CASE STUDY
Pactriglo: L.A.’s Real Estate Treasure Map

When Land is Abundant but Difficult to Find: L.A.’s Paradoxical Housing Crisis

Los Angeles is the second largest city in the United States and easily one of the most iconic. In 2017, her population surpassed the 4 million mark, as people from all over the world migrate to the sunny metropolis for its cultural and commercial celebrity. Yet her popularity comes at a cost. Los Angeles is home to one of the worst housing shortages and affordability crisis in the United States.

A 2015 report by the Legislative Analyst’s Office shows that growing demand outpaces insufficient supply of housing. Paradoxically, there’s plenty of land to build on. A 2016 McKinsey report revealed that California has enough capacity to build 5 million units in building “hot spots”. The problem is that housing developers cannot quickly find plot of land they might develop, nor can they quickly identify information comparing that property’s zoning with municipal housing law. If a given property required a zoning change, that could mean years of red tape. Developers, builders, and third-party service providers to the construction industry needed a way to explore LA’s real estate data and quickly find land that doesn’t require a zoning change.

Pactriglo was launched in 2017 to solve this data exploration challenge. Benjamin Pezzillo, a former City of Los Angeles labor union executive and Robert Lega, a GIS analyst, sought a way to improve housing production by making geospatial data easier to explore.

Fundamentally, Pactriglo solves a data visibility problem. The land is real, but finding it required time consuming analysis of millions of records from multiple sources.

“We wanted to avoid the suffering that comes with the painfully slow queries of traditional analytics solutions. That’s when I heard about OmniSci.”

— Benjamin Pezzillo, CEO

Highlights:

• Visualize 45 million records from four sources with results in milliseconds
• No need to build SQL queries, resulting in tremendous time savings
• Eliminate the need for pre-aggregation
• Interactive visualization eliminates the need to present with PowerPoint

Pactriglo™
The City of Los Angeles lacked the ability to make that data easily searchable by developers. Existing platforms, such as ZIMAS, NavigateLA, and LADBS, were unable to dive into millions of data points simultaneously, or to interactively explore the data by zone, down to the street level.

Data visualization was central to Pactriglo’s business model, and finding the right technology partner was crucial to executing its mission. “The existing platforms were designed with public sector consumers in mind, not private. They couldn’t scale and they weren’t customer friendly”, said Benjamin. Pactriglo tested multiple commercial solutions as well, but the persistent problem was the volume of its data, over 45 million data points. None of these solutions allowed developers to visually explore housing geospatial data in real-time.

**An OmniSci Solution for Real-Time Geospatial Visualization**

Pactriglo was founded on the premise that maximizing developer utilization of existing zoning could circumvent the lengthy political process and help solve LA’s housing crisis, and its custom application could only meet that objective by harnessing OmniSci’s power to query and visually explore regional housing data much faster than any other analytics platform.

“There’s plenty of available land to build on,” argues Pezzillo. “Developers were focused on zoning changes, which necessitate years of risky bureaucracy. But there’s so much land that doesn’t need to be re-zoned. We can expedite the speed to construction.”

**The Results: 45 Million Los Angeles Records, Expansion into San Francisco and Beyond**

The company’s first task was to identify available zoning by pulling data from four public sources and making those 45 million records searchable by OmniSci Core’s SQL engine.

This massive repository would not be feasible with other analytic platforms. “Without OmniSci, we wouldn’t be able to present the level of insights at the scale that we’re working with. Even on an exceptionally fast CPU machine, you simply can’t crunch a ton of data quickly,” argues Pezzillo.

In addition to its speed, the real value of Pactriglo’s platform is its lightning-fast interactive visualization, powered by OmniSci Immerse. “People have a hard time looking at rows of monotonous data. They’re attracted to ways of making complex topics easy to understand. When people want to analyze real estate, they need to do that on a map,” claims Pezzillo. “With OmniSci, there’s no need to build separate SQL queries. Our customers can use OmniSci Immerse to explore the data, and the system generates the queries automatically. That’s a huge time saver, resulting in a flurry of one-click insights.”

Pactriglo empowers its customers by giving them OmniSci’s visual analytics and SQL engine so they can slice and dice the dataset in its entirety. This eliminates the need for pre-aggregation, and Pactriglo users see results in milliseconds. They can easily cross-filter the data by the features that matter: zoning, sub-zoning, utilization, or construction activity.

“You don’t know what you don’t know until you look at your data in new ways,” adds Pezzillo. “I can confidently walk into any presentation, with nothing more than a web browser, and give a live demo to a client of an entirely new software experience. There’s no need for a slide deck: I present right from the OmniSci Immerse platform.”
About Pactriglo

Pactriglo is a Los Angeles-based real estate intelligence platform that provides competitive insights to developers who build apartments. The platform expedites real estate development and reduces risks of real estate investment.

Learn More

To learn more about Pactriglo, visit pactriglo.com. You can also check out their article in Urbanize.LA.

Watch our video on: Geospatial Visualization for Urban Mapping