CREnetics
Fundamental Data Tangibilized

Redefining Real Estate Value
An AI-Driven Approach to Predictive Market Insights

Presented by CREnetics

At CREnetics, our team intimately understands the challenges that the commercial real estate industry faces due to inconsistent and low-frequency data, which hinder advanced analytics and meaningful insights. The inherent complexity of real estate – spanning across diverse cities and property types – complicates the development of standardized and flexible technology solutions. Many current offerings provide only superficial advancements, lacking the foundational change required to truly transform the industry. We believe that real transformation starts with a new perspective on data. CREnetics leverages advanced configuration and preprocessing techniques to establish a robust foundation that enables modern AI systems to interpret data more effectively. Our platform's models autonomously learn complex, non-linear relationships within the data without pre-set assumptions, allowing them to analyze all available information and uncover intricate patterns that traditional models overlook.

For example, during Hurricane Sandy and its aftermath, CREnetics' AI platform demonstrated the power of predictive analytics by accurately forecasting rent fluctuations in South Brooklyn, delivering critical insights into how extreme weather events impact local real estate markets. Our baseline model – incorporating traditional metrics like residual demand, vacancy rates, rent growth, and proprietary supply/demand growth features – proved effective in predicting real-time rental trends during and after the storm ("Traditional Baseline Model" provided in Exhibit 1). Layering in non-traditional indicators such as Discrete Capital Investments and FEMA Disaster Declarations into our bespoke neural network increased the predictability by 30% and decreased errors by approximately 50%. Layering in another non-traditional indicator of Crime, along with a more robust model architecture – **enhanced the predictability even further by 20% and decreased error terms by another 50%** ("Non-Traditional Model – Climate, Capital Projects, Crime" provided in Exhibit 2)[1].

By integrating these non-traditional indicators, our AI model not only captured immediate rental fluctuations but also anticipated the longer-term economic impacts that disasters impose on real estate markets. Following Hurricane Sandy, the disruptions led to an immediate dip in rental demand due to property damage and displacement. Yet, as the Federal Reserve Bank of San Francisco's research indicates, disasters often drive complex economic effects. Over time, Insurance Payouts, Federal Aid, and Reconstruction Efforts tend to boost local incomes, catalyzing a recovery that CREnetics accurately forecasted using Department of City Planning Data, FEMA Records, and Local Transportation Trends. This pattern is especially prominent in wealthier areas that can attract long-term investment after the initial damage has been evaluated and addressed.

Building on these insights, CREnetics' AI capabilities have significant potential for forecasting how extreme weather events and evolving market conditions will impact commercial real estate values. By incorporating data on Climate Risk, Economic Recovery Patterns, and Demographic Shifts, our platform empowers

[1] Statistical outputs for the Traditional Baseline Model and Non-Traditional Model – Climate, Capital Projects, Crime are provided in Exhibit 3.

stakeholders to anticipate disruptions, price adjustments, and long-term impacts on property values. This foresight is crucial as climate change intensifies weather patterns, placing more commercial real estate assets at risk. CREnetics equips investors to withstand these challenges and seize new opportunities in their wake, while also enabling public entities, such as FEMA, to better budget for extreme weather events going forward – ensuring adaptive, profitable investments and more resilient community planning amid an uncertain future.

Extreme weather's impact on commercial real estate is highly apropos in today's market, but it's just one of countless, bespoke insights our platform can deliver. Navigating this rapidly evolving landscape demands more than traditional metrics; it requires a holistic understanding of real-world dynamics that affect transactions and influence the ways properties – and entire real estate ecosystems – function. Exhibits 4, 5, and 6 provide an additional glimpse into the **thousands of unique non-traditional indicators our technology leverages to generate these vital insights**. Historically, investment professionals approached space usage trends in isolation, yielding only anecdotal insights. As we continue to uncover unconventional indicators our platform is built to incorporate these variables seamlessly, transforming complex market signals into precise, actionable intelligence.

As referenced in our initial outreach to your CEO, we've built a powerful business model around this transformative methodology – **one that stands to deliver significant value to your entire customer base on a national scale**. We would be thrilled to present our findings at a November meeting, where we could dive into how CREnetics seamlessly complements and enhances your current offerings. Leveraging our proprietary models and integration system alongside your extensive property-level data, we can unlock synergies that provide unprecedented, granular insights – extending this level of precision across markets nationwide and setting a new standard in real estate intelligence.

We look forward to the possibility of working together to bring this transformative product to the commercial real estate industry.

Exhibit 1 - Traditional Baseline Model

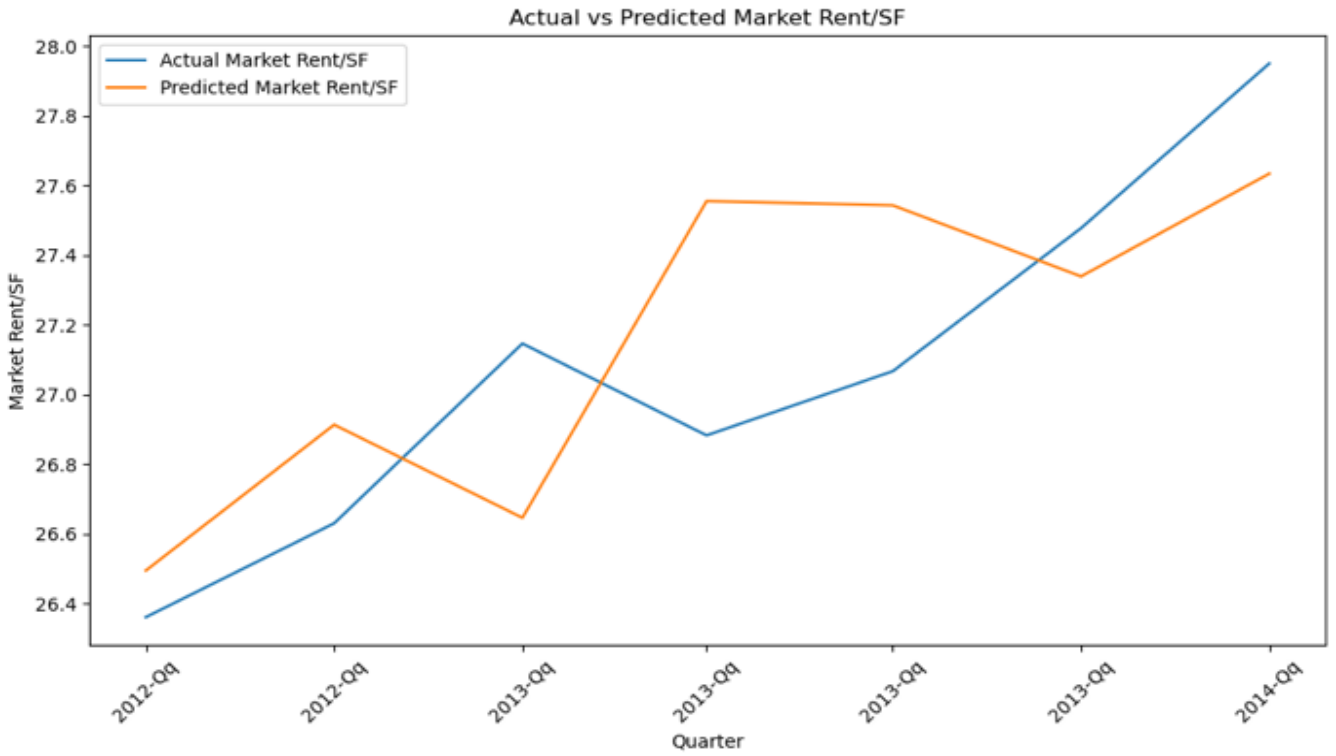

Exhibit #2 - Non-Traditional Model – Climate, Capital Projects, Crime

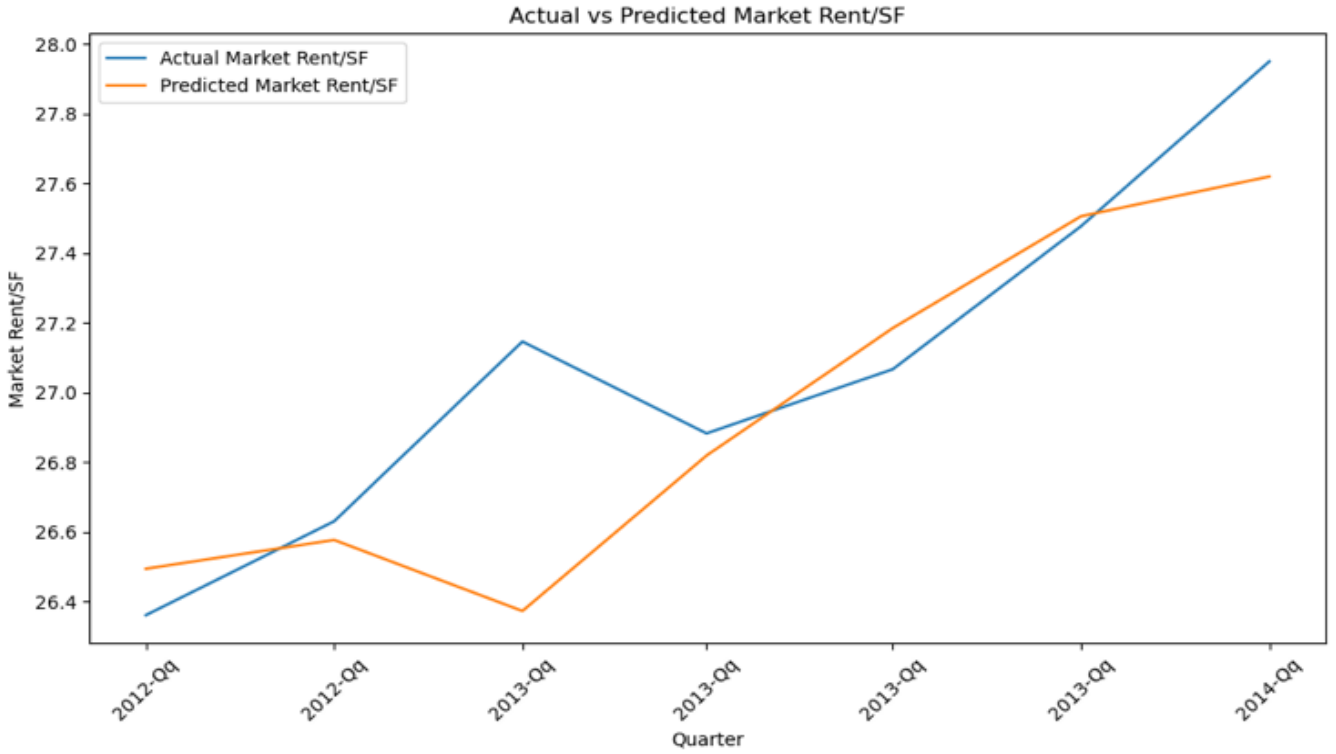

Exhibit #3 – Statistical Outputs for Traditional Baseline Model and Non-Traditional Model – Climate, Capital Projects, Crime

Model	**Training MAE**	**Training RMSE**	**Test MAE**	**Test RMSE**	**MAPE**	**Validation R^2**
Statistical w/ Traditional	N/A	N/A	$1.16	$1.32	3%	N/A
Statistical w/ Non-Traditional	N/A	N/A	$0.55	$0.77	2%	N/A
Simple Feed Forward Neural Network w/ Non-Traditional	$0.42	$0.47	$0.21	$0.33	.79%	.778
Hybrid Statistical- Deep Learning Framework	*Inquire*	*Inquire*	*Inquire*	*Inquire*	*Inquire*	*Inquire*

Exhibit #4 – Transit/Commuter Data

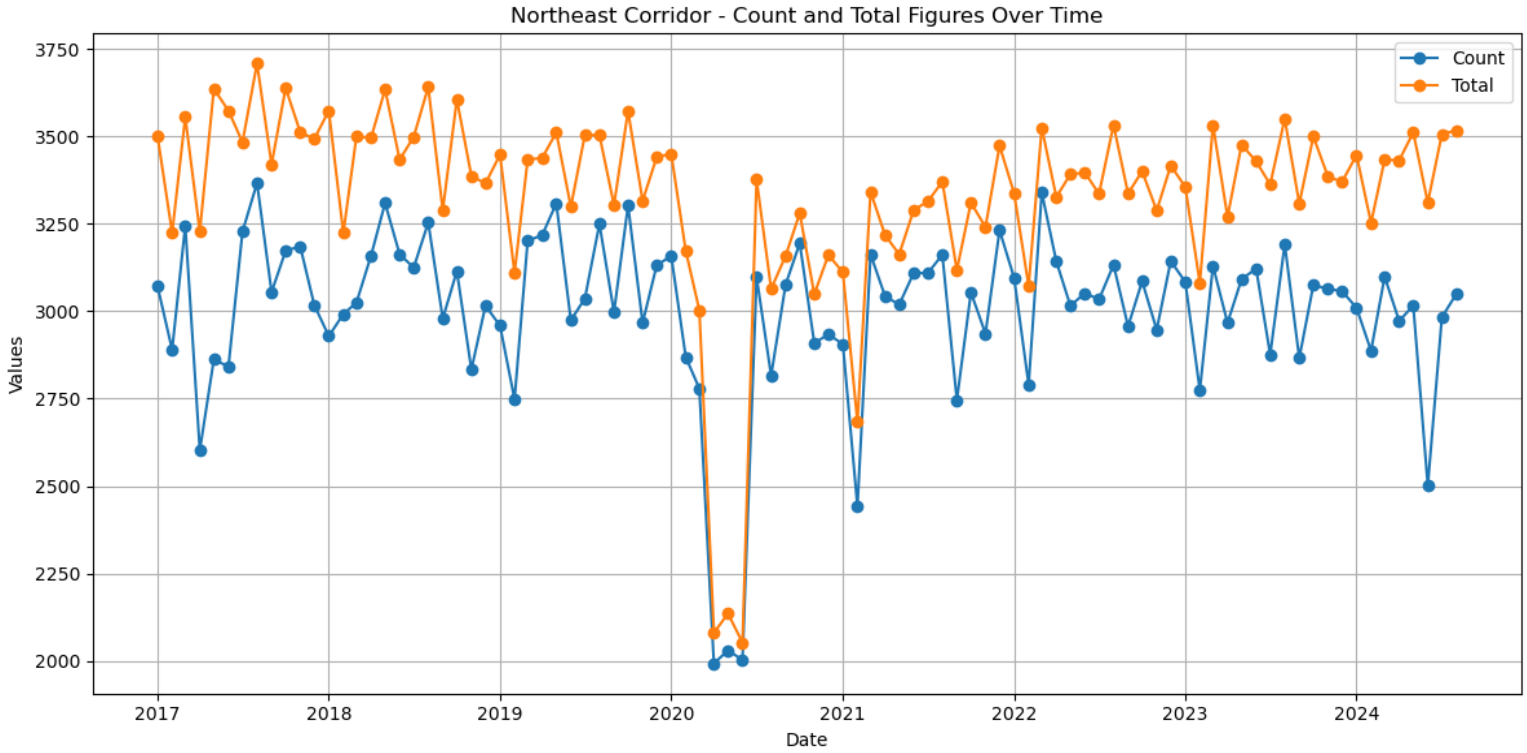

Exhibit #5 – Violent Crime Rates

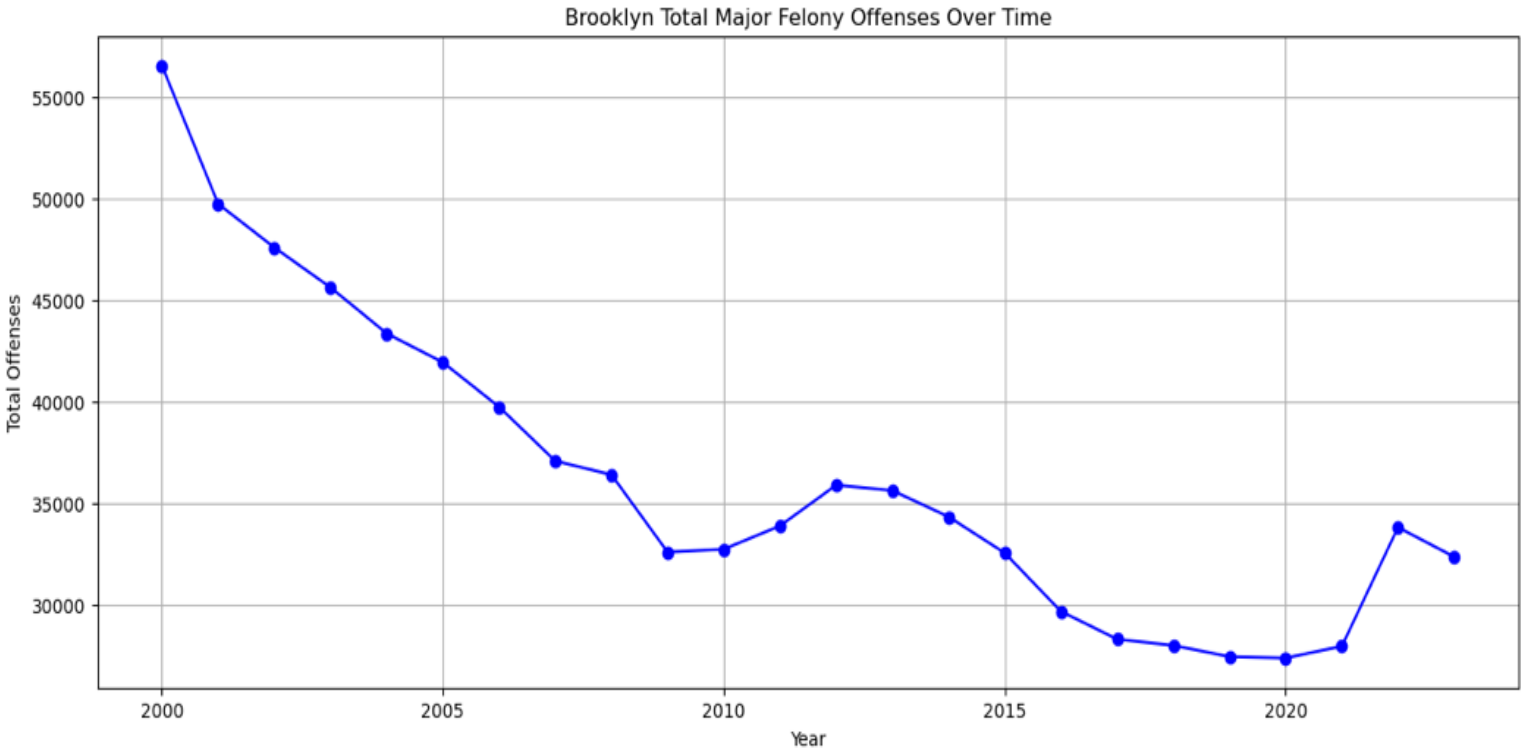

Exhibit #6 – Elevator Job Filings