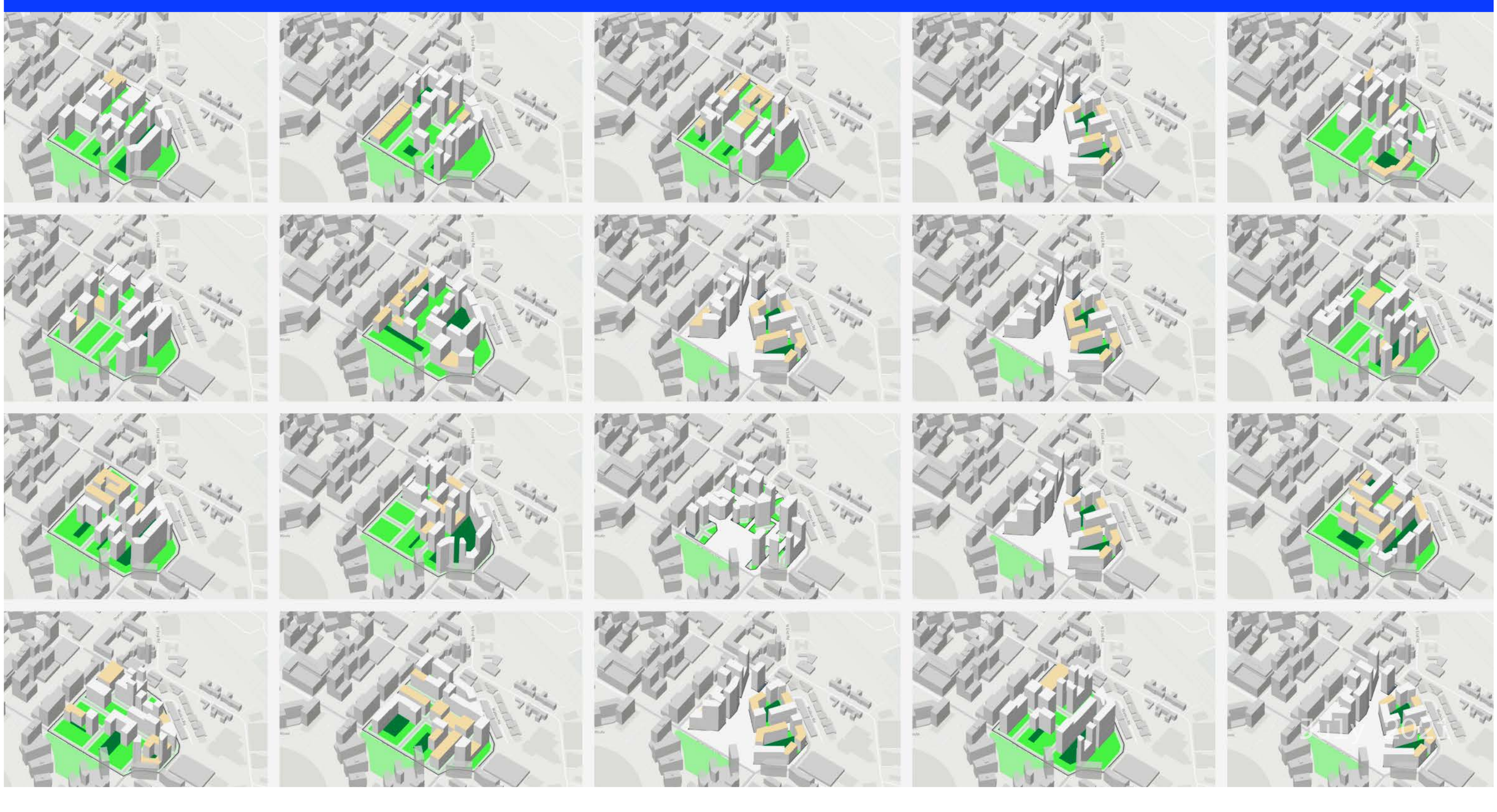
delve

BY SIDEWALK LABS

Press Kit



Introducing Delve by Sidewalk Labs

Hi There!

Any path to greener, more affordable cities involves building more dense, mixed-use developments that expand housing options while preserving quality-of-life outcomes. But the traditional real estate process struggles to design for a complex and competing set of priorities and constraints.

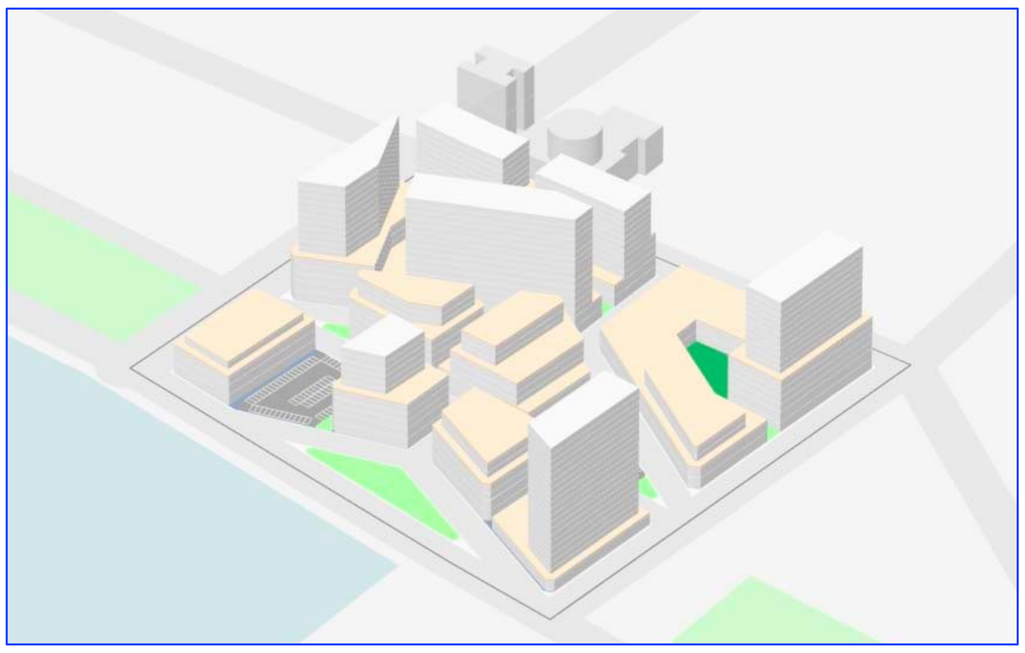
That's why Sidewalk Labs created Delve, a generative design product that uses machine learning to help real estate development teams discover the best neighborhood design for their project, based on the priority outcomes that matter most.

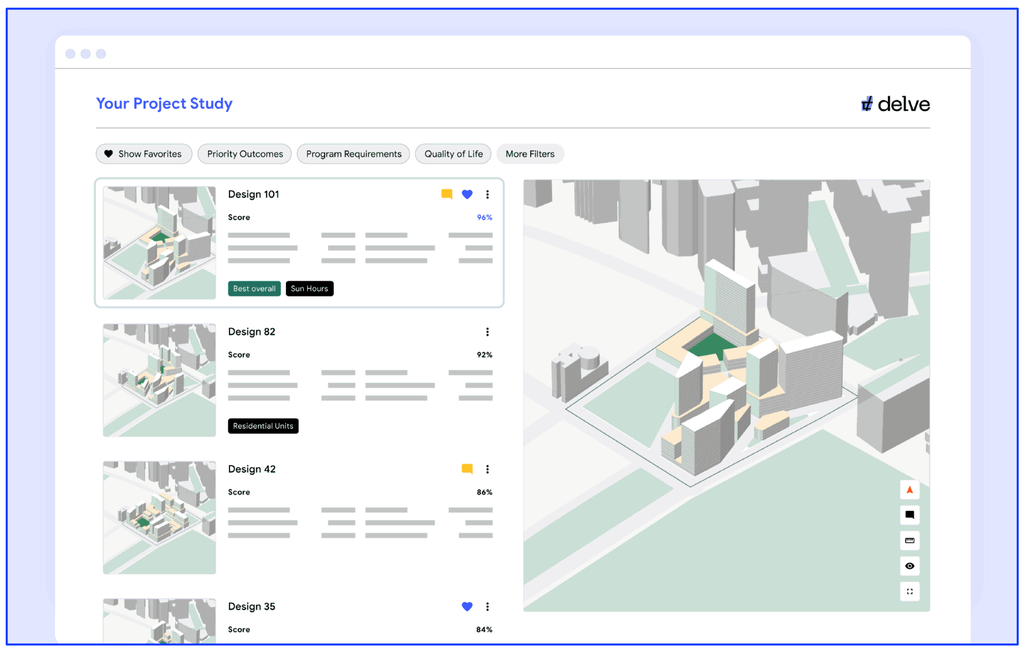
By revealing designs that meet or exceed the competing goals of many stakeholders, Delve by Sidewalk Labs takes a step toward building stronger consensus — and stronger cities. We're excited to share more about how developments around the world are using Delve to design more sustainable and equitable neighborhoods.

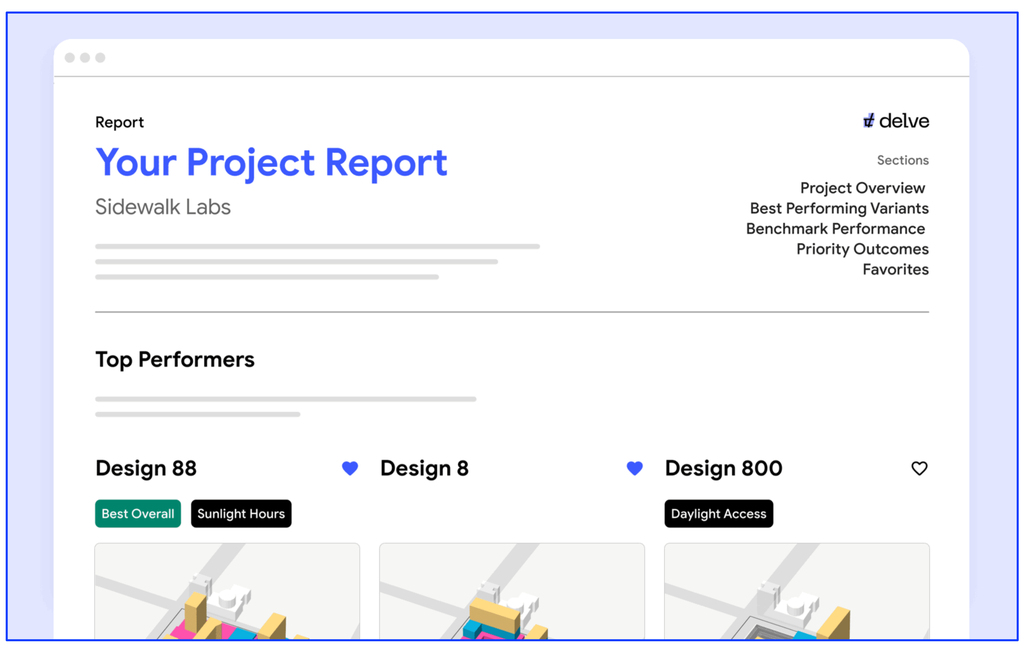
Best,

Douwe Osinga & Okalo Ikhena

Co-Heads, Delve



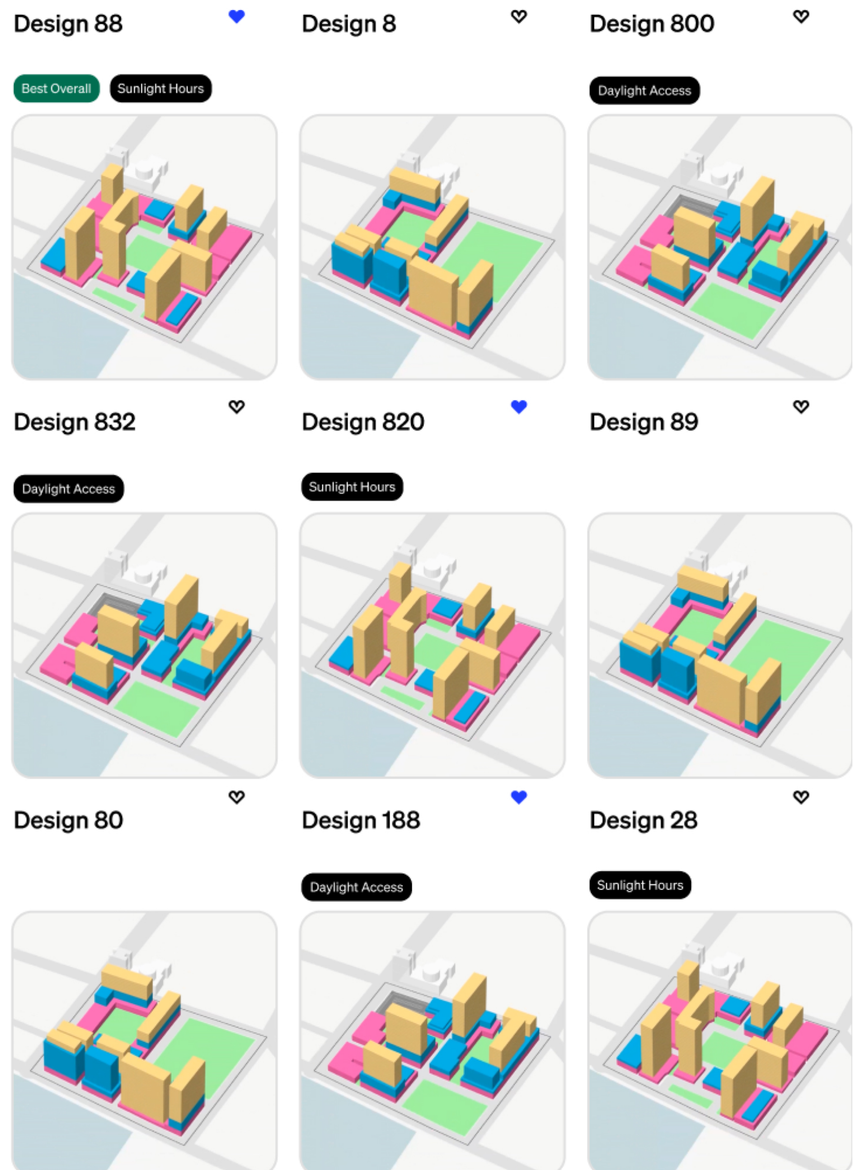




What Is Delve?

Click Here for Delve's Intro Video

Delve is a generative design product that uses machine learning to help real estate teams design better and faster with less risk. Delve identifies the best neighborhood design for a project based on the development team's priority outcomes. By revealing the optimal design option, Delve helps developers meet or exceed a project's economic goals while improving quality-of-life outcomes for residents and businesses.



What Is Generative Design?

Broadly speaking, generative design is the process by which a computer automatically produces thousands of designs based on goals and constraints.

Our team of architects, computational designers, and machine learning experts have applied generative design to the real estate process by training Delve's software to understand key development constraints and project priorities. Based on those inputs, Delve then generates thousands of unique, and often overlooked, possibilities for neighborhood designs.

Key Benefits for Development Teams

- Smarter decisions: Delve weighs complex and competing elements of urban development, like project financials, energy models, and site constraints.
- Valuable insights: Delve uses data to generate thousands of designs, based on a development team's priorities, and it can unlock viable options that may have been overlooked.
- Easier collaboration: Delve allows all project stakeholders to see their priorities together, making the process more cohesive.

How Does Delve Work?

Delve's Process: Two Key Steps

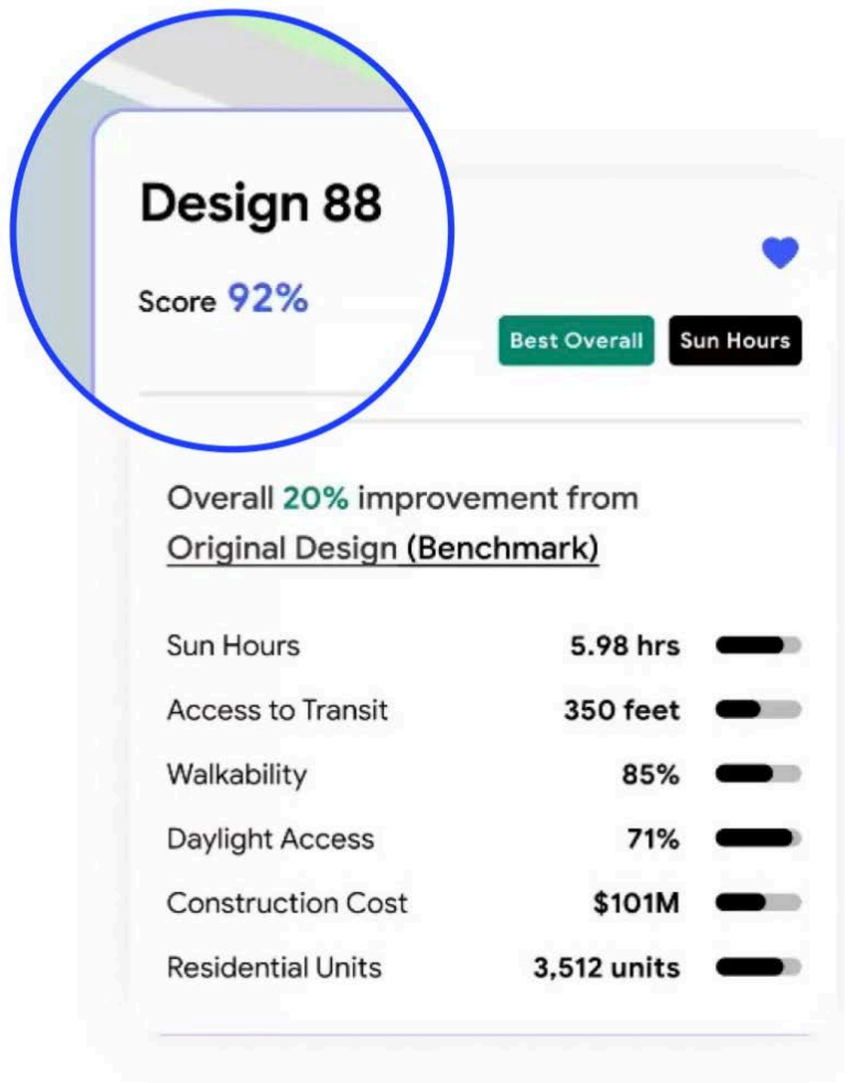
Step 1 – Discovery

First, a development team uses Delve's intuitive interface to identify a project's goals and constraints. These can include:

- Planning inputs (e.g. use types; building types; leasable area; unit mix; open space)
- Site constraints (e.g. height limits; parcelization; zoning; circulation strategies; open space strategies; views; daylight; walkability; access to amenities)
- Priority outcomes (e.g. construction costs; capital value; net profit; profit on cost)

Step 2 – Design Generation

Next, Delve generates hundreds of possible designs and provides a score to rank the best ones based on the priority outcomes in just minutes. Teams can also update their priorities as they change.



Case Study

A Large-scale Neighborhood Near London

Here's one example of what Delve can do. Quintain, an award-winning developer in the U.K. and Ireland, engaged Delve to help solve for complex project requirements in a 12-acre mixed-use development on the North East Lands site in Wembley Park, London.

Based on the project's planning inputs, constraints, and key priorities, Delve identified 24 high-performing design options that exceeded the benchmark designs on priority outcomes, including housing units, daylight access, and open space. One high-performing Delve variant added nearly 200 units (while also increasing the average unit size by 13 square feet), improved daylight access, and expanded open space by 11 percent.

Read the full case study.

Comparing a Benchmark to a High-Performing Variant

Priority Outcome	Baseline	Delve	Improvement
Unit Yield	**2,417 units**	**2,612 units**	**+8%**
Average Unit Size	**789 sq ft / unit**	**802 sq ft / unit**	**+2%**
Leasable Residential Area	**1.91M sq ft**	**2.09M sq ft**	**+10%**
Daylight Access	**62%**	**63%**	**+2%**
Sun Hours	**5.9 hours**	**6.1 hours**	**+3%**
Open Space	**7.26 acres**	**8.07 acres**	**+11%**

A Few More Delve Details

For Real Estate Developers, Architects, and Cities

Delve is a tool for professional development teams. While consumers can't currently use Delve, we eventually believe that Delve can serve as a community engagement tool that helps residents and businesses collaborate on a new development's goals.

How Does Delve Use Data?

Delve doesn't collect any personal information about people living in cities. To find the best designs, Delve uses publicly available planning information (such as zoning codes and street configurations) as well as any specific site information provided by the development team. For customers, Delve does collect user login and profile information, as well as usage data.

Downloads

Download Delve brand assets here, including Delve Logos and Delve UI Images.

About Sidewalk Labs

Sidewalk Labs is an urban innovation company that tackles cities' greatest challenges. We create products and solutions, invest in new companies, and help developers build more sustainable, innovative, and equitable places around the world. Sidewalk Labs was founded in 2015, and today has a diverse team of more than 130 urbanists and technologists based in New York City.

Learn more at https://www.sidewalklabs.com/