

# Hyperscale Site Selection is About Finding Hidden Value and Mitigating Development Risk

There is a lot that has to happen before a data center developer can break ground on a new facility. Securing land use permits. Environmental remediation. Ensuring adequate utility power and water. Interconnecting to utility infrastructure. How long it takes depends on a range of factors including, for example, the municipality's permitting processes and supply chains for utility infrastructure.

Timelines for accomplishing that pre-development work can vary significantly from one site to the next. In an industry in which speed is everything, then, site selection is a critical component of time to market.

## KEY TAKEAWAYS

- Today, hyperscale-friendly properties require significant infrastructure development and risk mitigation work before construction on the actual facility can begin.
- For Stream, location strategy and site development is a competitive advantage as it drives our ability to develop new data center capacity for our customers on time and without any surprises.
- One of our differentiators is our dedicated team, many of whom honed their skills developing sites for the biggest buyers of data center capacity.
- Another differentiator is our proprietary Geographic Information System (GIS) platform to analyze and display pertinent information about potential sites in any given market.
- Stream's systematic and strategic approach mitigates risk and ensures we get the best properties in the market.





## Today's Data Center Used to be a Farm

When scale requirements were under 5 megawatts, the data center site selection process often involved finding and buying sites that were already fully developed, often in existing business parks. These 'off-the-shelf' sites were shovel-ready. They didn't require bringing in high-voltage power lines and building new substations, moving or vacating existing easements or utilities, or mitigating complex environmental risks on greenfield land.

Having been developing data centers since 1999, we remember the days when ideal sites—those where pre-development work could be accomplished efficiently and quickly—were relatively easy to come by. That's no longer the case. In today's environment, where scale requirements are 40+ megawatts, developing sites that meet the massive size and infrastructure capabilities necessary to serve customer needs is a more complex undertaking.

What many data center developers call site selection, we call location strategy and site development, because it involves so much more than selecting a site. For Stream, it is a competitive advantage as it drives our ability to develop new data center capacity for our customers on time and without any surprises. It also de-risks our land banking strategy by ensuring shovel-ready sites. We control a relatively large number of properties across North America—allowing us to meet the disparate needs of sophisticated customers—all of which have been thoroughly vetted to ensure fast development.

## How Stream Finds Hidden Value and Mitigates Development Risk

Location strategy and site development is a critical component of Stream's competitive advantage. It's driven by our team of deeply experienced experts, armed with proprietary technology and a systematic and strategic approach inspired by hyperscalers' own processes.

### An In-house Team of Experienced Experts

Stream has a dedicated team of experts with experience identifying opportunities that suit hyperscale needs and can be developed relatively quickly. The team follows a rigorous process and has developed metrics to drive decisions based on data. When analyzing a market, we rely on brokers and other stakeholders to share local insights on table stakes factors (e.g., low disaster risk) that complement our data and understanding of the nuanced factors that have to come together to make a site viable.

Many members of our team honed their skills developing sites for the biggest buyers of data center capacity. For example, Senior Vice President of Location Strategy and Development, Mike Lebow, spent eight years on the Energy and Location Strategy team at Google. He helped the hyperscaler acquire 13 data center campuses across North and South America, totaling thousands of acres and enabling multiple gigawatts of data center capacity.

### Proprietary Technology

Stream has built a proprietary Geographic Information System (GIS) platform to analyze and display pertinent information about potential sites in any given market. It is a highly scalable tool that allows us to analyze all potential properties in a market, better arming our team of experts to make data-driven decisions and enabling them to focus on final stage due diligence and working directly with stakeholders to develop sites.

The GIS platform is a quick way to reject sites where development would be too expensive, time-consuming, or otherwise risky. It enables us to uncover risks well before they become costly project delays. (For example, revealing soil conditions that would have added \$15-20 million to the development cost.) With the GIS platform, Stream has built a Development Cost Index that ranks properties according to the potential for success. The highest-ranked ones are the potential sites for which our team conducts on-the-ground due diligence.

Stream's proprietary platform also enables us to identify and capture the best opportunities and shorten the longest parts of the development process. For example, where the typical developer might go into a meeting with the power utility and ask where the utility has capacity (a question for which it is almost impossible to get a straight answer) we were able to discern based on our maps of the power grid which sites were most likely to have power capacity. We went into our meeting with the power utility and told them where we believed they had capacity, and they were able to confirm our assumptions.



## Systematic and Strategic Approach Inspired by Hyperscalers' Own Processes

Augmenting local stakeholders' insights about table stakes factors with our team's expert insights on the more complex nuanced factors, leveraging GIS data, and being systematic and strategic enables Stream to ensure that we have a full picture of the value opportunities and risks in a given market—so that we can identify the properties that are lowest risk, cost-optimized, and fastest to develop.

### 1. Look broadly at a range of potential sites

In any given market, we consider a wide range of sites, because it is not always the on-market site the broker is recommending, or the one the economic development agency or utility is marketing, that is best suited for data center development. It could be an off-market farm. Stream's proprietary GIS platform enables us to analyze all the potential sites in a given market and uncover hidden opportunities.

### 2. Assess location feasibility

Stream's location feasibility assessment considers over 180 factors. Top criteria include proximity to power sources, availability of water, climate conditions, telecommunications infrastructure, labor force availability, and tax incentives. The other 172+ factors ensure the assessment is broad enough to capture all the factors that could add cost or timeline to the development project. Once we've run the assessment, we assign risk classifications to each property.

### 3. Identify risks

Once we identify sites with the strongest fundamentals, we conduct a rigorous, multi-phase due diligence process to identify and characterize site risks. We work with utility providers to determine what upgrades or interconnection projects are required.

We work with local authorities to understand if rezonings or special use permits will be required, striving to make the allowable uses as flexible as possible. We work with government agencies to outline development and investment parameters and negotiate responsible and mutually beneficial economic development incentives.

### 4. Leverage the data proactively to mitigate risk

Armed with the data and due diligence, Stream is able to proactively address risks before they turn into cost overruns or schedule delays. For example, with sites that will become data centers in three years, we're already working to mitigate the kinds of risks that could add 6-8 months to the development timeline two years from now. Where risk mitigation isn't possible, we walk away from sites early in the process if a risk will be too costly or time-consuming to overcome.

### 5. Maintain a creative development mindset

In today's environment, there is no such thing as a perfect site. Every site will require risk mitigation; the key is to identify each project's unique challenges and to be creative in assessing how risks can be most quickly and easily mitigated. Mitigation of any given risk has multiple potential paths, and oftentimes the various project attributes are interrelated. All factors must be managed when optimizing a site.



## Winning on Site Selection

Complexity is a defining characteristic of location strategy and site development in today's environment. Even the most sophisticated developers have to engage a variety of stakeholders and work hard to mitigate risks associated with any site. With an in-house team of deeply experienced experts, proprietary GIS technology, and a systematic and strategic approach, Stream is able to navigate the complexity and bring new cost-optimized capacity to market, quickly.



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