

#### Midwest Data Centers

**UMRBA Quarterly Meeting** February 25, 2025







### NATIONAL TRENDS: ENERGY

- Data center capacity to double in the next 5 years, along with power consumption
- Al to result in an 160% increase of data center power demand by 2030 (Goldman Sachs)
- The International Energy Association estimates 1000 terawatt hours in 2026 (1 terawatt hour powers 70,000 homes)

Bridges, Lauren (2024, December 10). "Hydropolitics of the Cloud" Webinar Presentation for CSG Midwest





# NATIONAL TRENDS: WATER

- Data centers are expected to use 450 million gallons of water a day by 2030 (Bloomberg)
- U.S. data centers are expected to use
   75 billion gallons of water per year
- Substantial gaps in water use data and data centers persist

Bridges, Lauren (2024, December 10). "Hydropolitics of the Cloud" Webinar Presentation for CSG Midwest





### VIRGINIA REPORT: WATER USE

#### Legislature commissioned a study into data center impacts

- Expressed concern on longterm availability of groundwater sources
- Recommended the legislature require water use estimates for new developments
- Condition tax exemptions on environmental management standards





### MIDWEST DATA CENTERS: GROWTH

- In Chicago, an increase in the number of data centers from 66 to 122, and from 997 MW of capacity to 1,839 MW.
- In Columbus, Ohio, an increase in the number of data centers from 40 to 85, and from 914 MW of capacity to 1,627 MW.
- In Des Moines, Iowa, an increase in the number of data centers from 27 to 48, and from 712 MW of capacity to 1,286 MW.
- In Omaha, Neb., an increase in the number of data centers from 38 to 46, and from 1,233 MW of capacity to 1,798 MW.

Source: S&P Global



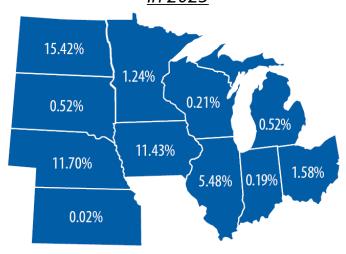


# MIDWEST DATA CENTERS: ENERGY

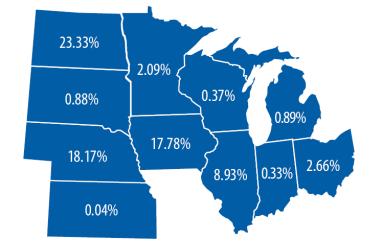
### CENTERS: ENERG

#### DATA CENTERS AND ENERGY CONSUMPTION IN THE MIDWEST

% of total state electricity consumed in 2023



<u>Projected % of total state electricity</u> <u>consumed in 2030</u>



Electric Power Research Institute, May 2024.





### MIDWEST DATA CENTERS: INCENTIVES

#### Sales and use tax exemptions

• Illinois, Indiana, Iowa, Michigan, Ohio, Wisconsin

#### Sales and use tax refund

lowa

#### Criteria for environmental or social priorities

• Illinois

#### Personal property tax exemption

Minnesota





# MIDWEST DATA CENTERS: EARLY CONCERNS

- AEP Ohio (electrical utility) put a moratorium on new data center service agreements in 2023.
  - Currently have a proposed demand charge at 85 percent for data center companies.
- Indiana Michigan Power filed a data center tariff proposal in July 2024
  - Settlement agreement between Indiana Michigan Power, Amazon Data Services, Google, Microsoft, and the Citizens Action Coalition of Indiana





#### MIDWEST DATA CENTERS: 2025 LEGISLATION

- MN H.F.1109/S.F.608 (introduced): Prohibits data centers outside of industrial zones
- MN H.F. 1150 (introduced): Funds study of environmental impacts of Al
- IN S.B.0431 (passed first chamber): Restricts foreign-owned companies from constructing data centers in Indiana
- IN H.B.1601 (passed first chamber): Restricts eligibility for data center tax incentives
- IN H.C.0003 (enacted): Urges reforms to expedite approval of transmission projects to meet data center demand
- IN S.B.0135 (unlikely to proceed): Requires data centers reports of energy and water use, creates Commission
- MI H.B.4085 (introduced): Restrict data centers to industrial zones
- IL S.B.2181 (introduced): Requires data centers annually report energy and water usage to the Illinois Power Agency
- IL S.B.0094 (introduced): Prohibits foreign companies from constructing data centers in Illinois





#### **NEXT STEPS**

- Great Lakes-St. Lawrence Legislative Caucus Water Use Committee
  - Great Lakes Compact
- Contribute to regional studies on data centers impacts in the Great Lakes region
- Continuing to seek partners to better understand data center water use and align data collection



