# Facilities Management

Business Plan 2014-2015



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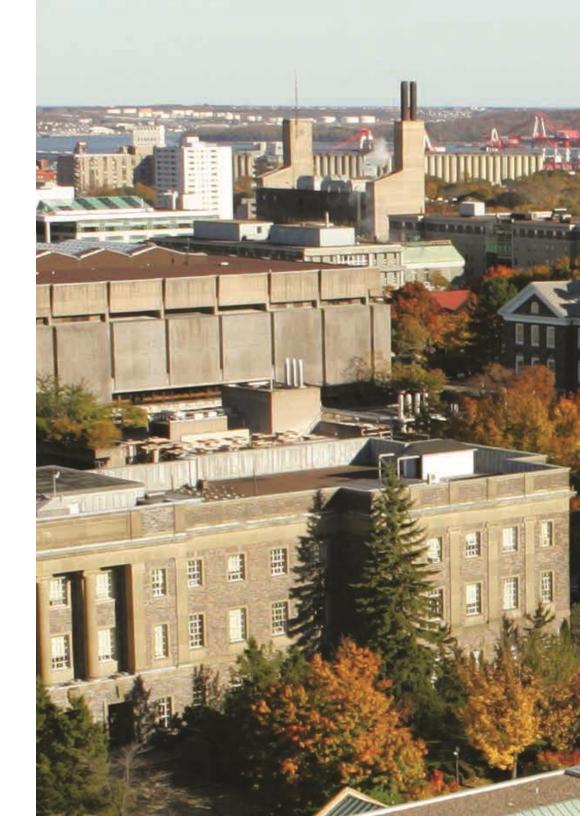
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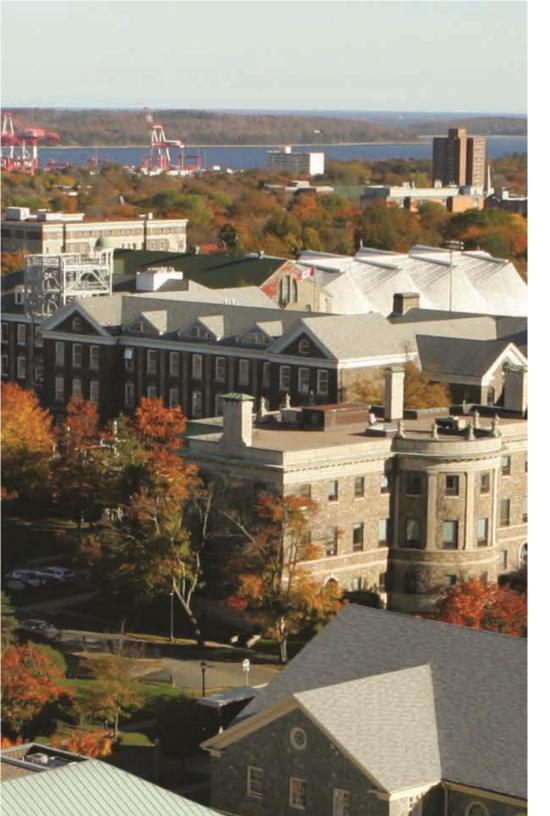
Appendix B Planning Cycle

#### Facilities Management Business Plan 2014-2015

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### 1.0 Profile

#### Our Mission

To provide the Dalhousie community with an inviting, safe and sustainable environment which supports and enhances an inspiring experience in learning, living, working and research.

#### Our Vision

To be an innovative team of motivated professionals recognized for excellence in facilities management

#### Our Values

Commitment - We care

**Dedication** – We are devoted to excellence in facilities management

**Integrity** – We treat everyone with respect and honesty

**Leadership** – We lead by example in everything we do

Quality - We do the right thing at the right time

**Teamwork** - We work together to achieve success for all

#### Our Goals

- To create a culture which will foster motivated, successful employees
- To advance campus renewal through exceptional stewardship of the University's facilities
- To cultivate client trust by understanding, anticipating and responding effectively to their needs
- To provide comprehensive and integrated management of Dalhousie facilities through continual process improvement
- To develop and deliver collaborative and inclusive communication strategies that engage, educate and inform relevant audiences

# Planning for growth...

In the fall of 2004, Dalhousie University's Department of Facilities Management (FM) undertook a strategic planning initiative in order to ensure that the Department was properly prepared to provide the full range of services required to create and maintain a high quality of campus environment.

Strategic planning resulted in:

- mission, vision, goals and objectives created and shared
- a new organizational structure
- multi-year plan of strategic activities to guide FM in achieving objectives
- strategic plan reviewed annually as part of FM budget preparation

#### Our Role

Responsible for the planning of major capital construction projects and the planning, development and implementation of all other University construction and maintenance projects, for the day-to-day operations and maintenance of buildings, grounds and campus utilities and for the provision of security, custodial, parking, transportation and mail services.



#### Our Team

525 regular, term and student employees

#### Comprised of five units:

- Operations manages and provides maintenance, repair, and installation services for all the University's physical assets and infrastructure; and also provides project management of minor projects
- Campus Planning manages and monitors the integration of the University's requirements into the capital and operational plans and performance of FM
- Security Services manages and monitors the security of the University community
- Administration provides exceptional administrative support to all FM units
- **Finance** manages, monitors and reports on all departmental financial transactions



#### Service Groups:

- Grounds
- Custodial
- Mail
- Stores/Trucking
- Carpentry
- Plumbing
- Electrical
- Mechanical
- Painting
- Logistics
- Thermal Plant
- Project Management
- Planning
- Design
- Space Management
- Real Estate
- Security
- Parking
- Tiger Patrol
- Administration
- Human Resources
- Environmental Health & Safety
- Communications
- Information Technology
- Finance

# 2.0 Activity Drivers Summary

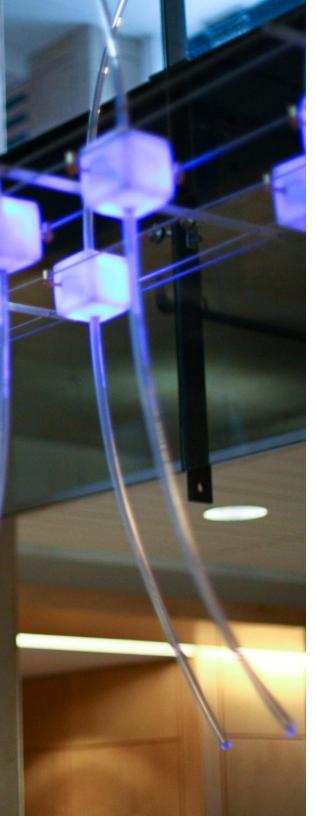
Facilities Management plays a significant role in helping Dalhousie reach its goal of becoming the "best university in Canada".

Each of the following departmental activity drivers is governed by the priorities outlined in the University's Strategic Focus.

See Page 24 for more detailed information on each activity driver.

- i. University transitions new Agricultural Campus (AC) and new Strategic Direction for Dalhousie to be developed
- **ii. Buildings** quantity of space (increasing), condition (decreasing), efficiency of space utilization (increasing), and types of space (increasing)
- iii. Campus population students (increasing), faculty/staff (modest fluctuation), and community interactions (increasing)
- iv. Sustainability utility prices (increasing), student/employee values (increasing), ecosystem changes (increasing), financial investments (increasing), partnerships/policy alignment (increasing)
- v. Service levels APPA standards (reconfirm), KPIs (finalize), Sightlines (multi-year trending)
- vi. Budget operating budget (decreasing), capital availability (limited)





# 3.0 Priority Projects for 2014-15

### i. Positive Work Environment

- Reduce Absenteeism
- Recruitment and Retention Negotiations
- Supervision Focus

#### ii. Energy Management

- Measurement and Management of Utilities
- Thermal Plant renewal
- Tupper EPC

#### iii. Space Management

- Policy
- Modernizing Academic and Space Scheduling (MASS) Project – INFOSILEM Implementation

#### iv. Process Improvement

- Agricultural Campus Transition
- Best Value Business Model
- Signing Authorities/E-Procurement

#### v. Reputation Management

- Program Review
- Service Level Definition

#### vi. Capital Projects Planning

- Wallace McCain Learning Commons
- Fitness Centre
- Varsity Arena
- Student Union Building Reno/Expansion
- University Avenue Bike Lanes Pilot
- Sexton Campus Renewal
- Dentistry Clinic Renewal
- School of Performing Arts
- Tupper 1&2 Repatriated Space
- P3 Parking Structure

#### vii. Capital Planning

- Major Capital Project Policy and Process
- Minor Capital Process (Facilities Renewal/Client Funded)
- Agricultural Campus Master Plan



### 4.1 Facilities Management Senior Team

#### 4.1.1 Core Objectives 2014-15

- Strategic planning conduct bi-annual review of the FM Strategic Plan, assess progress towards achievement of priorities and adjust the plan for the subsequent 6-month period
- Business planning prepare the annual FM Business Plan for 2014-15 and the corresponding budget; during the 2014-15 year, planning must also begin on the 2015-16 Business Plan
- Performance monitoring monitor the performance of the FM department in achieving core objectives through monthly status meetings where budget and KPI information is reviewed and corrective action, if required, is identified
- Sustainability ensure that all FM activities are carried out with strong consideration for environmental and financial sustainability
- Campus Master Plan use the Campus Master Plan to guide all FM capital planning and campus renewal activities
- Communication management reinforce Dalhousie's branding and communications strategy through all available opportunities, including: FM's annual Business Plan and Year In Review documents, the Department website, and regular communication channels
- **Business continuity** maintain plans for business continuity for all unique/essential positions within the FM department

#### Responsible for:

- Departmental alignment with Dalhousie
   University's Strategic Plan
- Leadership in implementing plans within FM
- Managing unit teams to achieve expected results
- Evaluating strategic initiatives developed by each unit
- Developing departmental strategies that require participation of multiple
   FM units

#### 4.1.2 Senior Team Strategic Objectives for 2014-15 (sorted by FM Goals, listed on Page 1)

#### **Employees**

- Recruitment and retention contribute to negotiations of collective agreements in 2014-15 to ensure appropriate benefits to ensure recruitment and retention of skilled employees
- **Performance management** further develop and administer the ACHIEVE Program and the FM Planning Cycle to have a cohesive department working toward common goals
- Positive work environment promote an inviting, rewarding, respectful and harassment-free work environment, in
  particular by reinforcing team-building initiatives and enhancing the effectiveness of the departmental safety committee

#### Stewardship

- Energy management oversee the implementation of the Energy Master Plan initiatives, including the development of the thermal plant renewal project
- Document management review usage and continue populating the Meridian document management system to improve accessibility of key documents and information
- Space management finalize the new Space Management Policy and modify the space committee processes to reflect the resulting space management responsibilities and accountabilities
- Modernizing Academic and Space Scheduling (MASS) Project contribute FM experience and knowledge to the
  implementation of the INFOSILEM timetabling and event booking system that will allow Dalhousie to optimize the use of
  instructional space on campus
- Agricultural Campus Master Plan lead the planning process for the creation of a new Campus Facilities Master Plan for the Agricultural Campus
- Capital Planning process develop and obtain approval for a process to ensure transparent prioritization and implementation of all major projects on campus including significant Facilities Renewal, Client-Requested and Major Capital Projects

#### Clients

- Service levels define service levels in accordance with APPA standards and obtain approval of a service level catalogue including financial responsibility
- Business Intelligence (BI) contribute to the development of the institutional BI system to ensure that the information
  and supporting processes being developed can be efficiently supported by FM and will contribute to effective
  institutional strategic planning
- **Institutional strategic planning** encourage and participate in the creation of a systematic integrated strategic planning process for the University, including a capital planning and a real estate development process

#### **Process Improvement**

- **Performance management** refine key performance indicators for all major processes in FM, in particular, for utilities and productivity
- **Process improvement** identify processes, both intra- and inter-departmental, for review and improvement in terms of timeliness and resource utilization, including E-PRINT, leave tracking and streamlined signing and approval processes
- Agricultural Campus transition build on progress made in the first two years of the merger process and implement further process and policy development and training
- Best Value Business Model (BVBM) participate in BVBM pilot projects and assess the value of this methodology for
  use in controlling risk in procurement and project management

#### Communications

- Capital Projects communications finalize the governance documents and reporting structure for capital projects and develop Communications Plans for all projects
- Reputation management continue to improve communication efforts, both internally and externally, around the cost effectiveness and quality of work completed by FM, particularly minor projects

#### Responsible for:

- Design
- Project management
- Maintenance/repairs
- Environmental services
- Custodial services
- Material management and purchasing
- Trucking services
- Utilities production and monitoring
- Building automation and access control
- Resource management and scheduling
- Event bookings
- Contract administration
- Safety
- Operations/project documentation

## 4.2 Operations

#### 4.2.1 Core Objectives 2014-15

- Business planning prepare the 2014-15 Business Plan and budget for Operations
- Performance monitoring monitor the performance of the Operations Unit in achieving our core objectives through regular evaluation and feedback
- Proactive service culture promote and foster a proactive service delivery & maintenance culture
- Workplace safety ensure that all workplace activities are carried out in a safe manner
- Workplace culture promote a respectful workplace culture that fosters motivated employees who are recognized and rewarded for their achievements
- Sustainability ensure that all operational activities are carried out with strong consideration for environmental and financial sustainability
- Communication management ensure effective communication of service delivery information to our clients





#### 4.2.2 Strategic Objectives for 2014-15

- Service catalogue oversee development of an FM Operations Service Catalogue for clients, outlining our service level abilities, costs based on 2014-15 budget funding, and associated APPA Staffing Guideline benchmarks
- Labor relations contribute to negotiation of a new collective agreement with NSGEU
  Local 99 by participating in the bargaining process with a focus on flexible shift
  arrangements, wage structure changes, and absenteeism reduction
- Performance management oversee implementation of the ACHIEVE process at the Supervisory and Project Manager levels
- Performance measurement develop key performance indicators (KPI's) for team/employee performance and productivity to be displayed on Operations team dashboards
- Communication develop and implement process improvements for communication of service delivery information to our clients
- Employee recognition contribute to developing and implementing an FM Employee Recognition Program
- Service contracts oversee the development and procurement of major service contracts and Standing Offer Agreements by utilizing the most effective procurement option (Dal Procurement, ISI or Best Value) for each contract (Snow Removal, Waste Management, Elevator Service, Refrigeration Service and various Minor Project Standing Offer Agreements)
- Workplace safety develop and implement KPI's for safety performance goals and communicate with staff
- Sustainability implement new waste management collection processes
- Business continuity develop and implement effective contingency plans for ensuring reliable operation of both the Halifax and Agricultural Campus Central Heating Plants

#### Responsible for:

- Integrating strategic planning (campus/asset/space/ real estate)
- Client requirements
- Resource allocation
- Document management
- Project record documentation
- Operation planning (projects)
- Benchmarking
- Performance standards
- Performance analysis
- Design guidelines

## 4.3 Campus Planning

#### 4.3.1 Core Objectives 2014-15

- Asset management data maintain the VFA (asset) database, ensure as renewal projects are complete the database is updated
- Operational planning prepare the annual Project Forecast Plan for the subsequent fiscal year in order to determine resources and workload for the year; monitor monthly projects
- Business planning develop the Planning unit's Business Plan in association with other units of FM
- Client planning identify, respond, and plan the project needs of clients through setting up major projects in FAMIS
- Departmental performance analysis, planning and management –
  analyze and report on all major processes in FM; manage
  performance; provide and report on data for the APPA survey; and
  establish key performance indicators for all major processes for use
  at monthly FM status meetings
- Client/stakeholder communication improvement continue to improve communications with clients/stakeholders
- Strategic initiative planning continue to assist the University's
   Financial Services in reporting of successful Strategic Initiatives
- Workplace culture promote a respectful workplace culture that fosters motivated employees who are recognized and rewarded for their achievements





- Sustainability ensure that all operational activities are carried out with strong consideration for environmental and financial sustainability
- Performance management continue to use ACHIEVE with the Assistant Director of Asset Management, and the Assistant Director of Capital Planning
- Asset management planning effectively spend the entire facilities renewal budget based upon the priorities determined by VFA (asset) software and various other inputs including zone supervisors, investigations, studies, assessments, building administrators, etc.
- Client/Stakeholder communications improve client satisfaction survey results (Sightlines Survey and or internal FM generated survey)
- Design guidelines maintain the design guidelines for construction on Dalhousie Campuses
- Space audits perform space audits as noted in the plan
- Agriculture Campus integration -
  - maintain incorporation of the Agricultural Campus into the Annual Planning process
  - maintain and update Agricultural Campus space inventory and drawings



- Campus renewal through use of the Campus Master Plan provide planning of:
  - Fitness Centre and Dalplex
  - o Arena
  - Student Union Building
  - IDEA Building and Sexton Workshop
  - o Carleton Campus Repatriated Space
  - P3 Parking
  - o University Avenue

- School of Performing Arts
- Wallace McCain Learning Commons
- Sexton Campus Renewal assist with information required for potential land purchase with HRM
- through use of the Campus Master Plan provide planning of land issues at Sexton and Studley campuses

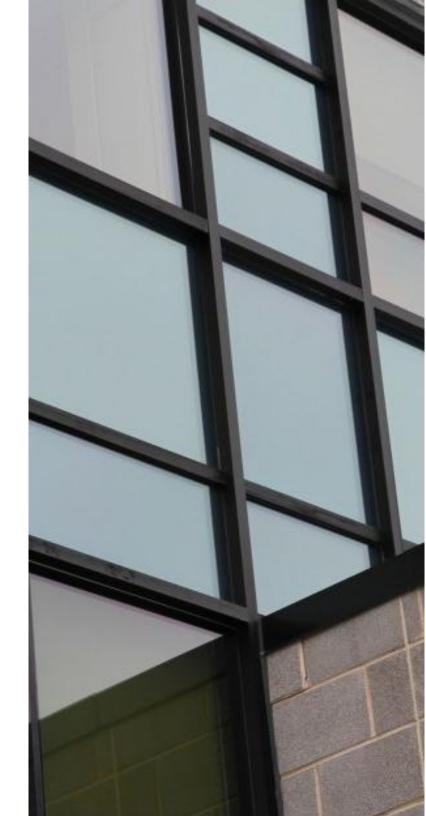
#### Real estate property management:

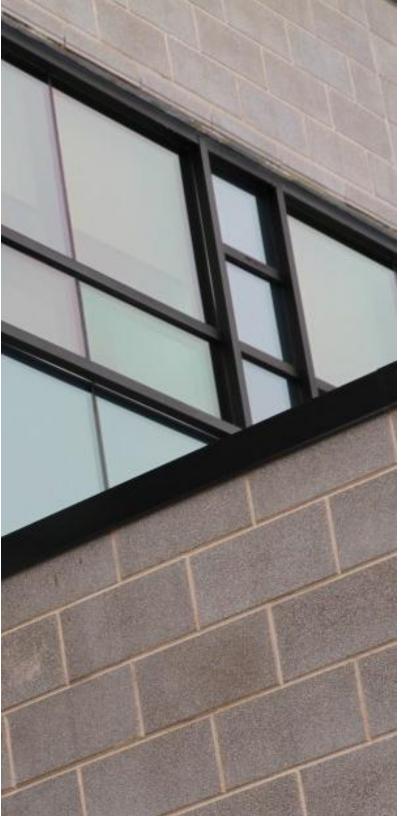
- continue to work on leases that are due to renew and/or expire
- o perform regular review of lease agreements
- prepare new leases, renewal of leases and lease termination as required
- provide property management for all leased spaces which falls under Facilities Management
- continue to act as the primary liaison for occupants of Dalhousie properties
- Space management manage and report on space use:
  - report annually on classroom utilization during normal working hours
  - o conduct annual space inventory surveys
  - coordinate and monitor annual classroom inspections
  - o perform sessional surveys on classroom conditions

- provide space information and data when needed for institutional surveys
- review new programs and respond to space issues as required
- o develop a land survey database for Dalhousie properties
- o continue to monitor the HRM Centre Plan process

#### 4.3.2 Strategic Objectives for 2014-15

- Property lease and real estate management attend conference to review and assess the current real estate module in order to determine if it should be implemented in FAMIS
- Building inspections set up regularly scheduled inspections along with clear and decisive follow up implementations
- Student experience improve student experience space by planning scoping and schematic design of Classroom Planning Committee projects
- FM recognition assist in providing the necessary information needed for the APPA award
- Agricultural Campus Master Plan provide planning input into the Campus Master Plan at the Agricultural Campus and create new professional contacts with AC colleagues
- Facilities renewal budget spending establish a track record of
  effectively spending the facilities renewal budget in order to
  justify and enable advocacy for increased funding a track record
  would be recognized as three consecutive years at +- 1.5%
  spending of the facilities renewal budget
- Target a decrease in deferral currently Sightlines indicates in FY11-12 Dalhousie had a deferral rate of 0.5% (this was a reduction from 0.7% and 0.8% in the two previous years)
- Performance management implement Phase 2 roll out of the ACHIEVE program to the Assistant Director of Space Planning and the Real Estate Property Manager





- MASS Project assist in the implementation of the new academic scheduling system (INFOSILEM)
- Integrated University planning assist with the implementation of the university integrated planning
- Capital Construction assist with the necessary process and integration between Campus Planning and the newly established Department of Capital Construction
- Integrate emerging priorities assist with setting up the necessary framework/structure required by Campus Planning for the President's Emerging Priorities
- International strategy support the University's International Strategy by specifying international student needs in capital project planning
- Space guidelines receive approval and implement space guidelines, policies and procedures
- Staff development cross-train CAD Tech's on space inventory and floor plan updates
- School of Performing Arts provide space planning for Costume Studies
- Strategic Initiatives provide necessary documentation for new 2014-15 Strategic Initiatives requests
- Storage space optimization:
  - o develop an implementation plan for organizing ATCAN
  - explore and evaluate the best options for the leased storage space at ATCAN, including agreement
  - develop lease rates for storage space at ATCAN for departmental use

#### Responsible for:

- Security operations
- Education/liaison
- Investigations
- Parking
- Emergency management
- Community involvement/referral

### 4.4 Security Services

#### 4.4.1 Core Objectives 2014-15

- Protection and promotion protect persons and property through the delivery of programming and facilitating activities that promote safety and security
- Preventative measures prevent crime, maintain the peace, resolve conflicts and promote good order
- Referral service provide referral to community services
- Emergency response manage and respond to emergency incident situations
- Parking management manage on Campus parking through the provision of administrative and enforcement activities
- Facility access provide effective facility access control
- Investigation conduct preliminary investigation of criminal offences and violations of University policy
- Visibility maintain 24 hour visible security patrols
- Collaboration work with other University departments in areas of concern related to personal safety
- Workplace culture promote a respectful workplace culture that fosters motivated employees who are recognized and rewarded for their achievements
- Sustainability ensure that all operational activities are carried out with strong consideration for environmental and financial sustainability

#### 4.4.2 Strategic Objectives for 2014-15

#### Process improvement:

- o continued assessment of the oversell capacity of reserved parking to maximize parking space utilization
- o completion of final year Dalhousie Restorative Justice Pilot Project with focus on the inclusion of community nuisance, and University Code of Conduct complaints
- o improve customer service through enhancement of the 2 IC role in regards to post incident/investigative follow-up
- o conduct a "table top" emergency planning exercise
- Perspective resource management systems develop standardized data entry practices for Perspective Dispatch
   Log module to effectively report and analyze security related activities
- Graffiti management assess the ability to extend Security graffiti management practices to building interiors through a
  pilot project at the Killam Library
- Agricultural Campus transition integration of the Security incident response at the Agricultural Campus through the centralization of call intake and Security Officer dispatch
- Employee development expand Security Officer development opportunities through workshops and online training, and all Security Services staff in restorative practices by providing training and program participation opportunities
- Organizational development compliance with training and licensing requirements associated with the Province of Nova Scotia Private Investigators and Private Guard Act (Regulations)
- Collaboration ensuring safety for students and staff through Security Services collaboration with University committees addressing sexual assault/harassment, anti-bullying and responsible alcohol use

#### Communication:

- o improve awareness of emergency resources through the implementation of a Security/Safety mobile "app"
- o communication of approved Crisis Management Plan to senior managers and key stakeholders

#### Responsible for:

- Human resources
- Labour relations
- Communications
- Employee training and professional development
- Information Technology
- Policy, procedure and process management
- Environmental health and safety
- General administration

### 4.5 Administration

#### 4.5.1 Core Objectives 2014-15

- Business planning prepare 2014-15 Business Plan and budget for Administration
- Process improvement address the amount of time it takes to post/recruit positions
- Labour relations continue to foster sound working relationships with union executives, advocates and members (NSGEU Locals 77, 92, 99)
- **Employee recognition** assist in the development of an effective employee recognition program to increase morale and improve results of the workplace survey
- Employee development expand professional development opportunities by providing more learning opportunities for staff
- Workplace culture increase respectful interactions between employees to increase morale, reduce complaints/grievances, and improve workplace survey results
- Internal relations continue to build partnerships with Dal HR, C&M, ITS and EHS
- Communications prioritize internal communications objectives from the existing Communications Plan
- Document management expand the use of document management to all FM units
- Change management prepare the department for on-going changes in technology
- Workplace safety work collaboratively with FM Senior Team and the Director of Environmental Health and Safety to develop and implement safety strategies



#### 4.5.2 Strategic Objectives for 2014-15

- Labour relations prepare for Local 99 collective bargaining, addressing recruitment and retention issues as well as high absenteeism
- **Employee support** implement the attendance support program to address the issue of excessive absenteeism
- Employee recognition develop, launch and manage a new recognition program to enhance morale and engagement, insuring that employees are recognized for their achievements, and realize a sense of accomplishment for their work
- **Performance management** implement Phase 2 of the ACHIEVE program and roll out the program to the next employee level
- Business continuity develop a business continuity plan to identify key positions/functions that at are at risk from an unplanned loss to prevent critical business functions from occurring
- Business intelligence oversee the FM Data Management Committee (FMDMC) to develop, execute and supervise plans, policies, programs and practices
- Workplace safety oversee EHS initiatives to promote a safe environment for FM employees, and decrease work injuries and accidents

#### Communications:

- develop an FM Communications Plan for 2014-15 which will also address reputation management issues
- develop a Communications Plan and establish communications processes for the Department of Capital Construction
- develop a complete set of templates, resources and guidelines for regular communications activities

#### Responsible for:

- Budget coordination
- Accounts payable
- Billing (internal/external)
- Accounts receivable
- Charge-out rates
- Internal audit (financial/procedural)
- Financial consultation
- Financial analysis

### 4.6 Finance

#### 4.6.1 Core Objectives 2014-15

- Business planning prepare 2014-15 Business Plan for Finance and all budgets
- Efficient service delivery:
  - o ensure invoice payment is timely and accurate
  - ensure client billing is timely and accurate
  - ensure budget submissions for operations/non space/energy are provided to Financial Services as required
- Data management update hourly charge rates for trades/custodial/grounds/ security, update project manager fees and prepare financial statements for parking to set parking rates
- Performance monitoring provide an independent review of FM records, operations, policies and/or procedures to evaluate for efficiency, effectiveness, compliance and assurance of the existence of adequate internal controls to mitigate risks to the achievement of FM and University goals
- Process improvement advise FM regarding all issues relating to financial policies, procedures and business planning
- Communications and support resources ensure FM units have the financial tools required to operate under their budget requirements
- Agricultural Campus integration support financial requirements of the AC including invoice payments, billing, budgeting, financial consultation, etc.

#### 4.6.2 Strategic Initiatives for 2014-15

- Agricultural campus transition integrate FM financial practices with Agricultural Campus including; charge rates, budgeting, variance analysis, etc.
- **Performance monitoring** use KPI's to measure accounts payable, billing measurements, and monthly financial position
- **Document management with imaging** a strategic improvement to manage accounts payable documents received in FM; by scanning and numbering all documents all documents can be accurately tracked and issues documented during the process leaving a clear audit trail

#### • Process improvement:

- E-print integration a strategic improvement reliant on FM Computing and ITS; use of this Dalhousie system of choice is available for FM to use FAMIS data, will automate the current billing process and will be an improvement for clients in both reporting timelines and the data provided
- o promote the usage of FAMIS with the Office of Sustainability and ITS
- o manage use of the procurement module within FM with introduction of the procurement module a review of processes will be completed, including: finalize the approval process for projects/capital initiatives/purchase order approval/contract; process flow within purchasing/finance/FM, etc.
- o energy reporting budgets/reporting requirements require mechanization to meet future needs
- Business Continuity ensure FM Finance staff are trained (and cross trained) to ensure that each employee is capable
  of undertaking responsibilities in at least one of the other areas within Finance Unit
- Workplace culture work with Financial Services to promote a respectful and harassment-free work environment
  through the development and implementation of process improvements including: monthly budgeting by account,
  budgeting salaries with salary increases and steps included, communication link to keep FM aware of upcoming
  financial requirements, planning schedule, etc.; any process improvements will result in efficiencies and improved
  reporting



### 5.1 University Transitions

#### 5.1.1 Nova Scotia Agricultural College Merger

#### Overview

On September 1, 2012, the NSAC became the Dalhousie Agricultural Campus (AC) and Facilities Management assumed responsibility for all services on that campus that we already provided to the other three campuses.

#### Opportunities/Challenges

- budget
- Campus Master Plan
- potential for a Net Zero Energy Campus

#### 5.1.2 New Strategic Plan

#### Overview

The arrival of a new president in 2013 coincided with the end date of the previous strategic focus document. Beginning with 100 Days of Listening, Dr. Florizone started the process of developing a new strategic plan and made some significant changes in the operation of the senior executive of the university.

- greater transparency in information and approvals submitted to the Board
- greater need for formal submission of information for 100 Days of Listening and for other forms of approval
- increased support for formal planning mechanisms and performance management, including the Provost Table
- P3/Community Partnerships

## 5.2 Buildings

#### 5.2.1 Quantity of Space

#### Overview

The Campus Master Plan was created in October 2010, under the management of FM and approved by the Board of Governors; the plan calls for significant increases in virtually all types of space on campus over the next 5-10 years. Subsequently, the merger with the NSAC was approved and further unforeseen space demands and opportunities became apparent.

- Dalhousie instantaneously increased its building area by approximately 750,000 sq. ft. as a result of the NSAC/Agricultural Campus merger.
- Additional capacity is required to oversee the design and construction of multiple capital projects concurrently if we are to keep up with the necessary pace of campus development.
- Resources are required to clean, secure, maintain and provide utilities to the
  additional space which is being constructed. In recent years, additional funds
  have been added to the FM operating budget as necessary when new buildings
  were opened; it is essential that this policy be continued for FM to maintain
  adequate service levels across all campuses.
- In the case of the AC, the FM budget will be based on the amount that was spent on the NSAC campus in past years and it will have to be maintained as a separate budget structure from the main FM budget until the end of a three-year transition period. The overall budget amount was assessed to be reasonable on a square footage basis during due diligence work that was carried out, with the distribution of the funds between accounts being reviewed during the transition process.





#### 5.2.2 Condition

#### Overview

The condition of the buildings on campus is measured by the Facilities Condition Index (FCI); the ratio of outstanding deferred maintenance costs to the total replacement value of the building or buildings being considered.

- With a deferred maintenance backlog of \$290 million on a campus with an estimated replacement value of \$1.45 billion, the Dalhousie FCI is currently 20%, which is considered to be poor.
- FM must have the capacity to implement an annually increasing amount of major maintenance work in order to spend the available funds.
- Halifax Campus the facilities renewal budget has been increased in the last few years and should continue to rise each year in the future if the condition of the campus is going to improve.
- Agricultural Campus the condition of the (former) NSAC campus was cursorily assessed during the due diligence period and some funds were transferred from NS Transportation and Infrastructure Renewal to a segregated AC Facilities Renewal budget based upon their historic spending levels. More detailed study was conducted during 2012-13 in order to fully incorporate the AC into our asset assessment and facilities renewal processes.
- FM must ensure that funds are spent on the projects which will have the
  greatest impact on the condition of the campus and so we need to have a
  robust asset assessment system to identify the priority projects.
- As the condition of the campus improves, it will be important to do adequate preventive maintenance work on the facilities to maintain the improvements and ultimately to reduce the cost of corrective maintenance work.

#### 5.2.3 Efficiency of space utilization

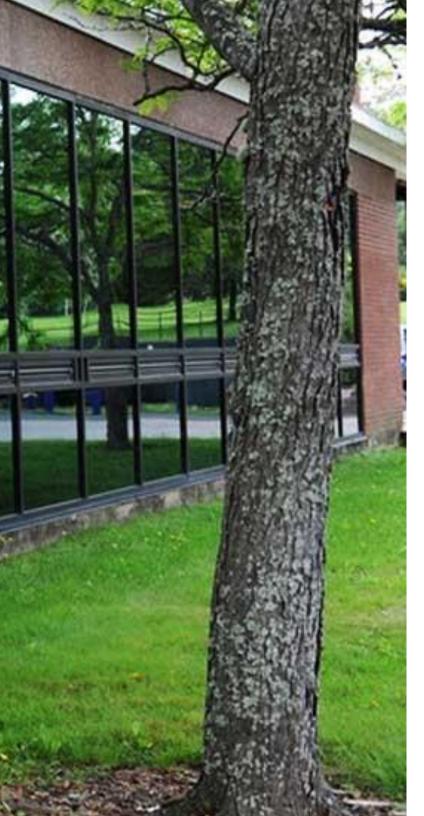
#### Overview

Building, maintaining, heating and cleaning rooms or buildings which are not being occupied for significant periods of time is an unsustainable waste of resources, especially in periods of government budget reductions. The reasons for having spaces that are not effectively utilized are many and varied. Two examples are:

- Specialized research or teaching labs being created without full time requirement for the space or with insufficient flexibility to allow for other uses.
- Inefficient classroom scheduling leading to empty classrooms at certain times of the day or week or even for an entire term or inadequate access controls unnecessarily limiting use of buildings in the evening after "normal business hours".

- The Campus Master Plan recommends that before new buildings are constructed, Dalhousie must ensure that all of the existing buildings on campus are being used efficiently.
- FM will develop new space management policies and conduct audits to ensure compliance with those policies.
- FM will ensure that all facilities are designed appropriately, keeping flexibility of use in mind and trying to avoid the trap of over-specialization.
- Once constructed, FM will ensure that spaces are operated efficiently and that
  measures are taken to reduce energy usage in spaces for which sub-optimal
  occupancy is unavoidable (e.g. installation of motion sensors and other control
  systems).
- FM will play a role in the implementation of a more effective classroom scheduling system, ensuring that existing learning spaces are utilized efficiently and that additional spaces are not created when existing spaces could meet the requirements if scheduled appropriately.





#### 5.2.4 Types of Space

#### Overview

The Campus Master Plan identifies a need for new types of space on campus to improve the student experience and to increase academic and research excellence.

- A total of four Learning Commons hubs have been identified as requirements in the near future.
- Residence structures with different residential layouts and accommodating a mixture of functions within one structure are also called for in the plan.
- In the academic arena, new forms of learning environments in the Health Professions and Engineering/Architecture require different, more flexible lab and classroom designs with complex building control, IT and audiovisual systems.
- The opening of the LSRI in spring 2011, has given us a taste of the high tech building security and environmental control systems being incorporated in leading edge research facilities.
- With the continuation of the CFI program and award of such high profile research programs as the Ocean Tracking Network and the Oceans Canada Excellence in Research Chair, Dalhousie will only require more similar facilities.
- Recent policy changes within the University have also called for all new facilities to be designed to LEED Gold standards, so not only will they be more complicated in order to meet pedagogical or research requirements, but they will also have to be energy efficient and meet high standards of sustainable operations.

- Much like the previous areas of impact identified, these new types of space will have various effects on FM:
  - A more complex design and construction.
  - LEED compliant buildings will require FM staff to continuously upgrade their knowledge of new building systems so that the work of design firms can be monitored and verified and so that appropriate commissioning methods can be used to ensure that the new buildings will meet our needs once constructed.
  - New space utilization practices will have to be enforced by FM in order to ensure that the flexibility of the new space designs is appropriately used.
- The number and training of FM tradespeople and custodians will have to be increased to maintain operating standards in these new, high tech and environmentally sustainable facilities.
- To put these issues related to buildings into context, the Department of Capital Construction is currently responsible for the construction of:
  - LeMarchant Street Mixed-Use Facility (\$48M)
  - o The Collaborative Health Education Building (\$38M)
- And FM is responsible for the planning of:
  - Wallace McCain Learning Commons (\$7M)
  - Thermal Plant Renewal project (\$89M)
  - Fitness Facility (\$26M)
  - Energy performance contract Tupper/CRC (\$10M)
  - IDEA Building on Sexton Campus/P3 development on former Infirmary lands (TBD)





## 5.3 Campus Population

# 5.3.1 Availability of living and learning environments for students

#### Overview

Dalhousie's Strategic Focus requires FM to plan for an increased student population within the upcoming years. However, the quantity of high school graduates in Nova Scotia is currently decreasing each year and is expected to continue to decrease in future years.

- More of the students entering Dalhousie will have to be recruited from outside of Nova Scotia and the Maritimes; the Campus Master Plan identifies a requirement for up to 700 more residence beds on campus and the plan identifies that more desirable types of accommodations such as suites or apartments will be needed to aid in recruitment.
- New Learning Commons hubs and other sophisticated learning environments will also be used to improve the student experience, and therefore, aid in recruitment.
- The impact of student numbers on FM will not only be in the direct need for more facilities to accommodate greater numbers, but also in the greater intensity of use of the existing facilities as they are used by more students each day.
- The Dalhousie Student Union has recently begun developing plans to implement the renewal of the Student Union Building that was proposed in the Campus Master Plan and intense effort will have to be expended to meet their schedule expectations.

# 5.3.2 Availability of office space & parking for faculty and staff

#### Overview

Faculty and staff numbers are often assumed to be linked directly to the number of students on campus, but that is not actually the case. Because the Dalhousie student/faculty ratio is the lowest in the G13 group of Canadian comprehensive research universities, limits have been placed in recent years on the hiring or replacement of faculty members and these will likely remain in place until noticeable impact has been made on the ratio.

- In terms of support staff, increases in research funding will likely generate an expanded number of grant-paid staff, but government budget cuts will create pressure to improve efficiencies in administrative functions and staffing increases in these areas are unlikely. Because of this variability, staff and faculty numbers will have to be monitored on an annual basis by FM so that impacts on such issues as office space and parking requirements can be accommodated.
- Demands to increase availability of parking on campus continue and a P3 study is underway to identify practical means of providing market rate accommodation of parking.





#### 5.3.3 Engaging our external communities

#### Overview

While FM does not have an active role in the international academic engagement activities of the University, there are three main areas of engagement for FM within the Halifax community:

- Dalplex
- The Arts Centre (hosting community activities)
- The Varsity Arena Development

- The Campus Master Plan has identified that expansion and modernization is required for both Dalplex and the Dalhousie Arts Centre; FM must engage the community to determine building requirements and the financial support necessary for both of these projects.
- FM collaborates with municipal initiatives like the Strategic Urban Partnership and P3 projects including the development of the former Halifax Infirmary lands adjacent to the new Halifax Central Library. Both of these collaborations are relatively new ones for FM and, in the past few years, P3 training has been conducted for FM and other staff at Dalhousie and new project management and capital planning staff positions have been created and filled to provide us with more capacity in these areas.
- A joint proposal prepared by Dalhousie and Saint Mary's Universities was submitted to HRM in July 2013 and is being reviewed by HRM Council for consideration.

## 5.4 Sustainability

#### 5.4.1 Rising Utility Price Volatility

Electricity rates are unpredictable, and although not increasing in 2014, they are expected to rise as much as 3% annually for the next three to five years. There are planned water rate hikes. Natural gas pricing changes rapidly. There is an opportunity to invest in projects that reduce vulnerability to escalating and variable costs.

#### 5.4.2 Student and Employee Interests and Values

Dalhousie has focused on sustainability and environmental issues for over 30 years, with key sustainability declarations and events happening at the University. In recent years, additional focus has been placed on sustainability with the creation of the College and the Office of Sustainability. More students are coming to Dalhousie for these programs. Human resource research consistently highlights the importance of sustainability for employees, especially those in younger demographics. It is important to match these values and expectations with demonstrated action in University operations. This is an important recruitment strategy.

#### 5.4.3 Ecosystem changes

The impacts of ecosystem changes are being realized today. Recent research from the International Panel on Climate Change has shown climate impacts to be more rapid in onset than originally projected. Dalhousie Halifax campuses experienced 30 degree Celsius days in March 2012 and severe flooding occurred near the Truro campus during September 2012. The Canadian Environmental Sustainability Indicators (CESI) measure the progress of key ecosystem indicators from water to GHG and air emissions at a national and regional level.

"Nationally, Canada's total GHG emissions in 2010 were 692 megatonnes (Mt) of carbon dioxide equivalent ( $CO_2$  eq), or 17% (102 Mt) above the 1990 emissions of 589 Mt."

In Nova Scotia, GHG emissions are reducing due to provincial strategies such as the Renewable Electricity Regulations. Impacts of existing air pollution contaminants, not associated with GHG emissions, have recently been shown to be linked to heart disease and asthma. The University, as a leader in the community, can demonstrate commitments to reduce impacts and restore areas through transportation, natural environment planning, and energy efforts.



#### **5.4.4** Resource Investments

The 2012 Campus Energy Master Plan identified over \$123 million of potential energy savings through efficiency, renewable and deferred maintenance measures, including key projects such as Tri-generation. In addition to our existing buildings, there is opportunity with new buildings and the new Agricultural Campus (AC) to save money and improve environmental and social conditions by using a life-cycle approach to costing.

There is great potential to move the University into more sustainable operations with investments made into human resources and projects that increase energy security, reduce operational costs, and create environments that reflect student and employee values. Actions taken now around new buildings will set the agenda for future costs. Investments that are not made now into the district heating systems and energy reduction may result in enhanced risk related to energy security, financial costs, and reputation.

#### 5.4.5 Critical Partnerships and Policy Alignment

The University is taking an active role in the community on issues ranging from transportation to energy. Issues of transportation require critical partnerships with HRM, the County of Colchester, the Town of Truro, the Village of Bible Hill and other institutions. Issues such as energy engage three levels of government: neighbours, institutions, and non-government organizations (NGOs). To move ahead successfully, strong partnerships need to be formed and maintained. Municipal, provincial and federal governments have policy and legislation that supports our sustainability goals, for example, the Province's Environmental Goals and Sustainable Prosperity Act (EGSPA) and municipal sustainability plans.

Sustainability practices and the availability of qualified industry professionals is on the rise. "They say time is money. But now, sustainability is money too." (from *Climate change and sustainability - how sustainability has expanded the CFO's role - 2011*, Ernst and Young). Partnering and learning with other like-minded groups is a key approach for meeting sustainability goals. Strategic partnerships increase knowledge and skills, leverage resources, build reputation, and help to meet mission-critical goals.



### 5.5 Service Levels

#### Overview

- APPA, an international professional association of post-secondary facilities managers, has established formal standards
  for levels of service in the areas of custodial, buildings and grounds maintenance. These standards provide guidance
  concerning the number of personnel required to perform a variety of tasks carried out by organizations similar to FM's
  operation unit, in order to achieve various standards of service.
- A performance analyst was hired in 2011-12 and has been working with all members of the FM Senior Team to establish key performance indicators (KPIs) in each unit. A performance dashboard has been created which will allow us to assess our performance standards.
- FM engaged a third party benchmarking service, Sightlines, in 2012-13 to review the performance of Dalhousie FM
  against a group of 12 peer institutions and this provided further information regarding our service standards and how
  they compared to others. Once we have reviewed all of this information, we can set realistic performance standards
  and take proactive measures to improve our performance through both motivational and process related measures,
  such as the APPA Award of Excellence.

- According to APPA standards, Dalhousie provides sufficient funds to provide only basic levels of service in most areas of
  the Operations unit. The expectations of the Dalhousie community, however, are generally higher than "basic" and one
  activity driver is to balance client expectations with resource limitations inherent in the budget.
- A formal review of service levels has not been carried out in more than eight years and new APPA standards have just
  recently been published; a renewed quantification of service standards is required in the areas covered by APPA so that
  performance indicators can be defined and monitored.
- One of the goals of the original FM Strategic Planning effort was to define service levels for all areas of FM. Some
  progress has been made in defining schedule and budget standards for the implementation of projects, but there have
  only been a few actual performance measurements created to monitor our success in achieving these standards.

## 5.6 Budget

#### Overview

- Financial restraint will be an activity driver in FM again this year due to a 1% increase in Province of Nova Scotia education grant funding for this year which does not keep up to increases in many of the costs borne by FM.
- Financial restraint will be an activity driver in FM again this year due to a 1.25% reduction in Facilities Management budget allocation or \$200K. This is the fourth consecutive reduction.

- Addressing multi-year reductions has required modification to our approach. Prior to 2011-12, FM had been operating
  within an expanding budget for four years (see Appendix A). This expansion was due to Strategic Initiative funding
  allocated to the department to provide new services, and to increases in custodial and trades staffing due to the
  opening of new buildings which added to the campus building area that needed to be serviced.
- FM has been working to increase our levels of preventive maintenance work in order to reduce the need for corrective work orders. The department has also been using surplus resources generated from this operational improvement to increase service levels.
- This year, no service improvement Strategic Initiatives requests were submitted and FM will have to use any operational savings to meet budget reduction requirements.
- Efficiencies will have to be made merely to maintain service levels rather than attempt to improve them.
- Care will also have to be taken in the allocation of support costs within the FM budget. During a time of increasing
  operating budgets, increases in the workload of FM Finance, Administration and in the Senior Team (e.g. major capital
  or facilities renewal projects) may end up being absorbed within the operating budget increase rather than in the
  charge-out or project management fees.
- When reductions are made in the operating budget while increases continue in recoverable areas, capacity reductions in FM made to meet operating budget cuts may impact our ability to deal with the recoverable workload, unless appropriate fee levels are maintained.

# Appendix A: Budget Tables

Expenditure history and forecasted funding for Facilities Management major budget categories

### 1. Dalhousie Campus

Description	Actual 08-09	Actual 09-10	Actual 10-11	Actual 11-12	Actual 12-13	Actual 13-14	Budget 14-15
Gross Operating Expense	20.5	22.4	23.2	24.0	23.6	26.6	24.3
Non Space	0.3	0.1	0.4	0.2	1.3	0.2	0.4
Facilities Renewal	10.6	11.7	13.3	17.7	18.3	19.1	16.3
Client Funded Projects	4.3	10.3	6.5	4.5	7.7	8.2	6.0
Capital Projects (Note 1)	15.8	47.6	61.5	28.0	34.2	34.2	40.0
Utilities Expense Total	14.7	15.0	14.5	13.1	14.6	17.1	16.2
Total Expenditure	66.2	107.1	119.4	87.5	99.7	105.4	103.2
Description	Actual 08-09	Actual 09-10	Actual 10-11	Actual 11-12	Actual 12-13	Actual 13-14	Budget 14-15
Net Operating Expenses	14.3	15	16.7	16.5	16.8	18.2	17.4
Net Utilities Expense	11.2	11.7	12	10.8	13.3	14.3	14.3

**Note 1** Capital expenditures are the total annual expenses for capital projects. Capital projects are planned in Facilities Management and constructed by the Department of Capital Construction.

### 2. Agricultural Campus

Description	Actual 12-13	Actual 13-14	Budget 14-15
Gross Operating Expense	2.6	2.5	2.6
Non Space			.1
Facilities Renewal and One-Time Transition Funding	.1	2.1	7.1
Utilities Expense Total	2.3	3.1	3.0
Total Expenditure	5.0	7.7	12.8
Description	Actual 12-13	Actual 13-14	Budget 14-15
Net Operating Expenses	2.4	2.5	2.4
Net Utilities Expense	1.9	2.8	2.6

# Appendix B: Planning Cycle

Annual work management process outline for Facilities Management Senior Team

