

Rosemount Non-Motorized Transportation Evaluation Plan



Liz Harens, Jenna Larson,
James Murphy, Elizabeth Rojas,
& Danielle Winner

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Resilient Communities Project

University of Minnesota

330 HHHSPA

301—19th Avenue South

Minneapolis, Minnesota 55455

Phone: (612) 625-7501

E-mail: rcp@umn.edu

Web site: <http://www.rcp.umn.edu>

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Executive Summary

The Rosemount Non-Motorized Transportation Program is a strategic plan for walking and bicycling that developed as a part of Rosemount's 2030 Comprehensive plan, which focuses on active living. Rosemount's goal is to be a community where choosing to bicycle or walk is a safe, convenient, and enjoyable recreation and transportation option for everyone.

This is a formative evaluation plan that focuses on how Rosemount can improve the Non-Motorized Transportation Program and assesses the extent to which the program is reaching its goal of making walking and biking safer, more convenient, and more enjoyable for residents. This evaluation plan will also provide Rosemount with data to compare its current performance to that of other similar cities. This information will assist Rosemount in progressing in their goal of being designated a Bicycle Friendly City.

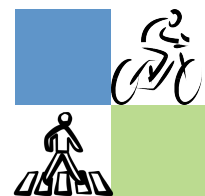
This evaluation proposal contains:

- Object description detailing program goals, scope, and strategies
- Logic model highlighting program elements and anticipated outcomes
- Evaluation plan outlining evaluation questions, including performance indicators, data sources, methods, and analysis techniques for each question
- Survey form for collecting data associated with measuring project goals and improving the program services
- Observation protocol for collecting data to measure program participation
- Recommendations for implementing this evaluation plan

Throughout the development of the evaluation plan, these key evaluation questions emerged. This evaluation hopes to address:

1. To what extent and in what ways do Rosemount residents use non-motorized transportation?
2. To what extent has Rosemount implemented the non-motorized program as described in the Master Plan?
3. What are the barriers to non-motorized transportation usage in Rosemount?
4. How does Rosemount compare to other similar cities in regards to non-motorized transportation?

Answering these evaluation questions will allow the City of Rosemount to better understand how the Non-Motorized Transportation Program affects residents. More importantly, the data collected from implementing this evaluation proposal will provide guidance to city staff for improving how the program serves the community. To this end, we hope the evaluation plan proposal will allow Rosemount to reach its active living goals, attain the Bicycle Friendly City designation, and create a safer, more convenient, and more enjoyable community for walking and bicycling.



Introduction

The City of Rosemount encompasses 36 square miles, fifteen miles south of the Minneapolis and Saint Paul metropolitan area, in Dakota County. According to the 2010 Census, Rosemount has a population of 21,874, an almost 50% increase from 2000. With ongoing housing developments, the population is expected to continue to increase. 61% of residents are between the ages of 18 and 64 years old, with a median age of 34.7 years old.

Considering its relatively small size, Rosemount has a thriving and diverse economy. Major local employers include the Rosemount School District, a petroleum and coal products manufacturer, a freight trucking company, and a grocery store chain. The median income for a Rosemount resident is \$79,300, compared to \$64,200 for a metro area resident and \$72,900 for a Dakota County resident. The median home value in Rosemount is \$249,300 compared to \$239,100 for the metro area and \$243,700 for Dakota County. Rosemount houses a Community Center and Ice Arena, a movie theater, multiple baseball fields, a County park, six community parks, and fifteen neighborhood parks. Other destinations include a library, a medical clinic, and six schools that educate approximately 5,300 students.

As Rosemount is spatially and culturally a suburban city, development has traditionally favored car-centric design and activities, resulting in certain areas not having sidewalks, having narrow sidewalks, or having limited right-of-way for pedestrians and bikers. Many trails do not lead to specific destinations, leading to more residents using the trails solely for recreation purposes. Rosemount offers fifty miles of sidewalks, thirty-four miles of trails, approximately twenty miles of on-road designated bike routes, and 534 bike parking stalls for resident use. Additionally, Rosemount has preserved 302 acres of land for 23 local parks.

Rosemount began to focus on active living goals in the mid-2000s and, after receiving a Statewide Health Improvement Program (SHIP) grant in 2010, the City Council developed a Pedestrian and Bicycle Master Plan that strives to create a safer, more convenient, and more enjoyable experience for non-motorized transportation users. The City has partnered with the school district to develop the Safe Routes to School Plan to encourage the youngest members of the community to embrace an active lifestyle. In 2011, Rosemount received an honorable mention for their application for a Bicycle Friendly Community designation.

Object Description

Program Goals

Rosemount's primary goal is to increase the number and frequency of its residents using of non-motorized transportation (walking and biking). Rosemount believes that if citizens view non-motorized transportation is safe, convenient, and fun, more people will walk or bike for both recreational and utilitarian purposes. The increased use of non-motorized transportation will lead to active lifestyles for the participants, creating positive benefits to the participants and the community related to health, environment, transportation, economic development, and overall quality of life.

Target Audience

As the program is a public service offering, participants are not selected and all residents are encouraged to participate. The program is designed to serve a broad range of residents, including school children, young families, commuters, businesses, and the aging population. Rosemount wants to ensure that the program activities are inclusive of residents of different ages, genders, ethnicities, and abilities. There is little data available on how program participants are using the program (recreation vs. utilitarian) and the demographics or socio-economic composition of program participants.

Program Implementation

Rosemount plans and administers the program under the shared supervision of three departments. Community Development provides overall vision for the program, Parks & Recreation plans trails and other facilities for public use, and Public Works builds facilities, lays out the trails, and provides maintenance. Each department has their own staff and leadership structure to meet these responsibilities. Jason Lindahl from the Community Development team provides the overall vision for the program and facilitates activities and relationships with program stakeholders, including school leaders and members of the local business community. The program currently partners with the school district to encourage children to walk and bike safely to school over time. They are also hoping to partner with the Rosemount Cycling Club to encourage community residents to cycle more frequently.

Program Budget

Program activities are funded under all three of the aforementioned departments' budgets. In 2014, Community Development has a total budget of \$929,300, Public Works has a total budget of \$2,181,700 for street and park maintenance, and Parks & Recreation has a total budget of \$1,356,800. The 2014 Capital Budget includes \$125,000 for a Pedestrian Improvements Program under the Public Works Department. The recent Pedestrian and Bicycling Master Plan was developed with grant funding from the Minnesota State Health Improvement Program through the Dakota County Active Living Partnership and Public Health Departments.

Activities

Rosemount constructed an underpass, posted directional signs, and built bike racks to encourage residents' participation, while maintaining existing trail and sidewalk infrastructure. City staff meets with community members to plan activities to encourage non-motorized transportation. Rosemount has partnered with the school district to plan events for International Walk to School Day, coordinated a bike ride with neighboring community Apple Valley during National Bicycling Month, participated in the school district's health expo, and recruited community members to become certified bicycling instructors through the League of American Bicyclists program. Staff members coordinate with Dakota County and neighboring communities on collaborative non-motorized transportation efforts, including the Greenway Plan and the Mississippi River Trail. Additionally, the City of Rosemount applies for state and federal grants to improve trails and routes for users.



Logic Model

Rosemount Non-Motorized Transportation Logic Model: This program encourages non-motorized transportation for both utilitarian and recreational purposes to increase the overall quality of life for Rosemount residents. While the program has support and funding from key stakeholders, such as the City and County governments, Rosemount’s suburban and subsequent planning efforts have revolved around a more car-focused approach. Consequently, the program’s success requires both infrastructure investments and educational/promotional efforts to increase awareness of the benefits for residents of using non-motorized transportation.

Inputs	Outputs		Outcomes -- Impact		
	Activities	Participation	Short	Medium	Long
<ul style="list-style-type: none"> • City, state, and federal funding (including SHIP grants and a \$125,000 city allocation) • Staff time from the Parks & Recreation, Community Planning, and Public Works Departments • Existing infrastructure of trails and sidewalks • Stakeholder support from City Council, City Departments, Area Schools, and Dakota County • Existing plans, including Pedestrian and Bicycling Maser Plan 	<ul style="list-style-type: none"> • Post directional signs on trails and sidewalks • Build bike racks throughout the City • Construct new pathways for walking and biking (i.e. new underpass). • Maintain and improve trails and sidewalk system. • Partner with local schools for promotional events, such as national Walk to School Day and the local Health Expo • Partner with local communities for promotional events, such as National Bicycling Month • Recruit trainees for League of American Bicyclists certification program. 	<ul style="list-style-type: none"> • School Leaders • Teachers • Students • Young Families • Local Businesses • Cycling Club • Cycling Enthusiasts • New Bikers 	<ul style="list-style-type: none"> • Increased community awareness of opportunities for walking/ biking, including how and where to use non-motorized transportation. • Increased perception among residents of safety, convenience, and enjoyment of non-motorized transportation options in Rosemount. • Increased awareness of the program benefits, including health and cost-savings. • Increased numbers of individuals interested in walking/biking and/or considering starting this activity. 	<ul style="list-style-type: none"> • More residents engaging in non-motorized transportation. • Increased frequency or duration of trips by those already walking/biking. • Increased patronage of local businesses resulting from these efforts. • New partners participating in (or hosting) events, including religious groups, local businesses, and other community or civic groups. • Decreases in car purchases or multi-car households. • Rosemount is bike-friendly certified community. 	<ul style="list-style-type: none"> • Residents have lower rates of obesity, diabetes, and blood pressure. • Increased economic activity in downtown from meeting new demand. • Increased community engagement and socialization through events, community groups, and community meet-ups. • Population, or economic development, increases due to heightened quality of life. • Land-use patterns support non-motorized Transportation. • Green Step Cities emissions goals met.

Assumptions

External Factors

Discussion of Logic Model

The logic model describes and connects the main elements of the non-motorized transportation program. This logic model served as the basis for developing this proposal's evaluation questions and for determining the data collection methods, timeline, and analysis for addressing those evaluation questions.

Assumptions

Underlying the program's conception and implementation are the assumptions that there will be effective coordination and agreement between the various city departments involved; that walking and biking will result in these desired outcomes; and also that the city controls the tools and resources necessary to generate these desired outcomes.

External Factors

The main external factors identified include availability of funding for these efforts, the community attitudes toward non-motorized transportation, and also the seasonal variance that occurs in Minnesota.

Inputs

The program inputs include funding, infrastructure, and human resources. Rosemount receives city, state, and federal funding for elements of this program, including a recent \$125,000 city allocation. Human resources include staff from three different city departments and stakeholder support from city and county officials and other key community partners. Additionally, the program inputs include both existing infrastructure (sidewalks and trails) and established planning documents.

Program Outputs

Program outputs include both activities and those participating in the activities. Activities range from posting signs and installing new bike racks to constructing a new underpass to recruiting trainees for a bike league certification program. The Rosemount residents taking part in the program include new and current bikers, young families, teachers, students, and cycling club members.

Program Outcomes

Short-term outcomes focus on changes in attitudes and awareness, such as increasing community knowledge of non-motorized transportation opportunities and increasing their interest in taking part in these opportunities. Medium-term outcomes demonstrate changes in behavior, such as increased frequency of walking or increased patronage of local businesses by those walking or biking downtown. Long-term outcomes address community challenges related to health, economy and environment for example. For Rosemount, desired long-term outcomes are reduced diabetes and obesity of residents, increased population or economic development, and the establishment of better land use patterns.

Evaluation Plan

Rosemount strives to create a safer, more convenient, and more enjoyable experience for utilitarian and recreational non-motorized transportation users. The increased use of non-motorized transportation will lend to active lifestyles for participants and increased health, environmental, economic, and social benefits for both the participants and the general Rosemount community.

The City has invested substantial resources and time in advancing this program, with the largest investment being the new underpass connecting emerging housing developments with the downtown Rosemount area. Subsequently, those involved with the program are interested in learning whether their activities are supporting their strategy of promoting non-motorized transportation as a safe, convenient, and enjoyable activity and whether those activities are actually leading to increases in participation and awareness among community members.

As the city's goals related to the Pedestrian and Bicycle Master Plan cross departments, this evaluation proposal could be used by the Community Development, Parks and Recreation, Public Works, and Police Department. The primary evaluation user is Jason Lindahl who commissioned the evaluation. Other potential users could include the Community Development Director, Kim Lindquist, and Senior Planner, Eric Zweber, who may use the results to design future trails and routes throughout Rosemount. The Parks and Recreation department administers recreational activities and maintains park facilities. The Parks and Recreation Director, Dan Schultz, Recreation Supervisors, Lacelle Cordes and Lisa Maurer, and Parks Supervisor, Tom Schuster, could use the results of the evaluation to assist in planning, improving, and maintaining recreational activities and park facilities.

The Public Works department is responsible for the construction and maintenance of Rosemount's streets, trails, sidewalks, and parks. The Public Works Director, Andy Brotzler, Assistant City Engineer, Phil Olson, and Public Works Supervisor, Jim Koslowski, could use the results of this evaluation to better serve the community in the construction and maintenance of the streets, trails, sidewalks, and parks. Finally, the Pedestrian and Bicycle Master Plan strives to increase education, awareness, and enforcement of non-motorized transportation safety within the community, with the assistance of the Police Department. Though this is a relatively underdeveloped portion of the program, the results could be passed along to Community Resource Office Julie Pulkabrek, who deals with many of the Police Department's community outreach programs.

As a result of the cross-departmental nature of the non-motorized transportation program, each of these potential primary intended users is encouraged to use the results of this evaluation in a manner that will most benefit the community while supporting the efforts of the other departments.

The evaluation approach proposed is formative as it will be conducted during the program's implementation with the intention of assisting the implementers in improving

the program delivery. First, the evaluation will assist Rosemount staff in understanding how the Pedestrian and Bicycling Master Plan is being implemented. The evaluation will also enable the city to measure the community's use of and satisfaction with the infrastructure and activities in support of non-motorized transportation. Infrastructure includes components such as the installed underpass, bike racks, and directional signs, whereas activities include conducted outreach and promotions to encourage bicycling and walking.

Additionally, program staff will use the evaluation results to establish benchmarking data and criteria for ongoing use. This will enable staff to identify any recent increases in usage since the baseline data was collected in 2012, while providing a structure for ongoing collection of walking and biking counts. Beyond basic usage counts, the evaluation will be to address underlying issues, including attitudes toward non-motorized transportation and general barriers, that are impacting residents' interest and ability to participate.

Evaluation Questions

The purpose of the evaluation is to evaluate the impact of existing efforts, develop a benchmarking infrastructure, and identify factors affecting community adoption. The following evaluation questions aim to address each of purpose.

1. To what extent and in what ways do Rosemount residents use non-motorized transportation?
2. To what extent has Rosemount implemented its non-motorized program as described in the Master Plan?
3. What are the barriers to non-motorized transportation usage?
4. How does Rosemount compare to similar cities in regards to non-motorized transportation?



Evaluation Plan Chart

Evaluation Questions	Indicators or Performance Measures	Potential Data Sources	Methods	Timeline for Data Collection	Analysis
<p>1. To what extent and in what ways have the Rosemount residents used non-motorized transportation?</p>	<p>a. Number of residents walking/biking on trails and sidewalks b. Number of bike racks occupied each day c. Number of residents who own bikes d. Public's awareness</p>	<p>a-b. Rosemount NMT system & facilities c-d. Rosemount Residents</p>	<p>a. Observation counts on trails and sidewalks b. Observation counts on bike racks c-d. Surveys sent to the homes of Rosemount residents</p>	<p>a. Observation counts of walking/biking seasonally b. Observation counts on bike racks seasonally c-d. Surveys sent to Rosemount residents annually</p>	<p>a-d. Collect data in forms, compile in spreadsheets, analyze cross-sectionally & longitudinally</p>
<p>2. To what extent has Rosemount implemented its non-motorized program as described in the Master Plan?</p>	<p>a. Activities planned / Activities executed b. Amount of funding secured c. Number of partnerships created</p>	<p>a-c. Archival data & records (Master Plan, Rosemount implementation documents, Activities list) a-c. Program staff</p>	<p>a-c. Document review a-c. Interviews with Rosemount staff</p>	<p>a-c. In 2015, collect data and continue on annual basis</p>	<p>a-c. Compile data in spreadsheet, analyze longitudinally a-c. Record and transcribe data digitally, compile in spreadsheet, analyze cross-sectionally & longitudinally</p>

Evaluation Questions	Indicators or Performance Measures	Potential Data Sources	Methods	Timeline for Data Collection	Analysis
<p>3. What are the barriers to non-motorized transportation usage?</p>	<p>a. Resident opinions about non-motorized transportation and project facilities b. Rosemount police and city staff perceptions of safety, convenience, and enjoyment c. Number of ped/bike related accidents d. Enrollment in safety classes e. Number of designated walk/bike paths, crosswalks, walk and bike facilities f. Proximity to infrastructure and facilities</p>	<p>a. Rosemount residents b. Rosemount police, city staff c-e. City data, archival data, police reports</p>	<p>a1. Surveys sent to Rosemount residents a2. Focus group with Rosemount residents a3. Interviews with Rosemount residents b. Interviews with Rosemount police and city staff c-e. Document Review</p>	<p>a1. Annual survey to residents a2. Annual focus group with residents a3. Annual interviews with residents b. Annual interviews with police and staff c. Bi-annual (summer and winter) document review of ped/bike related accidents d. Annual document review of enrollment in safety classes e. Document review of facilities and proximity to facilities upon new project completion</p>	<p>a. Collect data in forms, compile in spreadsheet, analyze cross-sectionally & longitudinally b. Record and transcribe data digitally, compile in spreadsheet analyze cross-sectionally c-e. Compile data in spreadsheet, analyze cross-sectionally</p>
<p>4. How does Rosemount compare to similar cities in regards to non-motorized transportation?</p>	<p>a. Dollars spent b. Infrastructure c. Participation Rates</p>	<p>a. CAFRs, program budgets b. City reports c. Observation studies of other cities</p>	<p>a-c. Document Review</p>	<p>a-c. Document review every five years</p>	<p>a-b. Compile data in spreadsheet, analyze longitudinally c. Compile data in spreadsheet, analyze cross-sectionally</p>

Data Collection

Data Collection Tool: Survey

The evaluation team identified surveys as the most effective way to gain a better understanding of (1) if and how Rosemount residents are using non-motorized transportation options and (2) what barriers exist to Rosemount residents using those options. The developed survey will address and measure responses to the following questions:

1. Do Rosemount residents use non-motorized transportation (walking or biking)? How often do they use these options and for what purposes?
2. Are Rosemount residents aware of Rosemount's efforts to build and improve their non-motorized transportation system and infrastructure? To what extent have Rosemount's efforts increased resident usage of non-motorized transportation?
3. What are the demographics of the individuals using these transportation options?

Most importantly, the designed survey will establish a protocol for regular data collection to measure growth against the program goals over time.

Surveys are a powerful tool for gathering direct and personal feedback, opinions, and other forms of information from a target group of interest to the program managers. While surveys may be conducted via multiple mediums, including mail, email, Internet, or in-person, all surveys are intended to provide the evaluator with honest assessments of the reactions and experiences of individuals that can be generalized to a broader population. We have developed both a web version and a paper version of the survey.

There are multiple positive aspects to utilizing surveys for data collection and for this project in particular. First, surveys enable an evaluator to collect a sizeable amount of data from a target population relatively quickly and cost-effectively in comparison to other data collection techniques. Many survey techniques do not require significant staff time, travel time, or equipment to administer. Second, as surveys can be administered to a larger number of participants, well-designed surveys may be effectively generalized to a larger population. With the options to use various mediums, evaluations can adjust their approach to each particular audience or use a mixed modes approach to each subsections of that audience. The survey that we have developed could be tailored for specific target populations (families, individuals, students, etc.). Finally, if not using an in-person survey method (i.e. online, mail, etc.), the evaluator may be able to solicit personal or sensitive information from the participants as they may feel more sense of anonymity than in other research methods.

Despite these positive attributes, there are some limitations to effectively using survey for data collection. For a survey to effectively and adequately collect the intended information, a well-designed survey will require extensive development, including designing the instrument and pretesting with a small sample before larger implementation, otherwise the evaluator may not be certain that the information collected is valid or reliable. For

surveys conducted in-person, there is potential that the respondent will not feel comfortable honestly answering sensitive questions, while non-in person surveys reduce the evaluator's control as individuals may skip questions or not fully answer. Further, a paper or online survey filled out without an evaluator present can limit the evaluator's ability to collect any nuanced data that does not fit within the survey framework. For that reason, we are also recommending that you implement a number of other evaluation tools- observations, focus groups, and document review- that will help fill in any gaps left by this survey.



Sample Survey

Dear Rosemount Resident,

Thank you for taking time to participate in this survey on non-motorized transportation in Rosemount. Your anonymous feedback will be directly used to improve the non-motorized transportation system in Rosemount. Non-motorized transportation refers to walking and biking. Rosemount's non-motorized transportation activities include building and maintaining sidewalks and trails; installing signs and bike racks; and participating in community events.

Please have one member of your household who is 18 or older fill out the following survey. If additional members of your household who are 18 or older wish to fill out the survey, they may do so by going to the following link: [LINK]. All of your feedback will remain anonymous.

If you would like to be entered for a chance to win a [AMOUNT] gift card to [STORE], please enter your email address at the end of the survey and return by [DATE]. Your email address will only be used by the City of Rosemount to contact you upon winning and for annual non-motorized transportation surveys. The survey results will be posted on the Rosemount website and in the Rosemount Town Pages.

Again, thank you for taking the time to participate in this community survey!

Jason Lindahl
Planner, City of Rosemount

1. How many times per week do you bike for each of the following activities? Please mark one circle per activity.

	0 times per week	1-2 times per week	3-5 times per week	6 or more times per week
Commuting (Work/School)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Errands/Shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify: _____)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. How many times per week do you walk for each of the following activities? Please mark one circle per activity.

	0 times per week	1-2 times per week	3-5 times per week	6 or more times per week
Commuting (Work/School)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Errands/Shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please specify: _____)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. If you choose to walk or bike instead of driving, why? Check all that apply.
- It is healthy and good exercise
 - It is environmentally-friendly
 - It is faster than a car or mass transit
 - It is cheaper than a car or mass transit
 - Infrastructure/facilities (sidewalks, bike trails, bike racks, etc.) exist and are convenient
 - Other (Please specify: _____)

4. If you choose not use a bicycle to commute (work/school/errands/shopping), why not? Check all that apply.

- I do not own a bike
- My destination is too far from home
- Roadway/sidewalk surface conditions are poor
- No safe storage facility for my bike
- Too much traffic
- No shower/change facility at my destination
- No bike lanes/routes from my residence to destination
- I don't feel safe biking alongside cars
- I prefer to drive a car
- I have to transport my child/children
- Other (Please specify: _____)

5. If you do not bike or walk for recreation/exercise, why not? Check all that apply.

- I do not own a bike
- I do not enjoy riding a bike
- Health reasons
- Vehicles do not observe bike lanes
- Roadway/sidewalk surface conditions are poor
- No bike lanes/routes near my home
- I exercise in other ways
- Other (Please specify: _____)

6. Please rate your satisfaction of the following:

	Satisfied	Unsatisfied	Unaware of
Signs with Bike Routes & Landmarks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
S. Robert Trail/Highway 3 Underpass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bike Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information Available on City of Rosemount Website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information from City of Rosemount staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sidewalk, Trail, & Facility Maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. What features would you like to see implemented in Rosemount? Check all that apply.

- Bike lanes with buffers
- Colored asphalt for designated bike lanes
- Two-way bikeways with barriers
- Shared-used sidewalks
- Greenways
- More street signs
- Traffic signals dedicated to bikers
- Dashed lines to mark bike lanes through intersections
- Bike safety classes
- Other (Please specify: _____)

Our last questions are for statistical purposes only. Please answer them to the best of your ability.

1. What is your gender?

- Male
- Female
- Do not wish to disclose

2. What is your age?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 or older
- Do not wish to disclose

3. How many people live in your home, including yourself? _____

4. How many people that live in your home are under the age of 18? _____

5. What is your income range?

- Less than \$15,000 per year
- \$15,000 - \$30,000 per year
- \$30,001 - \$45,000 per year
- \$45,001 - \$60,000 per year
- \$60,001 - \$75,000 per year
- Greater than \$75,000 per year
- Do not wish to disclose

6. What race/ethnicity would you use to describe yourself? Please check all that apply.

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or other Pacific Islander
- White
- Hispanic or Latino
- Other (Please Specify: _____)
- Do not wish to disclose

Please share any additional comments you may have about non-motorized transportation in Rosemount.

To be entered for a chance to win a AMOUNT gift card to STORE, please enter your email address: _____

Thank you for sharing your thoughts and opinions with us!

Survey Instructions:

Characteristics of Respondents

The survey will be distributed by mail to an address-based sample of Rosemount residents. Rosemount has approximately 7,900 single-family, multi-family, and manufactured housing units. The survey should be distributed to approximately 500 homes to be filled out by one resident. The survey will be also available online on the Rosemount website to increase the number of respondents.

Timing and Procedure of Survey Administration

1. The survey will be distributed annually each spring to a sample of Rosemount residents.
2. Respondents should be given four weeks to respond to the survey.
3. Residents who return the survey by the four-week deadline will be entered for a chance to win a gift card (we suggest one \$250.00 gift card to Cub Foods or Target).
4. The survey results will be posted on the Rosemount website.

In future years, the survey can be done in-person at Leprechaun Days, the Health Expo, and other community events.

Pilot Testing

Before the distribution of the survey to collect the data, it is essential to carry out a pilot testing. The purpose of this is to improve the questionnaire to avoid problems in the understanding and recording of the data. It also helps to assess the validity and reliability of the questions, and to make sure that the data answers the investigative questions.

For pilot testing, the survey should be sent to 20 residents who will be asked to give feedback about the clarity on the instructions and questions, the length of the questionnaire, the terms used, and the attractiveness and clarity of the layout.

Analysis of the Data

The compiled survey data should first be coded according to the Survey Codebook (see Appendix A) and analyzed cross-sectionally based on Survey Sent Date. Cross-sectional data should be used to understand the behaviors and attitudes of residents regarding non-motorized transportation, as well as demographic makeup of those behaviors and attitudes. Once multiple survey rounds have been completed, longitudinal analysis based on Survey Sent Date can be pursued. Longitudinal data should be used to track benchmarking goals, participation patterns, and demographic shifts over time. Cross-sectional analysis will best for examining participation information based on one Survey Sent Date, and can be used to analyze demographic information.

Data Collection Tool: Observations

In 2012, the City of Rosemount completed bicyclist and pedestrian observation counts using a technique developed by the University of Minnesota and the Minnesota Department of Transportation. This technique established general baseline data and can be a basis for further observations.

While the previous counts tracked demographic characteristics, these characteristics were not included in the final report. As the client has expressed an interest in increasing diversity in the use of non-motorized transportation in Rosemount, we recommend collecting demographic data so that the city can start tracking these trends. Additionally, for future and ongoing observation counts, our team identified the importance of accounting for seasonal behavior changes, as well as time-of-day behavior changes in non-motorized transportation use. We recommend these components be included in observation analyses, and have included them in our collection tool.

In the proposed data collection tool, age group has been given two categories (Child/Teen or Adult) and gender has three (Male/Female/Unknown). Status for pedestrians is considered either assisted or non-assisted, where assisted status is defined as a pedestrian using wheeled equipment, other than a bicycle. This may include skateboarders, skaters, wheelchairs, wagons, and strollers. It was determined that race/ethnicity would be better to track in a self-reported tool such as the survey, as this category would be much more difficult for the observer to determine accurately.

Using the formulas developed and recommended by the University and implemented by Rosemount's previous study, the counts should be used to estimate 12-hour estimates. The observation analysis should seek to address the following questions:

1. How many people in Rosemount are walking/biking in a 12-hour period? How has this changed over time?
2. What is the gender makeup of non-motorized transportation in Rosemount? How has this changed over time?
3. What is the age makeup of non-motorized transportation in Rosemount? How has this changed over time?
4. What is the pedestrian makeup (assisted/non assisted) of non-motorized transportation in Rosemount? How has this changed over time?
5. How much of an impact does season make on walking/biking?
6. How much of an impact does time of day make on walking/biking?

Ultimately, this data collection tool is intended to measure growth against the program goals. It will also be important for continuing to analyze the differences between each observation location as well as determining what characteristics of the non-motorized transportation system in Rosemount may make one location more successful than another.

Observations can be a very useful data collection tool given the appropriate context, and the technique is one that any evaluator should very seriously consider for use with their client. In the context of program evaluation, "observation" is defined as using one's eyes

(and/or other senses) to count, classify, or rate specific conditions, actions, behaviors, or some other set of data.ⁱ For the use of observation to be effective, the specific factor being measured must be clearly observable, and the observer must be able to distinguish differences according to defined criteria, as is possible with bicycle counts.ⁱⁱ

As with any other technique, there are strengths and weakness of the use of observation in an evaluation context. Observations are useful when other methods may not be, such as when the factors being measured are objects, not humans, and thus cannot be surveyed or interviewed. Observation can also be especially appropriate when it would be difficult to speak directly to the individuals being observed, such as counting bicyclists on a specific pathway during rush hour. Evaluators can frequently train and utilize volunteers to conduct an observation, so one does not necessarily need a large staff or to occupy one's staff's time.ⁱⁱⁱ Further, if the volunteers are simply counting something such as walkers or riders, they may not need extensive training. This method can be low-cost, as observations can frequently be conducted by volunteers who only need to observe circumstances with their eyes and record data on paper or electronically.^{iv} And finally, observer ratings or findings can be organized and presented in very simple ways that are easily understood.^v

Depending on the specific data being collected by the observers, it may take an extended period of time to train the observers. It may also be difficult to maintain consistency of ratings. For example, if observers are ratings the quality of a roadway or bike path, it is important that each observer knows the criteria and is using the same scale; however, this can be addressed through proper training.^{vi} It may be difficult to use this technique for an evaluation requiring collection of data over time, though, again, this can be addressed through a properly designed tool and through proper training, as evaluators need to ensure they duplicate the circumstances of the initial data collection and maintain consistency of rating criteria. As Rosemount is interested in determining how many citizens use its system of bike trails, observers could be trained and deployed to count users at specific times over the course of a number of days.



Sample Pedestrian/Bicyclist Observation Form

Instructions for staff: Record observation location, date, start/end time, and observer name. Stand in unobtrusive location at observation location for full two hours and keep tally of observed bikers, unassisted pedestrians, and assisted pedestrians, tallying under appropriate column. Assisted pedestrians are pedestrians using any kind of non-bicycle wheels, such as a skateboard, skates, wheelchair, wagon, or stroller. Attempt to record tally marks by gender and age. If gender is unknown, record under gender unknown. If age is unknown, record under adult. In cases of large groups where it may be difficult to determine gender/age of individuals, make a total count and record under "Group." After two hours of observations, total tally marks of each category and return form to City Staff. Do not record information in black cells.

Location:

Date:

Start/End Time:

Observer name:

Gender	Age	Bikes (Tally)	Bikes (Count)	Unassisted Pedestrians (Tally)	Unassisted Pedestrians (Count)	Assisted Pedestrians (Tally)	Assisted Pedestrians (Count)	Totals
Male	Child/Teen							
Male	Adult							
Female	Child/Teen							
Female	Adult							
Unknown	Child/Teen							
Unknown	Adult							

Observation Instructions:

Characteristics

Observations should be conducted in a manner similar to previously established data, but with added components for increased data analysis capabilities.

Timing and Procedure

1. Pedestrian and bicycle counts should be done four times per year at four locations including one school, during week day morning and evening peak travel hours - 9:00 A.M. and 4:00 - 6:00 P.M. Counts should be done in October, January and July.
2. Staff will choose four locations for observation, ideally the locations used in the initial study, with one location on a school transit route. Each location will be numbered 1-4, with the school location given number 1. Staff should rotate through the four locations.
3. All the data will be recorded in the Pedestrian/Bicyclist form for further analysis.

Analysis of the Data

The compiled survey data should first be coded according to the Pedestrian/Bicyclist Observation Codebook (see Appendix B) and analyzed cross-sectionally by Observation Date. Cross-sectional data should be used to understand the demographic makeup of non-motorized transportation users, as well as for comparing observations at different locations. It is also important to consider the age demographic makeup of the location.

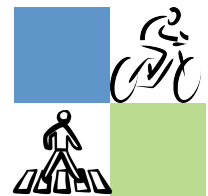
Once multiple observation rounds have been completed, cross-sectional analysis may be used to analyze differences in participation rates over seasons and times of day. In addition, longitudinal analysis based on Observation Date can be pursued. Longitudinal data should be used to track benchmarking goals, participation patterns, and demographic shifts over time. When analyzing data based upon observations, it is important to note that the observer will introduce bias into the demographic data characteristics.

Recommendations

This evaluation plan was devised for the City of Rosemount to assess and improve non-motorized transportation activities in the hopes that more residents will choose bicycling and walking for recreational and utilitarian purposes because it is a safe, convenient, and enjoyable experience. The evaluation plan provides two data analysis tools, a survey and observation protocol, which will allow Rosemount to track performance on a number of indicators. This information can then be used for comparison to similar non-motorized transportation programs in other cities.

The tools provided in the evaluation plan should be implemented beginning in the spring of 2015. The survey should be repeated annually at approximately the same time each year. The observations should be collected four times per year, each round of observations occurring at approximately the same time. Once data is collected and analyzed, the City of Rosemount can begin incorporating resident feedback and usage into strategic plans.

This evaluation plan was designed with thoughtful feedback from Jason Lindahl, Rosemount City Planner, and Dr. Hanife Cakici from the University of Minnesota's Humphrey School of Public Affairs. As a part of the Resilient Communities Project, this evaluation plan aims to assist the City of Rosemount in advancing community sustainability.



**Appendix A
Survey Codebook**

Instructions: After a survey is complete, assign each returned survey a unique three digit Survey ID#, beginning with 001. In the Survey Database, enter the Survey ID# in the appropriate column under the first tab, "Survey Main." T-questions correspond to information about the survey round, Q-questions correspond to respondent behavior/attitudes questions, D-questions correspond to demographic questions. If a respondent checks more than one box under a question, enter each code in separate cell under the relevant question column. All "Other" responses should be coded as 0. Respondent entries under "Other" should be entered manually as text under appropriate Survey ID# and question in second database tab, entitled "Other Responses" in Survey Database. Leave missing values blank.

The compiled data may either be analyzed longitudinally or cross-sectionally. Longitudinal analysis will be based on Survey Sent Date, best for tracking benchmarking goals, participation patterns, and demographic shifts over time. Cross-sectional analysis will best for examining participation differences in usage patterns, but also may be used for demographic purposes.

T1 = Survey Sent Date

Q1= How many times per week do you bike for each of the following activities? Please mark one circle per activity.

	0 times week = 1	per 1-2 times week = 2	per 3-5 times week = 3	per 6 or more times per week = 4
Q1A= Commuting (Work/School)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q1B= Errands/Shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q1C= Exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q1D= Recreation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q1E= Other (Please Specify:_____)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2= How many times per week do you walk for each of the following activities? Please mark one circle per activity.

	0 times week = 1	per 1-2 times week = 2	per 3-5 times week = 3	per 6 or more times per week = 4
Q2A= Commuting (Work/School)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q2B= Errands/Shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q2C= Exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q2D= Recreation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q2E= Other (Please Specify:_____)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3= If you choose to walk or bike instead of driving, why? Check all that apply.

- 1= It is healthy and good exercise
- 2= It is environmentally-friendly
- 3= It is faster than a car or mass transit
- 4= It is cheaper than a car or mass transit
- 5= Infrastructure/facilities (sidewalks, bike trails, bike racks, etc.) exist and are convenient
- 0= Other (Please specify: _____)

Q4= If you choose not use a bicycle to commute (work/school/errands/shopping), why not? Check all that apply.

- 1= I do not own a bike
- 2= My destination is too far from home
- 3= Roadway/sidewalk surface conditions are poor
- 4= No safe storage facility for my bike
- 5= Too much traffic
- 6= No shower/change facility at my destination
- 7= No bike lanes/routes from my residence to destination
- 8= I don't feel safe biking alongside cars
- 9= I prefer to drive a car
- 10= I have to transport my child/children
- 11= Other (Please specify: _____)

Q5= If you do not bike or walk for recreation/exercise, why not? Check all that apply.

- 1= I do not own a bike
- 2= I do not enjoy riding a bike
- 3= Health reasons
- 4= Vehicles do not observe bike lanes
- 5= Roadway/sidewalk surface conditions are poor
- 6= No bike lanes/routes near my home
- 7= I exercise in other ways
- 8= Other (Please specify: _____)

Q6= Please rate your satisfaction of the following:

	Satisfied = 1	Unsatisfied = 2	Unaware of = 3
Q8A= Signs with Bike Routes & Landmarks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q8B= S. Robert Trail/Highway 3 Underpass	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q8C= Bike Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q8D= Information Available on City of Rosemount Website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q8E= Information from City of Rosemount staff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Q8F= Sidewalk, Trail, & Facility Maintenance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7= What design features would you like to see implemented in Rosemount? Check all that apply.

- 1= Bike lanes with buffers
- 2= Colored asphalt for designated bike lanes
- 3= Two-way bikeways with barriers
- 4= Shared-used sidewalks
- 5= Greenways
- 6= More street signs
- 7= Traffic signals dedicated to bikers
- 8= Dashed lines to mark bike lanes through intersections
- 0= Other (Please specify: _____)

D1= What is your gender?

1= Male

2= Female

3= Do not wish to disclose

D2= What is your age?

1= 18 to 24

2= 25 to 34

3= 35 to 44

4= 45 to 54

5= 55 to 64

6= 65 or older

7= Do not wish to disclose

D3= How many people live in your home, including yourself? _____

D4= How many people that live in your home are under the age of 18? _____

D5= What is your income range?

1= Less than \$15,000 per year

2= \$15,000 - \$30,000 per year

3= \$30,001 - \$45,000 per year

4= \$45,001 - \$60,000 per year

5= \$60,001 - \$75,000 per year

6= Greater than \$75,000 per year

7= Do not wish to disclose

D6= What race/ethnicity would you use to describe yourself? Please check all that apply.

1= American Indian or Alaska Native

2= Asian

3= Black or African American

4= Native Hawaiian or other Pacific Islander

5= White

6= Hispanic or Latino

0= Other (Please Specify: _____)

7= Do not wish to disclose

Appendix B
Pedestrian/Bicyclist Observation Codebook

Instructions: After a seasonal bike count is complete, compile the four Pedestrian/Bicyclist Observation Forms and assign each form a unique Observation Record ID#. In the Non-Motorized Transportation Observation database, there will be one row per Observation Record ID#. T- questions are for information about the observation session; Q- questions are for questions about the findings of the observation session. Leave missing values blank.

T1 = Observation Date

T2 = Observation Location

- 1 = Location 1
- 2 = Location 2
- 3 = Location 3
- 4 = Location 4

T3 = Observation Time

T4 = Observer Name

Q1 = Gender

- 1 = Male
- 2 = Female
- 3 = Unknown

Q2 = Age

- 1 = Over 18
- 2 = Under 18

Q3 = Total Bikers per Category

Category	Total Bikers per Category (1=1, 2=2, 3=3, etc)
Q3A = Male Child/Teen	
Q3B = Male Adult	
Q3C = Female Child/Teen	
Q3D = Female Adult	
Q3E = Unknown Gender Child/Teen	
Q3F = Unknown Gender Adult	

Q3G = Group	
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Q4 = Overall Total Number of Bikers (1=1, 2=2, 3=3, etc)

Q5 = Total Pedestrians per Category

Category	Total Pedestrians per Category (1=1, 2=2, 3=3, etc)
Q5A = Male Child/Teen	
Q5B = Male Adult	
Q5C = Female Child/Teen	
Q5D = Female Adult	
Q5E = Unknown Gender Child/Teen	
Q5F = Unknown Gender Adult	
Q5G = Group	

Q6 = Overall Total Number of Pedestrians (1=1, 2=2, 3=3, etc)

Q7 = Total Assisted (Wheeled) Pedestrians per Category

Category	Total Wheeled Pedestrians per Category (1=1, 2=2, 3=3, etc)
Q7A = Male Child/Teen	
Q7B = Male Adult	
Q7C = Female Child/Teen	
Q7D = Female Adult	
Q7E = Unknown Gender Child/Teen	
Q7F = Unknown Gender Adult	
Q7G = Group	

Q8 = Overall Total Number of Assisted (wheeled) Pedestrians (1=1, 2=2, 3=3, etc)

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ⁱ San Francisco, CA: Jossey-Bass. p.298

ⁱⁱ *ibid.*, p.299

ⁱⁱⁱ *ibid.*, p.299

^{iv} *ibid.*, p.317

^v *ibid.*, p.318

^{vi} *ibid.*, p.314

