



# Health Care Capital Expenditures in Minnesota - A Data Short Take -

Health Economics Program

March | 2019

# Background on Health Care Capital Expenditures

- Hospitals, clinics, and other health care providers commonly spend money in the following ways:
  - Updating, leasing, or building new facilities
  - Replacing or adding medical equipment
  - Installing or modernizing electronic health records systems
- These expenses contribute to what some call a ‘medical arms race’<sup>1</sup> where providers invest in costly technology<sup>2</sup> or building projects to attract patients away from competitors.
- Health care capital expenditures have been found to add about 5 percent in overall spending<sup>3</sup> nationally as providers must pay for these investments by borrowing, using revenue exceeding expenses, or other assets such as charitable foundations.

# Capital Expenditure Monitoring in Minnesota

- Under Minnesota law, all major spending commitments (over \$1 million) by health care providers must be reported to MDH<sup>4</sup>
- MDH started comprehensively collecting these major spending commitments in 2007
- There is likely additional spending on health care projects beyond what is reported, as the following types of projects over \$1 million are exempt:
  - Medical education or medical research
  - Building maintenance or projects not directly related to patient care (e.g., parking lot or elevators)
  - Certain changes in ownership or control (e.g., mergers or acquisitions)

# General Trends in Health Care Capital Expenditures

# Amount of Health Care Dollars Devoted to Capital Expenditures in Minnesota

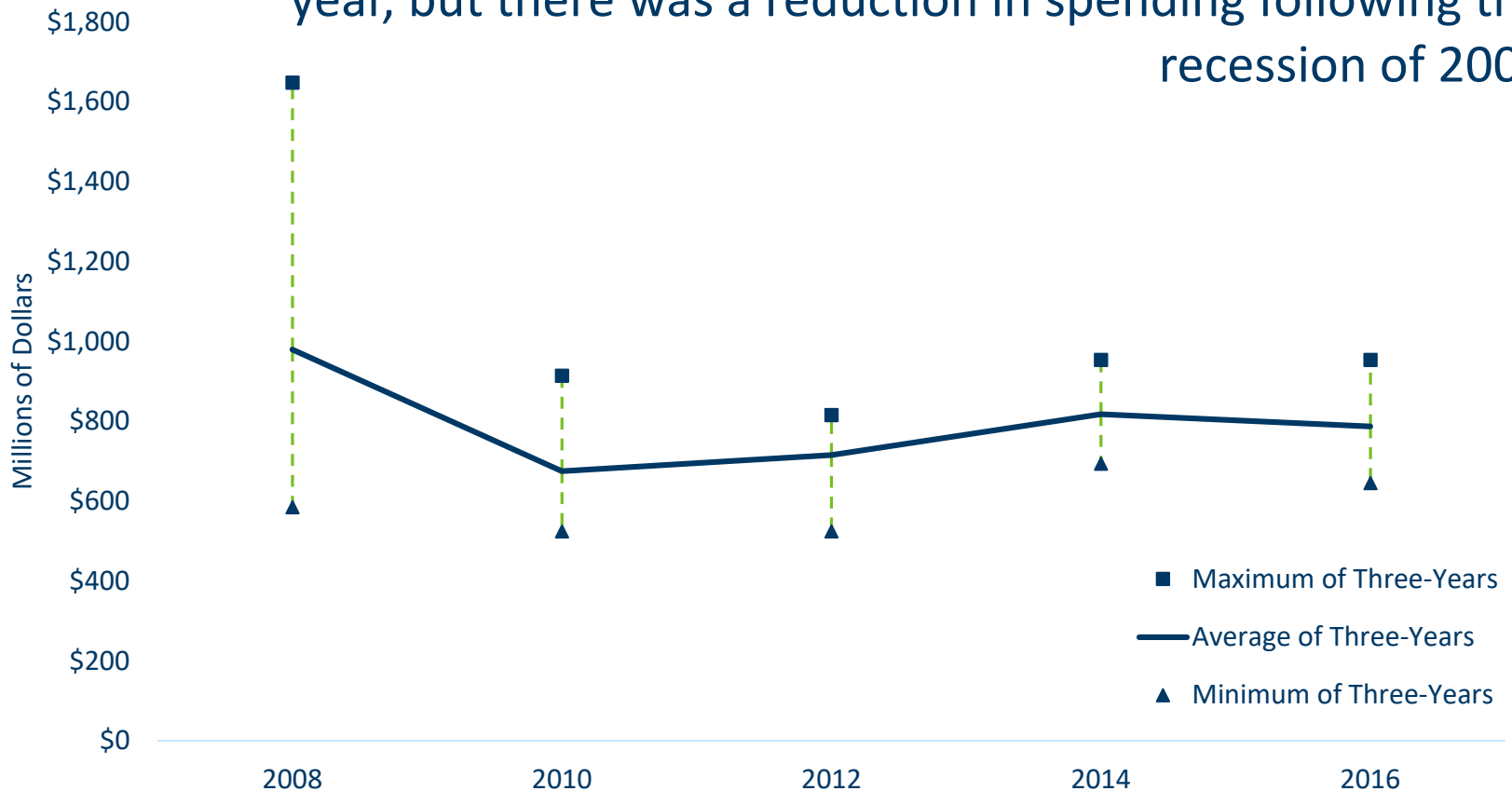
In 2016, health care providers committed **\$645.4 million** to major projects



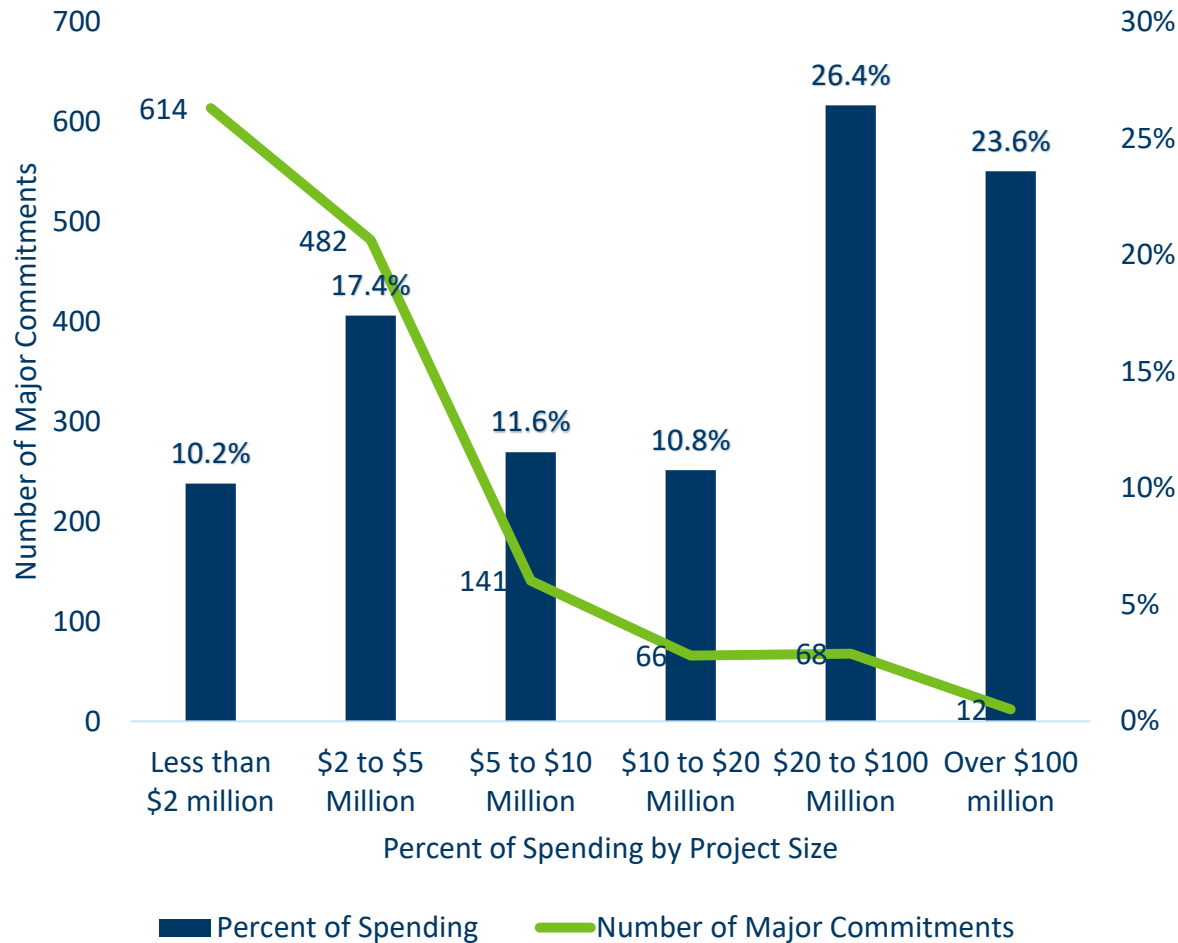
This amounted to \$2.12 spent on major capital projects for every \$100 spent health care in 2016

# Three-year Rolling Average Total Capital Expenditure Spending with Maximum and Minimum, 2007 to 2016

Total capital expenditure spending varied substantially by year, but there was a reduction in spending following the recession of 2008



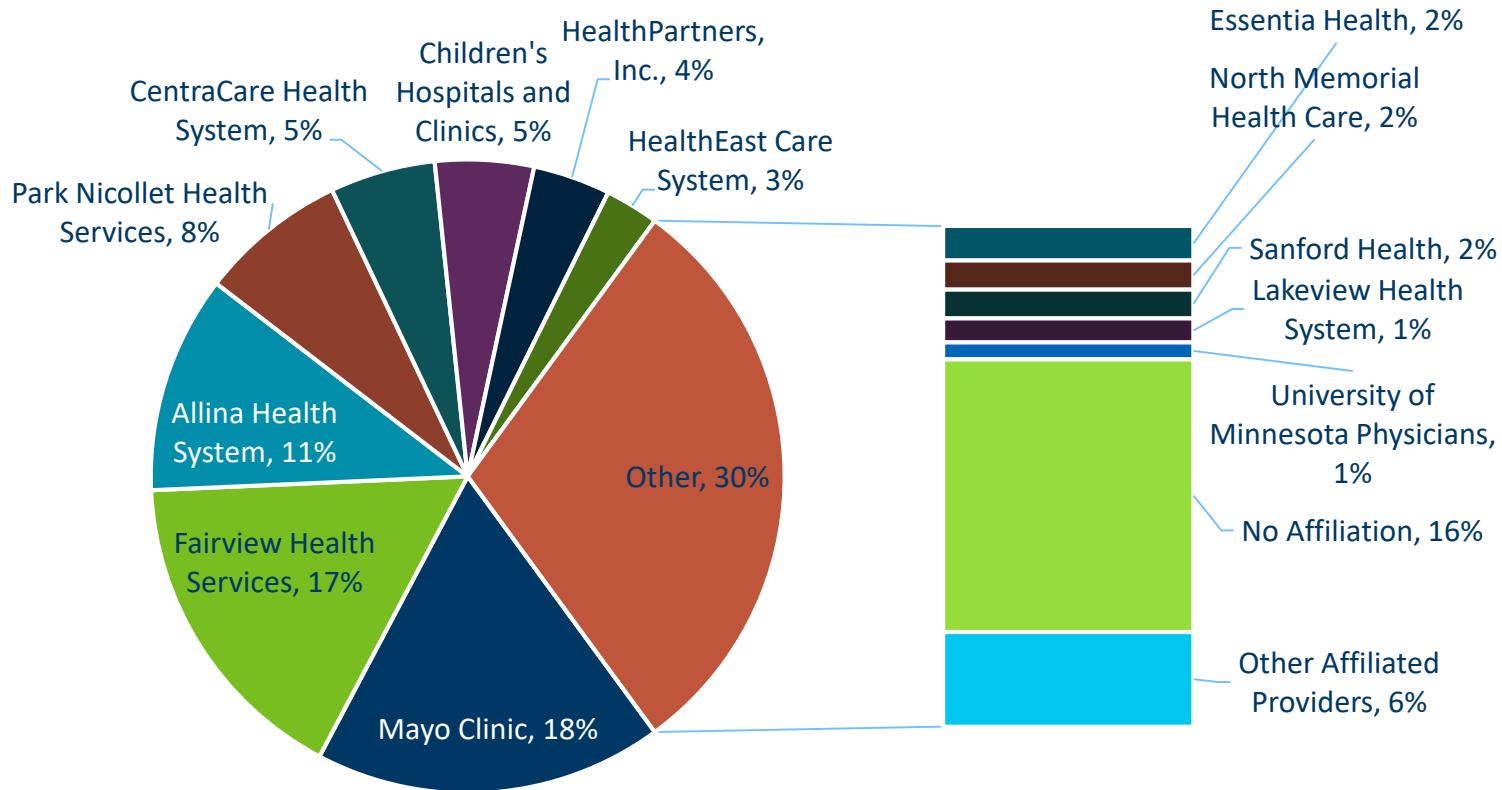
# Minnesota Health Care Capital Expenditures by Size of Major Spending Commitment



While most commitments were less than \$5 million, half of all spending was over \$20 million and nearly one quarter was devoted to just 12 projects over \$100 million from 2007 to 2016

# Percent of Capital Expenditures by Health Care System, 2007 to 2016

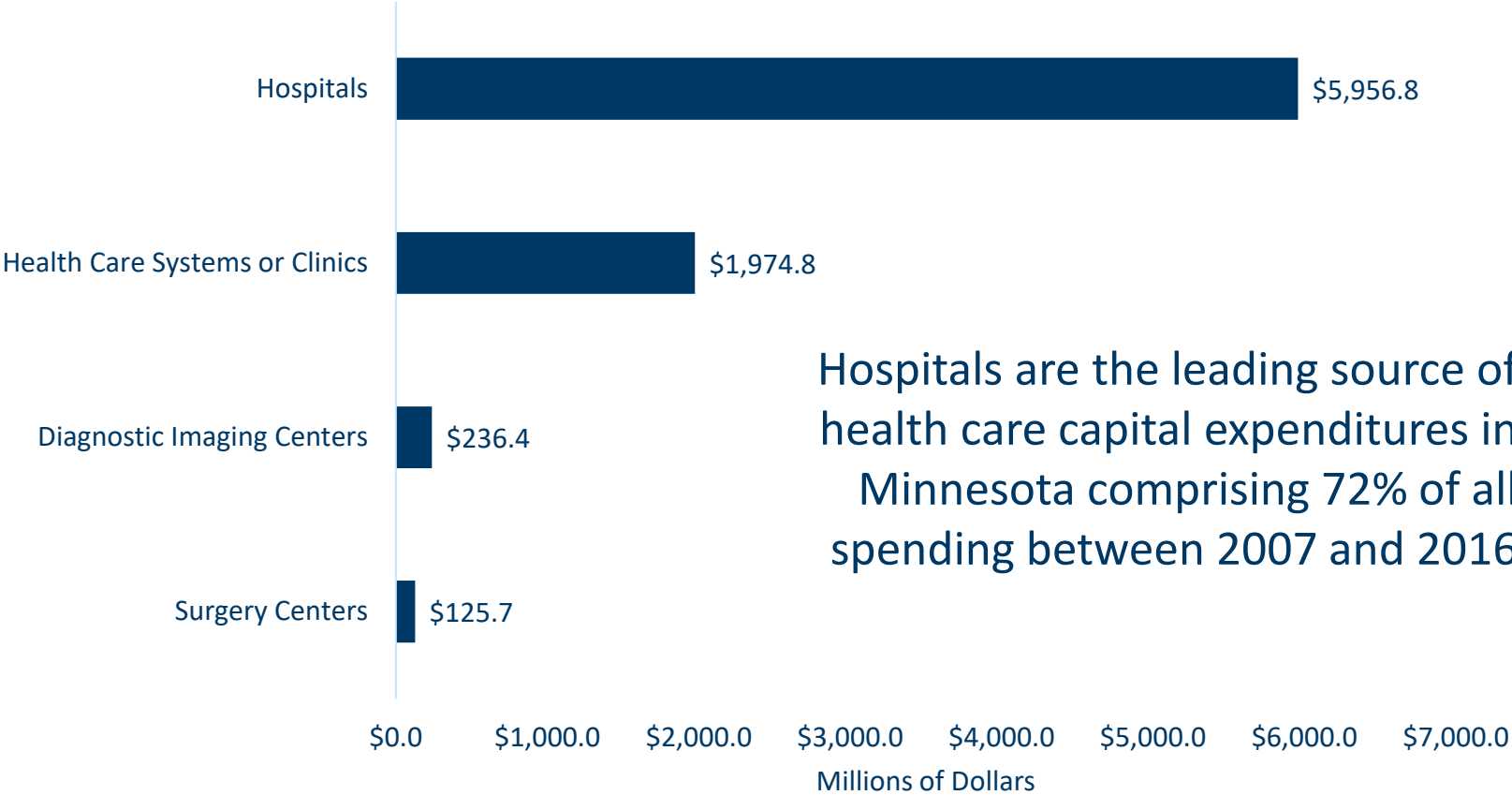
More than half of spending is invested by large health care systems





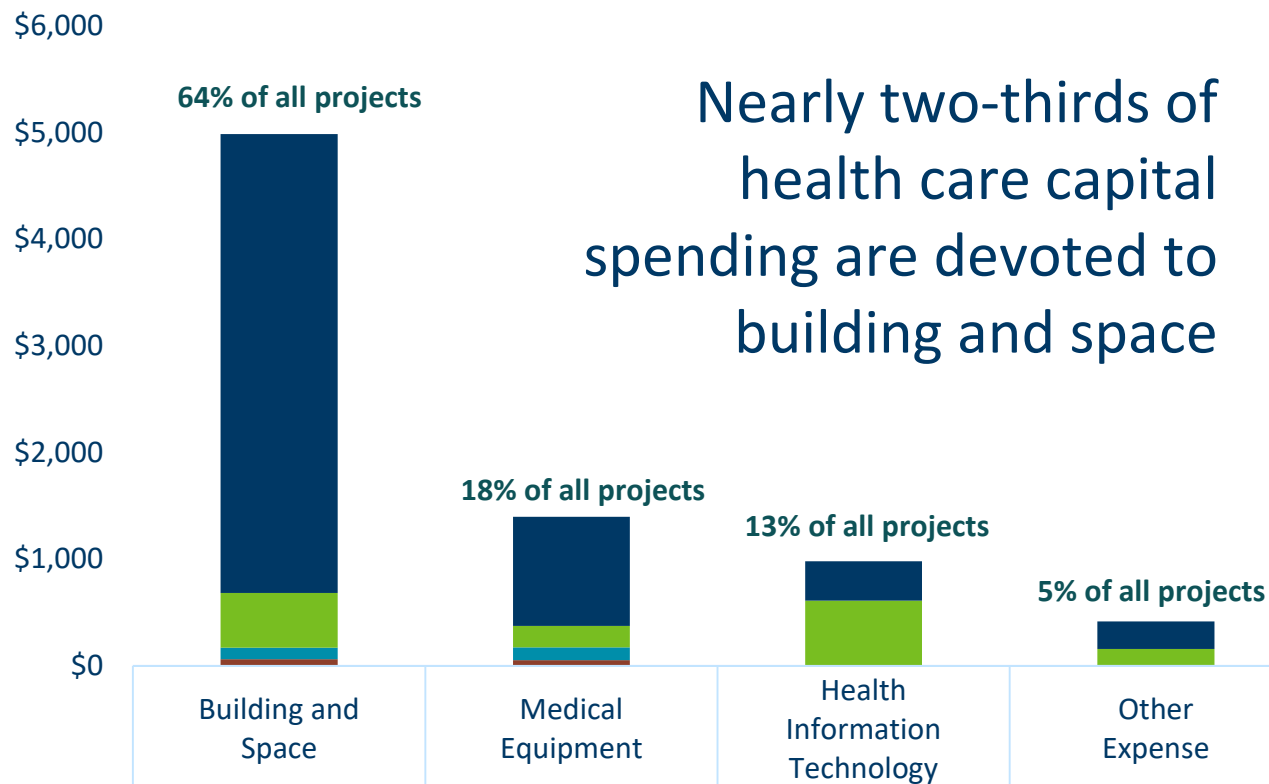
# Types of Capital Expenditure Projects

# Capital Expenditures by Type of Provider



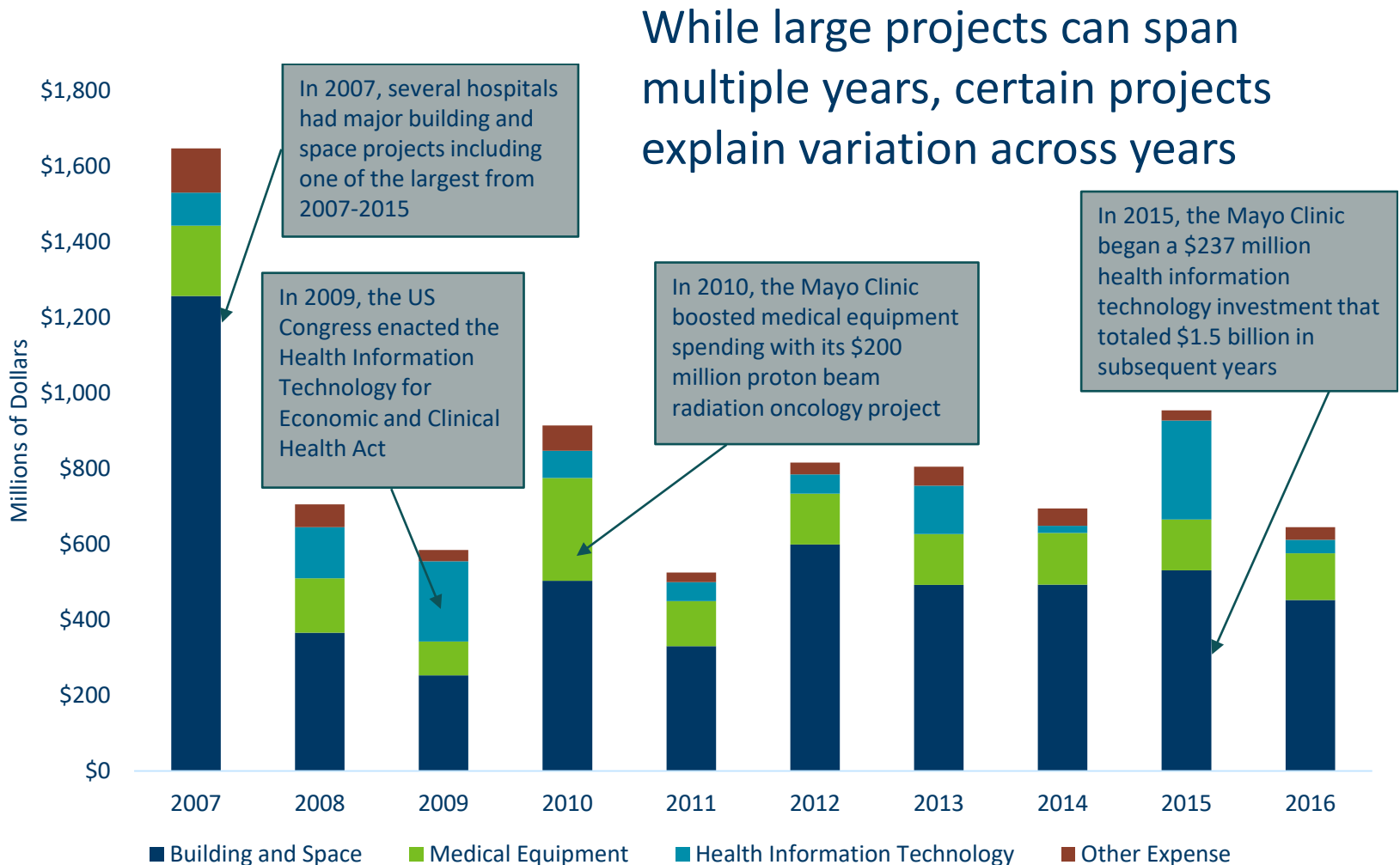
Source: MDH, Health Economics Program analysis of major spending commitments submitted under Minnesota Statutes, Section 62J.17 for 2007 to 2016.

# Capital Expenditures by Type of Provider and Project Type, 2007 to 2016



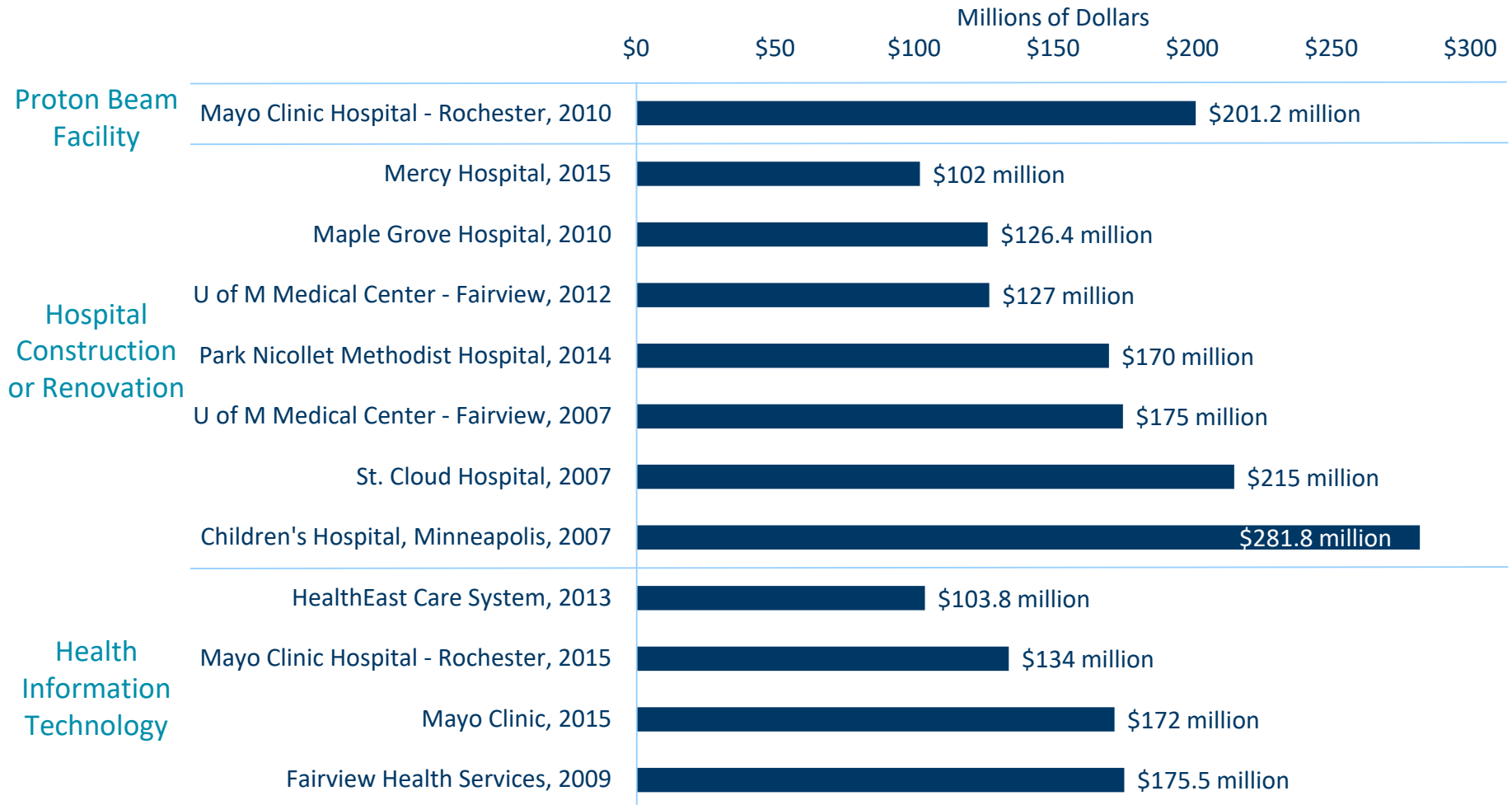
	Building and Space	Medical Equipment	Health Information Technology	Other Expense
■ Hospitals	\$4,301	\$1,026	\$369	\$260
■ Health Care Systems and Clinics	\$512	\$200	\$609	\$147
■ Diagnostic Imaging Centers	\$108	\$119	\$4	\$5
■ Surgery Centers	\$65	\$55	\$0	\$6

# Capital Expenditures, by Type of Project and Year, 2007 to 2016



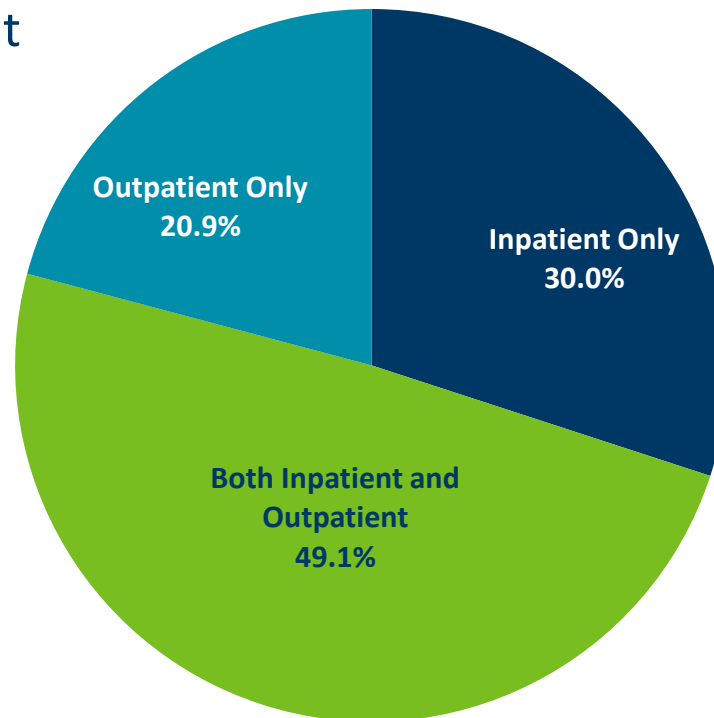
Note: Major spending commitments can span several years and are monitored by commitment date such as board authorization.  
 Source: MDH, Health Economics Program analysis of major spending commitments submitted under Minnesota Statutes, Section 62J.17.

# Single Capital Expenditure Projects Over \$100 Million, 2007 to 2016



# Proportion of Hospital Construction Expenditures by Setting Type, 2014 to 2016

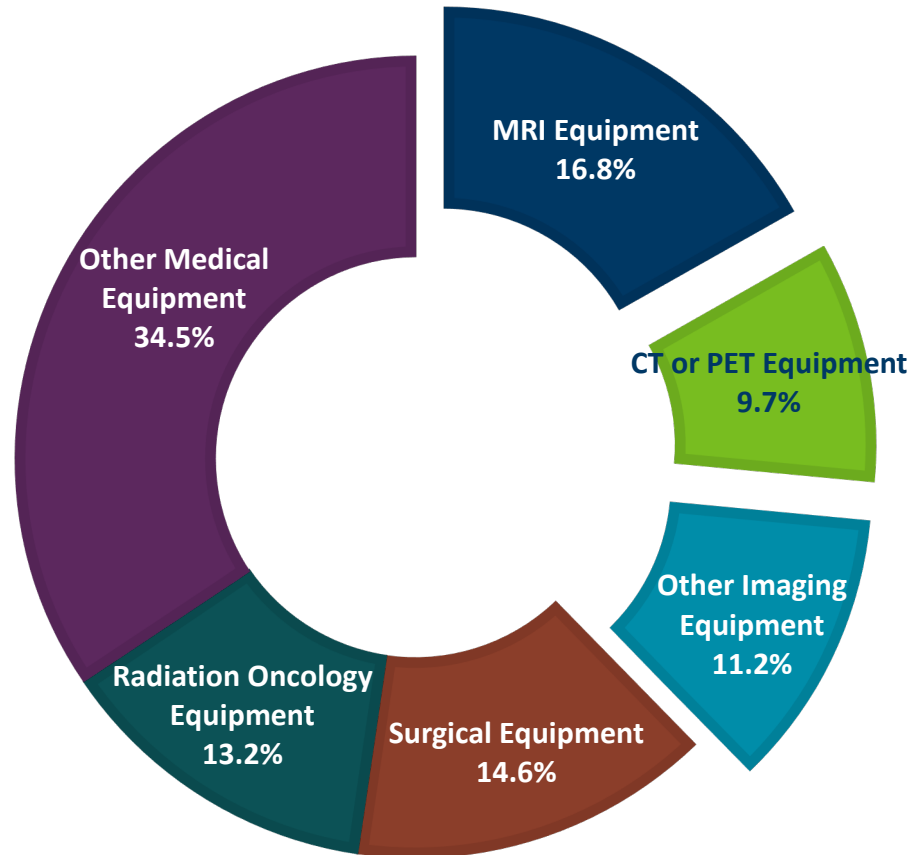
Examples of combined inpatient and outpatient hospital capital expenditures include facility renovation or replacement of existing facility housing inpatient and outpatient services



Less than one-third of hospital capital expenditures are devoted to inpatient services alone

# Proportion of Capital Expenditures on Medical Equipment

More than one third of major spending commitments was devoted to diagnostic imaging equipment including magnetic resonance imaging (MRI), computed tomography (CT), and other imaging modalities from 2007 to 2016

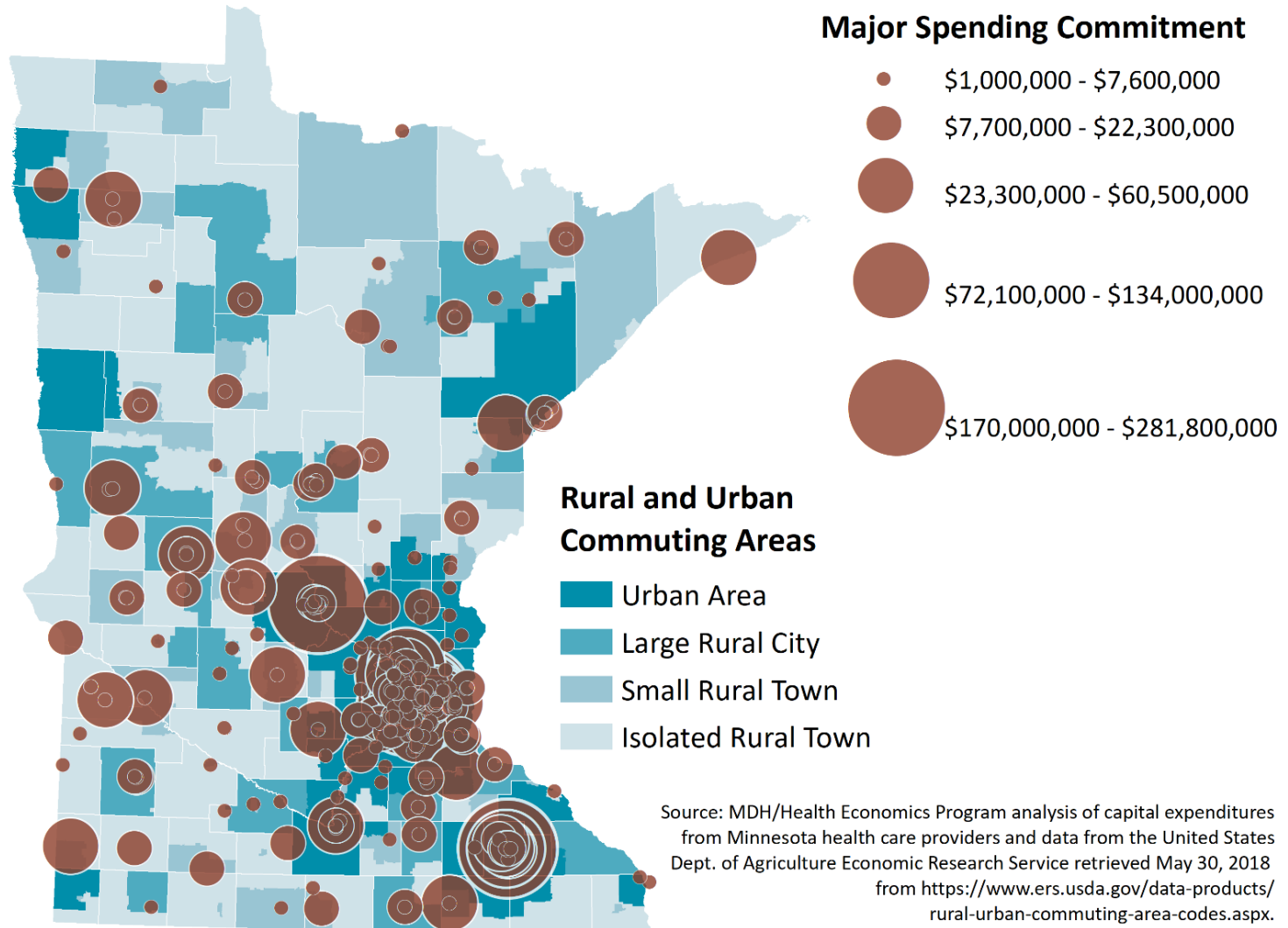


# Geographic Location of Capital Expenditure Projects

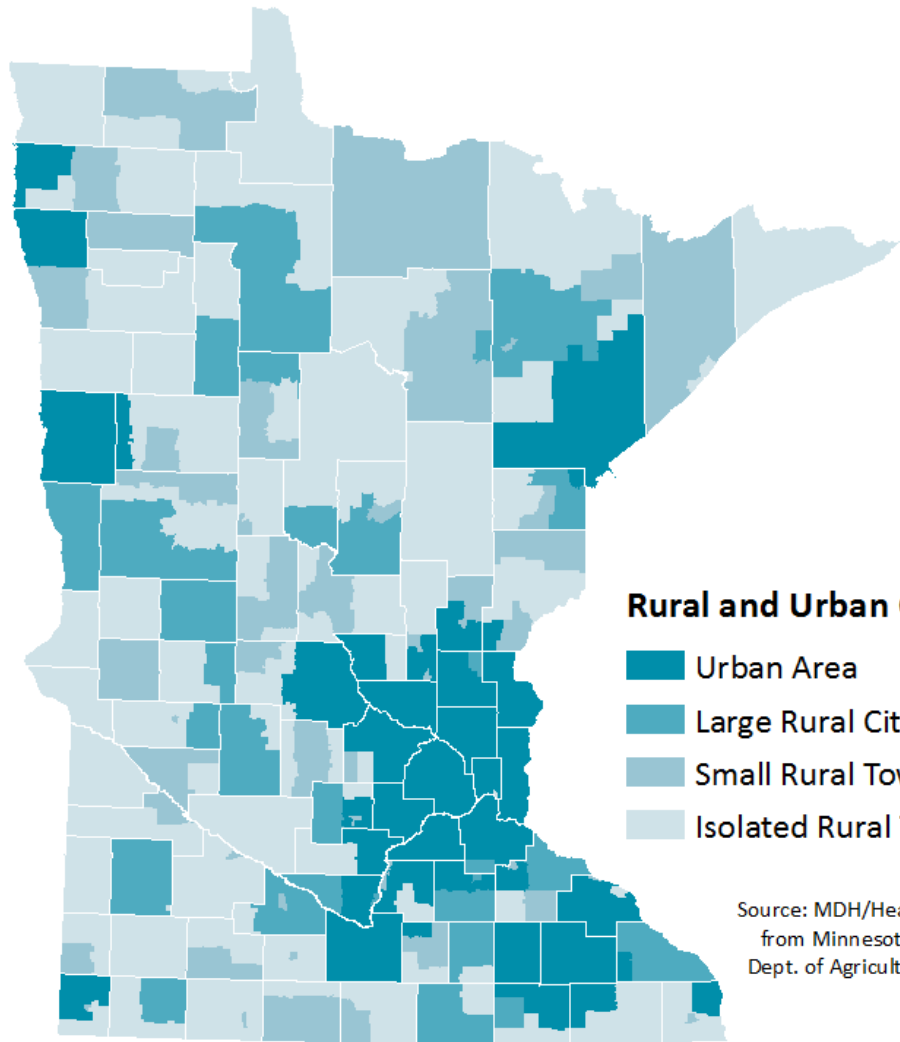


# Location of Minnesota Health Care Capital Expenditures by Project Size, 2007 to 2016

The volume of spending is dependent on the location of major health care providers



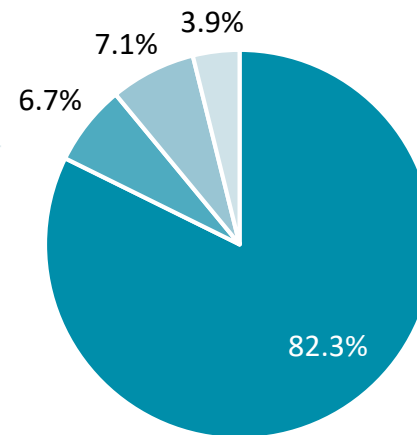
# Distribution of Minnesota Health Care Capital Expenditures in Urban and Rural Areas, 2007 to 2016



## Rural and Urban Commuting Areas

- Urban Area
- Large Rural City
- Small Rural Town
- Isolated Rural Town

Percent of Health Care Capital Expenditures

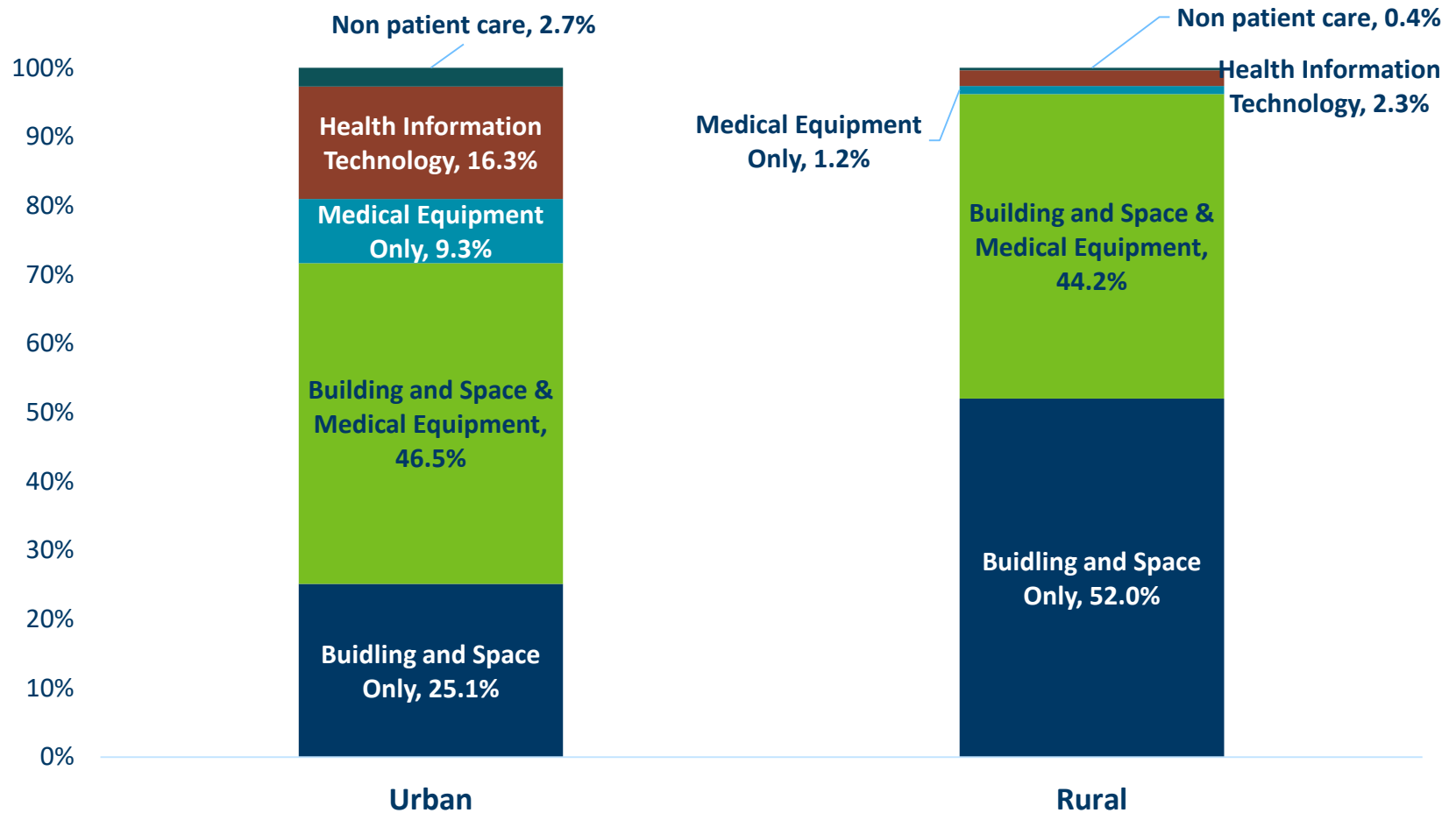


Urban Areas had 82% of state health care capital expenditures and 74% of the state population

Urban Areas also had 79% of available hospital beds

Source: MDH/Health Economics Program analysis of capital expenditures from Minnesota health care providers and data from the United States Dept. of Agriculture Economic Research Service retrieved May 30, 2018 from <https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes.aspx>.

# Minnesota Hospital Capital Expenditures by Type of Service, 2014 to 2016 by Urban or Rural Status



# References

<sup>1</sup> Devers, K. J., Brewster, L. R., & Casalino, L. P. (2003). Changes in Hospital Competitive Strategy: A New Medical Arms Race?. *Health Services Research*, 38(1p2), 447-469.

<sup>2</sup> Smith S. et al., “Income, Insurance, and Technology: Why Does Health Spending Outpace Economic Growth?” *Health Affairs*, 28, no. 5 (September/October 2009): 1276-1284. A prior analysis estimated technology was responsible for 38-65 percent of spending growth: Robert Wood Johnson Foundation. “High and Rising Health Care Costs: Demystifying U.S. Health Care Spending.” Research Synthesis Report, No. 16. October 2008.

<sup>3</sup> Glied, S., Ma, S., & Solis-Roman, C. (2016). Where The Money Goes: The Evolving Expenses Of The US Health Care System. *Health Affairs*, 35(7), 1197-1203.

<sup>4</sup> Minnesota Statutes, Section 62J.17 requires all providers of health care services (with the exception of nursing homes) to report major commitments to the Minnesota Department of Health (MDH). The threshold was \$500,000 from 1992 through 2002 and is currently \$1 million. The information in this presentation only includes spending officially reported to MDH; however, we routinely track health care capital expenditure information reported elsewhere.



# Contact and Other Information

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HEP Home Page: [www.health.state.mn.us/healtheconomics](http://www.health.state.mn.us/healtheconomics)

Health Care Market Statistics:

<http://www.health.state.mn.us/data/economics/chartbook>