

IonE DISCOVERY GRANT FINAL REPORT

PROGRAM AREAS (check all that apply)

<input type="checkbox"/> Bioenergy & Bioproducts <input type="checkbox"/> Algae <input type="checkbox"/> Biological Catalysis <input type="checkbox"/> Biomaterials <input type="checkbox"/> Biopower <input type="checkbox"/> Chemical Catalysis <input type="checkbox"/> Next Generation Feedstock <input type="checkbox"/> Transportation Fuels <input type="checkbox"/> Waste Stream Remediation - Bio <input checked="" type="checkbox"/> Conservation & Energy Efficiency <input type="checkbox"/> Hydrogen Production, Storage & Use	<input checked="" type="checkbox"/> Policy, Economics & Ecosystems <input type="checkbox"/> Life Cycle Analysis <input type="checkbox"/> Carbon Sequestration <input type="checkbox"/> Solar <input type="checkbox"/> Photovoltaic <input type="checkbox"/> Thermal Energy <input type="checkbox"/> Waste Stream Remediation – Solar <input type="checkbox"/> Wind, Hydro & Geothermal <input type="checkbox"/> Geothermal <input type="checkbox"/> Hydroelectric <input type="checkbox"/> Wind <input type="checkbox"/> Waste Stream Remediation – Geothermal
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B. EXTERNAL COLLABORATIONS

Name	Company/Organization	Explanation of Relationship
Jeff Thomson	City of Minnetonka	Community partner, 2012-2013
Paul Ammerman	City of North St. Paul	Community partner, 2013-2014
Kim Lindquist	City of Rosemount	Community partner, 2014-2015

C. LEVERAGED FUNDS

Status:	Awarded	Award Date: 7-2012
Project Title:	Resilient Communities Project	
FOA # or Title:		
Primary Funding Org:	Center for Urban and Regional Affairs	Amount: \$ 5000
Other Matching Org:		Amount: \$
Other Matching Org:		Amount: \$
Other Matching Org:		Amount: \$
Other Matching Org:		Amount: \$

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Status: Awarded	Award Date: 7-2013
Project Title: Resilient Communities Project	
FOA # or Title:	
Primary Funding Org: Center for Urban and Regional Affairs	Amount: \$ 5000
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$

Status: Awarded	Award Date: 9-2013
Project Title: Resilient Communities Project–North St. Paul	
FOA # or Title:	
Primary Funding Org: City of North St. Paul	Amount: \$ 40,000
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$

Status: Awarded	Award Date: 9-2014
Project Title: Resilient Communities Project–Rosemount	
FOA # or Title:	
Primary Funding Org: City or Rosemount	Amount: \$ 40,000
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$

Status: Awarded	Award Date:
Project Title:	
FOA # or Title:	
Primary Funding Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$

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Status: Awarded	Award Date:
Project Title:	
FOA # or Title:	
Primary Funding Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$

Status: Awarded	Award Date:
Project Title:	
FOA # or Title:	
Primary Funding Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$

Status: Awarded	Award Date:
Project Title:	
FOA # or Title:	
Primary Funding Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$
Other Matching Org:	Amount: \$

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E.2 PRESENTATIONS

List all of the presentations to date that have resulted from funding to support this research.

Type	Full Citation
Speaker	Carissa Slotterback, Association of Collegiate Schools of Planning Conference, “ACSP Presidential Address 1: Urban Planning Programs as Campus Community Engagement Leaders,” University of Cincinnati, November 1, 2012
Speaker	Mike Greco, American Planning Association, Minnesota Chapter, “Resilient Communities Project–Minnetonka: Building Community-University Partnerships for Sustainability,” Minnetonka City Hall, December 12, 2012
Speaker	Carissa Slotterback, League of Women Voters – Council of Metropolitan Area Leagues Quarterly Program, “Resilient Communities Project–Minnetonka: Building Community-University Partnerships for Sustainability,” Minnetonka City Hall, March 16, 2013
Panel participant	Carissa Slotterback and Mike Greco, Second Annual Sustainable City Year Conference, “Resilient Communities Project,” April 11, 2013, Eugene, OR
Speaker	Carissa Slotterback, Upper Midwest Civic Engagement Summit: Weaving Deep Connections Across Institutions and Communities, “We Can and Must Do More: Community Engagement and Sustainability as the Keys to Higher Education Transformation,” May 30, 2013, Dubuque, IA
Speaker	Carissa Slotterback, Housing Collaborative Institute, September 9, 2013, Minnetonka, MN
Panel participant	Mike Greco, Upper Midwest Planning Conference, “A Community-University Partnership for Sustainability: The Resilient Communities Project and the Iowa Initiative for Sustainable Communities,” September 19, 2013, Rochester, MN
Panel participant	Mike Greco, Imagining America Conference, “The Sustainable City Year Program: An Adaptable Model for Large-Scale, University Engagement and Impact,” October 5, 2013, Syracuse, NY
Panel participant	Mike Greco, Associate for the Advancement of Sustainability in Higher Education (AASHE) Conference, “Nationalizing the University of Oregon’s Sustainable City Year Program: One Radically Simple Idea Carried out in Three Ways,” October 7, 2013, Nashville, TN
Panel participant	Mike Greco, Associate for the Advancement of Sustainability in Higher Education (AASHE) Conference, “Building Resilient Communities Through University-Community Partnerships,” October 8, 2013, Nashville, TN
Presenter	Mike Greco, Sensible Land Use Coalition (SLUC) Annual Roundtables of Knowledge, “The Resilient Communities Project,” October 30, 2013, St. Louis Park, MN
Panel participant	Mike Greco, City Engineer’s Association of Minnesota (CEAM) Annual Conference, “A Community-University of Minnesota Partnership for Sustainability: The Resilient Communities Project,” January 29, 2014, Earle Brown Center, Brooklyn Center, MN

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Keynote speaker		
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Keynote speaker		
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Additional presentations may be submitted in a separate document as an appendix.

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F. PATENTS

Status	Patent Information
Pending	
Pending	
Pending	
Pending	

G. POSTDOCS

Name	Current Professional Position

H. DEGREES AWARDED

Name	Degree Type	Major	Title of Dissertation/Thesis
	PhD		
	PhD		
	PhD		
	PhD		
	PhD		

I. WEBSITE

http://www.rcp.umn.edu

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J. PROJECT OVERVIEW

The Resilient Communities Project (RCP) supports one-year partnerships between a selected community (typically a city) and the University of Minnesota by facilitating course-based projects that meet community-identified sustainability needs. Through these partnerships, RCP advances an innovative model of community-engaged sustainability education that provides direct assistance to enhance local environmental, social, and economic sustainability; trains future sustainability practitioners; builds city staff capacity to advance sustainability and resilience; and produces best practices, tools, and cases that inform sustainability practice throughout Minnesota.

Each academic year, RCP selects a partner city through a competitive request-for-proposal (RFP) process. Working with a wide range of city staff and stakeholders in the selected community, RCP helps to identify 15–30 potential projects that will advance local sustainability and resilience based on community-identified environmental, social, and economic issues and needs. RCP then serves as a centralized “matchmaker,” strategically connecting these projects with one or more courses at the University of Minnesota that can provide research or technical assistance to move the project forward. Graduate, professional, and advanced undergraduate students participate in RCP by enrolling in an RCP-affiliated course, or through connecting an individual thesis, capstone, or independent study to an RCP project.

Commitment and involvement from the community is key to a successful RCP partnership. Community leaders play an organizational and leadership role, supporting and motivating staff to participate. The community lead, typically a high-level City staff member, works collaboratively with the RCP program manager to oversee all projects. In addition, city staff and relevant stakeholders work closely with U of MN faculty and students to provide local knowledge and deeper insight into the issues, ensuring projects are not only innovative, but also relevant to the community context.

Outcomes from each University course are documented in a final report and presentation at the conclusion of the semester. Project results are shared with the community, and widely disseminated for use by other communities through the RCP website, social media, and traditional media outlets. At the conclusion of the partnership, RCP assists project partners to review and integrate student research and other deliverables, and outline next steps and priorities for the community’s efforts to advance sustainability and resilience.

RCP employs a comprehensive approach to key environmental, social, and economic issues facing communities, engaging hundreds of graduate and professional students, advanced undergraduates, and expert faculty to develop innovative solutions to real community needs. The collaboration among community staff and University faculty and students advances sustainability education opportunities for students, and results in on-the-ground impact and momentum for a community working toward a more environmentally, socially, and economically sustainable future.

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K. PROJECT IMPACTS

FOR COMMUNITIES:

During the period of the grant, RCP provided the cities of Minnetonka, North St. Paul, and Rosemount with research and technical assistance on more than 60 community-defined sustainability-related projects in the areas of housing, transportation, energy, climate change and adaptation, civic engagement and communication, environmental and natural resource management, and demographic change.

RCP provided access to students and faculty members across a range of academic disciplines, drawing on expertise related to all aspects of sustainability (environmental health, economic opportunity, social equity, and community livability) and all stages of sustainability efforts (analysis, planning, design, implementation, and evaluation).

RCP facilitated larger discussions within the three communities regarding sustainability and resiliency, and created relationships between the city staff and University of Minnesota staff that will last long after the official partnership with RCP ended.

FOR STUDENTS:

During the period of the grant, RCP has provided more than 800 graduate and undergraduate students with community-engaged experiential learning opportunities. RCP-affiliated courses allowed students the opportunity to apply their knowledge, skills, and creativity to real-world projects identified as a high priority for advancing community sustainability.

More than 70% of students who responded to a survey at the end of their RCP-affiliated course indicated that this was the first course in their degree program that included a real project with an actual community partner. Respondents overwhelmingly indicated that their RCP project experience complemented their coursework (93%), made concepts and issues discussed in class easier to grasp (86%), made their class more interesting and engaging (87%), provided a meaningful professional experience (84%), and made them feel more prepared to work as a professional in their field of study (82%). With respect to environmental, social, and economic sustainability, students reported that working on an RCP project improved their understanding of what sustainability means at a community level (76%), provided practical experience addressing sustainability issues (78%), and increased their determination to work on sustainability issues in their future career (72%).

FOR FACULTY:

During the period of this grant, RCP worked with 55 individual faculty to connect projects with more than 90 graduate and undergraduate courses across dozens of academic departments in 11 colleges on two University of Minnesota campuses (Twin Cities and Duluth).

RCP provided these faculty with an opportunity to integrate a meaningful community-based sustainability project into their courses, as well as logistical, project management, and promotional support related to the project.

national case studies, analyzed residential “market leakage” into neighboring communities, and evaluated alternatives such as smaller lots and new methods of subdivision. The project also included an audit of the City of Minnetonka’s zoning and subdivision codes, comprehensive plan, and other relevant policy documents to identify policies that might inhibit affordable and mid-priced housing, a broader range of housing types and sizes, and higher density/infill residential development in the community.

Class: PA 8203: Neighborhood Revitalization

Instructors: David Hollister and Lauren Martin, School of Social Work

City Project Lead: Loren Gordon, City Planner, City of Minnetonka

Student Project: [Housing and Density Options Study](#) | [Presentation](#) | [Poster](#)

Class: PA 5212: Managing Urban Growth and Change

Instructor: Ed Goetz, Humphrey School of Public Affairs

City Project Lead: Loren Gordon, City Planner, City of Minnetonka

Student Project: [Housing & Smart Growth Study](#) | [Presentation](#)

3. Post-Development Critique

Project Description: The Minnetonka Planning Division routinely works with developers and other stakeholders to manage development projects in the community, some of which are initially contentious with neighbors who live nearby. Objections to the projects range from concerns about density and traffic to potential negative impacts on natural resources or community character. This project revisited three past developments—the Glen Lake Redevelopment Project, the Crest Ridge Corporate Center, and the Goodwill Industries Development—that were contentious at the time the projects were under review. The goal was to determine, several years after development, if community goals were met, neighborhood concerns addressed, and whether developments remain controversial. In addition to providing answers to these questions, students made recommendations for how the city can enhance the public input process for future developments to ensure that the needs and concerns of both developers and residents are being considered.

Class: OLPD 5501: Principles and Methods of Evaluation

Instructor: Jean King, Organizational Leadership, Policy and Development

City Project Lead: Susan Thomas, Principal Planner, City of Minnetonka

Student Project: Evaluation plan and data collection for OLPD 8595

Class: OLPD 8595: Evaluation Problems

Instructor: Jean King, Organizational Leadership, Policy and Development

City Project Lead: Susan Thomas, Principal Planner, City of Minnetonka

Student Project: [Post-Development Evaluation Final Report](#) | [Presentation](#)

4. Water and Energy Conservation and Surface Water Education

Project Description: Many businesses and industries in Minnetonka use and discharge a significant amount of water and use large amounts of energy as part of their operations. This project developed education and outreach strategies that assist businesses in the community to address water and energy conservation, as well as surface water protection, through their operations and site management. Students worked with Holaday Circuits, Inc., to develop a case study based upon a life cycle analysis of the business' water and energy use, and identified conservation strategies that could improve the company's bottom line. This case study was then used to develop a more general checklist for future business energy audits. In collaboration with more than 10 Minnetonka-based businesses, the project also employed both ethnographic and survey methods to understand barriers and opportunities Minnetonka businesses face in pursuing strategies for improving water quality and conservation in their operations.

Class: ESPM 5606: Pollution Prevention: Principles, Technologies, and Practices

Instructor: Cindy McComas, Bioproducts & Biosystems Engineering

City Project Lead: Jo Colleran, Natural Resources Manager, City of Minnetonka

Student Project: [Energy Efficiency Checklist](#) | [Poster](#)

Class: COMM 5110 Environmental Communication

Instructor: Mark Pedelty, Communication Studies

City Project Lead: Jo Colleran, Natural Resources Manager, City of Minnetonka

Student Project: [Commercial Survey Minnetonka-Nokomis](#)

5. Conservation Development Standards

Project Description: Conservation development approaches encourage sustainable developments that protect natural environmental features, preserve open space, protect natural habitats for wildlife, and maintain rural character. This project examined the City of Minnetonka's conservation development scorecard to assess its effectiveness in evaluating previous and proposed conservation developments. The analysis found that the scorecard was influential in encouraging conservation strategies as part of development projects, and recommended strategies for using the scorecard to increase social acceptability of conservation development, as well as implementing the tool through the city's Planned Unit Development ordinance.

Class: ESPM 5242: Methods for Natural Resource and Environmental Policy

Instructor: Dennis Becker and Michael Kilgore, Forest Resources

City Project Lead: Susan Thomas, Principal Planner, and Jo Colleran, Natural Resources Manager, City of Minnetonka

Student Project: [Conservation Design Standards Final Report](#)

6. Water Resources Prioritization Plan

Project Description: The City of Minnetonka contains a large number of lakes, creeks, and

wetlands. However, the city has only limited financial resources to support preservation and restoration projects. This project developed a prioritization plan to guide such investment. The project created and verified estimates of leaf litter nutrient inputs and nutrient and chloride surface transport within four priority watersheds in Minnetonka. These estimates of nutrient mass, flux, and transport were then used to model the feasibility and cost of mitigation actions for reducing nutrient levels in water bodies. Several models indicated increasing the frequency of street sweeping would be the most cost-effective measure. As a result, the city is now considering how to direct resources to support more frequent street sweeping along key roadways, and has added a requirement for regular street sweeping by the owner to the development agreement for a major redevelopment project at the Ridgedale Mall.

Class: ESPM 5295: GIS in Environmental Science and Management

Instructor: Paul Bolstad, Forest Resources

City Project Lead: Liz Stout, Water Resources Engineer, City of Minnetonka

Student Project: [City of Minnetonka Watershed Analysis](#) | [Presentation](#)

Class: CE 5511: Urban Hydrology and Land Development

Instructor: John Gulliver, Civil Engineering

City Project Lead: Liz Stout, Water Resources Engineer, City of Minnetonka

Student Project: [Crane Lake Report](#) | [Glen Lake Watershed BMP Analysis](#) | [Lake Windsor Report](#) | [Shady Oak Lake Report](#) | [Ridgedale Mall Stormwater Management Report](#) | [Effective Impervious Surface Analysis](#)

7. Neighborhood Identities and Resident Engagement

Project Description: Minnetonka has many residential neighborhoods, but neighborhood representation and participation varies widely—from a few formal neighborhood organizations to numerous informal associations and, in many cases, no organizational representation at all. This project surveyed existing neighborhood associations in Minnetonka to help the city understand what they do and how they function, and researched local and national models for facilitating and supporting the creation of neighborhood organizations. The project also used design thinking to examine how residents currently envision community in Minnetonka. This approach suggested that, because residents socially engage based on mutual interests and activities—such as clubs, schools, and recreational activities—strengthening social ties and community by creating geographically-defined neighborhoods might not be as effective as enhancing or augmenting existing social networks.

Class: LS 5100: Design Thinking for Action

Instructor: Virajita Singh, College of Design

City Project Lead: Jeff Thomson, Associate Planner, City of Minnetonka

Student Project: [Design Thinking for Neighborhood Identities 1](#) | [Presentation 1](#) | [Design Thinking for Neighborhood Identities 2](#) | [Presentation 2](#) | [Poster](#)

Class: PA 8203: Neighborhood Revitalization

Instructors: David Hollister and Lauren Martin, College of Education and Human Development

City Project Lead: Jeff Thomson, Associate Planner, City of Minnetonka

Student Project: [Neighborhood Identities Report](#) | [Presentation](#) | [Poster](#)

8. Housing and Aging in Place

Project Description: Like many cities in Minnesota, Minnetonka’s population is rapidly aging. Many residents have lived in Minnetonka for all or the majority of their lives, and wish to remain in their homes—or at least in the city—as they age. Students investigated opportunities for the city to assist residents to age in place through a broader range of housing options, more compact urban design, better transportation options, and improved access to social services and other assistance.

Class: HSG 5463/PA 5261: Housing Policy

City Project Lead: Loren Gordon, Planner, City of Minnetonka

Instructor: Jeff Crump, Design, Housing and Apparel

9. Parking and Land Use

Project Description: The City of Minnetonka’s zoning ordinance establishes minimum parking standards for land uses, which can often result in excess parking that reduces land values, creates increased stormwater runoff, and inhibits infill and compact development. This project reviewed the city’s existing parking regulations, explored innovative parking management strategies in the literature, reviewed local and national best practices, computed average parking demand, and recommended updates to the city’s parking ordinance. The project also included a GIS analysis for Minnetonka of the number of jobs vs. number of parking spaces provided by businesses in several key employment/village center locations and calculated the peak parking demand in these locations to inform updates to the parking code.

Class: GEOG 5564: Urban GIS

Instructor: Jeff Matson, Geography

City Project Lead: Susan Thomas, Principal Planner, City of Minnetonka

Student Project: [Maximum Parking Regulations for Minnetonka](#) | [Poster](#)

Class: PA 8202: Networks and Places

Instructor: Jason Cao, Humphrey School of Public Affairs

City Project Lead: Susan Thomas, Principal Planner, City of Minnetonka

Student Project: [Parking Policy Assessment](#) | [Presentation 1](#) | [Parking Reduction Report](#) | [Presentation 2](#) | [Parking Reform Proposal](#) | [Presentation 3](#) | [Parking Lots Case Study & Model Ordinance](#) | [Presentation 4](#) | [Transit-Oriented Development Parking Recommendations](#) | [Presentation 5](#)

10. Transportation Demand Management Policy

Project Description: Minnetonka has required transportation demand management (TDM) plans for large development projects within the I-394 corridor for many years. However, these plans are not required in other areas of the city. This project evaluated the city's existing TDM ordinance requirements and reviewed TDM ordinances and best practices in comparable suburban communities nationwide. To understand the considerations involved with implementing TDM plans, students also interviewed key stakeholders, including city planners and engineers in neighboring communities, businesses in Minnetonka that currently have TDM plans, and 494 Commuter Services. The students then recommended an innovative two-phase TDM policy for the city of Minnetonka to reduce peak-hour demand.

Class: PA 8081: Land Use and Transportation Capstone Workshop

Instructor: Mike Greco, Humphrey School of Public Affairs

City Project Lead: Jeff Thomson, Associate Planner, City of Minnetonka

Student Project: [PA8081 TDM Report](#) | [Presentation](#)

11. Mid-Priced Housing

Project Description: According to a recent Opportunity Cities study of Minnetonka conducted by the Urban Land Institute/Regional Council of Mayors (ULI/RCM), Minnetonka does well meeting its regional affordable housing targets and has an adequate supply of higher-end housing. However, the city also has an aging housing stock and a lack of mid-priced housing that might appeal to empty-nesters looking to downsize or young families and professionals interested in move-up housing. City staff wanted to better understand the market for mid-priced housing in Minnetonka and neighboring communities to inform future efforts to increase the amount of mid-priced housing in the city. Using American Community Survey data, foreclosure data, market price decline data, and other available data, student teams conducted a GIS housing market analysis of Minnetonka and surrounding communities where residential "market leakage" from Minnetonka is occurring.

Class: HSG 5464: Understanding Housing Assessment and Analysis

Instructor: Jessica Deegan, Design, Housing and Apparel

City Project Lead: Elise Durbin, Community Development Supervisor, City of Minnetonka

Student Project: [Demographic Report](#) and [Presentation](#) | [Comparative Analysis Report](#) and [Presentation](#) | [Market Demand Report](#) and [Presentation](#)

12. Green Roofs and Rooftop Gardens

Project Description: Minnetonka is interested in promoting green roof or rooftop garden projects, but staff wanted to understand perceptions and attitudes among Minnetonka residents, developers, and community leaders that might facilitate or hinder such efforts. This project evaluated options for encouraging rooftop gardens and green roofs in residential and commercial developments. Students in one course identified innovative best practices for implementing green roofs in the context of a suburban community located in a northern climate through both policy changes and city or private initiatives. Students in another course

examined the biophysical aspects of implementing green roofs in Minnetonka, and undertook an ethnographic analysis to understand the social context around green roofs in the community.

Class: AGRO 5321: Ecology of Agricultural Systems

Instructor: Nick Jordan, Agroecology, Agronomy, & Plant Genetics

City Project Lead: Jo Colleran, Natural Resources Manager, City of Minnetonka

Student Project: [Poster](#)

Class: PA 5242: Environmental Planning, Policy, and Decision Making

Instructor: Carissa Schively Slotterback, Humphrey School of Public Affairs

City Project Lead: Jo Colleran, Natural Resources Manager, City of Minnetonka

Student Project: [Presentation](#)

Student Project: [Combined Final Report: Green Roofs](#)

13. Transit-Oriented Zoning

Project Description: Minnetonka is beginning station-area planning efforts for two proposed stations along the Southwest Light-Rail Transit Line and has just participated a sector analysis of public transit in the city, and was interested in developing transit-oriented zoning district models for the major station areas and future transit hubs in the community. Students developed detailed policy-oriented case studies of TOD districts in similar cities, including how the municipality was involved in (re)development projects; recommended model districts for station areas and transit hubs in Minnetonka, including appropriate transportation connections, land-use mixes, zoning regulations, and parking requirements; and recommended guidelines for the city's financial and policy role in future redevelopment projects in these locations.

Class: PA 8081: Land Use and Transportation Capstone Workshop

Instructor: Mike Greco, Humphrey School of Public Affairs

City Project Lead: Loren Gordon, Planner, City of Minnetonka

Student Project: [PA8081 TOD Report](#)

14. Housing Program Evaluation

Project Description: The Minnetonka Home Enhancement Program (MHEP) is a housing rehabilitation program that was established in 2011 to assist low- to medium-income residents to make improvements to their homes. Since the beginning of MHEP, only one housing rehabilitation loan has been executed. Students used a program evaluation approach that included surveys and phone interviews with MHEP applicants to determine why the program was not being fully utilized. Based on this analysis, the students provided recommendations related to program promotion, administration, and logistics.

Class: OLPD 8595: Evaluation Problems

Instructor: Jean King; Organizational Leadership, Policy and Development

City Project Lead: Elise Durbin, Community Development Su

North St. Paul Projects

For the 2013–2014 academic year, RCP partnered with the City of North St. Paul on 16 projects that engaged 35 courses across 11 colleges at the University of Minnesota Twin Cities and Duluth campuses, and provided hands-on, applied research opportunities to more than 300 graduate and undergraduate students. Descriptions of the projects, as well as the resulting student work, are listed below.

1. Live/Work Housing

Project Description: A recent Redevelopment Master Plan for North Saint Paul identified live/work housing as a unique strategy for residential development on the edge of downtown. This type of housing would include both living units and workspace for artisans/craftspeople to pursue their small business or entrepreneurial endeavors, and would help fit the city’s traditional image as a working class community that supports small business enterprises. The goal of this project was to determine the potential of this housing option in North Saint Paul as a means of enhancing livability, creating jobs, promoting equitable economic development, and increasing housing density, and to identify implementation steps for making it happen. Teams of students from a housing studies course prepared development proposals for live/work housing projects, while a team of students in urban planning focused on recommended policy changes to promote live/work housing.

Class: HSG 4461: Housing Development and Management

Instructors: [Becky Yust](#) and [Lyn Bruin](#) (College of Design)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Projects: Group 1: [Proposal](#) and [Poster](#) | Group 2: [Proposal](#) and [Poster](#) | Group 3: [Proposal](#) and [Poster](#) | Group 4: [Proposal](#) and [Poster](#)

Class: PA 5261: Housing Policy

Instructor: [Edward Goetz](#) (Humphrey School of Public Affairs)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Project: [Report](#) and [Presentation](#)

2. Living Streets and Capital Improvements

Project Description: The City of North St. Paul recently completed a 20-year capital improvement plan, a key component of which is to allocate funds for major infrastructure improvements. The City also adopted a Living Streets Plan in 2011, which presented an argument for making North St. Paul streets more livable as the city undertakes street

reconstruction projects over the next 20 years. The plan includes design recommendations for pavement street width, storm water treatment, underground utilities, bicycle and pedestrian infrastructure, and street plantings. It also identifies specific street routes that should be targeted for improvements, connecting major recreational assets in the community. Students in a participation processes course in urban planning designed a prototype public participation process for the city to engage residents prior to and during reconstruction projects. Students in three other courses in public policy, public health, and architecture documented the benefits of a living streets approach to help the city make the case to residents for street improvements, and identified other engagement methods such as visual preference surveys and a living streets model that the city can use to better engage residents around street reconstruction projects.

Class: PA 5253: Designing Participation Processes (fall 2013)

Instructor: [Carissa Schively Slotterback](#) (Humphrey School of Public Affairs)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Projects: [Team 1 Report](#) | [Team Two Report](#) | [Team 3 Report](#)

Class: PA 8081—Making Sustainable Transportation Work (Spring 2014)

Instructor: [Greg Lindsey](#) (Humphrey School of Public Affairs)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Project: Report and [Poster](#)

Class: PH 6100—Topics in Environmental Health: Urban Ecosystems (Spring 2014)

Instructors: [Betsy Wattenberg](#), Petrona Lee, and [Matt Simcik](#) (School of Public Health)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Project: [Report](#) and [Presentation](#)

Class: ARCH 3250—Architecture: Community-Based Projects (Spring 2014)

Instructor: [James Wheeler](#) (College of Design)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

3. Green Energy Initiative

Project Description: North Saint Paul is unique in that it operates its own electric utility, in cooperation with Minnesota Municipal Power Agency. The city sought assistance investigating and providing information to residents, businesses, and elected officials about alternative energy and energy conservation initiatives, as well as identifying strategies for dedicating electric utility revenue toward green energy initiatives such as wind, solar, and geothermal. A public policy course investigated options for green energy initiatives, community-based energy development, distributed generation systems, district energy approaches, and net-zero-carbon development. Students in a law clinic focused on green energy and broader sustainability initiatives the city could implement through regulatory changes and incentives.

Class: PA 5721: Energy and Environmental Policy (fall 2013)

Instructor: [Elizabeth Wilson](#) (Humphrey School of Public Affairs)

City Project Lead: Brian Frandle, North St. Paul Electric Utility Director

Student Projects:

- **Overview by Elizabeth Wilson:** [PowerPoint](#)
- **Energy Efficiency:** [Policy Brief](#) | [PowerPoint](#) | [Video](#)
- **Smart Meters:** [Policy Brief](#) | [PowerPoint](#) | [Video](#) | [Project Poster](#)
- **Demand-Side Management:** [Policy Brief](#) | [PowerPoint](#) | [Video](#)
- **Distributed Generation:** [Policy Brief](#) | [Video](#)
- **Net Zero:** [PowerPoint](#) | [Video](#)

Class: LAW 7012: Land Use, Energy and Environment Clinic (fall 2013/spring 2014)

City Project Lead: Paul Ammerman, Community Development Director, North St. Paul

Instructor: [Jean Coleman](#) (Law School)

Student Projects: [GreenStep Cities Memo](#) | [Sustainability Memo](#) | [Presentation](#)

4. Crime Watch and Neighborhood Identities

Project Description: Strong communities are built on strong neighborhoods. The City of North St. Paul sought to build on existing neighborhood crime watch organizations to engage and empower neighborhood residents to keep their neighborhoods safe, livable, and vibrant, while developing a clearer sense of resident issues and priorities. A graduate-level Urban Planning course in public participation processes developed a generalized engagement strategy for unengaged or underrepresented populations in the city, including a process for getting residents engaged in neighborhood and community issues.

Class: PA 5253: Planning Participation Processes

Instructor: [Carissa Schively Slotterback](#) (Humphrey School of Public Affairs)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Projects: [Team 1 Report](#) | [Team 2 Report](#)

5. Community Branding

Project Description: North Saint Paul has a proud history and identity as a working-class community with a small-town feel, a collective identity that helps foster strong social ties among residents. However, the City is in need of a fresh “brand” that acknowledges the richness of the community’s past but also embraces its future direction and opportunities. Students in an undergraduate graphic design course conducted background research on the city’s historical and current identity, and solicited input from residents, city staff, and appointed and elected officials to create several design alternatives for a new graphic identity that the City can use for signs, business forms and marketing materials, communications media (website, Facebook account, newsletter), and other materials. The designs were accompanied by standards to guide implementation.

Class: GDES 3352: Identity and Symbols (fall 2013)

Instructor: Deb Lawton (College of Design)

City Project Lead: Laurie Koehnle, Communications Manager, City of North St. Paul

Student Projects:

- **Elise Boraas:** [Presentation](#) | [Standards Manual](#)
- **Emi Nguyen:** [Presentation](#)
- **Emma Radke:** [Presentation](#) | [Standards Manual](#)
- **Jacinda Schweitzer:** [Presentation](#) | [Standards Manual](#)
- **Kathryn Blong:** [Presentation](#) | [Standards Manual](#)
- **Laura Nygren:** [Presentation](#) | [Standards Manual](#)
- **Max Lindorfer:** [Presentation](#) | [Standards Manual](#)

6. Downtown Revitalization Strategies

Project Description: A recently adopted Redevelopment Master Plan for North Saint Paul’s “diversified district” identified strategies for revitalization of the downtown, including compression of the downtown retail core, supporting streetscape and other improvements to enhance the pedestrian experience in the downtown, and identifying “niche” businesses that would thrive in the downtown to guide future redevelopment efforts. Teams of graduate students in a public policy course on community economic development analyzed parking needs, conducted a market analysis for the downtown area, and offered recommendations for related strategies to revitalize North St. Paul’s downtown business district. An urban planning graduate capstone course on economic development investigated options for business improvement districts as one strategy to revitalize downtown North St. Paul.

Class: PA 5511: Community Economic Development (fall 2013)

Instructor: Bob Streetar (Humphrey School of Public Affairs)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Projects:

- Parking Analysis: [Final Report](#) | [Project Poster](#)
- Market Analysis: [Final Report](#) | [Project Poster](#)

Class: PA 8081: Economic Development (spring 2014)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Instructors: [Lee Munnich](#) and Lyssa Leitner (Humphrey School of Public Affairs)

Student Project: [Final Report](#) and [Presentation](#)

7. Conservation and Economic Development Initiative

Project Description: North St. Paul has its own municipal utility, which is required by state law to spend 1.5% of its gross operating revenue on conservation improvement projects (CIP). The city has existing conservation improvement and energy efficiency programs, but believes these programs are not being fully utilized by local residents and businesses. A course in program evaluation designed an evaluation plan to assess the existing conservation and energy efficiency programs, including whether the programs are being effectively marketed/communicated, and whether the incentives being offered are consistent with

homeowners' or business owners' needs and interests related to conservation and energy efficiency. A graduate-level public policy course on energy and environmental policy investigated options to promote new energy efficiency/conservation rebate programs and conservation improvement projects.

Class: OLPD 5501: Principles and Methods of Evaluation (fall 2013)

Instructor: [Randi Nelson](#) (College of Education and Human Development)

City Project Lead: Brian Frandle, Utilities Director, City of North St. Paul

Student Project: [Final CIP Program Evaluation Plan](#) | [PowerPoint Presentation](#) | [Handout](#)

Class: PA 5721: Energy and Environmental Policy (fall 2013)

Instructor: [Elizabeth Wilson](#) (Humphrey School of Public Affairs)

City Project Lead: Brian Frandle, Utilities Director, City of North St. Paul

Student Projects:

- **Overview by Elizabeth Wilson:** [PowerPoint](#)
- **Energy Efficiency:** [Policy Brief](#) | [PowerPoint](#) | [Video](#)
- **Smart Meters:** [Policy Brief](#) | [PowerPoint](#) | [Video](#) | [Poster](#)
- **Demand-Side Management:** [Policy Brief](#) | [PowerPoint](#) | [Video](#)
- **Distributed Generation:** [Policy Brief](#) | [Video](#)
- **Net Zero:** [PowerPoint](#) | [Video](#)

8. Civic Engagement and Communication

Project Description: One of the key goals for the North St. Paul outlined by the city council in 2013 was better communication with residents. The city's aging and increasingly diverse population creates challenges to communicating effectively. Students in two program evaluation courses worked on this issue: one designed an evaluation plan to assess the city's existing internal and external communications efforts, while the other conducted an assessment of the city's current communications efforts and future needs and provided recommendations for how to better engage residents in their local government and community.

Class: OLPD 5501: Principles and Methods of Evaluation (fall 2013)

Instructor: [Randi Nelson](#) (College of Education and Human Development)

City Project Lead: Laurie Koehnle, Communications Manager, City of North St. Paul

Student Project: [Final Evaluation Plan Report](#) | [PowerPoint Presentation](#) | [Handout](#)

Class: OLPD 8595: Evaluation Problems (spring 2014)

Instructor: [Jean King](#) (College of Education and Human Development)

City Project Lead: Laurie Koehnle, Communications Manager, City of North St. Paul

Student Project: Final Report | [Poster](#)

9. Environmental Education Initiative

Project Description: Increasingly, urban residents are detached from, and lack opportunities to meaningfully interact with, their natural environment. North St. Paul has many unique natural features that offer opportunities to educate residents about the local ecosystem and natural resources that are available, and to encourage residents to reengage with their natural environment. RCP engaged students in environmental education at the University of Minnesota Duluth campus to develop recommendations to inform a long-range operations and management plan for Southwood Park, a 29-acre nature reserve located in the southern portion of North Saint Paul that features a large wetland, a restored oak savannah, and a limited walking trail system. Students in another course in the School of Design used a “design thinking” approach to identify how best to engage residents in learning about the local ecosystem and environmental issues in Southwood Park, which currently has minimal programming or interpretive signage to engage visitors. A graduate student in Environmental Sciences, Policy, and Management focused on North Saint Paul’s environmental education needs as the subject of her thesis project for her master of science degree, examining how residents of North Saint Paul understand parks, trails, and natural areas in the community. A second course in environmental education at the University of Minnesota Duluth campus developed recommendations for creating environmental education programs at Southwood. Finally, a course in adult education considering educational programming for residents and users of Southwood Park. All of these projects involved collaboration with community education staff, local master naturalists, and neighbors of Southwood Park.

Class: EnEd 4315: Operations & Management (fall 2013)

Instructor: [Ken Gilbertson](#) (Environmental Education, University of Minnesota at Duluth)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Aerial Image](#) | [PowerPoint](#) | [Final Report](#)

Class: DES 3131: User Experience in Design (fall 2013)

Instructor: [Ange Wang](#) (College of Design)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Projects: [Student Poster](#) | [Team 1](#) | [Team 2](#) | [Team 3](#) | [Team 4](#) | [Team 5](#) | [Team 6](#) | [Team 7](#) | [Team 8](#)

Master of Science Thesis: Environmental Sciences, Policy, and Management (year-long)

Student: [Mary Hammes](#) **City Project Lead:** Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Hammes Plan B Paper](#)

Class: EnEd 5325: Environmental Issues Investigation (spring 2014)

Instructor: [Ken Gilbertson](#) (Environmental Education, University of Minnesota at Duluth)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Report](#) | [Presentation](#) | [Project Poster](#)

Class: OLPD 5204: Designing Adult Education Programs (spring 2014)

Instructor: [Catherine Twohig](#) (College of Education and Human Development)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Report](#) | [Project Poster](#) | [Presentation](#)

10. Redevelopment-Ready Community

Project Description: In addition to making specific redevelopment sites “shovel-ready,” North Saint Paul seeks to create an action plan to become an Urban Land Institute–certified “redevelopment-ready” community—a city that is an attractive and inviting location for developers to work and for businesses to (re)locate. To help inform this effort, students in a principles and methods of evaluation course designed an evaluation program to assess the city’s current development review process and regulations based on input from stakeholders (developers, investors, business owners, commercial real estate brokers, lending institutions) who have worked with the city in the past.

Class: OLPD 5501: Principles and Methods of Evaluation (fall 2013)

Instructor: [Randi Nelson](#) (College of Education and Human Development)

City Project Lead: Paul Ammerman, Community Development Director, City of North St. Paul

Student Project: : [Final Redevelopment Process Evaluation Plan](#) | [PowerPoint Presentation](#) | [Handout](#)

11. Community Gardening Planning

Project Description: In recent years, there has been some interest among residents in North St. Paul to develop community gardens. The City recognized urban agriculture as a growing trend that could improve sense of community, encourage healthy eating, and improve food security through access to locally produced food. However, the city had no formal policy or process in place for community gardens. An urban planning course in public participation designed a community engagement process the City can use to develop a community gardening policy and identify key garden site opportunities in the community. Students in another course in environmental policy and planning researched best practices related to fostering and supporting community gardening.

Class: PA 5253: Planning Participation Processes (fall 2013)

Instructor: [Carissa Schively Slotterback](#) (Humphrey School of Public Affairs)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Projects: Team 1: [Final Report](#) and [Poster](#) | Team 2: [Final Report](#)

Class: PA 5242: Environmental Planning, Policy, and Decision Making

Instructor: [Carissa Schively Slotterback](#) (Humphrey School of Public Affairs)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Report](#) | [Project Poster](#) | [Presentation](#)

12. Housing Conservation and Aging in Place

Project Description: Most of the housing stock (both single-family and multifamily) in North St. Paul is post–World War II vintage, and many of these homes are in need of repair or upgrading. However, many aging residents do not have the financial resources, skills, or assistance to make improvements or repairs. The purpose of this project was to develop programs or policies that would stabilize the housing stock in the community and provide housing options that make it possible for residents to age in place in North St. Paul. Students in a housing studies course focused on promoting independence in housing and community evaluated existing housing and community design characteristics in North Saint Paul and made recommendations for regulations, standards, and public policies the City can consider to support aging in place and upgrading existing housing stock. A course in the School of Social Work conducted aging-specific in-home assessments with 15 volunteer North St. Paul residents and their caregivers that included their housing situation, resource management, formal and informal support systems, mental health, and cognitive abilities. Students then identified gaps in services and made recommendations for what the city can do to address these gaps, either directly or in partnership with other organizations or agencies. Another course in the School of Public Health conducted focus groups with volunteer senior North St. Paul residents to identify their specific needs, challenges, and concerns related to aging in place (either in their current homes or in another home in the community) and made recommendations for how the city can support aging in place. Finally, a graduate student in an urban planning course on housing policy researched and made recommendations for programs, policies, and strategies the city can use to support aging in place and make North St Paul truly a “community for a lifetime.”

Class: HSG 5481: Promoting Independence in Housing and Community (fall 2013)

Instructor: [Lyn Bruin](#) (College of Design) | [Accessible House, Adaptable House, Smart House Presentation](#)
City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Report](#) | [Final Presentation](#) | [Project Poster](#)

Class: SW 8251: Social Work Practice in Health, Disabilities, and Aging (fall 2013)

Instructor: Stacy Remke (College of Education and Human Development)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Report](#) | [North St. Paul Resources for Seniors](#) | [Project Poster](#)

Class: GERO 5105: Multidisciplinary Perspectives on Aging (fall 2013)

Instructor: [Lisa Edstrom](#) (School of Public Health)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Presentation](#) | [Executive Summary](#) | [Final Report](#) | [Project Poster](#)

Class: PA 5261: Housing Policy (spring 2014)

Instructor: [Edward Goetz](#) (Humphrey School of Public Affairs)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Report](#) | [Presentation](#)

13. Staff Satisfaction and Staff Development

Project Description: The City of North St. Paul recognizes that staff satisfaction and enrichment can encourage staff retention, ultimately helping the community to move in a consistent and forward direction. The city employs approximately 60 staff within four areas: Public Works, Public Safety, Community and Economic Development, and Finance. To help inform the creation of a staff development plan, the city wanted to understand how satisfied current staff are with their job at the city and understand how to better ensure staff satisfaction and development. Students enrolled in a principles and methods of evaluation course designed an evaluation program to assess staff satisfaction, including what staff want or need in their day-to-day work environment, as well as what incentives or educational opportunities would encourage them to continue working at the city. Another course in human resources and industrial relations developed recommendations for improving staff morale and fostering staff development.

Class: OLPD 5501: Principles and Methods of Evaluation (fall 2013)

Instructor: [Randi Nelson](#) (College of Education and Human Development)

City Project Lead: Jason Ziemer, City Manager, City of North St. Paul

Student Project: [Staff Satisfaction Evaluation Plan](#) | [PowerPoint Presentation](#) | [Handout](#)

Class: HRIR 8034: Employee Development—Creating a Competitive Advantage

Instructor: [Stacy Doepner-Hove](#) (Carlson School of Management)

City Project Lead: Jason Ziemer, City Manager, City of North St. Paul

Student Projects: [Poster](#)

Student Projects:

- [Change Management and Employee Engagement report](#)
- [Onboarding report](#)
- [Individual Development report](#)
- [Performance Management report](#)
- [Wellness and Work-Life Balance report](#)

14. Public Art Plan

Project Description: North St. Paul wanted to engage residents of all ages and demographics by better incorporating public art into the community, instilling a greater sense of community pride. The community once had an Arts Council that had gone dormant, and hoped to re-engage the community and revitalize the downtown and neighborhood districts through public art. Students in an urban planning course focused on public engagement designed a participation process for developing a public art plan, proposed a strategy for facilitating long-term community engagement around public art, and identified strategies to reengage the previous city arts council. Students in a design thinking course identified strategies for engaging local residents around public art.

Class: PA 5253: Planning Participation Processes (fall 2013)

Instructor: [Carissa Schively Slotterback](#) (Humphrey School of Public Affairs)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Projects: [Team 1 Report](#) | [Team 2 Report](#) | [Team 2 Poster](#)

Class: LS 5100: Design Thinking

Instructor: [Virajita Singh](#) (College of Design)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Final Report](#)

15. Emerald Ash Borer Management Plan

Project Description: With the recent discovery of the Emerald Ash Borer (EAB) in the Twin Cities metropolitan area, the damage from the borer is an issue every community in the region will soon need to address. Roughly one-third of the trees in North St. Paul are ash, including 80% of the trees in parks and 80% of the trees on the north side of town. The City had no plan in place to respond to the invasion of the EAB, to remove dead or dying trees before they become a public hazard, or to replace trees so the community maintains its tree canopy. Teams of students in urban forestry completed an inventory of trees in North St. Paul, used a cost-benefit analysis to develop recommendations for managing EAB in the city, and developed a protocol for how to gain community support for the management plan. In addition, a course in adult education developed a plan for how to communicate the risks of EAB to homeowners.

Class: FR 4501/5501: Research Problems: Urban Forestry—Biology and Management (spring 2014)

Instructor: [Gary Johnson](#) (College of Food, Agricultural, and Natural Resource Sciences)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [EAB Management Plan Report](#) | [Presentation](#)

Class: OLPD 5204: Designing Adult Education Programs (spring 2014)

Instructor: [Catherine Twohig](#) (College of Education and Human Development)

City Project Lead: Jon Fure, Community Development Intern, City of North St. Paul

Student Project: [Community Education Training Manual](#) | [EAB: Do I Have It?](#)

[Factsheet](#) | [Project Poster](#)

16. Stormwater Management

Project Description: Significant rain events in the last few years have overwhelmed the storm water systems in North St. Paul, creating localized flooding issues in several neighborhoods. In addition, most portions of the city drain to Kohlman Lake, one of the four lakes that make up the Phalen Chain of Lakes. Kohlman Lake is impaired for phosphorus, which causes potentially dangerous algae blooms, and storm water from North St. Paul contributes to the problem. Students in a civil engineering course investigated cost-effective solutions to remediate local flooding issues and reduce total suspended solids and phosphorus load to local and downstream lakes.

Class: CE 5511: Urban Hydrology (spring 2014)

Instructor: John Gulliver (College of Science and Engineering)

City Project Lead: Morgan Dawley, contract city engineer for North St. Paul/WSB Associates
Student Projects:

- Casey Lake Subwatershed: [Final Report](#) | [Presentation](#) | [Project Poster](#)
- Urban Ecology Center Subwatershed: [Final Report](#) | [Presentation](#) | [Project Poster](#)
- Silver Lake Subwatershed: [Final Report](#) | [Presentation](#) | [Project Poster](#)

Rosemount Projects

For the 2014–2015 academic year, RCP partnered with the **City of Rosemount** on 31 projects that engaged 45 classes and more than 400 students across 11 colleges at the University of Minnesota Twin Cities and Duluth campuses. Summaries of the projects and links to final student reports and presentations (where available) are below.

1. Private Student Housing for DCTC: Investigate options for private student housing for Dakota County Technical College students.

Project Lead: Eric Zweber, Senior Planner, City of Rosemount

UMN Course: HSG 4461: Housing Development and Management (Dr. Lyn Bruin and Dr. Becky Yust)

2. Neighborhood Cohesion: Identify strategies to support healthy neighborhood cohesion among residents, as well as integration of neighborhoods into the larger Rosemount community.

Project Lead: Alan Cox, Communications Coordinator, City of Rosemount

UMN Course: SW 8551: Advanced Community Practice: Assessment, Organizing, and Advocacy (Liz Lightfoot)

3. Homeowner Association Collaboration: Identify opportunities for collaboration and partnership with homeowners associations to provide public benefit and improved services.

Project Lead: Christine Watson, Public Works Coordinator, City of Rosemount

UMN Courses:

- **LAW 7750:** Community Practice and Policy Development (Dr. Nancy Cook)
- **PA 8081:** Public/Private Partnerships (Jim Westcott and Kevin Gerdes)

4. Communications Methods: Identify methods of information dissemination most effective for communicating with underserved or hard-to-reach populations such as youth, seniors, and non-native residents.

Project Lead: Alan Cox, Communications Coordinator, City of Rosemount

UMN Course: PA 5281: Immigrants, Urban Planning, and Policymaking (Dr. Ryan Allen)

5. Daytime Staffing at Fire Department: Develop a strategic plan to increase the amount of on-call firefighters available during work week hours.

Project Lead: Rick Schroeder, Fire Chief, City of Rosemount

UMN Courses:

- **HRIR 6301:** Staffing, Training, and Development (Dr. John Kammeyer-Mueller)
- **PSY 5707:** Personnel Psychology (Dr. Deniz Ones and Dr. John Campbell)
- **PSY 5708:** Organizational Psychology (Dr. Aaron Schmidt)

6. Resident Preferences and Community Amenity Capital Planning: Identify strategies for publicizing existing community amenities and engaging residents in future capital improvement planning.

Project Lead: Tom Schuster, Parks Supervisor, City of Rosemount

UMN Course: PA 5145: Civic Participation in Public Affairs (Dr. Kathy Quick)

7. Safe Youth Driving Behavior: Investigate successful programs and partnerships to reduce teen traffic accident risks.

Project Lead: Chad Rosa, Police Officer, City of Rosemount

UMN Courses: YOST 5032: Adolescent and Youth Development for Youthworkers (Dr. Ross VeLure-Roholt)

8. Healthy and Safe Youth Behavior: Conduct a program inventory, evaluation, and gap analysis of mental health services and substance education and prevention programs that serve youth.

Project Lead: Chad Rosa, Police Officer, City of Rosemount

UMN Courses: YOST 5032: Adolescent and Youth Development for Youthworkers (Dr. Ross VeLure-Roholt)

9. Cultural Integration: Inventory, evaluate, and identify gaps in services and programs geared toward new immigrant groups in Rosemount.

Project Lead: Lisa Maurer, Recreation Supervisor, City of Rosemount

UMN Courses:

- **PA 5281:** Immigrants, Urban Planning, and Policymaking (Dr. Ryan Allen). **Student Project:** [Immigrant Resident Needs Assessment Report](#)
- **SW 8551:** Advanced Community Practice: Assessment, Organizing, and Advocacy (Liz Lightfoot).

10. Comprehensive Planning Public Engagement Process: Develop a proposal for a broadly inclusive public engagement process for Rosemount’s upcoming 2040 Comprehensive Plan update.

UMN Course: PA 5253: Planning and Participation Processes (Dr. Carissa Schively Slotterback)

Student Projects:

- **Group 1:** Learn, Participate, Lead – [Proposal](#) | [Presentation](#)
- **Group 2:** MyRosemount – [Proposal](#) | [Presentation](#)
- **Group 3:** PowerUp 2018 – [Proposal](#) | [Presentation](#)

11. Employee Wellness Programming: Assess the health and wellness issues that are most prevalent for Rosemount city employees and provide recommendations for a comprehensive wellness program.

Project Lead: Emmy Foster, Assistant City Administrator, City of Rosemount

UMN Course: PSY 3960: Stress & Trauma (Dr. Patricia Frazier)

12. Recreational Programming for Children’s Interaction with Nature: Assess opportunities for nature-based recreation and play, and recommend improvements to park and recreation systems to provide more nature-based opportunities for children.

Project Lead: Tom Schuster, Parks Supervisor, City of Rosemount

UMN Courses:

- **REC 3281:** Research and Evaluation in Recreation, Park, and Leisure Studies (Dr. Tony Brown). **Student Projects:** [Group 1 Report](#) | [Group 1 Presentation](#) | Group 2 Video
- **LS 5100:** Revitalizing Environmental Reform: Re-Imagining the Arts for Public Parks (Dr. Roslye Ultan).
- **EnEd 4315:** Operations & Management (Dr. Ken Gilbertson) (UM Duluth Campus). **Student Project:** [Final Report](#) | [Presentation](#)

13. Recreational Opportunities for Underserved Populations: Evaluate how well current recreational offerings meet the needs of underserved populations (people with disabilities, seniors, new immigrants) and recommend improvements to better serve the needs of these groups.

Project Lead: Lacelle Cordes, Recreation Supervisor, City of Rosemount

UMN Courses:

- **PA 5281:** Immigrants, Urban Planning, and Policymaking (Dr. Ryan Allen). **Student Project:** [Immigrant Resident Needs Assessment Report](#)
- **REC 3281:** Research and Evaluation in Recreation, Park, and Leisure Studies (Dr. Tony Brown). **Student Project:** [Memo](#) | [Presentation](#)
- **LS 5100:** Revitalizing Environmental Reform: Re-Imagining the Arts for Public Parks (Dr. Roslye Ultan)
- **EnEd 4315:** Operations & Management (Dr. Ken Gilbertson) (UM Duluth Campus)

14. Community Gathering Spaces: Research the characteristics of place-making in a suburban setting and identify opportunities for place-making through redesign or redevelopment.

Project Lead: Dan Schultz, Parks and Recreation Director, City of Rosemount

UMN Courses:

- **LS 5100:** Revitalizing Environmental Reform: Re-Imagining the Arts for Public Parks (Dr. Roslye Ultan)
- **URB 3751:** Understanding the Urban Environment (Paula Pentel)

15. Community Gardens: Assess Rosemount’s existing community gardening program and recommend programmatic changes to improve gardeners’ success, reduce the administrative burden on staff, and balance the use of public spaces for gardening against other recreational uses and needs.

Project Lead: Tom Schuster, Parks Supervisor, City of Rosemount

UMN Course: PA 5311: Program Evaluation (Dr. Hanife Cakici and Jodi Sandfort)

Student Project: [Community Garden Program Evaluation Plan](#)

16. Urban Agriculture: Explore opportunities to capitalize on the existing local agricultural economy in Rosemount by supporting locally grown food and value-added agribusinesses. ☒

Project Lead: Eric Zweber, Senior Planner, City of Rosemount

UMN Courses:

- **SUST 4004:** Sustainable Communities (Samantha Grover and Amir Nadav). **Student Projects:**
 - **Food Producers:** [Final Report](#) | [Presentation](#)
 - **Wholesale Food Consumers:** [Final Report](#) | [Presentation](#)
- **PA 5242:** Environmental Planning, Policy, and Decision Making (Carissa Schively Slotterback)

17. Mississippi Riverfront Greenway Restoration: Evaluate existing restoration activities in the Mississippi River Critical Area Corridor and recommend an overall restoration strategy or plan that builds on these efforts and incorporates additional public access opportunities.

Project Lead: Eric Zweber, Senior Planner, City of Rosemount

UMN Courses: HORT 5071: Ecological Restoration (Dr. Susan Galatowitsch)

Student Projects: [Final Presentation](#) | [Site N1 Restoration Plan](#) | [Site N2 Restoration Plan](#) | [Site N3 Restoration Plan](#) | [Site N4 Restoration Plan](#)

18. Athletic Stadium Turf Options: Analyze the lifecycle costs of using synthetic turf versus natural turf grass on athletic fields.

Project Lead: Tom Schuster, Parks Supervisor, City of Rosemount

UMN Courses: HORT 4061: Turfgrass Management (Dr. Eric Watkins)

19. Turf Management and Landscaping: Identify strategies or opportunities to reduce long-term turf and landscaping maintenance costs.

Project Lead: Jim Koslowski, Public Works Supervisor, City of Rosemount

UMN Courses: HORT 4061: Turfgrass Management (Dr. Eric Watkins)

Student Projects: [Sustainable Turf Management Final Report](#) | [Student Videos](#)

20. Expansion of Public Art in Downtown Historic District: Develop a public art program for Downtown Rosemount, including a strategic implementation plan that engages residents.

Project Lead: Kim Lindquist, Community Development Director, City of Rosemount

UMN Courses: LS 5100: Revitalizing Environmental Reform: Reimagining the Arts for Public Parks (Roslye Ultan)

21. Alternative Sources of Energy: Assess and make recommendations for the use of solar, wind, and other alternative energy sources to power municipal facilities.

Project Lead: Christine Watson, Public Works Coordinator, City of Rosemount

UMN Courses: PA 5242: Environmental Planning, Policy, and Decision Making (Carissa Schively Slotterback)

22. Climate Adaptation: Identify potential local impacts of climate change in Rosemount, as well as specific strategies to reduce the community's vulnerability to these impacts, including an education and outreach campaign.

Project Lead: Jason Lindahl, Planner, City of Rosemount

UMN Courses:

- **LAW 7012:** Environmental Sustainability: Land Use and Water Policy (Jean Coleman)
- **OLPD 5204:** Designing the Adult Education Program (Catherine Twohig)
- **PA 5242:** Environmental Planning, Policy, and DM (Carissa Schively Slotterback)

23. Greenhouse Gas Emissions Study: Develop a climate action plan that identifies specific strategies for reducing greenhouse gas emissions throughout the community.

Project Lead: Jason Lindahl, Planner, City of Rosemount

UMN Courses:

- **SUST 4004:** Sustainable Communities (Amir Nadav and Samantha Grover). **Student Project:** [Final Report](#) | [Presentation](#)
- **PA 4790/5790:** Sustainable Infrastructure and Cities (Anu Ramaswami)
- **OLPD 5204:** Designing the Adult Education Program (Catherine Twohig)
- **SUST 4004:** Sustainable Cities (Julia Nerbonne)
- **PA 5242:** Environmental Planning, Policy, and Decision Making (Carissa Schively)

Slotterback)

24. Storm Water Management: Identify opportunities or design strategies for storm water infiltration that balance aesthetics and functionality, reduce long-term maintenance costs, manage winter snow melt, and provide opportunities for other passive uses.

Project Lead: Andy Brotzler, Public Works Director/City Engineer, City of Rosemount

UMN Course: PA 5242: Environmental Planning, Policy, and Decision Making (Carissa Schively Slotterback)

25. Water Reuse and Conservation: Investigate the feasibility of reusing storm water or treated effluent for irrigation, industrial applications, or other uses.

Project Lead: Andy Brotzler, Public Works Director/City Engineer, City of Rosemount

UMN Courses:

- **PUBH 6132:** Air, Water, and Health (Matt Simcik)
- **LAW 7012:** Environmental Sustainability: Land Use and Water Policy (Jean Coleman)
- **OLPD 5204:** Designing the Adult Education Program (Catherine Twohig)

26. Non-Motorized Transportation Assessment: Evaluate the impact of non-motorized transportation plans and investments in Rosemount and recommend strategies to increase biking and walking.

Project Lead: Jason Lindahl, Planner, City of Rosemount

UMN Courses: PA 5311: Program Evaluation (Dr. Hanife Cakici and Jodi Sandfort)

Student Project: [Non-Motorized Transportation Evaluation Plan](#)

27. Travel Shed Analysis: Conduct a travel shed analysis of where Rosemount residents and employees work and live that can inform future transit and transportation planning, and provide recommendations for increasing transit use.

Project Lead: Eric Zweber, Senior Planner, City of Rosemount

UMN Courses:

- **PA 8202:** Networks and Places (Dr. Yingling Fan)
- **GEOG 5564:** Urban Geographic Information Science and Analysis (Jeff Matson)

28. Green Energy Impacts on Urban Development: Evaluate the suitability of green energy generation in a suburban context, including potential nuisance issues, siting of facilities, and compatible adjacent development types.

Project Lead: Jason Lindahl, Planner, City of Rosemount

UMN Courses: PA 5242: Environmental Planning, Policy, and Decision Making (Carissa Schively Slotterback)

29. Analysis of Dakota County Business Clusters: Analyze existing business clusters in Rosemount and Dakota County, identify opportunities for synergies between existing businesses and clusters, and create a marketing strategy to attract or grow synergistic businesses.

Project Lead: Kim Lindquist, Community Development Director, City of Rosemount

UMN Courses:

- **PA 5590:** Topics in Economic and Community Development (Lee Munnich). **Student Project:** [Dakota County Business Cluster Analysis](#) | [Presentation](#)
- **PA 5290:** Community Economic Development (Dr. Brent Hales)

30. Eco-Green Business Park: Explore opportunities for attracting green businesses and encouraging adoption of green building/manufacturing standards for a future green business park in Rosemount.

Project Lead: Kim Lindquist, Community Development Director, City of Rosemount

UMN Courses:

- **PA 5290:** Community Economic Development (Dr. Brent Hales)
- **MBA 6504:** Carlson Consulting Enterprise (Toby Nord)
- **PA 5242:** Environmental Planning, Policy, and Decision Making (Dr. Carissa Schively Slotterback)

31. Economic Development Website: Evaluate Rosemount's existing economic development website, review similar websites in other communities, and provide recommendations for modifying the site to align with community marketing standards for economic development.

Project Lead: Kim Lindquist, Community Development Director, City of Rosemount

UMN Course: PA 5512: Community Development (Dr. Brent Hales)