'Where The Power Is': Data Center Developers Charge Toward Brownfields

August 9, 2021 | Dan Rabb, Bisnow Data Centers Reporter (https://www.bisnow.com/author/dan-rabb-496530) (mailto:dan.rabb@bisnow.com)

From an abandoned smelting plant in Maryland (https://www.bisnow.com/tags/maryland) to a decommissioned factory in northern Maine (https://www.bisnow.com/tags/maine), data center (https://www.bisnow.com/tags/data-center) builders are increasingly looking at former industrial properties (https://www.bisnow.com/tags/industrial-properties).
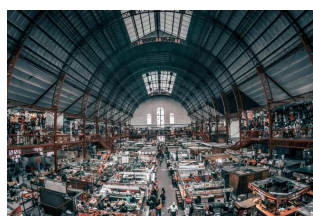
While most data centers (https://www.bisnow.com/tags/data-centers) are built on undeveloped land, industry insiders tell *Bisnow (https://www.bisnow.com/tags/bisnow)* that so-called brownfield developments on former industrial sites will continue to pick up in the years ahead.

Land scarcity in major data center hubs is already driving brownfield development despite its higher construction costs (https://www.bisnow.com/tags/construction-costs). Even outside these areas, the opportunity for data center operators to take advantage of pre-existing infrastructure and government incentives is pushing down costs and making the redevelopment of these sites a smart choice.

"The growth is ahead of us," said James Connaughton, CEO of Nautilus Data Technologies (https://www.bisnow.com/tags/nautilus-data-technologies), which is in the early stages of building a 50-megawatt facility on the site of a former paper mill in Millinocket, Maine.

"This isn't something that's slowly going to occur over 20 years — it's going to rapidly occur over the next 10 years."

In many ways, former industrial properties may seem like an intuitive choice for data center development. A site that once held a factory or power plant (https://www.bisnow.com/tags/power-plant) usually checks many of the

boxes required to build a data center: multiple connections to power, access to water, location resiliency and appropriate zoning, among others.

Beginning around 2010, a brief trend of conversions saw underutilized buildings repurposed into data centers — from the Prince spaghetti factory near Boston (https://www.bisnow.com/tags/boston) to suburban shopping malls. But modularization of data center construction (https://www.bisnow.com/tags/data-center-construction) and the growing need for scale have made building from the ground up significantly less expensive than retrofitting an existing building.

Yet data center operators are increasingly looking to build these new facilities on brownfield sites, particularly industrial plots.

For most of the brownfield data center projects currently underway, the siting decision was driven by the high cost of land and lack of suitable sites near data center boomtowns in Northern Virginia (https://www.bisnow.com/tags/northern-virginia) and Silicon Valley (https://www.bisnow.com/tags/silicon-valley), according to Kelly Morgan (https://www.bisnow.com/tags/kelly-morgan), data center research director at 451 Research (https://www.bisnow.com/tags/451-research).

In the past two weeks alone, both Cyrus One (https://www.bisnow.com/tags/cyrus-one) and CoreSite (https://www.bisnow.com/tags/coresite) received approvals (https://www.datacenterdynamics.com/en/news/cyrusone-and-coresite-both-gain-design-approval-for-data-centers-in-santa-clara/)to redevelop two brownfield sites in Santa Clara (https://www.bisnow.com/tags/santa-clara) – replacing a paperboard mill and a research facility, respectively. In Northern Virginia, Amazon (https://www.bisnow.com/tags/amazon) announced plans (https://www.bizjournals.com/washington/news/2021/07/23/aws-plans-to-build-data-center-in-springfield.html) to raze a recently purchased office building and replace it with a data center.

"In places like Northern Virginia where the land cost is high, it makes it worth it to just buy something and knock it down," Morgan (https://www.bisnow.com/tags/kelly-morgan) said. "Land is going there for $2K an acre, and for data centers that's a lot of money, so in that area, if you have some special reason why any piece of land that can be repurposed, they're going to tear it down for data centers."

Yet it's not just in these hot spots where data center developers are giving brownfield a closer look. In dense urban corridors far from data center hubs — like New York (https://www.bisnow.com/tags/new-york) and Boston — many experts foresee a growing need for digital infrastructure offering low latency computing near these major economic centers.

According to Lisa M. Zana, a partner at Shipman & Goodwin who heads the firm's data center team, in areas like New York with little greenfield space available, these data centers are likely to replace the industrial infrastructure surrounding the city.

"We haven't seen that much interest in the Northeast to this point because of the high power costs, but there's definitely a population here that needs to be served," Zana said. "There's a lot of space in and around these major downtowns — think about parts of Queens or over the bridge in New Jersey — where there was [an] industry that has gone elsewhere, so you have these properties right next to Manhattan that makes sense."

Yet even in rural areas with cheap land and no shortage of open space, a growing number of data center developers are determining that redevelopment of industrial sites makes sense. Nautilus Data Technologies received approval for their data center in Millinocket in June. Built on the site of a paper mill that was decommissioned in 2008, the data center will be powered by an existing hydroelectric power plant on-site and cooled with the same water that spins the turbines.

With no shortage of inexpensive land surrounding Millinocket, why choose the added expense of redeveloping an industrial property?

"The brownfields (https://www.bisnow.com/tags/brownfields), it turns out, that's where the power is, and that's where the last mile of fiber is before it hits a city," said CEO James Connaughton, who points to the fiber optic cable network installed by the state of Maine. "It runs through the industrial corridors because that's the cheapest and easiest places to underground the lines."

The Millinocket mill also exemplifies another force boosting brownfields: government programs and incentives to encourage redevelopment of certain distressed sites. While Connaughton is quick to insist that the Millinocket project does not need government incentives, the project is taking advantage of more than one.

The project is located in a Qualified Economic Opportunity Zone, meaning investors in the project can avoid capital gains taxes. Preparation of the site and feasibility determinations were aided by a grant of more than $5M from the Federal Economic Development Agency.

According to Shipman & Goodwin's Zana, these incentive programs are common at the state and municipal levels as well. Beyond tax breaks and subsidies, she says some of the most important programs are those meant to limit environmental cleanup costs that could be incurred from old industrial facilities and mitigate environmental liability concerns that scare away new owners and investors.

"If the state and the counties and the cities want these things to happen, there's a lot of money ready to be taken — it's just a matter of connecting the dots," Zana said. "There's also insurance that can backstop some of that so your obligations are known and not infinite or uncapped. People know exactly what they're getting, and the banks and investors don't get scared."

While data centers provide too few jobs to offset a factory closure, Zana and other experts say municipalities are beginning to view data centers as a solid redevelopment option for certain properties, providing high-paying jobs, replacing decaying buildings and emitting fewer direct emissions than many other industrial uses.

And with water consumption and energy use at greenfield data center developments creating controversy from Mesa, Arizona (https://www.bisnow.com/tags/mesa,-arizona), to Limerick, Ireland (https://www.bisnow.com/tags/ireland), Nautilus' Connaughton says he expects both operators and local governments to begin turning their gaze toward the shuttered industry.

"The industry has built itself into a corner when the industrial side of town is there to be redeveloped," Connaughton said.

Contact Dan Rabb at dan.rabb@bisnow.com (mailto:dan.rabb@bisnow.com)

See Also: Loudoun County's Data Center Tax Revenue $60M Short Of Projections (/national/news/data-center/loudoun-countys-tax-revenue-from-data-centers-60m-short-of-expectations-109824)

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