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# THE NEXT URBAN RENAISSANCE

How Public-Policy Innovation  
and Evaluation Can Improve Life  
in America's Cities



MANHATTAN INSTITUTE  
FOR POLICY RESEARCH



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# ABOUT THE MANHATTAN INSTITUTE

**T**he Manhattan Institute for Policy Research develops and disseminates new ideas that foster greater economic choice and individual responsibility. Since 1977, the institute has helped change the United States and its cities for the better: welfare reform, tort reform, proactive policing, and supply-side tax policies are at the heart of MI's legacy. Today, the institute continues to develop new ways to advance its message in the battle of ideas.

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Renn holds a B.S. from Indiana University, where he coauthored an early social-networking platform in 1991. He has created several widely used open-source software packages, including the only program for recovering data from corrupted gzip backups. In 1998, Renn launched one of the nation's first blogs, the Weekly Breakdown, to cover the Chicago Transit Authority.



# FOREWORD

Edward L. Glaeser

What public-policy innovations can make cities better places to live? A large number of American cities—from New York to San Francisco—have experienced remarkable rebirths over the past 30 years. But their success has made housing less affordable and traffic congestion worse. Even America’s most successful cities contain large numbers of poorer citizens left behind by the urban renaissance. Can creative public policy reduce the downsides of density and improve economic opportunity in urban America?

This collection of essays brings together the best ideas from scholars with expertise across a broad spectrum of urban issues. The common theme of the papers is to innovate, evaluate, and leverage the remarkable private talent that is so abundant in America’s great cities. Public capacity is sharply limited; the ingenuity of urban entrepreneurs seems practically boundless. Local governments should be more entrepreneurial and do more to use the talents of the entrepreneurs around them.

The first two essays address two core problems that exist in almost all thriving cities: high housing costs and traffic congestion. New York was an affordable city in 1977 when it teetered on the verge of bankruptcy. As incomes have risen and crime has dropped, demand for urban space has soared. Because the supply of new homes has not kept pace, prices have risen dramatically. Housing costs are so high that even extremely successful urbanites find them to be a burden, and the poor suffer even more. The whole city is hurt when high housing costs drive away talent and increase the wages that businesses need to pay to retain their workers.

In **Chapter 1**, Ingrid Ellen delivers three clear recommendations for reducing the cost of living in America’s expensive cities. First, she follows the legendary Henry George and calls for a switch from property taxation to land taxation. A tax that scales up with the size of a building reduces the incentive to build big, which reduces the supply of new housing and raises prices. A tax that is tied to the value of the land beneath the building will push developers to get as much value out of that land as they can by building larger structures.

Ellen's second proposal is to eliminate minimum-parking requirements for new structures, something that Manhattan has already done. There is little reason to require builders to subsidize driving in urban America. It makes far more sense for them to build parking if their residents are willing to pay for that parking.

Finally, to help the very poor, Ellen advocates spending less on homeless shelters and more on time-limited rental assistance, targeted toward those at risk of becoming homeless. At the very least, experimenting with such programs would provide us with more evidence about whether short-term assistance can reduce the risk of permanent homelessness.

In **Chapter 2**, Matthew Kahn takes on the topic of urban mobility. Like many economists, Kahn believes that America's cities should follow London and Singapore and do more with congestion pricing: charge drivers who drive on crowded city streets during peak hours. But his essay focuses on the public-transit side of urban mobility, especially making buses better. Kahn, like many transport economists, thinks that buses are the right solution for public transportation for cities that have medium-density levels and a desire for flexibility and innovation.

One reason that America's buses are so unloved is that federal law requires cities, if they want transportation-department dollars, to buy American-built buses. Just imagine if American car drivers faced the same constraint. Not only would every BMW aficionado or Camry lover be out of luck, but the American car industry would be much more of an old-fashioned cartel, with far worse products. Yet we don't let our public bus companies get the best bus for the dollar. That means that buses are less cool, less energy-efficient, and less comfortable.

Kahn argues that buses are far cheaper than rail lines and far more conducive toward innovation. Rail lines are set; buses can move as demand requires. Bus flexibility can be even stronger if there is a mix of private and public bus provision. The growth of private low-cost bus transport across metropolitan areas has been one of the great transportation success stories of the past two decades. There is no reason that more private-sector bus provision can't also aid urban mobility. The general point is to ensure that urbanites have plenty of transit choices that reflect the heterogeneity of cities and their changing needs.

The next two essays focus on the problem of enduring urban poverty. Education is widely seen as one of the few proven means of lifting poor children

out of poverty. Indeed, the remarkable success of a few early preschool programs has generated a national push for early-childhood education that goes beyond Head Start. But Eric Hanushek, in **Chapter 3**, urges an approach that is more oriented toward experimentation and evaluation.

Some early-childhood programs, such as Perry Preschool and Abecedarian, worked magic; but not every preschool program has been so effective. There is a healthy debate about the efficacy of Head Start. Just throwing money at an expanded preschool system may not achieve much, especially if the money has to come out of already strapped upper grades. Hanushek proposes that we must recognize that we don't know what ingredients produce a cost-effective quality preschool. This ignorance argues for experimentation, evaluation, and pay-for-performance.

Just as with buses, there are strong reasons to encourage both public and private provision. But in the case of small children, we can't count on the market disciplining poorly

performing programs; therefore, school compensation, particularly for private schools, should be tied to appropriately measured school outcomes. It is key to have consistent evaluation to determine what makes preschools more effective.

In **Chapter 4**, I focus on the creation of districts within cities to encourage entrepreneurship in lower-income areas. These districts are not meant to bribe people to locate in poor areas. Instead, they should be low-cost; if they work, they should be expanded. The reason to begin with a district rather than an entire city is, again, humility: we don't know what works, and we have to start with policies that let us learn.

An entrepreneurship district should have two core elements: first, regulatory relief and one-stop permitting. Too many of our cities have erected too many barriers to starting new businesses, and the process of getting started can be a painful maze. It would be far better to have a single permitting czar in the district, in charge of assembling all permits for every business. The permitting chief can then be judged on the speed with which applications are handled.



Public capacity is sharply limited; the ingenuity of urban entrepreneurs seems practically boundless. Local governments should be more entrepreneurial and do more to use the talents of the entrepreneurs around them.”

Second, the district should have a training component, for young adults and older teenagers, delivering skills that are tied to entrepreneurship. One type of training might focus on teaching the basics of entrepreneurship. A second type could focus on vocational skills that entrepreneurs demand. In all cases, the programs should include components of randomization and evaluation because we don't currently know what works. Only by a constant process of innovation and evaluation can we learn how to connect more young urbanites with the labor market.

In **Chapter 5**, Aaron Renn argues that cities should worry far less about brain drain. Instead, they should recognize that cities benefit from the connections that migration creates. A far better set of policies would encourage the emigrants to remain connected with their old home and to consider a return home later. Cities are not islands, and people who move bring ideas with them. A city can benefit greatly from a migrant who leaves and comes back.

These essays fit together. They all argue for urban-policy innovation that recognizes that good government means respecting the power of private initiative. Ellen wants to encourage private development. Kahn and Hanushek argue for private provision of buses and preschool programs, respectively. My essay is all about private entrepreneurship as a tool for economic mobility. Renn focuses on using nonpublic talent wisely. They all make the case for public experimentation. We don't know the answers to the hardest problems, and we shouldn't pretend that we do. Instead, the public sector needs to behave more like a nimble start-up than a stately bureaucracy. The goal is to try new ideas, evaluate them, and then take the best and reject the worst.

Cities have a tremendous capacity for innovation. Their modest size makes them the true laboratories of democracy. But to live up to those words, they need to embrace experimentation and evaluation.

# HOUSING AMERICA'S CITIES: PROMISING POLICY IDEAS FOR AFFORDABLE HOUSING

**Ingrid Gould Ellen, *New York University***

## Introduction

New York City mayor Bill de Blasio recently announced an ambitious plan to build or preserve 200,000 units of affordable housing in the next ten years. More than 100 pages in length, the plan lays out a long list of strategies to increase the supply of affordable housing. Not all the ideas involve spending more money; but overall, the plan calls for considerable resources, proposing to spend over \$8 billion in city funds and nearly \$3 billion in state and federal funds.

Cities around the country would be hard-pressed to match this financial commitment, and a significant increase in federal spending on housing is highly unlikely. But even without spending billions, cities can still do much to enhance the affordability of housing.

This essay suggests three such reforms. First, cities could incentivize construction and development—and thereby increase the supply of housing—by more heavily taxing land than property. Such a “split-rate” tax would encourage development of underutilized land by reducing the added tax burden that standard property taxes impose on improving buildings. Second, cities could reduce (or even eliminate) minimum parking requirements that significantly increase the cost of housing. Finally, cities could shift some of the public funds currently spent on homeless shelters to time-limited rental subsidies for those at risk of homelessness. None of these ideas is new, but each deserves

serious reconsideration as housing affordability problems mount around the country, especially in high-demand, coastal cities.

## I. Adopt Land-Value Taxation

Henry George first proposed the idea of a land tax in his 1879 classic, *Progress and Poverty*.<sup>1</sup> Economists ever since have celebrated the land tax as the most efficient, least distortionary way that governments can raise money. Unlike taxing income, which can discourage work, or taxing buildings, which can discourage property investment and maintenance, taxing land will not inhibit supply because the quantity of land is literally fixed.

Further, a land tax would discourage speculators from hoarding undeveloped land and incentivize them to develop their parcels to the full extent allowable. Regardless of whether a parcel sits vacant, houses a partially occupied, one-story retail strip, or holds a 30-story apartment tower, the annual tax bill would be the same. By switching to a land tax, a city could therefore increase the supply of housing and, by doing so, reduce prices across the board.

Land taxes offer other benefits. They should appeal to environmentalists by encouraging denser development in cities, thus reducing suburban sprawl.<sup>2</sup> George also emphasized the normative appeal of a land tax. He stressed that increases in the value of a parcel of land are essentially windfall gains from urban growth, as any appreciation is driven by private and public investment in the surrounding area, not by any actions of the owner of the particular parcel. Thus, he argued that owners should be taxed on the value of their land. In the words of George, if you own land, “you need do nothing more. You may sit down and smoke your pipe; you may lie around like the lazzaroni of Naples or the leperos of Mexico; you may go up in a balloon, or down a hole in the ground; and without doing one stroke of work, without adding one iota to the wealth of the community, in ten years, you will be rich!”<sup>3</sup>

Despite the clear appeal of a land tax, surprisingly few localities have adopted it, perhaps in part because of the political challenges posed by transitioning to such a tax. That said, the idea is not completely untested. About 700 cities around the world (in 30 countries) currently use what is called a split-rate tax system, in which the tax rate levied on the value of land is higher than the rate on the value of improvements.<sup>4</sup>



A split-rate tax would likely be more viable politically because it would involve a less dramatic shift for most jurisdictions; yet it would still offer many of the same advantages as a land tax. By taxing improvements at lower rates than land, owners would face a reduced disincentive to invest in improvements that increase the value of the structures on their property. In the U.S., only 16 municipalities in Pennsylvania and two counties in Hawaii have adopted a split-rate property tax.<sup>5</sup> The Connecticut and Virginia state legislatures recently granted cities the authority to implement a split-rate tax, but no cities in either state have yet adopted one.<sup>6</sup>

Admittedly, there is little empirical work on the effects of a split-rate tax, partly because of its relatively limited reach to date. But what little evidence we have suggests promise. Wallace Oates and Robert Schwab studied a tax reform in Pittsburgh, which increased taxes on land to more than five times the rate on structures. The authors found that the higher taxes on land—and correspondingly lower taxes on improvements—stimulated building activity in the city.<sup>7</sup>

Perhaps the most commonly voiced criticism of a split-rate tax is concern about feasibility and, in particular, reliable assessments. Property-tax assessors are widely criticized for failing to provide timely and accurate assessments of property values in our current property-tax systems, and a system that requires valuing land separately from buildings or improvements would be even more challenging. While 29 states require land and improvements to be assessed independently for property-tax purposes, assessors in these states feel little pressure to accurately price the underlying land, as any disputes that arise center on total assessments, not the division of value between structure and land.

One recent survey<sup>8</sup> suggested that most assessors in these states simply estimate land values from the sales of vacant land, an approach that may yield highly inaccurate estimates in jurisdictions where such sales are rare. But in this age of Big Data, it is hard to imagine that we cannot develop more reliable ways to value land. Property-tax assessors have already created new computer models to arrive at more accurate and timely assessments of the value of individual components of properties, including land; further improvements are surely possible.

Simpler approaches can work, too. Several recent studies show that teardowns, or situations when properties are sold and then fairly quickly

demolished, can be used to value land, at least in large cities.<sup>9</sup> Further, most housing in the U.S. is now produced through planned unit developments, with a minimal variety of homes. Thus, variation in prices of such comparable homes sold across areas should be explained largely by variation in the price of land.

The larger challenge is the politics. Any proposal for tax-system reform will inevitably create winners as well as losers, and the losers will have an incentive to resist change. In the case of a split-rate tax, the losers will be owners of parcels with high land-to-building value ratios, or owners of small buildings on valuable, centrally located parcels, who will likely see an increase in their tax bills after the switch to a split-rate tax.

Jurisdictions can mitigate the increased burden on selected property owners—and the political opposition they invite—by phasing in the split-rate tax rate slowly. They should also be sure to adopt timely and state-of-the-art assessment practices so that both structure and land values are assessed as fairly and accurately as possible. Finally, cities might introduce a tax credit to help reduce the burden on lower-income landowners, or owners of affordable housing, who may otherwise have difficulty paying the increased tax bill.

To be sure, on its own, a split-rate tax may not be sufficient to dramatically transform the level of housing production in a city. But switching to a smarter tax-policy regime is an important piece of the solution.

## II. Eliminate Minimum-Parking Requirements

Nearly every U.S. city mandates that developers include a minimum number of parking spaces in their developments. New York City's government, for example, started requiring that new residential development include off-street parking in 1950. The 1961 Zoning Resolution later increased those requirements.

Today, developers in New York are required to provide an average of 43 new off-street parking spaces for every 100 new housing units they construct. The minimum requirements differ dramatically across boroughs, ranging from an average of 122 spaces per 100 units on Staten Island to just five spaces in Manhattan (most of which is exempt).

Around the country, requirements are typically even more onerous; the median municipality in the U.S. requires that developers set aside 1.5 parking spaces for each two-bedroom unit. Given that a parking space requires 300 to 400 square feet of building area, these regulations typically add about 50 percent to the floor area needed to build a 900-square-foot apartment.<sup>10</sup> Of course, many—indeed, most—developers might choose to provide parking, anyway; but recent research suggests that in many jurisdictions, the requirements are forcing developers to build more parking spaces than they would otherwise build.<sup>11</sup>

Consider that in New York City, the average five-to-nine-unit development that qualified for a waiver from parking requirements built just 0.5 parking spaces; developments that failed to qualify for a waiver included 5.3 spaces, al-

most exactly the average requirement for a project of this size. For developments that include ten to 14 units, those that qualified for a waiver built fewer



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than one parking space, while those that did not included more than seven spots—again, roughly the average number required by the city.<sup>12</sup> (An additional concern is that requirements that vary by building size may create perverse incentives for developers to subdivide lots and build multiple smaller buildings in order to evade parking requirements.)

Proponents of minimum parking requirements argue that, without them, developers would under-provide parking, as they would fail to take into account the burden that new residents without parking spaces would impose on existing residents—car owners, in particular—in the neighborhood.

While some car owners would surely be willing to pay a premium for the privilege of off-street parking, others might choose to park in nearby garages or on neighborhood streets, imposing an external congestion cost on neighbors. The additional time that drivers would then have to spend traversing the neighborhood to look for parking would increase congestion and local air pollution. Further, city officials may worry that more competition for parking will make it harder for them to retain middle-class households, most of which own cars.<sup>13</sup>

While these externality arguments have some merit, the provision of parking itself generates negative externalities. For one thing, off-street parking may encourage both car ownership and driving, which increases congestion and emissions. For another, off-street parking typically comes with unsightly street-front entrances that undermine a streetscape and eliminate at least one curbside parking space.

Thus, the benefits of internalizing this externality of increased competition for parking must be weighed against the externalities generated by the provision of parking, as well as the enormous cost that such parking requirements impose on housing. By requiring that developers set aside roughly 450 more square feet of additional space for every residential unit, these regulations add significantly to construction costs and increase the price that residents must pay for housing. Donald Shoup estimates the cost of a Los Angeles parking space at over \$31,000.<sup>14</sup>

Significantly, these costs are passed on to all city residents, not just car owners. Even apartment dwellers without cars are effectively forced to pay for the cost of a parking space because the cost of parking provision makes development more expensive. There is no way for residents to reduce what they pay for parking by driving less or owning fewer cars. Their only option is to move to another jurisdiction that does not have binding requirements.

If a jurisdiction wishes to address parking-congestion externalities that may exist, there are more efficient ways to address them, such as charging for on-street parking to balance supply and demand. To make such parking fees more politically palatable, Shoup has proposed the establishment of Parking Benefit Districts that would dedicate revenues raised from curbside parking charges to pay for local neighborhood improvements.<sup>15</sup> Given improvements in technology, the transaction costs of charging for parking (and adjusting fees by time of day) are now relatively low.

While some city leaders might still blanch at the political risks of removing minimum parking requirements, some leading cities have done so without any major revolts or reductions in growth rates. In the early 2000s, London ended its minimum parking requirements and actually replaced them with maximum parking standards. Similarly, through a series of ordinances passed in the late 1990s and 2000s, San Francisco eliminated minimum parking requirements in much of the city.

While cities may shy away from complete elimination of requirements and replacement with maximum parking standards, they might at least consider eliminating requirements for buildings constructed within a certain distance of transit. Alternatively, or in addition, cities might eliminate requirements for affordable housing developments, especially in areas near public transit, as fewer low-income renters own cars and those who do drive less than other car owners.<sup>16</sup>

High construction costs frustrate efforts to create more affordable housing around the country. While there is a limit to what cities can do to reduce those costs, they should do whatever they can to wrestle with the aspects of the costs they can control. Parking requirements are one such lever and, as such, should be carefully considered for reform.

### III. Experiment with Short-Term Rent Subsidies

Federal assistance programs currently help approximately 5 million low-income households pay for housing. The largest assistance program is the Housing Choice Voucher program, which has been shown to be effective in reducing household crowding, lowering the risk of doubling up, and preventing homelessness. However, only about one in four renter households eligible for federal housing assistance actually receives it. Thus, in most cities across the country, demand for housing assistance far outstrips supply.

The lucky few essentially receive a lifetime subsidy if their incomes remain below eligibility thresholds; the unlucky many receive nothing and continue to struggle to make ends meet. Estimates from the U.S. Department of Housing and Urban Development show that two-thirds of income-eligible but unassisted renters paid more than half of their income on rent, leaving little for other critical needs.<sup>17</sup>

Policy reform at the federal level would be needed to fundamentally address this inequity, and the Bipartisan Housing Commission recently offered several proposals.<sup>18</sup> But reform is not coming anytime soon. In the meantime, cities have some ability, in partnership with their states, to experiment with time-limited subsidies that would allow them to serve more households. Indeed, a number of cities have recently moved in this direction in their approach to assisting homeless families and individuals.

Rather than placing families in need in shelters, they have provided them with what is called “rapid rehousing” help, or temporary assistance to move into permanent housing as quickly as possible, typically in the private market. Government officials provide housing search counseling, help with landlord negotiation, short-term rental assistance, and other services as needed to help participants stay in their homes. Because assistance is time-limited, cities have been able to serve many more households than they would by relying on traditional housing subsidies. These time-limited subsidies have also been shown to be cheaper than assigning people to temporary shelters.<sup>19</sup>

Preliminary evidence suggests that these rapid rehousing programs have been effective in reducing spells of homelessness and in helping people find and keep housing. Most people participating are



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able to find housing, and few appear to return to shelters. Rapid rehousing programs may also promote long-term self-sufficiency, as shelters are not only costly for taxpayers but also stressful and dis-

ruptive for families and children.<sup>20</sup> It is highly difficult for adults to find and maintain a job while living in a shelter.

There has not yet been a rigorous evaluation of the long-term impacts of rapid rehousing programs, and many questions still remain: Will landlords be willing to accept them? How will families manage the transition when the subsidy ends? Will such time-limited subsidies make any meaningful difference in an individual’s long-term well-being? Still, the promise of initial evidence supports further exploration of this approach.

Further, this evidence is sufficiently promising to call for pilot programs to provide short-term housing assistance to low-income households more generally. For example, cities might introduce or expand efforts to provide temporary assistance to help renters weather short-term setbacks, such as a job loss or an unexpected health care expense.

Existing housing programs are useless in providing such short-term assistance, designed, as they are, to address permanently low incomes

rather than volatility. In many cities, wait lists for housing assistance are so long that applicants have to wait five to ten years to receive subsidies, rendering them completely unable to address temporary setbacks. Thus, cities might experiment and test different models of providing emergency assistance, such as developing rental insurance programs that provide one-time assistance for rent shortfalls. We need more evidence to understand what models are most cost-effective in stabilizing families at risk of losing their homes, and cities can help.

Some charge that, in high-cost cities like New York, time-limited subsidies aimed at either preventing eviction or rapid rehousing would be too modest to meaningfully help households and would merely forestall the inevitable. Yet this is far from a foregone conclusion. Even in high-cost cities, short-term subsidies might help many more households to get back on their feet after losing their homes or to avoid homelessness altogether. With three out of four low-income households not receiving any housing subsidy at all, the dramatic need for broader housing assistance warrants more exploration of ways to stretch scarce subsidy dollars further.

## Conclusion

To be sure, these proposed reforms would not be sufficient to solve the housing affordability problems that so many cities around the country face. But both theory and existing research suggest that they would be promising additions to a city's policy toolbox.

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# THE BUS-CHOICE MENU: PROMISING POLICY IDEAS TO IMPROVE URBAN MOBILITY

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## Introduction

In 2011, public-transit riders in the United States traveled 56 billion passenger miles, with 38 percent of those miles covered by public buses. Bus services require drivers, mechanics, buses, and fuel. Given the high cost of owning and operating a private vehicle, buses are a key transit option for millions of urbanites. Private vehicle use offers private benefits but imposes social costs, from traffic congestion, to road safety, to local and global pollution. This creates an imperative to identify policies that would increase bus ridership. This essay proposes four policies to improve the quality and lower the cost of supplying urban-transit service.

The first calls for eliminating current “Buy America” requirements. Federal subsidies for purchasing domestic buses have strings attached that limit the menu of procurement choices available to transit agencies. Second, cities should privatize more bus routes. By introducing competition into this public monopoly, labor costs would fall. The resulting savings would allow transit agencies to expand service provision. Third, many low-density cities should substitute away from constructing costly light rail and instead develop a flexible, fast bus system. Fourth, cities should recognize the diverse preferences of riders by offering a greater menu of quality, price, and routes.

Together, these reforms would increase public-transit systems’ ridership and efficiency, improving the urban poor’s job prospects, as well as all riders’ quality of life. If more middle-class urbanites used public

transit, political support for more efficient public-transit policies, such as road pricing, would rise, too.

## I. Repeal the Buy America Act

Urban-transit agencies rely heavily on Federal Transit Administration funding to purchase capital equipment, such as new buses. These subsidies provide up to 80 percent of the purchase price of new buses. Such purchases are subject to Buy America rules, which require that vehicles undergo final assembly in the U.S. and have at least 60 percent of their components, by cost, manufactured in the United States. The Buy



Urbanites spend many hours commuting. If such individuals can comfortably move at higher speeds without exacerbating externalities of congestion and pollution, city life will improve dramatically.”

America requirement thus constitutes an important entry barrier for foreign bus makers seeking to compete in the U.S. market.<sup>1</sup>

If urban-transit agencies could access federal government subsidies without strings attached, they would have a far larger menu of global buses from

which to choose. At present, U.S. bus makers are small in scale: the top two, New Flyer and Gillig, sell 1,000–1,500 buses each year in the U.S., where annual sales total 4,000–5,000. Major international bus makers are significantly larger. Germany’s Daimler sells 30,000–40,000 buses and chassis annually, while Swedish-based Volvo sells 10,000. Japan’s top two bus makers, Hino and Fuso, each sell more than 2,000 buses domestically per year (out of the more than 9,000 total sold in Japan). In 2012, China’s largest bus maker, King Long, sold 29,000.<sup>2</sup>

The absence of the threat of foreign competition limits innovation incentives for small American producers. The fuel economy of U.S. cities’ bus fleets is insensitive to the price of gasoline and natural gas; in private U.S. vehicle markets, on the other hand, when gas prices rise, consumers respond by demanding more fuel-efficient vehicles, with for-profit sellers quickly responding by designing and marketing such vehicles. That the fuel economy of new buses acquired in the U.S. public-transit bus market

does not rise as the price of energy increases is consistent with the hypothesis that protected U.S. firms do not need to innovate to be competitive and retain market share.<sup>3</sup>

Due to the Buy America requirement, America's urban bus fleet is more expensive, less fuel-efficient, and of lower quality than it would otherwise be if transit agencies could select from a global procurement menu. In 1997–2011, according to National Transit Data (NTD), the average price for a U.S. public-transit bus (in 2011 dollars) was \$309,000 (with the 10th percentile of the empirical distribution \$104,000 and the 90th percentile, \$497,000). While it is, admittedly, difficult to standardize buses sold by different nations to allow an apples-to-apples comparison, buses in Tokyo and Seoul are half the price of U.S. buses, with buses produced in China cheaper still. Wealthy, well-governed Singapore imports buses from China.<sup>4</sup>

In short, if U.S. transit agencies could purchase on the international market and still receive federal subsidies, increased competition would lower the prices that agencies pay, while greatly expanding choice. Cheaper buses would lower the cost of providing urban transit, boosting supply. As transit agencies retire gas buses and transition to natural gas buses, hybrid buses, and electric buses, the opportunity to benefit from expanded choice would grow.

In Europe, an extensive network of bus producers works closely with major cities to develop electric buses.<sup>5</sup> If such buses run on electricity generated by renewables, they hold the potential for great progress in reducing local particulates and greenhouse gas emissions.

## II. Privatize More Bus Routes

Labor is the major cost of providing bus services, accounting for roughly 70 percent of the total cost of operating a bus. Relative to their private-sector job alternatives, bus drivers and mechanics are generously compensated, with some drivers earning over \$100,000 annually.<sup>6</sup> Privatizing more bus routes would, among other advantages, create a positive, credible threat in future negotiations—over wage contracts and work flexibility rules—between transit agencies and public-sector unions.

NTD provides data, for all the nation's bus systems, on total operating costs, total passenger miles, total vehicle miles, and operational

control (i.e., publicly or privately operated). Such data can be used to study the real average operating cost, per vehicle mile, from 1992 to 2012.

Several noteworthy facts emerge from a review of the data. First, cost per mile increased sharply during 1992–2012. Second, privatized buses display far lower operation costs, per vehicle mile. Third, privatization's share of miles, though rising, remains low. In 1992, it cost \$3.83 (1982 dollars) to move a bus one mile (carrying, on average, 11 people). In 1992, private service providers supplied 6 percent of all bus miles traveled. In 2012, the cost of a bus mile increased to \$7.58, with 18 percent of all bus miles privately supplied. In 2012, the average cost of a publicly provided bus mile was \$8.10, while a privately provided bus mile cost \$5.20—a 36 percent difference.

This large cost differential suggests that privatization would lower the cost of bus service provision. Nevertheless, an “apples and oranges” comparability issue arises: the 36 percent differential is based on comparing 2012 operating costs for transit agencies that did *and* did not privatize routes. In an ideal experiment, on the other hand, transit agencies would randomly choose whether to privatize routes, with a before-and-after comparison measuring average reduction in operating costs resulting from privatization.

While such an experiment has not been conducted, existing evidence does support the claim that privatization would significantly lower operating costs. Combining this reform with a repeal of the Buy America requirement would make purchasing buses and operating them considerably cheaper.

At present, the political clout of public-sector unions artificially inflates bus drivers' and mechanics' wages. It also artificially inflates the number of workers employed, relative to the number deployed by a cost-minimizing firm. New York City's Metropolitan Transportation Authority's (MTA) recent negotiations with Transport Workers Union Local 100 highlight how union work rules impede the efficient allocation of workers over the course of a day.<sup>7</sup>

Nearly everywhere, bus ridership is higher during the morning and late afternoon commutes. Yet the MTA (and many other city transit authorities) is required to employ only full-time workers, despite the fact that the nature of the job means that many such workers have little work to perform during off-peak hours. Such inefficiency is, of course,

good for the workers employed but bad for the public, for the transit authority enjoys less flexibility to offer different levels of service to meet fluctuating rider demand.

Bus drivers' artificially high pay—relative to their best private-sector alternatives—represents another harmful inefficiency: in essence, it amounts to income redistribution financed by taxpayers.<sup>8</sup> Finite budgets mean that the higher taxes necessitated by this public-sector wage premium results in lower levels of bus service provision. Were it less costly to purchase and operate buses, more buses could operate. Higher quality would remove vehicles from the roads, mitigating transportation's social costs, such as pollution, traffic accidents, and congestion.

Reductions in bus service costs would likely expand the quantity of bus services provided. Such an increase in service provision could have important benefits for the urban poor, who typically do not own cars and often face long commutes to work. The “spatial mismatch” literature posits that urban minority unemployment is high, partly because of the considerable time cost of commuting from urban ghettos to areas with jobs.<sup>9</sup> Recent empirical work has further documented how higher levels of bus service could help moderate this urban-employment challenge.<sup>10</sup>

By privatizing bus routes, transit suppliers would enjoy greater freedom to incorporate technological advances, such as driverless vehicles. Of course, transit unions are aware that such technology poses a threat to demand for their services, creating a Luddite-like incentive to discourage innovation and oppose technology.<sup>11</sup> This raises the question of whether public union workers have the right to inefficiently do their jobs, even if more cost-effective substitutes emerge. If such a right is legally recognized, transit authorities should consider buying out such workers to phase in new technologies.

### III. Invest in Buses, Not Light Rail

Though relatively few U.S. cities have an underground subway system, many more continue to build light rail.<sup>12</sup> The latter includes Oklahoma City, Pittsburgh, Raleigh (N.C.), Rochester (N.Y.), and Miami, which all plan to open new light-rail stations in 2015. These are expensive initiatives. Milwaukee's streetcar project has an expected price tag of \$123 million,

and New Orleans's, \$75 million. Unfortunately, previous research suggests that rail projects are unlikely to generate the ridership necessary to justify such investments. Economists have documented the enormous cost overruns on many rail transit projects and their ex-post failure to deliver ridership that matches ex-ante forecasts.<sup>13</sup>

Light rail is most likely to be cost-effective if it takes shoppers and workers to desired locations more swiftly than alternative options. Begun in the early 1980s, Boston's Red Line into Davis Square helped gentrify the neighborhood surrounding that transit stop.<sup>14</sup> However, another study—examining public-transit use in areas surrounding new transit lines built in 16 U.S. cities from 1970 to 2000—documented

that only the Washington, D.C., and Boston transit expansions produced a significant positive impact on local ridership.<sup>15</sup> Why?

Rail transit connects outside areas to city centers. Likely ridership hinges on whether particular urban

downtowns represent attractive clusters of jobs and culture. Proponents of rail transit often claim a “field of dreams” effect, such that new development communities will sprout up around new transit stations. Gentrification and densification are most likely to occur when attractive walk-and-ride stations connect riders to networks that quickly whisk them to desirable downtowns.

An ongoing research literature examines how place-based investments in subways affect urban economic growth. One recent study, investigating every subway installation around the world, rejects the hypothesis that city populations grow after a subway is built. The study suggests that subways are not a key input in local economic growth.<sup>16</sup>

Such research represents broad averages and may not reflect the experiences of certain cities. New York, for instance, has certainly benefited from its subways: its high population density raises the likelihood that sufficient riders reside within walking distance of its very expensive system. In more decentralized cities, it is unlikely that constructing a new subway will boost densification.



If more middle-class urbanites used public transit, political support for more efficient public-transit policies, such as road pricing, would rise, too.”



All this suggests that urban planners should be more modest about their ability to predict their respective cities' future economic development. When planners recognize their inherent limitations, a strong incentive emerges to increase their flexibility to switch course in the future, should new city hot spots arise. Buses, which can be rerouted, offer such flexibility. Indeed, as crime levels and the general appeal of various neighborhoods rises and falls, the desire to live and work in different areas within a city fluctuates.

The current Big Data revolution offers urbanists the opportunity to plot, in remarkable detail, emerging hot spots of economic and cultural opportunity—at all hours of the day. Armed with such data, buses could be redeployed to rising areas, with extra routes added to meet peak demand. The combination of flexible, re-routable transportation technology (buses) and real-time data on demand offers the realistic possibility of a vastly more responsive urban transportation system.

One unanswered question involves how best to approximate the advantages of light rail using bus rapid transit. With the adoption of the latter, urban areas will face the challenge of having dedicated bus lanes, such as those on New York's 34th Street.<sup>17</sup> Cities can experiment by first opening bus rapid transit, and then exploring the extent to which bus speed and ridership increase as a result (with rider satisfaction judged by, say, tweets and other social media). Such experiments would also allow transit agencies to measure the unintended consequences of such policies: To where is car traffic deflected? How are citywide traffic speeds affected?

## IV. Increase the Bus-Choice Menu: “Uber for All”

For decades, urban public-transit buses have suffered from the stigma that they are slow (in waiting times and in frequent stops, per mile of driving) and uncomfortable, with strangers packed together and seats scarce. (In the past, when urban crime levels were higher, such proximity added further anxiety.) The net effect—a cheap fare but an expected low-quality experience—has meant that poorer people disproportionately ride buses, while richer individuals favor the more costly but faster, higher-quality experience of riding cars.

Three recent trends suggest that buses could become significantly more attractive for a broader set of urbanites. First, urban crime is down

sharply, boosting the willingness of middle-class travelers to ride in close proximity with strangers. Second, the WiFi era of mobile phones and applications offers new opportunities to improve the quality of public-transit bus use. Third, the shifting demographics of cities (more children and senior citizens) suggest that demand for high-quality bus services might rise, with more young people choosing not to drive and many older ones no longer able to operate private vehicles but still requiring transport services.

The rise of Uber, the popular ride-sharing app, holds important lessons for urban bus transportation. Uber's business model features several key elements.

With the aid of a smartphone, a potential rider can quickly know the time cost of waiting for a vehicle to arrive. In addition, Uber now offers different grades of vehicles (low-cost, high-end, spacious) from which to choose—and with known prices. Uber collects riders' credit-card information in advance, so no time is lost paying fares at journey's end. (A fare confirmation receipt is e-mailed to riders.) Such convenience has propelled Uber into the ranks of billion-dollar companies.

Widespread cell-phone ownership would allow individuals to swiftly enter their location and final destination into a public-transit app. The app would then provide the recommended travel route, along with the nearest bus stop and expected waiting time. An electronic account could be created, allowing potential riders to prepay, or tap a card upon entering the bus. Just as Uber offers different levels of service, bus-transit agencies could differentiate their bus fleet based on various attributes, such as free WiFi, seat size, and even the guarantee of an empty seat.<sup>18</sup>

By making bus ridership more comfortable and productive, demand would likely rise. In big cities in particular, a difficult commute is a major quality-of-life cost: if, say, a person is awake for 16 hours a day and commutes merely 35 minutes each way by public transit, 7 percent of the person's weekday waking hours are spent commuting.

Supplying more precise information on bus arrivals and seat availability (coach, first class) would help riders better plan their days—a development particularly valuable in cities that experience harsh weather, thereby reducing time spent waiting outside. Improving quality and reliability would produce a multiplier effect: as the social

## Google Buses

*This future vision for transit buses resembles the widely discussed “Google buses.” Of course, whether riders would pay for the more luxurious possibilities would depend on the cost parameters discussed:*

Google has them. Facebook has them. Apple, Genentech, and Electronic Arts have them. Every day, beginning at around 6 a.m., they pick up employees at dozens of stops around the city and deposit them an hour later on the manicured suburban campuses of their tech companies. At night, they reverse the route, with the last riders getting back to their city dwellings around midnight. Collectively, these buses represent a vast armada of plush, Wi-Fi-enabled chariots, delivering the precious brains of coders and other employees safely to their destinations without enmeshing them in the hassle of public transportation....

Google says its buses—which cost upwards of \$500,000 apiece—carry a combined 4,500 to 5,000 riders a day. Facebook says that between 40 and 47 percent of its employees use some form of alternative transportation, including six different shuttle routes, to get to work. Both companies employ transportation managers who use complicated tracking systems to figure out the best ways to hack traffic in real time and ensure that the shuttle-to-rider ratio stays optimized.<sup>19</sup>

stigma of bus ridership declined, middle-class people with “keeping up with the Joneses” preferences would be more willing to ride buses.

Some estimates put the annual cost of owning a car, excluding parking costs, as high as \$7,000. An unlimited bus and subway pass in New York costs \$116.50 per month. If middle-class households chose to substitute bus for car, it would be the equivalent of a large tax cut for middle-class urbanites.<sup>20</sup> With better public transit, land currently dedicated for parking could be redeployed for other uses.<sup>21</sup>

Better access to bus service would stimulate the development of new neighborhood restaurants and cultural hot spots, reinforcing the link between private retail entrepreneurs, restaurants, bars, and clubs, and the transportation network. Big Data generated by apps would help determine where new bus routes should be deployed, matching supply in real time with emerging demand.

A bus with 40 riders is one (albeit unusual) type of small community. Another dimension of bus quality thus involves ridership

demographics. Buses could differentiate themselves by, say, targeting a younger crowd (or an older one). Buses might offer different sections where groups could form and interact. The possibilities for innovation are considerable. Transit agencies could rely on Big Data and tweets to infer whether various experiments offer services that riders desire.

New York offers exceptional space for piloting new ideas.<sup>22</sup> The city's MTA carries 70 percent of all U.S. subway riders, 40 percent of all commuter rail trips, and 20 percent of all bus riders.<sup>23</sup> These figures highlight the MTA's national leadership role in educating other U.S. transit agencies on innovative policy.

## Conclusion

Urbanites spend many hours commuting. If such individuals can comfortably move at higher speeds without exacerbating externalities of congestion and pollution, city life will improve dramatically. The four reforms discussed would offer diverse urban-transit riders—especially the urban poor, who would see their productivity rise—higher-quality transport at lower cost.

In recent decades, the major quality-of-life challenges in cities have included crime, pollution, and congestion. Great progress has been made reducing urban crime and pollution, yet traffic congestion persists. Road pricing is a widely accepted solution to the latter; yet it suffers from insufficient political support. If middle-class households enjoyed access to high-quality public transit in the form of better bus networks, opposition to road pricing would invariably decline—and with it, congestion.

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# THE PRESCHOOL DEBATE: TRANSLATING RESEARCH INTO POLICY

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## Introduction

There is a broad consensus that the United States should expand its current preschool programs, particularly for disadvantaged students. This consensus reflects both a general interest in improving the preparation of students entering schools and a particular concern that disadvantaged students are especially handicapped by current preschool educational experiences. Matched with this desire to improve school preparation is evidence that at least some preschools are able to significantly improve the outcomes of their students.

The calls for expanded preschool programs—frequently coming to rest on ideas of universal preschool for all four-year-olds—became national news when introduced in New York City and New York State. These policy moves echoed proposals from President Obama and a wide range of state policy leaders in other states. Most recently, the president introduced the idea of offering incentives to states to develop new and improved programs.

Arguments for new and expanded preschool almost invariably make large leaps in generalizing from existing evidence of preschool effectiveness. The clearest evidence of the latter comes from evaluations of two high-quality programs conducted decades ago. Nonetheless, these small-scale, very expensive efforts bear little relationship to any of the programs espoused in current policy discussions.

Indeed, much of the present discussion skirts mention of evidence from the most significant preschool program currently in existence: Head Start. For a half-century, the federal government has run this national preschool program, currently serving more than 900,000 disadvantaged students at an annual cost of over \$8.5 billion. Yet every periodic evaluation of this program casts considerable doubt on its efficacy in improving student performance (let alone its efficiency in spending taxpayer money).

When considering a mass expansion of public pre-K, two central questions arise. First, what should be the characteristics of new, broader preschool programs? Second, how best should such programs be taken to scale? Unfortunately, available evidence provides limited guidance on both issues. Because we lack basic information about program design and program implementation, it would be foolhardy to move directly into a broad universal pre-K program. We should act on preschool, but in a way that generates information on how to develop and improve programs.

Preschool programs are particularly well suited for high-quality evaluations. The key is to develop a systematic program for expanded preschool such that the outcomes are readily observed and direct experimentation emphasized. Three design elements should receive high priority: evaluate incentives for outcomes; vary resources and inputs; and mix public and private provision.

## I. The Case for Expanding Pre-K

Considerable attention has rightfully focused on early-childhood education programs, particularly for children from economically disadvantaged backgrounds. At the same time, much of the public discussion treats preschool programs as a knife-edge issue: society either has them or does not have them. Unfortunately, this treatment does not lead to enlightened public policy.

This essay provides perspective on the existing knowledge base and the range of decisions required to develop a comprehensive, effective pre-K policy. The essay touches on ongoing politics, programmatic choices, and policy decisions in New York City and New York State. The latter are also embedded in a national conversation, led by President



Obama, potentially carrying through to significant new federal funds to encourage broader state initiatives.<sup>1</sup>

This author's intent is not to critique these statements and proposals but instead to provide a way for all parties to better understand where current and projected policies fit into the overall pre-K picture.<sup>2</sup> There are two straightforward ways to marshal attention to quality preschool programs. On the demand side, we know that there are significant variations in the preparation of children for schooling and that these variations are systematically related to families' socioeconomic status. On the supply side, we have credible evidence that quality preschool can significantly improve achievement and life outcomes of disadvantaged students.

### *Deficits at Entry into School*

Existing evidence suggests that a direct line can be drawn tracing the impact of skills acquired in childhood across an individual's life. This linkage of early experiences and performance to adult and societal outcomes underscores the former's importance. Such experiences and performance are closely tied to family background, implying an intergenerational linkage with large societal implications. Therefore, consideration of early skills relates directly to topics of income distribution and intergenerational mobility.

Evidence from a wide variety of sources indicates that disadvantaged students have less education in the home before entry into school. The Coleman Report, the massive governmental report mandated by the 1964 Civil Rights Act, first documented early achievement differences by family background.<sup>3</sup> These differences, documented in 1965, focused on racial differences.

When tests were given at grades one, three, six, nine, and 12, two facts stood out. First, black students in the first grade fell 0.75 to one standard deviation below white first-graders in the same region. In terms of the distribution of white students' scores, such differences imply that the average black first-grader started at between the 16<sup>th</sup> and 23<sup>rd</sup> percentiles of the white distribution. Second, the gaps seen in 1965 grew across grade levels.

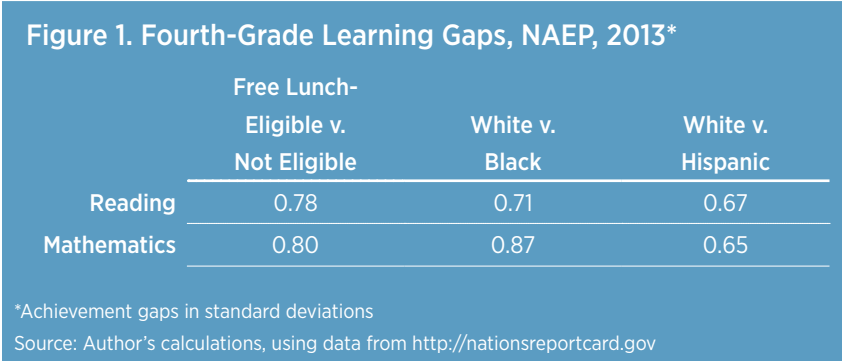
Another important investigation, by Betty Hart and Todd Risley, looked at the vocabulary of children and found dramatic differences

by parents’ socioeconomic status.<sup>4</sup> Both the amount and quality of parent-child interactions differed significantly, leading to large differences in vocabularies that directly reflected parental background.

More recently, data from the Early Childhood Longitudinal Study documents the continuing early achievement deficits that accompany family background. Fryer and Levitt identify gaps in scores by socioeconomic status,<sup>5</sup> while Reardon suggests that these gaps may have widened over many years.<sup>6</sup>

How important are these initial gaps? Considerably so: while there is some disagreement about whether they shrink, expand, or hold constant over time, there is no evidence that they actually disappear.

National testing of students under the National Assessment of Educational Progress (NAEP)—often called the “nation’s report card”—begins at grade four. **Figure 1** reveals that, in 2013, fourth-grade reading gaps were enormous. Blacks trail whites by 0.71 standard deviations; Hispanics trail whites by 0.67 standard deviations; and those eligible for free, or reduced-price, lunch trail higher-income students (who are not eligible) by 0.78 standard deviations. Fourth-grade math gaps are similarly large. Such gaps indicate challenges of monumental proportions: a person who is 0.8 standard deviations below the more advantaged average falls at the 21<sup>st</sup> percentile of distribution.



The final demand-side element for preschool is the significant impact on individuals’ future incomes. The most direct relationship between early test performance and earnings is found in the work of Chetty, which traces kindergarten performance directly to college completion and early career earnings.<sup>7</sup>

Other evidence of the skills-earnings relationship comes from recent surveys of adults and their labor-market experiences. The OECD conducted the Programme for the International Assessment of Adult Competencies (PIAAC) in 2011–12.<sup>8</sup> From these data, it is possible to estimate the returns to greater cognitive skills. Importantly, the returns are higher in the U.S. than in any of the other 22 countries surveyed by the OECD (i.e., the U.S. economy rewards skills more than other developed countries do).<sup>9</sup>

Such returns are high in absolute terms, too. For instance, scoring at the 84<sup>th</sup> percentile of the numeracy skills distribution, rather than at the mean of distribution, implies 28 percent higher wages throughout a person's working life.<sup>10</sup> Scoring at the 16<sup>th</sup> percentile implies 28 percent lower earnings throughout a person's life. While recent public and media focus has largely concentrated on the top 1 percent of earners, such results thus point to the enormous implications of skill gaps *within* the remaining 99 percent of earners.<sup>11</sup>

### *Ameliorating Early Deficits*

Nobel-winning economist James Heckman has contributed greatly to the body of literature in support of the importance of early-childhood education.<sup>12</sup> Substantial evidence from numerous studies confirms an intuitive proposition: skills beget skills. In particular, early skills make acquisition of subsequent skills easier.<sup>13</sup> This dependency of skill development on prior skills highlights the particular disadvantage of starting school at a low skill level.

But just how effective are preschool programs in boosting the school readiness of disadvantaged youth? Certain studies with strong research designs, based on random assignment of students to programs, suggest high efficacy: the Perry Preschool Project is perhaps the best known, but others, such as the Carolina Abecedarian Project and the Early Training Project, also provide important evidence in favor of early-childhood education.<sup>14</sup>

Cost-benefit analyses of Perry Preschool suggest that the program was effective, conferring social benefits significantly in excess of expenditures.<sup>15</sup> In one widely cited evaluation, benefits exceeded costs by a factor of six.<sup>16</sup> Returns of this kind, if widely reproducible, clearly justify intensive preschool investment—and, where the market fails to elicit appropriate private responses, substantial public investment. Yet most

other cost-benefit evidence on preschool outcomes is less certain and indicates smaller positive effects. In other locations, experimental evidence has been supplemented by observational studies.

Chicago's Child-Parent Center program, still operating in the city's public schools, is a highly cited example of the latter.<sup>17</sup> Child-Parent Center is lower-cost than Perry or Abecedarian; its benefits are also considerably less certain. More recently, studies on preschool outcomes in Tulsa, Oklahoma—meant to assess the state's universal pre-K program—provide another interesting, albeit limited, evaluation of mass pre-K expansion.<sup>18</sup> Still more recently, this evaluation was expanded to include Georgia's universal pre-K program.<sup>19</sup> Available evidence for both states indicates a positive impact for disadvantaged children and no impact for non-disadvantaged kids.<sup>20</sup>

On the negative side of the pre-K results ledger lies, notably, the federal Head Start program—now administered for a half-century, at great expense, and extensively evaluated.<sup>21</sup> One recent high-quality evaluation found that any achievement gains produced by Head Start disappear by third grade.<sup>22</sup> Many more pre-K programs have not been evaluated and thus provide no information on efficacy.

### *Summary*

- Early acquisition of skills is important for fully developing individuals' potential.
- Large differences in early skills directly relate to family background.
- Skills offer a significant labor-market payoff.
- Some quality preschool programs display positive returns.
- The exact magnitude of impact varies widely, presumably with program characteristics.
- Such findings offer justification for public action.

## **II. Translating Evidence into Policy**

Such findings do not, alas, translate easily into sound public policy. Developing an actual set of policies requires filling in the details. To set the scene for the issues that must be addressed, it is useful to dig one layer below the evidence just presented. To be clear, the purpose of

this exercise is *not* to deny the strong case for improving the country's preschool programs but rather to move the discussion to a level more appropriate for policy deliberation.

The first detail of note is the importance of knowing the target student population. In 2011, two-thirds of all U.S. four-year-olds were enrolled in preschool programs—though this figure is lower for the children of less educated parents, single-parent families, and nonwhite families.<sup>23</sup>

The second detail of note is the cost of existing preschool programs. The experimental programs discussed (which provide the clearest evidence of positive impact) are not typical. Perry Preschool, estimated to cost more than \$15,000

per child (in 2000 dollars), involved intensive treatment by teachers with master's degrees in child development, student-teacher ratios of 6:1, and regular home visits (though the program ran only from October through May).<sup>24</sup> Carolina Abecedarian—a full-day, five-days-per-week, 50-weeks-per-year, five-year program beginning at birth and including medical care and home visits<sup>25</sup>—was estimated to cost \$75,000 per child (2002 dollars).



We should act on preschool, but in a way that generates information on how to develop and improve programs. It would be foolhardy to move directly into a broad universal pre-K program.”

Such experiments are plainly not financially realistic for broad imitation in most states. Such experiments were also very small and provided no information on their most essential components or what more modest versions might resemble.<sup>26</sup> Head Start is considerably different from Perry Preschool and Carolina Abecedarian. In 2005, only 35 percent of Head Start teachers held a bachelor's degree, with Head Start programs varying considerably in length and intensity. In addition, if run on a full-time, full-year basis, per-child costs are estimated to exceed \$20,000 annually.<sup>27</sup>

The third detail of note is that virtually all the aforementioned pre-K programs' benefits accrued to girls; boys were, at best, likely to reap no benefit.<sup>28</sup> Further, a substantial part of such benefits fell outside academics: Perry Preschool's most significant benefit (around 70 percent) related to reduced criminal behavior.<sup>29</sup>

### III. Questions for Developing Policy

To develop effective, efficient preschool programs, the following questions must be considered.

#### *What Is Quality Pre-K?*

Almost all discussions of preschool expansion specify that the goal is to create “high-quality preschool.” These discussions generally focus on various inputs to the desired program—defined, say, in terms of providers’ qualifications, adult-to-child ratios, and attributes of the physical teaching space. Yet there is no reliable evidence on how these attributes relate to desired outcomes. At the same time, each input requirement has resource implications, with total program expenses and efficiency of provision directly affected by input choices.

#### *How Should Pre-K Be Provided?*

The current structure of U.S. pre-K programs involves mixed public and private provision. More than one-third of four-year-olds are now enrolled in private preschool (for families above the poverty line, this figure is higher).<sup>30</sup> Views also differ widely on how best to provide for any pre-K expansion. Some desire purely public provision—transitioning from the current public K–12 to a public “P–12” system—largely to ensure minimum standards of quality. On the other end of the spectrum, some desire a pure voucher program, with goals such as parental choice, competition among suppliers, and more efficient provision.<sup>31</sup>

#### *Should Pre-K Be Mandatory?*

If programs are optional, children most in need may be less likely to enroll. Indeed, some of the nonattendance at existing preschool programs derives not from lack of resources or availability but from lack of parental interest. Still, mandatory pre-K may not garner sufficient public support.

#### *What Role for Incentives?*

Much discussion has focused on top-down mandates: quality standards, regulations for participation, and so on. Instead, using incentives—to encourage families to enroll and to encourage providers to produce

quality programs for a given cost—offers considerable advantages. Indeed, if one can assess program outcomes, one can design rewards and punishments for programs based on desired outcomes (with no need to speculate on the implications of different inputs).

### *How Should Pre-K Expansion Be Financed?*

Preschool enrollment is, as mentioned, already privately financed to a significant degree, especially among higher-income families. As such, if preschool were made free (i.e., taxpayer-financed) to all families, it would amount to a large public subsidy to the middle class and the affluent, who would likely substitute public funding for (their current) private funding. The inequity of such a development would be at odds with most arguments for expanding preschool.<sup>32</sup> Instead, means testing—with families making sliding payments based on income—would avoid such an outcome. Yet here, too, a difficulty emerges: insufficient information on program enrollment sensitivity to prices and subsidies.<sup>33</sup>

### *What to Do About Head Start?*

Even as President Obama calls for expanding preschool, Head Start stands out as a major program (2014 price tag: more than \$8.5 billion) that displays little in terms of desired outcomes for its 900,000 enrollees. (In 2006, 26 percent of American children in poverty attended Head Start programs.)<sup>34</sup> It would thus appear that an expensive public program continues at the detriment of its (mostly disadvantaged) participants. Can Head Start be steered in a more productive direction? Or do its shortcomings suggest the great difficulty of “going to scale” with public programs?<sup>35</sup> Considerable political support exists for its continuation, if not expansion; but Head Start, as constituted, is inconsistent with efforts to promote access to high-quality preschool.

## **IV. The Path Forward**

The preceding discussion presents a real dilemma. There is strong evidence in favor of improving and expanding existing preschool services, particularly for disadvantaged children. There are also fundamental design questions—and little existing information to usefully answer them.

To the latter, some expansion advocates retort that the goal of politics is to find a societal solution to difficult questions: “Just do it,” they urge.<sup>36</sup> But with considerable competition for public funds, a more rational approach (though one, admittedly, that does not require all pre-K expansion to be halted until all questions have been answered) seems justified.

Such an approach would involve developing a program of experimentation designed to add information, over time, to the open questions discussed. Currently, it is common to introduce broad, uniform programs to the entire eligible population. Unfortunately, such programs are unlikely to provide much, if any, usable information that can provide evidence for developing programmatic detail or alterations. On the other hand, considerable information can be gained from planned programmatic variations introduced alongside a comparison group.

Preschool expansion lends itself well to such experimentation. Three areas should receive high priority in establishing evidence on outcomes:

1. **Evaluate incentives for outcomes.** As a rule, all preschool programs should be judged on the basis of observed student outcomes (especially vital when expanding programs). Yet most programs are not systematically assessed, with few incentives for better outcomes.<sup>37</sup> Instead, experiment by offering different preschool centers different outcome incentives, and then evaluate the results.
2. **Vary resources and inputs.** Much discussion focuses on defining preschool quality. Yet little evidence directly relates different input combinations to child outcomes. Instead, vary overall funding and input requirements to assess student impact.
3. **Mix public and private provision.** Current preschool provision involves a mix of public and private. Here, too, little information exists on which to base overall decisions on the optimal structure of provision. Instead, introduce funding in a way that provides information on how public versus private provision compares in efficacy and efficiency.



## Conclusion

Translating research on the general importance of expanded preschool into effective governmental programs requires information that simply does not exist. While we *should* proceed with preschool expansion—because this offers clear gains, given current programmatic shortcomings—we should do so in a thoughtful way that develops a continuous improvement program and uses the early experiences of expanded programs to inform later developments.

If, however, we simply plunge into an immediate move toward universal preschool, we will probably make it impossible to learn from pre-K expansion. This is likely to produce very expensive programs that are less effective than desired.

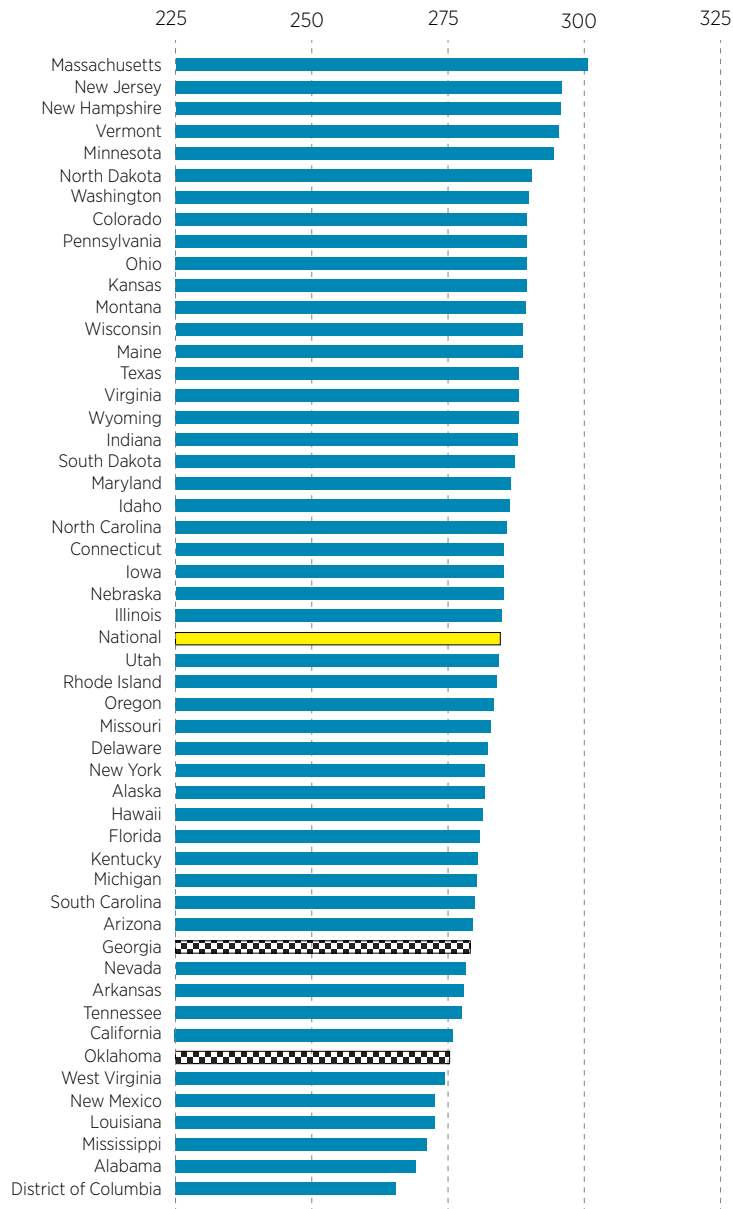
Some discussions of preschool overpromise on results, naively suggesting that most of the current problems with U.S. K–12 schooling would be solved merely by better preschool programs. Alas, there is no evidence suggesting this to be true. There would be benefits from getting disadvantaged students better prepared for school; but without widely effective public schools, such benefits are inherently limited. Indeed, one of the common explanations for the “fade-out” of Head Start—the tendency for gains at kindergarten to disappear after a few years of schooling—is that the schools that receive Head Start completers are not of sufficiently high quality.

Consider the experiences of Georgia and Oklahoma, which introduced universal preschool in the 1990s. If the latter were indeed a silver bullet, one would expect both states to rank highly in student achievement. Yet their poor respective performances on the 2013 NAEP eighth-grade math exam (**Figure 2**) indicates that universal preschool is hardly a panacea. There is no substitute for high-quality K–12 schooling.

Nor is it likely that simply spending more on schools will cure America’s current K–12 ills.<sup>38</sup> To that end, ensuring that high-quality teachers are present at all grade levels is critical.<sup>39</sup> To achieve this, reforming educational incentives—through stronger accountability, greater parental choice of schools, and better rewards for effective schools and teachers—is equally vital.

In the quest to improve education outcomes for all Americans, high-quality preschools will help but must be linked with high-quality K–12 schools. This is not only a moral goal but also one rooted squarely in the national interest.<sup>40</sup>

Figure 2. NAEP Eighth-Grade Math Exam, 2013\*



\*Massachusetts earned the highest score; the District of Columbia, the lowest.  
Source: Author's calculations, using data from <http://nationsreportcard.gov>

## Endnotes

1. A call for universal preschool was included in President Obama's 2013 State of the Union Address; see Office of the Press Secretary, the White House, "Fact Sheet: President Obama's Plan for Early Education for All Americans (Washington, D.C.: 2013). Added funding for this was subsequently announced by President Obama in December 2014; see Justin Sink, "Obama to Unveil \$1B Early Childhood Education Funding," *The Hill* (December 10, 2014).
2. The current, wide-ranging discussion is visible in books focused on policy issues, including Chester E. Finn, Jr., *Reroute the Preschool Juggernaut* (Stanford, Calif.: Hoover Institution, 2009); Bruce Fuller, *Standardized Childhood: The Political and Cultural Struggle over Early Education* (Stanford, Calif.: Stanford University Press, 2007); David L. Kirp, *The Sandbox Investment: The Preschool Movement and Kids-First Politics* (Cambridge, Mass.: Harvard University Press, 2007); and Edward Zigler, Walter S. Gilliam, and Stephanie M. Jones, *A Vision for Universal Preschool Education* (New York: Cambridge University Press, 2006). This essay does not attempt to review all arguments but instead highlights issues most salient to current discussions.
3. James S. Coleman et al., *Equality of Educational Opportunity* (Washington, D.C.: U.S. Government Printing Office, 1966).
4. Betty Hart and Todd R. Risley, *Meaningful Differences in the Everyday Experience of Young American Children* (Baltimore: Paul H. Brookes, 1995).
5. Roland G. Fryer, Jr., and Steven D. Levitt, "Understanding the Black-White Test Score Gap in the First Two Years of School," *Review of Economics and Statistics* 86, no. 2 (May 2004): 447–64.
6. Sean F. Reardon, "The Widening Academic Achievement Gap Between the Rich and the Poor: New Evidence and Possible Explanations," *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children*, ed. Richard J. Murnane and Greg J. Duncan (New York: Russell Sage Foundation Press, 2011).
7. Raj Chetty et al., "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project STAR," *Quarterly Journal of Economics* 126, no. 4 (November 2011): 1593–1660.
8. See *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills* (Paris: Organisation for Economic Co-operation and Development, 2013). PIAAC's target population was the noninstitutionalized population, aged 16–65. PIAAC tested various cognitive domains of 5,000 or more adults in 24, mostly OECD, countries. PIAAC assessments—designed to provide international comparisons of adult skill levels—measure three cognitive skill areas needed to advance in the workplace and society: numeracy, literacy, and problem solving in technology-rich environments.
9. Eric A. Hanushek et al., "Returns to Skills Around the World," *European Economic Review* (2013).
10. These estimates derive from statistical analysis relating the log of weekly earnings to measured numeracy skill, experience, experience squared, and gender. Math skills are normalized to mean zero and standard deviation one. The comparison with the 84th percentile represents being one standard deviation above the mean in numeracy performance; the 16th percentile represents being one standard deviation below the mean in numeracy performance. Similar estimates derive from substituting literacy assessments for numeracy (though the returns to problem-solving skills are less significant).

11. See also David H. Autor, "Skills, Education, and the Rise of Earnings Inequality Among the 'Other 99 Percent,'" *Science* 344, no. 843 (May 23, 2014): 843–51.
12. See, e.g., Pedro Carneiro and James J. Heckman, "Human Capital Policy," in *Inequality in America: What Role for Human Capital Policies?*, ed. Benjamin M. Friedman (Cambridge, Mass.: MIT Press, 2003), 77–239; Flavio Cunha and James J. Heckman, "The Technology of Skill Formation," *American Economic Review* 97, no. 2 (2007): 31–47; and Flavio Cunha and James J. Heckman, "Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation," *Journal of Human Resources* 43, no. 4 (fall 2008): 738–82.
13. Commonly labeled "dynamic complementarity"; see Flavio Cunha et al., "Interpreting the Evidence on Life Cycle Skill Formation," in *Handbook of the Economics of Education*, ed. Eric A. Hanushek and Finis Welch (Amsterdam: Elsevier, 2006), 697–812.
14. Lawrence J. Schweinhart et al., *Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40* (Ypsilanti, Mich.: High/Scope Press, 2005); and John F. Witte, "A Proposal for State, Income-Targeted, Preschool Vouchers," *Peabody Journal of Education* 82, no. 4 (2007): 617–44. A comprehensive review of different pre-K programs and their evaluations can be found in Douglas J. Besharov et al., "Summaries of Twenty-Six Early Childhood Evaluations," Welfare Reform Academy (College Park, Md.: University of Maryland, 2011).
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16. Belfield et al., "The High/Scope Perry Preschool Program."
17. Arthur J. Reynolds et al., "Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Centers," *Educational Evaluation and Policy Analysis* 24, no. 4 (2002): 267–303. The evaluation of the program relies on matching participants with comparable students in similar schools. The validity of this approach rests on the uncertain assumption that similar students, as measured by only a few characteristics, provide a sufficiently good control group.
18. William T. Gormley, Jr., et al., "The Effects of Universal Pre-K on Cognitive Development," *Developmental Psychology* 41, no. 6 (2005): 872–84.
19. Elizabeth U. Cascio and Diane W. Schanzenbach, "The Impacts of Expanding Access to High-Quality Preschool Education," *Brookings Papers on Economic Activity* (fall 2013): 127–78.
20. Ibid.
21. In practice, Head Start is not a unified program but rather a funding stream with loose regulations on the character of actual programs. As such, Head Start programs display considerable heterogeneity.
22. The first random-assignment evaluation of Head Start assessed a variety of child outcomes, with none showing significant impact by third grade: Michael Puma et al., *Third-Grade Follow-Up to the Head Start Impact Study Final Report* (Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2012).

23. U.S. Department of Education, *Digest of Education Statistics, 2012* (Washington, D.C.: National Center for Education Statistics, 2013), table 57. Preschool enrollment falls below 40 percent for three-year-olds.
24. Cost estimates and programmatic comparisons are found in Witte, "A Proposal for State, Income-Targeted, Preschool Vouchers." Children participated for one or two years: the \$15,000 figure represents the average cost for all participants. (For a new program, costs per child would presumably be larger if all students participated for two years.)
25. Frances A. Campbell and Craig T. Ramey, "Cognitive and School Outcomes for High-Risk African-American Students at Middle Adolescence: Positive Effects of Early Intervention," *American Educational Research Journal* 32, no. 4 (winter 1995): 743–72.
26. The Perry Preschool treatment group consisted of only 58 children; Carolina Abecedarian, 57; and the Early Training Project, 44. Campbell and Ramey, "Cognitive and School Outcomes for High-Risk African-American Students at Middle Adolescence"; and Frances A. Campbell et al., "The Development of Cognitive and Academic Abilities: Growth Curves from an Early Childhood Educational Experiment," *Developmental Psychology* 37, no. 2 (2001): 231–42. Small sample sizes obviously raise concern about whether evaluation results can be generalized to far larger programs.
27. The cost of Head Start is usually reported as slightly over \$7,000 per pupil, per year (2003–04 dollars), derived by dividing total program costs by total participants. Yet as welfare specialist Douglas Besharov notes, such calculations mix a variety of different programs; see Besharov et al., "Summaries of Twenty-Six Early Childhood Evaluations."
28. Michael L. Anderson, "Multiple Inference and Gender Differences in the Effects of Early Intervention: A Reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects," *Journal of the American Statistical Association* 103, no. 484 (December 2008): 1481–95.
29. Belfield et al., "The High/Scope Perry Preschool Program."
30. U.S. Department of Education, *Digest of Education Statistics, 2012*, table 56.
31. The efficiency of current, publicly provided K–12 schooling does not lead to optimism about potential outcomes in a (hypothetical) mass expansion of public pre-K; see Eric A. Hanushek, "The Failure of Input-Based Schooling Policies," *Economic Journal* 113, no. 485 (February 2003): F64–F98.
32. Cascio and Schanzenbach, in "The Impacts of Expanding Access to High-Quality Preschool Education," observe a considerable shift to subsidized public programs after the adoption of universal preschool in Georgia and Oklahoma.
33. Dueling visions can be seen in current policy analyses in Kirp, *The Sandbox Investment*; and Fuller, *Standardized Childhood*.
34. U.S. Department of Education, *Digest of Education Statistics, 2012*, table 60.
35. There is little evidence that *any* educational policy extracted from the scientific evaluation literature has been successfully implemented across the heterogeneous districts of states. Available science, in other words, does not support regulatory and implementation policies that reliably replicate evaluation results broadly.
36. One extension of the "just do it" argument notes that programs designed exclusively for the poor tend to be of low quality. Broad programs involving the middle class, the argument runs, yield stronger political support that pushes them toward higher quality.
37. Numerous questions have been raised over the ability to reliably measure preschool outcomes. Nevertheless, there is an expanding set of performance measures that can assess outcomes. It is also possible to trace preschool impact into K–12 schools.

38. Eric A. Hanushek and Alfred A. Lindseth, *Schoolhouses, Courthouses, and Statehouses: Solving the Funding-Achievement Puzzle in America's Public Schools* (Princeton, N.J.: Princeton University Press, 2009).
39. Eric A. Hanushek, "The Economic Value of Higher Teacher Quality," *Economics of Education Review* 30, no. 3 (June 2011): 466–79; and idem, "Valuing Teachers: How Much Is a Good Teacher Worth?," *Education Next* 11, no. 3 (summer 2011).
40. As documented in Eric A. Hanushek, Paul E. Peterson, and Ludger Woessmann, *Endangering Prosperity: A Global View of the American School* (Washington, D.C.: Brookings Institution Press, 2013), U.S. students, high- and low-performing alike, are generally *not* competitive with students in many other developed countries. Addressing both the international competitiveness and domestic achievement gaps would have enormous positive implications for America's future prosperity.

# ENCOURAGE ENTERPRISE, EMPOWER CITIES: THE PROMISE OF ENTREPRENEURSHIP ZONES

**Edward L. Glaeser, *Harvard University; Manhattan Institute***

## Introduction

**C**an cities be pro-poor as well as pro-business? Many popular progressive policies, such as raising taxes on rich urbanites, are likely to send successful entrepreneurs to some other locale. This essay argues that entrepreneurship districts located in high-poverty areas may encourage economic success among the less fortunate in a way that lifts up the entire city.

Three decades ago, Sir Peter Hall persuaded Margaret Thatcher to experiment with “Enterprise Zones” in the United Kingdom. These zones would provide tax breaks to firms that locate in higher-poverty areas. The U.S. followed in 1993, with “Empowerment Zones,” which also targeted tax cuts toward particular locales. These policies increased employment but at an impressively high cost—some estimates run as high as \$100,000 per job.

The principle of spatially targeted assistance is most compelling if the zone is a potential model for the city—not a tax-subsidized neighborhood. Ideally, entrepreneurship zones can play the role that Hong Kong once served for China: providing a tangible illustration of what better government can achieve.

Entrepreneurship zones have two parallel tasks: encouraging enterprise and empowering the community. The first task focuses on encouraging local business formation, primarily through simplifying the permitting process but also by mentoring would-be entrepreneurs and

consolidating existing public support for small businesses. The second task focuses on local schools, community groups, and other organizations that can help train local residents to work with entrepreneurs and to be entrepreneurs themselves.

The encouraging-entrepreneurship task begins with reducing the regulatory barriers to opening new businesses. Ideally, this can occur with legally mandated one-stop permitting that can get any business going within 30 days. When new legislation is not feasible, one-stop permitting can be facilitated with independent legal support (funded publicly or privately) for would-be entrepreneurs that can offer the same sort of one-stop service. In immigrant communities, these services would be explicitly polyglot.

Existing pro-business policies, including government loan programs, can also be embedded into the zone structure. Successful entrepreneurs should be encouraged to become more actively engaged, especially in forming local angel-investor groups for would-be start-ups.

Empowering the community means ensuring relevant skill accumulation in the entrepreneurship zone so that local residents are not merely bystanders to expanding economic growth. This process can begin in the classroom and can be provided by competitively sourced after-school programs. Vocational education can be strengthened and targeted toward vocational skills that are in high demand. Entrepreneurship is a skill—and more likely to be taught well by entrepreneurs themselves than by traditional educators.

Entrepreneurship zones are far more likely to work in successful cities, such as New York, Boston, and San Francisco, than in more troubled areas like Detroit. The time is right to experiment with such zones in thriving places—and to test whether such a relatively low-cost intervention can be an alternative to economically expensive redistribution.

## I. Background

Mayor de Blasio won election by emphasizing the poverty that persists alongside wealth in New York City—the “two cities” side by side. Some 2,500 years ago, Plato wrote that “any city, however small, is in fact divided into two, one the city of the poor, the other of the rich.”<sup>1</sup> Urban inequality is persistent because cities attract rich as well



as poor people; and there is nothing intrinsically wrong with such economic diversity.

Yet dangers stalk a city of scattered prosperity. The city may fail in its central task of permitting upward mobility and instead create a permanent underclass. The income inequality of the two cities may degenerate into class conflict that harms the city as a whole and its wealth-generating capacity. Plato declared that the two cities were “at war with one another.”

For much of the last 30 years, many U.S. cities have embraced centrist government that valued competence above all and recognized the limits that all local governments face. Today, spurred by anger about the stalled progressive agenda at the national level, some local leaders have sought to use local tools to reduce inequality.

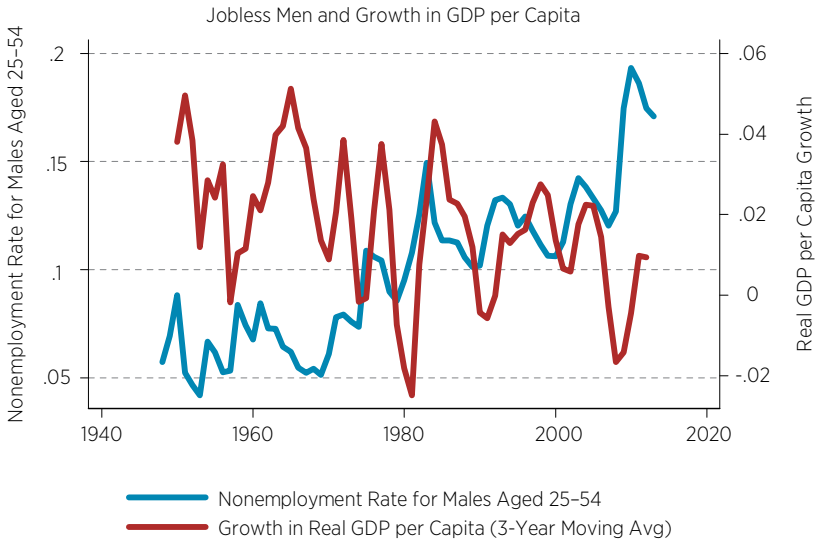
If local progressivism becomes local redistribution, there is much danger and little upside. The history of U.S. cities in the 1960s and 1970s should remind us of the risks of a wealth exodus to nearby suburbs. Some local leaders, such as Detroit’s Coleman Young, angrily attacked America’s inequities and ended up presiding over a city that was poorer than ever. Economist Thomas Holmes’s work documents how strongly industry followed pro-business policies in postwar America.<sup>2</sup>

Among the great advantages of American local government is that cities can be laboratories of good government. We don’t know exactly how to fix the significant problem of rising American joblessness among prime-aged adults that persists in good times and bad (**Figure 1**). Cities are well poised to experiment, whether with welfare-to-work or entrepreneurship zones, but there is little upside to experiments that emphasize large tax increases on the wealthy. National policies based on such local innovations would have little chance of success in Washington today.

If city governments can figure out better ways of solving social problems, particularly underemployment, on the cheap, such policies will not repel the rich from the city. These policies will also more naturally appeal to a national audience. This is the moment for experimenting with local, lower-cost interventions that might reduce urban poverty and provide greater upward mobility.

This essay focuses on entrepreneurship-related interventions because the connection between entrepreneurship and local economic

Figure 1. The Growth of Jobless Adult Males



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, and U.S. Census

success is strong. Fifty years ago, economist Benjamin Chinitz argued that New York was more resilient than Pittsburgh because New York's garment industry had built a culture of entrepreneurship and Pittsburgh's steel industry had not.<sup>3</sup>

A large statistical literature has shown a strong link between measures of entrepreneurship, such as initial shares of employment in start-ups or average establishment size, and subsequent local economic success. That connection holds within region, city, and industry, and using a large array of statistical techniques.<sup>4</sup> **Figure 2** shows the remarkable difference in job growth between those areas with the smallest average establishment sizes (quintile one) and the largest average establishment sizes (quintile five) between 1977 and 2010.

If cities are able to promote entrepreneurship among the less skilled, they will be able to strengthen both the poor and the city as a whole. Yet even if cities everywhere agreed on the need for more entrepreneurship, especially among the poor, we still need more understanding to achieve that objective. We now turn to a zone-based approach that targets investments toward specific neighborhoods.

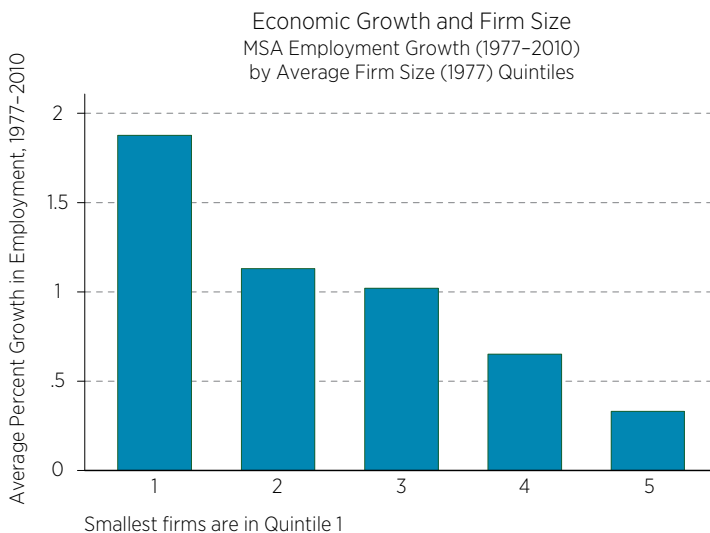
## II. The Case for Entrepreneurship Zones

There are three starkly different rationales for a zone-based approach to encouraging entrepreneurship: targeting, agglomeration, and ignorance. The targeting argument is that we want to support zones in order to target resources toward people who live in poorer areas. The agglomeration argument is that since we see successful examples of private-sector clusters emerge naturally, as in Silicon Valley, the government should follow this lead. The ignorance argument is that when we don't know exactly what works, we should experiment on a small area before blanketing the city or the nation with an idea.

The targeting argument has strengths. If we have agreed that a policy is beneficial—charter schools or preschool, perhaps, depending on your political perspective—it makes sense to target scarce resources toward the most troubled areas. Yet if done with large-scale spending or tax breaks, targeting can easily become the artificial subsidization of high-poverty areas. Such subsidization is dangerous.

Subsidizing poor areas essentially bribes poor people to stay in underperforming districts, when out-migration may be a far better

**Figure 2. Entrepreneurship and Metropolitan Area Growth**



Source: Author's calculations, using data from <http://www.census.gov/econ/cbp/>

path toward economic opportunity. Economist Bruce Sacerdote found that children who were forced by Hurricane Katrina to leave New Orleans typically experienced better educational outcomes elsewhere. In many cases, the benefits from such subsidies are received by the property owners in the locales, not the individual residents. If a targeted tax break causes rents to rise more than wages for poor residents, it can actually make them worse off. We should focus on helping poor people, not poor places.

Yet when it comes to both regulatory reform and education, there is value in targeting. Successes can later be scaled, so that they do not provide a permanent subsidy. Politically, it is far easier to

make the case for deregulation if the beneficiaries are likely to be entrepreneurs working in higher-poverty areas. Since education is often delivered at the institutional level, limited resources may force a focus on a single institution.

The agglomeration argument

has strengths but is also bedeviled by numerous complexities. True, successful firms often generate benefits for their neighbors, which is why industrial clusters are so common; and the existence of such spillovers provides a possible case for government support of a cluster where smart entrepreneurs and workers learn from one another. Yet it should be obvious that the delicacy of person-to-person idea flows is not naturally managed by a public bureaucracy. Clustering firms in one area will also reduce the potential for those cross-industry leaps of imagination that can be particularly productive.

Empirically, the track record of industrial clusters is mixed.<sup>5</sup> Some efforts have worked uncommonly well—the Innovation District in Boston and Silicon Alley in New York stand as successes—but there are many failures. It is far safer to encourage entrepreneurship generally within a given zone than to try to micromanage industrial choices; and, importantly, urban entrepreneurship can mean owning a grocery store as well as writing software.



At the heart of entrepreneurship zones is the idea that the best economic development strategy is to attract and train smart people—and then get out of their way.”

The strongest case for a zone-based approach is that it facilitates learning. If we accept that we do not know what will generate new enterprises or reduce joblessness, we should not start by adopting a uniform policy everywhere. We should experiment with particular policies in particular areas, and, through careful experimentation and evaluation, we can learn what works.

Some experiments could be done citywide. For example, if we were happy trying out a particular form of entrepreneurship training, such as that espoused by the Kauffman Foundation of Kansas City, we might randomly select high school students from throughout the city to receive this training. Yet the cost of implementation is often far lower if the experiment is done in a particular locale.

We should start with the view that the zone itself is an experiment but that there are also smaller experiments within that zone. Different students may receive different types of after-school training, which will enable the impact of the training to be properly evaluated. Evidence on private-sector innovation is constantly provided by customers and financiers; the success, or failure, of public-sector innovation is often less obvious. A well-designed zone can be a tool for evaluating local policy change.

### III. Entrepreneurship-Zone Design: Encourage Enterprise

The first key element in entrepreneurship-zone design is encouraging enterprise. The most important way to encourage enterprise is to reduce the regulatory burden on new enterprises within the zone. There is nothing novel about reducing regulations; the original ideal of an enterprise zone also favored less regulation. Yet in the U.S., enterprise zones have more often been marked with financial support than with a reduced regulatory burden.

America's cities face an enormous array of business regulations. The U.S. Chamber of Commerce Foundation recently completed a report<sup>6</sup> documenting the number of procedures needed to start a professional-services business in various cities. In Chicago, the business required seven procedures, cost \$900, and took 32 days. New York City also required seven procedures, which took less time (eight days) but

cost \$1,306. The permits required for food-related companies, or for changing the physical structure of a building, become far more onerous.

Since 1996, the Devens Enterprise Commission has provided a model for permitting. When the Fort Devens military base was closed, Massachusetts searched for an alternative model for the area and imagined an economy rebuilt around freer markets. To that end, the Enterprise Commission was established to provide speedy one-stop permitting to any business wanting to start in the area. The commission has largely fulfilled that goal, and the area has done relatively well despite its noncentral location in the Boston metropolitan area.<sup>7</sup>

The advantages of a single centralized permitting agency are accountability and measurement. It is easy to tell if Devens is fulfilling its mandate to provide speedy one-stop permitting. If the commission goes too far and permits a firm that does public harm, that will be obvious as well. The commission can still turn to the expertise of the fire department and other experts but cannot force them to take responsibility for delayed business permitting.

New York City has attempted to embrace a more transparent permitting process, with NYC Business Express and its New Business Acceleration Team (NBAT). Business Express provides a single website where one can learn about the permits required to open a new business. The New Business Acceleration Team appears ready to help new restaurants negotiate the tricky regulatory terrain. These are admirable steps, but the city's regulatory maze remains burdensome, and different departments have maintained their control over different forms of regulation.

There are two distinct approaches toward reducing the regulatory burden in an entrepreneurship zone: one modeled on the Devens Enterprise Commission and the other modeled on the NBAT. The first approach requires significant new legislation; the second merely requires private or public money.

The Devens approach, which is more likely to be effective, defines each entrepreneurship zone as a distinct legal entity. Within that zone, an independent commission maintains control over permitting. The mandate is to permit as quickly as safety permits, with data kept continuously about the speed and success of new business applicants. The commission will employ outside experts but will keep responsibility to itself.

The NBAT approach is simply to fund a one-stop shop for new business formation within the zone. This can be funded by the city government or by an independent nonprofit. There are advantages to the legitimacy conferred by public funding, but independent funding may allow for greater nimbleness and stronger incentives. It is then the job of the shop to handle all permits for the new business. The one-stop shop's success can still be measured and its leadership can be held accountable, but it will be hard to blame the entity if outside regulatory processes are slowing it down.

In either case, the permitting entity can develop special skills for interfacing with public bureaucracies and for connecting with the neighborhood. In many poorer neighborhoods, language is an issue: it is crucial for the entity to have good skills for interacting with non-English speakers, who can often be among the most entrepreneurial urbanites.



Ideally, entrepreneurship zones can play the role that Hong Kong once served for China: providing a tangible illustration of what better government can achieve.”

Regulatory ease is one major way to encourage enterprise in an entrepreneurship zone. There are others. Cities, states, and the national government already have a bevy of programs intended to support new businesses, including loan guarantees and other forms of financial support. Many economists are often skeptical of public attempts to play venture capitalist; but if these programs exist, they should be used most effectively and evaluated.

The natural way to incorporate these programs into the zone structure is for there to exist a central public support office with close ties to the permitting entity. In many cases, the personnel could overlap. Ideally, all public funds would be consolidated into this single office, which would enable one-stop shopping for public support, as well as permits. Consolidation would enable funds to be spread evenly, too, although there is a case for randomization of some funding sources among qualified applicants. Only with such randomized trials can we truly learn if these programs lead to job creation in the long run.

To implement these plans, the city would need to inventory the public funds available within the zone. Boston has already begun this process. After that point, there should be negotiation with the current funding entities to determine the possibility of consolidation within a single zone-related entity, at least for a limited period. A limited time horizon is appropriate if the zone is seen as an experimental entity.

Yet another way to encourage enterprise is to harness the social energy of successful local entrepreneurs. Instead of threatening to punitively tax local entrepreneurs, mayors can form communities to help support and educate entrepreneurs in the zone. This will be particularly natural if the zone attracts a well-defined group of outside firms into a particular incubator space—which appears to be happening in the Dudley Square district of Boston. Even within such a well-defined community of interest, it is possible to generate business groups that collaboratively work to support new start-ups in higher-poverty areas. Retired entrepreneurs may be a particularly natural resource here.

The community's first job would be to design an outreach program to connect with would-be start-ups. Ideally, this would be coordinated with the one-stop permitting and public-assistance shops. In some cases, the outreach program would go beyond these two entities, directly into the communities to encourage potential entrepreneurs to take a risk.

The community's second job would be mentoring: teaching these prospective entrepreneurs how to think about new business opportunities. The possible gains from communicating with entrepreneurial human capital are enormous. In some cases, discussions might work better in small groups. In others, one-on-one mentoring would be more appropriate.

Finally, on an entirely voluntary basis, the community could act as angel investors for prospective start-ups. They could play this role with their own money or, just as plausibly, could play an advisory role to the public entity that is directing the existing public support to new entities. This group should be able to provide expertise that the public sector does not inherently possess.

In essence, this group is meant to help educate would-be entrepreneurs. It can also help in educating the people who will work for those entrepreneurs. That education process is the topic of the next section.



## IV. Entrepreneurship-Zone Design: Empower the Community

One great fear facing any local economic improvement strategy is that the neighborhood improves, but the longer-term residents do not benefit. An area can become a hub for entrepreneurs, but that can produce gentrification rather than widespread economic benefits. The strategies discussed here are meant to limit the divisions between new businesses and older residents.

There are multiple prongs to this strategy, just as with encouraging enterprise; but there is no sense that one prong is more important than another. We will focus on entrepreneurship training in the schools first because it connects most closely to the entrepreneurship strategy previously discussed; second, we will discuss vocational reform; and last, the formation of community-entrepreneurship groups.

In the previous section, we discussed the mentoring of new business owners by successful entrepreneurs. This is entrepreneurship training at a fairly advanced state: the new business owners must already have an idea that they want to implement. We can also experiment with school-based or community-organization-based programs to provide entrepreneurship training at a more basic level.

The goal of such training is to teach the basics of new business formation to teenagers. What might make a new enterprise successful? What will ensure that revenues exceed costs? What are the basic rules surrounding new enterprises? The Kauffman Foundation has an established program on entrepreneurship education, which could be adapted for younger students.

Even if these students do not become entrepreneurs, they will learn a bit about how businesses operate, which should be useful. The program will also have the salutary effects of reminding at-risk teenagers of the significant returns that can come from successful legitimate entrepreneurship. Entrepreneurship training may even provide a more compelling means of teaching basic math skills than formal mathematics classes.

The natural delivery mechanism for such training is an after-school program. School days are already sufficiently crowded that they should not be reduced further to make way for this extra training.

One advantage with after-school programs is that they can be competitively sourced, and randomized experiments are easy. One group of students can be put into one class while others are given a different type of training. A program that operates after school for teenagers can also be given to older students through a community center.

In many cases, the need is to train workers as much as entrepreneurs. Start-ups will be more attracted to a district if it has skills that the start-ups need. This means better vocational training.

Some cities have existing vocational schools that can be improved. Boston's Madison Park High School, for example, dramatically underperforms. Improving the school would require basic management more than any brilliant reconfiguration of the curriculum. Ideally, vocational training reform would embed employers from the beginning: What skills do high-school graduates from this neighborhood need to be hired? How can such graduates receive effective training?

After-school programs probably dominate school-day education in providing this human capital. It is too much to ask teachers to take on a new set of skills that they were never trained to teach. Instead, the potential employers of the young can work with the city and the nonprofit sector to develop a robust after-school program to provide training in the most needed areas, from plumbing to writing software.

As with entrepreneurship training, a number of program providers should be evaluated through randomized trials. Evaluation will be easy because pupils can be judged immediately after completing the course on the basis of their displayed competence.

In addition to after-school programs, vocational training should have apprenticeships as well as summer-job programs. Learning on the job is likely to be the best way of learning a skill. Again, randomized evaluation would be ideal, but that may not be feasible if employers insist on choosing exactly one temporary worker.

Many employers might be located within the zone, but that should not be a binding limitation; any employer willing to participate in the apprenticeship and summer jobs program should be welcomed. Boston and New York have had thriving summer jobs programs for many years. These programs can surely be improved and better oriented toward particular skills, but they provide an excellent starting point.

Another way to empower communities is to create a community-based entrepreneurship group. This group will comprise not only entrepreneurs; anyone who cares about the progress of entrepreneurship within the community can become a member. The group will focus on opportunities and problems in the entrepreneurial ecosystem. It will be able to report on the failures of the zone and commend its successes. The ultimate goal of the group is to bring the community together around grassroots economic development. The group should focus on organically developing local jobs, not seeking external largesse. Just as local religious leaders have sometimes been exceptionally helpful in fighting crime, they can be helpful in this context as well.

## Conclusion

Entrepreneurship zones are being proposed not because of the certainty that they will be the best long-term solution for encouraging enterprise and employment among lower-income urbanites. We do not always need to know the final destination to know the best path for the present. We face enormous social challenges, especially underemployment, and we need to develop better tools for fighting those challenges.

At the heart of the zones is the idea that the best economic development strategy is to attract and train smart people—and then get out of their way. Empowering the community means training smart people. Encouraging enterprise means attracting smart people and getting out of their way. The heart of the entrepreneurship-zone idea is that urbanites are capable of solving their own problems if government does a better job of providing usable human capital and does less to interfere with natural human ingenuity.

These zones are ultimately experiments and should be evaluated as such. The design for measuring their effects should be built in to the programs from the beginning. We need to ensure that they are opportunities for cities to do what they do best: teach humanity how to strengthen itself.

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# BRAIN DRAIN RECONSIDERED: TOWARD A MORE SOPHISTICATED APPROACH TO REGIONAL TALENT

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## Introduction

American cities, regions, and states try hard to increase educational attainment because education is a major driver of economic success. Such efforts focus heavily on retaining locally raised or educated talent—stopping the so-called brain drain. This is a mistake.

Why the emphasis on brain drain? Talent retention is seen as the return that justifies local investment in education. The focus on brain drain also comes from a fear that a place may be insufficiently attractive to lure outsiders. In many such places, however, few people actually leave. What's more, out-migration can drive economic development locally—a form of human-capital development in its own right. For this reason, places with low population churn may be better off *encouraging* more people to leave.

Rather than focus efforts on brain drain, cities, regions, and states should engage émigrés to benefit from economic connectivity and encourage their later return home. Further, such places should be bolder and seek to attract newcomers without previous local connections.

## I. Brain Drain

Data show that about 60 percent of the variation in metropolitan areas' per-capita income is explained by college-degree attainment rates.<sup>1</sup> Public-policy discussions about creating economic growth in cities, regions, and states—particularly those that have experienced

significant decline—tend to revolve around raising a community's number and percentage of residents with college degrees. The main focus of such efforts has been to retain educated residents. This is often expressed by a desire to stop “brain drain,”<sup>2</sup> or the migration of educated residents away from an area.

Why the focus on brain drain? In part, retention is implicitly what justifies a community's investment in education. States and cities pay lots of money to educate their children. If they leave, that educational investment appears wasted. The title of a *Columbus Dispatch* article on the subject—“Ohio Grads Take Diplomas and Run”<sup>3</sup>—neatly captures this view. The article quotes a local foundation official: “We need our best

and brightest to invest their energy and future in Ohio.” If grads leave Ohio, the argument runs, the state loses its return on investment.

There's an emotional component, too. Not only is brain drain seen as an economic loss; it is viewed as a form of rejection, even

betrayal. For example, when NBA star LeBron James famously left the Cleveland Cavaliers in 2010 to sign with the Miami Heat, team owner Dan Gilbert thundered: “As you now know, our former hero, who grew up in the very region that he deserted this evening, is no longer a Cleveland Cavalier.... The good news is that the ownership team and the rest of the hard-working, loyal, and driven staff over here at your hometown Cavaliers have not betrayed you nor NEVER will betray you.... This shocking act of disloyalty from our home grown ‘chosen one’ sends the exact opposite lesson of what we would want our children to learn. And ‘who’ we would want them to grow-up to become.”<sup>4</sup>



Halting ‘brain drain,’ or the migration of educated residents away from an area, has become a key part of the talent strategy for U.S. cities, regions, and states.”

## II. How to Think—and Act—About Brain Drain

Halting brain drain has become a key part of the talent strategy for cities, regions, and states. There are no comprehensive spending statistics available on anti-brain drain initiatives. In some cases, the

“stopping brain drain” label is applied to projects with other, hidden motivations, such as subsidizing professional sports teams or well-connected developers. Yet it is easy to find anxiety about brain drain almost everywhere—in some of America’s most successful places, as well as in distressed areas.

One notable case is Michigan, where former governor Jennifer Granholm created a project, “Cool Cities,” to apply the theories of economist Richard Florida to reverse brain drain in the Wolverine State. The initial Cool Cities report stated: “At the ‘State of the State’ address, Governor Granholm made it known to all of Michigan that her administration would pursue an initiative to create ‘Cool Cities’ throughout the state, in part as an urban strategy to revitalize communities, build community spirit, and most importantly, retain our ‘knowledge workers’ who were departing Michigan in alarming numbers.”<sup>5</sup>

In Indiana, many studies have also sounded the alarm about brain drain. One study by the Indiana Fiscal Policy Institute found that Indiana retains 30 percent fewer college grads than other states.<sup>6</sup> Since 2000, organizations in the state have spent nine figures on various brain-drain initiatives, much of it in the form of grants to universities.

In Ohio, Eric Fingerhut, former chancellor of the University System of Ohio, set retention as one of his personal success metrics: “ ‘But this,’ he said, pointing to the next objective, ‘Keeping graduates in Ohio,’ ‘this is all new to higher education. Isn’t this the mayor’s job, the chamber of commerce’s job? No, it’s our job, and we have ways to do this.’ Fingerhut promises to persuade 70 percent of graduates to stay in Ohio—roughly the same percentage that now leaves. ‘We own this metric now, and that’s a radical departure,’ he said.”<sup>7</sup>

Chicago, the city that the rest of the Midwest most worries about losing its brains to, also worries about brain drain, particularly the loss of tech talent to Silicon Valley. *Crain’s Chicago Business* quoted Mayor Rahm Emanuel discussing the people “who made their start in Illinois, but made their reputations and fortunes in Silicon Valley,” as he announced a major push to create tech jobs locally to retain talent.<sup>8</sup>

In 2014, the website Curbed worried that the harsh winter “polar vortex” was causing a brain drain from Chicago.<sup>9</sup> In 2003, the Boston Chamber of Commerce commissioned the Boston Consulting Group to create a study, “Preventing a Brain Drain: Talent Retention in Greater Boston.”<sup>10</sup> These are just some of the ways in which states and cities think about and respond to the idea of brain drain.

### III. Brain Drain—A Defeatist Mind-Set Rooted in Fear

At its heart, brain drain is a concept inspired by the fear of losing what communities tend to emotionally value most: their children and young people. Brain drain ignores gains and thinks only of losses, assuming a zero-sum worldview.

A trope of the motivational industry is to ask, “Do you have a scarcity mentality or an abundance mentality?”<sup>11</sup> Fear of brain drain derives from a scarcity mind-set. Because of its obsession with losing locals, brain drain implies that a city or state cannot attract residents who were not born there or did not attend school there. That place’s current talent base is all it has, the argument goes, and therefore the only way to grow human capital is to educate and retain people who reside there.

The belief that only native residents could possibly choose a particular city or state to live in is a sign of a community that has lost faith in itself. By contrast, while America’s talent hubs also fret about brain drain (anxiety about retention is universal), they are confident in their ability to attract global talent. Silicon Valley was not built on retaining the graduates of Palo Alto High School. Yes, local institutions such as Stanford play a key role in the tech industry; but Bay Area talent is sourced, overwhelmingly, from the global, not the local, best and brightest.

Such places know that an important factor in evaluating a business opportunity is market size: How big is the target market? Applying this to talent, brain drain focuses resources on a comparatively small market: the local one. Metro Buffalo, for example, has a population of about 1.1 million,<sup>12</sup> while the U.S. population is 316 million. In other words, Buffalo’s local market is only 0.35 percent of the national one, to say nothing of the global market. Communities obsessed with brain drain



target their small-pond market; those with more self-confidence target a much larger potential talent base.

When a community fails to believe in itself and falls prey to fear, it begins to behave not only defensively or irrationally, but perversely.

Consider Indiana University's School of Medicine, which is proposing to build a full medical campus in Evansville. This would enable students to become fully trained physicians without having to study or complete a residency in Indianapolis, by far the state's biggest city. From birth to board-certified doctor, a local kid would never have to leave Evansville. State Representative Holli Sullivan approves: "The campus will help control the 'brain drain' in keeping physicians in the South-western Indiana area and in the state."<sup>13</sup> Adds Sullivan, "I will do my best as a representative from my district to be a key player in making sure that we really focus on how this is really important for our whole state as far as physician retention."

Thus it is that a university—an institution chartered with expanding young people's minds and opportunities—becomes complicit in a plan to circumscribe the possibilities of Evansville's children by trying to ensure that they never discover the world beyond their hometown.

What futures are curtailed in the name of stopping brain drain? The tragedy of Rust Belt places like Evansville is not that they failed but that they have too often succeeded in their quest—to the detriment of community and individuals alike. In many cases, as Section IV will show, the places that fret most about brain drain are not losing people and are actually gaining college graduates.

## IV. Shrinking Cities Have Low Out-Migration and Are Gaining Brains

This brings us to the biggest problem with brain drain: it often is not real, especially in urban areas. Brain drain is frequently assumed, not demonstrated—or demonstrated with metrics that tell an incomplete story.

Consider Buffalo. The population of metropolitan Buffalo dropped by 3 percent, or 35,000 people, between 2000 and 2013.<sup>14</sup> Over that period, the region ranked a dismal 49<sup>th</sup> for percentage population growth among the 52 largest U.S. metro areas (those with more

than a million residents). Only Detroit, Cleveland, and New Orleans performed worse. Since 2010, Buffalo has lost 1,200 residents and is 51<sup>st</sup> in population growth among large metro areas,<sup>15</sup> with net domestic migration of -8,500.<sup>16</sup>

The conventional narrative suggests that Buffalo's population is falling because people—especially the young and educated—are voting with their feet and fleeing a failing region. But according to my analysis of IRS data, Buffalo has one of the lowest out-migration rates in the U.S.: 20.91 per 1,000 residents in 2011, for example (50<sup>th</sup> among large metro areas).<sup>17</sup> This rate has been low since at least the mid-1990s.

Buffalo's problem is not that many people are leaving (they aren't). It is that even fewer are coming. In 2011, Metro Buffalo's in-migration rate was 17.68—again, third from bottom. While the IRS data cannot be analyzed exclusively for college graduates, Census Bureau data confirm that Buffalo has low out- and in-migration of educated residents. Even cities such as Memphis and Birmingham, hardly renowned as global-talent magnets, attract significantly more college graduates than Buffalo.

With both low out- and in-migration, Buffalo has the highest share of born-and-bred residents, 81.7 percent, of all large U.S. metro areas.<sup>18</sup> Far from losing brains, Buffalo is gaining them: from 2000–13, the number of Buffalo residents holding a bachelor's degree, or higher, increased by more than 53,000, a nearly 7-percentage-point increase. Indeed, over this period, Buffalo placed seventh among large metro areas in its percentage-point increase in college-degree attainment.<sup>19</sup> All this suggests that Buffalo enjoys excellent retention.

This, too, may explain why, although its headline performance in population and job growth is weak, Buffalo's per-capita GDP has increased by 15.9 percent since 2001—again, seventh-best among large U.S. metro areas.<sup>20</sup> Buffalo, in other words, has experienced an increase in human-capital growth without population growth. Buffalo does face serious demographic and economic challenges; but traditional measures of health, such as population growth and net migration, tell only part of the story. If Buffalo tried to address its problems by emphasizing brain drain, the city would be missing the point.

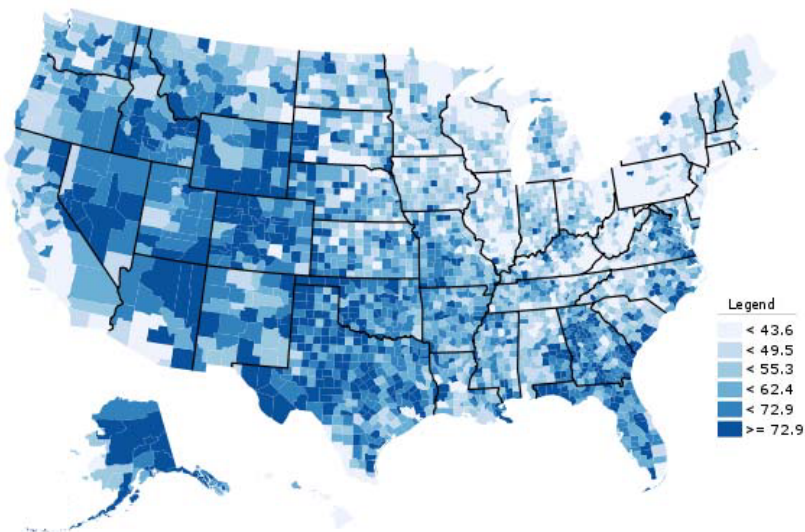
**Figure 1** reveals 2011 out-migration rates for all U.S. counties. It shows significant complexity in the migration story. Certain states considered successful, such as Texas, Colorado, and Georgia, experience high out-migration. The lowest rates of out-migration are found in a band running across Appalachia into western New York (including Buffalo) and the Rust Belt.

In underperforming cities, regions, and states, too little out-migration may thus be a bigger problem than too much. With limited outflow and even less inflow, such areas have become what geographer Jim Russell calls “cul-de-sacs of globalization,” cut off from the demographic and economic flows that power development.<sup>21</sup>

## V. Exporting Talent Can Stimulate Economic Growth

To some degree, brain drain may stimulate local economic development. AnnaLee Saxenian of the University of California, Berkeley, has written extensively about what she terms the “New Argonauts,”<sup>22</sup>

**Figure 1. Out-Migration Rate, per Thousand Population, 2011**



Source: Author's analysis of IRS county-to-county migration data

immigrants from places such as India and Taiwan who became successful in Silicon Valley's tech industry, and then returned home to become key players in establishing their countries' own tech industries. Saxenian observes: "Developing economies typically have two major handicaps: they are remote from the sources of leading-edge technology and distant from developed markets and the interactions with users that are crucial for innovation.... As foreign-born, but U.S.-trained engineers transfer know-how and market information to their countries of origin, and help jump-start local entrepreneurship, they are allowing their home economies to participate in the information-technology revolution." Migration allows individuals to acquire expertise and establish

networks to the global economy. "Brain circulation," Saxenian suggests, is a more accurate description of the phenomenon.

One such example involves Lisbon's booming call-center industry, where companies such as Teleperformance have added thousands of jobs in recent years,

despite Portugal's struggling economy. Teleperformance CEO João Cardoso attributes his company's success partly to an exodus from Portugal, noting: "In the 1960s, we experienced huge waves of people emigrating to Germany and France. But a large number of people have returned. As a result, we have a lot of people who speak German and French at a native level."<sup>23</sup> Portugal, in other words, benefited from the skills and experience acquired by Portuguese émigrés.

Or consider President Obama's executive amnesty for millions of illegal immigrants, many Mexican. Did Mexican president Nieto react angrily, denouncing the U.S. for stealing away his country's citizens by illegal means? Not at all. Instead, he called the move "very intelligent."<sup>24</sup> Nieto understands that, for the aforementioned reasons, Mexicans moving to the U.S. is good for Mexico. Similarly, Brazil created a program, Science Without Borders, to send 200,000 students abroad to study in STEM fields. To date, Brazil has spent \$2 billion on the program.<sup>25</sup>



Brain drain obscures the fact that the 'brain' that was 'lost' may never have existed in the first place without leaving the community: the act of migrating enabled the development of human capital."

Such wisdom is frequently ignored in the United States. One reason that Buffalo, Cleveland, and other Rust Belt cities have struggled economically is that they have been cut off from information flows and expertise that are a product of migration. Such places certainly have too little in-migration—and, perhaps, insufficient out-migration. (Note, again, metro Buffalo's 81.7 percent share of residents born in New York State.) Rather than fight brain drain, a better strategy may be to encourage more of it: to decrease insularity and to better connect to global knowledge and economic networks.

One American city attempting to apply these international lessons is Cleveland, where Cleveland State University established the Center for Population Dynamics, inspired by a 2013 paper, "From Balkanized Cleveland to Globalized Cleveland,"<sup>26</sup> which articulated the following theory of change:

Cleveland didn't decline because industry left. Cleveland didn't decline because people left. Vacant houses are not Cleveland's cross to bear. Cleveland's ultimate problem is that it is cut off from the global flow of people and ideas. Cleveland needs to be more tapped into the world.... Often, Cleveland's interconnectivity is weaved as thus: college graduates hailing from Greater Cleveland move to global city and experience neighborhoods filled with outsiders. A successful global city network is one of weak ties and openness to people living outside of the community. This environment socializes Cleveland expatriates for knowledge transfer, as well as inter-regional and international trade. Think of an act of migration, then, as a laying down of human "fiber optics" that connect two points in space.... Upon repatriation to Cleveland, return migrants bring with them this social orientation that opens up certain neighborhoods to globalization. The neighborhood's evolving interconnectedness makes the area more attractive to outsiders who have no connection to Cleveland, pulling more globally-connected citizens—be they native newcomers or the foreign born—into the city.

## VI. Migration: A Key Form of Human-Capital Development

Given the well-known link between education and income, people rightly focus on education when thinking of human-capital development. And everyone understands that people often move in order to access superior economic opportunities elsewhere. But fewer appreciate that migration is a key form of human-capital development in its own right.

My personal story is instructive. I grew up a few miles outside Laconia, a rural town in southern Indiana (a 45-minute drive from Louisville, Kentucky) with a population of 50. At 18, I left home for university and never returned. I am now a senior fellow at the Manhattan Institute.

It would be easy to see me as the living embodiment of brain drain. However, had I returned to my hometown, even after earning a degree, what would my professional value be today? Most of my skills and expertise, as well as my global network of connections, were acquired by virtue of my life and work outside Indiana. Had I stayed in southern Indiana, or even nearby in small, urban Louisville (a region similar in size to metro Buffalo), my professional potential would have been stunted, just as it would have been had I not attended university.

Brain drain obscures the fact that the “brain” that was “lost” may never have existed in the first place without leaving the community: the act of migrating enabled the development of my human capital.

In 2014, One Southern Indiana, a regional chamber of commerce near Laconia, retained me to do an economic development study of the area. In early 2015, I was the keynote speaker at *Governing* magazine’s “Summit on Performance and Innovation,” hosted by the mayor of Louisville. While there, I also spoke to the Louisville chapter of the Urban Land Institute and to a conference on rural economic development in southern Indiana. What is the likelihood that I would have been selected to give any of these talks, had I stayed locally (or, if somehow selected, what is the likelihood that I would have had much insight to contribute)? Very low.

Skills acquired via migration can later be repatriated and made available to sending regions, through return migration and by expertise provided from outside. (After four seasons in Miami—which included

four consecutive NBA Finals appearances, two championships, and two league MVP awards—LeBron James returned, via free agency, to his hometown Cavaliers for the 2014–15 season.)<sup>27</sup> Exporting talent may often be more valuable to the sending community, not less.

## VII. What Human-Capital Policies and Initiatives?

In developing policies and initiatives rooted in a more robust view of talent, the first step is to take a life-cycle view of human-capital development that incorporates an understanding that out-migration is natural for a certain percentage of natives. The next step: profit from out-migration.

How universities and professional-services firms view their alumni may be instructive. These organizations understand that their alumni networks are one of their most important assets. How might a city, region, or state do the same?

Start with finding ways to stay civically engaged with people who leave. At present, this is rarely done beyond existing personal networks, such as family. Former Boston mayor Tom Menino observed: “Every university in



The successful out-migration stories of Taiwan, India, and many other countries suggest that the benefits of wiser thinking about talent, and talent export, hold significant upside.”

the world promotes itself through the personal relationships of the people who studied there. But to my knowledge, no city in the world has ever attempted to create the same kind of massive, information-sharing community on behalf of a city.”<sup>28</sup> In 2009, Menino launched Boston World Partnerships to attempt this, though the organization was shuttered after only three years.<sup>29</sup>

A more successful, focused effort was developed in Indianapolis. IndyXmas,<sup>30</sup> an annual holiday party hosted by TechPoint, the city’s technology industry consortium, targets expatriates who are in town visiting family for the holidays. Hosted at a local co-working space, attendees mix and mingle with local tech firms and workers, with the goal

of having fun, building relationships, showcasing growth in the local tech industry, and, the city hopes, persuading people to move back to Indianapolis to work.

Louisville has staged out-of-town events to showcase the city to expatriates. Using IRS data, a University of Louisville researcher undertook a migration analysis to determine which cities were popular destinations for out-migrating Louisvillians. The mayor and local businesses then hosted “Louisville Reunion” events in cities such as Tampa—featuring Kentucky products, such as bourbon<sup>31</sup>—with attendees pitched on moving back to Louisville.

These events were targeted at former residents; other cities have taken a more aggressive marketing approach, attempting to lure people with loose or no affiliation. Chicago created its Think Chicago<sup>32</sup> event in conjunction with marquee local events, such as Chicago Ideas Week and Lollapalooza. The city invites top technology students from around the country for three days to be immersed in the city’s tech scene and attend the associated showcase event, where Mayor Emanuel personally pitches visiting students to build their careers in Chicago, instead of Silicon Valley or elsewhere.

In Las Vegas, Zappos CEO Tony Hsieh received enormous positive press for his “Downtown Project,”<sup>33</sup> aimed at reinventing the city’s bleak downtown. This overflowing press coverage resulted, in part, from Hsieh’s unique marketing approach, which included setting aside a block of apartments in a downtown high-rise for attendees to use as “crash pads” (effectively free hotel rooms for invitees to see what he was doing).<sup>34</sup>

Realizing that many people enjoy visiting Las Vegas but do not necessarily want to live there, Hsieh also developed and pitched an idea called “subscribe to Las Vegas,”<sup>35</sup> to persuade such people to have a part-time presence in downtown Las Vegas. While the Downtown Project has since largely floundered—partly because its goal was unrealistic—Hsieh was successful in generating enormous publicity for his project, including getting many people who otherwise never would have given downtown Las Vegas a second thought.

There are many other ways to market cities, regions, and states and leverage civic-diaspora networks. Again, much as universities and professional-services firms proactively stay in contact with



alumni, such places should do the same. This can be as simple as a low-volume e-mail list.

Domestic expatriates can organize local clubs tied to their native city, such as Detroit Nation.<sup>36</sup> Such groups could be used to notify members of hometown news, job openings, and upcoming events. Mayors and governors routinely travel out of state to speak at events, attend fund-raisers, and meet with businesses. On such already scheduled trips, they could set aside time for informal receptions with former residents, with priority given to key global hubs like New York and the Bay Area.

Given that diaspora networks play a vital role in facilitating access to global knowledge networks, the destinations of out-migrants matter. High schools should ensure that their students consider colleges situated in the recruiting sights of firms based in those same global hubs. Indiana, for instance, already sends lots of residents to midwestern schools, who then get drawn into Chicago's workforce. Indiana would benefit from more connectivity to coastal markets, beginning with local students going to universities where coastal firms recruit.

## Conclusion

The place-based development paradigm is widely established. The development of policies that take a more sophisticated view of human capital is in its infancy. These are some early efforts and ideas, but the field is ripe for innovation and development. The successful out-migration stories of Taiwan, India, and many other countries suggest that the benefits of wiser thinking about talent, and talent export, hold significant upside. U.S. cities, regions, and states that get it right—and get there first—may set themselves apart in the marketplace.

## Endnotes

1. See <http://cityobservatory.org/talent-and-prosperity>.
2. According to the OECD, the term was coined by the Royal Society to describe the exodus of U.K. scientists to the U.S. in the early 1960s. See [http://www.oecdobserver.org/news/archivestory.php/aid/673/The\\_brain\\_drain:\\_Old\\_myths,\\_new\\_realities.html](http://www.oecdobserver.org/news/archivestory.php/aid/673/The_brain_drain:_Old_myths,_new_realities.html). Brain drain draws 4 million hits on Google and has its own Merriam-Webster entry ("The departure of educated or professional people from one country, economic sector, or field for another usually for better pay or living conditions"), <http://www.merriam-webster.com/dictionary/brain%20drain>.
3. See [http://www.dispatch.com/content/stories/local/2009/06/16/brain\\_drain.ART\\_ART\\_06-16-09\\_A1\\_MLE6N0F.html](http://www.dispatch.com/content/stories/local/2009/06/16/brain_drain.ART_ART_06-16-09_A1_MLE6N0F.html).
4. See [http://www.huffingtonpost.com/2010/07/08/dan-gilbert-letter-lebron\\_n\\_640318.html](http://www.huffingtonpost.com/2010/07/08/dan-gilbert-letter-lebron_n_640318.html).
5. "Michigan Cool Cities Initial Report," Office of the Governor, State of Michigan, December 23, 2003.
6. See <http://www.purdue.edu/uns/html3month/2004/0407.Persp.braindrain.html>.
7. See <http://highereducation.org/crosstalk/ctbook/pdfbook/OhioBrainDrainBookLayout.pdf>.
8. See <http://www.chicagobusiness.com/article/20131105/BLOGS11/131109934/how-chicagos-tech-brain-drain-might-be-slowed-reversed>.
9. See <http://chicago.curbed.com/archives/2014/12/19/is-the-polar-vortex-behind-a-chicago-brain-drain.php>.
10. See <https://bostonchamber.com/wp-content/uploads/2012/01/2003-brain-drain.pdf>.
11. E.g., Stephen Covey said that an abundance mind-set was one of three necessary attributes for implementing principle four: "think win/win." See <https://www.stephencovey.com/7habits/7habits-habit4.php>.
12. Census population estimates, 2013.
13. See [http://www.courierpress.com/news/politics/medical-school-funding-tops-list-for-local-lawmakers\\_73975535](http://www.courierpress.com/news/politics/medical-school-funding-tops-list-for-local-lawmakers_73975535).
14. Census population estimates, latest revised estimates for 2000s (updated to reflect 2010 census results) and vintage 2013 population estimate release, rounded.
15. Census, vintage 2013 population estimates, rounded.
16. Census, vintage 2013 population estimates, components of population change, rounded.
17. Unless otherwise specified, all migration information is based on IRS county-to-county migration data, as analyzed by the author.
18. Census, American Community Survey, table B05002, 2013 one-year survey.
19. Census 2000, SF3, table P37; and American Community Survey, table B15002, 2013 one-year survey.
20. Bureau of Economic Analysis, Regional Economic Accounts.
21. See <http://www.psmag.com/books-and-culture/bright-flight-silicon-valley-78442>.
22. See [http://people.ischool.berkeley.edu/~anno/Papers/IMF\\_World\\_Bank\\_paper.pdf](http://people.ischool.berkeley.edu/~anno/Papers/IMF_World_Bank_paper.pdf).
23. See <http://www.dw.de/lisbon-call-center-boom-draws-eu-guest-workers/a-18269637>.
24. See <http://www.washingtontimes.com/news/2015/jan/6/pena-nieto-of-fers-obama-help-amnesty-documents/?page=all>.


25. See <http://www.theatlantic.com/education/archive/2014/12/when-brazil-sends-its-students-abroad-everyone-wins/383466>.
26. See <http://www.urbanophile.com/wp-content/uploads/2013/12/From%20Balkan-ized%20Cleveland%20to%20Global%20Cleveland%20A%20White%20Paper.pdf>.
27. See <http://www.si.com/nba/2014/07/11/lebron-james-cleveland-cavaliers>.
28. See <http://www.urbanophile.com/2009/01/06/urban-alumni-networks>.
29. See <http://commonwealthmagazine.org/uncategorized/017-boston-world-partnerships-calls-it-quits>.
30. See <http://www.wthr.com/story/27601164/consortium-hosting-party-to-show-off-indys-tech-skills?clienttype=generic&mobilecbypass>.
31. See <http://www.tampabay.com/news/business/economicdevelopment/louisville>.
32. See <http://www.thinkchicago.net>.
33. See <http://www.downtownproject.com>.
34. I was one of the people who received a personal invitation from Hsieh to take advantage of this.
35. See <http://www.bloomberg.com/bw/articles/2014-12-30/zappos-ceo-tony-hsieh-las-vegas-startup-paradise>.
36. See <http://www.detroitnews.com/story/opinion/2014/10/16/letter-detroit-nation-connects-expats/17321981>.









The background of the entire page is a stylized, red line-art map of a city grid. The map features a complex network of streets, blocks, and irregular shapes representing buildings or parks. The lines are thin and red, set against a white background. A solid blue horizontal band runs across the middle of the page, partially obscuring the map. The text is centered within this blue band.

“This collection of essays brings together the best ideas from scholars with expertise across a broad spectrum of urban issues. The common theme of the papers is to innovate, evaluate, and leverage the remarkable private talent that is so abundant in America’s great cities. Public capacity is sharply limited; the ingenuity of urban entrepreneurs seems practically boundless. Local governments should be more entrepreneurial and do more to use the talents of the entrepreneurs around them.”

*Edward L. Glaeser*