Crain’s New York Business

The building that juices genomes

The New York Genome Center's plans to build a $47 million, seven-story headquarters at 101 Sixth Ave., formally announced this week by Mayor Michael Bloomberg (who contributed $2.5 million), would have been impossible were it not for another building, 375 Pearl St.

Most New Yorkers know the 32-story structure at the foot of the Brooklyn Bridge by the Verizon sign that adorns it. Last year, the Sabey Corp. bought the building for $120 million. Sabey was drawn by a rare feature that owes its existence to the building's origin as a switching center for the New York Telephone Co.: access to a huge amount of electricity.

"Access to that power is in our view probably worth more than the building because you just can't replicate that infrastructure," said Dave Sabey, CEO of the Seattle-based company.

Much has been said about the city's emergence as a tech hub. Far less attention has been paid to the electricity needed for the ever-growing data demands of business. Few buildings have 375 Pearl's electricity access. One exception is Google's Ninth Avenue building, a former Port Authority headquarters and freight station.

The Pearl Street data center, dubbed Intergate.Manhattan, will ultimately be able to draw as much as 40 megawatts of electricity. The juice will help power the genome center's immense data volume. Each sequenced genome will generate 130 gigabytes. After two years, the center expects to have 5 petabytes (5 million gigabytes) of info. Most will be stored at Sabey's data warehouses in Washington state (where electricity and space are cheaper) and connected via a secure network to 375 Pearl, which will act as a hub for scientists at the center's Sixth Avenue centerpiece.

The center is a collaborative effort of 11 health care research institutions. "Not one of these research institutions has the money to buy the computing infrastructure necessary to really be able to model these massively complex interactions between genetic communities," Sabey said.

He said other industries, especially finance, are likely to follow suit as these industries becomes ever more data-heavy and speed-dependent.