

THE MAGAZINE OF THE AMERICAN PLANNING ASSOCIATION

SUMMER 2024

PLANNING

**CAR-FREE LIVING
IN CULDESAC**

**HOW TO STOP
THE MEETING
BULLDOZER**

**WHY ROAD DIETS
SAVE LIVES**

**PLUS: SMART CITY
TECH TOOLS**

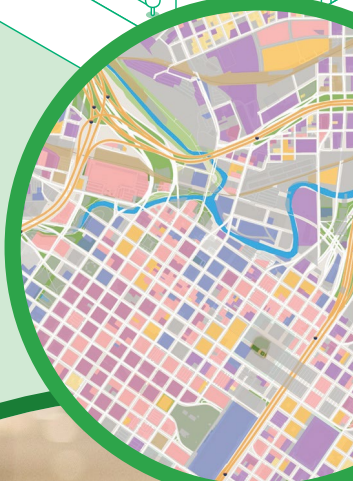


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On the cover: Planner Ryan Levesque worked with developers to create the car-free community of Culdesac in Tempe, Arizona. From top: The intersection of gaming and planning; build a citizen planner network.

Contributors



Rebecca Noble

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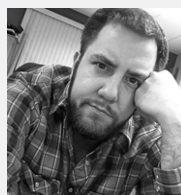
This Tucson, Arizona-based photojournalist has spent her career roaming the West, covering everything from politics to climate change to the beauties and challenges of rural life. While on assignment in Tempe, she "enjoyed seeing one of many ways the Phoenix area is implementing forward-thinking, climate change-oriented solutions."



Donna J. Carney, RA, LEED AP

How to Inspire and Empower Citizen Planners, page 18

This Philadelphia planner and recovering architect discovered community engagement work late in her career and tries to create "light bulb" moments to help residents see their own power in planning. "My goal is to guide the development of educational tools to empower communities to learn, grow, and improve the quality of their neighborhoods," she says.



Bill Jones

The Marvelous World of City-building Games, page 30

Games can aid the planning process, "but there are also plenty of planning practices that go into creating some games," says this Chicago-area writer. With experience writing about the gaming world for magazines, newspapers, and online publications, he "got to see the intersections of planning and games from both perspectives," he says.

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 THE CHIEF EXECUTIVE OFFICER

Champion Reforms to Solve the Housing Crisis

HOW BEST TO create housing abundance and affordability is a classic “wicked problem”:

Difficult to solve. Complex. With changing and interconnected variables. When we confront today’s housing crisis, we face difficulties and dimensions that are economic, social, spatial, historical, and multi-sectoral. Despite these obstacles, creating housing supply by increasing housing diversity, attainability, and equity is an essential challenge of our time.

Progress on housing can unlock opportunity in many other areas—health, wealth, education, and prosperity. That’s why the work of the Housing Supply Accelerator, a partnership between APA and the National League of Cities (NLC), is so important.

Planners are proud to join with local elected leaders, developers, home builders, real estate professionals, and the housing finance industry in this effort to explore differing perspectives, examine diverse needs, and find shared strategies and policies that can be implemented now. We’ve asked ourselves and each other hard questions, and through these conversations over the past year, we’ve identified a range of actionable and impactful ideas that communities can embrace now.

Those strategies are collected in the game-changing *Housing Supply Accelerator Playbook*, a new guide from APA and NLC that focuses on a systems approach to addressing housing supply challenges. A resource for local leaders, planners, and public and private stakeholders, it offers strategies, guidance, and case studies in four areas that we identified as critical to accelerating housing supply through our early partner work. Those areas are collaboration and partnership, construction and development, finance, and land use and regulation.



‘Outdated approaches must change, and new, disruptive forces must be addressed. The *Housing Supply Accelerator Playbook* offers specific interventions and policies that are scalable to fit the diversity of the country.’

—JOEL ALBIZO,
FASAE, CAE

Solutions for local needs

Outdated approaches must change, and new, disruptive forces must be addressed. The *Housing Supply Accelerator Playbook* offers a more comprehensive approach and specific interventions and policies that are scalable to fit the diversity—geographic, political, and economic—of the country.

Take, for instance, this replicable approach from Fayetteville, Arkansas. That city is developing a construction and development program to streamline residential housing production by expediting the permitting process and offering 30 pre-approved housing designs—

including single-family, townhomes, duplexes, and cottages—to encourage compatible infill in two of its neighborhoods, including downtown.

Another example comes from Hood River, Oregon, where 43 percent of renters are cost-burdened. The city’s Affordable Housing Strategy identifies a diverse set of potential funding sources to pay for housing development and preservation. In addition to identifying partner funding sources at the local, regional, and state levels, the strategy explored options such as creating a tax increment financing district, pursuing a general obligation bond, and using revenue from a 1 percent construction excise tax to fund developer incentives and acquire land.

The housing landscape stands at a pivotal juncture, demanding that communities address local housing supply challenges with urgency and innovation. This playbook serves as a guide and a call to action to embrace complexity and champion collaboration. Tackling this national housing supply shortage at the local level demands collective momentum to achieve meaningful progress.

Joel Albizo, FASAE, CAE, is APA’s chief executive officer.

Star Parties are just one way that Groveland, Florida, educates community members about light pollution and why preserving the night sky is important. The city is the first in Florida to meet DarkSky International standards.

MIKE FRIED/SONACITY PHOTOGRAPHY





INTERSECTIONS

WHERE PLANNING AND THE WORLD MEET

Climate Resilience | Economic Development
People Behind the Plans | Et cetera

CLIMATE RESILIENCE

Lights Out for a Certified Dark Sky Success

How a Florida city turned down the lights to turn up conservation benefits through planning leadership and policy creation. By Rebecca Susmarski

GROVELAND, FLORIDA, lives by its brand: the “city with natural charm.” Located 30 miles west of Orlando, the eco-agrarian city of about 24,000 people prioritizes preservation of its natural resources. In 2017, the growing city added protecting its view of the night sky to the list of conservation efforts.

To curb light pollution from new residential developments, advocates negotiated for a developer of a large project to install outdoor lighting fixtures in accordance with standards set by DarkSky International, a recognized worldwide authority on light-pollution mitigation. DarkSky recommends lighting fixtures be fully shielded to direct light downward and reduce the amount of light thrown upward.

But continued community interest in DarkSky practices drove the city to embark on a larger initiative to achieve certification, which Groveland included as a conservation goal in its 2022 strategic plan. In 2023, Groveland was certified as an International Dark Sky Community, the first city to do so in Florida.

Andrew Landis—then the city’s planning and zoning division manager and currently the conservation and strategic initiatives division manager—led the DarkSky initiative with help from community members. The result was an adaptable model for light-pollution mitigation rooted in thoughtful policy creation and widespread community engagement.

“I think what makes Groveland’s initiative unique is the community support that we’ve had throughout,” Landis says. That buy-in was no accident. “We’ve gone to great lengths to continually educate the community, to build a base of community support.”

Using the ‘best of the best’

Landis found early supporters in Marty Proctor, a Groveland resident and DarkSky advocate, and Steven Miller, director of DarkSky’s Central Florida chapter. Landis and Miller researched 24 ordinances from around the world to create a modern, holistic policy that featured “the best of the best” standards, Landis says.

DarkSky International says

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streetlights produce most of the light pollution on the planet. But some of the older ordinances Landis and Miller researched exempted streetlights from DarkSky standards or only required basic shielding. Groveland's streetlight standards include color temperature specifications and light-trespass limitations.

"We were kind of judging [the ordinances] in terms of their progressiveness, but also, different-sized municipalities have different needs," Landis says. "Some of these small towns might not have [many] streetlights because they're so rural."

Groveland's comprehensive ordinance defines permitted light levels for development across categories—from general types, such as residential and industrial, to specific-use developments like athletic fields and greenhouses. Landis and Miller took inspiration for the latter from parts of Canada and the Netherlands.

"[Groveland] really wanted to do something all-encompassing to cover all angles so that no matter how the city grows, at least on the lighting side of things, it's covered, and it can grow responsibly," Miller says.

Meanwhile, as part of the DarkSky International certification process, Groveland needed to educate its residents about the causes of light pollution and how DarkSky lighting standards and fixtures could help mitigate it.

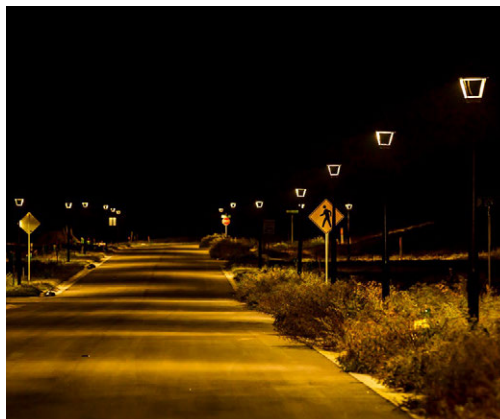
"It's not intuitive that you can make lighting something fun or worth discussing," Landis says, so the team sought unique ways to

get the community involved.

DarkSky recommends low-level, warm-colored, and fully shielded lights aimed at specific locations only at times when the light is needed. The benefits of compliant lighting include reduced glare at night, which improves safety for drivers and nondrivers; greater protection for wildlife, including birds and sea turtles; and lower energy costs.

To drive those points home, Landis turned to visual aids to show how the night sky used to look compared to today. During virtual workshops, the team also

Streetlights in new residential developments in Groveland are now required to meet DarkSky International requirements.



used maps showing the intensity of light pollution throughout Florida based on the Bortle scale, which measures the sky's brightness.

The most effective visual aid was the night sky itself. Earlier this year, Groveland hosted a Star Party, an outdoor event Landis coordinated that drew around 1,000 attendees. Jessica Ulloa, public works administrative coordinator for Oakland, Florida, attended to gain inspiration for her town's DarkSky initiative. She was "wowed" when she saw

the contrast between Groveland's dark night sky and the more polluted sky over nearby Clermont—without needing a telescope. "Just showing what the sky can be and what it is compared to, I feel like that's important in showing the effects of pollution," Ulloa says.

Proctor also loved seeing how engaged the children were at the Star Party. Some eagerly volunteered their knowledge about DarkSky lighting and the negative effects of light pollution.

"This is an outstanding community full of very forward-thinking people who were willing to put in the effort and the work," he says.

'An ongoing commitment'

Landis says "easily a dozen" Florida communities have reached out for guidance on either achieving Dark Sky certification or crafting lighting ordinances, including Oakland, which hopes to become Florida's second International Dark Sky Community. Ulloa hopes that Oakland and Groveland working together will start a cascade of other Florida communities becoming certified to make the sky as dark as what she saw in Groveland at the Star Party.

In the meantime, Landis continues to work with community partners to address light-pollution mitigation in Groveland.

"It didn't end with the certification," Landis says. "It really began with the certification because it really is an ongoing commitment."

Rebecca Susmarski is an award-winning journalist and advocate for stronger, healthier communities.



Great Scott! Community Market in Winchester, Illinois, opened in 2018 to sell local foods in a rural food desert. But the co-op store closed in late 2023 after a Dollar General moved into town.

ECONOMIC DEVELOPMENT

Support Grows to Keep Rural Grocers in Stock

Communities and lawmakers fight to save access to healthy food and the social infrastructure local markets provide. By Kevin Hardy

PRESERVING grocery stores has been a perennial challenge for rural communities. Small, often declining populations make it tough to turn a profit in an industry known for its razor-thin margins. Increased competition from online retailers, the onslaught of chains such as Dollar General stores, and an aging lineup of independent grocers have only made things tougher.

By 2015, U.S. Department of Agriculture research showed a total of 44 counties had no grocery store at all—all but four of the counties were rural. In Kansas, one in five rural stores closed between 2008 and 2018, according to the Rural Grocery Initiative

at Kansas State University.

Proposed legislation at Nebraska's capitol in Lincoln could provide some relief. If passed, the new law would provide grants and loans for small grocers. It's among several legislative efforts in the region that aim to tackle the complex problem.

In neighboring Kansas and Iowa, lawmakers have introduced bills with similar goals, following the lead of states—including Illinois, Minnesota, North Dakota, and Oklahoma—that have enacted laws setting up special funds to boost rural grocery stores.

"We're in a global economy, and Amazon's dominating, but that doesn't mean we should surrender," says Kansas state senator

Rob Olson, a Republican.

Olson says lawmakers should be investing in grocery stores, broadband, and housing to improve rural communities.

The pandemic underscored both the importance and fragility of rural grocery stores, says Jillian Linster, policy director at the nonprofit Center for Rural Affairs. "We have seen a lot of these local grocery stores just struggling to keep the doors open with all the economic and workforce challenges we face in the current economy and the competition from the big-box retailers," she says.

Based in Lyons, Nebraska, the center has backed bills in both Nebraska and Iowa this session to provide small grants or loans to grocery stores with fewer than 25 employees in underserved communities.

Aside from preserving fresh food access, Linster says, grocery stores serve a wider social role. "It's a place where you see your neighbors, where your teenagers get their first job, where there's a bulletin board with help wanted and things for sale," she says. "So, it's a really important part of the social infrastructure in our small rural towns."

Investing in grocery stores

Nebraska state senator Teresa Ibach says rural grocery stores, whether they're for-profit, cooperatives, or nonprofits, deserve the state's support. Ibach, a Republican, sponsored the legislation that would set aside \$4 million over two fiscal years.

Kathryn Draeger, director of regional sustainable development partnerships at the University of

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Minnesota, works with grocery stores across the state. Aside from the health benefits of fresh food, she says, rural stores are key to building more resilient supply chains since they can procure products from a variety of small vendors.

Draeger advocated for a state program to improve healthy food access that began offering grants to rural and urban stores in 2017. Last year, the state agriculture department funded 15 projects at a cost of \$426,862—though nearly five times as much was requested.

“I believe every rural grocery store we lose is at our own peril,”

Draeger says. “There’s so much public good in these small, private businesses. That is why this public investment in this private sector is really important.”

Just as important as money, though, is leadership, says North Dakota Democratic state senator Kathy Hogan. She cosponsored a new law last year that made \$1 million available to help preserve rural grocery stores. That money will only help if communities have strong leaders willing to work together, she says.

“Sometimes people think money is the answer to everything,” she says. “The secret of the success of this is not so much money but local organization.”

Republican state senator

Rural stores are key to building more resilient supply chains since they can procure products from a variety of small vendors.

Janne Myrdal, another cosponsor, says the legislation was inspired by the work of grocery stores, communities, and schools in the northeast corner of the state. After struggling to find vendors willing to make small deliveries to remote areas, three stores formed a cooperative that can demand more inventory and better prices from suppliers. The legislation required a local match from organizers and aims to pull multiple retailers and community organizations together to help stabilize deliveries and costs.

Kevin Hardy is a staff writer for Stateline. This story was reprinted with permission from States Newsroom, a national nonprofit news organization focused on state policy.

Submit Your Story to HUD's RBC

In 2023, Washington state adopted legislation requiring cities to permit middle housing in areas zoned for single-family detached housing. Find more on this and other regulations, ordinances, and research that state and local governments are using to reduce impediments to affordable housing at HUD User's Regulatory Barriers Clearinghouse (RBC).



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Megan Oliver Shares the Key to Happy Places

IN 2019, Megan Oliver, AICP, wondered how she could put together all the things she had been learning about her own happiness, self-care, and mental health into her practice as a planner. In her research, she came across a new approach—neurourbanism, which links brain science and urban planning in studying how places impact how we feel.

“If we want happy, joyful communities, we need to be deliberate about creating spaces that support well-being for everyone,” said Oliver, the founder of Hello Happy Design and a happiness expert, in a recent *People Behind the Plans* podcast hosted by APA Editor in Chief Meghan Stromberg. This interview has been edited for length and clarity.

STROMBERG: Why study happiness?

OLIVER: I wish that I knew when I was younger that happiness researcher was a potential job title. Looking back, I realized that I’ve kind of been pointed in this direction through the entirety of my life. But it wasn’t until about 10 years into my planning career that I finally had that “aha” moment.

Long story short, by the end of 2019, I was wrestling with a lot of personal losses. I really wanted to find a way to channel what I was feeling constructively into my work. When I saw a talk by the positive psychologist Shawn Achor, a light bulb came on. Despite doing all this personal work to get into a better headspace, I was still navigating a world that was largely oblivious to my mental health needs and mental health in general.

I set out to launch my own research initiative on International Day of Happiness in 2020, which is on March 20. And, as you probably recall, five days earlier, the entire country shut down in response to the pandemic—and the need to create joyful, healing spaces was amplified.



HEAR THE FULL STORY

Want to hear more from Oliver—and view her happiness and neuro-urbanism reading list? Scan the QR code or go to planning.org/podcasts.



Q&A

STROMBERG:
How does happiness show up in classic planning literature?

OLIVER: Setting out to plan happy cities doesn’t require us to throw out the great lessons that we’ve already learned and start fresh. It’s already at the core of our profession.

In the 1950s and 1960s, folks like Jane Jacobs and Kevin Lynch were making waves in the planning profession. At the same time, neuroscientists were beginning to understand how people respond to their environments, and ideas from this new field have since

been merging with other professions to create interdisciplinary areas of study.

Neurourbanism is one of those. It helps to root the well-being of places in a robust understanding of what’s happening in our brains and our bodies. Scientists and planners are partnering to measure how our bodies respond to different environmental cues and stimuli. Ann Sussman and Dr. Justin Hollander, FAICP, have been studying eye gaze, which maps where a person is drawn to look when they’re peering at a building or looking down the street. This has implications for both architectural design and navigation.

STROMBERG: What’s the role of technology?

OLIVER: Planners need to be aware of how our use of different technology tools—and, sometimes, our dependency on them—is impacting our communities. In our planning efforts, the tools that we employ could make it easier for some people to come and interact with a project, but they could also deepen the digital divide for some groups of people entirely.

As the field of neurourbanism is revealing, technology is not only making our cities and communities smarter, but it’s helping to make them healthier,

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too. If we're to use our technology superpowers for good, we first need to think about internet access as a public utility, not just a luxury afforded to some. Then, we can use things like real-time data to improve the experience for transit riders. We can use QR codes and geofencing to provide tailored and interactive experiences for people when they're in public spaces, and we can create and utilize apps that help people to interact with public agencies.

STROMBERG: How does neurodiversity fit in?

OLIVER: Until recently, most of the world has been designed for neurotypical people without much consideration for the needs of neurodivergent people—for instance, people with autism, people with ADHD, sensory processing disorders, dyspraxia, and mental health conditions. As we are learning more about people's diverse sensory and information-processing needs, planners can improve our practice, from how we engage with our coworkers, to our methods

for engaging with community members, to how we shape our physical communities. Planning for neurodiversity can mean creating easily navigable spaces, being mindful of sensory stimuli, and producing sensory maps of areas based on intensity—like mapping the noisiest streets.

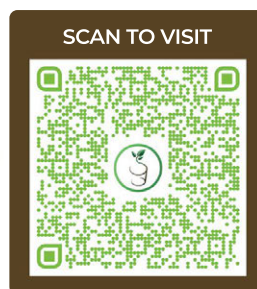
STROMBERG: How can planners start building happiness into their work?

OLIVER: Step one, I think, is recognizing and improving our own mental health. I cannot overemphasize this. Every day, we need to be asking ourselves, "What headspace am I in, and in what ways does that impact how I'm showing up for others?" If we need to improve that headspace, we need to go do more of the things that we love, that bring us joy, and that reenergize us—and not feel guilty about that at all. If we're burned-out, drained, [or] annoyed, I don't know how we're supposed to help our communities come to solutions to those big, ugly problems.

Meghan Stromberg is APA's editor in chief.

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NOW STREAMING

Consensus Building in a Crisis

After an earthquake levels most of their city, tenants self-govern for survival in this South Korean disaster flick. By Ezra Haber Glenn, AICP

EVER SINCE THE days of *Earthquake*, *The Towering Inferno*, and *City on Fire*, Hollywood has made an art of chaos, terrifying audiences with a special form of horror: the disaster movie.

It's a clever formula. A flood, wildfire, volcanic eruption, earthquake, or giant Kaiju monster can suddenly remake the entire physical landscape, removing everything we thought was solid ground. These catastrophes often lead to a complete breakdown of urban infrastructure and the rule of law, revealing the fragility of our cities, governments, economies, and social systems.

In the latest entry into the genre, a nascent tenant government soon learns the hard way what many planners already know: policies are easier to adopt than to enforce, and the devil

is often in the details.

South Korean filmmakers have attracted attention over the past decade, with Bong Joon-ho's *The Host* and Yeon Sang-ho's *Train to Busan*, by using disasters to highlight the social and economic tensions of Korean society.

The focus is not surprising: the effects of uneven growth, uncertain futures, and unequal opportunity are common themes in today's Korean films, and Um Tae-hwa's *Concrete Utopia* is no exception, zooming in on residents of a single housing complex as they navigate a natural disaster that exposes just how deep these societal fractures are. Following an earthquake so large it destroys nearly every structure in Seoul, the story focuses on the Hwang Gung Apartments, a solitary structure that has miraculously survived. The residents



In *Concrete Utopia*, the fate of Seoul apartment dwellers rests on their ability to build consensus—a vital skill in planning. The film is available on viki Rokuten (\$5.99).

quickly organize, working collectively to gather food, restore water and power, and literally fight fires as the ongoing effects of the disaster disrupt every aspect of urban living. They establish their own internal government—with an elected “Resident Delegate”—and proceed to institute policies for collective survival through the cold winter.

The film also poses a moral quandary. In times of scarcity, many people look to save themselves first, but there are neighbors just outside the Hwang Gung gates also struggling to survive. Further, while collective action, consensus building, and communal organization may sound good, in practice they may rely on coercion (or worse) to deal with differences of opinion and dissent, especially in times of stress or national crisis.

Through the debates and actions of the residents toward each other and those outside dying to get in, the film presents problems of exclusion, hoarding, authoritarianism, and social control—with parallels to migration, divisive politics, class warfare, and exclusionary housing policies.

Concrete Utopia is a thrilling ride with real personal drama and deep insights into both human nature and the communities we build, all presented in a visually stunning and surprisingly fun package. Bonus: it has one of the most uplifting endings of any disaster film ever made.

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

Set the stage at community meetings to anticipate and diffuse misunderstandings, miscommunication, power struggles, and more.
ROBERT FRANKLIN/SOUTH BEND TRIBUNE VIA AP



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THE PROFESSION

5 TIPS TO STOP THE MEETING BULLDOZER

Follow these steps to anticipate and navigate conflicts and design better meetings. *By Jonathan DePaolis*

IT'S A FEELING that countless planners have experienced.

The meeting for a big issue has started. It could be about any hot-button topic, from housing affordability or a big zoning change to developing a plan to grapple with the effects of climate change. Then, conflict happens. An elected official vehemently disagrees with the project. A member of the public wants answers to questions that are still being researched—and they want those answers right now.

Your heart is beating fast. Your stomach is in knots. You can feel your anxiety coursing through your veins, and you're wrestling with responding or running for the door.

Take a moment, breathe.

Conflict is a normal—and at times necessary—aspect of working with others to achieve a goal. While it can be stressful, planners are equipped to not only handle these issues in the moment but also manage them within a larger environment of change so that

they can turn tense situations into fruitful outcomes.

Throughout her career, Jennifer Raitt has been eager to solve problems and try to make things better in her neck of the woods. As the executive director of the Northern Middlesex Council of Governments in Lowell, Massachusetts, Raitt has found that doing that work sometimes means having to embrace and manage conflict.

“Community change comes with a lot of challenges,” Raitt recently said in an APA webinar. “You might find that you’re in the middle of a lot of conflict. It’s really the nature of our work.”

But there are ways to handle these types of situations. In “Mastering Conflict for Effective Planning: Navigation and Resolution,” Raitt highlighted several key skills for planners, including managing relationships and optimally designing meetings to get better outcomes.

“Conflict can be about breakthrough change,” notes Raitt, adding that it can lead to a deepening of relationships and

alignment on ideas that could become shared goals in the future. However, planners often lead communities through difficult issues, and getting to a resolution often means confrontation somewhere along the way. “Getting to the heart of that problem means understanding conflict scenarios and group dynamics,” she says.

Managing through anticipation

Conflict can come from misunderstandings, miscommunication (or lack of communication), differences of opinion, strong emotions or biases, values, or even power struggles. It also may be tied to a person’s core identity—what Raitt describes as characteristics like beliefs, rituals, allegiances, or emotionally meaningful experiences that define an individual or a group of people. It also may be tied into their identity politics of who gets what and when and how.

A way to help manage conflict is through anticipation. It’s one of the four A’s—anticipating, accepting, appreciating, and acknowledging—that Raitt teaches planners to use to help manage conflicts. There are several ways planners can put anticipation skills into practice.

1 SET THE STAGE. Whether you’re planning a one-on-one conversation or a group session with stakeholders, think through and design a purposeful meeting agenda. Planners can create greater clarity about the desired outcomes of the engagement by clarifying the roles of the people in the meeting and how to participate, understanding the meeting’s purpose and objectives, and being clear about your expectations.

2 UNDERSTAND THAT EVERYONE IS DIFFERENT. Be open to participants’ varied learning styles, thoughts,

and perspectives. Tap into your empathy skills to design meeting experiences that acknowledge the different ways people engage with a learning process.

3 LAY OUT DECISION RIGHTS AND PROCESSES. Not all participants have the same decision-making authority. Understanding the level of decision rights in a public process and communicating them clearly puts everyone on the same page and helps planners get ahead of potential conflict.

4 REQUEST INPUT AND ACCEPT FEEDBACK. Focus on the perspectives of those you have engaged

and share information as you receive it. Put that input to work by plugging it into scenarios and trade-offs in the process and use it to negotiate or mediate issues. Effectively accepting and incorporating feedback could help build a strong foundation for making recommendations to find agreement or consensus down the road.

5 PREPARE FOR DIFFERENT PERSONALITIES. The expert wants to dominate with their knowledge on a topic. A bulldozer plows through conversations trying to get their way. Then there is the conversational arsonist, who not only wants to throw a match onto an incendiary situation but also fan the flames. A hairsplitter needs all the nitty-gritty answers right away. Regardless of the personality type you are engaging with, remember that you are inviting them to be a part of the group process—so find ways to engage. Ask questions, give affirmation, and practice active listening to truly communicate.

Ultimately, Raitt believes harmony is the way to achieve broader goals. By anticipating what might happen at a meeting, planners can prepare themselves to shift away from “individuals who might take over or other dominant forces that are getting in the way and [toward] acknowledging more of a communal mindset.”

Nurturing that communal mindset, she says, often can sway “adversarial people to become cooperative, the self-righteous to potentially become more compassionate, and people who feel more closed to become more open to engage.”

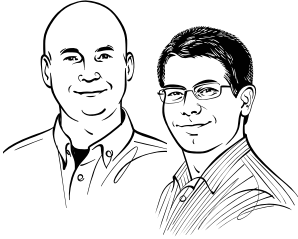


LEARN MORE ABOUT CONFLICT MANAGEMENT

“Mastering Conflict for Effective Planning: Navigation and Resolution” is part of APA’s Upskilling Initiative. To access this course and learn more strategies related to the four A’s (anticipating, accepting, appreciating, and acknowledging), visit planning.org/Passport or scan the QR code below.



Jonathan DePaolis is APA’s senior editor. This article is part of APA’s Upskilling Initiative, a program dedicated to providing members with the tools they need to navigate the evolving landscape of planning.



TECH

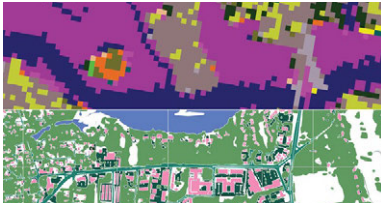
4 TOOLS TO HELP BUILD A DIGITAL TWIN

APA's Technology Division recommends scenario planning datasets. *By Andrew Buck, AICP, ENV SP, and David Wasserman, AICP*

DIGITAL TWINS ARE increasingly being used in planning as the ultimate scenario planning tools, where physical components of our world are intertwined with simulations and data feeds. They can enable communities to understand the ripple effects of planning actions. But connecting the many systems and data to build digital twins can feel daunting, and communities are far more than data and physical assets. They also are defined by people and their collective choices.

This technology can expand planning practice through integrating diverse datasets from public and private sources, as well as data collected by planners themselves. Geospatial data, detailed 3D models, and physical world captures, among others, help to build a comprehensive understanding of both the built environment and the communities that inhabit them.

ECOPIA AI DATA

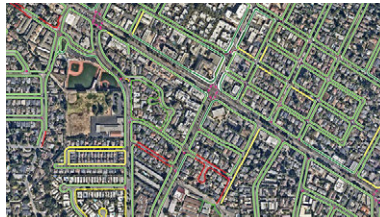


Ecopia AI leverages advances in computer vision to convert high-resolution images into high-definition vector maps of land cover and infrastructure assets in a geospatial format. While remotely sensed data depends on the quality of the imagery and visibility of assets, it provides a scalable and cost-effective licensed data source. Its data is also increasingly being used to improve the resilience of coastal communities by improving on traditional land cover classification methods. Ecopia AI produces high-resolution vector data globally at 30-centimeter resolution, a significant improvement over the traditional 10- to

30-meter resolution from similar derivative products. Its innovative approach has led to the production of high-quality datasets at costs similar to less detailed products, supporting the National Oceanic and Atmospheric Administration's Digital Coast program into 1-meter raster formats.

COST: ● Paid (licensed data product)
CODING SKILLS REQUIRED: ● No
RESOURCE FORMATS: Geospatial

GEOMATE DATA



GeoMate, a startup and Esri Partner, provides high-definition vector maps from high-resolution aerial imagery to support autonomous vehicles and urban

planning use cases. Like Ecopia AI, GeoMate's advanced remote sensing techniques have similar limitations and data-licensing considerations for practitioners to consider, but they focus on enabling a human-centric approach to data acquisition and cataloging to help cities create environments suitable for all forms of transportation. In collaboration with Mountain View, California, GeoMate mapped sidewalk and active transportation networks to meet Americans with Disabilities Act (ADA) standards, providing precise data on crosswalks, slopes, and geometry to help the city prioritize sidewalk improvements. This data ensured ADA compliance, improved pedestrian safety, and fostered inclusive urban environments.

COST: ● Paid (licensed data product)
CODING SKILLS REQUIRED: ● No
RESOURCE FORMATS: Geospatial

CYBERCITY 3D DATA | 3D MODELING



CyberCity 3D is a 3D data provider specializing in transforming stereo imagery and point clouds into high-resolution building models. CyberCity 3D has provided digital city models in a large variety of formats for government, planning agencies, architects, commercial real estate, and more. CyberCity 3D can provide a variety of output models ranging from planimetric building footprints to attributed digital models and photorealistic textured models. For example, the Hollywood Chamber of Commerce in Los Angeles leveraged CyberCity 3D

COST: ● FREE ● PAID **CODING SKILLS REQUIRED:** ● YES ● NO

TOOLS FOR THE TRADE

The Profession | **Tech** | **Community Engagement**

buildings to create a user-friendly web application that meets the needs of its members and stakeholders. By digitizing the economic development map, the chamber seeks to provide a modern and efficient tool for accessing vital information about development projects in the Hollywood area.

COST: ● Paid

CODING SKILLS REQUIRED: ● No

RESOURCE FORMATS: Geospatial, 3D models (multiple)

REALITYSCAN AND REALITYCAPTURE

DATA | REALITY CAPTURE | 3D MODELING | VISUALIZER



Part of the Unreal Engine ecosystem, RealityScan and RealityCapture offer a robust solution for digitizing the built environment. RealityScan, a user-friendly mobile app, facilitates image capturing directly from smartphones. Scans are uploaded to Sketchfab, where they can be downloaded and incorporated into 3D modeling software. RealityCapture automates the photogrammetry process to transform photos and laser scans into precise 3D models. Together, the tools empower communities to create detailed digital representations of their spaces and also allow planners to integrate the 3D models into modeling and GeoBIM software like Twinmotion, Unreal Engine, Cesium, and Esri.

COST: ● Paid

CODING SKILLS REQUIRED: ● No

RESOURCE FORMATS: Mobile, computer

Andrew Buck, AICP, ENV SP, is a senior urban planner and technologist at VHB. David Wasserman, AICP, is the chair of APA's Technology Division and leads Alta Planning + Design's Civic Analytics team.



Philadelphia Citizens Planning Institute's alumni pool is sought after by other city departments to serve as facilitators in community meetings.

COMMUNITY ENGAGEMENT

HOW TO INSPIRE AND EMPOWER CITIZEN PLANNERS

Planning academies not only educate community members but create trusted partners in planning. *By Donna J. Carney, RA, LEED AP*

IMAGINE AN ENGAGED constituency who understands the role of planning. They understand power networks and are trusted partners and advocates. They proactively participate in local planning processes, support staff, and make their neighborhoods better.

Community planning academies have existed for many years to educate local leaders about land use issues. Today, their role has expanded to include facilitating capacity-building at a neighborhood level, making participants valuable advocates for policies and partners in planning at every level of the community.

The Philadelphia Citizens Planning Institute (CPI) was launched in 2010 to empower citizens to change their community by gaining a greater understanding of city planning and how development projects work.

Yvonne Hughes participated in CPI's Spring 2022 cohort. Hughes, who

is legally blind, learned how to use city resources and services to support her ongoing work in a local community health and empowerment group. She is one of many success stories for the CPI program, which has graduated more than 730 participants from about 130 neighborhoods. Philadelphia was an early adopter of the community planning academy concept, but CPI staff say there are at least 18 others today.

Long-lasting benefits

Community planning academies have mutually beneficial outcomes for both planners and participants.

TRUST-BUILDING: Participants can become important liaisons in their communities, helping staff to build trust and relationships and sharing community members' feedback.

ADVOCACY: Planners can gain new

allies and advocates for land use policy by including people from a variety of political constituencies.

UPSKILLING STAFFERS: Interacting with individuals from diverse cultures, classes, races, and ethnic backgrounds can help build internal cultural competency.

CROSS-AGENCY COLLABORATION: Adding other government departments and agencies to the network—for focus groups, surveys, and to test new initiatives—strengthens it and broadens buy-in.

Participants of community planning academies point to their ability to develop a strong network of like-minded citizen planners. Often, the experience encourages future engagement, as it did for Ted Smith. “I’ve become a member of several

community organizations and business associations,” Smith told CPI staff. “I’m using the knowledge I learned from CPI to become more of a force than just an individual.”

Participants also reported feeling empowered to become the go-to person in their neighborhood and to leverage their experience to take on larger community roles. They have learned to network and know who to contact for specific issues.

Deepening the role of planning

To be successful and sustainable, a community planning academy should be grounded in clearly articulated outcomes. Goals should be transparent, and organizers should understand that they may evolve over time as conditions or sponsors change.

Establish a vision and goals for the

program during the groundwork stage, considering who the target audience is, what outcomes are expected, and the kinds of metrics that will be tracked for evaluation, among other criteria. The investment of time and resources in a well-designed program will pay off over time through better representation of all community voices during engagement efforts.

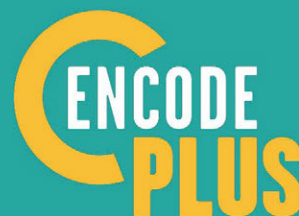
There are no shortcuts in creating trust, but community planning academies offer an opportunity to build enduring relationships with a more informed and involved constituency, one cohort at a time.

Donna J. Carney, RA, LEED AP, is the founding director of the Philadelphia Citizens Planning Institute, the education and outreach arm of the Philadelphia City Planning Commission. She is the author of the 2023 PAS Report 605, A Guide to Community Planning Academies, which was excerpted, in part, for this article.

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This page: An interior view of Culdesac.
Right: A resident waits for a Valley Metro Rail train to pass before crossing the street on his e-bike. The Tempe Transportation Overlay District opened the way for denser development.

Arizona's Antidote to Car-centric Sprawl



Long-term planning paved the way for Culdesac, a bold experiment in people-focused development that puts density, transit access, and walkability first.

By PATRICK SISSON
Photographs by REBECCA NOBLE



Above and right: Culdesac draws on elements of Mediterranean design. The placement of buildings, walkways, and shared spaces creates a quiet coziness.

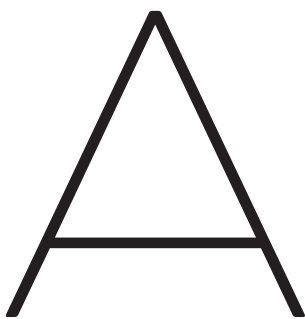


complimentary light rail passes and free and discounted driverless rides, allowing her to avoid the expense of car ownership in one of the most auto-dependent areas in the U.S.

“When I found this place, it was perfect,” she says. “I don’t have a car and didn’t want to buy one.” As far as transit goes, it’s not France, where she taught English for a time. But it is something new for American development. (Carmen, like some other residents quoted in the story, chose to not have her last name published.)

The start-up behind this 17-acre infill experiment hopes that the blend of community-focused design and a car-lite lifestyle becomes a selling point. Since it was announced in 2019, the \$170 million work-in-progress, which is roughly one-third complete, has been nothing short of an urbanist celebrity. Its rapturous reception included a feature in *The New York Times*, adoring videos, and excitement over the promise of car-free living—there’s only on-site parking for retail customers—in a metro where more than 92 percent of households own a car.

Culdesac certainly sticks out from its sprawl-focused surroundings of asphalt and strip malls with red rock landscaping and a smattering of cacti. It’s an attempt to be a hipper, car-free version of urban living—a village of Euro-style



As the bright winter sun starts waning one late February afternoon, Carmen, 25, steps out of a white, driverless, Waymo SUV. It’s my first encounter with a resident at Culdesac, a newly opened car-free community in Tempe,

Arizona—and it feels like I have traveled into the future.

The experience—bumping into a new resident at the development’s entrance, across from a light rail stop along Apache Boulevard—is exactly the kind of serendipitous encounter Carmen says happens often in her new home. Consisting of clusters of three-story alabaster apartment complexes that have been called “Mediterranean sugar-cube white,” the neighborhood is arrayed around pathways, shared greenspace, and a redbrick main walkway that runs past a row of small retail stores.

The community feels like it was “built to bring people together,” Carmen says. Culdesac also provides built-in mobility options, such as

white buildings, highlighted with multihued murals, terra-cotta accents, and an occasional green or blue door as vivid as the cloudless sky. And, with shaded brick or gravel paths, it does feel noticeably cooler than its surroundings.

The community's design and functionality offer a departure from decades of car-centric planning gone wrong and a place where creative work and flexibility by urban planners and developers have made a difference. It offers an oasis of sorts—a vision of what's possible. But, like any oasis, it's a fragile ecosystem, with surroundings that aren't necessarily compatible. After all, an island of walkability surrounded by a sea of cars can only go so far.

"It takes a level of openness to say, 'Hey, codes and regulations aren't just one-size-fits-all,'" says Ryan Levesque, deputy director of the Community Development Department's planning division in Tempe, who worked on the project. "If we bend the code or do different things here, we need to be able to self-reflect and ask if we're doing them for the right reason."

Culdesac is the brainchild of founders and Arizona natives Ryan Johnson and Jeff Berens, who saw an opportunity to add to the small supply of in-demand, walkable real estate in the U.S. The start-up and its developer partners zeroed-in on Tempe because of long-term transportation and development planning.



Above: The design and functionality of the neighborhood offer an oasis from the surrounding car-centric communities. Below: Tempe Deputy Director of Planning Ryan Levesque and other planners worked closely with developers to find creative and flexible solutions.

The city long ago realized it needed to grow *up* and not *out*, and it has focused on creative ways to densify without cars, because there simply isn't much space for more, says Deborah Salon, a professor at Arizona State University (ASU), who studies transportation. She has an ongoing research project focused on transit options, Culdesac, and figuring out what infrastructure, policy, and changes can inspire mode shifts away from cars.

The Apache Boulevard area had long been a focus of redevelopment, according to Levesque, making it an ideal space for Culdesac's experiment. Once a major thoroughfare, the strip had fallen on hard times and become home to transient lodgings, mobile homes, and motels. By the time developers broke ground in 2019, the lots two miles from the ASU campus were empty. But, unlike so many sites around the Phoenix metro, it had potential for density.

When plans were announced in 2000 to run the Valley Metro down Apache Boulevard and a half-cent countywide sales tax was approved in 2004 to fund more transit options, Tempe planners seized the opportunity and adopted a transit oriented development overlay in 2005—the Tempe Transportation Overlay District (TOD)—that created additional incentives for higher density. Salon says those decisions made the site ripe for what Culdesac is attempting to do, as both



Mesa and Phoenix's downtowns are accessible within 20-minute light rail rides.

"That's really the city's commitment to saying, 'Hey, build here, create that density so you can have alternate modes of transportation,'" Levesque says.

Building a 'dream project'

DESIGNER AND LEAD architect Daniel Parolek, of Berkeley-based Opticos Design, describes Culdesac as a dream project. An advocate of legalizing more urban infill projects—as well as the person who is credited with the term "missing middle" housing—Parolek knows from experience that "not a single zoning code in the country would allow a project like this by right."

But that didn't stop him and the Culdesac design team from proposing something significantly different. Drawing from myriad strains of vernacular architecture—coastal Italian enclaves, adobe homes across the Southwest, a handful of still-standing early 20th-century neighborhoods in Tucson, and Greek island architecture—Parolek and his team devised a kind of urban village concept, with small pods of relatively unadorned three-story buildings surrounding communal courtyards, interspersed with walking paths called paseos and knitted together with a grand walkway, a commercial main street, flanked by small, 500-square-foot storefronts.



Culdesac was designed to exemplify gentle density. By eliminating cars and standard-sized roads, it achieves a density of about 40 units an acre while allocating lots of room for parks and green space.

The development allowed the city to test its new mobility hub concept and refine its vision, says Transportation Planner Chase Walman.

Culdesac was designed to exemplify what housing advocates dub gentle density; by eliminating cars and standard-sized roads, which typically take up a third of U.S. developments, it achieves a density of about 40 units per acre while allocating lots of room for parks and green space. Parolek calls the concept "fabric buildings."

The irregular placement and angles of the buildings create nooks and crannies, some with benches and communal grills, and others that allow revelations when, turning a corner, a bright sunburst-shaped mural pops out vibrantly from a staircase wall. Lines of string lights hang overhead. And despite the closeness of roaring traffic on Apache Boulevard and numerous nearby construction crews, both seem out of sight and out of mind. The walk is relaxing and quiet, with just the ambient crunching of gravel beneath my feet and the occasional call of birds.

Initially, another developer had proposed a more traditional project for the lot in 2016, aiming to meet existing TOD standards with a three-tower development that included 1,000 parking spots. But Culdesac and developer

Left: A covered, communal patio area along Lectric Avenue, the main paseo, which was widened from the original concept to accommodate emergency vehicles. Below: The residential units and communal areas are designed to bring people together.

Sunbelt Holdings convinced the other developer to sell them the land. Then, they shared their vision with Tempe planners—who spent a year working with the Culdesac team to create a Planned Area Development master plan that could meet the developer’s vision and be approved by the city’s Development Review Commission.

Parolek says it was an extensive lift and credits the collaborative nature of planners for making the whole thing possible. Parking requirements were waived due to the extensive investment in mobility resources. Culdesac offered to build a protected sidewalk to access the light rail stop to encourage more rail trips

(Salon’s research found about a quarter of those moving into Culdesac came from car-free households). The development also worked to test the city’s new mobility hub concept, working with planners to design their bike- and car-sharing areas so they could be used as a feasibility study for future development. Developers included bike parking, showers, space for scooters and bike repairs, as well as granting a bike shop prime retail space facing Apache Boulevard.

The partnership helped the city refine its own vision, says Chase Walman, Tempe’s principal transportation planner, creating a model they could later show to developers and that will help the city create an eventual network of such hubs.

“This isn’t on an island,” he says. “It’s not by chance this is happening; it’s a design supported by the Transportation Overlay District and the city transportation master plan.” The city-developer collaboration also has carried over into the infrastructure expansion, as Walman says future bike boulevard projects are under development to connect Culdesac to other bike paths.

“Once Culdesac came in, it really elevated the importance of filling in this system gap,” he says.

One significant sticking point was the main paseo. Culdesac wanted a narrower street, to match the rest of the development, but Tempe planners needed to make sure that even in a pedestrian-first environment,



emergency vehicles could access every unit. Overall, the development is set to have 636 rental apartments when complete. The compromise widened the main paseo to 26 feet to fit ambulances and emergency vehicles but left the overall pod structure intact.

Other big questions around trash pickup and the color of the buildings—Tempe didn't authorize white exteriors for fear of glare but settled for slightly off-white—slowly were resolved. To avoid additional external staircases and fire escapes, they agreed to hide ladders within chimney elements on the buildings. They even relaxed certain building code rules about downspouts and color variation on the exteriors.

Biweekly meetings helped refine the project. Because it was set to be done in phases, Levesque says the city approved a special site plan that allows the staff to administratively approve additional phases to avoid additional design reviews and speed up the process. He adds that the parking was finished in the first phase to ease the city's concerns.

Culdesac's biggest challenge



WHILE SITTING OUT at the wooden tables laid out on the main walkway in Little Cholla plaza, and under a steel shade structure,

I meet a couple coming back from a morning workout. Frankie, 27, and Stephanie, 26, have spent six months in Culdesac—they were among the first 30 residents—and love having easy access to the on-site gym. They say it's easier to meet people at Culdesac than in other places, including the CEO, Ryan Johnson, who is also a resident. There are barbecues in the pods and weekly nighttime markets on Thursdays.

"We like New York but wanted outdoor space, and we loved LA but hated driving, so [we] thought this was a nice middle ground," says Frankie, a designer and engineer. "It felt like something historic was happening, and we wanted to experience it."

"We jumped at the chance to sell the car," says Stephanie, an illustrator. "We're both big city people, and I think we've felt the same sense of comfort here."

It hasn't all been easy, mostly because Tempe itself simply isn't set up for life without a car.

TO SAVE PEDESTRIAN LIVES, PUT YOU

Shrinking lane widths may curb fatalities, save money, promote

Crossing the street to get to Main Elementary School in Rome, Georgia, can be downright dangerous for kids. Brittany Griffin, a former senior planner of the northwest Georgia city and now community advocate, has been trying for years to implement traffic calming measures or install a pedestrian crossing signal along a four-lane, 100-foot-wide stretch of Georgia State Route 293, just a stone's throw from the school.

She is fighting for the roadway to be narrowed, the curb to be extended, and the medians to be expanded and planted with trees.

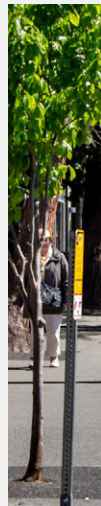
It's a snapshot of a problem vexing communities big and small across America, as more pedestrians and bicyclists are being killed on roadways. In 2022, more than 7,500 pedestrians were killed by drivers, according to a study from the Governors Highway Safety Association.

New research, *A National Investigation on the Impacts of Lane Width on Traffic Safety*, published by the Johns Hopkins Bloomberg School of Public Health in late 2023, suggests that the solution may be narrowing road widths.

While the American Association of State Highway and Transportation Officials recommends lane widths between 10 and 12 feet, the study found that lanes that were nine, 10, or 11 feet had a lower accident risk or frequency than 12-foot lanes. The study, which analyzed 1,117 streets in seven cities across the country, also found that wider lanes with higher speed limits had significantly more crashes.

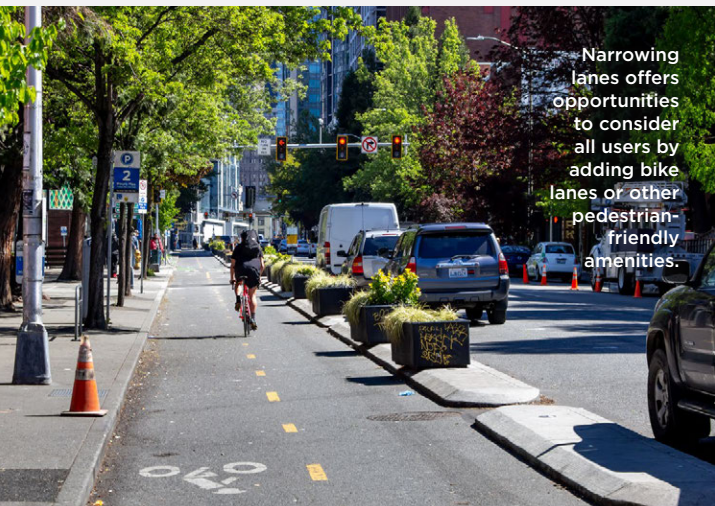
"Other benefits of lane width reduction are increasing roadway capacity, promoting walkability, and inclusive use of streets by all travel modes," as well as reducing construction and maintenance costs. The study reports that narrowing lane width also "would address challenging environmental issues by accommodating more users in less space, using less asphalt pavement, less land consumption and smaller impervious surface areas," which could help reduce the occurrence of urban heat islands.

PEDESTRIAN FATALITIES ARE RISING. Shima Hamidi, PHD, assistant professor of environmental health and engineering at Johns Hopkins Bloomberg School of Public



R ROADS ON A DIET

walking and biking, and mitigate the effects of urban heat islands. BY JONATHAN DEPAOLIS



Health and director of the Center for Climate-Smart Transportation at Johns Hopkins, was the study's principal investigator, along with planning professor Reid Ewing, PhD, Distinguished Chair for Resilient Places at the University of Utah. Hamidi says the number of pedestrian fatalities is "shocking."

"If you look at the fatality rate in the U.S.—11.66 per 100,000 population as compared to 1.3 to 3.2 in European countries, almost 10 times higher—it's just worse for pedestrian and cyclists," Hamidi says. "There was a 40 percent increase just between 2010 [and] 2018 for pedestrian fatalities."

Hamidi says streets should prioritize the most vulnerable users. And, if a street is safe for pedestrians and cyclists, she says, "then the street is safe for everyone—including drivers."

Narrower lanes also force drivers to pay more attention—a critical safety factor, says Chris Comeau, FAICP CTP, senior transportation planner at TranspoGroup.

When he was the senior transportation planner in Bellingham, Washington, the city received a federal grant to reduce the number of fatal and serious collisions on

Alabama Street, a four-lane road with a high-frequency bus route that connects several low-income neighborhoods. A road diet took it from four lanes to three, with a bike lane on the western third of the corridor and a center turn lane in the eastern third. The whole corridor also received Americans with Disabilities Act upgrades, sidewalk improvements, and six pedestrian signals at bicycle crossings. In the years that followed, the number of collisions resulting in injuries was reduced by about 30 percent, while travel times increased by just one minute.

'WHAT DO YOU VALUE?' Hamidi and the team of investigators spoke with departments of transportation and urban planners during the study. A common theme was concern about liability if lanes widths were reduced and crashes went up.

"Now, we have the data, and the data says narrower lanes are safer than wider lanes," Hamidi says. "So, how about we consider lane width reduction and make streets more livable, multidimensional, and safer for everyone?"

But that disconnect over safety is compounded by another challenge: getting decision-makers to place that value above overall traffic efficiency.

Robert McHaney, AICP CTP, chair of APA's Transportation Planning Division and chief of integrated planning at The Goodman Corporation, says he advises, but does not prescribe answers.

"What do you value in your transportation infrastructure?" McHaney asks. "Is it moving from Point A to Point B really fast and efficiently? [Or] a place where people want to walk, be, or hang out? ... There is typically only enough right of way for achieving a few of the goals."

He believes the study's recommendations may help get buy-in from stakeholders to make changes and says planners play a crucial role in those conversations. "What does the community want to look like in the next 10 to 15 years? Because transportation can help drive that vision."

Jonathan DePaolis is APA's senior editor. A longer version of this story appeared at planning.org/planning.



Cocina Chiwas, a James Beard Award-nominated restaurant with an established following, is one of the successful businesses in the development where many shops are struggling.

Frankie described it as operating within a “zone of convenience.” Outside a relatively small radius where car-free living is simple, transportation can be challenging.

But when it works, it really works. Ally Merschant, 23, an actress who lives at Culdesac, can take light rail to and from her production of *A Midsummer Night’s Dream* at the Mesa Arts Center. On the right night, you might hear her practicing her Shakespeare on the westbound train.

Still, unless a destination is directly walkable from a light rail stop or walkable from Culdesac—unlikely, as the development has a railroad on one side and a string of mostly under-development apartment complexes along Apache Boulevard—it’s inconvenient without a car.

Case in point: the previous weekend, Frankie and Stephanie wanted to go to an escape room. What would typically be a 20-minute drive would be 90 minutes using public transportation. A ride-hailing service was charging \$50 each way. Ultimately, they booked a Culdesac-provided rental vehicle for \$25 total.

Brad Biehl, a former Culdesac intern and now resident who operates a recording studio in one of the micro-retail spaces, where he also records his own urbanism-focused podcast, *Good Traffic*, says the challenge is that the

community does a great job of supporting you with the right infrastructure, but Phoenix and Tempe don’t. And while he is comfortable, with years of experience, biking down a busy main arterial road on an e-bike, other residents new to the experience may not be.

But perhaps the biggest challenge facing Culdesac right now is reaching critical mass. During my short stay, I don’t witness the utopian vision that promoters have been selling—that car-free life can knit together a neighborhood culture otherwise ruined by car-centric development. There aren’t spontaneous meetings in the shared common spaces, or neighbors walking together from the train stations, or flocks of cyclists heading to work. To be fair, the Little Cholla Markets on Thursday, which I’m not able to see during this visit, are said to be big draws. But I mostly see more staff members in Culdesac-branded shirts than Culdesac residents.

I see very few cyclists during my stay—maybe in part due to the subpar biking experience on nearby streets, especially the main drag, which only has painted bike lanes. On a neighborhood ride, a few motorized scooters and bikers buzz by, rarely straying from the sidewalks. But change is coming: a forthcoming bike lane is anticipated to start construction this year that will connect Culdesac to a nearby mall; paths and trails exist within a short ride; and Salon says there are extensive ongoing efforts to expand the bike network. As Culdesac property managers there tell me, residents overwhelmingly use the light rail.

Even as construction workers toil away on the upcoming phases of Culdesac, which are set to bring in hundreds of additional residents when they open in 2025 and 2026—not to mention several under-construction apartment developments nearby on Apache Boulevard—right now, it’s tough.

The coworking hub located above the gym is rarely used. Operators say they plan to close it and convert it into more retail space, owing to underutilization and more residents working from their homes. The owner of the tea shop, Complete Comforts, tells me that the shop was especially empty the first few months of operation last fall, especially during the rainy season.

The existing food market is a week from closing when I visit—though a Culdesac rep says a new one will be taking its place shortly. The largest crowd comes from Cocina Chiwas, the James Beard-nominated restaurant located in the corner of the development, which also plans to open a coffee shop and wine bar later this year. The restaurant remains constantly crowded—a walk-in table isn't available on the Tuesday night I'm there—but it's also an existing business with a draw of its own.

It's a reminder that Culdesac remains a bold experiment that isn't finished. Parolek believes it will take a few more years of renting units and steady operations to make a business case for rapid expansion of similar projects and to show that even in one of the most car-dependent parts of the county, car-free living is possible.

But replicating that kind of development



Culdesac remains a bold experiment that isn't finished. It will take a few more years of renting units and steady operations to show that even in one of the most car-dependent parts of the county, car-free living is possible.



Above: The city waived parking requirements since Culdesac's developers built a protected sidewalk to encourage use of the Valley Metro Rail light rail stop. Left: The community does a good job of supporting residents, say Brad Biehl and Ally Merchant, who bike and use the light rail to get around Tempe.

without the planning prescience of Tempe won't be easy. There have been other U.S. developers, in cities like Houston and Charlotte, North Carolina, with TOD ordinances similar to Tempe's, that have experimented with car-lite apartment complexes. Even Culdesac can't necessarily repeat the same level of car-free living without similar investments in transportation infrastructure and planning policy; in Mesa, the firm has plans to build a 1,000-unit project downtown that'll have 800 parking spaces, owing to the lack of transit options.

One project can't instantly change an entire region's development and travel patterns. But Culdesac, by using the foresight and flexibility of planners in Tempe, is making a case that noteworthy change is possible.

"They're selling it like they're going to create this situation where you're actually going to have a better life without a car than you've ever had," Salon says. "I think it remains to be seen whether they're successful in doing that. But I love that approach because it's not the approach most people have been bold enough to take."

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



To create the webslinging world of Central Park, Times Square, and other Manhattan locales in *Marvel's Spider-Man 2*, game designers researched the real city and even talked to residents, ultimately balancing authenticity with workability.

COURTESY SONY/
PLAYSTATION

GAMING TECHNOLOGY HAS COME A LONG WAY

in a relatively short time. From the ripped-from-a-textbook appearance of 1997's *SimCity* to the straight-from-the-silver-screen look of *Marvel's Spider-Man 2* in 2023, we've gone from measuring the appearance of games in bits to harder-to-quantify levels of immersion capabilities that go far beyond what we once imagined.

But as that technology has gotten more realistic, it also has expanded the ways people interact with it. Andrew Buck, AICP, ENV SP, senior urban planner and technologist at VHB and treasurer for APA's Technology Division, is excited about where gaming intersects with planning.

"There are just so many opportunities to look at the urban experience or anywhere [else] from a pedestrian perspective," Buck says. "That can be used as a powerful planning—but also design—tool when deployed in the right way."

Josue Benavidez, design director for Insomniac Games, which created *Marvel's Spider-Man* and its sequel, encountered that intersection from a different perspective. The design process started with establishing the scale, which was set by the game's Central Park and Times Square, with the early goal of making sure characters could swing through the city at a speed that made sense for gameplay. To that end, street widths in the game are narrower than those in real-life Manhattan, and the game's average building heights are taller than IRL—a distinct advantage.

"We benefit from building the whole city at one time, whereas the real-world city was developed over centuries, which just means we have more consistency in street layout across the city," Benavidez says.

But the team also faced some real-world problems, like traffic flow—something with which planners have long had to contend.

"Early on, we had issues where we would quickly get gridlocks and massive traffic jams," Benavidez says, but they worked up solutions to solve them. "The traffic system is laid out in a way that provides adequate flow for traffic into and out of an area."

While gamers are spared the experience of navigating Manhattan traffic from the perspective of a driver, the attention to real-world detail goes a long way in building a world where the city feels alive and vibrant below as Spider-Man swings from building to building above it.

City-building games such as *Cities: Skylines II* and others are also capturing the imaginations of today's planners to test new designs, engage communities, and more. It's not a new concept: the genre itself dates back to 1964, and the mainstream success of *SimCity* reportedly helped inspire a generation of planners like Buck.

"If I could design a city in *SimCity*, why can't I have access to those software sets today in terms of being able to visualize what's happening in complex urban areas and do these types of simulations?" Buck asks. "Games like *Cities: Skylines* are a great opportunity to think about ... concept-level iterations of what you can do in terms of designing—at least at a macro level—what a city could be."

Games and their sets of tools, he says, can be used to show others what is possible, from transit to elements of land use planning and zoning. They also can explain concepts of urban planning to novices and invite them to engage.



THE MARVELOUS WORLD OF CITY- BUILDING GAMES

Planners harness video game tech to imagine possibilities
and test ideas that could impact communities IRL.

By BILL JONES

"It's a great tool for learning and experimenting. You can try a lot of different things in a safe environment," Buck says. Plans, policies, and land use decisions, especially if they are not carefully designed, can negatively affect people. Gaming, he says, "gives you an opportunity to do a simulation to see the potential results," including unintended consequences.

The *Cities in Motion* series, for instance, allows players to build, manage, and operate a transportation network to connect and influence how communities and cities grow, Buck explains. *Cities: Skylines II* allows gamers to build from the ground up and can introduce the fundamentals of municipal management, with elements of urban planning such as zoning, transportation, public services, and even taxation.

"This provides the user the ability to see positive or negative impacts that the combination of different land uses could have on their communities," Buck says. However, he notes that there isn't a strong tool that gives planners

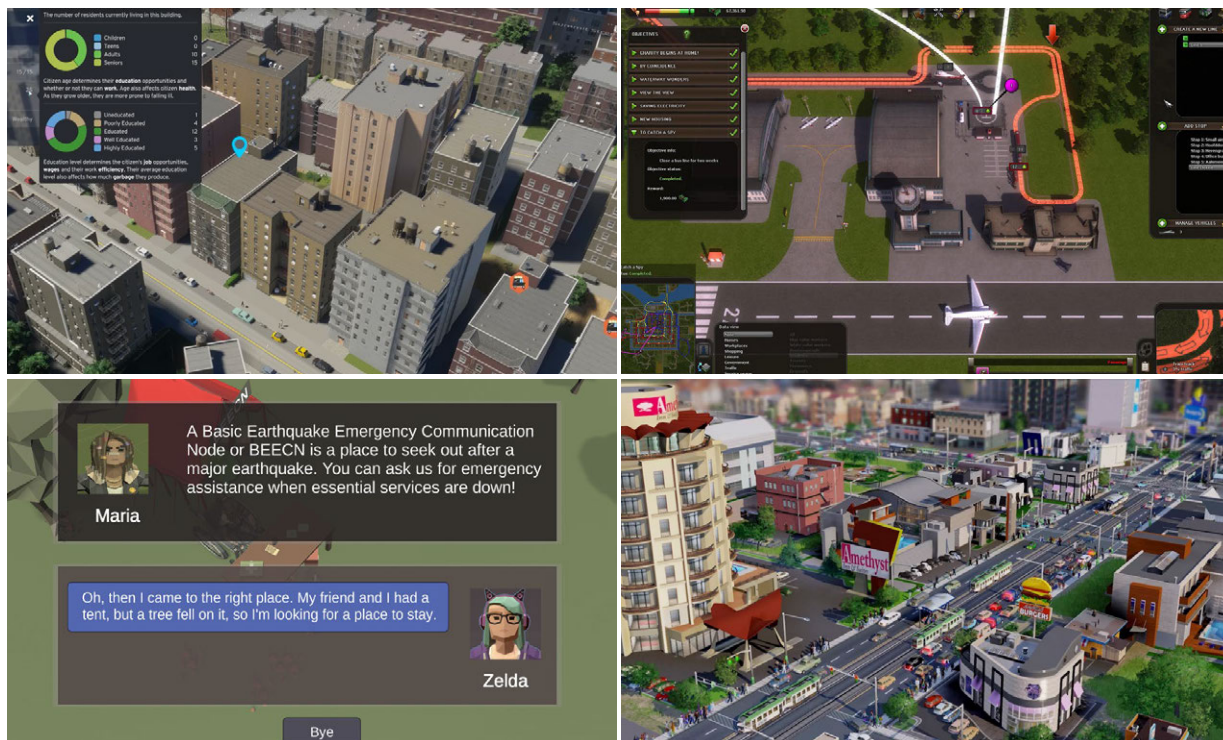
an "out of the box," on-the-ground, city-builder experience. "For a more professional-grade experience, there are game engine-based tools like Twinmotion or even Unreal or Unity game engines that can also allow urban designers to build places."

GAMING MEETS PRACTICE

Michael Allen, AICP, doesn't use video games as a tool—or at least he doesn't do so consciously. "Although, I think subconsciously I might be looking to test my own theories on how city planning should be laid out and utilize those games to [do that]," he says. "I generally do it just for fun, but there's a lot of upside, a lot of potential."

Allen has been a professional planner for more than two decades, now serving as community development director for El Segundo, California. He played *SimCity* growing up but had never done more than "tool around" with *Cities: Skylines* until *BuzzFeed* sat him down to play it for a video.

Clockwise from top left: Choosing housing in *Cities: Skylines II*, building transportation options in *Cities in Motion*, a *SimCity* metropolis, and earthquake safety information in *Cascadia 9.0*.



'IT'S A GREAT TOOL FOR LEARNING AND EXPERIMENTING. YOU CAN TRY OUT A LOT OF DIFFERENT THINGS IN A SAFE ENVIRONMENT...AND SEE THE POTENTIAL RESULTS.'

—ANDREW BUCK, AICP, ENV SP

"Unfortunately, that gave me another fun tool to play with," Allen says, laughing.

Allen says *Skylines* gave more flexibility to design and build than what he had seen in games before it, getting into some of the "nuance of land use and spatial planning." But there are other programs and software available that take a more scientific approach to those issues, which Allen thinks may be why games aren't used more in a professional setting.

Skylines and *SimCity*, for example, provide an entry-level understanding of how land use decisions interrelate and the impact they have on things such as traffic and the environment. But Allen says they still don't stack up to traditional modeling programs.

"It's unclear to me in the games what the methodology is behind these impacts, other than some general intuition or assumptions the game developers made given their lived experiences," Allen says. "Take traffic for example. The games don't allow you to play with the varying degrees or adjustments that land use planners and engineers make every day."

Planners often use travel demand modeling software such as TomTom or similar programs for real-time trip generation, speed, queuing, signal timing, and lane configuration to better understand the impacts of projects—and mitigate the negative ones. If games, however, can better marry their platforms with those issues, Allen thinks they can grow as a tool for community engagement.

"It would definitely help create a broader understanding of the impacts of development, the impacts of land use decision-making for a broader audience," Allen says.

There are ways to practically apply the concepts from games to planning. Jason Baker, a consultant who has worked on transportation and housing, has used *SimCity* for reference to guide his thinking about city planning. But he notes the real world poses different challenges.

"There isn't a [California Environmental Quality Act] in *SimCity*," he says. "There aren't neighbors in *SimCity* who come out and get mad if you want to put something there."

The planning aspects of video games aren't limited to city building. Some games are all about what happens when things are literally falling apart. Among them is *Cascadia 9.0*, a game created for research being conducted by a group of professors at Lewis & Clark College in Portland, Oregon, that examines what motivates earthquake preparedness behavior, especially in young adults. It has already garnered attention from emergency managers and educators.

Peter Drake, PhD, associate professor of computer science at the college, says the team worked to make the game easy to play. They also were keenly aware of and worked to address one potential roadblock of their own.

"Educational games are notoriously not entertaining," Drake says, noting *Cascadia 9.0* keeps things interesting through mechanics and story, while still presenting the right information. "In a game, you want to have excitement and daring heroics, but the disaster management people we talk to, all the advice they give people is how to make your life as boring as possible in a disaster environment."

BRIDGING THE GAP

While games are ubiquitous nowadays, that doesn't mean they are a fit for every planner.

Artificial intelligence, however, is making technology more accessible to planners, with more user-friendly natural language programming and an ability to generate incredibly realistic videos. Additionally, gaming engines such as Unreal are available for free to develop software, reducing the financial barrier. Still, you need to find people who know how to use the tools.

"It's more of a knowledge gap, in terms of anything, to entry," Buck says.

But custom-made games that can guide stakeholder discussion are appreciated by planners. The only real pushback he has seen is when tech is used irresponsibly.

"If it's not really adding to the conversation or helping in a real way or is misleading, that's when there tends to be pushback on it," Buck says. "I think people are open to it when it can help get everyone on board with an idea through providing a compelling visual that makes things clear—clearer than what you'd get out of a site plan or a static rendering or any of the traditional means of providing information on a design."

Bill Jones is an award-winning journalist and communications professional who resides in the vicinity of Chicago. Read the full version of this story at planning.org/planning.



SAN GERONIMO COMMONS

Marin County, California

WHAT HAPPENS TO FAIRWAYS after the golfers move on? At San Geronimo Commons, the once chemically green 18-hole course has been spared from redevelopment, restored, and rewilded. Managed by Marin County, after a period of stewardship by the Trust for Public Land, the 157-acre site now joins, rather than interrupts, 100,000 acres of contiguous public open space. Today, hikers and cyclists traverse golf cart paths. Floodplains and streams are being restored, and endangered Coho salmon can migrate to critical spawning habitat. Human well-being is prioritized, too. The Commons hosts public health clinics, food pantries, and youth programs. This summer, it's home to a classical concert series celebrating the harmony of ecological restoration.

A massive oak tree in the Larsen Meadow, formerly the "back nine" of the San Geronimo Golf Course. (Got a climate win-win that makes your Community Green? Tell us about it: email mstromberg@planning.org.)



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