

PPAA WINTER CONFERENCE

SUNY Capital Update

January 29, 2020



State University
Construction Fund

**2020/2021
CAPITAL BUDGET REQUEST
AND
EXECUTIVE BUDGET**

2020/21 SUNY CAPITAL BUDGET REQUEST

(in millions)

PROGRAM	2020/21 REQUEST	2020/2021 EXECUTIVE BUDGET
Educational Facilities		
• Base Critical Maintenance (recurring)	\$650.0	\$550.0
• Strategic Needs, Matching Program (State share)	200.0	200.0
Subtotal, State Bonded Capital	\$850.0	\$750.0
• Strategic Needs, Matching Program (Campus share, dry appropriation)	100.0	100.0
• Additional Capital, Campus supported Capital Projects Fund (384, dry appropriation)	100.0	100.0
Subtotal, Campus Supported Capital	\$200.0	\$200.0
TOTAL, EDUCATIONAL FACILITIES	\$1,050.0	\$950.0
Hospitals Critical Maintenance and Strategic Needs	150.0	150.0
Residence Halls (Pay-as-you-go) Capital	75.0	75.0
TOTAL, STATE-OPERATED/STATUTORY CAMPUSES	\$1,275.0	\$1,175.0
Community Colleges (State Share)	\$51.9	\$46.0

Variable Funding Allocations Present Planning Challenges

2017/18
ENACTED

\$153.4M
CAMPUS
ALLOCATION

\$296.6M
FUND-
DISTRIBUTED

\$100.0M
CAMPUS
ALLOCATION

2018/19
ENACTED

\$353.4M
CAMPUS
ALLOCATION

\$196.6M
FUND-
DISTRIBUTED

2019/20
ENACTED

\$153.4M
CAMPUS
ALLOCATION

\$396.6M
FUND-
DISTRIBUTED

2020/2021
EXECUTIVE

\$153.4M
CAMPUS
ALLOCATION

\$396.6M
FUND-
DISTRIBUTED

RESTRICTED:

Existing facilities

High priority critical
maintenance on
existing facilities

LESS RESTRICTED:

New construction,
additions, or
existing facilities

\$550M EVERY YEAR

2020/2021 Executive Budget – Language Changes

- The 2020-21 Executive Budget includes language that authorizes the Fund to utilize design-build contracts
- There is no explicit dollar threshold for the size of projects established in the language for utilization of the design-build mechanism
- It appears that design-build projects may be required to have a Project Labor Agreement (PLA)

Advocacy for 2020/21 Capital Funding

BUILDING SUNY

BUILDING THE FOUNDATION FOR NEW YORK'S FUTURE

Requires a 2020-2025 Multi-Year Capital Plan

DRAFT

State University Construction Fund

THE POWERFUL IMPACT OF CAPITAL FUNDING

American public universities have a broad and fundamental commitment not only to learning, education, and scholarship, but also to serving the wider public by driving economic development through the preparation of tomorrow's workforce, conducting research that can improve the world we live in, and even helping to solve some of society's greatest challenges.

Each campus within The State University of New York makes many diverse contributions beyond academics to the region in which it is located. When these contributions are gathered together, we are better able to appreciate the enormous impact of SUNY on each of our communities.

IMPACT OF CAPITAL FUNDING



96K Degrees granted annually.

CAPITAL INVESTMENT IN SUNY CREATES JOBS IN EVERY REGION OF THE STATE



BUILDING SUNY

THE GREEN BOOK

DRAFT

ENERGY-EFFICIENT DESIGN

Science IV is a 77,000 sq ft facility originally constructed in 1973. In 2018 in the first phase of its renovation, the building was insulated and re-clad to significantly improve thermal performance and comfort, and to address facade deterioration. New windows and rainscreen cladding were installed, the roofing system was replaced, and the mechanical and electrical systems were upgraded. This project is responsible for...

617 metric tons of carbon avoided annually

80,715,297 CO₂ from smart phones charged annually

The expansiveness of the NYS Clean Energy vision presents unique opportunities that supports a cleaner, more resilient, more affordable energy system for all of New York.

BUILDING SUNY

Advocacy for 2020/21 Capital Funding

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CAPITAL INVESTMENT IN SUNY CREATES JOBS IN EVERY REGION OF THE STATE



- 1) Increase \$550M to \$650M over 5 years
- 2) Recurring Matching Program?

Every \$1 of NYS investment in SUNY = \$8.17 in economic impact

SUNY hospitals serve over 1 million patients annually.

NYS \$9.4B investment over 12 years created 73,408 high paying construction jobs

96,000 jobs created

BUILDING SUNY

THE DRAFT

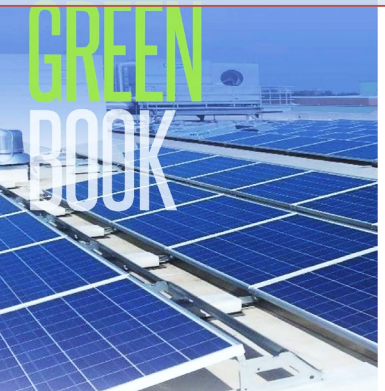
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BUILDING SUNY

BUILDING SUNY

WHAT'S NEW

Fund Board of Trustees and Officers

As a Public Benefit Corporation, the Fund is governed by a three-member Board of Trustees (BOT) appointed by the Governor who serve a six-year, staggered term without pay. One trustee must also be a SUNY trustee, and the Governor appoints the Chairman of the Board.

Fund Board of Trustees

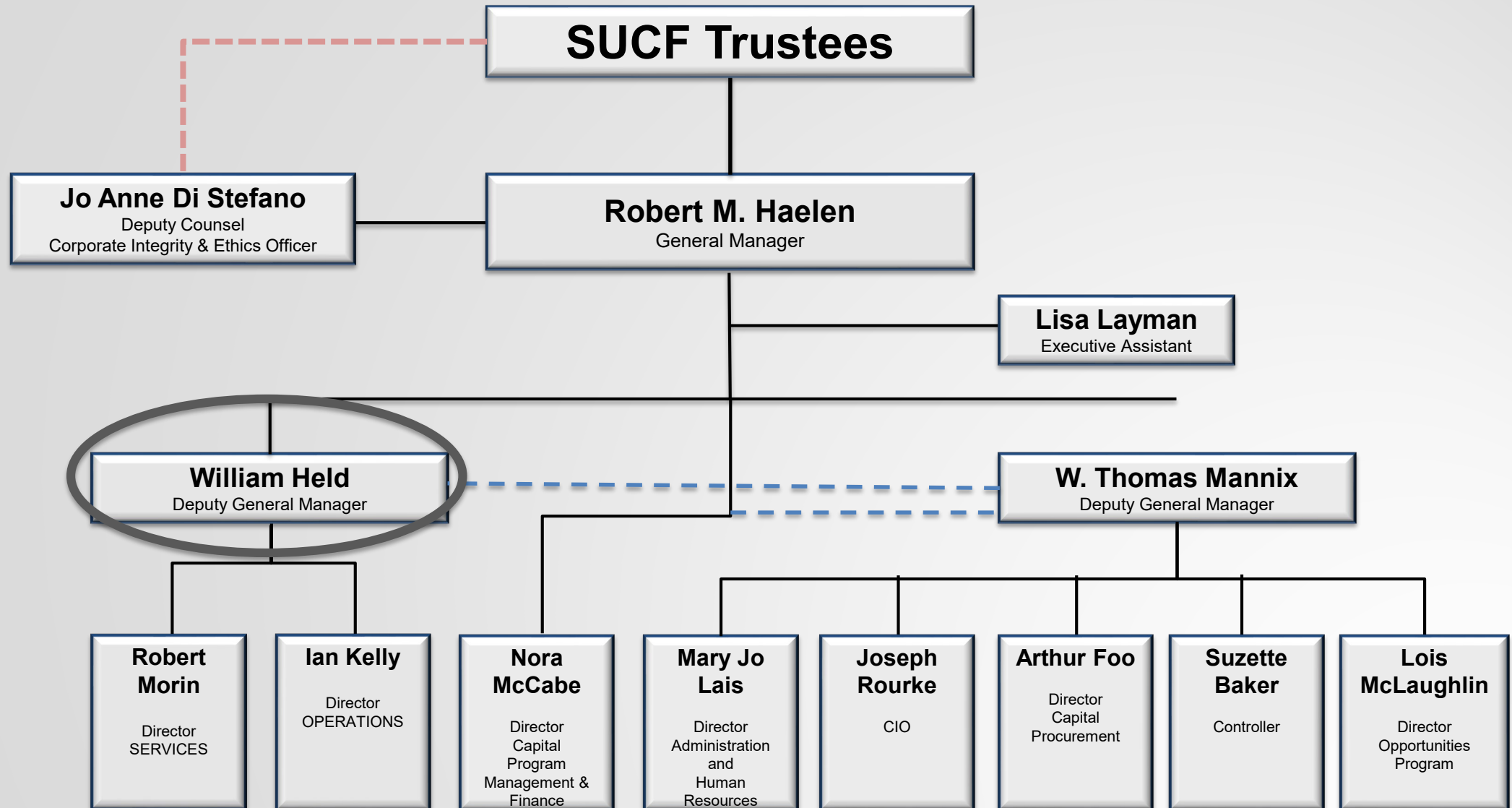
Eric Corngold, Chairman

David Ourlicht, Trustee

Eric Corngold is the Fund's newest board member. He was appointed as a member of the SUNY Board of Trustees in June 2013, and appointed as a member of the Fund Board of Trustees in December 2019.



The Fund Organization



**PROCESS
IMPROVEMENTS**

**CHANGES TO
CONTRACTS**

Enhanced 'Project Acceptance' Language

- More clearly defined deliverables/requirements for **Substantial Completion**.
 - Requires punchlist value to be no more than 1% of the contract consideration.
 - Requires punchlist to be complete within 90 days of substantial completion.
 - O&M Manuals submitted, all training complete. As-builts submitted.
- Allows for partial acceptance of work without stopping the assessment of liquidated damages.
- Eliminated the term, 'Beneficial Occupancy'

Changes to 'Schedule and Reporting Requirements'

- Requires monthly/regular submission and maintenance of a time progress schedule per the General Requirements
- Failure to comply shall be deemed to be a waiver by the contractor of all claims for additional time, compensation or damages.

Changes to 'Proceed Order'

- Historically coordinators could direct only base contract work
- Coordinators now have the ability to issue a Proceed Order if it becomes necessary to add, modify or change the work covered by the contract

Review of Contract Language for Insurance Coverage

- Procured an Insurance expert to review all insurance requirements
- Performed an exhaustive review of construction language for required insurance coverage and required forms from the vendor
- Modifications to the contract and internal process are in process

Zero Punchlist Initiative

Incorporate Initiative During the Planning Phase

1. Obtain early buy-in from all parties especially at executive level
2. Identify point person early to coordinate process and maintain the master log
3. Consider tracking approach (Software System vs. Excel workbook)
4. Consider need for additional Consultant and/or Subconsultant site visits
5. Consider designating separate punchlist coordination meetings
6. Incorporate time into the baseline schedule for the development and completion of the punchlist

Zero Punchlist Initiative - Benefits

1. Reduces need for contractor and subcontractors to remobilize for small tasks
2. Helps expedite the closeout process
3. Reduces transition time between projects for (consultant) staff
4. Eliminates punchlist work that occurs after building occupancy
5. Reduces overlap with fit-out efforts
6. *Ultimately, it helps to reduce costs*

“The ‘zero punch list’ initiative SUCF has instituted promises to have a tremendous positive impact on the construction industry. As stated by J.D. Young of AGC NYS Member firm Welliver, this effort has the effect of focusing the team into a more collaborative one leading to positive project results for the entire team. AGC NYS greatly appreciates SUCF’s leadership here.”

Joe Hogan, VP Building Services, AGC

Zero Punchlist Initiative Example

SUNY Cortland: Renovate Park Center Façade



Zero Punchlist Initiative Example

SUNY Cortland: Renovate Park Center Façade



Zero Punchlist Initiative Example

SUNY Cortland: Renovate Park Center Façade



- \$11.2M exterior façade renovation
- 92,500 GSF of vertical exterior surface
- NTP: May 2018, SC: May 2020
- Consultant: Flynn Battaglia Architects, P.C.
- Contractor: Welliver McGuire, Inc.

“Establishing the goal of “zero punchlist” at substantial completion for both the design and construction teams, **did more to foster collaboration for the mutual benefit** of the Owner, Architect and Contractor, **than any single initiative** Welliver McGuire has undertaken with the SUCF in our 30 year history of working together.”

At last, a singular purpose of finishing 100% complete permeated every action in each job meeting. So similarly with closing the project out 30 days thereafter.”

J.D. Young, Welliver-McGuire
Park Center Façade Project

Zero Punchlist Initiative Example

Renovate Student Union, Stony Brook University



Zero Punchlist Initiative Example

Renovate Student Union, Stony Brook University



- \$64M gut renovation
- 170,000 SF late 1960's concrete building
- NTP: January 2017, SC February 2020 (estimated)
- Consultant: The Spector Group
- Contractor: EW Howell Co, LLC

“EW Howell’s experience with the “Zero Punch List” program at Stony Brook University’s Student Union Project has been **highly successful** and rewarding. We have established a ZPL close-out meeting and lessons learned for February at the campus. ...We are now modifying our subcontract scope agreements to **incorporate this approach on all future work.**”

Jack Hagen, EW Howell

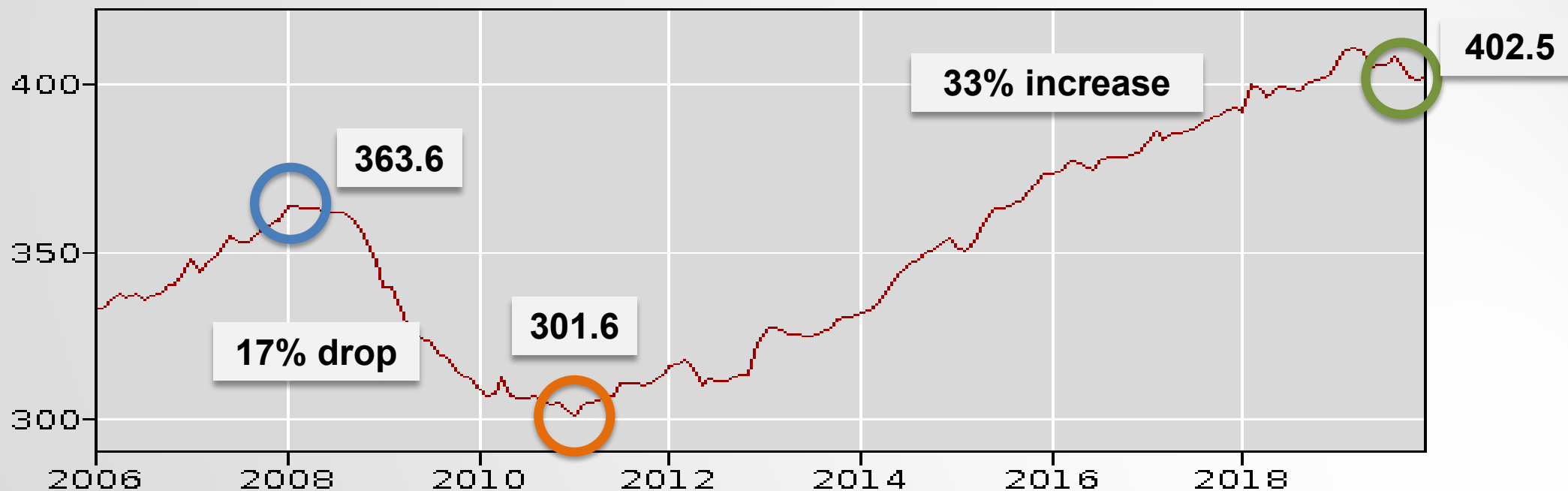
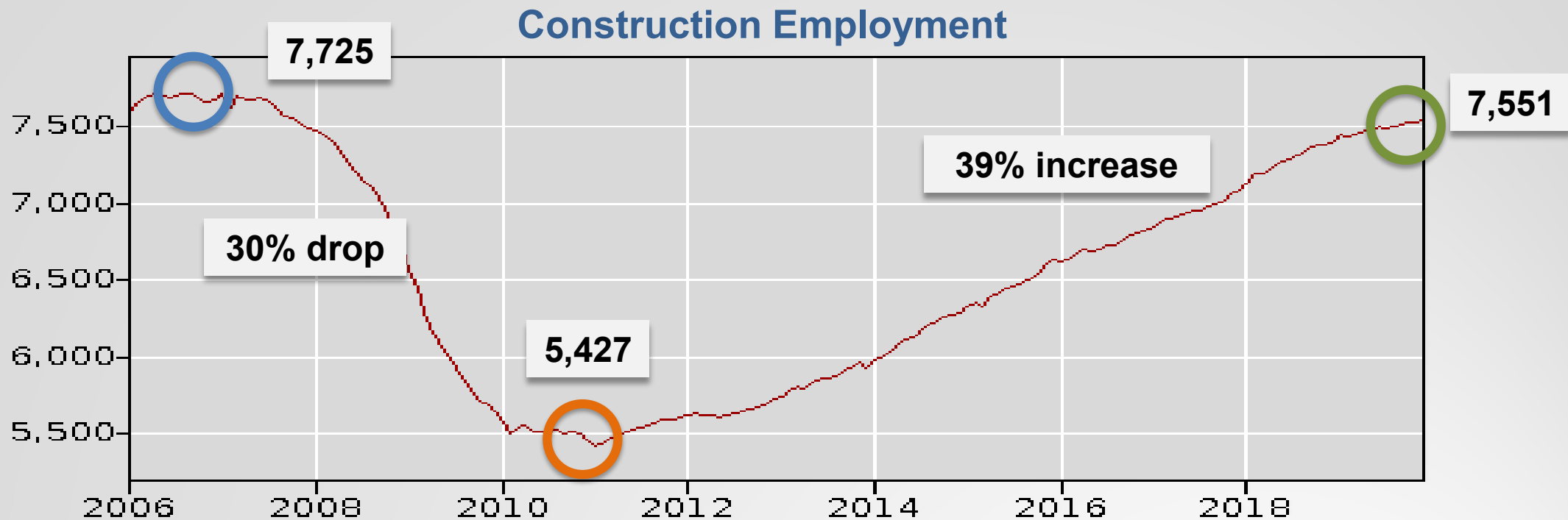
Constructability Review Process

- The 1A-8 constructability review checklist was updated to better align with today's campus requirements and design directives.
- The design consultant and subconsultants must address identified constructability issues during the design process.
- This effort allows for better project schedule management due to more accurate design.

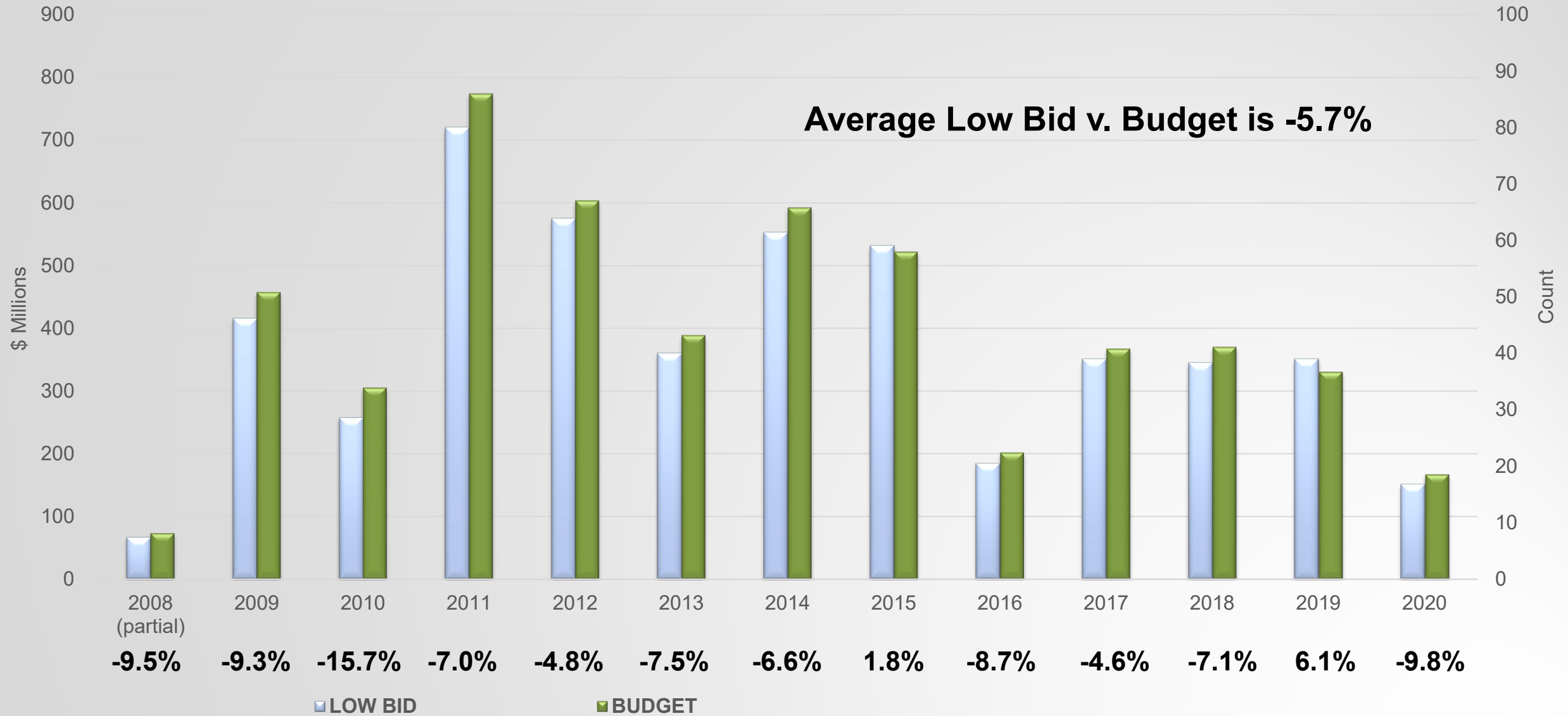
TRENDS

NEW YORK STATE UNITED STATES

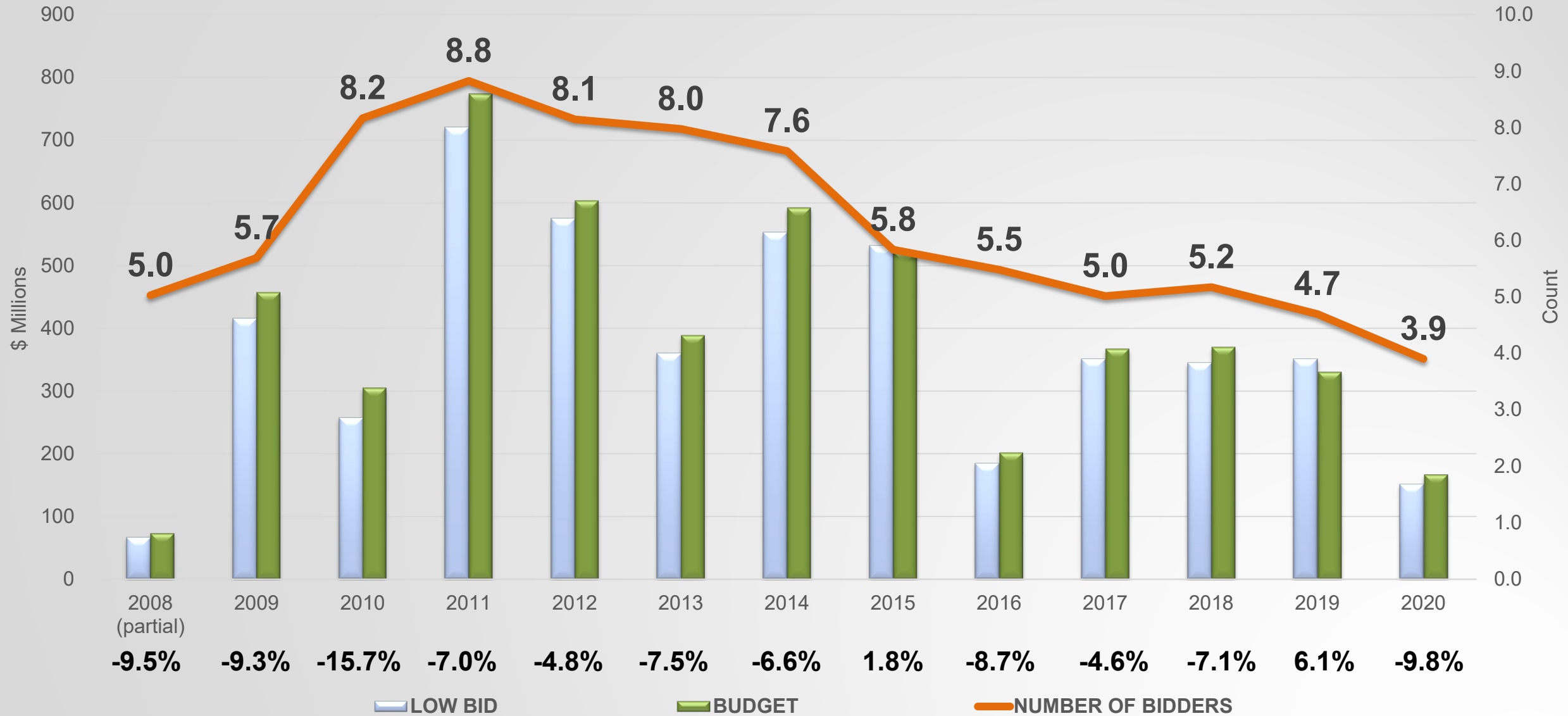
ALL EMPLOYEES, IN THOUSANDS



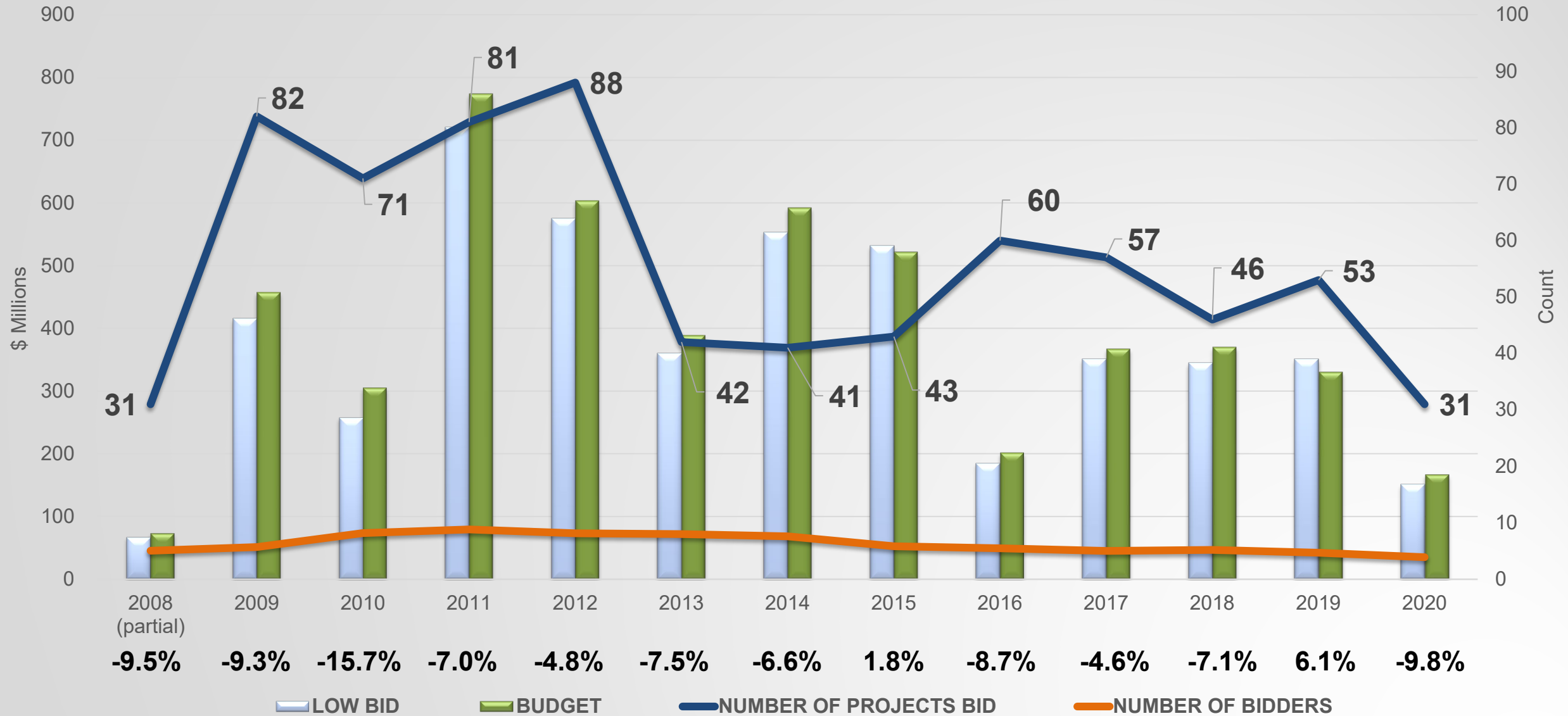
Fund Annual Bid History, 2008 to 2020



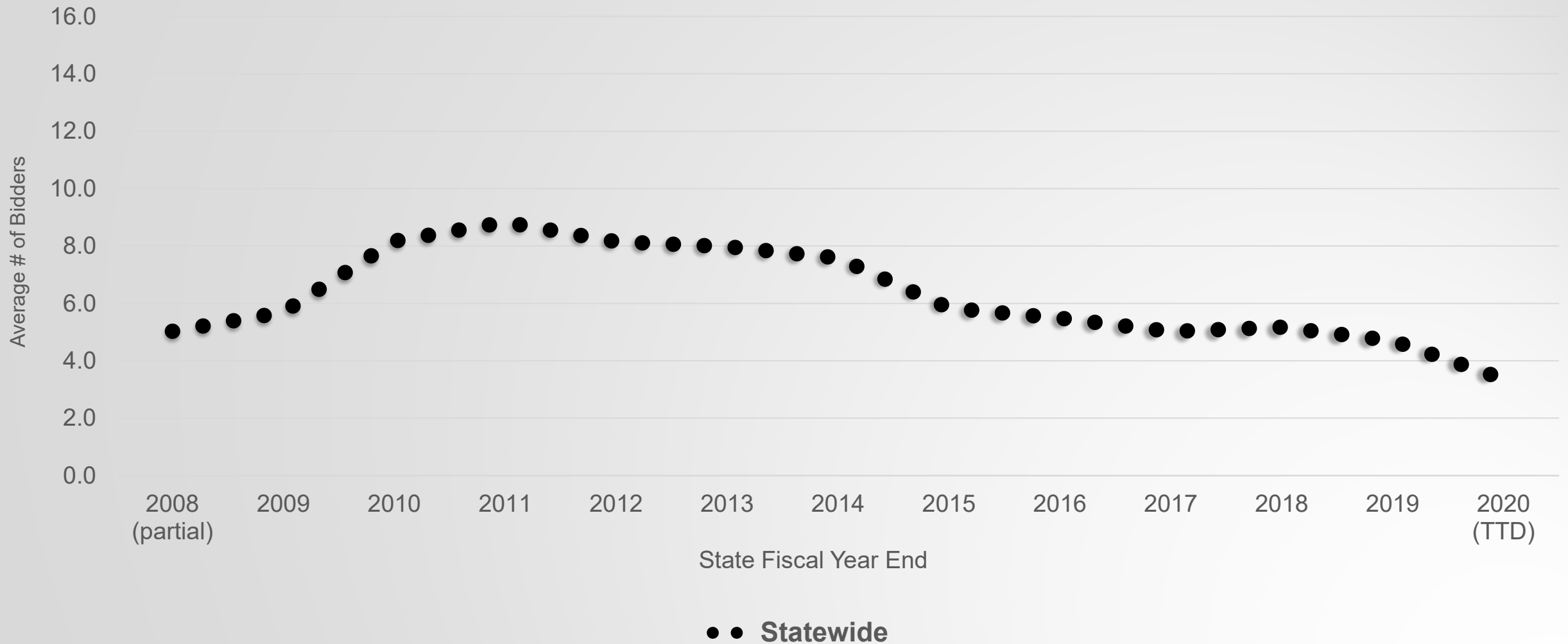
Fund Annual Bid History, 2008 to 2020



Fund Annual Bid History, 2008 to 2020

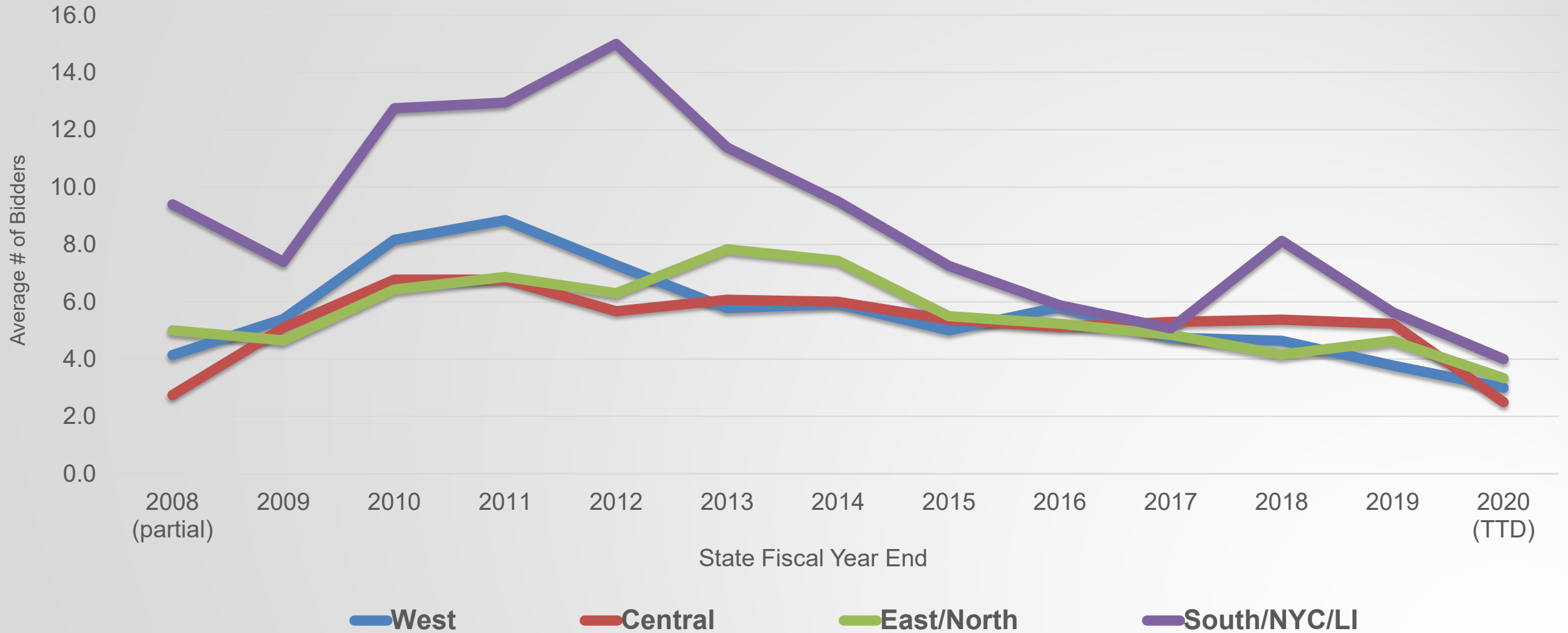


Average Number of Bidders Statewide 2008 to 2020

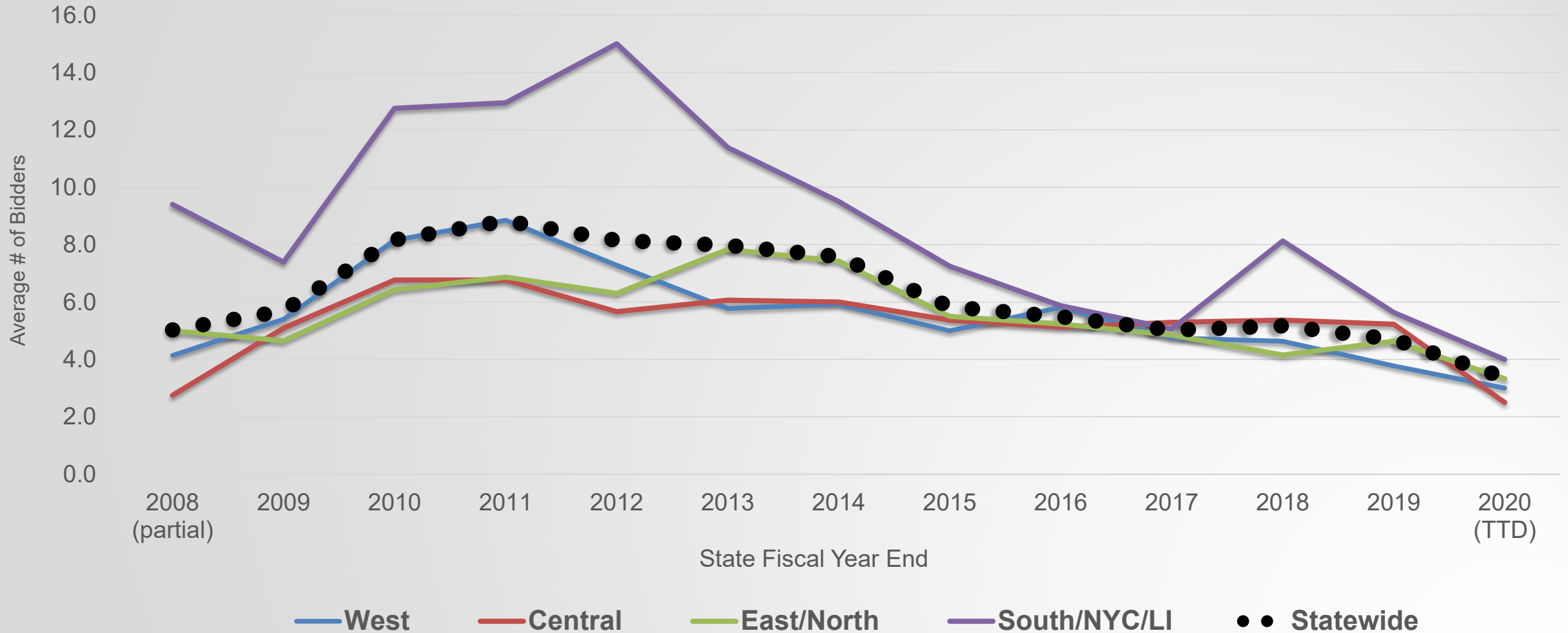


Average Number of Bidders By Region

2008 to 2020



Average Number of Bidders By Region and Statewide 2008 to 2020



Master Planning

- Evaluate the need to update your Facility Master Plan.
- Campuses are encouraged to update their FMPs when appropriate.
- FMP updates should include residence halls, transportation, and an energy master plan.

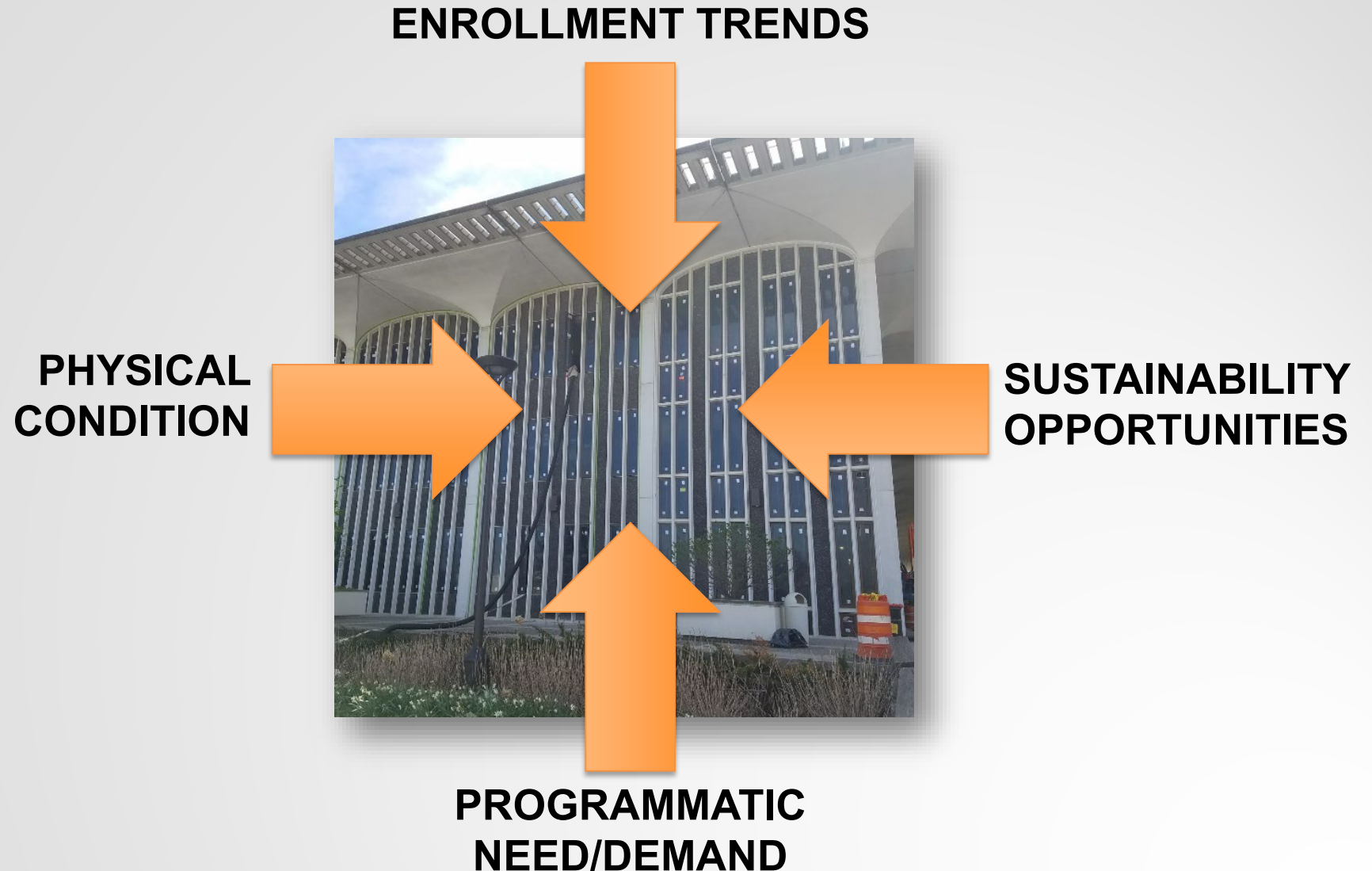
Major Elements of Project Planning

EXAMPLE:

University at Albany Building 27

This academic space is a recently completed comprehensive renewal and full gut renovation that includes mechanical, electrical, plumbing systems, telecommunications systems, windows, and roofing.

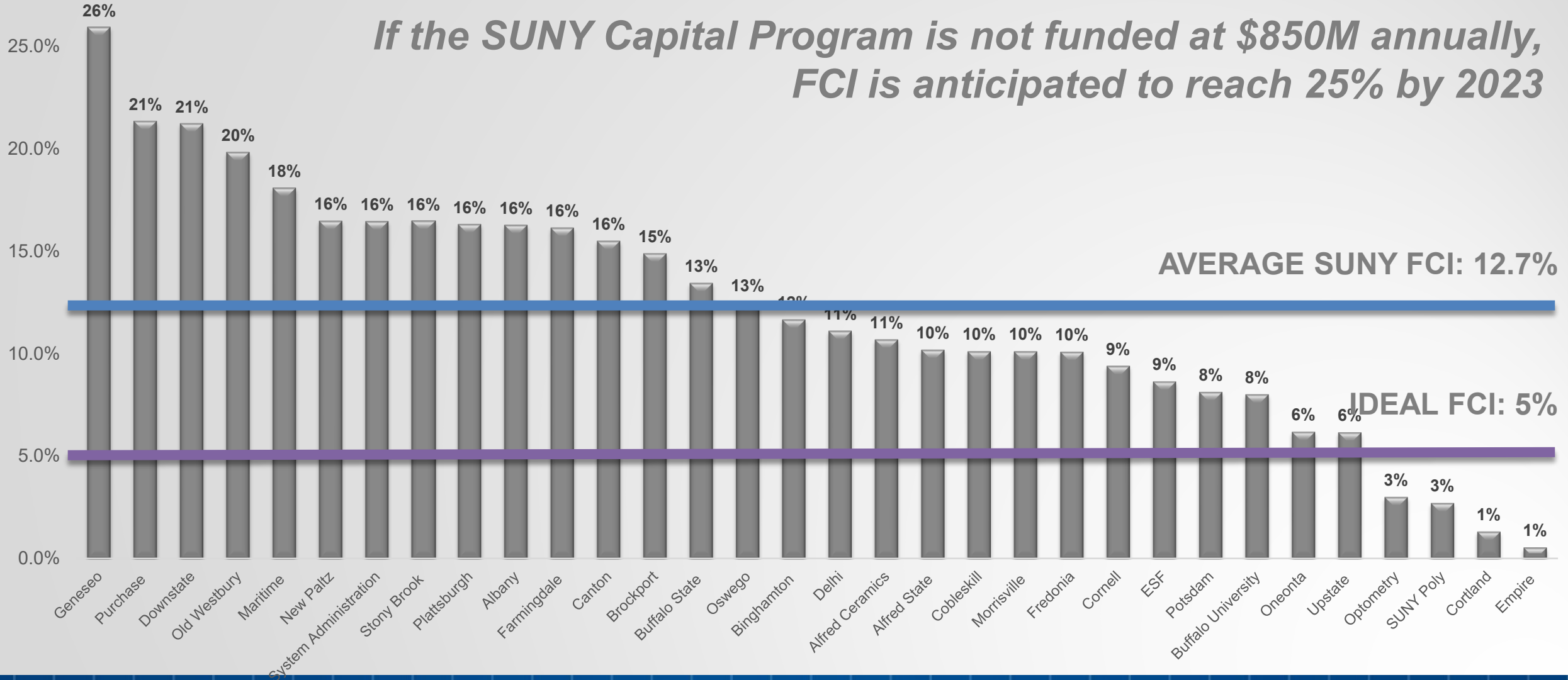
The new space will accommodate the Education and Math Departments.



2019 FCI by Campus

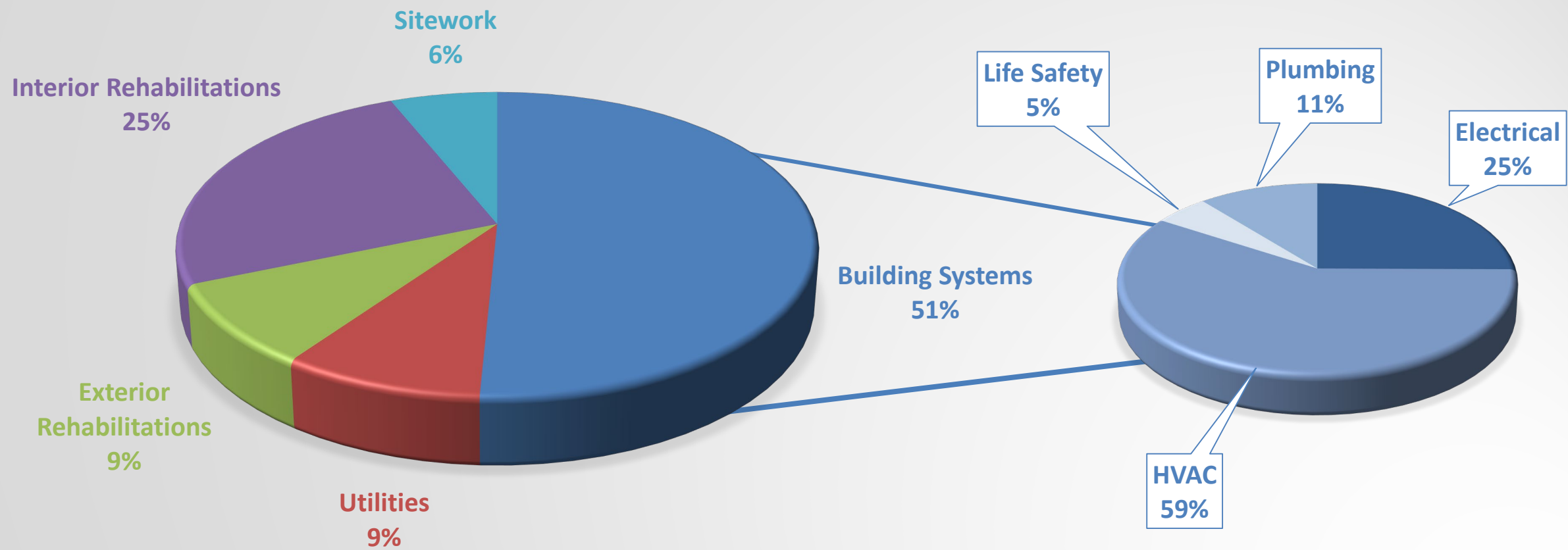
Includes Buildings, Grounds, Parking, and Athletics

30.0%



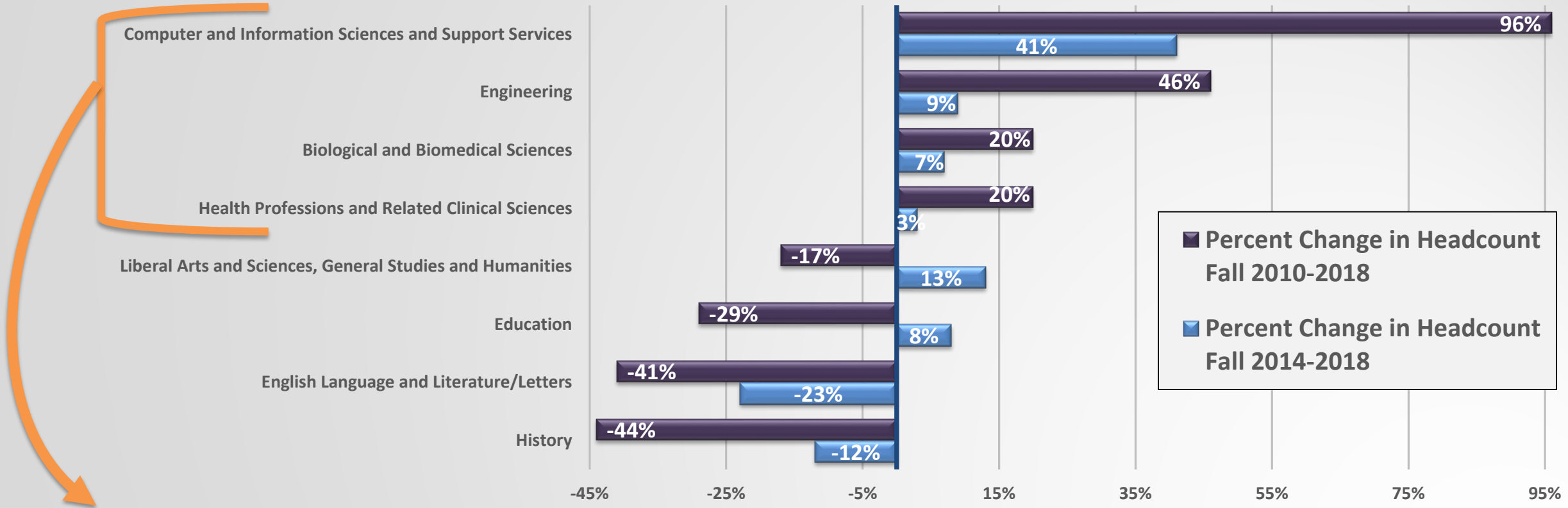
Much More Investment is Needed to Maintain Aging Assets

DISTRIBUTION OF \$4.5B IMMEDIATE ASSET RENEWAL NEEDS



Aligning Critical Maintenance Investment with Enrollment Growth and to Prepare SUNY Graduates for 21st Century Professions:

Percent Change in Headcount Enrollment, by Program of Study
LONG TERM (2010-2018) AND SHORT TERM (2014-2018) TRENDS



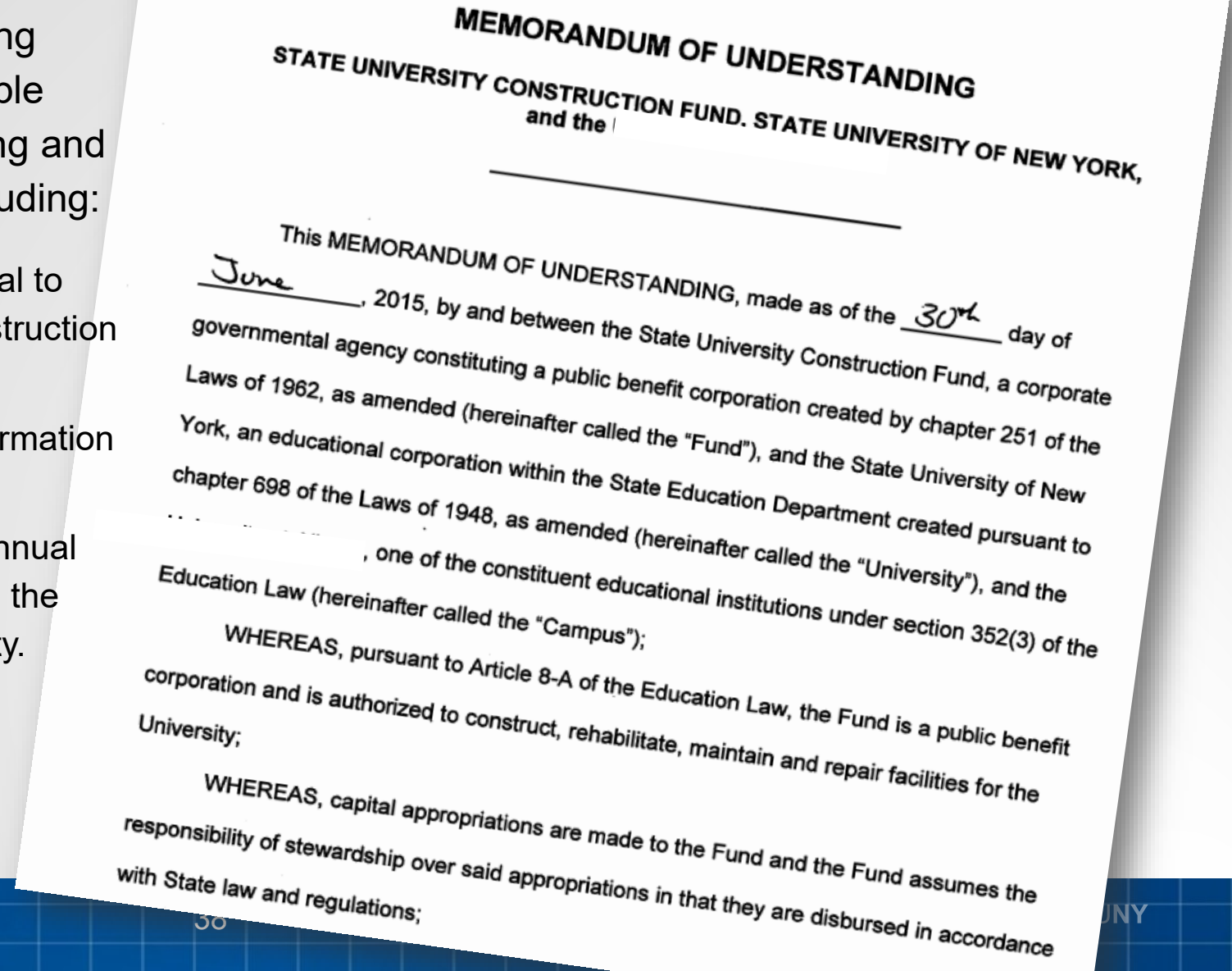
Over the past decade, SUNY has invested more than \$3B in facilities that support STEM programs.

THE PUBLIC POLICY / PUBLIC ADMINISTRATION ASPECT OF CAPITAL

The Enduring Requirements of Fund/Campus Memorandums of Understanding

Our MOU requires that the Campus, as a letting agency for the Fund, will adhere to all applicable laws, rules and regulations related to accessing and utilizing the Fund's capital appropriations, including:

- Obtaining DOB and Executive Chamber approval to advance campus-administered design and construction contracts and establishing MWBE goals.
- Providing the SUNY Controller's Office with information necessary to capitalize the asset.
- Completing and certifying the accuracy of the annual non-governmental (private use) survey detailing the percentage of private use in each campus facility.
- Adherence to the Fund's Design Directives.



FEBRUARY 15, 2019 | Albany, NY

No. 192: Executive Order Imposing Continuing Vendor Integrity Requirements in State Contracts

EXECUTIVE ORDER

“The State must conduct business only with responsible entities.”

OSC Pre-Audit

- Checklist
 - Construction 30 Day Review Submission Checklist
 - New Construction Contract
 - Construction Contract Amendment/Change Order
- Guidance document



OSC Pre-Audit Checklist

Office of the State Comptroller
Bureau of Contracts
Construction 30 Day Review Submission Checklist¹

Yes	No	
☐	☐	The procurement opportunity was advertised as required by law; If not, please explain:
☐	☐	This was a competitive procurement with three or more responsive bids received;
☐	☐	The award(s) were made in accordance with the solicitation's method of award;
☐	☐	If provided for in the solicitation, the debriefing period has passed and all debriefings requested have been completed;
☐	☐	Were any bids rejected? Please explain any bid rejections:
☐	☐	Were any protest or appeals of protest determinations received? Please explain any protests/appeals and how resolved (no protest or appeal, where provided for, should be open):
☐	☐	This transaction was submitted through the Electronic Documents Submission System (EDSS) and all required documentation based on the attached Document Order Guide has been provided;
☐	☐	All other required agency reviews are complete and approvals have been obtained (e.g., DOB, IG, AG).
☐	☐	The awarded low bid is within 15% of the pre-bid cost estimate;
☐	☐	A clause is included in the contract/amendment agreement indicating that procurement documents and contracts have no force and effect and the State bears no liability unless the procurement documents and contracts are approved by OSC or the pertinent pre-audit review period has elapsed (Item 3A, Memorandum of Understanding).

OSC Pre-Audit Checklist

Documentation Order Guide for Construction Contracts, Contract Amendments / Change Orders Subject to 30 Day Review

(Transmitted via OSC's Electronic Document Submission System)

New Construction Contract

1) Transaction Identifying Documents

- Cover Letter which includes agency contact preferences, FOIL concerns, and any unique or unforeseen circumstances.
- SUNY Construction Procurement Checklist (Form 7554-00)
- OSC Non-Approval Notice, if resubmission

2) Contract

- Construction Contract Agreement or Purchase Order Document (including performance bond and labor and material bond, and all current appendixes, exhibits and attachments)

3) Procurement Documents

- Project Manual (Invitation to Bid Package)
- New York State Contract Reporter Advertisement
- Newspaper advertisements
- Bid Tabulation, signed and dated
- All correspondence between agency and vendor pertaining to rejected or withdrawn bids
- When two or fewer responses are received:
 - Agency justification of award with limited competition
 - Canvass of those who did not bid and their responses, if applicable
- Original bids, including any withdrawn or rejected bids
- For Emergencies only
 - Signed Declaration of Emergency
 - Three quotes for Emergency
- Mandatory pre-bid conference and / or site visit sign-in sheet, transcript and items presented or distributed, if applicable
- If a Rebid, submit original Bid Tab and explanation why contract was rebid
- Subcontractor list for Campus funded projects under Wicks Law threshold, if applicable
- Wicks Law Waiver for Campus Let contracts, if applicable
- Project Labor Agreement and Due Diligence Study, if applicable
- Any debriefing or protest/appeal correspondence/documentation relative to the procurement (Note: all protests, and appeals where provided for, must be resolved prior to submission to OSC)
- Municipal Resolution/Authority Board Resolution authorizing the Municipality or Authority to enter into contract, if applicable
- Pre-Bid Cost Estimate
 - Price justification if awarded bid is not within 15% of estimate
 - Revised estimate if awarded bid is higher than the pre bid estimate by more than 15%
- Procurement Lobbying Act documentation as required by law
- Sexual Harassment Prevention documentation as required by law

4) Vendor Responsibility and Integrity

- Vendor Responsibility Profile
- Vendor Responsibility Questionnaire (or CUNY Construction Fund Vendor Disclosure Form dated 10/2014 or later version as mutually agreed to by the parties) certified within six months of the contracting entity's defined due date for the Questionnaire (or CUNY Construction Fund Vendor Disclosure Form)
- Proof of Workers Compensation and Disability Insurance coverage
- Vendor Responsibility documentation on all known subcontractors
- Proof of EO 192 compliance as applicable, including any required vendor integrity certification forms

OSC Pre-Audit Checklist

Construction Contract Amendment/Change Order

1) Transaction Identifying Documents

- Cover Letter with agency contact preferences, FOIL concerns, and any unique or unforeseen circumstances
- OSC Non-Approval Notice, if resubmission

2) Construction Change Order/Contract Amendment

- Change Order/Contract Amendment, including a description of all increases and decreases and/or request for time extension

3) Supporting Documents

- Justification of need, including reasonableness of transaction
- Justification of price for all increases and decreases
- Justification of time extension, including estimate of percentage of project completion

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SUNY CAPITAL INVESTMENTS INCORPORATE GREEN INITIATIVES THAT:

- **Educate** the clean energy workforce of the future
- **Maximize** energy-efficiency in building components
- **Clean** the grid with 100% renewable grid-sourced electricity
- **Design** deep energy retrofit and new net zero carbon buildings
- **Reduce** carbon output

BUILDING 

Incorporating Mass Timber into SUNY Design

Mass (Cross-Laminated) Timber is:

1. Fire Resistant

During a fire resistance test of a 5-ply CLT panel wall, the panel lasted 3 hours and 6 minutes, more than the two-hour rating required.

2. Strong

Mass timber buildings weigh approximately 1/5th that of comparable concrete buildings, which in turn reduces their foundation size, inertial seismic forces, and embodied energy.

3. Sustainable

Replacing steel with mass timber reduces carbon dioxide emissions between 15% and 20%.

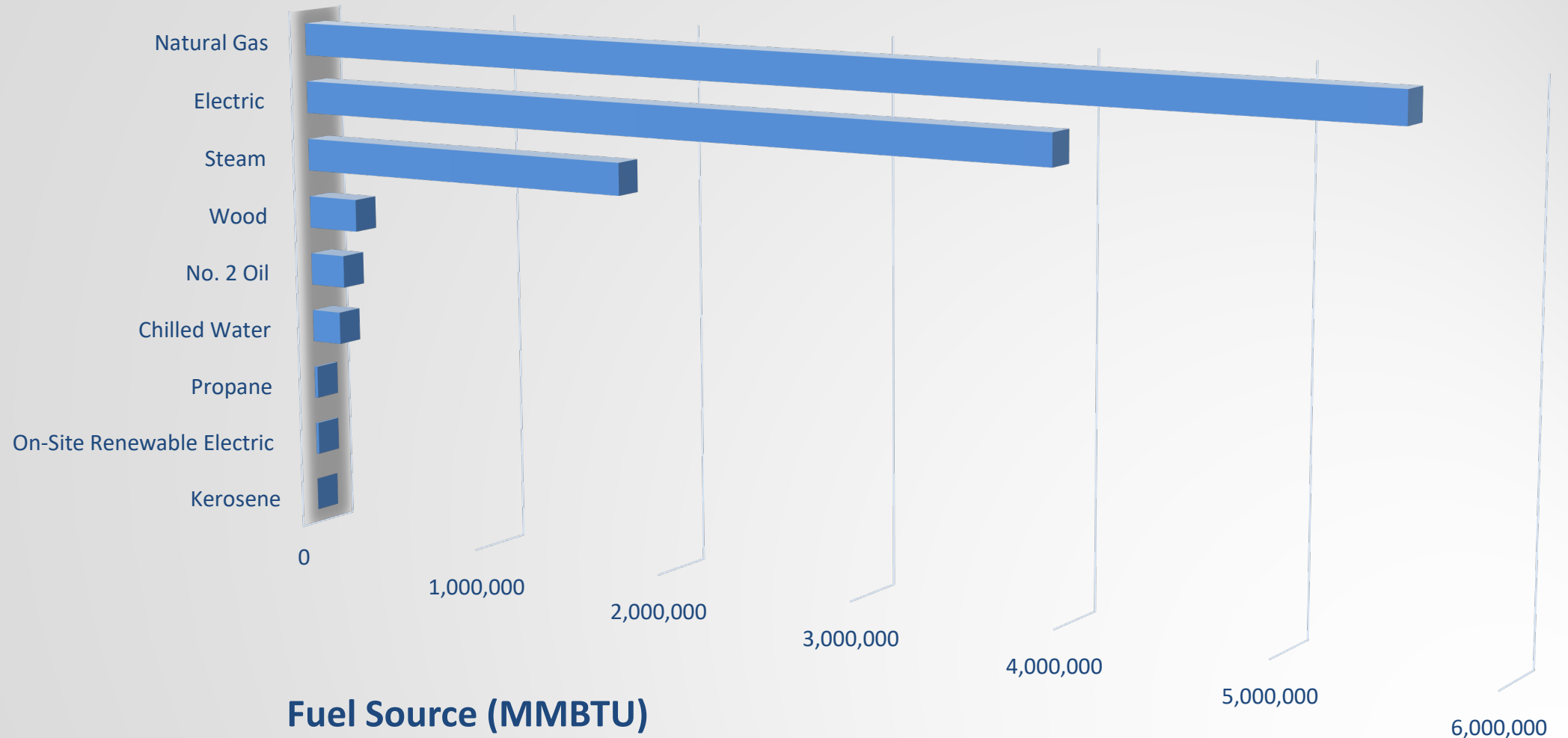
4. Cost-efficient

Mass timber buildings are roughly 25% faster to construct than concrete buildings and require 90% less construction traffic since mass timber panels are prefabricated off-site and assembled on-site.



Incorporating Design Elements to Meet Energy Goals: Designing SUNY Projects to Maximize Energy Savings

SUNY's Energy Profile



SUSTAINABILITY UPDATE

Net Zero Portfolio Support Program

In April 2019, SUNY and the Fund were awarded \$250,000 from NYSERDA as part of the Net Zero Portfolio Support program.

The funding supports the development of performance standards and institutional mechanisms that enable the design, construction and operation of Net Zero buildings.



September 2019 workshop between Fund/SUNY & the NYSERDA consultant team

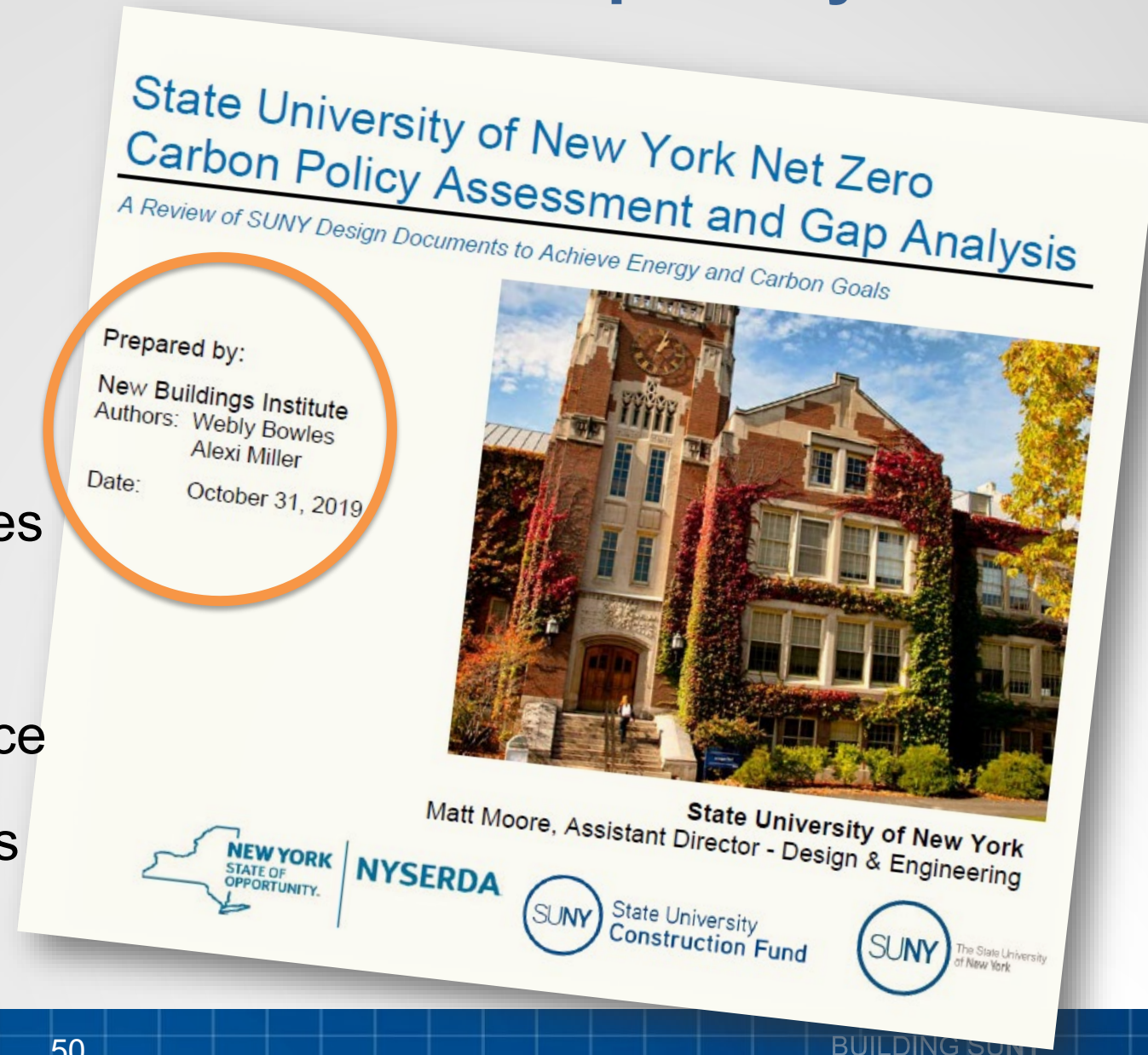
Topics of discussion included implementation challenges related to:

- Financing
- Types of Projects
- Operations
- Technology
- Design Consultants
- Central Plants



Net Zero Carbon Policy Assessment & Gap Analysis

- Procurement guidance
 - Performance Based Contracting
 - Consultant Interview Questions
 - Owner Project Requirements Template
- Further development design guidelines
- Design Checklists
- Power Purchase Agreements guidance
- Develop campus energy master plans



Revisions to the Net Zero Carbon Policy Directive

PROGRAM DIRECTIVES



Issue date: July 2018

DIRECTIVE 1B-2

Net Zero Carbon New Buildings and Deep Energy Retrofits of Existing Buildings

Background

The purpose of this Directive is to define and identify goals for Net Zero Carbon (NZC) new buildings and Deep Energy Retrofits (DER) of existing buildings. In support of SUNY's energy and carbon use reduction goals, this Directive outlines the project target goals and provides direction for project designs.

The U.S. Department of Energy defines a Zero Energy Building as: "an energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the on-site renewable exported energy."

NZC and DER projects have evolving targets for building design and performance for which there are multiple but similar definitions. As such, some of the guidance provided in this Directive may not be universally accepted, but the overarching goal is to design and construct highly energy efficient buildings which significantly reduce energy consumed below an energy code standard for new buildings or energy usage for an existing building.

This Directive uses Site Energy as the measure of performance and energy consumption. This approach is in keeping with an evolving recognition that the source to site energy factor is continuing to adjust downward with time and that site energy is the most direct indicator of building energy usage.

1. Net Zero Carbon New Buildings

Design all new construction building projects to achieve SUNY's goals of NZC buildings. It is recognized that project funding may not be able to include supplying the full energy usage of the building from non-carbon renewable energy sources. In those cases, the design goal will be to design the building as NZC "capable" where the design achieves the energy use intensity (EUI) limit using HVAC equipment and systems that can be electrically powered from renewable energy sources such as ground and air source heat pumps and variable refrigerant flow systems.

Performance goals:

- Site Energy Use Intensity (EUI) limits
- Classroom building – 50 kBtu/ft²/year
- Office building – 50 kBtu/ft²/year
- Laboratory building – 150 kBtu/ft²/year
- Residence Hall – 32 kBtu/ft²/year

The NYSERDA consultant team is developing revisions to the Directive 1B-2 "Net Zero Carbon New Buildings and Deep Energy Retrofits of Existing Buildings"

Significant upcoming revisions include:

- Guidance on buildings connected to District Energy Systems
- Establishing EUI goals for new construction and major renovation projects
- Elimination of simple payback approach for component replacement projects.

RFP Template for Compliance with 1B-2

RFP for Net Zero Carbon and Deep Energy Retrofit

Project: *<project name>*

Client: *<client name>*

SUCF Project #: *<SUCF project number>*

Architect Project #: *<architect's project number>*

Introduction

In July 2018, SUNY State University Construction Fund released Directive 1B-2, with the purpose of defining and identifying goals for Net Zero Carbon new buildings and Deep Energy Retrofits of existing buildings. The goal of the Directive is “to design and construct highly energy efficient buildings which significantly reduce energy consumed below an energy code standard for new buildings or current energy usage for an existing building.”

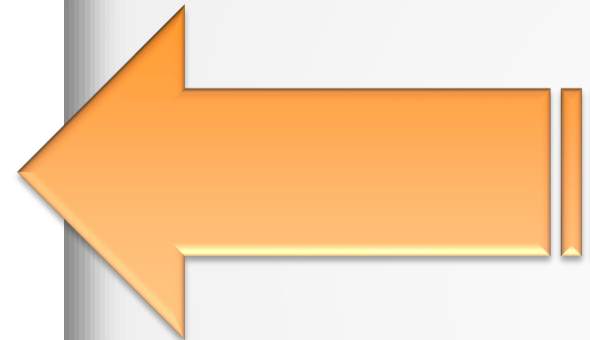
Appendix A of this RFP includes a description of 1B-2 directive requirements and definitions of commonly used terms in this RFP.

The proposed project shall use the following energy analysis methodology.

<For projects that are 100% new construction>

- Create a code compliant Base Building of the Concept Design compliant with the current NYS Energy Code.
- Incrementally incorporate any additional energy efficiency measures being considered as part of the project Concept Design and confirm that this design would meet Directive 1B-7 goals of achieving LEED Silver certification.
- Using the Base Building model as a reference model, evaluate additional energy efficiency measures that may be required to meet the site EUI and net zero carbon goals in Directive 1B-2.

The Fund created a Request for Proposal (RFP) template for the procurement of consulting services for facilitating compliance with the 1B-2 Directive.



UPDATE to the Energy Conservation Construction Code

The New York State
2020 Energy Conservation
Construction Code
is anticipated to be published
May 2020



Adoption of the NYStretch Energy Code

NYStretch Energy Code — 2020

An Overlay of the 2018 International Energy Conservation Code and ASHRAE Standard 90.1-2016

Version 1.0 | July 2019

As part of the adoption of the 2020 New York State Codes, the Fund will adopt the 2020 NYStretch Energy Code.

What is it?

- A more stringent energy code by NYSERDA that can be adopted instead of the NYSECCC.

Why adopt it ?

- Amends the 2020 NYSECCC, resulting in an estimated 7% energy savings and 10-11% more energy cost efficient.
- Supports the goals of the Climate Leadership Community Protection Act and 1B-2.

NYStretch Energy Code Key Changes

Building Envelope:

Improved window performance, increased insulation requirements, air leakage testing, air barrier commissioning

Lighting/Electrical:

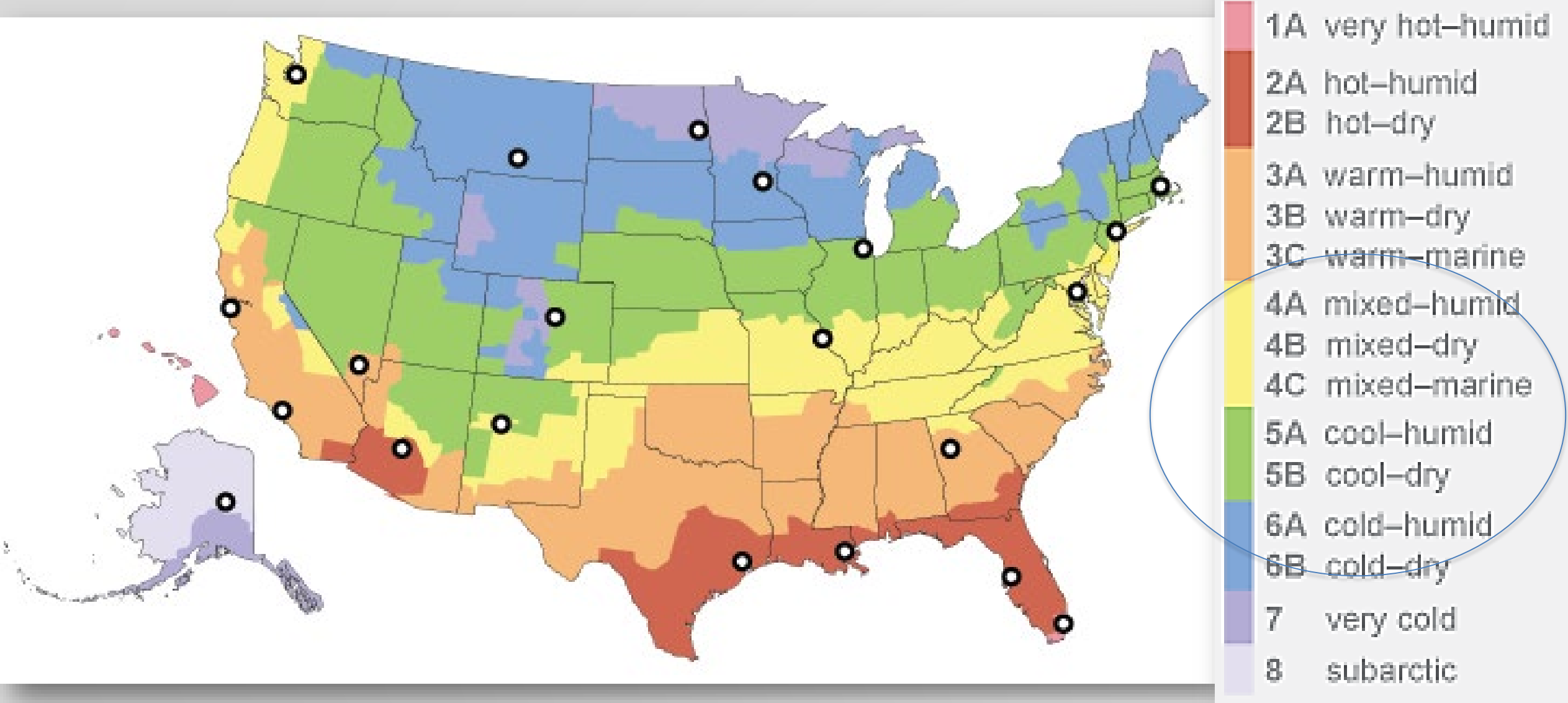
Reduced interior and exterior lighting power, lighting controls, whole-building energy monitoring

Miscellaneous:

Commercial kitchen equipment efficiencies

Economics of the NYStretch Energy Code

Climate Zones

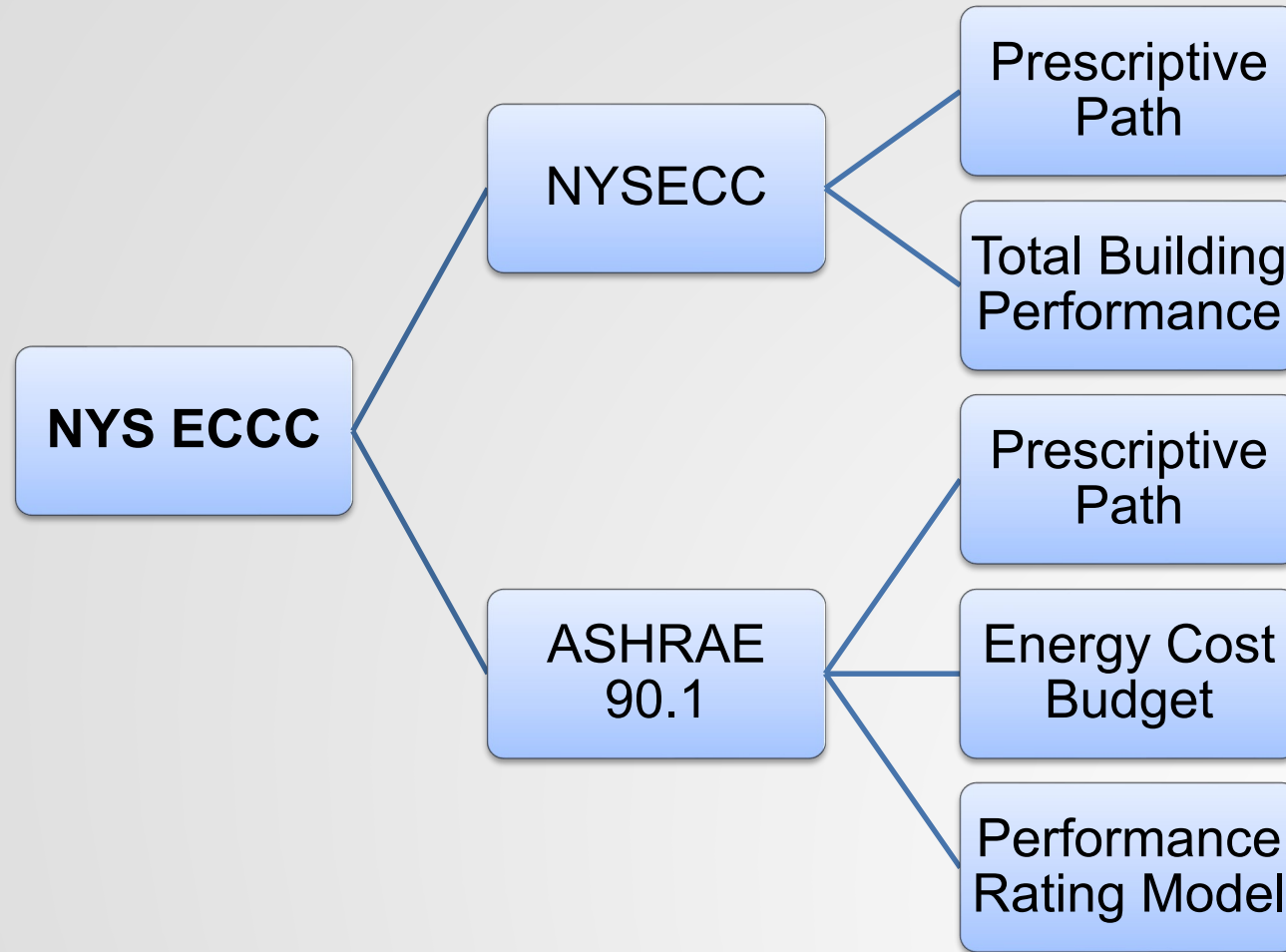


Economics of the NYStretch Energy Code

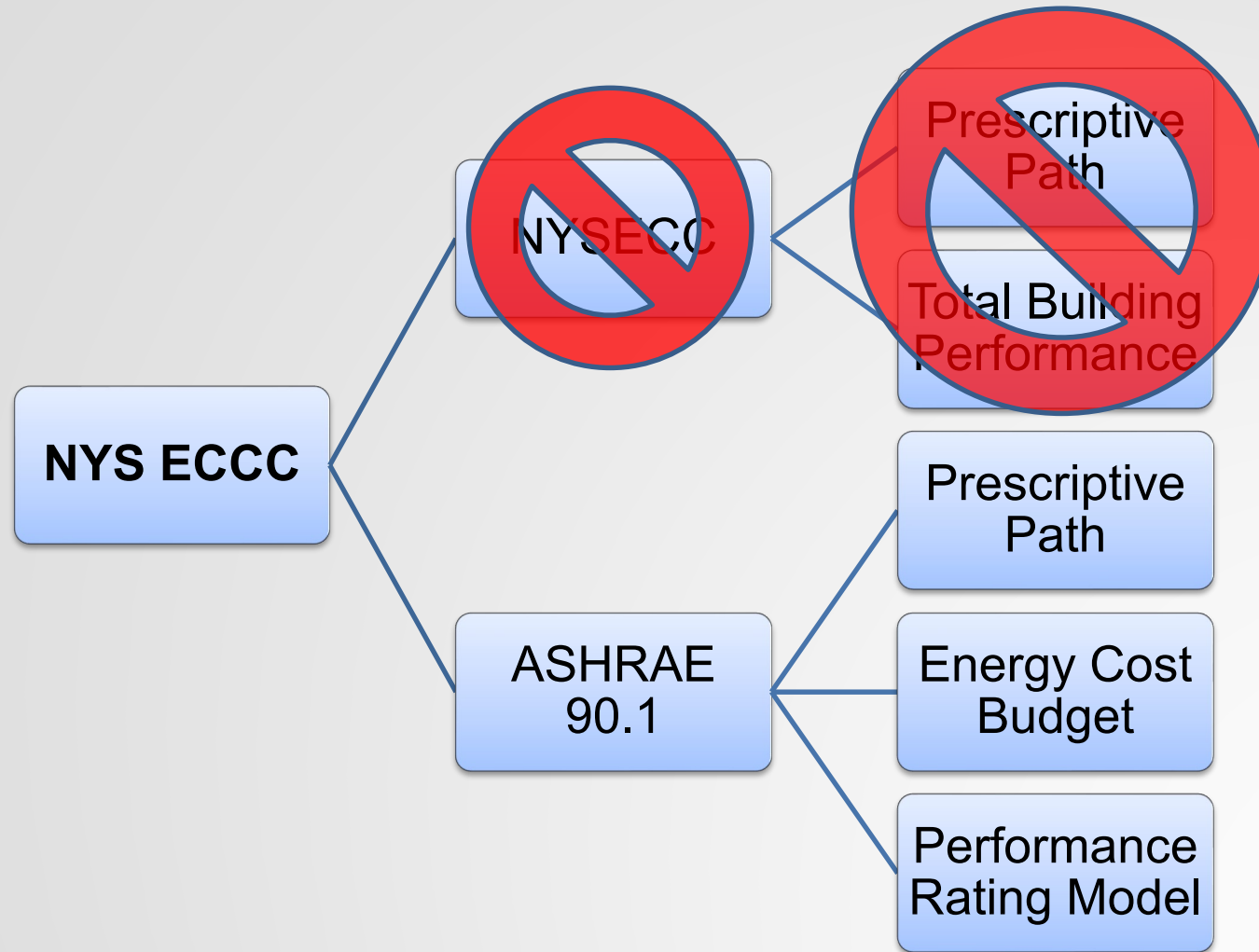
Commercial Results by Climate Zone:

Prototype		Energy Cost Savings	Incremental First Cost	Simple Payback
Climate Zone 4A		5.5%	\$ 0.85/SF	11.0
Climate Zone 5A		10.5%	\$ 1.81/SF	9.8
Climate Zone 6A		9.9%	\$ 1.96/SF	10.5

Energy Code Compliance Paths



Energy Code Compliance Paths



ACTIVE AND ANTICIPATED CAPITAL PROJECTS

EXAMPLES OF ACTIVE SUNY CAPITAL PROJECTS

- Shovel-ready
- Environmentally sustainable
- Create job growth
- Improve infrastructure
- Offer long term ROI



MARITIME:

Renovate Marvin Tode Science and Engineering Building, \$27.4M

✓ Shovel-ready

In design, first phase (\$4M) to bid in Spring 2020

✓ Environmentally sustainable

Anticipated to meet or exceed energy goals

✓ Creates job growth

Will create construction or construction-related 150 jobs

✓ Improves infrastructure

FCI is at 23.6%

✓ Long term ROI

Engineering Enrollment Has Increased by 9% since 2010, with employment rates in this discipline projected to increase by more than 13%.



ONEONTA:

Rehabilitate Alumni Hall for Economics and Business, \$24.7M

- ✓ **Shovel-ready**

Currently in design, construction bid Fall 2020

- ✓ **Environmentally sustainable**

Anticipated to meet or exceed energy goals

- ✓ **Creates job growth**

Will create 134 construction or construction-related jobs

- ✓ **Improves infrastructure**

FCI is at 33.6%

- ✓ **Long term ROI**

Business and Economics enrollment increased 47% since 2010, with employment rates in this discipline projected to increase by more than 13%.



Renovate Farnsworth Hall for Veterinary Science, \$28.2M

- ✓ **Shovel-ready**

Currently in design, first phase for surge space (\$3M) is in construction

- ✓ **Environmentally sustainable**

Anticipated to meet or exceed energy goals

- ✓ **Creates job growth**

Will create 190 construction or construction-related jobs

- ✓ **Improves infrastructure**

FCI is at 25.8%

- ✓ **Long term ROI**

Vet Science enrollment increased 11% since 2015, with employment rates in this discipline projected to increase by nearly 20%.



GENESEO:

Renovate Sturges Hall, \$34.2M

✓ **Shovel-ready**

In design, first phase for demo and abatement (\$9.4M) to bid Spring 2020

✓ **Environmentally sustainable**

Anticipated to meet or exceed energy goals

✓ **Creates job growth**

Will create 196 construction or construction-related jobs

✓ **Improves infrastructure**

FCI is at 52.5%

✓ **Long term ROI**

Social Science enrollment has increased by 17% since 2010, with employment rates in this discipline projected to increase by 13%.



OSWEGO:

Renovate Hewitt Hall, \$75.1M

✓ **Shovel-ready**

In design, first phase for abatement and demo (\$22M) to bid in late 2020

✓ **Environmentally sustainable**

Anticipated to meet or exceed energy goals

✓ **Creates job growth**

Will create 415 construction or construction-related jobs

✓ **Improves infrastructure**

FCI is at 30.2%

✓ **Long term ROI**

Communications Enrollment has increased by 10% since 2010, with employment rates in this discipline projected to increase by nearly 9%.



Additional Examples of Planned High-Priority SUNY STEM Capital Projects

University at Albany	Renovate former Albany High School for College of Engineering and Applied Sciences
University at Buffalo	Construct new Engineering Building to accommodate growth in School of Engineering & Applied Sciences
Stony Brook University	Construct new multi-disciplinary Engineering Building to accommodate growth in School of Engineering & Applied Sciences
Cornell	Renovate Plant Science Building
Environmental Science & Forestry	Renovate Illick Hall for Environmental Forest Biology
Optometry	Renovate 7 th Floor for Clinical Services
Upstate Medical University	Renovate Silverman Hall for Health Professions
Old Westbury	Rehabilitation of Natural Science Building
Purchase	Renovation of Natural Science Building

PROJECT AWARDS AND RECOGNITION

BINGHAMTON: NEW SCHOOL OF PHARMACY



BINGHAMTON: NEW SCHOOL OF PHARMACY

In May 2019, the Jeffrey J. Zogg – Build NY Award was awarded to the Pharmacy project.



BINGHAMTON: RENOVATE SCIENCE IV



BINGHAMTON: RENOVATE SCIENCE IV

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MARCH 2019

Modern Makeover

Schools and universities are finding that there can be a lot of life left in their older facilities.

Science IV building, Binghamton University. Photo courtesy of Ashby McGraw Architects. David Lamb Photography.

thy campus presence.

"The buildings are all of a style that complements the Penn State aesthetic," says Dress.

Beyond sentiment, the building, though approaching 90 years old, remained in good physical shape, so modernization made financial sense, too. Dress says.

After using parts of the building for a few years as surge space, Penn State decided that the university's Eberly College of Science, some of whose programs were housed in nearby facilities, would lay claim to Rittenhouse's east wing and provide expanded space for undergraduate support services.

Although the floor-to-floor heights of the Rittenhouse building were not tall enough to accommodate modern science labs, Dress says, the space was suitable to be converted to faculty offices, learning labs, meeting rooms and spaces for academic advising, and job recruitment.

The features that educators desire in their classrooms and other spaces aren't always an easy fit for an older



Science IV was featured on the March 2019 cover of American School and University Magazine, recognized for breathing 'new life into an older building with a modernization that embraces a facility's link to the past while providing learning spaces that accommodate the needs of 21st-century students.'

FREDONIA: RENOVATE ROCKEFELLER ARTS CENTER (RAC)



FREDONIA: RENOVATE ROCKEFELLER ARTS CENTER (RAC)

The RAC Project received a 2019 American Institute of Architects New York State Excelsior Award for Public Architecture Design.



ONEONTA: MILNE LIBRARY



ONEONTA: MILNE LIBRARY



Milne Library was the First Place winner in the 2019 American Society of Interior Designers Award for Large Commercial Design.

QUESTIONS

Oneonta Milne Library