NYU Facilities Management
Academic Client “Summit”

May 22, 2009
Agenda

9:00  Meet & Greet Breakfast
9:30  Introductions
9:45  Services and Standards
10:00 NYU Facility Expense Accounting Policies
10:15 Capital Maintenance Five-Year Priorities & Plan
10:30 Code Compliance Challenges & Achievements
10:45 Energy Management Goals & Achievements
11:00 Client Forum
11:30 Adjourn
Services & Standards
About Facilities & Construction Management: Fast Facts

– We serve:
  • More than 3,000 faculty and other academic professionals
  • Almost 40,000 students
  • More than 6,000 employees

– We manage:
  • More than 11 million square feet of building space
  • More than 100 owned buildings, plus countless leased
  • More than $140 million in annual capital expenditures
  • More than $160 million in annual expenses
  • More than 150,000 client work requests each year
Service Management Concept

NYU Client Work Requests
  Academic/
  Faculty Residential/
  Student Residential

Scheduled Preventive Maintenance Routines

External Community

Client Services Center

NYU Service Employees

Contractors/Vendors

FCM Professionals/
Other NYU Departments
# Service Priorities

<table>
<thead>
<tr>
<th>Priority</th>
<th>On-site Response Time</th>
<th>Stabilization/Completion Time*</th>
<th>Work Categories</th>
<th>Examples</th>
<th>Communications FCM</th>
<th>Communications Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Immediate</td>
<td>Same day</td>
<td>*Time-sensitive</td>
<td>*Work required to support a scheduled event</td>
<td>Radio dispatch</td>
<td>Convey response team updates to client until situation is stable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Imminent threat to life safety</td>
<td>*Fire or other emergency response *Life safety system malfunction or outage</td>
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<td></td>
<td></td>
<td></td>
<td>*Critical space impact or critical system outage</td>
<td>*Research labs *Data centers *HVAC system failure *Electrical system failure</td>
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<td></td>
<td></td>
<td></td>
<td>*Imminent threat or actual property damage</td>
<td>*Roof leak *Flood</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>*Imminent threat to security</td>
<td>*Exterior doors won’t close/lock *Broken window</td>
<td></td>
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<tr>
<td>1</td>
<td>1 hour</td>
<td>As soon as possible</td>
<td>*Public visibility</td>
<td>*Graffiti *Trash around building exterior *Property damage</td>
<td>Radio dispatch</td>
<td>Communicate status changes and work order completion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Security equipment failures/malfunctions</td>
<td>*Cameras *Interior locks</td>
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<td></td>
<td></td>
<td></td>
<td>*Non-discretionary cleaning services</td>
<td>*Spills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Same day</td>
<td>As soon as possible</td>
<td>*Adverse impact on ability to work</td>
<td>*Lights out</td>
<td>Normal dispatch</td>
<td>Communicate status changes and work order completion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Adverse impact on comfort</td>
<td>*Too hot/too cold</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>*Adverse impact on neighboring community</td>
<td>*Neighbor complaints regarding construction projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Next day</td>
<td>Within one week or as soon as possible, as appropriate and as agreed by client</td>
<td>*Potential to worsen if not corrected</td>
<td>*Dripping faucet *Repair fraying carpet</td>
<td>Normal dispatch</td>
<td>Communicate status changes and work order completion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Discretionary requests</td>
<td>*Paint office *Plant new landscaping</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>*Minor handy person requests</td>
<td>*Hang bulletin board, shelves, etc.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>*Non-emergency cleaning requests</td>
<td></td>
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<tr>
<td>4</td>
<td>As scheduled and assigned</td>
<td>To be completed within the month it is scheduled</td>
<td>Preventive Maintenance</td>
<td>*Fire-life safety preventive maintenance tests, drills and inspections</td>
<td>Normal dispatch</td>
<td>Not applicable</td>
</tr>
<tr>
<td>5</td>
<td>Not applicable</td>
<td>As determined by Capital Plan</td>
<td>Capital Projects</td>
<td></td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
## Service Standards

<table>
<thead>
<tr>
<th></th>
<th>FY2008 Actuals</th>
<th>FY2009 Performance</th>
<th>FY2010 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-time completion for client work requests</td>
<td>Not measured</td>
<td>69%</td>
<td>85%</td>
</tr>
<tr>
<td>On-time completion for preventive maintenance</td>
<td>Not measured</td>
<td>75%</td>
<td>85%</td>
</tr>
<tr>
<td>Client satisfaction for cleaning services – academic</td>
<td>72%</td>
<td>Not measured</td>
<td>85%</td>
</tr>
<tr>
<td>Client satisfaction for maintenance – academic</td>
<td>35%</td>
<td>Not measured</td>
<td>75%</td>
</tr>
<tr>
<td>Overall maintenance cost/square foot – all facilities</td>
<td>$6.74</td>
<td>$5.68</td>
<td>$5.45</td>
</tr>
</tbody>
</table>

*Overall Maintenance Cost Per Square Foot*

![Graph showing overall maintenance cost per square foot from FY2008 to FY2010]
NYU Building Expense Funding Policies and Cost Allocation
Facilities Management Budget Parameters

- Facilities Management is responsible and funded to provide all cleaning, operating, maintenance and repair services required to maintain clean, healthful, safe, functioning, and code compliant spaces.

- Client-requested “extra” services or services not associated with a capital asset or that may be deemed discretionary, i.e. not essential to maintaining life-safety, complying with OSHA and code requirements or maintaining and operating critical infrastructure, may be funded by client.

- Responsibilities are for capital assets, i.e. building structures and their interior capital improvements and do not generally include furnishings, fixtures or equipment unless specifically noted.
Facilities Management “Free Services”

- Custodial Services
  - Trash removal and provision of trash receptacles
  - Recycling pick-up and provision of recycling containers
  - Provision of consumable supplies, i.e. paper products, soap, etc.
  - Restroom cleaning
  - Floor maintenance (sweep, polish, wash)
  - Carpet maintenance (vacuum, shampoo)
  - General cleaning, dusting
  - Light bulb replacement
  - Window washing
  - Pest control
- For complete list of custodial services, please see your handout
- For schedule of cleaning frequencies in your building, please go to www.nyu.edu/fcm/cleaning
Facilities Management “Free Services”

- Heating, Ventilating, & Air Conditioning (HVAC):
  - Preventive maintenance
  - Equipment repair
  - Emergency response services

- Fire/Life Safety
  - All maintenance, repair, inspections and tests required to meet code and safety requirements

- Infrastructure (Architectural, Roofing, Elevators, Electrical, Plumbing, etc.)
  - All maintenance, repair, inspections and tests required to maintain safe, efficient operations

- For complete list of services, please see your handout
- To report problems, please call Client Services Center at 8-1001
Examples of Discretionary Requests

• Events set-ups
• Custodial support during and clean-up after events
• Painting of proprietary spaces
• Major/minor moves
• Replacement or repair of furniture, fixtures, equipment
• Carpet replacements not associated with a project or repair
• Any work not associated with a capital building asset
Plant and Indirect Costs

• Costs allocated to schools and units have historically included:
  – Building operating costs, including cleaning, maintenance, utilities and insurance for all spaces, and rent for leased spaces
  – Costs of FCM overhead (sans Office of Construction Management) allocated on a square foot basis
• Update of the cost allocation methodology is currently in progress for implementation with the FY2011 budget
• Office of Construction Management overhead is recovered via the “supervision fee” for capital projects
Capital Maintenance
Capital Maintenance

- Capital maintenance has previously been known as “deferred maintenance”, the act of postponing maintenance in order to save money or avoid costs.¹

- At NYU, the term “deferred maintenance” has been replaced by “capital maintenance” to more accurately reflect all the project types that are funded from this annual allocation.

- At NYU, capital maintenance funds are used for more than just repair or replacement of aged infrastructure: projects required for legal or code compliance, to achieve energy savings and necessary refurbishment projects are also funded from the capital maintenance program.

- Capital maintenance funds are primarily used to address life-safety, legal and code requirements, energy conservation projects and critical infrastructure needs where academic priority projects do not.

Capital Maintenance Program – Highlights

• The total of all capital construction spending (new construction, renovation and capital maintenance) at NYU exceeds average of benchmarked peer institutions on a per square foot basis.

• When combined with infrastructure investments funded as part of academic priority projects, NYU’s deferred maintenance backlog is beginning to erode.

• The backlog of deferred maintenance has decreased from 2006 to 2008, and is nearing parity with benchmarked peer institutions.

• Continuing this progress depends upon the University maintaining the current capital maintenance funding allocation as well as academic priority projects continuing to fund associated deferred maintenance and other asset reinvestment needs.
Total Project Spending vs. peers

NYU 2004-2008 average = $8.80/GSF

Source: Sightlines
Total Project Spending vs. peers

Source: Sightlines

Annual Stewardship | Asset Reinvestment

$ in Millions

2004 2005 2006 2007 2008

Increasing Backlog

Decreasing Backlog

Annual Investment Target
Asset Reinvestment backlog

Source: Sightlines
Annual Construction Program Overview – All Projects

FY2008 Actual Spending (in $000's)

- **Academic Priorities** - 117 Projects, $97,734
- **Faculty Housing** - 31 Projects, $17,316
- **Student Housing** - 9 Projects, $8,754
- **CoGen Plant** - 1 Project, $21,581
- **Leak Remediation**
- **CoGen / Central Plant (CM Related)**, $100
- **Capital Maintenance**
- **Infrastructure** - 26 Projects, $11,882
- **Dorm Renovation**, $7,737
- **Life Safety**, $5,608
- **Code / LL11**, $2,624
- **Other**, $3,970
Capital Maintenance Projects by Project Type

FY2010 (Projected)

- **Infrastructure**: 27%
- **Dorm Renovation**: 19%
- **CoGen/Central Plant**: 20%
- **Code / LL11**: 13%
- **Life Safety**: 11%
- **Leak Remediation**: 6%
- **Other**: 4%

Spending ($000's)

- **Life Safety**: FY2007: $4,000, FY2008: $6,000, FY2009: $8,000, FY2010*: $10,000
- **Code / LL11**: FY2007: $5,000, FY2008: $7,000, FY2009: $9,000, FY2010*: $11,000
- **Leak Remediation**: FY2007: $3,000, FY2008: $5,000, FY2009: $7,000, FY2010*: $9,000
- **Infrastructure**: FY2007: $2,000, FY2008: $3,500, FY2009: $5,000, FY2010*: $6,500
- **CoGen/Central Plant**: FY2007: $1,500, FY2008: $2,000, FY2009: $2,500, FY2010*: $3,000
- **Dorm Renovation**: FY2007: $1,000, FY2008: $1,500, FY2009: $2,000, FY2010*: $2,500
- **Other**: FY2007: $2,000, FY2008: $3,000, FY2009: $4,000, FY2010*: $5,000

*estimated
The 5-year capital maintenance funding plan is:

- 2010 = $33.2M
- 2011 = $34.3M
- 2012 = $35.4M
- 2013 = $36.5M
- 2014 = $37.7M
Capital Maintenance – Schedule of Academic Projects

**FY 2009 Academic Projects**
- Classroom Upgrades at Bobst and Waverly
- Meyer Air Handler Replacement
- Meyer Vault Replacement
- Meyer Elevator Modernization
- New Fire Alarm System at La Maison Francaise
- New Smoke Detection System at Deutsches Haus
- 20 Cooper Boiler Repairs
- Exterior Façade (Local Law 11) Repairs at Fairchild, Schwartz, Weissman, 715/721 Broadway, and Barney
- Roof replacement at 1-3 WSN
- Emergency repairs at various locations

**FY 2010 Academic Projects**
- Classroom Upgrades (locations to be determined)
- Bobst Library Riser Replacement
- New Fire Alarm System at 25 Waverly
- Cellar structural repairs at 5 Washington Place
- Tisch Roof Safety Equipment Installation
- 726 Broadway Cooling Tower Modifications
- 726 Broadway Backflow Preventer Installation
- 25 West 4th Street HVAC Replacement
- Pless Annex HVAC Replacement
- 48 Cooper Square HVAC Upgrades

2. It is important to note that projects are subject to change based as funding, market conditions and infrastructure priorities change.
Code Compliance
Code Compliance – Highlights

• Facilities & Construction Management assumed full responsibility for all forms of violations in February 2009

• Since that time, the number of open violations has been reduced by almost 20%

• Violations relating to blocked exit paths (corridors and stairwells), storage of combustibles in equipment rooms, and fire doors being propped require the cooperation of clients to eradicate

• Violations of every type (parking ticket, FDNY, Department of Buildings, etc.) should be sent immediately to Pam Comport for resolution to avoid fines
Code Compliance – Types of Violations

- Notice of Violation
- Violation Order
- Criminal Summons
- Elevator Violation
- Housing Preservation Department
- Health Department
- Sanitation
- Boiler
- Electrical
Clearing and Closing Violations – Progress Report

The chart shows the monthly trends in open violations from January to May. The bars represent the open violations, with the yellow section indicating closed violations, the red section indicating new violations, and the blue section representing the balance. The data suggests a decrease in open violations from January to May.
The Violations “Pie” – Composition of Open Violations

[Diagram showing the percentage composition of open violations, with categories such as OTHER, MISC, SANITATION, HEALTH, HPD, BOILER, CONSTRUCTION, ELECTRICAL, ELEVATOR, PERMIT, CRIMINAL, NOV, and VO, each represented by a specific color and percentage.]
Keeping NYU Code Compliant – How You Can Help

• Report un-lit exit signs to Client Services Center at 8-1001
• Keep corridors, exit stairs and other egress paths clear
• Report blocked stairwells and other egress paths to Client Services Center at 8-1001
• Report non-functioning stairwell doors and fire doors between buildings to Client Services Center at 8-1001
• Do not use equipment rooms for storage
• Keep fire doors closed at all times
• Do not exceed posted occupancy limits
Energy Management
Energy Management – Highlights

- Fast Facts of NYU’s Annual Energy Consumption:
  - 150,000,000 kWh of electricity
  - 4,000,000 gallons of fuel oil
  - 8,800,000 therms natural gas
  - 80,000 mlbs steam
  - Virtually all of NYU’s carbon footprint is created by building energy use
  - NYU contributes about 0.3% of New York City’s total carbon output

- NYU’s energy consumption (weather-normalized) has decreased 4.9% year-to-date compared to the same period one year ago

- Energy budget in FY11 will be almost flat compared to FY08 with new cogeneration plant and energy commodity contracts

- Biggest opportunity to reduce consumption and cost is through modification of building operating hours, implementation of “summer operating mode”, and optimizing HVAC in energy-intense academic spaces
Electricity Consumption – Weather Normalized

In January 2008 we begin to see impact of reducing building operating hours.

By February 2009, we see potential for consumption to creep back up if we are not vigilant.
Electricity Consumption Per Square Foot & by Space Type

Average Yearly kWhs / Sq. Ft.

<table>
<thead>
<tr>
<th></th>
<th>FY 07</th>
<th>FY 08</th>
<th>FY 09 Projected</th>
<th>FY 10 Projected</th>
<th>FY 11 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom</td>
<td>11.5</td>
<td>11.2</td>
<td>11.0</td>
<td>11.0</td>
<td>9.5</td>
</tr>
<tr>
<td>Faculty Housing</td>
<td></td>
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<tr>
<td>Science Lab</td>
<td></td>
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<tr>
<td>Office Administrative</td>
<td></td>
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<tr>
<td>Student Housing</td>
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</table>
After temporary increases during construction of new cogeneration plant, FY11 total energy budget stabilizes at FY2008 level.

Purchased electricity consumption drops when the cogeneration plant goes into service; there is a corresponding increase in fossil fuel consumed by the new plant, producing significant net savings.
Comparison of Annual Energy Consumption Patterns

<table>
<thead>
<tr>
<th>Total Energy Consumption (weather adjusted)</th>
<th>FY 07</th>
<th>FY 08</th>
<th>FY 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>135,108</td>
<td>133,404</td>
<td>121,269</td>
</tr>
<tr>
<td>October</td>
<td>120,347</td>
<td>138,853</td>
<td>112,567</td>
</tr>
<tr>
<td>November</td>
<td>126,043</td>
<td>128,595</td>
<td>122,172</td>
</tr>
<tr>
<td>December</td>
<td>124,534</td>
<td>111,159</td>
<td>101,659</td>
</tr>
<tr>
<td>January</td>
<td>137,157</td>
<td>144,409</td>
<td>137,295</td>
</tr>
<tr>
<td>February</td>
<td>133,175</td>
<td>120,364</td>
<td>124,950</td>
</tr>
<tr>
<td>March</td>
<td>126,613</td>
<td>122,216</td>
<td>122,172</td>
</tr>
<tr>
<td>April</td>
<td>134,789</td>
<td>147,169</td>
<td>137,295</td>
</tr>
<tr>
<td>May</td>
<td>114,557</td>
<td>119,035</td>
<td>121,269</td>
</tr>
<tr>
<td>June</td>
<td>124,987</td>
<td>126,891</td>
<td>122,172</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,569,545</td>
<td>1,506,713</td>
<td>867,082</td>
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Percent Change from Same Month

<table>
<thead>
<tr>
<th>Percent Change from Same Month</th>
<th>FY 08</th>
<th>FY 09</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>-1.3%</td>
<td>-9.1%</td>
</tr>
<tr>
<td>October</td>
<td>15.4%</td>
<td>-18.9%</td>
</tr>
<tr>
<td>November</td>
<td>2.0%</td>
<td>-5.0%</td>
</tr>
<tr>
<td>December</td>
<td>-10.7%</td>
<td>-8.5%</td>
</tr>
<tr>
<td>January</td>
<td>-1.7%</td>
<td>9.2%</td>
</tr>
<tr>
<td>February</td>
<td>8.4%</td>
<td>-4.9%</td>
</tr>
<tr>
<td>March</td>
<td>-10.1%</td>
<td>3.8%</td>
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<tr>
<td>April</td>
<td>-11.2%</td>
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<tr>
<td>May</td>
<td>-9.8%</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>-11.1%</td>
<td></td>
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<tr>
<td>July</td>
<td>-16.9%</td>
<td></td>
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<tr>
<td>August</td>
<td>1.5%</td>
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</table>

NYU Total Weather Adjusted MMBTUs Consumed From All Commodities

Total energy consumption is down 4.9% overall year-to-date through March 2009 from the same period a year ago
Measuring Consumption:
Smart meters in place and working

On-line access to electricity demand graphs from smart meters will be available to clients in mid-summer 2009!
$aving Energy: What can I do?

• Participate, and support conservation measures in your area:
  – Building schedules
  – Occupancy sensors
  – Comfort band changes
  – Relamping

• Be a green advocate for your school:
  – Lights off when not in use
  – Computer hibernation
  – Recycled paper products
  – Double sided copying and printing
  – Print only what you need
  – Recycle

• Shut off all office devices/equipment every night and weekend
Client Forum

• Urgent needs?

• Process improvements?

• Priorities?

• Other suggestions for improvement?