MEETING AGENDA

I. SUNY Capital Program & SUCF Overview

II. SUCF Current Planning and Design Projects

III. SUCF/Downstate Current Capital Construction Projects

IV. Questions????
### SUNY Capital Programs

<table>
<thead>
<tr>
<th>State Operated</th>
<th>Number of Buildings</th>
<th>Square Foot&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>Average Age&lt;sup&gt;(2)&lt;/sup&gt;</th>
<th>Funded By</th>
<th>Projects Managed By</th>
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<tr>
<td>Educational Facilities</td>
<td>1,844</td>
<td>58.5</td>
<td>45.4</td>
<td>State</td>
<td>Fund/Campus</td>
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<td>DMC</td>
<td>4</td>
<td>0.9</td>
<td>39</td>
<td>Hospital Revenues</td>
<td>Fund/Campus</td>
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<td>3.3</td>
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<td>Room Rents</td>
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<td>Residence Halls</td>
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<td>DASNY/Campus</td>
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<td>DMC- Res, Student, Parking</td>
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<td>55</td>
<td>Room Rents</td>
<td>DASNY/Campus</td>
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<td>Community Colleges</td>
<td>503</td>
<td>18.9</td>
<td>41.3</td>
<td>50% State 50% Local</td>
<td>Local</td>
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<td>Totals</td>
<td>2,851</td>
<td>101.2</td>
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<td>DMC Totals</td>
<td>10</td>
<td>2.2</td>
<td>48</td>
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**Notes:**
<sup>(1)</sup> Square footage and funding expressed in millions.
<sup>(2)</sup> Average age (in years) represents straight average with no consideration given to the size of buildings or subsequent renovations.
WHO WE ARE?

THE STATE UNIVERSITY CONSTRUCTION FUND IS:

• A Public Benefit Corporation

• Governed by a three-member Board of Trustees who must approve all contracts

• Exempt from Wicks Law

• Treated as a State Agency and subject to post audit by the Office of the State Comptroller
WHAT WE DO

• SUNY is the SUCF’s **ONLY** client.

• SUCF is the primary conduit for SUNY capital funding and is held responsible for how capital appropriations are used.

• Help develop, justify, and manage the Educational Facilities and Hospital Capital Plans, totaling over $5B, with a staff of 152.

  **SUCF is responsible for expediting Educational Facilities and Hospital Capital Plans.**

• Provide planning, design, construction and **funding oversight**.

• SUNY/SUCF projects are managed through the Design-Bid-Build delivery mechanism. SUCF has no authority for Construction Manager at Risk or Design-Build delivery approaches.
There are two primary means of capital project management:

- **SUCF**
  Construction Fund acts as agent. Contracts let through the Fund. Design & Construction administration by the Fund.

- **Campus Let**
  Local contracts let by the campus. Design and construction administration by campus staff.
SUNY Educational and Hospital Capital Appropriations

($ in millions)

Capital Appropriations

<table>
<thead>
<tr>
<th>State Fiscal Year</th>
<th>System-Wide (CM)</th>
<th>Campus Specific Appropriations</th>
<th>Hospitals</th>
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DOWNSTATE APPROPRIATION BY FISCAL YEAR

($ in millions)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Unrestricted (CM)</th>
<th>Restricted (SI)</th>
<th>Hospital</th>
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<td>FY04-05</td>
<td>$29</td>
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<td>FY05-06</td>
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<td>FY06-07</td>
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<tr>
<td>FY07-08</td>
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<td>FY08-09</td>
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<td>FY09-10</td>
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<tr>
<td>FY16-17</td>
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</table>
**Downstate Uncommitted**

**Educational and Hospital Capital**

*as of February 2015*
DOWNSTATE MEDICAL CENTER’S SUCF TEAM

Yvonne Kielb
Capital Program Manager

Susan DeSimone
Assistant Director Design

Bill Hagan
Assistant Director Construction

Costing Services
Project Estimating

Raul Garip
Design Coordinator

Rick Feltman
Construction Coordinator

Engineering Services
MEP, Life Safety, Code

Simon Stein
Construction Coordinator

Other Services
Finance, Accounting, Procurement, Legal Counsel
Current Downstate Planning & Design
EDUCATIONAL, $48M Total Project Cost:

- Student Center Plumbing and Piping Replacement $295K
- Preheat & Pump Mech Basic Science Building $669K
- Replace Roof Basic Science Building $2.24M
- Installation of GRI Equipment $6M
- Minor Critical Maintenance Rehab Ed Facilities $3M
- Rehab HVAC & Water piping animal Labs Basic Science Buildings $28M
- Installation of Alternative Energy Sources $6M
- Facade Restoration Basic Science Building $400K
- Health Science Education and Basis Science Restrooms Renovation $400K

SUNY Downstate Medical Center
Projects Completed 2012 to 2015

Remaining Ed/CM Capital not under contract 2015: $76M
SUNY DOWNSTATE MEDICAL CENTER
Projects Completed 2012 to 2015

Remaining Hospital Capital Uncommitted 3/2015: $139M

HOSPITAL, $21.5M Total Project Cost:

• Electrical Upgrade UH $1.7M
• Replacement Peripheral Heat/Cool System $100K
• HVAC for Transplant Unit $8.4M
• Inter Imaging Mod Program $3.9M
• Transplant Make Ready $600K
• Replace Standpipe-UHB $200K
• Rehab of Hospital Kitchen $6M
• Minor Critical Maintenance Rehab Hospital Facilities $300K
• Materials Management Plan $250K
In Planning/Design for EDUCATIONAL, $23.2M Total Project Cost:

Funded:

- Space Utilization Planning for BSB/HSEB
  $200K, in Planning

- Upgrade CO Detection Systems, Various buildings, Hospital/Educational Split
  $1M, in Design

Unfunded:

- Upgrade Research Lab & Core Facilities at Basic Science Building
  $13M, Awaits Study

- Develop Administrative Space, Basic Science Building
  $9M, Awaits Study
In Planning/Design for HOSPITAL, $36M Total Project Cost:

Requires Downstate Leadership Participation:

- Space Utilization Planning  
  $300K, in Planning

- Assess Mechanical Systems, Hospital  
  $1M, in Planning

- Pharmacy Upgrades  
  $3M, in Design

- Electrical Segregation  
  $32M, in Design
SUNY Downstate Medical Center
Campus Projects in Planning and Design, 2016

In Planning/Design for EDUCATIONAL, $4M Total Project Cost (Unfunded):

- Upgrade Campus Cellular Service, Hospital/Educational split, in Planning, $1.5M
- Waterproof Penthouse Floor BSB, in Design, $380K
- Replace HSEB Facade, in Design, $2M

In Planning/Design for HOSPITAL, $10M Total Project Cost (Funded):

- Endoscopy Upgrades, $300K
- Renovate Mammography Suite, $2M
- Renovate Ceilings Operating and Recovery Rooms UHB, $2.5M
- Replace Labor & Delivery and Transplant Roofs, $5M
- Provide Dedicated Exterior Exhaust for X-Ray #1, $250K
SUNY DOWNSTATE MEDICAL CENTER
SUCF Projects Planned Over Five Years

Ready for Construction in 2015-2016, $250M Total Project Cost:

- Replace Hospital Air Handling Units, Hospital, $18M
- Replace Campus Boilers, Hospital/Educational split, $77M
- Upgrade Electrical Power BSB, Educational, $9M
- Sprinkler Systems, Lab Exhaust Stacks at Basic Science Building, Educational, $14M
- Upgrade BSB Heating and Ventilation, Humidification Controls, Educational, $32M
- Public Health Academic Building, $103M
STATUS OF DOWNSTATE CAPITAL PLAN

• Educational Capital Funding $0M
  All funds are committed to current project construction

• Educational CM planned for FY 2017-2020

• $3.7M annual (SUBOA Formula of $200M System)

• Planning and Design focus on Hospital $120M

• Promote Advocacy for Downstate Campus
YOUR ROLE IN THE CAPITAL PROGRAM

As a campus stakeholder:

• Participate in Stakeholder Committees, solicit input
• Facilitate decision-making
• Review and comment on design progress

As a capital program administrator:

• Adhere to Campus Let procedures
• Resolve stakeholder conflicts
• Collaborate with the Fund team to facilitate project completion
YEARS 2016-2020:

CONSTRUCTION
LOGISTICS
AGENDA

• Multiple Construction Projects
  – Coordination
  – Potential Impacts

• Logistics and Project-Specific Construction Management

• Major Project Descriptions
  – 5 Projects at $127M
Benefits

- Replace 1950’s vintage, neglected infrastructure
- Increase capacity of infrastructure to support future renovations
- Improve energy efficiency
- Reduce required maintenance
CONSTRUCTION MANAGEMENT

CAMPUS COMMUNITY

DMC FM&D PROJECT MANAGERS

LOGISTICS CONSTRUCTION MANAGER

SUCF PROJECT MANAGERS

PROJECT CONSTRUCTION MANAGERS

CONTRACTORS DESIGN CONSULTANTS

BUILDING SUNY
GOALS OF CONSTRUCTION AND LOGISTICS COORDINATION

• Minimize Impacts on End Users
  Students, Faculty, Staff, Researchers, Patients

• Minimize Impacts on Campus Operations
  Heating, Cooling, Ventilation, Deliveries, Access, Security, Elevators

• Deliver projects on budget and on schedule
• Centralized coordination of all project work at DMC
CONSTRUCTION IMPACTS

- Vibration/Noise
- Dust
- Service Outages (Hood Exhausts, Steam, Power, Water)
- Emergency Egress and Building Access
- Use of Elevators, Corridors
- Material Deliveries and Removals
- Traffic Control
- Crane Logistics
SOLUTIONS / MITIGATIONS

• Contractor work restrictions and controls included in the Construction Documents

• Logistics Plans created to show contractor access points, paths of travel and work areas and highlight potential conflicts.

• Enhanced construction management oversight including Logistics CM retained

• Coordination and specification of deliveries and crane locations

• Enhanced communication with campus community to provide advance notice, progress updates, and coordination to minimize impacts
SECURITY

- Access to service area will frequently be required off-hours by contractors
- DMC Security staff overtime included in contract
- Contractor employees will be on-boarded including background checks, training, and for UHB work inoculations
CAMPUS CONSTRUCTION COMMUNICATION

• Daily communication with the campus community when construction will cause impacts
• Periodic “Campus Construction Project Update Meetings”
• FM&D Website has been updated to include project progress information.
• Email Blasts: Notifications, Alerts and Emergency Information
• Maintenance Operations Center (MOC) Issues x 1212
LOGISTICS PLANS
ENTRY, PATH OF TRAVEL, AND WORK AREA PLAN

CONTRACTOR ENTRY to Sub Basement

---Dotted Line Shows Worker Path of Travel

FLOOR OF BSB
LOGISTICS PLANS

AREA OF WORK AND PATH OF TRAVEL BY WORKERS IN SUB-BASEMENT
LOGISTICS PLANS

AREA OF WORK AND PATH OF TRAVEL BY WORKERS IN BASEMENT
LOGISTICS PLANS

AREA OF WORK AND PATH OF TRAVEL BY WORKERS ON FLOOR 1
LOGISTICS PLANS

AREA OF WORK AND PATH OF TRAVEL BY WORKERS ON FLOOR 6
LOGISTICS PLANS

AREA OF WORK AND PATH OF TRAVEL BY WORKERS ON FLOORS 8 AND 9
LOGISTICS PLANS

AREA OF WORK AND PATH OF TRAVEL BY WORKERS ON THE ROOF
Upcoming Construction Projects:
HVAC UPGRADES, BSB
Benefits:
Improve Mechanical Systems and Emergency Power for BSB. Ensure AAALAC requirements for temperature and humidity are maintained in DCM.

Schedule / Total Project Cost:
September 2016 to December 2018 / $32M

Scope:
• Building Management system and Emergency Generator for BSB
• Security Cameras required for all projects installed through this project > in corridors BSB
• Install new Heating, Ventilation and Air Conditioning (HVAC) equipment for DCM and Gross Anatomy > in mechanical equipment rooms
• Replace IAVI leaking floor drains on the 9th floor > access is from the 8th floor below
Mitigation Efforts:

- **Noise and vibration**
  - Activities will be scheduled at best times and vibration/noise monitoring equipment will be installed

- **Drain replacement in IAVI impacts spaces below**
  - Off-hours, restore room to use by morning, protection of furnishings, cleaning

- **Air handler shut-downs, cutovers**
  - Done during intersession period for Gross Anatomy and coordinated with DCM
Upcoming Construction Projects:

REPLACE BOILERS
Benefits:
Replace antiquated boiler plant and related equipment to ensure reliable delivery of steam for heating, cooling and sterilization

Schedule / Total Project Cost:
October 2016 to December 2019 / $77M

Scope:
• Construct temporary boiler plant > *in Grove*
• Create construction access to boiler plant > *between Library and driveway to loading docks*
• Install new boilers and equipment > *in boiler plant*
• Install new oil tanks > *between Lenox and HSEB*
• Repair boiler chimney > *on BSB roof*
Mitigation Efforts:

• **Boilers will be taken out of service for replacement**
  – Temporary boilers will be provided for service continuity

• **Temporary boiler building constructed in the Grove**
  – Deliveries of large equipment by crane on weekends

• **Noisy construction to create access to boiler plant between Library and driveway to loading docks**
Mitigation Efforts (Continued):

- Protection of windows above access areaway and cleaning at end of the project

- Construction material deliveries
  - Will be coordinated with DMC

- Material staging area
  - Staging area if approved by NYC will be located in the street
AREA OF WORK AND PATH OF TRAVEL BY WORKERS IN SUB-BASEMENT
AREA OF WORK AND PATH OF TRAVEL BY WORKERS ON FLOOR 1

TEMPORARY BOILER PLANT IN GROVE

NEW AREAWAY

AREA OF WORK & PATH OF TRAVEL FLOOR 1

LEGEND:
- PATH OF TRAVEL (TYPICAL)
- 1496.01 STACKS
- 1496.02 SPRINKLER
- 1496.00 DLAR
- 14A16 AHU
- 14817 BSB BOILER
- 14906 POWER

NEW ACADEMIC BUILDING (UNDER CONSTRUCTION)
Upcoming Construction Projects: 

ELECTRICAL SWITCHGEAR, BSB
Benefits:
Replace aged, non-serviceable electrical equipment, provide additional normal and emergency power for current and future needs

Schedule / Total Project Cost:
December 2016 – January 2019 / $9M

Scope:
• Replace main electrical switchboards that serve BSB > in basement
• Connect to power coming from PHAB > in sub-basement and basement
• Decommission and remove existing transformers > in areaways in front of BSB
• Connection to new emergency generator > on 8th floor
Mitigation Efforts:

• Nearly every space in BSB will experience two 6-hour power outages after normal work hours
• Outages will be pre-planned and weeks of advance notice will be provided
• Lighting and equipment not connected to emergency power will be affected
• DCM, data center, and equipment throughout BSB that is plugged into emergency power will not experience outages
• Electrical shutdowns will impact 1/5 of a floor at a time
• Data and power for computers shutdowns impact half a floor at a time
Managing Power Outages

• Principal Investigators (PI) have been asked about need for back-up power

• A plan to deal with shutdowns will be developed for each PI

• Alternatives include:
  • Determine the shutdowns can be tolerated
  • Connect essential equipment not currently fed by emergency power to emergency power if available within the lab
  • During construction, connect essential equipment to back-up power through temporary means (reduces shutdown time to the time to switchover from the existing source to the temporary source). Temporary power has limited capacity so only for essential equipment.
Upcoming Construction Projects: FIRE STANDPIPE, BSB
Benefits:
Provide updated sprinkler standpipes for fire protection and ability to connect future sprinkler system as spaces in BSB are renovated

Schedule / Total Project Cost:
June 2016 to December 2018 / $5M

Scope:
• Replace corroded standpipes > in stairwells and corridors
• Install new Fire Pump > in basement
• Replace corroded sprinkler piping > in basement and sub-basement
• Standpipe install in stairwells, impacts emergency exits, dust
  – Work limited to one stair at a time, signage to alternate exits, reopen stair during business hours after cleaning

• Pipe installation noise (stairwells, basement, sub-basement)
  – The use of vibration monitoring equipment to be installed near sensitive lab equipment

• Existing sprinkler head and piping replacement in sub-basement and basement service areas only *(excludes Gross Anatomy)*
  – Protection of furnishings and equipment by contractor, cleaning
• One piping connection in Gross Anatomy at end of central aisle in ceiling (100 sf)
  – Access from NY Ave, done during intersession and coordinated with the Departments, dust protection partition, HEPA vacuum

• Open corridor wall in DCM – three 5’ x 5’ openings
  – Straight time versus off-hours to be coordinated with DCM during construction. Seal opening daily at end of shift (AAALAC). Continuous cleaning.

• Open corridor wall – three 5’ x 5’ openings on other floors
  – Off-hours. Seal opening daily at end of shift. Continuous cleaning.
Upcoming Construction Projects: EXHAUST STACKS
Benefits:
Mitigate entrainment of BSB lab exhaust into the fresh air intakes of the PHAB

Schedule / Total Project Cost:
October 2016 to April 2018 / $7.5M

Scope:
• Replace exhaust goosenecks with vertical stacks to prevent exhaust air re-entrainment into BSB and PHAB > on roof of BSB
• Replace fans and motors > in BSB penthouse
• Exhaust goosenecks serve fume hoods, some general building exhaust, cage wash exhaust and toilet exhausts
• Two 2-3 day shutdowns of fume hoods will occur several weeks apart

• Shutdowns will be staggered in 4 Phases, vertically through the building, so that most fume hoods on a floor will be operational during any given phase

• Shutdowns will be pre-planned with weeks of advance notice provided to the impacted individual
Managing Fume Hood Shutdowns

• Principal Investigators (PI) have been asked about hood use and tolerance for shutdowns

• A plan to deal with shutdowns will be developed for each PI

• Alternatives include:
  • Schedule around or curtail work during the shutdown
  • Work in an operational hood in another lab during the shutdown
  • Cases where continuous fume hood operation is required will be identified and a contingency plan made
PHASING PLAN, ALL PHASES, ROOF VIEW
SHARED HOOD SAMPLE – 6TH FLOOR
GREEN = ROOM WITH OPERATIONAL HOODS

LET’S ZOOM IN HERE
SHARED HOOD SAMPLE – 6TH FLOOR
SUMMARY

• Projects will benefit the campus and prepare BSB for modernization

• Particular care being taken to minimize impacts, hear concerns and remedy problems

• FM&D, CMs and Design consultants will be making plans with PIs for emergency power, fume hoods, and vibration sensitive equipment

• Various communication strategies rolling out
  • Monthly Campus Construction Project Update Meetings
  • FM&D Website  http://www.downstate.edu/FMnD
  • Center-Wide email notifications
  • Maintenance Operations Center (MOC) Issues x 1212 (8:30-4:30pm)
  • Personal communication regarding upcoming and ongoing work
Questions?...