

Data Center Insights from a Contractor Perspective

January 16, 2025



GISI Creating solutions for the world's most complex challenges

\$13b

Annual Revenue

100

Countries

15k+

Employees

GISI PLATFORMS

-  CONSTRUCTION SERVICES
-  PROGRAM & PROJECT MANAGEMENT
-  ENGINEERING CONSULTING
-  GLOBAL DEVELOPMENT

#2 Contractor in the US
#8 in Data Centers
Engineering News Record (ENR) 2024

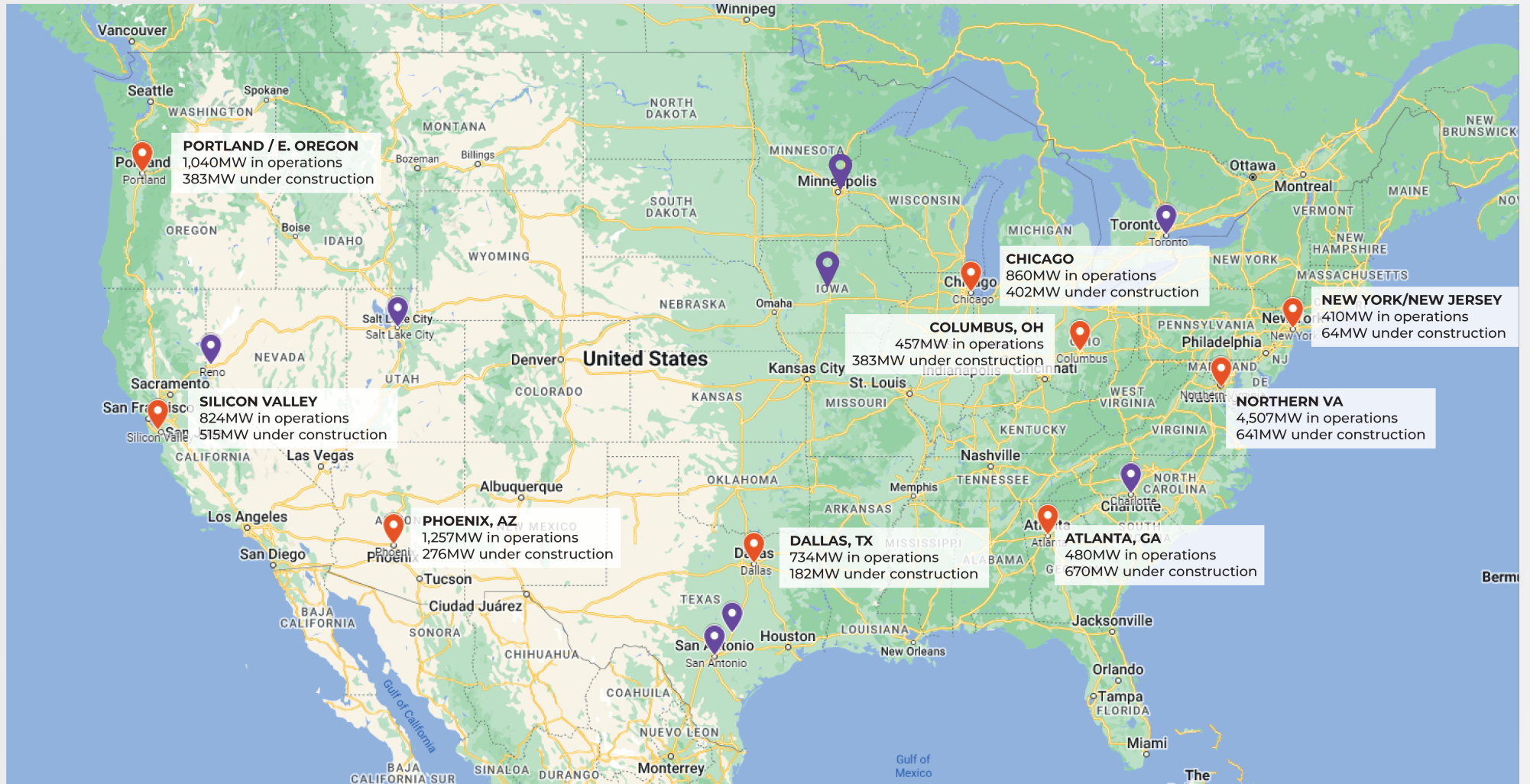


GISI An Increasing Demand for Energy

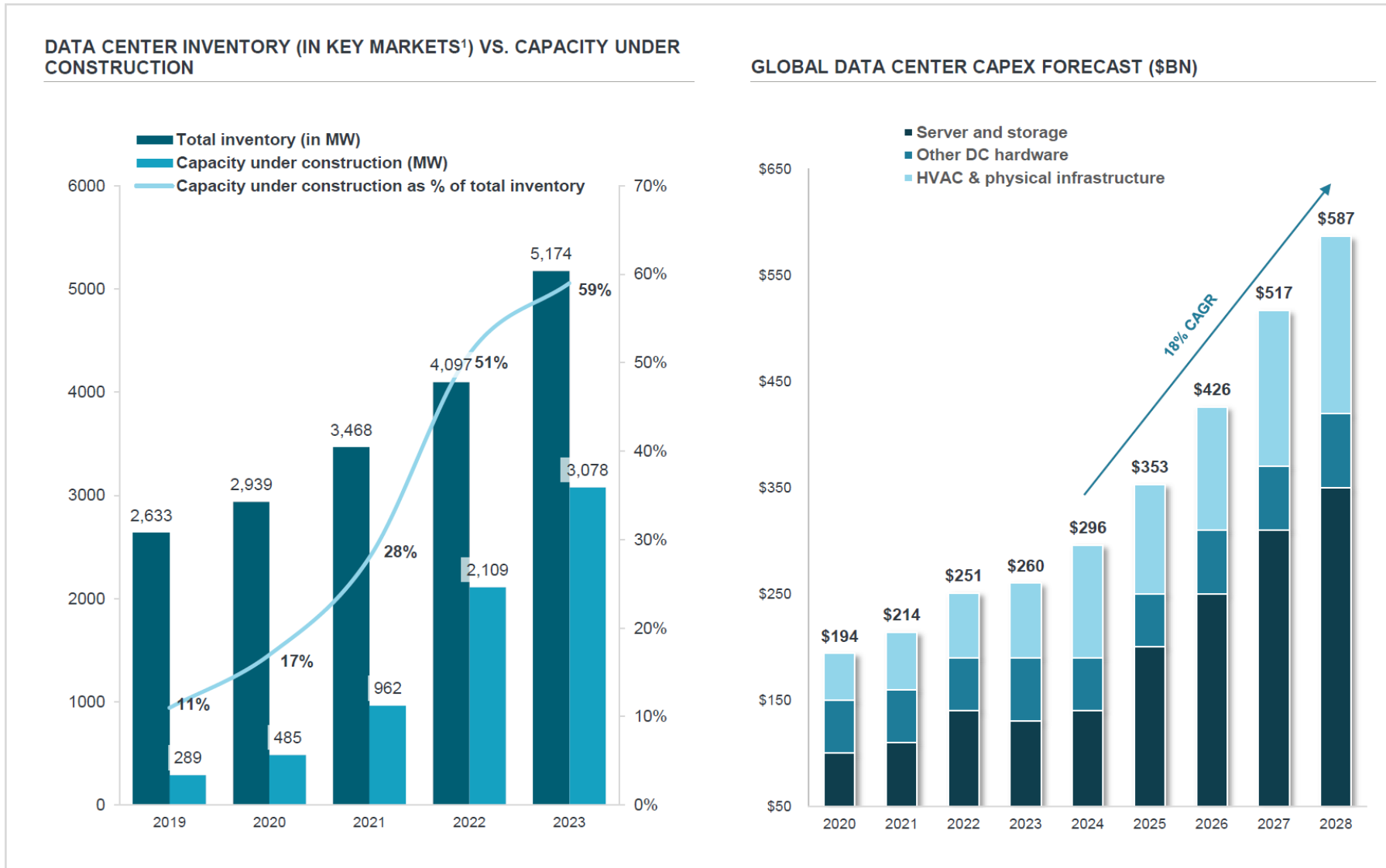
- AI technology is here and rapidly expanding
- Data center power consumption reached **19GW** in 2023, anticipated to increase a further **50GW** by 2030
- The data center construction industry integrates land, power, and cooling infrastructure
- Data centers require 24/7 electricity
- “Speed to power” is critical
- Power supply presents a critical bottleneck and risk



GISI Key and Secondary Markets for Construction, 2023



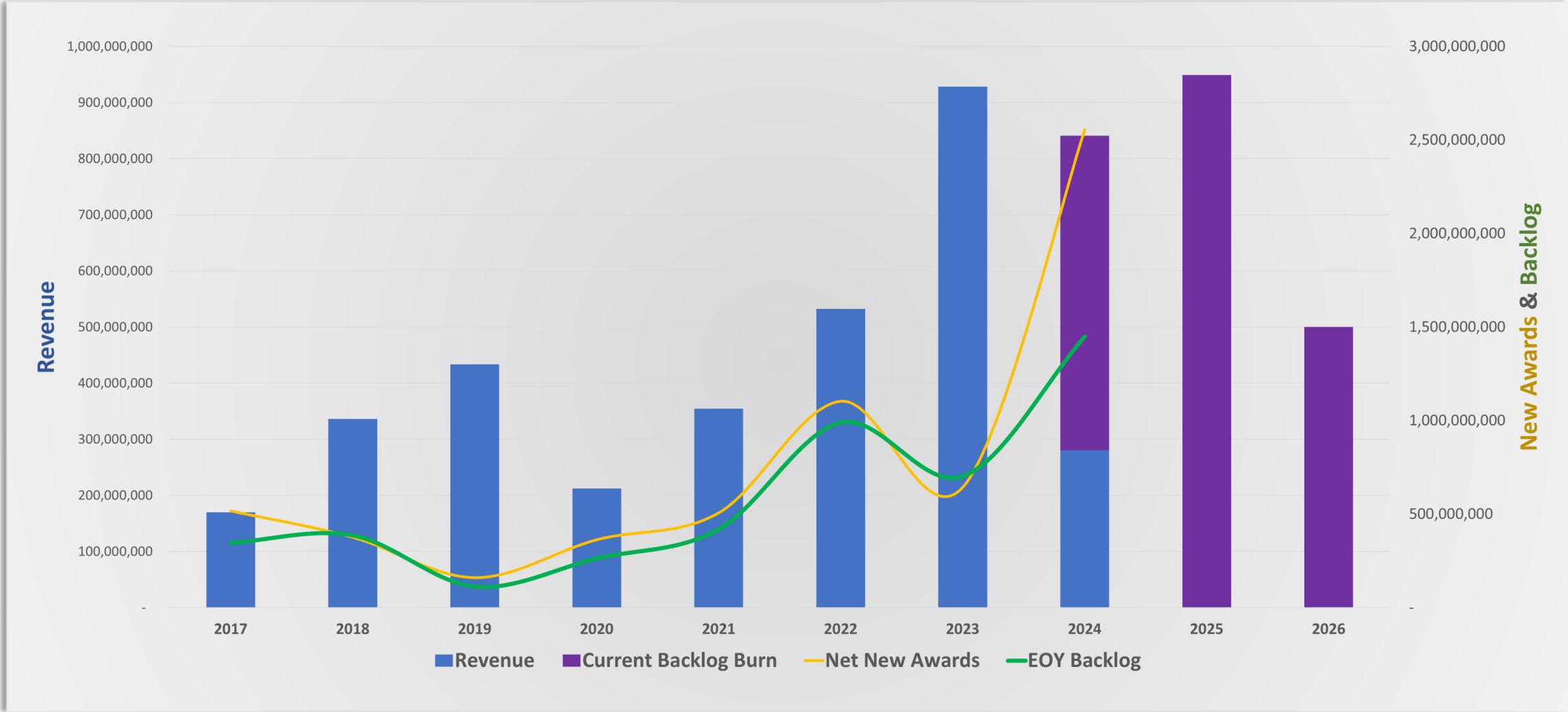
GISI Significant Increase in Data Center Investment



Source: J.P. Morgan / CBRE, TD Cowen

¹ Only includes Virginia, Dallas, Chicago, Silicon Valley, Phoenix, Atlanta, Hillsboro and NY State

GISI Construction Trends Reflect Market Demand



GISI Data Center Revenue and Backlog 2017 - 2026+

GISI New Market Entrants – Investment Firms

Deal flow is exceeding \$20 billion per month in digital infrastructure sector

Blackstone

QTS, DIGITAL REALTY

Brookfield
Infrastructure Partners

EVOQUE, COMPASS,
DIGITAL REALTY TRUST

Stonepeak

COLOGIX, CORESITE

TPG

QUANTUM LOOPHOLE,
DIGITAL REALTY

BlackRock

CYRUSONE, VANTAGE

DIGITALBRIDGE

VANTAGE, DATABANK,
SWITCH

GI PARTNERS

DIGITAL REALTY TRUST

HARRISON STREET

1547 REALTY, AREP

KKR

CYRUSONE

IPI

STACK, T5 DATA CENTERS

EQT

EDGECONNEX

MACQUARIE

PRIME DATA CENTERS,
ALIGNED DATA CENTERS

GISI Market Challenges – Technology, Power, & Communities

STOMC Overview

FACILITIES **GROWING**

SINGLE STORY BUILDING 20 – 40 MW

SINGLE BUILDING CAMPUSES

RANGE OF 125 – 175 WATTS PER SQUARE FEET

FUN FACT:

20MW ←→ 40MW

1MW = 750 HOMES | 40MW = 30,000 HOMES

3

YEARS AGO



STOMC Overview

FACILITIES **GROWING**

AVERAGE **40-80MW** PER BUILDING (ALMOST DOUBLE)

DENSITIES EXCEEDING **200 WATTS** PER SQUARE FEET

MULTISTORY BUILDINGS

CAMPUSES THAT ARE **5-6 BUILDINGS** PER CAMPUS

SOME CAMPUSES EXCEED **400MW**

FUN FACT: 80MW = 60,000 HOMES

40MW ←→ 80MW

1

YEAR AGO



AI/ML IMPACT BEING FELT THROUGHOUT THE INDUSTRY

RACE FOR **AVAILABLE POWER** AND LAND IS DRIVING LOCATIONS

NIMBY – NOT IN MY BACKYARD – **COMMUNITY IMPACTS**

STOMC Overview

FACILITIES **GROWING**

TODAY AI FACILITIES

300MW ←→ 600MW

AVERAGE **300 to 600 MW** PER BUILDING

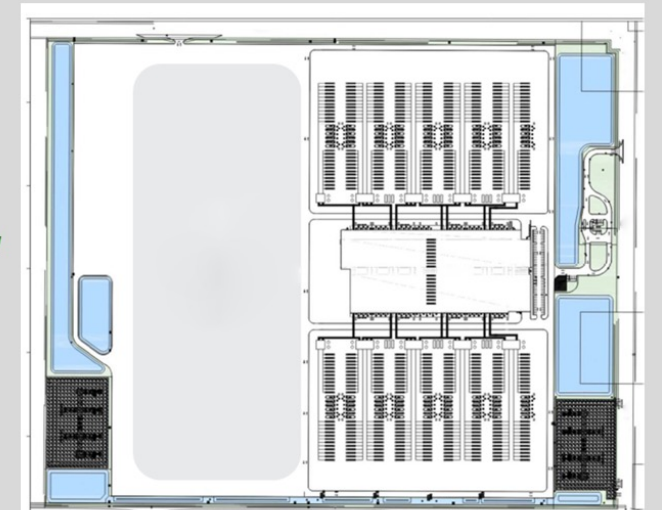
DENSITIES EXCEEDING **400 WATTS** PER SQUARE FEET

+350lb PSF FLOOR LOADING

+1.0MSF **MULTISTORY BUILDINGS**

LARGE SCALE UTILITY YARDS FOR HEAT REJECTION

FUN FACT: 600MW = 450,000 HOMES



GISI Key Takeaways

- Construction is showing same trend as the overall market
- New entrants investing in data center growth are some of the largest financial service companies in the world
- Tenants are the some of the largest market capitalization companies in the world
- Exponential growth of data center industry continues to outpace the available power supply
- No sign of a slowdown in demand



Q&A

