<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4-6</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>7-23</td>
</tr>
<tr>
<td>Discoveries</td>
<td>23-36</td>
</tr>
<tr>
<td>Principles</td>
<td>37-60</td>
</tr>
<tr>
<td>Observations &amp; Recommendations</td>
<td>61-84</td>
</tr>
<tr>
<td>Next Steps</td>
<td>85</td>
</tr>
</tbody>
</table>
Carleton College is a highly selective liberal arts college located in Northfield, Minnesota striving to provide a progressive education of the highest quality. Founded in 1866 on a bluff overlooking the Cannon River, Carleton was part of a movement during the mid-nineteenth century during which new world Congregationalists founded dozens of colleges across the country, promoting the advancement of literature, arts, and sciences. Charles M. Goodsell led the founding of several of these institutions and was selected to lead the establishment of Northfield College, rechristened Carleton College in 1871.

Carleton College is a complex and unique place. The campus today encompasses nearly 1000 acres of floodplain and upland forest, oak savanna, agricultural land and restored prairie. The campus is embedded in quiet small city set within the greater regional agrarian landscape. The core of the campus borders a flourishing historic residential neighborhood and the vibrant Northfield downtown. This distinct character and deep traditions of Carleton are rooted in the people and the place. The Carleton community of students, faculty, staff and alumni is diverse, eclectic and independent, and function as a remarkably engaged and collegial group. The College is committed to a highly engaged learning and teaching experience with a concentrated focus on its students. It is an experience that is academically challenging and free thinking, but with humor, care and personality. The intellectual challenge is balanced with a Midwestern character that reflects the regional values of friendliness, fairness, hard work and

“From this day forward, you are a part of Carleton and Carleton is part of you.”

-Laurence M. Gould
Carleton President
1945-1962
“The goal of such an education is to liberate individuals from the constraints imposed by ignorance or complacency and prepare them broadly to lead rewarding, creative, and useful lives.”

Scott Bierman & Steve Kelly
Carleton College, 2004

respect for others. At the core of the College mission is the collaboration of faculty, students and staff seeking knowledge together. The number of alumni who have returned to Northfield to live near College is a testament to the special and intangible qualities of the Carleton experience.

The complexity of the Carleton culture is reflected in the complexity of the physical order of the campus. The physical character of the campus has evolved as the college has grown. Begun as a small college set in the prairie, the campus landscape, jointly with the emergence of the Carleton culture, has become entwined with the Midwestern culture and place. There is an order to the regional landscape that originates with the pragmatic organization of the Jeffersonian grid that is consistent with the democratic and egalitarian principles that the people share. The campus integrates spatial experiences both intimate and expansive, garden and lawn, prairie and forest, lowland and upland, but it is the trees on the campus that give structure to the sense of Carleton as a place.

The concepts of community, sustainability and stewardship are integral to the culture of Carleton. This requires a commitment to participation by the people of the College and of Northfield; a respect for the inherent value of the regional landscape both native and agrarian; and in acknowledgment of a global view; and a consciousness of the limitations of nonrenewable resources.
This Campus Plan is a framework for the future development of the campus that will guide planning, architecture and landscape design and construction decisions. It is intended to be a catalyst for thought; to inspire decisions that are rooted in understanding Carleton as a unique and special place, and recognizing that the regional landscape and the rich history of the place contribute to a powerful vision for the future of the College.

The Plan is the result of a close collaboration of Carleton leadership and campus planning advisors led by Civitas with periodic interaction with the Carleton community at large. The planning process began by building a deep understanding of Carleton by learning its history, evolution, envoirns and coming to know the people that make it so special. In January of 2003, Civitas led a series of meetings at the college, engaging students, faculty, staff, administration, alumni, and neighbors into a dialogue about the place, its history, its values and its future. The timeline on this page outlines the process leading to the Campus Plan.

Our research was initially organized in four conceptual categories, to explore Carleton as a campus, its role in the city, its place in the larger landscape, and its culture. Understanding to the role of these four parallel stories led to an understanding of how the culture of Carleton emerged from the relationship of the College to the land and how this relationship is at the core of Carleton today. This discovery proved central to the Campus Plan.
Executive Summary
“Cautiously I slipped from under the buffalo hide, got up on my knees and peered over the side of the wagon. There seemed to be nothing to see; no fences, no creeks or trees, no hills or fields. If there was a road, I could not make it out in the faint starlight.

There was nothing but land: not a country at all, but the material out of which countries are made.”

-Willa Cather, *My Ántonia*

So began the settlement of the great prairie. Individuals of strong back and stronger will, settlers laid down the seeds of a great enterprise, building a community from the prairie. Carleton .. the people, the place and the legacy .. is woven from this cloth. Founded by people of vision and enterprise, Carleton today rests squarely on these shoulders. Begun on a bluff above the Cannon River, overlooking the prairie mosaic and the emerging town of Northfield, the founders set out to build a community of learning and knowledge.

After 130 years their vision continues, embodied in the spirit of Northfield, in the minds of the campus community, in the hearts of alumnae, and significantly, in the physical legacy .. the buildings, walkways, trees, signs, symbols and spaces that we know as Carleton.

There is magic here, known to everyone who has invested enough of themselves in the institution to become part of it. Carleton’s magic is not the kind that is elusive or mysterious, and it does not require special powers to call it forth. It requires nothing more than submitting one’s self to the joy of belonging to a community committed to knowledge and the power of individuals to find, add to, shape and grow from it. These special powers saturate everything that is Carleton, to varied degrees, but more than any other college in America, Carleton’s spirit is embodied in a unique culture of people, deeply rooted in a special place. They are one, inseparable, ever-growing and changing but always remaining the same, faithful to the dream that propels them:
Each person who joins the Carleton community becomes part of this legacy. Each person who leaves expresses the culture in his thoughts and deeds. Each person that participates adds richness and color. Each person who contributes to the knowledge or quality of the place becomes part of it, taking some and leaving some behind. Anyone that contributes, in any way large, small, temporary or lasting, must embrace the ideals and leave themselves and the place richer.

What We Found

Civitas was invited to come to Carleton in late 2002 to begin the development of a new “Master Plan” for the physical parts of the campus—buildings, landscape, walks, roads, parking and other miscellaneous features. We came, eyes and ears open, observing the place, listening to faculty, students, administrators, staff, and the Northfield community. We reviewed all prior plans for the campus, scoured the archives and spent time getting to know the place. We found several Master Plans for the campus, but little evidence that they had much impact. Instead, we found that building has taken place from time to time, in eclectic fashion, sometimes for better and sometimes for worse.

It was clear from the first day on campus that there is an identity and self-concept that contributes to the success of the institution. Carleton is more than a collection of collegiate buildings where a teaching curriculum is delivered

“...to liberate individuals from the constraints imposed by ignorance or complacency, and to prepare them broadly to lead rewarding, creative and useful lives.”

-Scott Bierman & Steve Kelly,
Carleton Faculty

The Arboretum
to attentive students. It is not that. What we found instead is one of the most vibrant, inquisitive, and collegial colleges that we have ever encountered. Clearly, the successes of Carleton come from the people, academic philosophy, and knowledge base combined with a clear purpose and a spirit of excellence.

Our investigations into the physical campus found something unexpected as well. Carleton is unusually eclectic in the physical patterns and architecture of the place, yet a strong sense of place is inescapable. Virtually every person that we interviewed, from community neighbors to alumni, focused much of their reflection onto the campus itself. the landscape, special places, occasionally a building, but above all, the sense of Carleton as a place was preeminent. Through these discussions two things kept recurring. First, that there are very special landscape places and spaces on campus that should never be harmed. the Arb, the Lyman Lakes, Mai Fete Island, among others. and second, that each of these places has suffered from harm within the reach of current memory.

We reviewed a handsome series of photographs that chronicle the patterns of change on campus over the past 80 years. We further mapped the time and location of every building added and removed from campus since the inception of the College. What we found was remarkable: If the people of Carleton are right, Carleton has reached a tipping point, a moment in time when decisions must be made to redirect the growth of the campus or valued elements of the campus may be lost.

"Excellence without pretense."
-Robert Oden, President
It is not uncommon to find such a clear and radical shift in the physical vision of a campus, but here it has not gone so far that it cannot be retrieved. In the past forty years Carleton has set a new direction that will destroy the original vision and its legacy unless things change. The spatial qualities and the tie to the regional landscape that once defined the Carleton campus has been diminished. This plan proposes to make changes that make the legacy visible, by creating a Campus Plan that supports the academic mission and by aligning the Plan with the campus culture. With this approach the community will tend to make choices that contribute to and expand the best of Carleton rather than diminish it.

Why is the physical campus so compelling to the community in our interviews, and why do people feel that it has been diminished? The physical environment of Carleton, especially this unique, open prairie landscape has special meaning to the culture. The landscape, sky and sense of space of the prairie remain a powerful influence on people, just as they were on the founders. This place is home. To individuals, departments, families, campus organizations, alumni and others, the Northfield prairie is a home to personal learning, growth, friendships, hopes and memories. Carleton is indeed special because of this place.

Carleton College was built as a college on a hill overlooking the prairie. Virtually every building built on campus until the late fifties was respectful of this vision. Since roughly 1960, every new building except Language and Dining has defied and diminished this vision.
With roughly 130 years of history, Carleton has grown in cycles, from inception, to development into a complete liberal arts college, to the rapid growth and optimism of the postwar years, to the struggles of the years involving Vietnam, environmentalism, globalization and student empowerment. Carleton the institution has reached a level of maturity. This maturity, and the self-confidence that comes with it, are a backdrop to the academic excellence, inquisitive nature, and competitive collegiality that is ever present in and out of the classroom. By “Living and learning together” this community excels.

**Awakening**

Reading the stories of Carleton tells us of the richness of the culture and reminds us that this has been a culture of involvement in decision making, a culture of discovery and discourse, and a culture of committed intellectuals seeking excellence together. We observed in our discussions and in the records of the past that decisions, at least those that affect the physical campus, are not made by an ordered hierarchy of people or processes. Carleton has become a fluid culture that makes decisions by the active and intense involvement of many strong individuals. A kind of “situational logic” is applied to each major change on campus, with voices from all sides heard in the discourse. Final decisions that lead to real change are routed through an intellectual gauntlet that deepens the debate around any idea. But in observing what has been built on campus, we find that this process has not always respected the legacy of the campus, and at times, some of the best has been lost.
When we compare this process to the prior Master Plans we find an answer as well. Each of the prior plans proposed to impose organization onto the campus. Some plans called for enclosed quadrangles, an ordered arrangement of uses or spaces and hierarchy in building placement and function. These attributes are contrary to the organization of the College itself. This new Campus Plan must resonate with how and why decisions are made at Carleton by aligning a vision of the future of the college with the future of the campus. The Carleton campus is an eclectic mix of buildings and uses because the Carleton culture values an eclectic mix of disciplines engaged in learning and growing together.

It is time to awaken the college community to the richness and importance of the campus as a home to learning. In our interviews, we found a reverence for many campus landscapes, but we also found that these add up more to a lore of the campus than to a clear understanding of the meaning and values that the campus itself embody. The college culture moves continually forward while depending on lore to protect its home. This is a formula for failure!

An awakening is occurring as a result of this plan. Carleton is finding that the roots of its future are deeply set in the past. Now is the time for a vision of the campus that aligns and resonates with the direction of the learning community.
Carleton = People + Place

This realization, that the time is right for serious reflection and new direction, caused us to look further into the relationship of the institution of Carleton with the place called Carleton. We made a finding that we believe is central to the future of the school.

The people and the place of Carleton are one. Bringing the culture and the place into alignment with a vision of the long term could produce a Carleton campus of even greater value, deeper purpose, and more authenticity than any other campus in America.

With this discovery we knew that the future of the Carleton campus must combine the best of the past with a vision that would engage and inspire the community to expand and deepen the connection of the cultural and learning environments together.
Carleton Mission & Values

The overarching mission of the College is to preserve Carleton as a liberal arts educational institution of the highest quality. Carleton has a mature, diverse, ever changing, and resilient culture that continues this commitment to the liberal arts. This culture has determined and continues to define the physical patterns of the campus. A set of common values have become apparent to us that reaffirm this culture and are filtered through a commitment to excellence and generations of the people of Carleton – students, faculty, administration and staff:

Engagement: Passionate commitment and energy
Responsibility: To oneself, to the college, to community to the world
Openness: To each other, to learning, to the place
Respect: For each other, for the culture, for the place
Curiosity: Commitment to exploration, discovery and understanding
Humor: A visible joy in participating and in each other

These values have emerged over time and will continue to grow and be refined as perceptions, people, and knowledge continue to change.
Carleton in the next 100 Years

Carleton has an opportunity that is unique in America. Situated at the juncture between a healthy, vibrant Northfield and overlooking a large expanse of diverse, restored prairie, Carleton one day could become the only liberal arts college that embodies all of its values both academically and physically. Carleton values a holistic view of education within a healthy campus culture and environment. The campus today retains strong elements that allow Carleton to pursue a course toward a sustainable campus, one that restores and enhances the sense of place, a joining of small town and prairie, that protects the value of the campus for generations.

This vision is built on a few simple but critical strengths that the campus has today:

- Handsome, small buildings that exude personality and human scale
- Broad open landscape spaces that run together without boundaries
- A seamless connection to vibrant Northfield neighborhoods and downtown
- A relaxed, eclectic physical character that turns the eye to the horizon and opens the mind
- The Arb, in all its parts, as setting, enclosure, foundation and relief valve for an intensive learning environment
These are the key physical legacies of Carleton. If there were no other plan, these words should be considered in any future decisions that change the physical campus:

_Honor this place in its prairie, celebrate the campus and town together, do no harm that would diminish any one over the other._

This Campus Plan is more a guide toward a long-term future than it is a specific plan for building. The decisions of building on campus will occur again and again, each with its own discourse and situation. No one can or should preclude the brilliance of the Carleton community from making the best decision for each change. But we can implore the community to understand, respect and advance the health of the prairie, the college and the town together at every turn.
Things We Cannot Change

These elements are the foundation of what makes Carleton a special campus:

The essence of this place comes from the underlying ecological mosaic, the layers of change brought by people, and the alignment of the institution’s values and culture with the place.

The landscape of Carleton is a diverse mosaic of geological and ecological systems, evolved over that will produce an even richer composite when stewarded by people with a vision.

Carleton is situated, immovable and immutable in its location between town and prairie, field and stream, forest and plain.

Northfield and Carleton are intertwined and complementary. They need each other. Each is better because of the other.

Growth is approaching. The Twin Cities are already changing the social and economic character of Northfield and Carleton. Time is of the essence in establishing the long-term future that will protect the values that town and College embody. Capturing and sustaining the health of both is imperative.
How to Build
Adding to Carleton, whether by changing a road, repairing a landscape, or building a new structure, is just that . . an addition. With over 3,000 years of recorded human history and 130 years of Carleton, each project and each person can do no more than to add. No one can complete Carleton, or any part of it. To the depth that already exists, we each add richness and diversity that expands knowledge and deepens the romance of the culture and this place.

We can seek alignment of new with old, without being slaves to the past or to style. Goodness is embodied in what we already find at Carleton, and any keen observer, any student of design or any caring individual can make the distinctions between good and bad, better or worse. We need just to look, see and to know that what we see has meaning.

If we build, does our building add? Is it neutral? Will people in 100 years agree with our decisions and choices made today?
Buildings

Each building should add to the legacy. Individual and eclectic, but deferential.

Each building should stand proudly on its site, while acknowledging that the larger landscape dwarfs and subsumes buildings into one whole.

The landscape is horizontal. Buildings are not.

The built patterns of Carleton are seamless. Boundaries do not belong.

Each building should possess humanity, dignity and personality that will be visible and human for the life of the programs that the building houses.

Carleton changes. Cultures change. Buildings change as well. The best buildings can adapt to change gracefully without losing their own integrity, and without requiring undue compromise from the users.
Buildings are internally organized by function and structure. The Carleton culture is organized by the social networks and complexities of knowledge. Buildings should be organized to stimulate the expression of a knowledge culture and should not be structured or bounded to suppress it. The orders of knowledge can only be separated for convenience and simplicity. In fact, all knowledge is related and mixed. Buildings should not create boundaries that constrain the real mixed nature of a knowledge culture.

People and buildings are ecology. Build to last, gracefully and with less effort.

The campus and its landscape are a fabric. Buildings are part of that fabric, not embellishments.
What We Should Do

Carleton has a unique opportunity to build a sustainable place that embodies the values of the College and that enhances the best of Northfield. Carleton can become the most holistic and sustainable college in America. Achieving this depends on understanding the integrity and complexity of the landscape, campus and urban systems that together complete the whole.

Building the campus as a continuum of prairie (in all its diversity), campus (with its complexity) and town (in a symbiotic relationship) is the goal. One hundred years from now, Carleton could be the one college that has applied its values and decisions toward the fulfillment and protection of its learning environment, its landscape, and its urban context.
Discoveries express the knowledge and experience gained through the analysis of the place, city, campus and the culture to understand how Carleton College has come to be the remarkable place it is today.
Understanding the essence of Carleton emerged through many discussions and interactions with the people of Carleton and of Northfield, and through research of historical documents, maps, drawings, and photographs. We discovered that it is the regional landscape that Carleton sits within that defines this place. Buildings are part of this landscape fabric acting as components rather than defining elements. This is particularly true for the first century of Carleton. Recent patterns of growth on campus and in Northfield combined with the development of the agricultural landscape are compromising Carleton College. The strong landscape fabric is threatened by suburban growth, creating the potential for Carleton to become an enclave within the growing urban environment in the not too distant future.

“This really is one of the things that brought me to Carleton. I’d heard stories of watching the stars from an alum and toured the building (Goodsell Observatory) during Accepted Students Weekend.”

- Student
Regional Landscape

The regional landscape includes:

- landform
- watershed
- plants
- climate

Landform:
The structure of the landscape is the result of glacial movement and retreat interacting with geology, soil structure, erosion and vegetation. The surface topography expresses the underlying record of these processes engaged over time. West of the glacial edge, the land is characterized by flat topped round hills of till and lakes resulting from melting ice. East of the extent of the last glacial episode, the topography is characterized by the dendritic pattern of rivers and streams eroding the surface. Carleton sits on the edge where the Des Moines lobe of the Wisconsin glacial epoch halted.
Watershed:

The headwater of the Cannon River originated as glacial melt water in Rice County at Shields Lake. It passes through the heart of Northfield on its way to the Mississippi River north of Red Wing, Minnesota.

The Cannon River is included in Minnesota's Wild and Scenic Rivers Program, and has a management plan outlining rules and goals for the waterway.

The watershed encompasses nearly 1500 square miles, including the flow from the Straight River in Freeborn County. Numerous creeks are tributary to the Cannon River, including Prairie Creek and Chub Creek to the east, Wolf Creek south of Dundas and Heath, Rice and Spring Creeks in Northfield. Rice Creek is also known as Spring Brook, and is notable as one of the last cold water native trout streams in Minnesota and the only one in Rice County. The spring fed stream provides habitat for the native Brook Trout.

Spring Creek was dammed and dredged in 1920 to create Lyman Lakes as a central feature of the campus, based in the English landscape tradition. Most central Minnesota lakes are either pot holes left by retreating glaciers, as found west of Northfield, or oxbow lakes left by changing river patterns. The Spring Creek stream channel passes through Lyman Lakes. The slowing of the stream flow has lead to increased sedimentary deposition filling in the lakes over time. The shallow lakes are warmer as a result, further contributing to the growth of plant growth in the lakes. The deteriorating quality of the lakes and stream is exacerbated by increased run-off of pollutants from agriculture, development and environmental practices up stream. The manicured edge may also contribute to increased pollution of the lakes.

Today the lakes are ecologically unhealthy and thus seem inconsistent with the Carleton cultural value of environmental stewardship. Correcting this condition must begin with understanding the issues on a watershed scale.
Plants:

The Cannon River valley is at edge of two broad plant regimes. East of the Cannon, the pre-settlement vegetation was primarily tall grass prairie with significant stands of oak savanna and pockets of maple-basswood forest. The tallgrass prairie was concentrated on the least dissected portions of the landscape and extended into Wisconsin. Bur oak savanna was concentrated on the rolling moraine ridges or dissected ravines. Maple-basswood forests were restricted to minor portions of the landscape with the greatest fire protection, either in steep ravines or where stream orientation reduced fire frequency or severity.

West of the Cannon oak woodland and maple-basswood forest dominated the landscape into central Minnesota before transitioning to tall grass prairie, particularly on irregular ridges. Remnants of the pre-settlement vegetation can be found in pockets like the Nerstrand Woods and McKnight Prairie. The historic native landscape included the lowland forests in river and stream corridors, upland hardwood forests, mid-grass prairies and oak savanna. The campus offers the opportunity to experience all of these plant communities; from the prairie in the Arb, the lowland forest along the Cannon River and along Spring Creek, to savanna on the valley slopes and on to the urban and domestic landscape of the campus core and the neighborhood.

Today the Arboretum still offers the extraordinary experience felt by the early settlers of Minnesota of seeing the vast prairie meet the sky, a horizon of grasses.
Climate:
The climate and weather are an essential component of the Carleton experience. The seasons change dramatically, from an average mean temperature of 7 degrees F in January and to a mean temperature of 87 degrees F in July. Cold winter winds from the northwest impact pedestrian movement and summer breezes from the southeast add comfort in the summer.

The people of Carleton thrive and enjoy their campus during all the seasons. The ice rink on the Bald Spot exemplifies that even the cold winter time can be celebrated. The character of the campus changes as the seasons change, making each season a unique experience.

“Carleton is a very comfortable place. It’s easy to feel at home here, to be loved, and be a kid again sometimes. Carleton is also a place to enjoy the seasons-- all of them, even winter.”

- student
The Northfield Context

Northfield is a uniquely situated and vibrant community. Agriculture and the two liberal arts colleges of St. Olaf and Carleton are essential to the character of Northfield. Its involved citizenry, historic and healthy downtown and neighborhoods add to the vibrancy of the community.

Northfield is bisected by the Cannon River. The combined presence of rich prairie soil, plentiful timber for building and heat, and the River made this a successful site to establish a milling town. Carleton was established on the bluff overlooking the confluence of Spring Creek and the Cannon River shortly after the founding of the town. Today Carleton is situated at the unique juncture of the urban town, rural landscape and re-emerging native landscapes of
the arboretum. However, the idyllic qualities of the college are threatened by the potential changes to the landscape surrounding it. Northfield is projected to grow from its current population of roughly 14,000 to over 22,000 during the next 15 years. The Northfield Comprehensive Plan of 2001 proposes an urban expansion area that will surround Carleton College and the Arboretum, add the Jefferson Parkway that will isolate the college from the regional agricultural landscape and replace some of this landscape with suburban development.
Evolution of the Campus

Carleton College was established on two, ten acre tracts of land, perched on a hill overlooking Northfield on the edge of the vast agrarian landscape.

The early character of the campus was defined by small, discrete, highly articulated buildings surrounded by open landscape.

The initial direction of the campus was established during the presidency of John Cowling from 1909 to 1945 and his influence remains evident today. When Cowling arrived, six college buildings were loosely scattered about the bluff, aligned orthogonally with the city grid.

Cowling envisioned a highly ordered campus with internally focused spaces, formally defined by architecture. The Depression and World War II slowed building on campus and the Holmes and Flynn plan was never carried out.

Cowling acquired vast amounts of land, maintaining it as agriculture – a holding for the college. By 1945 the campus holdings including 14 more buildings and hundreds of acres of agricultural and river bottomland.
Together with President Cowling, D. Blake ‘Stewsie’ Stewart created campus grounds in the tradition of the romantic English garden that defined the character of the campus grounds for over 50 years. Stewsie created Lilac Hill and began plantings of evergreens that created a visual edge between the farmland, to the north, and the campus. The campus became an arboretum in the traditional sense, typical of the early twentieth century, designed to display plants by species or by type, in a contrived setting.

The planning and architectural direction established during the Cowling era shifted abruptly beginning in the 1950’s. A new approach led to modernist buildings that interrupted the order of the city grid and related and ignored the

“Carleton is a special place on the prairie”

-Robert Edwards, Carleton President 1977-1986
relationship to space and landscape established by earlier buildings.

Walks were aligned for efficiency rather than a romantic notion of experience and the architecture of the buildings focused on efficiency and function.

A shift in thinking at Carleton began with the social unrest of the sixties and the emergence of the environmental movement. The first prairie restoration project in the Arb took place on Earth Day in 1970. The Arboretum as an environmental resource reflected this shift. Stewardship of the land and an understanding of the systemic nature of landscape introduced a new element in the campus landscape.

Since then, substantial strides have been made to replace the agricultural land with prairie and savanna landscapes. By 2007, restoration of the entire arboretum to native plant communities is expected to be complete. In some places that prairie has been brought on to campus, but with a mixed reaction.

Determining the direction and character of the campus landscape is a significant design decision.
The Campus Today

As the college has matured, the physical campus has continued to grow and diversify. Some physical changes have reinforced the Carleton legacy and some have not. Today the organization of people and activities is eclectic. Departments and uses are intermixed in a seemingly random, but clearly deliberate manner, as evidenced by the combination of the “Language and Dining” building.

Most American colleges have responded to the pressure to grow within limited physical confines by increasing order, segregating uses, increasing density, enclosing spaces, and organizing infrastructure into large, efficient systems.
“I can’t stress enough how important it is to preserve the quirky and unique spaces of the campus...”

-Carleton professor
“Carleton College recognizes that it exists as part of interconnected communities that are affected by personal and institutional choices. We are dedicated, therefore, to investigating and promoting awareness of the current and future impact of our actions in order to foster responsibility for these human and natural communities. Carleton strives to be a model of environmental stewardship by incorporating ideals of sustainability into the operations of the College and the daily life of individuals.”

(Approved by the Environmental Advisory Committee, 12 April 2001; Endorsed by Board of Trustees, Buildings and Grounds Committee, 18 May 2001)

The fundamental principles and frameworks of this campus plan will provide a source of guidance for the physical planning and building over the next one hundred years.

The mixed culture of Carleton College is eclectic, collaborative, and engaged. This should continue to be expressed in the physical campus, embodying campus life by strengthening relationships between the campus, city, and arboretum.

The people of Carleton recognize that they are part of interconnected communities that are affected by personal and institutional choices and strive to be a model of environmental stewardship. Ideals of sustainability are incorporated into the operations of the college and the daily life of the individuals. Along with this is a dedication to the investigation and the promotion of understanding of the current and future impact of our actions and the fostering of responsibility for all communities. The Carleton students and Trustees worked together to define the Carleton College Environmental Statement of Principles.

The core values of Carleton that emerged from discussions with students, faculty, staff, administration and alumni (openness, responsibility, passion, respect, and inquiry) will be embodied and expressed through this evolving process. This vision could be a powerful part of the identity of Carleton providing a liberal arts education which promotes lifelong learning experiences that will extend Carleton’s success and impact throughout the coming years.
Carleton College understands the implicit value of its setting within the Midwestern region’s ecological habitats and is committed to integrate the campus both intellectually and physically into this landscape. This means understanding the landscapes of the arboretum and core campus both physically and philosophically as one place.

Embracing a vision of landscape as the foundation for campus planning decision making could make Carleton the most holistic, authentic and sustainable campus in America. Landscape is the overarching experience of place, it is an expression of the dynamic connection between place and those who dwell there. It is both global and local, understood on three levels:

- **surfaces & spaces**: the entire surface of the earth, spaces, textures, objects and anything that we see. This idea of landscape is primarily visual and spatial.

- **plants**: the fields, gardens and habitats that make up any given place. This landscape combines natural and designed places. It is the one that most people think of when they use the word “landscape”.

- **natural systems**: a complex ecology of interdependent natural systems, this includes the impacts and modifications made by people. Based in science, this way of thinking is a foundation for education, environmental health and stewardship on campus.
Five principles form the basis of the campus plan. All decisions that affect the campus growth and expansion, new buildings, renovations, circulation and landscape should be tested against these principles and build upon the ideas and intents expressed within them.

**Natural systems are the foundation of the Carleton sense of place**

**Landscape is primary**

**Buildings are part of and contribute to the landscape**

**Pedestrian movement should be predominant**

**The campus will change**
Natural systems determine the form and character of the Minnesota landscape. The confluence of rich soil, a flowing river and abundant timber contributed to the settlement of Northfield in this location. There is an understanding of the world as interwoven natural, social and political systems, and that human role and responsibility is at the core of the College culture. This is evidenced by the college’s active participation in the preservation of native landscapes, using renewable energy sources, and participation in community activities. The college is deeply rooted in this Midwestern landscape.

Principle One:
Natural systems are the foundation of the Carleton sense of place
Sustainable Systems

Carleton College recognizes a deep seated value in community and the integrity of the local and regional ecological and social systems of which the college participates. Initiating the reestablishment of native plant communities in the arboretum that continues to thrive today.

Carleton is at the forefront of commitment to sustainable energy, exemplified by the construction of the wind turbine east of the campus in 2004. The turbine will generate the equivalent of 40% of the campus energy needs. Earth Day has been a recognized annual celebration at Carleton since its inception in 1970.

The Environmental Advisory Committee approved the following statement of stewardship that was subsequently endorsed by the Board of Trustees Building and Grounds Committee:

Carleton College recognizes that it exists as part of interconnected communities that are affected by personal and institutional choices. We are dedicated, therefore, to investigating and promoting awareness of the current and future impact of our actions in order to foster responsibility for these human and natural communities. Carleton strives to be a model of environmental stewardship by incorporating ideals of sustainability into the operations of the College and the daily life of individuals.

The intent of the Campus Plan is to support and expand institutional practices that promotes energy efficiency, encourage the use of renewable resources, decrease production of waste and hazardous materials, improve the health and diversity of campus ecosystems and increase the presence of native species, and support and participate in improving the health and diversity of ecosystems on a watershed and regional scale. Each campus decision should consider its impact on the greater community and the physical environment over the long term. Such thinking should extend to the application of planning tools that enable comparative analysis of sustainability in the consideration of long-term economic, environmental, social, academic and cultural decision making. These tools include:

- Minnesota Sustainable Design Guide. The Design Guide recommendations should be integrated into all campus planning, landscape, architecture and maintenance projects. The Guide addresses the six environmental topics: site, water, energy, indoor environment, materials, and waste.
- Continue to explore opportunities to expand upon the use of alternative energy sources and plan towards increased efficiency power generation.
- Integrate the concepts of stewardship, sustainability and environmental systems into the academic process by continuing and expanding upon programs such as the environmental energy housing project.
- Continue to implement ecological restoration projects in the Arboretum and on the campus and seek opportunities to build multi-benefit environments that improve water quality, wildlife habitat, and provide for both learning and recreation. For example, the restoration of the floodplain along the Cannon River will make direct connection between the Arboretum and downtown Northfield, with the potential to expand the riparian river edge and lowland forest, with trails, interpretation and removal of impervious parking lots and buildings from the floodplain.
The landscape surface is the fabric of the campus. Forests, fields, gardens, lawn, buildings, spaces and sky contribute to making the place a whole. The Midwestern landscape is characterized by the order of the Jeffersonian grid, by clearly defined edges between landscape types, by vernacular buildings (often clustered to create enclaves for function or protection) and by climatic extremes, of the distinct four seasons. The campus landscape should embody the culture and character of the Midwest.

**Principle Two:**
*Landscape is Primary*
**Groundplane**

The groundplane is the surface topography, low plant cover and paved surface materials. The groundplane materials define the relative rusticity and urbanity of the campus. The groundplane character serves as a continuum from the heart of the campus through the bluff, the valley and the upper arboretum. Change in ground plane material should respond to change in elevation and slope.

**Mid-Plane**

The mid-plane landscape includes elements from waist to eye level. Often this landscape can obscure views, be out of scale, be overly decorative, and can tend to be overgrown, decreasing the sense of security. It often fills in the “human space” between ground plane and tree canopy. The mid-plane elements must be carefully placed with clear intention and be minimally used as decoration.

**Canopy**

The tree canopy at Carleton tends to be low, defining the space inhabited by people. It frames views, pathways, building wall patterns and emphasizes building entries. It is horizontal and relatively narrow, accentuating the human scale and a focus on people moving through the landscape. It also underscores the significance of the sky. Distant views are revealed where the canopy opens to the broader landscape and horizon.

**Edges**

The character of edges vary throughout the campus. From naturalized where the arboretum and core campus merge, to urbanized where the campus merges with the neighborhood. Edges are the transition between texture, color, pattern, materials, canopy and scale, and should be part of a continuum from natural to urban.
Spaces

The Carleton landscape includes spaces that are both intimate and expansive. Many are historically significant, memorable and steeped in lore such as Lilac Hill, Mai Fete Island, Hill of Three Oaks and the Bald Spot. Over time new traditions have formed around many of these places. The experience of the legacy landscapes is essential to the campus and should be preserved. Opportunities for unique new landscapes should be considered, incorporating new traditions of stewardship, native plants and a connection to the regional landscape.

Places

Outdoor places are an essential part of the experience of the campus. They are places to play, to study, to think, to meet, to teach. Scale, surface texture, sunlight, shade and prospect define the character of these places. A variety of changing activities depending upon season, time of day, and number or people should be accommodated. Some of these places may become revered over time, becoming the “legacy places” of the future.

Scale

Scale is experiential. The natural landscape scale ranges from dense lowland forest that feels enclosed, to open prairie that includes the sky. The built landscape includes small seating areas under trees, to informal outdoor classrooms, to the Bald Spot. A variety of scale, of openness and enclosure enriches the experience of moving through the campus.

Plants

Plants in the landscape have many functions. Both exotic and native species exist today on the campus and should continue to be a part of the landscape palette as educational tools, to provide environmental protection (from sun or wind), and as elements of beauty. Plantings can mark special places or create a sense of arrival or entrance. They can also provide interest to spaces on campus especially as they change with the changing seasons.
Views

Today there exist many views between the core campus and both the arboretum and the adjacent neighborhood. These views are critical in maintaining a strong sense of connection and place between the college and its urban and regional landscape. Consideration should be given to strengthening this by finding new opportunities as new buildings are placed and/or old buildings are removed on the campus.
The architecture of Carleton is eclectic. Buildings vary in scale, style and material, but several buildings dating from the Cowling era (and before) established a tradition of small scale buildings, sited orthogonally along the city street grid, and carefully articulated detailing of entries, windows and roof lines that have a unique and individual relationship to the landscape and spaces around them. These buildings do not dominate the landscape but rather are participants in it. These buildings are the legacy buildings of Carleton. The experience of architecture when trees are in leaf is primarily of building entry, foundation and the rhythm of ground floor wall. Buildings are only revealed in their entirety during winter months when leaves drop and buildings are visible through a veil of branches.

**Principle Three:**
Buildings are part of and contribute to the landscape.
Architectural Attitude

Architectural design and character of buildings should respond to the place and honestly express function and the role of the building in the academic community. The design of new buildings should establish conceptual connections with surrounding buildings through careful siting, orientation and consideration of mass, scale, articulation and materials. All new buildings on campus have a rich context to relate to, draw references from, and contribute to. The classic Vitruvian touchstones of firmness, commodity, and delight are sound guidelines and a measure of excellence. Buildings are places for people to live, work, study and interact. The architecture must express and enhance the human experience and engagement of people with Carleton. Values should be expressed in terms of appropriate scale and proportion, rhythm and texture, daylight and form.

Expression

Buildings has a responsibility to express and engage people.

- dignity
- identity
- celebration
- humor
- community
- seriousness
- repose
- comfort
- memorability
- charm
- socially engagement
- color
- cultural identify

Layering

How the layering of buildings relates to other buildings and to the landscape should be considered. The tree canopy offers clues to how buildings visually engage people moving through the campus. A distinct base connects them solidly to the groundplane; by raising the main floor above the ground, the building sits proudly within the landscape. The vertical layering of mature deciduous tree canopy offers clues to appropriate layering of architecture, set within the trees.
Corners
Building corners are often visible against the sky. Corners frame views to spaces, the sky and landscape and should be carefully articulated.

Entrances
People are most engaged with buildings at their entrances. Many at Carleton are framed by tree canopy and other landscape elements. Entrances should be human scaled, highly articulated, detailed, proportioned, and of quality materials. Entrances should be unique. For example, the Boliou courtyard framed by burning bush is a unique place; different than the approach to Music beneath the low canopy of overhanging branches and plantings that focus attention on the entrance.

Roofs
Many Carleton buildings meet the sky with an interesting and detailed profile. The ‘horizon line’ of new buildings should respect their elders and other buildings of significance, and add to the quality of the campus context.

Scale
Buildings are part of the composition of space and mass that defines the campus. New buildings must contribute to, rather than overwhelm, the scale of the campus. Buildings near the neighborhood should consider the scale and massing of the homes nearby. Larger buildings should be composed of smaller, discrete volumes with elements that relate to other buildings. Large inarticulate wall expanses should be avoided.
Interior/Exterior Connections

Buildings engage the landscape by providing views and access to it. New buildings should add to the many existing views to both enclosed intimate spaces and to the regional landscape.

Service Access

The Carleton campus does not have a ‘back’, therefore the service and dock side of each building must be given design consideration equal to any other facade. Buildings are typically visible from many perspectives. Entrances for service to buildings should be oriented to the edges of the campus and be well designed. Optimal delivery conditions should not dictate the size and configuration of service docks and access. Impacts of deliveries should be diminished by scheduled deliveries in the early morning or late in the day to avoid conflicts with pedestrians.

Lighting

Building entrances and paths should be lit to accentuate entrances without glare or escaped light while providing a safe entrance environment. Entrance lighting should primarily illuminate the groundplane with minimal building wash or glare at eye level. The light source should not be visible when approaching the entrance.

Orientation and Siting

Until recent decades there has been a visual and physical connection through the campus from the neighborhood to the surrounding landscape. The siting of buildings contributes to preserving and improving the “porosity” of the bluff overlooking Lyman Lakes. Buildings south of the Lyman Valley should be oriented orthogonally and relate to other buildings and the neighborhood. The city street grid allows views deep into the campus from the neighborhood and reinforced the connection of city to rural countryside through the campus.
Bluff Edge

The bluff edge above Lyman Lakes is an important element of Carleton, highly visible from Highway 19 and offering views to the surrounding landscape. No new buildings or building expansions should occur between existing buildings. Porosity of the bluff edge should be preserved and improved, the pruning and removal of plant materials should be considered where appropriate.

Grid

The grid has historically extended into the campus. Both Leighton and Laird face the street corridors and all other buildings south of Lyman Lakes are aligned with the grid. The grid should help organize space and building location along the neighborhood edge, but should dissolve as the campus stretches out into the rural landscape to the north. Campus buildings near the neighborhood should be oriented outward, respecting setbacks. Variations of the setbacks of neighborhood buildings should align with the city grid with an informality consistent with the residential neighborhood.

Building Programming & Uses

The eclectic distribution of uses and activities within buildings and around campus should be maintained and built upon. Zoning of uses by campus precinct or by building is not typical of Carleton and should be considered carefully. For example, the benefits of close proximity are important to activities such as the sciences and the arts.

New buildings should seek opportunities to offer a mix of uses and activities in unexpected combinations. Language and Dining is a recent example.

Indoor/Outdoor Uses

Building entrances and plazas offer opportunity to create usable outdoor spaces. Combined with landscape elements, a variety of places and exposures should be created that encourage interaction between people.
The hierarchy of circulation at Carleton should prioritize pedestrian movement over all vehicular movement. It may not be necessary to separate pedestrians and vehicles entirely, but circulation patterns, sidewalk scale, parking locations, and building orientation should be evaluated and refined to improve the pedestrian environment and pedestrian experience of moving through the campus.

**Principle Four:**
*Pedestrian movement should be predominant.*
Scale

Walkways should be pedestrian in scale with a hierarchy appropriate to the level of use. Walks that share pedestrian and bicycle traffic should be wider (i.e. 8’) but pedestrian only walks can be more narrow (i.e. 6’).

Service

Service should be located at the rear of buildings whenever possible and service drives located to minimize intersection with major pedestrian routes. Deliveries should be scheduled during class times in order to minimize conflicts.

Connections

Sidewalks should make direct physical connections between major destinations.

Parking

Parking should be eliminated from the interior of the campus and placed around the campus perimeter to minimize vehicle / pedestrian conflicts and to remove it from view from within the campus.
Emergency

Major walks on campus today are of vehicular scale to accommodate emergency vehicles. All walks should be primarily pedestrian in scale with alternate paving systems such as structural turf (grass rings) or gravel fines to provide the width necessary for emergency access. Emergency vehicle access, materials, and routing must meet local fire department requirements.

Climate

Landscaping should enhance environmental comfort by considering microclimatic conditions. Building and landscape elements should provide a variety of conditions, including sun-drenched pockets protected from winter winds, shaded walks and seating areas, and screening from winter winds.
The campus is a living organism. People come and go, buildings evolve, landscapes grow and mature, needs of the college and the pedagogy change. The college environs in Northfield and the surrounding agrarian landscape will change as well. Thoughtful change will build on the Carleton legacy, other changes may diminish the special qualities of the place. Change must be anticipated and appropriate action taken to purposefully preserve and enhance the best qualities of the college.

Principle Five:
The campus will change.
Regional growth:

Northfield will continue to grow and develop around the college campus, eventually making the campus an enclave within the urban area. The potential for transit between Northfield and the Twin Cities will make it more desirable as a satellite to the Twin Cities and may increase growth expectations beyond that anticipated today.
Physical growth of the college:

The college will grow. New teaching spaces will be required. New programs will develop, generating new expectations and competition for students that will demand continual improvement. The demand for more living space for students and amenity space such as recreation will be a significant component of this growth.

In some circumstances, controlling or influencing the land use and condition is adequate to preserve quality and character of the place.

Evolving landscape:

The landscape today is far different than in Stewie’s period (1920’s-1970’s). It is evolving from a traditional arboretum and English garden approach toward a more naturalistic landscape based in stewardship. Many places, such as Lyman Lakes, in the landscape lack a clear purpose and role as a component of the whole. Others, like Lilac Hill, have deteriorated beyond recovery. The arching vase-shaped branching of Elms has given way to low, horizontal branching of maples and lindens. The campus of the future must accommodate both tradition and continuous change. The next generation of canopy trees should be under consideration now, or in the very near future. It may be a canopy of burr oak on the bluff edge of the campus core.

Evolving processes and ecology:

Since 1970, the arboretum has been transitioning back to native habitats of floodplain forest, upland forest, savanna, and prairie. The relationship of the arboretum and the campus is perceived differently by different people. The arboretum and the campus should be physically and conceptually linked as a continuum and the role of the arboretum as an educational component to expand the college should continue.

Volunteer efforts and class participation should continue to be encouraged. This may include relocating ball fields, removing exotic species, and redefining lake edges.

New traditions (short and long term):

The campus is unique in its wealth of special landscape places and spaces (the Bald Spot, Lilac Hill, Hill of Three Oaks). Over time, equally unique traditions have developed with these places. Places like the Bald Spot provide tradition (ice skating in the winter) while also providing opportunity for spontaneity (students playing in a drum circle). New places and spaces should be created that are interesting and unique. They should accommodate a variety of interpretations and uses. Some spaces may be very flexible, others may be distinct and named as places where new traditions may find a home. The way people will use these spaces should be integral to thinking about how the campus may change in the future.
Observations & Recommendations
Planning and Design Process/Observations

Part of the richness of the Carleton experience is the culture of an involved decision making process. Decisions affecting the campus have not typically been made by an ordered hierarchy of people or processes, but are made through a fluid process of active and intense involvement of strong individuals. Final decisions are routed through an intellectual debate that is inclusive but has often been incremental. The Campus Plan will create a framework for decision making. In some cases decisions have been responsive to the immediate issue, but miss the opportunity and need to take a global view to thoroughly understand the context and future impacts of the decision.

Planning decisions made without considering the entire campus picture have lead to several building and space relationships that have diminished the overall quality of the campus. For example, the Center for Mathematics and Computers (CMC) site selection has resulted in an awkward relationship of the building to other buildings, to the lakes, and no presence on the Bald Spot. The service drive that it shares with Bolliou isolated the academic precinct from the lakes. Together with the southeast library expansion, CMC has created a physical and visual barrier between the academic precinct, the arboretum and the regional landscape. Although one of the newer buildings on the campus, it is already considered by some to be inadequate for much of the current program and difficult to adapt to accommodate emerging technologies. The appropriateness of the location of the Recreation Center has also been at the center of much debate.
Overall

Observations:

A balance must be found that integrates traditional value-based incremental decision making and incorporates the right mix of design expertise and a holistic view of the campus, its past with the implications for the future.

Recommendations:

• Each building project should include at least one of the advisors as part of the steering committee from the inception of the project. The advisors would then continue to participate through programming design and implementation of the project.

• Determine a schedule for building replacement on campus. This should assess cost of maintenance, accessibility, functional and architectural improvements, and space and program needs, along with the opportunity for increasing campus porosity. This study should identify those buildings that are essential to the Carleton legacy and will always be invested in, those that contribute, and those that detract from the quality of the campus.

• Establish design standards for architecture, landscape and urban design.

• Begin each proposed new building with a programming phase to clearly establish the role and purpose of any new building on campus.
Growth

Carleton currently has no stated intent to increase the student population but acknowledges that during the next twenty years, additional academic and residential space may be needed to maintain quality of teaching facilities and to remain competitive with peer colleges.

According to the Carleton Capital Renewal Master Plan, an additional 72,000 to 85,000 square feet of academic space will be needed. Projections based on historic growth indicate that 81,000 to 120,000 square feet of residential space may also be needed.

Study of the historic evolution of the campus indicates that the college physical plant has grown an average of 1.05% each year. The has typically been sporadic (such as the decision to increase the student population following WWII), opportunistic (a significant endowment such as Skinner Chapel) or in response to a specific need to meet academic needs (such as a laboratory or technological improvement).

Carleton is unique in that it has tended to distribute uses throughout the campus, mixing humanities, sciences, the arts, residential and administration activities throughout the campus. Over time, the sciences in particular have begun to trend toward establishing a "precinct" by developing an adjacent set of shared uses. The arena theater and concert hall are in diminished condition. Combined with increasing needs of studio arts and media studies, the potential exists to create an arts precinct.

Overall

Observations:

The academic campus today is nearing it carrying capacity. Further building could significantly impact the spatial character of the campus.

There are areas on areas on campus that should not be touched, based on today’s value system) and there are also other areas that may be uses as expansion.
There are places on campus today that are considered ‘legacy’ landscapes. Several of them have deteriorated. These places should be carefully considered when planning for future growth and building placement on campus.

The vision of the early campus leaders remains evident today in the architectural character of the ‘legacy’ buildings that date from the Cowling Era or before. These are the buildings that should be considered for reinvestment in perpetuity.
Compared to other liberal arts colleges of similar size, Carleton has generally less total space and space per student than these Primary Reference Colleges.

The Capital Renewal Master Plan projected growth in certain academic areas for the college. Based on historic trends of the college, growth in areas not covered by the Capital Plan should also be anticipated, therefore, the historic trend was analyzed and used as a basis to project growth in areas such as housing, science, and athletics.

The Capital Renewal Master Plan for 2025 projects a greater increase in need for academic and office space than post-war historic trends had indicated (since 1950).
Today's projected expectations for student housing indicate that the residential space needs will be greater than projected by the Capital Renewal Master Plan.

Since 1950, the student population has grown at an average of 1.06% cumulatively per year. If this rate were to continue, the total student population would be 2415 by the year 2025.

If the student population does grow, the spatial needs of the college in 2025, will be substantially higher than outlined in the Capital Renewal Master Plan if today’s ratio of space per student is maintained.
Areas identified for potential academic campus expansion are: North of Lyman Lakes, the north edge of the Creek, Bell Field, along the First Street edge, along Maple Street, and the area south of the campus and townhomes. Each of these areas is expanded upon in the following pages.

**Recommendations:**

- Determine the appropriate reinvestment response to each building on campus as they reach the end of their life cycles.
- Determine reuse potential of each legacy building on campus. Expand upon DunWiddie study.
- Determine a direction for the landscape to choose whether to restore or redesign the legacy places, and to determine the character, plant material and maintenance of the entire campus landscape.
- Define the College's intention with any potential moves towards downtown or into the neighborhood so that a symbiotic relationship is established and maintained.
Science

Observations:

The sciences will require additional space in the future. Adjacency and sharing of facilities is important.

The location of the sciences in the heart of the academic precinct with an ‘address’ on the Bald Spot is important, but limits the opportunities for another building, unless one of the existing buildings is removed.

The relationship of the three science buildings (Hulings, Mudd, and Olin) creates a mass that acts a barrier, isolating the east end of the campus from the Bald Spot.

The enclosed connections between the three science buildings have created an underutilized outdoor courtyard and an awkward relationship between the buildings and the space around them. This is particularly evident in the main entrance to Hulings that is sunken relative to the Bald Spot.

Recommendations:

• Anticipate future growth of the sciences and establish a multi-faceted solution that outlines the overall science program. Anticipate obsolescence of existing facilities, accommodation of new technologies, the need for expanded facilities, new types of facilities and a phased approach to implementation without interruption.

• Consider the value and flexibility of the existing buildings. Determine if Olin and Mudd warrant extensive reinvestment in the future.

• New development on the First Street edge must respond to the scale and quality of the neighborhood. Placing buildings here gives them good adjacency to the Bald Spot and other academic buildings and is significant space near the center of campus. Consideration should be given to the scale of any new buildings along the campus edge because large scale buildings are inappropriate adjacent to the neighborhood.

This location offers the best opportunity for new development near the Bald Spot and other academic buildings. The west portion is critical for future expansion of the science buildings. The eastern portion offers the potential for other academic uses or possibly student housing.
Fine Arts & Performing Arts

Observations:

The concert hall and arena theater housing the performing arts are inadequate and deteriorating. The college has identified the need to replace these facilities in the near future. The impact of such large scale facilities on the edge of the campus and the neighborhood is a concern.

The need to expand studio arts is emerging. Boliou will not easily accommodate further expansion without seriously diminishing both the architectural quality and the porous character of the bluff and the compromise the spatial character of the Lyman Lakes valley.

Recommendations:

• Consider combining fine arts uses in Boliou with the proposed new Arts Complex.

• Study what other uses may be accommodated in Boliou or if the building will eventually need to be removed.

• Determine the elements that constitute the “arts” at Carleton, and what are their relationships, needs for adjacency, etc.

• Consider the need and appropriateness of establishing a precinct that combines the arts in a single facility or group of buildings.

• Continue to consider the Middle School south of campus as an opportunity to accommodate the arts program.

• Consider the impact of the college on the quality of the neighborhood if it expands to the south.

• Consider community outreach benefits of a performing arts facility located centrally between downtown and the campus, such as access, parking, and creating a gateway to the campus.

• Study alternative sites that may accommodate the arts program, study both a single facility and multiple buildings.

• Continue to assess the fine arts and performing arts programs to develop a program for a new facility. Assess need for adjacency between specific programs.

• The blocks in the neighborhood south of First Street offer the opportunity to reach out toward downtown. This area is a mix of college and privately owned houses as well as other uses. There is an opportunity to reuse the middle school building and envision new uses for other buildings south of campus. The College already owns many properties in these blocks. Some growth in this area would require acquisition of additional properties in the neighborhood and this may be perceived negatively by residents of the community. The south expansion is a logical direction for growth, particularly for performing arts and other ‘outreach’ uses that share public value component.
Student Housing

The need to expand residential space will become a significant need at Carleton. The trend on competing college campuses is to provide diversity of unit types and styles and an increasing allotment of space per student. Today at Carleton the average space per student is approximately 260 square feet in dormitory buildings and approximately 400 square feet in the townhouses.

Observations:

New student residential facilities of any style are likely to provide more common space and more space per student.

The College has no immediate plans to increase student population, yet in 2005 it is over 1900. The student population has historically increased periodically (refer to growth rate projections).

Musser Hall and Myers Hall are universally disliked by students. The quality of the living environments, common space, architectural design and location are such that removal of these dorms will improve the campus. The siting of both buildings interrupts the street grid, blocks views to the arboretum and neighborhood and constricts adjacent building site opportunities. Creating new residential facilities in other locations will contribute to improving the campus environment.

Recommendations:

• Explore opportunities to continue, strategically and selectively, acquiring homes in the neighborhood to the south of campus that can provide student housing in the short term and contribute to a broader view of expanding in the long term.

• Determine a housing strategy to guide new building on campus. This may be new dormitory typologies, additional townhomes, or additional off-campus housing.

• Bell Field is both a legacy landscape created by Stewsie and a wonderful play field surrounded by natural landscapes. It is adjacent to other residential uses, but is a unique and special site. It is separated by elevation and view from the academic core and could be developed with / without a loss of open/play space. Alternately, Bell Field could remain as is, or be restored (in whole or part) to contribute to the riparian character of Spring Creek. If developed, this is an appropriate location to create a unique and sensitive student housing enclave.

• The site overlooking the north edge of the creek offers a strong connection to natural open space in the upper Arb. This is a logical location for additional student housing, with adjacency to Goodhue, the recreation center and the Arboretum although it is, felt by some, to be somewhat isolated from the academic core.

• Any development along Maple Street must also respond to the scale and quality of the neighborhood. If used for housing, it is adjacent to other residential and to Bell Field. This location offers the opportunity to create new residential scale student or faculty housing as a transition to the scale of the neighborhood.
Library
Observations:
The library’s spatial needs will continue to grow, even without an increase in student population. The college intends to move Media Services into the library, further pressing the capacity of the facility.

Recommendations:
• Study the library program to understand what is necessary to the main library location. Explore the potential to move archives or other parts of the current library to other nearby facilities. Consider the potential to create a library / media precinct that incorporates the reuse of adjacent buildings such as Laird.

• Consider the potential for the library to also become the center of student life on campus. Explore the potential to expand student life activities as a component of the expanded Library.

• Consider the value of maintaining and improving the porosity of the bluff when determining the appropriate location to expand the library.

Recreation
Observations:
The recreational needs on campus will continue to grow, even without an increase in student population.

Recommendations:
• Significant land area exists north of Lyman Lake, but the distance from the academic core suggests a special use. This is a large open site, with good access from Highway 19 and adequate space for parking. Grade change allows for building into a slope.

• It is logical that recreation and athletic programs be nearby to share space and facilities. At sometime in the future, when it is necessary to replace Laird Stadium and West Gym, these facilities should be relocated out of the Cannon River floodplain.
North edge of Creek
Recommended for:
Residential Expansion
North of Lyman Lakes
Recommended for:
Recreational Uses
Infill the First St. Edge
Recommended for:
Science Expansion
& other Academic Uses
North edge of Creek
Recommended for:
Residential Expansion
Extend the Campus South
Recommended for:
Arts Relocation/Expansion
& or Residential Expansion
Bell Field
Recommended for:
Residential Expansion
Along Maple Street
Recommended for:
Residential Expansion

Recommended Land Use Areas
**Growth Strategy Options**

The following options suggest ways that the college may build within the previously suggested “growth areas”. Depicted in each option is a build-out strategy that meets the anticipated growth needs for the next 20 years. This is based on a combination of Carleton from the projected historic growth rate and the Capital Renewal Master Plan previously discussed.

**Observations:**

- **The Optimization Strategy** maximized placement of new buildings primarily on area currently owned by the college. This strategy protects the Bald Spot and Bell Field as open spaces.

- **The Expansion Strategy** places the Arts programs in the newly acquired Middle School as a re-use of the building or a total / partial reconstruction. The success of this strategy will require the development of a strong connection between the new Arts programs and the Core Campus. No additional building across the Lakes is maintained and the Bald Spot and Bell Field are protected as open spaces.

- The **Infill Strategy** builds only on existing campus holdings. This strategy protects the Bald Spot and the Arboretum as open spaces. This also means there is no additional building across the Lakes or into the adjacent neighborhood. This strategy does require significant changes to Bell Field and may require relocation of the recreational fields north to the areas near the Recreation Center. It also requires the buildings along First Street to have considerable mass in order to meet program needs.

- The **Formal Expansion Strategy** protects the Bald Spot and Bell Field as open spaces. It also protects the Arboretum by allowing no building across the Lakes. It does require the purchase of additional homes in the neighborhood between Parish House and Skinner Chapel. Making strong circulation, landscape, and visual connections in this area would be pertinent to maintaining a cohesive campus in this strategy.
75 OBSERVATIONS & RECOMMENDATIONS

Recommendations:

- The Recommended Strategy suggests placing the Arts programs in the newly acquired Middle School as a reuse of the building or a total / partial reconstruction. By expanding the physical campus, this strategy is able to preserve openings between buildings on the Core Campus that maintains view connections to the Arboretum and into the neighborhood. The success of this strategy will require the development of a strong connection between the new Arts programs and the Core Campus. By allowing minimal building across the Lakes future expansion sites along First Street are preserved and the Bald Spot and Bell Field are protected as open spaces.
**Northfield Growth**

Northfield is a special community with a unique mix of urban and small town characteristics as a result of its agriculture and academic roots. The downtown is exceptionally healthy. The city expects to grow in the future and this growth will effect its basic character.

The 2001 Northfield Comprehensive Plan establishes a Priority Growth edge that bisects the campus between Spring Creek Road at Wall Street and the sewage treatment plant on the Cannon River and an Urban Expansion Area that extends further east. The Jefferson Parkway is proposed to extend to Highway 19 at Canada Road by 2010. The Parkway is planned to eventually extend to the iron bridge at the north end of the arboretum. Commuter rail may someday extend south from the Twin Cities, further encouraging an increased population in Northfield.

The outcome of such growth and a ring road will be the enclosure of the east edge of the arboretum by suburban growth, increased traffic, diminishment of views and isolation of the campus from the agrarian landscape to the north and east.

**Recommendations:**

- Assess the value of a visual and physical connection to the greater regional landscape. Consider acquisition of additional land to the ridgeline northeast of the arboretum to protect the quality of the experience within the Arb and the unique view of the prairie horizon line against the sky.

- The arboretum is of benefit to Carleton as well as Northfield. Seek opportunities to establish partnerships that protect the quality of experience in the arboretum and benefit the community. Consider extending the arboretum trail system to downtown and create a trailhead at the corner of Second Street and Division Street. Consider creating an ‘Arboretum Visitor Center ’ jointly with the city.

- Begin a discussion with Northfield regarding the proposed alignment of Jefferson Parkway. Encourage the consideration of alternative alignments that will relocate the parkway further east, beyond the ridgeline, and further north than the iron bridge in order to protect the quality of experience in the arboretum. Preserve the iron bridge.

- Support and participate in the preservation of the quality of downtown Northfield. Continue an appropriate level of presence in downtown.
Neighborhood Quality

Houses

The residential neighborhood south of First Street is one of Carleton’s assets. With quiet, shady streets and many historic homes, it has a character that contributes to the quality of the campus. It also seems to protect the college from uses that could diminish the character of the campus edge.

Observations:

The college owns several houses scattered throughout the neighborhood between First and Third Streets. These buildings often have limited landscaping and other maintenance standards that dissociate them from privately owned homes in the neighborhood.

The scale of and proposed college building along First Street, adjacent the neighborhood, should be designed and placed at an appropriate scale and character to relate to the neighborhood. Vistas, setbacks, and sidewalk alignments between the neighborhood and the campus should be maintained.

The intent of college ownership of houses in the neighborhood has been more opportunistic than purposeful or strategic. It is important that the quality of the neighborhood be preserved and enhanced to maintain its benefit to the college.

Recommendations:

- Define a policy regarding the college owned houses in the neighborhood and the acquisition of new properties. The intended uses for these properties must be determined, i.e. housing, administrative use, or special campus uses.

- Consider a partnership with the city to establish streetscape and lighting standards. Develop street lighting and campus lighting standards. Encourage front porch lighting to improve a sense of safety and security and improve nighttime visibility.

- Develop a diverse color palette for college owned houses. Research historic precedence from the surrounding neighborhood and of the specific houses as a guide.
Landscape Fragmentation:

For fifty years the landscape of Carleton was guided by the vision of ‘Stewsie’ in his role as superintendent of grounds. Beginning with the support of President Cowling, Stewsie created a collegiate landscape influenced by the romantic English garden tradition. Stewsie was tireless, determined, opportunistic and creative. His efforts led to the creation of some of Carleton’s most memorable landscapes; including Bell Field, Lilac Hill and (with Professor Harvey Stork) he planted hundreds of trees and over 200,000 wildflowers in he Arboretum and around Lyman Lakes.

Stewsie’s dedication to the landscape contributed to the value and uniqueness of the Carleton campus. Several treasured and named landscape places are essential to knowing the campus, including: The Arb, the Bald Spot, Hill of Three Oaks Lilac Hill and Mai Fete Island were developed out of this dedication. Today some of these places have suffered from neglect and the landscape between them is sometimes without purpose resulting in fragmentation of the campus landscape.

Arboretum
Observations:

The purpose of the Arboretum is viewed differently by different people and groups. Today, the proposed purpose of the arboretum is education, recreation and conservation. Since 1970, the focus has been on ecological restoration.

Laird Stadium and West Gym are located in the floodplain of the Cannon River. If the Arboretum were to extend to downtown, it would be appropriate to relocate these facilities out of the floodplain when they reach substantial reinvestment becomes necessary.

Recommendations:

• Understand the historical role of the Arboretum in order to understand its initial role in defining the College.

• Determine the contribution of the Arboretum to the educational, recreational, and sustainable goals of the College and to what extent it can contribute to the quality of life in the community.

• Engage the Carleton and the Northfield communities in joint efforts to maintain, evolve, and use the Arboretum as a recreational resource. This may include Earth Day programs, trail maintenance, re-vegetation efforts or other activities. Establish a “Friends of the Arb” committee of Carleton and Northfield people to organize citizen support for Arboretum management.
**Lyman Lakes**

**Observations:**

The purpose of the lakes has changed over time. Once an idyllic garden setting, today it is unclear whether the lakes are to be naturalized or gardenesque. They have been dredged once, but continue to fill in from sediment deposit and have become polluted, most likely from agricultural runoff from upstream. There are a mix of emotions and memories that suggests a range of values and thoughts regarding the lakes.

**Recommendations:**

• Determine the purpose and value of the lakes to the college. Identify a sustainable and healthy future for them and consider what they can contribute to the educational mission of the college and to the overall ecological health of the campus. The lakes are of historic and emotional significance to the campus and alumni, but are ecologically unhealthy, unattractive, and underused. Study the health of Spring Creek and the lakes on a watershed scale and determine a purpose and course of actions to improve the water quality, ecologic condition, aesthetics, and value of the lakes to the College.

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**Lilac Hill**

**Observations:**

Most of the lilacs are dead and those remaining are beyond their typical lifespan and no longer bloom.

The emotional value of this landscape suggests consideration of the meaning to the college of having “a Lilac Hill” on the campus.

The site could be considered for other purposes such as: a native landscape, a building site, a future athletic facility site, or for future expansion of parking.

**Recommendations:**

• Determine the value of Lilac Hill to the College in this location.

• Decide how to proceed with restoration or removal of this landscape. Consider the role of this landscape remnant within the larger landscape picture of the campus.
Health of ecosystems:

**Lyman Lakes**

Observations:

The openness of the islands provides little visual protection so that students feel like they’re in a fishbowl when on the islands.

Geese are attracted to the open water, leaving the lake edges messy and unkempt looking.

The water flowing into the lakes isn’t filtered by the lawn surrounding the lake edges as well as it could be by other landscape plants.

The depth of the lakes is inadequate for necessary flow and circulation that could minimize the stagnant, unhealthy ecosystem.

**Recommendations:**

- College must decide how they want the lakes to contribute to the campus, outline goals to balance its legacy with a healthy sustainable ecosystem.

- Prepare a study of the Spring Creek watershed to determine the hydrologic and ecologic health of the system. Identify source and type of pollution and runoff. Identify regional stakeholders and strategies for improving water quality.

**Bald Spot**

Observations:

Poor drainage causes damage to lawn, especially when the hockey rink is in place.

Many of the trees are of the same age, with few young specimens.

**Recommendations:**

- Consider the addition of underdrains, or modification of grades to provide positive drainage to improve drainage.

- Prepare a tree study and determine an attitude towards tree specimens to be used on campus and density of tree cover. Develop a program for the long term generational succession of the trees throughout the campus.
**Floodplain:**

**Observations:**

The Floodplain (west of Hwy 19) has buildings, recreation fields, and parking lots that are contributing to polluted runoff into the Cannon River. Also, these facilities create a physical and mental barrier between downtown Northfield and the Arboretum.

Recreation facilities: This location of buildings and parking may be causing increased pollution to enter the Spring Creek Watershed. There is potential flood hazard to these facilities in this low area. This recreation ‘zone’ also causes a physical disconnect between downtown Northfield and the Lower Arb.

Bell Field was created in the 1920’s by filling in the Spring Creek floodplain. Today, it could be considered as a potential development area, as a part of the floodplain again, or either in the whole or in part to remain unchanged.

**Recommendations:**

- Study the facilities in Bell Field to understand when upgrades or replacement will be necessary. Consider alternative areas on campus for these recreational uses and how the college may be able to address a physical connection between downtown Northfield and the Lower Arb.

- Understand the “carrying capacity” of the academic campus and determine an attitude towards what uses are appropriate to place in a floodplain.

**Arboretum:**

**Observations:**

The purpose of the arboretum has been loosely defined as an educational and recreational landscape. It has the potential to engage students and to connect to the regional landscape and to downtown Northfield in a much more purposeful and meaningful way.

**Recommendations:**

- Develop an attitude about the role of the arboretum landscape in the greater academic mission. Begin by analyzing the proposal in the Carleton College Arboretum External Review that the purpose of the Arb is: education, recreation, and conservation.

- Continue with restoration efforts for the prairie, oak savanna, and forest ecosystems that have already been initiated. Include a focus on the removal of invasive species that are potentially damaging to restoration efforts.

- Address management concerns to maintain the restored areas and consider adding staff or volunteers to provide sufficient assistance in this effort.

- Assess facilities for arboretum use and determine future needs as restoration efforts continue.
Open spaces

Historical

Observations:
The Bald Spot, Goodsell Observatory open space, Lyman Lakes / Spring Creek Valley, the Nourse and Language & Dining quadrangle, and the Upper and Lower Arboretum are places that are essential to the identity of Carleton. These spaces enrich the character of the campus, providing space to recreate and connect the campus and the city to the greater regional landscape.

Recommendations:
• Develop an attitude, based on the college values and principles, towards appropriate uses of these historically important places.
• Place new buildings to create high quality and purposeful outdoor spaces without enclosing or blocking important connections to the larger landscape.

Circulation

Autos / Pedestrians / Service

Observations:
Auto circulation and service and parking on campus often conflicts with pedestrians and bicycles.

Recommendations:
• Prepare a plan to identify and address current and future vehicle parking needs, service vehicle circulation and emergency vehicle circulation. The plan should assess parking volume and proximity to destination, review current parking management regulations and recommend revisions if appropriate. The plan should also address parking on neighborhood streets and explore the appropriateness of management solutions such as permitting to ensure adequate parking for neighborhood residents, college faculty and staff. For example, time restricted permitting could allow day use for commuting college staff and reserve evening use for residents.
• Prepare a pedestrian circulation plan that analyzes pedestrian and bicycle traffic volume, desire lines, principal destinations and frequency of travel. Coordinate with Arb trail system and City of Northfield bicycle and trail system and planning efforts.
• Establish a hierarchy of walk widths. Consider accommodating pedestrian traffic and bike traffic on the same path system.
• Carefully consider the location of service access when planning for new buildings. Coordinate new service access with existing service routes and limit the addition of new service access drives.
• Manage service to minimize the presence of service vehicles on campus sidewalks by scheduling these activities to occur during classes or during low activity times of day to reduce conflicts with pedestrians. Provide pull-outs for parking vehicles off of walks.

• Identify emergency vehicle access routes and review with local fire department.

• Develop an acceptable alternative to full width concrete paths for the campus, such as structured turf systems (grass pavers, grass rings), gravel fines, or other soft systems to reduce the perceived width of emergency vehicle access routes.

• Accommodate emergency vehicles on roads where possible and minimize shared access on pedestrian ways.
Lighting

Safety & Night Sky

Observations:

Today the campus has inconsistent lighting that sometimes reduces safety and negatively affects the valued “night sky” visibility.

Recommendations:

• Determine an overall approach to illuminating the campus that balances safety and security with nighttime visibility and function. Work with a lighting advisors to prepare an implementation strategy and a phasing plan.

• Determine light source color, select standard high-performance light fixtures, and luminaries.

Arrival

Highway 19

Observations:

Highway 19 is a thoroughfare that creates both a physical and psychological barrier between the academic core of campus and the arboretum and athletics areas.

There are multiple ways to arrive at the campus. This creates a potential to develop one or more gateways of arrival.

Recommendations:

• Study the potential to re.define Highway 19 as a city street. Create the opportunity to add crosswalks, reduce speed and develop an urban streetscape character.

• Identify arrival to campus through landscape character and quality. Subtle character and material changes should envelop the areas where both neighborhood and college uses exist.
Next Steps

Following the acceptance of the Campus Plan, decisions should be made on each of the recommendations in the Plan and further studies and refinements may need to take place for the following:

• Support the Spring Creek and Lyman Lakes watershed study

• Refine the growth projections by identifying the appropriate priority for the next programming studies

• Decide upon a development direction for future building and landscape on the campus

• Refine a program for the arboretum

• Prepare a Campus Landscape Master Plan

• Proceed with additional studies on campus that may include: a parking analysis and developing a long term parking policy based upon development direction and a Performing Arts study

• Prepare design guidelines for: general site planning, pedestrian environment, and lighting.
This plan has been prepared by Civitas, Inc. for use by Carleton College in Northfield, Minnesota.

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Northfield, Minnesota
City Planning Office & website
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