Advising the Congress on Medicare issues

Hospital construction trends

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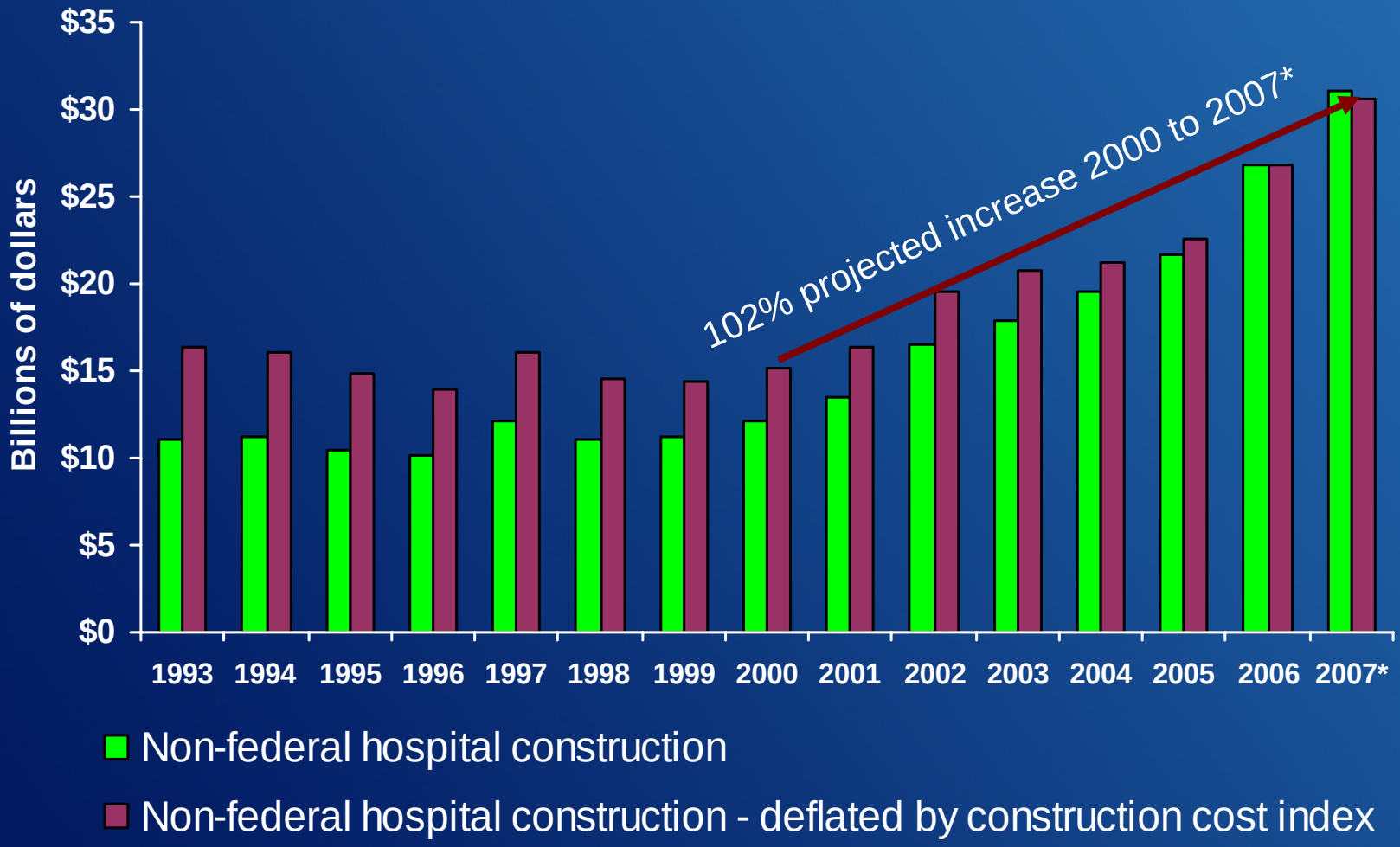
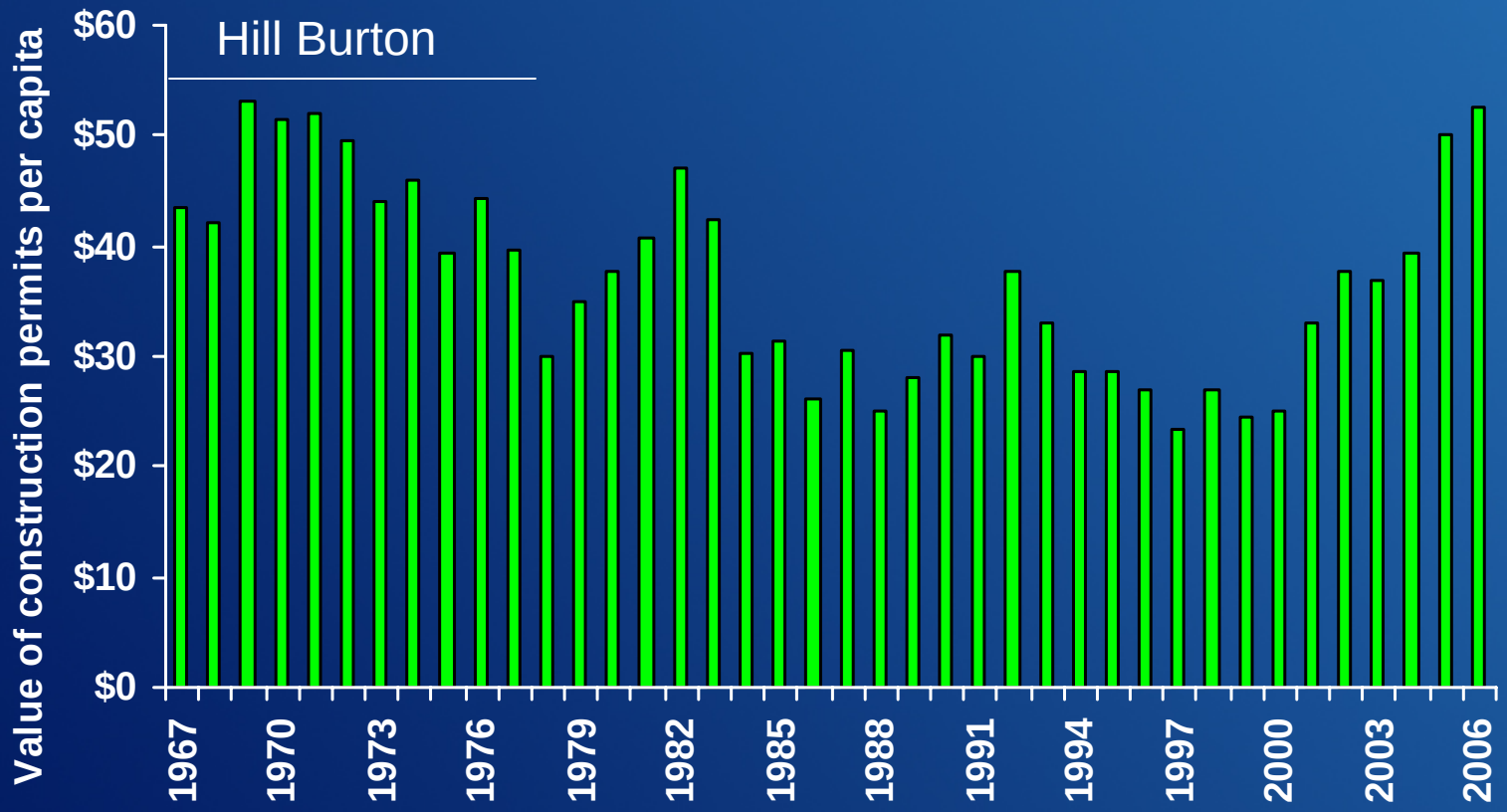
Non-federal hospital construction

(including partially completed structures)



Note: *2007 numbers are Census projections based on data through July of 2007
Source: Census Bureau construction, deflated by the McGraw Hill construction cost index

Value of hospital construction permits per capita highest level since 1969



Note: Construction permit values are all inflated to 2006 dollars
The hospital category of construction includes ASCs and Imaging centers
Source: Permits reported by McGraw Hill, deflated by the McGraw Hill construction cost index

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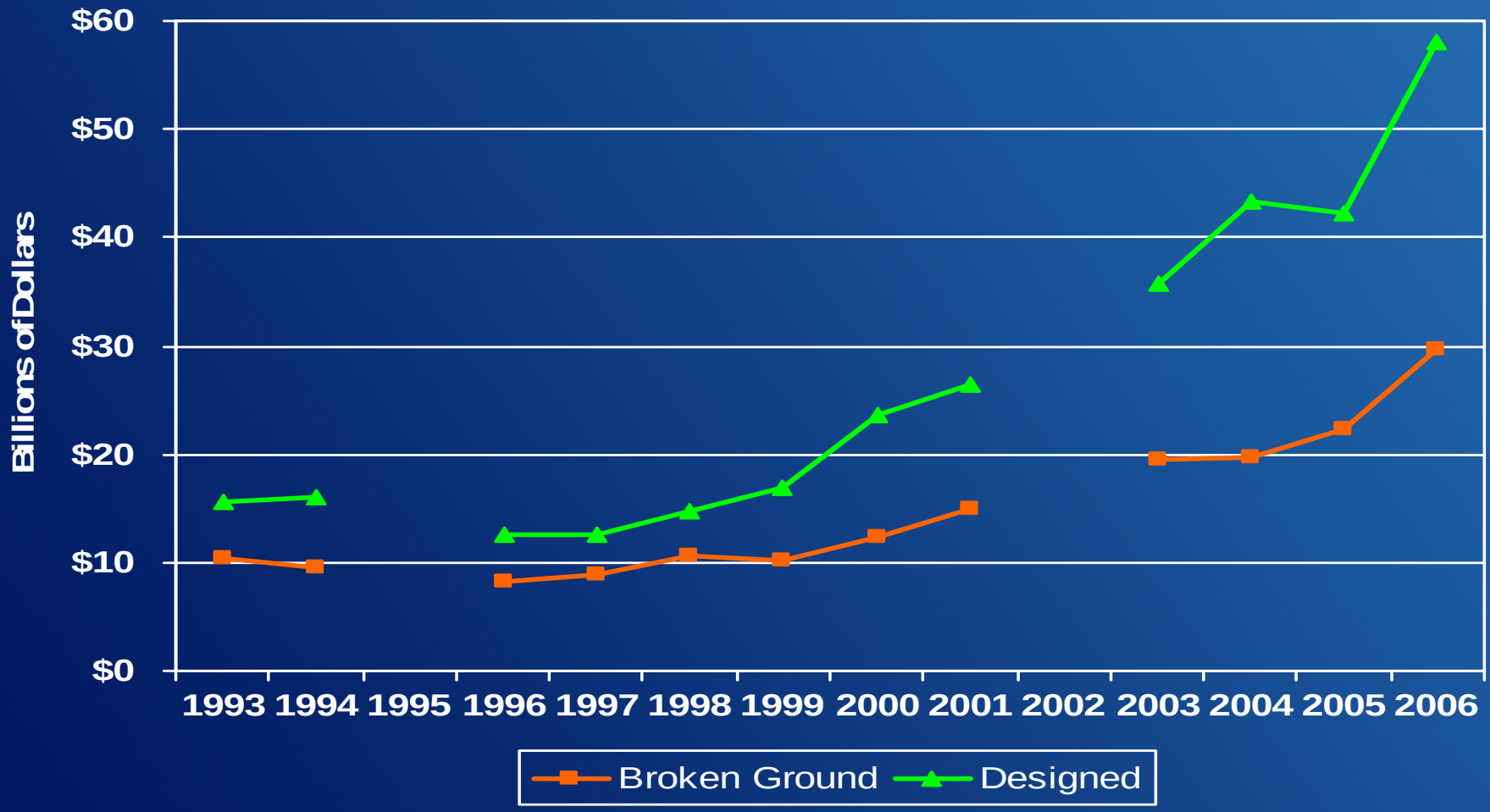
Hospital construction in the pipeline



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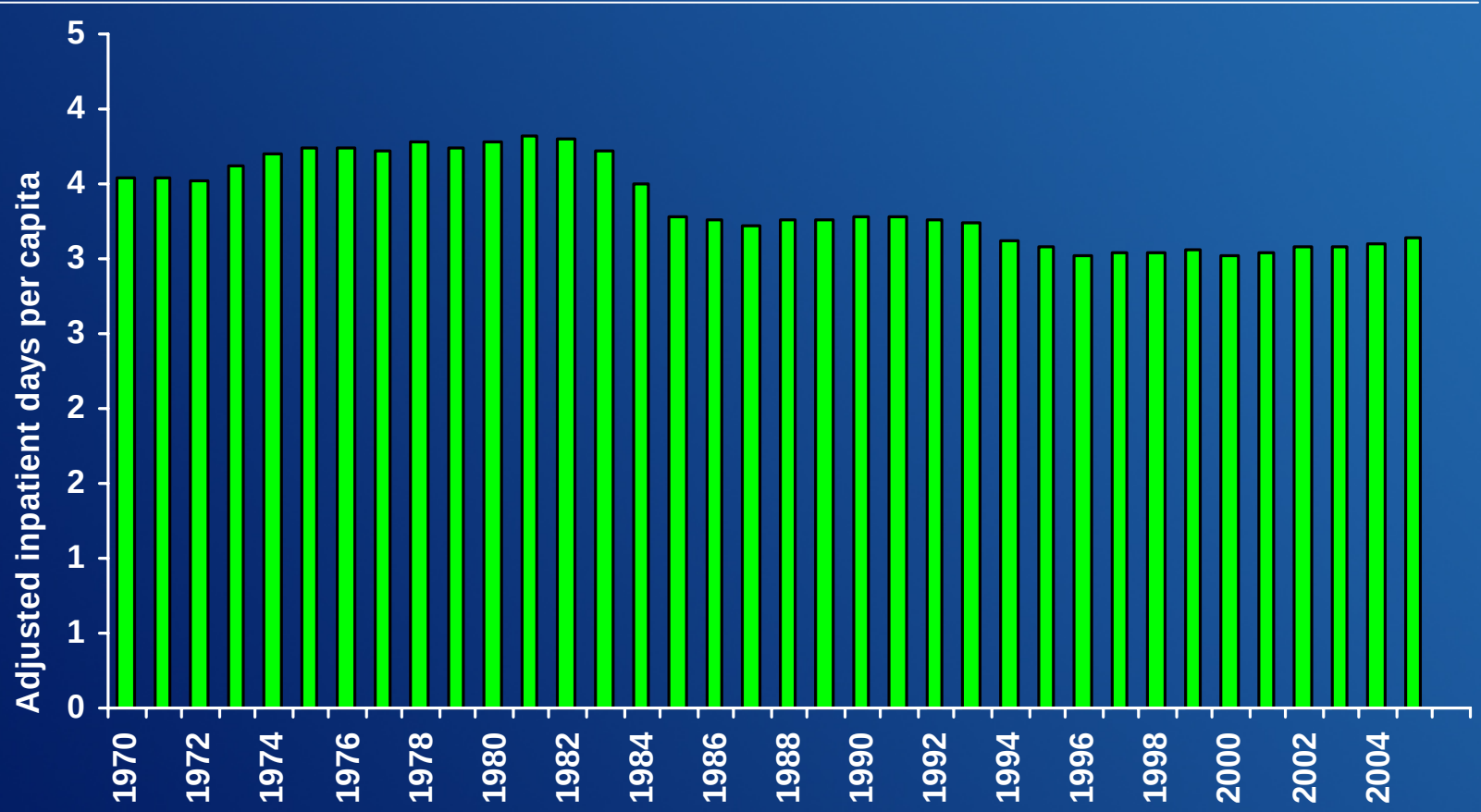
Source: Modern healthcare

Hospital use lower than in the 1970s



Note: Adjusted days include inpatient days and outpatient day equivalents
Source: 2007 AHA annual hospital survey, Census

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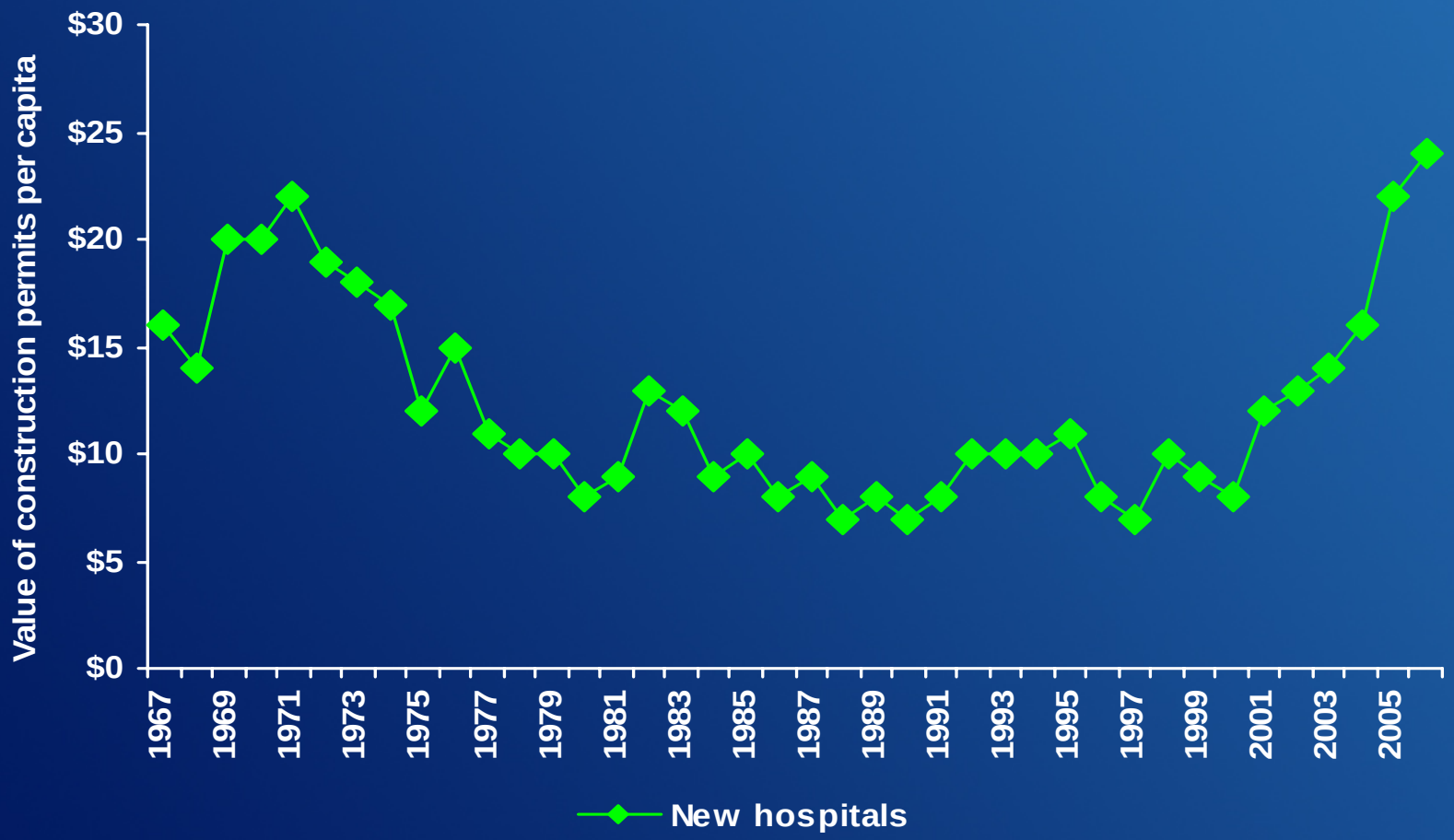
Robust new hospitals construction



Note: Construction permit values are all inflated to 2006 dollars
The hospital category of construction includes ASCs and Imaging centers
Source: Permits reported by McGraw Hill, deflated by the McGraw Hill construction cost index

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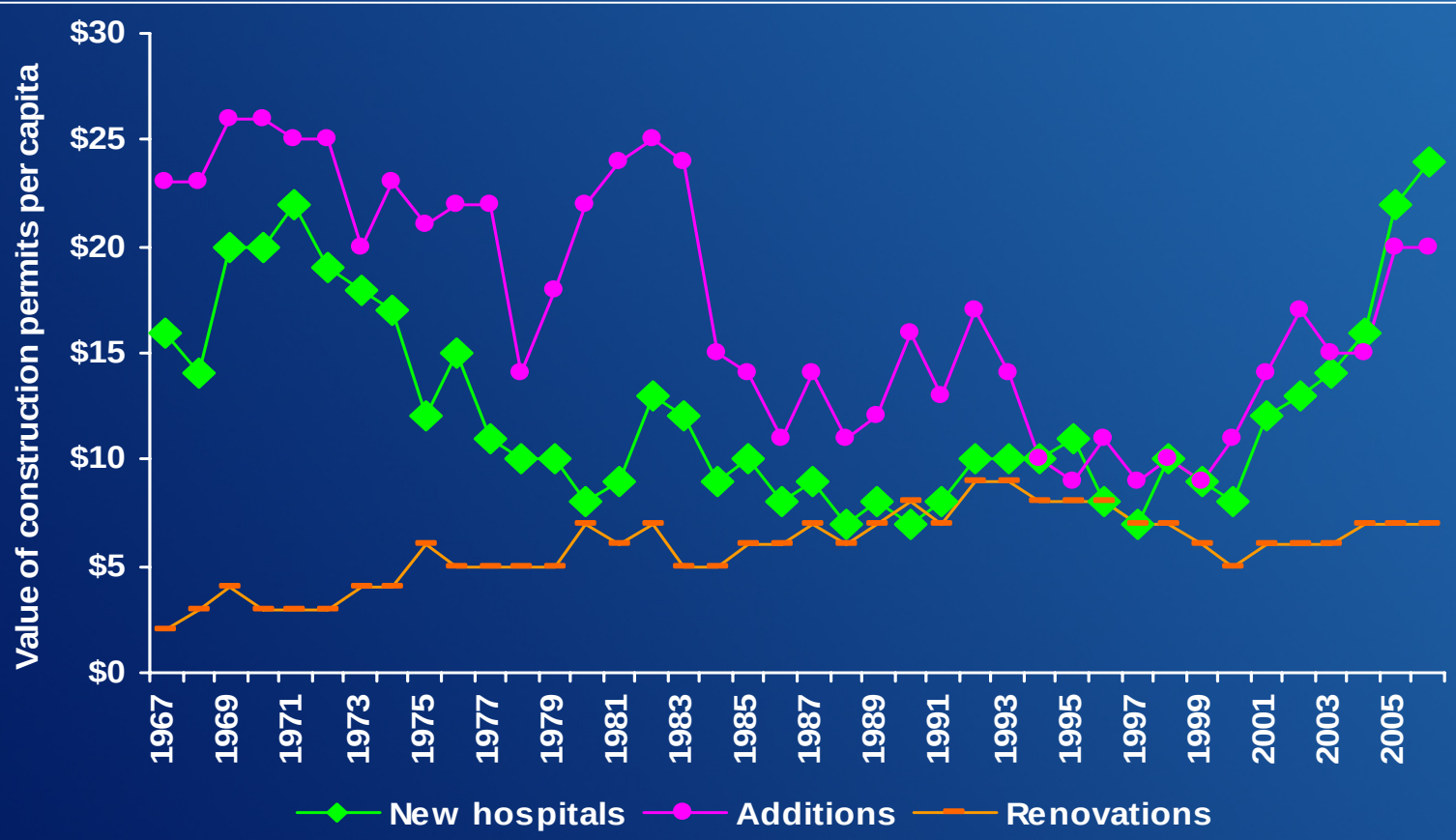
New hospitals and additions predominate



Note: Construction permit values are all inflated to 2006 dollars
The hospital category of construction includes ASCs and Imaging centers
Source: Permits reported by McGraw Hill, deflated by the McGraw Hill construction cost index

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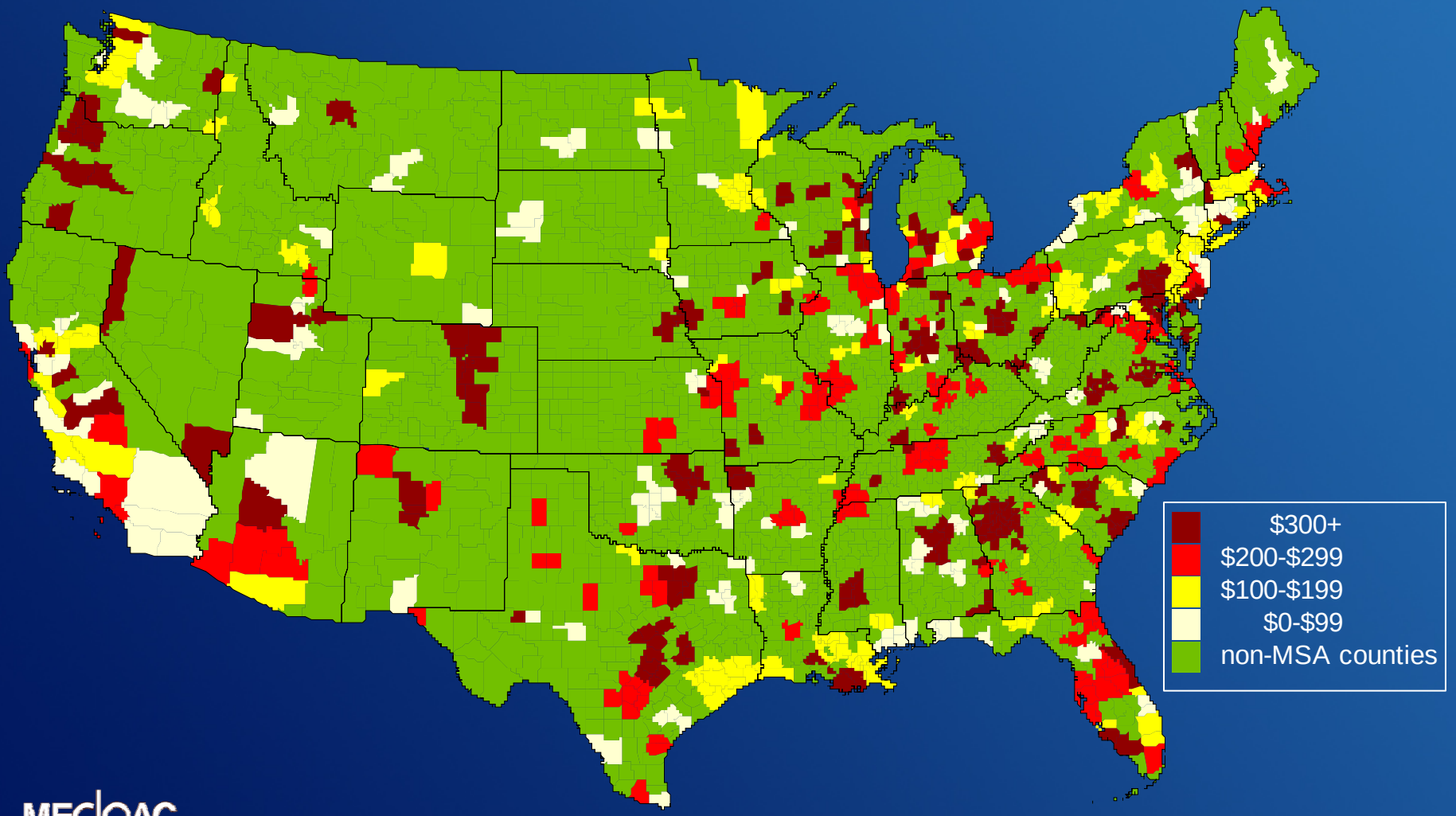
What is being built?

- More on new facilities and expansions, less for renovations
- Increased outpatient and inpatient capacity
- New services
  - Radiation therapy
  - Cath lab
  - Wound care
  - Cardiac surgery appears to be less of a focus
- Evidence based design

Where is construction greatest?
(Value of permits 2002-2006 per capita)



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Source: McGraw Hill

Population growth explains a small share of hospital construction growth

- In counties where the population grew quickly (12% or more from 1992 to 2002) construction grew quickly
  - Construction grew by 80% from the five year period ending in 2001 to the five year period ending in 2006
  - Construction levels were slightly higher than the counties' population would predict: the counties had 42% of the nation's population in 2002 and 45% of the construction from 2002 to 2006
- Even counties with slow population growth had strong construction growth
  - In Counties with less than 2 percent population growth, construction grew by over 30% from the five year period ending in 2001 to the five year period ending in 2006

Note: Construction refers to the value of construction permits per capita deflated by the McGraw Hill cost of construction index. Counties are limited to those with a general acute care hospital in 2002.
Source: Area resource file and McGraw hill construction permits

Profit-margins have an effect – but still explain a small share of regional variation

- In counties where hospitals have high all-payer profit margins (over 5%) construction grew quickly
  - Construction grew by over 90% from the five year period ending in 2001 to the five year period ending in 2006
  - Construction levels were slightly higher than the counties' population would predict: the counties had 34% of the nation's population in 2002 and 41% of the construction from 2002 to 2006
- Even counties where hospitals have low all-payer margins (-2% or less) had strong construction growth
  - In Counties with less than 2 percent population growth, construction grew by over 30% from the five year period ending in 2001 to the five year period ending in 2006

Note: Construction refers to the value of construction permits per capita deflated by the McGraw Hill cost of construction index. Counties are limited to those with a general acute care hospital in 2002.
Source: Area resource file and McGraw hill construction permits

Medicaid shares have an effect – but it is a small effect

- In counties with high Medicaid shares (over 14% of inpatient days) had slightly lower levels of construction than their population would indicate
  - These counties had 37% of the nation's population and 33% of the construction

Note: Construction refers to the value of construction permits per capita deflated by the McGraw Hill cost of construction index. Counties are limited to those with a general acute care hospital in 2002.
Source: Area resource file and McGraw hill construction permits

What factors are driving the construction?

Regression results

- Faster population growth → more construction
- Higher hospital margins → more construction
  - Non-Medicare margins are the main driver
- Higher Medicaid shares → less construction
- State certificate of need laws – no significant effect
- Age of existing facilities – quality of the data is poor
- While statistically significant, these factors explain little (5%) of the variation in hospital construction from one county to the next

Summary

- Access to capital is adequate to fuel a building boom
- All-time high in construction per capita
  - It may be a natural effect of increasing wealth per capita
  - It may also be a symptom of a medical arms race that leads to increase use of supply sensitive services
- Did Medicare policy drive the building boom?
  - Private-payer margins, interest rates, and the construction cycle are probably more significant factors
- Will the building boom drive Medicare payment policy?
  - Future Medicare costs may rise due to increased capital costs
  - Volumes may be driven higher