IV. CHALLENGES AND OPPORTUNITIES WITHIN SUNY'S CAPITAL PROGRAM

Size of Physical Plant/Age of Facilities/Conditions

SUNY's educational and hospital facilities have evolved greatly from their beginnings. These facilities became assets of SUNY, and by extension, the State, in two major periods. The first was at the creation of the SUNY system, spanning 1948 to 1953, following the findings of the Temporary Commission on the Need for a State University System in 1948. During this brief period, a total of 24 campuses were moved from stand-alone institutions and began life as SUNY system-related entities. The second, between the 1960's and the 1980's, saw either the transition or establishment of eight campuses to the State-operated and statutory components that comprise today's SUNY system. Today, SUNY campuses account for 40 percent of all State-owned building assets (excluding infrastructure and land), with the Educational Facilities alone accounting for more than 1,800 academic buildings covering over 62 million gross square feet (GSF). The maintenance of these campus facilities continues to grow in cost, a direct result of their inherent age. Over the past 60 years, the passage of time and the impact of heavy annual use have left a mark on SUNY's physical condition. As shown in the following chart, approximately 70 percent (47 million GSF) of all educational and hospital facilities, are more than 39 years old and date back to nearly the formation of SUNY itself. SUNY has, however, invested significant resources to address the renewal needs of these aging facilities.
With an average age of 47 years, many of SUNY's facilities have an immediate need to renew and replace aging assets. Based on the life cycle model, SUNY's State-operated and statutory colleges have an immediate renewal need of $3.8 billion. The graph below shows the breakdown of this immediate need by major asset type:
$3.8B Immediate Asset Renewal Needs

- CONVEYING (Elevators/Escalators) 1%
- LIFE SAFETY SYSTEMS 2%
- HARDSCAPE 3%
- PLUMBING 6%
- UTILITY DISTRIBUTION 7%
- BUILDING EXTERIORS 8%
- ELECTRICAL 12%
- HVAC (Heating, Ventilation, Air Conditioning Systems) 33%
- BUILDING INTERIORS 25%
- SUPERSTRUCTURE 1%
- CENTRAL PLANT 1%
- PARKING 2%
- MINOR STRUCTURE 0%
- WAYFINDING 0%
- ATHLETIC FIELD 0%
Execution of Master Capital Plan and Multi-Year Capital Program

The SUNY Educational Facilities and Hospital Capital Programs are administered by the Fund. The Fund coordinates funding and capital planning for all capital projects under these programs, while design and construction contracts for these projects can be managed by either the Fund or the campuses. Campuses typically manage smaller, quick-turnaround projects and the Fund manages large-scale, longer duration projects.

The timely and effective execution of the Capital Plan requires sufficient staff resources. The ability of the Fund to maintain its current level of services to campuses will be dependent upon securing additional operating resources. Similar to other State agencies, the Fund has not received an increase to its operating budget since 2012/13.

Current Educational Facilities and Hospitals Workload
($ in Millions)

- SUCF Projects in Design: 622 Projects, $2,060, 29%
- SUCF Projects in Active Construction: 100 Projects, $1,743, 25%
- SUCF Projects In Active Planning: 45 Projects, $558, 8%
- Campus Administered Projects: 131 Projects, $2,711, 38%
Economic Development

SUNY is a state-wide entity and plays an important role in New York’s economy throughout the State. SUNY’s physical environment and continued capital investment to maintain this infrastructure fuels economic development in four important ways. First, is that SUNY plays a vital role in educating New York State’s future workforce. Modern, up-to-date, facilities are essential to providing a quality education for students, the majority of whom are from New York and stay in New York after graduation. Second, capital investment to update facilities and modernize laboratories that support research also promotes economic development by assisting with the recruitment of world class faculty and researchers who generate revenue through grants and patents. Third, capital investment in SUNY, particularly in urban environments, revitalizes communities and brings SUNY and community together. Last, capital investment has the direct benefit of creating design and construction industry jobs throughout New York State.

SUNY’s physical environment is essential to supporting the economic output produced by the University. A recent report by the Rockefeller Institute of Government estimated that SUNY’s annual economic impact on New York State’s economy is $28.6 billion, and generates a return on investment of $8.17 for every $1.00 invested.

As New York State seeks to grow and transform its economy, SUNY is in a unique position to aid this effort as both an educational and economic force. As demonstrated on the following map, the investment made in SUNY’s capital program over the last 12 years has greatly benefited every region of the State just in the creation of construction and construction-related jobs. The data on this map shows jobs created as a result of direct capital investment and is exclusive of any trickle-down economic impact.
SUNY Capital Investment and Jobs Created, by Region

2004 through 2019

FINGER LAKES
$558M Invested
4,044 Jobs Created
$54/hr

SOUTHERN TIER
$1.5B Invested
12,579 Jobs Created
$52/hr

CAPITAL REGION
$1.2B Invested
8,913 Jobs Created
$59/hr

MOHAWK VALLEY
$553M Invested
4,008 Jobs Created
$54/hr

WESTERN NY
$2.3B Invested
16,468 Jobs Created
$59/hr

NORTH COUNTRY
$631M Invested
4,575 Jobs Created
$51/hr

MID-HUDSON
$628M Invested
4,551 Jobs Created
$73/hr

NYC
$924M Invested
6,699 Jobs Created
$102/hr

LONG ISLAND
$2.5B Invested
18,165 Jobs Created
$99/hr
Energy Savings Efforts

SUNY has long been a leader in promoting energy efficiency and sustainability, including through the capital programs. Since 2001, pursuant to Executive Order 111, the State University has required that all new buildings, additions, and major rehabilitation projects at State-operated campuses and statutory colleges achieve a Leadership in Energy and Environmental Design (LEED) rating, and since 2007, SUNY has made efforts to achieve at least a LEED silver rating for these type of projects.

In 2012, Governor Cuomo issued Executive Order 88, requiring a 20 percent improvement in the energy efficiency performance of State Government buildings by April 2020. With the largest building portfolio of all New York State entities and departments, SUNY is at the forefront of Executive Order 88 and has willingly embraced a leadership role in state-wide compliance.

Over the past year, SUNY and the Fund continued its leadership role in supporting and advancing the State’s clean energy agenda, including helping the State meet the goals of Executive Order 166 which affirms the State’s continued commitment to the 2015 Paris Climate accord. To support the State’s agenda, and pursuant to Chancellor Johnson’s goals calling for a “Sustainable SUNY”, the Fund recently issued new design directives. These directives guide campuses and design consultants on the major building and infrastructure components that should be incorporated into the design of SUNY facilities, where feasible, to achieve a net-zero carbon emissions standard for all new SUNY buildings, and a deep energy retrofit standard for major building renovations.

In July 2019 Governor Cuomo signed the Climate Leadership and Community Protection Act which includes ambitious climate targets, including 100 percent carbon-free electricity by 2040 and economy-wide, net-zero carbon emissions by 2050.

SUNY has already played a significant role in achieving these energy and sustainability goals as demonstrated in the chart below. SUNY and the Fund will continue to play a large part in meeting the targets outlined above.
2005/2006

-20% decrease in energy cost per square foot

-22% decrease in total energy cost

2% increase in total energy usage (MMBTUs)

28% increase in SUNY GSF

2016/2017