Facilities Management

Business Plan 2015-2016



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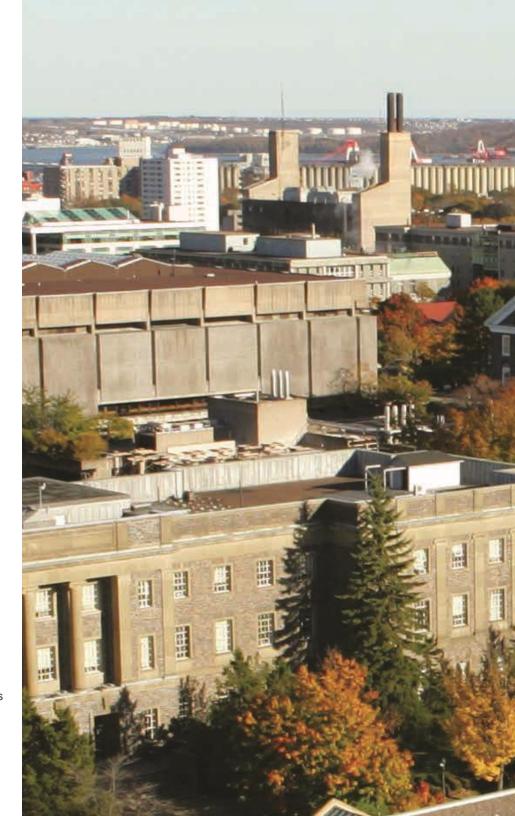
Appendix A Budget Tables

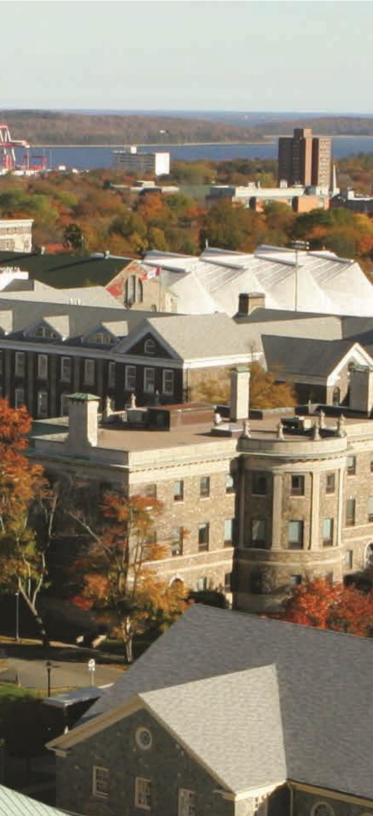
Appendix B Planning Cycle

Facilities Management Business Plan 2015-2016

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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 Principles

- **Our People** We create an inclusive culture, fostering a diverse team of engaged, professional employees who are valued for their contributions to the successful achievement of our goals.
- **Stewardship** We are entrusted to ensure the University's resources and impacts are managed over time with care. Balanced consideration will be given to economic, technological, health and environmental factors.
- **Service** We provide professional, high quality services, in response to the current and future needs of the University community and all those we serve. These will be delivered in a consistent manner, transforming over time for continuous improvement and effectiveness.
- **Partnership** We develop and promote respectful relationships within Facilities Management, the Dalhousie Finance and Administration team, the broader University and external communities. We optimize outcomes through communication, understanding and collaboration.

Planning for growth...

Dalhousie University's Department of Facilities Management (FM) operates within a comprehensive strategic planning and operational management framework in order to ensure that we are properly prepared to provide the full range of services required to create and maintain a high quality campus environment. 2014-15 was an important year. The University launched *Inspiration and Impact: Dalhousie's Strategic Direction 2014-18* which provides 25 strategic priorities to guide university operations.

The FM mission, vision, values and principles have been reviewed and revised in light of our role in the achievement of those 25 strategic priorities. This business plan has been created to set our course for 2015-16 as we move forward towards their accomplishment.

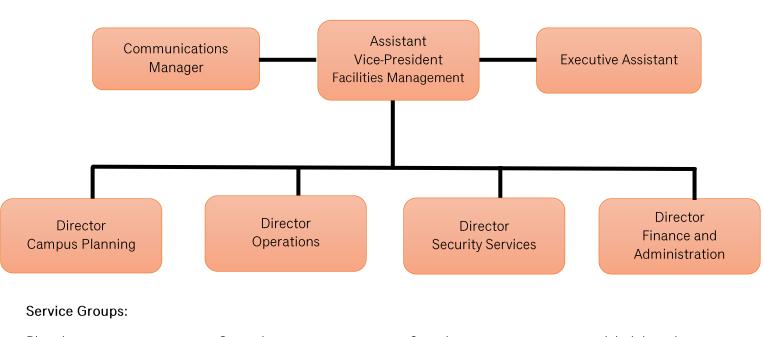
Our Role

Our FM Team is responsible for the planning of major capital construction projects and the planning, development and implementation of all other University construction and maintenance projects, as well as 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 in four units:



Planning Design Space Management Real Estate Grounds
Custodial
Mail
Stores/Trucking
Carpentry

Plumbing
Electrical
Mechanical
Painting
Logistics
Thermal Plant
Project Management

Security Parking Tiger Patrol Administration Human Resources Environmental Health & Safety Information Technology Finance

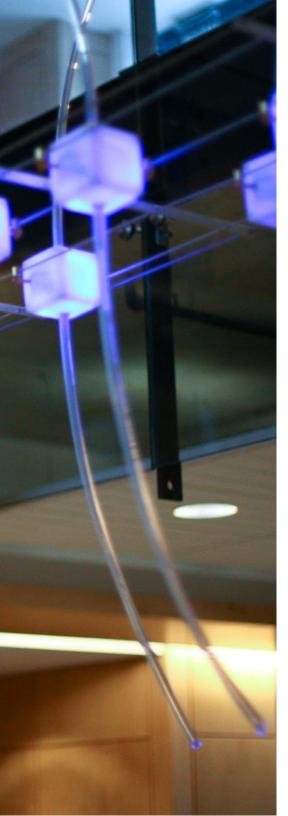
2.0 Activity Drivers Summary

Each of the following departmental activity drivers is governed by the priorities outlined in the *Inspiration and Impact: Dalhousie Strategic Direction 2014-18*.

See Page 25 for more detailed information on each activity driver.

- i. **University transitions** Strategic Priorities within *Inspiration and Impact*, complete AC transition activities
- **ii. Buildings** quantity of space (increasing), condition (decreasing), efficiency of space utilization (increasing), and functionality 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), and partnerships/policy alignment (increasing)
- v. **Service levels** diversity and inclusion (increasing), student recruitment and retention (increasing), attract, support and reward faculty and staff (increasing), operational effectiveness and efficiency (increasing)
- vi. **Budget** operating budget (decreasing), capital availability (limited)





3.0 Priority Projects for 2015-16

i. Our People

- Negotiation of Collective Agreements
- BELONG Report Responses
- FM Safety Committee Renewal
- ACHIEVE Process Formalization
- Workplace Health Survey Responses

ii. Stewardship

- Capital Projects Planning
 - Varsity Arena
 - University Ave. Bike Lanes Pilot
 - Sexton Campus Renewal
 - School of Performing Arts
 - Tupper 1 & 2 Repatriated Space
 - P3 Parking Structure
- AC Master Plan
- Meridian Document Management System Implementation
- Energy Management & Sustainability
 - Formalize Energy Management Committee
 - Halifax Thermal Plant Renewal
 - AC Thermal Plant Renewal
 - Tupper Energy Performance Contract

iii. Service

- Dalhousie Strategic Priority 5.5
 Multi-Year Capital Plan that promotes Sustainable
 Development
- Dalhousie Strategic Priority 5.6
 Improve Teaching & Research Space
- Client Communication Improvement
- Service Level Catalogue
- Modernizing Academic and Space Scheduling (MASS)
 Project INFOSILEM
 Implementation

iv. Partnership

- Process Improvement
- AC Transition
- Best Value Business Model
- Signing Authorities Electronic Approvals
- Attendance Reporting System
- Communication Framework Development



4.1 Facilities Management Senior Team

4.1.1 Senior Team Core Objectives for 2015-16

- Strategic planning set the strategic direction for FM, aligning it with Inspiration and Impact
- **Business planning** develop the annual FM Business Plan and corresponding budget and conduct semi-annual review, assessing progress towards achievement of priorities and adjusting the plan for the subsequent 6-month period
- Performance monitoring monitor the performance of FM in achieving core unit objectives and taking corrective action as required
- **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
- Communications communicate essential information regarding FM services, policies and procedures, as well as Capital Projects to appropriate Departmental, University and external audiences
- Business continuity maintain plans for business continuity for all unique/essential positions within FM

Responsible for

- Developing departmental strategies that align with Inspiration and Impact: Dalhousie University's Strategic Direction
- Leadership in implementing plans within FM
- Leading unit teams to achieve expected results

4.1.2 Senior Team Strategic Objectives for 2015-16 (sorted by FM Principles, listed on Page 1)

Our People

- **Recruitment and retention** set operational priorities and contribute to negotiation of collective agreements to ensure appropriate benefits to assist in recruitment and retention of skilled employees
- **Performance support** further develop and administer the ACHIEVE Program and the FM Planning Cycle to ensure the team is working towards common strategic goals
- **Positive work environment** promote an inviting, rewarding, respectful and safe work environment, supported with team-building, diversity and inclusiveness initiatives, effective departmental safety committee initiatives and an employee performance recognition program

Stewardship

- **Energy management** oversee the implementation of the Energy Master Plan initiatives, including the development of the thermal plant renewal projects and an Energy Management Committee
- **Document management** implement Phase 2 of 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
- **Institutional strategic planning** encourage and participate in the creation of a systematic integrated strategic planning process for the University, including a capital planning process and an integrated budget process
- AC Master Plan lead the planning process for the creation of a new Campus Facilities Master Plan for the AC

Service

- **Service levels** define service levels in accordance with APPA standards and in consultation with students and administrators, and obtain approval of a service level catalogue including financial responsibility and client engagement
- 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
- Multi-Year Capital Plan develop and obtain approval for a process to ensure transparent prioritization and implementation
 of all major Capital Projects on campus
- **Performance management** refine key performance indicators (KPIs) for all major processes in FM, in particular for utilities and productivity, in order to support fact-based decision making and Total Cost of Ownership approach wherever possible
- **Reputation management** continue to improve communication efforts, both internally and externally, around the cost effectiveness and quality of work completed by FM, particularly for minor projects

Partnership

- **Process improvement** identify processes to review and improve timeliness and resource utilization, including FAMIS mobile, attendance reporting and streamlined signing and approval processes; use client-focused LEAN approach on some pilot projects to assess applicability to FM
- **AC transition** build on progress made during the merger process and implement further process integration, policy development and training
- **Best Value Business Model (BVBM)** continue to use BVBM techniques in selected projects and ensure all project managers are trained in this methodology for use in controlling risk in procurement and project management
- Capital Projects communications develop effective communication planning and processes in conjunction with the Capital Projects group and the University Communications and Marketing team
- **FM communications management** develop a communication framework and systems to support client service, client consultation, decision making, annual reporting, and operational requirements

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 2015-16

- Business planning develop the annual Business Plan and budget for the Operations unit
- Performance monitoring monitor the performance of the Operations unit in achieving FM 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, diverse and inclusive 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 by co-leading the Energy Management Working Group
- **Agricultural Campus transition** oversee the continuing implementation of Dalhousie policies and procedures within the Operational units at the AC
- Communication management ensure effective communication of service delivery information to our client





4.2.2 Strategic Objectives for 2015-16

Our People

- **Employee engagement/ communication** develop and implement an FM employee engagement process that fosters process and productivity improvements to meet the standards set in our service catalogue
- **Performance support** oversee implementation of the ACHIEVE process at the Supervisory and Project Manager levels
- **Labour relations** contribute to negotiation of a new collective agreement with NSGEU Locals 92 and 99 with a focus on flexible shift arrangements, wage structure changes, and absenteeism reduction
- **Leave management** contribute to the development of processes to support the successful integration of the Attendance Reporting System

Stewardship

- **Workplace safety** develop and implement key performance indicators (KPIs) for safety performance goals and improve reporting and documentation
- Sustainability implement new waste management collection processes
- **Business continuity** develop and implement effective contingency plans to ensure reliable operation of both the Halifax and AC Central Heating Plants
- Service contracts oversee the development and procurement of major service contracts and Standing Offer Agreements to create operational savings by utilizing the most effective procurement option (Dal Procurement, ISI or Best Value) for each contract (Natural Gas, Fuels, Snow Removal, & Refrigeration Service and various Minor Project Standing Offer Agreements)
- **Document management** provide support to the Meridian Implementation team by ensuring operational staff provide quality information to the team in a timely manner

Service

- **Service Catalogue** oversee development of an FM Operations Service Catalogue that includes FM's service levels abilities and costs, based on current and future budget funding projections, and associated APPA Staffing Guideline benchmarks
- **Performance management** develop key performance indicators (KPIs) for team/employee performance and productivity to be displayed on Operations team dashboards

Partnership

• Client engagement/ communication – develop and implement a client engagement process to determine the service and information needs of our clients



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 2015-16

- Workplace culture promote an inclusive respectful workplace culture that fosters motivated employees who are recognized and rewarded for their achievements
- Client planning identify, respond, and plan the project needs of clients
- Communications continue to improve communications with clients/ stakeholders
- Asset management planning continue to maintain asset management database with input from Operations and other sources to update the 10 year renewal plan that identifies and determines infrastructure and system project priorities
- Operational planning prepare the annual Project Forecast Plan for the subsequent fiscal year for all four campuses to determine resources and workload for the year
- Business planning develop the Planning unit's Business Plan in association with other FM units
- Space planning conduct studies, space allocation proposals and schematic proposals for university departments and administrative groups evaluating space utilization to maximize space efficiency





- **Student experience** improve student experience by planning, scoping and providing schematic design of approved projects from the Classroom Planning Committee
- **Departmental performance analysis and management** establish, maintain and analyze key performance indicators (KPIs) for all major processes in order to continuously improve performance management
- Sustainability ensure that all operational activities are carried out with strong consideration for environmental and financial sustainability
- Design guidelines maintain the design guidelines for construction on Dalhousie campuses
- **Space audits** perform space audits as required using internal and external consultants
- Campus renewal utilize the Halifax and AC Master Plans for planning of Capital Projects
- **Real Estate property management** provide property management for all leased spaces that fall under FM including property inspections, and the monitoring, reviewing, preparation and termination of leases
- **Space management** monitor, manage, and report on space by conducting space audits inspections and surveys
- **Academic program review** review and asses new and modified programs in conjunction with space needs and availability at the University
- Land entities maintain a land survey database for Dalhousie properties
- **Capital Construction** assist with the integration between Campus Planning and the Department of Capital Construction (CC)
- **Energy Master Plan** provide stewardship for the implementation of the Halifax Campus Energy Master Plan



4.3.2 Strategic Objectives for 2015-16

Our People

• **Performance recognition** – administer the ACHIEVE Program and the FM Planning Cycle within Campus Planning to establish a cohesive department working towards common strategic goals

Stewardship

- **Facilities renewal budget spending** monitor the Facilities Renewal Budget to ensure effective spending and a reduced deferral rate each year
- **Energy management** assist in the implementation of the Energy Master Plan initiatives, including the development of the Thermal Plant Renewal projects and an Energy Management Committee
- **Institutional strategic planning** participate in the creation of a systematic integrated strategic planning process for the University, including a capital planning process and an integrated budget process
- AC Master Plan assist in the planning process for the creation of a new Campus Facilities
 Master Plan for the AC
- Space management and Real Estate property planning assist in finalizing and implementing the new Space Management Policy and governance structure to reflect the University's space management responsibilities, accountabilities, and real estate property management planning
- Space assessments develop a framework to allow FM space staff to perform space audits
- **Space reporting** review and modify university space inventory reports to reflect updated COU space categories
- **Document management** provide support and quality information to assist in the implementation of the Meridian Document Management System
- Capital Planning assist in the planning of a varsity arena, University Ave. Bike Lanes Pilot project, Sexton Campus Renewal, School of Performing Arts, Tupper 1 & 2 repatriated Space and a P3 Parking Structure





Service

- Integrated University strategic planning assist with the creation of a multiyear capital plan and improve the quality and inventory of research and teaching spaces to enhance and build the University's institutional infrastructure capacities
- Multi-Year Capital Plan assist with the development of a process to ensure transparent prioritization and implementation of all major Capital Projects on campus
- Modernizing Academic and Space Scheduling (MASS) Project
 –assist in the implementation of the INFOSILEM timetabling and campus booking system for better utilization of bookable space on campus
- Performance management assist with refining key performance indicators (KPIs) for all major processes in FM, to support fact-based decision making and Total Cost of Ownership approach wherever possible
- Facilities Management recognition contribute APPA information to assist with Facilities Management recognition amongst its peers

Partnership

- Capital Planning and Capital Construction develop a common Project Character template to improve project information and planning consistency between Capital Planning and the Department of Capital Construction (CC)
- **Client spending** develop working relationships with University units to promote growth of client spending as a part of the University's strategic planning process
- Parking by-laws develop a case for modification of the HRM land use by-law for University parking requirements
- Best Value Business Model (BVBM) train all planners on BVBM techniques to assist with determining best value project delivery methods in the planning of projects

Responsible for:

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

4.4 Security Services

4.4.1 Core Objectives 2015-16

- Personal safety & protection protect persons and property through the delivery of programming and facilitating activities that promote safety and security
- Protection of University and personal property provision of 24/7 high visibility patrol, effective facility access control, and continuous fire and intrusion alarm monitoring
- **Investigation** conduct preliminary investigation of criminal offences and violations of University policy
- **Crime prevention** prevent crime, maintain the peace, resolve conflicts and promote good order
- **Referral & collaboration** work with other University departments in areas of concern related to personal safety and provide referral to community services
- **Emergency response** manage and respond to emergency incident situations
- **Sustainability** ensure that all operational activities are carried out with strong consideration for environmental and financial sustainability
- **Parking management** manage on campus parking through the provision of administrative and enforcement activities
- **Workplace culture** promote an inclusive, respectful workplace culture that fosters motivated employees who are recognized and rewarded for their achievements

4.4.2 Strategic Objectives for 2015-16

Our People

- **Employee development** expand Security Officer development opportunities through workshops and online training
- **Labour relations** contribute to negotiation of new collective agreement with NSGEU Locals 92 and 99 with a focus on shift scheduling arrangements, wage structure changes, and absenteeism reduction

Stewardship

- **Sustainability** green transition of the Security Services fleet to reduce both fuel costs and carbon emissions
- Perspective resource management systems develop standardized data entry practices for Perspective Dispatch Log module to effectively report and analyze security related activities
- **Process improvement** standardization of the Security incident response on all campuses through the centralization of call intake and Security Officer dispatch
- **Process management** compliance with training and licensing requirements associated with the Province of Nova Scotia Private Investigators and Private Guard Act (Regulations)





Service

- Proactive service culture align Security Services operational policies and procedures with a customer service focus along with the establishment of a regular customer service feedback process
- **Service Catalogue** development of service delivery standards to be included in the FM Service Catalogue
- **Emergency management** continued roll out of Critical Incident Response training by way of presentations, online training, and leveraging of DalSAFE mobile safety app

Partnership

- **Community safety**–ensure safety for students and staff through collaboration with Student Services, Human Rights Equity & Harassment Prevention Office, and DSU in addressing sexual assault/harassment, anti-bullying and responsible alcohol consumption
- **Communication** development and execution of a marketing initiative to promote the utilization of DalSAFE
- Community education collaboration with other University business units and student groups to further the delivery of safety/crime prevention education and graffiti management on all campuses
- **Restorative Justice** continued partnering with Student Services, Halifax Regional Police and the Province of Nova Scotia in establishing restorative practises as an institutional response to University Code of Conduct and University/ neighborhood conflict complaints

Responsible for:

- Financial Management, accounting, budgeting and financial analysis and internal control for FM and Capital Construction (CC)
- Employee Services, Labour Relations, Employee Development and Safety Training for FM and Capital Construction (CC)
- Information Technology, systems and controls for FM and Capital Construction (CC)
- Policy, Procedure, Process
 Management and general
 administration for FM and Capital
 Construction (CC)

4.5 Finance and Administration

4.5.1 Core Objectives 2015-16

Financial Management:

- Lead financial accounting, cost accounting, financial management, analysis and reporting.
- Manage the operational, utility, non-space and training budgets for the department.
- Support the development of key performance indicators.
- Implement effective cost-recovery rates for services provided to clients.
- Monitor FM internal controls.
- Provide strategic financial advice to FM units.

Human Resources:

- Foster professional working relationships with union representatives (executive and members), negotiate and implement Collective Agreements (NSGEU Local 92, 77 and 99).
- Manage Human Resource policies, procedures and processes for FM and CC.

Information Technology:

- Manage the information technology requirements for FM and CC.
- Upgrade FM systems technology (e.g. FAMIS).

Environmental Health and Safety:

- Support and enhance safety training in FM and CC units.
- Collaborate with the Dalhousie Safety Office on safety initiatives.
- Develop and implement strategies to promote and support a safe workplace.
- Manage safety and employee development training for FM and CC.

General Administration:

- Prepare the annual Business Plan and operating budget for the unit.
- Develop professional working relationships and contribute to the broader Dalhousie community.
- Model excellence in communication with employees, clients and the Dalhousie community.
- Model excellence in change management processes.
- Integrate AC processes and practices with those of the Halifax campuses.

PICK IT UP!



Respect our space

Bending and maneuvering around tables and chairs is uncomfortable and awkward. It increases risk of back, knee, and shoulder injury.

Please remove your garbage and recyclables as you leave class. Help out further and throw away any waste other students leave behind



WorkSAFE@Dal Custodial Services and the School of Occupational Therapy

WorkSAFE Keep Dat clean and safe for



4.5.2 Strategic Objectives for 2015-16

Our People

- Lead the development and implementation of FM responses to the *BELONG Report* and the *Workplace Health Survey*.
- Develop and implement an Attendance Management Program for FM and CC.
- Develop and manage effective employee performance recognition programs.
- Lead FM collective bargaining efforts for custodial, trades and security employees.
- Develop an employee development framework for FM.
- Create a plan to implement the Dalhousie Attendance Reporting System into FM operations.
- Update and expand the Facilities Management Safety Program.

Stewardship

• Contribute to the University's strategic direction 5.3 by supporting the development of a multi-year integrated budgeting and forecasting model for FM and CC.

Service

- Provide financial, technological, human resource and training expertise to service initiatives of other FM units.
- Explore the business case for a FM mobility strategy.

Partnership

- Integrate financial policies, practices and procedures of the AC with Halifax campuses.
- Manage FM implementation of University information technology initiatives, including Attendance Reporting, MASS and the Brio replacement.





5.0 Activity Drivers

This section of the Business Plan outlines the various activity drivers or factors affecting the allocation of costs within the FM budget and the prioritization of the services and functions that are provided by FM.

5.1 University Transitions

5.1.1 Inspiration and Impact: Dalhousie Strategic Direction 2014-18

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 which was approved by the Board of Governors and the Senate in the spring of 2014. *Inspiration and Impact: Dalhousie Strategic Direction 2014-18* includes revamped vision and mission statements for the University, as well as 25 strategic priorities, organized under five broad themes:

- 1. Enhance the transformative power of teaching and learning.
- 2. Expand opportunities for research, scholarly and artistic work.
- 3. Catalyze the intellectual, social and economic development of our communities.
- 4. Take our place nationally and internationally.
- 5. Build our institutional capacities.

All of the strategic priorities are shown on the following chart and they will be referenced in this document using the numbering system identified on the chart.

STRATEGIC PRIORITIES

2.0 TEACHING AND LEARNING Enhance the transformative power of teaching and learning 1.1 Increase retention and degree completion

- 1.2 Focus on strategic student recruitment based on discipline, level and diversity
- Strengthen student experience, leadership development and additional support for our locally diverse and international students
- 1.4 Embark on strategic program reviews to enhance the effectiveness and student focus of our program offerings
- 1.5 Foster and support innovation in program development and excellence in teaching and pedagogy

2.0 RESEARCH



Expand the opportunities for research, scholarly and artistic work

- 2.1 Direct and attract resources to priority research areas, with local, national, and international importance
- 2.2 Attract and retain outstanding professors
- (2.3) Attract and support excellent graduate students and postdoctoral fellows to strengthen the impact of research
- 2.4 Foster undergraduate research
- 2.5 Enhance research with state-ofthe-art facilities and resources in accordance with the Institutional Framework for the Support of Research

3.0 SERVICE



Catalyze the intellectua social and economic development of our communities

- 3.1) Contribute to cultural and economic vitality, locally and globally, by fostering creativity, innovation and entrepreneurship
- 3.2 Maximize the opportunities for students, faculty and staff to contribute to community both inside and outside of the university
- Promote a culture of service and engagement among students, faculty and staff

4.0 PARTNERSHIP AND REPUTATION



Take our place nationally and internationally

- 4.1 Foster and support key external partnerships and relationships with alumni, other universities, governments, businesses and NGOs
- 4.2 Strengthen the recognition for our academic excellence and reputation at national and international levels
- 4.3 Develop a plan to secure and maintain top 200 status
- 4.4 Prepare for Dalhousie's 200th Anniversary in 2018
- 4.5 Attract additional external investment

5.0 INFRASTRUCTURE AND SUPPORT



Build our institutiona capacities

- 5.1 Develop a human resource strategy that allows us to attract, support, and reward the best faculty and staff
- (5.2) Foster a collegial culture grounded in diversity and inclusiveness
- Develop a multi-year, integrated budget
- 5.4) Reduce the deficit of our pension plan
- Enhance our infrastructure with a multiyear capital plan that promotes environmentally sustainable development
- Improve the quality and inventory of research and teaching spaces
- 5.7 Improve the effectiveness and efficiency of administrative and operational processes aligned with our academic mission

September 16, 2014

Opportunities/Challenges

- Strategic Priorities (SP) 5.5 and 5.6 are being led by the Assistant Vice President of Facilities Management and both will create greater rigour in the formulation of capital plans at Dalhousie and in the provision of improved teaching and research space on campus.
- Many of the SPs will require areas of expertise that reside in FM such as project management, space planning and optimization, and classroom assessment and design, so there will be many demands on the time of key personnel within FM who will be called upon to contribute to multiple SPs concurrently.
- SP 5.7 will lead to a review of all administrative services, including those provided by FM, so many FM personnel will be taking part in the review process and in devising the improvements in efficiency and effectiveness that will be needed to address issues arising from the review.
- Most of the SPs will likely require additional people and funds, so there will be increased competition for limited Strategic Initiative funding.

5.1.2 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 provide to the other three campuses.

- Limited budget.
- Integrating the AC FM team into the Dal FM team.
- Campus Master Plan to be developed.
- Potential for a Net Zero Energy Campus.
- Improving energy efficiency of campus systems.

5.2 Buildings

5.2.1 Quantity of Space

Overview

The Campus Master Plan was developed between 2008 and 2010, under the management of FM and approved by the Board of Governors in October 2010; 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.

- SP 5.6 calls for an increase in teaching and research space on campus which specifically reinforces the requirements for additional space more broadly identified in the Campus Plan.
- Additional capacity has been created in FM and the Capital Construction unit to oversee the design and construction of multiple capital projects concurrently so that we can 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 is 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 for the foreseeable future. The overall budget amount was assessed to be reasonable on a square footage basis during due diligence work that was carried out, but experience in the transition years has shown that the budget is very tight.



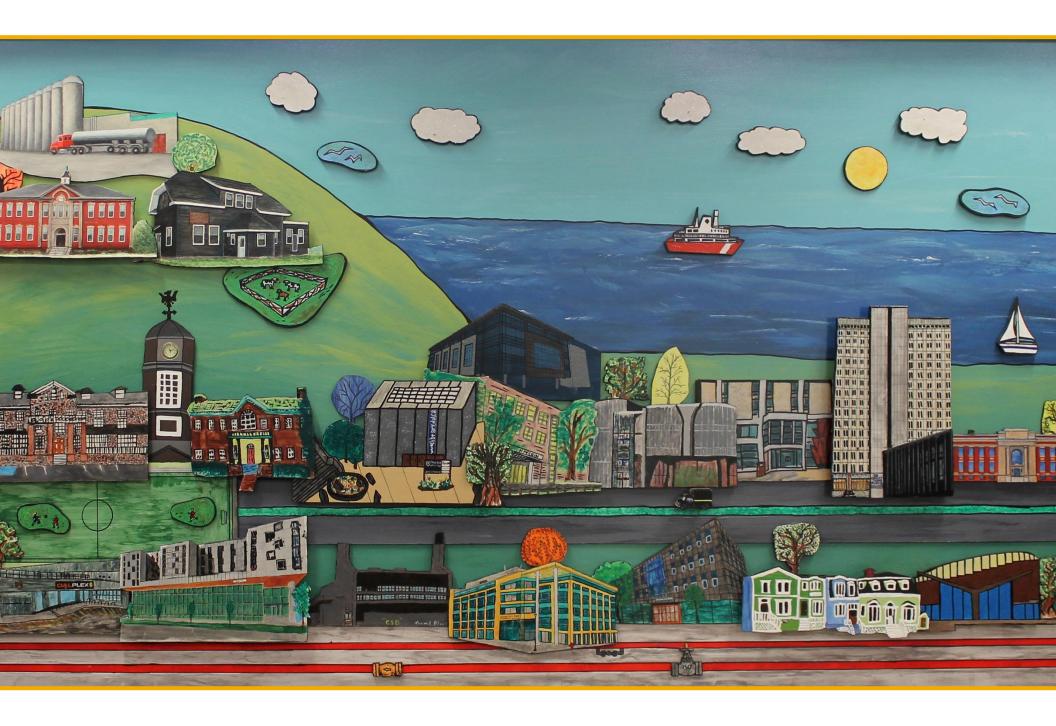


5.2.2 Condition

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 \$363 million on a campus with an estimated replacement value of \$1.48 billion, the Dalhousie FCI is currently 22%, which is considered to be poor. If SPs 1.3, 2.2 and 5.1, which all involve attracting people to learn, teach and work on campus, are to be achieved, then improving the condition of campus will be important.
- Halifax Campus the facilities renewal budget has been increased in the last few years and must continue to rise each year in the future if the condition of the campus is going to improve.
- AC the condition of the (former) NSAC campus was 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. The AC has been fully incorporated into our asset assessment and facilities renewal processes, but the limited funds provided both for transition projects and for ongoing Facilities Renewal will make it challenging to maintain a reasonable FCI.
- FM must have the capacity to implement an annually increasing amount of major maintenance work in order to spend available funds.
- 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 in order to identify the priority projects for inclusion in the multi-year capital plan being created under SP 5.5.
- 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 budget reductions. The common 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. A new element of the multi-year capital plan being developed under SP 5.5 will
 be the need to justify not only capital costs, but also substantiating operating cost
 increases necessary to service the new space.
- FM is developing new space management policies and will 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 is playing a leading role in the implementation of the INFOSILEM 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. This prediction is reinforced in many ways in *Inspiration and Impact* as outlined below.

- A total of four Learning Commons hubs were identified as requirements in the Campus Master Plan and will support SPs 1.1, 1.3 and 5.6. One is in place, two are under construction and the fourth is being designed.
- Residence structures with different residential layouts, accommodating a mixture of functions within one structure, are also called for in the plan and LeMarchant Place which opened last fall is the first example of that model.
- 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 as called for in SPs 1.5 and 5.6.
- The opening of the LSRI in spring 2011, gave us a taste of the high tech building security and environmental control systems being incorporated in leading edge research facilities, as per SPs 2.5 and 5.6.
- With the continuation of the CFI Program and award of such high profile research programs as the Canada First Excellence Research Fund, the Ocean Tracking Network and the Oceans Canada Excellence in Research Chair, Dalhousie will only require more of these leading edge facilities.
- Recent policy changes within the University have also called for all new facilities to be
 designed to LEED Gold standards, which is also aligned with the requirement of SP5.5. Not
 only will new buildings 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:
 - o 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 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, while at the same time we will be called upon as part of SP 5.7 to ensure that we are operating as efficiently and effectively as possible.
- To put these issues related to buildings into context, the Department of Capital Construction is currently responsible for the construction of:
 - Wallace McCain Learning Commons (\$7M)
 - o The Collaborative Health Education Building (\$38M)
 - o Fitness Facility (\$23M)
 - SUB Expansion and Renovation (\$11.5M)
 - o Dentistry Clinic and Facilities Renewal (\$27.6M)
 - Sexton Campus Hot Water Line Installation (\$6.3M)
- And FM is responsible for the planning of:
 - o Thermal Plant Renewal project (TBD)
 - o Energy Performance Contract Tupper/CRC (\$12.6M)
 - IDEA Building on Sexton Campus/P3 development on former Infirmary lands (TBD)
 - o Fountain School of Performing Arts (\$15M)





5.3 Campus Population

5.3.1 Availability of Living and Learning Environments for Students

Overview

Inspiration and Impact requires FM to plan for an increased student population within the upcoming years as more students are to be recruited and retained under SP 1.1, 1.2 and 1.3. 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 350 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.

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 G15 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 budget cuts and SP 5.7 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. Construction of a new Fitness Centre attached to Dalplex will begin in the summer of 2015, but it will be financed entirely by a student fee, so other sources of funding will need to be found for renewal/replacement of Dalplex itself. Similarly, conceptual designs are being developed for an addition to the Arts Centre to house the Fountain School of Performing Arts, but raising just the funds to construction the addition is a daunting task and that does not include renewal or replacement of the Arts Centre proper.
- 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. The upcoming purchase by Dalhousie of the Infirmary Lands will necessitate revisiting the Sexton Campus Master Plan including the incorporation of partnership opportunities to enable effective development of the entire campus.
- Although HRM declined to be involved in the joint 2-pad arena proposal with Dalhousie and Saint Mary's, Dalhousie continues to pursue a 1-pad option if the Province is still willing to provide the land on the Gorsebrook site. FM will continue to provide the capital planning to support these ongoing negotiations and design development if the project does go ahead.

5.4 Sustainability

5.4.1 Utility Price Volatility and Security

Electricity rates are unpredictable but, on average are expected to rise as much as 3% annually for the next three to five years. There are also planned water rate hikes. Natural gas pricing changes rapidly. There is an opportunity to invest in projects (energy and water efficiency and renewable energy) that reduce vulnerability to escalating and variable costs. There is an increasing trend in universities in North America to invest in renewable energy on and off campus through partnership arrangements such as power purchase agreements, as co-investors or developers. In Nova Scotia, a Renewable to Retail tariff is currently under-development.

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. From the 2014 Annual Campus Sustainability Survey (over 1900 campus respondents), 90% identified very strongly and/or strongly that campus environmental sustainability should be a campuswide goal. This importance is echoed in the University Strategic Plan with this sentiment captured in Strategic Priority 5.5.

Recent research published from the Conference Board of Canada highlights the importance of millennial workers interest in meaningful work at organizations with sustainability ethics and goals.

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 (CO₂ 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 the Halifax Thermal Plant Renewal. In addition to our existing buildings, there is opportunity with new buildings and the new 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. Dalhousie can be a leader in demonstrating simple and durable green building techniques in commercial buildings such as meeting Passive House standards for envelope performance.

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 Halifax, 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." (*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.
- Client involvement in the setting of standards and education of the clients around our success in achieving those standards will be important as SPs 1.1,1.3, 2.2, 2.3, 2.5, 5.1, 5.2 and 5.7 all are dependent to some degree on our ability to effectively achieve the FM mission.



5.6 Budget

Overview

• Financial restraint will be an activity driver in FM again this year due to a 2% reduction in the overall Facilities Management budget allocation. This is the fifth consecutive annual reduction, although in some years these reductions have been masked by additional funding being provided to support the operation of new buildings added to the campus.

- 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.
- Efficiencies will have to be made merely to maintain service levels rather than attempt to improve them.
- 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

Dalhousie Campus

Description	Actual 11-12	Actual 12-13	Actual 13-14	Actual 14-15	Forecast 15-16
Gross Operating Expense	25.9	27.0	28.9	29.4	29.9
Non Space	0.2	0.1	0.1	0.1	0.1
Facilities Renewal	17.7	18.3	19.1	17.7	18.2
Client Funded Projects	4.5	7.7	8.2	8.2	10.3
Capital Projects (Note 1)	30.9	38.0	42.0	26.2	40.0
Utilities Expense Total	13.1	14.9	17.1	18.6	18.8
Total Expenditure	92.3	106.0	115.4	100.2	117.3
Description	Actual 11-12	Actual 12-13	Actual 13-14	Actual 14-15	Forecast 15-16
Net Operating Expenses	16.5	16.8	18.2	17.9	18.2
Net Utilities Expense	10.8	12.4	14.2	15.3	15.6

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.

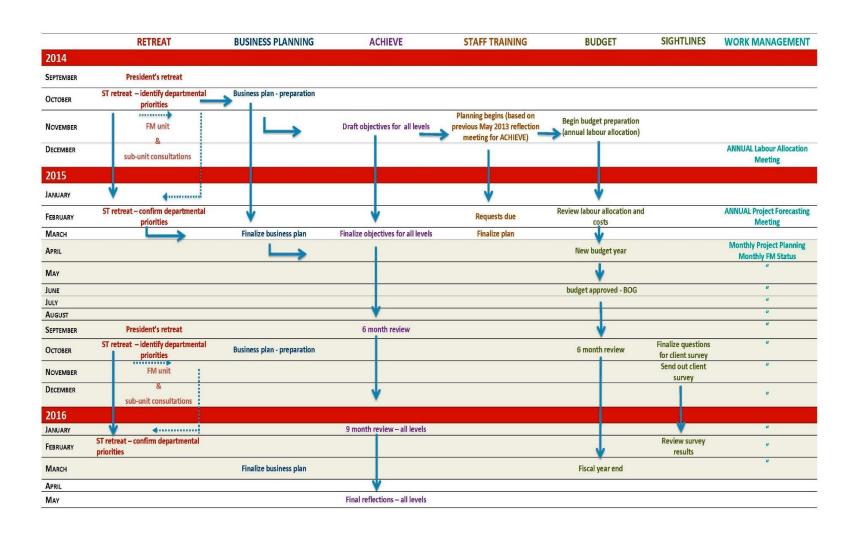
Appendix A: Budget Tables

Agricultural Campus

Description	Actual 12-13	Actual 13-14	Actual 14-15	Forecast 15-16
Gross Operating Expense	2.7	2.8	2.8	2.8
Facilities Renewal and One-Time Transition Funding	0.1	2.6	6.9	1.9
Client Funded Projects			1.0	0.7
Utilities Expense Total	2.3	3.1	3.1	2.9
Total Expenditure	5.1	8.5	13.8	8.3
Description	Actual 12-13	Actual 13-14	Actual 14-15	Forecast 15-16
Net Operating Expenses	2.4	2.5	2.5	2.5
Net Utilities Expense	1.9	2.7	2.7	2.5

Appendix B: Planning Cycle

Annual work management process outline for Facilities Management Senior Team



Glossary

BVBM

EPC **ACHIEVE** AC MASS Infosilem KPI APPA **FAMIS** Business Intelligence ISI **EPrint** VFA SI Engineering - F206 R1 and R2 (MJ) HR C&M ITS EHS NSGEU Locals 77,92,99