Active Transportation in Brooklyn Center

Existing Conditions: Environment, Access, and Attitudes

Draft Summary for Review

February 9, 2015
Active Living: Existing Conditions

Report Contents

This report includes the following sections:

1. Introduction
An Introduction to Active Transportation concepts.

2. Brooklyn Center Community Health
A summary of overall health indicators for Brooklyn Center, and a comparison to health indicators of Hennepin County as a whole.

3. Active Transportation in Brooklyn Center
A description of existing conditions for Active Living in Brooklyn Center as they relate to Active Transportation such as walking and biking, and to the perceptions and realities of Brooklyn Center residents.

4. Health Disparity Communities
Discussion of health disparity communities and their presence in Brooklyn Center.

5. Conclusions and Next Steps
Summary of the report and its implications for future Active Living and Active Transportation efforts in Brooklyn Center.

How do Brooklyn Center Residents Get to Work?

According to recent US Census data, Brooklyn Center residents walk and bike at a lower rate than residents in Hennepin County overall:

<table>
<thead>
<tr>
<th>Means of travel</th>
<th>Brooklyn Center</th>
<th>Hennepin County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drove alone</td>
<td>71.3%</td>
<td>73.7%</td>
</tr>
<tr>
<td>Carpoled</td>
<td>13.8%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Public transit</td>
<td>8.4%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Walked</td>
<td>2.5%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Biked</td>
<td>0.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Other</td>
<td>0.9%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Work at home</td>
<td>2.2%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

1. Introduction

Active Living policies and initiatives seek to make physical activity (like walking or biking) a useful, easy, fun and normal part of everyday life for a community’s residents.

An Active Living approach is multi-disciplinary, and recognizes that policies and initiatives to foster and support active communities must occur in several policy spheres - from transportation to land use, from community and economic development to public health and beyond.

Active Living is important for a community because it can:
- Improve physical and mental health,
- Reduce traffic congestion, improve air quality, and reduce transportation costs for families,
- Build safer, stronger communities, and
- Decrease the risk and severity of chronic disease and medical costs.

Developing a Baseline Understanding

To make recommendations for improving a community’s orientation to Active Living, it’s important to first understand that community’s current conditions - its overall level of health, its residents’ socioeconomic conditions, and the relative ease with which they can access health-promoting behaviors, including access to Active Transportation (walking, biking and transit).

Access to Active Transportation (where residents can easily incorporate physical activity into their everyday travel routines) is a key component for Active Living. Active Transportation, in combination with improved land-use, placemaking, access to healthy food, and other elements, support an Active Living approach.

The Role of Active Transportation

Walking is a foundation for individuals’ health, well-being and sense of connection. Walking is free and...
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accessible for people through the widest range of ages, income levels and physical abilities. It is the most basic form of transportation - at some point during every trip, everyone is a pedestrian. Like walking, bicycling offers mobility and connectivity at a relatively low cost for residents young and old alike.

Communities that provide safe, comfortable and convenient facilities for Active Transportation enjoy increased levels of health and equity, as more people are able to access school, transit, employment, services, recreation, and everyday needs.

Communities that don’t provide comfortable walking and biking infrastructure, or where dispersed land use patterns, perceptions and realities of crime and public safety, and other factors are present, typically have lower rates of walking and bicycling. These lower rates negatively impact a community’s residents, especially among health disparity communities.

This document provides a baseline understanding of Active Living conditions in Brooklyn Center through a compilation of information derived from Hennepin County’s SHAPE (Survey of the Health of All the Population and the Environment) surveys, Census data, and other resources.

Residents’ Decision-Making for Travel

A variety of factors affect an individual’s decision to walk or bike, including access to comfortable facilities, proper equipment, availability of nearby destinations, and attitudes and perceptions. Examining these factors is essential to understanding why people choose to walk and bike, or not to walk and bike.

Summary of Brooklyn Center Health Status

In general, Brooklyn Center’s residents are not as healthy as the rest of Hennepin County, in part due to lower physical activity rates, higher obesity rates, and greater populations experiencing health disparities.
2. Brooklyn Center Community Health

2.1 - Overall Health Indicators

Every four years, Hennepin County conducts a Survey of the Health of All the Population and the Environment (SHAPE). The goal of SHAPE is to report on the health of Hennepin County residents. SHAPE collects information in the following areas:

- Overall health;
- Health care access and utilization;
- Healthy lifestyle and behaviors; and
- Social-environmental factors.

For data reporting purposes, Brooklyn Center is included in the “NW1: Northwest Suburbs - Inner Ring” geographic reporting area, with Crystal, Golden Valley, New Hope, and Robbinsdale.

Reviewing the most current (2010) SHAPE report for each of these areas provides an understanding of the health of Brooklyn Center relative to the rest of Hennepin County.

In general, Brooklyn Center residents, compared to the rest of Hennepin County, are:

- Less likely to meet physical activity guidelines;
- Less likely to have walked or biked for recreation or transportation purposes;
- More likely to be overweight (BMI >25 and <30) and also more likely to be obese (BMI >30).

<table>
<thead>
<tr>
<th>SHAPE Survey: Selected resident health data, 2010</th>
<th>NW1/Brooklyn Center *</th>
<th>Hennepin County</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Conditions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High blood pressure</td>
<td>19.9%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Depression</td>
<td>21.5%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>5.7%</td>
<td>5.3%</td>
</tr>
<tr>
<td><strong>Health Behaviors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>37.3%</td>
<td>32.8%</td>
</tr>
<tr>
<td>Met moderate or vigorous activity guidelines</td>
<td>65.2%</td>
<td>76.8%</td>
</tr>
</tbody>
</table>

Source: 2010 Hennepin County SHAPE. * Brooklyn Center results are for SHAPE area NW1.

Less Physically Active

Data indicates a lower rate of physical activity in the NW1 geographic reporting area which contains Brooklyn Center compared to Hennepin County as a whole.
3. Active Transportation in Brooklyn Center

3.1 - Introduction

Many factors affect an individual’s decision to walk or bike, including access to comfortable infrastructure, appropriate equipment, availability of nearby destinations, and attitudes and perceptions. Examining these factors is essential to understanding why people choose to walk and bike, or not to walk and bike.

3.2 - The Walking and Biking Network

The physical environment, including walking and biking facilities, plays an important role in determining whether someone will choose to walk or bike. Walking and biking facilities in Brooklyn Center include sidewalks, local park multi-use trails, and three regional trails: the Shingle Creek Regional Trail, the Twin Lakes Regional Trail, and the Mississippi River Trail.

The Brooklyn Center Pedestrian and Bicycle Plan

The 2014 Brooklyn Center Pedestrian and Bicycle Plan identifies barriers to walking and biking in the city, and proposes infrastructure and programming solutions for improving walking and biking conditions in the city.

The Pedestrian and Bicycle Plan also identifies Brooklyn Center’s predominantly auto-oriented development pattern as a factor making walking and biking in the city more difficult. Dispersed land uses make accessing destinations challenging, particularly for health disparity populations with lower incomes, with no or less reliable automobile access, and with disabilities. Large arterial streets with high traffic speeds and volumes create barriers to walking and bicycling connectivity.

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Walking and Biking Connections

This figure from the 2014 Pedestrian and Bicycle Plan shows the network around the Brooklyn Center Transit Center. Sidewalks are in orange, local trails in brown, regional trails in green, and transit routes in pink.

Active Living successes in Brooklyn Center

Brooklyn Center has completed several important initiatives to advance walking and biking in the city, including, among others:

- A citywide Active Living resolution;
- A citywide Complete Streets policy;
- Safe Routes to School audits and plans for nine city schools; and
- The 2014 Pedestrian and Bicycle Plan.

Current efforts are underway to integrate and combine active living efforts to create sustaining policies and programs that advance walking and biking, especially among health disparity communities.

One current policy effort includes developing a Travel Demand Management Plan to guide developers in establishing integrated walking and biking facilities around proposed developments.
3.3 - Walking and Biking Access to Destinations

According to the Pedestrian and Bicycle Plan, city residents would like better walking and biking access to many destinations, including schools, parks, and shopping. Improved walking and biking access to more destinations allows residents to more easily incorporate physical activity into daily routines.

Access to Information and Equipment

Other elements of access that especially affect lower-income residents include:
• Access to bicycles and helmets; and
• Access to information on where to walk or bike.

The Pedestrian and Bicycle Plan proposes wayfinding signage and locations to improve walking and biking travel throughout Brooklyn Center.

Printed and online walk/bike maps and Earn-a-Bike programs are examples of initiatives that could reduce these barriers and improve access to active transportation among health disparity communities in Brooklyn Center.

Earn-A-Bike programs aim to overcome economic barriers to bicycle access by connecting low-income families and individuals with bicycles and bicycle education. Earn-A-Bike programs expand opportunities for all people, regardless of age or income, to experience bicycling for both recreation and transportation. These programs help expand access to active transportation to the wider community.

Destinations are Less Accessible

According to 2010 SHAPE data, residents in the NW1 geographic area which includes Brooklyn Center report a lower rate of walking access to specific destinations, compared to Hennepin County as a whole. These destinations include grocery stores, restaurants, shops/stores, recreation centers, parks/playgrounds, and bus stops. Results are summarized in the figure to the right.

<table>
<thead>
<tr>
<th>Most residents can walk to...</th>
<th>NW1/ Brooklyn Center *</th>
<th>Hennepin County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grocery stores or markets</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>Restaurants, shops, or stores</td>
<td>17%</td>
<td>25%</td>
</tr>
<tr>
<td>Recreation center, park, or playground</td>
<td>57%</td>
<td>63%</td>
</tr>
<tr>
<td>Bus stops</td>
<td>64%</td>
<td>62%</td>
</tr>
</tbody>
</table>

Source: 2010 Hennepin County SHAPE.
* Brooklyn Center results are for SHAPE area NW1.
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Gaps in the Brooklyn Center Walking and Biking Network

Rates of Physical Activity

The figure to the right compares resident experiences with walking or biking for recreation, and for transportation. The percentage is how many respondents answered the question, “During an average week (when weather permitted), I walked/biked...” Hennepin County residents reported being more physically active than area NW1 residents in all three variations of the question.

Many reasons contribute to reduced rates of walking and biking in Northwestern Suburb communities such as Brooklyn Center. They include: dispersed land use patterns, gaps in connectivity, and difficult access to comfortable facilities.

Prominent locations in Brooklyn Center with missing walking and biking connections include Brooklyn Boulevard and 57th Avenue North. Locations with difficult crossing conditions include Interstate 94, Minnesota 252, and others.

Comparing Walking and Biking

<table>
<thead>
<tr>
<th>In an average week, I ...</th>
<th>NW1/ Brooklyn Center *</th>
<th>Hennepin County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walked or biked for recreation</td>
<td>72%</td>
<td>79%</td>
</tr>
<tr>
<td>Walked for transportation purposes</td>
<td>38%</td>
<td>48%</td>
</tr>
<tr>
<td>Biked for transportation purposes</td>
<td>13%</td>
<td>20%</td>
</tr>
</tbody>
</table>

* Brooklyn Center results are for SHAPE area NW1.

Source: 2010 Hennepin County SHAPE.
3.4 - Potential Infrastructure Solutions

This project’s Best Practices Toolbox identifies several potential infrastructure improvements that could be applied in Brooklyn Center. A sample is provided below.

*Imprinted thermoplastic crosswalk used to provide a high-visibility crosswalk for students near Creek Valley Elementary in Edina, MN. Additional resources are provided in the Best Practices Toolbox. Image courtesy of ennisflint.com.*

*Solar-powered RRFB installation in St. Petersburg, FL. Additional resources are provided in the Best Practices Toolbox. Image courtesy of pedbikeimages.org, Michael Frederick.*

*A two-way protected bicycle lane (also known as a cycletrack) is shown. Physical separation is provided between bicycle riders and motor-vehicles. Image from the NACTO Urban Bikeway Design Guide, referenced in the Best Practices Toolbox.*
3.5 - Attitudes about Walking and Biking

Personal attitudes and perceptions about a number of factors, whether real or not, can affect rates of walking and biking. This includes attitudes related to access to facilities, lighting, public safety / crime rates, and safety concerns related to motor vehicles.

Rates of Crime

According to the Minnesota Department of Public Safety Crime Book, the violent crime rate is significantly higher in Brooklyn Center than it is in Hennepin County as a whole (about 60% higher than the county-wide rate). While the extent to which persons walking and biking are victims of crime is unclear, it has been shown that fears about personal safety can have a significant impact on people’s behavior. These fears may negatively affect walking and biking rates to parks, school, and other destinations, particularly among children.

Attitudes and Perceptions of Safety

Residents in the NW1 geographic area, which includes Brooklyn Center, have similar rates of fear of violence at night, compared to Hennepin County residents. However, a lower rate of Brooklyn Center residents feel their children are safe in their neighborhood when compared to Hennepin County as a whole (see figure to the right). This fear may contribute to a reduction in parent comfort and a decrease in walking rates among children for travel to school, parks, and other destinations.

Negative perceptions of safety related to exposure to crime while walking and biking may keep people from integrating walking and biking into healthy everyday routines, even if these perceptions do not reflect actual conditions.

Perceptions of safety are important to monitor as Brooklyn Center continues its Active Living initiatives. An increase in walking and cycling rates can also lead to a stronger sense of community connection as a result of increased interpersonal contact between residents, and to improved feelings of safety through the addition of more “eyes on the street.”

### Comparing Crime Rates

<table>
<thead>
<tr>
<th>Violent Crime Rates</th>
<th>Brooklyn Center</th>
<th>Hennepin County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime Rate per 100,000 people</td>
<td>6,053</td>
<td>3,753</td>
</tr>
</tbody>
</table>


### Perception of Safety

<table>
<thead>
<tr>
<th>Perceptions of Safety</th>
<th>NW1/ Brooklyn Center</th>
<th>Hennepin County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of fear of violence at night</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Rate of feeling children are safe</td>
<td>40%</td>
<td>45%</td>
</tr>
</tbody>
</table>

*Notes:

“Violence at night” percentage listed is how many respondents strongly agreed or somewhat agreed with the statement, “People in this neighborhood are afraid to go out at night due to violence.”

“Children are safe” percentage is how many respondents strongly agreed with the statement, “Children are safe in this neighborhood.”

*Source: 2010 Hennepin County SHAPE. * Brooklyn Center results are for SHAPE area NW1.
4. Health Disparity Communities

4.1 - What is a Health Disparity Community?

Health disparity communities are those that experience differences in health outcomes and/or status when compared to the general population. Population groups that experience health disparities can differ from the general population by race or ethnicity, income, disability, or other factors. Health disparities are a known problem affecting ethnic minorities such as African Americans, Asian Americans, Native Americans, and Latinos. Health disparities also impact the elderly, immigrants, and people with disabilities.

These groups are at higher risk of being uninsured, have more limited access to care, and experience lower quality of care. This leads to a higher prevalence of chronic conditions and less favorable health outcomes when compared with the general population. Active Living efforts in Brooklyn Center seek to increase awareness of health disparities in the city and develop sustaining programs to close the gap in health outcomes.

4.2 - Health Disparity Communities in Brooklyn Center

Ethnically Diverse and Immigrant Populations

According to the 2011-2013 American Community Survey, Brooklyn Center is an ethnically and racially diverse community with a population of 42% white and 58% non-white, including Hmong, Latinos, Africans, and African Americans. Hennepin County as a whole has a population that is 29% non-white. Census information indicates an increasing population of ethnic and racial minorities in Brooklyn Center over recent time.

Concentrations of Poverty

Brooklyn Center and other suburban areas in the region have experienced a rise in poverty rates. According to the 2009-2013 American Community Survey, the poverty rate in Brooklyn Center is 19% compared to 13% for Hennepin County. Concentrations of poverty exist throughout Brooklyn Center, particularly in the northeast area.
4.3 - Adverse Health Outcomes in Disparity Communities

The differences in health outcomes between disparity communities and the general population are real and often significant. Three conditions that result in reduced quality of life and increased mortality are diabetes, heart disease and stroke. The chart below notes differences in the prevalence of these conditions between Minnesota residents who define their ethnicity as African American and those who define their ethnicity as white:

The difference in rates at which African American residents experience these conditions in comparison to white residents is shown in the magenta box. Diabetes, heart disease and stroke are strongly correlated with lower levels of physical activity. Easier access to walk or bike options may increase resident participation in these modes. This can lead to more favorable health outcomes for individuals and for communities overall. Physical infrastructure improvements, combined with new non-infrastructure investments (programming, information and outreach), may lead to improved outcomes for health disparity communities in the city.

Physical activity and health

Some facts related to proven health benefits of regular physical activity, at moderate and low intensities (like walking and cycling):
- The Centers for Disease Control and Prevention (CDC) recommends 30 minutes of moderate physical activity five days per week to maintain health
- In 2005, only half of all Minnesotans met the CDC recommendation
- Three hours of bicycling per week reduces the risk of heart disease and stroke by 50%
5. Conclusions and Next Steps

This document provides a baseline understanding of the Active Living framework of Brooklyn Center as it relates to walking and biking: the health of its residents, the current state of walking and biking, and the factors that affect walking and biking rates in the city. Opportunities exist in Brooklyn Center to improve walking and biking, including the following:

Addressing physical barriers to connectivity
- Improve crossing treatments
- Implement a placemaking demonstration project
- Review the crossings and facility locations identified in the 2014 Brooklyn Center Pedestrian and Bicycle Plan

Addressing barriers related to access
- The implementation of an Earn-a-Bike program will increase access to bicycling by providing free or low-cost bicycles
- The development of printed and online walk/bike maps will improve city wayfinding and increase access to the walking and biking network
- Increased police engagement can help to improve the perception of safety by residents

Addressing barriers related to policy
- All future Active Living programs and policies in the city should actively engage members of health disparity communities within Brooklyn Center
- Policies can help influence the form and function of the built environment so that it is more walkable and bikeable
- Future 2014 SHAPE data can be compared with the 2010 SHAPE data to measure progress

Continued efforts, programs, and policies that make the city’s built environment more conducive to walking and biking will foster a culture of healthy daily physical activity among its residents, which will lead to great gains for residents’ health, prosperity and overall quality of life.

2014 SHAPE (Survey of the Health of All the Population and the Environment)

Eight local public health departments (including the cities of Bloomington and Minneapolis, and Hennepin County) are conducting the Metro SHAPE 2014 survey as part of ongoing efforts to identify the health needs of their communities. About 5 percent of households in the Twin Cities have been asked to participate in the survey.

Source: Hennepin County SHAPE data webpage.

Best Practices Toolbox

A Best Practices for Active Living Toolbox has been developed for Brooklyn Center as part of this project. The Toolbox includes sections on Infrastructure, Policy, Planning, Programs, Placemaking, and Pilot Projects.