# The Tech That Tries to Tackle NIMBYs

City officials are using digital simulations and other online tools to ease contentious public debates over new development and street changes.

Patrick Sisson

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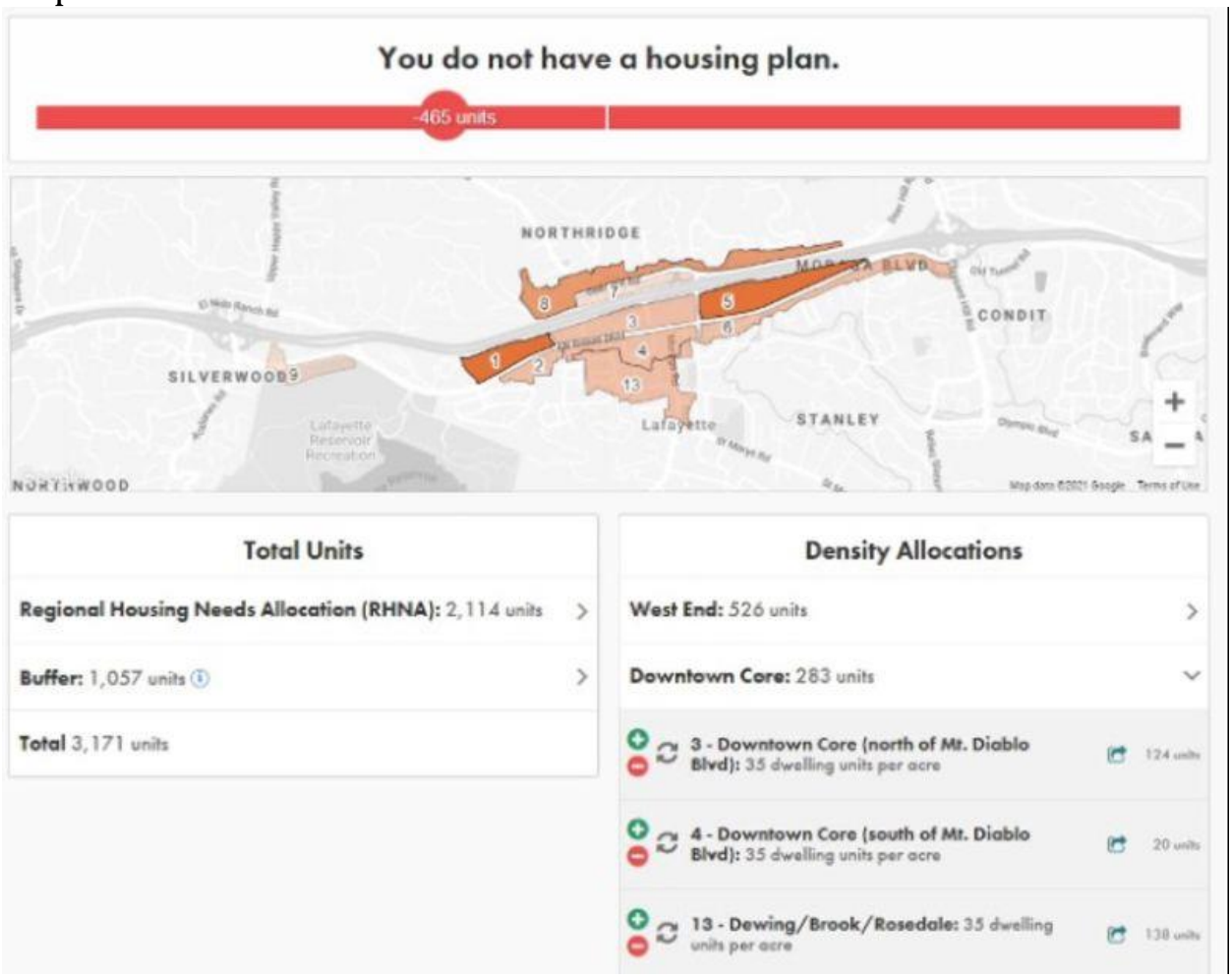
It's not easy to get new housing built in Marin County, the California enclave that's infamous as a NIMBY stronghold.

But the town of Fairfax didn't have a choice: As part of the state's housing element law, which requires municipalities to periodically update their general plans and change planning and zoning to accommodate more housing to meet the state's severe supply crunch, the small city of roughly 7,600 people needed to add 490 housing units.

Given Fairfax's hilly topography, wildfire risks, and tradition of slow-growth political sentiment, deciding where to put new development promised to be a delicate dance for Mayor Stephanie Hellman. So when Fairfax began the latest round of updates last year, which are due to take effect in 2023, she turned to a new tool — a digital simulation called Balancing Act. Using a map-based visual interface, the interactive tool allowed online participants to decide where they would zone and permit additional housing, and submit their own maps to meet the state-mandated housing production goals (known as the Regional Housing Needs Assessment, or RHNA).

The city's version of the tool, accessed at FairfaxSpeaks.com, "gamified" the housing process, according to Hellman, helping residents get a better sense of the challenges facing planners around the lack of affordable

housing, and providing significant feedback. Instead of going site by site and inviting public wrath over specific development proposals, Balancing Act forced users to confront the challenges planners face, providing context and allowing them to weigh multiple options. Think of a very simple version of SimCity, but instead of building up commercial blocks or metropolises, it's placing residential units across a municipal map.



A screenshot from Lafayette, California's Balancing Act simulation.
*Image courtesy of Balancing Act*

Not everyone in Fairfax, however, was happy to play this particular game. "People do want an option in the simulation that essentially wouldn't support the state mandate," Hellman said. "They've expressed frustration: 'I don't see an option for zero allocation.' Well, that isn't an option."

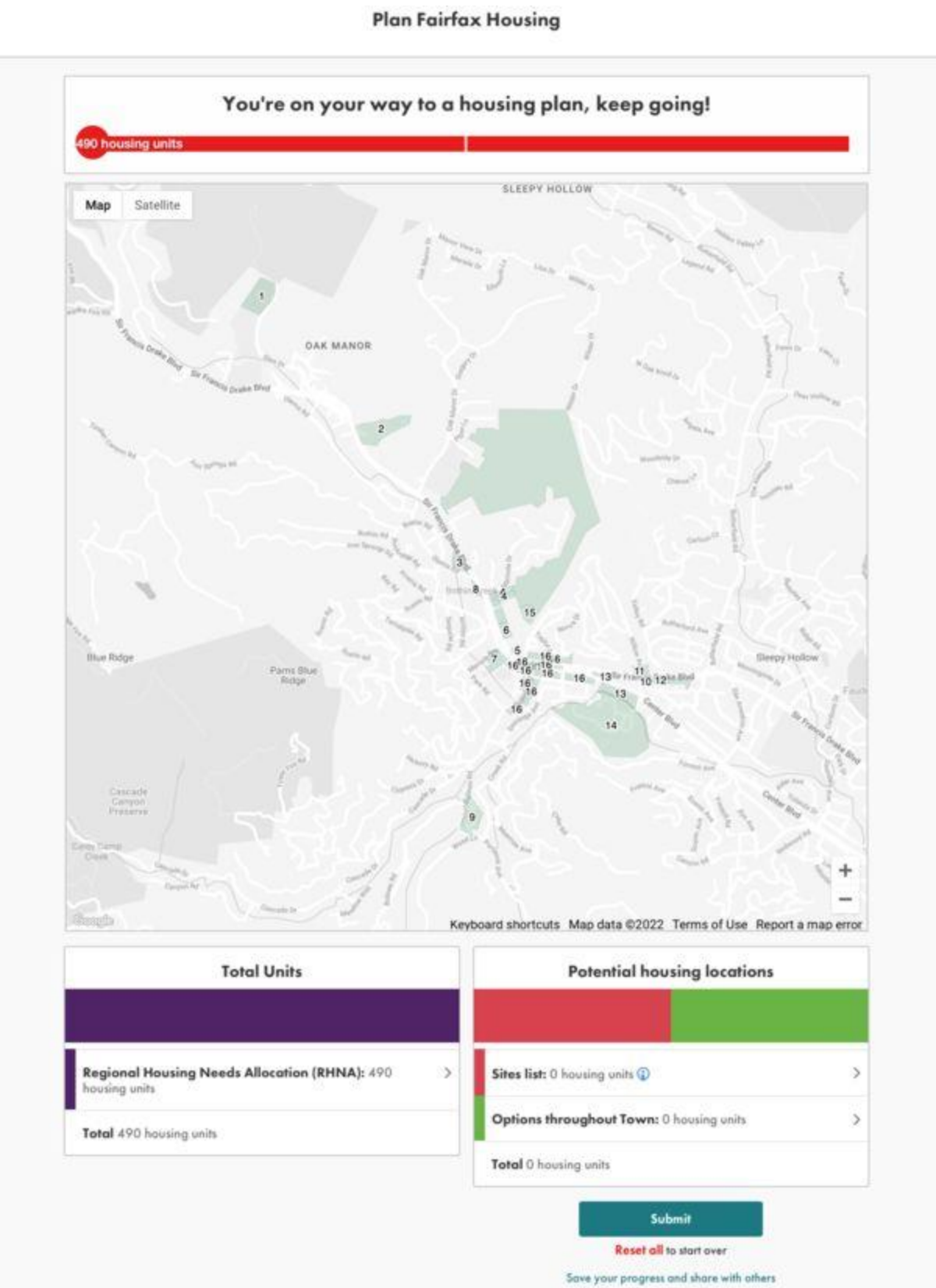
Marin County could be a particularly grueling proving grounds for Balancing Act, one of several new digital tools designed to help cities with public engagement and feedback. The use of such online platforms and services by municipalities was hastened by the Covid era's pivot to virtual meetings, but it's continued as lawmakers and participants have found that digital tools can have big advantages over traditional public decision-making processes — as well as some limits.

Balancing Act was born in the real world: Engaged Public, the Denver-based firm that created it, launched in 1998 to do face-to-face public policy facilitation with local governments. In the early years, says company president Chris Adams, the most important thing he learned was that framing mattered.

In 2007, Engaged Public launched its first simulation tool for the state of Colorado, focused on collective decisions around budgets. Eventually, local governments started asking for similar software programs. In 2020, the firm had an epiphany: Could their budget simulation be recast as a means to make housing debates more community- and solution-oriented, as opposed to inviting NIMBY anger at public meetings?

"The way to have a successful public conversation is to frame it appropriately and have [people] oriented to solving the problem, instead of just inviting complaining," Adams said. "It's not just what you're hyper-local against; it's what you're for."

In fall of 2021, as part of a broader technical assistance program, the Association of Bay Area Governments signed a contract to provide 25 licenses for Balancing Act to be used by any of the municipalities in the nine-county, 101-city area (subscription fees for the service are based on population size). So far, most officials and residents who have used the program seem to agree that it's been a useful addition to their toolkit. Jillian Zeiger, Marin County senior planner, said that while it perhaps didn't change anybody's mind, Balancing Act did at least force them "to be a little bit more concrete about their criticism."




Fairfax officials say that the online tool helped city residents understand development plans.
*Image courtesy of Balancing Act*

Most importantly, it was a way of confirming acceptance; after so much pushback, laying out the problem, providing visual aids, and spelling out that it was a mandate that needed to be filled forced many opponents to make the hard housing choices themselves. Residents who couldn't attend meetings had a chance to offer detailed suggestions. (Zeiger held Zoom office hours to help residents submit their ideas.) In Fairfax, after using the tool quite a bit in the early stages of debate and public feedback, town leaders recently signed off on final sites for housing development.

Gustavo Gonzalez, planning manager of the city of Eastvale, says that Balancing Act helped explain the city's housing element plan process, and how planners work. "Many community members didn't understand what we were doing," he said.

The city, located in the Inland Empire east of Los Angeles, needed to add 3,000 units. There wasn't much open land left, and residents voiced a familiar litany of concerns: There's no room, everything will be high-density, and the schools will be overrun. Users who participated in the Balancing Act simulation were given 13 potential sites, and public input trended towards a handful of sites near the city's developing downtown. The process worked out, with the program putting residents in the driver's seat, Gonzalez said.

"The beauty of this tool is that literally, unit by unit, you can say where the housing should go," said Gonzalez, who called the software a game-changer for the town's once-contentious new-housing debate. Before the simulation process, a standing-room-only meeting of angry residents opposed the development; when the housing element was later passed in council chambers, after Balancing Act, nobody was there to oppose the final vote.

Doug Chen, a project manager for Discovery Builders, offered his feedback as part of the housing element process run by the city of Clayton, California, where his firm currently operates. He felt the program was useful, and the information provided in the interface about

zoning types and available areas for development provided good background for residents looking to understand the challenge and provide feedback.

Suzanne Sadowsky, a retired Marin resident in the San Geronimo Valley who used Balancing Act, said local residents can get set off when planners talk about placing dozens of new units on an acre of land, but the tool made it easier to understand what that really means, and play a role in the "long educational process" needed to get people away from only approving suburban-style, single-family development.

# "They're able to see how reorganizing the street could actually work, instead of being a ridiculous idea."

Other examples of digital simulations or software platforms used in planning and public meetings have also shown that such technology has promise, despite being in an early iteration. Symbium, a tool that allows homeowners to figure out where they can place accessory dwelling units (ADUs) to help speed up the permitting and building process, just announced a partnership with the California Association of Realtors to allow any homeowner in the state to access the program to plan potential backyard apartments. Its designers call it "TurboTax for planning."

Transportation planner Robert Guthart saw virtual-reality planning pay off with residents evaluating a transportation project. While working for the Texas Department of Transportation in the El Paso district between 2017 and 2020, his previous firm, CDM Smith, embarked on a long-range master plan for the US-67 corridor, which goes through small towns, border regions, and the arts mecca of Marfa. One of his main concerns was figuring out how to reconfigure the roadway so large freight trucks

engaged in cross-border trade wouldn't overwhelm the main streets of these small West Texas towns.

After a poor initial public engagement process for another project in the area, the Trans-Pecos Pipeline — "They came out with pitchforks," Guthart said — he feared a similar reception. So he decided to utilize the Microsoft HoloLens, a mixed-reality device that allows wearers to see a digital images overlaid with real-world scenes, to show residents what potential intersections and roadways would look like with new designs and safety enhancements. The HoloLens process helped participants visualize changes such as adding bicycle lanes to streets that saw heavy truck traffic. "It helped create confidence in the government, using more cutting-edge technology," he said. "They're able to see how reorganizing the street could actually work, instead of being a ridiculous idea."

Such tech needs more tweaks, test results and real-world use, many officials say, and the final results of the Bay Area simulations haven't been fully adopted. Eastvale's Gonzalez would use Balancing Act for the next housing element process, but wants the ability to offer more qualitative feedback to better understand exactly what residents want. Zeiger found that online feedback invited a much more diverse set of replies, but the office hours and support Marin County set up to help users take advantage of the tools need to be expanded to make sure the digital tool is accessible by the entire population.

"If you can have rich and robust and broad public participation, it can be a huge boon to public officials as they're trying to move these plans through the process," said Adams. When it comes to hot-button issues like new development, it helps if residents can see first-hand that there are tradeoffs and no easy answers, and that playing urban planner can be harder than it looks.

"In public policy negotiation, you always fear what's called a brittle agreement," he said. "People feel like the process didn't accommodate their interests. We want people to go through the simulation, see that the tradeoffs are hard, and have a bit of empathy for public officials."