

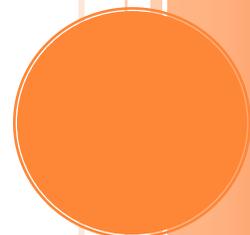
HEALTH IMPACT ASSESSMENT (HIA)

Of Highway 61 Corridor Redesign, Grand Marais, MN

Executive Summary

Moving Matters Project of the Sawtooth Mountain Clinic and
the Active Living Steering Committee (ALSC)

July 2015



HIA STEERING COMMITTEE

The core of the HIA Steering Committee was the Active Living Steering Committee, which has been active in Cook County since 2011.

Heidi Doo Kirk
Cook County Board of Commissioners

Tim Kennedy
Grand Marais City Council

Mike Roth
City of Grand Marais Administrator

Dave Tersteeg
Grand Marais Parks & Recreation

Joni Kristenson
Cook County Public Health and
Human Services

Frances Jarchow
Citizen Representative - Seniors

Kristin Wharton
Sawtooth Mountain Clinic

Sissy Lunde
ISD 166 School Board

Leif Lunde
Cook County Law Enforcement

Inger Andress
Leadership Advisor

Maren Webb
Sawtooth Mountain Clinic

Nikki Boostrom
Citizen Representative -
Disabled, Non-Drivers

AUTHORS

Maren Webb, MPP
Sawtooth Mountain Clinic
Assistant Coordinator, Moving Matters Project

Kristin Wharton, RN, PHN, IBCLC
Sawtooth Mountain Clinic
Coordinator, Moving Matters Project

We wish to extend thanks to the Minnesota Department of Health for their support of this project through a one year mini-grant and technical assistance, provided through funding from the Centers for Disease Control and Prevention.



Health Impact Assessment (HIA)

Of Highway 61 Corridor Redesign, Grand Marais, MN

EXECUTIVE SUMMARY

Introduction

During spring 2014, the Sawtooth Mountain Clinic identified a potential opportunity for a Health Impact Assessment (HIA) to be conducted in conjunction with a streetscape design process. As part of its Moving Matters project, the Clinic has partnered with the City of Grand Marais to explore safety concerns on the main corridor through Grand Marais: Minnesota State Highway 61. The Grand Marais City Council previously identified the current Highway 61 corridor to be a chief concern due to public feedback about crossing and traffic safety. After completing a screening process and receiving funding from the Minnesota Department of Health to pursue this HIA, the Sawtooth Mountain Clinic initiated an HIA, with the local Active Living Steering Committee (ALSC). This HIA complemented the City of Grand Marais' Highway 61 Redesign process planned for late 2014. The Highway 61 Redesign Process, called Highway 61 Revisited, was a series of public and stakeholder meetings to explore the role Highway 61 plays in the community and to consider alternate designs. The Highway 61 Revisited process continued into 2015; therefore, the HIA was completed in the summer of 2015.

HIAs allow health considerations to be brought into rigorous policy conversations, especially with processes focused on the built environment and social policies and plans that do not typically consider health. HIA is a “**systematic process** that uses an array of **data sources and analytic methods** and considers **input from stakeholders** to determine the potential effects of a proposed policy, plan, program, or project on the **health of a population and the distribution** of those effects within the population. HIA provides recommendations on **monitoring and managing those effects.**”¹ The Active Living Steering Committee and the Moving Matters project, both being concerned with Highway 61 and safety, physical activity, and health, deemed an HIA a worthwhile pursuit to help ensure a Highway 61 project that will contribute to the health of the community. This Executive Summary provides an overview of this HIA process; however, the full report contains detailed information about the process, data gathered, and other in-depth discussions that are helpful for understanding the process and results of this HIA.

Process

The HIA process includes six steps, which have been followed for this specific HIA: Screening, Scoping, Assessment, Recommendation, Reporting, and Monitoring and Evaluation. Over the course of one year, this HIA process was guided by the ALSC serving as the HIA Steering Committee, led by Sawtooth Mountain Clinic staff. At the start of the process, the Highway 61 corridor was roughly defined as the area between 8th Avenue West and the New Gunflint Trail along Highway 61 through Grand Marais. Baseline community data was collected and presented to the committee, including physical health indicators (such as Body Mass Index and rates of diabetes and

¹ National Research Council, Improving Health in the United States: Role of Health Impact Assessment, 2011.

high blood pressure) and indicators related to the social determinants of health (such as affordability and availability of housing and unemployment rates). With input from the community, the HIA Committee chose three health concerns to focus upon for the purposes of evaluating the community health impacts of the Highway 61 corridor redesign:

- Safety: crossing safety, and walking and biking safety,
- Access: connectivity to core destinations within the City and Highway 61 corridor, and access in terms of mobility/accessibility, and
- Economic: economic potential of the corridor and individual economics/livability.

The committee then helped develop research questions to inform the data collection to assist in understanding and projecting how the proposed designs could impact the designated health concerns. The Clinic staff leading the HIA then compiled relevant data to create an assessment based upon the research questions. The committee reviewed the assessment, compiled, and developed recommendations based upon the assessment data. The HIA process has been iterative, informed both by data, observations, and local experience throughout the process. This local committee has been the heart of this process, and the recommendations developed reflect both the rigorous process and the established experience of this committee in the issue areas.

Assessment

The research questions identified by the HIA Steering Committee are as follows:

Health Concern	Existing Conditions Research Question	Impact Research Question
Safety	What accidents have occurred along this stretch of road?	With the corridor redesign, how will the proposed changes impact collision rates and severity?
	What levels of walking and biking are happening in the corridor?	How will the proposed changes impact the levels of walking and biking in the corridor?
	Are traffic speeds an issue in the corridor?	Will traffic speeds be reduced with the design changes?
	What are the current crossing distances, location of marked crosswalks, and types of crosswalk markings on the current corridor?	Will the crossings in the proposed designs increase perceived safety and reduce near misses and crashes between cars, bikes and vehicles?
Access	What are the missing connections for bikes and pedestrians in the corridor?	With connected bike and pedestrian infrastructure, will there be better access to priority destinations on foot and bike?
	What challenges do high risk populations (such as seniors, children, and disabled people) face in the Highway 61 corridor with accessibility?	How will the design changes impact mobility and accessibility for people of all ages and abilities in the corridor?
Economic	What are the current property value trends along the Highway 61 corridor?	What kind of impact could the Highway 61 redesign have on the property values along the corridor?

These research questions were then used to gather data to inform the committee’s assessment work.

Data was collected from a variety of sources, including data requests of the Minnesota Department of Transportation, Minnesota Department of Health, Cook County Assessor, and City of Grand Marais, with additional data gathered through a literature review, a speed study, bicycle and pedestrian counting, focus groups, and a community survey. The concept designs for the corridor, developed through a three-meeting community process and online feedback, were used during the assessment process. The main design components considered were reduction of crossing distances (with bump outs and narrowing of roadway), addition of dedicated bicycle and pedestrian infrastructure (sidewalks and multi-use trail or sidewalks and bike lanes), vertical definition of the corridor, and the narrowing of the roadway (influencing vehicle speeds and crossing distances).

Overall, the HIA found that the Highway 61 Revisited redesign would be beneficial to health. A summary of the HIA findings are presented in the following table:

HIA Assessment: Summary of Findings				
Health Outcome/ Determinant	Direction (Positive or Negative Impact)	Likelihood of Impact	Distribution of Impact	Quality of Evidence
Collision rates and severity	▲	Likely	Affects whole community relatively equally	***
Levels of walking and biking	▲	Likely	Affects whole community relatively equally	**
Traffic speeds	▲	Likely	Affects whole community relatively equally	***
Perceived safety	▲	Likely	Affects whole community relatively equally	*
Access to destinations on foot or bike	▲	Likely	Affects whole community relatively equally	***
Mobility and accessibility	▲	Likely	Disproportional effect on seniors/children/ disabled	**
Property values	▲	Possible	Possible disproportional effect on property owners and businesses	*

▼ = negative impact ▲ = positive impact ▲▼ = both positive and negative impacts possible

Literature association – strength of studies associating health impact with redesign of roads:

*** Many strong studies ** Few good studies * No clear studies, but consistent with public health principles

Recommendations

These findings led the HIA Steering Committee to create recommendations in order to maximize the health benefits of the Highway 61 Redesign. The recommendations are divided into “project” recommendations and “process” recommendations.

Prioritized **Project** Recommendations for Highway 61 Redesign:

1. Create Safer Pedestrian Crosswalks

Crosswalk design and visibility should be considered for maximum pedestrian safety, as safety was the highest priority within the Highway 61 corridor redesign project. A plan for ongoing enforcement and education should be created and implemented by law enforcement and the City of Grand Marais in partnership with the Active Living Steering Committee, including evaluation measures.

2. Design a Corridor that Welcomes and Invites People

The corridor project should be designed as a place that is welcoming, accessible, and scaled for people (seniors, children, and all people) through strategies such as signage, seating, lighting, trees and vegetation.

3. Re-assess Streets Network and Pedestrian Connectivity

With the pre-design of the corridor project, take the opportunity to reassess where any missing connections are off of the corridor, that if resolved, would improve the pedestrian connectivity in Grand Marais.

4. Year-round Maintenance Plan including Pedestrian and Bicyclist Use

All modes, including walking, biking, snowmobiling, driving, etc., should be considered and, if possible, separately accommodated within the corridor year round. Create a year-round maintenance plan to ensure pedestrians the ability to use the corridor during all seasons. Snow clearing should happen in a timely manner. Responsibilities for maintenance between the City, MnDOT, and County should be set from the start.

5. Appropriate Vehicle Speeds to Achieve Goals of Safer and More Accessible Walking and Biking

Create a corridor with 20-25 MPH **design speed**² to increase pedestrian, bicyclist, and motorist safety and create a more village main street feel to the corridor. Vehicle speeds greatly influence the perception of safety for people on foot and bike as well as the rates of survivability if a collision occurs.

* From AASHTO (American Association of State Highway and Transportation Officials): “Design speed is a selected speed used to determine the various geometric design features of the roadway.” In other words, design speed does not necessarily equal the posted speed limit.

6. Monitor Impact of Project

Measure the impact of the corridor project on community health, including economic impact and number of people walking and biking. Highlight the creation of community capital and impact on health of the Highway 61 project.

Prioritized Process Recommendations for Highway 61 Redesign:

1. Community Engagement

The community needs to be actively engaged by the City of Grand Marais and MnDOT throughout the stages of the planning and construction of the corridor project. Special efforts should be made to include input from potential and current users, including children/young families, seniors, people with disabilities, those that don't feel safe in the current corridor, and business/property owners along the corridor. Input from these groups will be especially important during the creation of the final design and the year-round maintenance plan.

2. Building a Healthy Community through Future Decision Making

Many government decisions that impact health are not traditionally considered health-related. The City of Grand Marais can have a positive impact on the health of our community through considering the health impacts of decision making. The use of HIA is one way to include health as a consideration in decision making. We encourage the City of Grand Marais to continue to consider health in future decisions taking into account the social determinants of health*, such as housing, transportation, access to health care, the built environment, natural environment, etc.

3. Use of Pilot Projects to Inform the Design

To help ensure a successful and appropriately designed project, pilot projects could be used to test out options for the final design. This may be most helpful with the amenities portion of the design, such as seating types and locations.

4. Sharing Project as Success

Leverage the Highway 61 project, including the use of the HIA tool, as a success for other communities to replicate and experience while visiting Grand Marais. Also use the project to expand the community's understanding of the connections between health and the built environment and the HIA results to increase the community support and buy-in for the corridor project.

* From U.S. Department of Health and Human Services, Healthy People 2020: "Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." The five key areas (determinants) include: Economic Stability, Education, Social and Community Context, Health and Health Care, and Neighborhood and Built Environment.

Conclusion

The HIA findings suggest that the proposed Highway 61 redesign will have an overall positive impact on the health of the community in the health concern areas. With the construction of the new corridor design, it is likely to have positive impacts on the safety of the corridor, as well as access related to connectivity and accessibility/mobility. It is possible that it will also have positive impacts on economics. In spring 2015, the City of Grand Marais was awarded project funding from the Transportation Alternatives Program for continuous pedestrian and bicycle facilities with a Highway 61 redesign project to be constructed in 2019/20. The scope and final design of the project are undetermined at this time. However, in order to maximize the positive health impacts of the Highway 61 project, the HIA Committee developed ten recommendations, which upon implementation will improve the benefits to the community especially for seniors, the disabled, and children.