



building portfolio
solutions

Springfield Technical Community College

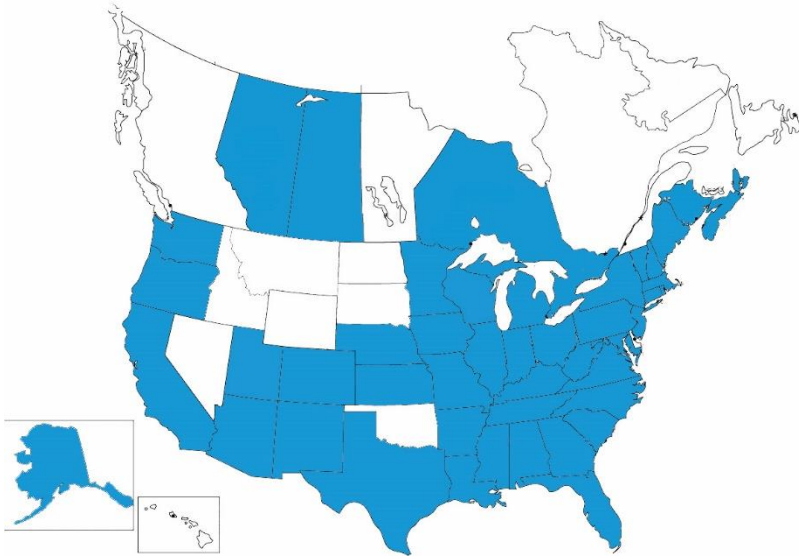
Presented by: Gayle Perez

March 2017

Wesleyan University
West Chester University
West Liberty University
West Virginia Health Science Center
West Virginia Institute of Technology
West Virginia School of Osteopathic
Medicine
West Virginia State University
West Virginia University
Western Connecticut State University
Western Oregon University
Westfield State University
Widener University
Williams College
Worcester Polytechnic Institute
Worcester State University
Xavier University

Who Partners with Sightlines?

Robust membership includes colleges, universities, consortiums and state systems



Serving the Nation's Leading Institutions:

- **70% of the Top 20 Colleges***
- **75% of the Top 20 Universities***
- **35 Flagship State Universities**
- **14 of the 14 Big 10 Institutions**
- **9 of the 12 Ivy Plus Institutions**

* U.S. News 2016 Rankings

Sightlines is proud to announce that:

- 450 colleges and universities are Sightlines clients including over 325 ROPA members.
- Consistently over 90% member retention rate
- We have clients in over 40 states, the District of Columbia and four Canadian provinces
- More than 125 new institutions became Sightlines members since 2013

Sightlines advises state systems in:

- Alaska
- California
- Florida
- Hawaii
- Maine
- Massachusetts
- Minnesota
- Mississippi
- Missouri
- Nebraska
- New Hampshire
- New Jersey
- Pennsylvania
- Texas

Review of the Building Portfolio Solutions Process



Goals and methodology

Inclusive

- The inventory is inclusive of the diverse knowledge of Facilities staff and existing facilities data

Credible

- The process is comprehensive and consistent in the identification and codification of projects

Flexible

- The inventory is flexible to changes in institutional priorities and renovation coordination

Affordable

- The plan will be cognizant of the finite availability of institutional resources

Sustainable

- The BPS should become an internal planning tool for the Facilities Services organization

Summary of Findings



- As noted in the ROPA+ analysis, Springfield Technical Community College is an aging campus with 87% of space over 25 years old.
- The Building Portfolio Analysis found Springfield Tech has \$314M of total Asset Reinvestment need over the next 10 years.
- \$262.4M of this need is critical and should be addressed within the next three years.
- The majority of Springfield's needs fall into the Interior Shell / Renovation category, as well as significant needs within HVAC systems.

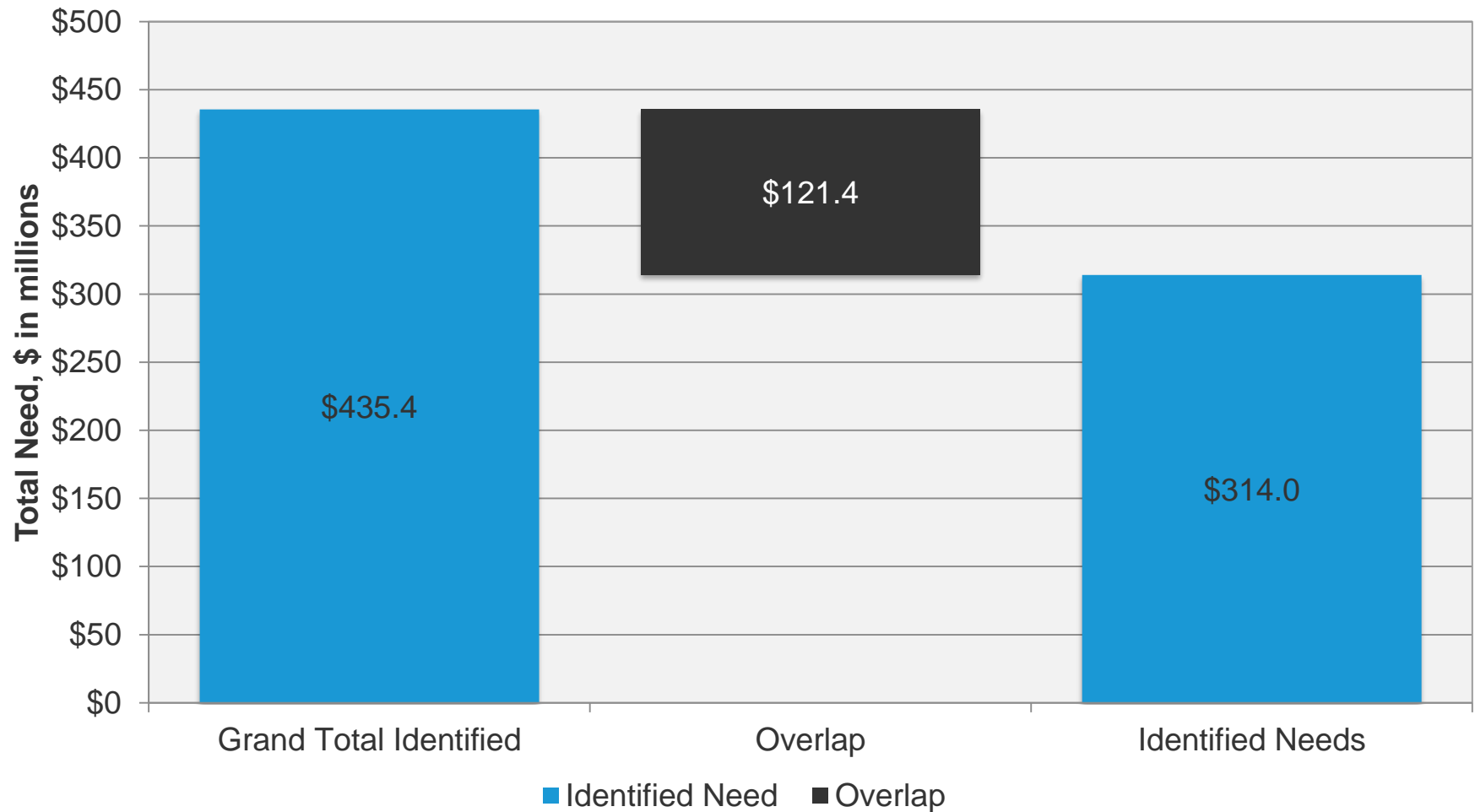
Identified Needs

Total Identified Needs



\$314.0M total identified need

Total Identified Needs



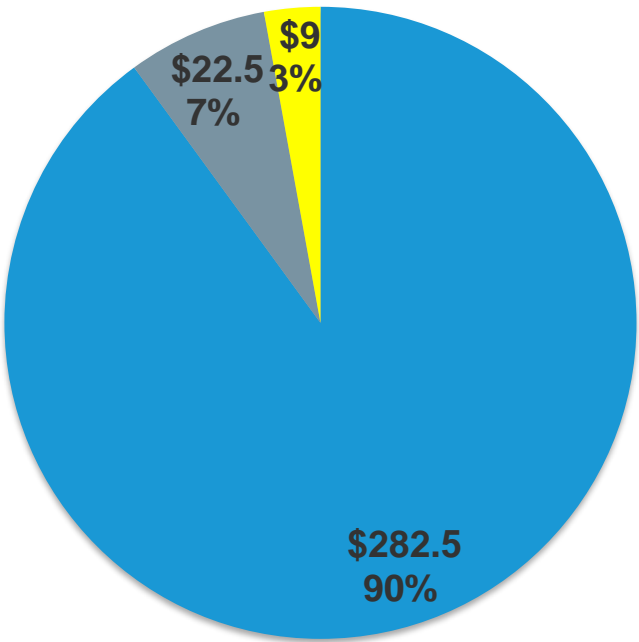
Identified Needs by Structure



Categorizing the \$314.0M in total campus needs

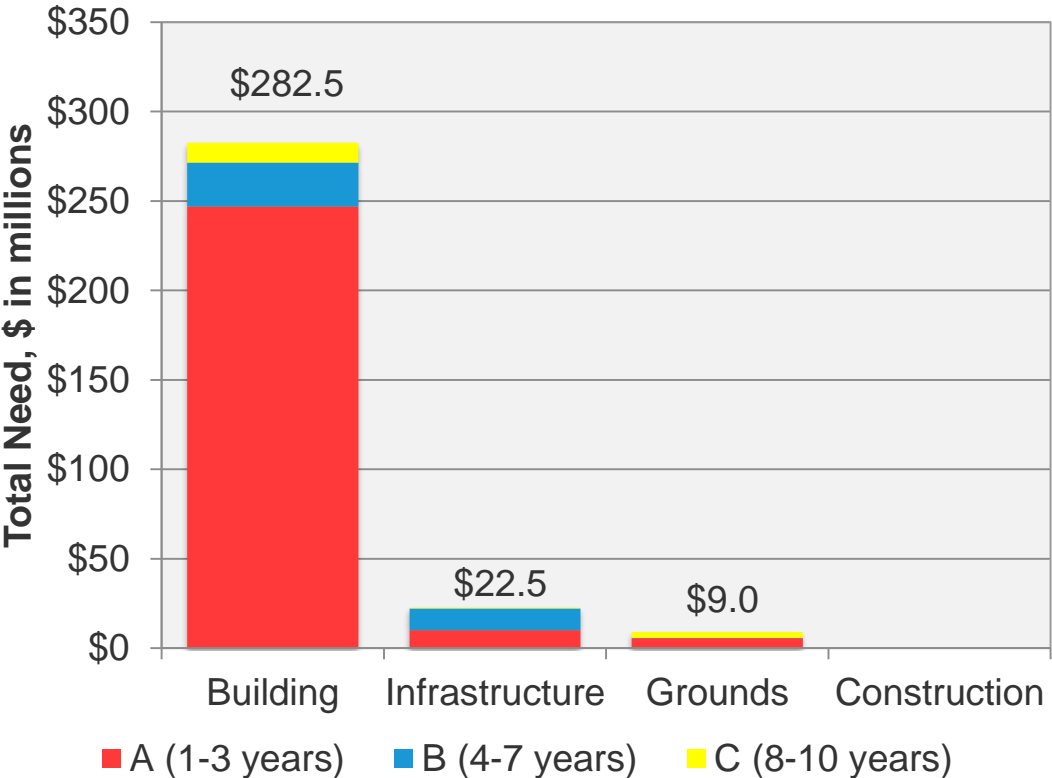
Total Needs by Structure

\$ in millions



- Building Needs
- Infrastructure
- Grounds Needs
- New Construction

Total Needs by Structure and Timeframe

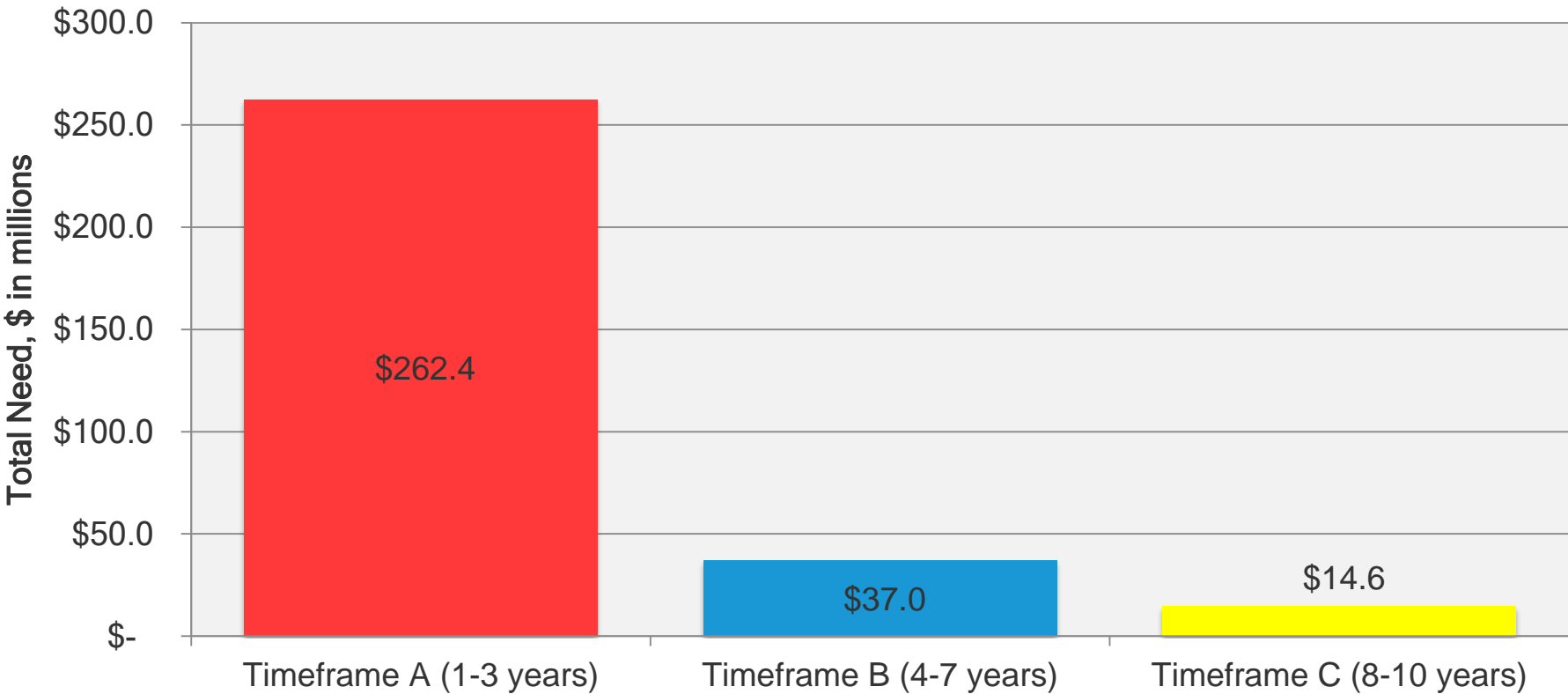


Identified Needs By Timeframe



Timeframes A, B, & C only – excluding new construction

Identified Needs by Timeframe



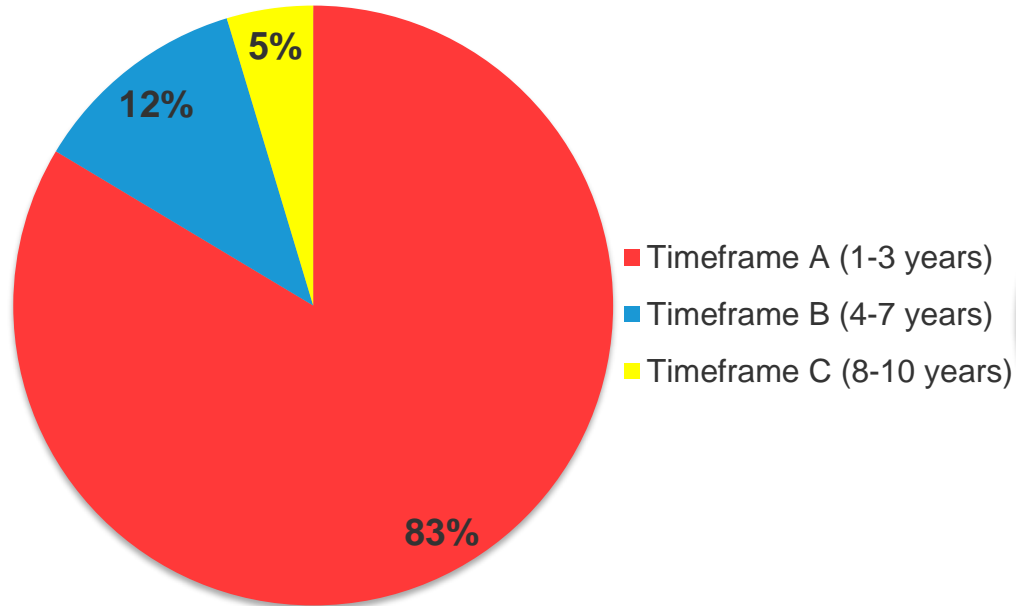
# of projects	630	201	96
---------------	-----	-----	----

Identified Needs by Timeframe

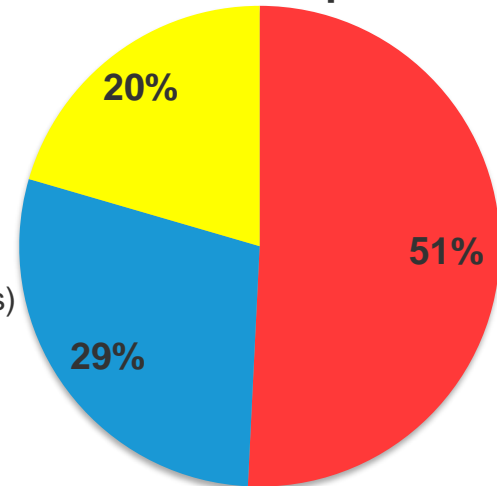


Timeframes A, B, & C only – excluding new construction

Identified Needs - \$314M



Recent BPS Experience



• Timeframes

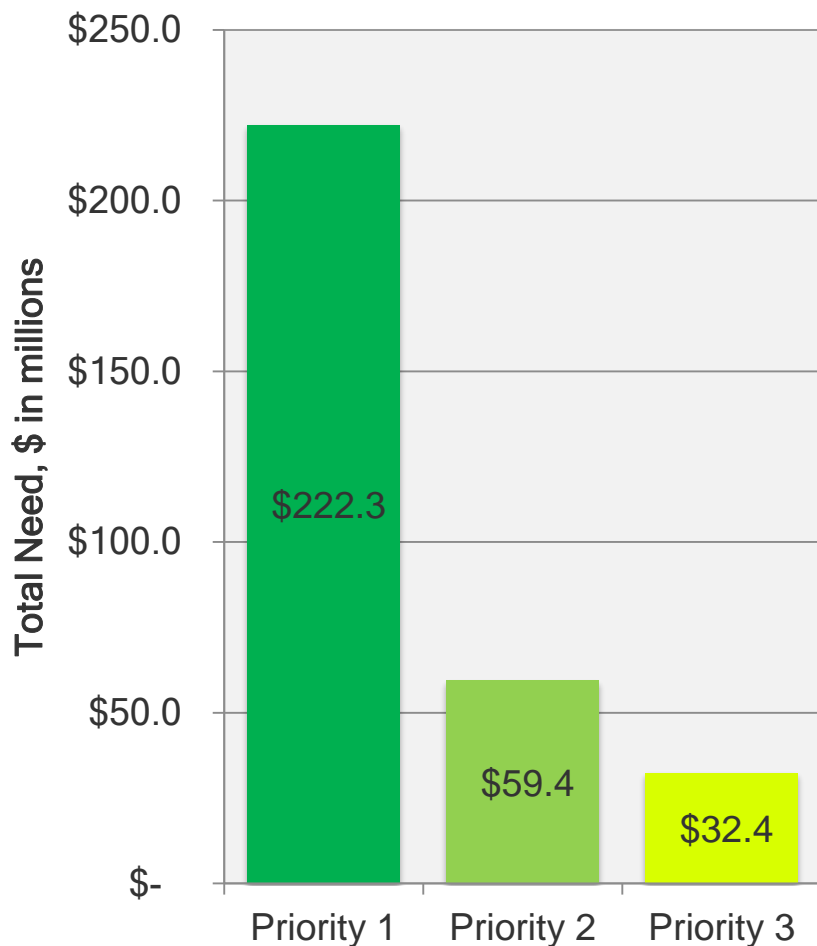
- **A Timeframe:** Projects due or coming due within the next one to three years
- **B Timeframe :** Projects coming due within the next four to seven years
- **C Timeframe :** Projects coming due within the next eight to ten years. Outside of ten years is considered “X” timeframe and outside of the scope of work for Building Portfolio Solutions

Identified Needs by Priority



The majority of need falls in Priority 1

Identified Needs by Priority



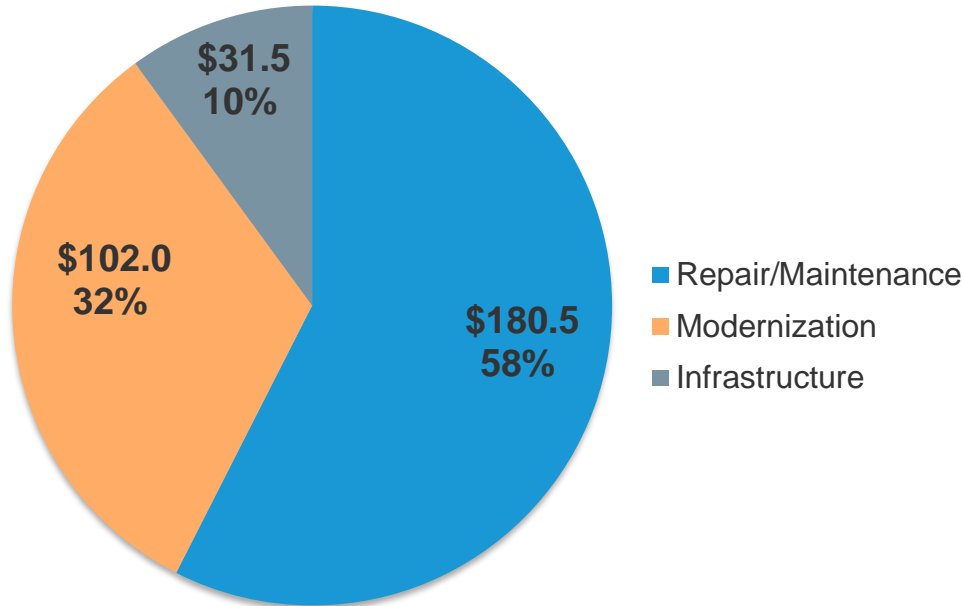
- **Priority 1:** Currently Critical. These are needs and/or projects which significantly impact the mission of a college and require immediate action to return a facility to normal operation, stop accelerated deterioration, or correct a cited safety hazard, especially those conditions which potentially impact an entire campus or pose a significant risk to health and safety.
- Examples of such conditions would be:
 - Campus impact: A Campus-wide chilled water system is in imminent danger of failing. Failure would make all buildings non-functional, essentially bringing an entire campus down.
 - Health and Safety Impact: Previously undiscovered dry rot has compromised structural beams. The building cannot be safely used without immediate repair.
- **Priority 2:** Potentially Critical. These needs and/or projects will become critical within a year if not corrected expeditiously. Situations in this category include intermittent interruptions, rapid deterioration, and potential safety hazards. The significance of these conditions to the mission of the College should be a factor.
- **Priority 3:** Necessary, Not Yet Critical. These needs and/or projects include conditions requiring reasonably prompt attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further. Conditions which do not significantly impact the mission of the College should be placed in this category.

Identified Needs by Project Category

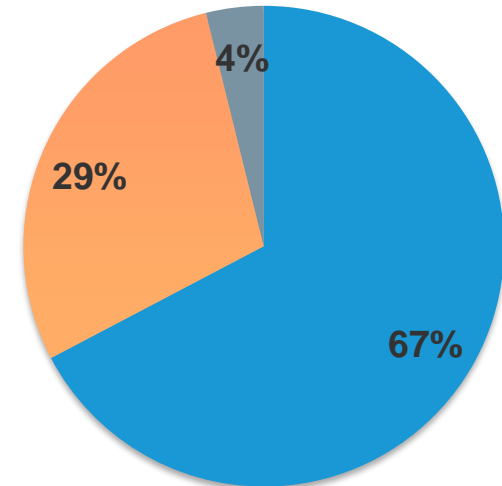


Timeframes A, B, & C only – excluding new construction

Identified Needs - \$314M



Recent BPS Experience



• Project Category

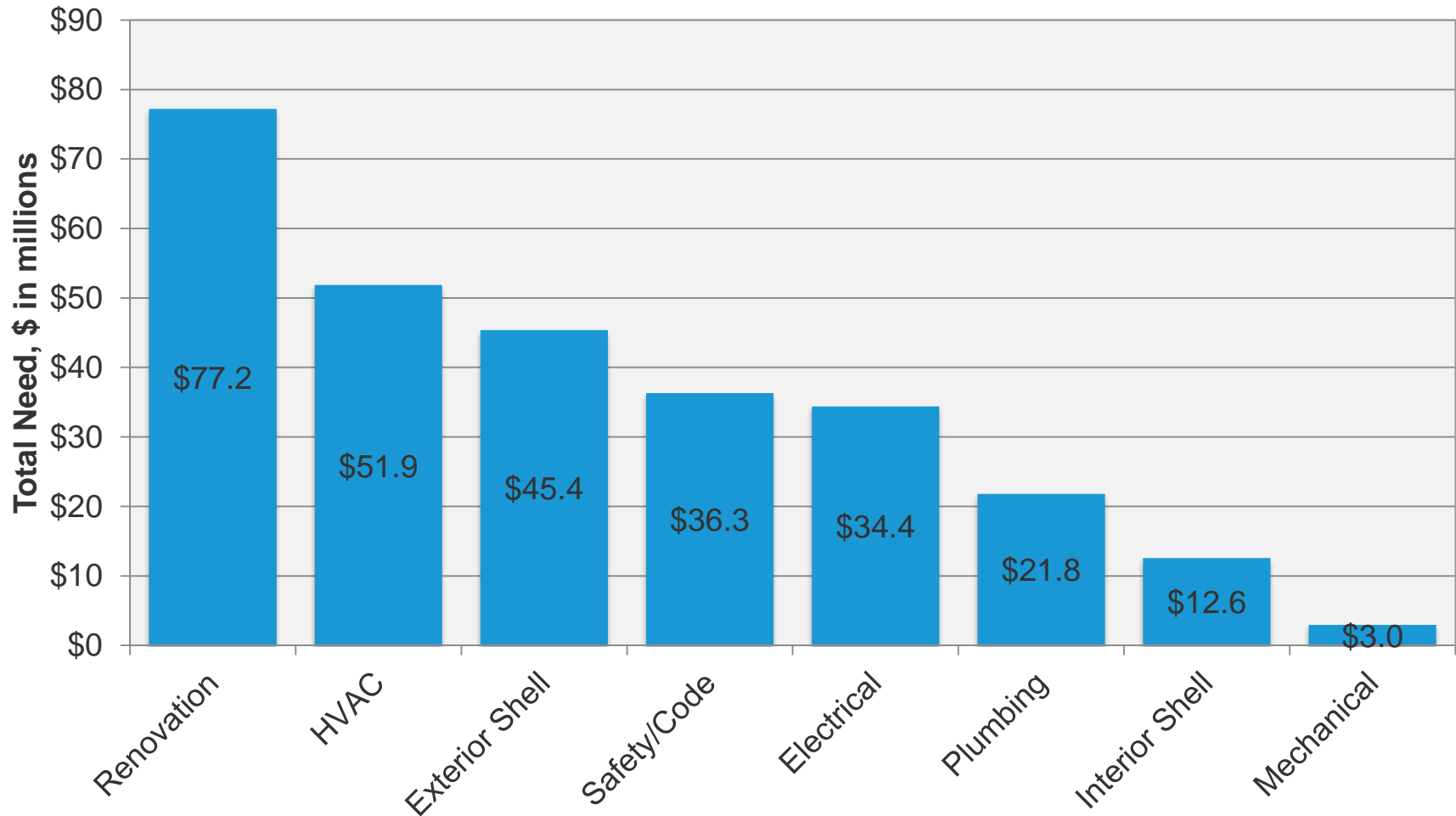
- **Repair/Maintenance:** Replacement of components that have failed or are failing, or planned replacement at the end of a component's life expectancy
- **Modernization:** Replacement of components before the end of their life expectancy
- **Infrastructure:** Replacement of grounds and utility components outside of buildings

Identified Building Needs by System



Timeframes A, B, & C only – excluding new construction

Identified Needs by System



*HVAC includes Cooling, Heating, and HVAC BPS Systems

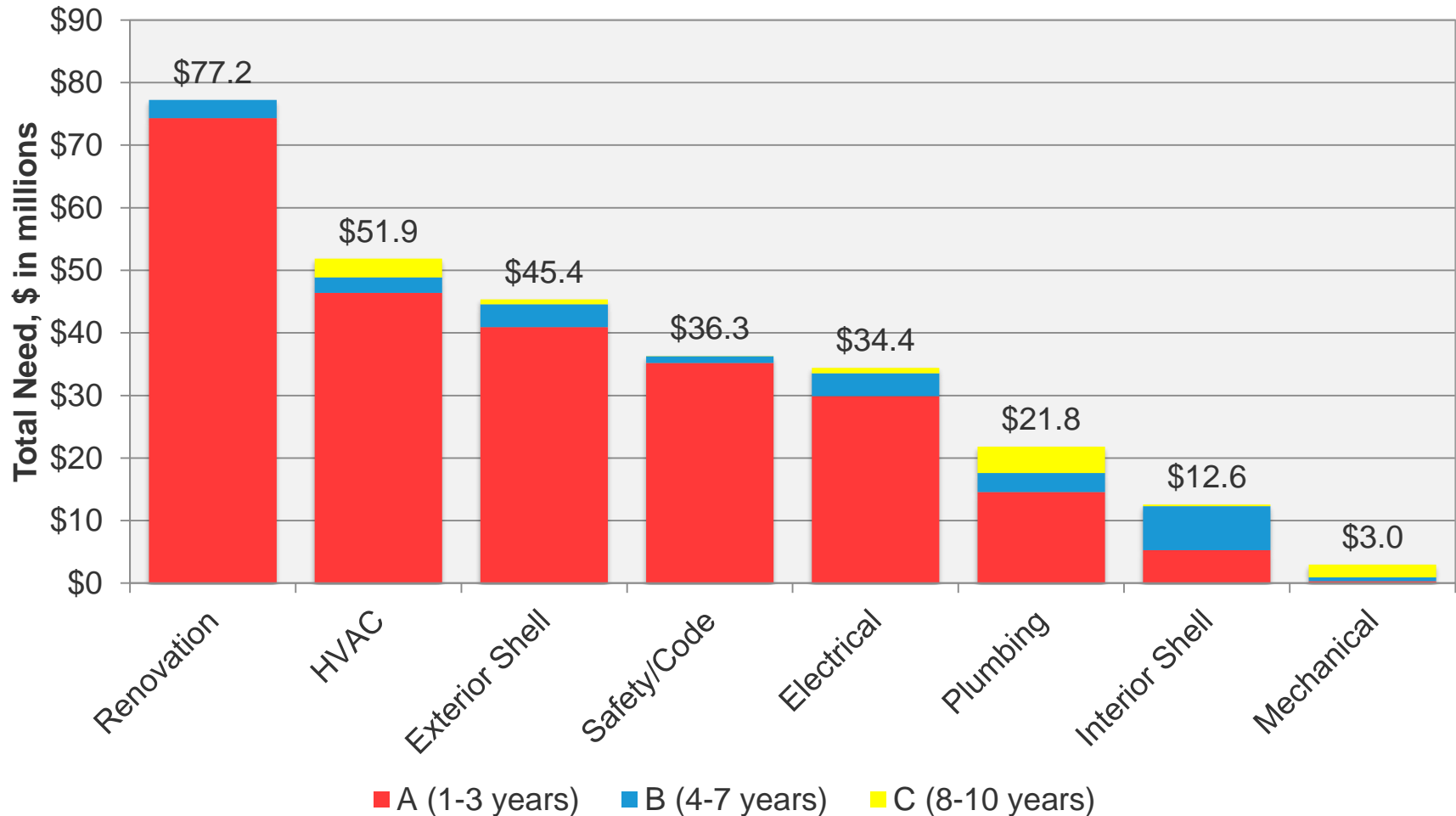
*Includes only Building Need, excludes Grounds, Infrastructure

Identified Building Needs by System



Timeframes A, B, & C only – excluding new construction

Identified Needs by System, by Timeframe



*HVAC includes Cooling, Heating, and HVAC BPS Systems

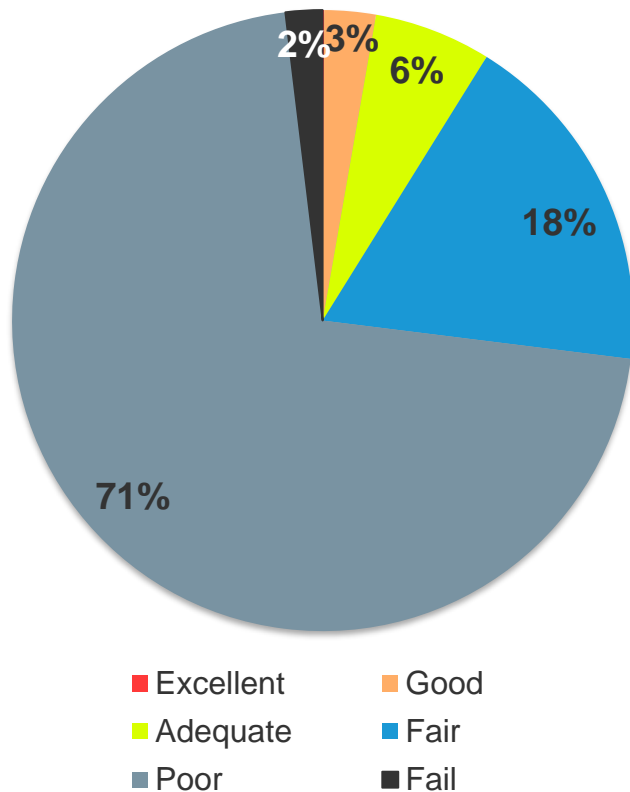
*Includes only Building Need, excludes Grounds, Infrastructure

Identified Need by Condition



No needs identified in excellent condition

BPS Identified Needs



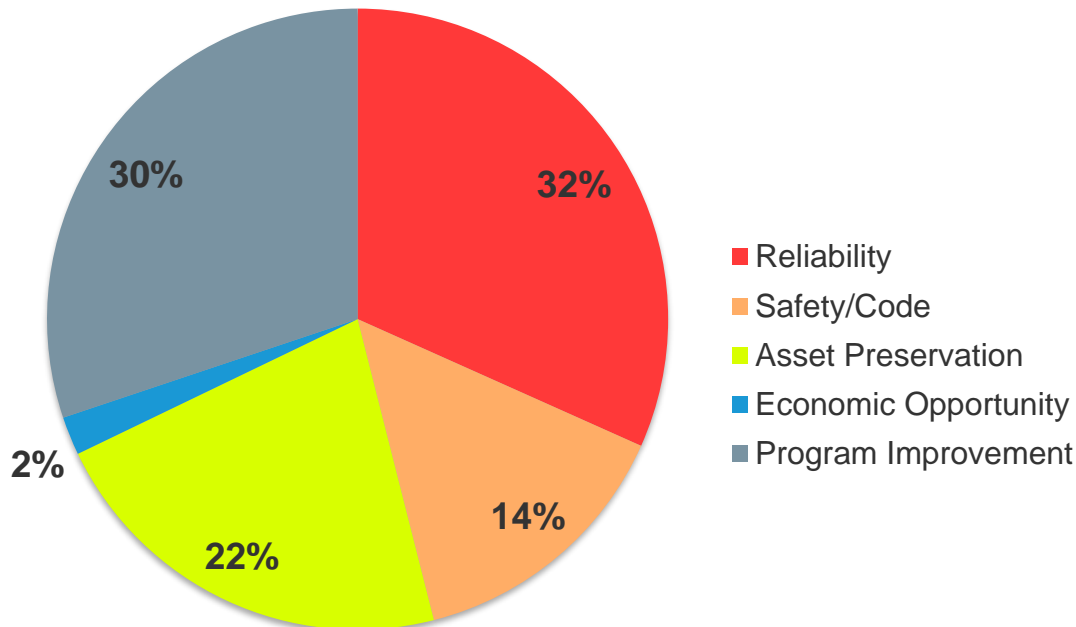
- **Excellent:** Performs to original specifications using non-standard tests, easily restorable to like-new condition. Minimal routine maintenance at a cost of less than 2% of replacement value.
- **Good:** Performs to original specifications as measured using historical data and non-standard tests. Routine maintenance at a cost of less than 5% of replacement value.
- **Adequate:** Performance meets requirements. Some corrective and preventive maintenance required at a cost of less than 10% of replacement value.
- **Fair:** Performance fails to meet code or functional requirements in some cases. Failure(s) are inconvenient. Extensive corrective maintenance and repair required at a cost of less than 25% of replacement value.
- **Poor:** Consistently substandard performance. Failures are disruptive and costly. Requires constant attention. Renovate or overhaul at a cost of less than 60% of replacement value
- **Fail:** Non-operational or significantly substandard performance. Replacement required because repair cost is greater than 60% of replacement value.

Identified Needs by Investment Criteria

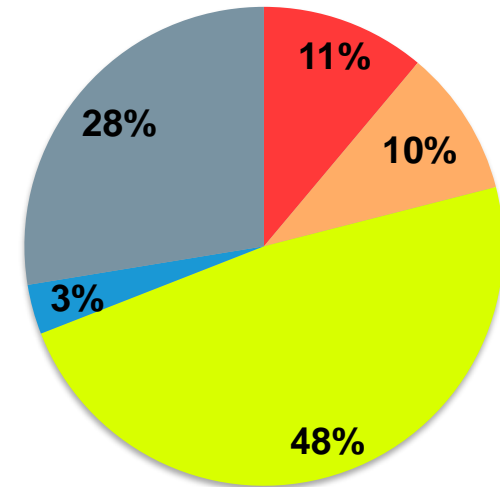


Timeframes A, B, & C only – excluding new construction

BPS Identified Needs



Recent BPS Experience



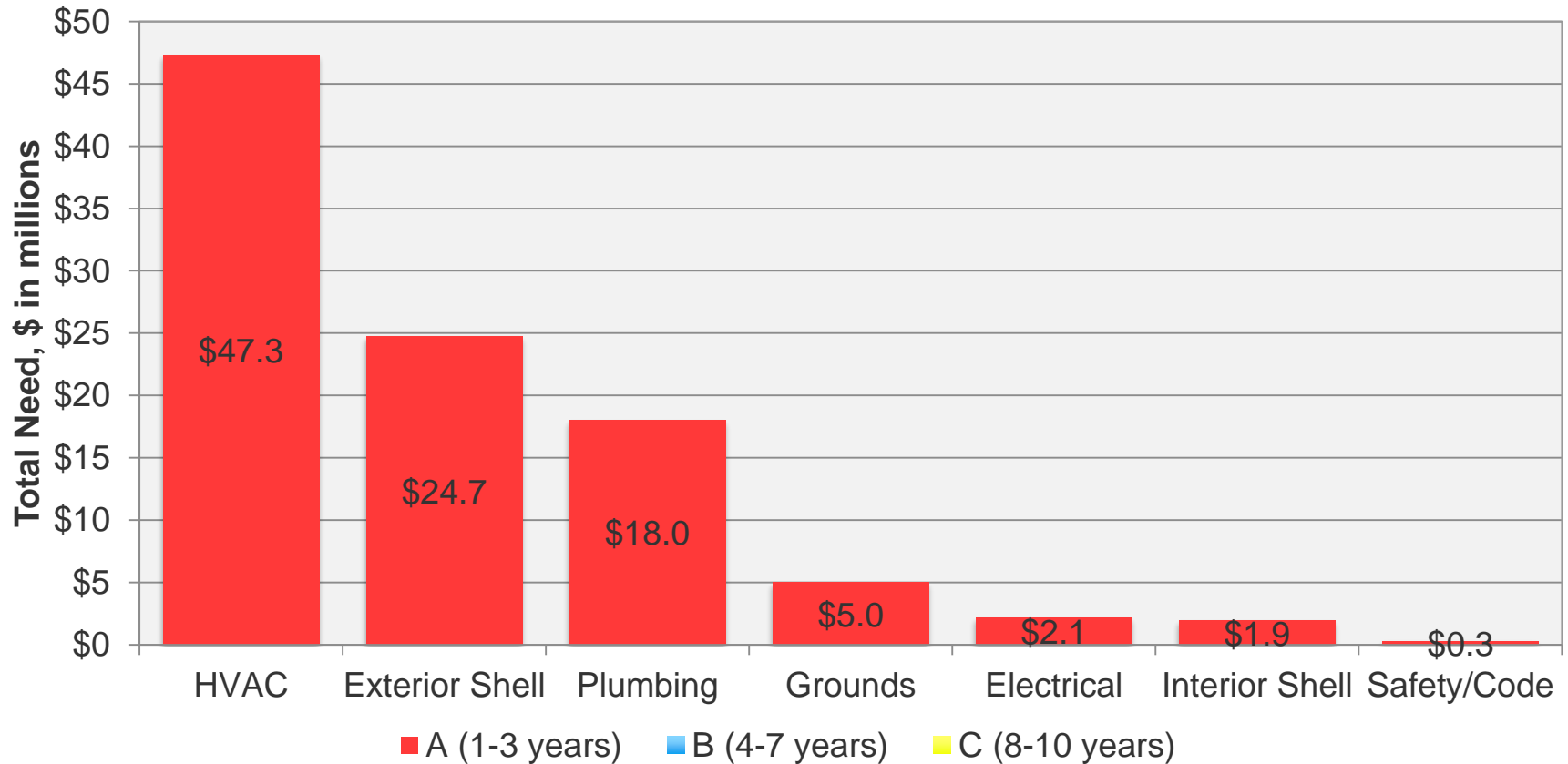
- **Reliability:** Issues of imminent failure of compromise to the system that may result in interruption to program or use of space.
- **Safety/Code:** Code compliance issues and institutional safety priorities or items that are not in conformance with current codes, even though the system is “grandfathered” and exempt from current code.
- **Asset Preservation:** Projects that preserve or enhance the integrity of buildings systems, structure, or campus infrastructure.
- **Economic Opportunity:** Projects that result in a reduction of annual operating costs or capital savings.
- **Program Improvement:** Projects that improve the functionality of space, primarily driven by academic, student life, and athletic programs or departments. These projects are also issues of campus image and impact.

Identified Reliability Needs



32% of total needs

Identified Reliability Needs



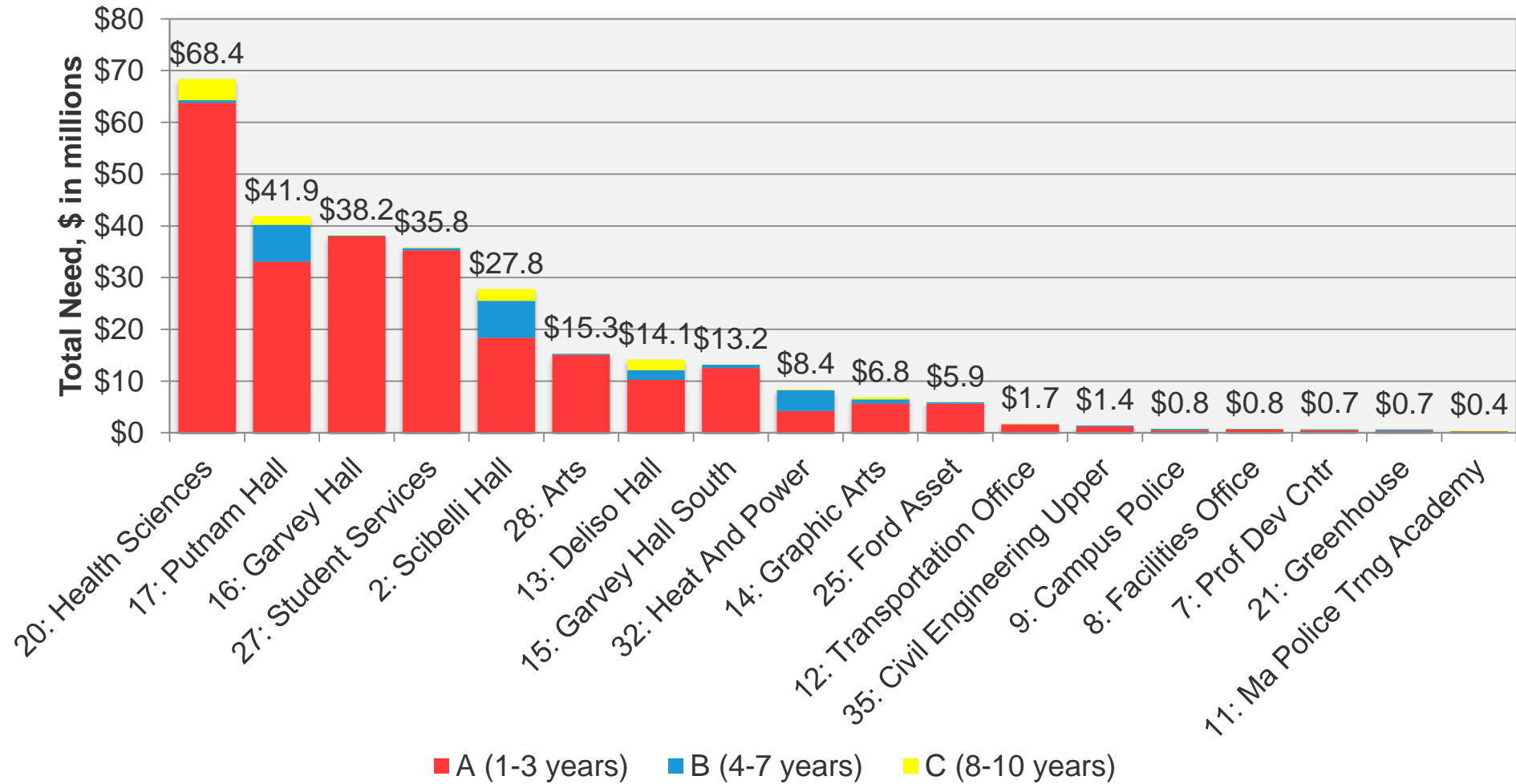
Total # of Projects	Total Estimated Needs
263	\$99.5M

*HVAC includes Cooling, Heating, and HVAC BPS System Categories

Identified Needs by Building



Needs By Buildings

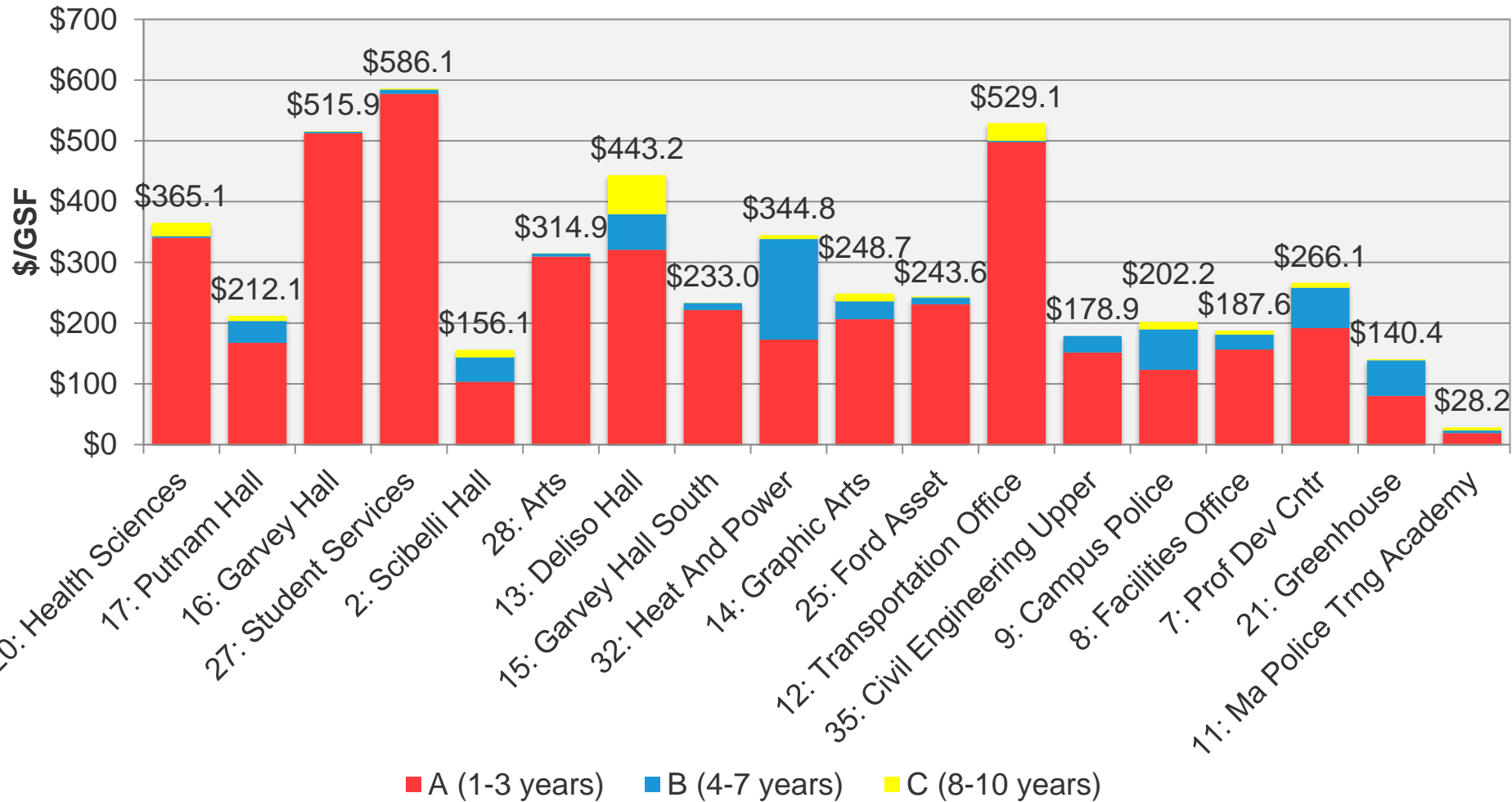


A Look at Building Needs Over the Next 10 Years



Buildings with the highest \$/GSF need

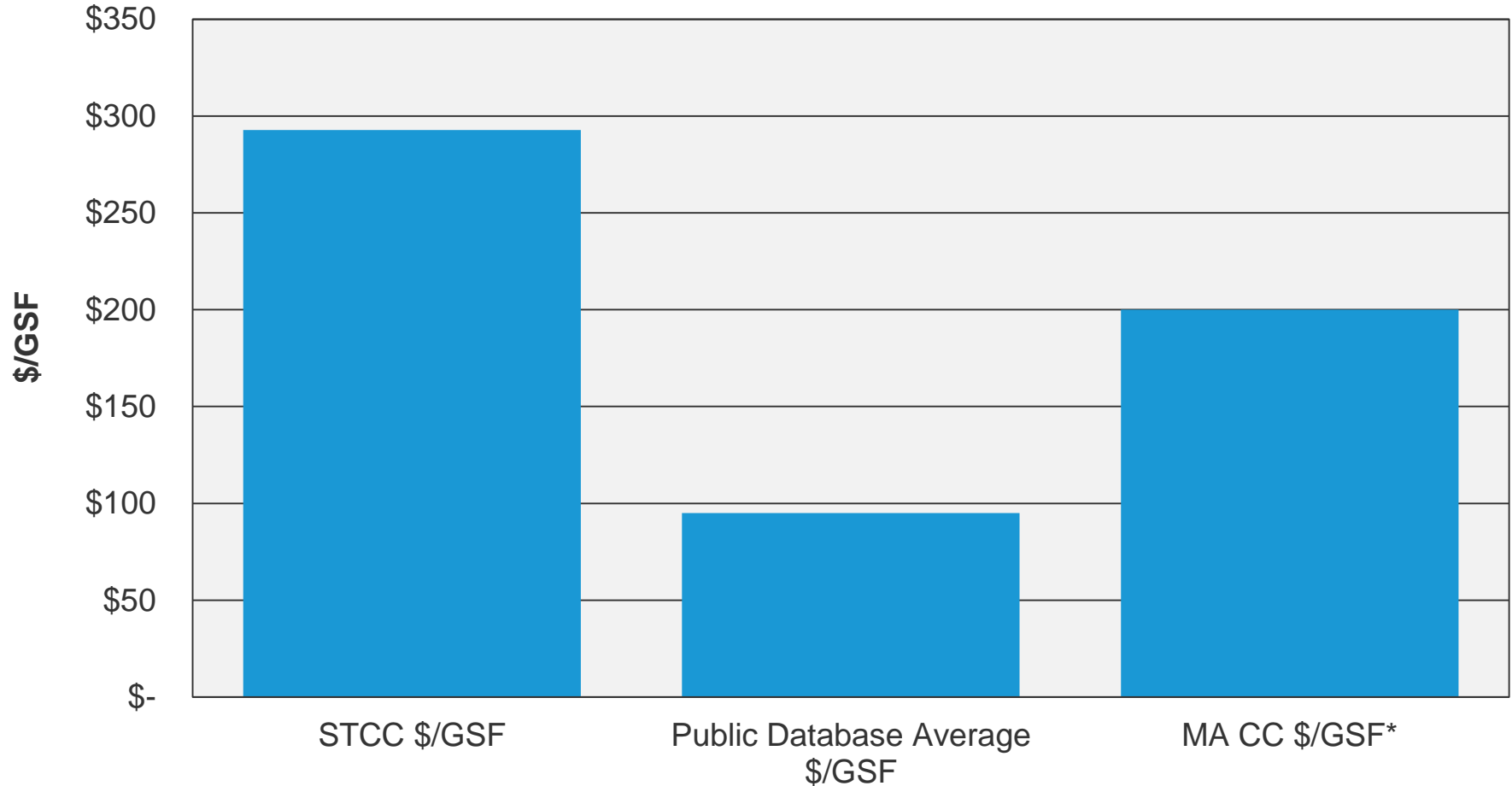
Building Needs \$/GSF



Putting Total Asset Reinvestment Need In Context



Total Asset Reinvestment



**MA CC \$/GSF figure based on Sightlines ROPA+ estimate; the figure will be adjusted once all BPS analyses have been completed*

Questions & Discussion