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# SHAW SYMPOSIUM ON URBAN COMMUNITY ISSUES

Equitable Investment in Infrastructure and Housing



# About the Urban Land Institute

**THE URBAN LAND INSTITUTE** is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide.

ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 80 countries. The extraordinary impact that ULI makes on land use decision-making is based on its members sharing expertise on a variety of factors

affecting the built environment, including urbanization, demographic and population changes, new economic drivers, technology advancements, and environmental concerns.

Peer-to-peer learning is achieved through the knowledge shared by members at thousands of convenings each year that reinforce ULI's position as a global authority on land use and real estate. In 2020 alone, more than 2,600 events were held in cities around the world.

Drawing on the work of its members, the Institute recognizes and shares best practices in urban design and development for the benefit of communities around the globe.

More information is available at [uli.org](http://uli.org). Follow ULI on Twitter, Facebook, LinkedIn, and Instagram.

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## About the ULI Curtis Infrastructure Initiative

**THE ULI CURTIS INFRASTRUCTURE INITIATIVE** aims to build a movement to promote infrastructure solutions that are equitable and resilient and that enhance long-term community value. By creating new global and strategic partnerships, providing technical assistance, building capacity at the local level, and acting as a feedback loop to promote the most innovative and effective best practices, the Curtis Infrastructure Initiative will ensure the success of ULI's mission to positively shape the future of the built environment for transformative impact in communities worldwide. A thoughtful approach to infrastructure planning and implementation addresses the pressing needs of today and improves diverse communities for the long term.

A building block for communities everywhere, infrastructure encompasses transportation, critical utilities, and the means of communication. But beyond these foundational physical and digital structures and facilities, infrastructure broadly includes the key spaces that build community—anchor institutions, the civic commons, and housing. Because infrastructure provides the means for connection, creative placemaking, and opportunity, smart infrastructure investment is an imperative for our cities now and in the future.

Together we can build the future of equitable and resilient communities. Learn more about the Curtis Infrastructure Initiative at [uli.org/infrastructure](http://uli.org/infrastructure).

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## About the ULI Terwilliger Center for Housing

The goal of the **ULI TERWILLIGER CENTER FOR HOUSING** is to advance best practices in residential development and public policy and to support ULI members and local communities in creating and sustaining a full spectrum of housing opportunities, particularly for low- and moderate-income households.

Established in 2007 with a gift from longtime member and former ULI chairman J. Ronald Terwilliger, the center integrates ULI's wide-ranging

housing activities into a program of work with three objectives: to catalyze the production of housing, provide thought leadership on the housing industry, and inspire a broader commitment to housing. Terwilliger Center activities include developing practical tools to help developers of affordable housing, engagement with members and housing industry leaders, research and publications, a housing awards program, and an annual housing conference.

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# Letter from the Chair

September 27, 2021

It was my pleasure to chair the 2021 ULI Charles H. Shaw Virtual Symposium on Urban Community Issues. The Shaw Symposium is an annual forum endowed by former ULI chairman Charles “Charlie” H. Shaw that brings together a selection of leading national experts and practitioners to address the challenges and opportunities of urban neighborhoods.

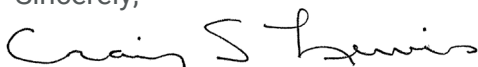
The 2021 virtual event focused on the nexus of infrastructure, housing, and equity. As the United States begins to emerge from a tumultuous year, Congress debates a series of infrastructure packages, and communities increasingly shift their focus to recovery, it is important to look to the future informed by the knowledge of the past. Many of the challenges facing today’s cities and neighborhoods are linked to the decisions made decades ago. These decisions include positive, transformational investments in transit, parks, and other community assets that have been critical to restoring urban vibrancy. However, they also include the disastrous legacy of redlining, segregation, and the intentional dismantling of neighborhoods—all of which have produced generational harm for minority households and Black families in particular.

A new, more equitable approach to regional planning and investment is critical, not only because it is morally just, but also because it is a key aspect of economic growth and opportunity. If the United States is to compete in a rapidly changing global economy, we must build our cities, towns, suburbs, and regions in a manner that enables and empowers all people to meet their full aspirations and potential. As such, a distinguished group of 2021 Shaw Symposium attendees elevated leading practices that have informed this publication, which includes high-level recommendations and a framework to assist local communities in designing and implementing infrastructure investments. The goals of this framework are to achieve the following:

- Enable equitable access to transportation, particularly transit.
- Improve access to and affordability of housing for moderate- and lower-income households.
- Reconnect and reinvigorate neighborhoods damaged by past infrastructure investments.
- Address historical disparities in community investment, particularly those based on race, and ensure equitable access to the economic opportunities and the benefits of development.
- Improve health, enhance environmental sustainability, and reduce climate risks.

We hope that this report will help inform the housing- and infrastructure-related conversations that are to come at the federal, state, regional, and local levels.

Sincerely,



Craig Lewis  
Chair, ULI Curtis Infrastructure Initiative  
Principal, CallisonRTKL-US

# Introduction

A critical relationship exists between housing, the health of neighborhoods, and the development of core infrastructure (including, but not limited to, transportation, water/sewer, and public space). The structure of the built environment influences where people decide—or can afford—to live, how they get to work or school, and where they shop and play. National, regional, and local planning decisions influence the quality of the air we breathe and the water we drink. [Connected neighborhoods and transportation networks link businesses with their workforce and people with economic opportunities.](#) Conversely, [disconnected or segregated communities can inhibit economic growth, exacerbate wealth disparities, and inhibit upward mobility,](#) particularly for [historically marginalized populations.](#)

Increasingly, the availability and attainability of housing affordable to the full income spectrum are being discussed as part of a region's core infrastructure. According to a [2021 survey of ULI members by the Curtis Infrastructure Initiative,](#) ULI members see increasing affordable housing as a top priority, along with adapting to and mitigating climate change, increasing renewable and green energy, maintaining existing infrastructure, and improving public transportation. Housing affordability, changes as a result of COVID-19 such as working from home, and climate change were the most mentioned real estate trends that would affect infrastructure investment over the next five years.

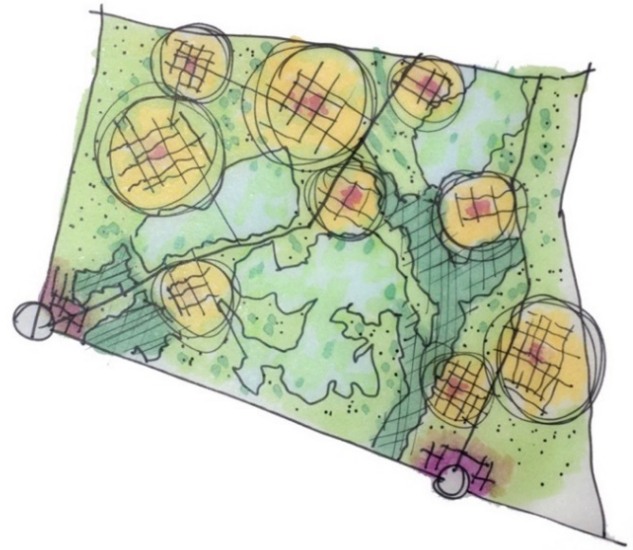
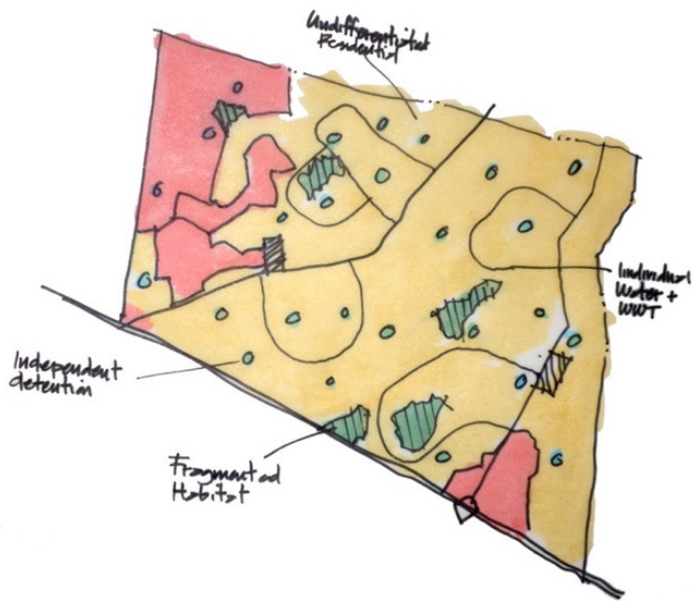
Meeting the joint housing and infrastructure challenges of the 21st century requires resources. Since the advent of the automobile and the beginning of major federal investment in road infrastructure, the “path of least resistance” for accommodating growing regions and economies has often been sprawl. Aside from the environmental consequences of such development

## Explore More: Background Materials for the 2021 Shaw Symposium

As part of the briefing package for the Shaw Symposium, attendees were provided with materials and appendixes with examples of recent and ongoing efforts to encourage more equitable investment in housing and infrastructure:

- Shaw Symposium Briefing Book
- Attachment A: “2021 Shaw Symposium Case Studies: Equitable Transit-Oriented Development”
  - Planning, Vision, and Coordination: Mile High Connects and the Denver Regional TOD Fund
  - Incremental Investment Approaches: Transportation Demand Management and Mixed-Income Housing at Casa Arabella (Oakland, CA)
- Attachment B: “People-Centric Funding Model Workshop Background Brief”: Case Study Excerpts from the ULI Curtis Infrastructure Initiative Workshop
  - Creative Infrastructure Financing Solutions: The Cap at Union Station (Columbus) and Capital Crossing (D.C.)
  - Large-Scale/Corridor-Level Redevelopment: 11th Street Bridge Park, Washington, D.C.
- Attachment C: ULI Case Study
  - Creative Transit-Oriented Housing Financing: Paseo Verde, Philadelphia

These materials and the recording of the [virtual session](#) are available for download on Knowledge Finder.



JIM HEID/JULI

These images show two different approaches to urban development patterns in St. Tammany Parish, Louisiana, as proposed in a [2015 ULI Advisory Services report](#), that accommodate the same level of growth. The first is a fragmented approach that is typical of existing development patterns, and the second is a smart growth approach that is more interconnected, resilient, and fiscally sustainable.

patterns, additional sprawl is likely to have [negative fiscal implications](#) at the national, regional, and local levels. Within the United States, the G20 estimates at least \$12 trillion in investments is needed. Using existing baseline funding trends, only \$8.5 trillion is anticipated to be funded, which leaves a \$3.8 trillion investment gap.<sup>1</sup> The numbers identified by the G20 do not account for additional investment required to maintain and grow needed social infrastructure, such as affordable housing, available child care services, and stronger anchor institutions that are fundamental to build transformative spaces that build community and place. Given the considerable need for infrastructure investment and other competing budgetary priorities, focusing on fiscally sustainable development patterns is critically important.

As this report discusses, filling the financing gap will require investments from all levels of government, and the specific tools and funding approaches used by state and local governments will vary. Federal policy and financing tools are a critical component of the housing and infrastructure finance systems, and influence the choices that lower levels of government make (for better

and worse). Recently, [the Biden-Harris administration](#), several U.S. federal agencies (across several administrations), and some members of Congress have signaled that they would be prioritizing investments, policy, guidance, regulations, and other activities with the primary goal of adapting to and mitigating changes in climate as well as addressing racial and economic disparities. This strategy includes increasing investments in the creation of more attainable housing, supporting better land use at the local level, and improving transportation connectivity.

Some progress has already been made. The U.S. Department of Housing and Urban Development (HUD) has published an [interim final Affirmatively Furthering Fair Housing rule](#), designed to meet the statutory requirements of the Fair Housing Act of 1968 to proactively dismantle segregation and barriers to housing choice. The U.S. Department of Transportation is working to finance both transit infrastructure and transit-oriented development (TOD) through updated eligibility guidance for [Railroad Rehabilitation and Improvement Financing](#) and [Transportation Infrastructure Finance and Innovation Act](#) lending programs.



The Federal Transit Administration (FTA) has worked to advance TOD through technical changes and clarifications to revenue standards and eligible projects under the agency's [Joint Development Guidance](#). However, it remains to be seen whether legislative efforts (such as the pending bipartisan infrastructure investment and

transportation program reauthorization legislation; see text box) will proactively advance the goals of equitable and resilient investment in housing and infrastructure and the commitment by the Biden-Harris administration to support “shovel-worthy” projects (not just those that are shovel-ready).

## The Bipartisan Infrastructure Bill

In August 2021, the Senate passed the [Infrastructure Investment and Jobs Act of 2021](#), a legislative package that increased investment in infrastructure and reauthorized federal surface transportation programs. As of the time of this writing, the House of Representatives had not completed its consideration of the bill, and therefore the final components and policy details are subject to change.

If the Senate bill were to become law, it would result in \$1 trillion in spending over five years, representing an increase of about \$550 billion over current levels.<sup>2</sup> Supporters of the bill cited the increased resources for emerging challenges: broadband expansion, new clean energy funding, resilience investment, lead pipe replacement,<sup>3</sup> and active transportation safety improvements (walking, biking, micro-mobility).<sup>4</sup> The bill also included a (considerably scaled-back) program for reconnecting communities that were damaged and segregated by past transportation infrastructure projects. However, others criticized the amount of spending for automobile-oriented infrastructure and a lack of focus on land use, arguing that the bill's new investments in transit and multimodal options would be undermined by larger sums dedicated to highway expansion.\*

Given the flexibility in the use of funds that federal infrastructure programs have historically granted to states (primarily) and regions, the effectiveness of federal policy is substantially influenced by the decisions at lower levels of government. Even with the current prioritization of road spending in resource distribution, a state department of transportation (DOT) or metropolitan planning organization (MPO) could advance environmental, resilience, and equity goals if it took a “fix-it-first” approach, prioritized traffic calming, dedicated lanes to transit, or enhanced gridded networks (among other measures). Conversely, even the most transit- or multimodal-focused federal bill would be undermined if MPOs and state or local transportation agencies continue to prioritize single-occupant vehicular travel. This underscores the importance for continued “bottom-up” education and engagement.

*\*Prominent critics of the bill included [City Observatory](#), [NACTO](#), [Shared Use Mobility Center](#), [Transportation for America](#), and [Strong Towns](#).*

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# Shaw Symposium 2021: Key Themes and Takeaways

The Shaw Symposium featured a series of presentations, open discussions, and breakout conversations on the critical housing and infrastructure challenges facing the United States. Informed by those conversations and other background research on these topics, this report highlights 10 key takeaways for policy, finance, and practice moving forward.

## **1. Previous models of planning, financing, building, and maintaining the core components of communities had fundamental flaws.**

The federal, state, regional, and local planning processes of the 20th and early 21st centuries failed to adequately engage the full diversity of the population or consider the effects of investment on racial and social equity and the environment. The system disenfranchised and harmed minorities and other disadvantaged populations. In addition, the primary focus on vehicular travel increased greenhouse gas emissions, polluted communities, and made it harder to address the threat of climate change.

Nowhere was this more evident than in the post-World War II creation of segregated, suburban sprawl, accelerated by both private and Federal Housing Administration (FHA)-financed mortgages and federally funded highway investments that often sundered cities in two along racial lines.<sup>5</sup> Rather than using policy and funding to enable communities to evolve, adapt, and grow, tools of the state were used to radically transform the urban environment, in the process destroying wealth, harming the environment, and creating fiscally unsustainable development patterns.<sup>6</sup> The Interstate 35 corridor in Austin, Texas (see

sidebar), is just one example of a process that repeated itself across the country.

Even today, the tendency to revert to past models persists. Over the last several years, the nonprofit Strong Towns has highlighted the controversial planning process for the I-49 connector project in Shreveport, Louisiana, which would dramatically affect the predominantly Black Allendale neighborhood if constructed.<sup>7</sup> A proposed highway expansion plan in Houston would put at risk “more than 1,300 homes, businesses, schools, and places of worship.”<sup>8</sup> An interstate widening project near York and Harrisburg, Pennsylvania, will result in the full or partial seizure via eminent domain of about 200 properties, including the full acquisition of 60 residential and 27 commercial properties.<sup>9</sup> These projects fail to account for the human, community, and financial costs of these decisions, as well as the future costs associated with partially remedying the harms created.

## **2. The built environment needs repairs, focusing on both physical elements and restorative equity.**

Given the overwhelming infrastructure needs facing the United States, any concerted effort to address those needs requires a robust discussion of prioritization. Generally speaking, the fix-it-first mantra should apply. This includes repairing individual “pieces” of infrastructure (transit networks, bridges, buildings, and roads) to prevent calamity and preserve what already exists. The need to confront deferred maintenance and address changing conditions brought on by environmental factors was laid bare in the recent tragic collapse of a condominium tower in Surfside, Florida. However, a holistic definition of repair also refers

## Opportunities and Challenges for Repairing the Urban Fabric in Austin, Texas

With the I-35 highway that connects suburban areas to downtown Austin reaching the end of its useful life, stakeholders from the state, region, city, and local communities began envisioning the future for this corridor. Rebuilding I-35 presents the opportunity to reconnect neighborhoods that were separated along racial lines by the highway's initial construction.

In 2020, the I-35 Task Force led by Downtown Austin convened an Advisory Services panel (see [full report](#)) that resulted in recommendations for lowering portions of the elevated highway; creating connections and opening up developable land through “caps” and “stitches”; and focusing on creating a mixed-use, multimodal environment. This proposal (along with two other community-oriented proposals known as Rethink 35 and Reconnect Austin) would repair the urban fabric and increase the connectedness of historically segregated communities. Though such proposals carry considerable upfront costs, they would increase development opportunities and potentially enhance the city's long-term tax base.

However, this vision is not universally shared. A recent analysis commissioned by the state DOT questioned the viability of three community proposals that represented a change from the suburban commuter-oriented status quo for reasons related to costs and impact on travel patterns.<sup>10</sup>

Here, the fundamental disconnect between the respective groups' vision for the future becomes evident. Citing the potential for longer commuting times for suburban residents, the report states: “It does not seem realistic that people would be willing to do this. A much more likely scenario is that the jobs and population will grow differently across the region in response to long travel times between the Austin suburbs and downtown Austin. Some people will move closer to their existing job; others will move their job closer to their home. And because of our COVID-19 pandemic experience, we also know that some workers with flexibility will choose to not commute every day.”<sup>11</sup>

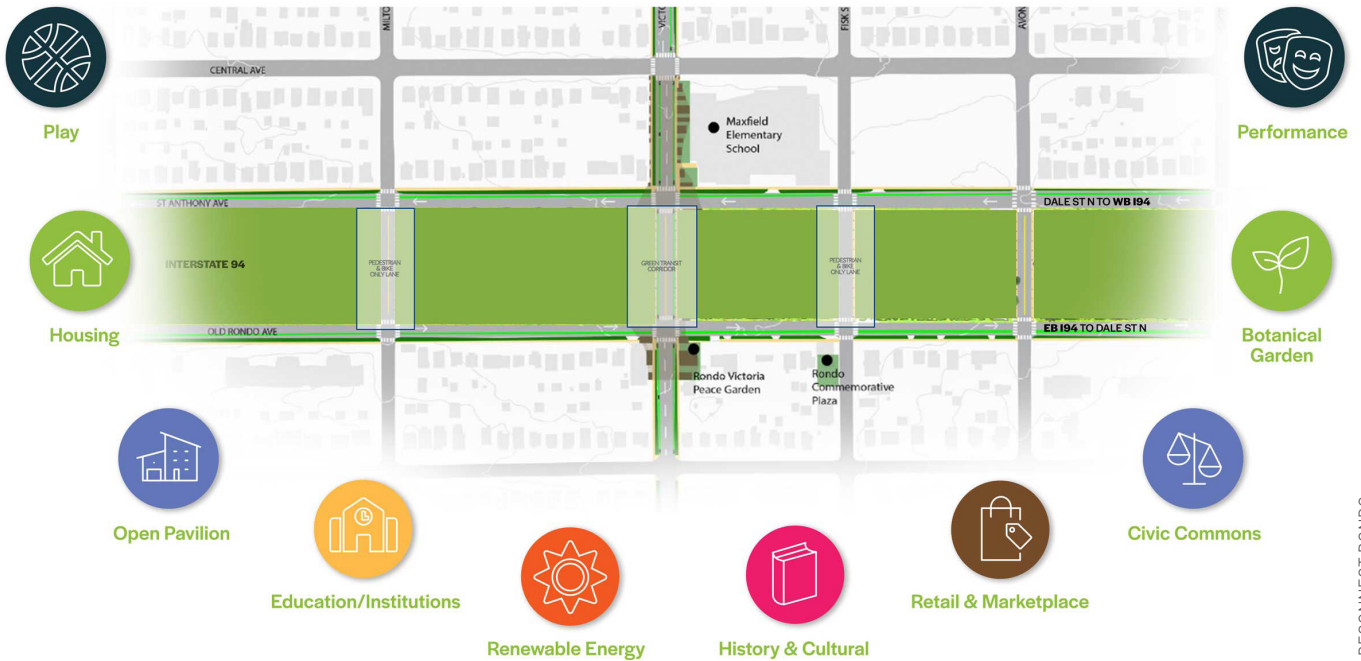
The report's implication is that this dynamic is a flaw, whereas a more forward-looking interpretation is that these plans would result in the type of change that is necessary to achieve social, economic, and environmental goals.

to overall systems: fixing gaps where infrastructure does not exist or other barriers are present (suburban retrofits, filling sidewalk gaps, fixing dangerous intersections, etc.).

Finally, the concept of “fix it first” must also apply to the need to remedy the harms created by past de facto and de jure discriminatory behavior. The Austin I-35 Advisory Services panel recommendations, Rethink I-35, and Reconnect Austin addressed those issues.

Another example is the Rondo community in St. Paul, Minnesota. When the interstate highway system was constructed in the 1960s, it went through the heart of Rondo, then home to 85 percent of St. Paul's African American residents. The highway not only obliterated the community and its social fabric, but it also extinguished [millions of dollars of generational wealth](#). There now is a proposal to restore this community by constructing a lid over Interstate 94. Keith Baker, executive director of ReConnect Rondo, summed up the

# AFRICAN AMERICAN CULTURAL ENTERPRISE DISTRICT



RECONNECT RONDO

Financing a more restorative approach for reconnecting St. Paul's Rondo neighborhood was the focus of a [2020–2021 Curtis Infrastructure Initiative grant](#). Learn more about this project and others at [uli.org/infrastructure](http://uli.org/infrastructure).

goal of this project during the [2020 Fall ULI Infrastructure Forum](#), saying: “We have an opportunity to put the social, cultural, and economic framework back together. It is almost like reassembling the old puzzle pieces. It is about the future and regeneration of the community.”

Beyond the interstate system, another example of repairing the legacy of past harm is found in Richmond, Virginia’s effort to “move from redlining to greening” by addressing environmental challenges, tree canopy, and the urban heat island effect in historically racially segregated neighborhoods.<sup>12</sup> These efforts require both top-down leadership and true, representative engagement with affected communities. With a focus on restorative investment, it is also important to consider what success looks like, and to plan for it. This includes proactively working to address displacement concerns through the preservation and creation of affordable housing and broadening opportunities for ownership, wealth creation, and creating spaces that are designed and created for those communities most impacted.

### 3. The status quo model of housing and infrastructure investment must evolve to meet new challenges.

The flaws and gaps in the models used to plan, finance, and build communities and regions made them inadequate for meeting the needs of the 20th and early 21st centuries. Despite examples of progress, the overall system is even less prepared for meeting current needs and emerging challenges, such as the following:

**Addressing climate change,\*** both in terms of preventing future damage (i.e., electrification, clean energy) and adapting to both acute (hurricanes, “heat domes”) and chronic (drought brought on by shifting weather patterns) events.

**Preparing for demographic shifts and accompanying lifestyle changes,** such as the aging of the population and increases in intergenerational households. Too many communities are built for a single life stage and have failed to adapt to

*\*Though the forces causing climate change are neither new nor emerging, the longer-term failure to address this issue creates an ever-increasing impetus to take action if society is to mitigate the harms of and adapt to the realities brought on by a warming planet.*

emerging needs. For example, low-density automobile-oriented suburbs can create challenges for those with mobility impairments and downsizing households; and some urban neighborhoods lack attainable family-sized units. Society has rightly emphasized the importance of being able to “age in place” and has insufficiently invested in the health care and infrastructure necessary for an alternative model. However, not enough communities are built in a manner that makes that possible at scale and across the diverse spectrum of needs. Addressing this issue requires diversification of housing stock, a substantial improvement in multimodal accessibility and connectivity, and investment in health care services.

**Responding to demand for new models of mobility**, brought on by consumer preferences and modal shifts, delivery or shipping changes, evolving commute patterns and preferences, and increases in autonomous and electric vehicles, among other factors. Mobility planning systems remain stubbornly automobile-centric, and even “forward-looking” multimodal changes often fail to diverge from the outdated models. For example, many “complete streets”-related projects are in effect highway widening efforts that marginally improve space for pedestrians but still prioritize drivers. A new mode of thinking would focus on right-sizing public space capacity, which in this example could mean [reclaiming space currently dedicated for automobile travel for transit, cyclists, and pedestrians](#).

Moving forward, there is a need to think differently about commuting patterns when planning mobility investments, especially those that include transit. Decision-makers should consider who uses transit, and for what purpose. In the modern economy, a true multimodal system will need to focus on all-day service and not just peak “9-to-5” commutes, especially if working from home continues to play a larger role. A broader, mobility-focused mindset links both transportation and land use, manages population and economic growth (or in some cases, decline) with a focus on mixing land uses, provides diverse

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“One of the things we learned in COVID, [the economy] really depends on people who have to show up. So maybe it’s just a shift in that argument that the people who are essential are essential everyday, not just during COVID. And if we don’t have transportation options for folks, then our places don’t work or economy doesn’t work. Or shopping doesn’t work. Or health care doesn’t work. . . . These are not optional items for the most part.”

—Harriet Tregoning,  
Shaw Symposium participant

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housing choices in all communities (particularly in job centers), allows “gentle” density increases, and makes the infrastructure improvements necessary for neighborhood-centric development (the “15- or 20-minute neighborhood”).

**The acute and long-term effects of COVID-19** will reverberate for years to come. The ultimate impact of the pandemic and the changes in preferences and behavior that it produced are yet to be seen. However, the past two years have illustrated that “preexisting conditions”—from the perspectives of health, household finances, and social equity—are closely linked to the relative impacts of the pandemic.<sup>13</sup> Long-term disparities by income and race have been exacerbated by the COVID-19 crisis, with earners of lower wages (who are disproportionately Black and Hispanic) more likely to work in high-contact jobs. A significant number of households have accrued large amounts of deferred rent or mortgage payments, raising the longer-term risk of an eviction or foreclosure crisis with detrimental effects for households, property owners, and the housing market as a whole.

Among households that have the ability to work remotely or have fared comparatively well



Slide from Shaw Symposium presentation by Harriet Tregoning, director, New Urban Mobility Alliance.

financially, there is considerable debate about long-term changes in consumer and neighborhood preferences. Though it is too early to tell what these changes will look like, marginal shifts can have a considerable impact on demand for housing, services, and infrastructure. As such, adaptability and flexibility are important. For example, changing codes to have a broader definition of “commercial” uses could be important for allowing businesses to better leverage open retail spaces (for example, for production, distribution, and repair uses) or reorient underutilized assets (such as parking lots) to better accommodate changing consumer and commuter demand.

**4. The concept of infrastructure is evolving, and full-spectrum housing opportunities are a necessary component of a modern infrastructure strategy.**

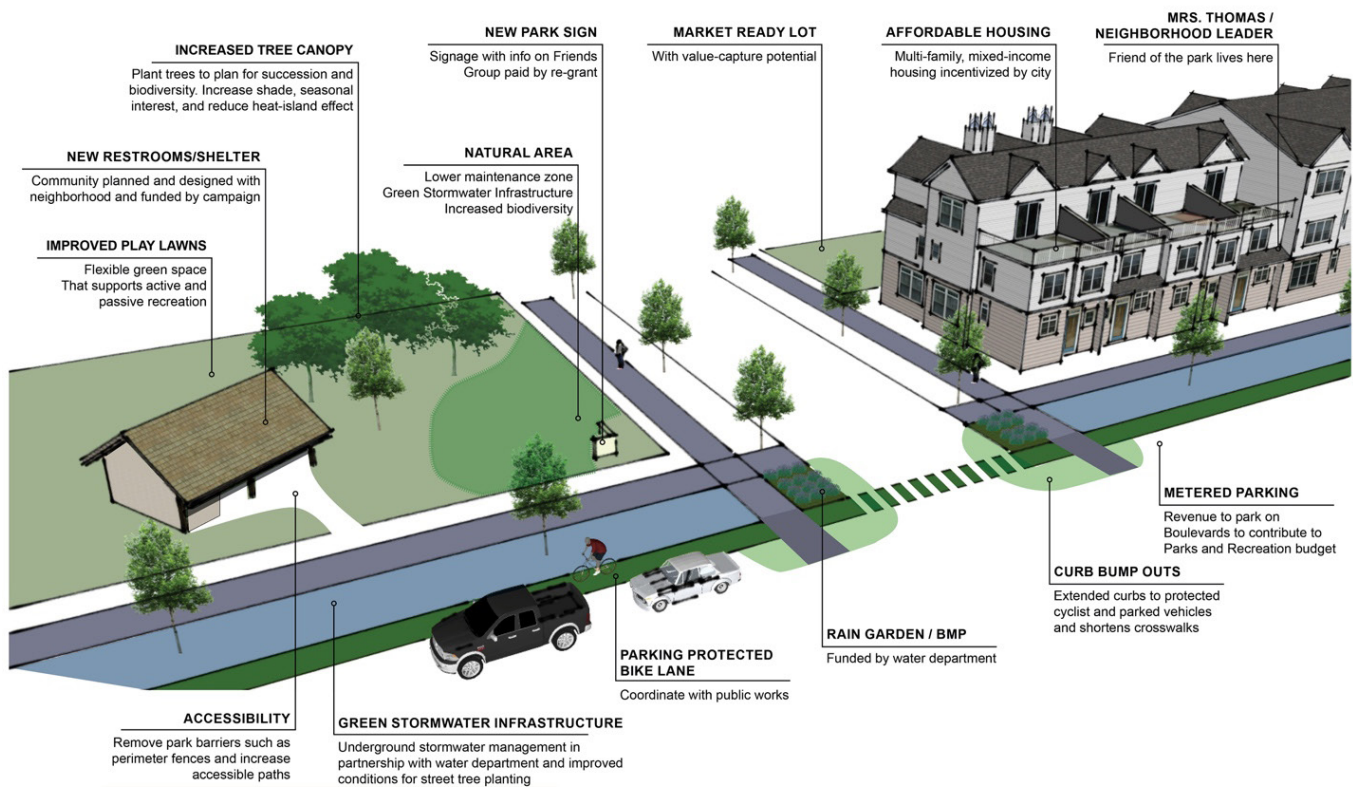
Housing is necessary for the three core components of sustainability: equity, economy, and environment. Diversity in housing type and price

point is required in all communities to meet the full spectrum of needs and preference. It is critical that housing and more traditional forms of infrastructure investment (such as transit, water infrastructure, streets, etc.) are planned holistically, to avoid the aforementioned mistakes of the prior century.<sup>14</sup>

The ULI Curtis Infrastructure Initiative aims to build a movement to promote infrastructure solutions that are equitable and resilient and that enhance long-term community value.

View the Curtis Initiative’s latest report, [\*Broadband and Real Estate: Understanding the Opportunity\*](#).

In addition to housing and transportation, other infrastructure focus areas include (but are not limited to) broadband/internet connectivity, energy and water, and other social infrastructure such as health facilities, child care services, and parks. In all sectors, macro-level investments, such as fiber



BONNIE ROY/ULI

A [2019 ULI Advisory Services panel](#) recommended a holistic investment strategy for Kansas City, Missouri, to spur equitable residential and commercial revitalization surrounding Ivanhoe Park.

installation and grid-scale energy improvements, are needed along with better integration at the micro and development levels. For example, during COVID-19, housing providers (especially affordable housing owners serving vulnerable populations) were at the forefront in connecting residents to internet access and health care services. On the energy front, individual housing developers are pushing the envelope across a range of disciplines, from energy efficiency to on-site renewable production. Meeting 21st-century infrastructure challenges requires the effective coordination of both macro- and micro-level investments to enhance the effectiveness of both.

## 5. The different elements of the built environment should be viewed as interconnected systems.

Communities, economies, and regions are complex and intertwined. Planners, policymakers, and funders/financiers need to view community

building using a systems approach. To accomplish this, the way housing and infrastructure are planned, funded, and built must be realigned. Replacing siloed decision-making with holistic systems would allow for cross-agency efficiencies and better management of scarce resources. Better coordination would also enable the disparate elements that contribute to thriving communities (parks, schools, public safety,

“The goals of transportation planners are largely driven by FTA funding formulas about cost per passenger and fastest travel time. City planners tend to look at transit from a community and economic development [perspective]. The silos and different expectations are a big part of the problem.”

—Shaw Symposium participant

libraries, etc.) to scale along with both population and economic growth. A systems-related approach to planning and investment is necessary across a range of dimensions:

**Aligning coordination within and across government agencies:** For example, many jurisdictions could improve alignment among brick-and-mortar agencies across capital improvement plans (for example, coordinating investment in transit expansion with affordable housing preservation resources; co-locating complementary public uses when developing public facilities). Agencies would also benefit from improving alignment of brick-and-mortar investment with other public services, such as education, workforce development, public safety, and health services. Anchor institutions—such as universities, community colleges, and hospitals—are also critical groups to have “at the table.”

Nashville recently restructured transportation-focused agencies to create a new Department of Transportation and Multimodal Infrastructure, with responsibility for a range of functions including “road maintenance, traffic signal management, paving, sidewalk construction and maintenance, bikeway construction and maintenance, bridges, capital roadway improvements, stop signs, pavement markings, parking, and permitting.”<sup>15</sup>

**Aligning inputs (especially financing) with impact and results:** Inputs to a specific project (land, financial capital, human capacity) should be better aligned with productive impact and results, not just output. Barriers to this approach often result from a misalignment between (a) the revenue-generating mechanisms and expending agencies (the “wrong pocket problem”) and (b) the relationship between the people who benefit from an investment (or the status quo) and who accrues the cost (often, though not always, a “tragedy of the commons” situation). For example, much opposition to denser housing development is ostensibly based on the premise

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“The health care sector is beginning to understand that by directly partnering with and providing affordable housing, they’re actually able to drive health care outcomes by lowering costs for the hospital and patient. They can help shift populations from emergency care to preventative care, and that’s all due to access, which is prompted or provided through housing.”

—Paul Bernard,  
Shaw Symposium presenter

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“One of the key features, I think, is opportunities to look for co-benefits. We have an example here . . . the San Diego River, which is a habitat river flood channel but naturalized with a lot of development along it, including a trolley line. As they planned the River Park, they’re also planning the [pedestrian and bike] trail system. If they plan the ped and bike and design it the right way, and put it in the policy documents in this way, it could also be part of the circulation system. So it serves recreation, but it also serves circulation, and then they can use and leverage transportation dollars combined with park dollars and habitat dollars to implement the park.”

—William Anderson,  
Shaw Symposium presenter

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that building more will negatively affect a municipal budget (creating the need for new supportive infrastructure, school capacity, etc.). Despite empirical evidence that often points to residential development creating fiscal benefits, it is sometimes true that many of the expenditures are borne by the local government, while some benefits accrue to other levels of government (state sales taxes on economic activity generated) or are not felt directly in the moment (less need for state- or regionally funded infrastructure to serve development pushed further out).

Massachusetts has worked to address this issue through its [Chapter 40 policies](#), which provide a carrot-and-stick approach. The state rewards jurisdictions that adopt zoning policies enabling and streamlining mixed-use, mixed-income housing with additional funding for each new unit produced (40R) and to cover the net costs of educating new students (40S). For jurisdictions that fail to meet affordability goals, the state provides an opportunity for developers of mixed-income housing to override local zoning (40B).

To create a more equitable framework for impact, modern financing mechanisms must be:

- **People-centric:** Though difficult in a resource-scarce environment, financing mechanisms must address alignment of sources and uses (What activities does tax increment financing, or TIF, revenue fund?) and the tension that often exists between profit maximization and equity (i.e., How much affordability is required in a joint development project?).
- **Fiscally sustainable:** A need exists to better maintain infrastructure and pay for it over the long term. This means building cities in a way that pays for that investment and covers the costs, and addresses the “wrong pocket” problem (among geographies, across agencies, etc.).

People-centric and fiscally sustainable revenue sources can be mutually reinforcing in many circumstances, as evidenced by tax base analyses that suggest dense, mixed-use communities—even those suffering from disinvestment and

## Transportation and Housing Coordination in the Puget Sound Region

Stakeholders in the Seattle metropolitan region have made considerable—if incomplete—progress in aligning housing and transportation infrastructure objectives. Of particular note, [Sound Transit has a policy for disposition and development of agency-owned property](#) that encourages dense, mixed-use development near transit stations and includes strict affordability requirements.

To advance multimodal transportation options, the Seattle Transportation Benefit District was created, which uses a combination of vehicle license fees and sales taxes to fund transportation infrastructure, and importantly, transit operations and service expansion.<sup>16</sup>

poverty—can be some of the most productive neighborhoods on a tax revenue per acre basis.<sup>17</sup> As such, even modest infrastructure and public space investments that improve the quality of life of lower-income communities can have a disproportionately positive impact on a municipality’s finances.

**Prioritizing the appropriate outcomes:** Current systems often prioritize easier-to-measure outputs rather than outcomes. Traditional transportation metrics, such as level of service and vehicle miles traveled, often lead to perverse effects such as increased automotive dependency and sprawl.<sup>18</sup> A new approach to measurement and evaluation should focus on overall mobility and access, creating an integrated system rather than zeroing in on individual projects. Integration implies not only system connectivity (i.e., transfers between modes) but also the interoperability of how each mode is managed/operated (i.e., are fares integrated/bundled?). Planning agencies are starting to shift to this mindset, but there are challenges when operators are siloed. Bureaucracy

and a legacy of deferred maintenance to the existing system remain as barriers. Beyond the realm of transportation-investment specifically, considering housing (and real estate more broadly) in the infrastructure equation is compatible with an outcome-oriented approach that focuses on the value created by the investment in addition to the more traditional mobility metrics.

**Improving community engagement:** Perhaps the most difficult challenge is to reform processes for engagement that address the needs of the whole population, including traditionally marginalized groups, without grinding processes to a halt. Meeting this challenge is made more difficult by the lack of trust in many existing processes and institutions. Rectifying past harms caused by many of the institutions that are still managing the process of investment and renewal is critical. Institutions must acknowledge their role and understand that building trust within communities takes time. It will take effort, resources, proactive planning, and the building of bridges with trusted voices within disenfranchised and disinvested communities. In the end, a first principle

should be to achieve buy-in from the people the investment is most intended to benefit: Have they helped shape the vision? Have they accepted or embraced the fundamental value proposition to them?

Though there are many ways to improve on existing engagement efforts (see sidebar), structural reform is also necessary. First, many engagement efforts focus on achieving a “shared vision.” This step is critical at some scales and for certain types of projects or investment, but in other cases it can be detrimental (i.e., stakeholder accommodations that undermine overall objectives). A critical question to ask is whether the focus should be on building a consensus vision or making space for diverse visions of success. Second, any structural reforms should reverse the paradigm that is currently baked into planning, zoning, and entitlement practices—evolution, rather than stasis, should be the default condition.

**Aligning timelines:** It is important for cross-sectoral stakeholders to align timelines and appropriately sequence planning and investments to

## Reckoning with the Past and Moving Forward at ULI

“In the early 20th century, many real estate and land use professionals, including some of ULI’s earliest members, advocated for policies and practices that the Urban Land Institute now unequivocally stands against. Acknowledging and reflecting on this history is an important step toward moving forward and upholding ULI’s commitment to promoting diversity, equity, and inclusion.

ULI member and influential real estate developer J.C. Nichols, who had a profound and wide-ranging impact on land development in America, is part of this history. Although Nichols’s work shaped the industry in some positive ways, he was also a proponent of racial covenants, which prevented certain groups from living in the neighborhoods he developed based on their race, ethnicity, or religion.

These restrictions had long-lasting consequences for the individuals and communities they excluded . . . Today, the viewpoints of the Institute and its membership have evolved, and ULI is steadfastly committed to the creation of diverse, inclusive, and equitable communities.<sup>19</sup>

Prominent ULI members and *Urban Land* magazine feature articles supported the mid-20th-century urban highway and “slum clearance” initiatives referenced throughout this report that caused considerable harm for lower-income and African American communities.<sup>20</sup> Today, ULI’s work is informed by this past and is committed to building a more equitable future.

## Improving Rules and Engagement to Enable Housing Supply Growth

In 2019, ULI Washington released a report focused on structural reforms to increasing housing supply and improving housing attainability in the Washington, D.C., metropolitan region. A major component of that research was improving the community engagement process. Following are selected recommendations from that study:

- Establishing respect, trust, and open communication among all stakeholders engaged in the development process is necessary to achieve both local and regional housing production and preservation goals.
- Enacting clear and consistent policies, procedures, and regulations to guide the development process is essential to accomplishing housing attainability goals.
- “Codify the consensus” reached during planning processes by updating zoning and establishing specific guidance on developer requirements and contributions.
- Make community engagement more inclusive and equitable by welcoming a broad range of perspectives on development, particularly from underrepresented voices.
- Ensure that more people are able to, and encouraged to, participate by providing alternatives to traditional public participation venues.
- Build capacity and understanding to enable informed decision-making and an understanding of development-related costs, benefits, and tradeoffs.

The full report is available for download at <https://washington.uli.org/release-increasing-housing-supply-and-attainability-improving-rules-engagement-to-build-more-housing/>.

reduce friction and mismatches (i.e., school capacity lagging new growth). Investments in equity should lead, not follow. This is particularly important in the housing realm, as investment in affordability and full-spectrum housing opportunities will need to precede anticipated catalytic investment. If such investments begin too late, the cost of producing and preserving housing and services for lower-income households at the scale needed can be prohibitive.

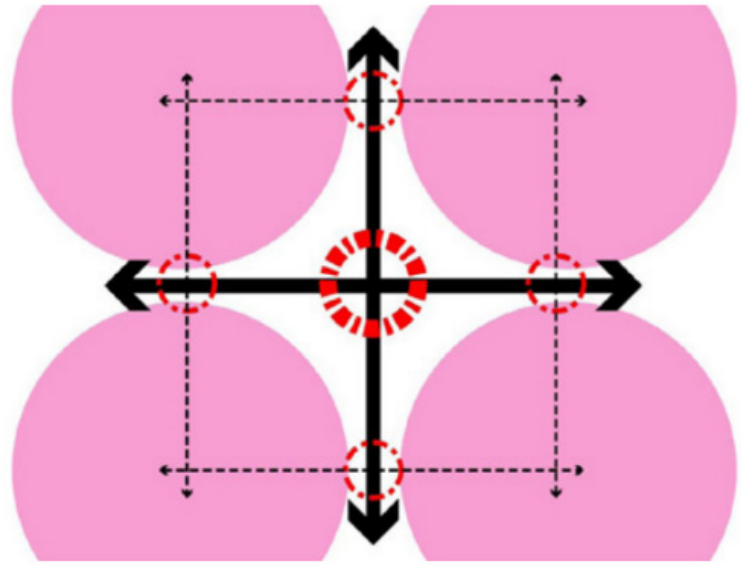
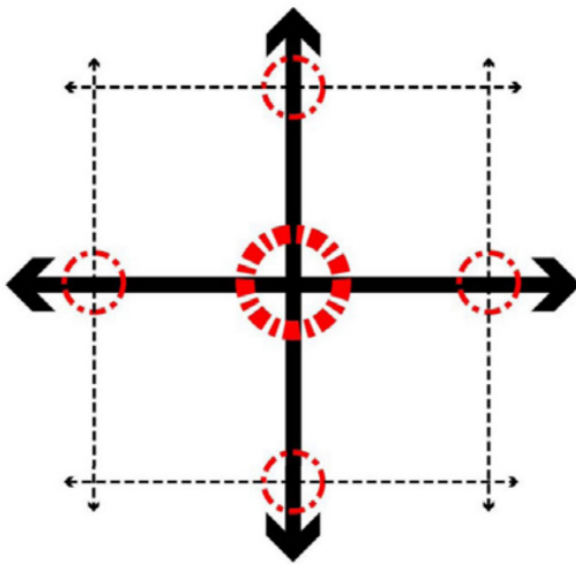
Infrastructure delivery is hampered by an often decades-long planning and buildout period. A critical challenge will be to find ways to expedite project delivery to respond to growth and changing demand in something approaching real time. A more reasonable infrastructure delivery timeline could also make it easier to align investments in housing and services.

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“In the scheme of things, [affordable housing] wasn’t the priority and it [was] overlooked. And now that it’s built out, going back and recapturing it is so difficult. We had zoned in space for a school. We have a big park. It would be great to have room for a school to encourage families [to move to the neighborhood, but] vertical developers traded that out. So now there’s no way for a school, and I think that’s an enormous loss as we look forward . . . and try to figure out how we bring families [into the neighborhood].”

—Marilee Utter,  
Shaw Symposium participant, in reference to  
Denver’s Union Station development effort

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ROSS TILGHMAN/ULI

A 2017 *ULI Advisory Services panel concept* to create better circulation along the Interstate 4 corridor in Hillsborough County, Florida, by targeting public investment within nodes (red circles) in a historically suburban community represented by the pink.

## 6. Adaptation and resilience are critical components of future systems.

Given our knowledge of both the positive and negative impacts of past plans, policies, and investments, planners and practitioners should not presume that today’s assumptions are necessarily going to be more prescient than those of the 20th century, even if society is eventually able to root out the elements of racial animus that were embedded into many of those decisions. As such, plans should be designed in a manner so they can support successful, vibrant communities even if assumptions are not fully realized. Such plans would likely prioritize flexibility and adaptability over prescriptiveness.

With few exceptions, the 20th-century model went “all-in” with a single mode—the automobile. Though planners may not be able to predict the dominant modes of the future, multimodality is resilience. It maximizes household choices and elevates the mobility “floor” for lower-income and vulnerable households. Given the demand for multimodal neighborhoods, it is critical to focus on providing the full-spectrum housing opportunities within the communities where these options already exist.

Plans should incorporate iterative feedback loops and allow for trial and error, to enable incremental improvement. There is a considerable difference between making an error (misjudging a market) versus allowing changes that create permanent damages (such as the dismantling of existing transit systems and the destruction of urban communities to make way for freeways, the cost of which we are only beginning to reckon with).

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“I come from a very suburban environment built in the 1960s [Tampa]. There are a lot of disconnected collector subdivisions. From our perspective, a low-cost, high-impact shovel-worthy project would be to make those connections, build out sidewalks and trails, connect and create micro-nonvehicular modes. This becomes even more and more important as you start looking at auto-dependent lower-income communities living on [the] suburban fringe, which is a compounding problem.”

—Lucia Garsys,  
Shaw Symposium participant

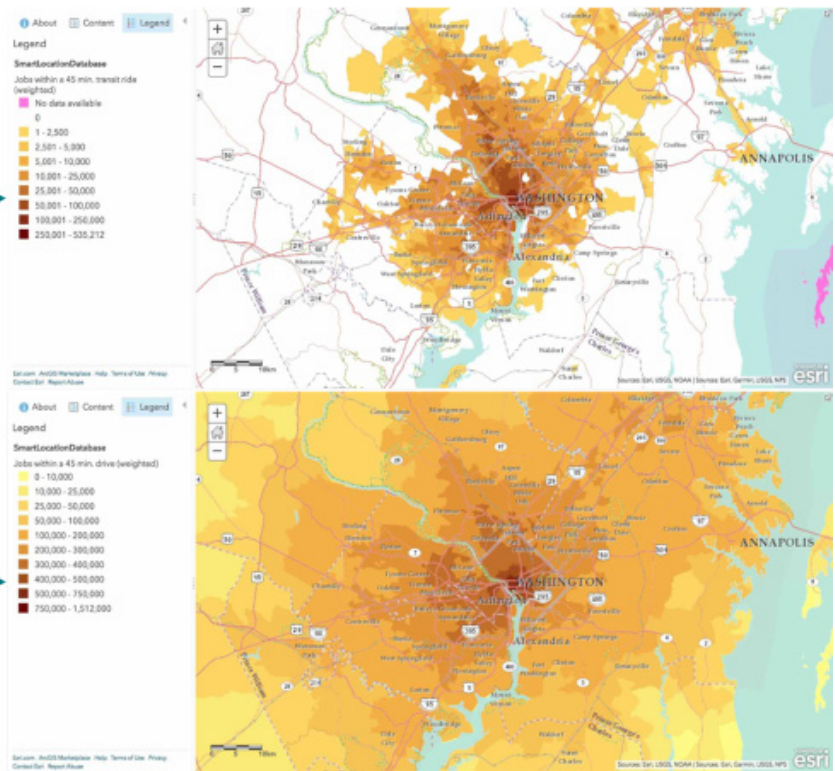
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**Inequitable access to mobility = inequitable access to opportunity**

**Access to jobs in the Washington, D.C. region...**

**Without a car...**

**With a car...**



Slide from Shaw Symposium presentation by Harriet Tregoning, director, New Urban Mobility Alliance.

To avoid transformational mistakes, one needs the ability to measure, adapt, and change course when even well-meaning policies (such as urban growth boundaries and adequate public facilities ordinances) lead to unintended consequences (i.e., some policies encouraged the very type of unsustainable leapfrog development they were meant to prevent).<sup>21</sup> Building in scope for trial, error, and adjustment can theoretically improve trust, because the public may have more confidence that course corrections can be made before substantial or irreversible harm occurs.

This approach would recognize the fact that cities are ever evolving and that allowing such evolution serves as a “release valve” for pressures that can build up over time. For example, it is reasonable to surmise that the current housing crisis in high-cost cities would be less severe if all residential zones historically allowed modest increases in density. Although such gradual, “gentle” density might not be sufficient to meet demand and control costs on its own, this approach could have relieved some pressure on the margins without

the speculation-driven price increases that sometimes accompany one-time increases in zoning capacity.

## 7. The future of many regions and communities strongly resembles the cities of the past.

In many ways, what is old is new again, as demand for TOD and TOD-style living is returning society to the traditional neighborhood model of the past. This dynamic is starkly illustrated in slow- or no-growth regions that are seeing demand and development in downtown and walkable areas despite disinvestment and population decline overall. However, many communities and regions deconstructed many of the systems that used to enable walkable, mixed-use, multimodal living. This deconstruction includes both policy frameworks (more restrictive zoning codes) and physical infrastructure (the removal early to mid-20th-century streetcar lines). These conscious policy choices over the last century had the effect

of dramatically increasing automobile use—single-occupancy vehicles accounted for 54 percent of commuters in 1970; by 2018 that proportion had risen to 76 percent.<sup>22</sup> As suburban commutes became increasingly arduous and cities began reinvesting in their urban core to accommodate demand for transit-served neighborhoods, those long-defunct legacy systems are starting to be replaced, at great expense.

To meet the demand for neighborhoods that conform to a more traditional, walkable development pattern, the following three-pronged approach is necessary, requiring coordination among the private sector, local jurisdictions, the state, and the federal government:

- Preserve affordability and build more housing in areas with transit.
- Expand transit and adapt land use patterns to improve service and reach more neighborhoods, particularly in “tipping point” communities that have features (such as mixes of uses, reasonable density) that are amenable to TOD and multimodal travel. These improvements should reduce the journey time for passengers, locate urban facilities closer to stations or hubs, and improve the user experience during waiting and transfer times.
- Create more mixed-use, walkable neighborhoods that promote incremental multimodality even if transit is not a part of the short- to mid-term transportation equation. This can include encouraging or facilitating a critical mass of diverse, walkable commercial destinations<sup>23</sup> through zoning reforms, economic development efforts, and multimodal infrastructure improvements (investment in sidewalks, traffic calming, and safe crossings). These improvements have the effect of reducing marginal trips (and the length thereof) and set the stage for potential future improvements in transit access.

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“They had trolley lines that ran from downtown just across the L.A. River when they started to build homes, and people would not consider living up here unless they had a transit system to get them from here into the downtown. So at times, L.A. is always kind of back to the future in terms of transit.”

—Michael Banner,  
Shaw Symposium participant

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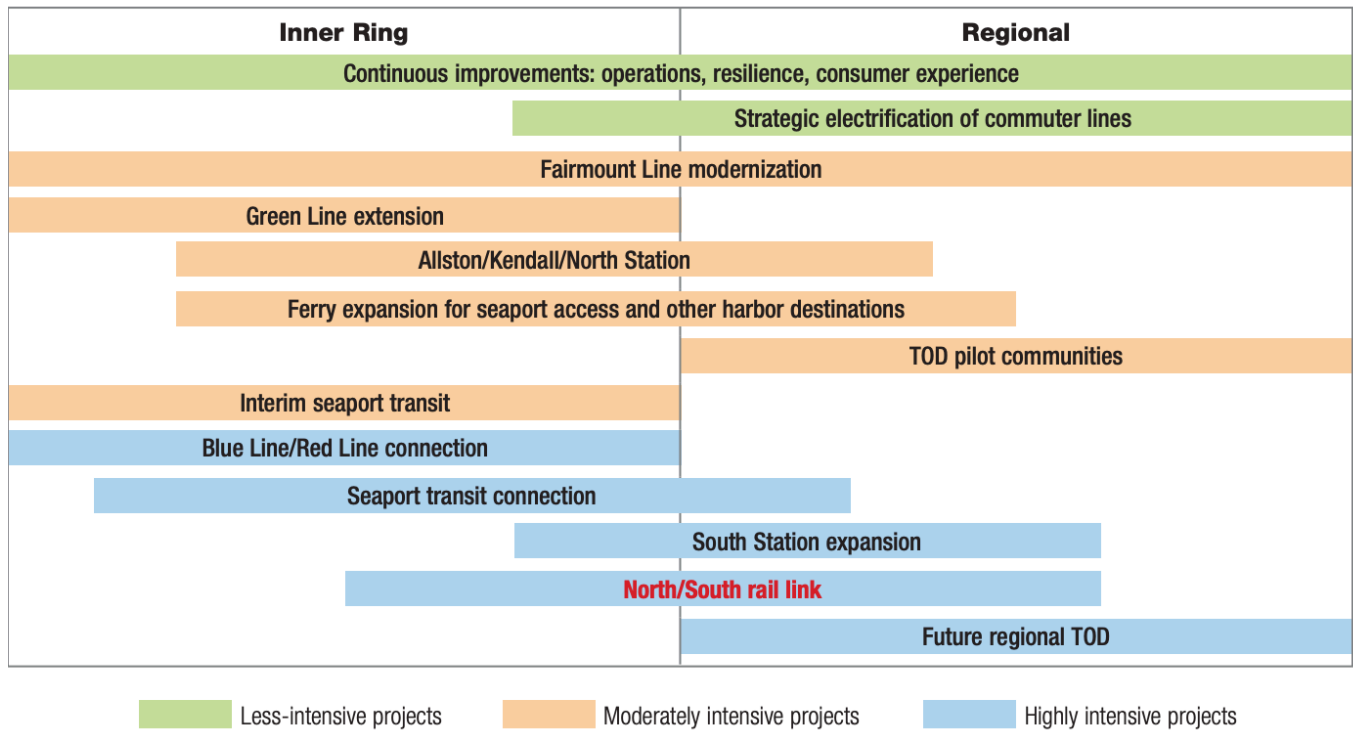
“Our issue in the U.S. is that transit is such a scarce resource that we can’t pretend we don’t know that any investment in improving mobility has the effect of raising prices, has the potential to displace the people that most need that access to non-automotive transportation.”

—Harriet Tregoning,  
Shaw Symposium participant

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Demand for more human-oriented infrastructure does not have to be limited to major cities. Smaller towns and rural areas can and should consider the same principle. In a recent example, Hillsboro, Virginia (on the outskirts of the Washington, D.C., metropolitan statistical area) dealt with through-traffic speed and safety issues in the town core through a reconstruction project, rather than creating a highway bypass. Features included installation of sidewalks, crossings, parking, and traffic circles at both ends of town.<sup>24</sup> This enabled the town to achieve its transportation safety and state-of-good-repair goals without diverting potential customers away from local businesses (as is typical with bypass projects).

## Project Examples and Geographic Focus



STEPHEN WHITEHOUSE/ULI

This three-pronged approach was discussed as part of a [2017 ULI Advisory Services panel](#) report that provided recommendations on better leveraging the Boston region's existing transportation network for economic development, addressing the region's housing affordability crisis, and creating a framework for transit-oriented development.

### 8. Suburban areas can and should become more equitable and sustainable.

Despite the trends toward urbanism, TOD, and traditional urban development patterns, demand for suburban/exurban-style living will not go away, and developers are continuing to produce homes, offices, and retail in these locations. In many jurisdictions, the “drive until you qualify” effect is real, and the risk of suburbanization of poverty is high. How do we make these communities a contributing part of a more sustainable future?

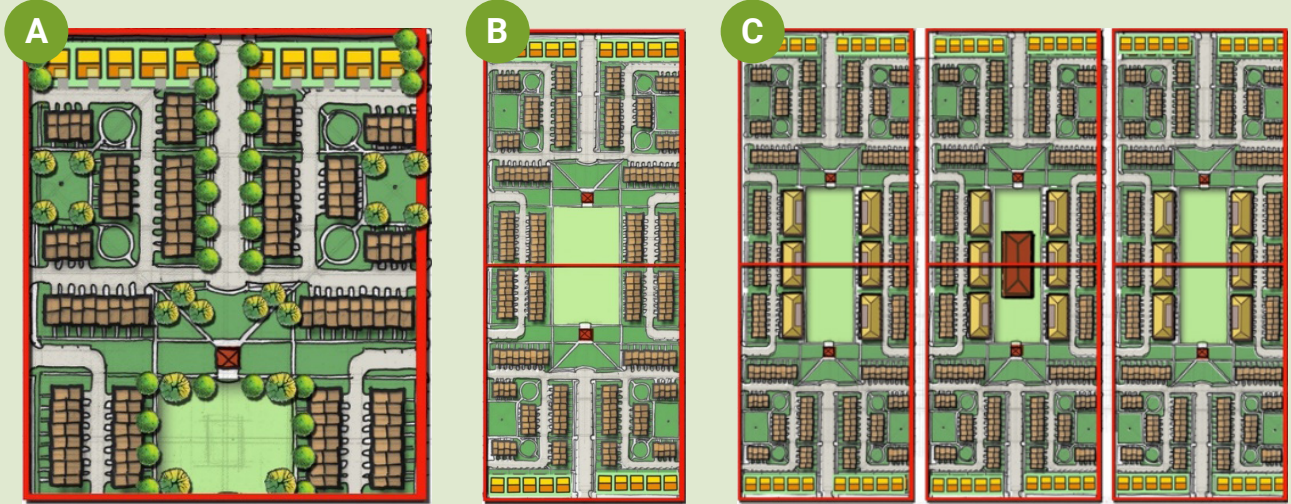
Several considerations should be taken into account when investing in suburban-style communities:

- “First, do no harm.” Planners and developers should pay attention to environmental sensitivities (watershed maintenance, wildfire risk, etc.). Furthermore, new infrastructure obligations should not create an unsustainable life-cycle fiscal burden.

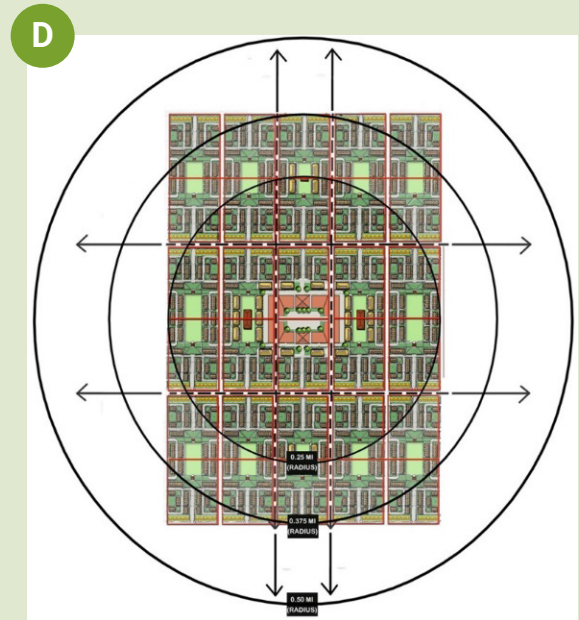
- Plan requirements should enable adaptability and increased connectivity over the life cycle of the suburban community. To illustrate, jurisdictions could require subdivisions and master-planned communities to provide integrated connectivity, allow for mixes of uses, and provide a mix of housing types in exchange for accessing municipal roads, waters, sewers, and other services.

At a macro/regional level, one approach is to allow regions to grow from “pancakes to pyramids,” as outlined in a study of cities across the world.<sup>25</sup> The authors posit that sprawl is inevitable in some contexts, given the resource intensity and wealth necessary for denser developments. To encourage sustainability in these situations, it is critical at the outset to “conserve irreplaceable cultural and natural amenities” and create a framework for making the evolution from horizontal spread to infill development and vertical layering (regulatory flexibility, networked infrastructure).

## Hypothetical Sustainable Suburban Development Scenario

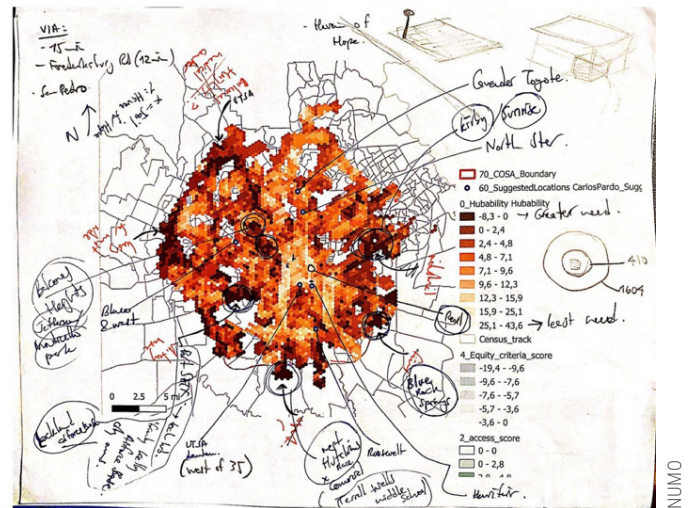


- A. Image A represents prototypical suburban development of a diverse type of housing ranging from townhouses to detached single-family houses.
- B. If two prototypical developments (image A), are combined, a central park could be established (as shown in image B).
- C. If three image B developments are combined, a small community center could be built along with multifamily housing while retaining park space (image C).
- D. If three image C developments are combined, a full neighborhood retail center could be established along with retaining community centers and open space.





# Mobility hubs with the City of San Antonio, Urban Land Institute & VIA Metropolitan Transit



ULI is working in partnership with the city of San Antonio, VIA Metropolitan Transit, and the New Urban Mobility Alliance to identify opportunities to create an equitable network of mobility services to maximize transportation tax revenue, reduce vehicle miles traveled, and expand first- and last-mile solutions. Learn more at [uli.org/infrastructure](http://uli.org/infrastructure).

Zoning codes should also promote suburban evolution, which implies gradual, incremental change rather than making changes all at once, which is often done through the more radical—and costly—transformation of “suburban retrofit” efforts. To be clear, larger-scale suburban retrofit projects are often highly beneficial. They can establish “proof of concept” for walkable development in less dense areas. They can also be a catalyst for more evolutionary changes across a broader area. However, the large number of communities where change—whether through evolution or retrofit—is necessary vastly outstrips the capacity (in terms of capital, infrastructure, and community engagement, zoning, and regulatory processes) available to achieve success through any single approach.

- For existing communities, it is important to build connections and make incremental progress that allows for improvement on the margins. People may not be able to commute to work without an automobile at scale, but can they walk to the store, the restaurant, the park, or the pub? Are there ways to deliver microtransit or targeted services to lower-income communities within the suburban built environment?

## 9. The scale of the intervention needs to meet the scale of the challenge.

Under the status quo paradigm, there is not enough money for “fix it first” (particularly in legacy areas/areas with lower growth), much less the major investments necessary to meet changing demand and urban resilience in the 21st century. This deficit makes efficiency and coordination of the resources that do exist all the more critical. A failure to coordinate the scale of disparate investments can lead to missed opportunities and higher costs in the long run.

Figuratively speaking, an approach to scale should be both “horizontal” and “vertical”:

- “Horizontal”—mostly bottom-up, incremental change over a wider area (gentle density increases, tactical investments, bus system redesigns); and
- “Vertical”—large, catalytic projects (i.e., highway capping, major transit expansions, and associated TOD programs).

Horizontal interventions are important because they can be implemented rapidly, require less intensive and lengthy planning processes, and can reach a considerably broad geographic area. They represent smaller investments and minimal risk. In some markets, much of the demand for infrastructure and housing could be served primarily through horizontal approaches. However, in larger or high-demand markets where investment has substantially lagged population and economic growth, vertical interventions are likely necessary to accommodate the needs of the population. Importantly, horizontal and vertical approaches can and should be complementary—the information gleaned from the incremental “small bets” of horizontal approaches can inform planning processes for vertical investments.

## 10. The time for action is now.

The deferred challenges and investments necessary to address housing, infrastructure, climate, and social and racial equity goals will only become harder and more costly to address if delays persist. Given the current attention being paid to these issues, combined with historic federal investments in economic stimulus and infrastructure investments, it is incumbent upon all stakeholders in the arena to plan and build communities to seize this historic opportunity and address today’s challenges.

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“It’s now over 10 years since the Denver TOD fund [was created] . . . when you think about how much money was put in—\$25 million for 15 to 16 acquisitions, totaling a couple thousand units of housing. If we went back in time, we talked about needing to get to 40,000 to 60,000 units of affordable housing. [The fund provided] access to capital, ability to implement, but it was a drop in the bucket compared to the need. What we needed was a true commitment of \$250 million to pull this off.”

—Aaron Miripol,  
Shaw Symposium participant

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# Framework for Investment Moving Forward

Informed by the findings and takeaways from the Shaw Symposium and associated research, the Terwilliger Center and Curtis Infrastructure Initiative propose the following framework for evaluating and planning critical investments in housing and infrastructure:

## First, do no harm.

- Does the plan/project create an unsustainable life-cycle fiscal burden? Does it build long-term community value beyond near-term returns on investment?
- Does the plan/project destroy wealth in order to create it?
- Does the plan/project protect vulnerable communities and repair community assets?
- Does the plan/project prioritize activation of underutilized assets before redeveloping productive properties?

## Avoid burden shifting.

- Does the plan/project support or cut against broader goals (i.e., a neighborhood plan's relationship to city objectives, or a city policy's relationship to the regional objectives)?
- Does the plan/project exploit a "tragedy of the commons" and shift burdens (i.e., resisting infill leading to more sprawl)?
- Does it shift development in a way that encourages disinvestment elsewhere?

## Advance equity goals.

- Are direct beneficiaries bought in? Or does the plan project the perspective of planners/empowered stakeholders as that of vulnerable populations?
- Does the project directly benefit those who belong to or identify as part of groups known to have been discriminated against in the past (either intentionally or not)?
- Do disadvantaged communities have a direct ownership stake?
- Does the investment encourage ground-up entrepreneurship and economic growth?
- Are complementary programs in place to ensure employment opportunities created benefit the broader community?

## Involve community and institutional stakeholders.

- Are relevant public agencies at the table?
- Are core community institutions engaged (anchors, employers, philanthropy)?
- Is there sufficient institutional capacity to effectively execute the plan/investment?

## Align finance mechanisms.

- Are federal, state, and local leverage points aligned?
- Are you funding what needs to be built, or designing to chase funding?

- Are value-capture mechanisms in place?
- Are the long-term fiscal impacts of the investment understood? Are ancillary benefits (increases in tax base, enhanced retail consumer base, etc.) taken into consideration?
- Within a holistic framework, does the project generate enough revenue to pay for ongoing maintenance and replacement?
- How do finance mechanisms balance revenue maximization versus equity?
- Does the scale of the resources match the scale of the challenge?

### **Invest in resilience.**

- Does the investment account for existing and emerging natural hazards?
- How sensitive is the success of the plan/project to the accuracy of the projections/assumptions?
- Is there a process for adaptability, experimentation, and trial and error?

### **Measure and evaluate.**

- Is there a structure of measurement and accountability for both outputs and outcomes?
- Do outcome measures prioritize end goals (economic mobility, job access, etc.) in addition to output performance measures (VMT reduction, etc.)?

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