A Community-University Partnership for Sustainability:

The Resilient Communities Project and the Iowa Initiative for Sustainable Communities

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Center for Urban and Regional Affairs (CURA) – U of MN
What Is Resilient Communities Project?

New model for university–community collaboration

Connects U of MN + local communities to advance sustainability and resilience

One-year community partnership – RCP as matchmaker

Matches community projects with U of MN graduate and undergraduate courses
What Is Resilient Communities Project?

Initial support from Institute on the Environment + Center for Urban and Regional Affairs

2012–2013 pilot program with City of Minnetonka

Modeled on Sustainable City Year Program at the University of Oregon
Sustainability + Resilience

**Sustainability**
recognizes the interconnectedness and interdependence of environmental, economic, and social systems; takes a long-term perspective

**Resilience**
adaptive + responsive to changing circumstances; recognizes the need for flexibility and collaboration
Capitalizes on multiple intersecting opportunities + trends

Community motivation to respond to changing demographic, fiscal, and other conditions

Increased public awareness of need for sustainable + resilient approaches

Reduced staff and economic resources

Resilient Communities Project

Increasing focus on university-community engagement

Growing student interest in sustainability + resilience, as well as "real world" experience

Faculty expertise in sustainability + resilience, as well as "real world" projects

Growing student interest in sustainability + resilience, as well as "real world" experience
How Does RCP Work?

Request for proposals for 2013–2014 partnership

Received 7 proposals from metro-area communities

North St. Paul selected as community partner
How Does RCP Work?

City staff identify projects (15–30) and project leads

RCP + city collaborate to:

- clarify and scope projects
- identify relevant community partners and stakeholders

RCP matches each project with one or more U of MN courses
Students complete the project as part of regular coursework
Final presentations + work products delivered to community
2013–2014 Partner:
City of North St. Paul
North St. Paul Projects

Live/work housing
Living streets and capital improvements
Green energy initiative
Neighborhood identities
Fiber optic network development
Community identity and branding
Downtown revitalization strategies
Civic engagement and communication
Environmental education
Redevelopment-ready community
Public art and public history
Master redevelopment plan
Silver Lake trail connection
Community gardens and local food
Staff development and retention
Development of underutilized parcels
Housing Conservation and Aging in place
Energy conservation initiative
Emerald Ash Borer Management Plan
Bulk Waste Pick-Up Program Evaluation
Documenting the RCP-North St. Paul Partnership

U of MN Departments

Housing Studies
Civil Engineering
Law School
Landscape Architecture
Communication Studies
Sociology
Liberal Studies
Graphic Design
Gerontology
Journalism
Bioproducts and Biosystems Engineering
Architecture
Org Leadership, Policy and Development
Urban and Regional Planning
Public Policy
Environmental Education (UMD)
Environmental Science, Policy and Mgt
Forestry
Agronomy
Social Work
Recreation Resources Management
**City Goal:** Capitalize on the City’s municipal electric utility by promoting and incentivizing alternative modes of energy generation and energy conservation approaches, in order to reduce peak demand and make progress on the community’s effort to become certified as a Minnesota GreenStep City.

*Photos courtesy of North St. Paul*
Green Energy and Conservation

OLPD 5501: Principles and Methods of Evaluation—create evaluation plan for existing energy conservation programs

PA 5721: Energy and Environmental Policy—identify additional energy conservation approaches the City can incentivize

LAW 7012: Land Use, Energy and Environment Clinic—conduct an audit of City ordinances to identify barriers to green energy

ARCH 8563 Energy Issues in Sustainable Design—identify energy efficient building design options

CE 5571 Design for Sustainable Development—envision and launch business ventures that support green energy and conservation
Living Streets and Capital Improvements

City Goal: Address initial opposition to implementing the Living Streets Plan adopted in 2011 by documenting long-term cost savings from a Living Streets approach to street design and reconstruction, and creating a community input process to support planning for future reconstruction projects.
Living Streets and Capital Improvements

PA 5253: Designing Participation Processes—develop prototype community engagement process for street reconstruction projects

ISME 5503: Financial Management in Public Organizations—document cost-savings from Living Streets approach to street design and reconstruction

L.Arch./MURP capstone project—develop design prototypes that communicate to the public the value of green infrastructure

PUBH 6772/PA 8081: Planning and Public Health Capstone—document public health benefits of a Living Streets approach
Housing Conservation & Aging in Place

City Goal: Develop programs or policies that stabilize the housing stock in North St. Paul and provide housing options that make it possible for residents to age in place in the community, with a focus on targeting housing rehabilitation and improvement programs at older homeowners.
Housing Conservation & Aging in Place

**HSG 5481: Promoting Independence in Housing and Community**—develop case studies of housing and planning strategies for inclusive home, work, and community environments

**SW 8251: Social Work Practice in Health and Aging**—conduct comprehensive in-home assessments with home-bound residents

**GERO 5105: Multidisciplinary Perspectives on Aging**—conduct needs-assessment focus groups with ambulatory senior residents

**ARCH 4284: Design for Sustainability Studio**—explore universal design approaches for new and existing homes

**PA 5261: Housing Policy**—investigate programs and policies that support lifecycle housing and aging in place
City Goal: Capitalize on North St. Paul’s many unique natural features by creating opportunities for residents to learn about the local ecosystem and natural resources that are available, and encouraging residents to reengage with their natural environment.

Environmental Education
Environmental Education

**M.S. Thesis in ESPM**—use qualitative approaches to determine how residents understand parks, trails, and natural areas in the community

**DES 3131: User Experience in Design**—evaluate the user experience of Southwood Nature Preserve to inform an environmental education strategy

**EnEd 5325: Environmental Issues Investigation**—identify environmental issues of concern in Southwood Nature Preserve and other natural areas

**EnEd 4315: Operations & Management**—create an operations and management plan for Southwood Nature Preserve

**ESPM 2401 Environmental Education & Interpretation**—design an environmental education curriculum for local schools
Partner Community

Provide single point of access to faculty + courses
Expand conversation beyond planning department
Infuse energy + creativity
Enhance local capacity + collaboration
Establish long-term relationship with U of MN
Increase visibility as a leader in sustainability

Students

Provide efficient + *meaningful* access to community-based projects
Offer critical “real world” educational opportunities
Demonstrate value of multidisciplinary approaches
Enhance long-term capacity for sustainability-related and community-based work
For the Community Partner. . .

Potential to make **significant progress** toward sustainability and resilience

Fall 2013   Summer 2014

complete 15–30 locally relevant projects
A Community-University Partnership for Sustainability:

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Jeff Thomson
Associate Planner
City of Minnetonka
City of Minnetonka

Population: 50,747

- Fully-developed suburban community
- Developed primarily from 1950s to 1980s
- Residential neighborhoods characterized by single-family homes on large lots
- Lakes, wetlands, woodlands and slopes
City of Minnetonka

Employment: 45,000

Employment Centers:
  • Ridgedale/394, Minnetonka Corporate Center, Opus Business Park

Major Employers:
  • United Health Group, Carlson Companies, Cargill, GE Osmonics
Community Assets

Natural Environment

Parks & Trails

Schools

Housing Diversity

Transportation

Centers of Commerce
Strategic Profile

– We will be **responsible stewards** of the city’s physical assets, human capital and financial resources.
– We will protect and enhance the unique **natural environment** of our community.
– We will maintain quality **public safety** for our residents and businesses.
– We will work to meet the **transportation** needs of our residents and businesses.
– We will support well-planned, responsible **community development**.
– We will provide excellent **recreational** amenities.
Previous Work

2010 Opus Station Study

2011 Shady Oak Station Study
Minnetonka’s Mission

“Our purpose is to provide the core public services our community residents and businesses rely upon in their daily lives, while striving to preserve and enhance the distinctive character that makes Minnetonka a special place to live.”
City-Identified Projects

- Business and Surface Water Protection
- Conservation Development Standards
- Density and Housing Options
- Green Roofs and Rooftop Gardens
- Housing Program Evaluation
- Light Imprint Streets
- Mid-Price Housing Study
- Neighborhood Identities Project
- Parking Regulations
- Post-Development Critique
- Private Property Tree Inventory
- Redevelopment White Paper
- Stormwater Illicit Discharge Training
- TOD Redevelopment Policy
- Transportation Demand Management Policy
- Village Center Business Associations
- Village Center Connections
- Water Conservation Education
- Water Resource Prioritization Plan
Stormwater Management and Illicit Discharge

Project Goals

• Develop stormwater management tools for a site that impacts an important natural resource

Course

• ARCH8567: Building and Site Integration in Sustainable Design
REDESIGNING THE URBAN WATER CYCLE
A VISION FOR RIDGEDALE MALL 2030

Below: Pre-settlement Water Cycle Flow Diagram & Chart

Impervious Surfaces Diagram Showing Primary Ridgedale Site and Surrounding Extended Site Boundaries

Below: Existing Water Cycle Flow Diagram & Chart

7.2 Million SF Impervious Surfaces
During a 1” rain event, the amount of stormwater runoff generated from the impervious surfaces on the site would be enough water to fill about 7 Olympic swimming pools
REDESIGNING THE URBAN WATER CYCLE
A VISION FOR RIDGEDALE MALL 2030

- permeable paving
- tree trenches
- bio-swales
- rain gardens
- green roofs
- low-flow fixtures
- water reuse system

ABOVE: Parking lot trees with permeable paving and minimal bio-swales capture storm water and provide shade while improving views and temperature in the parking lot. Larger bio-swales in strategic areas create pedestrian oases in the parking lot with a safe pedestrian path from the parking areas to the shopping mall.
Stormwater Management and Illicit Discharge

Project Goals

- Examine city’s existing stormwater ordinances
- Assess ordinances for compliance with MPCA requirements
- Recommend ordinance changes

Course

- LAW 7102: Land, Environment, and Energy Law Clinic
Neighborhood Identities Project

Project Goals

• Survey existing neighborhood associations in Minnetonka to help the city understand what they do and how they function
• Research local and national models for facilitating and supporting the creation of neighborhood organizations to promote community engagement and involvement

Courses

• PA8203: Neighborhood Revitalization
• LS5100: Design Thinking for Action
Neighborhood Identities Project

Findings:

• Minnetonka has a strong community identity
• Residents could not name or geographically define their neighborhood
• Community would not be well served by formal neighborhood organizations
Neighborhood Identities Project

Recommendations:

- Connect with neighborhoods through existing organizations
- Maintain formal and informal communication with community
- Develop interactive list of community organizations
- Foster alternative channels of communication via online communities
RCP-Minnetonka Partnership

Community Benefits

• Significant progress on city’s work plan
• High-quality and innovative results
• Facilitated discussion about sustainability within the organization
• Publicity
• Networking and connections
Thank you!

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Photos by Carissa Schively Slotterback (unless otherwise noted)