



AI in Real Estate: *Reshaping how we develop,
operate, and invest*

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Recap

- 1956 Dartmouth College
- Earlier AI **analyzes** – algorithms, machine learning, NLP, computer vision
- Generative AI **generates** new material – text, images. music/sound
- Power of Generative AI comes from ability to ingest immense quantities of data, identify patterns, iterate, summarize, and repackage it

What “just” happened?

- Significant increasing in computing power: NVIDIA Pascal chip 2016
- Release of advanced LLM tools: ChatGPT-1 in 2018
- Cleaner data refining methods
- LLMs analyze complex datasets, discern subtle patterns, and generate accurate predictions

What it means

- Scarce expertise more abundant – David Autor, MIT
- GenAI lifts performance of lower-skilled employees; “skill leveler” – MIT
- GenAI shifts work from point-and-click to describe-and-done – Dror Proleg
- Complexity moves behind the scenes and simplicity comes to the forefront
- “Vibe coding/“vibe analytics”
- Those who best articulate their desired outcome will get the best results

Example

FREEHOLD FOR SALE RESIDENTIAL DEVELOPMENT OPPORTUNITY

LAND AT BROOK STREET

Halstead, Colchester



Site boundary for real estate purposes only

Key Highlights

- Hybrid greenfield/brownfield site on the outskirts of Halstead.
- Resolution to grant consent for up to 70 units, subject to conclusion of s106.
- Total site area of approximately 5.3 acres (2.14 Ha).
- Site comprises two individual parcels separated by a central brook.

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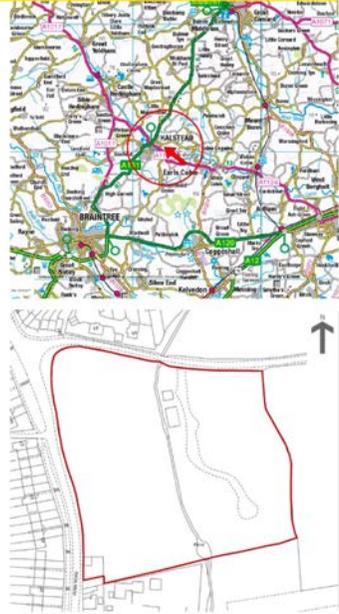


Approximate distances from Halstead

| LOCATIONS | MILES | KM |
|------------------------|-------|------|
| Brantree | 7.1 | 11.4 |
| Brantree Train Station | 6.8 | 10.9 |
| Colchester | 13.4 | 21.4 |
| Sudbury | 8.1 | 13.0 |
| Stansted Airport | 23.7 | 38.0 |
| Chelmsford | 20.7 | 33.1 |
| Ipswich | 28.8 | 46.0 |
| Central London | 55.3 | 88.5 |

Location
The site is located on the eastern periphery of Halstead, a town of approximately 12,000 residents in the Braintree district of Essex. Halstead has all the local services expected in a regional town such as supermarkets, food and drink establishments, local businesses and schools. The largest major town is Colchester, 13.4 miles to the south-east. Other nearby towns include Brantree, 7.1 miles to the south-west, and Sudbury, 8.1 miles to the north-east.

Site Description
The site comprises a hybrid greenfield and brownfield opportunity extending to approximately 2.14 Ha (5.3 acres), located at the corner of Fenn Road and Brook Street on the north eastern edge of the town of Halstead in Braintree District, Essex. Part of the site has operated as a small scale woodland for over 50 years. The plot comprises two developable areas each side of the central brook - the western parcel will be accessed from a new point on Fenn Road and the eastern parcel from the existing wood yard access on Brook Street.



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Viewing
Viewing should be arranged by prior appointment with Savills. Unaccompanied viewings can be undertaken with details in hand during day light hours only.
Prospective purchasers should note that Savills take no responsibility for any injury or accident at the site. Viewers visit the site at their own risk.

Planning
The site is the subject of an outline planning application (Braintree District Council REF: 18/01803/OUT for up to 70 dwellings, landscaping, public open space and a sustainable drainage system (SuDS)), with all matters reserved apart from access.
We are advised that the final consultation response is from EC Highways which is due and would allow the application to move forward.
Delivery of the scheme may require some widening of the highway at Fenn Road along its length with the site boundary between the new access to the development and the junction with Brook Street to assist in alleviating local road congestion and to improve on street parking.

Existing Wayleaves, Easements and Rights of Way
The site will be sold subject to and with the benefit of all wayleaves, easements and rights of way, whether or not mentioned in these particulars.

Tenure and Possession
The site is available for sale on a freehold basis.

Access
Vehicular access to the site will be from Fenn Road on the western boundary and Brooke Street to the northern boundary.

VAT
The site is currently exempt from VAT.

Method of Sale
The site is being marketed by private treaty process, with expressions of interest invited.
In submitting offers, parties should provide sufficient information to allow the vendor to assess the nature of the proposal and the level of due diligence undertaken.
We will also be grateful to receive details of any proposed Overage provisions that are offered to enable the vendor to take a share in any revised and improved density pursuant to a subsequent planning consent.
Expressions of interest should be sent to the agents, for the attention of Tony Lockwood, Savills, Parkview House, Victoria Road South, Chelmsford Essex CM1 1NG or by email to tlockwood@savills.com.
The vendors are not bound to accept the highest or indeed any offer and may withdraw the property from the market at any time.

Data Room
<https://sites.savills.com/brookstreethalstead>

Contact
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tlockwood@savills.com
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neilsnyman@savills.com

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Example

- Please underwrite this property. Be detailed and make sure you give me the purchase price at an appropriate IRR for risk.
- Risk free interest rate is 4.5%. We can borrow at a fixed rate of 5.25% with a 60% LTV.
- Exit after 10 years.
- Please tell me what the cap rate should be.
- Make your own market assumptions where needed but state them clearly.



Free plan · [Upgrade](#)

Hey there, Steve

How can I help you today?

Claude Sonnet 4  

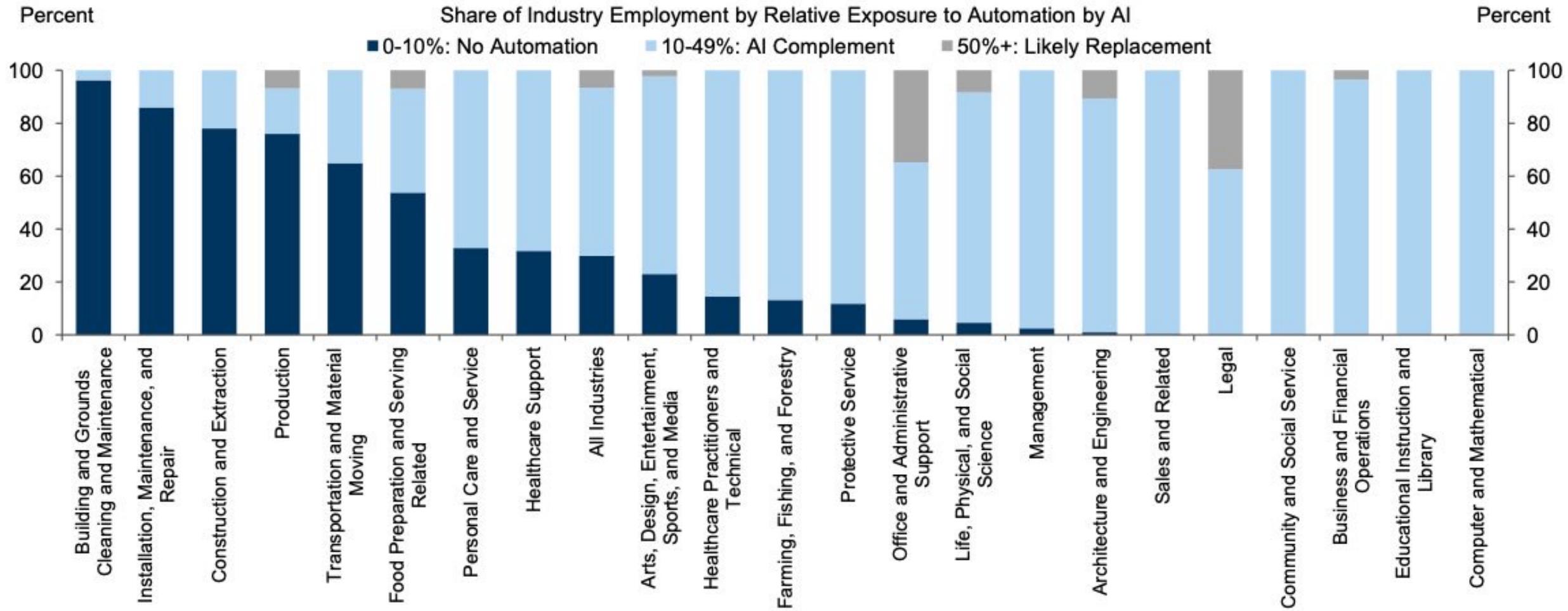
-  Learn
-  Strategize
-  Write
-  Code
-  Life stuff



@Macro

- 18% of global workforce could be automated; transition 300 million jobs – GS
- GenAI may cause loss of 83M jobs but gain of 69M by 2027 – WEF
- Only 5% of jobs will be replaced or heavily assisted by AI – MIT
- AI could eventually increase annual global GDP by 7% – GS
- Remember, AI doesn't see anything outside the data; humans are still critical
- Fletcher's 4 primal human powers: *Intuition, Imagination, Emotion, Common sense*

Exhibit 8: Replacement in Legal and Administrative Fields, Little Effect in Manual and Outdoor Jobs, and Productivity-Enhancement Everywhere Else



Source: Goldman Sachs Global Investment Research

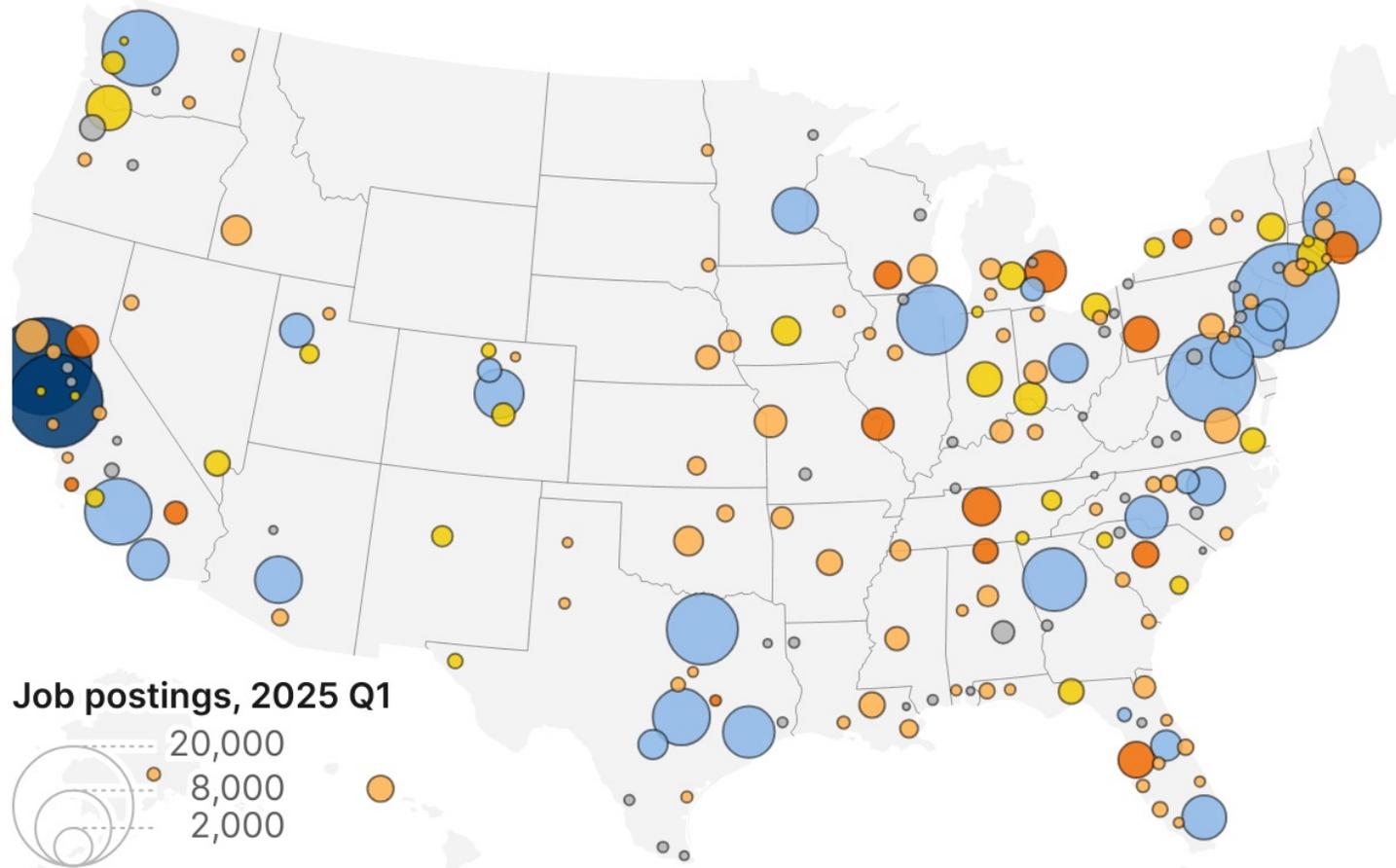
@Macro

- Agglomeration under pressure? Non-linear Cities – Dror Proleg
- Abundant AI knowledge yields knowledge-nodes connected by networks
- As the AI workforce grows, combined with remote work, placemaking becomes more important – Dominic Endicott, *Knowledge Towns*

Six different types of AI metro areas

AI cluster type

■ Superstars ■ Star Hubs ■ Emerging Centers ■ Focused Movers ■ Nascent Adopters ■ Others



Job postings, 2025 Q1



Source: Brookings' analysis of job posting data from Lightcast.

Why is AI ideally suited for real estate?

- Fundamentally data driven
- Staggering amount of fragmented, proprietary, third-party data
- Many repetitive processes – contract generation, tour scheduling, maintenance request management, etc. often follow predictable patterns
- AI's ability to rapidly process + interpret voluminous, unstructured information
- AI will continue to impact ALL areas of real estate



Assets





The Guardian logo, featuring the words 'The Guardian' in a white, serif font on a dark blue rectangular background.

Tyler Perry halts \$800m studio expansion after being shocked by AI

US film and TV mogul says he has paused his plans, having seen demonstrations of OpenAI video generator

Data centers

- Computing demand increasing faster than computing power of chips (Moore's law is stalled)
- Global demand data center capacity could 3X by 2030 (~200 GW) – McKinsey
- Requires >2X capacity built since 2020 in a quarter of the time

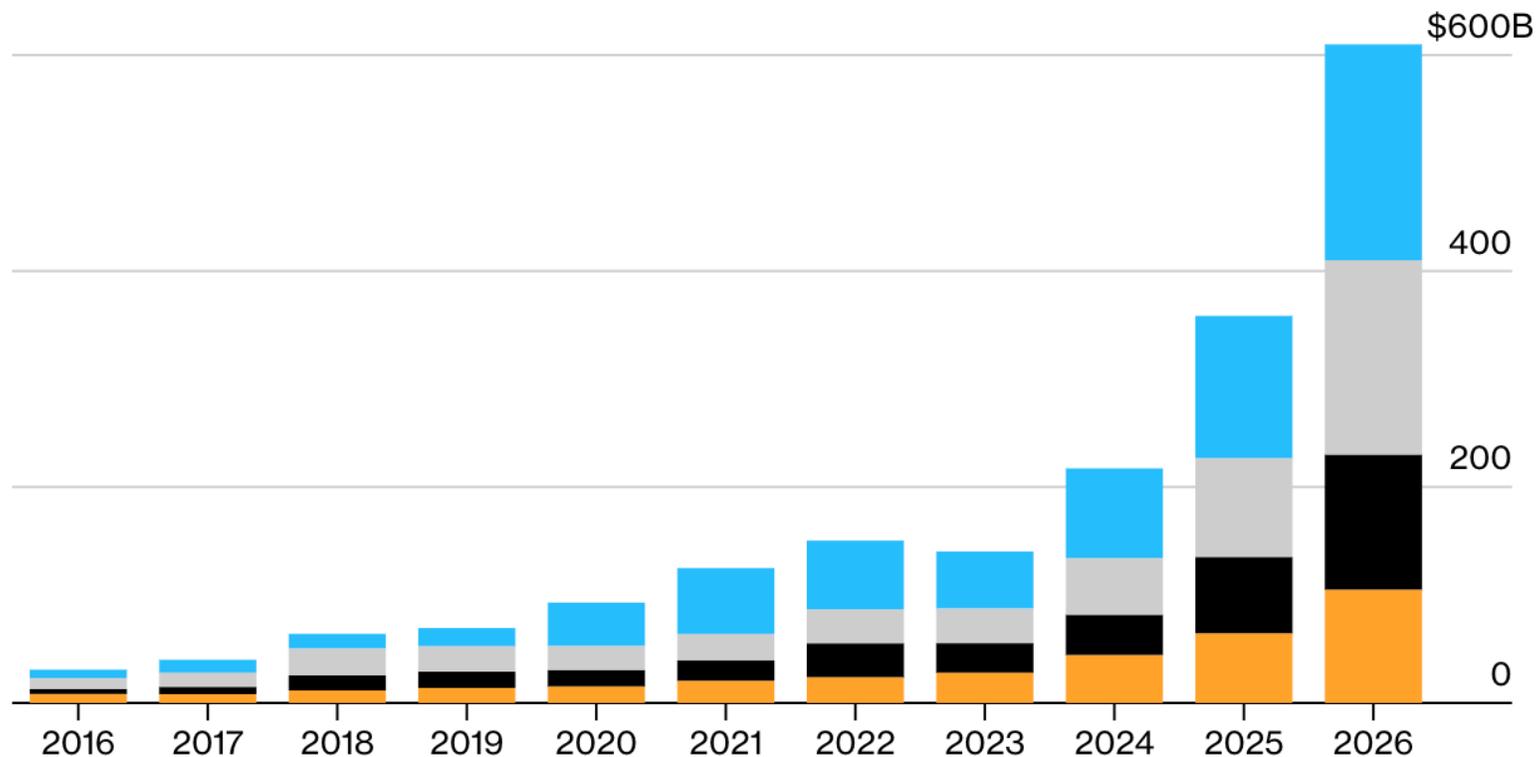
Data centers

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- Requires >2X capacity built since 2020 in a quarter of the time
- Global CapEx on data centers ~ \$1.7T by 2030 – McKinsey
- Code to concrete: Meta last year spent more on capital projects than on R&D

Hyperscaler Capex Explodes Higher

2026 estimates based on mid-point of guidance (META, GOOGL, AMZN), Bloomberg consensus (MSFT)

■ Microsoft
 ■ Meta
 ■ Alphabet
 ■ Amazon



Source: Bloomberg

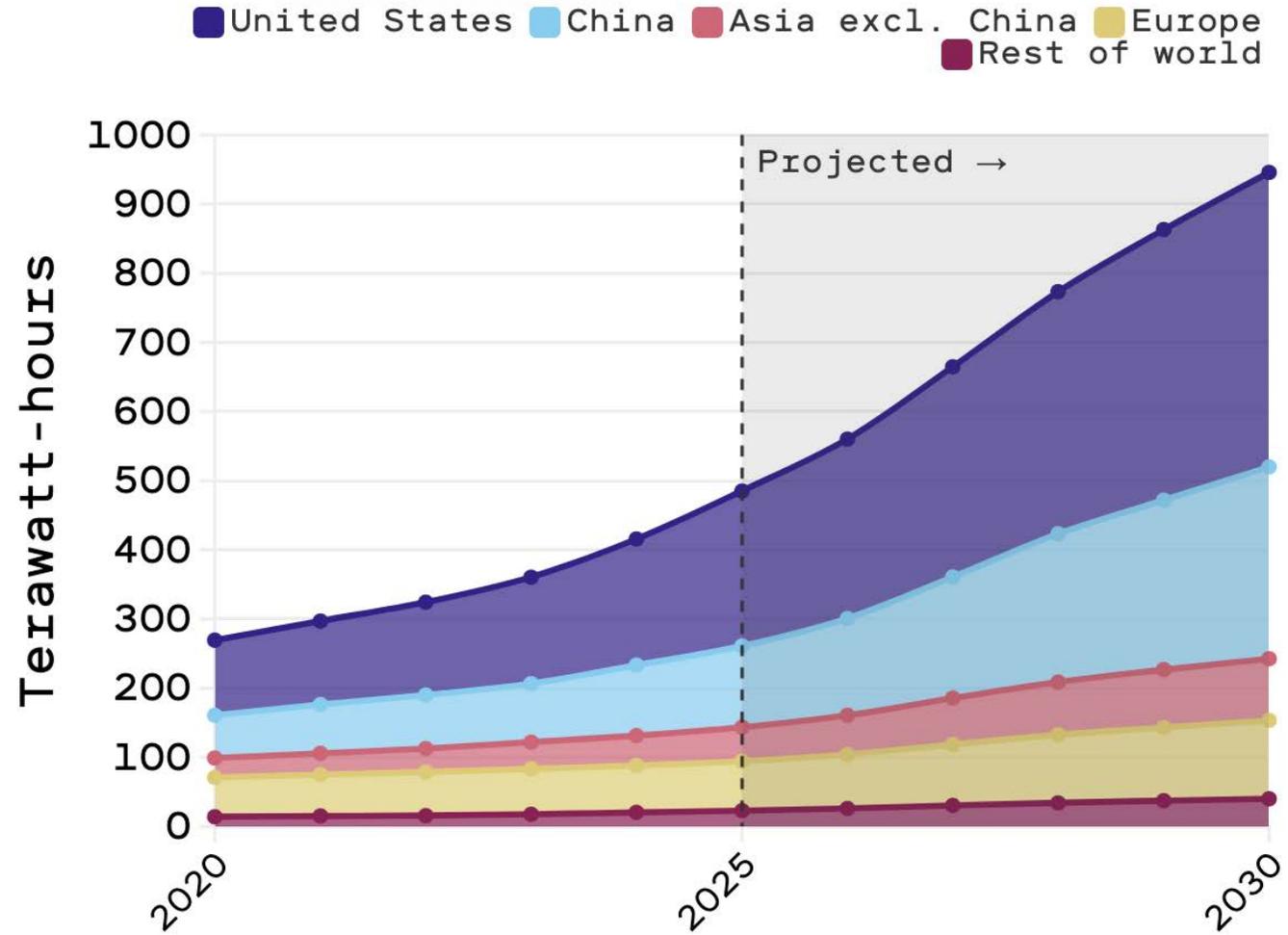
Note: Capex based on fiscal year-ends, Dec. (AMZN, GOOGL, META), June (MSFT)



Data centers

- Global AI data center power demand will increase significantly

Data Center Energy Consumption



Source: [International Energy Agency](#)
 Chart by Casey Crownhart, MIT Technology Review

Data centers

- Global AI data center power demand will increase significantly
- *Microsoft Knows Future of Data Center Power Will Be 'Everything Everywhere All at Once'* – Data Center Frontier
- Encourages innovation in generation, grid hardware/design, storage

Innovation



IKEA Milan

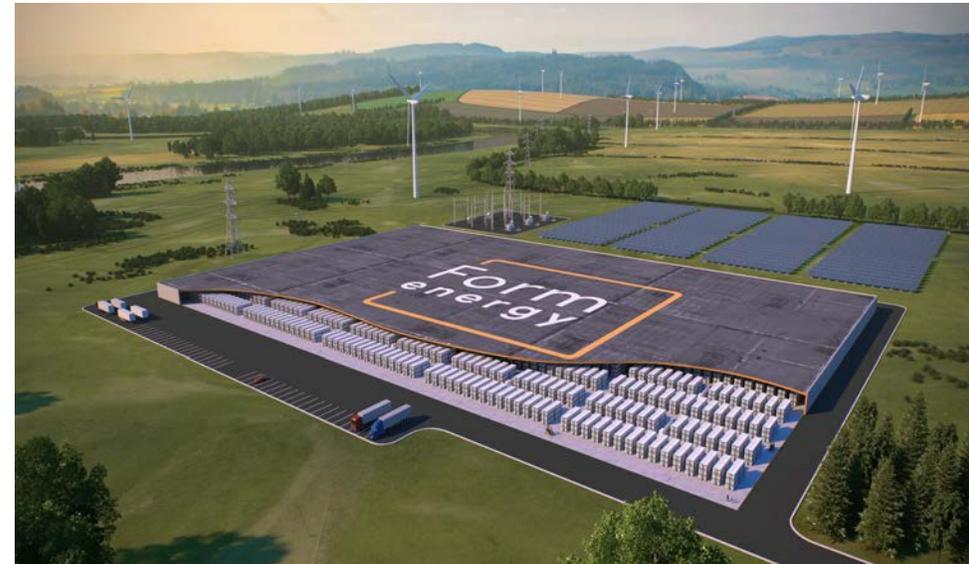
Bedrock
Energy



Innovation



Lakeside Energy Park
North Yorkshire, UK



Form Energy Battery Warehouses
MN + WV

Innovation



Jännersdorf “brightfield” solar park
Prignitz, Germany

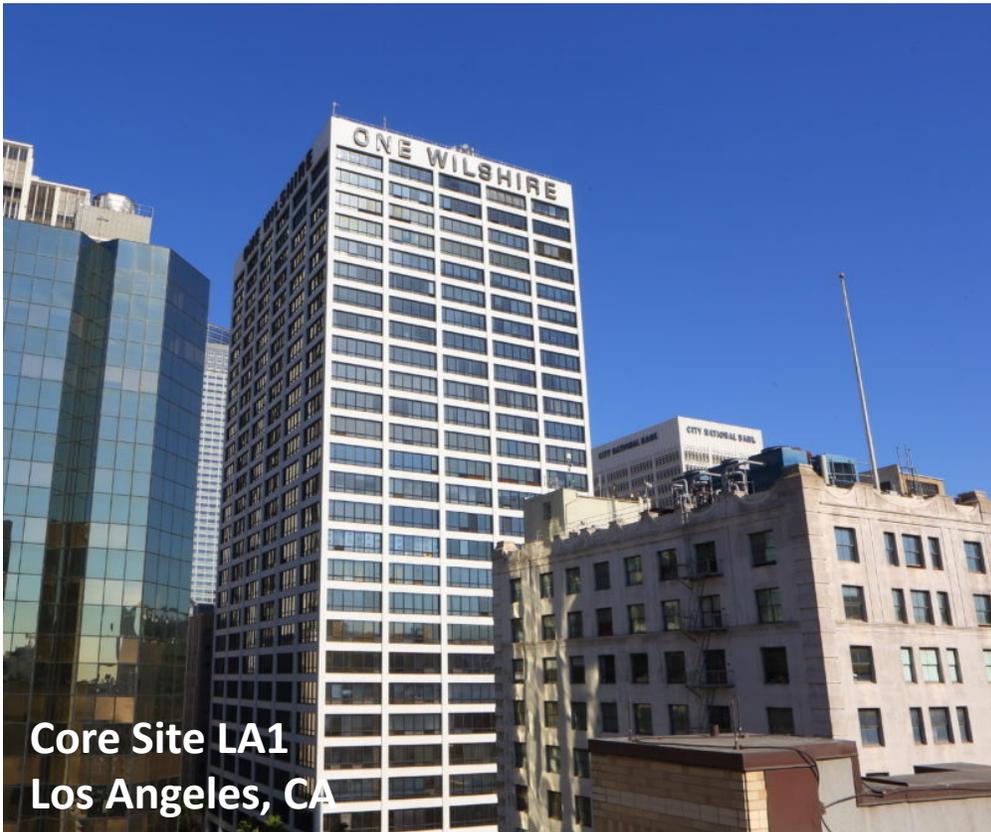


GM Powertrain Solar Project
Danville, IL

Data centers

- Global AI data center power demand will increase significantly
- *Microsoft Knows Future of Data Center Power Will Be 'Everything Everywhere All at Once'* – Data Center Frontier
- Encourages innovation in generation, grid hardware/design, storage
- Encourages innovation in data center design and development

Innovation



**Core Site LA1
Los Angeles, CA**



**Union Bank Tower
Portland, OR**



Data centers

- *From VA to GA to MO, pushback against data center projects is gaining bipartisan support due to community impact and rising energy costs. – Bisnow*
- *Data center projects drawing materials, labor, and capital away from other real estate sectors, potentially driving up costs and constraining development capacity for offices, multifamily, retail, etc. – Commercial Observer*
- **Developers chase “powered land,” sites prepped with grid access and utility entitlements ready for data centers. – CNBC**

Office demand

- Dow Chemical – replacing 4,500 positions with AI
- IBM – replacing 7,800 positions with AI over 5 years
- IKEA – replacing call centers with an AI chatbot called Billie
- Number of US co-working spaces increased from 5800 to 8800 in 5 yrs
- Continued “Real Estate Fracking”



Residential supply

- Better locational decisions
- Optimized design processes
- More efficient project delivery
- Smarter homes/IoT integration
- Improved customer interaction/engagement
- Better energy management/efficiency
- Automated property management

Retail supply

- Better locational decisions
- Smart Stores – optimized layout, product placement, inventory control
- Better forecasting, demand forecasting
- 24/7 virtual assistance
- Visual product curation – image recognition, hyper-personalization, interactive showrooms
- Enhanced security – biometrics, facial recognition, fraud detection

Industrial/warehouse

- Smart Warehousing – optimized layout, product placement, picking patterns, AV movement, inventory control, demand forecasting, logistics
- NVIDIA's partnership with BMW has led to a 30% improvement in manufacturing efficiency – Design News
- Possible reduction in demand for manufacturing space due to AI
- Rise of the robots
- SoftBank Group eyes \$1T plan for AI robot industrial parks – Nikkei Asia

60
MINUTES

A

B

C

TRANSLOAD 1

CKQ RECEIVING 1

CW26

CW27







Enterprise

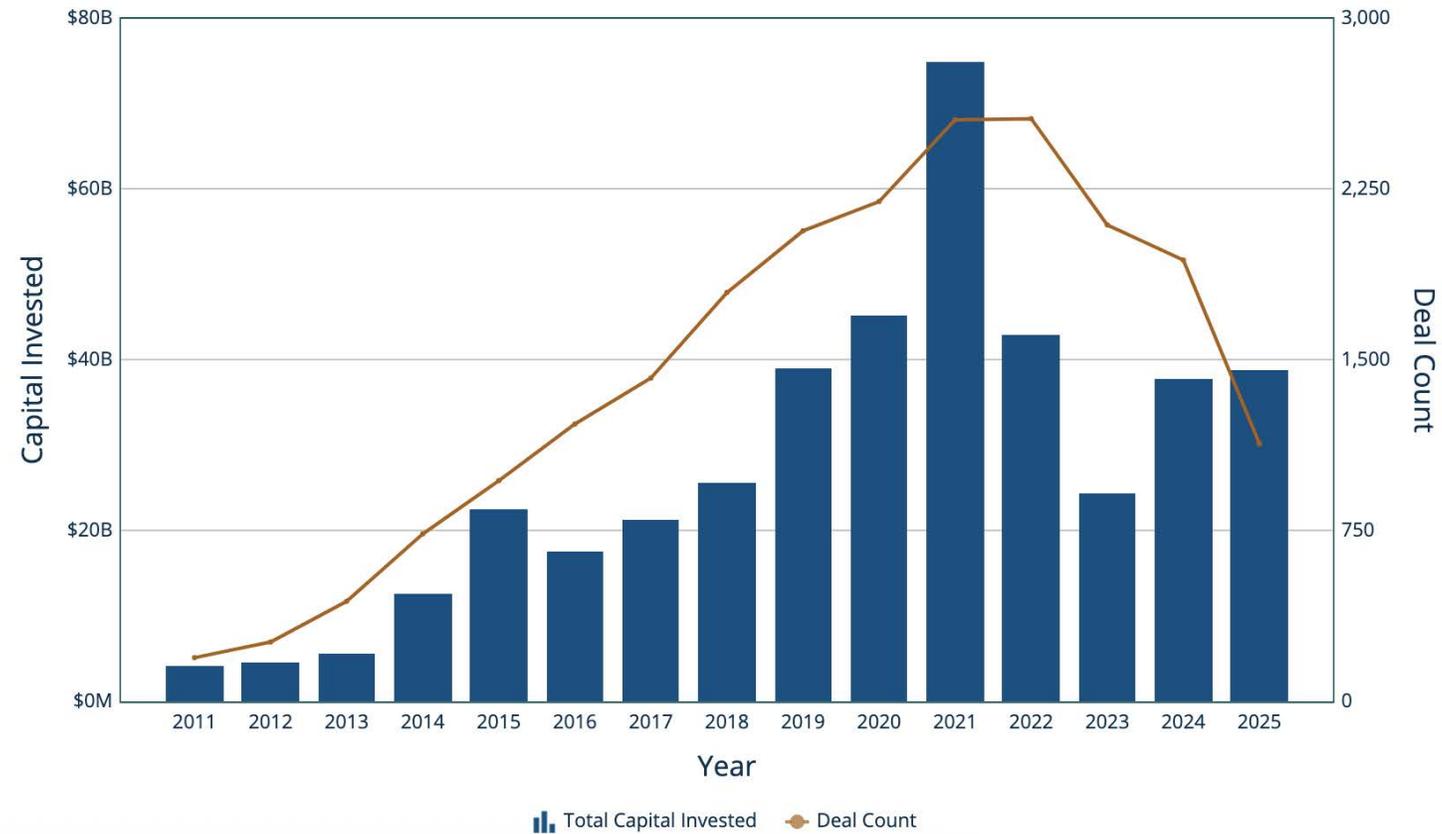


Funding

- VC funding to AI-related companies 2X to >\$100 billion in '24 – Crunchbase
- Big Tech expected to invest >\$1T into AI over the next five years – GS
- PropTech, ConTech, ClimateTech, Fintech converge

Proptech

Capital Invested & Deal Count



Source: Pitchbook

Funding Sources

| | | |
|---|---------------|---|
| \$ | US | Fifth Wall, Navitas, Alpaca, Camber Creek, Second Century |
| £ | UK | Noa (A/O Proptech), Concrete VC, Pi Labs |
| € | Europe | Proptech1 |
| ₹ | India | BlueSky |
|  | CVC | Brookfield, Prologis, CEMEX, JLL |
|  | @MIT | E-14, MET Fund, The Engine |

Funding Sources



Examples

| | | | | | |
|---|--------------------------|---|---|---|---|
|  | Location Analysis |  |  |  |  |
|  | | | | | |
|  | | | | | |
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|  | | | | | |
|  | | | | | |

Examples

| | | | | | |
|---|-------------------|---|---|---|---|
|  | Location Analysis |  |  |  |  |
|  | Environmental |  |  | | |
|  | | | | | |
|  | | | | | |
|  | | | | | |
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Examples

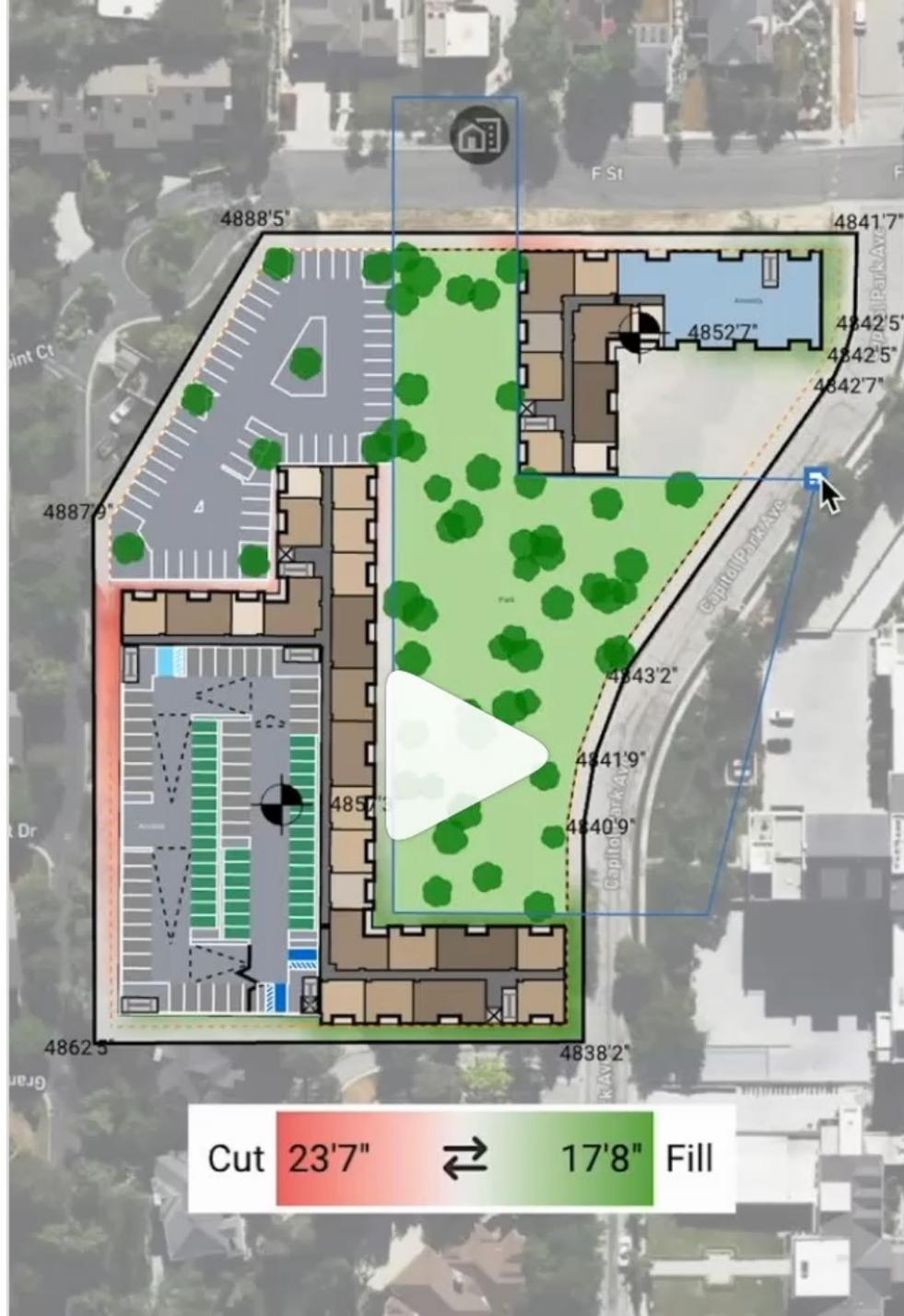
| | | | | | |
|--|--------------------------|--|--|--|--|
| | <p>Location Analysis</p> | | | | |
| | <p>Environmental</p> | | | | |
| | <p>Permitting</p> | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Examples

| | | | | | |
|--|--------------------------|--|--|--|--|
| | <p>Location Analysis</p> | | | | |
| | <p>Environmental</p> | | | | |
| | <p>Permitting</p> | | | | |
| | <p>Development</p> | | | | |
| | | | | | |
| | | | | | |



| | |
|-----------|-------|
| Key Count | 239 |
| Parking | 125 |
| Budget | \$60M |
| Cap Rate | 9.52% |





Midjourney



Enter:

Futuristic towers

Utopian technology

Symbiotic w/nature

Bioluminescent material



Heydar Aliyev Center | Baku, Azerbaijan

Zaha Hadid
Architects

Examples

| | | | | | |
|--|----------------------------|--|--|--|--|
| | <p>Location Analysis</p> | | | | |
| | <p>Environmental</p> | | | | |
| | <p>Permitting</p> | | | | |
| | <p>Development</p> | | | | |
| | <p>Property Management</p> | | | | |
| | | | | | |

Examples

| | | |
|--|----------------------------|--|
| | <p>Location Analysis</p> | |
| | <p>Environmental</p> | |
| | <p>Permitting</p> | |
| | <p>Development</p> | |
| | <p>Property Management</p> | |
| | <p>Chatbots/AI Agents</p> | |

 Click to listen

Elise^{AI} |  VoiceAI



iTWO





Key takeaways

- AI will continue to impact ALL areas of real estate
- Real estate is ideally suited to AI
- Physical assets will evolve; new ones will emerge
- How humans engage with real estate will change
- Scarce expertise becomes more abundant
- Identify unused data pools; they may have value
- Beware the AI hype that AI solves everything



Thank you!

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