in areas without transit access (ARB 2015). Providing cars directly to low-income households is still a popular method, but it has a number of shortcomings that merit broader understanding. Car-donation programs require a stream of donated vehicles, but changes in cars and in household finances have reduced donations to small numbers. Relying on donated cars also does not necessarily reduce greenhouse gas emissions. Cash-for-clunkers programs, by contrast, subsidize drivers of old, dirty vehicles to scrap their cars and help pay for a newer, low-emission vehicle. The California Air Resources Board has initiated such a program in Greater Los Angeles and the San Joaquin Valley, where driving imposes tremendous costs on households already hit hard by high rents, produces large amounts of smog, and creates a strain on the global environment. But the cost per household served—up to \$12,000 for a driver who scraps a dirty car and replaces it with the cleanest electric vehicle—would probably limit the appeal of this approach to a small number of households in areas with extremely poor air quality (ARB 2015).

Who Would It Help, and What Aspects of Exclusion Would It Address?

Affordable and reliable car access is a pervasive issue for low-income households in the United States. Families above the federal poverty level, on average, have one car per adult in the household; those below poverty, by contrast, have only 0.52 cars per adult (Klein and Smart, forthcoming). On average, about 20 percent of people in poverty lived in households without a car in 2014. Meanwhile, 40 percent had one car in their household and 40 percent had two or more. On average, families in the lowest income quintile spent 15 percent of their income (\$3,555) on transportation in 2014.

Households with access to cars do better than those without. For example, differences in carownership rates help explain interracial employment gaps; in the early 1990s, for example, 43 percent of the difference in employment between blacks and whites nationwide could be explained by whites' higher access to cars (Raphael et al. 2001). A series of studies on welfare leavers modeled the effects of car access. Welfare leavers in the Los Angeles area in the late 1990s were over 20 percentage points more likely to have a job if they had access to a car, even accounting for previous employment history (which would have enabled car acquisition) (Ong 2002). Tennessee welfare leavers with access to cars also had better employment and wage outcomes than those without cars in the early 2000s (Gurley and Bruce 2005).

A broad perspective on affordable, reliable, clean car access expands the pool of potential beneficiaries from only those who lack a car to low-income people more broadly. Almost no family manages without car access for long. A recent report using the longitudinal Panel Study on Income Dynamics showed that only 5 percent of families had never had a car over the seven waves of the study period between 1999 and 2011. Much more common for low-income African American and Hispanic households was switching into and out of car ownership. Twenty-two percent of families who were in poverty most years and 16 percent of African Americans both in and out of poverty had switched into and out of car ownership over time compared with just 5 percent of those not in poverty in any year and 6 percent of non-Hispanic whites both in and out of poverty (Klein and Smart, forthcoming).

Sustained access to a car protects against several dimensions of economic exclusion. It protects against *economic shocks* like losing a job, getting evicted, or having a medical emergency in the family. Car access, thereby, can help sustain economic resilience for families who are just one disaster away from long-term distress. It also provides *access to jobs* and can make it easier to manage the complexity of balancing family and educational objectives with making a living. Affordable and reliable car access dampens the negative effects of geographic *isolation* for households who live in high-poverty neighborhoods, because cars allow them to reach more employment and educational opportunities. By allowing households to move to safer, higher-opportunity neighborhoods, car access also reduces geographic isolation.

Where Has It Been Tried, and What Have We Learned?

Our proposed CETA approach builds on the popularity and enthusiasm around other "collective impact" programs, which build a common agenda among stakeholders who commit to shared measurement, mutually reinforcing activities, continuous communication, and backbone support within a dedicated organization (Grossman, Lombard, and Fisher 2013). Evaluations of Communities That Care coalitions, which align public, private, and nonprofit stakeholders to use evidence-based interventions that improve adolescent health and well-being, suggest that such alignment makes a measurable difference in outcomes. Furthermore, Communities That Care coalitions tended to persist even after initial funding ended (Gloppen et al. 2012). In "cradle-to-career" programs (e.g., Cincinnati's Strive Partnership), for which the collective impact framework is best known, we still lack evidence of causal impacts. Even so, the idea appears to be spilling over into other policy arenas, like increasing employment among public-housing residents (Parkes et al. 2012).

So far, we have limited evidence of the impact of the portfolio of approaches with which CETAs might experiment. We know little about the impacts of car-access programs, for example, because most studies have explored outcomes without providing strong evidence of what might have happened to the same or similar family in the absence of the program. Peer-reviewed research shows that beneficiaries of programs of Burlington, Vermont's Good News Garage experienced appreciable improvements in employment and wages (Lucas and Nicholson 2003). Non–peer reviewed studies and organizational self-reporting claim similar outcomes for New Hampshire's Bonnie CLAC program (now called More Than Wheels) and the DC-area Vehicles for Change program (Ward and Savage 2007). Some evidence

supports the idea that exempting vehicles from benefit-program asset limits increases vehicle ownership (Sullivan 2006). And a recent Los Angeles study completed with funding from Uber Technologies, Inc. found that Uber significantly out performs taxicabs in cost and wait time for riders living in low-income neighborhoods (Smart et al. 2015).

What Else Do We Need to Know or Do to Make This Idea Work?

We have enough evidence about the value of multistakeholder collaborations to make the CETA a worthwhile concept. Since 2009, federal agencies have launched a series of place-based programs for improving neighborhoods, cities, and regions. Private philanthropy has also undertaken or fostered multisite collective impact initiatives. Taken together, these programs support the idea that competitions and planning grants can lead to new relationships that persist beyond the application and planning-grant periods. Sometimes they even lead to system change, shifts in programs, and new rationales, all of which can drive smarter investments.

An initial survey of the field could show how many metropolitan areas already have at least some efforts under way to improve low-income people's access to cars, including work at metropolitan planning organizations as part of mandatory long-range transportation plans. Once the CETAs are under way, they will be outstanding platforms for testing the value of each intervention and program. They will also test the value of applying the collective impact idea to improving economic mobility by integrating affordable, reliable car access into planning for low-income households' transportation mobility.

In the post-interstate era, "transportation equity" has become a central theme of the national transportation policy dialogue. A coordinated effort to align smart automobile-based solutions with public transit could move the discussion forward by encouraging outside-the-box thinking about ways to meet the diverse short- and long-term mobility needs of low-income households. CETAs provide a collaborative forum for engaging in this dialogue and exploring practical strategies for improving access to opportunity.

Notes

¹ "State-Specific Costs of Motor Vehicle Crash Deaths," Centers for Disease Control and Prevention, last modified December 14, 2015, http://www.cdc.gov/motorvehiclesafety/statecosts/index.html.

² Lyft Line, for example, operates in seven cities ranging in density from New York to Atlanta, allowing riders to pay up to 60 percent less than single-person nonstop riders. See https://www.lyft.com/line.

³ "Community: Rates and Plans," Ithaca Carshare, accessed April 18, 2016, http://www.ithacacarshare.org/rates/community.

 $^{^4}$ We do not know whether these programs still exist or what their impact was on recipients.

⁵ Data from American Community Survey, 2014.

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⁶ "Table 1101. Quintiles of income before taxes: Annual expenditure means, shares, standard errors, and coefficients of variation, Consumer Expenditure Survey, 2014," Bureau of Labor Statistics, Consumer Expenditure Survey, September 2015. http://www.bls.gov/cex/2014/combined/quintile.pdf.

⁷ See, for example, Hawkins et al. (2008).

⁸ "StriveTogether Cradle to Career Network Results," StriveTogether, accessed April 19, 2016, http://www.strivetogether.org/results.

⁹ "Our Impact," Vehicles for Change, accessed April 19, 2016, https://www.vehiclesforchange.org/about-vfc/our-impact/.

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