

Losing the War of Attrition: Mobility, Chronic Decline, and Infrastructure

Michelle Wilde Anderson

ABSTRACT. For decades, moving from areas of concentrated poverty to areas of opportunity has required increasing levels of both luck and suffering. More people and more places are bound to be stuck, but providing assistance will take more than reducing formal legal barriers to interstate mobility. This Response to David Schleicher’s Article *Stuck! The Law and Economics of Residential Stagnation* argues that meaningful improvements to mobility—whether social or geographic—will require a new antipoverty agenda for declining regions. So too it will require fiscal and environmental responsibility for the existing infrastructure debts of our prior regional and interstate mobility, before climate change sets us in motion once again.

INTRODUCTION

In 1981, the band Journey wrote about the “small town girl, living in a lonely world” and the “city boy, born and raised in South Detroit” who “took the midnight train going anywhere.”¹ By then, a mass internal migration out of rural areas and urban industrial cores was decades underway. In the postwar years, Americans had moved in droves away from central cities into suburbs, away from the Rustbelt and towards the Sunbelt, and away from rural areas nationwide. The 1970s and 1980s marked an era of decline and disinvestment in cities in general, and older cities of all sizes lost population and revenues, while poverty and crime rose for those who stayed behind. These were high times for interstate mobility, with a federal government that subsidized Sunbelt metros as though they were the mark of a modern nation.

1. JOURNEY, *Don’t Stop Believin’*, on ESCAPE (Fantasy Studios 1981).

By the late 1990s, a few early industrial cities had begun regaining businesses and residents. Fast forward to today, and most regions have a single thriving metropolis connected to the modern knowledge economy. Land values in these areas are high and rising, making the cost of housing, not the availability of a job, the key antagonist of lower-skilled workers. Yet in much of the territory beyond these recovered cities—be it other cities, old mill towns, or rural areas—jobs are scarce and local governments are broke. America has experienced a return to the city, to be sure, but only in some cities in some states.

This uneven recovery has created a major problem: people need jobs as well as homes they can afford near those jobs. Some places, like Silicon Valley, offer more plentiful jobs than affordable housing; others, like Detroit, have more plentiful housing than they have jobs. Some, like Albuquerque, are hanging on in the middle.²

We could try to correct this problem, often referred to as a jobs-housing imbalance, by pursuing one or both of two policy goals. We could try to move more people to expanding economies, and/or we could try to restore the job base and educational attainment rates in declining places. A number of economists (most prominently Edward Glaeser and Enrico Moretti) have emphasized the importance of the first approach, arguing that much of the nation's headroom for economic growth lies in the strongest metropolitan areas.³ Sharing the prosperity in these regions, they argue, requires building more housing within them. Building more housing in turn requires dismantling controls on density and other land-use measures that drive up the costs of that housing.⁴

David Schleicher's Article *Stuck! The Law and Economics of Residential Stagnation*⁵ marshals and joins the body of work endorsing this first approach, arguing that Americans are not moving as much as they used to (or at least, as much as they should) to reach job opportunities in high-growth regions.⁶ Schleicher assembles empirical evidence about the extent of and causes for the slowdown in interstate migration, identifying additional state and local laws that may interfere with mobility.⁷ He carefully concedes that it is not clear how much the lag in interstate mobility is caused by these legal deterrents, but ar-

2. ENRICO MORETTI, *THE NEW GEOGRAPHY OF JOBS* 13-15, 77-79 (2012).

3. See, e.g., EDWARD GLAESER, *TRIUMPH OF THE CITY* (2011); MORETTI, *supra* note 2.

4. See Edward L. Glaeser et al., *Why is Manhattan So Expensive?: Regulation and the Rise in House Prices*, 48 J. L. & ECON. 331 (2005).

5. 127 YALE L.J. 78 (2017).

6. *Id.* at 81-83.

7. *Id.* at 84-86, 111-32.

gues for a federal agenda to strip away these impediments and encourage Americans to move away from declining regions.⁸

Reducing the cost of housing in thriving regions, especially by removing density controls, is a critical step towards correcting the jobs-housing imbalance and allowing newcomers to these regions to capture and create economic growth. I have always agreed with this point. But this is not a sufficient answer to the uneven map of prosperity. The goal of improving opportunity, stability, and quality of life in declining areas—the second of the two strategies for correcting the jobs-housing imbalance—is inseparable from the goal of increasing geographic and social mobility. These are interdependent objectives, because chronic decline itself inhibits mobility. If we do not address the decline, we cannot promote mobility for meaningful numbers of people. This represents a more difficult policy challenge than Schleicher’s work acknowledges: if we do not invest in people, we cannot divest from places, but if we divest from places, we cannot invest in their people.

A broader policy agenda for rebuilding opportunity in declining areas is beyond the narrow scope of this Response (though it is underway in my current book manuscript).⁹ Instead, this Response makes three discrete points in response to Schleicher’s Article. The first is that any policy agenda to promote mobility—including the federal efforts that Schleicher seeks¹⁰—will falter without a plan for those areas left behind, as long-term joblessness and rising concentrations of poverty impede any kind of mobility. Whether the goal is helping people to *move out* of declining areas or helping them to *move up* the education and skills ladder, the problem is the same—we cannot make people more mobile by waging a slow war of attrition on their communities. That war, I argue in Part I, is what truly makes people stuck. We know this because such a war of attrition has been underway for more than fifty years of industrial restructuring. Many historic centers of twentieth-century industry have dutifully lost thirty to sixty percent of their population—the very mobility that Schleicher advocates. The fallout is littered everywhere: cruel losses to life, health, and property values that are borne by the millions of people who remain behind.

An agenda pursuing mobility as the central answer to post-industrial restructuring is also fiscally wasteful. Part II focuses on just one of its fiscal impacts, arguing that internal migration triggers not only the costs of what we must build, but also the costs of what we must rebuild. American infrastructure

8. *Id.* at 78, 149-54.

9. MICHELLE WILDE ANDERSON, *LEFT FOR DEAD: CITY GOVERNMENTS AFTER THE FALL OF INDUSTRY* (forthcoming 2018).

10. See Schleicher, *supra* note 5, at 149-54.

in cities and suburbs built before the 1960s has entered what engineers call “The Replacement Era,” in which a precious inheritance of infrastructure built by earlier generations is coming to the end of its “useful life” – engineering jargon for leaking, corroding, bursting, and, in the case of natural gas, exploding.¹¹ If there were a magic wand to reorganize population quickly according to macroeconomic interests, big systems in declining areas could be shuttered instead of rehabilitated. But such wands are hard to come by, and the millions of people who still live in declining industrial cities – from North to South, West to East, central city to historic suburb – need infrastructure now. Detroit has hemorrhaged residents, but today’s more than 713,000 residents still need a tap and a toilet.¹² The city remains the biggest in its state, and it has more residents than Washington, D.C.¹³ The bill for rebuilding historic cities’ infrastructure is past due, and a slowly draining population cannot pay it.

A national infrastructure agenda, I argue in Part III, is not just an urgent public health imperative, but also a down payment on future mobility as well. We will need our historic industrial regions down the road, when climate change alters the underlying environmental conditions upon which cities depend for water, land, and public safety. America’s early industrial hubs were all built alongside major domestic sources of freshwater. The deterioration of the aging sewer and water systems drawing from and dumping into our surface waters – with no funding for replacements – is a local problem with national significance. The nation will need that water, and climate change promises to intensify that dependence. That many weak areas are located away from the coasts, including the Gulf, means that mobility tomorrow will look different than it does today, and it would be wise not to burn the bridges that will allow a cost-effective return to the Rustbelt’s strategic interior location at the shores of the Great Lakes.

If ever it looked wise to pursue a pro-mobility agenda while withdrawing funding to declining regions, recent years should have laid that temptation to rest. The growth regions in Silicon Valley, Seattle, Houston, and South Florida have been devastated by record-setting hurricanes, wildfires, and droughts. We are going to need a better plan than a war of attrition for declining areas – for the sake of their residents’ present as well as for our nation’s future.

11. See, e.g., *Buried No Longer: Confronting America’s Water Infrastructure Challenge*, AM. WATER WORKS ASS’N. 3 (2011), <http://www.awwa.org/Portals/0/files/legreg/documents/BuriedNoLonger.pdf> [<http://perma.cc/546Y-RFET>].

12. *United States*, U.S. CENSUS BUREAU (2010), http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml [<http://perma.cc/LA5P-5XGH>] (indicating a 2010 city population of 713,777 in Detroit).

13. *Id.* (indicating a 2010 city population of 601,723 in Washington, D.C.).

I. THE COUNTERFORCES TO EXIT

Why do people stay in places that are losing population and jobs? Having interviewed more than one hundred people across our so-called “dying places,” I have heard again and again that much of the answer lies in love of home, family, and land—as Naomi Schoenbaum has captured in her parallel Response.¹⁴ While no one living in a declining area denies their community’s hard times, many people express shocked disbelief, if not anger, at the doomsday story that outsiders tell of their hometowns. But for those people who do wish they could move, Schleicher’s identification of barriers to exit fails to account for a larger problem: the degree and nature of concentrated poverty in post-industrial areas.

Schleicher’s Article identifies several legal rules that may create barriers to exit, including eligibility standards for public benefits, defined benefits plans for public employees that discourage movement between cities or states, and a lock-in effect from homeownership.¹⁵ He acknowledges that it is difficult to assess the impact of these rules. I accept his hypothesis that these rules may disincentivize exit for some people, but with all due respect to his account, they seem to work at the margins of the bigger headwinds to social and geographic mobility. Law and politics have made people in some places poorer, and less geographically or socially mobile for that reason alone.

Across recent years of lagging mobility, these larger headwinds have included the following: a particularly steep nose dive between 2000 and 2014 in the number of manufacturing jobs;¹⁶ rising concentrated poverty;¹⁷ falling levels of educational attainment in declining areas (which impedes economic de-

14. Naomi Schoenbaum, *Stuck or Rooted? The Costs of Mobility and the Value of Place*, 127 YALE L.J. F. 458 (2017), <http://www.yalelawjournal.org/forum/stuck-or-rooted> [<http://perma.cc/LL49-C7MM>].

15. See Schleicher, *supra* note 5, at 122–31.

16. While jobs have been lost to deindustrialization and globalization for decades, employment took an even more extreme dive between 2000 and 2014, when the number of manufacturing jobs fell by more than five million—more than one-fourth of the total jobs in the sector during the prior three decades. Robert E. Scott, *Manufacturing Job Loss: Trade, Not Productivity, Is the Culprit*, ECON. POLICY INST. (Aug. 11, 2015), <http://www.epi.org/files/2015/ib402-manufacturing-job-loss.pdf> [<http://perma.cc/CH2W-YHG2>].

17. From 2000 to 2010, the number of cities and counties where at least one in five residents lived below the poverty line rose by twenty-five percent. David T. Lichter et al., *The Geography of Exclusion: Race, Segregation, and Poverty*, 59 SOC. PROBLEMS 364 (2012). The term “poverty line” is code for the colder truth of living on less than \$22,050 per year for a family of four. See Office of the Assistant Sec’y for Planning & Evaluation, *The 2010 Poverty Guidelines for the 48 Contiguous States and the District of Columbia*, U.S. DEP’T OF HEALTH & HUMAN SERVS. (Aug. 1, 2010), <http://aspe.hhs.gov/2010-hhs-poverty-guidelines> [<http://perma.cc/5Q28-EVJD>].

velopment efforts and agglomeration effects);¹⁸ 7.8 million homes lost in foreclosure between 2007 and 2017;¹⁹ the failure to protect low-wage earners from price gouging and habitability code violations by landlords in weak markets;²⁰ the human and fiscal costs of the opioid addiction crisis;²¹ and the disproportionate concentrations of children and elderly people in communities hit by population losses among working-age adults (which can be caused not only by employment outmigration, but also by high incarceration or homicide rates).²² The confiscation of local wealth due to all these setbacks places the disposable cash needed for a costly interstate move out of reach. The majority of Americans do not have \$400 on hand,²³ so how could they afford an interstate move averaging more than \$5,000?²⁴

Racial discrimination adds another set of major barriers to mobility from city to suburb or from state to state. As Sheila Foster's Response for this Collection demonstrates, our opportunity gap remains wedged open in declining and thriving areas alike, because we have failed to remedy the racial discrimination that causes it.²⁵ Patrick Sharkey's sweeping empirical work, for instance, shows how systemic disinvestment from black neighborhoods, unrelenting segregation, and declining economic opportunities have led to the new generation of African-American communities inheriting the same neighborhood ine-

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18. Enrico Moretti, who has diagnosed our polarizing "geography of jobs," identifies education as the major impediment to mobility – regions with low levels of college attainment are least mobile. See MORETTI, *supra* note 2, at 90-107.
 19. *US Residential Foreclosure Crisis Decade in Review*, CORELOGIC (Mar. 14, 2017), <http://www.corelogic.com/about-us/news/corelogic-issues-us-residential-foreclosure-crisis-decade-in-review.aspx> [<http://perma.cc/U5KY-FT54>].
 20. See MATT DESMOND, *EVICTED: POVERTY AND PROFIT IN THE AMERICAN CITY* (2016).
 21. See *Opioid Crisis*, NAT'L INST. ON DRUG ABUSE, (June 2017), <http://www.drugabuse.gov/drugs-abuse/opioids/opioid-crisis> [<http://perma.cc/Z9K8-94NH>] (stating that more than ninety Americans fatally overdose on opioids daily, and the economic impacts of opioid misuse alone total \$78.5 billion a year in the United States).
 22. See ANDERSON, *supra* note 9 (assessing the skewed demographics of declining post-industrial areas).
 23. Neal Gabler, *The Secret Shame of Middle-Class Americans*, ATLANTIC (May 2016), <http://www.theatlantic.com/magazine/archive/2016/05/my-secret-shame/476415> [<http://perma.cc/J2J7-M95R>].
 24. *6 Tips for Moving Out of State*, ANGIE'S LIST (June 25, 2015), <http://www.angieslist.com/articles/6-tips-moving-out-state.htm> [<http://perma.cc/2N4C-8KN7>] (citing estimates by the American Moving & Storage Association).
 25. Sheila R. Foster, *The Limits of Mobility and the Persistence of Urban Inequality*, 127 YALE L.J. F. 480 (2017), <http://www.yalelawjournal.org/forum/the-limits-of-mobility-and-the-persistence-of-urban-inequality> [<http://perma.cc/T5YA-A762>].

quality as their 1970s forebears.²⁶ The racialized and spatially concentrated reality of mass incarceration, accompanied by a generation of attendant felon exclusion laws that inhibit mobility in both housing and employment, has been among the primary drivers of decline in African-American cities like Detroit.²⁷ The high rates of incarceration in poor areas have fiscal impacts, as they draw scarce government funds toward prison systems that only compound long-term joblessness and family disintegration.

Cuts to and degradation of local government services themselves create counterforces to opportunity and mobility—contrary to Schleicher’s hypothesis that excess local government capacity may be functioning as a barrier to exit in declining places.²⁸ In my several years of budget and field research on declining regions across the country, I have yet to find a place that fits that hypothesis. Instead, in a rising number of places nationwide, local governments have slashed services, employees, and capacity in the face of long-term revenue collapse.²⁹ Uncompetitive pay, state fiscal handcuffs, management turnover, mass layoffs, and irregular patterns of attrition mean that declining places offer barren and ineffective profiles of local government services.³⁰ This only creates a toxic spiral of decline in which household fiscal crises (joblessness, falling wages, and the like) become local government fiscal crises, which cause austerity measures in services that drive mobile residents away and devalue local properties, further digging the economic hole in which local families are buried. Dan Kildee, the U.S. Representative for Flint, Michigan, captured this dynamic well when he told me: “We’re not offsetting the real drivers of decline. We have only applied one tool: Take a city with high service demand and low capacity. Then cut the capacity. It only increases the need for public services.”³¹

This does not mean, however, that we should not work to change and improve government in such areas.³² Since the economy has changed for lower-skilled workers, local governments must do more to make their residents both socially and geographically mobile. But as President Obama put it in 2011 (and

26. PATRICK SHARKEY, *STUCK IN PLACE: URBAN NEIGHBORHOODS AND THE END OF PROGRESS TOWARD RACIAL EQUALITY* (2013).

27. See, e.g., Heather Ann Thompson, *Unmaking the Motor City in the Age of Mass Incarceration*, 15 *J.L. & SOC’Y* 41 (2013-2014).

28. Schleicher, *supra* note 5, at 139.

29. See ANDERSON, *LEFT FOR DEAD*, *supra* note 9; Michelle Wilde Anderson, *New Minimal Cities*, 123 *YALE L.J.* 1118, 1157-73 (2014).

30. See Anderson, *supra* note 29, at 1157-73, 1180-88.

31. Interview with Dan Kildee, Congressman for Flint, Mich., U.S. House of Representatives (Mar. 7, 2016) (on file with author).

32. See ANDERSON, *supra* note 9.

as I have heard quoted in declining areas): “We can’t simply cut our way to prosperity.”³³

As a scholar of areas that seem to be in chronic decline, I get asked again and again (as Schleicher has suggested in *Stuck!*)³⁴: Why keep putting resources into an area where people are getting more poor, and more stuck, as time goes by? The biggest answer, I think, is that we do not have a serious alternative—too many people live in such areas. Any withdrawal of federal and state transfers to these areas would actually treat them worse than wealthier areas. The federal and state governments engage in revenue sharing with all cities and counties—rich and poor. The question of how (and how much) to support declining areas must be answered every year, at just about every turn of budget appropriations and policymaking. The question is simply who gets what, and in what form? In these days of fiscal austerity for struggling places, states often reclassify their usual state-local revenue sharing distribution as “emergency aid packages,” even if that distribution is no higher than the one the city would have received in the usual statewide revenue-sharing allocations. To call those distributions “bailouts” is deceptive when decades of state and federal disinvestment in older industrial areas (combined with subsidization of infrastructure to newer urban areas) helps explain why places—and their people—went broke in the first place.

Even in cases where regions pay lower rates of taxation than their state metropolitan engines, it is incorrect to conclude that they disqualify themselves from government assistance, as Schleicher suggests in his presentation of my work on high-poverty rural Oregon.³⁵ His position overlooks the ties that bind that state together—a series of constitutional and statutory reforms by antigovernment, antitax advocates at the state level that subjected all local tax policy to local elections.³⁶ Local governments there are stuck with an ossified starting tax rate and an onerous electoral process to increase that rate by the smallest increment.³⁷ While these tax increase elections have usually failed in poor counties seeking to improve services, most have failed at such slim margins that they raise more difficult questions than Schleicher’s description portrays. Should a forty-nine percent minority of voters who do vote to approve an in-

33. See Jamie Klatell, *Obama Radio Address: ‘Can’t Simply Cut Our Way to Prosperity’*, HILL (June 25, 2011, 10:06 AM), <http://thehill.com/homenews/administration/168457-obama-we-cant-simply-cut-our-way-to-prosperity> [<http://perma.cc/MB5X-PSKS>].

34. Schleicher, *supra* note 5, at 143.

35. Schleicher, *supra* note 5, at 143–45.

36. Michelle W. Anderson, *The Western Rural Rustbelt: Learning from Local Fiscal Crisis in Oregon*, 50 WILLAMETTE L. REV. 465, 480–82 (2014).

37. *Id.*

crease in taxes – but who lose the election anyway – be deprived of rudimentary or emergency services because the tax levy failed? Is it ok for 911 dispatch on nights and weekends to be subject to electoral approval in the first place? The ramifications of fiscally broke governments are felt far beyond their borders, especially because so many of these places have become central hubs for the distribution and production of illegal narcotics. The dealers and producers in such a system do not mind that new taxes to fund basic law enforcement must clear high bars for electoral approval. The rest of us should mind.

Proponents of mobility too rarely acknowledge these difficult quandaries about what to do for the land and people in struggling regions, and the questions of whether and how to stimulate and protect investment there. Yet economist Glaeser, one of our strongest national voices for interstate mobility, got it right when he said: “Above all else, every child should have access to good schools and safety, and the federal government has every reason to invest in America’s children, whether they’re in Houston, New York, or Detroit.”³⁸ Local governments work at the frontlines to deliver that promise. So-called dying places contain living homes, and the people in those homes need basic things. Even when they cannot afford to pay for them, residents need shared public services focused on their safety and life chances. They need stable and challenging schools, as well as safe sidewalks, parks, and activities for children during the summer. They need public works (including drinking water, sewage disposal, and roads); effective policing; library and community college programs for children and adults; and, in some areas, public transportation to get people to work when they cannot afford a car. From fire protection to blight redevelopment to drug rehabilitation, local governments help weave the safety net. When that net no longer reaches poor places, adults and kids face even steeper odds against moving out or moving up.

The water crisis in Flint offered an especially dire warning about answering decline with accelerated government withdrawal. An estimated 8,000 or more of the city’s children face the risk of lifetime neurological damage from lead poisoning.³⁹ Across a nearly two-year period, children were drinking water with lead levels that ran higher than 27 parts per billion in ten percent of samples – and 13,000 parts per billion in at least one sample – compared to an EPA safety threshold of 15 parts per billion and consistent scientific admonitions that no lead level is safe in drinking water.⁴⁰ The city’s underground water sys-

38. GLAESER, *supra* note 3, at 257.

39. Abby Goodnough, *Flint Weighs Scope of Harm to Children Caused by Lead in Water*, N.Y. TIMES (Jan. 29, 2016), <http://www.nytimes.com/2016/01/30/us/flint-weighs-scope-of-harm-to-children-caused-by-lead-in-water.html> [<http://perma.cc/W5W2-Y4QH>].

40. Christopher Ingraham, *This Is How Toxic Flint’s Water Really Is*, WASH. POST (Jan. 15, 2016), <http://www.washingtonpost.com/news/wonk/wp/2016/01/15/this-is-how-toxic-flints>

tem was built with lead pipes or lead solder, and unlike in Lansing, the state capital, there had been no citywide investment to remove the aging and vulnerable water lines.⁴¹ When state officials' budget cuts meant that the city switched its water supply to a more polluted, corrosive source, the water accelerated the disintegration of the lead pipes into the water supply.⁴² The city's long-term population loss fueled the tragedy, because when a water system has fewer users than it was designed for, the water inside moves slowly and infrequently, absorbing higher levels of corrosion.⁴³

Flint's water crisis is a grim reminder that shrinking, struggling cities are not empty. With more than 100,000 people, the city is hardly a ghost town.⁴⁴ Newborns, elderly people, and people of every age in between drink, cook with, and bathe with Flint's tap water. Those water lines supplied two university campuses, a major regional hospital, several industrial facilities, downtown restaurants and coffee shops, and tens of thousands of homes. Flint was poor and it was shrinking, but it was alive. The city needed its local public services. When the city became unable to afford something as basic as safe drinking water, denying that need only made the city poorer and more in need of emergency aid. Now more than ever, Flint residents are too poor to leave.⁴⁵

Flint's hardships help capture my overriding concern about focusing efforts on mobility without commensurate stabilization in declining areas. After a long

-water-really-is [<http://perma.cc/UTK6-AURE>]; see also Ctr. for Disease Control & Prevention, *Blood Lead Levels Among Children Aged <6 Years – Flint, Michigan, 2013–2016*, U.S. DEP'T HEALTH & HUM. SERVS. 2 (July 1, 2016), <http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6525e1.pdf> [<http://perma.cc/EZU6-6TNR>] (finding that children younger than six years old had a 46% higher chance of testing above the Center for Disease Control and Prevention's "level of concern" for lead exposure during the period the city relied on drinking water from the Flint River).

41. Anna Clark, *The City That Unpoisoned Its Pipes*, NEXTCITY (Aug. 8, 2016), <http://nextcity.org/features/view/flint-lansing-michigan-replaced-lead-water-pipes> [<http://perma.cc/V7Y4-WTWV>].
42. FLINT WATER ADVISORY TASK FORCE, FINAL REPORT 1 (Mar. 21, 2016), http://www.michigan.gov/documents/snyder/FWATF_FINAL_REPORT_21March2016_517805_7.pdf [<http://perma.cc/3CTZ-Y44S>].
43. DEP'T ENVTL. QUALITY, GOVERNOR'S OFFICE BRIEFING PAPER: CITY OF FLINT DRINKING WATER, reprinted in *Gov. Rick Snyder's Flint Water Emails*, CRAIN'S DETROIT BUS. 36 (Jan. 19, 2016), http://issuu.com/crainsdetroit/docs/snyder_emails [<http://perma.cc/HYD2-QLH4>].
44. *United States*, U.S. CENSUS BUREAU (2010), http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml [<http://perma.cc/LA5P-5XGH>] (indicating a 2010 city population of 102,434 in Flint).
45. See Lolita Brayman, *Why Haven't Flint Residents Fled?*, WASH. POST (Feb. 22, 2016), <http://www.washingtonpost.com/news/monkey-cage/wp/2016/02/22/why-havent-flint-residents-fled> [<http://perma.cc/8GLJ-6EJN>].

period of declining population and difficult economic years—years when just about everyone who could leave did leave, and those who stayed endured disintegrating conditions, worsening economic hardship, and rising crime—the people who remain do so for some reason. Those reasons could be based either in choices or in a lack of choices. Either way, for the person who remains in Flint even after its water crisis, what could finally get her to pack up and leave? It could be an opportunity, like a federal voucher, that gives individuals the cash to transplant with starting funds at the other end. But until and unless such vouchers come to life in huge numbers and housing costs come down in growth areas, the more likely reality is that the only reason people will move is a terrible, final straw: a violent crime against them or a family member, a fire or flood that destroys their home, a parent trying to keep a teenage son from gang violence. At that point, it is hard to imagine that person making it across state lines to start anew.

If we decide to focus political firepower on a slow war for mobility that might yield a few vouchers here and some new affordable apartments there, many of those tragic, final straws will come to people in our declining areas. And those who receive that final blow will most likely have to move to some other broke, affordable place nearby anyway. Someday, if political rebellion does not intervene first, a war of attrition might be “won” against some declining places. Depopulation might well transform some cities into shantytowns, some rural towns into abandoned ruins. This process would take decades, if not a century, because there is no sweeping, instantaneous mobility plan to move everyone to high-growth areas. Given that post-industrial decline has already been underway for so long, the collapsed buildings across declining Rustbelt towns remind us that the human and physical fallout of these decades does, in fact, look much like war.

Atrophy is a bludgeon, not a cure. A mobility agenda like Schleicher’s is still compatible with a plan for economic recovery, wherever recovery is possible. Where recovery is not possible, there is even harder transitional work to do.

II. THE HIDDEN COSTS OF EXIT: WHAT WE MUST BUILD AND REBUILD

The refrain “don’t throw good money after bad” is often invoked with respect to declining cities. But the alternative of letting our old places wither while we develop new land should also be known by another financial cliché: digging a “money pit.” It is not just generations of people that are harmed as a city fades across the decades. So too, that decline wastes public resources. Leaving a city or region to hollow out means leaving behind all that was built

there – its underground utilities, its school buildings, its homes – and replacing all, rebuilding all, on green land somewhere else.

As millions of people have shifted from North to South, East to West, and city to suburb, the bill has mounted. Expanding metropolitan areas require basic infrastructure, including water treatment and delivery; wastewater disposal and treatment; gas pipelines to supply fuel for heating and cooking; flood and storm water control; roads; and, in some places, commuter rail systems. Each time new development is built on open land on an urban periphery, the infrastructure grid sprawls farther out. Meanwhile, as older places lose population, they still need infrastructure too. The circuitry of infrastructure in such places remains necessary, even as it is unnecessarily large. This circuitry also ages in ways that impose urgent costs and long-term fiscal challenges.

Pennsylvania offers a paradigmatic case of the human and financial costs of a lack of foresight and planning with respect to American migration and infrastructure. Once a national capital of coal mining, iron and steel works, and manufacturing,⁴⁶ Pennsylvania has struggled with sagging population and job growth, both of which have been limited by the state's slow-growing higher education attainment.⁴⁷ Despite its overall slowdown in growth, local governments in the state have permitted the rapid conversion of the state's forested hillsides into tree-lined subdivisions of developer-built tract mansions.⁴⁸ In just the twenty years from 1980 to 2000, an extraordinary 2.9 million acres of greenfield property – twenty-two percent of the state's rural land – was devel-

46. Michelle Wilde Anderson, *Who Needs Local Government Anyway? Dissolution in Pennsylvania's Distressed Cities*, 24 WIDENER L.J. 149, 158-59 (2015).

47. Metro. Policy Program, *Committing to Prosperity: Moving Forward on the Agenda To Renew Pennsylvania*, BROOKINGS INSTITUTION 2-3 (Mar. 2007), <http://www.brookings.edu/wp-content/uploads/2016/06/committingtoprosperity.pdf> [<http://perma.cc/GM4S-VZ4T>]; see also Jason Cato, *Census Shows Slow Pa. Population Gains*, TRIB LIVE (Jan. 4, 2014 12:03 AM), <http://triblive.com/news/allegHENY/5339987-74/state-growth-pennsylvania> [<http://perma.cc/SL3A-BQNH>] (discussing Pennsylvania's slow growth).

48. Hills and trees make sprawl less visible in Pennsylvania (and in the South and East in general) than in the flat, arid West. See David Rusk, "Little Boxes" – *Limited Horizons: A Study of Fragmented Local Governance in Pennsylvania: Its Scope, Consequences, and Reforms*, BROOKINGS INSTITUTION 8 (Dec. 2003), <http://www.brookings.edu/wp-content/uploads/2016/07/Rusk.pdf> [<http://perma.cc/2V9G-S5XS>]; *Short History of the Evolution of Coal Hill (Mount Washington)*, BROOKLINE CONNECTION (2014), <http://www.brooklineconnection.com/history/Facts/CoalHill.html> [<http://perma.cc/XSE7-T5NS>] (explaining how forested hills have become tree-lined subdivisions).

oped into suburban townships.⁴⁹ In all but one metropolitan area, urban areas are expanding spatially without growing their populations at all.⁵⁰

This shift of population away from historic towns towards undeveloped land imposes steep costs on taxpayers and government to fund new roads and infrastructure.⁵¹ Meanwhile, the abandoned territories lose population, rate-payers, and taxable property value. An extraordinary ninety-eight percent of cities and sixty-seven percent of boroughs in Pennsylvania experienced a decline in their relative fiscal health between 1970 and 2003.⁵² Nineteen of the state's twenty-two central cities are trapped in a downward trajectory of population and economic health.⁵³ Yet they must still rebuild and modernize their infrastructure for the hundreds of thousands of people who stay behind. Allegheny County, for instance, must bring its aging and overloaded sewer system up to code—changes that will cost the region between two and three billion dollars through the year 2026.⁵⁴ Yet water rates in the Pittsburgh area, like those in four other metro areas in the state, are already among the top ten most expensive systems in the nation.⁵⁵

The picture does not get any better across state lines, in the Sunbelt metro areas that have used the thinner land-use laws and less durable housing types

49. Metro. Policy Program, *supra* note 47, at 4.

50. See Rusk, *supra* note 48, at 6 (referencing the Scranton-Wilkes Barre metropolitan area); *This is Sprawl, Pittsburgh Edition*, URBANOPHILE BLOG (Jan. 24, 2012), <http://web.archive.org/web/20120123075746/http://www.urbanophile.com/2012/01/04/this-is-sprawl-pittsburgh-edition> [<http://perma.cc/3HQ6-P295>] (depicting the three to four-fold increase in the footprint of urbanized land around Pittsburgh and Southwestern Pennsylvania between 1950 and 2010, with no increase in population).

51. See Rusk, *supra* note 48, at 14 (noting that sprawl and abandonment of existing cities, boroughs, and townships is “fiscally wasteful”).

52. Metro. Policy Program, *supra* note 47, at 3.

53. Rusk, *supra* note 48, at 9.

54. Anderson, *supra* note 29, at 1151; Mark Patrick Flaherty, *Review of the Allegheny County Sanitary Authority (ALCOSAN) For the Period January 1, 200 Through July 31, 2008*, ALLEGHENY CNTY. CONTROLLER'S OFFICE 1 (Apr. 2, 2009), <http://www.alleghenycontroller.com/admin/attachments/uploads/8708082MERGEDALCOSANREPORT.pdf> [<http://perma.cc/JA4U-PECX>] (assessing the costs to regional public agencies of compliance with consent orders by the US Environmental Protection Agency); see also *The Costs of Sprawl in Pennsylvania*, CLARION ASSOCIATES, INC. (Jan. 2000), http://www.sustainablepittsburgh.org/pdf/Costs_of_Sprawl_in_Pennsylvania.pdf [<http://perma.cc/9A4F-22GS>] (explaining how urban sprawl has consistently led to increased costs for taxpayers); *Sewage Facilities and Land Development*, 10,000 FRIENDS OF PA. (2009), http://1000ofriends.org/sites/1000ofriends.org/files/ExecutiveSummary_text1.pdf [<http://perma.cc/62EL-VLP8>] (explaining the burdens of increased infrastructure and utilities).

55. *The State of Public Water in the United States*, FOOD & WATER WATCH 10 (Feb. 2016), http://www.foodandwaterwatch.org/sites/default/files/report_state_of_public_water.pdf [<http://perma.cc/8GGZ-4TF7>].

that Schleicher appears to prefer.⁵⁶ Florida's existing drinking water systems are facing a \$17 billion price tag over two decades just to maintain the status quo, even as the state's water and wastewater systems face adding strain from fast growth and hurricane flooding.⁵⁷ The failure to build adequate transit infrastructure to match the restless pace of peripheral growth in Atlanta's suburbs has left the region choked by its commute times,⁵⁸ while the acres of septic tank suburbs across its landscape not only suppress density, but also represent a current and costly water contamination problem.⁵⁹ In the farmworker trailer parks of the San Joaquin Valley in California, homemade wiring strung across trailers is a fire hazard that residents might worry about if it were not also so hard to access drinking water.⁶⁰ The only way to avoid funding major infrastructure investments in such areas is to keep public investment below habitability standards.

The bill accumulating behind American migration patterns is only getting worse. We have entered the Replacement Era, in which our older cities require urgent infrastructure investment to serve their present and future populations. In the early nineteenth century, our early cities designed and built the first American pipe and sewer systems – fresh water in, sewer flow out.⁶¹ From 1890 to 1940, our expanding map of urban places fought off water-borne diseases through the invention and installation of the first generation of drinking water treatment plants.⁶² In the 1970s and early 1980s, American taxpayers invested \$20 to \$30 billion in sewage treatment technologies to keep contamination out

56. Schleicher, *supra* note 5, at 106-07, 122-28.

57. Henry Fountain, *Irma Will Test Florida's Infrastructure, From Dikes to Sewage Plants*, N.Y. TIMES (Sept. 9, 2017), <http://www.nytimes.com/2017/09/09/us/irma-florida-infrastructure-okeechobee.html> [<http://perma.cc/G5LP-5FMH>].

58. See, e.g., Doug Monroe, *Where It All Went Wrong*, ATLANTA MAG. (Aug. 1, 2012), <http://www.atlantamagazine.com/great-reads/marta-tsplost-transportation> [<http://perma.cc/7BTQ-PGH8>].

59. See, e.g., Brett Walton, *America's Spreading Septic Threat*, CIRCLE OF BLUE WATERNEWS (Oct. 15, 2015), <http://www.circleofblue.org/2015/world/alabama-clean-water-polluti> [<http://perma.cc/WC29-UEQ9>].

60. See Michelle Wilde Anderson, *Cities Inside Out: Race, Poverty, and Exclusion at the Urban Fringe*, 55 UCLA L. REV. 1095, 1100-12 (2008); Dan Barry, *Beside a Smoldering Dump, a Refuge of Sorts*, N.Y. TIMES (Oct. 21, 2007), <http://mobile.nytimes.com/2007/10/21/us/21land.html> [<http://perma.cc/HM33-GV7G>]; Laura Bliss, *Before California's Drought, a Century of Disparity*, CITYLAB (Oct. 1, 2015), <http://www.citylab.com/environment/2015/10/before-californias-drought-a-century-of-disparity/407743> [<http://perma.cc/9HT7-AHF4>].

61. DAVID SEDLAK, WATER 4.0: THE PAST, PRESENT, AND FUTURE OF THE WORLD'S MOST VITAL RESOURCE 41 (2014).

62. *Id.* at 48-61.

of our waterways.⁶³ According to civil engineering professor David Sedlak, these waves of investment constitute, respectively, Water 1.0, 2.0, and 3.0.⁶⁴ These investments by prior generations of American taxpayers cannot sustain us forever. A Water 4.0 revolution—the technology for which is still emerging—is now upon us.⁶⁵ The hearty, huge water supply systems underneath early industrial cities gave 100 years of use, but they are now breaking down just as the more flexible, but less durable, systems built in postwar suburbs are also expiring.

Because the cities around the Great Lakes region urbanized prior to the 1920s,⁶⁶ they relied on early technology for sewage treatment that draws sewage and rainwater into the same water treatment systems, overloading those systems during heavy rain.⁶⁷ When an old combined system is over capacity, excess sewage dumps into the lakes and rivers of our water supplies.⁶⁸ Sewer overflows inundate waterways with pathogens and other pollutants, causing fish kills, ecological dead zones, and toxic algae blooms.⁶⁹ In the era of climate change, with increasingly extreme storm deluges and flooding, sewage overflows will become even more common.⁷⁰ In the summer of 2014, for instance, an algae bloom in Lake Erie was so severe that treated tap water in the Toledo Metro area drawn from the lake was deemed unsafe for use in drinking, cooking, and even bathing.⁷¹ Yet within weeks, the long-term problem worsened when historic levels of rain and flooding overloaded the sewage systems of the Detroit region to such an extent that billions of additional gallons of untreated

63. *Id.* at 87.

64. *Id.* at x.

65. *Id.* at x-xi.

66. *See id.* at 118.

67. *What Are Combined Sewer Overflows (CSOs)?*, U.S. ENVTL. PROTECTION AGENCY, <http://www3.epa.gov/region1/eco/uep/cso.html> [<http://perma.cc/M9YX-4V4Q>].

68. *Id.*

69. *See* Mary Anna Evans, *Flushing the Toilet Has Never Been Riskier*, ATLANTIC (Sept. 17, 2015), <http://www.theatlantic.com/technology/archive/2015/09/americas-sewage-crisis-public-health/405541> [<http://perma.cc/3LGZ-F7Y4>].

70. Glob. Change Research Program, *A Screening Assessment of the Potential Impacts of Climate Change on Combined Sewer Overflow (CSO) Mitigation in the Great Lakes and New England Regions (Final Report)*, U.S. ENVTL. PROTECTION AGENCY (Feb. 2008), http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=472009 [<http://perma.cc/4LAM-7WGY>].

71. Jane J. Lee, *Driven by Climate Change, Algae Blooms Behind Ohio Water Scare Are New Normal*, NAT'L GEOGRAPHIC (Aug. 6, 2014), <http://news.nationalgeographic.com/news/2014/08/140804-harmful-algal-bloom-lake-erie-climate-change-science> [<http://perma.cc/K6BW-TT59>].

sewage poured into Lake St. Clair, which in turn drained into Lake Erie.⁷² All told, in 2014, Lake Erie received more than sixteen billion gallons of untreated sewage from the ninety-three separate combined sewer systems that discharged directly or indirectly into the lake.⁷³ As in that case, the connectivity of water bodies carries contagions from one region to another, exposing cities across boundaries to one another's infrastructure underfunding.

Though the EPA called for the replacement of combined sewer systems years ago, the expense in rebuilding them is so substantial that 772 remain – all of which are located in our oldest urban areas.⁷⁴ New technologies mean that these systems may not need to be overhauled entirely. However, solutions like green infrastructure, which can reduce the stress on a combined sewer system, require careful, serious, and very long-term planning, including systemic changes to local land use and landscaping.⁷⁵

Paradoxically, failing infrastructure is also more expensive for ratepayers. In exchange for services posing greater health risks, residents of ailing cities pay higher bills for basic services like tap water. Indeed, a national study of 2015 water rates found that the highest water bills in the country were in Flint, where residents paid an astronomical \$910 per year – compared to the national low price of just \$84 in Phoenix, a desert.⁷⁶ As with so many things, basic infrastructure follows the rule that “it’s expensive to be poor.” This problem is also a self-fulfilling prophecy of decline: high water bills add one more push for mobile families to leave, even as they hamper the ability of the poorest people to muster the savings they would need to start a life elsewhere.

All of these problems extend past water and wastewater. Aging supply lines that ferry natural gas to homes in older cities have exploded in several devastating cases, including in New York City (eight deaths in a 2014 incident⁷⁷); Al-

72. Eric D. Lawrence, *Sewer Overflows During Storm Hit 10 Billion Gallons*, DET. FREE PRESS (Oct. 26, 2014, 12:00 AM), <http://www.freep.com/story/news/local/michigan/2014/10/26/august-storm-dumped-billions-gallons-sewage/17907335> [<http://perma.cc/3ZD3-YQJ6>].

73. U.S. ENVTL. PROT. AGENCY, EPA 833-R-16-006, REPORT TO CONGRESS: COMBINED SEWER OVERFLOWS INTO THE GREAT LAKES BASIN, at ES-4 tbl.ES-2 (Apr. 2016), http://www.epa.gov/sites/production/files/2016-05/documents/gls_cso_report_to_congress_-_4-12-2016.pdf [<http://perma.cc/3ZJG-UXXD>].

74. *What Are Combined Sewer Overflows (CSOs)?*, U.S. ENVTL. PROTECTION AGENCY, <http://www3.epa.gov/region1/eco/uep/cso.html> [<http://perma.cc/M9YX-4V4Q>].

75. See SEDLAK, *supra* note 61, at 112-38.

76. *The State of Public Water in the United States*, *supra* note 55, at 10.

77. Noah Rayman, *Death Toll Rises to 8 in New York City Blast*, TIME (Mar. 13, 2014, 5:05 AM ET), <http://time.com/23148/death-toll-rises-to-7-in-new-york-city-blast> [<http://perma.cc/J3HL-XR7K>].

lentown, Pennsylvania (five deaths in a 2011 incident⁷⁸); and San Bruno, California (eight deaths in a 2010 incident⁷⁹). Even when they are too small to cause immediate fatalities, pipeline leaks release methane, a greenhouse gas with twenty times the impact of carbon dioxide. A natural gas storage well in California that dates back to 1953 sprung a leak in 2015 to become the largest single methane release ever recorded.⁸⁰ The leak took 112 days to close, forced the evacuation of thousands of nearby homes, and released about 97,000 tons of methane—a quantity of emissions so high that it swamped California’s annual greenhouse gas emission targets.⁸¹ Many other older systems with pipes fifty years old or more suffer from a high frequency of natural gas leaks, such as the pipes in Syracuse, New York, which average about one leak for every two miles—compared with Indianapolis’s newer system, which averages a leak per 200 miles.⁸²

When state and federal governments treat infrastructure as a local expense, they effectively leave weak cities with no alternative but to decay and delay. The usual model for funding infrastructure locally is premised on growth—a solid and growing base of ratepayers to pay fees for service, along with good credit to issue low-risk municipal bonds. Weak cities and counties are often too small, have poor credit, or are maxed out on the debt or user fees they can legally take under state law. When they go searching for exotic financing that lets them work around these barriers, they face much higher risk of losses. Thus, it was that Jefferson County in Alabama, home to Birmingham and one of the oldest industrial regions of the South, ended up in bankruptcy. Jefferson County, which was under an EPA consent order to limit the raw sewage discharged into the Cahaba and Black Warrior Rivers, turned to JPMorgan Chase and other

78. Katharine Q. Seelye, *Blast Kills 5 in Pennsylvania*, N.Y. TIMES (Feb. 10, 2011), <http://mobile.nytimes.com/2011/02/11/us/11allentown.html> [<http://perma.cc/R6KD-LUW7>].

79. Rebecca Bowe & Lisa Pickoff-White, *Five Years After Deadly San Bruno Explosion: Are We Safer?*, KQED NEWS (Sept. 8, 2015), <http://ww2.kqed.org/news/2015/09/08/five-years-after-deadly-san-bruno-explosion-are-we-safer> [<http://perma.cc/BJ9E-S6S6>].

80. *California: Methane Leak Was a Record for the U.S.*, N.Y. TIMES (Feb. 25, 2016), <http://www.nytimes.com/2016/02/26/us/california-methane-leak-was-a-record-for-the-us.html> [<http://perma.cc/MYC4-F99T>]; *Porter Ranch Gas Leak Happened in Old Well Regulated by Old Rules*, CBS NEWS (Jan. 28, 2016), <http://www.cbsnews.com/news/porter-ranch-gas-leak-happened-in-old-well-regulated-by-old-rules> [<http://perma.cc/UK6Q-XMR7>]; Jordan Wirfs-Brock, *Massive Gas Leak Points to Vast, Aging Natural Gas Infrastructure*, INSIDE ENERGY (Dec. 23, 2015), <http://insideenergy.org/2015/12/23/massive-gas-leak-points-to-vast-aging-natural-gas-infrastructure> [<http://perma.cc/L7ND-EU69>].

81. S. Conley et al., *Methane Emissions from the 2015 Aliso Canyon Blowout in Los Angeles, CA*, 351 SCIENCE 1317 (2016).

82. *City Snapshots*, ENVTL. DEF. FUND, <http://www.edf.org/climate/methanemaps/city-snapshots> [<http://perma.cc/MF7U-2LQJ>].

banks for help funding the project.⁸³ The county signed a bond deal with an elaborate system of interest-rate swaps that tanked during the 2008 financial crisis and left the county suddenly facing \$647 million in termination fees for defaulting on its debt.⁸⁴ That deal, and the broader context of bribery and graft around the project, ended with several people in jail (including county officials) and JPMorgan paying millions in penalty fees to the Securities and Exchange Commission and the county.⁸⁵

Jefferson County presents a solemn warning for metro regions like Pittsburgh and the Rustbelt cities of the Northeast with huge unpaid infrastructure bills: do not wait until pollution is so severe, and the scale of needed infrastructure investment so extensive, that reconstruction will land the region's governments in bankruptcy. Reflecting its industrial productivity, Birmingham was once known as "the Pittsburgh of the South"; looking ahead, Allegheny County may one day be dubbed "the JeffCo of the North."

Jefferson County's experience also provides some insight into the increasingly antagonistic relationship between the federal government and local governments over decaying infrastructure. The EPA continues to enforce the Clean Water Act and the Safe Drinking Water Act, but meanwhile, federal funding for water infrastructure has fallen. The 2011 Budget Control Act, for instance, established caps for federal "discretionary funding" for nondefense programs (a classification that includes nearly all water infrastructure), which has lowered spending on infrastructure and which will remain in place through 2021.⁸⁶ The U.S. Conference of Mayors warned the EPA to avoid assuming "the role of 'prosecutor'" rather than remaining "the 'partner' to local government that it once was," which the Conference alleged has left local government officials to look like "the ones who are 'poisoning' our waterways."⁸⁷ Such sentiments, in

83. Dwight V. Denison and J. Bryan Gibson, *A Tale of Market Risk, False Hope, and Corruption: The Impact of Adjustable Rate Debt on the Jefferson County, Alabama Sewer Authority*, 25 J. PUB. BUDGETING, ACCT. & FIN. MGMT. 311, 324-25 (Summer 2013).

84. Mary Williams Walsh, *J.P. Morgan Settles Alabama Bribery Case*, N.Y. TIMES (Nov. 4, 2009), http://www.nytimes.com/2009/11/05/business/05derivatives.html?_r=0 [http://perma.cc/KYP3-XANG].

85. *Id.*

86. CONG. BUDGET OFFICE, CBO- 49910, PUBLIC SPENDING ON TRANSPORTATION AND WATER INFRASTRUCTURE, 1956 TO 2014, at 2 (Mar. 2015), <http://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/49910-infrastructure.pdf> [http://perma.cc/H52V-Q3TV].

87. Richard F. Anderson, *Trends in Local Government Expenditures on Public Water and Wastewater Services: Past, Present and Future*, U.S. CONFERENCE OF MAYORS – MAYORS WATER COUNCIL iii (Feb. 2010), <http://voiceofdetroit.net/wp-content/uploads/2012/09/US-Mayors-Water-Council-report.pdf> [http://perma.cc/Q2TW-ETTT].

turn, erode support for the EPA itself, which is seen as delivering the federal government's unfunded mandates.⁸⁸ The bottom line is this: by withdrawing funds for infrastructure, Congress leaves the EPA to enforce laws that are too important to ignore, but that some cities are too poor to obey. A mobility agenda promises no solution to these difficult problems.

Without federal support (or substantial technological changes) that bring down the costs of system improvements, it is hard to imagine a path forward that will spare the rivers and the residents both. With no magic wand to effect a sweeping and complete reorganization of our population—which even the staunchest mobility proponents would not want anyway—focusing political will and public funds on the fight for a few additional interstate relocations simply kicks the same old can down the same old road we have been walking since the earliest job losses from deindustrialization.

III. THE FUTURE OF EXIT: DON'T BURN THAT STEEL BRIDGE TO THE RUSTBELT JUST YET

Here now, in the Replacement Era, America's water and wastewater treatment systems need an urgent round of reinvestment. To fail at this core generational duty will only drive up the costs of the necessary migration predicted for the Climate Change Era. A waterway treated as a sewer today may be needed as a water supply tomorrow. Climate change promises to shift the national map of environmental comfort and safety. Even those proponents of mobility who believe that giving up on declining areas is economically rational should think twice about the costs of walking away from the Northeast and Midwest's surface waters and interior locations.

Here too, Flint provides a cautionary tale. The Flint River is part of a watershed that drains into Lake Huron, the third-largest freshwater lake on the planet. Twentieth-century manufacturing turned the Flint River into an industrial sewer.⁸⁹ When the city later needed that river for the higher purpose of a water supply, the river was contaminated with infectious fecal coliform bacteria; carcinogenic trihalomethanes; and high levels of chlorides (intensified by road salts).⁹⁰ One generation had used the Flint River for waste disposal; another needed it for drinking water.

88. See, e.g., *The Growing Burden of Unfunded EPA Mandates on the States*, U.S. CHAMBER COM. (Aug. 2016), http://www.uschamber.com/sites/default/files/documents/files/o22879_etra_epa_coercive_federalism_report_fin.pdf [<http://perma.cc/BQ25-RUSD>].

89. Tim Carmody, *How the Flint River Got So Toxic*, VERGE (Feb. 26, 2016, 10:39 AM) <http://www.theverge.com/2016/2/26/11117022/flint-michigan-water-crisis-lead-pollution-history> [<http://perma.cc/N33A-MEGP>].

90. *Id.*

That, in fact, captures the long history of the Great Lakes themselves—one of the most precious natural resources in the United States. At one point, their scale made them critical building blocks of American industrial growth. Today and in the future, they are vital to the U.S. drinking water supply. Climate change will trigger intergenerational changes in the water sources we need most—not only disrupting systems at the local level, but also forcing new, dramatic population shifts among regions. Post-industrial states like Michigan and Pennsylvania look like they will be premier places to live fifty years from now. They might have fiercely cold winters, but that is comparatively minor compared to running out of water completely (in Las Vegas, for example), facing routine floodwater burials (as in New Orleans and Baton Rouge), or being sunk under seawater entirely (the fate of Miami Beach). Even now, still before the two-degree threshold of the most acute, escalating danger from the effects of climate change, the effects of extreme weather are testing the mettle of local infrastructure to withstand wider (and different) temperature ranges and extreme levels of wind, snow, rain, and flooding.⁹¹

We need to rebuild both our commitment to antipollution laws and our aging water and wastewater treatment infrastructure—not just for cities’ present populations, but also for their future ones. With these changes looming ahead, phrases like “strong city” and “weak city” begin to look temporary. If cities in the Northeast and Midwest manage to keep their lakes and rivers relatively free of sewage and industrial pollution, they will have a local water supply that is much cheaper to treat and use than Coastal deserts like my neck of the woods in California, where we will be paying a pretty penny for desalinated ocean water. The future people of a city like Fort Lauderdale thus have their fate linked with those of the aging Rustbelt cities today, because while Fort Lauderdale is tax-healthy now, it will be begging for one of two things in the not-so-distant future: either mass relocation, or a huge financial investment in infrastructure powerful enough to hold back the sea.

CONCLUSION

There is surely a reason that the Journey song that opened this piece is one of the most famous rock ballads in American history. “Don’t Stop Believin’” is an anthem for the American promise that here or there, you could make a better life than the one you were born into. But since at least the early 1980s, we

91. See *Climate Change: Future Federal Adaptation Efforts Could Better Support Local Infrastructure Decision Makers*, U.S. GOV’T ACCOUNTABILITY OFF. 14-17 (Apr. 2013), <http://www.gao.gov/assets/660/653741.pdf> [<http://perma.cc/RP9C-LJB8>].

have required increasing levels of hardship—and a dose of good luck—to make that true. More people and more places are bound to be stuck in a spiral of poverty. Whether we want residents to be free to move out of town or move up the ladder of skills and income, we will need to do more than reduce the formal legal barriers to interstate mobility. The work ahead necessitates a much broader answer for the millions of “strangers waiting, up and down the boulevard, their shadows searching in the night.”⁹² It will require a new antipoverty agenda for our areas in decline, as well as investments in their urgent unmet needs for basic infrastructure. Taken together, these two efforts provide an opportunity to bridge the post-industrial transition into the twenty-first-century economy with a new wave of working-class jobs. Infrastructure investment in declining regions would respond to urgent public health and environmental needs, while also protecting the regions and water resources that future generations will need when climate change reverses our mass migration out of the Great Lakes watersheds. Social and geographic mobility both demand reinvestment.

Michelle Wilde Anderson is a Professor of Law and the Robert E. Paradise Faculty Fellow for Excellence in Teaching and Research at Stanford Law School. Malia McPherson provided outstanding research assistance for this Response.

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92. JOURNEY, *supra* note 1.