THE MAGAZINE OF THE AMERICAN PLANNING ASSOCIATION SUMMER 2022

PLANNING

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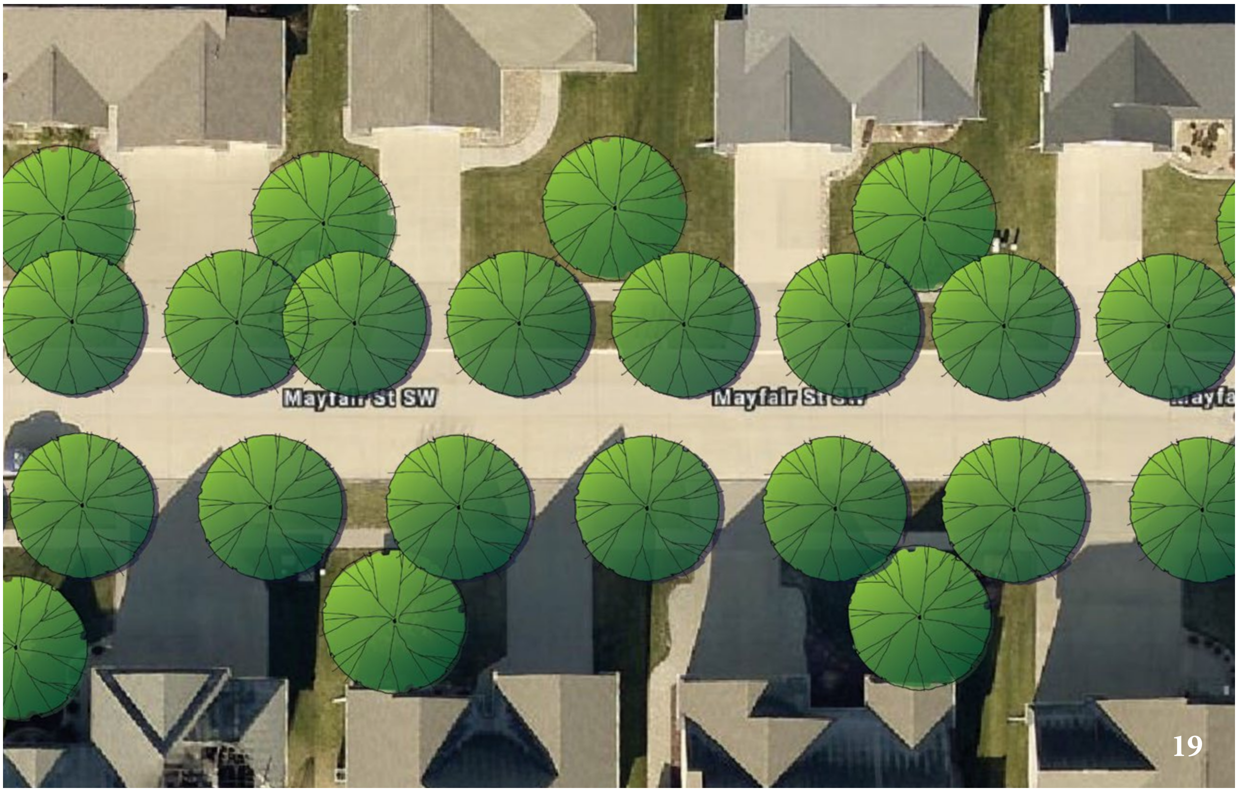

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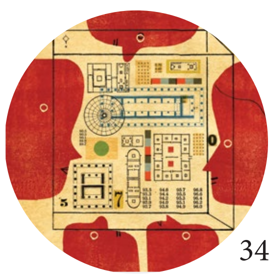

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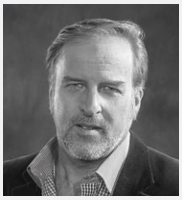
On the cover: Vertical farming at Plenty Farms. Top: The new rules of urban reforestation. Above: Transparency and the blockchain.

COVER: PLENTY FARMS; THIS PAGE: *RELEAF CEDAR RAPIDS*; DAVID PLUNKERT

Contributors



Anthony Flint

Developers Help Foot Climate Resilience Bills, page 13

"Some developers actually want to participate in this approach," says this veteran journalist. A senior fellow at the Lincoln Institute of Land Policy, he investigates the role land use can play in confronting the climate crisis, from new agricultural practices to conservation. "This 'climate fund' in Boston is only the beginning."

Tippe Morlan, AICP

A Passion for Planning and Social Justice, page 15

Currently based in Saratoga Springs, Utah, this planner once interned at the Thai Community Development Center of Los Angeles and wrote the book *Thais in Los Angeles* with its founder, Chanchanit (Chancee) Martorell. "I was eager to interview my friend and mentor," she says. "Chancee has completely shaped how I approach my work, especially as a fellow Thai American planner."

Francine S. Romero

Local-Level Precedents for Zoning Reform, page 23

This professor and former San Antonio zoning commissioner was drawn to some surprisingly current ideas in century-old state supreme court cases. "Many modern arguments against zoning's legitimacy, which I encountered in public hearings, echo these judges' opinions," she says. "It suggests *Euclid v. Ambler* never fully resolved their valid concerns."

PLANNING

THE MAGAZINE OF THE AMERICAN PLANNING ASSOCIATION

The American Planning Association will lead the way to equitable, thriving communities by creating unique insights, as well as innovative and practical approaches that enable the planning community to anticipate and successfully adapt to the needs of a rapidly changing world.

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FROM THE DESK OF APA'S PRESIDENT-ELECT

Zoning Reform: A Moment to Lead

PLANNERS—AND THE WORK we do—are at the center of the nation's current economic agenda. As a nontraditional planner with deep roots in housing, I have never felt more encouraged by and hopeful about the steps I see communities, states, and the federal government taking to modernize regulatory structures that have severely constrained housing supply and driven up housing costs nationwide.

Planners are at the forefront of this work, conducting studies to assess where housing gaps exist, updating the housing elements of comprehensive plans, and speaking with community stakeholders about the impacts of changing zoning rules and codes.

At NPC22 in San Diego, Alex Fisch, a Culver City, California, council member, credited planners with giving elected officials fact-based analyses that allow them to confidently push zoning reforms forward. "Planners set the stage so that someone who wants to can take the political step of saying that we should hear all the benefits of land-use reform," said Fisch. "It gives people the factual basis to go to the community and say, look, our consultants say [reform is the right thing for this community], our staff says this, your common sense says this. We can ... have more just land use."

States are also taking significant steps to promote increasing the housing supply. In April, Maine passed legislation that allows missing middle housing like accessory dwelling units (ADUs) and duplexes on single-family lots. Like California's statewide reform laws, the legislation would give the state authority to set housing goals and require communities to meet them. And in New York, Governor Kathy Hochul has called for legalizing ADUs, allowing multifamily housing near transit, and repealing the statewide floor-area-ratio cap.

'With movement on reform across all levels of government, planners will never have a better chance to influence local, state, and federal policies that so directly affect the housing work we are uniquely positioned to lead.'

—ANGELA BROOKS, FAICP

At the federal level, President Joe Biden's new Housing Supply Action Plan strongly encourages locally led reforms by linking some U.S. Department of Transportation and Economic Development Administration programs to housing action and outcomes. It also calls for federal housing agencies to provide simpler, more affordable financing options for building ADUs.

Last year, Biden included a provision in his Build Back Better plan that would empower planners to reform zoning and development codes and create housing action plans with dedicated planning and implementation grants, as well as technical assistance. The provision was based on a bipartisan bill, the Housing Supply and Affordability Act, which APA worked with members of Congress to craft.

APA is already taking steps to support and guide you as you advance incremental reforms in your community. Later this year, we'll debut a new Equity in Zoning policy guide written by and for APA members. We're also partnering at the state and national levels with other pro-housing policy groups. And most importantly, we're talking with state legislators and Congress about the type of support and assistance planners need to lead the way on zoning reform.

The stars have aligned on planners' and APA's top policy priority. With movement on reform across all levels of government, planners will never have a better chance to influence local, state, and federal policies that so directly affect the housing work we are uniquely positioned to lead. As your president-elect, I look forward to advocating for locally driven reforms that meet the unique needs of our communities.

APA president-elect Angela Brooks, FAICP, who is the director of the Illinois Office of the Corporation for Supportive Housing, believes housing is a human right. Reach her at angela.brooks@csh.org.

In Case You Missed It

***PLANNING* DOESN'T END** with our back cover—bookmark planning.org/planning for exclusive content. Recent must-reads include playlist recs (bit.ly/hiphopplan) from the Hip Hop Architect himself, Michael Ford, and a love letter to infrastructure's unsung hero: sidewalks (bit.ly/sidewalksplan). But don't just take our word for it. "Every planning agency, local jurisdiction, and government official should prioritize safe, navigable sidewalks. Great article from @stevewright64," reader @DeborahMyerson tweeted.

Send your comments about our content to mstromberg@planning.org or @APA_Planning on Twitter. Letters may be edited before publication.

Other paths to affordability

Reading about "zoning reform going mainstream" in "2022 Trends for Planners: A Sneak Peak" (Winter 2022) I'm perplexed to see colleagues proposing that eliminating single-family-only zoning will densify cities and produce housing affordability.

It doesn't, and it can't. Cities that are trying it (Minneapolis, Portland, Seattle) are finding that less than a tenth of their residential permits are pulled for these upzoned areas, so there's no appreciable densification.

Single-family neighborhoods transect all demographic groups, form the base for social cohesion, and share the goal of improving their living environment. Most jurisdictions notify their citizens of impending zoning changes, with the right to weigh in on the process. Ignoring the values of "neighborhood," though, promoters want to take away those rights with top-down blanket upzoning.

As the gatekeepers of zoning, planners must maintain citizen engagement as a core process. We should not revert to our solutionist past as all-knowing experts. Meanwhile, the lack of affordable shelter is a crisis.

Atlanta repulsed a single family zoning attack last fall. Here's what's being explored instead:

- Conserve/repair existing stock
- Secure public and nonprofit lands for pro forma subsidies
- Engage faith-based properties
- Put density where supportive infrastructure exists, in transit corridors and denser centers.

Zoning and other codes have been properly vilified as discriminatory. It's our job to listen, to reverse these effects, and to reshape codes to serve equity and inclusion purposes. If housing affordability is our priority, upzoning single-family neighborhoods does the opposite.

Michael Dobbins, FAICP, FAIA
Atlanta, Georgia

***Planning* responds:**

The APA *2022 Trend Report for Planners*, on which the "Sneak Peak" article is based, is indeed identifying a shift away from single-family-only zoning, but the report's purpose is not to endorse that trend or any others.

That fact notwithstanding, APA does strongly support zoning reform and housing opportunity, one of three legislative priorities (planning.org/policy/priorities). In this issue, APA president-elect Angela Brooks, FAICP, describes it as "planners' and APA's top policy priority" (p. 6), affirms the importance of local planners, and notes the influx of federal dollars available to support planners' zoning reform work.

A roundabout route for pedestrians

Having grown up in the roundabout capital of the world—Carmel, Indiana, the city featured in Community Green on *Planning*'s back page in Spring 2022—I have seen firsthand the transformation circular traffic-control infrastructure can have. You probably know the benefits of roundabouts when compared to stop signs or traffic lights: reduction in fatal crashes, less collisions with injuries, fewer conflict points, etc.

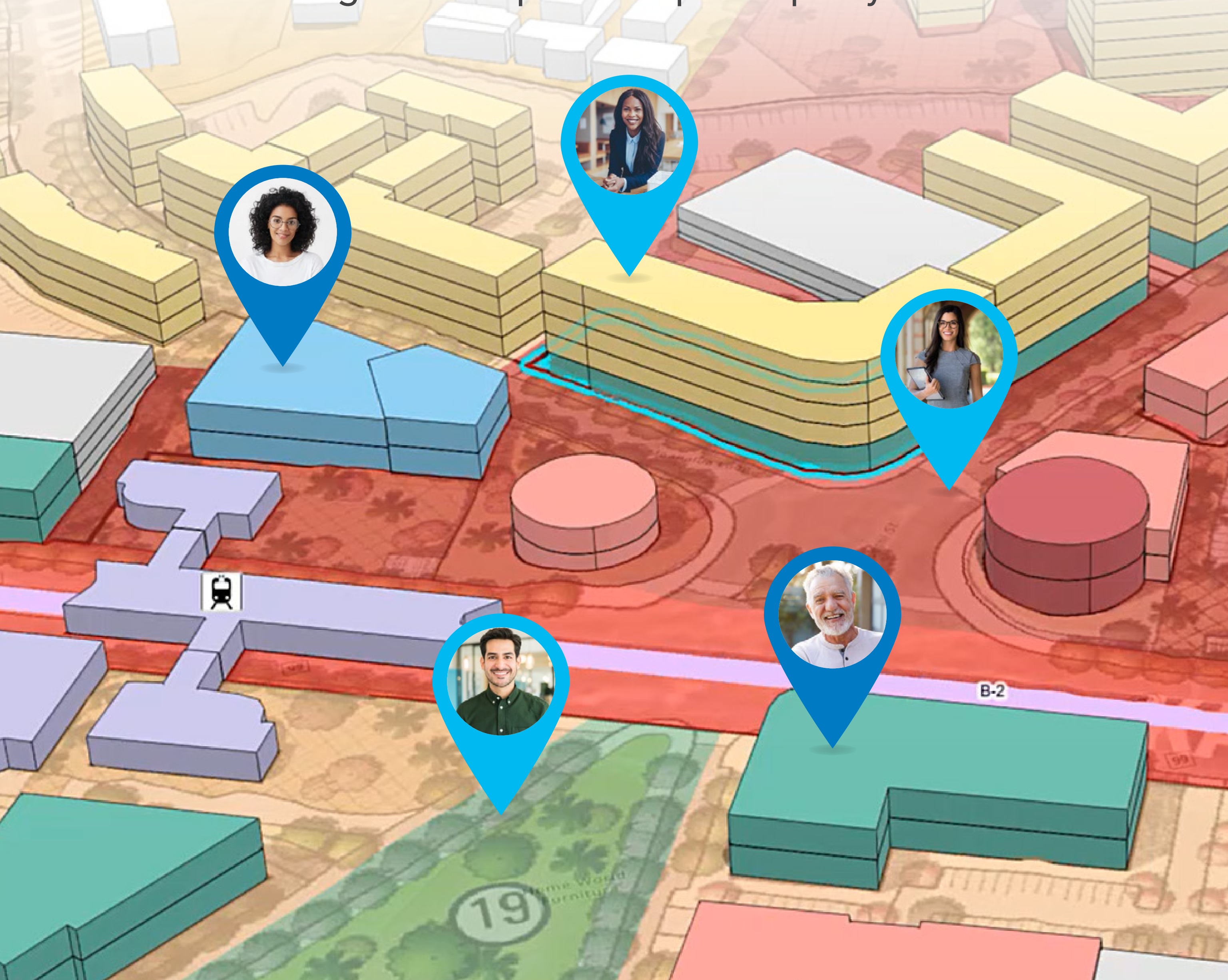
But we also need to keep in mind how they feel to pedestrians and other noncar users—particularly in urban settings. I encourage you to try. Do you find drivers yield to you when you are walking or biking by? Do you notice how you're routed around the intersection, needing to travel farther despite moving slower? Do you see how little life there is around a typical American roundabout? Do you know how much it costs to build them, while providing little to no additional community wealth?

Roundabouts have been commonplace in Europe for quite some time now, but when translated to an auto-centric realm stateside, we need to respect vulnerable road users before implementing them, and we need to build more quality places than simply intersections to speed through.

Zane Bishop, AICP
Muncie, Indiana

Prioritize the Human Element in Designing Your Neighborhood

Use GIS to determine how, where, and when your designs can have the greatest impact to improve quality of life.



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Pittsburgh's soon-to-launch universal basic mobility pilot aims to create easily managed connections between active transportation options, including bike share and buses.
ARLUTZ73/ISTOCK EDITORIAL/GETTY IMAGES PLUS

INTERSECTIONS

WHERE PLANNING AND THE WORLD MEET

Transportation | Climate Mitigation | People Behind the Plans | Et cetera

TRANSPORTATION

Universal Basic Mobility Gets the Green Light

Oakland and Pittsburgh are the latest cities to create pilots that reduce mobility barriers. Here's how—and what they've learned so far. *By David Kaner*

"NO MATTER WHERE you live, how much money you have, or who you are, you have access to dignified, frequent, affordable transportation that serves all of the needs that you have."

That's how, in a speech last year, Los Angeles Department of Transportation general manager Seleta Reynolds summarized universal basic mobility (UBM), a concept centered on eliminating the barriers—financial, logistical, informational—to transportation and ensuring a baseline level of mobility for all.

The past few years have seen a variety of efforts that either explicitly focus on UBM or incorporate its principles. While most of these programs are nascent, longstanding transportation demand management initiatives—broadly defined by the U.S. Department of Transportation as "a set of strategies aimed at maximizing traveler choices"—demonstrate how long-term behavior can change as mobility barriers are reduced.

Seattle's Commute Trip Reduction Program, for example, was initiated by a 1991 law and requires large employers to use a mix of information and amenities, subsidies, and parking management strategies to encourage alternatives to driving alone to and from work. Workers covered by the program use sustainable modes at a rate higher than the citywide average: since 2007–08, participants have slashed their rate of driving alone by nearly a quarter, and greenhouse gas emissions per employee fell by nearly a third.

This spring, as Pittsburgh prepared to launch a UBM program that's been in the works since last year, Oakland, California, released an evaluation of its first yearlong pilot—and the results are already encouraging.

Signs of success

With more than $200,000 in grants from the Alameda County Transportation Commission, Oakland's pilot launched in November 2020 with 500 prepaid cards that could be used for public transit, bike share, and e-scooters.

The cards were distributed to residents along a new bus rapid transit corridor in East Oakland that serves neighborhoods where people of color and low-income residents are the majority. The area has a history of inequitable access to transit and essential goods and services, as well as a disproportionate share of health and environmental impacts from fossil fuel infrastructure.

According to the pilot evaluation, nearly 80 percent of survey respondents reported that they could not always afford their preferred transportation options before the program. The pilot sought to address these access issues. Quinn Wallace, a transportation planner for Oakland's DOT who led the program, says its objectives were to retain extant riders, reduce financial burdens, and attract new users.

The data indicates these aims were met. About 40 percent of survey respondents said the program changed the way they traveled. The pilot saw a 12 percent rise in bus usage and an eight percent increase in using Bay Area Rapid Transit (BART), while six percent of respondents reported a reduction in driving as their primary commute mode.

"This was an effective way to shift trips from cars and onto transit," Wallace says.

Building partnerships

The transportation departments in both Oakland and Pittsburgh—neither of which operate their own transit systems—have focused their pilots on partnerships with public and private mobility providers.

Pittsburgh is building on Move PGH, a program that enables seamless planning, booking, and payment for all transportation providers on a single digital platform, an offering known as mobility as a service. In pursuit of that goal, the city brought together a wide array of entities, from the transit agency and bike-share operator to car-sharing and micromobility services. Transit-focused navigation and payment app operators also play a part. To further break down barriers, the pilot will employ trained "trip coaches" and offer 50 mobility hubs across the city.

"That city-led convening of these mobility services is what has enabled [this pilot], because we have these working relationships with these partners, and they have these working relationships with each other—and a common vision," explains Kim Lucas, acting director of Pittsburgh's Department of Mobility and Infrastructure. "That is the foundation for better mobility for all our residents and visitors."

In Oakland, collaborations with community groups have been just as essential. The city engaged more than 30 organizations working in the pilot area. A key lesson highlighted in the program's evaluation is to "seek your partners' input in the program design phase—don't wait until implementation."

"We had a lot of really phenomenal community partners … who we worked with in program design stages as well as in helping us get the information out there and inviting folks to apply," says Wallace. This coalition was "vital" to encouraging participation; around 1,000 residents took a survey to join the pilot, more than twice the number of spots in the program. A partnership with the Vietnamese American Community Center, headquartered in the project area, helped distribute around 3,000 informational flyers. Pittsburgh's pilot team has also worked "hand-in-hand" with community organizations. "Having those dialogues, early and often and consistently … has really helped us avoid pitfalls," says Lucas.

A small focus group of residents was likewise important in surfacing challenges. While the project team anticipated

MOBILITY BARRIERS REDUCED

As part of a universal basic mobility pilot, 500 prepaid transit cards were distributed in an East Oakland neighborhood where many residents are lower income. Survey feedback from participants revealed the mobility barriers they face—and how the pilot changed their options and behaviors, including a 12% increase in bus use.

79.3% said they had issues affording the mobility options they wanted to use before the pilot.

40% said the prepaid cards changed the way they traveled.

23% said they drove alone less when they could use the prepaid cards.

SOURCE: *UNIVERSAL BASIC MOBILITY PILOT*

FROM LEFT: BUBAONE (WALLET),BOUNWARD (TRANSPORT)/DIGITALVISION VECTORS that smartphone access would be an issue, they learned that those with smartphones still experienced other barriers, like insufficient data and software incompatible with the Move PGH app. “You don’t know until you do it,” Lucas emphasizes. “That’s the point of a pilot.”

System-wide impact

UBM could become a guiding framework for transportation in both cities. In Oakland, Wallace says the pilot has underlined how the city “can support accessing transit through first-/last-mile connections and also reducing the cost of transit and shared mobility.” A second pilot is being planned in a different area to build on the lessons of the first; the long-term vision is to implement a UBM program citywide.

Pittsburgh’s pilot, meanwhile, is slated to launch later in 2022. Lucas hopes the reduction in barriers will initiate a virtuous cycle of greater transit and micromobility usage, bolstering the case for investment in nonvehicle modes and redesign of streets for sustainable mobility. The city also aspires for its pilot to yield findings on impacts to health, finances, and access to services that could be replicated by other jurisdictions.

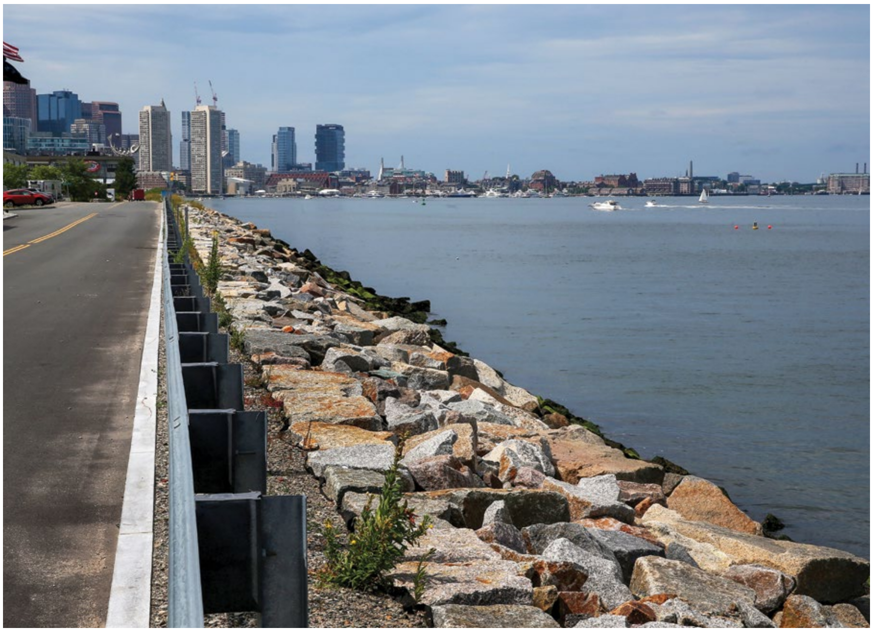
As both cities work toward mobility for all, they’re sharing ideas with and drawing inspiration from one another and global peers engaged in similar efforts. “In the public sector,” points out Lucas, “there is no theft.”

David Kaner is a marketing communications specialist for Sam Schwartz, a planning and engineering firm. Follow him on Twitter @DavidKaner.

CLIMATE MITIGATION

Developers Help Foot Climate Resilience Bills

Boston is becoming a leader in using land value capture to finance infrastructure projects that protect the city—and real estate assets—from the impacts of climate change. By Anthony Flint



DAVID L. RYAN/BOSTON GLOBE/GETTY IMAGES

Developers of the waterfront Raymond L. Flynn Marine Industrial Park in South Boston pay into a fund that the city will combine with other sources to pay for resilience infrastructure.

WITH 47 MILES of coastline subject to punishing inundation, Boston is considering a range of innovative techniques to build resilience against the inevitable impacts of climate change. But one of the most groundbreaking features of this effort may well be the mechanism used to pay for it.

City officials last year established a Climate Resiliency Fund to help finance the berms, seawalls, and natural systems that will help protect real estate in the vulnerable Seaport district and other potential flooding hotspots. Private developers will make contributions to augment local, state, and federal funding.

This mechanism will be applied to the estimated $124 million cost of protecting a city-run, 191-acre coastal industrial park. It’s also poised to become a template for resilience-building in many other vulnerable areas. While chipping in to help build defenses seems like an obvious thing to do, the resiliency fund reflects an important recognition: Public investments in critical infrastructure benefit the private sector by boosting property values—and in the case of rising seas, keep land usable.

According to Brian Golden, who retired in April 2022 after eight years as director of the Boston Planning and Development Agency, "there's been a cultural shift." With such a huge task—preparing for 40 inches of sea level rise by 2070 across hundreds of acres of squishy landfill dating back to colonial times—developers understand they have to pitch in, he said at an April 2022, two-day workshop for climate journalists held at the Lincoln Institute of Land Policy, a Cambridge, Massachusetts-based think tank.

"We don't get a lot of people balking at any of this," he added, suggesting that developers have come to understand exactions and charges for climate infrastructure as a basic reality of the times—and appreciate the policy's consistency and predictability. "If you're doing business with us … you're going to be paying to build some resiliency measures."

Leaving money on the table

What's happening in Boston reflects a growing consensus around the world, rooted in the concept of land value capture: the retrieval of increased land and property values specifically associated with government action and public investment. Just as a new transit line may increase values for the properties along it, resilience infrastructure can do the same. That increase in value is identified as the land value increment.

Allowing the private sector to enjoy those benefits without contributing to the infrastructure is increasingly recognized as the equivalent of "leaving money on the table," noted Enrique Silva, director of international initiatives at the Lincoln Institute of Land Policy.

> 'Allowing the private sector to enjoy those benefits without contributing to the infrastructure is increasingly recognized as the equivalent of "leaving money on the table." '
>
> —ENRIQUE SILVA, DIRECTOR OF INTERNATIONAL INITIATIVES AT THE LINCOLN INSTITUTE OF LAND POLICY

Value capture won't fully finance climate adaptation efforts, but it can become part of a "stack" of public finance arrangements that jurisdictions can leverage together, said Lourdes Germán, executive director of The Public Finance Initiative, at the Journalists Forum. Drawing contributions from developers and landowners can help fill critical gaps that often remain at the local level after national and state funding is allocated.

Sharing the costs

The search for the necessary revenue to fight the battle against climate change, estimated by the UN to be some $90 trillion worldwide through 2030, is certain to intensify. Already governments have been using versions of value capture in Brazil, Colombia, Ecuador, the United Kingdom, and throughout Asia for many years. Officials in Miami are studying similar mechanisms to help pay for resilience infrastructure in that flood-prone city.

The argument for developer contributions is bolstered by the quality of the climate action efforts, which build confidence that real estate assets on urban land will indeed be protected.

This move is the latest in a decades-long series of planning efforts to address climate change in Boston. It is backed up by changes to zoning regulations and the broad application of Article 80, which gives the city discretion to approve projects with certain strings attached. The city has received accolades for this work, including a 2019 APA award for *The Climate Ready Boston* plan and Singapore's Lee Kuan Yew World City Prize, which bestowed special recognition for Boston's efforts to address climate change in an older coastal city.

Golden noted that it may have taken the climate crisis for landowners and developers to accept the obvious benefits of such government-funded interventions. In the past, public investments that enhanced land and property values may have been regarded largely as a gift to the private sector, or a form of stimulus for economic activity. Now the enormity of the task—fending off the water in some places, letting it be absorbed in others—is clear to all the stakeholders, who are more willing to be part of such a daunting, but necessary, effort.

"It's an old city, our building stock is fundamentally 19th century and early 20th century, and none of this was considered," said Golden, referring to climate impacts and flooding. "And it's not just about the benefit to metropolitan Boston. We are, after all, the economic engine of all the New England states. So people are, in 2022, signing up for this. They get it."

Anthony Flint is a senior fellow at the Lincoln Institute of Land Policy, host of the Land Matters podcast, and a contributing editor to Land Lines, *the Lincoln Institute's magazine.*

PEOPLE BEHIND THE PLANS

A Passion for Planning and Social Justice

CHANCHANIT (CHANCEE) Martorell has built a career in community organizing and the nonprofit sector, with many years of service on the Central Los Angeles Planning Commission. She is an advocate, urban planner, and community leader, dedicated to Thai, immigrant, and local communities, and she founded and is the executive director of the Thai Community Development Center (Thai CDC). A mentor to me personally, I interviewed Martorell in December 2021 during a launch event for APA's Asian and Pacific Islander Interest Group. Our interview has been edited for length and clarity.

—*Tippe Morlan,* AICP

Students from the UCLA Community School surround Chancee Martorell and her portrait from UCLA's *Our Stories, Our Impact* traveling exhibit, which celebrated those who have advanced equity and equality in America.

COURTESY CHANCEE MARTORELL

Q&A

TIPPE MORLAN: What led you to planning and social justice work?

CHANCEE MARTORELL: What has inspired me and informed me—and why I'm where I am and doing what I'm doing—really stems from being an immigrant myself. I'm a Thai immigrant who grew up in Los Angeles after my parents immigrated here with my sister and me.

I grew up in the inner city of LA, in a very multi-ethnic immigrant neighborhood, where I got to witness firsthand the struggles of newcomers and immigrants. In my neighborhood, we had no access to parks and green space, and the services and infrastructure were a lot poorer compared to the suburbs, where there was greenery, resources, and a built environment that was just better.

'What has inspired me and informed me—and why I'm where I am and doing what I'm doing—really stems from being an immigrant myself.'

—CHANCEE MARTORELL

Eventually, I studied abroad in Thailand, and it sparked my interest in international development. But when I got back to the States and grad school at UCLA, where I was pursuing my degree in urban planning, there was the civil unrest in Los Angeles in 1992 (following the acquittal of the police officers who brutally beat up Rodney King). Then in 1994, we were struck by the Northridge Earthquake.

Both crises left devastation in their wakes and had adverse impacts on the Thai community, leaving them displaced from their homes, jobs, and businesses. That led to the birth of Thai CDC, and I've been here ever since.

MORLAN: What were those early days like?

MARTORELL: We came to understand that this community was really having difficulty overcoming its invisibility factor—a lot of policymakers and elected officials just did not see us as having any significance because we lacked the political clout. It was important for us to make our presence known and make sure that the powers that be knew that we exist, that

READ THE FULL INTERVIEW with planner and advocate Chancee Martorell at bit.ly/3wJEeGd

we occupy space associated with history. That's why we then began the campaign to designate East Hollywood, a historic port of entry for newly arrived Thai immigrants, as Thai Town.

MORLAN: Can you tell us about Thai CDC's affordable housing work?

MARTORELL: Thai CDC is part of a number of coalitions that are trying to protect housing—especially for low-income and very low-income people—as well as address the homelessness crisis. For us, it's the three Ps:

- Preservation of existing housing stock (especially rent controlled housing and units)
- Production of more affordable housing
- Protection of tenants

We also see a need to regulate short-term rentals, and we are pushing for legislation in California that makes housing a form of public good—a right.

MORLAN: How can planners advance social justice issues for AAPI—and all—communities?

MARTORELL: Social justice is something that I feel very passionately about and that I've sought all my life, regardless of the price.

Ultimately, I would hope that you choose unwavering principle over political expediency, discomfort over comfort, sacrifice over privilege, change over the status quo, and action over complacency. But above all, choose social justice.

If planners are going to come from the lens of equity and social justice, you have to be constantly thinking of your actions and your decisions, and whether they are going to be for the benefit of the community as a whole, and then how to mitigate any negative impacts on the immediate community. If we want to really see justice, we have to advocate for immigrant rights, workers' rights, and human rights.

Tippe Morlan, AICP, is a senior planner for Saratoga Springs, Utah, and the Director of Membership and Social Media for APA's Asian and Pacific Islander Interest Group.

PLANNERS PLAYLIST

SOME HELPFUL HOW-TOS

The Modern Mobility Podcast, hosted by planners Keli Kemp, AICP, and Kristen Mote, AICP, focuses on the practical. Each episode tackles transportation challenges with modern-day solutions—and offers some AICP credits, too. Listen at bit.ly/pmmpod.

TILclimate is an award-winning, 15-minute-or-less podcast from MIT on the impacts of climate change and the policies and tech that can address them. A new season premieres soon at bit.ly/pptilmit.

The Four Degrees to the Streets Podcast kicks off each episode with its mission: to "empower anyone curious about places and spaces" with the "tools they need to overcome institutional barriers" like racism, classism, and sexism. Listen to past episodes and get ready for season three at bit.ly/pp4degrees.

LAWRENCE FRIED/ICONIC IMAGES

NOW SCREENING

A Sweet Slice of Americana Pie

Actor Audrey Hepburn peruses meal options at America's first "waiter-less" restaurant. To watch *The Automat*, visit automatmovie.com. Listen to a *99 Percent Invisible* episode about the restaurant at bit.ly/99automat.

IN 1902, BUSINESS partners Joseph Horn and Frank Hardart opened the Automat, America's first "waiter-less" restaurant. Over the next six decades, the chain expanded across Philadelphia and New York City. This history—and its intimate connection with the rise and decline of the American city—is the subject of *The Automat*, a new documentary from director Lisa Hurwitz.

In the first three decades of the 1900s, over 20 million immigrants came to the U.S. Many settled in the eastern seaboard's gateway cities, while millions of domestic migrants relocated from rural areas. For these new urban residents, the Automat provided cheap food without the complications and judgments of traditional dining. (No language barriers! No tipping! No fears of using the wrong fork!)

These features were a draw for others, too. In interviews, Ruth Bader Ginsburg, Colin Powell, and a very funny Mel Brooks recount their own dining memories. Former Philadelphia mayor Wilson Goode describes strategy sessions with the city's nascent Black Political Forum there, while coffee magnate Howard Schultz credits the Automat for much of his Starbucks vision. Discussed throughout are the social, economic, and technological shifts cities saw during these decades, from the expansion of transportation networks and the suburbs to attitudes on race, gender, and immigration.

At times, Hurwitz—like so many of these patrons of yore—seems almost captivated into an uncritical nostalgia by these magical machines and the spell their Art Deco flourishes cast. While a short segment highlights a failed attempt to unionize, the film does little to challenge Horn and Hardart's corporate image as a model of "welfare capitalism." But in the end, *The Automat* serves up a great slice of Americana pie.

Ezra Haber Glenn, AICP, is Planning's film reviewer. He teaches at MIT's Department of Urban Studies & Planning and writes about cities and film at urbanfilm.org.

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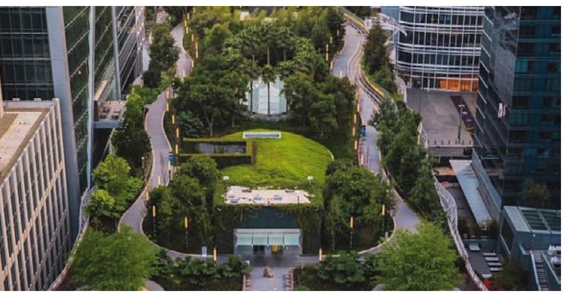

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TOOLS FOR THE TRADE

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How-To | The Profession | Legal Lessons

RELEAF CEDAR RAPIDS

HOW-TO

RECREATING THE URBAN FOREST

Cedar Rapids's post-disaster plan is built on data and principles. *By Patrick Alvord, PLA, RA, LEED AP, ASLA*

HOW DO YOU reforest an entire community virtually from scratch? Where do you start? How can you apply modern ecological insights and an environmental justice lens? How do you get broad public and private buy-in?

These were some of the questions facing Cedar Rapids, Iowa, after a catastrophic derecho, with gusts equivalent to an F3 tornado, ripped through the heart of the city on August 10, 2020. Four people were killed that day and hundreds more injured. A thousand homes were rendered unlivable, and total property damage was estimated at $4.9 billion. And in little more than an hour, 50 to 65 percent of the city's canopy—nearly 670,000 trees—were destroyed. In the face of such loss, City Manager Jeff Pomeranz reached out to renowned planner Jeff Speck, FAICP, FAIA, with a monumental request: Give us a blueprint to reforest our city.

While Speck previously redesigned the downtown street network, he was initially reluctant to take this on. But he says he saw an opportunity to build a good team and "create a model plan that could push the practice of urban forestry in some important directions."

That team included our firm, Confluence, a national landscape architecture, planning, and urban design firm with offices in Cedar Rapids. The city and local nonprofit Trees Forever partnered to commission the plan. Released to the public in February 2022, *ReLeaf Cedar Rapids* has lessons and insights with broad applicability for communities and planners everywhere.

Rule No. 3 instructs the city to plant native species wherever they will thrive.

RELEAF CEDAR RAPIDS

Prioritize replanting using principles and data

Cedar Rapids had an existing street tree inventory, which saved the planning team months of legwork and allowed the team to more quickly assess which areas of the city were hit hardest. The team layered into its GIS publicly available data from Tree Equity Score, as well as city data sets that capture percentage of trees lost, pedestrian infrastructure demand, and young people's proximity to park space.

Using these huge datasets, the team was able to carefully prioritize replanting that reflected a set of guiding principles defined through a robust public outreach process. These are summarized in ReLeaf's mission statement: "*ReLeaf Cedar Rapids* is committed to rebuilding a resilient canopy of trees, one that preserves citywide plant diversity and distinct neighborhood character, while striving to limit climate change, increase social equity, encourage volunteerism, grow human capital, and educate our children."

The team then created a scoring system for equitably prioritizing replanting, with the hardest hit areas with the lowest Tree Equity Score tapped for replanting first. In all, some 67 park properties and more than 7,400 distinct street segments were analyzed and prioritized for replanting over 10 years. The plan carefully creates a chronology of interventions based on integrating geographical data with community-sourced principles, which is a system that could easily be applied to many other planning efforts.

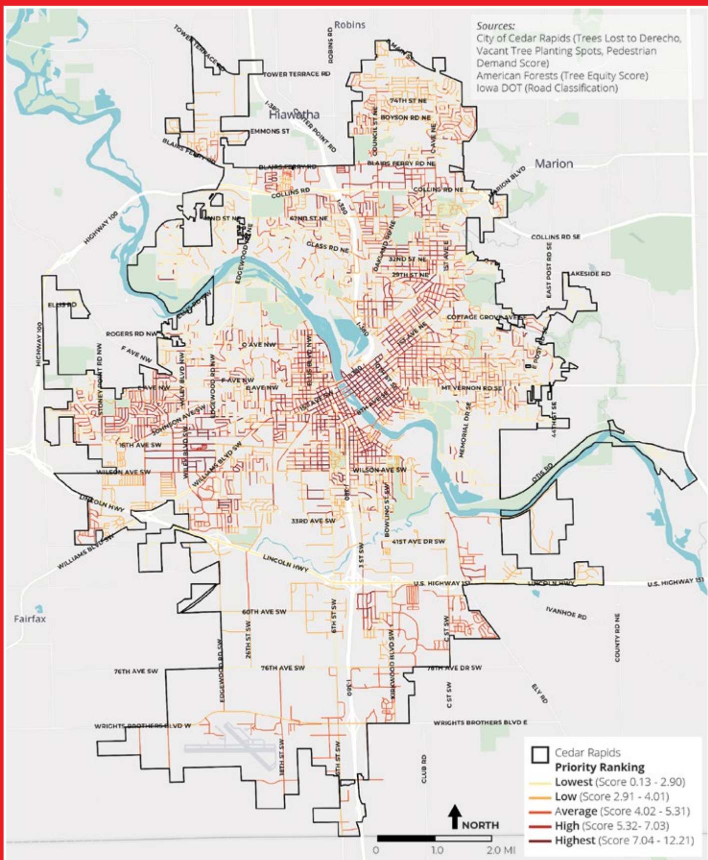
Update your urban forestry thinking

The planning team reexamined current urban forestry practices in light of recent findings to guide the city in what to plant and how. The result is the eight ReLeaf Rules, some of which run counter to what many cities are currently doing.

"Rule, 2, *Citywide Diversity and Local Character*, recognizes that citywide diversity goals do not mean that you can't or shouldn't create memorable places by using the same species to line an entire street," Speck says. "Frank Santamour of the National Arboretum, who wrote the book on street tree diversity, said 'Strips or blocks of uniformity should be scattered through the city to achieve spatial as well as biological diversity.' Many cities think they need to put a tutti-frutti potpourri on every street, and this is simply not the case."

STREET TREE PLANTING PRIORITY RANKING

ReLeaf Cedar Rapids **considered road classification, percent of trees lost to the storm, total number of vacant planting spots, the Tree Equity Score, and pedestrian infrastructure demand as factors in this ranking.**



SOURCE: *RELEAF CEDAR RAPIDS*

For years, urban foresters have debated the importance of planting native trees. ReLeaf Rule No. 3, *Locals, Not Imports*, acknowledges what biologists have now confirmed: Nonnative trees can provide many useful ecosystem services, but they actively erode the food web. With that in mind, the tree list for Cedar Rapids instructs the city to never plant a nonnative tree in a location where a native tree will thrive. That guidance led the planning team to reach out to regional growers and nurseries early on to jump-start increased growing of native tree stock.

Perhaps one of the most surprising recommendations is Rule No. 6, *Let Trees Mingle*. "Trees in fact do not benefit from being given room to breathe—another common misconception in some places," Speck adds. "As in a natural forest, they love being planted very close together, where their roots can share nutrients and information, and they can support each other during windstorms. The only real limitation to planting density is budget."

Build a system for private participation

Both the city and Trees Forever have hired staff dedicated to implementing the plan, but even if the city meets all of its own planting goals, that would account for just 15 percent of the total tree canopy in the community.

It was therefore vital that ReLeaf inspire and empower private citizens, businesses, and institutions to do their part. The plan is being widely distributed in magazine format with accessible graphics and writing that also educates users about tree selection; caring for trees; and the role of trees in reducing urban heat, capturing carbon, improving air quality, reducing energy costs, and even increasing property values.

Partnerships are key. In addition to Trees Forever, organizations like the Monarch Research Project are helping plan tree adoptions, tree distributions, and sales of native species. And corporate campuses are hosting planting days, which removes the burden of labor costs from the city.

The plan has already seen success. In 2021, even before it was finished, the city planted 400 park trees, and the nonprofit Trees Forever installed more than 800 street trees. Cedar Rapids has obligated $1 million a year for 10 years from its general obligation fund, while Trees Forever is leading efforts to raise the rest of the $27 million required to implement the 10-year plan.

Ultimately, sustained will on both the public and private side will determine whether the Emerald City's famed canopy is rebuilt, but by creating a data- and principle-driven framework with specific, actionable recommendations and resources, Cedar Rapids certainly has the tools to succeed.

Patrick Alvord is the managing principal of Confluence's eastern Iowa office in Cedar Rapids, where he leads a small but dedicated staff of landscape architects serving public and private clients on projects of all scales.

THE PROFESSION

5 ESSENTIAL TIPS FOR LEADING A TEAM, WHEREVER THEY WORK

Management, like any discipline, requires practice. Here are five tips to help you navigate today's changing workplace. *By Aimee Nassif,* AICP

THE RAPID DEVELOPMENT of new and agile leaders should be a priority for any organization that wants to remain relevant. More than ever, managers must quickly learn to deploy core leadership skills, develop a strategic perspective, and expand their networks.

In the *2017 Planning Supervisor's Playbook*, Matt Brandmeyer, AICP, and I laid out entry-level management skills to develop. This summer, we're launching the *Planning Supervisor's Playbook Part 2*. This intensive program is tailored to those established in the profession of planning and working in supervisory positions. During three interactive sessions, participants will learn to create more inclusive environments that help attract and retain high-quality employees.

Through APA Learning Circles, we spoke with planners across the country to identify how we can help improve management practices through recruitment, hiring, performance reviews, and recognizing unconscious biases. Here are five ways to boost your management techniques—whether your workplace is in-person, remote, or somewhere in between:

1 ASK MORE QUESTIONS. Communication is key—that fact is well known. But as supervisors, it's time for us to start asking more questions. Be direct and proactive with your prospective and existing team members: What are their goals? What are they looking for from their careers? What are their priorities? As supervisors, we need to keep learning and growing—which includes learning about our staff.

> Make your expectations, priorities, and procedures clear for the entire team when working remotely.

2 DEVELOP WRITTEN POLICIES. Make your expectations, priorities, and procedures clear for the entire team when working remotely, especially for new hires. Working from home has introduced new challenges to training and getting started in a new role, so laying out clear expectations is essential.

Whatever you choose, put the procedures and policies in writing so everyone is on the same page. Sometimes managers try to be so flexible that we skip over documenting our expectations. We might think our staff is already aware of these elements, but failing to provide written communication can result in uncertainty.

3 IDENTIFY MOTIVATIONS. What moves you—being rewarded or avoiding pain? This may seem like a strange question, but people can be driven by either one. If you have an employee that isn't energized, and you're having trouble finding what sparks them, it may be time for a conversation about motivation.

What drives one person might not work for another. Some are attracted to the prospect of a reward: a sense of accomplishment, a financial incentive, or a contest. They may want to feel like they've made a difference. Others, however, might prefer to reduce a problem. These individuals like to volunteer as problem-solvers, especially when you explain the ramifications of failing to find a solution.

4 CREATE AN ENGAGING WORK CULTURE—EVEN IF YOU'RE REMOTE.

A positive work culture goes beyond manager expectations and work policies. It depends on team engagement and ensuring that everyone still feels connected, valued, and that the work they are doing is important.

Take a step back, look at your staff, and ask yourself: Is there still a strong sense of team here? Do people feel connected, or do I need to develop a team dynamic that's as strong as when everyone was in the office together? Assign tasks to small groups so they have the opportunity to work together. Be sure to take time out for team-building activities or fun contests that don't have anything to do with work projects.

5 GET CREATIVE.

As supervisors, we must step up our creativity and innovation game—to motivate staff, find ways to reward and celebrate efforts, and retain and attract team members. Be open to new ideas, especially those you've never allowed or even considered! This could include hiring a fully remote planner in a different location, instituting signing bonuses, or providing perks like a monthly lunch in the office or extra personal days off from work.

Aimee Nassif, AICP, is the chief planning and development officer of Olathe, Kansas.

COURTESY THE MARYLAND CENTER FOR HISTORY AND CULTURE, MC7554.2

In 1916, Maryland's Supreme Court overturned a law that cited fire hazards as justification for outlawing brick apartments near wood-framed single-family homes.

LEGAL LESSONS

LOCAL-LEVEL PRECEDENTS FOR ZONING REFORM

How century-old arguments against exclusionary zoning support policy changes today. *By Francine S. Romero*

ELIMINATION OF single-family-only zoning is quickly gaining currency in Minnesota, Oregon, and other places across the country. This innovation disrupts conventionally segregated land use by allowing multifamily structures by right in any residential zone, which advocates argue could help promote housing affordability and diversity.

Despite much debate over these measures, curiously little attention has been paid to the legal context—or perhaps not so curiously, as the 1926 U.S. Supreme Court decision constitutionally authorizing comprehensive zoning has never been revisited. That decision, *Euclid v. Ambler*, ruled that segregating land uses through zoning is a valid exercise of police power—or the government's power to control its jurisdiction in the interest of general security, health, safety, morals, and welfare—because it protects residential areas from the supposed dangers of mixed uses.

Almost 100 years later, modern planners might see little point in consulting other legal reasoning of the era. To be sure, zoning was upheld by most judges, even before the Supreme Court made *Euclid* the law of the land.

But a cadre of state supreme court opinions issued before 1926 took a different tack, concluding that shielding single-family neighborhoods from other uses is often discriminatory and, essentially, unconstitutional. This small group of cases offers arguments against the legal legitimacy of exclusionary zoning that can be useful in many of today's policy debates.

Legally questionable justifications

Euclid's value to municipalities is in its declaration that comprehensive zoning does not amount to regulatory taking (a governmental regulation that limits the use of private property by depriving it of its economic value), thus freeing cities from the need to compensate property owners. That logic is grounded in many legally meaningful aspects of zoning, but especially its alleged power to prevent harm, thereby passing the crucial test of any regulatory policy legitimized by the police power: to protect some aspect of the public welfare.

Yet that was the rub in cases where a state supreme court overturned a comprehensive or rudimentary zoning effort. Judges did not see a valid public welfare justification for separating single-family from multifamily or low-intensity commercial uses. What they did see, however, was evidence of bias, discrimination, and legally questionable justifications.

Many of these cases revolved around disputed attempts to ban multifamily structures in single-family detached residential (SFR) neighborhoods, with the courts finding regulatory justifications weak or nonexistent. In 1917, for example, the Minnesota Supreme Court prohibited an effort in Minneapolis to reject a four-unit building on the assumption of "nuisances" like congestion, crime, and fire risks. Similarly, the Maryland Supreme Court in 1916 confronted a state law (passed at the behest of homeowners) prohibiting apartments in a Baltimore neighborhood. In overturning the statute, the ruling challenged the putative harms like the alleged fire hazard—existing homes were constructed of wood, it pointed out, while the proposed apartments were to be brick.

Later, in 1922, the New Jersey Supreme Court rejected the exclusion of a two-family home in a SFR neighborhood because the city of South Orange had jumped straight to prohibition. If there were a legitimate public harm, the opinion questioned why it hadn't been managed with a new condition, like a building setback. The real motivation for refusal seemed obvious to the justices: Neighbors simply didn't want a multifamily building there.

One year later, that same court restricted application of a similar ordinance in Nutley, which attempted justification via blight avoidance. The court observed that, in reality, the "blight" concern was a fear of people of different nationalities, ethnicities, and races moving into the area. The opinion declared that assessment unreasonable and discriminatory.

> The approach these judges took suggests single-family-only zoning may not just be bad policy, but constitutionally deficient, too.

Other decisions of this era overturned prohibitions on small stores in neighborhoods. Justices typically explained that it was appropriate to limit retail operations that could impact public welfare through dangerous substances or manufacturing processes, but banning trade in goods that would not spoil, explode, attract vermin, or so on, failed that basic test.

Police power and zoning

From a policy perspective, these ideas are not new; planners have long challenged the logic of Euclidean zoning. But that generally led to adoption of mixed-use zoning as an *alternative* to segregated zones, not a substitution, leaving the legal foundation of single-family exclusivity in place. In other words: Planners were free to innovate, but where cities opted to retain conventional zoning, its legal foundations remained rock solid.

Zoning retains legitimacy today despite a growing recognition that it does not strictly align with the police power—scale-appropriate multifamily and neighborhood commercial uses rarely represent material threats to single-family homes. This has largely been glossed over because zoning (theoretically) emanates from a comprehensive plan, indicating public support, a lack of arbitrariness, and generic (if not specific) links to public welfare.

But the approach these 20th-century judges took when encountering SFR zoning for the first time suggests it may not just be bad policy, but constitutionally deficient, too. A key takeaway is reconsideration of police power justifications that only protect the preferences of existing homeowners. These judges articulated that idea through "aesthetics," a term they applied to uses that presented no physical danger or discomfort but were repugnant to residents simply due to their nature.

This assertion, that police power fails to justify SFR zoning, is due for a revival. While policy experts are successfully advocating for the advantages of zoning reform in many communities, this legal argument goes further by weakening the foundational legitimacy of exclusionary zoning.

Francine S. Romero is associate professor and chair of the Public Administration Department at the University of Texas, San Antonio, and a former San Antonio zoning commissioner. This story was inspired by "'For the Contrary View': Reconsidering the Early Anti-Zoning Decisions" (bit.ly/3EwfEvM) in the Journal of Planning History.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get ready to grow

Urban agriculture is going digital—and cultivating more efficient, all-season farming.

By MICHELLE McCUE

Freight Farms creates vertical farms (left) inside shipping containers that can be trucked anywhere. Their IoT software Farmhand allows operators to automate and control their hydroponic farms with the touch of a screen, whether they're on location or remote.
COURTESY FREIGHT FARMS

DIGITAL URBAN AGRICULTURE. VERTICAL FARMS. Plant factories.

Known by many monikers, this emerging sector of controlled-environment agriculture has generated a lot of buzz over the past few years—particularly since 2020, when the pandemic threw supply chains into upheaval and communities saw food insecurity rates skyrocket. Today, venture capitalists and economic developers alike are investigating and investing in what some are calling the future of food.

Urban agriculture (UA), or the cultivation of food in cities, is as old as cities themselves. Traditionally, UA comprises community gardens, urban farms, backyard or patio gardens, and cultivation of space-thrifty animals (like chickens). Many practitioners of traditional UA lean into regenerative agriculture and permaculture practices that reconnect farming with nature.

Digital urban agriculture (DUA) is a different variety of UA. A technology-driven form of indoor food production, DUA is also known as Z-farming (zero-acreage farming) or building-integrated agriculture. Implementations range from rooftop greenhouses and vertical plant factories to shipping container farms, edible walls, and other indoor growing approaches. Generally speaking, its growing practices rely on one of three technological methods: hydroponics, aeroponics, or aquaponics. All three systems depend on artificial lighting, HVAC systems to control temperature, and automation technology—which has made these sites big energy consumers and expensive to set up and operate.

But where venture capitalists once saw obstacles, they're now seeing opportunity: The vertical farming sector has raised more than $1 billion in funding since 2015 and was valued at $14.5 billion in 2020. Already widespread in the Netherlands, Japan, and parts of Scandinavia and China, DUA operations are popping up in geographically diverse areas across North America, with footprints ranging from the size of a parking space to 20 football fields.

Plenty Farms, which will soon complete a 95,000-square-foot vertical farm in Los Angeles County's Compton, recently announced it raised $400 million in a Series E funding round and formed a strategic retail partnership with Walmart. Other big players in the DUA sector include AppHarvest, Cox Enterprises (which bought BrightFarms), Bowery Farming, and Netherlands-based InFarm, among many others.

What's driving the boom? Advancements in full-spectrum, energy-efficient LED lighting and renewable energy that are making the sector more environmentally friendly and financially viable. Interest in agricultural technology (ag-tech) has also increased in response to multifold threats to traditional farming, like soil and water degradation, agricultural land loss to development, erratic weather due to climate change, and weaknesses in the food supply chain exposed by the pandemic. Together, these concerns have sparked intense research and development into new approaches to farming that emphasize more efficient, all-season food growth.

rightsized farming

"LOCAL" IS THE KEY, SAYS ENVIRONMENTAL AND food justice advocate Niaz Dorry, who calls for community-based food solutions. As the joint director of the National Family Farm Coalition and the North American Marine Alliance, Dorry works toward sustainable approaches to both land and seafood production. She says aquaponics, hydroponics, and other ag-tech production solutions can be part of a sustainable local food system, but she urges planners to do their research before green-lighting projects.

"To understand the issues around any innovative operation, you have to ask three questions: What's the scale? Who owns it? To what end?" she says.

DOLLARS FOR DIGITAL FARMS

Venture capitalists are starting to pay attention to digital urban agriculture.

$1 billion
The amount of funding raised in the vertical farming sector since 2015.

$14.5 billion
The valuation of the sector in 2020.

$400 million
Series E funding announced by Plenty Farms, which is building a 95,000-square-foot facility in Compton, California.

SOURCE: *FUTURE FARMING*, PLENTY FARMS

Clockwise from top left: Veterans learn about vertical farming during a Recirculating Farms Growing Local NOLA class; aquaponic romaine lettuce; “Roots on the Rooftop” with the New Orleans skyline; local growers tend aquaponic beds that use recycled water as an alternative to soil.

MARIANNE CUFONE/RECIRCULATING FARMS

Based in the nation's oldest fishing town of Gloucester, Massachusetts, her food systems goal is "re-localizing"—which, she says, "may mean exploring some new forms of agriculture" without divorcing food production from nature. She references Mi Oh My Farms, a small-scale hydroponic farm co-op in the Bronx that "is actually meeting food access needs" by employing a local workforce to produce and distribute CSA shares to 25 member families.

Dorry also cites New Orleans's Recirculating Farms, a nonprofit that, according to the organization, "builds eco-efficient farms that use clean, recycled water to grow fresh local food almost anywhere and create sustainable jobs." The group runs several farm spaces in New Orleans in cooperation with veterans, musicians, senior housing, and community health and wellness organizations, managed under Growing Local NOLA Farms. And every week, it runs a locally sourced, low-cost, fresh food delivery and holistic health program called Growing Local On the Geaux, which brings DUA farm-raised produce and various health-supportive services into New Orleans neighborhoods with little access to such resources.

Some for-profit operations see the value of scaling down and focusing on rightsized solutions for various community-based applications. Boston-based Freight Farms, for example, has created vertical farms inside shipping containers that can be trucked anywhere—hence their tagline, "Move Farms, Not Food."

Freight Farms provides ready-built farms to small-scale aspiring farmers and entrepreneurs (think restaurants and grocery stores), as well as to existing farmers that lack all-season growing capacity. The company also works with schools like Mountain Vista High School in Highlands Ranch, Colorado, to provide hands-on learning experiences across a range of subjects, including chemistry, biology, and business.

SMALL-SCALE SUCCESSES

Firms and nonprofits are making fresh foods and farming knowledge more accessible to urban communities.

2-4 tons
The amount of produce one Freight Farms Greenery 5-model shipping container can produce annually, depending on the type of crop.

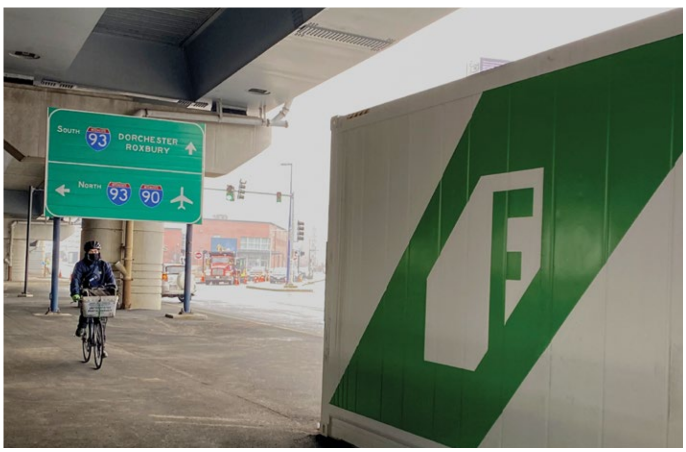
10+ years
How long Recirculating Farms has been supporting fresh food production in New Orleans.

SOURCES: FREIGHT FARMS, RECIRCULATING FARMS

annexed greenhouses

IN AMERICA'S HEARTLAND, THE CITY OF ROCHELLE, Illinois, has taken a different approach. Jason Anderson, economic development director of Rochelle, says it's poised to become a food hub capable of distribution across the country. A city of 9,000 residents, it's also home to MightyVine, a hydroponic tomato farm inside a series of greenhouses that span nearly 30 acres.

MightyVine offered an attractive solution to several issues faced by the city's planners, starting with the site. Once a traditional farm, the farmer sold his land to a developer in the mid-aughts; the city worked with the developer to



Freight Farms uses modular hydroponic farms to grow food in any climate and environment, including at a shelter for women and children in Miami (left) and under a highway overpass in the middle of Boston (right).

FREIGHT FARMS

HOW TO HARVEST THE BENEFITS OF AG-TECH

When it comes to food production technology, true success can be measured through a values lens—Food Solutions New England focuses on democracy, racial equity, sustainability, and trust, says Lisa Fernandez, communications director of the six-state food systems network.

"Some projects are decidedly extractive and are characterized by harmful [and] illegal treatment of workers, disdain for local communities and regulations, horrible reliance on fracked gas, et cetera—the list goes on and on," she explains. "Other enterprises seek to model low [or] no fossil fuel use, care for workers and communities, worker-owner attributes, and other values-based approaches to greenhouse growing."

Want to establish an equitable controlled-environment agriculture (CEA) program in your area? These tips from a New York City case study in *Land Use Policy* can help you evaluate whether a proposed farm is right for your community.

DO YOUR HOMEWORK. Learn which technologies are used, whether the intended crops are of nutritional value, and how many living-wage jobs could be created.

SET GOALS. Are you looking to address food inequities? Due to startup costs, commercial CEA farms are more likely to focus on high-value crops for wealthy consumers, whereas community and institutional farms are better positioned to get healthy food into the hands of those who need it—but they can require more financial and technical assistance to ensure their longevity.

PRIORITIZE ENERGY-EFFICIENT OPERATIONS. CEA farms on roofs, in glass buildings/greenhouses, or on the ground that rely on solar, not single-source lighting, should take precedence.

SITE WITH INTENTION. CEA farms located in cities with high land values are best sited on roofs; however, in cities where land values are low, greenhouse production at the ground level could be a viable alternative to extend growing seasons—and provide better connections to local communities.

KEEP FINANCIAL EXPECTATIONS REALISTIC. Rural and peri-urban CEA businesses are likely more viable than those in city centers due to lower operational costs and greater economies of scale.

CREATE COMMUNITY BENEFITS. If you encounter businesses that demand tax incentives or other benefits, consider requiring that a meaningful percentage of hires include unemployed and underemployed individuals in the identified communities, that businesses guarantee living wages for entry-level workers, and that unsold produce be donated to food banks or shelters.

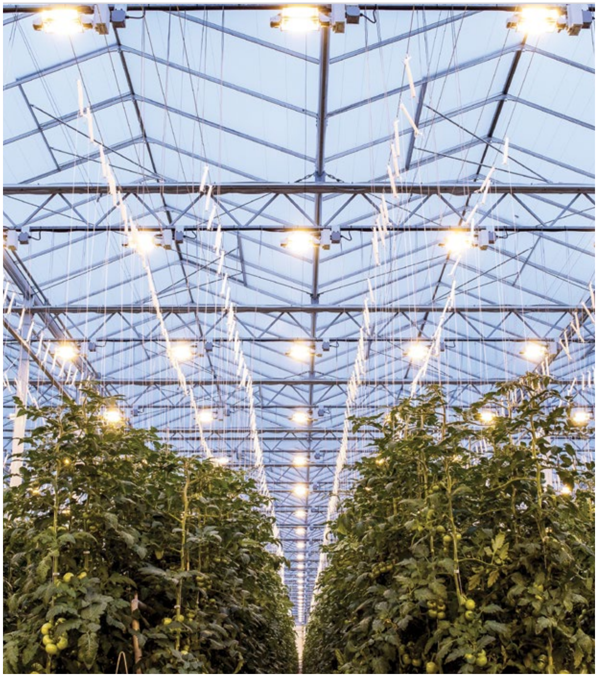
—Michelle McCue

annex the site and zone it as an industrial park. It was then scraped of topsoil and prepped to become a large distribution center. However, the project fizzled, and the pad-ready site sat idle for more than a decade. When the farmer bought back the land, the lack of topsoil made it impossible to farm.

Enter MightyVine. Zoned for medium industrial use, the site was perfect for a greenhouse, and had the added advantage of reverting the land to farm use. Anderson highlights some of MightyVine's advantages over a traditional farm: With just 10 percent of the water required for field-grown tomatoes, it can reportedly produce more than 16 tons per acre of tomatoes each year on its 30 acres. Contrast that with an outdoor tomato farm, which yields an annual average of about 20 tons per acre, and one starts to appreciate the efficiencies from a land-use perspective.

Given its small population, it's clear that Rochelle isn't the target market for MightyVine's vast production—though, Anderson notes, locals sometimes benefit from overproduction that gets donated to local food banks. The company distributes nationally, with its products going from "field" to fork in 24 to 48 hours, according to

Clockwise from top right: Plenty Farms is building a 95,000-square-foot vertical farm in Compton, California. In Rochelle, Illinois, MightyVine produces nearly 300-foot-long rows of cherry tomatoes in greenhouses built on a former industrial site. During the winter months, high-pressure sodium grow lights supply needed sunlight. At Plenty Farms outside San Francisco, robots grab seedlings and transplant them to large towers hung vertically in grow rooms.



MIGHTYVINE; SPENCER LOWELL/PLENTY

Anderson. The distribution model is similar to that of a large, traditional farm; the distinctions are on the production side.

MightyVine touts various sustainability features, including rainwater capture, a closed water system that doesn't leech chemicals into groundwater, integrated pest management to control harmful bugs, and bumblebees to aid pollination. The growing environment, as well as vine health and progress, is monitored 24/7 using automated technology that can be managed from afar, thanks to the city's beefy broadband infrastructure. MightyVine's hefty energy needs are met by Rochelle's natural gas–fed municipal utility, which has added a new substation to meet demand as the operation expanded.

Anderson is enthusiastic about not just the future of MightyVine, but also the city's future as a food hub. Highlighting Rochelle's advantages in attracting similar ag-tech businesses, he cites its distribution-friendly location at the country's transit crossroads, its history as an agricultural community with a trained workforce to match, and—perhaps most importantly—infrastructure investments made by his predecessors that give the city a leg up when pitching site selectors.

MightyVine brought part of Rochelle's farmland full circle. The site where its clean, efficient greenhouses now stand was once a traditional farm. And, Anderson says, there's more farmland to be had. "It's a win-win-win scenario for our community," he says, noting that retiring farmers can get top dollar for their land if it's annexed by the city and zoned for industrial development. Sites that are part of Rochelle's Enterprise Zone are also eligible for a variety of incentives, from tax abatement to tax credits and exemptions.

BIG FARMS, BIGGER YIELDS

Digital urban agriculture farms can produce year-round, yielding larger harvests than more traditional methods.

10%
The portion of water generally used for field-grown tomatoes that is needed for MightyVine's greenhouses.

16+ tons
The yield per acre of tomatoes in MightyVine's greenhouses.

10 days
The time between leafy green harvests at Plenty's vertical farms in California.

SOURCES: MIGHTYVINE, PLENTY FARMS

a blended approach

IN THE FAR NORTHERN REACHES OF THE continent, entrepreneur Sonny Gray is pursuing a different approach to DUA. The CEO of NorthStar Agriculture, based in Canada's Yukon Territory, Gray's mission is to "feed the North." He works closely with First Nations and other Indigenous communities to help design and build farms to address food insecurity and contribute to food sovereignty, or the ability of communities or groups to control the means of their own food production.

Gray notes that food justice advocates and others doing this type of work are committed to traditional agricultural practices. They can react strongly against the introduction of tech-driven solutions. "In each camp," he says, "you have people very dedicated to their perspective." He tends to advocate for "a blended approach."

"It's too late to go back to the old ways of growing food. We're used to being able to get strawberries year-round, no matter where you live," he says. "People don't can anymore, they don't have root cellars. It's unrealistic to think that we can meet communities' food needs through community gardens and permaculture alone, as important as those things are."

NorthStar Ag is currently engaged in research and development of DUA solutions appropriate for the Yukon, both in terms of weather resilience and operating scale. Gray aims to blend traditional field farming, small-scale fish farming using aquaculture, indoor vertical farming as a winter or small-space supplement, and small animal husbandry, including microdairies and production of "dual-purpose animals" that can both produce milk or eggs and be processed as meat.

He notes that an important component to the plan is integrating farm energy systems. "By locating indoor farms next to power plants producing heat or off-gassing, we can harness that energy and use it." He notes that this approach could be scaled up to large urban areas as well.

Key to this work is community engagement, Gray says. Through community meetings, listening sessions, and conversations with community leaders, he works hard to suss out the "food champions" in the areas where he works, tapping into their knowledge to help guide his projects.

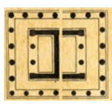
"Building something without first engaging the community would be a breach of trust," he explains. "You don't even know what people want to eat [if you don't talk to them]!"

Michelle McCue is the founder of McCue Marketing Communications, a consulting firm that helps build strong communities and place-based brands through strategic planning, branding, and communications. Specializing in tourism, food, and agriculture-based development, McCue combines practical planning knowledge with strategic outreach to help clients achieve sustainable growth.

THE NEW

BLOCK CLUB

Blockchain tech, still nascent and little understood, could have significant implications for city services and the environment.



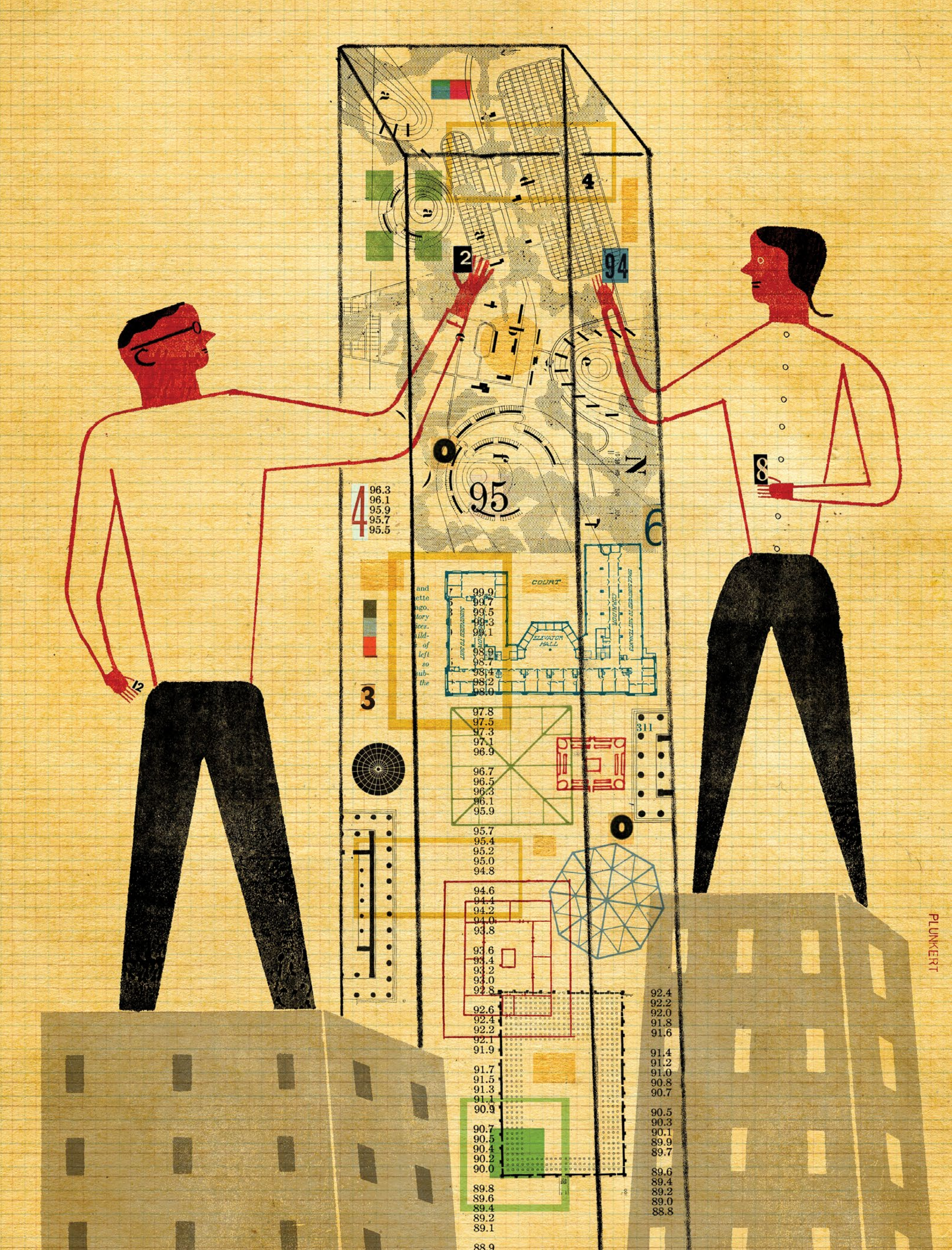
WHEN BIG-CITY LEADERS like Francis Suarez—Miami's Twitter-fluent, future-focused mayor—tout their blockchain bona fides, or when New York City's newly elected mayor Eric Adams offers to take his salary in the cryptocurrency Bitcoin, it seems like a shift is underway.

The ever-evolving, often hypercapitalist world of blockchains, cryptocurrency, and non-fungible tokens (NFTs) might seem too bleeding-edge for civic operations. The swift rise of crypto millionaires and fads that drive the prices of currencies up (and down, as we saw this spring) suggest a Wild West atmosphere, unwelcome at a city hall with the sober duty to serve its citizens.

"When you start looking at blockchain technology, you have to understand and realize how much hot air is in the room, and how much of it is irrational exuberance on the tech and money side," says Mark Wheeler, Philadelphia's chief information officer, who launched a city initiative last fall to explore its potential. "But I do believe there's a there there. And that it also has a use in government."

Amid the hype, experts say it's important planners understand the potential impacts, from more transparent and secure record keeping to the significant amount of energy often needed for operations.

By PATRICK SISSON *Illustrations by* DAVID PLUNKERT



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> The blockchain is designed to take input from multiple sources and store it across multiple computers, resulting in a shared system that's meant to be transparent, incorruptible, and accessible.

AT THE CENTER of this technological shift is the blockchain, a decentralized, digital record-keeping and ledger system that tracks transactions. In other words, it's a series of individual records ("blocks") that appear on a single list ("chain").

Whereas typical city data-keeping often relies on a single entity or agency controlling files and distributing them through a central depository or database, the blockchain is designed to take input from multiple sources and store it across multiple computers, resulting in a shared system that's meant to be transparent, incorruptible, and accessible. Transactions have little cost, typically occurring instantly and securely. A National League of Cities report describes the system as an "anonymous smart spreadsheet listing and time-stamping each new bill paid, purchase made, vote cast, and credit earned" that's "verified by a trusted third party."

Justin Hollander, FAICP, an urban planning and design professor at Tufts University, says existing government operations and traditional internet safety protocols are far more vulnerable to hacking than the blockchain, an attractive feature as more cities field ransomware attacks.

"It's important to understand that the only thing that has actually been hacked are the intermediaries that operate on top of the blockchain," says blockchain advocate Matthew Snider, senior vice president of strategy and business development at Centri Tech, a social tech firm focused on expanding broadband access. "The blockchain has never been hacked."

Within this distributed, digital file- and record-keeping system, it's possible to create cryptocurrency, a digital alternative to traditional currencies, as well as NFTs, tokens stored on the blockchain that each represent a one-of-a-kind digital item. Much of the hype around NFTs comes from artists and others creating singular art objects or collections and selling them as rapidly appreciating collector's items, but that uniqueness could actually be an advantage for secure record keeping—records stored on the blockchain can't be altered or faked.

BUT AMID THE HYPE, some critics are concerned about the environmental impacts. Cryptocurrencies must be "mined," which requires specialized computers that verify extremely complex calculations, known as "proof of work," to both authenticate transactions on the blockchain and create more. This process has been so energy-intensive that global mining activities already dwarf the total emissions of many medium-size countries.

The U.S. alone created roughly 40 billion tons of carbon dioxide annually via mining operations. In some regions of upstate New York, where mining is prevalent, increased electricity demand has boosted local energy costs by tens or even hundreds of millions of dollars by some estimates. Tim Berners-Lee, inventor of the World Wide Web, has described the concept as "one of the most fundamentally pointless ways of using energy."

But as Bitcoin advocates and the cryptocurrency industry come to terms with their environmental footprint—roughly 250 industry players have signed the Crypto Climate Accord, promising to be net-zero by 2030 and decarbonized by 2040—there have been more immediate efforts and initiatives to make these processes more sustainable. Some coins work on different proof methods that use less electricity. One of the major cryptocurrencies, Ethereum, is switching to a "proof-of-stake" system, in which a network of validators will "stake" their own currency to validate equations and earn rewards, which would significantly cut down on the competition and excess energy use of the proof-of-work method.

Many of the blockchain's current uses raise environmental concerns, but its transparency could create more sustainable options for the future. Suppliers could use blockchain record keeping to ensure that materials are accurately tracked and traced in industries like mining and forestry, for instance. Theoretically, cities could also use this tech to track suppliers and the second- and third-order environmental impacts of urban resource consumption and energy use.

Others see the potential to use Bitcoin's energy-hungry nature as a way to prop up new, green energy infrastructure. Colocating crypto-mining operations with zero-carbon, renewable power sources like hydro, wind, and solar would not only cut down on the carbon emissions of the mining itself but also provide a ready and willing market for green power. With renewable power sources able to sell excess power to miners when grid demand is low—and even charge a premium—such an arrangement might help accelerate the deployment of zero-carbon electricity generation. Theoretically, it could even help finance and distribute the benefits of renewable power, making the complicated finances of selling solar across borders more seamless.

PLANNERS EXPLORING the blockchain should understand that many, if not most, of its applications are still in their nascent stages of development—and fairly impractical without additional advancements in technology—but there are exceptions. Reno, Nevada, and Miami may be the best known; their mayors have courted the industry and worked with staff and consultants to understand and embrace the technology.

While some consider promotion of Bitcoin a way to entice blockchain startups—and a play to be seen as a wealthier, tech-savvy city—Reno

TROUBLING ENVIRONMENTAL EQUATIONS

Mining has always left physical scars on the landscape. While crypto mining may take place inside computing rigs and servers, these mathematical equations leave anything but an abstract footprint.

The Bitcoin and Ethereum Energy Consumption Indices report that Bitcoin has an energy footprint equivalent to Thailand, or more than the consumption of Google, Apple, Facebook, and Microsoft combined. A single transaction uses as much energy as a typical U.S. household would over nearly 74 days.

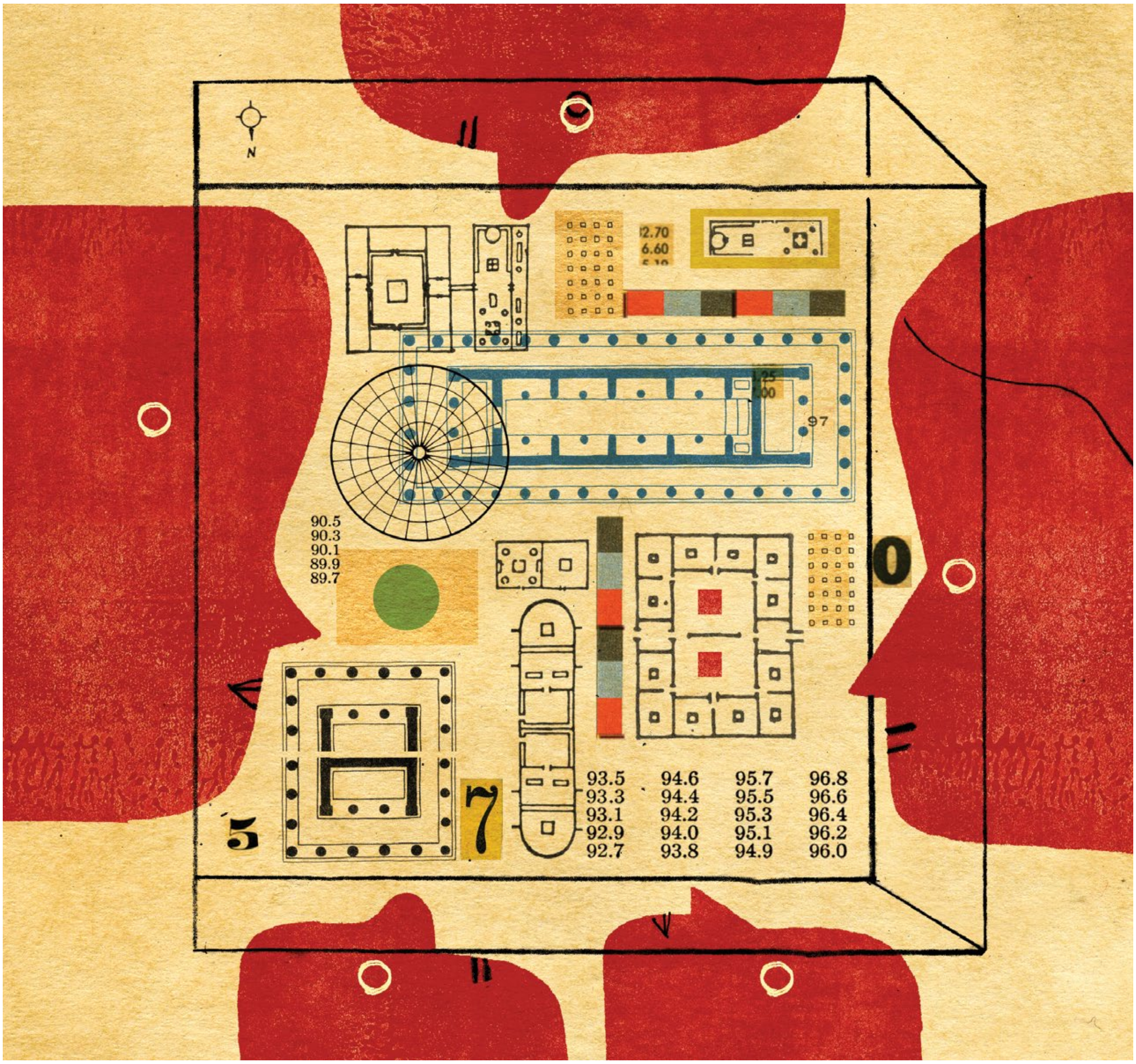
Comparing the decentralized nature of Bitcoin to traditional bank financing helps explain its energy consumption. In a top-down, centralized system like a bank, a transaction or payment is processed by a speedy, centralized network. On the blockchain, which uses a proof-of-work system, 51 percent of the distributed databases must confirm a transaction. Within the larger system, super-users with more elaborate computer systems try to do more of these validation tasks for digital currency. This process requires validating nearly three dozen variables and solving a puzzle involving a specific algorithm that generates a random 64-character string of numbers and letters, after which a new block is created and added to the chain.

That all requires incredible effort and has led to increased competition—an estimated one million Bitcoin operators currently compete, though many have formed mining pools that may link together numerous users to multiply computational power. As the price of the currency goes up, there's more incentive to battle, the puzzles get more complex, and more energy is expended in solving them.

Due to this increased competition, miners are incentivized to process more transactions, leading to a search for the cheapest possible power and the most energy-intensive computers. These rigs, which are constantly replaced in a bid to have the latest and most powerful gear, create excessive e-waste, and often need excessive amounts of water to cool all the equipment, which creates heat pollution in streams and rivers that can damage and even kill wildlife.

In many cases, fueling these computers has led miners to buy and restart old coal plants or connect to hydropower and divert renewable power to mining operations. China, which once controlled 65 percent of Bitcoin processing power, cracked down on the practice in an effort to meet environmental targets, pushing miners to countries like Kazakhstan that rely more on fossil fuels.

— Patrick Sisson



mayor Hillary Schieve has already pushed a blockchain-based system to track real estate contracts and monitor changes to agreements. "Politicians don't like to be the first out of the gate," she told *Wired* magazine. "I'm not afraid of that."

She's not alone. Dubai is seeking ways to digitize government data storage, technologists in Argentina and India have experimented with ways to track and incentivize garbage collection using the blockchain, and Estonia has instituted digital national IDs to vastly increase access to government services and improve bureaucratic efficiency. On a more local level, Cook County, Illinois, has used the blockchain to store property records in an effort to combat deed fraud.

Helium, a blockchain broadband network that provides open data to smart devices and uses tokens to incentivize its use and expansion, has also been used by San Jose to make passive income. They plan to test an expansion to pay for broadband for 13,000 households.

Wheeler, Philadelphia's CIO, says the key term here is "disintermediation": taking people out of the equation and freeing data to move and interact on the blockchain. This means that files or applications can proceed more quickly through reviews. Blockchain tech could be applied to city approvals, smart contracts, environmental impact statements, and all other forms of municipal documentation.

"Think about going from the Dewey Decimal system used in libraries to something like Google in terms of how you search for something," says Snider of Centri Tech. "From a government perspective, there [are] a lot of orders and rules, which are perfect for this environment. There are also inexpensive platforms for them to grow on."

Ultimately, big-city blockchain advocates envision a scenario in which records are evaluated and approved in a traditional manner, then stored in a digital system that is more flexible, accurate, accessible, and transparent. It's not a panacea, they say, but rather a better process that gets the gears of bureaucracy moving faster: a county registry of deeds available anytime from anywhere, for example, or property and zoning databases that require significantly fewer resources to maintain and archive.

Based on lessons learned throughout the pandemic, during which the rollout of emergency digital services made most of us more comfortable with and desiring of online government interaction, it's clear that digital solutions and quicker responses will only be more in demand. "This is all about smart contracts," says Hollander. "It could help speed up civic operations without as much need for operational oversight."

The record-keeping potential of the blockchain could be expanded to cover resident feedback and community meetings and even offer another avenue for voting. Hollander sees the same tech monitoring neighborhood-level decision making. That could include simple tasks, like seeing where the city is spending money and tracking voting records of representatives and council members, as well as more complex interactions between databases.

"That input can become alive in ways we've never been able to track before," Hollander predicts.

> Getting educated about blockchain tech at this early stage of development could help protect the public interest, particularly when it comes to environmental considerations.

THE TIME TO start learning about and experimenting with this nascent tech could be now, advocates say.

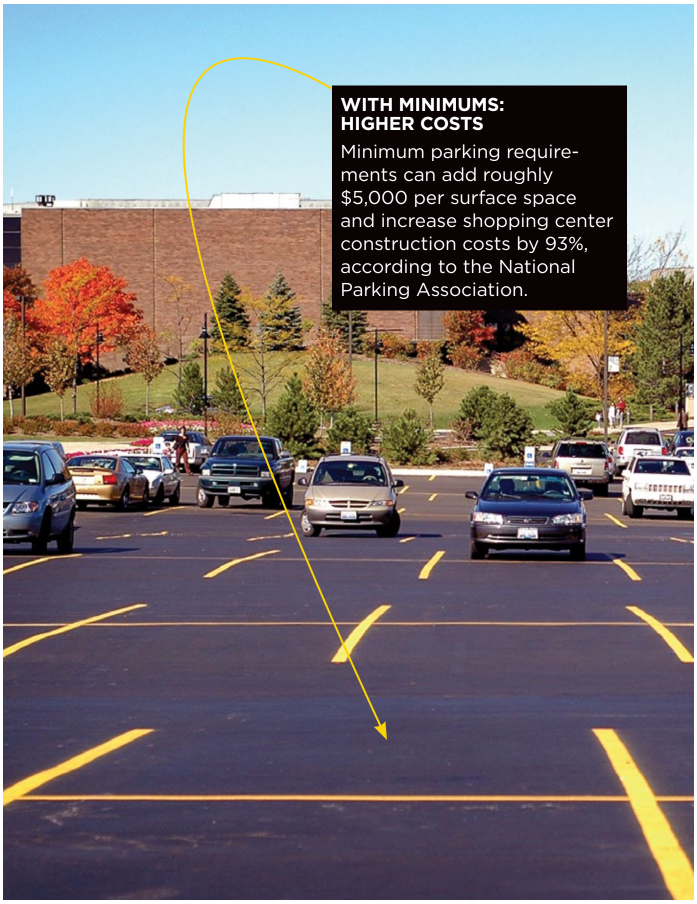
With the rollout of federal stimulus and infrastructure dollars, last year's record-setting investment in government technology, and the increasing digitalization of government operations, we may be seeing more opportunities to invest in trials and tests of blockchain-based services, as well as update some older legacy systems that have been coasting due to inertia.

Planners and other decision makers will need to traverse a vast skills gap to fully participate in designing new blockchain apps and products. At present, few schools offer majors or courses of study on the subject, but a handful of industry groups like the Blockchain Council and Government Blockchain Association offer training and certification. Some states and municipalities are even beginning to offer educational opportunities for government employees.

While grasping this technology might seem like a trial-and-error process, especially in the early days of civic blockchain rollout, experimentation can create clarity at a time when constant experimentation is becoming the norm. And getting educated and involved at this early stage of development could help protect the public interest—particularly when it comes to environmental considerations—and reduce municipal reliance on contractors and consultants.

Developing in-house understanding, appreciation, and, in some cases, apprehension of the blockchain can help us focus resources and continue moving toward the future communities want to plan—technology included.

Patrick Sisson is a Los Angeles–based writer and reporter focused on the tech, trends, and policies that shape our cities.



WITH MINIMUMS: HIGHER COSTS
Minimum parking requirements can add roughly $5,000 per surface space and increase shopping center construction costs by 93%, according to the National Parking Association.

WITH MINIMUMS: INEFFICIENCIES
Some locales require two spaces per chair at a barber shop when a barber's chair can only hold one person at a time.

FROM LEFT: IDEABUG AND STEFANAMER/ ISTOCK/GETTY IMAGES PLUS

A Business Case for Drop

Reforming policies doesn't just put people over parking. It can be a smart econ

AUBURN, MAINE, is a quaint, picturesque river town dating back to the 18th century, with a Main Street historic district of Victorian-era homes. There's also a riverwalk, a hockey arena, and even a mall. But like lots of smaller towns all over America, COVID ravaged some of its businesses. A Ruby Tuesday restaurant closed. So did a locally owned brunch place. And a Chinese buffet. And a French café. And others.

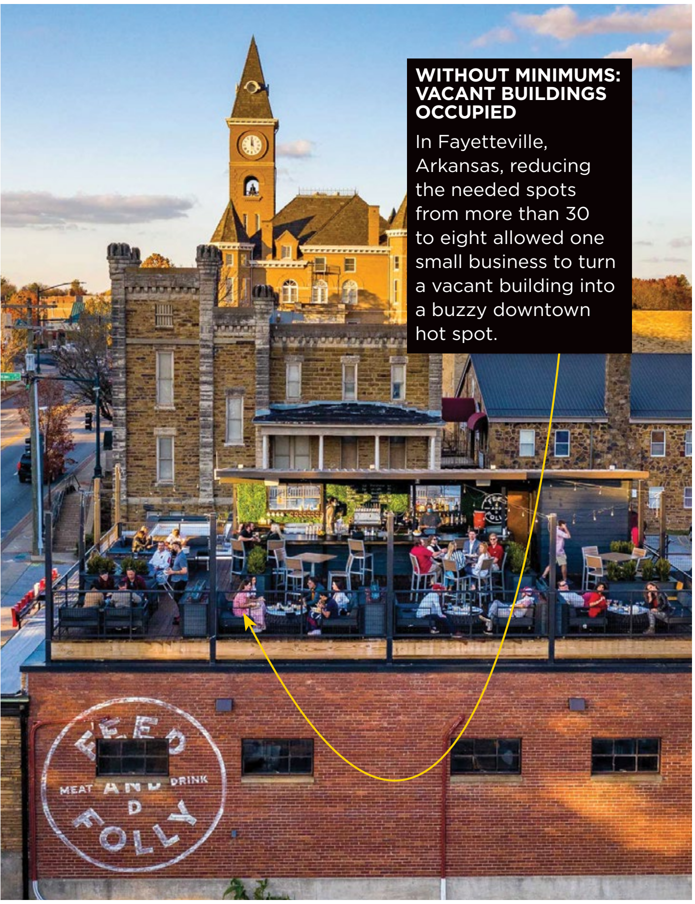
Something had to be done to replace the restaurants and encourage new businesses.

So, what this city of 24,000 people did in June 2021 was eliminate all minimum parking requirements for commercial developments, thus reducing upfront costs for new businesses and expansions. It had an immediate impact. Later that autumn, the Olive Garden restaurant chain looked to open in Auburn and eyed the Ruby Tuesday's site, but the company wanted to build more square footage. Under the old parking regulations, Olive Garden would have had to supply more parking spaces. But now it didn't. The deal was done and approved.

"With COVID, we were searching [for] any way that could help businesses," says Eric Cousens, Auburn's longtime planning director. "This worked for us, and it's setting us apart from other communities."

Indeed, municipal parking reforms to reduce or eliminate parking minimums are such a major movement now across the U.S. that they're even spreading and taking off in small town America.

"It's such a small but significant step that any city can take to reduce development costs and encourage more commercial and residential



WITHOUT MINIMUMS: VACANT BUILDINGS OCCUPIED
In Fayetteville, Arkansas, reducing the needed spots from more than 30 to eight allowed one small business to turn a vacant building into a buzzy downtown hot spot.

WITHOUT MINIMUMS: TAX REVENUE INCREASES
In Sandpoint, Idaho, dropping minimums encouraged tech company Kochava to renovate an old lumber storage facility, resulting in a tax value assessment increase of more than $2 million.

ping Parking Minimums

omic development move, even in small towns. *By* JEFFREY SPIVAK

COURTESY FEED AND FOLLY; RILEY EMMER/KOCHAVA

growth," says Rachel Quednau, program director at a Minnesota-based nonprofit called Strong Towns that focuses on sustainable community initiatives such as parking reform. "I don't think there's any small town in America that doesn't want more businesses."

'A tidal wave'

TO QUANTIFY THE nationwide movement to reduce or eliminate parking minimums, a couple of advocacy groups—Strong Towns and the Portland, Oregon–based Parking Reform Network, made up of planning professionals—collaborated to compile a list of all the North American cities that have implemented or proposed parking minimum reforms in certain districts (like a downtown) or citywide.

THE PSEUDOSCIENCE OF PARKING REQUIREMENTS

In *Zoning Practice*, Donald Shoup, FAICP, runs through the many costs of parking minimums—and exposes the weak rationales used to justify them.

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The early-adopter big cities that were at the forefront of the parking minimums movement are all there: Buffalo, New York; Minneapolis; Portland; San Francisco; and Seattle. So are the most recent big cities to join the movement: Boston; Raleigh, North Carolina; and San Diego. Overall, a recent version of the Strong Towns–Parking Reform Network list contained 73 cities with populations of at least 200,000 people.

Yet, the compilation of parking minimum reforms contained even more locales—more than 130—with populations under 100,000. There are college towns, industrial cities, metropolitan suburbs, rural hamlets, retiree hubs, and resort communities. Some 40 states are represented, and states such as Florida, Idaho, Minnesota, North Carolina, Ohio, and Washington have five or more communities on the list. It's a geographic cross-section of rural and suburban America.

"I've been surprised at how many there have been," says Tony Jordan, president and cofounder of the Parking Reform Network. "It's been a tidal wave."

Smaller cities may not have the same congestion issues or transit alternatives as big cities, but they're pursuing parking minimum reforms for some of the same reasons—to promote downtown and commercial development, reduce barriers to small business growth, and encourage more housing.

That potential is certainly what's led Cutler Bay, Florida, down the path of parking minimum reforms. A town of 45,000 people and eight senior living facilities, the AARP "age-friendly" community south of Miami has had a waiting list for senior units for years.

Town officials talked to developers about what was holding them back. One common refrain: parking costs. So, in 2019, the town reduced parking minimums for senior housing, cutting the requirements in half from two spaces per unit to one. This move immediately led to a 99-unit senior project proposal.

Now Cutler Bay is doubling down on parking reform. A new metro bus rapid transit line is being built on the edge of town, and in April 2022, the town council passed new reductions in parking minimums for mixed-use and multifamily developments in a special transit zone.

"This is the town's way of incentivizing development," says Town Manager Rafael Casals.

Benefits of reforms

SO WHAT'S SO WRONG with parking minimums, anyway? Parking minimums tend to be controversial because they can be inconsistent and unpredictable. The requirements in one city aren't necessarily the same in another city. And some standards aren't always efficient, such as locales dictating two spaces per chair at a barber shop when a barber's chair can only hold one person at a time.

In today's age of environmental sustainability concerns, there's also more awareness about the spatial costs of parking—the fact that suburban parking lots can be larger than the square footage of the buildings they serve, and a string of downtown parking lots can look like a mouthful of missing teeth on the face of a walkable public realm. There can also be water quality costs, as rainfall lands on all that asphalt and then runs off into nearby waterways or storm sewers, taking oil and other surface contaminants with it.

Then there are the direct costs of building parking—estimated by industry analysts at roughly $5,000 per surface space and up to $50,000 per space in multilevel garages. This of course escalates the costs of real estate developments, sometimes to a point of making a project financially unfeasible.

"Parking requirements do so much harm," says Donald Shoup, FAICP, a distinguished urban planning professor at the University of California, Los Angeles, and a longtime evangelist for parking reforms, as the author of several books on the issue. "They add costs to the building of housing, and they increase the usage of cars and greenhouse gas emissions. They seem to work against almost everything that planners want."

Even the National Parking Association, the industry's trade group of parking operators, now supports reducing or eliminating parking minimums and instead favors allowing communities and developers to make market-based decisions on parking supply and demand.

But do parking minimum reforms actually produce their expected benefits? So far, there hasn't been much research on this topic, but some new studies have begun to be published that appear to answer that question with an emphatic "yes."

In Seattle and Buffalo, separate groups of academic researchers in 2020 and 2021, respectively, found that after policy changes concerning parking minimums, a large portion of developers did build less parking than previously required, and they particularly took advantage of the cost savings to build mixed-use projects. And in San Diego, another group of academic researchers in 2021 found that in the first year after parking reforms, proposals for affordable housing units jumped fivefold.

Bottom line, these studies indicate that more commercial and residential development occurred after parking reforms than would have happened without the reforms.

As the Buffalo researchers—planning professors from the University at Buffalo—wrote in the *Journal of the American Planning Association* article "Minus Minimums" last year, "Cities of all types stand to benefit from undoing constraining parking policies of the past and allowing developers to transform parking lots into 'higher uses.'"

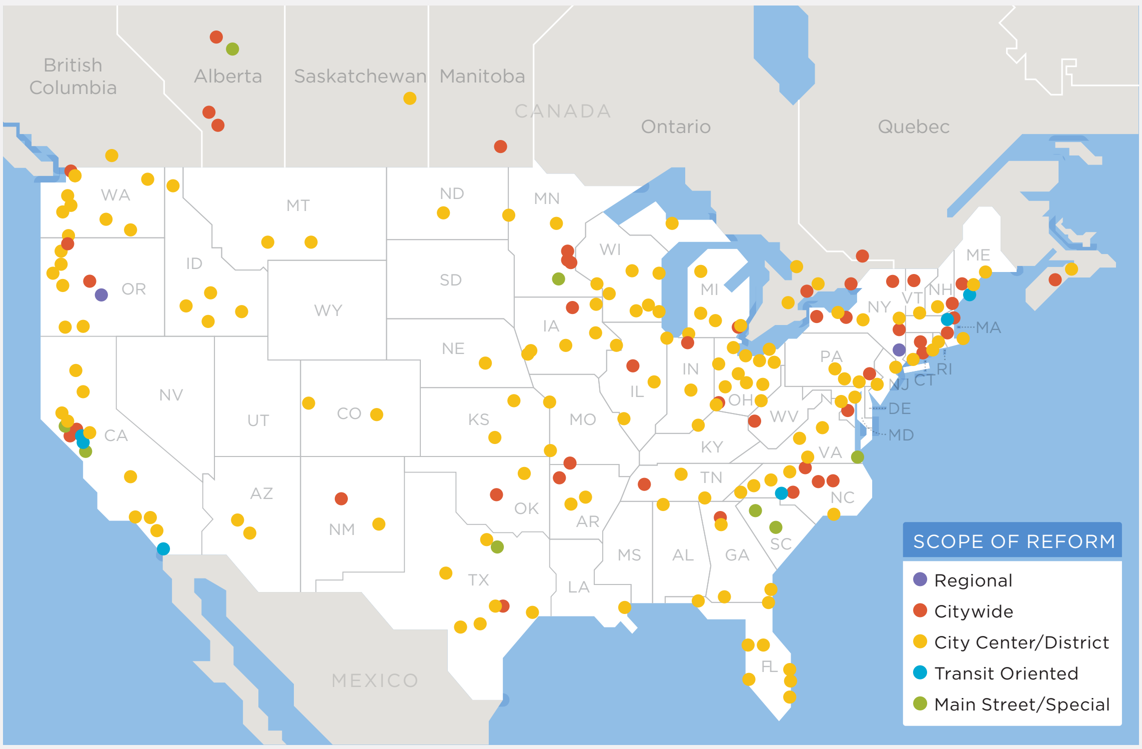
Smaller-city experiences

BUT ALL THAT parking research so far is from bigger cities. Can the same impacts occur in smaller towns? A couple of experiences in different parts of the country are already showing it can.

The college town of Fayetteville, Arkansas, is believed to be one of the first cities in the

PARKING REFORMS IN BIG AND SMALL TOWNS

Places of all sizes are eliminating parking minimums, whether it's just downtown or throughout the whole city. An interactive map from the Parking Reform Network allows users to not just see where reforms are happening, but also to click through to read the details about local parking regulations (users can submit data, too). Of the 200 or so communities on the map, more than half have populations of under 100,000.



SOURCE: PARKING REFORM NETWORK. PARKINGREFORM.COM/RESOURCES/MANDATES-MAP

U.S. to have eliminated parking minimums citywide, which it did in 2015 for commercial properties. In the seven years since, Fayetteville officials don't claim that it spurred a frenzy of new development or redevelopment. But they do maintain it led to some projects that likely wouldn't have happened otherwise.

Take the Feed & Folly restaurant just off the downtown square. Its owners took over a building that had been vacant for decades, but the parking lot only had room for a half-dozen cars—some 30 less than the city's old parking regulations would have required. But under the new rules, it was able to open in 2020 while adding just a handful of parking spaces, and it instantly became a buzzworthy hotspot with its rooftop bar.

Similarly, Matthew Petty was on the Fayetteville City Council when the parking minimums reform was passed, and as a planning consultant and developer, he eventually wanted to take advantage of the rule change. So, he and his partners developed what's called 495 Prairie, a three-story project with nine apartments on upper floors, plus offices, a craft beer bar, and a smoothie shop at the street level. The project

HAISAM HUSSEIN

5 TIPS TOWARD REPEALING PARKING MINIMUMS

It may take a while, but you can change a community's thinking. BY MEGHAN STROMBERG

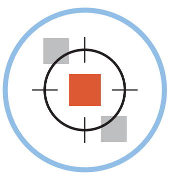
IN 2009, SANDPOINT, IDAHO, (pop. 8,692) passed a series of parking reforms, although not without a fight. Two things kicked it off: the construction of a new bank in the small town's historic downtown that would have required 200 new parking spaces (despite being a block away from a municipal lot) and a historic building's interior remodel project, which triggered a new parking minimum. After much debate, the city council cut the bank's requirement in half and nixed new spots for the remodel.

With those wins—and growing community support—it then eliminated parking minimums downtown entirely, greatly reduced minimums for commercial and residential properties elsewhere in the city, and instituted parking maximums. The latter was meant to prevent large, empty lots from damaging the community's economy and quality of life.

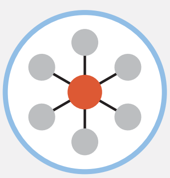
Here are some of the lessons learned by former Sandpoint city council member John Reuter, who wrote about it for the Strong Towns blog in 2017.

1. STAY ALERT FOR OPPORTUNITIES. Rarely are policies crafted and adopted in a linear sequence. Look for chances, like the restoration of a historic building, to argue that requiring additional parking makes no sense. Remember your end policy goals and push for them as soon as opportunities emerge.

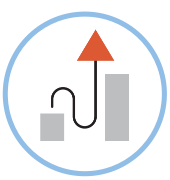
2. DO WHAT YOU CAN, AS YOU CAN. Sandpoint didn't start by removing all parking minimums. The incremental changes it did pursue have made a difference—and could help make a case for a complete repeal. So, make an exception for the reuse of existing structures, reduce parking requirements where possible, and eliminate them entirely in the sections of town where you can garner majority support.



3. POINT OUT SPECIFIC NEGATIVE OUTCOMES IN YOUR COMMUNITY. Don't get lost in theory, abstract ideas, or even concrete examples from other communities. Show specific examples where parking requirements are causing problems for your city's businesses or are driving up the cost of housing. Point out blocks that everyone loves and show how they would be illegal to build today.



4. BUILD BROAD COMMUNITY SUPPORT. Use these local examples to identify and gain the support of new partners who would benefit from eliminating parking minimums: the family that wants to build an accessory dwelling unit for their aging parents but can't meet the parking requirements; the business that can't expand; or the developer who wants to reuse an old building. Well-organized facts are useful in supporting the implementation of new policies, but real people who demand action based on those facts are even better.



5. DON'T GIVE UP. It took a long time to eliminate parking minimums in downtown Sandpoint—and that positive outcome didn't always look likely. Keep building support, person by person and business by business, and eventually you will get to a new community consensus.

Meghan Stromberg is APA's editor in chief. This article was reprinted with permission from Strong Towns.

HAISAM HUSSEIN

built just nine parking spaces—less than half of what would have been required before 2015.

"We wouldn't have been able to do mixed-use without the new parking policy," Petty says.

A thousand miles from Fayetteville, a town in Idaho called Sandpoint experienced some of the same benefits from parking minimums reform.

Sandpoint is a resort town with less than 10,000 residents that swells with visitors who come for its lake, beach, and nearby skiing in pine forests. The town first did away with parking minimums for its downtown in 2009. Nine years later, it reduced the minimums citywide. Why? To make building renovations and redevelopments more affordable for small business startups.

Aaron Qualls, AICP, saw it all. From 2010 to 2021, he served as a planning commissioner, city planning director, and a city councilperson in Sandpoint, and he documented what he called "success stories made possible by parking reform." There was MickDuff's Brewery that remodeled an old library and Pend d'Oreille Winery that took over a vacant old furniture store. A tech startup renovated a dilapidated lumber supply building. And on and on—and Qualls says they wouldn't have happened under the old parking requirements, because local business startups often don't have extra capital to devote to parking.

"We've always assumed that more parking is better," says Qualls, now a project manager and planner for SCJ Alliance, an engineering and planning firm, "and what we found in Sandpoint is that's not always the case."

The lesson: A flexible policy

THE COUNTRYWIDE PARKING REFORM movement is, of course, not a single-issue crusade. Cities such as Boston and San Diego also established parking maximums, or limits on how many spaces a new development can provide in transit-accessible neighborhoods. Los Angeles and Washington, D.C., have technology-driven programs that adjust parking rates based on demand, like higher rates during the morning commute. And Chicago; Kansas City, Missouri; Philadelphia; and several other cities have allowed businesses and neighborhoods to repurpose on-street parking spaces into restaurant seating, parklets, and other public gatherings during the pandemic. In many cases, those temporary changes are becoming permanent.

But parking minimums are by far the most popular form of parking reform—they're even spreading to state legislative efforts in places like California, Connecticut, and Oregon—and they're usually the focus of smaller-town policies.

In Jackson, Tennessee, an industrial hub of 68,000 people, leaders are trying to encourage more infill development. Eliminating parking minimums for commercial projects last October was "an easy decision," Mayor Scott Conger says, because it didn't require any government funding or subsidies.

Nevertheless, it's not always an easy plunge for smaller cities to take.

Proposals to reduce or eliminate parking minimums are sometimes met with skepticism and apprehension in smaller towns. There, people are used to parking right by a store's front door. "There still is trepidation in these communities," says Carl Schneeman, managing principal of Walker Consultants, a Minneapolis-based parking design and planning firm that works with cities of all sizes. "A lot of them simply fear a change."

And it usually turns out that such fears are overblown and don't come to pass. "Every time these reforms are put in, people go to meetings and say, 'This is going to be terrible.' And it never is," says Parking Reform Network's Jordan. "The sky doesn't fall."

If there's a lesson for how smaller communities can avoid or lessen such fears of parking minimums reform, it's by providing flexibility in the new policy. That is, don't necessarily apply the reduced parking standards to all types of properties or all parts of town. Be targeted in the approach.

That's what Auburn and Fayetteville did, applying reduced parking standards for commercial projects. Same with Cutler Bay, which lowered parking minimums first for senior housing only, then for mixed-use and multifamily developments in a transit zone. And the city of Alameda, California, was one of the latest communities to officially join the movement, passing an ordinance that eliminated parking minimums citywide in November 2021.

In Alameda, the Planning Board for years had been passing parking variances to reduce parking spaces for new projects. So the decision to eliminate minimum standards simply reflected the community's evolving attitude toward parking, plus the realization that this city—an island without room to sprawl—needed more room to devote to new housing growth.

"We have space for people and more buildings," says Andrew Thomas, AICP, director of the city's Planning, Building, and Transportation department. "We don't have space for more automobiles that need to be stored.

"We've come a long way."

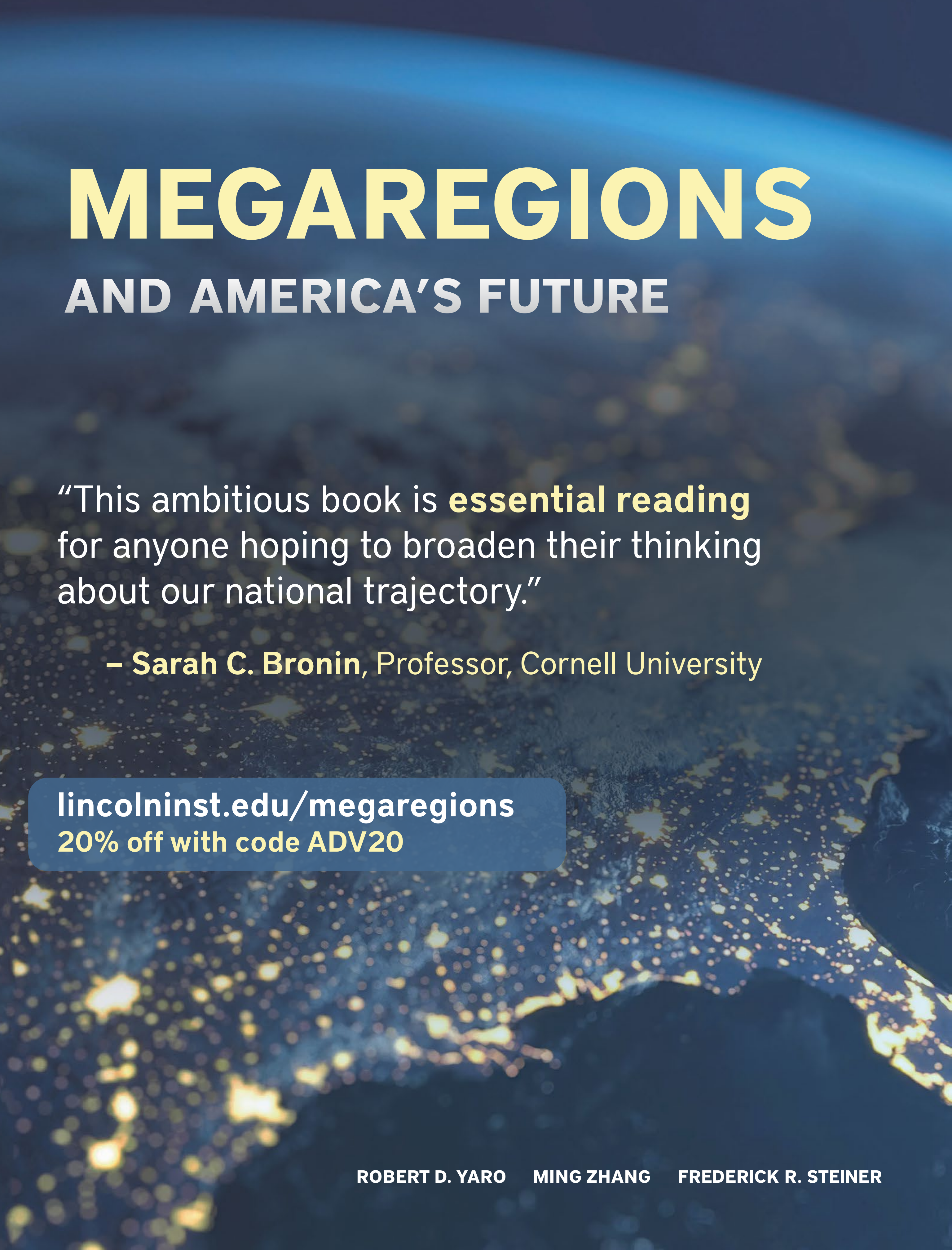
Jeffrey Spivak, a market research director in suburban Kansas City, Missouri, is an award-winning writer specializing in real estate planning, development, and demographic trends.

RIVERLIFE SHORELINE

Wausau, Wisconsin

WHAT IS THE POTENTIAL of a vacant, contaminated industrial site? For residents of Wausau, Wisconsin, the cleanup of a former brownfield has resulted in 2,200 feet of recreation on its vital waterfront. Designed by the global planning and design firm Stantec, the rehabilitated RiverLife shoreline offers up a new pedestrian bridge, boat and kayak access, picnic plaza, a destination playground, and multi-use trail links to downtown. A newly daylit stream recirculates fresh water from the Wisconsin River, enhancing its flow during summer low periods. Going from brown to green cost $2.5 million in federal and state funding, and it is paying dividends to the local community. (Got a climate win-win that makes your Community Green? Tell us about it at mstromberg@planning.org.)

An arched bridge with a lighted waterfall feature brings movement, sound, and visual delight to the 30-acre remediated and restored urban riverfront.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