The Center for Changing Landscapes
Mary Vogel, Co-Director
Alan Ek, Co-Director
Roger Martin, Senior Research Fellow, Professor Emeritus
James Pettinari, Senior Research Fellow
Laura Detzler, Research Fellow
Carlos Fernandez, Research Fellow
Egle Vanagaite, Research Fellow
Cindy Zerger, Research Fellow
Alexander Smith, Research Assistant

Center for Changing Landscapes Mailing Address
151 Rapson Hall
89 Church Street
Minneapolis, MN  55455

Physical Office and Studio Location
1425 University Avenue S.E.
Minneapolis MN 55455
Phone: 612.624.7557

©2010 Regents of the University of Minnesota. All rights reserved.
The University of Minnesota is an equal opportunity educator and employer.
Printed on recycled and recyclable paper with at least 10 percent post consumer material.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td>4</td>
</tr>
<tr>
<td>Goals</td>
<td>6</td>
</tr>
<tr>
<td>CCL, CDes, the University &amp; the Larger Community</td>
<td>8</td>
</tr>
<tr>
<td>Major Accomplishments</td>
<td>10</td>
</tr>
<tr>
<td>Honors</td>
<td>12</td>
</tr>
<tr>
<td>Structure &amp; Funding Sources</td>
<td>16</td>
</tr>
<tr>
<td>Strength &amp; Weaknesses</td>
<td>18</td>
</tr>
<tr>
<td>Opportunities &amp; Challenges</td>
<td>20</td>
</tr>
<tr>
<td>The Future</td>
<td>22</td>
</tr>
<tr>
<td>Appendices I-IV</td>
<td>24</td>
</tr>
</tbody>
</table>
**Mission**

**Center for Changing Landscapes**
“Center for Changing Landscapes is an interdisciplinary research and outreach center in the College of Design and the College of Food, Agricultural and Natural Resource Sciences. Its cross-scale work combines design/planning knowledge and expertise with natural resource expertise and knowledge to support land use and community form decision-making at the site, district, and regional levels to protect, preserve, and enhance Minnesota’s landscapes and their related cultural and natural environmental resources in the face of changing development patterns, resource use, demographics, and environmental degradation.”

Hallmarks of the Center include:
- Design/planning explorations that promote environmental, economic, and cultural sustainability.
- Design/planning cross-scale work that is known for its quality, depth of analysis, graphic effectiveness, relevance, usefulness, and publicly engaged character. and
- Opportunities for young designers, analysts, and other specialists to enhance their skills by working with accomplished professor/professionals.

**College of Design**
“The College of Design is a new, multidisciplinary college incorporating the departments of architecture, landscape architecture, and design, housing, and apparel, and associated research and outreach units. The new college aspires to be an international and national leader in multidisciplinary research, creative production, teaching, and public engagement in a wide variety of design-related fields.”

**College of Food, Agricultural and Natural Resource Science**
“The College of Food, Agricultural and Natural Resource Science is a new, multidisciplinary college with eleven departments and devoted to solution-driven science; we use critical and innovative thinking plus all the tools of the arts and sciences to make our planet a productive, friendly, and sustainable environment—to solve everyday problems. We study the health of the land and the health of the living.”

**University of Minnesota**
“The University of Minnesota, founded in the belief that all people are enriched by understanding, is dedicated to the advancement of learning and the search for truth; to the sharing of this knowledge to benefit the people of the state, the nation, and the world. The University’s mission, carried out on multiple campuses and throughout the state, is threefold:

Research and Discovery: Generate and preserve knowledge, understanding, and creativity by conducting high-quality research, scholarship, and artistic activity that benefit students, scholars, and communities across the state, the nation, and the world.

Teaching and Learning: Share that knowledge, understanding, and creativity by providing a broad range of educational programs in a strong and diverse community of learners and teachers, and prepare graduate, professional, and undergraduate students, as well as non-degree-seeking students interested in continuing education and lifelong learning, for active roles in a multicultural world.

Outreach and Public Service: Extend, apply, and exchange knowledge between the University and society by applying scholarly expertise to community problems, by helping organizations and individuals respond to their changing environments, and by making the knowledge and resources created and preserved at the University accessible to the citizens of the state, the nation and the world. …”
MINNESOTA RIVER STATE TRAIL
NEW ULM, MN: A TERRACE TOWN

UPPER TERRACE
- AGRICULTURE
- NEW HOUSING DEVELOPMENTS
- VALLEY VIEWS

MIDDLE TERRACE
- URBAN GRID
- HISTORICAL SITES
- CIVIC CENTERS

LOWER TERRACE
- RIVER INDUSTRY & TRANSPORTATION
- RIVER/CITY HISTORY
CCL’s mission of multidisciplinary publicly engaged, creative research, teaching, and outreach work and the University’s mission of research and discovery, teaching and learning, and outreach and service are supported by CCL’s goals that seek to:

Demonstrate that the what-is descriptive nature of natural resource sciences can be combined with the what-could-be nature of design to create alternative scenarios for development and resource use that is more meaningful, appropriate, and sustainable than singular, narrowly defined project–based considerations.

Demonstrate the power inherent in regional/district/site landscape architecture/community design cross-scale work to promote environmental awareness.

Demonstrate how problem solving and design/planning can be both natural resource-based and culturally–based while contributing to active, healthy living.

Demonstrate the integration of research and public art into cross-scale design work to interpret the landscape, promote land stewardship, and sustainable development practices.

Enrich teaching in both colleges by participating in classes, mentoring students, and serving on graduate degree committees.

Extend and enhance the education of recent graduates by providing them an opportunity to work on a team with seasoned masters of landscape architecture and urban design engaged in cross-scale work.

Utilize the talents, skills, and expertise of current and retired faculty members by engaging them in project teams with recent graduates.

Increase citizens’ and officials’ access to, exposure to, and understanding of the power of design.

Engage the community officials, citizen groups, citizens, and other professionals in order to create relevant work that reflects community aspirations, values, and needs.

Empower communities and government agencies to reframe individual projects with a more meaningful/environmental/sustainable agendas.

Raise the profile of the landscape architecture profession among governmental officials and the public beyond the misperception of many that garden design is the profession’s only focus.

Create work for the landscape professionals.

**Strategies**

**Project Content:** Large linear public infrastructure systems are design/planned at the regional, district, site scales to explore natural resource, economic, and cultural sustainable environmental strategies.

**Community Engagement:** Asset-based approach to explorations and an engagement process that is negotiated and created with each community or interest group involved.

**Faculty:** Current faculty are engaged as co-principal investigators or employed as project consultants. Retired master designer professors are employed as senior research fellows.

**Staffing:** Research fellows are hired for 2-3 years; students are hired if possible during the summer.

*Note: Excerpts from the 2002 planning grant application to establish CCL is found in Appendix I*
College of Design
CCL participates in the life of CDes and CFANS. It is involved in CDes’ educational activities even though it primarily contributes to the two Colleges’ outreach and research.

Teaching & Learning:
CCL contributes to this mission; CCL:

- Has increased the College’s teaching capacity by sharing appointments. CCL staffers have taught graphics and stormwater management for Landscape Architecture through joint appointments,
- Provides resources to studio teachers when CCL projects intersect with studio work,
- Provides over-the-board critiques,
- Participates in design reviews,
- Gives lectures in classes,
- Mentors undergraduate students,
- Mentors students with community assistantships,
- Works with individual capstone students,
- Participates in capstone reviews,
- Participates in dissertation and plan B paper mentoring, and
- Continues Minnesota’s drawing tradition that has historically characterized the architecture and landscape architecture programs.

In the past CCL has been able to offer research assistantships to graduate students, an effort that enriched the educational experience of students and aided their unit’s recruitment efforts. The multiple tuition increases have limited this because paying graduate students during the school year is now too costly for many of our projects to support. To compensate for this lost opportunity, the Center employs recent graduates. CCL sees this effort as a unique opportunity to enhance their skills and knowledge in a post-graduate setting before they enter professional practice.

Research & Discovery/Outreach & Public Service
Outreach, research, and problem solving are integrated at CCL; the Center’s work is applied. Most of its projects are created in response to requests from communities, citizen groups, and units of governments. The Center’s projects are shaped and informed by research questions and questions discovered by working in partnerships with citizens, citizen groups, and governmental units.

The Larger Community
CCL’s projects connect it to state, regional, and local government units; these include:
- Minnesota Department of Natural Resources,
- Minnesota Department of Transportation,
- Explore Minnesota Tourism,
- Minnesota Forest Resources Council,
- Metropolitan Council,
- Metropolitan Transit,
- Arrowhead Redevelopment Commission,
- Saint Louis/Itasca Regional Rail Authority
- Red Lake River Joint Powers Board
- USDA Forest Service, Minnesota Forest Resources Partnership,
- Minnesota Association of County Land Commissioners,
- Legislative Citizens Commission of Minnesota Resources, and
- Numerous local governments

CCL has connections to members of the private community, these include:
- Trail groups throughout the state,
- Citizen-led groups,
- Local chambers of commerce, and
- Private consulting firms.
University of Minnesota

CCL has connections to other University units outside and within its two core colleges. CCL’s relationships with other University units include the:

- Department of Landscape Architecture,
- Department of Forest Resources,
- Tourism Center,
- Remote Sensing and Geospatial Analysis Lab,
- Center for Transportation Studies,
- Institute for Advanced Studies,
- Regional Sustainable Development Partnerships,
- Center for Urban and Regional Affairs,
- State and Local Policy Program,
- Center for Democracy and Citizenship,
- Department of Art,
- Center for Environment and Natural Resource Policy,
- Extension Service,
- Office of Public Engagement, and
- Council on Public Engagement

CCL members have worked with faculty members both within and outside the College; these include:

- Landscape Architecture: Dean Abbott, Vince deBritto, Rebecca Krinke, Kristine Miller, Laura Musacchio, Lance Neckar, David Pitt, & Robert Sykes
- Design, Housing & Apparel: Ann Ziebarth
- Department of Forest Resources: Marvin Bauer, Melvin Baughman, Stephen Carlson, Mae Davenport, Joseph Knight, & Ingrid Schneider

Department of Art: Christine Baeumler, David Feinberg, & Thomas Rose

CCL’s interdisciplinary project academic partners and colleagues include:

- Marvin Bauer, Professor, Dept. of Forest Resources
- Christine Baeumler, Associate Professor, Department of Art
- Mae Davenport, Assist. Professor, Dept of Forest Resources
- David Fineberg, Associate Professor, Department of Art
- Linda Kingery, Executive Director, Northwest Regional Sustainable Development Partnership:
- Lee Munnich, Director, State and Public Policy Program, Humphrey Institute of Public Affairs
- Tom Rose, Professor, Department of Art
- Dorothy Rosemeier, Executive Director, West Central Regional Sustainable
- Ingrid Schneider, Professor, Department of Forest Resources, Director, Tourism Center
- Nan Skelton, Co-Director, Center for Democracy and Citizenship, Humphrey Institute of Public Affairs,
- Okchukwu Ukaga, Executive Director, Northeast Regional Sustainable Development Partnership:
**Major Accomplishments**

Developed an appropriate and successful plan of operation:
- Continued to meet its goals of supporting the mission of the Center, the College, and the University,
- Continued to use effective strategies to implement work that meets those goals,
- Strengthened interdisciplinary partnerships with the Department of Forest Resources and the Department of Art,
- Strengthened the Center’s identity,
- Successfully demonstrated the importance and power of interdisciplinary cross-scale work,
- Strengthened public engagement skills and knowledge, and
- Created, funded, and worked on many successful projects. (See appendix for projects)

**Recognized as an asset by communities, State of Minnesota, and others**
Most of CCL’s work is requested. CCL is asked to participate in many projects by a variety of people and groups including by many of whom we have previously worked, those that have used our work, and those that have seen or heard of our work. Examples include:

- Many requests for projects on the North Shore and the Minnesota River Valley.
- Request from the Federal Highway Administration to participate in a transit study of the Interstate 394 Corridor led by the Minnesota Department of Transportation.
- State of Minnesota requested that CCL play a major role in helping them set the priorities for the allocation of 11 billion dollars plus for parks and trails during the next 25 years in Minnesota.

**Professional firms value CCL employment**
Private firms recognize the value of the experience that recent graduates receive by working at CCL; they actively recruit them and pay them well.

**Provided valued employment experiences**
Research fellows value their time at CCL: Because CCL consciously works with each research fellow to identify and give them experiences that help them develop professionally and reach their ultimate career goals:

- Research fellows see working at CCL as a valuable experience that positions them for their next job in their professions.
- Research fellows have been able to get jobs with higher levels of responsibility and compensation because of the CCL work.

Senior Research Fellows value their affiliation with CCL: Having older, retired master designers/professors as project team members has been very successful; they have:

- Enriched the work experience for young fellows,
- Enhanced the quality of the Center’s work, and
- Have personally benefited from an opportunity to contribute to the College, the University, and the community.

**Created environmentally informed, community-connected, high-quality, relevant projects**
The projects have focused on the environmental issues of large linear regional infrastructure (state trails, transit corridors, scenic byways, and highways), their local connections, and the landscapes and communities associated with them.

CCL has worked in rural, suburban, and urban landscapes with officials and citizens.

The projects have been used by citizens, advocacy groups, local units of government, and state agencies to plan, promote, and fund environmentally informed projects all over Minnesota.

Have expanded project content to contribute to active, healthy living efforts by participating in a study led by Professor Ingrid Schneider and her PhD student that documented and analyzed park and trail use by Latino and African Americans in urban and urban distant parks and trails that was published* and created a healthy living design/plan for the City of Marshall based on the healthy living work by the Metropolitan Design Center.


Note: For example projects see Appendix III.
CCL received many honors in the last five years, these include:

**The North Shore Scenic Drive: All American Road**
The Federal Highway Administration Environmental Excellence Award 2009
Partnership Award, Center for Transportation Studies, University of Minnesota 2007
Honor Award, Minnesota Chapter American Society of Landscape Architects 2005

**Linking Communities Along the Gitchi Gami Trail**
Honor Award, Minnesota Chapter, American Society of Landscape Architects 2005

**Red Lake River Enhancement Project**
Honor Award, Minnesota Chapter, American Society of Landscape Architects 2006

**Minnesota River Trail Communities:**
**Designs for Trails & Waterfronts in Redwood Falls, New Ulm, and Saint Peter**
Designs for Trails & Waterfronts in Redwood Falls, New Ulm, and Saint Peter
Award of Excellence, Minnesota Chapter, American Society of Landscape Architects 2008.

*Note: A disc of this project report is included in the sleeve on the back flap of this report.*
Great understanding of the various communities along the river: their history, uniqueness, etc.

Nice graphics!

Good connection of cultural history to design.

What an outstanding submittal, good, clear communication of ideas, context and design thinking.

Very thorough report and able to be referenced for many years to come.

Comprehensive in scope; complete in detail.

Good identity markers, signage.

Very thorough well thought out and outstanding product!

Mastery of graphic presentation

Nice plan studies of St. Peter landscape typologies.

Cultural heritage traces in designs very nice.
North Shore Scenic Drive: All American Road

Environmental Excellence Award, The Federal Highway Administration 2009, a prestigious national award.

Excerpts from MNDOT’s application for the Environmental award granted to the interdisciplinary team led by MNDOT Team that included CCL:

“Of particular importance – in 2005 (with collaboration from the Council, Arrowhead Regional Development Commission, MN Dept. of Transportation, MN Dept. of Natural Resources and Center for Transportation Studies), the University of MN Center for Changing Landscapes completed a comprehensive North Shore All-American Road corridor master plan and interpretive plan to help stakeholders and communities to make better informed decisions about future activities, growth and development to ensure that future actions will be ecologically and culturally sustainable while enhancing the intrinsic resources and scenic character and experiences of the North Shore.

This master plan provides and graphically illustrates:

1) A National Scenic Byway Program overview, guiding principles and MN visitor profiles,

2) Analysis of intrinsic natural and cultural resources and location patterns (Geology, Topography, Hydrology, Vegetation, Rare Habitat, Ecology, Human Settlements, Land Cover, Development, Infrastructure, Land Ownership, Historic Structures, Archeological Sites, Recreational Sites, Scenic Views & Vistas, Existing Highway Cross-Sections),

3) A corridor planning framework:

   A. Articulation of 5 distinct corridor planning districts based upon unique combinations of intrinsic resource qualities and

   B. Identification, analysis, and prioritization of corridor nodes, stopping points and interpretive potential to strategically increase interpretive and recreational opportunities throughout the North Shore Byway,

4) Design and management concept, strategies and guidelines:

   A. A “Superior 61 Trail” concept as the organizing theme for further developing the North Shore All-American Road experience,

   B. A palette of local and indigenous materials and styles to express and reinforce natural, cultural and historic influences specific to overall corridor and planning district or site specific context,

   C. A unique style and family of rustic timber signage structures that can unify and incorporate all sign types along the corridor including integration with information kiosks stone cairn markers at strategic locations,

   D. Design guidelines for view sheds, building codes, roadway alignments & cross-sections,

   E. Design guidelines for environmental sustainability and low-impact development and redevelopment opportunities that encompass the interpretive, recreational, residential, commercial, community, roadway, and trail uses along the North Shore), and

5) Additional resources, potential partnerships & funding sources and desired next steps. This collaborative master planning has already led to funding (including National Scenic Byway discretionary funding grants) and in-progress development of more than a half-dozen MnDOT cooperative wayside restoration, gateway marker, interpretive signing and trailhead projects with byway partners.”
**Current Structure**

Co-Directors: leaders, principal investigators
- Alan Ek* (5%): Professor & Head Department of Forest Resources
- Mary Vogel (74%): College of Design

Senior Research Fellows 3 (hourly): design & mentoring
- Roger Martin: Professor Emeritus, former Director, & Founder Landscape Architecture
- James Pettinari: Professor Emeritus & former Director Urban Design Program, University of Oregon, Portland
- Ralph Rapson: Professor Emeritus & former Head, School of Architecture, University of Minnesota (deceased)
- Christine Baumeler: Associate Professor of Art, University of Minnesota

Research Fellows 4 (1 hourly, 3.75 FTE) assist with office management, analysis, design support, social science analysis, design, public engagement & document production
- Carlos Fernandez: design
- Laura Detzler: data gathering, analysis, report production, office support
- Andrea Schuweiler: social science analysis
- Egle Vanagiate: analysis, design, design production
- Cynthia Zerger: design, project management

Hourly: 1 Bachelor of Science graduate (FTE)
- Alexander Smith*: GIS mapping, data compilation

Recent graduates hired from College of Design & Department of Forest Resources in the last five years:

Faculty: Co-principal investigators 25% FTE
- Ingrid Schneider*: Professor and Director Tourism Center
- Mae Davenport *: Assistant Professor

* Denotes Department of Forest Resources
### Funding for Last Five Years

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations (Blandin, McKnight, Monsanto):</td>
<td>$51,388</td>
</tr>
<tr>
<td>Development Associations/Agencies (foundation grants)</td>
<td>107,300</td>
</tr>
<tr>
<td>Local units of Governments (foundation grants):</td>
<td>167,467</td>
</tr>
<tr>
<td>Legislative Appropriations</td>
<td></td>
</tr>
<tr>
<td>Legislative Commission on Minnesota Resources &amp;</td>
<td>569,000</td>
</tr>
<tr>
<td>Legislative Citizens Commission on Minnesota Resources</td>
<td></td>
</tr>
<tr>
<td>Direct legislative appropriation</td>
<td>400,000</td>
</tr>
<tr>
<td>State Agencies (federal grant)</td>
<td>170,000</td>
</tr>
<tr>
<td>U of MN Regional Sustainable Development Partnerships</td>
<td>125,000</td>
</tr>
<tr>
<td>Federal Agency</td>
<td>2,500</td>
</tr>
<tr>
<td>State/Tuition O &amp; M</td>
<td>13,356</td>
</tr>
<tr>
<td>Sales</td>
<td>210</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,606,221</strong></td>
</tr>
</tbody>
</table>

**Percentage Contributions:**
- Foundations: 3.2%
- Development Associations/Agencies: 6.7%
- UMN Regional Sustainable Development Partnerships: 7.8%
- Federal Agency: 0.2%
- State/Tuition O & M: 0.8%
- Local Units of Governments: 10.0%
- Legislative Appropriations: 35.4%
- Direct Legislative Appropriation: 25.0%
- State Agencies (federal grant): 10.6%
- **Foundation Direct / Indirect: 19%**
- **Minnesota Legislature Funding: 60.4%**
Strengths & Weaknesses

Strengths
Mission & Goals
- Relevant mission
- Appropriate goals to carry out the mission
- Effective strategies to meet the goals

Structure
- Strong working relationship among the co-directors and their support staff.
- Flexibility permits responses to opportunities and the ability to staff projects appropriately
- Quality academic and community partners

High Quality Effective Work
- Ability to create, fund, manage, and execute projects
- Honored work

Identity & Reputation
- A strong community reputation
- Most work requested
- Community partners ask for additional projects

Funding
- Ability to fund projects
- Diverse sources of funding: non-University and University sources
Weaknesses
Lack of Base Funding:
- Creates peaks and valleys of funding
- Limits CCL’s long-term stability
- Creates a dependence on co-directors’ fund raising efforts
- Limits CCL’s ability to contribute to the life of the College
- Impedes realistic long range planning

Dependence on the Co-Directors:
- CCL’s existence is dependent on the energy, connections, and support of the co-directors

Limited Faculty & Student Project Involvement:
Project schedules
- Faculty time constraints
- The high cost of student appointments
- Academic demands on students’ time
Opportunities & Challenges

Opportunities

Content:
Trends in content provide opportunities for new CCL project work:

- Sustainability: CCL’s cross-scale work is based on promoting sustainability.
- Public Engagement: As higher education is challenged to be more relevant, public engaged work is being promoted within the academy.
- Public Art: Public art’s strong new emphasis on environmental projects is compatible with CCL’s emphasis on making the natural and cultural environment more visible and understandable.
- Economic & Development Patterns & Trends: As the United States continues its long trend of urbanization, the need for programs outside the traditional Extension canon is increasing. These include efforts to address the disparity between economic status of growing and shrinking areas of the state, the growing importance of retirement and second homes in Greater Minnesota, and the growing importance of natural resource-based tourism as an economic engine in Minnesota. The Great Recession’s cooling of rapid development provides opportunities for communities to position themselves to address environmental issues before development is proposed.
- Emphasis on Health: As obesity increases, the emphasis on active, healthy living is growing as more foundations and governmental units seek to identify and develop strategies to improve health that include retrofitting existing communities for more active life styles like the CCL project in Marshall.
- Transit Expansion: Federal and state interest in and support of expanding transit provides opportunities for additional transit-related work.

Collaborations:

- Government Partnerships: As State and local governments experience more and more retrenchments and staffing cuts, the need to spend public money strategically has grown. CCL’s strong relationships with governmental units position it to seek partnerships with state departments that will inform strategic decision-making.
- Legacy Projects: Environmental, cultural, and recreational Legacy Funds provide opportunities for CCL projects.
- Foundation Partnering: Many of Minnesota’s foundations are involved in issues that CCL addresses. An opportunity to partner with a foundation on a program has been identified but not yet pursued.
- Collaborative Classes: CCL is positioned to partner with the Department of Forestry and the Department of Art on courses related to trails and the expression of environmental character. It also has a potential for collaboration with partners within the College.
- Project Collaboration: There is an opportunity for more involvement with College faculty.
Challenges

Institutional Issues

Research & Outreach Model: The University’s research policies and revenue distribution models are based on National Science Foundation/National Institute of Health models that disadvantage CCL’s research as a revenue source.

Public Engagement: Although the University promotes publicly engaged work, the infrastructure to support it and reward it is very thin, if not nonexistent.

Interdisciplinary Work: Although promoted in policy by the University, it is not well supported by University policies.

Private University Model: In response to diminished state funding for higher education, static federal land grant funding, and the desire to become one of the top three research universities in the world, the University is moving towards a University of Michigan model of high tuition and research supported by industry and away from its traditional land grant model. As a result, fewer resources are available for support of its land grant mission.

State Projects: Previous University efforts to secure an agreement with the State of Minnesota to charge 10% indirect cost recovery on state contracts is not currently being pursued. The lack of an agreement disadvantages CCL’s ability to support the services that CDes provides the Center.

Faculty Participation: University policies, workloads, and culture make faculty participation as principal investigators of CCL projects challenging because their available time is very limited, and often faculty schedules are not compatible with project schedules.

Foundation Funding: The University’s policies in controlling access to foundations limits CCL’s ability to secure large foundation grants.

High Tuition: The large increases in tuition have made hiring graduate students during the regular school year too expensive because the fringe costs are too high for project budgets. The previous role that CCL work in assisting the College’s recruitment efforts has also been impacted. It has been diminished because CCL can no longer offer research assistantships as it did previously.

Physical Location: Although CCL’s current space meets its needs, its separation from CDes departments and some other research and outreach activities is a barrier to collegiality and partnering.

Web Site: CDes’s web site issues have postponed or diminished some of CCL’s publicly engaged activities because the Center’s work depends on easy access to CCL’s web site.

Staffing Requirements: Because CCL has a small staff, hiring the “right-fit” staff for the right amount of time is very important. Sometimes the University’s staffing requirements can be a barrier when a hire has not been a “right fit” or if the length of the hire does not fit the work to be done. The human resources staff has been very helpful in helping CCL minimize this challenge.

Long Term Sustainability and Institutional Position: Because CCL’s success and existence is currently dependent on the energy and support of the co-directors in the current funding-challenged University, financially viable future plans need pursuit.
The Future

**Vision**
The Center for Changing Landscapes continues to lead and participate in interdisciplinary cross-scale design/planning that is highly relevant, valued, visible, and useful.

CCL is recognized as leader in using the design/planning of linear infrastructure as vehicles to promote sustainable environmental, economic, and cultural landscapes.

CCL is connected to and contributes to the programs, missions, needs, and aspirations of its home colleges, the University, and the larger community.

Modest, stable support enables CCL to pursue larger opportunities by funding selected staff activities.

**Goals, Directions, and Priorities**

**Short Term Goals**

- Continuing to pursue CCL’s established goals and directions with flexibility in order to respond to new opportunities as they arise,

- Increasing efforts to strengthen teaching and learning relationships within the CDes and Department of Forest Resources. These could include greater participation in classes, studios, and graduate papers,

- Increasing efforts to strengthen interdisciplinary research and outreach efforts with collegiate and University colleagues,

- Pursuing and securing recurring project funding that supports CCL’s mission, and

- Seeking long-term base funding to support CCL’s infrastructure, creation of projects, additional funding efforts, and projects or parts of projects.

**Next Five Years: Potential Directions**

- Participating in EcoTourism Curriculum: Pursue addressing the tourism industry’s interest in ecotourism by working with the Tourism Center and FR to co-teach or co-create eco tourism classes.

- Public Art Initiative: Pursue interest in public art that expresses the environment to co-create public art classes that include landscape architecture, graphic design, and art students, and

- Pursue National Reputation & Projects in Cross-Scale Design/ Planning of Linear Infrastructure Systems & Land Uses: Continue to pursue funding for national scenic byway work through Congress and the National Scenic Byway Resource Center and seek opportunities connected to statewide natural resource based park and trail planning.

**Priority Directions**

- Existing Trail Design Class: A forestry professor who teaches the current class in trail design is retiring this year, so having a discussion with FR about the possibility of redesigning the class for CCL participation is timely.

- State Agency/CCL Relationships: Build and consummate CCL-government agency relationships for specific projects that meet state needs. Because CCL is positioned to build on existing relationships and current state conditions opportunities to strengthen and formalize relationships with Minnesota state agencies may exist because:

  - When first established, CCL sought direct state funding, a goal that was not realized at the time due to changing circumstances. This strategy was built on the design/planning work that the co-director from College of Architecture and Landscape Architecture had led and the Department of Forest Resources’ hundred-year plus strong relationship with state agencies.
Since its inception, CCL has had and has continued to build relationships with state agencies.

These assets could help position CCL to revisit seeking more formal, ongoing relationships with some of the State’s departments by building on the many CCL projects that have Department of Natural Resources, Department of Transportation, and Explore Minnesota Tourism partners.

Issues of environmental, economic, and cultural sustainability are confronting the State,

Some agencies are seeking to change their culture to integrate sustainability consciousness and practices into their work.

The State is facing large financial challenges that will result in large staff layoffs and reduced capacity to address state needs.

The intersection of issues confronting the State and unfortunate reduction in capacity may offer opportunities to pursue partnerships with state agencies to work on projects that will inform their work and help transform agency culture.

Pursuing a Programmatic Relationship with the Blandin Foundation:
Because an important part of Blandin’s mission is to assist economic development in rural Minnesota communities, the foundation has a leadership training program for rural citizens, and the Foundation has funded a number of CCL projects, CCL will pursue creating a partnership with the Foundation that would expand their current leadership program to include cross-scale design projects as vehicles for community leadership development.

Future Structure & Staffing
Planning for changes in personnel and staffing has taken place:

Leadership, Co-directors:
It is anticipated that the current co-directors will step down within the next five years.

Plans to replace CFANS co-director are not in place at this time, but a future leader from CDes has been identified that will work .50 FTE

The current CDes co-director will become a senior research fellow with these roles:
- Creation of and framing projects
- Assisting in funding efforts
- Critiquing design/plan work
- Mentoring and supporting the new co-director

Assistant Director
A research fellow will be promoted to assume more administrative duties and will become an assistant director.

A person has been identified for this position.

Senior Research Fellows
The opportunity to engage the current retired professors will continue.

A professor that will be retiring soon has agree to become a senior fellow.

Research Fellows
Recent graduates will continue to be hired on an as-needed basis.

Resources Needs
Financial
A base funding $50,000 - $100,000 annually is desired to insure sustainability, it would provide for:
- Some salary support
- CDes support
- Some equipment needs

Facilities
Current facilities meet CCL’s space needs.

CCL is physically disconnected from CDes.
Appendix I

From the original Planning Grant Application to Establish the Center for Changing Landscapes 2002

“Sustainability, Natural Resources, and Human Activity on the Land: Planning for a Civically-Engaged Interdisciplinary Design Center for Transitioning Landscapes”

Abstract: This proposal seeks planning funds for an interdisciplinary applied research center that aggregates and builds on existing University strengths to address issues of landscape transition within the context of sustainability. Urbanizing, forested, wetland, lake, riparian, mining, and agricultural landscapes and small communities in Greater Minnesota will be the focus of the inquiry. Housed jointly in the College of Architecture and Landscape Architecture and the College of Natural Resources, this center will be a catalyst for linking existing expertise in natural resources, tourism, landscape architecture, and urban design to the interdisciplinary research to address issues generated by changing landscapes. Research methods will include traditional scientific inquiry, geographic information system and neural network technology, and landscape and urban design. Center work will be done across scales at the regional, sub-regional, district, neighborhood, and site levels. It will be developed in conjunction with advice from local communities, state and regional agencies, and foundations. Emphasis will be on producing research results that can inform local community, regional, and state decision-making in land uses, natural resource-based development, community form, infrastructure investment, development patterns, natural resource protection, amenity creation, etc. that increase the livability and the economic viability of areas of the State.

Goal: To plan an interdisciplinary applied research center housed in the College of Landscape Architecture and College of Natural Resources that works with foundations, state agencies, and local communities to address issues generated by transitioning Minnesota landscapes.

Background and Context

Changing Landscapes in Minnesota: Demographic and economic changes and anticipated further development dynamics suggest that Minnesota’s changing landscapes will continue to undergo unprecedented alterations in the next several decades. The current “suburbanization” of the many areas of the state with many environmental amenities such as lakes, rivers, and forests and in areas adjacent to the Metropolitan Areas and regional population centers is expected to continue while other parts of the state will see fewer residents as current residents age and young people leave their communities.

Changes in regional and global markets market forces and the development of new technologies are also radically reshaping Minnesota’s natural resource-based industries including forest products, mining, tourism, and agriculture. Often changes in these sectors dramatically impact others. Both the changes in settlement patterns and the resource-based industries impact the availability and quality of natural and environmental resources and the vitality of the communities that simultaneously support and depend upon them.

The Future of High-Quality Landscape Environments: Mark Drabenstatt, Director, Center for the Study of Rural America, Federal Reserve Bank, Kansas City, has documented that areas of economic growth and prosperity in midwestern and the mountain states are areas of high environmental quality and amenity. In our contemporary mobile world people are choosing to live and work in areas with access to lakes, mountains, rivers, and forests. Greater Minnesota with its high-quality environments has grown while its less environmentally blessed neighbors, Iowa, the Dakotas and Nebraska, have not. He predicts that this trend will continue. In Minnesota more and more people will seek living and working by and in Minnesota’s lakes and forests.

Cornelia Butler Flora, a rural sociologist and Director North Central Regional Center for Rural Development, Iowa State University defines capital as resources invested to create new resources. In her community model she has identified the health of a community’s environmental capital (infrastructure systems, buildings, built landscapes, air, water, soil, bio-diversity, and natural landscapes) along with the health of its human capital, social capital, and financial capital as key indicators of a community’s ability to respond to contemporary changes with positive self-development. In this model these capitals are interdependent. All four contribute to a vital community composed of intersecting private, civic, and public sectors. She warns that privileging any form of capital over another can deplete all forms of capital in the long run. (Minnesota Rural Summit August 12, 1999, Duluth) ....

Current Support for Response to Landscape Change in Greater Minnesota: Currently the physical capital dimension is being short-changed in Minnesota. There is no sustained developed capacity to address the physical capital issues that communities and regions are facing. Although the College of Architecture and Landscape and the College of Natural Resources have developed an impressive body of knowledge and have a number of faculty and research fellows engaged in projects that address physical capital issues, there is no interdisciplinary focused effort within the University. University Extension has funded some of the single-discipline work on a project-by-project basis; however, there is no substantial and ongoing capacity to develop, sustain, and transfer the work to Minnesota communities and regions in a systematic effort.

Outside the University, Minnesota-based foundations and public sector agencies have a number of programs that seek to assist development efforts in Greater Minnesota. These efforts focus on human, social, and financial capital. Issues of physical capital have not been addressed in a substantial, integrated, and compelling way that assists and empowers community, regional or statewide decision-making. No physical analysis and design components are in community development programs funded by the Blandin Foundation, the McKnight Initiative Funds, and the Norwest Area Foundation. The Minnesota Department of Transportation has a context-sensitive design program with no substantial urban design. Minnesota Planning Agency has a Minnesota by Design program with no design component. Although the Department of Natural Resources does address physical analysis and some trail and park work, it limits its agendas to natural resource preservation and management. The sustainability efforts such as they are, are in Planning and the DNR that rely on the University for content.
Center Work: Research done at the Center will focus on transitional landscapes and landscapes in transition within the context of sustainability. Work will be done at the regional, sub-regional, district, neighborhood, and site scales. Work will be done using geographic information systems, neural networking, and design research methods.”
Title: Using Design as Civic Actor: The Red Lake River Enhancement Project, A Place-based Case Study in Building Regional Civic Capacity through Partnerships

Session Organizers

Mary Vogel, Co-Director
Center for Changing Landscapes
College of Architecture and Landscape Architecture; College of Natural Resources
University of Minnesota
151 Rapson Hall
Minneapolis, MN 55455
vogel001@umn.edu

Linda Kingery, Executive Director
Northwest Regional Sustainable Development Partnerships
262 Owen Hall
University of Minnesota Crookston
Crookston, MN 56716
Kinge002@umn.edu

Session Goals

Present design work as an effective catalyst for regional capacity building through partnerships

Project Summary

The Red Lake River Enhancement Project took an asset-based, community-engaged design approach to build civic capacity and to promote the building of recreational amenities that support the vitality of the Northwest Region of Minnesota. Addressing issues and creating designs at the regional/community/site scales, the project uses the design and planning of a large linear recreational system, the Red Lake River Canoe Trail as its vehicle to engage citizens, local officials, advocacy groups, and state agencies. Design and the civically engaged design process are the catalysts that built the local support, the regional civic capacity, and the means to secure the funds to build the work.

Session Format

Presentation followed by a discussion

Rationale

A national issue is addressed: the future of Rural America. Rural areas all over the United States are facing challenging futures. Large areas of the country are becoming depopulated as people and economic activities migrate to urban and regional centers leaving formerly thriving small towns and their surrounding areas with declining populations and declining prospects for the future. The future is not all bleak; however, research by the Federal Reserve Bank has documented this trend, but it has also documented that the areas of growth and stabilization in Rural America are areas of high natural amenity. In this highly mobile era Americans are choosing to work and to live in areas of natural beauty and recreational opportunities provided by forests, lakes, rivers, mountains, etc. The research has also identified another factor that supports vibrant rural areas: a strong commitment by communities, organizations, and individuals to working cooperatively together at the regional level. The Red Lake River Enhancement Project addressed both of these factors. It created ecologically sensitive plans and designs for enhancing the Red Lake River Canoe Trail, a major regional recreational amenity and it developed regional leadership and the building of a regional network.

The Future of Rural America: A National Issue: Rural areas all over the United States are facing challenging futures. Large areas of the country are becoming depopulated as more and more people and economic activities migrate to urban and regional centers leaving formerly thriving small towns and their surrounding areas with declining populations and declining prospects for the future. The Great Plains is one part of the United States where this trend is most apparent.

The future is not all bleak; however, research by the Federal Reserve Bank has documented this trend, but it has also documented that the areas of growth and stabilization in Rural America are areas of high natural amenity. In this highly mobile era Americans are choosing to work and to live in areas of natural beauty and recreational opportunities provided by forests, lakes, rivers, mountains, etc. The research has also identified another factor that supports vibrant rural areas:
a strong commitment by communities, organizations, and individuals to working cooperatively together at the regional level. The Red Lake River Enhancement Project addressed both of these factors. It created ecologically sensitive plans and designs for enhancing the Red Lake River Canoe Trail, a major regional recreational amenity. The civically engaged design process assisted in developing regional leadership and the building of a regional network.

Red Lake River Corridor Overview: The Red Lake River is the major river that flows through the Northwest Region of Minnesota. Three of the major biomes of North America are in its watershed: the coniferous forest in its eastern reaches, the deciduous forest in its middle reaches, and prairie in its western reach. The Red Lake River is 181 miles long from its outlet in Lower Red Lake to its confluence with the Red River of the North that forms the Minnesota/North Dakota border. Its watershed is part of the Glacial Lake Agassiz Basin. The watershed’s many drainage ditches make the river highly susceptible to flooding. It was designated a state canoe trail by the Department of Natural Resources in 1986, but the trail has been underutilized and under funded. Three counties, an Indian reservation, and six communities are located along the Red Lake River. All the communities are small; they range in size from Crookston at 7,946 to Saint Hilaire at 272. Although most of Minnesota is economically vital and growing, this region is like much of the Great Plains. Its population and its economic base are declining.

Design Strategy: A recreational amenity approach to corridor development, community enhancement, and natural resources management was used to celebrate the river corridor’s unique identity and engage citizens and officials in the design process.

Project Products: The Red Lake River Corridor Enhancement Project produced culturally and environmentally sensitive plans and designs to create a major regional recreational amenity for Northwestern Minnesota. The protection and the restoration of the Red Lake River’s natural corridor is promoted while providing recreational and economic opportunities for the region’s citizens. Regional/community/site scales connect the six Red Lake River communities to the river and to each other in more powerful, meaningful ways. Signature interpretive elements, a logo, memorable access points, picnicking spots, rest areas, and camping sites along the river’s 181 miles are all part of the design work.

The design work:
Created consensus around a master plan for the canoe trail that leverages current assets by identifying the opportunities for enhancements and the needs for developing additional assets,
Identified areas of growth and decline using land transformation computer modeling based on satellite imaging,
Created a GIS regional analysis tool for future decision making by citizens, local natural resource teachers, state agencies, and local officials,
Demonstrated sustainable development strategies,
Created designs for local trail systems in the river communities that connect to the canoe trail,
Produced site designs in six community parks, and
Developed a signature Red Lake River package that included a logo, signage, river gauge sculpture, fencing, and lighting.

The civic building work:
Built local support in six communities and three counties for individual projects and for the entire corridor,
Created a connection with the Minnesota Corps for participation in the building of some of the corridor sites,
Linked the communities and the corridor with interns from University of Minnesota Crookston’s natural resource program,
Created tools and a plan for securing funding for the designs, and
Built an effective, energized, cooperative regional network of citizens, local public officials, business owners, civic organizations, state agency staff, state legislators, and recreational groups.

Partners: The Red Lake River Joint Powers Board, local officials, state officials, educators, and citizens were engaged in the community-driven design process. Work emphasized the creation of a regional partnership among the communities to facilitate pursuing state funding to build the trail, create efforts to improve environmentally degraded sites on the river, promote understanding of the watershed’s ecology, and build regional leadership capacity. The design team was responsible for the management of the project that included working in partnership with local citizens and officials in fund raising, conducting community meetings, gathering and analyzing information, selecting sites, designing at region/community/sites scales, and producing the 180 page Red Lake River Report. An all-corridor meeting was held in October 2005 to present the completed work and kick off the request for funding the project in the state bonding bill. State legislators are supporting the request and it is part of the bill that is to be heard and funded in 2006.

Sample Discussion Questions:
How could this kind of work be enriched and expanded by including the arts and humanities disciplines in the effort?
How could students and faculty from these disciplines be involved?
What are some of the barriers to this work, and what are the strategies to overcome them?
Appendix III: Current Projects

County Trail System Design: Brown, Lyon, Redwood, & Renville Counties

CCL’s state trail work has generated interest at the local level to create county trail systems that link to state trails and celebrate regional environmental and cultural assets. The state has recognized the value of such trails by establishing a regional grant program. However, most rural counties lack the planning and design resources themselves or the funds to engage outside planning/design assistance that would move a county trail system forward. This project for four county trail systems is a response to the many requests that CCL has received for planning/design assistance at the county level. The design/planning work includes county, community, district, and site designs/plans. A project team is working with counties, communities, trail groups, and citizens in a community-engaged process to ensure local and user input. The plans/designs goals are to:

1. Create county trail plans/designs that support and promote recreation and environmental awareness and stewardship by addressing issues of environmental type, quality, and preservation along new trail corridors and in the larger trail landscapes to preserve, enhance, and interpret natural and cultural landscape systems and features;

2. Leverage the effectiveness of existing and planned local, regional, and state recreational, natural, and cultural assets such as parks, trails, historic sites, and conservation lands;

3. Create community consensus around trail opportunities; and

4. Empower counties and citizens to effectively seek regional trail funding by creating planning/design tools that can be used for grant applications.
**Lyon trail**

Connecting Amenities

- Municipalities
- County Owned Land
- Federally Owned Land
- DNR Owned Land
- Grassland/Shrubland
- Forested Land
- City Trails
- Alternate Proposed County Trails Through Private Land
- Proposed County Trails Adjacent to Paved Roads
- Proposed County Trails Adjacent to Unpaved Roads
- Alternate Proposed County Trails Adjacent to Paved Roads
- Possible Trail Corridors
- Possible Connections to Other Counties

Municipalities:
- Marshall
- Garvin
- Florence
- Ghent
- Cottonwood
- Tracy
- Lynd
- Russell
- Minneota
- Taunton
- Green Valley
- 59
- 59
- 23
- 23
- 19
- 68
- 19
- 68
- 14
- 91
Appendix III: Current Projects

The Red Wing River Way
This project explores strategies to incorporate public art and planning/design into trail work to tell a complex environmental story and support the existing robust publicly engaged civic culture. In order for the Red Wing River Trail to compellingly tell that story, connect with many of the city’s and the region’s “parts” and systems, engage Red Wing’s civic culture, and create materials useful for fund raising; it is necessary to identify and design/plan the trail’s many cultural and natural resources as features at the regional, district, and site scales and hold a number of meetings with the public, the steering committee, and the city staff. Community design, landscape architecture, and public art are all being used to design environments along the trail that interpret nine cultural and natural resource aspects of Red Wing and its region.

The work is being done under a separate contract between the City of Red Wing and the Center for Changing Landscapes and is coordinated with the work done by SEH, a consulting engineering firm that is also working on the Red Wing River Trail under a separate contract with the City. A professor of art whose work focuses on public art that interprets the environment is part of the CCL design team. CCL is generating plans/designs at the site, district & regional scales that will inform SEH’s production of biddable, buildable construction drawings for the trail.
Superior National Forest Scenic Byway

CCL is working on the Superior National Forest Scenic Byway with the Scenic Byway Task Force, Aurora, Hoyt Lakes, Silver Bay, and the Arrowhead Region Development Commission in a community-engaged design process to identify ways to improve tourism assets while enhancing each community’s livability.

Although the Byway offers an opportunity to interpret historic sites, the mining industry, and recreational opportunities found in the corridor as identified in the National Forest Scenic Byway Management Plan, because the Byway passes through a national forest and two state forests, it also provides an opportunity to add to this approach by interpreting the northern forest in ways that go way beyond the usual “kiosk, sign, and plaque approach” to tell the story of the northern forest as a dynamic, living landscape. It offers an opportunity to answer the question, “What is a northern forest?”

Topics we are working on to interpret include a number of forest features.

- Tree Species/forest and landscape composition, Soils, hydrology, geology, topology & microclimates, habitat types
- Flora and Fauna: forbs, shrubs, birds, small mammals, large mammals etc.
- History: ancient pine forests, forest from Last Glacier to present, etc.
- Forest Research sites
- Forest Dynamics: succession, vulnerabilities, etc.
- Natural Disturbances: historic fires, blow downs, diseases, wildlife impacts
- Human Disturbances: global climate change, forest management, logging/harvesting, reforestation, farming, abandoned
- Farms, land parcelization & forest fragmentation, homes & cabins, recreational impacts (hunting, water access, snowmobile use, all terrain vehicle use, hiking,
Data Gathering and Initial Analysis began March 2010
Appendix III: Current Projects

West Side Circulator as Neighborhood Infrastructure

Working in collaboration with neighborhood residents, youth/children service providers, neighborhood artists, and the Circulator’s coordinator, and using planning, design, art, and public engagement, CCL is creating designs for the Circulator bus and the major and minor bus stops that will make the bus, bus stops, and the bus route important parts of the neighborhood infrastructure.

Context: The West Side Circulator’s goals include:

To increase children’s opportunities for learning/development in neighborhood-based activities after school by providing Circulator buses on neighborhood bus routes for greater access to the existing neighborhood-based youth programs and resources,

To strengthen the West Side Neighborhood of Saint Paul as a place for children’s learning and development, and

To foster cooperation and coordination among public and private youth service providers and neighborhood residents.

Long Term Design Project Goals:

The project’s programmatic goals are to use public art, landscape architecture, and community design to create memorable designs for the bus stops and the bus itself in order to:

Increase the Circulator’s use by neighborhood youth and children after school and during the summer by,

Make the neighborhood network of child/youth programs visible through the presence of the bus and its stops, and

Strengthen the West Side as a vital neighborhood by expressing its culture and aspirations.

The design work supports the programmatic goals by:

Creating designs for active play environments at each of the designated major bus stops that reflect the Circulator and child/youth program at the stop,

Create a design strategy that identifies the minor bus stops,

Create a neighborhood signature bus design that expresses the neighborhood and its learning network, and

Building support among the community that will attract funding to build the designs.

CCL’s design work on the Humboldt School Campus site reflects the high school’s new emphasis on environmental studies and college preparation.

The Circulator was a class project in a studio art class. Several landscape architecture students and CCL staff participated in the class.
Appendix III: Current Projects

Minnesota’s Network of Parks and Trails: Inventory and Framework

The Minnesota State Legislature asked CCL for assistance in creating a context for planning and funding decisions for natural resource-based parks and trails in the State for the next 25 years. This includes decisions about Legacy funding for parks and trails and all the other state and federal funds: bonding, regional trail funds, Legislative Citizens Commission on Minnesota Resources funds, funding through the state budget process, local trail grants, etc. The projected amount of funding is in excess of 11 billion dollars. CCL is part of an interdisciplinary collaboration that includes the Department of Natural Resources, the Citizens’ League, Explore Minnesota Tourism, and the Metropolitan Council.

CCL is compiling an inventory of all the natural resource-based parks and trails in the state. Using geographic information system technology, parks and trails are being mapped that are on the ground, planned, and proposed. A database cataloging the attributes of each of these facilities is also being compiled. As a part of the inventory process, social science professors from the Tourism Center and the Department of Forest Resources are analyzing park and trail user studies and trends in recreation to identify needed facilities, underserved populations, overused facilities, etc. These physical and social science inventories are being used to identify the gaps in facilities statewide.

The inventories and the gaps are being used to create a framework that identifies the opportunities to address the gaps in ways that enhance and strengthen natural resource-based parks and trails and link the pieces together to make a more coherent network of parks and trails across the state. When complete, the inventory and framework will be posted on the website for all to use. The maps and the database will also be used by the DNR and Explore Minnesota Tourism to improve the quality of the information on their websites that promote park and trail use in Minnesota.

The Citizens’ League is running a statewide public engagement process that utilizes 16 public meetings, and social networking technology to gather public input on needs and priorities that will inform the inventory, the framework, and the plans.

The Department of Natural Resources has been directed to create a 10 year strategic plan and a 25 year long range plan for natural resource-based parks and trails of regional and state wide significance. The plans will be based on the inventory, the framework, and the information gathered from the statewide public engagement process. The Legislature will use the inventory, the framework, and the plans to inform its natural resource-based park and trail funding decisions.

Minnesota’s Network of Parks & Trails: Inventory & Framework

> Products Inform:
  > Local & State: planning & funding of parks and trails: $11 billion of investment
  > Minnesota DNR website & recreation maps
  > Explore Minnesota Tourism website
  > Public recreation system users

> Process & Partners
  > Inventory
  > Framework
  > Partner efforts
  > Network of parks and trails

Identifying Gaps
  > Physical
  > Users & Uses

Identifying Opportunities for Strategic Investments
  > Addressing Unmet Needs
  > Filling Gaps
  > Creating Synergies Among City - Federal Systems
Minnesota’s Network of Parks & Trails: Inventory
Goodhue County DNR Region 3 DRAFT March 8, 2010
Appendix IV: Completed Projects

A Safe & Healthy Marshall: A Pedestrian and Bikeway Plan

This project for the City of Marshall used the healthy, active living urban design research done by Anne Forseth at the Metropolitan Design Center and the design for personal safety done by Mary Vogel and Gerda Werkle to identify and analyze some of the issues to be addressed in the plan/design of the City’s pedestrian and bicycle system. This project was one of the first non-metro projects funded by the Blue Cross Blue Shield Active Living Grant Program. The Marshall YMCA and the City of Marshall also funded the work. The study’s foci were personal safety, health, and fitness, the reduction of the need for automobile use, and environmental awareness. The trail system design/plan connected important city destinations, created a framework for environmentally sensitive future development, celebrated the prairie landscape, and interpreted the City’s extensive flood control system. The work has been presented to the city council and they have adopted it as part of their comprehensive plan.
Appendix IV: Completed Projects

The Minnesota River State Trail: Designs for Trails and Waterfronts in Redwood Falls, New Ulm, & Saint Peter

Culturally and environmentally sensitive plans and designs at the regional, district, and site scales that protect and interpret the natural and cultural heritage of the Minnesota River Valley were produced by this project. The design/planning work provides recreational and development opportunities for the region’s citizens and its visitors and protects present and future resources in ecologically and culturally appropriate ways. The project expands the current perception of the Minnesota River’s identity beyond its riparian lands to include the larger Glacial River Warren Valley and the uplands contiguous to it. Besides connecting the trail to the communities along the river and celebrating the Valley’s unique landscape, the designs connect the Trail to the other state trails, local trails, distinctive natural features, and important historic cultural assets.

Plan/Design Foci: Work emphasized the Glacial River Warren as landscape creator, and the unique characteristics of its natural and cultural environment. (slide 3) The designs/plans promote an understanding of the Valley’s natural environment by interpreting the Glacial River Warren landforms, Prairie and Big Woods ecologies, and celebrating the granite, quartzite, and Kasota Stone revealed as the river flows through the Valley. (slide 4) Designs also honor the historic and current Dakota communities and holy sites, interpret historic European settlements and the current rich agricultural landscape and connect the trail to the river towns in substantive ways.

Regional Scale: The Minnesota River Valley

Creation of a Regional System: The regional scale work connected the trail to other state trails, state parks, and the Minnesota River Scenic Byway creating an integrated Minnesota River recreational system. Because the region is actively engaged in developing a robust tourist economy, access points and their associated parking were sited in communities to minimize their impact on natural systems and maximize their local economic impact.

Linear and Loop Route Alignments: Experiential segments with distinct landscape features centered on Redwood Falls, New Ulm, and Saint Peter were identified. Because the Valley’s cross-section provided many natural and cultural features, the traditional trail-as-linear-system strategy was modified in favor of a series of connected trail loops that transverses the landscape. The loops start and end at the community, and recreational hubs are linked to form a linear system. A trail user can either start at one hub and return to it, or start at one hub to follow the river moving from loop segment to loop segment. The opportunities and constraints of alternative trail alignments were identified.

An Interpretive Identity: Signature trail elements promote regional trail identity and interpret the landscape. Because the geology changes as the river flows eastward, local materials for the signs, bicycle racks, kiosks, and resting places change. Granite is used in the granite area, quartzite in the quartzite area, and Kasota Stone in the Kasota Stone area. Information, seating, and wind sheltering are provided by the horizontal kiosks whose form reflects the prairie’s horizontality. The kiosk’s axonometric community drawings promote an understanding of the landscape. Native plants interpret each of the two biomes. The Dakota’s historic and contemporary presence is the Valley is honored. The rest/contemplative areas reference the four directions, the sacred circle, and the earth. The Dakota Remembrance Circle honors the Dakota Commemorative March, Minnesota’s version of the Trail of Tears.

Community/Site Scale:

Connector, Catalyst for Community Form, and Leverager of Resources: The trail planning/design work connects the river communities of Redwood Falls, New Ulm, and Saint Peter more powerfully to the Minnesota River, to cultural sites, and to each other. Locating trails and trailheads in communities strengthens community form and provides community access to trail users and trail access to community residents. New local trails connect to state trails.

Three Different Glacial River Warren Communities: Each community is a different River Warren landscape type. Redwood Falls spans a river tributary, New Ulm is built upon the ancient river’s terraces, and Saint Peter lies in the wide glacial valley.

Redwood Falls, the Tributary Community: One trailhead design expands an existing overlook and connects to the large, spectacular Ramsey Park. In another, a vacant downtown lot becomes a trailhead/gathering place/trail hub that supports local businesses. A parking lot/farmers’ market/art fair space is included in both.

New Ulm: The Terrace Community: Streetscape designs connect the town to the river while interpreting each terrace. The trail connects the state park, local parks, the historic downtown, and local trails. One trailhead design expands an existing city park; another redesigns an existing city park and river interpretive center.

Saint Peter: The Valley Community: The trail is sited along the river and a riverside trailhead is located in the redesigned Mill Pond Park. Redesigned local streets create a local trail system and connect the city to the river. A one-way pair scheme or a median scheme address the traffic problems, strengthen the downtown business district and create a pedestrian-friendly environment on Highway 169, the city’s historic main street.

Products: A regional analysis, regional trail plans, three local trail plans, six trailhead designs, streetscape designs, a state highway segment, and an identity package were produced. Citizens, the DNR, and the communities are using the digital and printed 166-page decision–making tool/report.

Participants: Redwood Falls, New Ulm, and Saint Peter officials, citizens, business owners, regional development agencies, local and state Department of Natural Resources staff, and scenic byway members participated.
MnPASS, Transit & Community Form: Creating Access to Transit & Destinations in the I-394 Transit Corridor

Environmentally sensitive plans and designs at the regional, district, and site scales that promote more transit use and transit-friendly redevelopment were produced by this land use section of the larger MnPASS II Study. This interdisciplinary effort identifies ways to increase automobile capacity and transit use by modifying the freeway, transit service, and land uses in the congested, underutilized post-World War II I-394 Corridor west of Downtown Minneapolis. The land use designs/plans focus on creating green, more sustainable strategies for three areas. The Minnetonka work transforms the congested, car-dominated Ridgedale Shopping Area into a pedestrian-friendly, green place. Existing and new civic, residential, and commercial uses are integrated by a green strategy that includes an environmentally-driven pedestrian and bicycle system. In Golden Valley a newly rezoned industrial/commercial area is transformed into a transit-friendly mixed-use area. A new green spatial system links it to the larger regional greenway system. In Saint Louis Park the planned office complex/commercial area is linked to city neighborhoods and green amenities are created.

Regional Scale:

The Corridor: Besides being useful to the transit consultants, the extensive corridor analysis by the design team informed the design/planning work. Because of its lakes, streams and hydric soils, the clustering of some commercial at key intersections, and older suburban land use patterns that poorly use valuable land; the Ridgedale Area and Louisiana and Park Place sites were selected for stations and transit-friendly redevelopment. The corridor’s water issues and environmental assets and sensitivities drove linking hydrologic features to pedestrian and bicycle routes to the stations.

Community/Site Scale:

Louisiana Avenue & Park Place: Busy roads, ineffective transit routes, a fragmented pedestrian system, paved surfaces, underutilized lands with obsolete uses, and dispersed wetlands provide many opportunities to improve the area. Because most of the current land uses are Post-World War II and small-scale, there are many redevelopment opportunities on the valuable land along the I-394 Corridor. Because the many wetlands and storm water areas are scattered and there will be a need for more capacity as the station areas are redeveloped, there are opportunities to make a more effective, connected storm water system. A green strategy and denser development are strategies make the two station areas both a destination and a place to access transit from the new multifamily housing and the older residential neighborhoods. Signature tall buildings are sited by the crossings. Protected pedestrian and bicycle environments are provided on the bridges that provide protection to pedestrians and cyclists as they cross the freeway to reach the transit stations.

Saint Louis Park: Louisiana Avenue & Park Place Plan/Designs: In order to build on the new office towers, enhance the two station areas, and provide access from the neighborhoods, the designs/plans feature a new green heart, green arteries, a new north/south corridor, and denser development patterns and an extensive pedestrian system.

Golden Valley: Louisiana Avenue & Park Place Plan/Designs: Along the freeway many of the existing industrial and small-scale commercial uses are converted to larger scale commercial and multi-family housing. Parkland, ponds, and a greenway link to the larger regional greenway systems in order to create uses that support transit, use this valuable land more efficiently, create amenities supportive of the redevelopment, create access pathways to the Louisiana and Park Place/Xenia transit stations, and add value to the city’s tax base.

Minnetonka: Ridgedale Area Existing Conditions & Opportunities: The area is characterized by a mix of small-scale commercial, civic institutional, and multi-family residential uses and is dominated by a large regional shopping mall. Built on an environmentally-sensitive land contiguous to a lake and several wetlands, the area has a very poor pedestrian system, ineffective transit, a congested automobile circulation system, and acres of impervious surfaces. Limited developable land in the city, increased land values, larger commercial buildings, unutilized land, the siting of a new park and ride facility with a new transit station, and the area’s environmental features; all provide an opportunity for transforming the area into a vital green transit, bicycle, and pedestrian area.

Minnetonka: Ridgedale Area Plan/Designs: The 20th century automobile-dependent Ridgedale Area is transformed to an integrated, pedestrian friendly, green center. It utilizes this valuable land more efficiently by increasing its density, building on the existing mix of uses to strengthen all of them; (more retail, more office, more multi-unit housing are added), increasing and improving the civic realm, adding to the city’s tax base, and creating pathways within the area and to the Ridgedale Transit Station. Design features include a place-making green signature, renovated commercial heart, renovated ring, and area wide pedestrian/bicycle system.

Minnetonka: Ridgedale Area Civic Plaza & Architectural Scale Concepts: A new Ridgedale Civic Plaza celebrates the large wetland that was previously hidden from sight, provides a place for civic events and informal gatherings, and cleans storm water before it enters the wetland. The high rise signage provides an identity to the shopping center, multifamily housing is added to the area, and transit stations are located in a free standing office buildings to provide a transit presence in the area.

Products:

A corridor analysis, three local area plans, bicycle/ pedestrian access plans and architectural concepts were produced in a digital and printed decision-making tool/report. The work was adopted in the communities’ comprehensive plans

Participants:

Transit and highway engineering consultants; officials from corridor communities, MnDOT, regional planning and transit agencies; advocacy groups; business owners; and citizens participated.
Appendix IV: Completed Projects

The Gitchi-Gami Trail: Beaver Bay, Taconite Harbor, Lutsen

Recreation, natural and cultural resource protection, tourism, and community livability are promoted by designs for the Gitchi Gami State Trail. The project produced culturally and environmentally sensitive plans and designs at the regional, district and site scales that protect and interpret the natural and cultural heritage of Lake Superior’s North Shore. The work provides for present and the future resource protection in ecologically and culturally appropriate ways by designing recreational and development opportunities for the region’s citizens and its visitors. The project sought to expand the current popular perception of the North Shore’s identity beyond the narrow strip of land contiguous to the lake to include the larger landscape of forest, stream, and mountain. Besides connecting the trail to the communities along the shore and celebrating the splendid North Shore landscape, the designs connect the Gitchi Gami Trail to the other linear recreations systems on the North Shore such as the Superior Hiking Trail and the kayak trail. The designs that include town centers, highway and county roads, trail heads, interpretative features, and signature trail elements such as railing details, signs, and kiosks. Community leaders, citizens, government officials, and the trail association were all actively involved.

Gitchi Gami Trail as Regional Recreational System Driver:

On the regional scale, the work connected the existing Superior Hiking trail, the North Shore Scenic Byway, the North Shore Kayak Trail to the Gitchi Gami Trail and proposed new cross country ski trails in order to create an integrated North Shore recreational system. Because the region’s economy is heavily dependent on tourism, the design strategy concentrated access points and their associated parking in communities or in already developed areas in order to minimize their impact on natural systems and maximize their economic impact on the local economy.

Gitchi Gami Trail as Catalyst for Community Form and Leverager of Resources:

On the district scale town centers along the trail were designed for Beaver Bay, an existing community, and for Taconite Harbor, a new community, that provided opportunities for trail users to both access the trail and support local businesses. A trailhead focused access to the many recreational resources in Lutsen. The community work leveraged its impact by linking to and shaping other capitol projects such as the rebuilding county roads and a state highway.

Trailheads and Special Sites As Interpreters, Problem Solvers, and Placemakers:

The site designs play multiple roles. For example, at Beaver Bay one site design integrated the existing historical society and visitor center into an appropriately scaled precinct that functioned both as a trailhead, a rest stop for the scenic byway, and a cultural resource. Located on an old parking lot whose runoff eroded the banks of the Beaver River and degraded its water, the design regraded the site to create a storm water system that reduced the run off, cleaned the water, and diverted it away from the river. The memory of the historic mill was evoked by the site’s scenic viewing platform that overlooks the river and the mill site.

Signature Elements as Identifiers and Interpreters:

The signature elements create a common aesthetic that promotes trail identity and interpretation. Their design vocabulary is made of wood, stone, and steel, all materials rooted in the North Shore’s natural and cultural landscape. Elements include bicycle racks, kiosks, and guard rails. Signature axonometric landscape drawings depict the relationship of trail to the other amenities and recreational systems and promote an understanding of the North Shore as a large landscape beyond the narrow shoreline strip.

Products:

The project produced plans for a regional recreation system, master plans to two communities, two town center designs, one interpretive precinct, streetscape designs for two county roads and one segment of a state highway, trail heads, several trail segments, two gathering places, and signature trail elements. The work was compiled in a _ page project report in digital and printed form that is being used as a decision making tool by project participants and others.

Project Participants:

Gitchi Gami Trail Association, community officials, local citizens, local business owners, seasonal residents, regional development agency staff, local and state Department of Natural Resources staff, Department of Transportation staff, land developers, scenic byway committee members and county engineers all participated in the design process.
Appendix IV: Completed Projects

Red Lake River Corridor Enhancement Project
The Red Lake River Corridor work includes an analysis of the corridor within a regional context, a projection of future development sites, corridor design and planning and site locations. Design work also included the creation of a logo and signature elements to be used along the corridor to give it identity and the Red Lake River Corridor Brochures that provide the necessary river information for canoe, boating, fishing and other recreational uses. A community design process that engaged the Red Lake River Joint Powers Board, citizens, and local officials was used to gather information, select the sites to be studied, and receive feedback on the design work. The 181-page report presents the across-scale work for use by the Board, local communities, trail groups, and citizens. The work is important to the Northwest Region of Minnesota because it addresses:

Regional Scale:
The Red Lake River flows through three major biomes of North America. The geographic information system analysis which explored landscape types, waterscape types, and cultural landscape features paid particular attention to exploring the implications of the three biomes in the corridor: the coniferous forest, the deciduous forest, and the prairie biomes. Work with the communities emphasized the creation of a regional partnership among the communities to facilitate pursuing state funding to build the trail, create efforts to improve environmentally degraded sites on the river and promote understanding of the ecology of the watershed.

District Scale:
The corridor segments were identified in entire 181-mile length. The effective river buffer was 4 miles and included all communities as well as critical relationships needed for the planning and design of the river corridor. River segments are based on the river character, community locations, and the length of canoe trips. Sites of existing access points, camping sites, and other amenities are identified for each segment, and potential sites for additional ones are suggested.

Site Scale: River Communities:
Design work on local parks that included local pedestrian trails, boat launches, picnic areas, camp sites, etc. for Thief River Falls, St. Hilaire, Red Lake Falls, Crookston, Fisher and East Grand Forks.

Corridor Identity:
Signature elements create a common aesthetic, user recognition, and a regional sensibility among all the corridor communities. They include a logo, a design vocabulary, and designs for signs.

Project Participants:
The Red Lake River Joint Powers Board of representatives from each of the cities and counties along the Red Lake River. East Grand Forks, Fisher, Crookston, Red Lake Falls, St. Hilaire Thief River Falls, the Red Lake Watershed District, and Polk, Red Lake, and Pennington counties, all the Red Lake River corridor governmental units, and citizen groups participated.

Partners & Working Relationships:
The Workgroup has partnered with the Pembina Trail Resource, Conservation & Development Association as a fiscal agent (a 501c3 non-profit) and is closely advised by several federal, state, and local agencies, and several non-profit organizations. The Workgroup routinely consulted with the Minnesota Department of Natural Resources, the USDA’s Natural Resource Conservation Service, Soil and Water Conservation Districts, and The Nature Conservancy.

Design Goals:
The project is an effort to produce culturally and environmentally sensitive planning and design documents for boat access points, city and county parkland and trails, and a geographic information system analysis focusing on a corridor from the border with the Red Lake Nation to East Grand Forks. It seeks to connect the Red Lake River communities more powerfully and more meaningfully to the river. A community design process was used to engage governmental units and citizens in the effort. The report is a tool for community and agency decision-making and seeking state support.

Project Strategy:
Activities focused on a well-defined strategy for successfully integrating all communities into a recreational amenity approach to natural resources management along the river corridor. This strategy enhanced the interactions of communities and visitors with the Red Lake River. It has produced the document, The Red Lake River Corridor Enhancement Project for use to energize communities to seek funding to build the corridor.

Project Funding:
All cities and counties along the river corridor provided some base funding support for these activities. Red Lake Watershed District Board of Directors, the Northwest Regional Sustainable Development Partnership, and the Northwest Minnesota Foundation have provided additional grant funds.

Funding Strategy:
An all-corridor meeting was held to kick off the request for funding the project through the state bonding bill. State legislators are supporting the request and it is part of the preliminary bill that is to be heard and funded.
Duluth Township: Community Center & School
CCL worked with the community and the school to create a master site plans that:

- Used an engaged participatory process that created consensus among community members, officials, and the school on the site’s future directions,
- Looked holistically at current and future needs,
- Located future site developments, and
- Empowered future fundraising efforts to implement the plan over time.

The project investigated, analyzed, and identified existing conditions; established a site program; created three design concepts driven by site opportunities, constraints, and programmatic considerations; and created, three preliminary designs, and a final design. The work was informed by a series of meetings with community members, community officials, school staff, and the 4th, 5th, and 6th grade students.

The Site Master Plan structures the site to function as a campus for both a community center and a charter school. It responds to the existing soil conditions and storm water run-off issues while creating a circulation system that serves both the community at large and the school community. It enhances the unique qualities of the site and adds more facilities. Features of the plan include:

### Circulation Systems

- The main entry on Ryan Road provides access to both the current building and its planned expansion spaces,
- Expanded parking lots accommodate 60 cars,
- A paved fire truck/emergency vehicle access lane and a pedestrian/emergency vehicle route encircles the building to accommodate pedestrian movement and emergency access to all parts of the building,
- The service road is off Ryan Road beyond the main entry, and
- A handicap accessible pathway system knits the site together and provides a framework for the addition of elements over time,

### Play Areas and Athletic Fields:

- An enlarged and improved ice hockey rink with an expanded warming house is located on the edge of the site,
- Renovated softball/soccer field with bleachers and dugouts serves both the school and the community,
- Two separate play areas, one for primary grades and one for 4-6 grades are located north of the building,
- An existing tether ball court is upgraded, and
- Two soccer fields are relocated added graded to enhance their playing surfaces.

### Gathering Places:

- The event patio is expanded,
- A new picnic/outdoor classroom pavilion with storage and toilet facilities is located for access by the community and the school,
- An Old Veteran White Pine Gathering node is created in the woods for interpretation and education,
- An existing log shack gathering place in the woods remains, and
- Two environmental learning nodes that over look the creek are created.

### Environmental Features:

- A grading plan moves storm water towards rain water gardens and the green environmental corridor. A heavily planted green corridor is dominant element on the non-wooded portion of the site. It receives storm water runoff from the regraded site and cleans it before it reaches a creek,
- The existing rainwater garden is expanded and a new one is created,
- The pond/wetland is expanded,
- The cistern system for storing storm water is expanded,
- A community and school garden is located by the green,
- The septic garden is retained and upgraded,
- The septic mound’s size and capacity is expanded, and
- The pathway system through the woods and along the creek is expanded.

### Environmental Features: Solving the Stormwater Challenge: The Green Corridor

The site’s clay soils and current grading cause ponding and run-off problems. Storm water on playing fields and in other areas creates mud spots and makes playing field games difficult. The run-off brings pollution to the stream compromising its water quality. The Master Plan solves the storm water challenge by regrading the site to make an amenity.

Storm water from the building’s roof is channeled into an enhanced rainwater garden. Stormwater from the playing fields runs off into a swale that feeds a second rain garden. Both rainwater gardens help form a heavily planted Green Corridor that functions ecologically to clean the storm water before it infiltrates or leaves the site to reach a stream. The Green Corridor is not only an environmental asset, it an aesthetic and educational asset as well. Is size and its position between the main built portion of the site and the ball fields makes it the dominant environmental feature of the non-wooded portion of the site. Planted with many native plants, its beauty not only enhances the landscape, it is also a very visible demonstration of an ecologically sound strategy to treat storm water. Because of its proximity both to the school and the playing fields used by the community, the site can be used for casual interpretation and can be an outdoor learning environment for the school’s environmental curriculum.
Appendix IV: Completed Projects

Crafting a Northwoods Town: Lutsen Town Center & Gitchi Gami Trail Alignments
CCL’s previous North Shore Scenic Byway and Gitchi Gami Trail work is built upon to design/plan the development of the Lutsen’s town center while addressing the future re-alignment of State Highway 61, the Gitchi Gami State Trail alignment through town, trailhead locations, and a design vocabulary that expresses Lutsen’s unique natural resource and architectural character. Consensus building, citizen motivation, identification of near and future development projects, changes to the zoning ordinance, and funding source identification are also part of the project.

CCL design/plan work consists of a regional trail network and a conceptual Gitchi Gami State Trail alignment that celebrated the regional landscape; two gateways along Highway 61; access points to Highway 61; the highway alignment through the town center area; proposed zoning changes; and a sustainable town center plan that strengthened the town’s identity, concentrated development, and provided housing and commercial spaces using a Lutsen-appropriate form and scale.