

# FACILITY CONDITION ASSESSMENT

**Board of Regents  
Facilities Committee  
September 11, 2008**

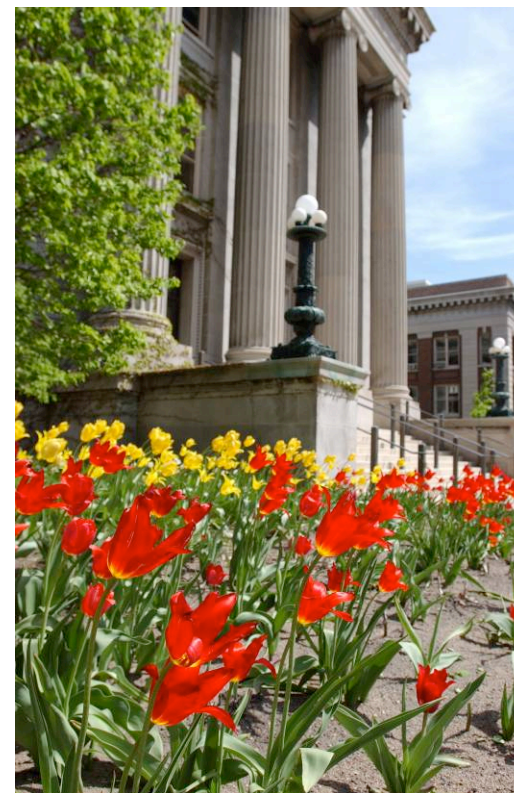


UNIVERSITY OF MINNESOTA

**Driven to Discover<sup>SM</sup>**

# Facility Condition Strategies

- Build new facilities
- Renovate existing spaces
- Demolish targeted buildings
- Utilize existing space
- Target individual system improvements



# Facilities Condition Assessment (FCA)

## Vision:

- The enterprise source of the most accurate and up-to-date information regarding existing buildings (building component conditions, fire safety, environmental safety, historical characteristics, past improvements, budgeted/planned capital projects, etc.) used to ensure effective operation of facilities and guide capital projects.
- Operationally:
  - An independent, inspection based review of building conditions
  - Report identifies and prioritizes needs for facilities renewal over the next ten years
  - Database provides a tool for accessing and utilizing information
  - Information used to measure long term facilities condition against established metrics and peers







# Background: System-wide Facilities

- 28 Million gross square feet
- 5 Unique campuses
- 7 Research and outreach centers
- Extension services



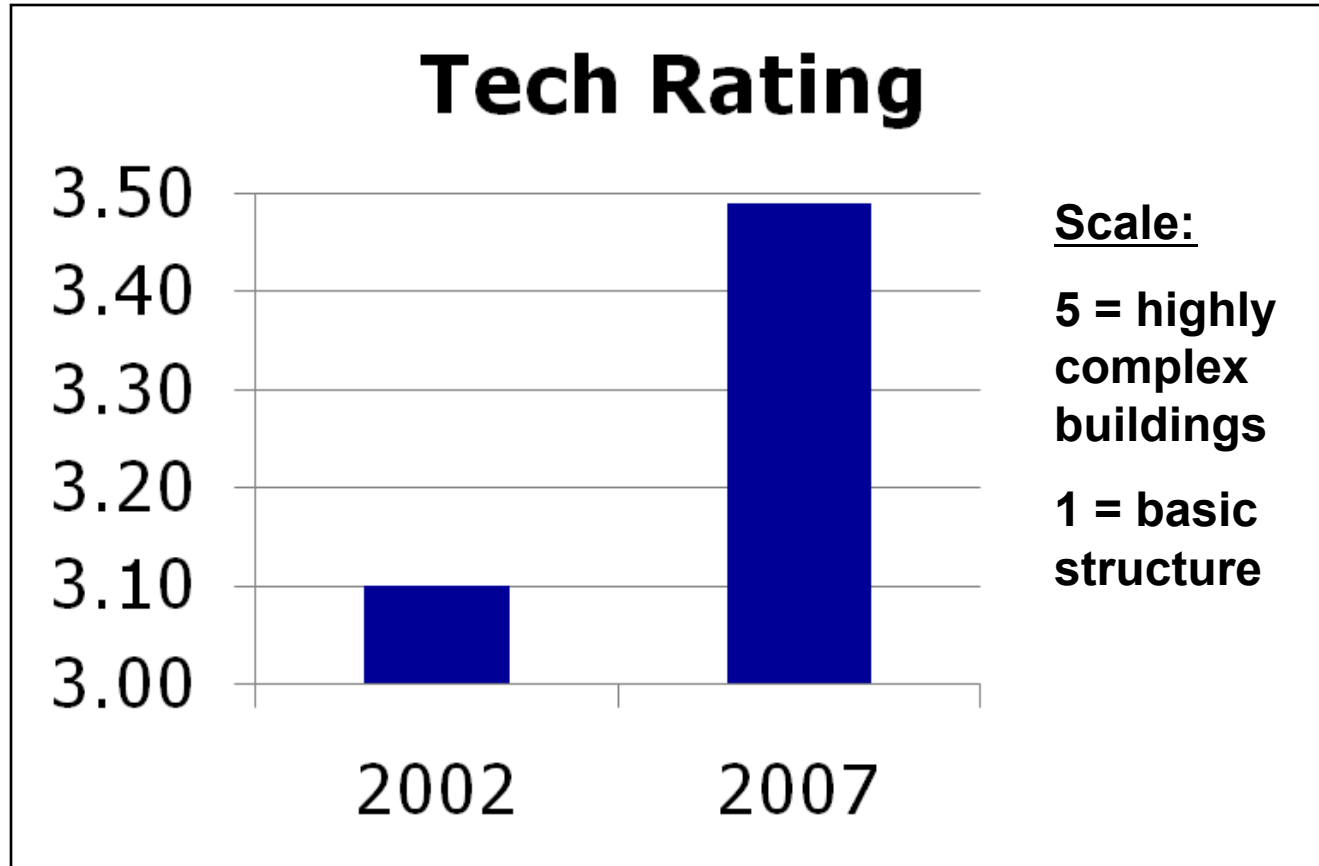
# Background: Twin Cities Facilities

- 23 Million Gross Square Feet
- Unique campus programs
- Historical buildings
- Technical facilities



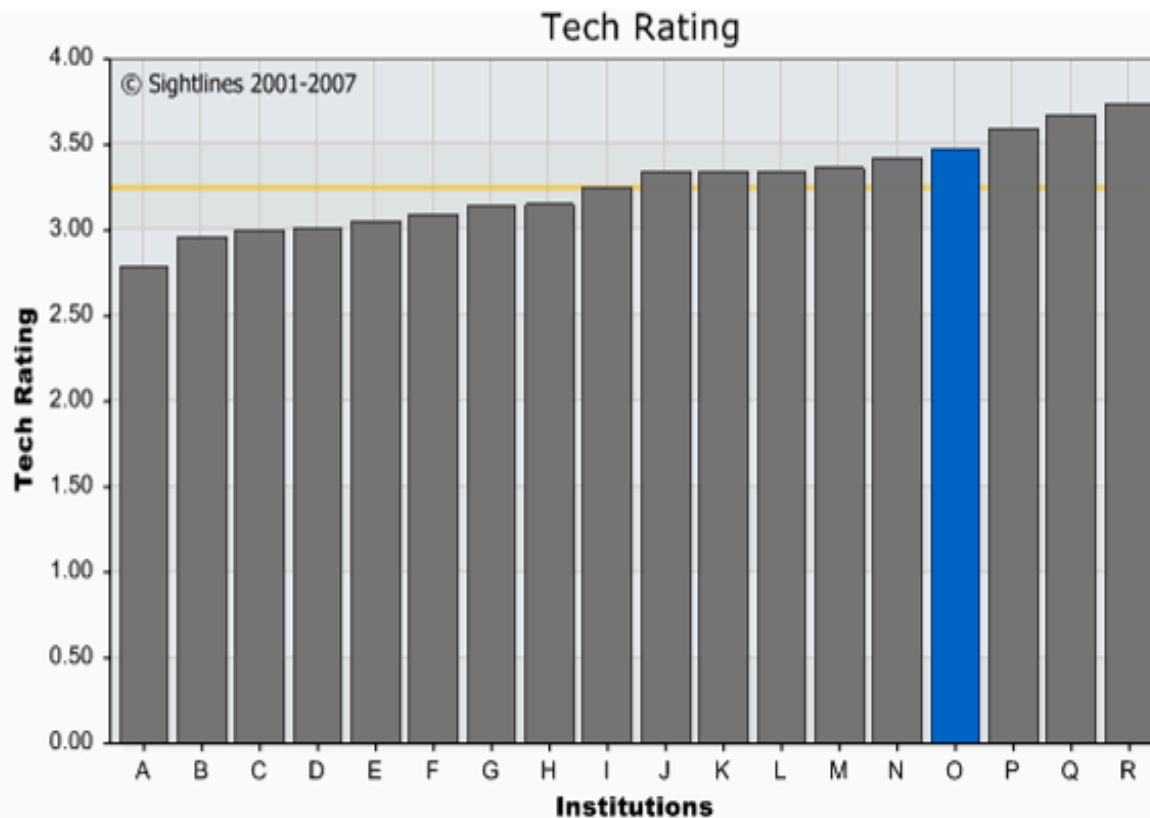
# University of MN Technical Rating

Complexity of buildings has increased 12% in the last 5 years.



# University of MN Technical Rating

## Tech Rating: Comparison to Peer Group



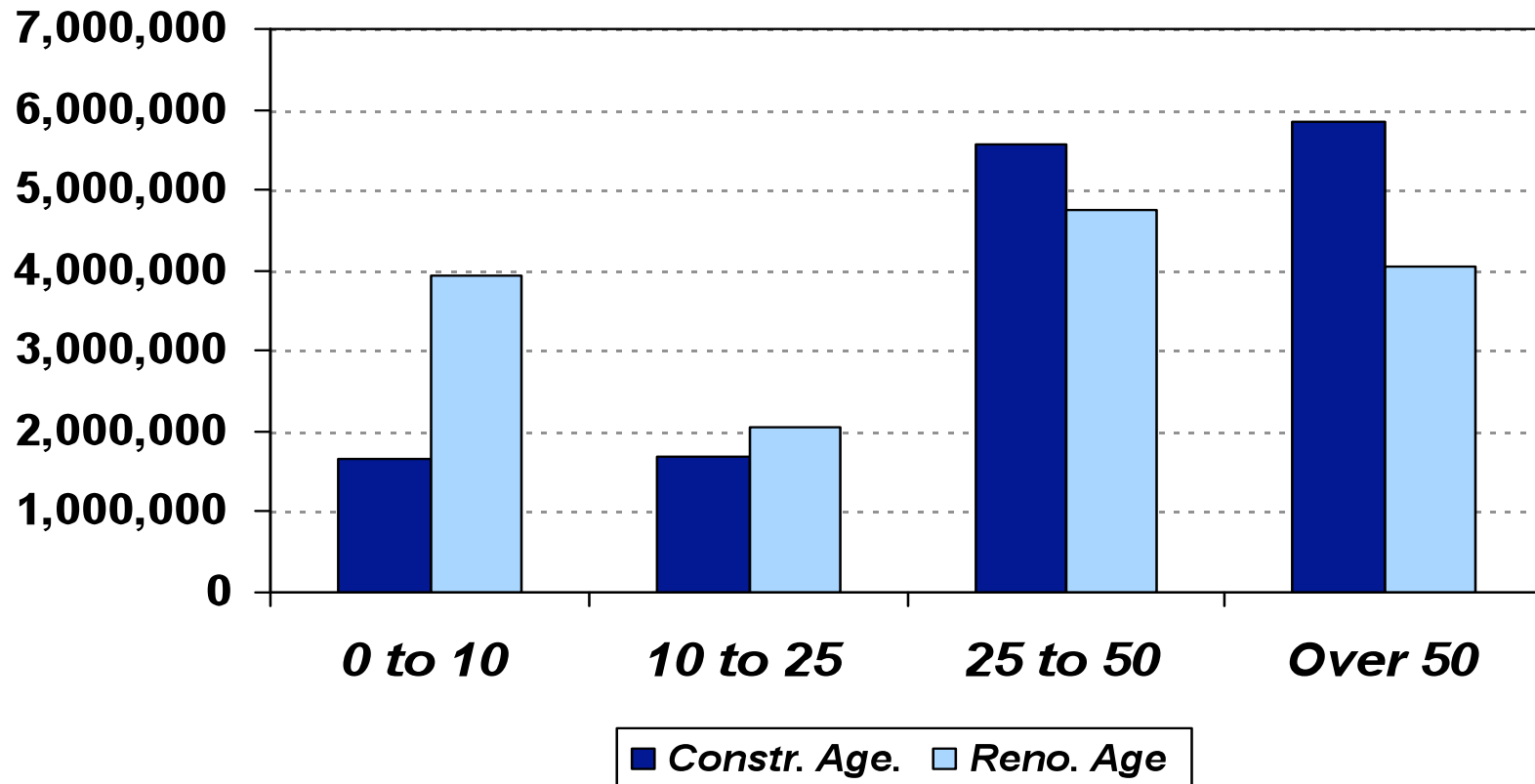
Institutions shown in order of increasing TechRating

Institution	Location
Cornell University	Ithaca, NY
Georgetown University	Washington, DC
Georgia Institute of Technology	Atlanta, GA
Massachusetts Institute of Technology	Cambridge, MA
New York University	New York, NY
Northwestern University	Evanston, IL
Princeton University	Princeton, NJ
Purdue University	West Lafayette, IN
The Johns Hopkins University	Baltimore, MD
The Ohio State University	Columbus, OH
The Pennsylvania State University	State College, PA
University of Chicago	Chicago, IL
University of Illinois at Chicago	Chicago, IL
University of Michigan - Ann Arbor	Ann Arbor, MI
University of Missouri - Columbia	Columbia, MO

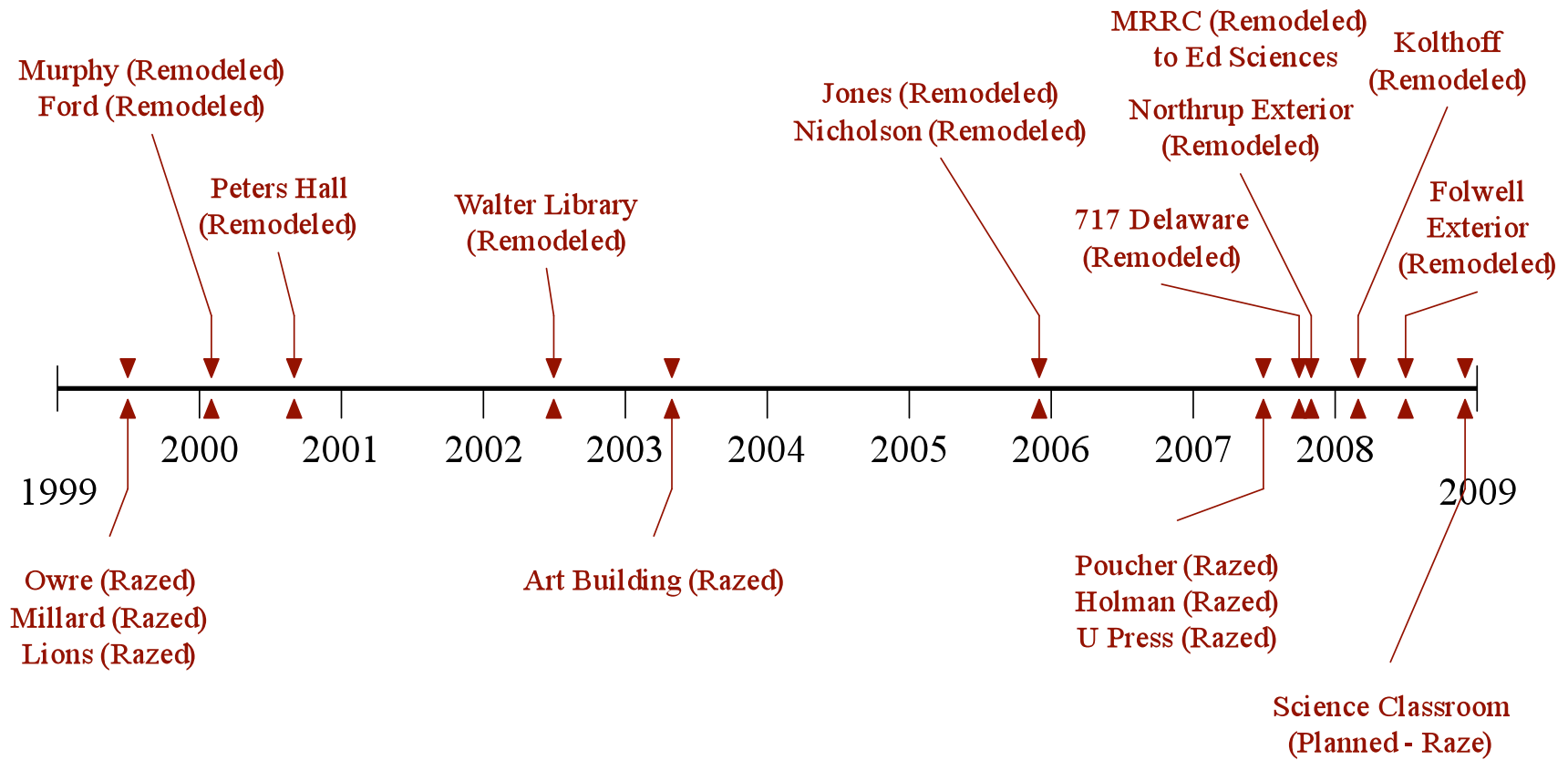


# University of MN Facility Portfolio By Age

Renovation Doubles the Newer Space



# Sample Capital Projects Addressing Facility Needs





# Process: Where we are

- Twin Cities building inspections - completed two full cycles
- Coordinate campus building inspections completed
- Infrastructure inspections completed



# Process: Where we are

- Validated and benchmarked using Sightlines national facilities benchmarking firm
- Linked FCA data to capital budget prioritization
- Tracked as a strategic metric
- Trained district project coordinators to maintain the data internally
- Engaged BRIDGE customer group





# Facilities Condition Assessment Updated 2008

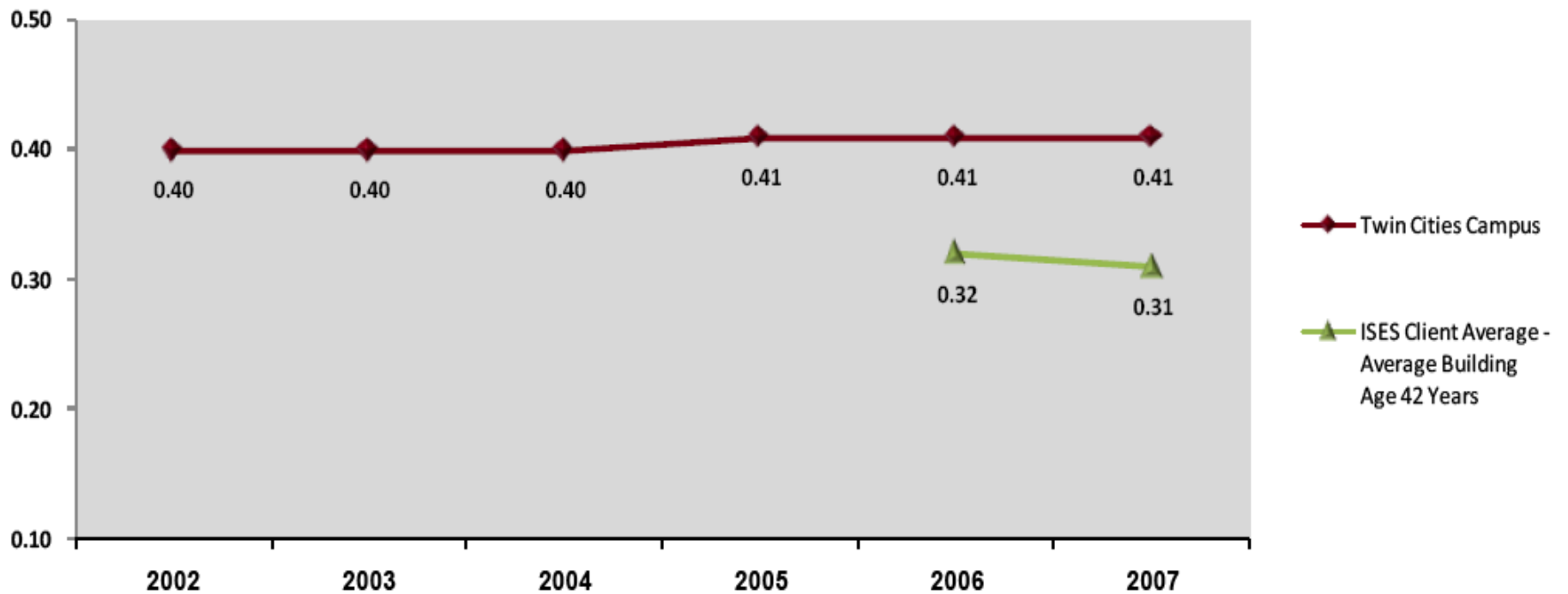
Campus	Building GSF	Estimated Replacement Value	Projected 10 – Year Needs	10 Year Needs/ Replacement Value = (FCNI)
Twin Cities	23,022,446	\$5,354,613,848	\$2,213,081,118	0.41
Duluth	1,875,845	\$ 489,267,872	\$ 169,416,414	0.35
Morris	921,923	\$ 207,452,021	\$ 79,344,118	0.38
Crookston	415,495	\$ 80,751,599	\$ 28,599,577	0.35
<b>Grand Totals</b>	<b>26,235,709*</b>	<b>\$6,132,085,340</b>	<b>\$2,490,441,227</b>	<b>0.40</b>

\* Excludes 1.9 Million GSF for Rochester Campus, Experiment Stations and Outreach Centers



# Facilities Condition Trend

Twin Cities Campus Facility Condition Needs Index 2002-2007, Including Intelligent Systems and Engineering Services (ISES) for 2006-2007



# Facilities Condition Assessment Updated 2008

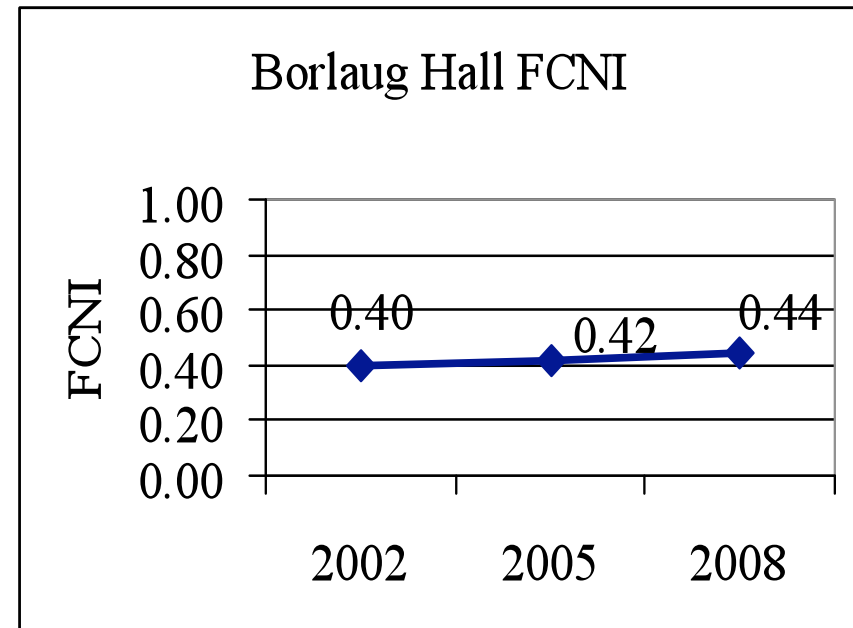
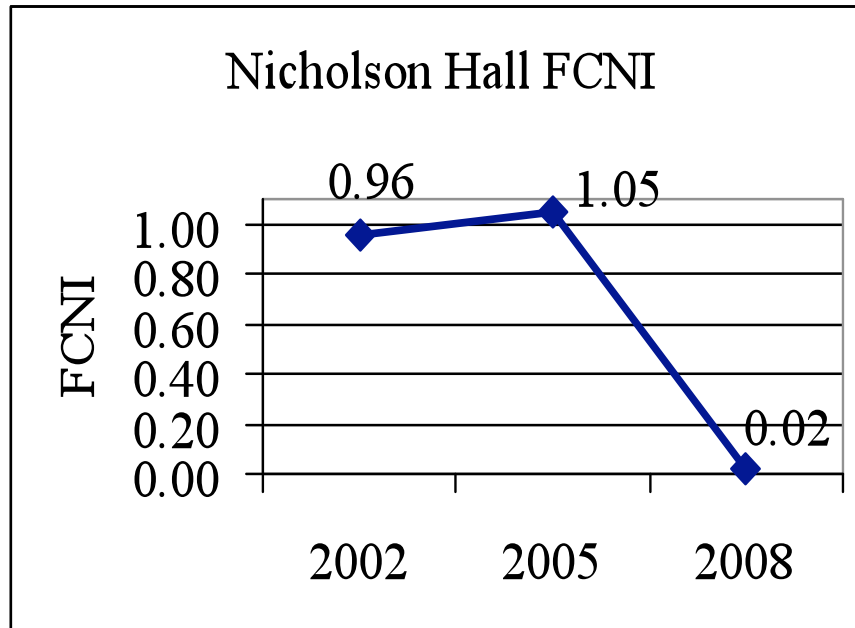
## DRAFT MODEL:

### Segmentation of FCA Data by Building Purpose (Twin Cities only)

Campus	Building GSF	Estimated Replacement Value	Projected 10 – Year Needs	10 Year Needs/ Replacement Value = (FCNI)
High-Tech Research	2,286,140	\$ 663,510,924	\$ 190,111,864	0.29
Clinic	1,388,672	\$ 419,837,990	\$ 255,374,142	0.61
Mixed Use (Educ/Inst/Resch)	7,431,650	\$1,993,048,148	\$ 876,331,224	0.44
Office/Admin Support	2,423,788	\$ 681,708,905	\$ 396,675,381	0.58
Venue/Specialty	2,492,911	\$ 491,923,093	\$ 165,375,975	0.34
Residential Housing	1,927,965	\$ 426,156,353	\$ 227,680,748	0.53
Other	4,684,070	\$ 625,410,235	\$ 100,682,119	0.16
<b>Grand Totals</b>	<b>23,022,446</b>	<b>\$5,354,613,848</b>	<b>\$2,213,081,118</b>	<b>0.41</b>



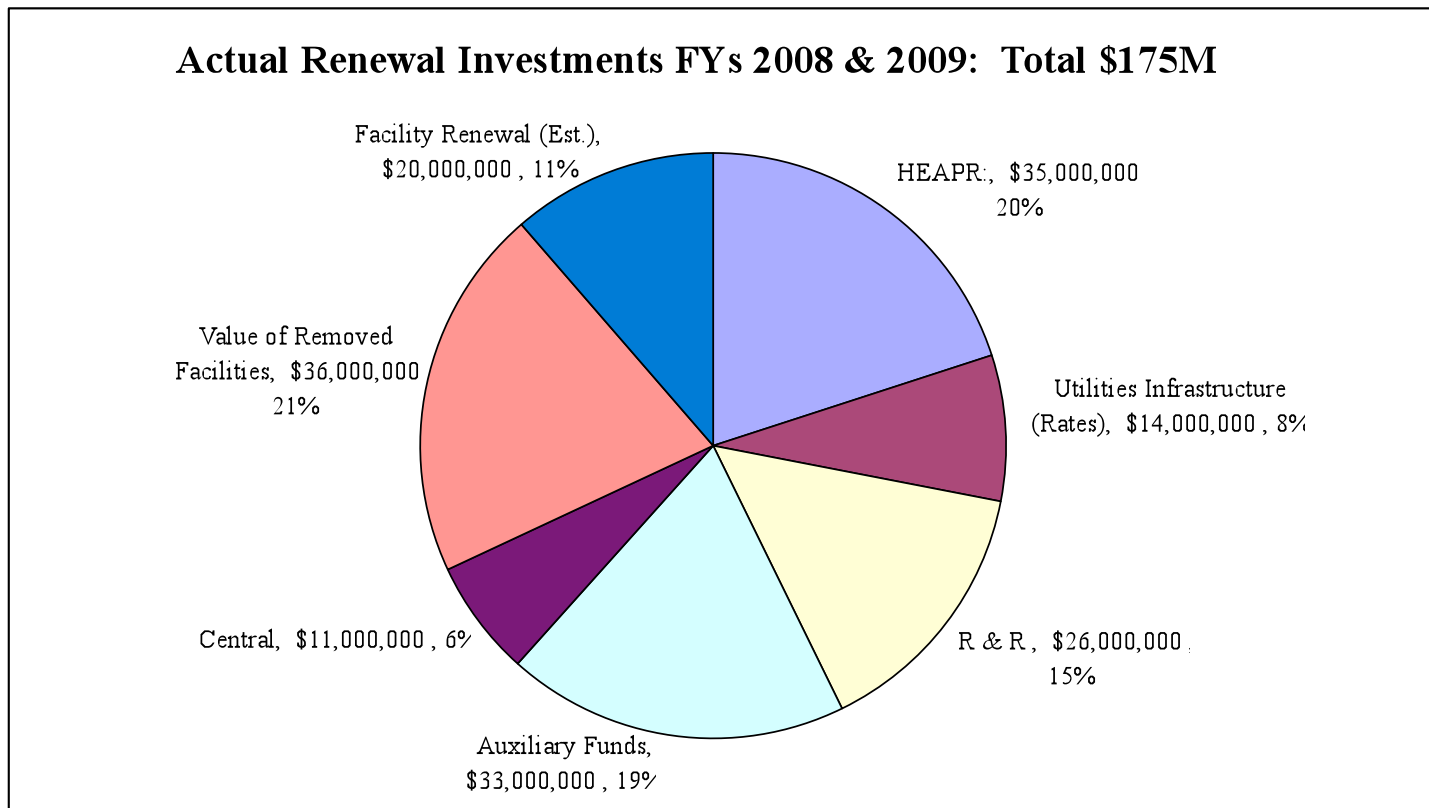
# Sample FCNI by Building



# Capital Need Exceeds Available Funding

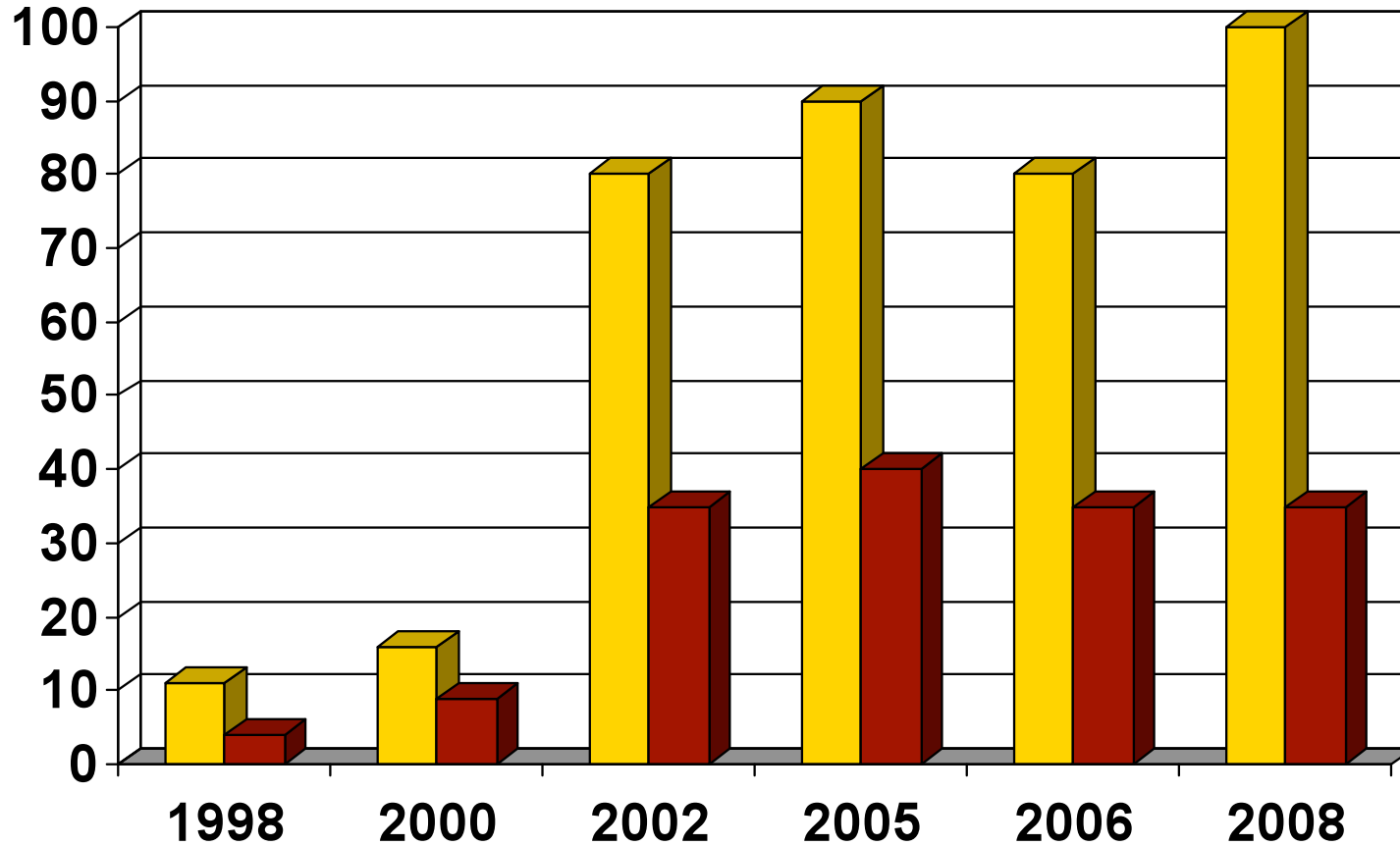
**Required Capital to Maintain .41 FCNI Ratio: \$160 Million per year**

**Actual Funding (average over the last 2 years): \$88 Million per year**

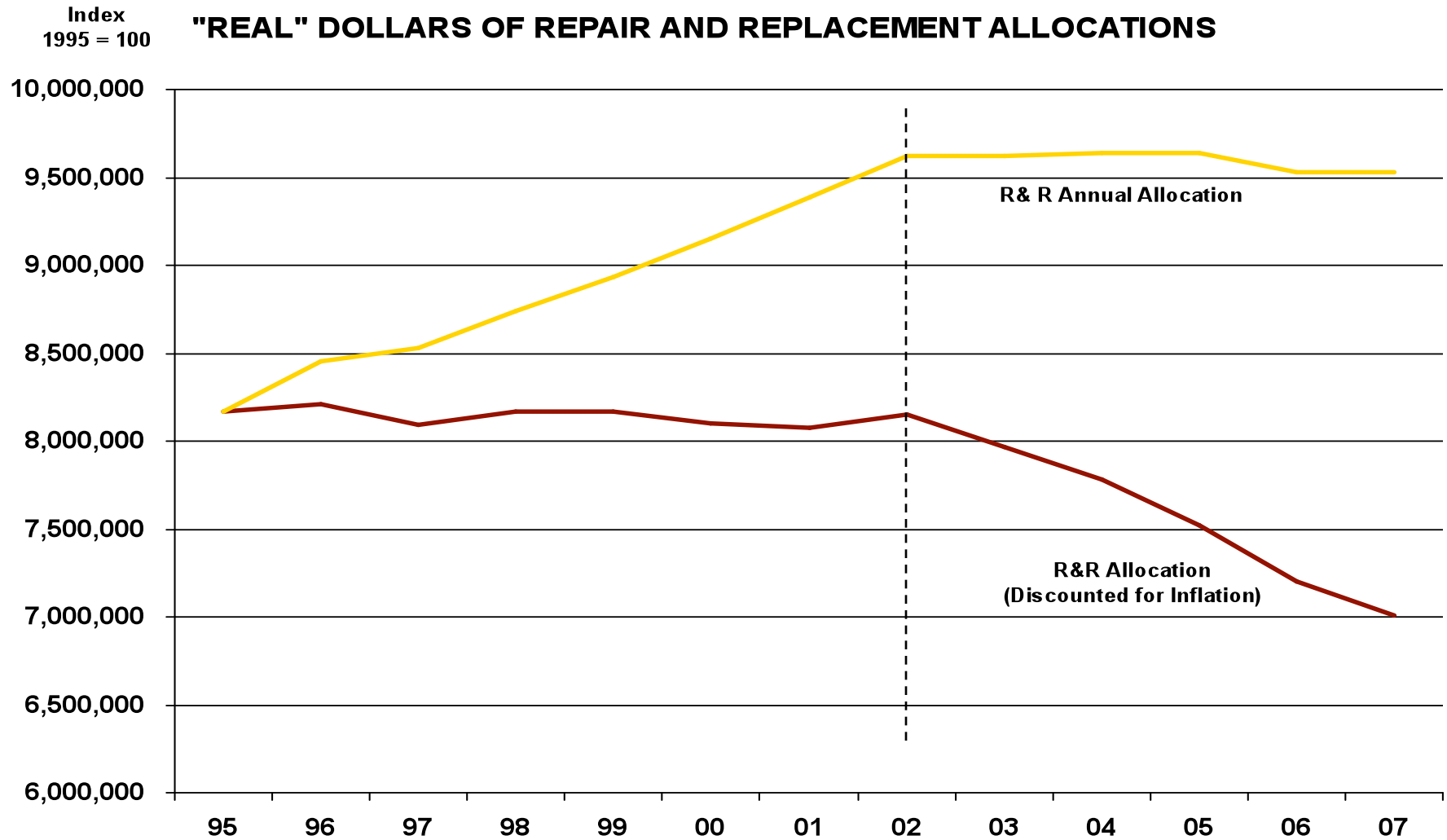


# HEAPR Appropriation History (System-wide)

\$ Millions



# Capital Need Exceeds Available Funding



# How have we maintained the current FCNI ratio in spite of a funding gap?

- Adding new buildings
  - Increases the average condition
- Extending the useful life of buildings through good maintenance
  - Pushes the projected needs further into the future
- Tearing down targeted buildings
  - Reduces the total project need



# Continuing Strategies to Address Facility Needs

- Clearly identify and understand facility needs by using multiple sources of information
- Engage departments and customers to use FCA information to support capital and program needs
- Use FCA data to transform FM into a more strategic organization
- Target available resources carefully to mitigate risks and support academic priorities



# Future Strategies to Address Facility Needs

- Create groups of buildings that are of similar strategic value that are managed as a whole (high-tech research, classroom, office, high impact)
- Identify criteria to prioritize buildings/systems within building groups.
- Complete thorough inspections of prioritized buildings/systems. Reduce inspection frequency of low priority buildings.
- Set targets for each type of space
- Identify funding necessary to meet targets (seek consistent funding streams)
- Allocate available funding in a consistent manor to meet targets

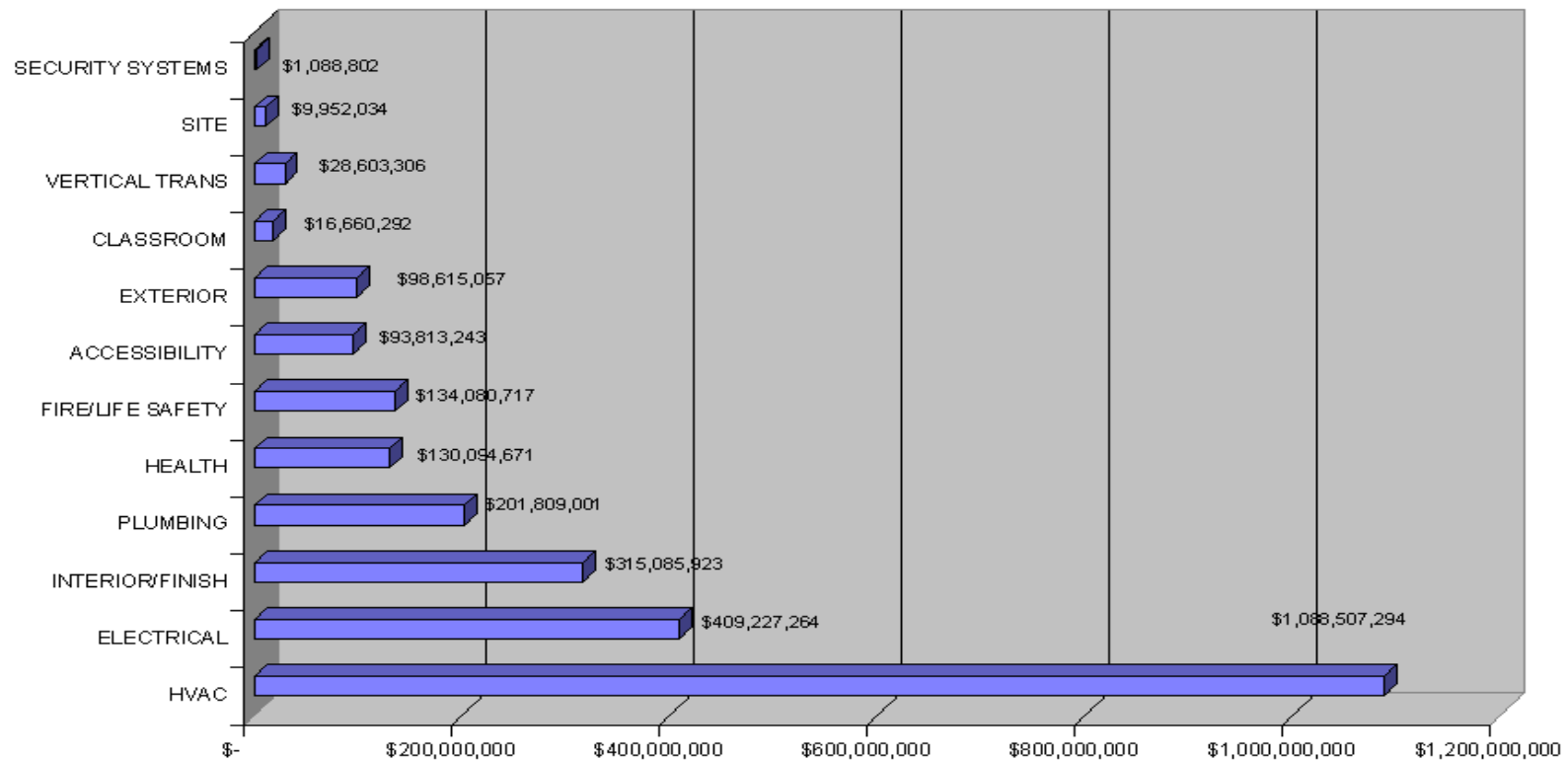


# Questions?



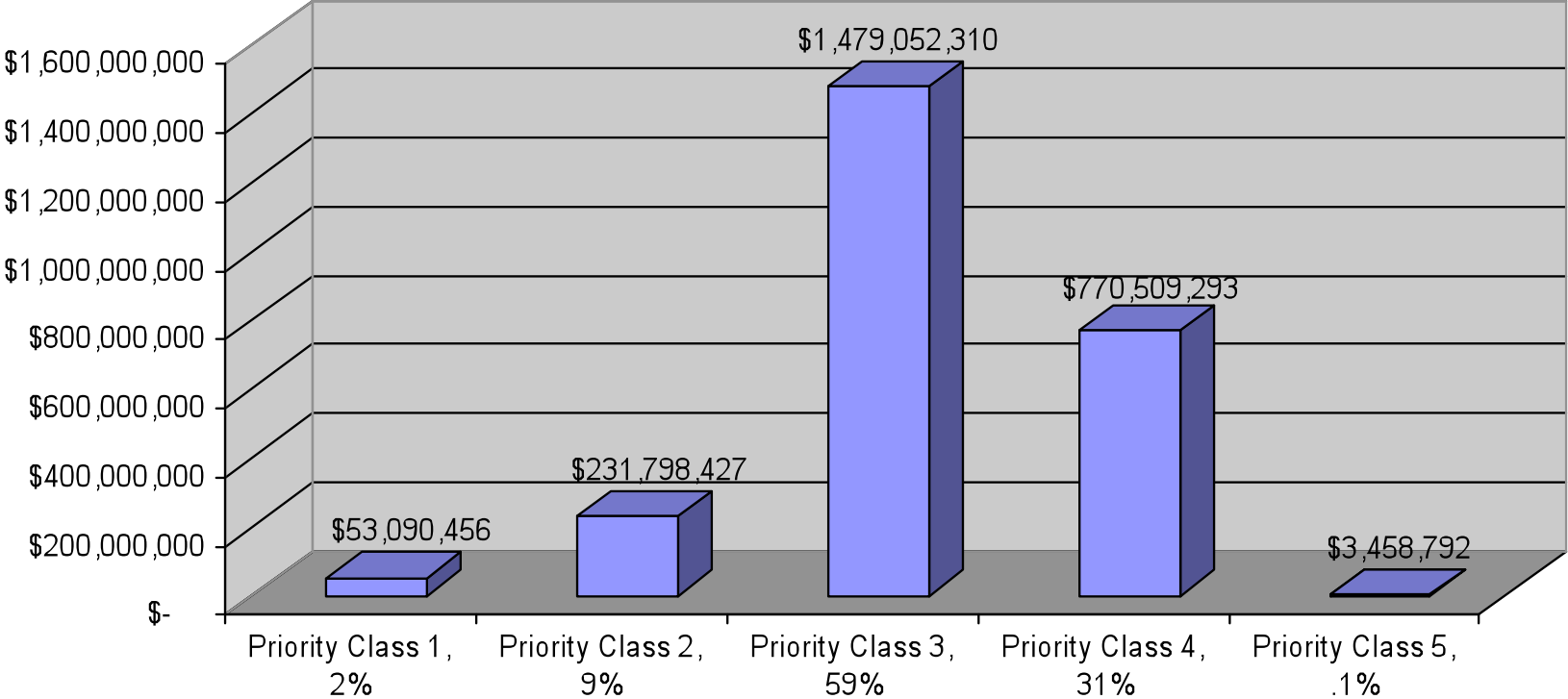
# Est. Facility Need by Project Type

## System Wide Forecasted Needs



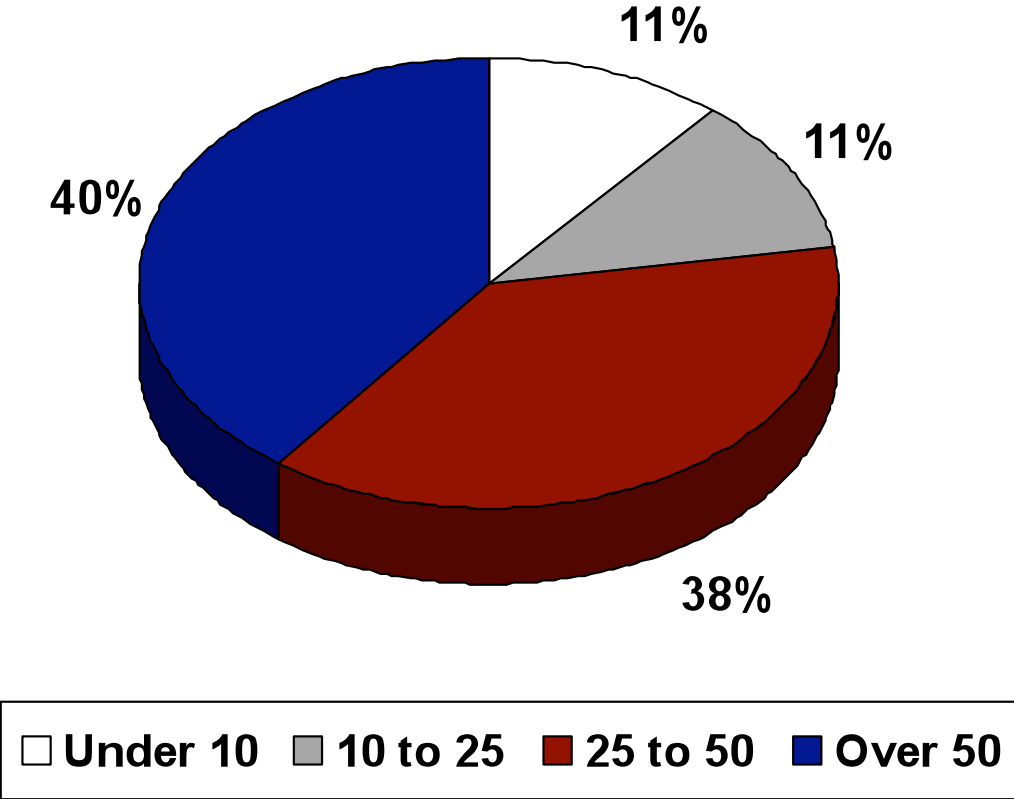
# Building Deficiencies By Priority Class

System Wide FCA Forecasted Needs



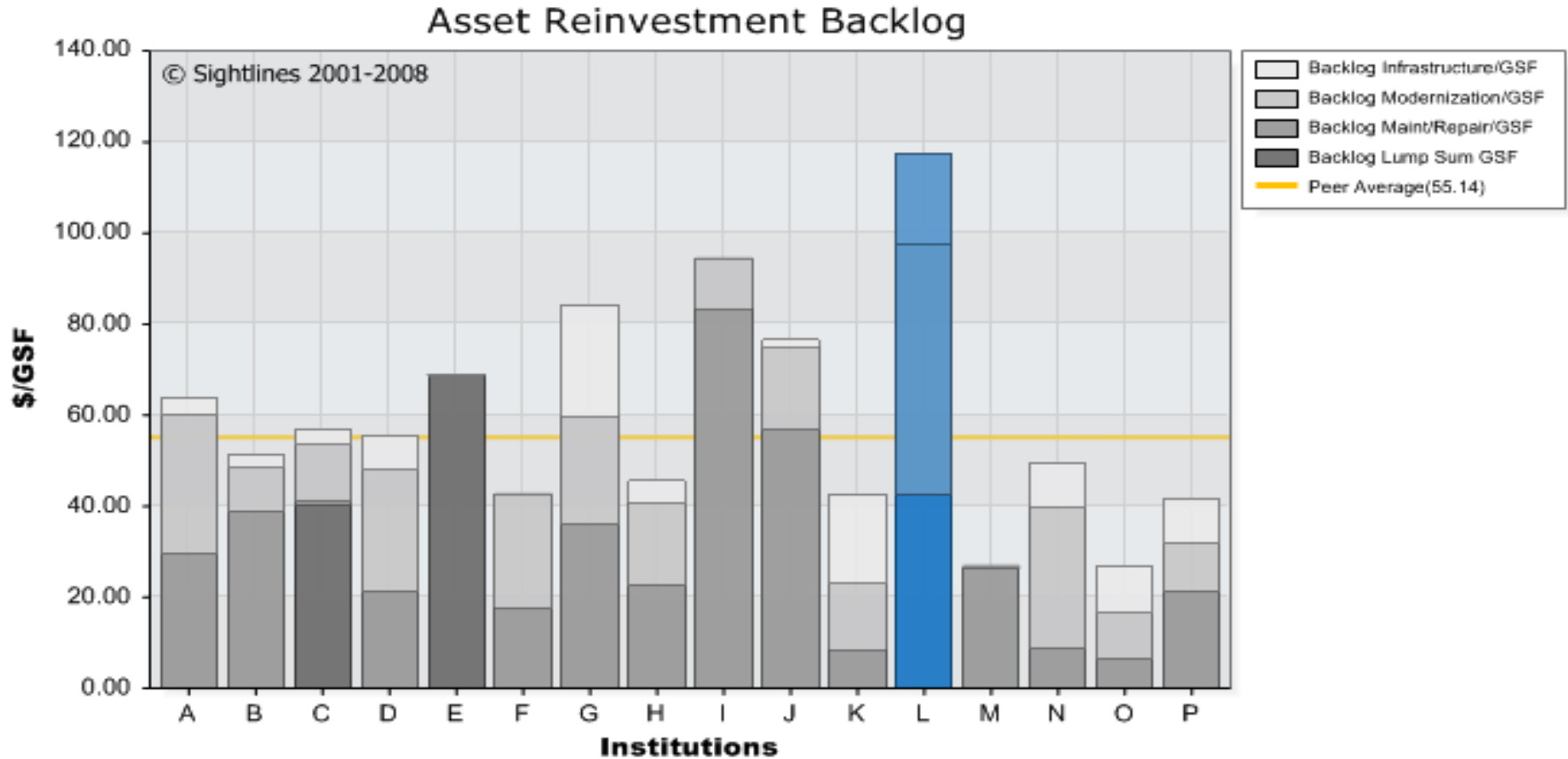
# University of MN Facility Portfolio By Age

Campus Age-Supported GSF



# Benchmark: Total Capital Need

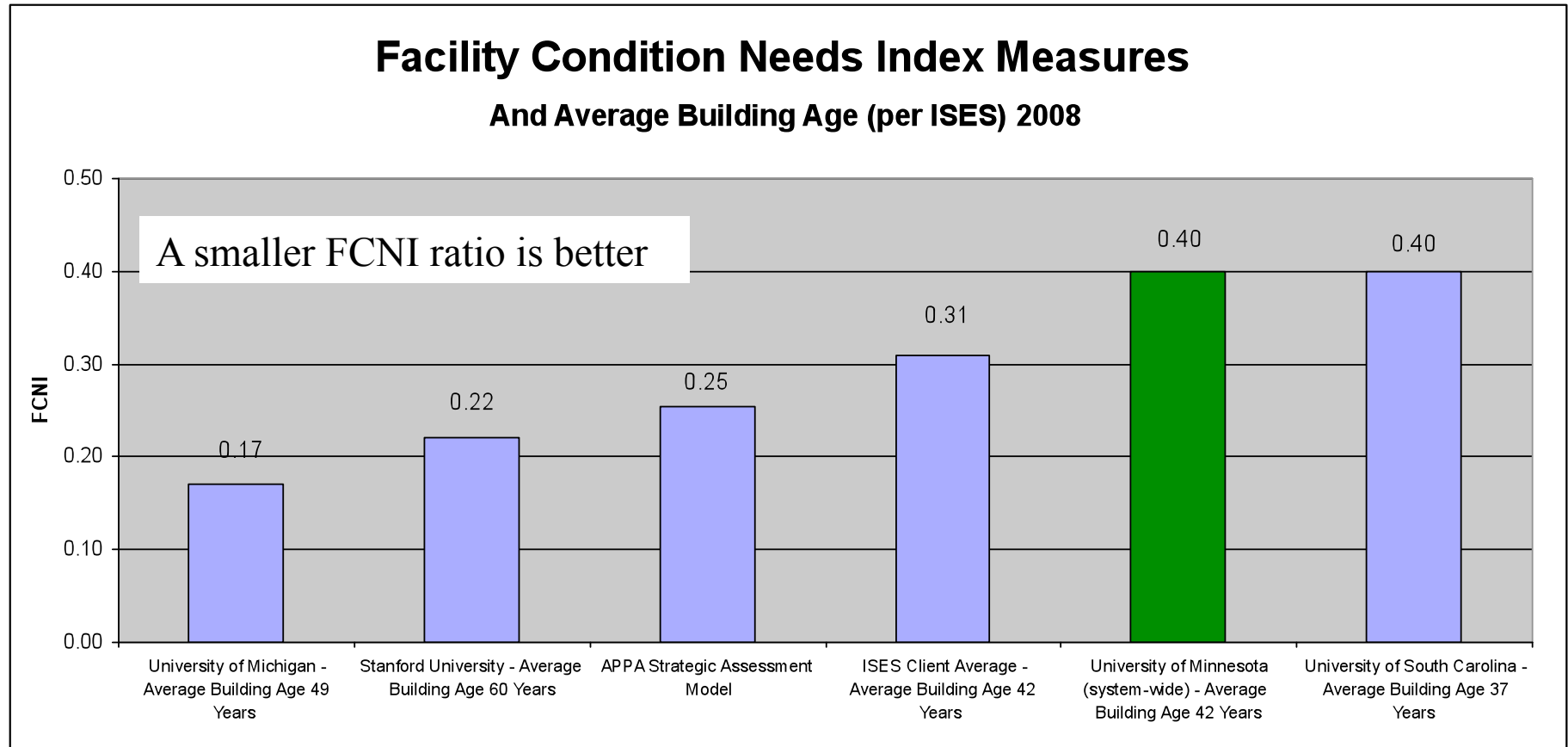
(Total Need / Supported Square Feet)



Institutions shown in order of increasing TechRating



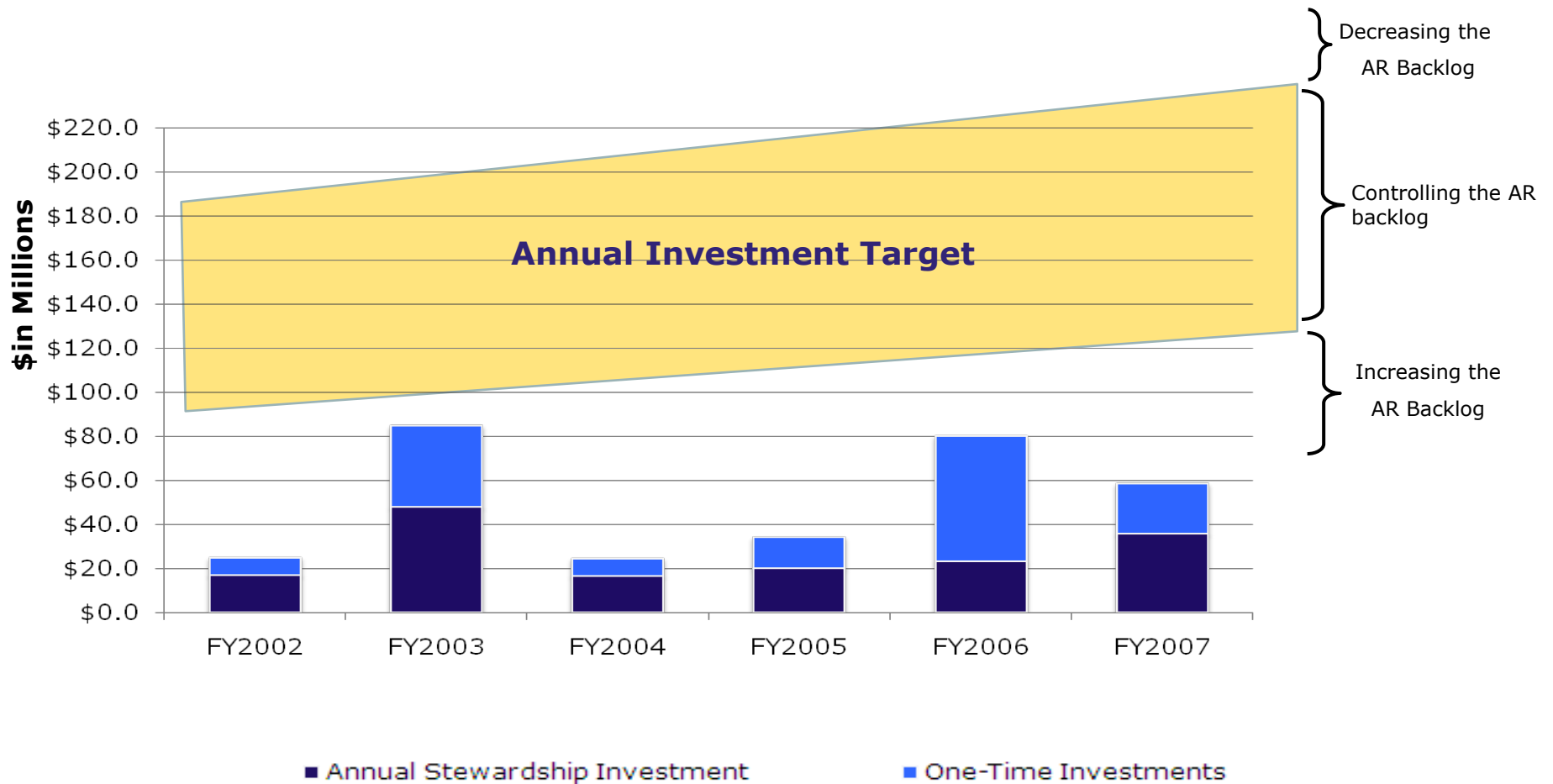
# Benchmark: Facility Condition Needs Index (10 Year Facility Need / Replacement Value)





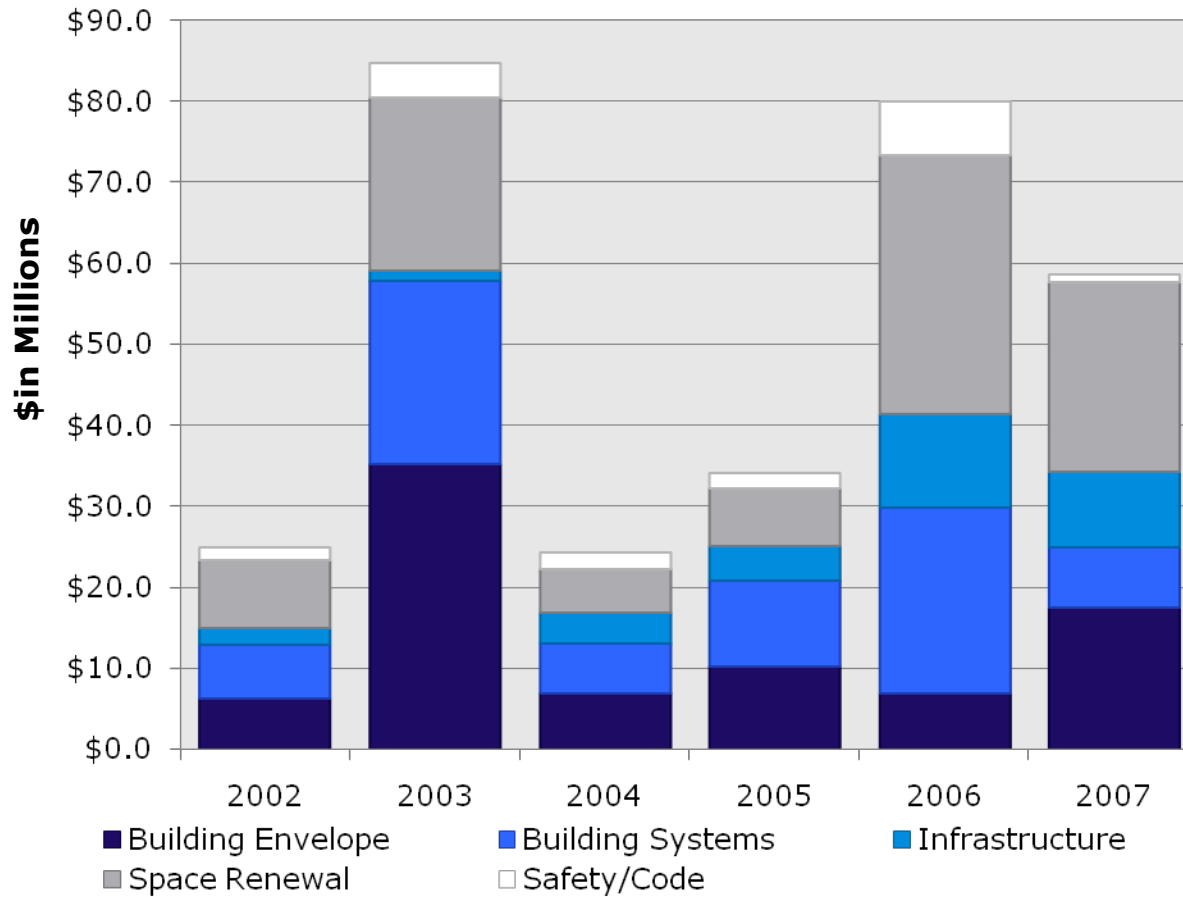
# Total Capital Investment Over Time

Approximately \$202 Million has been deferred since FY2002



# Although Spending Less, The Mix of Projects is Well Balanced

## Total Project Spending by Category



## Composite 6 Years of Spending

