

Multi-Year Capital Plan for the Second Planning Cycle

2008/09-2011/12

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BACKGROUND

The University of Saskatchewan's (U of S) *Multi-Year Capital Plan* is a planning document that supports the university's *Strategic Directions (2002)* and the integrated planning process. Our planning process has matured to the stage where we are attempting to link academic, financial and capital planning through the inclusion of this first *Multi-Year Capital Plan* as one of the components of the *Second Integrated Plan*. Like the *Multi-Year Operating Budget Framework*, the *Multi-Year Capital Plan* is produced early in each planning cycle and will be updated annually and re-drafted every 4 years.

The Second Integrated Plan	Identifies the priorities, strategies and commitments for the next four years	
University Implementation Plan	Identifies leaders for each commitment area and principles that will guide the	
for Second Integrated Plan	implementation process	
Multi-Year Operating Budget	Provides a financial projection and guiding principles for the university's operating	
Framework	budget for the next four years	
College and Unit Planning	Outlines expectations for colleges and units, including specific initiatives, and goals	
Parameters	related to enrolment, research and scholarship, program innovation and resources	
Multi-Year Capital Plan	Provides details on new and continuing capital projects for the planning cycle	

What is a multi-year capital plan?

The *Multi-Year Capital Plan* represents the University of Saskatchewan's priorities for capital planning over the planning cycle. It is a framework that encompasses the breadth of capital planning at the U of S, including physical assets such as buildings and space, land, infrastructure, information and communications technology, and equipment.

The *Multi-Year Capital Plan* provides an overview of capital needs, issues, and projects in various stages of development, as well as current and planned capital activities directly related to the integrated planning process, including critical maintenance and renewal of the university's capital assets. The *Multi-Year Capital Plan* denotes capital projects to be completed or developed during the second planning cycle as established through the institutional capital planning process.

The following table illustrates the relationship of the *Multi-Year Capital Plan* within the hierarchy of key capital plans and reports prepared by the university. For a detailed version of this table, please see Appendix A: Key Capital Plans and Reports at the University of Saskatchewan.

Levels of Planning/Reporting	Key Capital Plans and Reports at the U of S	Audience	Review
Strategic: university's overall philosophy and approach on managing capital; highest level of planning; fundamental decisions and actions directed to achieving institutional goals	Multi-Year Capital Plan	Public	Every planning cycle
	Core Area Master Plan -Foundational Document (2003)	Public	Every 2nd planning cycle
	Vision 2057: University Land Use Plan (under development)	Public	Every 2 nd planning cycle
	ICT - Foundational Document (2003)	Public	Every 2nd planning cycle
Portfolio Governance: updates/	Annual Capital Plan	Public	Once/year
funding status of capital projects for Board; delineate U of S management, oversight and monitor capital projects approved/under construction	Major Capital Project Status Report	Board	Quarterly
	Major Capital Project Portfolio Funding Report	Board	Twice/year
	Operating Costs of Major Capital Projects Report	Board	Twice/year
Project Management: identify strategic and specific capital requirements along with plans and strategies intended to resolve the most urgent and highest priority needs	Key Technical/Management Documents (Asset Report	ts)	
	Strategic Campus Space Plan (under development)	Public	As required
	Maintenance Master Plan	Public	As required
	Infrastructure Master Plan (under development)	Public	As required
	Major Project Progress Report	Public	As required
	Major ICT Projects Inventory	Public	As required

The *Multi-Year Capital Plan* and the institutional capital planning process reference the following:

- Section I: Principles
- Section II: Drivers
- Section III: Process for Approval of Capital Projects
- Section IV: The *Multi-Year Capital Plan (2008-2012)*
 - A: Components and Planned Actions
 - B: Capital Priorities, Commitments and Initiatives for the Second Planning Cycle

For an illustrative overview of the *Multi-Year Capital Plan*, please see Appendix B: Capital Planning at the University of Saskatchewan. A detailed version of the *Multi-Year Capital Plan* will be available online July 2009 at www.usask.ca/ip.

Capital projects to be completed or developed during the second planning cycle are noted in Appendix B: The Capital Portfolio for the Second Integrated Plan.

Why create a multi-year capital plan?

The *Multi-Year Capital Plan* provides guidance and direction to the U of S in order for the institution to respond to strategic and logistical capital needs in an ever-changing physical, structural and economic landscape. The *Multi-Year Capital Plan* also identifies capital funding needs and issues, outlines current actions as well as new approaches for potential funding solutions and strategies that inform decision-making at the U of S. Capital planning and reporting is closely tied with the integrated planning process and budgeting process which envisions a synoptic view of resource allocation through the Provost's Committee on Integrated Planning.

The Annual Capital Plan

The *Annual Capital Plan*, as a supplement to the *Multi-Year Capital Plan*, will be developed within each year of the planning cycle and will provide a refreshed synopsis of capital needs, capital funding, priorities and projects for the upcoming year similar to the *Operations Forecast* and the *Multi-Year Operating Budget Framework*. Specifically, the *Annual Capital Plan* will provide an overview of the various capital needs of the university and will illustrate how the institution will address the most critical and highest priority capital projects and programs for the upcoming year with the funding available. The Plan will also identify both requested and secured funding sources and will note specific major and minor capital projects to be developed, implemented or completed.

The *Annual Capital Plan* will reference:

- 1. Operations Forecast Second Planning Cycle
- 2. Operations Forecast Annual Capital Allowance (Request and Allocation)
- 3. Major Capital Projects Commitments and Expenditures (to date in the second planning cycle)
- 4. Summary of Annual Capital Needs and Priorities
 - i. Buildings/Space
 - ii. Land
 - iii. Infrastructure
 - iv. Information and Communications Technology
 - 1. Campus-Wide Information Technology
 - 2. Campus-Wide Multimedia Technology
 - v. Equipment

Capital Reporting

Since the approval and implementation of the University of Saskatchewan's *First Integrated Plan 2003-2007*, capital planning at the university has experienced a transformation in process and governance to ensure that our capital plans, projects, and programs respond to and align with institutional priorities and initiatives identified in the *Strategic Directions* and the university's integrated planning process. The *Multi-Year Capital Plan* will serve as a guide for university capital development and expenditures over the second planning cycle and will be part of a process which links academic, financial and capital planning and decision-making during planning cycles.

The University of Saskatchewan has identified 3 levels of planning and reporting within its internal capital planning process:

- 1. **Strategic** The *Multi-Year Capital Plan* serves as a Strategic Plan encompassing the institution's highest level of planning wherein fundamental decisions and actions are directed to achieving institutional goals. Strategic Planning includes the integration of planning and budgeting; the integration of academic and administrative planning; a multi-year framework and a governance structure. Strategic plans are derived from institutional guidance and direction responding to priorities and decisions that have been made to ensure institutional success.
- 2. **Portfolio Governance** To ensure that the financial aspects of the university's capital projects are being governed in a prudent, expeditious, and diligent manner, the University Board of Governors is regularly provided with reports that provide project updates and the funding status of our capital projects. These reports include the *Annual Capital Plan*, Major Capital Project Status Report, Major Capital Project Portfolio Funding Report, and the Operating Costs of Major Capital Projects Report.
- 3. **Project Management** Capital planning at the U of S involves numerous departments, offices, and committees including Institutional Planning and Assessment, Facilities Management Division, Information Technology Services, Educational Media Access and Production, Financial Services Division, the Provost's Committee on Integrated Planning, the Planning and Priorities Committee, and the Board of Governors. Within the institution, there exist several reports and plans that identify specific capital requirements along with plans and strategies intended to resolve the most urgent and highest priority needs. The creation of these internal planning documents and the associated review/approval processes are critical components of a successful *Multi-Year Capital Plan*.

For an illustrative overview of the relationships between the various documents, please see Appendix A: Key Capital Plans and Reports at the University of Saskatchewan.

I. PRINCIPLES

Principle 1: Capital planning is aligned with the university's Strategic Directions (2002).

The Multi-Year Capital Plan aligns with the Strategic Directions, which identifies "sense of place" as one of three features that will distinguish the U of S and define the institution's direction into the next century. Specifically, the Strategic Directions state: "Increasingly in this age of differentiation, an inspirational campus will be an important factor in attracting students and faculty. But, campus resources extend beyond the physical environment. A setting for scholarly excellence must also include facilities and infrastructure such as up-to-date laboratories and classrooms, effective and innovative information technology, and a major research library. Issues such as deferred maintenance and

environmental obligations must also be addressed. And in planning for the future, we should also allow ourselves to dream beyond the current critical priorities for capital projects, and consider, for example, how facilities such as a health sciences complex or a performing arts centre would enrich the university and the city."

Principle 2: Capital planning is aligned with the university's current integrated plan.

This Multi-Year Capital Plan aligns with the university's current plan, the Second Integrated Plan, which states that "a key focus for university administration over this planning cycle will be the successful completion of these and other projects, such as the Campus Core Area Revitalization, which address the university's most critical space needs. Yet we cannot stop and focus just on the current priorities: the university must continue to respond to emerging demands, take advantage of new opportunities, and continue to plan for and implement the next phase of capital projects. As always, the list of new projects will be driven by a range of factors, such as: our own strategic priorities, including the need to improve the undergraduate and graduate student experience and grow our research efforts; opportunities that arise from government or donors; health and safety requirements that may emerge; environmental sustainability; and the continued need to add academic and administrative space to the core of our campus. Our ability to respond to all of these will be constrained by the funding available, and by our capacity and appetite for managing a larger portfolio of projects." Capital needs will surely arise from the initiatives identified in the Second Integrated Plan, including two commitments in particular:

- **Infrastructure and Capital Resources**, which commits the U of S to "continue to enhance its physical environment by completing current priority capital projects, by working with the Province to develop a long-term strategy for deferred maintenance, and by identifying the next phase of projects to enrich our teaching, learning and research environment." (p. 28)
- **Financial Resources**, which, in addition to strengthening its financial position and enhancing transparency, commits the U of S to implement a process for more effective resource allocation. (p. 26)

Principle 3: Capital planning will align with the *Core Area Master Plan* and the *Vision 2057: University Land Use Plan.*

The *Core Area Master Plan (2003)* responded to the need for a coordinated, cohesive approach to development on campus. Guided by the university's strategic goals and mission, the *Core Area Master Plan* establishes the physical planning framework for growth of new areas and enhancement of existing areas on campus. It is based on the evaluation of space needs, building and landscape design, sustainable development, traffic and parking, way-finding, utilities, facilities operations, maintenance, phasing, funding and the management of campus projects. All capital building projects are now evaluated within the context and recommendations of this plan.

In 2008, the Land Use Task Force recommended that the university prepare a 50-year master land use plan, which is currently under development. The Task Force completed an inventory of U of S lands, identifying both current and potential usage and the development of a land use decision-making framework. The *Vision 2057: University Land Use Plan* will assist the U of S in assessing and making recommendations for current and future land requirements, changes in land use, and development opportunities. Upon completion and in conjunction with the *Core Area Master Plan*, the *Vision 2057: University Land Use Plan* will serve as a guide for campus development.

Principle 4: The U of S is committed to sustainability in all its capital activities.

The Second Integrated Plan states that "in both its intellectual life and its operational activities, the University of Saskatchewan will address the great issues of our time, including sustainability, and it must do so in a collaborative way. Sustainability cuts across the boundaries of faculty and students and staff, academic and administrative units. An engaged 21st century university has a special role to play in mediating the dialogue of environment and economy, in creating and disseminating knowledge needed by all parties in current debates, and in modeling environmental as well as economic sustainability in our own programs and practices" (p. 24)

Sustainability will inform the teaching and learning and work undertaken on campus, and the university is committed to expanding sustainability efforts for physical infrastructure, both through energy savings projects and environmentally sensitive building design. An Office of Sustainability at the U of S has been established to address rising concerns in environmental sustainability. In addition to overseeing campus operations, this office facilitates logical linkages to academic, research and community development by working with the School of Environment and Sustainability and others in the local and regional community.

Principle 5: Capital planning will adhere to U of S Project Development Guidelines.

The *Multi-Year Capital Plan* will adhere to the project development guidelines for capital building, information and media technology projects set by various U of S departments.

- Capital Building Projects Guidelines¹ (Facilities Management Division (FMD))

 These include beauty, durability, sustainability, heritage preservation, economy, maintenance and life-cycle costing, flexibility, accessibility, and safety and security.
- Information Technology Guidelines (Information Technology Services (ITS))
 IT projects will be reviewed within the Information and Communications Technology (ICT) governance model that includes strategy, architecture, infrastructure applications, and investments. This will ensure that priorities are understood, plans are sound, and that spending is done in the most effective way. Further, ICT follows seven development principles: inter-operability (e.g. wireless); economies of scale; campus versus unit; strategic consequence of not proceeding; fit within function including total cost of ownership, purchase, implementation, and ongoing operation; and business and technical requirements.
- Media Technology Guidelines (Educational Media Access and Productions (EMAP))
 Key goals of EMAP are interoperability and standardization to realize cost savings in buying, repairing and maintaining equipment. Drawing on the research of professional bodies (e.g. New Media Consortium and collaborative relationships with peer institutes), EMAP ensures appropriate standards are met for a university setting. Partnering with the University Learning Centre and the Centre for Continuing and Distance Education, with consideration for both current and emerging use of media, ensures that best practices are recognized. EMAP and ITS work closely with each other, and with FMD, on all capital projects.

Principle 6: Capital planning will take into account diverse funding sources.

In the past, the provincial government was the sole or primary funding source for U of S capital projects. Now, multiple funding sources are common, including government, institutional, external

¹ A description of these guidelines will be included in the detailed version of the *Multi-Year Capital Plan* available online July 2009 at www.usask.ca/ip.

sources, and fundraising. As capital projects are developed at the U of S, the process ensures that diverse funding sources are sought. Capital projects may be supported by one funding source, joint funding sources, research overhead, university-secured funds from fundraising campaigns, and/or internal funds from the operating or capital budgets.

Principle 7: Operating budget implications and requirements will be identified as multi-year capital plans are developed.

Investments in new capital also means increased and ongoing needs for associated costs and increasing "liability" related to capital renewal and replacement for buildings, infrastructure, information and communications technology and equipment. Securing major capital project funding brings with it added financial responsibility for operating costs to support that capital. The *Multi-Year Capital Plan* must therefore link to the university's operating budget. Operating budget implications and funding sources are integral components of the review and approval process of the Major Projects Planning Process.

- Capital building projects should identify associated operating cost implications including: building, operating, maintenance and utility costs; technology systems and equipment upgrades and renewal; maintenance contracts; and associated support staff.
- Ongoing operations costs for computer technology projects should include maintenance contracts, equipment upgrades, support staff, and new functionality.
- Considerations must be given to operating budget implications for the operation of
 permanent multimedia installations in teaching spaces at the U of S. The costs for maintaining
 multimedia technology in learning spaces and the human resources required to support this
 increased activity also needs to be addressed.
- Additional operating cost implications include infrastructure readiness for both direct and indirect costs (e.g. equipment maintenance, technician salaries, equipment repairs, equipment maintenance contracts) and direct operating costs related to the direct cost of the program/research (e.g. technician salaries for collection of data).

II. DRIVERS

A driver is defined as an input or initiator that influences capital projects, programs and expenditures. Four primary drivers or "influencers" of capital planning have been identified at the U of S and are adapted from a Capital Planning Committee submission to University Council in June of 2001. The *Multi-Year Capital Plan* recognizes that these four drivers influence the need and development of capital projects either individually or in combination.

1. Strategic (planned) Drivers

Strategic drivers of capital planning stem directly from the strategic needs of the university. Determination of academic priorities is a major factor in the identification and implementation of capital considerations. New capital initiatives must be responsive to the changing academic and research priorities and strategic growth needs of the U of S. Two strategic drivers include:

- Academic/research/student enhancements (the 'academy' of the university): This
 includes the *Strategic Directions, Second Integrated Plan,* Foundational Documents,
 college and administrative unit plans, enrolment plan, student success, faculty
 recruitment and retention, academic imperatives, research competiveness,
 accreditation, and space deficiencies.
- Infrastructure and support: The 60 core buildings that make up the U of S span a total gross area of 500,000m². The physical infrastructure to operate and support these facilities is comprised of central and distributed infrastructure necessary for the

ongoing academic and research activities occurring within these physical facilities. The supporting infrastructure for U of S facilities will require planned/proactive expansion and upgrading to be responsive to an expanding and more technologically-complex campus.

2. Operational (renewal) Drivers

Operational drivers of capital planning include renewal of existing capital assets, whether physical or infrastructure in nature, and deferred maintenance. Capital renewal and deferred maintenance are capital expenditures required for the preservation of capital assets in order to keep the physical assets and infrastructure in reliable operating condition for present use and to extend the life and maintain the functional and useable condition of facilities and systems.

- Capital renewal ("keep up") addresses condition deficiencies including major maintenance issues and deals with the planned repair and replacement of existing systems and components on a maintenance cycle of more than a year. This does not include upgrades.
- Deferred maintenance ("catch up") addresses overdue condition deficiencies including major maintenance and deals with previous repair and replacement of systems and components deferred due to a lack of resources. This is work that has not happened at the prescribed time and includes assets that have not been renewed at the end of their useful life and are obsolete or have failed and are impacting negatively on service, satisfaction and finances.

3. Opportunistic Drivers

Opportunistic drivers of capital planning result from new fundraising efforts and external partners beyond the traditional funding model. Funding for capital projects has diversified from past practice, and in recent years, the U of S has been able to leverage fundraising opportunities and external funding partnerships to secure capital funds. Opportunistic drivers fall into three categories:

- Fundraising: aligning external fundraising with institutional needs and priorities
- Programs/partnerships: collaboration with public/government agencies and programs to secure capital funds some of which may be directed to targeted capital projects
- Unplanned opportunities: unplanned acquisition of buildings, property and assets as a result of non-university, affiliated or government agencies releasing space or through capital endowments from individuals or corporations

4. Existing Commitment Drivers

Existing commitment drivers include capital commitments made by the university, such as project approval or financial commitments to capital activities, prior to the development of this *Multi-Year Capital Plan*. Currently, the U of S has approximately 40 major capital projects within the Major Projects Planning Process ranging from concept, planning and design, to construction. These projects have a range of funding sources including the provincial and federal governments, charitable fundraising, internal institutional funding (e.g. Academic Priorities Fund), research overhead, and internal operating and capital allocations. Financing for these projects must be completely secured before the U of S is able to commit to new capital projects.

III. PROCESS FOR APPROVAL OF CAPITAL PROJECTS

Major capital projects are defined as those projects including buildings, information communication technology needs, and equipment estimated to cost \$0.5 million or more. Consideration of changing land uses is also given.

The First Integrated Plan identified a need to create a planning process for major capital projects at the U of S. As a result, the Major Projects Planning Process (MPPP) was developed and approved by University Council and the Board of Governors in June 2005 along with a Major Projects Governance Structure by which all major capital projects are reviewed and approved within the institution. The objective of this process is to ensure appropriate academic consultation occurs early in the consideration of major capital projects and to establish a process that is transparent, responsive, and provides for timely consideration of these projects.

All major capital (building and ICT) projects are assessed and developed through the four stages of progressive reviews and approvals within the MPPP:

1. Stage One (project request)

- Development of a concept document outlining project scope, rationale and justification.
- Submission of the document to the President, Provost's Committee on Integrated Planning (PCIP), and the Planning and Priorities Committee of University Council for review, feedback, and comments.

2. Stage Two (pre-planning)

- Establishment of a Project Development Team to further examine and develop the project program (space needs, capital and operating budget details) and respond to feedback given by the various committees in Stage One.
- Creation of a Planning Brief consisting of a detailed description of the proposed capital project including justification, scope, program, and capital and operating funding requirements and sources.

3. Stage Three (planning approval)

- Submission of the Planning Brief to PCIP and the Planning and Priorities Committee for secondary review.
- PCIP to determine if project will be (1) approved (2) deferred or (3) referred back for clarification or further information.

4. Stage Four (project governance)

PCIP-approved projects will follow the Major Project Governance Structure process, which includes two main steps:

- Establishing a Steering Committee with an Executive Sponsor and Working Committees, as necessary; and
- Submitting a series of documents to the Board of Governors for approval.

For more information and to see a listing of all current projects at various stages in the MPPP, please visit www.usask.ca/ip.

IV. THE MULTI-YEAR CAPITAL PLAN (2008-2012)

Multi-Year Capital Plan Overview

The university is experiencing its largest building boom in its history coinciding with an incredibly busy time of construction and economic development in the surrounding City of Saskatoon and Province of Saskatchewan. Further, in March 2008, the U of S adopted the *Second Integrated Plan: Toward an Engaged University* (2008/09-2011/12) which sets priorities and commitments for the

next four years. The *Multi-Year Capital Plan* is one key component of the overall integrated plan, as is a multi-year operating budget framework.

The U of S *Multi-Year Capital Plan* is unique from most capital plans in that it illustrates the interrelationship of the various components of the institution's capital assets and requirements and recognizes the need to integrate and review these capital needs and projects comprehensively. For example, a new building project entails space to address institutional needs, as well as an assessment and determination of building site and land implications, and typically includes the acquisition, installation, and operation of municipal and building infrastructure, computer technology, multimedia technology, and teaching and research equipment. Further, all elements of a new building require renewal and replacement funding and ongoing operating funds.

Developing this *Multi-Year Capital Plan* during such an active time presents the challenge of capturing ongoing activities and commitments and planning for future capital projects in one "snapshot" document. Many capital projects have been completed successfully at the U of S, others are underway and commitments have been made to completing them, and new projects are emerging as the second planning cycle unfolds. In addition to prior commitments and projects underway, the *Second Integrated Plan* calls for new capital projects related to:

- the three university priorities
 - 1) to improve the student experience,
 - 2) to enhance the university's profile in research, scholarly and artistic work,
 - 3) to work together more effectively across boundaries
- the 20 commitments (as commitment leaders work through each commitment, capital projects will emerge)

The following section provides an overview of the current situation and future planned actions in five areas: 1) buildings/space, 2) land, 3) infrastructure, 4) information and communications technology, and 5) equipment. It also outlines specific capital activities that stem from the commitments and initiatives in the *Second Integrated Plan*.

A. Components and Planned Actions

The Multi-Year Capital Plan aligns with the Second Integrated Plan commitment on Infrastructure and Capital Resources: "continue to enhance its [U of S] physical environment by completing current priority capital projects, by working with the Province to develop a long-term strategy for deferred maintenance, and by identifying the next phase of projects to enrich our teaching, learning and research environment." The Commitment Leaders and the Working Group for this commitment will use the Multi-Year Capital Plan and "planned actions" (see below) as a starting point for their undertakings.

1. Buildings/Space

At over 100 years old, the U of S benefits from a beautiful campus with architecturally designed buildings that recognize the investment of previous generations. To ensure this previous investment remains a legacy for future generations, there must be continued investment in existing buildings. In addition, new buildings must be constructed to address expanding, technically complex and sophisticated space demands. The ultimate goal of university facility development is to provide functional space in an efficient and effective manner that will allow the university's academic and research community to perform the tasks for which they are mandated. Not to be forgotten though, is the premise buildings typically are reflections and representations of the community and programs located within the structure itself. The building structure symbolizes the culture within.

Current situation

Buildings: U of S infrastructure is equivalent to a city similar in size to North Battleford. With an estimated daily population of 30,000-35,000 students, faculty, staff and visitors, the U of S is the fifth largest community in the province on any given day in the fall/winter. The U of S is comprised of approximately 60 core buildings and extensive infrastructure; a physical asset with a current replacement value estimated at \$5.0 billion dollars. The complexity, distinctiveness, and diversity of U of S facilities require continual physical and functional adaptation and upgrading, renewal, and maintenance along with expansion. Currently, a backlog of \$620 million in deferred maintenance exists; of this total, \$250 million is considered critical.

Space: The U of S currently occupies 300,000 net assignable square metres (NASM) of space (functional space) that is inventoried, audited and categorized within a provincial government approved classification system. The Space Management and Planning Unit within FMD prepares individual college and overall campus space reviews and analysis using space entitlement calculations based on a provincial government approved space formula. Based on current information, it is estimated the U of S has a space deficiency of 61,250 NASM (roughly equivalent to 3 buildings the size of the Engineering Building).

Planned actions

- Complete a *Comprehensive Space Review* and develop a *Strategic Campus Space Plan* that will serve as a strategy to address short, medium and long term space needs of all planning entities
- Develop and review a Faculty Recruitment Resource Template to assist colleges and the university to proactively identify space and other capital needs (e.g. computer technology, equipment) when recruiting new faculty
- Develop a strategy to secure increased funding for capital renewal and to address the most critical deferred maintenance issues
- Place greater emphasis on alignment of fundraising efforts with institutional priorities and needs including assessments to determine the capability and capacity to fundraise for targeted capital projects
- Explore various provincial/federal government programs that have a direct link to developing or approved capital projects as a potential funding source
- Develop creative funding models for capital projects internally within the U of S and with partner agencies
- Ensure all committed funding sources for capital projects are secured and in place prior to committing to additional projects. The capacity to finance and manage additional capital projects must be determined to ensure that existing commitments and projects are not jeopardized or negatively impacted.

2. Land

U of S lands constitute approximately 1/20 of the total urban lands within the City of Saskatoon's urban boundary. These lands are located at the core of the city adjacent to the South Saskatchewan River and downtown. The Land Use Task Force Final Report (April 2008) notes the Strategic Directions' call for the U of S to "...enhance revenue opportunities, in part through creative use of endowment lands which have been identified as surplus to the needs of the university – such as Preston Crossing real estate development, whose proceeds add to our scholarship and bursary resources for students." To assist with the management of U of S land issues, the Land Use Task Force Final Report included the following two recommendations:

- Develop the *Vision 2057: University Land Use Plan* (in progress)
- Refine the governance process for land use decisions

Current situation

The U of S currently holds 1,865 acres/750 hectares of central city lands with approximately 40% used for the core campus and related uses and 60% for agricultural teaching and research. These land holdings are a critical strategic asset for the U of S and for various colleges. Land also represents a vital element in the student community as it provides an opportunity and site for the development of student housing and also accommodates student recreational programming, both of which contribute to the enhancement of the student experience. In addition to lands located centrally in the City of Saskatoon, the U of S owns research land totaling 5,686 acres/2,300 hectares (e.g. Termuende, Goodale, and Kernen Farms), Emma Lake Kenderdine Campus (22 acres/9 hectares), and 4,296 acres/1,740 hectares of land leased to agriculture producers.

Planned actions

- Review the *Core Area Master Plan (2003)* and update where needed, and assess the potential of this document to respond to initiatives from the *Second Integrated Plan*
- Initiate and complete the *Vision 2057: University Land-Use Plan* to assist the U of S in making collegial decisions about how land is used in future years
- Report on findings of the *Vision 2057: University Land Use Plan* consultation process, anticipated to run between fall 2008 and spring 2009
- Review the integration between the Core Area Master Plan and the Vision 2057: University Land Use Plan (upon completion) potentially as a single Foundational Document

3. Infrastructure

Behind the day-to-day operation of the U of S is a complex, intricate, and often invisible infrastructure that is assumed. This includes internal building systems integral to functional and safe working environments and buildings; information technology and systems necessary to support academic, research and administrative functions; multimedia and equipment assets critical to the needs of the teaching and learning, research and support needs of the U of S. Much like a city, the U of S is continually challenged to maintain and renew the infrastructure critical to the ongoing operation of the institution.

Current situation

Inside and surrounding the university's 60 core buildings, is a supporting physical infrastructure comprised of 24km of roads and walks, 54km of water and sewer lines, 18km of stream lines, 20km of electrical lines and accompanying technology systems. Analogous to buildings, the supporting infrastructure for U of S facilities requires continual physical and functional adaptation and upgrading, renewal and maintenance.

Planned actions

- Complete the *Infrastructure Master Plan* during the second planning cycle to identify the needs, priorities, critical completion dates to upgrade and expand the university's physical infrastructure
- Review the non-physical infrastructure needs of the university including information and multimedia technology
- Develop a funding strategy to address all capital infrastructure projects

4. Information and Communications Technology

Information and Communications Technology (ICT) is critical to the university's success. ICT is rapidly transforming how we teach, learn, perform research, deliver services, communicate, collaborate, conduct business, manage and plan. It can enhance teaching and learning, strengthen our research enterprise, transform business services and create new communities where creativity, collaboration and innovation can thrive. ICT is also critical to recruiting and retaining students and faculty so they can succeed in the knowledge age. In order for the U of S to succeed in addressing the priorities outlined for the second planning cycle, to contribute to the province's success and to be recognized among the most distinguished universities in Canada and in the world, the U of S must invest in ICT.

Current situation

Both information technology (IT), such as computers, and media technology (MT), such as a video camera, are part of the university's ICT system. Increasingly the "boundaries" between IT and MT are changing and blurring as these technologies converge. For example, most laptop computers today include a camera. Further, video capture, editing and streaming media devices now depend upon computers and network services. The current replacement value of the university's ICT assets is estimated at over \$100 million and represents a huge risk to the university should systems fail, given increasing reliance on these for much of our work.

ICT services, which are used by students, instructors, researchers and staff from all colleges and departments, are provided by central academic support units including Information Technology Services (ITS), Educational Media Access and Production (EMAP), Information Strategy and Analytics (ISA) and the University Library. Colleges and departments also provide ICT services that address their unit and/or discipline-specific needs. While this service delivery model is appropriate, the university must continuously monitor the balance between central and college/department service and ensure that services are not fragmented or duplicated.

Planned actions

- Renew the university's ICT assets on a cyclical basis so they continue to serve the purpose for which they were acquired
- Invest in and harness the benefits of new ICT technologies to meet the emerging needs and expectations of the changing student body and of instructors and researchers
- Develop a multi-year IT capital plan including the requirements for cyclical asset renewal and for projects to deploy new IT services as well as any resulting increases in operating costs. The plan will consider both the needs for campus-wide services as well as college and departmental needs.
- Enhance the multi-year classroom renewal plan including the requirements for improving more classrooms and for cyclical asset renewal as well as any resulting increases in operating costs
- Develop a funding strategy to address the increasing costs of ICT required to meet the university's teaching, research and service delivery needs and collaborate with University Advancement to identify opportunities for donor contributions
- Include the cost of information and media technology infrastructure within the project budgets for the construction of new buildings and major renovations. The operating budgets for new facilities should also address any additional operating costs resulting from the increased ICT infrastructure as well as the increased asset renewal costs.

5. Equipment

Equipment at the U of S is necessary for teaching, research, academic support and professional activities. The Financial Services Division has estimated the U of S equipment inventory currently has a calculated net book value of \$80 million after accounting for accumulated depreciation.

Current situation

Equipment needs at the U of S are discipline-based and vary widely. A range of equipment from science-based laboratory equipment to computer-based technology (becoming more common and critical to most disciplines) includes examples such as spectrophotometers, microscopes, chromatographs, balances, vacuum pumps, centrifuges, desktop and laptop computers. There are also several high-end, expensive equipment items including scanning electron microscopes, transmission electron microscopes, and gas chromatography – mass spectrometers. For the 2007/08 budget year, the U of S is estimated to have spent over \$20 million on the purchase of teaching and research equipment, computer equipment, and software from a variety of funding sources including capital allocations, operating funds, and research grants.

The U of S has two main equipment streams by which capital funding is allocated to colleges and units from centrally-held resources:

- Institutional (General Capital Equipment): Capital funds are allocated from centrally-held resources to colleges for the purchase of equipment in support of academic and research programs and to the administrative units to purchase equipment that is used for academic support responsibilities.
- Start-Up (Capital Equipment Funds): The Capital Equipment Start-Up Fund was created in 1999 to assist colleges in the recruitment of new tenure-track faculty and to promote research by new faculty by providing the equipment necessary in respective fields. Depending upon the exact nature of the research activities, faculty members utilize these funds primarily to establish and expedite their research endeavours. The equipment often directly benefits graduate students and, in several situations, also assists undergraduate programs.

In addition to funding provided from central sources, the U of S is able to partner with external agencies such as the Canada Foundation for Innovation and the Natural Sciences and Engineering Research Council of Canada to secure equipment grants, primarily for research-based activities. University Advancement has also been successful in securing capital equipment funds for specific initiatives and projects.

Planned actions

- Assess the need to have a centralized structure to coordinate/prioritize equipment needs and determine funding strategies to maximize capital expenditures from both internally-allocated and external funding agencies
- Assess if the current central allocation process should be continued or determine how the process could be modified to better reflect institutional priorities
- Assess the need for a strategy to renew and replace capital equipment

B. Capital Priorities, Commitments and Initiatives for the Second Planning Cycle

Priorities

Based on the above overview, the university has identified broad-based, strategic priorities for the second planning cycle. For an overview, please see Appendix D: Priorities for the Second Planning Cycle.

Commitments and Initiatives

New capital projects will emerge out of the commitments in the *Second Integrated Plan*, alongside projects already underway prior to the approval of the *Second Integrated Plan*. This is because the timeline for capital planning is longer than a 4 year window; it takes several years from concept to design, to completion for a capital project. Fortunately, the transition from the first to second integrated plans has been dramatically eased given the similarity of priorities between these plans. The *Second Integrated Plan* commits the U of S to concentrate resources and energy on three areas of priority over the next four years:

- 1. **Improve the undergraduate and graduate student experience, both inside and outside the classroom.** Capital projects which have received Board of Governors approval since the implementation of the second planning cycle:
 - College Quarter: Graduate Student Housing
 - College Quarter: Undergraduate Student Housing
 - Edwards School of Business: Downtown Campus
 - GSA Commons
 - Marquis Hall Renewal and Arts Food Services Outlet Upgrade
 - Place Riel Student Centre Expansion/Renovation
 - Student Health and Counseling Centre
- 2. **Enhance the university's research, scholarly and artistic profile.** Capital projects having received Board of Governors approval since the implementation of the second planning cycle:
 - Academic Health Sciences Project: D Wing Construction
 - Academic Health Sciences Project: E Wing Construction
 - WestGrid High Performance Computing Storage Facility
- 3. **Work together more effectively across unit and institutional boundaries.** Capital projects having received Board of Governors approval since the implementation of the second planning cycle:
 - Telephone System Upgrade

Building on the accomplishments of the *First Integrated Plan* and on the goals articulated in the *Strategic Directions*, the *Second Integrated Plan* steers the university toward becoming a fully engaged university, one that distinguishes itself by the integration of teaching and research, university and community, students and faculty and staff, in focused and collaborative endeavours. Twenty commitments within the plan are intended to generate university-level initiatives to accomplish these aims. Cutting across the three priorities, are three institutional imperatives: to engage more fully with Aboriginal peoples; to internationalize the university and the student experience; and to foster innovation throughout the university's programs and services.

Over the second planning cycle, existing commitments, the changing capital landscape, and university priorities will all influence new and continuing capital projects. Not all will be completed within the timeframe of the plan (2008-2012), given, as indicated above, the extended nature of capital plans.

Appendix C: The Capital Portfolio for the Second Integrated Plan identifies major capital projects and needs within three levels of progression:

• Approved Projects

These projects are in the final stage of the Major Projects Planning Process (project governance) and include projects that have been received or formally approved by the Board of Governors. In the latter case, the U of S is committed to these projects including those in final design or under construction.

• Projects in Development

These are projects formally incorporated within the Major Projects Planning Process but not yet presented to the Board of Governors for approval because of pending development, institutional review, and/or the securing of capital and operating funds.

• Emerging Projects and Initiatives

These are projects that have emerged from initiatives identified in the *Second Integrated Plan* or referenced within the college and administrative unit strategic plans. Additional projects may emerge from the Provost's planning parameter meetings with colleges, the *Second Integrated Plan* commitment on Infrastructure and Capital Resources, and initiatives developing from Commitment Leaders.

For brief descriptions (e.g. status updates) on major capital projects listed in Appendix C: The Capital Portfolio for the Second Integrated Plan, see Appendix E: Major Capital Project Descriptions and for more detailed information, please visit www.usask.ca/ip.

CONCLUSION

The *Multi-Year Capital Plan* reflects an ambitious set of plans and capital priorities under five major components that will challenge the university's offices, structures and budgets to complete. The U of S is currently committed to approximately \$600 million worth of capital projects, which will serve as the institution's highest priority during the second planning cycle; however, there is also the recognition that numerous developing and emerging capital projects exist which will require further exploration, investigation and development. Each individual project and initiative will adhere to the progressive review and approval stages of the Major Projects Planning Process that will engage PCIP, the Planning and Priorities Committee and the Board of Governors.

Given that this is the first *Multi-Year Capital Plan*, it is anticipated that the plan will change as the second planning cycle unfolds. At this stage, we are aware that other Canadian universities do not present plans of this type; typically they are less comprehensive and do not identify the 5 capital components referenced in this plan.

Comments, questions and suggestions to improve this plan are welcome. Please send to Bryan Bilokreli, Director, Integrated Facilities Planning, Institutional Planning and Assessment – bryan.bilokreli@usask.ca.

, A	Appendix A: Key	Capital Plans and Reports at the University of Saskatche	wan			
Levels of Planning and Reporting	Plans/Reports	Description of Plans/Reports	Audience	Review	Status	
Strategic Plans entail the university's overall philosophy and approach on managing capital; highest level of planning wherein fundamental decisions and actions are directed to achieving institutional goals	Multi-Year Capital Plan	Overview of capital needs/issues/projects in various stages of development and current/planned capital activities directly related to the integrated planning process, including critical maintenance/renewal of capital assets	Public	Every planning cycle	Pending Approval - June 2009	
	Core Area Master Plan (CAMP) - Foundational Document (2003)	Physical planning framework to guide future priorities and growth of new areas and enhancement of existing areas on campus; determined spatial capacity of campus to accommodate growth	Public	Every 2nd planning cycle	Implemented	
	Vision 2057: University Land Use Plan (under development)	Land use decision-making framework to help assess/make recommendations for current/future land requirements, changes in land use and development opportunities; possibly blend with CAMP to form one Foundational Document	Public	Every 2nd planning cycle	Approval Fall 2009	
	ICT - Foundational Document (2003)	Addresses individual ICT needs in an integrated context focusing on four major areas including ICT for teaching, learning and research, business support systems, infrastructure enhancement and ICT governance	Public	Every 2nd planning cycle	Implemented	
Portfolio Governance Reports for the University Board of Governors providing project updates and funding status of capital projects; these reports delineate the university's management, oversight and monitoring of capital projects that have been approved and are under construction	Annual Capital Plan	Supplement to the Multi-Year Capital Plan that provides an annually refreshed synopsis of capital needs, capital funding, priorities and projects for the upcoming year	Public	Once/year	Pending Approval - June 2009	
	Major Capital Project Status Report	Summary report to highlight developments within critical elements of capital projects (scope, budget, funding and schedule); financial summary of costs and current status of projects	Board	Quarterly	Implemented	
	Major Capital Project Portfolio Funding Report	Report on funding of major capital projects intended to identify various funding sources, confirm the status of capital funding sources and highlight any funding concerns	Board	Twice/year	Implemented	
	Operating Costs of Major Capital Projects Report	Report on operating costs related to current portfolio of capital projects/status of funding for costs; to guide development of future operating budgets related to capital projects	Board	Twice/year	Implemented	
Project Management Technical reports and project management tools that identify both strategic and specific capital requirements along with plans and strategies intended to resolve the most urgent and highest priority needs	Key Technical/Management Documents (Asset Reports)					
	Strategic Campus Space Plan (under development)	Inventory of campus space deficiencies including a strategy (short, medium, and long-term) to reduce or eliminate space shortfalls	Public	As required	Spring 2010	
	Maintenance Master Plan	Inventory of campus maintenance requirements and a strategy to address building maintenance, deferred maintenance, capital renewal, asbestos abatement and grounds/municipal services	Public	As required	Winter 2010	
	Infrastructure Master Plan (under development)	Inventory/assessment of campus utilities/municipal infrastructure needs; overview of sustainable reinvestment in systems/components required for maintenance, renewal, adaptation and growth	Public	As required	Winter 2010	
	Major Project Progress Report	Report on the status of major capital projects currently in one of the four stages of the Major Projects Planning Process	Public	As required	Implemented	
	Major ICT Projects Inventory	Potential projects related to campus-wide ICT services; projects reflect the expressed needs of instructors, students, researchers, colleges and administrative units	Public	As required	Implemented	

Appendix B: Capital Planning at the University of Saskatchewan

Principles

Principle 1: Capital planning is aligned with the university's *Strategic Directions* (2002)

Principle 2: Capital planning is aligned with the university's current integrated plan

Principle 3: Capital planning will align with the Core Area Master Plan and the Vision 2057: University Land Use Plan

Principle 4: The U of S is committed to sustainability in all its capital activities

Principle 5: Capital planning will adhere to U of S Project Development Guidelines

Principle 6: Capital planning will take into account diverse funding sources

Principle 7: Operating budget implications and requirements will be identified as capital plans are developed

Drivers

1. Strategic (Planned)

- Academic/Research/Student Enhancements
- Infrastructure and Support (Planned Projects)

2. Operational (Renewal)

- Capital Renewal
- Deferred Maintenance
- Renewal and preservation of capital building systems and components
- Information and Communications Technology

3. Opportunistic

- Fundraising
- Programs/Partnerships
- Unplanned Opportunities

4. Existing Commitments

- Approximately 40 major capital projects within the Major Projects Planning Process
- Range of funding sources
- Funding for Board approved projects has been committed

Process

Major capital projects will be reviewed, approved and governed through the four stages of the Major Projects Planning Process:

- 1. Stage One (project request)
- 2. Stage Two (pre-planning)
- 3. Stage Three (planning approval)
- 4. Stage Four (project governance)

Multi-Year Capital Plan (2008-2012)

Capital Plan Definition:

- A planning document that supports the university's Strategic Directions (2002) and the integrated planning process
- A framework that encompasses the breadth of capital planning at the U of S, including physical assets (see five components)
- An overview of capital needs, issues, and projects in various stages of development, as well as current and planned capital activities directly related to the integrated planning process

Tie to Integrated Planning:

- Capital planning is part of the integrated planning process (the Multi-Year Capital Plan is a component of the Second Integrated Plan)
- Second Integrated Plan has commitments on Infrastructure and Capital Resources and Financial Resources for which this Multi-Year Capital Plan is a key document
- Capital planning must be responsive to institutional priorities but also sensitive and responsive to urgent needs and day-to-day operations
- Many capital projects have evolved from the First Integrated Plan

Five Components:

- Buildings/Space
- Land
- Infrastructure
- Information and Communications Technology
- o Information technology
- o Multimedia technology
- Equipment

Commitments and Initiatives for the Second Planning Cycle

- Capital projects will emerge from commitments in the Second Integrated Plan, committing the U of S to concentrate resources and energy on three areas of priority:
 - Improve the undergraduate and graduate student experience, both inside and outside the classroom
- 2. Enhance the university's research, scholarly and artistic profile
- Work together more effectively across unit and institutional boundaries
- New and continuing capital projects will be influenced by existing commitments, the changing landscape and university priorities

The Capital Portfolio for the Second Integrated Plan identifies capital projects/needs within 3 levels of progression

Approved Projects

Projects that have been received or formally approved by the Board of Governors. In the latter case, the U of S is committed to these projects including those in final design or under construction.

Projects in Development

Projects that have been formally incorporated within the Major Projects Planning Process but have not been presented to the Board of Governors for approval.

Emerging Projects and Initiatives

Projects emerging from initiatives identified within the Second Integrated Plan or referenced within college/ admin unit strategic plans. Additional projects may emerge from the Provost's planning parameter meetings with colleges, Second Integrated Plan commitment on Infrastructure and Capital Resources, and the Commitment Leaders.

Annual Capital Plan

- Supplement to the Multi-Year Capital Plan developed each year of the planning cycle
- Refreshed synopsis of capital needs, funding,
- priorities and projects for the upcoming year
 Reports on progress to meeting the planned activities within the Multi-Year Capital Plan

Key Capital Plans and Reports

- 3 levels of planning and reporting identified within U of S capital planning process
- Key capital plans and reports at the U of S fall into these 3 levels: Strategic, Portfolio Governance and Project Management

Appendix C: The Capital Portfolio for the Second Integrated Plan (2008/09 to 2011/12)

As of June 1, 2009

Approved Projects

(projects that have been received or formally approved by the Board of Governors) *Scheduled Completion Dates*

Projects in Development

(projects formally incorporated within the Major Projects Planning Process but not yet presented to the Board of Governors for approval)

Emerging Projects & Initiatives

(projects emerging from initiatives identified within the *Second Integrated Plan* or referenced within college/admin unit strategic plans)

In alphabetical order

Board FYI (for information only)

Board 1 Approval

(campus-wide) *TBD*

College Quarter: Graduate Student Housing (campus-wide)

College Quarter: Undergraduate Student Housing (campus-wide)

Dairy Research Facility
(Agriculture and Bioresources) *TBD*

Student Health & Counseling Centre

(campus-wide) *TBD* Board 2 Approval

Academic Health Sciences Project: D Wing Construction (campus-wide) *2012/2013*

Academic Health Sciences Project: E Wing Construction *2013*, A & B Renovation *2014 & 2016* (multi-college)

Academic Health Sciences Project: Interim CLRC, B403, B307, Utilities (campus-wide) *Substantial Completion 2008*

Campus-Wide Lighting Replacement and Retrofit (campus-wide) *2010*

Core Area Revitalization Space Relief Plan: Phase 1 and 2 (campus-wide) *2010*

Core Area Revitalization Space Relief Plan: Phase 3 (campus-wide) *TBD*

Dental Clinic Computer System (Dentistry) *2009*

Feed Technology Facility (Agriculture and Bioresources) *2010* Grains Innovation Lab

(Agriculture and Bioresources) *2009*

High Performance Computing Research Facility (campus-wide) *Substantial Completion 2008* International Vaccine Centre: InterVac (Vaccine &

Infectious Disease Organization/campus-wide) *2010*
Marquis Hall Renewal and Arts Food Services
Outlet Upgrade (campus-wide) *2009*

Place Riel Student Centre Expansion/Renovation (campus-wide) *2010*

Telephone System Upgrade (Information Technology Services/campus-wide)

University Learning Centre/Library
Transformation: Phases 1 & 2 (campus-wide) *2009*

University Learning Centre/Library
Transformation: Phase 3 (campus-wide) *TBD*

WCVM Expansion & Renovation

(Western College of Veterinary Medicine) *2009*

WestGrid High Performance Computing Storage
Facility (campus-wide) *2009*

Beef Cattle Research Centre (Agriculture and Bioresources)

Centennial Plaza

(University Advancement)

College of Agriculture and Bioresources Phytotron: Chiller and Controllers Replacement (Agriculture and Bioresources)

Edwards School of Business: Downtown Campus

(Edwards School of Business)

Engineering Building Expansion

(Engineering)

GSA Commons

(campus-wide)
Heating Plant Boiler Feed Water Treatment

Replacement and Expansion (campus-wide)

Humanities & Social Sciences

(Arts & Science)

Steam Distribution System Upgrade:

WCVM to VIDO (campus-wide)

The Clarion Project (Arts & Science)

Twin Pad Ice Arena (Kinesiology/campus-wide) Alumni Hall

(University Advancement)

Capital Equipment: Renewal and Start Up –

Enhancement (campus-wide)

Capital Renewal/Deferred Maintenance –

Enhancement (campus-wide)

Classroom Enhancement

(campus-wide)

Computer Technology: Systems/Renewal/

Infrastructure/Hardware (campus-wide)

Core Area Revitalization Space Relief Plan:

Phase 4 (campus-wide)

Graduate Student Office Enhancement (campus-wide)

Infrastructure Master Plan

(campus-wide)

Mineral Technology Research Centre (Engineering)

Multimedia Technology - Enhancement

(campus-wide)
Research Transition Facility (Office of the Vice-

President Research/campus-wide)

School of Rehabilitation Sciences

(Medicine)

Social Sciences Research Lab & Knowledge

Translation Office (Arts & Science)

Students Services e.g. Day Care, Disability Services (Student & Enrolment Services Division/campus-wide)

For brief project descriptions on the major capital projects listed in this Appendix, see Appendix E: Major Capital Project Descriptions and for more detailed information, please visit www.usask.ca/ip.

Appendix D: Priorities for the Second Planning Cycle

Buildings/Space

- Complete a *Comprehensive Space Review* and develop a *Strategic Campus Space Plan* that will serve as a strategy to address space needs of all Planning Entities
- Complete a Comprehensive Capital Needs Audit and Assessment for each college and unit
- Align capital fundraising efforts with institutional priorities and needs
- Complete and/or make significant progress towards completion of the Board-approved capital projects for which we have full funding commitments
- Secure funding for Board-approved projects
- Secure additional funding sources and direct current available funding to address the most critical deferred maintenance projects
- Continue to assess and develop emerging projects through the Major Project Planning Process
- Continue to develop scenarios/options and secure funding for the Core Area Revitalization Plan (Phase 3) in order to provide critical academic space relief within the core area of the university

Land

- Completion of the *Vision 2057: University Land Use Plan* that will result in a 50-year master land use plan and a refinement of the governance process for land use decisions
- Complete current projects and develop additional capital projects within College Quarter

Infrastructure

- Completion of the Infrastructure Master Plan that will identity the capital projects required to support the academic and research functions of the University
- Develop a funding strategy to address all capital infrastructure projects
- Implementation of the Infrastructure Development Fund (approved by Board of Governors on Dec. 12, 2008) to serve as a contribution toward expansion of utility infrastructure on campus
- Complete projects required to support both existing activities and institutional growth

Information and Communications Technology

• Renew the university's ICT assets on a cyclical basis

Information Technology: Functional enhancements to the student information system (SiRIUS); development of an institutional data warehouse; enhancements to the central access management system; improved course tools in PAWS; implementation of a high performance computing cluster for teaching and research; expansion of campus wireless network; telephone system upgrade

Multimedia Technology: Develop a multi-year classroom renewal and enhancement program

Equipment

- Develop a strategy to renew and replace equipment required for teaching, research and administrative support
- PCIP to undertake an assessment of the current General Capital Equipment program (to assist college and units in purchasing equipment required for academic, research, and administration) for fundamental changes
- Continue the Faculty Capital Equipment Start-Up Fund (initially started in 1999) to assist in the recruitment of new tenure-track faculty
- Continue the Faculty Computer Replacement Program as a component of faculty retention

Appendix E: Major Capital Project Descriptions

Approved Projects (in alphabetical order)

Projects that have been received or formally approved by the Board of Governors as of June 1, 2009

Board FYI (for information only)

Board 1 Approval

Aboriginal Student Space

Planning continues for the development of an Aboriginal Student Space. The vision for this project is to provide resources and amenities for Aboriginal students while engendering knowledge and understanding of Aboriginal history and culture among non-Aboriginal students and the campus community. The location of this project, Wiggins Court, will allow the facility to be linked to the Lower Arts/Place Riel Tunnel and the new Academic Health Sciences D Wing. Fundraising efforts are currently underway.

College Quarter: Graduate Student Housing

The land parcel includes approximately 140 acres (57 hectares) located south of College Drive, north of 14th Street between Cumberland and Preston Avenues. The university has two main objectives in undertaking this mixed-use development plan:

- 1. To establish an attractive vibrant community complementary to existing and future university development and the surrounding community providing opportunities for student housing that will assist the university in meeting its enrolment goals.
- 2. To establish an ongoing endowed source of revenue to support future university needs. The completion of Vision 2057: University Land Use Plan, scheduled for summer 2009, will provide direction for College Quarter development. The University is currently developing a project to construct housing dedicated to graduate students.

College Quarter: Undergraduate Student Housing

The land parcel includes approximately 140 acres (57 hectares) located south of College Drive, north of 14th Street and between Cumberland and Preston Avenues. The university has two main objectives in undertaking this mixed-use development plan:

- 1. To establish an attractive vibrant community complementary to existing and future university development and the surrounding community providing opportunities for student housing that will assist the university in meeting its enrolment goals.
- 2. To establish an ongoing endowed source of revenue to support future university needs. The completion of Vision 2057: University Land Use Plan, scheduled for summer 2009, will provide direction for College Quarter development. The University is currently developing a project to provide 800 new undergraduate beds with Phase 1 to accommodate 400 beds.

Dairy Research Facility

The College of Agriculture and Bioresources, with support from the Dairy Farmers of Saskatchewan and the Saskatchewan Milk Control Board, are proposing the redevelopment and expansion of the existing Dairy Unit to bring the dairy teaching and research facility up to modern standards (e.g. need to meet Canadian Council on Animal Care standards). The renewed facility will emphasize teaching, applied research, extension, and technology transfer activities.

Student Health and Counseling Centre

The university has recommended that the two additional floors to be constructed as part of the Place Riel Student Centre Expansion/Renovation project be developed for Student Health and Counseling. The development of space for this unit will address space deficiencies, consolidate operations, eliminate Health, Safety, and Environment issues, enhance student recruitment and retention and allow for 46 residence beds to be returned to the university's residence inventory. The developed space will be operated, administered, managed and under the control of the university.

Board 2 Approval

Academic Health Sciences Projects: D Wing Construction

The D Wing addition to the B Wing of the existing Health Sciences Building will be a large four story addition on the East side and six story addition on the North side of B Wing. The majority of the new space will accommodate laboratory and vivarium space for research. Construction started in summer 2008 and will be completed in late 2012/early 2013.

Academic Health Sciences Projects: E Wing Construction; A and B Wing Renovation

E Wing Construction: The E Wing component of this project will be located on College Drive and Wiggins Road with connections to the Dental Clinic Building and Royal University Hospital. The E Wing will house the Health Sciences Library, lecture theatres, four floors of offices, graduate student spaces, labs, clinical teaching spaces as well as a parkade. The project is scheduled to be completed in fall of 2013.

A and B Wing Renovation: Once D and E Wings are functional, renovations will begin in the existing A and B Wings of the Health Sciences Building. This portion of the project is still in the preliminary planning stages. A Wing is scheduled for completion in 2014 and B Wing in 2016.

Academic Health Sciences Projects: Interim Clinical Learning Resources Centre; GEMS Laboratory Renovation; Site Utilities Project

Interim Clinical Learning Resources Centre: The new lecture theatre space and breakout rooms on the 4th floor (B Wing) have been in use for both curriculum and non-curriculum bookings since January 2006. The Interim Clinical Learning Resources Centre is also complete and has been in use since September 2006.

GEMS Laboratory Renovation (307): The B307 GEMS (Gene Expression Mapping Using Synchrotron Light) renovation is complete and involved the conversion of an under-utilized anatomy teaching lab into biomedical research space for the GEMS research group. The project also serves as a demonstration lab for the open design concept being used for D Wing. Researchers and scientists who will be working in the new space will be able to witness first hand the development of the collaborative lab space.

Site Utilities Project: Utility relocations and upgrades were required and have been completed to accommodate the large additions to the Health Sciences Building (D Wing and E Wing). Utilities affected include steam, chilled water, electrical infrastructure, gas lines, and fire lines and also necessitated the relocation of Campus Drive to make room for D Wing.

Campus-Wide Lighting Replacement and Retrofit

Existing fluorescent lamps on campus will be phased out by 2010. The campus lighting retrofit program will systematically replace fluorescent lamps and exit lights in areas that have not yet been retrofitted through capital renewal projects. The lighting retrofits are critical to a wide range of energy conservation measures that support the university's commitment to sustainability. They will reduce energy consumption (thereby energy costs) and greenhouse gases, and they will improve the indoor light quality throughout campus.

Core Area Revitalization Space Relief Plan: Phase 1 and 2

This project received Board approval in June 2007 and was developed to provide critical space relief to campus core activities. To date, the University Advancement Office and Industry Liaison Office have been relocated to leased space at Innovation Place thereby allowing for vacated space to be re-allocated internally to the College of Arts and Science, College of Engineering, and the School of Environment and Sustainability. Upgrades to Kirk Hall will be completed during 2009. Planning for Phase 3 is in progress.

Core Area Revitalization Space Relief Plan: Phase 3

The final selection of the strategies, options and components related to Phase 3 of the plan are currently being evaluated based upon the findings within the Feasibility Study of the location sites for University Advancement, Information Technology Services and potentially other units.

Dental Clinic Computer System

This project involves the investigation, selection, purchase, and implementation of a commercial computer package specifically designed for dental schools. The computer software will enable the efficient operation of the Dental Clinic portion of the College of Dentistry by providing software to 1) track patient billings and payments (financial information), 2) maintain a database of patient demographic information, oral health records and treatment information, and 3) maintain student academic records and evaluation information. The system will be implemented and operational during the summer of 2009.

Feed Technology Facility

The Feed Technology Facility, a Canadian Foundation for Innovation (CFI) project, upon completion will fill a critical infrastructure gap in feed processing research and development that will benefit the Canadian feed industry and promote rural economic development. The facility will enable applied scientific research in feed processing technology and animal nutrition. As part of an international network of advanced feed research facilities, it will provide national leadership in feed processing research. The university is currently developing a modified approach from the original project proposal. The project is to be competed by 2010.

Grains Innovation Lab

The Crop Development Centre in the Department of Plant Sciences, College of Agriculture and Bioresources, currently operates a grains quality screening laboratories program that has outgrown the physical space in which it operates. A new and expanded Grains Innovation Laboratory is scheduled to be completed in the summer of 2009, at the Crop Science Field Laboratory (CSFL). This project will not only provide the College of Agriculture and Bioresources with improved and increased research space, but will allow for the provision of service-related activities such as screening, grinding and milling in conjunction with the CSFL.

High Performance Computing Research Facility

Space on the fourth floor of the Spinks Addition has been developed to house research computing clusters – racks of computers that can draw large amounts of power (10 or more kW per rack). Therefore, they require a new transformer and high voltage distribution system to supply power to the racks of computer equipment and all the air conditioning, air conditioning in the room and on the roof, ventilation, fire suppression, and monitoring systems, and concrete and vibration dampening pads required for much of the large equipment both within the space and on the roof. The project is substantially completed.

International Vaccine Centre: InterVac

The new International Vaccine Centre (InterVac) will be the first laboratory in Western Canada to allow research on both animal and human health for current and emerging infectious diseases. The Centre is being developed collaboratively by the Vaccine and Infectious Disease Organization (VIDO), the College of Medicine, and the Western College of Veterinary Medicine. When completed, the bio-containment facility will be one of the largest vaccine research laboratories in North America and will lead Canada into world leadership in vaccine research and development for diseases as diverse as hepatitis C, SARS, HIV, tuberculosis, and avian influenza. The project is scheduled for completion in 2010.

Marquis Hall Renewal and Arts Food Services Outlet Upgrade

In order to improve University Food Services and Retail Services, renovations and upgrades will occur within Marquis Hall and the Arts Building Food Services Outlet to consolidate, modernize, and upgrade operations and services to meet the requirements and demands of the student and university community. The project is slated for completion in fall 2009.

Place Riel Student Centre Expansion/Renovation

University Portion: The university component of this project consists of a capital investment to structurally enhance the foundation of the proposed two-storey tower addition, invest in potential elevator connections to adjacent buildings and to construct the "shell" for two additional floors for future university occupancy. Student Health and Counseling has been identified as the U of S unit to occupy these two additional floors.

USSU Portion: The Place Riel Expansion will incorporate the renovation of the lower level of Place Riel, the renovation/expansion of the main floor, and the addition of three floors above the expanded main floor. The project is to be completed by fall 2010.

Telephone System Upgrade

This project calls for the upgrade of the university analog telephone system to one that uses Voice Over Internet Protocol Technology. The project will result in the university's telephone system consisting of the newest technology (the current analog phone systems are no longer being developed) and will result in less staff effort to maintain one system rather than two. The project is expected to occur over a seven-year period and will be totally funded by existing telephone system renewal funds and maintenance savings.

University Learning Centre/Library Transformation: Phases 1 and 2

The University Learning Centre and Library Transformation project involves major renovation of the ground and first floors of the Murray Library (South Wing), which will nearly double the space devoted to student programs and services within the library. The project includes a University Learning Centre dedicated to the development of learning skills for students and teaching skills for faculty. It will be a casual and flexible space, connected to new media resources, and designed to accommodate the new ways in which students are learning.

Phase 1: Phase 1, which is now complete, provided more space for the Gwenna Moss Centre for Teaching Effectiveness on the ground floor, Murray Building North. The Writing Help and Math Help services of the University Learning Centre were established on the first floor, Murray Building South. These changes accommodated the most critical components of the University Learning Centre.

Phase 2: Phase 2 construction is substantially completed and the new student facilities opened in March of 2009. The ground floor of the Murray Building South has been transformed into an exciting new space to include a café, group study and meeting rooms, and a large new study lounge with wireless internet access and comfortable seating. The circulation desk and reserve collection has been moved to the ground floor with library staff relocating to a renovated space on the sixth floor.

University Learning Centre/Library Transformation: Phase 3

Preliminary planning and consideration of Phase 3 will be initiated during the second planning cycle and will include: the internal shifting of library operations and material holdings within current library facilities; planning around the future use of information and communication

technologies to support service delivery and increase access to scholarly information resources and services; a review into the use of alternative library material storage methods such as compact storage.

Western College of Veterinary Medicine (WCVM) Expansion and Renovation

Work continues on the expansion and renovation of the Western College of Veterinary Medicine (WCVM). The improvements, including upgrades to facilities for teaching, research, diagnostic, and clinical purposes, were necessary to assure the college continued to meet national and international accreditation standards. The majority of the project should be complete by summer 2009, however, some smaller elements will continue into 2009.

WestGrid High Performance Computing Storage Facility

This CFI project is scheduled to be competed in 2009 and consists of a large-scale data storages service located in the University Services Building, a data tape backup facility in the Education Building and an Access Grid facility in the Agriculture Building equipped with stereo visualization equipment. The WestGrid facility is being developed through the CFI National Platforms Fund with an objective to build a shared distributed high performance computing infrastructure across Canada to best meet the need of the research community and to enable leading-edge world-competitive research.

Projects in Development (in alphabetical order)

Projects formally incorporated within the Major Projects Planning Process but not yet presented to the Board of Governors for approval

Beef Cattle Research Centre

The College of Agriculture and Bioresources has proposed that the Beef Cattle Research Centre be relocated from its current location immediately north of Circle Drive North and Preston Avenue North to an off-campus site. A critical component of this proposal is the acquisition of a suitable land base to operate the Centre and associated Feedlot.

Centennial Plaza

Centennial Plaza is proposed as a new urban square for the U of S. Its design has been developed to satisfy a number of complementary aims, which include: the celebration of the university's centennial and to recognize and honour the generosity of donors who have contributed financially to the university, including as part of the "Thinking the World of our Future" campaign. Various sites are currently being evaluated.

College of Agriculture and Bioresources Phytotron: Chiller and Controllers Replacement

As part of the Agriculture Building project, completed in 1991/92, a Phytotron/plant growth facility was developed. The purpose of the Phytotron is to provide space for growing plants under controlled conditions for both teaching and research purposes. There is a need to replace the original Chillers with a new system that is more functional and dependable. There is also a need to

replace the microprocessors that control the operating systems. Project alternatives and solutions are currently being developed.

Edwards School of Business: Downtown Campus

The Edwards School of Business has identified the potential to relocate selected programs to an offcampus site, likely in the downtown core of the city. The School anticipates being able to offer programmes at the Downtown Campus in the fall of 2009.

Engineering Building Expansion

The College of Engineering has proposed the construction of an expansion to the Engineering Building in the amount of \$50 million. The project would be composed of two phases: 1) Undergraduate Complex (500 seat lecture theatre; classrooms (120-150), Student Services Centre; case rooms, student space and 2) Interdisciplinary Research Facility (School of Biomedical Engineering, Mineral Research Centre, Centre for Energy Studies, rock mechanics lab, office and research lab space). The College is actively exploring the potential for external funding through a capital campaign.

GSA Commons

This proposed project calls for the development of new space, centrally located for the graduate student community with preliminary consideration being given to student office support space, a lounge, and a meeting room in addition to a computer/resource room. The space will be used for meetings, social engagements, and personal and scholarly reflection. The main floor of the recently-acquired Emmanuel and St. Chad's Chapel is being renovated as a GSA Commons. It is expected that this project will be completed in the fall of 2009.

Heating Plant Boiler Feed Water Treatment Replacement and Expansion

The Central Heating Plant at the university has reached capacity and Facilities Management has identified a need to expand the current Heating Plant in response to the recent and developing campus growth. The Central Heating Plant is undersized and a capital project is required to ensure safety, capacity, reliability and efficiency. Pre-planning activities have been initiated.

Humanities and Social Sciences

Departments within the Humanities and Social Sciences of the College of Arts and Science suffer from a critical shortage of teaching, research, and office space. The problem is further compounded as much of the existing space is of low quality and dispersed amongst several buildings across campus. As a component of the Strategic Campus Space Plan and Campus Core Revitalization, a strategy will be developed as to how to best address the needs of these units. Alternatives will likely include a combination of measures with construction of new space seen as the key component, supplemented by the relocation of departments through space "backfill opportunities" and upgrades/renovations to existing space.

Steam Distribution System Upgrade: Western College of Veterinary Medicine (WCVM) to Vaccine and Infectious Disease Organization (VIDO)

The existing direct buried steam line located in the northeast sector of campus (in the WCVM/VIDO area) is continuously failing and is in need of replacement. Pre-planning activities have recently been initiated.

The Clarion Project (Arts & Science)

The Fine Arts programs at the U of S severely lack performance facilities that are essential for enriching undergraduate teaching and also for extending the University's programs to the surrounding community. The Centre is envisioned to be a primary site for artistic performances and exhibitions for the U of S and the City of Saskatoon and would play a role in integrating the university with the city, the province and the country in keeping with the principles of the university's Outreach and Engagement mission. The College of Arts and Science is actively revisioning this project including the development of an architectural representation and a review of project scope and costs. A preliminary submission to the Board of Governors is anticipated for the summer of 2009.

Twin Pad Ice Arena

Rutherford Rink, constructed in 1929 with major renovations completed in 1982, houses the U of S men's and women's intercollegiate, student intramural, and recreational hockey programs. In 1998, upon recognition that Rutherford Rink would not be able to functionally serve long term university needs, a Board of Governor's chaired Task Force was charged with identifying options to replace Rutherford Rink. The Ice Arena Project Feasibility Study was submitted to the Board of Governors in 2001. A Predevelopment Study was commissioned by the university in 2002 to determine costs and funding strategies for the development of a multi-pad arena. The Huskie Athletics External Review completed in April 2006 recommended the replacement of Rutherford Arena with a new twin pad ice arena. Funding alternatives for this project are being explored.

Emerging Projects and Initiatives (examples only; not exclusive; in alphabetical order)
Projects emerging from initiatives identified within the Second Integrated Plan or referenced within the college and administrative unit strategic plans

Alumni Hall

University Advancement was re-located from Kirk Hall to Innovation Place in fall 2008 to allow for the vacated space in Kirk Hall to be re-allocated to address critical academic needs and functions that necessitate being located in the core of campus. The development of Alumni Hall would permit University Advancement to physically return to the main campus.

Capital Equipment: Renewal and Start Up - Enhancement

Several college strategic plans outlined the need for capital funds to renew and "evergreen" their existing teaching, research and administrative support equipment. An assessment of college needs will assist the university in developing a strategy to secure additional funding and to prioritize current available funding.

Capital Renewal/Deferred Maintenance - Enhancement

Capital funding strategies and funding sources need to be developed to determine how the university can address the deferred maintenance liability of \$620 million of which \$250 million has been determined to be critical.

Classroom Enhancement

The university currently has a modest annual program to upgrade classrooms across campus. Additional capital funds are required to enhance this program in order to allow institutional classrooms to accommodate current pedagogical needs and technologies. Institutional partnerships include Facilities Management Division, Information Technology Services, Educational Media Access and Production, and Student and Enrolment Services Division.

Computer Technology: Systems/Renewal/Infrastructure/Hardware

The completion of a Computer Technology audit and assessment will provide the university with a base of college and central computer technology needs from which funding strategies, sources and decisions can be further assessed.

Core Area Revitalization Space Relief Plan: Phase 4

As part of an ongoing attempt to address campus space deficiencies along with space quality and functionality, the university will continue to develop strategies and projects to resolve high priority and critical space demands.

Graduate Student Office Enhancement

Increases in graduate student enrolment have resulted in an increased need for space and, in particular, graduate student office space. Further examination is required to assess how the university can provide additional graduate student office space and also to upgrade existing spaces. The notion of "hotelling" graduate student offices requires investigation.

Infrastructure Master Plan

Facilities Management is finalizing an Infrastructure Master Plan that "will lead to strategic and sustainable reinvestment in the utility infrastructure component". The Plan will identify numerous capital projects required to maintain and enhance the university's infrastructure requirements.

Mineral Technology Research Centre

The College of Engineering has identified a Mineral Research Centre as "a hub for research, development, demonstration and deployment, in mining and minerals in the Province, providing 'one window' service". The Centre may be developed as a component within the Engineering Building Expansion project.

Multimedia Technology - Enhancement

To ensure the university remains competitive with others in terms of teaching technologies, media use in the classroom, or for communications and business strategies resources, a renewed and enhanced Multimedia Technology Enhancement program (likely in conjunction with a Classroom

Enhancement program) is required. Instructors are increasingly requesting new technologies such as audience response systems therefore teaching and learning spaces must be equipped to include changing technologies.

Research Transition Facility

Preliminary discussions have been undertaken to determine a model and strategy to develop a Research Transition Facility that would be created to allow faculty and researchers to transition laboratory-based activities and research to commercially viable operations.

School of Rehabilitation Sciences

The College of Medicine has proposed the establishment of a School of Rehabilitation Sciences which in addition to the existing School of Physical Therapy would also include programs in Occupational Therapy and Speech Language Pathology. The creation of these new programs will require physical facilities to accommodate teaching, research and office needs.

Social Sciences Research Lab & Knowledge Translation Office

The College of Arts and Science has identified the Social Science Research Lab and Knowledge Translation Office as a priority investment within the college's *Integrated Plan 2008-2012*. A determination will need to be made whether capital funding will be required to physically accommodate this initiative.

Student Services e.g. Campus Day Care, Student Employment & Career Centre, Disability Services for Students

The Student and Enrolment Services Strategic Plan notes the need to expand and develop student services on campus including additional day care space, Student and Employment Career Centre services and facilities for Disability Services for Students. Options will be investigated as independent projects or in conjunction with other developing projects where synergies and physical opportunities are present.