

THE NEW NORTH

# Opportunity Analysis

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Data Centers in the New North

### a. Objective

The New North is currently seeking sites that fit the previously mentioned criteria to solicit and attract data centers to our region. Over the past several months, the New North, along with an accomplished advisory group made up of IT, energy, construction, and telecommunication industry professionals from *WE Energies*, *Kimberly-Clark*, *BURR Computer Environments*, and *Wisconsin Public Service*, have come to the conclusion that the New North region has geographic advantages that strategically position it above competing locations to house and facilitate a data center operation.

### b. Data Center Grow

Recent research findings prove the existence of rapid data center growth and expansion into 2011 and beyond. *Digital Realty Trust*, which builds and leases data center property, in partnership with *Campos Research and Analysis*, recently, surveyed over 300 IT decision makers (CIOs) at large corporations in North America with annual revenues of at least \$1 billion and at least 5,000 employees. The survey found that 83 percent of respondents are planning data center expansions in the next 12 to 24 months. Of the 83 percent, 36 percent have definite plans to make those expansions this year, and 73 percent of the respondents plan to add two or more facilities as a part of their data center expansion strategy. The percent of respondents who indicated growth does not include those who have recently expanded their data center operations or who are currently in the process of expanding.

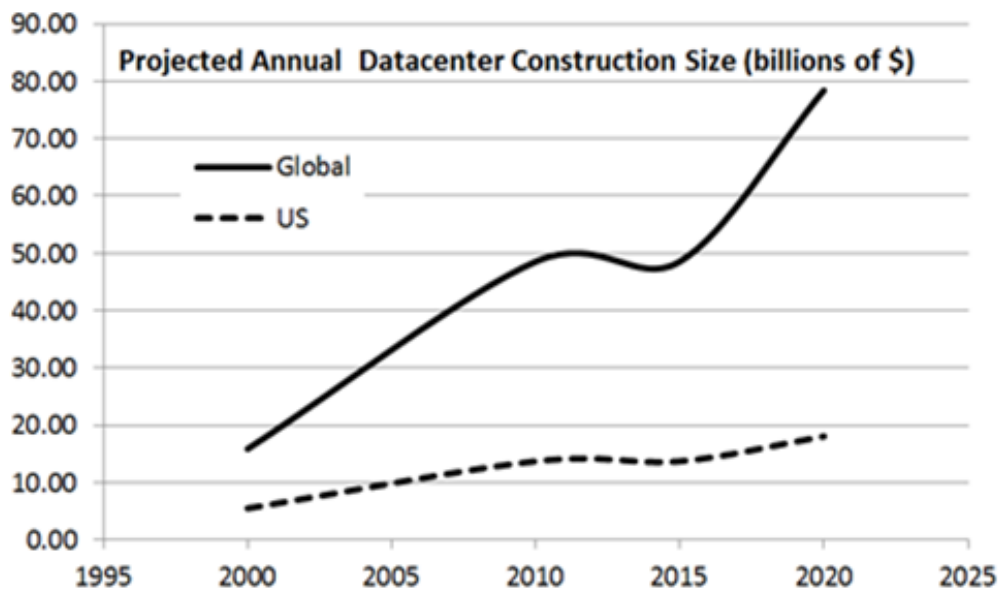


Figure 1: C. Belady, Microsoft; Data Center Knowledge

In addition, a study by *Microsoft* concluded that global data center construction will reach \$78 billion a year by 2020 (Figure 1, above). The United States market for data center construction is currently just under \$15 billion annually and will likely grow to about \$18 billion by 2020.

### **c. Data Center Trends**

In recent years, the trend in data centers has been to become “green.” The greening of data centers is not a fad; the amount of data center construction projects with green initiatives is set to reach \$13.81 billion annually in the U.S.—with a 29% annual growth rate, according to *Environmental Leader*. Additionally, in 2009/2010 *AFCOM*—a data center professional organization—released a trend survey paper regarding trends in the data center industry. After surveying 436 member data centers in 27 countries worldwide, 51.4% indicated that cooling efficiency was a main concern. One of the most notable ways to be “green” and reduce cooling expenses while increasing efficiency is to install advanced HVAC-CRAC (computer-room air conditioning) equipment. Advanced CRAC equipment allows the data center to take advantage of outside air temperature and use it to cool their servers, essentially, providing free cooling. Also, the *AFCOM* study determined that 46.6% of respondents considered susceptibility of natural disasters (earthquakes, floods, hurricanes, tsunamis, etc.) as their main concern and like the previously mentioned studies, over 50% of data centers they surveyed plan to relocate or expand their current data center operation.

### **d. New North’s Geological Advantage**

Being located in Northeast Wisconsin, the New North has an average temperature of roughly 44°F. This temperature will allow any data center in the New North region to utilize our climate—in essence, providing free cooling. The expenses saved by data center operators by moving to New North are enormous and will entice companies involved in the management of data centers to relocate. With so much growth and such specific trends, it is reasonable to believe that New North offers geographic advantages compared to the southern portion of the U.S. It is also prudent to mention the location of the New North relative to locations that are prone to natural disasters. The New North, and Wisconsin as a whole, is immune from earthquake, hurricane, tsunami and volcanic activity—with a rare occurrence of a tornado or major flood. In such a capital intensive industry, it is germane to note the importance of safety. The New North offers data centers a safe home; a geographic quality that sets us apart from many locations throughout the nation.

### **e. Additional Competitive Qualities**

In addition to geological advantages, the New North also remains competitive from other angles. The Wisconsin State Government allows for a number of financing programs, tax incentives, tax credits, and tax exemptions aimed at attracting high-technology business. New North is home to a number of telecommunication providers—providing a vast fiber-optic landscape. There are also enough utility providers able to provide reliable, high-quality electrical service to data centers in the New North. These three above mentioned qualities are critical to the relocation determination of a data center.

### **f. Conclusion**

All-in-all, the New North is positioned to benefit from the attraction of data centers.