Contents
ACKNOWLEDGMENTS........................................................................F

CHAPTER 1: STUDY PURPOSE............................................. 1

Study Goals..................................................................................... 1
Increase Walking and Biking.......................................................... 1
Engage the Community................................................................. 1
Identify Best Practices................................................................. 2
Identify Opportunities for Implementation.................................... 2

CHAPTER 2: IMPORTANCE OF WALKING AND CYCLING ................................................... 3
Benefits Associated with Pedestrian and Bicycle Planning.................. 3

CHAPTER 3: COMMUNITY BACKGROUND ............ 5

Community Profile........................................................................... 5
Demographics.................................................................................. 5
Development Patterns....................................................................... 7
Redevelopment Areas and Trends.................................................... 7

Popular Community Facilities and Destinations ...................... 10
Parks......................................................................................... 10
Other Recreational Facilities.......................................................... 13
Earle Brown Heritage Center......................................................... 13
Schools.......................................................................................... 13
Transit Station and Park and Ride Locations.................................. 15
Hennepin County Service Center..................................................... 15
Shingle Creek Crossing ................................................................ 15
Big Box Locations and Restaurants................................................ 15

CHAPTER 4: EXISTING AND PLANNED PEDESTRIAN AND BICYCLE NETWORK ................. 17

City Facilities – Existing and Planned........................................... 17
Sidewalks....................................................................................... 17
Trails............................................................................................ 19
On-Road Facilities........................................................................ 21

Three Rivers Park District- Existing and Planned Facilities ........ 22
Shingle Creek Regional Trail.......................................................... 22
Twin Lakes Regional Trail .......................................................... 22
Mississippi River Regional Trail .................................................. 25

Hennepin County – Existing and Planned Facilities .......... 27
County Road 152 – Brooklyn Boulevard .................................. 29
Hennepin County Bicycle Plan .................................................. 29

CHAPTER 5: COMMUNITY ENGAGEMENT .......... 33

Surveys .................................................................................. 33
Survey Highlights – Walking ..................................................... 33
Survey Highlights – Bicycling ................................................... 36

Mobile Display ....................................................................... 38
Partnerships with Local Organizations ....................................... 38

Other Outreach Efforts ............................................................. 39
Presentations .......................................................................... 39
News Releases ......................................................................... 40
Other Studies ........................................................................... 40

CHAPTER 6: SYSTEM CHALLENGES ..................... 41

System Gaps ........................................................................... 41
Sidewalk Gaps ......................................................................... 43
Trail Gaps ............................................................................... 44

Crossings .................................................................................. 44

Wayfinding .............................................................................. 46

Infrastructure, Infrastructure Condition and Maintenance .... 47
Lighting .................................................................................. 47
Bicycle Racks ......................................................................... 47
Wider Trails ............................................................................ 47
Pavement Surface ................................................................... 47
Winter Maintenance ............................................................... 47
Other ..................................................................................... 48

Security ................................................................................... 48
Brooklyn Center Pedestrian & Bicycle Plan

Education/Enforcement .......................................................... 48
Equipment .................................................................................. 49
Other Comments ........................................................................... 49

CHAPTER 7: RECOMMENDATIONS .............................................. 50

Trail and Sidewalk Network Vision ............................................. 50
On-Road Facilities ....................................................................... 52
Crossings ..................................................................................... 53

Policies, Activities and Practices ................................................. 54
Regular Plan Review, Project Identification and Studies ............. 54
Update Ordinances/Encourage Pedestrian and Bicycle Infrastructure . 55
Partnering with Other Agencies/Organizations .............................. 55
Education .................................................................................. 57
Maintenance .............................................................................. 58
Security ..................................................................................... 60

Wayfinding ................................................................................. 60
Signage for Sidewalks ................................................................. 60
Signage for Trails ........................................................................ 61
Signage for On-Road Facilities .................................................. 62
Priority Areas for Wayfinding ..................................................... 62

CHAPTER 8: BEST PRACTICES ....................................................... 64

Considerations for All Facilities ................................................... 64
Eliminate Gaps ........................................................................... 64
Consult MMUTCD ....................................................................... 65
Conduct Studies ........................................................................ 65
Signage and Wayfinding Materials .................................................. 65
Pedestrian-Level Lighting ................................................................. 66
Pedestrian Facilities ........................................................................ 67
ADA Requirements .......................................................................... 67
Sidewalks ......................................................................................... 67
Curb Extensions .............................................................................. 68
Median Refuge Islands ................................................................. 68
Marked Pedestrian Crosswalks ..................................................... 69
Leading Pedestrian Interval ......................................................... 70
Pedestrian Crosswalk Safety Systems ......................................... 70
Rectangular Rapid Flashing Beacon .............................................. 71
High-Intensity Activated Crosswalk ............................................. 71
LED Signage and In-Roadway Warning Systems ....................... 72
Countdown Pedestrian Signals ...................................................... 73
Multi-Use Facilities ........................................................................ 73
Consult MnDOT’s Bikeway Facility Design Manual ..................... 74
ADA Requirements .......................................................................... 74
Off-Road Trails .............................................................................. 74
Bicycle Facilities ............................................................................ 75
Consult MnDOT’s Bikeway Facility Design Manual ..................... 76
Traditional Bike Lanes .................................................................. 76
Buffered Bike Lanes ........................................................................ 76
Protected Bike Lanes/Cycle Tracks ................................................. 77
Pavement Treatment – All On-Road Facilities ............................... 77
Intersection Treatment – Through Bike Lane and Right-Turn Lane (vehicle) 77
Intersection Treatment – Bike Boxes ............................................. 78
Intersection Treatment – Forward Stop Bar .................................. 78
Intersection Treatment – Intersection Crossing Markings ............ 79
Intersection Treatment – Median Refuge Islands ......................... 79
Intersection Treatment – Bicycle Signals ...................................... 79
CHAPTER 9: IMPLEMENTATION ................................................. 80
Opportunities ................................................................................ 80
Funding Sources ........................................................................... 82
Hennepin County Sidewalk Participation Program ....................... 82
Hennepin County Roadside Enhancement Partnership Program .... 82
Hennepin County Bikeway Development Participation ................ 82
Hennepin County Bike Program Discretionary (Gap Program) .................. 83
Transportation Alternatives Program .................................................. 83
Surface Transportation Program (administered by Met Council) ........ 83
Highway Safety Improvement Program ............................................. 84
Minnesota DNR Local Trail Connections Program ........................... 84
Minnesota DNR Federal Recreational Trail Program .......................... 84
Statewide Health Improvement Program .......................................... 84
Livable Communities Demonstration Account ................................. 84

Ongoing Monitoring ........................................................................... 85

APPENDICES: .................................................................................. 87

Appendix A – Crossings at Shingle Creek Summary ......................... 87
Appendix B – Surveys ......................................................................... 90
Appendix C – Survey Summary ........................................................ 99
Appendix D – Press Releases ............................................................ 105
Acknowledgments

The city would like to thank Hennepin County and the many people who have had a hand in the development of this plan, including: staff, appointed officials, residents and students at Brooklyn Junior High. Their contribution to this study will result in an improved biking and walking environment for the City of Brooklyn Center.

The city also wishes to acknowledge the Center for Disease Control and Prevention for making funding available for the development of this plan.
CHAPTER 1: STUDY PURPOSE

The City of Brooklyn Center, in partnership with Hennepin County, is completing this Pedestrian and Bicycle Plan for a number of reasons, with the ultimate aim of increasing walking and bicycling within the community.

The purpose of this plan is to provide the City of Brooklyn Center and other relevant agencies with a framework for future decision-making with regard to policy and infrastructure for pedestrians and bicyclists. The study partners recognize that most trips begin or end with someone walking. Therefore, it is important for communities to have the necessary infrastructure in place to make those portions of trips easier. The plan strives to develop an accurate description of existing non-motorized networks, identify missing gaps and key connections and to establish future needs, best practices and other strategies that will enhance the ability of residents to walk and bike within the city.

The plan aims to make biking and walking a more viable option than it is currently by making it safer, more convenient and comfortable. While both Hennepin County and the City of Brooklyn Center have both adopted complete streets policies, the existing non-motorized transportation network faces challenges which are identified and addressed in this plan. The plan analyzes these challenges and makes recommendations for improvements that can be achieved with the implementation steps provided at the end of the plan.

Study Goals

The sections below discuss the goals of the study – which are to:

• Increase walking and biking
• Engage the community in creative ways to generate interest in the study
• Identify best practices and recommendations to make walking and biking more appealing to residents
• Identify opportunities to implement study recommendations

Increase Walking and Biking

As noted above, the City of Brooklyn Center and Hennepin County have committed their agencies to making walking and biking more attractive for transportation, recreational and health purposes. Ultimately, the city and the county want to increase walking and bicycling by providing the necessary infrastructure, policies and encouragement to make these modes more attractive, safe and enjoyable for residents of all ages and backgrounds.

Engage the Community

This study’s ultimate aim is to increase walking and biking. In order to accomplish this, the city and county need to understand why people walk and bike and what residents want and/or need to make walking and biking more attractive options – be it for health, transportation
or recreational reasons. To better understand the needs of the residents and the users of the pedestrian and bicycle network, a significant focus of this study was spent engaging residents at community events and public locations and soliciting their input and feedback.

Input collected at the community events and through surveys was focused on understanding travel behavior – how frequently do people walk or bike, where do people go when they walk or bike, why do people walk or bike; what could be done to the physical infrastructure to make walking and biking easier; what could be done to help people navigate the existing pedestrian and bicycle networks; what destinations are people interested in getting to; and what else is important to making biking and walking more appealing to residents.

**Identify Best Practices**

Along with understanding the needs and desires of residents, this plan seeks to identify industry “best practices” for developing a safe, efficient and enjoyable pedestrian and bicycle networks. By implementing strategies that have been proven effective over time, the city, county and Three Rivers Park District can ensure that the projects they propose to complete will provide users of the system with what they need in order to get to their destinations. Providing a safe and convenient sidewalk and bikeway system will increase walking and biking within the community.

**Identify Opportunities for Implementation**

Finally, this study intends to identify opportunities that the city, county and Three Rivers Park District can take advantage of to implement improvements over time and steps that can be taken to track pedestrian and bicycle use to ensure that the ongoing needs of users are evaluated and addressed.
CHAPTER 2: IMPORTANCE OF WALKING AND CYCLING

America and the communities within it are undergoing a number of changes that have emerged over the past decade. Our population is aging – the baby boomers are getting older and their transportation and recreational needs are changing. Additionally, health concerns about cardiovascular disease and increasing levels of obesity (at the adult and childhood levels) and the negative health effects associated with obesity (cholesterol, diabetes, strokes, certain types of cancer, etc.) have come to the forefront of the medical community and health consumers as a whole as insurance premiums have increased and the national health care debate has taken place.

Since the 1970s, the percent of children who are obese has tripled, with the largest increases seen in children of African American descent or from low income populations\(^1\). The trends for adults are no less concerning. Today more than one third of American adults are obese. In 2008, medical costs associated with obesity were estimated at $147 billion\(^2\). As with children, obesity is more prevalent in the African American community. Regular exercise and physical activity can reduce obesity – yet studies show that less than half of children meet and less than 10 percent of adults meet recommended guidelines for physical activity\(^3\).

**Benefits Associated with Pedestrian and Bicycle Planning**

The changes in our communities (both health and demographic) are beginning to make their impact and influence felt. Many cities have started to think about the actions they can take to encourage physical activity, to make their communities healthier, and to make systems more accessible for people as they age. Physical activity is likely to occur for four primary reasons – work, household activities, recreation/leisure and transportation\(^4\). One of the ways in which communities can make a difference is in its recreational and transportation facilities and their connections to key destinations.

Creating conditions that make walking and biking convenient and safe are beneficial for several reasons. One of the most important benefits is that increased biking and walking rates encourage a healthier community. If conditions are in place to make it safe, convenient and enjoyable to walk or bike, more people will have the opportunity to choose non-motorized transportation for commuting, running errands, getting to and from school or for recreational and leisure activities. For many people, walking and biking as a means of transportation may be their only opportunity for exercise in a given day.

---


\(^2\) Centers for Disease Control

\(^3\) Ibid

\(^4\) Design for Health website: [designforhealth.net/physical-activity](http://designforhealth.net/physical-activity)
Information obtained from the Design for Health website indicates the following:

- Proximity to public transit stops (bus, light rail, heavy rail) was linked to higher levels of physical activity among adults.
- People who use public transportation were less likely to be sedentary or obese.
- 29 percent of transit users meet the recommended 30 minutes or more of physical activity a day while walking to and from transit. Racial and ethnic minorities reported even greater percentages.
- Most studies of children and adolescents indicate that walking or biking to school is related to overall higher physical activity levels.
- Safe Routes to Schools programs increase rates of biking and walking to schools (schools within Brooklyn Center are participating in this program).
- Programs such as Safe Routes to Schools usually lead to infrastructure improvements that can be used by the community at large – thereby providing a safer environment for all users – not just students.
- More sidewalks are associated with adults having higher rates of walking and meeting physical activity recommendations.
- The presence of bicycle lanes and trails is positively related to cycling and to more adults meeting physical activity recommendations.
- Building multi-use trails can lead to both short- and long-term increases in walking and bicycling.
- Living near trails or having trails in one’s neighborhood has been associated with people being 50 percent more likely to meet physical activity guidelines.
- Fast traffic and high traffic volumes can be a barrier to walking and biking. Systems that increase the safety and/or separate the modes will encourage more use.

Additionally, a non-motorized transportation system will improve mobility for those who do not or cannot drive. This may include children, the elderly, those who are not physically able, and those who simply choose not to drive. With an increasing elderly population and a desire to appeal to young families, improving the safety and convenience of biking and walking is beneficial to the entire city.

Another benefit of increased walking and biking is reduced dependency on fossil fuels. While the number of electric and hybrid vehicles is increasing, most vehicles still operate on regular gasoline or diesel fuel which emits pollutants that contribute to poor air quality. Even at low levels, these emissions are known to cause respiratory issues, and are a suspected cause of some cancers. With the volume of vehicle related emissions increasing, efforts to increase non-motorized transportation are welcome for overall community health.

5 Ibid; Active Transportation – Making the Link from Transportation to Physical Activity and Obesity – Summer 2009 Research Brief
CHAPTER 3: COMMUNITY BACKGROUND

In order to achieve the overall purpose of the study and to address the goals outlined previously, an understanding of the community and its amenities is needed.

Community Profile

The City of Brooklyn Center is a first-ring suburb of the City of Minneapolis (Figure 1). It is approximately 8.5 square miles and is situated along the Mississippi River. It is approximately six miles from downtown Minneapolis and is connected to the Cities of Brooklyn Park, Crystal, Minneapolis and Robbinsdale. Brooklyn Center was first incorporated as a village in 1911, but remained largely rural until the city’s population boomed during the 1950s. Today Brooklyn Center’s population is approximately 30,104, which is not anticipated to change substantially through 2030.

Demographics

As noted previously, the City of Brooklyn Center has a population of approximately 30,000. The city’s population has been relatively stable over the past 30 years, experiencing little growth or decline due to its full development. However, the city has a fair number of residents that are in age groups where the automobile may not be the primary means of transportation on a daily basis. According to the 2010 Census Data, approximately 28 percent of the population is under the age of 20 and approximately 14 percent of the population is over the age of 60. The percent of the population over the age of 60 is expected to increase as more of the baby boomers enter that demographic.

The city’s population is similar to that of other first-ring suburbs; in that, it is much more diverse than more outlying areas. There are diverse ethnic communities (most notably Hispanic, Hmong and Liberian) that contribute to the city’s diversity. According to 2010 Census Data, approximately half of the population is Caucasian. Black/African Americans make up approximately 25 percent of the city’s population. Asians are approximately 14 percent of the city’s population and those of Hispanic decent are approximately 1 percent.

The community’s profile – with approximately 40 percent of the population over the age of 60 or under the age of 20 – in conjunction with a large number of new/newer immigrants (23 percent of the population was born outside of the United States as noted in the 2010 Census), contributes to a moderate poverty rate. In 2010, the median household income was approximately $48,000 with a per capita income of $21,400. Persons living in poverty were approximately 17 percent of the city’s population.
The demographics indicate that there are a number of residents within the community that could be users of the pedestrian and bicycle network and would benefit from improvements to that network. Brooklyn Center recognizes that there are many groups of people that do not drive including children, the elderly, those who are not physically able, those who may have limited means to own and operate a motorized vehicle and those who simply choose not to drive. By making pedestrian and bicycle transportation options safer and more convenient, the city will become more accessible.

**Development Patterns**

As a result of developing during the latter half of the 20th century, the City of Brooklyn Center is faced with the challenge of a largely auto-oriented landscape, consistent with many other first-ring suburbs in the Twin Cities. These development patterns pose some inherent constraints with regard to walking and bicycling, including sidewalk gaps, limited planned trail network, unsignalized or unmarked roadway crossings and high travel speeds on many corridors.

Of the existing land uses, 35 percent of the total acreage within the city is single-family residential development (as shown in Figure 2). This is by far the largest land use within the community. The next largest land use is roadways, which make up 23 percent. Cities with these characteristics generally do not present favorable conditions for walking and bicycling as destinations tend to be spread out.

Contributing to this challenge within Brooklyn Center is the fact that much of the commercial land uses are located near I-94, I-694, and TH 100. In general, interstate roadways and roadways with heavy traffic volumes and high speeds (such as TH 100 and TH 252) are not intended for bicycle or pedestrian traffic. These roadways can also serve as barriers to pedestrian and bicycle networks that need to cross or get around them, resulting in indirect routes that take longer and are less appealing to pedestrians and bicyclists. Fortunately, the City of Brooklyn Center and Hennepin County have recognized these challenges and have over time constructed a number of grade separated crossings for both pedestrians and bicyclists over facilities such as I-94, I-694 and TH 100.

**Redevelopment Areas and Trends**

Figure 3 shows some of the major areas in Brooklyn Center where redevelopment is occurring.

Moving forward there are some opportunities for modifying development and non-motorized transportation patterns as redevelopment occurs. Some of the redevelopment efforts can be seen along County Road 152 also known as Brooklyn Boulevard. Over the years, commercial development along this corridor has been changing to meet more local needs. Additionally, long-term, the city is envisioning existing residential uses along the corridor to transition to more commercial uses. Realizing the changing nature of the corridor and the existing traffic conditions (lower speeds, heavier volumes, limited pedestrian refuges, crashes, traffic operations at intersection, etc.) the city and the county undertook a corridor study that identified motorized transportation needs (access modifications, additional turn lanes, intersection geometrics, additional traffic signals, etc.) and pedestrian and bicycle needs. The study made a number of recommendations to make it safer and more appealing for pedestrians and bicyclists.
Figure 2 - Land Use Map

Legend

<table>
<thead>
<tr>
<th>Existing Use</th>
<th>Planned Future Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>SF</td>
</tr>
<tr>
<td>Two or Three Family</td>
<td>TF</td>
</tr>
<tr>
<td>Townhome (Medium Density)</td>
<td>TH</td>
</tr>
<tr>
<td>Multi-Family (High Density)</td>
<td>MF</td>
</tr>
<tr>
<td>Office / Service Business</td>
<td>OS</td>
</tr>
<tr>
<td>Retail Business</td>
<td>RB</td>
</tr>
<tr>
<td>Industrial</td>
<td>I</td>
</tr>
<tr>
<td>Railroad or Utility</td>
<td>RU</td>
</tr>
<tr>
<td>Public and Semi-Public</td>
<td>PS</td>
</tr>
<tr>
<td>Schools</td>
<td>S</td>
</tr>
<tr>
<td>Parks, Recreation, or Open</td>
<td>PRO</td>
</tr>
<tr>
<td>Vacant</td>
<td></td>
</tr>
<tr>
<td>Lakes and Rivers</td>
<td></td>
</tr>
<tr>
<td>Roadways</td>
<td></td>
</tr>
<tr>
<td>Airport</td>
<td></td>
</tr>
</tbody>
</table>

Note: Planned land use for 2030 is the same as existing land use except where parcels are outlined and labeled with Planned Designations.
Figure 3 - 2013 Redevelopment Map

Legend

- Existing Regional Trails
- Planned Regional Trails
- Local Trails
- Planned Local Trails
- Sidewalks
- Railroad
- Parks
- City Boundary
- Redevelopment Areas

Graphic Scale

0 1800 3600 Feet
Improvements include constructing a multiuse trail along the west side of Brooklyn Boulevard and a sidewalk on the east side. It is recommended that the trail and sidewalk be set back at least 10 feet from the roadway to enhance user comfort and safety. A trail on the west side of the roadway enhances connections to four neighborhood parks and one elementary school. The trail will also link to Twin Lakes Regional Trail and a local city trail. The sidewalk will provide convenient access to a city park, an elementary school and the city’s commercial core.

Along with the sidewalk and trail improvements, median refuge islands, countdown timers, and a new traffic signal at 61st Avenue are also recommended to enhance pedestrian and bicycle safety and use. Finally, an at-grade crossing at 55th Avenue for the Twin Lakes Regional Trail is recommended, unless future redevelopment occurs along the east side of Brooklyn Boulevard between 55th Avenue and TH 100. If that occurs, opportunities should be investigated for a grade-separated crossing. Implementation of the recommendations will be ongoing – with both agencies seeking funding for the proposed improvements.

Other locations for redevelopment that are intended to include more pedestrian and bicycle amenities include the area around the former Brookdale Mall, now referred to as Shingle Creek Crossing. Redevelopment plans for this area include retail, office and multifamily housing linked together by a trail network.

Popular Community Facilities and Destinations

The City of Brooklyn Center has a number of natural, community, cultural and commercial facilities that are linked or have the potential to be linked via the trail and sidewalk system. Figure 4 shows a number of these facilities as well as the trail and sidewalk system.

Parks

The city owns and operates over 520 acres of park and natural recreation areas and over 65 miles of city owned and operated trails and sidewalks, with approximately seven miles of Three Rivers Park District Regional Trails. The 24 parks within the system are dispersed throughout the community and offer a wide variety of activities. One of the parks, North Mississippi, is a regional park – the rest are city parks. Some parks are more natural and offer passive opportunities (walking, nature watching, gardens, etc.) and others offer more active opportunities (ball fields, playgrounds, boating, etc.). Some of the parks are smaller – designed to serve a neighborhood – and others are larger – intended to serve the broader community. Figure 4 shows the locations of the parks. Parks within the community include:

1. Arboretum – Eugene H. Hagel Arboretum: 61st and Major
   Amenities include: Natural wetland, flowers and trail

2. Bellvue Park: 801 55th Avenue North
   Amenities include: Basketball court, softball field, skating rink, playground, picnic area/shelter and trail

3. Bob Cahlander Park: 65th and Brooklyn Boulevard
   Amenities include: Wildlife, flower gardens and trail
Figure 4 - Parks & Recreational Facilities
4. Centennial Park: 6301 Shingle Creek Parkway
   Amenities include: Soccer fields, softball fields, tennis courts, archery, picnic area/shelters, playground and trail to Palmer Lake Nature Area

5. Centennial Park West: 6254 Brooklyn Drive
   Amenities include: Basketball court, hockey rink, skating rink, playground, community gardens shelter and trail

6. East Palmer Park: 7027 Oliver Avenue North
   Amenities include: Basketball court, softball fields, playground, picnic area/shelter and trail

7. Evergreen Park: 7112 Bryant Avenue North
   Amenities include: Baseball field, basketball court, softball fields, lighted football/soccer field, hockey rink, skating rink, pickle ball, tennis court, picnic shelter, playground, shelter building and trail

8. Firehouse Park: 6535 Bryant Avenue North
   Amenities include: Softball fields, playground, picnic area/shelter, grill and trail

9. Freeway Park: 6701 Beard Avenue North
   Amenities include: Basketball court, softball field, playground, picnic area/shelter and trail

10. Garden City Park: 3607 65th Avenue North
    Amenities include: Basketball hoops, softball field, shelter building and playground

11. Grandview Park: 1600 59th Avenue North
    Amenities include: Baseball field, basketball court, lighted football/soccer field, hockey rink, tennis courts, sliding hill and trail

12. Happy Hollow Park: 5030 Abbott Avenue North
    Amenities include: Basketball court, playground, picnic area/shelter, grill and trail

13. Kylawn Park: 6015 Kyle Avenue North
    Amenities include: Basketball court, softball fields, tennis courts, hockey rink, playground, picnic area/shelter, shelter building and trail

14. Lions Park: 5501 Russell Avenue North
    Amenities include: Basketball court, tennis courts, playground, picnic shelter, grill and trail. This park is adjacent to Centerbrook Golf Course and Little League Field

15. Marlin Park: 6404 Marlin Drive
    Amenities include: Playground and trail

16. Northport Park: 5512 Sailor Lane and 57th and France Avenue
    Amenities include: Baseball field, basketball court, hockey rink, skating rink, soccer field, football field, tennis courts, playground, picnic area/shelter and trail

17. Orchard Lane Park: 6512 Perry Avenue North
    Amenities include: Basketball court, softball field, picnic area and shelter, playground and trail

18. Palmer Lake Park: 2800 69th Avenue North
    Amenities include: 200 acre natural area, trail loop – paved trail and a woodchip trail and picnic area
19. Riverdale Park: 7031 Dallas Road  
Amenities include: Basketball court, picnic area/shelter, playground and softball fields

20. Twin Lake Park: 4651 Twin Lake Avenue  
Amenities include: Basketball court, playground, picnic shelter, grill and trail

21. Wangstad Park: 6100 France Avenue North  
Amenities include: Basketball court, picnic area, playground and trail

22. West Palmer Park: 7110 Palmer Lake Drive  
Amenities include: Baseball field, softball fields, basketball court, picnic area/shelter, playground, skating rink, tennis courts and trail.

23. Willow Lane Park: 4800 69th Avenue North  
Amenities include: Basketball hoop, hockey rink, skating rink, picnic area/shelter, playground, softball field and trail

24. North Mississippi Regional Park: 49th Avenue and I-94  
Amenities include: Boating, fishing, biking, hiking, trails, geocaching, picnic areas/shelters, grills, playgrounds, wading pool, Carl Kroening Interpretive Center, natural setting and snowshoeing. This park is shared with the City of Minneapolis.

Other Recreational Facilities

In addition to the city’s parks and trails there is a local golf course, Centerbrook, and a community center. Centerbrook golf course is located near the center of the city. It is a 9-hole, Par 3 golf course that is appealing to both beginner and experienced golfers. There are a number of leagues for residents to participate in.

Located near the intersection of Shingle Creek Parkway and I-94/I-694 is the Brooklyn Center Community Center. The community center offers a number of amenities that are appealing to residents of all ages. Amenities include: Olympic-sized swimming pool, water slide, wading pool, diving boards, exercise rooms, changing and locker rooms and meeting and event rooms. It is also possible to host children’s birthday parties at the center. Figure 4 shows the locations of these facilities.

Earle Brown Heritage Center

The Earle Brown Heritage Center is a historic restoration site that is home to a large conference center that hosts over 500 events a year. The site is approximately 15 acres and has a number of buildings and gardens for visitors to use. On site, and available for all visitors to review, is information about Earle Brown. Earle Brown was a resident of Brooklyn Center and was one of the area’s largest landowners. In 1920, he became sheriff of Hennepin County and reformed many corrupt practices. In 1929, he established the Minnesota Highway Patrol – one of the first in the nation. This center is a popular destination for local residents as well as visitors to the area. Figure 4 shows the location of the Earle Brown Heritage Center.

Schools

The City of Brooklyn Center is served by four school districts. There are a total of 14 schools, which serve children between kindergarten and high school. This includes both public and private schools. Figure 5 shows the locations of the schools.
Figure 5 - Educational Facilities

Legend

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Existing Regional Trails</td>
</tr>
<tr>
<td>T</td>
<td>Planned Regional Trails</td>
</tr>
<tr>
<td>P</td>
<td>Local Trail</td>
</tr>
<tr>
<td>L</td>
<td>Planned Local Trail</td>
</tr>
<tr>
<td>S</td>
<td>Sidewalks</td>
</tr>
<tr>
<td>R</td>
<td>Railroad Tracks</td>
</tr>
<tr>
<td>S</td>
<td>Schools</td>
</tr>
<tr>
<td>P</td>
<td>Parks</td>
</tr>
<tr>
<td>C</td>
<td>City Boundary</td>
</tr>
<tr>
<td>J</td>
<td>Junior / Technical College</td>
</tr>
</tbody>
</table>
In addition to elementary, middle and high schools, the City of Brooklyn Center has four institutions of higher learning that are a draw for residents and regional populations. These institutions include: Brown College, Minnesota School of Business and Globe University, ITT Technical Institute and National American University.

**Transit Station and Park and Ride Locations**

The City of Brooklyn Center is well-served by Metro Transit, the Twin Cities largest transit provider. There are a number of transit routes along major transportation corridors within the community that are fairly easy for residents to access. In addition to stops along corridors, there are also several park and ride facilities that people can walk or bike to in order to access transit service. Additionally, there is a major transit station, which serves multiple transit routes, located at Shingle Creek Crossing (mall). Figure 6 shows the transit routes, park and ride locations and the transit station.

**Hennepin County Service Center**

Given its location within Hennepin County and its population density, the City of Brooklyn Center was selected by Hennepin County to have one of its service centers. The service center is a location where people can obtain certificates, identification documents, licenses, permits and registrations. In addition, there are court and library facilities. Figure 6 shows the location of the service center.

**Shingle Creek Crossing**

Shingle Creek Crossing is located on the former Brookdale Mall site (Figure 6). This area is undergoing extensive redevelopment and updating, including the daylighting of Shingle Creek. On site are three anchor tenants – Sears, Walmart and Kohls. Additionally there is an Applebee’s restaurant, an L.A. Fitness and a Holiday gas station. Shingle Creek Crossing draws many local users with its stores and expects to draw in even more as the site continues to redevelop. Assisting in the attractiveness of the area as a destination is Metro Transit’s station area which serves a number of transit routes.

The city and private developers have been making significant investments in the site and the area is starting to redevelop. Adjacent parcels are also starting to see investments and upgrades to make the entire area more appealing and more of a destination. In addition to the activities identified above, investments are being made in redeveloping nearby residential areas – thus, bringing a population concentration to the area. With these improvements, it is expected that there will be a corresponding increase in demand for transit and pedestrian and bicycle amenities.

**Big Box Locations and Restaurants**

While not normally considered major destinations in terms of recreational or commuting purposes, residents participating in the survey indicated that their walking and bicycling destinations included local stores such as Walmart, Target and Cub Foods, as well as gas stations and fast food restaurants. These locations are an important part of the daily and weekly lives of residents in the community, and they desire to be able to safely get to these locations. These commercial destinations are located throughout the community.
Figure 6 - Transit and Services

Legend

- Transit Center
- Park & Ride
- Transit Routes
- Existing Regional Trail
- Planned Regional Trail
- Local Trail
- Planned Local Trail
- Sidewalks
- Railroad Tracks
- Parks
- City Boundary
- Hennepin County Service Center
CHAPTER 4: EXISTING AND PLANNED PEDESTRIAN AND BICYCLE NETWORK

This chapter describes the existing and planned pedestrian and bicycle network within the City of Brooklyn Center. Information is provided on facilities owned by the City of Brooklyn Center, Three Rivers Park District and Hennepin County. Figure 7 shows the existing and planned trails within the community regardless of ownership.

City Facilities – Existing and Planned

Sidewalks

The City of Brooklyn Center owns and maintains (snow removal and repair) the entire sidewalk network that is shown in Figure 7. The existing sidewalk and trail network comprises over 65 miles. Most of the sidewalk is between four and six feet wide and is made of concrete. Sidewalks can be found in residential and commercial areas as well as around public facilities.

As shown in Figure 7, the sidewalk network is not complete for all neighborhoods. As the community developed over time, there were certain periods in history where constructing sidewalks was not a priority, so sidewalks were not constructed. At other times, sidewalks were commonplace with new development, so they were constructed. Unfortunately, a majority of the city developed when it was not popular to construct sidewalk or trail facilities so the city is faced with the challenge of constructing sidewalks after the fact.

Second, as time has passed, the city has attempted on occasion to construct sidewalks where there are none during city street rehabilitation projects. However, there has not been much support to construct new sidewalks by many of the residents immediately adjacent to the project and decisions were made to not include such sidewalk improvements as part of the city’s roadway project. Residents can be hesitant to have sidewalks added to the roadway project for a number of reasons. Some do not want to have to pay additional assessments (the city allows for a 10-year repayment on roadway projects. Sidewalks typically add 3-5 percent to the project cost.), some do not want to have the sidewalk on their property and some have fear of liability if someone should fall. Others are also concerned that they will be required to shovel the sidewalk in the winter or be billed if they fail to do so. Although the city maintains (snow removal and repair) the sidewalk network, some residents still fear that they will be required to maintain the sidewalk.

It should be noted that it is city policy to include sidewalks on both sides of all arterial street reconstruction projects unless specifically omitted by the city council. Additionally, they are generally recommended to be included on one side of the street of collector roadway reconstruction projects.
Figure 7 - Existing and Planned Trail & Sidewalk Network

Legend

- Existing Regional Trails
- Planned Regional Trails
- Local Trails
- Planned Local Trails
- Sidewalks
- Railroad
- Parks
- City Boundary

Mississippi River Trail *
Mississippi River Trail (Planned) *
Shingle Creek Regional Trail
Twin Lakes Regional Trail
Twin Lakes Regional Trail (Planned)

* Multiple Jurisdictions

Graphic Scale
In terms of future sidewalks, the city will continue to encourage their development as part of roadway reconstruction projects. In addition, the city and the school districts have recently completed a Safe Routes to School evaluation process for nine schools serving the community. This process has identified a limited number of new sidewalk connections that could be constructed to make walking and biking to elementary and middle schools easier for children. Copies of recommended improvements (in addition to sidewalks, the process identified crosswalk locations and treatments, maintenance improvements, etc. that could be implemented) are available from the City of Brooklyn Center. Due to space constraints of this report, the individual school plans are not included. The proposed sidewalk connections identified as part of the Safe Routes to School study are included in the map in Chapter 6 – Recommendations.

**Trails**

Along with the sidewalk network, the city also owns a limited number of multiuse trail facilities that link to sidewalks and regional trails (discussed under “Three Rivers Park District”). These trails are intended to serve both pedestrians and bicyclists. Snow removal is provided on city trails. They are shown on Figure 7.

The City of Brooklyn Center has a limited trail expansion plans within its community that are for local trails. Most planned trail improvements are to the Twin Lakes Regional Trail extension (discussed under Three Rivers). There are, however, four trail segments that the city is working to construct in the future.

The first trail is on the city’s northwestern border with the City of Brooklyn Park. The city has coordinated with the City of Brooklyn Park and Hennepin County to study a trail connection that will feed into the Shingle Creek Regional Trail. In 2009, Connections at Shingle Creek – A Corridor Study was completed. This study identified a number of improvements for increasing the quality of Shingle Creek Trail, revitalizing land uses along the creek area and for providing trail connections to serve the area and to link to Shingle Creek Regional Trail. There were two recommendations made for trails – short-term and long-term improvements. Figure 8 shows the proposed trail connections.

In the short-term, the proposed plan shows a connection that ties into an existing trail just to the east of Park Center High School and follows Shingle Creek to Brooklyn Boulevard (County Road 152). It then parallels Brooklyn Boulevard until Regent Avenue, where it crosses Brooklyn Boulevard and connects with an existing trail. The economic development authority for the City of Brooklyn Park applied for, and received a grant to construct the short-term improvement. The two cities and Hennepin County, along with input from the watershed district and the school district, are beginning plans to design the project, with construction occurring in 2014 or 2015.

Long-term plans for the trail utilize the connection from Park Center High School to Brooklyn Boulevard. Once the trail reaches Brooklyn Boulevard, the long-term plan includes a grade separated crossing of Brooklyn Boulevard at this location rather than an at-grade crossing at Regent Avenue. Once over Brooklyn Boulevard, the trail parallels Shingle Creek until it connects with the existing trail. No funding has been identified for the long-term project at this time.
Figure 8 - Connections at Shingle Creek - Short & Long-Term Improvements
(Source: Connections at Shingle Creek - A Corridor Study)
For more details on all of the study recommendations, a copy of the 2009 study may be obtained from the city. A summary of the study purpose and recommendations can be found in Appendix A.

The second trail that the city would like to construct is a part of the Mississippi River Trail located along the city’s eastern border. The Mississippi River Trail is part of a larger, national effort to develop a bikeway (both on-road and off-road – facility type includes off road trails, shoulders, bike lanes and shared roadways) that follows the Mississippi River from its origins in Itasca State Park (Minnesota) to the Gulf of Mexico (Louisiana). The planned trail is close to 3,000 miles long. The trail is a work in progress, with more segments to be constructed in the future.

Within the City of Brooklyn Center, a portion of the trail is owned by the city and a portion of the trail is owned by Three Rivers Park District. The city owns the segment of trail from I-694 to the city’s northern border. The existing gap in the trail is from just north of I-694 to 65th Avenue North. Pedestrians can continue on a sidewalk. Bicyclists are required to travel along Willow Lane North, a low-volume city street. This segment has been identified as a gap area by the city as well as by Hennepin County in its Bicycle Plan.

The third trail segment the city plans on constructing is a segment of trail on the south side of Shingle Creek Crossing. This trail would complete a circle around the mall area and link pedestrians and bicyclists to shopping, transit and employment nodes.

The fourth trail segment the city plans on constructing is a segment of trail between TH 100 and the Twin Lakes Regional Trail just south of the interchange with County Road 152 (Brooklyn Boulevard). This section of trail will link high-density residential areas to the Twin Lakes Regional Trail.

**On-Road Facilities**

In addition to the sidewalks and trails, there are a limited number of city streets that have the space and/or shoulders to accommodate the more serious commuter bicyclists. These roadways include portions of Xerxes and Dupont Avenues North. The city does not sign these roadways as on-road routes. More information on these routes is provided under “Hennepin County”.

In the future, the city’s comprehensive plan indicates that it may be feasible to accommodate on-road bicycle facilities on select roadways where right of way could accommodate such facilities. The city’s plan identifies the following potential candidates:

- **Humboldt Avenue (County Road 57):** This route also shows up on the Hennepin County Bicycle Plan. No facilities are in place yet.

- **Dupont Avenue:** This route shows up on the Hennepin County Bicycle Plan – much of this corridor includes shoulders capable of accommodating bicycle traffic and is noted as an existing route in the Hennepin County Bicycle Plan.

- **Xerxes Avenue:** This route is identified as being needed north of County Road 10 (Bass Lake Rd). The Hennepin County Bicycle Plan also has this route identified. The county shows sections of this roadway as being in place (between 65th and 59th). Other segments still need to be completed.
• 69th Avenue: The plan identifies the area west of County Road 152 (Brooklyn Blvd) as an on-street facility. Hennepin County’s plan identifies this route and indicates that the existing roadway (shoulders) presently accommodates bicyclists.

• 57th Avenue and County Road 10 east of Brooklyn Blvd: A trail exists on County Road 10 east of Xerxes Avenue to County Road 57 (Logan Avenue). A trail will be constructed from County Road 57 to Lyndale Avenue in 2015 (Twin Lakes Regional Trail) addressing a majority of the identified needs.

Three Rivers Park District- Existing and Planned Facilities

The Three Rivers Park District owns approximately seven miles of trails within the city. These trails are regional trails and include: Shingle Creek, Twin Lakes and the Mississippi River Regional Trails. The City of Brooklyn Center performs snow removal on these trails.

Shingle Creek Regional Trail

The Shingle Creek Regional Trail is a multiuse trail through the Cities of Brooklyn Park and Brooklyn Center. The trail is about eight and a half miles long. Figure 9 shows the location of the trail in relationship to other trails. The Rush Creek Regional Trail connects to this trail. The Shingle Creek Regional Trail skirts Edinburgh Golf Course, travels along Shingle Creek Park, travels through Palmer Lake Park, crosses Shingle Creek, connects to Garden City Park, crosses Highway 100 and ends at the southern edge of Lions Park. There are no planned improvements for this trail within the city. The City of Brooklyn Center is working with Brooklyn Park on a local trail that will connect to the regional trail. This segment of trail is discussed under city facilities.

Twin Lakes Regional Trail

The Twin Lakes Regional Trail is under development, with segments of the trail already in place. Figure 9 shows the relationship of the trail with other regional trails. Figure 10 provides greater detail of the trail.

Portions the Twin Lakes Regional Trail were developed and constructed by Brooklyn Center as a local trail. However, Three Rivers Park District recognizes that there are gaps in the regional trail network, especially in the first ring suburbs due to the fact that they were developed in an era where trails and sidewalks were not routinely a part of development – as such, there are sections of the Twin Cities that lack regional trail facilities. To address gaps in the first ring suburbs, the Three Rivers Park District completed First Tier Trails, Greenways, and Parks Master Plan in 2000. This plan became a part of the Metropolitan Council 2030 planning framework. The Twin Lakes Regional trail is a result of this effort.
Legend

Regional Trail System Status

- **Existing**
- **Under Construction**
- **Current Planning**
- **Future Planning**
- **Twin Lakes Regional Trail**

**Figure 9 - Shingle Creek & Twin Lakes Regional Trails** (Source: Three Rivers Park District)
Figure 10 - Twin Lakes Regional Trail and Proposed Improvements (Source: Three Rivers Park District)
The Twin Lakes Regional Trail is planned to begin at the southern end of Twin Lakes in the City of Robbinsdale near Highway 100. From there it continues northward into Brooklyn Center where it crosses Shingle Creek Regional Trail and continues eastward to the North Mississippi Regional Park and Trail. Future plans for are documented in the Twin Lakes Regional Trail Master Plan completed by Three Rivers Park District in conjunction with Brooklyn Center, Robbinsdale and Minneapolis, Hennepin County, MnDOT and the Minneapolis Park and Recreation Board. There are two gaps identified that should be addressed in the short-term (Figure 10). These segments include the section of 57th Avenue North from Logan Avenue to the North Mississippi Regional Park and Twin Lakes Avenue between Lakeside and Lake Breeze Avenues. Programmed improvements have been identified for the 57th Avenue segment for the years 2015 - 2016.

Other improvements have been identified for the long-term. These improvements include:

- Extending a portion of the trail along Lakeside Avenue from Twin Lakes Avenue to an independent corridor that would connect to Lake Breeze Avenue.
- Providing a connection in front of Shingle Creek Crossing.

**Mississippi River Regional Trail**

As noted under the discussion on city facilities, the Mississippi River Trail is part of a larger, national effort to develop a bikeway (both on-road and off-road – facility type includes off road trails, shoulders, bike lanes and shared roadways) that follows the Mississippi River from its origins in Itasca State Park (Minnesota) to the Gulf of Mexico (Louisiana). The planned trail is close to 3,000 miles long. The trail is a work in progress, with more segments to be constructed in the future.

As previously mentioned, this trail is owned and operated by a number of jurisdictions within – it is not solely under the ownership of Three Rivers Park District, but has been included in this section due to the fact that the trail serves more of a regional connection.

Most segments of the trail within the community are currently in place – a majority of the trail is off-road in Brooklyn Center. There is a short gap in the off-road system that requires users to use Willow Lane North, a low-volume city street.

**Figure 11** shows the trail. In the northern portion of the city, at the border with the City of Brooklyn Park (73rd Avenue North), the trail is parallel to West River Road. It continues southward until 66th Avenue North. This section is an off-road facility. At 65th Avenue North, pedestrians can continue on a sidewalk until it connects to an off-road facility just north of I-694. Bicyclists are required to travel along Willow Lane North, a low-volume city street. This segment has been identified as a gap area by the city as well as by Hennepin County in its Bicycle Plan. It should be noted that this segment of trail is owned and operated by the City of Brooklyn Center.
Legend

- **Mississippi River Trail**: Existing Trail
- **Mississippi River Trail (Planned)**: Planned Trail
- **Existing Regional Trails**: Existing Trails
- **Planned Regional Trails**: Planned Trails
- **Local Trail**: Local Trail
- **Planned Local Trail**: Planned Local Trail
- **Sidewalks**: Sidewalks
- **Railroad Tracks**: Railroad Tracks
- **Parks**: Parks
- **City Boundary**: City Boundary

* Multiple Jurisdictions

Figure 11 - Mississippi River Trail

[Map Image of Mississippi River Trail with various trail types and legends indicated]
South of the gap, the trail is located in North Mississippi Regional Park, which is located in both the Cities of Brooklyn Center and Minneapolis. The park is owned by the Minneapolis Park and Recreation Board and operated by Three Rivers Park District. To add to the mix, the section of trail south of the gap until 57th Avenue North is operated by the Three Rivers Park District. South of 57th Avenue North, the trail is owned and operated by the Minneapolis Park and Recreation Board.

Hennepin County – Existing and Planned Facilities

Hennepin County does not operate nor maintain any trail facilities within Brooklyn Center. Rather, the county assists in their identification and construction through transportation projects along county roadways. Once developed, the trail is usually under the jurisdiction of the community or Three Rivers Park District. The county roadway where at least some segments of trail have been developed is:

- County Road 152 (Brooklyn Boulevard) from 71st Avenue North to 66th Avenue North

The trails along this roadway fall under the jurisdiction of the City of Brooklyn Center.

The Hennepin County Bicycle Plan notes that some existing on-road facilities are in place. In reviewing the facilities that exist within Brooklyn Center, they are limited to on-road shoulders that could accommodate an experienced cyclist. They are not facilities designed for inexperienced cyclists or parents with young riders. The current Hennepin County Bicycle Plan map identifies existing on-road bicycle facilities (in this case roadway shoulders) along the following:

- County Road 130 (69th Avenue North) between western city limits and County Road 152 (Brooklyn Boulevard).
- County Road 10 (58th Avenue North) between western city limits and County Road 152 (Brooklyn Boulevard).
- Dupont Avenue: Existing facilities are noted between 57th and 67th Avenues.
- Xerxes Avenue: Existing facilities are noted between 65th and 59th Avenues.

It should be noted that the Hennepin County Bicycle Plan shows on-road facilities for both county roadways and city streets. Hennepin county maintains on-road facilities for roadways under its jurisdiction.

In addition to identifying bicycle facilities along or on county highways and city streets, the Hennepin County Bicycle Plan also identifies independent trail corridors and some off-road city trails. The Hennepin County Bicycle Plan acknowledges all three of the regional trails previously described (Shingle Creek, Twin Lakes and Mississippi River). It also recognizes the off-road trail developed by the city along 69th Avenue North from County Road 152 (Brooklyn Boulevard to York Place North) and from York Place North to West River Road).

Figure 12 shows the locations of these facilities.

Planned pedestrian and bicycle facilities involving Hennepin County came from two primary resources: the County Road 152 (Brooklyn Boulevard) corridor study completed by the city and the county and the recommendations from the Hennepin County Bicycle Plan.

\textit{Hennepin County is in the process of updating its Bicycle Plan. A final plan is expected by summer 2014.}
Figure 12 - Hennepin County Existing Bicycle Facilities (Source: Hennepin County Bicycle Gap Study 2012)
County Road 152 – Brooklyn Boulevard

The county and the city have identified a number of improvements for County Road 152 (Brooklyn Boulevard). The improvements are a result of a transportation study that identified and evaluated a number of roadway, bicycle and pedestrian alternatives for the corridor. Based on technical analysis, feedback from the agencies, and input from the public, the following improvements were identified:

- Construct trails parallel to the roadway
- Provide landscaping that will enhance the corridor’s appearance
- Improve intersection crossings along the corridor for pedestrians and bicyclists
- Consider additional crossing locations – including a grade-separated crossing

The pedestrian and bicycle improvements are likely to be included as part of a larger project that will reconstruct the highway. A timeline for implementing the proposed improvements are dependent on available partnership funding. Figure 13 shows long-term concepts for County Road 152.

Hennepin County Bicycle Plan

The Hennepin County Bicycle Plan identifies a number of bicycle connections that could be on-road facilities, off-road facilities or independent trails. The plan identifies several different levels of accommodation that should be considered as facilities are developed. These accommodations are described below. Recommendations for the City of Brooklyn Center are shown in Figure 14.

Bikeway – Primary Routes

Primary routes are shown in blue. These are corridors where full accommodation is desired. Full accommodation includes both on-road and off-road facilities in order to serve all levels of bicyclists from beginners to advanced commuters. Within Brooklyn Center the following have been identified as primary routes:

- County Road 152 (Brooklyn Blvd): from northern city limits to southern city limits
- County Road 10 (58th Ave/Bass Lake Road): between western city limits and Xerxes Ave N
- County Road 57 (Humboldt Avenue): from 57th Avenue to the southern city limits
- County Road 130 (69th Ave): between western city limits and County Road 152 (Brooklyn Blvd)
- 69th Avenue: between County Road 152 (Brooklyn Blvd) and West River Road
- Shingle Creek Parkway: from York Place North to Xerxes Ave N
- West River Road: from northern city limits to I-694 crossing
- Xerxes Ave North: from Shingle Creek Parkway to County Road 10 (Bass Lake Road)
Figure 13 - Brooklyn Boulevard Proposed Trails

Source: Brooklyn Boulevard Corridor Study

Legend

- Existing Regional Trail
- Potential Trail Connection
- Existing Bituminous Trail
- Planned Bikeway / Trail by Others
- Planned Bikeway / Trail
- Existing Sidewalk
- Potential Sidewalk
- Transit Facility / Proposed Bus Stop
- Existing Signalized Intersection Crossing
- Existing Grade - Separated Crossing
- Potential Future Pedestrian Crossing Enhancement

Legend

- Existing Regional Trail
- Potential Trail Connection
- Existing Bituminous Trail
- Planned Bikeway / Trail by Others
- Planned Bikeway / Trail
- Existing Sidewalk
- Potential Sidewalk
- Transit Facility / Proposed Bus Stop
- Existing Signalized Intersection Crossing
- Existing Grade - Separated Crossing
- Potential Future Pedestrian Crossing Enhancement

Figure 13 - Brooklyn Boulevard Proposed Trails

Source: Brooklyn Boulevard Corridor Study
Figure 14 - Hennepin County Planned Bicycle Facilities (Source: Hennepin County Bicycle System Plan)
No timeframe or specific recommendations have been developed for these corridors (other than County Road 152 which had a study that identified off-road facilities only – no on-road improvements).

On-road facilities identified in the Hennepin County Bicycle Plan include the use of shoulders and/or bike lanes. Use of shoulders may result in signing as a bike route in some circumstances, but not all.

Secondary Routes
Secondary routes are shown in green. They are bikeways which have a heavy recreational focus or are lesser routes which still have an auxiliary importance to the overall system. Something less than full accommodation, such as an on-road shoulder or (not both) an off-road multiuse path is typical of secondary routes. There are no planned secondary routes within the City of Brooklyn Center.

Independent Corridor Trails
Independent trails are shown in red. These are the trails that are not within a roadway right of way. These trails have been included because they provide an important connection within Hennepin County. They generally cover a longer distance and cross a number of natural and other (large roadways, railroads, etc.) physical barriers. Planned independent trails include:

- Shingle Creek Regional Trail: between the city’s northern and southern limits (this trail has been constructed).
- Twin Lakes Regional Trail: between the southwestern limits of Brooklyn Center to North Mississippi Regional Park. See Three Rivers Park section for planned improvements and their timing.
- Mississippi River Regional Trail: between the northern and southern city limits along West River Road and through North Mississippi Regional Park. The only missing segment on this trail is the portion along Willow, north of I-694. No timing on improvements has been identified.
CHAPTER 5: COMMUNITY ENGAGEMENT

Critical to the success of this Pedestrian and Bicycle Plan is to understand what the residents in Brooklyn Center need to help them walk or bicycle more and what barriers prevent them from doing so. To get resident input, several strategies for community engagement were identified and implemented as part of the overall study. These strategies were specifically identified in order to:

- Identify priority populations to target activities.
- Implement creative methods to engage hard-to-reach populations.
- Work with community organizations and city and county staff to implement strategies.
- Identify ideas from residents that will encourage them to walk and bike more frequently.
- Identify barriers to biking and walking that can be addressed through the plan.

Because it is challenging to engage residents and property owners in long-term planning efforts, traditional efforts such as public meetings, open house events and city council meetings, were replaced with activities that engaged residents in locations where they were likely to be as part of their daily routine and through targeted community groups. In addition, the activities and materials used were designed to promote walking and bicycling as fun and healthy activities. The sections below highlight the community engagement strategies that were employed.

Surveys

The primary focus of the community engagement strategies was to get residents to take a survey that identified their walking and bicycling needs and their current bicycling and walking habits. The survey questions aimed to collect details on how often residents walk and bike, why they engage in these activities (for transportation or recreational purposes), where they go and what could be done to make these activities more attractive to them as users.

The survey was available in English, Hmong and Spanish. The survey was available in a hard copy form and an electronic form. The electronic version was available online via www.surveymonkey.com between March 20, 2013 and July 8, 2013. A total of 165 surveys were submitted (40 hard copies and 125 online). Copies of the survey are included in Appendix B and a full summary of the survey results is provided in Appendix C.

Survey Highlights – Walking

The first part of the survey focused on walking activities. As noted in the responses, a majority of survey respondents indicated that they walked at least once a week and that they walked for a variety of reasons. Popular destinations include community parks and facilities, shopping locations and fast food restaurants. When it came time to identify barriers to walking, survey respondents cited typical challenges related to: intersection crossings, lighting, security, maintenance, additional connections, wayfinding and shared-use facilities.
The following information was gathered from the survey.

1. How frequently do you walk around Brooklyn Center?
   A. Never: 13.2 percent
   B. Less than once a week: 22.1 percent
   C. 1 to 2 times a week: 18.4 percent
   D. More than twice a week – but not every day: 30.9 percent
   E. Every day: 15.4 percent

2. Main reason why you walk.
   A. Have fun: 23.1 percent
   B. Exercise: 60.3 percent
   C. Walk instead of drive: 10.7 percent
   D. Get to work: 1.7 percent
   E. I do not walk: 4.1 percent

3. What places do you walk to?
   - Local parks
   - Around the neighborhood
   - Community center
   - Library
   - Gas station (convenience food/products)
   - Local trails
   - Large retail/grocery stores
   - Fast food locations
4. What would help you walk to places more easily?

- Improving intersection crossings on busy roadways
- Bridges over busy/dangerous intersections
- Adding lighting to see at night and for safety
- Adding cameras for safety
- Add sidewalks to all local streets
- Extend trail connections near Shingle Creek Crossing (mall area)
- Add pavement markings to trails so you know where bicyclists and walkers are supposed to go
- Widen trails so it is easier to accommodate both pedestrians and bicyclists
- Snow and ice removal on trails; faster clearing of sidewalks
- Maps and directional signage
- Mobile app for city trails/sidewalks

5. Which places do you wish you could walk to more easily?

- Local parks
- Community center
- Movie theater
- Library
- Gas stations
- Retail/grocery centers
- Fast food places
**Survey Highlights - Bicycling**

The second part of the survey focused on bicycling habits of survey respondents. In general, fewer people indicated that they biked within the community. They also had different reasons for bicycling than those that did for walking. A greater percentage of respondents indicated that they bicycled for work purpose or to replace a car trip than those who identified themselves as walkers. Like walkers, bicyclists most frequently cited exercise and to have fun as the main reasons for bicycling. Popular destinations for bicyclists also included community parks and facilities, shopping locations and fast food restaurants. Schools were also noted by bicyclists, which were not noted by walkers. When it came time to identify barriers to bicycling, survey respondents cited: needing more trails and trail connections, additional bicycle racks at popular destinations, wider trail facilities, smoother pavement surfaces, mapping/signage and challenging intersection crossings.

The following information was gathered from the survey.

1. How frequently do you bike around Brooklyn Center?

   A. Never: 29.3 percent
   B. Less than once a week: 23.6 percent
   C. 1 to 2 times a week: 16.3 percent
   D. More than twice a week – but not every day: 23.6 percent
   E. Every day: 7.3 percent

2. Main reason why you bike.

   A. Have fun: 30.6 percent
   B. Exercise: 38 percent
   C. Bike instead of drive: 11.1 percent
   D. Get to work: 6.5 percent
   E. I do not bike: 13.9 percent
3. What places do you bike to?
- Local parks
- Around the neighborhood
- Community center
- Library
- Gas station (convenience food/products)
- Local trails
- Large retail/grocery stores
- Fast food locations
- Local schools
- Coon Rapids Dam

4. What would help you bike to places more easily?
- Additional trails and trail connections
- Additional bicycle racks at popular destinations
- Wider trails that accommodate both bicyclists and pedestrians
- Make busy intersections easier/safer to cross
- Smoother trail surfaces
- Additional maps-directional signage

5. Which places do you wish you could bike to more easily?
- Movie theater
- Schools
- Parks
- Shingle Creek Crossing (noted as Brookdale in response)
- Library
- Large retail/grocery centers
Mobile Display

A mobile display booth was created and used to engage people in conversation about walking and biking. The display included information about the pedestrian and bicycle study, a link to the online survey and fun facts about walking and biking. Hard copies of the survey in English, Spanish and Hmong were also available with the display.

The display was used as an informational table at three events and at four locations with a heavy amount of foot traffic. The display was staffed by consultant project staff and/or city staff at the following local events:

- Brooklyn Center Earth Fest: Saturday April 20, 2013 at Brooklyn Center High School
- Brooklyn Junior High Parent-Teacher Conferences: Thursday, April 25, 2013 at Brooklyn Junior High
- Earle Brown Days Festival- Dunkin’s Jamboree: Friday, June 28, 2013 at Centennial Park

The display was also used to engage people in high-frequented locations within Brooklyn Center. Project staff was available to provide information and answer questions at the following display locations:

- Brooklyn Center Community Center, 6301 Shingle Creek Pkwy: Thursday, May 16, 2013
- Brookdale Library/Service Center, 6125 Shingle Creek Pkwy: Friday, May 24, 2013
- Cub Foods, 3245 County Road 10: Friday, June 7, 2013
- Northwest Family Service Center, 7051 Brooklyn Blvd: Monday, June 10, 2013

Partnerships with Local Organizations

In addition to outreach efforts with the mobile display and surveys, project staff collaborated with local organizations and schools to assist in gathering information and to promote the study and survey through their publications, networks, websites and social media sites. The intent of this effort was to provide information on the study and the survey to the organization and in turn have the organization share that information with their members.

Information about the study and survey was distributed to:

- Riverwood Homeowners Association
- North Hennepin Chamber of Commerce
- Brooklyn Center Business Association
- TwinWest Chamber of Commerce
- Brown College – Brooklyn Center campus
- Minnesota School of Business – Brooklyn Center campus
- ITT Technical Institute – Brooklyn Center campus
- National American University –
Brooklyn Center campus

- North Hennepin Community College

As part of the local partnership efforts, the Riverwood Homeowners Association set up a display at the Brookdale Library promoting walking/biking, the study and the survey.

The study and survey were also promoted by city staff who work with community groups, including the city’s Cultural Liaison Officer, Crime Prevention Specialist and Juvenile Officer.

Other Outreach Efforts

In an effort to engage people who do not already walk and bike, as well as hard-to-reach populations, various community groups were identified and contacted. Project staff offered to attend an event hosted by the organization and/or provide a presentation in order to encourage walking and biking and to share information about the project study, as well as promote the community survey. A focus was made to work with organizations that cater to Hmong, Latino and African communities.

Presentations

Presentations were made to two groups during the study to engage different stakeholders about the study and their needs as residents of Brooklyn Center. The first group – students at Brooklyn Junior High – were selected because of their age (cannot drive yet – so as a group do more walking and bicycling) and because of their interest in math, science and engineering. The second group – Brooklyn Center Multicultural Advisory Committee – was selected because it had a more diverse cultural background that could provide insight into the concerns of different populations within the community.

Each presentation included an overview of the development of the Brooklyn Center Pedestrian and Bicycle Plan, information about the benefits of walking and biking, and information about the survey. Both groups completed a mapping exercise and completed the survey.

Comments/themes recorded during the mapping exercise included:

- Additional lighting is needed. This is especially true during winter months when it gets dark out – it is hard to see to walk and/or bike. Lighting also helps for personal safety concerns.

- Police enforcement/presence in locations with bridge crossings would be appreciated. These areas sometimes act as locations where people gather without a purpose.

- Traffic signals are needed to help people cross on busy roadways. In locations where there are traffic signals, make sure the push buttons work properly. Some of them take a long time to allow pedestrians and bicycles to go through the intersection.

- There are gaps in the system that need to be completed to make walking/biking easier.

- It would be nice to have a place to rent bicycles or have bicycles available for people to use.

- More efforts are needed to get helmets and bicycles for children and for those that may
have limited incomes.

- Bike racks should be installed at parks, schools and other public destinations.
- More grade-separated crossings of TH 100, I-94 and Brooklyn Blvd are wanted.
- Connections need to be made within parks to the rest of the network.
- Most of the sidewalks and trails are in good condition. Some locations have cracks and broken segments.
- Some users liked trails better than sidewalks and vice-versa
- Students used trails/sidewalks to get to the homes of their friends, to go the park and to get to stores and fast food restaurants.

Other organizations that did not request a presentation but were contacted by city/project consultant staff and provided with information about the Brooklyn Center Pedestrian and Bicycle Plan and the survey included:

- Northbrook Alliance Church
- Brookdale United Methodist Church
- Spiritual Life Church
- St. Alphonsus Church
- Imam Hussain Islamic Center

**News Releases**

Press releases were made to get the information out through local newspapers. City staff issued a press release at the end of April to let news organizations know about the study and the survey. A press release was issued at the end of June to remind news organizations about the study and to let them know that the survey closure date was approaching. Appendix D has copies of the two press releases.

**Other Studies**

Additional information about walking and bicycling was obtained through Brooklyn Center’s Safe Routes to School Planning Study. This study engaged local school officials, teachers, parents, students, city and county staff and elected officials in identifying walking and bicycling needs/improvements around elementary and middle schools within the community. As part of the study, an evaluation was made of walking/biking routes and the types of improvements that could be implemented over time. Information from this group is incorporated into the identification of system deficiencies and the recommendations sections of this plan.
CHAPTER 6: SYSTEM CHALLENGES

System challenges were identified through a number of efforts. First, staff and the consulting team reviewed existing facilities and identified areas where links were missing, areas where crossings were limited or challenged due to traffic volumes, speeds or barriers such as creeks, other natural resources or development. Second, information collected as part of the surveys was used to identify gaps in the network, crossing challenges and other issues that make walking and bicycling difficult from system users. Third, information identified as part of other studies and plans previously conducted was incorporated. These studies included plans from the city, Hennepin County and Three Rivers Park District. The studies also included information from the recently completed safe routes to school planning study completed jointly by the city and the school districts. Fourth, the study looked beyond the traditional infrastructure to identify barriers to walking and bicycling that may limit or hinder use of the existing facilities in place.

Figure 15, Public Input on System Challenges, includes all the comments collected as part of the study process, regardless of whether or not there is data, studies, etc. to support the comment. For example, someone may have commented that it is a challenge to cross Earle Brown Drive due to sight distance issues. Because of the study’s time and budget constraints, it was not feasible to verify every comment that was made. However, staff felt that it was important to include the comments as part of the public input process and to acknowledge them as part of the study.

The information collected on system challenges has been sorted into eight categories:

1. System Gaps
2. Crossings
3. Wayfinding
4. Infrastructure Condition and Maintenance
5. Security
6. Education/Enforcement
7. Equipment
8. Other

System Gaps

Gaps in both the sidewalk and trail networks were identified throughout the study process. Input on gap locations was obtained from city and county staff, participants in the Safe Routes to School program, residents and users of the system. It should be noted that the table and the figure include all comments about gaps identified through the study outreach process. Like Figure 15, Tables 1 and 2 include comments on gaps that have not been fully vetted.
Figure 15 - Public Input on System Challenges

Legend

- Existing Regional Trails
- Planned Regional Trails
- Local Trail
- Planned Local Trail
- Sidewalks
- Railroad Tracks
- Parks
- City Boundary
- Existing Grade-Separated Pedestrian Crossing

Identified Issues

- Difficult Crossing Area
- Trail Gap
- Sidewalk Gap
- Trail Connection Search Area
Sidewalk Gaps

As noted previously, Brooklyn Center was developed during an era when sidewalks were not always provided. To remedy this situation, the city has made efforts to construct sidewalks as part of street reconstruction projects and at the request of neighborhoods. As a result of these efforts, as well as some construction of sidewalks at the time of development, the city has a rather extensive sidewalk system. However, there are areas where input from stakeholders suggests that there are still some gaps in the network. Table 1 lists the gaps by roadway name.

Table 1: Gaps in the Sidewalk System

<table>
<thead>
<tr>
<th>Gap Location</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>53rd Avenue North</td>
<td>Greatview Avenue</td>
<td>France Avenue North</td>
</tr>
<tr>
<td>53rd Avenue North</td>
<td>Russell Avenue North</td>
<td>Penn Avenue North</td>
</tr>
<tr>
<td>55th Avenue North</td>
<td>France Avenue North</td>
<td>Sailor Lane</td>
</tr>
<tr>
<td>59th Avenue North (south side)</td>
<td>Knox Avenue North</td>
<td>Dupont Avenue North</td>
</tr>
<tr>
<td>61st/Scott Avenues North</td>
<td>Noble Avenue North</td>
<td>Boulder Lane</td>
</tr>
<tr>
<td>62nd Avenue North</td>
<td>Lilac Drive North</td>
<td>Lyndale Avenue North</td>
</tr>
<tr>
<td>67th Avenue North</td>
<td>France Avenue North</td>
<td>Drex Avenue North</td>
</tr>
<tr>
<td>70th Avenue North</td>
<td>Brooklyn Boulevard (CR 152)</td>
<td>Halifax Avenue North</td>
</tr>
<tr>
<td>70th Avenue North (south side)</td>
<td>West of Camden Avenue North</td>
<td>TH 252</td>
</tr>
<tr>
<td>70th Avenue North</td>
<td>West River Road</td>
<td>Willow Lane North</td>
</tr>
<tr>
<td>71st Avenue North</td>
<td>Halifax Avenue North</td>
<td>France Avenue North</td>
</tr>
<tr>
<td>72nd Avenue North</td>
<td>Bryant Avenue North</td>
<td>Camden Avenue North</td>
</tr>
<tr>
<td>73rd Avenue North</td>
<td>Halifax Avenue North</td>
<td>France Avenue North</td>
</tr>
<tr>
<td>73rd Avenue North</td>
<td>Penn Avenue North</td>
<td>Camden Avenue North</td>
</tr>
<tr>
<td>73rd Avenue North</td>
<td>West River Road</td>
<td>Willow Lane North</td>
</tr>
<tr>
<td>Boulder Lane</td>
<td>Scott Avenue North</td>
<td>Unity Avenue North</td>
</tr>
<tr>
<td>Camden Avenue North</td>
<td>70th Avenue North</td>
<td>73rd Avenue North</td>
</tr>
<tr>
<td>Dupont Avenue North</td>
<td>57th Avenue North</td>
<td>53rd Avenue North</td>
</tr>
<tr>
<td>Eckberg Drive</td>
<td>Halifax Avenue North</td>
<td>France Avenue North</td>
</tr>
<tr>
<td>France Avenue North</td>
<td>69th Avenue North</td>
<td>67th Avenue North</td>
</tr>
<tr>
<td>Frontage Road</td>
<td>Brooklyn Boulevard (CR 152)</td>
<td>Xerxes Avenue North</td>
</tr>
<tr>
<td>Frontage Road</td>
<td>Bass Lake Road (CR 10)</td>
<td>John Martin Drive</td>
</tr>
<tr>
<td>Halifax Avenue North</td>
<td>France Place</td>
<td>Eckberg Drive</td>
</tr>
<tr>
<td>Humboldt Avenue North</td>
<td>ITT Technical Institute Parking Lot (freeway side)</td>
<td>Earle Brown Drive</td>
</tr>
<tr>
<td>Freeway Overpass Sidewalk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irving Avenue North</td>
<td>57th Avenue North</td>
<td>59th Avenue North</td>
</tr>
<tr>
<td>John Martin Drive</td>
<td>Earle Brown Drive</td>
<td>Frontage Road</td>
</tr>
<tr>
<td>Northport Drive</td>
<td>Northport Elementary School</td>
<td>53rd Avenue North</td>
</tr>
<tr>
<td>Palmer Lake Drive West</td>
<td>72nd Avenue North</td>
<td>North of Woodbine Lane North</td>
</tr>
<tr>
<td>Perry Avenue North</td>
<td>65th Avenue North</td>
<td>Howe Lane</td>
</tr>
<tr>
<td>Unity Avenue North</td>
<td>Boulder Lane</td>
<td>63rd Avenue North</td>
</tr>
<tr>
<td>Willow Lane North</td>
<td>73rd Avenue North</td>
<td>70th Avenue North</td>
</tr>
<tr>
<td>Xerxes Avenue North</td>
<td>South of 55th Avenue North</td>
<td>Frontage Road</td>
</tr>
</tbody>
</table>
Trail Gaps

Along with the gaps in the sidewalk network, there are also some gaps in the trail network that were identified by stakeholders. Gaps are identified regardless of the agency that may ultimately own and operate the trail. Gaps in the trail network are shown in Figure 15 and listed in Table 2.

Table 2: Trail Network Gaps

<table>
<thead>
<tr>
<th>Gap Location</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>50th Avenue North (independent trail – not along a roadway)</td>
<td>Drew Avenue North</td>
<td>53rd Avenue North</td>
</tr>
<tr>
<td>57th Avenue North</td>
<td>Logan Avenue</td>
<td>North Mississippi Regional Park</td>
</tr>
<tr>
<td>58th Avenue North</td>
<td>Halifax Avenue North</td>
<td>June Avenue North</td>
</tr>
<tr>
<td>63rd Avenue North</td>
<td>Perry Avenue North</td>
<td>Major Avenue North</td>
</tr>
<tr>
<td>66th Avenue North</td>
<td>Orchard Avenue North</td>
<td>Indiana Avenue North</td>
</tr>
<tr>
<td>Azelia Avenue North (extension)</td>
<td>South of Lake Breeze Avenue</td>
<td>Lakeside Avenue</td>
</tr>
<tr>
<td>County Road 130 (69th Ave)</td>
<td>Unity Avenue North</td>
<td>County Road 152 (Brooklyn Blvd)</td>
</tr>
<tr>
<td>County Road 152 (Brooklyn Blvd)</td>
<td>I-94/694</td>
<td>49th Avenue North</td>
</tr>
<tr>
<td>Drew Avenue North</td>
<td>67th Avenue North</td>
<td>65th Avenue North</td>
</tr>
<tr>
<td>France Avenue North/France Place</td>
<td>Halifax Avenue North</td>
<td>53rd Avenue North</td>
</tr>
<tr>
<td>Halifax Avenue North</td>
<td>58th Avenue North</td>
<td>France Place North</td>
</tr>
<tr>
<td>June Avenue North</td>
<td>59 1/2 Avenue North</td>
<td>58th Avenue North</td>
</tr>
<tr>
<td>Lakeside Avenue North</td>
<td>Twin Lake Avenue</td>
<td>Azelia Avenue North (extension)</td>
</tr>
<tr>
<td>Logan Avenue North</td>
<td>59th Avenue North</td>
<td>57th Avenue North</td>
</tr>
<tr>
<td>Major Avenue North</td>
<td>63rd Avenue North</td>
<td>Arboretum</td>
</tr>
<tr>
<td>Marlin Drive</td>
<td>65th Avenue North</td>
<td>Marlin Park</td>
</tr>
<tr>
<td>Perry Avenue North</td>
<td>Howe Lane</td>
<td>63rd Avenue North</td>
</tr>
<tr>
<td>Shingle Creek Crossing</td>
<td>55th Avenue North</td>
<td>Bass Lake Road</td>
</tr>
<tr>
<td>TH 252 or Willow Lane North</td>
<td>North of I-694</td>
<td>66th Avenue North</td>
</tr>
<tr>
<td>Twin Lake Avenue</td>
<td>Lakeside Avenue North</td>
<td>Lake Breeze Avenue</td>
</tr>
<tr>
<td>Northern City Limits – along Shingle Creek</td>
<td>Brooklyn Boulevard</td>
<td>Park Center High School/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brooklyn Junior High</td>
</tr>
</tbody>
</table>

Crossings

In addition to identifying areas where trail or sidewalk segments are missing, study participants also identified locations where they found it challenging for bicyclists and/or pedestrians to cross the roadway. Locations were identified for a number of reasons such as: heavy traffic volumes, a large roadway or barrier to cross, high-speed traffic, lack of crossings for a significant distance or lack of crossings at a desired destination, and a desire for additional freeway crossings. These areas are shown on Figure 15 and are described below.
1. **Interstate 94**: West of County Road 152 (Brooklyn Boulevard) there are no pedestrian overpasses or any grade-separated roadway crossings within the city. As a result, residents living west of County Road 152 are required to go to County Road 152 to get to areas north and south of I-94. This can require pedestrians and bicyclists to go quite a bit out of their way. Additionally, conditions on County Road 152 are not as pedestrian and bicycle friendly as they could be (improvements have been identified, but not yet constructed). This results in limited use of County Road 152 by pedestrians and bicyclists.

   East of County Road 152 there are a number of grade separated crossings that pedestrians can use, including a regional trail (Shingle Creek).

2. **Trunk Highway 252**: MnDOT operates Trunk Highway 252 within the city. This roadway has three existing at-grade intersections where pedestrians and bicyclists can cross to/from the Mississippi River Regional Trail along West River Road. TH 252 is primarily a six-lane roadway with dedicated left- and right-turn lanes at the three intersections. In addition, TH 252 has a large, grass center median. Because there are a number of lanes and a wide median, it can be very challenging for pedestrians and bicyclists to cross at these locations.

3. **TH 100**: TH 100 is another large roadway that can be a barrier for pedestrians and bicyclists. There are a few grade separated crossings that pedestrians and bicyclists can use, but they do not always provide the most direct route to and from various destinations. It is important to note that there are crossings that connect with the mall (Shingle Creek Crossing) and near the Earle Brown Center. There are also sidewalks that can be used along County Road 152 (Brooklyn Boulevard) and along Lake Breeze/France Avenue.

4. **County Road 10 (Bass Lake Road)**: County Road 10 is an east-west roadway that enters the city at its western limits just north of Upper Twin Lake and continues to TH 100. West of County Road 152 (Brooklyn Boulevard) it is a three-lane roadway (one travel lane in each direction with a center turn lane). The area is primarily residential in nature and travel speeds are not excessive. However, there are no officially designated crossings.

   East of County Road 152 (Brooklyn Boulevard) to TH 100, County Road 10 becomes a four-lane divided roadway with dedicated turn lanes and traffic signals at some locations. The land use in this segment transitions to more commercial (including the mall area) and industrial uses. Traffic volumes are generally heavier and speeds can be faster. This section of roadway has transit stops and bus pullouts at some locations. Because of some major electrical transmission lines, the roadway has a wide median. However, the signalized intersections have wide enough medians that they serve as a pedestrian and bicycle refuges and offer people a safe place to stop half way across the corridor.

   Comments from stakeholders indicated that they would like to see a grade-separated crossing along the segment east of County Road 152 (Brooklyn Boulevard) and maybe have something in place to assist in crossing between neighborhoods west of County Road 152.

5. **County Road 152 (Brooklyn Boulevard)**: County Road 152 is a north-south roadway that travels through and beyond the city. This roadway has many design types. In some locations it is a four-lane undivided facility with center turn lanes, in others it is a four- or six-lanes with a center median and dedicated turn lanes, in some locations it is a four-lane undivided facility and in some segments it is a four-lane divided facility without dedicated turn lanes.
Some of the segments have trails, with sidewalks along most of the corridor. Travel speeds and traffic volumes can fluctuate depending upon where one is in the corridor. A majority of the corridor is currently commercial or industrial, with pockets of residential and institutional uses as well.

One of the more challenging segments of roadway for pedestrians and bicyclists to cross is in the area between 65th and 58th Avenues North. In this segment, the roadway is four travel lanes, two center turn lanes and some locations with dedicated turn lanes except for the signalized intersections at 65th, 63rd, and 58th Avenues. At these locations, there is a center median and at least dedicated left-turn lanes.

Because the roadway segments are large (minimum of six lanes to cross), and there are a limited number of signalized crossings, it is hard and unsafe for pedestrians to cross County Road 152 in this area. Other contributing conditions that make the crossing the roadway challenging include intersections that are off-set from one another. This means that the intersecting streets do not line up with one another and pedestrians cannot cross directly from one side of the roadway to the other.

To address roadway, bicycle and pedestrian transportation issues, the city and Hennepin County completed a corridor study between I-694/94 and 49th Avenue North. The study made a number of recommendations for the roadway and intersections as well as for supporting facilities such as trails and sidewalks. Within the study area it was recommended that a trail be constructed along the west side of the corridor and that a sidewalk remain on the east. In addition, it recommended providing an additional place for pedestrians to cross at 61st Avenue so that there would not be such a long gap between locations (63rd Avenue North and 58th Avenue North) where pedestrians can cross with the assistance of a signal.

6. Earle Brown Drive: Earle Brown Drive is a curvilinear roadway with a number of different land uses including the Earle Brown Center, a few hotels, institutions of higher learning and a fair number of people that are generally not familiar with the area (tourists, visitors to Earle Brown, etc.). The northeast corner of the roadway (in front of the Earle Brown Center) was identified by a couple of individuals as a location where it is hard for pedestrians and cars to see one another and to judge speed accurately.

**Wayfinding**

Comments from survey respondents indicated that directional signage would make getting to destinations easier. This is especially true on regional trails, which tend be longer and generally serve multiple destinations. Without signage on these facilities, it can be challenging for users to mentally calculate how far it is to a particular location or how long it will take to reach that location. Additionally, if the trails meander or have multiple connections, users can get confused as to which direction they should go.

While it is not practical to list on a sign all destinations that are possible on every street with a sidewalk or along every trail, opportunities may exist to provide additional wayfinding measures to guide system users. Potential opportunities for wayfinding measures are included in Chapter 7.
Infrastructure, Infrastructure Condition and Maintenance

The City of Brooklyn Center recognizes that it is important to have a complete pedestrian and bicycle network in good working order to encourage its use. To reflect that understanding, the city annually inspects approximately a quarter of the city for trails and sidewalks; it maintains the sidewalks in the winter; and applies to different grant programs for funding to construct and reconstruct facilities, to purchase bicycle racks and to identify short-, mid- and long-term needs. Comments from those participating in surveys or speaking with staff and the consultant agreed that overall the city did a good job when it came to infrastructure. However, there were some comments/themes that warrant discussion.

Lighting

Lack of lighting, particularly lighting that is more pedestrian scale in nature, was noted by a number of survey respondents and by individuals participating in outreach efforts. Lighting is particularly important for users of the system during winter months when it is dark going and coming to work as well as year-round for those that work non-traditional shifts. Lighting is needed not only to see sidewalks, trails and roadways better, but also for security/personal safety and for ice during the winter.

Bicycle Racks

Even though the city has actively pursued and received funding for bicycle racks, some survey respondents indicated that they would like additional bicycle racks at popular destinations, schools and at commercial/non-public locations such as strip malls, Target, Cub, Walmart, etc.

Wider Trails

Some survey respondents indicated that they would like to have wider trails or trails that had pavement markings designating which direction people should be walking and biking. On some of the more popular trails without these amenities, some users indicated that they felt crowded or there was not enough room on the trail.

Pavement Surface

Some of the bicycle survey respondents indicated that trail surfaces were not always smooth and that there were some locations where the pavement was cracked and contributed to a rougher ride.

Winter Maintenance

The City of Brooklyn Center performs winter maintenance (snow removal) on all sidewalks along city and county roadways. It also clears snow off of trails owned by Three Rivers Park District. Timing of winter maintenance for sidewalks and trails can be challenging – everybody wants
the sidewalk and trail that they use to be cleared right after the snow event so that they can use nearby facilities. Study participants indicated support and appreciation for snow removal – however, they also wanted faster clearance times. Clearance of snow from sidewalks near schools was also brought up as an issue as part of the Safe Routes to School planning efforts. In general, the city attempts to clear streets near schools in time for arrival and dismissal.

Other

An additional issue identified as part of the surveys indicated that there may be regular flooding issues on trails near some of the lakes. It was suggested that trails be raised in these areas. The city, in partnership with Three Rivers Park District, recently located a regional trail out of the floodplain for this very reason. Other segments still need to be addressed.

Security

People need to be and feel safe if they are going to walk or bicycle within the community or if they are going to be willing to let their children walk and/or bike without supervision. Some study participants noted that personal safety/security was a concern or a barrier that limited their use of the pedestrian and bicycle network.

As noted previously, lighting can play an important role in how safe someone feels. Lighting not only enables someone to see where they are going, it also helps them be aware of their surroundings and environment as a whole. It also makes people more visible should any type of incident (fall, injury, etc.) occur. Along with additional lighting, some study participants suggested that it would be appreciated if there were police patrols along trails and sidewalks, especially when it is darker out or in locations where crime can be an issue. Recognizing that police cannot be everywhere, it was also suggested that cameras be installed in areas with known safety/security concerns.

Education/Enforcement

While not a physical issue associated with the pedestrian and bicycle network, study participants noted a general lack of understanding of rules when it comes to motorized vehicles and bicyclists/pedestrians – on both the part of the vehicle drivers and the cyclists/pedestrians. It was suggested that educational efforts be made to make all users aware of the rules of the road and that police officers become more aggressive in enforcing these rules.

In addition to comments regarding education on the rules of the road, it was also noted that more education on owning and properly maintaining a bike may be desired and useful for residents.
Equipment

Given the downturn in the economy and the economic constraints that residents may have, comments were made that it would be beneficial to have programs available within the community that would help children obtain bicycle helmets and/or bicycles. In discussions with city and county officials, it was noted that some of these programs exist and that it may be necessary to make the availability of these programs more widely known and/or advertised.

Study participants also recommended that a program similar to Nice Ride (bicycle rental program – bicycles can be obtained and returned at multiple locations within a community and can be rented hourly) may benefit the community by providing options for those that may not be able to purchase a bicycle or need it for limited periods. It was also seen as an opportunity to potentially bring people into the community and explore its amenities.

Other Comments

Other comments received focused on operations at signalized intersections. Study participants requested audible crosswalk indicators and longer crossing times for pedestrians and bicyclists at busy intersections.
CHAPTER 7: RECOMMENDATIONS

The City of Brooklyn Center has the opportunity as part of its Pedestrian and Bicycle Plan to create the foundation for providing important community links and connections that would allow individuals to pursue walking and biking as part of their work, household, recreation, and transportation activities by making its system of sidewalks, trails and transportation facilities safer and more convenient. The city also has the opportunity to develop policies, coordinate with other agencies and implement practices that will encourage walking and bicycling within the community.

This section outlines an overall vision for pedestrian and bicycle facilities within the community and provides some broad recommendations for activities and practices that will encourage the long-term use of the system and a healthy lifestyle.

Chapter 8 provides overall best practices that should be considered when planning, designing and constructing improvements. Chapter 8 provides greater detail on design activities and considerations.

Trail and Sidewalk Network Vision

The proposed trail and sidewalk network vision should reflect the input of study participants and good planning practices that encourage connections to important destinations within the community, that provide opportunities for recreation as well as commuting purposes and that provide connections throughout the entire community. The proposed vision for the trail and sidewalk network:

- Creates linkages to existing and planned recreational facilities
- Creates linkages to schools from residential areas
- Creates linkages to community destinations (city hall, community center, mall, etc.)
- Creates linkages along transit lines and to transit facilities (bus stops, park and rides, etc.)
- Eliminates gaps in the existing network
- Provides parallel/separated facilities on higher-volume and/or higher-speed roadways

The vision in this plan is for the long-term. It is to be used as a guide for the city and its partners when making both long- and short-term decisions with regard to planning and construction of facilities. It is intended to be used to incorporate pedestrian and bicycle needs not only into projects immediately on the table, but to not preclude them as part of the planning and other activities. For instance, a trail may not be completed or constructed as a single parcel redevelops, but right of way or an easement should be preserved if it is included as part of the vision so that it can be constructed at some point when there are enough parcels for a trail to be constructed.

Figure 16 shows the trail and sidewalk network vision. Trails and sidewalks shown in solid lines represent facilities already in place. Dotted lines show “proposed” connections needed to complete the vision.
Figure 16 - Long-Term Pedestrian & Bicycle Infrastructure Vision

Legend

- **Sidewalks**
- **Recommended Sidewalk**
- **Existing Trails**
- **Recommended Trails**
- **Potential Grade-Separated Crossing**
- **Search Area for Potential Grade-Separated Crossing**
- **Parks**
- **Railroad Tracks**
- **City Boundary**

[Map of Pedestrian & Bicycle Infrastructure Vision with various symbols and lines indicating different infrastructure features.]
Input on the pedestrian and bicycle facility vision was developed based on the input from stakeholders regarding system challenges as well as from other studies (Safe Routes to School) that were recently completed.

As alluded to previously, there are not any specific priorities or timelines identified for improvements. Discussions with staff, appointed committees and elected officials will be used to identify priorities. In some cases, priority may be determined as a result of joint efforts with other agencies such as schools, Hennepin County and Three Rivers Park District. In other instances it may be the availability of funding for a particular type or improvement or grant funding that is targeted to a specific project. In some instances, improvements may never be prioritized, opportunities for improvements may not occur and funding may not be available.

On-Road Facilities

At this time, there are no specific recommendations to sign roadway shoulders as bicycle routes within Brooklyn Center. Experienced cyclists will choose to ride on roadway shoulders based on their comfort level and trip destination. As indicated previously, both the county and the city have identified roadways where consideration could be given to construct on-road facilities for experienced bicyclists to use for transportation purposes. It is recommended that individual corridors be studied if demand is sufficient and there are requests made for providing specific facilities. Opportunities as part of reconstruction projects or maintenance projects should jointly be explored by the county and the city to consider shoulders, bike lanes and other accommodations as appropriate. Corridors for potential study/consideration that have been identified previously by the county and/or city include:

- County Road 10 (58th Ave/Bass Lake Road): between western city limits and Xerxes Ave N
- County Road 57 (Humboldt Avenue): from 57th Avenue to the southern city limits
- County Road 130 (69th Ave): between western city limits and County Road 152 (Brooklyn Blvd)
- 69th Avenue: between County Road 152 (Brooklyn Blvd) and West River Road
- Shingle Creek Parkway: from 69th Avenue to Xerxes Ave N
- West River Road: from northern city limits to I-694 crossing
- Xerxes Ave North: from Shingle Creek Parkway to County Road 10 (Bass Lake Road)

The studies on these corridors should identify what type of on-road facility is most appropriate (bike lanes, shoulder use, cycle tracks, etc.). Based on the type of facility that is identified, the corresponding signage can be developed. It is important to ensure that the on-road facilities have connectivity to other bicycle facilities so riders are not forced into the traffic flow unexpectedly. This is particularly important for the less experienced cyclists and those that may be riding with children.
It should be noted that County Road 152 (Brooklyn Boulevard) was noted as a potential corridor for on-road facilities. The Brooklyn Boulevard study evaluated this alternative and recommended not including them. Instead, the study recommended a trail on the west side and a sidewalk on the east side as being sufficient to serve pedestrian and bicycle needs on the corridor.

Crossings

As noted in Chapter 6 – System Challenges, there are roadways where crossing provides some especially difficult challenges for pedestrians and bicyclists using the sidewalk and trail network. The good news is that there were consistent comments on where a majority of the crossing issues were concentrated and the overall number of corridors with concerns is fairly limited. This does not mean that other locations are not problematic or could be improved with some of the best practices identified in Chapter 8. It also does not mean that any improvements may be identified – especially if future studies indicate that there are no problems.

Crossing challenges identified by stakeholders included:

- I-94/694 west of County Road 152 (Brooklyn Boulevard)
- TH 252 from the northern city limits to 66th Avenue North
- County Road 10 (Bass Lake Road) between the western city limits to County Road 152 (Brooklyn Boulevard)
- County Road 152 (Brooklyn Boulevard) between 63rd Avenue North and County Road 10 (Bass Lake Road)
- Earle Brown Drive in the northeastern portion of the roadway

This plan recommends the following:

1. Implement proposed improvements to County Road 152 (Brooklyn Boulevard), including upgrading intersections to make them more attractive, providing additional crossing opportunities at 61st Avenue and ensuring that ADA requirements are met. At this point, the city and the county will need to work together to identify the funding needed to make the improvements.

2. Conduct studies that address crossing issues similar to the County Road 152 (Brooklyn Boulevard) study on TH 252 and County Road 10 (Bass Lake Road) between the western city limits and County Road 152 (Brooklyn Boulevard) with the appropriate partners.

3. Conduct a roadway segment/intersection analysis (sight distance review, crossing location review, crash analysis, etc.) on Earle Brown Drive to identify any potential changes.

4. Discuss with MnDOT potential opportunities for another crossing of I-94/694. If MnDOT is open to the opportunity, complete a study that would identify and compare potential crossing locations.
While some may want grade-separated crossings at all intersections on bigger/busier roadways because it reduces the time and/or length of one’s trip, this is not practical and it is not cost effective. As such, careful thought and consideration will need to be given to any new grade-separated crossings.

The areas identified above should be the focus of future studies to determine the appropriate treatments that are specifically suited to that particular location(s). General treatments and best practices have been identified in Chapter 8 – including treatments for intersections and mid-block crossings – that may be applicable to the situations above. However, additional study should be completed to thoroughly understand existing conditions at these locations in order to identify improvements that are most appropriate.

**Policies, Activities and Practices**

There are a number of things that the City of Brooklyn Center and its partners can do to ensure use of the pedestrian and bicycle network that go beyond constructing sidewalks, trails and on-road improvements. Some of the activities require a policy direction from the Brooklyn Center City Council, others require staff coordination and time and other activities may require cooperation from outside agencies. The sections below highlight other opportunities the city should consider.

**Regular Plan Review, Project Identification and Studies**

Having this plan is one of the first steps that Brooklyn Center has taken to ensure that there will be a robust pedestrian and bicycle network to serve residents throughout their lives. Additional steps will need to be taken to ensure that the plan’s long-term goals are achieved. These steps include:

- **Regular Plan Review:** One way to ensure that plan recommendations are being implemented and that people are using the pedestrian and bicycle network is to conduct a regular review of the plan (every 3 to 5 years) to ensure that the recommendations are relevant and that projects and policies are being implemented. Update the plan as needed.

- **Identify Projects and Develop a Timeline:** Identify potential projects on a set schedule (every year, every other year, etc.) for inclusion in the city’s capital improvement program. This ensures that projects are included in budgetary decisions and will assist in selecting priority projects.

- **Studies:** For more complicated issues/locations, invest in corridor or intersection studies to identify the appropriate recommendations. This will likely require coordination with other agencies such as Hennepin County, MnDOT and Three Rivers Park District. It could also include adjacent communities such as Brooklyn Park, Minneapolis, etc. Once studies are completed, implementation timeframes should be established if possible so that agencies can adequately prepare budgets for proposed improvements.
Update Ordinances/Encourage Pedestrian and Bicycle Infrastructure

The City of Brooklyn Center has been successful with its street reconstruction projects in adding neighborhoods to the sidewalk network and the city has successfully negotiated with developers to incorporate trails and/or sidewalks as part of major redevelopment efforts. These activities can be further enhanced by:

- **Zoning Code:** Incorporating sidewalk and/or trail requirements into development/redevelopment requests that are submitted to the city for review and approval. By incorporating requirements into the zoning/subdivision code, the city can make incremental changes in areas that lack facilities and/or supporting infrastructure (bicycle racks, signage, lighting, etc.).

- **City Improvements:** When the city makes improvements or changes to its facilities, consideration should be given for incorporating additional sidewalk and trail facilities and supporting infrastructure.

- **Coordinating with Existing Property Owners:** Work with existing property owners at popular destinations (Earle Brown, schools, technical schools, businesses) to encourage bicycle and pedestrian improvements. There may be opportunities to partner on grants for bicycle racks, signage, etc. that would benefit businesses, customers and the city.

Partnering with Other Agencies/Organizations

When agencies cooperate with one another, with other organizations and with the private sector, additional funding and resources can become available to make walking and bicycling easier for a greater number and types of users. A number of agencies and organizations have coordinated with the City of Brooklyn Center to get the pedestrian and bicycle network to the point where it is today. Continued cooperation and coordination will be required to grow and maintain the network in an orderly manner and to encourage walking and bicycling within the community. Potential partnering could include:

- **Plan Consistency:** Regular and ongoing coordination with Hennepin County and the Three Rivers Park District will ensure consistency among the plans for the three agencies. This consistency will be useful when applying for grants and trying to obtain funding for proposed projects.

Hennepin County has just completed its Pedestrian Plan and elements of that plan are reflected in this plan. The county is also just starting the process of updating its Bicycle Plan. As part of that process, the Three Rivers Park District and the City of Brooklyn Center will be invited to provide comments and input into the plan development. It will be important for the city to participate in this process so that any modifications can be incorporated into an update of this plan at a later date.
• **Establishing Standards:** The city, county and Three Rivers should establish some minimum design standards for trail facilities, signage, lighting and other amenities. Consistency in facilities is important to users of the system. It also allows for the easier transfer of facilities at a later date if jurisdictional changes need to be made.

• **Funding:** Coordinating with other agencies, organizations and the private sector provides greater opportunities to obtain and leverage funding for infrastructure and educational efforts. It can also open up new avenues of funding opportunities. For instance, the state may have a grant available for senior housing projects that pays for sidewalk improvements. Working with a developer on a senior housing project may pay for the sidewalk and free up funding for other improvements/enhancements to the site or reduce city costs.

• **Identify Needs:** Cooperating with other agencies and organizations can assist the City of Brooklyn Center in identifying any additional infrastructure, education, maintenance or program needs. The city, in turn, can assist other agencies in doing the same thing. When needs show up in multiple plans it can make obtaining funding easier and it can help in prioritizing improvements and programs. Additionally, making other agencies and organizations aware of needs may lead to sharing of information about resources that the city may not have heard about previously.

• **Education and Promotion:** Putting on programs jointly or sharing information across jurisdictions can save resources or allow for more robust programs that can reach more participants. It can also bring together groups that may not normally work together (for example, a bicycle education program that includes schools, police, bike shop, insurance company).

  The city should consider partnering with the school districts, insurance companies, bicycle shops, etc. to implement educational workshops, bike rodeos and walk/bike to school activities. Educational activities on safety involving children can be used to engage the parents as well. Events can focus on how to maintain/care for equipment, the importance of wearing a helmet and understanding the rules of the road. Additionally, these efforts can be used to assist the city in identifying any additional improvements or programs that may be needed as part of the program.

  Educational activities on health could be developed by partnering with Hennepin County and insurance companies to conduct educational workshops within the community on the importance of a healthy and active lifestyle. The workshops can promote opportunities to use the pedestrian and bicycle network within the community.

• **Equipment:** Partnering with other organizations and groups may enable the city, county and/or schools to get access to items such as new bicycle helmets and new and used bicycles that they can use in their programs and distribute to residents based on need.

  Other opportunities could also include working with Nice Ride to determine whether or not there is enough market demand to expand the program into Brooklyn Center.
• **Monitoring:** One of the goals of this plan is to get more people walking and biking within the community. On its own, the City of Brooklyn Center may not have the ability to count pedestrians and bicyclists using the system. However, in working with the schools, there may be an opportunity to have annual surveys on the number of kids that walk or bike to school. In working with Three Rivers Parks, there may be opportunities to use their data or assist them in counting usage on regional trails. In working with Hennepin County, there may be opportunities to obtain pedestrian and bicycle counts if the county is conducting traffic counts for highway projects. Pulling these sources together will assist the city in understanding usage of its system.

• **Transit:** Metro Transit serves the City of Brooklyn Center with regular route and express bus service. There are three park and ride locations, a transit station and numerous bus stops along regular route service lines. Improving pedestrian and bicycle connections to these facilities can assist in integrating biking and walking into the transportation discussion, thereby benefiting the transit system, the roadway network and the pedestrian and bicycle networks. It is also an opportunity to partner with Metro Transit on bus stop locations, shelter placement and overall service to the community. Regular communication with Metro Transit can be used to ensure that pedestrian and bicycle facilities (as well as supporting infrastructure – bicycle parking) are located on transit routes and connect to major transit facilities if routes are modified or if route modifications are discussed.

**Education**

As noted throughout this plan – the intent of the Brooklyn Center Pedestrian and Bicycle Plan is to encourage more people to walk and bike. Providing the necessary infrastructure is one part of that process – however, in order to see changes in behavior, additional efforts will be needed. These efforts should include education – about the system, the benefits of walking and bicycling and safety.

• **System Awareness:** In order to increase the number of users on the system, residents, businesses and public agencies/groups should be provided information about Brooklyn Center’s existing pedestrian and bicycle network. One way to do this is to distribute maps showing the existing network. This can be done on the city’s website, having hard copies of the maps at city locations (city hall, golf course, community center, etc.) or distributing maps as part of a city-wide newsletter. Another option is to build on the public outreach that the city initiated as part of this plan and have maps or information about maps on the website available at community events such as Earth Fest and Earle Brown Days.

Other options include working with the school districts to distribute maps to students during the school year so that they can use them to map their route to school and other destinations within the community.
• **Health Benefits:** As noted previously, there are opportunities to work with Hennepin County, health providers and insurance companies about the benefits of walking and bicycling. In addition to working together to put on programs within the community, there may be an opportunity to partner with some of the technical schools to teach a session on this topic in some of their health-related classes. Additionally, the city could potentially team with local clinics to put up a display (similar to the mobile one used in this study) on the benefits of walking and bicycling in their lobbies for a limited period of time.

• **Safety:** Safety is something that the city, county and Three Rivers Park District take seriously. They also understand that system users need to feel safe while on the system and while crossing major barriers (bigger roadways, railroads, creeks, etc.) or they will not use it. To this end, the agencies providing the infrastructure have identified best engineering practices for constructing the physical network. However, efforts beyond providing a well-designed system are needed to make users feel safe.

The city and the school districts have partnered together to implement Safe Route to School Activities. Ongoing efforts outside of the official program should be considered to continue to educate young people about safe walking and bicycling. This will reinforce the messages that they have been receiving and will expand that knowledge to new students annually. As more young people become better acclimated with rules and practices for safe walking and biking, the more likely they are to use the system and to share their knowledge with others.

In addition to providing safety training to children, consideration should be given to provide training and information about safe walking and bicycling to adults through community education programs, police outreach efforts or through handouts available via the internet or hard copy. Training for adults can serve as a refresher on safe practices and can be a way to introduce new users to the pedestrian and bicycle network.

**Maintenance**

As previously indicated, how well a facility is maintained can be an indicator of use. Well maintained facilities will encourage more use, whereas facilities in disrepair can provide a negative experience, and in some cases create a safety concern that will deter users. Regular maintenance of facilities also shows the city’s, county’s and Three Rivers Park District’s commitment to and investment in the non-motorized transportation network. Things the city can do to improve maintenance include:

• **Reporting:** The city, county and Three Rivers cannot be in every spot every day to ensure that infrastructure is in operable and safe conditions. Additionally, much of the public is unaware of what facilities belong to which agency. To make it easier for residents and users of the system to report problems or maintenance issues, the city should consider putting a “report a sidewalk” or “report a trail” link on its website so that users can report problems to the city. From there, the city can coordinate appropriately with other agencies if needed. Having an electronic way to identify problems to city officials will make it easier for users to report problems on the network and will provide staff with another means of being informed about issues to address.
• **Inspection:** Regularly inspect the condition of trails and sidewalks owned and/or maintained by the city. Items identified as needing attention should be addressed if they pose an immediate hazard. If they can wait, they should be incorporated either into the city’s capital improvement program or maintenance program. The City of Brooklyn Center inspects approximately a quarter of the community on an annual basis. This consistent approach ensures that most facilities are in operable and safe conditions.

• **Budgeting:** Just as roadway maintenance is a part of the city’s budget, a budget for sidewalk and trail maintenance should also be considered for short- and long-term maintenance needs. Including maintenance activities ensures regular use of funding for keeping the system safe and operational.

• **Snow Removal:** Snow and ice removal is an important safety consideration – especially for the pedestrian network. Handicapped and elderly populations are of particular importance when considering snow removal policies and practices. Facilities that are not maintained may force users to find other modes or may force them into locations (such as in the roadway) that are not safe. In addition to removing snow, policies should consider the timing of removal – is it done within a certain period of time after a snow event? Does it follow plowing for city streets? Are there certain facilities maintained by the city that should receive higher priority than others? These are questions that city policies should address.

Presently the City of Brooklyn Center provides snow removal on sidewalks and Three Rivers Park District trails. The plowing of the sidewalks and trails is done concurrently with the plowing of city streets in order to clear snow as soon as possible. As part of reviewing and updating its snow plowing route planning, the city may want to consider developing a priority list for snow removal on facilities that have higher usage or link to schools and transit destinations. In general, the city attempts to clear snow on routes with schools in advance of arrival and dismissal times. Doing so is not always feasible based upon the timing of the snow event.

• **Vegetation:** The city should consider trimming vegetation or asking homeowners to trim vegetation that extends into the public right of way. Vegetation can block sidewalk and trails by extending over these facilities, narrowing the travel path for users. It can also create an unexpected hazard for users. This can be problematic on high-use corridors where the full width of the facility is needed.

• **Drainage:** As part of the inspection process, review the trail/sidewalk area for any standing water or drainage issues. Sidewalks and trails can settle over time and redevelopment/construction can change drainage patterns. Standing water or mud/sand/debris washed onto a sidewalk or trail can create a safety problem or make it difficult for wheelchairs and/or bicycles to navigate.

• **Roadway Improvements:** The city should consider pavement materials when making roadway repairs. Plans should ensure that storm water grates are perpendicular to the roadway so that bicycle tires do not get trapped. When paving travel lanes, care should be taken to avoid leaving a ridge or joint where the bicycle may be traveling. Coordination and discussion should occur with the county and the state when improvements are made to their facilities.
• **Signage and Pavement Markings:** The condition of signage and pavement markings is an important part of the maintenance process. It is important to evaluate signage and pavement markings as part of regular inspections. The signage and pavement markings provide important information and they should be kept in good repair so that they are readable/visible to users.

**Security**

Security on the pedestrian and bicycle network was identified as a concern by study participants. If users feel physically unsecure, they will not use the system, nor are they likely to encourage family members (spouses, children, etc.) to use the system. There are several things the city could consider to improve user security. These include: installing pedestrian-level lighting, educating users on personal safety through a community program, having officers patrol areas where there are sidewalks and trails, and installing cameras in known problem locations or locations where getting patrols into the area is problematic (trails within park areas or areas separated from roadways).

**Wayfinding**

Development and implementation of a cohesive signage program is an important aspect of the pedestrian and bicycle plan. Wayfinding signage can be used both on road and on trail systems to help users navigate their way through an area. Because wayfinding is used to navigate and to provide information to system users it is important that the system that gets put into place is uniform and consistent. Signing and pavement marking must warranted by use and need. Multiple designs, oversigning and signs clashing with or too similar to regulatory signage can actually increase confusion, degrade the usefulness of signs, cause distractions and introduce conflicts between different mode users.

**Signage for Sidewalks**

Wayfinding is not recommended for the sidewalk system. The amount of signage provided by street labels at intersections provides pedestrians with information of their current location. Kiosks with maps and signs listing all potential destinations would add clutter and would likely add confusion for motorists, bicyclists and pedestrians. Additionally, providing such signage would be cost prohibitive. Instead, it is important to ensure that street signs are in place and are in good condition so that pedestrians can orient themselves.
Signage for Trails

Trails are different than sidewalks. Trails generally result in longer trips and include more of a mix of users. Trails are used for both recreational and commuting purposes and often times travel through parks, scenic areas and locations that are not easily locatable by street signage. Therefore, users of this system may need signage beyond what is provided for sidewalks. As noted earlier, signage for trails should be consistent and uniform – at the very minimum consistent throughout a single trail corridor, preferably throughout the community. The signage should also be used appropriately – that is – putting signs where it is useful, where it can provide guidance and where it does not create confusion for system users or users of other modes. To maintain consistency, the Minnesota Trail Planning, Design and Development Guidelines (MN DNR 2007) should be used as a guide for trail signage development. As explained in the guideline, trail signage generally falls into four categories:

- Regulatory, traffic control and warning signs. These signs should be in place to alert users to safety conditions, sharp curves, slopes or a change in condition that users should be aware of as they proceed down the trail.

- Trailhead and orientation signs. These signs should be used in locations where many of the trail users will be entering the system. Areas where there is parking, restrooms, etc. that users will start from. These signs provide an overall map and orient users where the trail starts and ends, what connections may be made off of or onto the trail, unique features, key destinations and identify where the user is currently located in relationship to the rest of the trail.

- Directional and route guide signs. These signs tell users where to go, how the trail continues and may indicate the next major destination or connection so that users know they are continuing in the correct direction.

- Trail identification and warning signs for motorists. These signs are for locations where there is the potential for conflicts between the modes. These should be used when trails cross roadways at-grade, especially in locations where there may be limited or no traffic control devices.

Incorporating these types of signage when trails are developed will enable all users of the system to safely navigate their way through the area.
Signage for On-Road Facilities

If the city decides to develop on-road facilities, signage for these facilities needs to be consistent with the Minnesota Manual of Uniform Traffic Control Devices (MMUTCD). Consistency with the MMUTCD and guidelines outlined in MnDOT’s Bikeway Facility Design Manual should provide motorists and bicyclists with the appropriate information to that they need to navigate facilities that are intended to serve multiple user groups.

In general, signage and/or striping for bikeways should only be provided under the following circumstances:

- Along routes that are part of the core bikeway system identified and supported by the community.
- The routes should be configured properly to safely accommodate bicyclists as proposed (do not sign and/or stripe for a bike lane unless it meets minimum design standards).

Priority Areas for Wayfinding

The previous sections suggest that wayfinding signage is most needed on trail systems where users may be travelling longer distances, may have numerous turns in direction or connections with other trail or on-road facilities or may be removed or separated from roadways or other locations that can provide users with a sense of place and/or direction. Trail users may also be less familiar with an area (due to the recreational component of most trails) than more advanced cyclists that use on-road facilities for commuting purposes and make the same trip on a regular basis. As such, additional direction through wayfinding signage is needed for users of the trail system.

The City of Brooklyn Center has been working with the Three Rivers Park District to provide wayfinding signage along the regional trails within the city to address user needs identified by both agencies and from feedback Three Rivers received from system users. Figure 17 shows the locations of existing signage along the trails. Locations for additional signage have also been suggested and are shown on Figure 17. In general, locations with trail connections, major intersections and trailheads are noted.

As more of the system gets developed, additional signage should also be considered as part of the planning and design processes. For example, as more of the trail near the Shingle Creek Crossing mall area is completed it would be important to consider the placement of an additional kiosk or wayfinding map on the southern portion of the site to complement the existing kiosk that is located on the northern portion of the site near the transit hub. There are likely different users of the system going to/through the northern and southern sections of this site.
Figure 17 - Wayfinding Signs

Legend

- Sidewalks
- Recommended Sidewalk
- Existing Trails
- Recommended Trails
- Existing Wayfinding Sign *
- Proposed Wayfinding Sign *

* The existing and proposed trails signs are separated into three categories: system sign (s), trail kiosk (k), and directional sign (d).

- Potential Grade-Separated Crossing
- Search Area for Potential Grade-Separated Crossing
- Parks
- Railroad Tracks
- City Boundary
CHAPTER 8: BEST PRACTICES

Just as there are best practices and design guidelines associated with developing roadway facilities, there are also best practices and design guidelines associated with developing pedestrian and bicycle facilities. This section of the report identifies best practices that should be considered as projects are developed. Some of the recommendations apply to the system as a whole, while others are targeted to a particular portion (e.g., sidewalk, trail, on-road facility) of the network. The best practices that are specific to particular portions of the network are not intended to be applied in every situation or that one recommendation is always better than another.

Considerations for All Facilities

There are some practices that should be considered regardless of the facility type that is being developed. These considerations include eliminating gaps, utilizing the Minnesota Manual on Uniform Traffic Control Devices (MMUTCD), conducting studies, wayfinding and lighting.

Eliminate Gaps

One of the most frustrating challenges for pedestrians and bicyclists is to reach a gap in the system and interrupt their trip, leave them in a location where they are unable to complete their journey without some challenges or require them to reroute significantly out of their way. Systems with a number of gaps in them will reduce the likelihood of users and will create frustration and safety concerns for those willing to use the system.

For pedestrians, if the gap is on a city street (local roadway) with low traffic volumes, lower speeds and with opportunities to use the roadway facility, the gap may be overcome by the user. However, on facilities with heavier traffic volumes (collector roadways and above) or higher speeds, a gap in the sidewalk or trail system can be a significant barrier because the user will not feel safe mixing with traffic and may not have anywhere else to go.

The City of Brooklyn Center should continue its practice of constructing sidewalks to eliminate gaps on collector roadways and above and as a part of its roadway reconstruction program. Between these two efforts, the sidewalk network will continue to grow and provide more connections to important destinations within the city. When reconstructing roadways, the Pedestrian and Bicycle Plan should be consulted to check for identified gaps in the trail and sidewalks network.

Additionally, the city should work with Hennepin County and MnDOT to encourage the completion or construction of pedestrian facilities in conjunction with county and state roadway reconstruction and transitway projects. Coordination with these agencies for sidewalk construction/reconstruction should also occur with regard to new development and redevelopment projects located along or near county and state roadway facilities.

The City of Brooklyn Center should continue its practice of identifying and addressing gaps in the trail network as part of its roadway reconstruction program and in its coordination with Hennepin County roadway maintenance and reconstruction projects. It should also continue to work with Three Rivers Park District in constructing gaps in the regional trail network. Efforts in past coordination have been successful – with significant portions of three regional trails being mostly complete and with recommendations for closing those gaps being made. When reconstructing city or county roadways, the Pedestrian and Bicycle Plan should be consulted to check for identified gaps in the trail network.
Finally, considerations for on-road bicycles facilities need to ensure that gaps are not created when making roadway improvements. Failure to have a complete connection with on-road facilities could create a safety problem. At this time it is recommended that additional studies be completed on the routes previously identified for potentially accommodating on-road facilities to determine the appropriate on-road improvement and logical termini.

**Consult MMUTCD**

All improvements related to signage, striping and traffic control devices should be reviewed against the current Minnesota Manual on Uniform Traffic Control Devices (MMUTCD). This manual provides the most up-to-date requirements and design practices. If additional information is needed, an additional resource is the federal Manual on Uniform Traffic Control Devices (MUTCD). However, the MMUTCD should be the guiding reference document for improvements.

**Conduct Studies**

The improvements identified in this section of the report are best practices. Not all practices should be used in all situations. Some situations favor one type of treatment over another given a set of circumstances. As such, treatments should be evaluated on a case-by-case basis and not just applied because a treatment has been identified as a best practice.

**Signage and Wayfinding Materials**

Signage can be helpful to direct pedestrians and cyclists towards popular destinations such as parks, community facilities, transit stations, malls/retail nodes, or other trail connections. Generally signage for wayfinding is used on regional trail facilities and on important city and county trail and/or sidewalk connections. Signage is generally not used on sidewalks within residential areas on roadways classified as local. Coordination with multiple agencies (Hennepin County, Three Rivers Park District, Metro Transit, etc.) may be needed for regional facilities and for connections to regional destinations.

**Standards and Guidelines for Signage and Wayfinding Materials**

- Signage should be consistent so as to be recognized by all users.
- Signage should not be placed in such a way as to distract cyclists focusing on their surroundings.
- Signage for trails or along roadways must be consistent with MMUTCD.
- Signage for hazards or advisory warnings must be consistent with the MMUTCD.
• Kiosks with maps or historic and/or cultural information can enhance user experience.

Other considerations that can assist pedestrians and bicyclists find their way for their trips:

• Ensure that trail and sidewalk maps are regularly updated and posted on the city’s website.

• Provide linkages to the county bicycle map located on Hennepin County’s website.

• Provide linkages to the Three Rivers Park District website.

• Consider providing a downloadable smart phone application with sidewalk and trail information.

• Consider map kiosk placement in community parks.

• Consider map kiosk placement as part of mall rebranding efforts.

• Work with Metro Transit to develop opportunities for signage at park and ride and transit facilities.

• Work with Hennepin County and Three Rivers Park District on signage opportunities.

Pedestrian-Level Lighting

Pedestrian-friendly environments encourage walking and bicycling. Pedestrian-level lighting, street furniture and landscaping all contribute to a pedestrian- and bicycle-friendly environment. While amenities such as lighting, street furniture and landscaping may add to project costs, their contribution to making the community friendlier to pedestrians and bicyclists should not be overlooked, especially in the case of lighting where it adds to a sense of security and safety.

The Hennepin County Pedestrian Plan recommends continuing its Roadway Enhancement Partnership Program (REPP). This program is used to enhance the roadside environment on county road corridors. Funding can be used to construct sidewalks, trails, pedestrian lighting, burying of utilities, transit shelters, benches, streetscaping and landscaping.

Coordination with the county or MnDOT should be considered as part of larger roadway construction projects or as part of
intersection or standalone projects on roadway facilities owned by the county or state.

Design Standards and Guidelines for Lighting:

- Lighting should be downward facing so that sidewalks, trails and roadways (if applicable) are lighted rather than lighting upwards which provides little benefit for users.
- Lighting can be used for safety as well as security reasons.
- Lighting can be staggered or aligned directly across from each other. Staggering can allow for fewer lights.
- More closely spaced lighting fixtures can create a stronger edge along a trail or sidewalk, reinforcing the use of these facilities.
- Bigger roadways (wider, more lanes) require different fixtures than narrow streets due to the arc of light.
- A photometric analysis should be used to determine the appropriate spacing of light fixtures (given their design/height) to ensure that light is provided where it is needed.

Pedestrian Facilities

The following are best practices for improving pedestrian sidewalk facilities:

**ADA Requirements**

The American with Disability Act has requirements for the slopes, size, crossing placement and other elements of pedestrian facilities. Any new construction and reconstruction of existing facilities should take these requirements into account to ensure that all potential users are able to enjoy the pedestrian network developed by the city.

**Sidewalks**

Sidewalks are the basis of the pedestrian network. As noted previously, gaps in the system should be eliminated where possible, but especially in areas where roadways are classified as collector facilities and above and where there are linkages to important community facilities such as schools, parks, etc.

Design Standards and Guidelines for Sidewalks:

- Minimum width is 5 feet; 6 feet preferred in residential areas.
- Minimum width in commercial areas should be wider – 6 to 8 feet to accommodate...
heavier use.

- Maximum cross slope should be 2 percent

**Curb Extensions**

Pedestrian bump-outs extend the sidewalk and shorten the distance of crossings. These decrease the amount of time needed to cross at intersections and can help to lower traffic speeds by narrowing the street. Pedestrian bump-outs can be most beneficial at existing intersections with wide crossings.

Installation of curb extensions is a proven safety strategy included in the Hennepin County Road Safety Plan. This plan identified corridors with a history of at least one severe pedestrian-vehicle crash between 2005 and 2009 and recommended constructing curb extensions where feasible. One of the roadways identified was Brooklyn Boulevard (CSAH 152).

Curb extensions can be done as standalone projects or as part of a roadway reconstruction project. Generally they are constructed on higher-volume roadways such as county and state facilities rather than local city streets. Coordination with the county or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects.

**Design Standards and Guidelines for Curb Extensions**

- Should not extend into traffic lanes or cut off bike lanes.
- Intended for streets with on-street parking or wide shoulders.
- Should be visible for oncoming traffic.

**Median Refuge Islands**

Median refuge islands provide cyclists and pedestrians a safe zone halfway through an intersection. By providing a safe midpoint while crossing a street, pedestrians and cyclists are only required to focus on one direction of oncoming traffic at a time. This is especially beneficial when crossing wide roads with high traffic volumes and high traffic speeds. Median refuge islands allow pedestrians (and cyclists) cyclists to take advantage of gaps in one direction of traffic which decreases the amount of time waiting to cross. Placing a median refuge island within a roadway can also have a calming effect on traffic.

Like curb extensions, refuge medians can be constructed as a standalone project or as part of a roadway reconstruction project. They are also
generally constructed on busier roadways owned by the state or the county. Coordination with the county or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects.

Design Standards and Guidelines for Median Refuge Islands

- Can be applied at signalized or unsignalized intersections.
- Minimum width is 6 feet, but 10 feet is desired to allow for cyclists with trailers.
- Medians should be raised at least 6 inches.
- Shape of the island should conform to the natural vehicle paths.
- Must be clearly visible for oncoming vehicles.
- Reflective markers around the median are recommended.
- Should only occupy the minimum area necessary while providing enough space to serve its purpose.

If median refuge islands are placed in locations where bicyclists can or will likely use them, then the city may wish to have a minimum width of 10 feet in order to accommodate bicyclists that have trailers or connect with a second bicycle.

**Marked Pedestrian Crosswalks**

This is a marked portion of the roadway indicating use for pedestrians to cross. Striping the roadway at the location of a crosswalk alerts drivers that this is a location where pedestrians may be present and have the right to enter the roadway. If feasible and practical, these locations should be at intersections, where drivers are more likely to be aware of the presence of activity. Mid-block crossings should be avoided if there is an intersection alternative that is close and likely to be used by pedestrians. If mid-block crossings are truly the appropriate location for a crossing, active notification should be considered as part of the design.

Design Standards and Guidelines for Crosswalks

- May be used at intersections or uncontrolled/mid-block locations.
- Marked crossings are especially beneficial for intersections with high levels of vehicle traffic and high speeds.
- Crosswalks at midblock locations may be accompanied by active warning systems (options discussed on the following pages) to increase awareness. This should be evaluated on a case-by-case basis.
• Should be at least 6 feet in width.
• Continental markings or zebra-style are recommended (perpendicular to crosswalk direction). Lines should be 12-24 inches wide and be spaced 12-24 inches apart.
• Marked crossings should extend the full width of the crossing.
• Appropriate signage warning drivers of crossings may be considered.
• Durable materials (rather than paint) should be used when feasible. The more durable materials can last several years versus the one to two years that may be obtained by paint.

Leading Pedestrian Interval

The leading pedestrian interval feature (LPI) activates the walk sign a few seconds prior to the vehicle light changing to green, giving the pedestrian a chance to get out into the intersection where they may be more visible to right-turning vehicles. Studies have found that the LPI method reduces conflicts for pedestrians. Hennepin County’s Road Safety Plan identified the deployment of advance walk/leading pedestrian intervals as a proven strategy for improving pedestrian safety as signalized intersections.

Coordination with Hennepin county or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects on county and state facilities.

Standards and Guidelines for LPI

• The FHWA recommends the LPI method be used where older pedestrians may frequently use an intersection.
• The leading pedestrian interval should be at least three seconds in duration.
• During the LPI, consideration should be given to prohibiting turns across the crosswalk.

Pedestrian Crosswalk Safety Systems

There are a few options for improving pedestrian safety at uncontrolled intersections. The following systems are pedestrian-activated (meaning a pedestrian has to physically engage the system in order for it to work).

• Standard beacons
• Perimeter mounted LED lights
• Rectangular rapid flashing beacon (RRFB)
Of the three alternatives, the use of RRFBs is generally preferred due to their effectiveness and the fact that they provide confirmation to pedestrians via a flashing light on their side of the system. This reassures the pedestrians that the system has been activated. RRFBs are discussed in more detail on the following page.

**Rectangular Rapid Flashing Beacon**

Rectangular Rapid Flashing Beacons (RRFBs) are a warning system used at crosswalks that flash a blinking light to oncoming motor vehicles to alert them of pedestrians or cyclists using the crosswalk. These types of systems are used at midblock and un-signalized intersections where warranted to notify drivers to yield to cyclists and pedestrians using the crosswalk. The system is typically activated by pedestrians and cyclists pushing a button but may also be designed to automatically detect users. By requiring pedestrians to activate the system or incorporating detection as part of the design, the system reduces the likelihood of drivers overlooking the beacon. If the beacon is always on – motorists have a tendency to begin to ignore it and not pay attention to see if there are any pedestrians or bicyclists present.

Although these systems are not currently in the MMUTCD, RRFBs have received interim approval from FHWA for the optional use as a warning beacon to supplement standard pedestrian crossings or school crossing signs at crosswalks across uncontrolled approaches in Minnesota. RRFBs have been identified as an effective measure in the Hennepin County Road Safety Plan due to their high compliance rates and overall costs.

Coordination with Hennepin county or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects on county and state facilities.

**Standards and Guidelines for RRFBs**

- RRFBs should be installed on the sides of roadways.
- Beacons should not be lit unless being used by pedestrians and cyclists to cross the intersection.
- RRFBs should not be used at signalized intersections or intersections with a yield or stop sign.

If RRFBs are used in locations where bicyclists can or will likely use them, then the city should consider placing them in locations where cyclists can activate them without having to dismount from their bicycle.

**High-Intensity Activated Crosswalk**

High-intensity activated crosswalk (HAWK) or hybrid beacons can be used when a street with lower traffic volumes intersects with a major street and a traffic signal is not desired. The
hybrid beacon helps pedestrians (and bicyclists) when crossing the major streets. Hybrid beacons consist of an overhead signal over the major street and have two horizontal red lights on top of one yellow light to alert drivers of people using the crosswalk. The HAWK or hybrid beacon is only lit when pedestrians (or bicyclists) activate the system. This reduces the likelihood of drivers overlooking the signal. Drivers tend to ignore traditional pedestrian signals because they are always on and are usually green for the motorists. HAWK signals have been identified as an effective measure in the Hennepin County Road Safety Plan due to their high compliance rates and overall costs.

Coordination with Hennepin county or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects on county and state facilities.

Standards and Guidelines for HAWKs

- Typically used when a major street intersects a minor road with low traffic volumes and does not warrant a traffic signal.
- The MMUTCD permits the use of hybrid beacons depending on vehicle speed, traffic volume, intersection length, and pedestrian volume.
- The MMUTCD provides standards for hybrid beacons including location and height, as well as length of signal phases.
- Sight obstructions such as on-street parking should not be permitted within 100 feet in front of a hybrid beacon or 20 feet beyond the marked crossing.
- The signal should not be lit unless being used by pedestrians to cross the intersection.
- Installation of a HAWK system should be based on meeting one of the signal warrants of Chapter 4C of the MMUTCD and justification through an engineering study. The engineering study should consider major-street volumes, speeds, widths and gaps in conjunction with pedestrian volumes, walking speeds and delay if no warrants are met. Systems should be installed based upon the provisions of Chapters 4D and 4E.

LED Signage and In-Roadway Warning Systems

Flashing LED stop signs or in-pavement LED markers can be an effective means of alerting vehicles that a pedestrian is using the crosswalk. Systems may use sensors or be activated by the user pushing a button to activate the flashing of the lights. Utilizing LEDs can be an effective way to catch a driver’s attention and can be used to provide advance notice of a crossing ahead. They are also beneficial when visibility conditions are poor (e.g., nighttime, poor weather). Flashing in-roadway lights are currently limited to marked uncontrolled crosswalks.

Coordination with Hennepin county or MnDOT should be considered as part of larger roadway construction projects or as part of intersection or standalone projects on county and state facilities.

Standards and Guidelines for LED Signage and In-Roadway Systems

- The MMUTCD regulates design, color, spacing and usage of light sources used for traffic crossings.
• Flashing in-roadway lights are currently limited to marked uncontrolled crosswalks.

Countdown Pedestrian Signals

Countdown timers at signalized intersections display the amount of time pedestrians have available to cross a roadway before the traffic signal changes. The countdown timers and audible/vibrotactile indicators allows users to use their judgment as to whether or not they can safely cross the intersection in the time available. Without timers and/or audible/vibrotactile indicators, pedestrians may enter the intersection believing they have enough time to cross only to have the signal change before reaching the other side. This is especially helpful for wider crossings and benefits those who need more time to cross intersections. Although countdown timers have been shown to increase the number of pedestrians entering the crosswalk after the flashing orange hand starts, they reduce the percentage of pedestrians that do not complete crossing the intersection in time. This is likely due to people speeding up their walk as the timer approaches zero.

Countdown timers were included as a proven safety strategy in the Hennepin County Road Safety Plan. The county is currently installing countdown timers as part of a signal retrofit program. This program should be continued and countdown timers should be installed at any remaining signals operated by the county.

Standards and Guidelines for Countdown Signals

• The MMUTCD requires that any new signal must include a countdown timer unless the pedestrian change interval is seven seconds or less.
• Timers must finish their countdown prior to the onset of the signal changing to yellow.
• Recommended for longer crossings.
• Timers should be designed in accordance with the MMUTCD which regulates size, color, and location of countdown numerals.
• Considerations should be made with all new traffic signals and/or reconstructed traffic signals pertaining to accommodations for the deaf and visually impaired by providing both audible and vibrotactile walk indications.

Multi-Use Facilities

Multi-use trails are popular with recreational bicyclists and pedestrians alike. Bicyclists that are focused on purely commuting/transportation purposes are not as likely to use these facilities because they have a mix of users and those users can block their way through the corridor. Additionally, the more advanced cyclists do not like interruptions (driveways and other interruptions) that require them to slow or stop as compared to on-road facilities. Multi-use facilities generally link to major
community destinations such as parks, schools, community centers and popular retail/commercial destinations. The following describe best practices for multiuse facilities:

**Consult MnDOT’s Bikeway Facility Design Manual**

MnDOT has put together a manual targeted to designing bicycle facilities. The manual provides recommendations and guidelines to improve safety and to provide a consistent facility for users throughout the state. When designing trails and on-road facilities, this manual should be consulted.

**ADA Requirements**

The American with Disability Act has requirements for the slopes, size, crossing placement and other elements of pedestrian facilities. As time has passed, many agencies have been incorporating some of the ADA requirements into their recreational trail facilities. Although not required at this time, ADA design standards are an option the city can consider as part of its trail design.

**Off-Road Trails**

The existing network of off-road trails in the City of Brooklyn Center provides a safe way for pedestrians and cyclists to get around the community. Off-road trails can be a much more comfortable option than an on-street bike lane for less experienced cyclists because they are separated from motorized vehicles. Multi-use trails provide a great opportunity for children and less experienced cyclists to use non-motorized transportation and feel safe. In many cases, off-road trails are used by multiple types of users such as cyclists, joggers, people on rollerblades, and people walking their dog. This variety can present some safety conflicts and should be anticipated by users. Providing adequate signage can be one way of alerting users of potential conflicts.

Hennepin County’s Pedestrian Plan highlights the need to continue to coordinate with cities regarding the construction of multiuse trails along county roadways. The city and the county have successfully worked together in the past to identify off-road trail facilities along Brooklyn Boulevard (County Highway 152). As the roadway gets reconstructed, the proposed improvements will be implemented.

Hennepin County is in the process of updating its Bicycle Plan and they will be seeking input from Three Rivers Park District and the communities within Hennepin County to identify typical design sections and other design elements. The City of Brooklyn Center should participate in this study and provide input on design and locational elements. This process also provides an opportunity for the three agencies (city, county and Three Rivers) to identify minimum trail standards and widths that could be constructed by any of the agencies so that additional partnering opportunities in the future could occur. In the interim, the following standards and guidelines are recommended.

**Standards and Guidelines for Off-Road Trails**
• For two-way trails, the minimum width is 10 feet. For trails that experience significant use, 12-14 feet is encouraged.

• Center lines should be provided for heavily used trails.

• Cautionary signage should be utilized as necessary.

• Intersection crossings should be at flat grades.

• Off-road paths should not cross roadways in areas where the roadway is not straight.

• Trails should be maintained in good condition to avoid potential safety hazards.

• If a route experiences significant traffic from a variety of users (cyclists, pedestrians, people on rollerblades, etc.) separate trail facilities should be considered. A 2 foot graded shoulder should be provided on each side of the path in case cyclists drift off the path or need to avoid hazards.

• Any signage, poles, trees or other obstructions should be at least 3 feet from the edge of the path. However, signage for cyclists should not be farther than 6 feet from the edge of the path.

• Pedestrian-scale lighting should be considered for user safety and security

• For routes that receive significant use, separate trails for different users may be necessary. When separate paths are provided, proper signage should indicate which paths are to be used by pedestrians and which should be used by cyclists. Using different paving materials or providing a median between the separate facilities can further reinforce designation for different users.

• Separated facilities for cyclists and pedestrians should be considered when peak hour bicycle traffic volumes exceed 100 users per hour or where combined pedestrian and cycle user volume is greater than 2,000 individuals per day.

Bicycle Facilities

In some instances, it may be advantageous to provide exclusive facilities for bicyclists. (In general, most city and regional trails are designed to accommodate both the bicyclist and the pedestrian. These trails are discussed in the Multi-Use Facilities section). The more expert bicyclists generally prefer to have on-road facilities. The expert cyclists are comfortable riding with passenger cars, busses and larger trucks. They primarily use the larger roadways which are more likely to provide bicycle facilities such as shoulders, bicycle lanes, etc. Having a system in place for these users is not necessarily the focus of this plan – however, their needs and desires should be considered and evaluated as county and state facilities are updated.

Before a decision is made for the use of on-road facilities, traffic volumes, speeds, right of way availability and connectivity to other bicycle facilities (on- or off-road) should be considered. If on-road facilities are considered for use, the following should be evaluated as part of the process in selecting the preferred method of delivering the facility:
Consult MnDOT’s Bikeway Facility Design Manual

MnDOT has put together a manual targeted to designing bicycle facilities. The manual provides recommendations and guidelines to improve safety and to provide a consistent facility for users throughout the state. When designing trails and on-road facilities, this manual should be consulted.

Traditional Bike Lanes

On-road bike lanes provide designated space exclusively for cyclists and are distinctly separate from motorized vehicle lanes. On-road bike lanes go in one direction, consistent with vehicle traffic and are striped and clearly visible for drivers. Striped bicycle lanes have been shown to have a channeling effect for both drivers and cyclists, and makes cyclists feel more confident that drivers will not drift into their path of travel.

Standards and Guidelines for Bike Lanes

- Lanes should be of a consistent width.
- Bicycle lanes should be 5-6 feet. Bike lanes wider than 6 feet may be misinterpreted as travel lanes or right turn lanes for vehicles.
- Bike lanes with a width of 4 feet may be appropriate on some roads with low traffic levels and low speeds.
- If adjacent to on-street parking, bike lanes should be setback slightly to provide room for vehicles to open their doors.
- On-road bike lanes may be considered on roads that cyclists are most likely to use, such as those that provide the most direct route and connect to popular destinations. Generally, residential roadways have lower traffic volumes and speeds and do not require separate bicycle facilities.

Buffered Bike Lanes

Numerous techniques exist to shield and separate bike lanes from vehicle traffic which adds actual and perceived safety. This added security helps attract new riders that may not otherwise feel comfortable riding adjacent to traffic. Buffered bike lanes include a painted buffer between the bike lane and travel lanes (minimum of two feet). Buffered bike lanes require additional right of way as compared to traditional bike lanes.

Standards and Guidelines for Buffered Bike Lanes

- The buffer should be a minimum of 2 feet, with a 5-foot (preferably 6-foot) bike lane.
- Larger buffers are recommended on roads with higher vehicle speeds and heavier traffic volumes.
Protected Bike Lanes/Cycle Tracks

Cycle tracks provide a middle ground between buffered bike lanes and off-road trails as they are considered on-street facilities, but are separated from traffic, parking and the sidewalk. Cycle tracks may be separated by a raised median, bollards, curb or other physical barriers. They offer a path exclusively for cyclists which is usually colored and marked as such. The separation from traffic makes them more appealing to less experienced riders due to the increased perception of safety.

Standards and Guidelines for Cycle Tracks

- Cycle tracks may be most appropriate along roads with high speeds and high traffic volumes but with fewer intersections.
- Cycle tracks should be wide enough to allow cyclists to pass one another (usually 6.5 or 7 feet).
- On street parking should be between the cycle tracks and vehicle traffic.
- May be one-way or two-way. Two-way traffic requires additional width if passing space is to be provided.
- Requires a significant amount of right of way.
- Barriers should not limit drivers’ visibility of bicyclists.

Pavement Treatment – All On-Road Facilities

To make on-road bicycle facilities more visible to both cyclists and to motorized vehicles, consideration could be given to coloring the bicycle pavement. Federal rules permit colored pavement on marked bicycle lanes and through intersections.

Intersection Treatment – Through Bike Lane and Right-Turn Lane (vehicle)

Striping a combination of an advisory bike through lane within a right-turn lane is used to allow vehicles making right turns at upcoming intersections the opportunity to cross over the bike lane into the right-turn lane. This allows cyclists going through an intersection to better position themselves and avoid conflicts with right-turning vehicles. At an intersection, cyclists remain in the bike lane, which is to the left of a right turn lane. It provides a specific location for motorists to safely cross over a bike lane and transition into a right-turn lane. Motorists should always yield to cyclists when crossing a bike lane.

Standards and Guidelines for Through/Right-Turn Lanes

- Applicable to intersections with right turn lanes.
• A dotted line is used to indicate the merging area, which must begin at least 50 feet from the intersection. Beginning the dotted section up to 100 feet before the intersection is recommended on high-speed roadways.

• Dotted lines to indicate the merge area should be at least 2 feet long and 6 inches wide.

• Through bike lanes should not be used at intersections with double right turn lanes.

**Intersection Treatment – Bike Boxes**

Bike boxes are a safety feature being installed at intersections that help make cyclists more visible to vehicles stopped at an intersection. Bike boxes are green boxes painted at an intersection that force drivers to stop short of the crosswalk, giving space for cyclists to position themselves ahead of vehicles. Bike boxes are especially helpful at reducing crashes where drivers are making right turns and cyclists are going straight. By grouping cyclists together at the front of an intersection, they tend to move through the intersection more quickly than if they went through one by one. Because cyclists are positioned ahead of vehicles, they also avoid breathing in vehicle fumes while waiting for the signal change.

**Standards and Guidelines for Bike Boxes**

• Intended for use at signalized intersections with high left- and right-turn crash rates.

• Most applicable on roads with high volumes of cyclists.

• Boxes should be 10-16 feet deep.

• Prohibits vehicles from making a right-turn on a red.

**Intersection Treatment – Forward Stop Bar**

A forward stop bar is a stop bar just for bicyclists in the bicycle lane. It is located closer to the intersection (and often in front of a marked crosswalk) than the stop bar for motorized traffic. By providing a space separate and ahead of motorists, bicyclists are afforded better visibility of cross traffic and traffic can better see cyclists. It also provides cyclists with a few extra feet head start over motorized traffic when the traffic signal turns green. This can be used in place of bike boxes – however, it has less capacity than a bike box.

**Standards and Guidelines for Forward Stop Bar**

• Intended for use at signalized intersections with high left- and right-turn crash rates.

• Most applicable on roads with lower volumes of cyclists than those selected for bike boxes.

• Should be a minimum of 10 feet deep.
Intersection Treatment – Intersection Crossing Markings

By marking the presence of a bike lane through an intersection, it keeps cyclists in a distinct path and is a visual queue to drivers to be alert of potential cyclists. A marked bike lane through an intersection indicates that cyclists going through an intersection have priority over turning vehicles. It should also increase predictability for drivers for where cyclists will be.

Standards and Guidelines for Intersection Crossings Markings

- Applicable for most signalized intersections where a bike lane exists.
- Most beneficial at complex intersections where paths for cyclists are not well defined.
- Markings should remain consistent among all intersections.
- A dotted line is typically used to mark a bike lane through an intersection and should be at least 6 inches in width.

Intersection Treatment – Median Refuge Islands

See Pedestrian Facilities section for specific details.

Intersection Treatment – Bicycle Signals

Signals specific to cyclists can increase safety by reducing times where conflicting movements may be present between cyclists and motorists. Signals can also be used to give priority to cyclists. For example, a bicycle signal may turn green before a traffic signal to allow cyclists to go through an intersection before permitting right or left turning vehicles. Bicycle signals are used most frequently in conjunction with cycle tracks or at complex intersections involving multi-use trails.

Standards and Guidelines for Bicycle Signals

- The clearance interval should be sufficiently long to allow cyclists to complete their movement before conflicting movements are permitted by vehicles.
- Signal heads should be located so as to be visible by all approaching cyclists.
- Include bike signal detection systems such as marked loop detectors, video detection, or push button detections. If using a push button system, ensure that it is placed easily for cyclists to engage from their bicycles.
- Restrictions on certain vehicle movements may also be necessary, such as a red right turn arrow while cyclists move straight through the intersection.
- A “Bicycle Signal” sign below the signal head is recommended to improve understanding.
- Should only be considered in areas with heavy bicycle traffic.
CHAPTER 9: IMPLEMENTATION

The recommended system and supporting policies, activities and practices identified to increase walking and bicycling within Brooklyn Center will take time to implement. Not all of the recommended changes/improvements will be able to be implemented in the near term. Some of the recommendations could take years before fully implemented. However, it is important that the plan and its associated recommendations remain in-place so that the city and its partners are prepared to: take advantage of opportunities as they arise, systematically implement recommendations through applying for grants and incorporating programs and projects into department budgets, and to monitor progress in achieving this plan’s objectives and goals.

Opportunities

As staff, other agencies and residents become aware of the Brooklyn Center Pedestrian and Bicycle Plan, new opportunities for implementation of the recommendations outlined in Chapter 6 may become available. The synergy that can be generated through regular dialogue, joint programming and working together on studies can expose agencies to additional funding sources, new partners and energized volunteers.

Opportunities the city could consider pursuing in the short- to mid-term include:

1. **Adopting the Brooklyn Center Pedestrian and Bicycle Plan.** Adopting the plan will ensure that the system and recommendations identified will be considered for implementation as funding becomes available and opportunities arise.

2. **Incorporate Study, Construction and Maintenance Activities in the Budget.** As new budget cycles emerge, include programming specific to sidewalk/trail studies, construction and maintenance. Consider programming a study a year to address system gap and crossing issues identified as part of the plan.

3. **Coordinate Internally with Other Departments.** Support from other departments will be needed in order to implement the recommendations identified as part of this plan. Specifically, efforts with the planning and the police department will be needed to address zoning issues, safety, education, and outreach efforts. Working together internally to develop and send a consistent message to the public will be important. Internal coordination also allows an opportunity for department resources to be pooled to deliver needed services.

4. **Continue to Review the System.** The city annually reviews a quarter of its sidewalk and trail systems. Staff should continue these practices to ensure that the system is safe and in usable condition. To enhance existing efforts, a link could be put on the city’s website for residents to report problems on the network.

5. **Continue to Include Sidewalk Construction as Part of Street Reconstruction Projects.** The city already incorporates sidewalk construction as part of its street reconstruction projects. This practice should continue as additional roadways are reconstructed in the future. Additional emphasis on sidewalk construction, the health benefits of walking, city maintenance procedures and the overall sidewalk network may be incorporated into presentations/information provided to residents when it comes time for them to decide on whether or not they want to include sidewalks as part of the project.
6. Update Zoning Codes/Ordinances. Review existing zoning codes and ordinances with regard to sidewalk and trail construction, as well as support facilities (bicycle parking, etc.). Consideration for trail and sidewalk facilities should be made for redevelopment and expansion projects so that identified gaps can be addressed as part of construction.

7. Provide Maps of the Existing Sidewalk and Trail Networks. Post a map with existing trails and sidewalks on the city’s website. The map should also include the schools, parks and other major destinations. Printed copies of the map could be made available at city hall, the library and the community center. Consider developing an application for smart phones that has the system available.

8. Annually Identify Grants for Potential Projects. The section below identifies a number of funding sources for sidewalk and bicycle construction. The city should annually review grant opportunities against system gaps and/or intersection crossing locations to pursue grants that are a best fit with system needs.

9. Work with Hennepin County on its Bicycle Plan Update. Hennepin County is in the process of updating its Bicycle Plan. This is an opportunity to work with the county and Three Rivers Park District in establishing standards for trail design and support facilities (signage, bicycle parking, etc.).

10. Set up Annual Meetings with Partnering Agencies. Meet annually with Hennepin County, Three Rivers Park District, Metro Transit, MnDOT and other organizations (as appropriate) to discuss sidewalk and trail concerns and opportunities. Topics for discussion could include:

   - System needs
   - Upcoming projects (could be roadway, intersection, route changes, etc. that impact sidewalks and trails and/or provide opportunities to address identified issues)
   - Best practices
   - Funding opportunities
   - Education and outreach activities
   - Study opportunities
Funding Sources

Local funding resources can be supplemented by funding from regional, state and federal grants. While the grant programs and opportunities may change over time, consideration should be given to apply to programs that will enable the city to eliminate gaps and crossing challenges. Potential grants to consider include:

**Hennepin County Sidewalk Participation Program**

This funding can be used to construct sidewalks and crossing improvements such as curb extensions, refuge medians, countdown timers and durable crosswalk markings. Hennepin County will participate at a rate of 25 percent up to a maximum of $50,000.

**Hennepin County Roadside Enhancement Partnership Program**

The purpose of this funding is to enhance the roadside environment on county road corridors in communities located within the 1999 Metropolitan Urban Services Area (MUSA). Funding can be used for: sidewalks; trails; undergrounding utilities; installing lighting, transit shelters, benches, streetscape materials, landscaping and vertical elements (bollards/banner poles).

Hennepin County will participate anywhere from 25 to 50 percent depending upon the element. This funding is generally used in conjunction with highway reconstruction, but has been available outside of major projects in the past.

**Hennepin County Bikeway Development Participation**

The purpose of this program is to assist in the development and implementation of effective bikeway projects. The primary goal is to support and enhance the Hennepin County bikeway network. Projects must be adjacent to a Hennepin County road and must be a designated route on the most current Hennepin County Bicycle transportation System Plan map or Bicycle Gap Study map.

Eligible projects include: construction of trails, bike lanes, shoulder widening, bridges, tunnels, etc. Projects are prioritized based on their potential to reduce crashes, project readiness, cost effectiveness, transportation purpose and connections to bicycle trip generators.

Additionally, the county will also contribute to feasibility studies to refine the scope of a project and determine the readiness of the project for future funding. Feasibility studies should result in locations ready for design and/or constructions. If successful, projects can apply for infrastructure grants in the future.

Hennepin County will participate at a rate up to 50 percent to a maximum of $100,000 for infrastructure projects and a maximum of $20,000 for a feasibility study.
**Hennepin County Bike Program Discretionary (Gap Program)**

The purpose of this program is to assist in developing and implementing projects that eliminate gaps in the Hennepin County bikeway system. To be eligible, the project must be a designated gap on the most current Hennepin County Bicycle Gap map.

Eligible projects include: construction of trails, bike lanes, shoulder widening, bridges, tunnels, etc. Project design and plan preparation are eligible expenses. Projects are prioritized based on their potential to reduce crashes, project readiness, cost effectiveness, transportation purpose and connections to bicycle trip generators.

Hennepin County will participate at a rate up to 50 percent to a maximum of $100,000 for any project. If outside funding is involved, county participation is limited to 50 percent of the local match up to a maximum of $100,000.

**Transportation Alternatives Program**

The 2012 federal surface transportation bill, Moving Ahead for Progress in the 21st Century (MAP-21) made provisions for alternative transportation programs, replacing the former Transportation Enhancements programs that existed previously. While the details for MAP-21 programs have not yet been determined, there will likely be funding for trail projects included in the Metropolitan Council’s regional solicitation program (competitive program that distributes federal transportation dollars). The city should review the new program guidelines when they become available.

It should also be noted that the Safe Routes to School program has been incorporated into the Transportation Alternatives Program. Presently MnDOT and the Metropolitan Council are working together to determine if/how Safe Routes will be integrated into the regional solicitation. The program may be separated from the rest of the regional solicitation activities.

**Surface Transportation Program (administered by Met Council)**

MAP-21 will continue to support the surface transportation program, although it will be at lower funding levels than in the past. This program is primarily used for roadway reconstruction, but does allow for construction of trails and sidewalks as part of a larger overall project. The program also supports the construction of independent bikeways (generally used for commuting purposes rather than recreational purposes). Brooklyn Boulevard would be a potential candidate for funding from this program. The grant would allow the vehicular and pedestrian and bicycle improvements identified in the Brooklyn Boulevard study to be implemented.
**Highway Safety Improvement Program**

The Highway Safety Improvement Program provides funding to smaller projects that address a targeted safety issue. The funding is administered by MnDOT. Depending upon the year, the program can be used to address safety problems in a proactive or reactive manner. Reactive projects generally include improvements at intersections, especially signalized intersections. Proactive improvements can include countdown timers, median construction, signing and striping, sidewalks, and other smaller-scale improvements designed to improve safety.

Funding can support 90 percent of project costs.

**Minnesota DNR Local Trail Connections Program**

This program is used to promote relatively short trail connections between residential areas and desirable locations. Up to 75 percent of the total eligible costs up to a maximum of $150,000 are provided by grant.

**Minnesota DNR Federal Recreational Trail Program**

The DNR Federal Recreational Trail Program provides up to $150,000 for trail projects (maximum of 75 percent cost participation). Funding categories are prioritized annually prior to the solicitation process.

**Statewide Health Improvement Program**

The Statewide Health Improvement Program (SHIP) is part of the Minnesota Department of Health initiatives to improve the overall health of Minnesotans and to decrease obesity rates. Funding for this program has recently been renewed. However, funding goes through community health boards, so the city will need to partner in order to be eligible for funding. Funding can be used for education, encouragement and enforcement strategies.

**Livable Communities Demonstration Account**

The Livable Communities Demonstration Account funds innovative development/redevelopment projects that efficiently link housing, jobs, services and transit in an effort to create inspiring and lasting communities. Grants are available to fund basic public infrastructure and site assembly. Projects can vary significantly from one community to the next, but they all provide linkages between multiple uses. Infrastructure, such as sidewalks, trails, benches, bicycle racks, etc. could be incorporated and paid for as part of this grant. However, the projects are generally large-scale in effort and are focused on redevelopment efforts.
Brooklyn Center has identified areas where redevelopment is occurring. There may be opportunities to work with developers and the Metropolitan Council to explore options for using funding from this program to support overall redevelopment as well as pedestrian and bicyclist infrastructure.

**Ongoing Monitoring**

To ensure that the system is being used and that overall levels of walking and bicycling have increased, it will be important to have ongoing monitoring and tracking of the network. Below is a list of potential performance measures and tracking techniques that could be used.

1. **Number of Trail Users.** While it is not practical to go out and count the number of people using any one sidewalk or trail on a particular day for the entire network, it is important to have an understanding if the systems are being used. To be most effective, it is recommended that the city partner with Hennepin County and Three Rivers Park District in obtaining information related to pedestrian and bicycle counts on regional trails and county facilities. Additionally, the city could solicit volunteers or hire interns to complete counts on city-owned facilities every few years. Supporting information could also come from Safe Routes to School activities and surveys.

2. **Miles of Trail Constructed/Reconstructed.** The city can track the length of trails (city and regional) constructed on an annual basis. Numbers could be reported every three to five years to show progress.

3. **Number of Gaps Addressed.** Public works/engineering can track the number of gaps identified in the system map that have been addressed. Numbers could be reported every three to five years. This tracking can be used to help the city council understand where targeted dollars for construction activities have been applied.

4. **Number of Crossings Addressed.** Public works/engineering can track the number of intersection and/or mid-block crossings that have been improved. Numbers could be reported every three to five years.

5. **Number of Snow Events.** Public works can track the number of snow events that have required city crews to clear snow from sidewalks. Tracking the number of events enables residents and council members to understand the level of effort required to keep sidewalks passable/usable and the importance of this service.

6. **Number of Sidewalk/Trail Segments Fixed.** The city regularly maintains its system. It should note the length or segments of sidewalk and trail that are repaired annually. If the city decides to include an opportunity for residents to report problems with trails or sidewalks on its website or through telephone calls, the number of requests responded to and/or addressed could also be tracked.

7. **Incorporate Applicable Reporting from Hennepin County Pedestrian Plan.** The Hennepin County Pedestrian Plan has identified a number of county-wide performance measures related to health that could be included in reporting by the city. While not specific to Brooklyn Center, it gives an overall indication of resident health that is easier to track.
8. Incorporate Applicable Reporting from Hennepin County Bicycle Plan. The Hennepin County Bicycle Plan (to be updated in 2014) will include performance measures. There may be opportunities for the city to include these measures as part of their reporting.

9. Grants. The city should track and monitor the grants that it applies for and its success rate. This may help to focus efforts on which grants to apply for depending upon project type.
APPENDICES:

Appendix A – Crossings at Shingle Creek Summary
Appendix B – Surveys
Appendix C – Survey Summary
Appendix D – Press Releases
The current study explores strategies to improve a targeted area of Shingle Creek, optimizing potential for private investment, enhancing surrounding property values, and reclaiming the natural corridor of the creek as an amenity.

Hennepin County, in partnership with numerous communities, developed an interdisciplinary initiative to explore ways to improve the county’s water-based corridors, like Shingle Creek. Through their commitment to improving water quality and biodiversity in streams, the County benefits in multiple ways: a clean stream becomes an amenity, and this amenity attracts and becomes an integral feature of development. Together, they build stronger and more stable communities in the County.

The cities of Brooklyn Park and Brooklyn Center have successfully completed recent projects that feature Shingle Creek and provide context for this study. Brooklyn Park developed a master plan in 2000 for the Village Creek area, which lies immediately upstream of the current study area. The build-out of that plan is underway and is a testament to the potential of Shingle Creek as a community amenity and focus for private investment. Brooklyn Center partnered with Hennepin County to develop the Daylighting Shingle Framework Plan in 2008. This study focused on strategies for daylighting and implementing environmental enhancements to a segment of Shingle Creek within the City of Brooklyn Center. The Brooklyn Center City Council unanimously approved the Framework Plan as a development guide and planning tool for redevelopment.

In 2007, Brooklyn Park and the Brooklyn Park Economic Development Authority (EDA) purchased the Huntington Pointe site adjacent to Shingle Creek at Regent Avenue for redevelopment and undertook a community-based visioning process to establish guidelines for redevelopment, reflecting their values as a community, priorities for new land uses, and the relationship between land use and open space.

PURPOSE OF THIS STUDY
Specifically, the purpose of this study is to explore alternatives for creek restoration in relationship to various development options, with an emphasis on the following outcomes:

- Create a more public creek including trails and amenities
- Connect potential trails with the network of existing trails
- Improve wildlife habitat and biodiversity
- Improve water quality
- Optimize redevelopment potential
STUDY + FOCUS AREAS

The study area is organized into four Focus Area components:

1. Regent Redevelopment Segment - The site of the 12-acre former Huntington Pointe housing development, this segment of Shingle Creek was enhanced when Village Creek was developed immediately upstream and is very similar in character to that area. The trail from upstream currently ends at 73rd Avenue.

2. Regent Avenue/Brooklyn Boulevard Segment - Extending from Regent Avenue to the point where Shingle Creek and Brooklyn Boulevard converge, this segment is primarily auto dealerships east of the creek and housing to the west.

3. The Crossing - The point where Shingle Creek and the natural corridor along the creek intersect Brooklyn Boulevard.

4. Park Center Segment - Adjacent to the high school property, this segment has the unique potential of offering access for educational purposes as well as providing trail access to parks and neighborhoods in both directions.

CONCLUSIONS AND RECOMMENDATIONS

Shingle Creek has the potential to again be beautiful and functional, through simple design interventions that begin to return it to a more natural condition. A revitalized stream will improve the attractiveness of parcels of land that adjoin it or are nearby, thus "setting the table" for reinvestment with an eye toward creating a more complete community.

To achieve the goals of this study, which evolved with input from the community, staff from Brooklyn Center, Brooklyn Park and Hennepin County, will require collaboration between the public and private sectors and leadership at all levels. This study recommends that future public and private action and investments focus on achieving the following ten priorities:

1. Preserve Shingle Creek in its current channel to optimize the re-development potential of adjacent undeveloped or underdeveloped properties.
2. Link Brooklyn Boulevard to Shingle Creek with a linear green space at the Regent Redevelopment Site, terminating in a special feature along the creek shoreline. Other similar green connections should be explored in the future.
3. Introduce water and/or the potential for greater infiltration into redevelopment sites to improve water quality in the stream.
4. Introduce a variety of in-stream improvements to improve both water quality and biodiversity.
5. Develop a trail system that links Village Creek with Noble Avenue following the creek alignment. In the near term, use an at-grade crossing of Brooklyn Boulevard at Regent Avenue. In the long term, construct pedestrian/bicycle overpass where Shingle Creek passes beneath Brooklyn Boulevard.
6. Open views to the creek from Brooklyn Boulevard with extensive clearing of understory vegetation.
7. Extend streetscaping on Brooklyn Boulevard from Noble Avenue on the south to Regent Avenue on the north to accentuate the point where Shingle Creek passes beneath Brooklyn Boulevard and to create a "greener" street.
8. Introduce an internal public road into the Regent Redevelopment Site (paralleling Brooklyn Boulevard) to subdivide the site into smaller parcels, optimizing flexibility for new development.
9. Create a smooth transition from the more manicured character of Shingle Creek at Village Creek to a mix of more natural and limited manicured landscape downstream to Brooklyn Boulevard.
10. Take advantage of the educational opportunities of the creek at Park Center High School, allowing direct access to the water for conducting science experiments, etc.

THE PREFERRED SCENARIO

The Preferred Scenario envisions Shingle Creek as a healthier stream and an important community amenity, with improved water quality and increased biodiversity. This will be achieved by implementing the ten priorities listed previously. More specifically, the Preferred Scenario envisions the following enhancements to each segment.

REGENT REDEVELOPMENT SEGMENT

At the Regent Redevelopment site, Brooklyn Park has already enhanced Shingle Creek by cleaning out debris, introducing aeration techniques, visually opening the creek to the public and constructing a trail alongside its banks. Stream improvements were contained within the existing channel, maximizing the land area available for private investment.

In the Preferred Scenario, the Regent Redevelopment site shows subdivision by a green visual and pedestrian connection from Brooklyn Boulevard to the creek and a new road (extending Village Creek Parkway) will be located approximately halfway between the creek and Brooklyn Boulevard. This creates four discrete parcels of land that can be developed incrementally. The road can extend alongside the creek past the current car dealership sites should future development benefit from it.

REGENT AVENUE/BROOKLYN BOULEVARD SEGMENT

In this segment, the creek will transition to a more natural character, with large pockets of naturalized landscape interspersed with openings to provide visual and physical access. Screening for housing on the west side of the creek will remain. In-stream improvements will include removal of debris, stabilizing the stream banks and introducing strategies to improve water quality and biodiversity.

THE CROSSING AND PARK CENTER SEGMENTS

At Brooklyn Boulevard, vegetation will be cleared and the stream will be easily seen from cars, bicycles and pedestrians crossing over. Brooklyn Boulevard itself will become a much greener street with landscaping and tree planting extending in both directions. Finally, as the stream passes by Park Center High School, it will again be opened to the school site to allow students to study it and learn about stream ecology.
Survey Questions

We want to make Brooklyn Center a fun place to live, work and play and one way to do that is to make the city a great place for walking and biking! This survey is part of a project to develop a Pedestrian and Bicycle Plan for the City of Brooklyn Center to help the city become a more bike-friendly and walkable community.

By responding to the following questions, you will help us understand your ideas and concerns about walking and bicycling in Brooklyn Center. Your responses will be kept confidential.

Thank you for participating!

General Activity

1. What do you like to do most to be active? Please list your top three choices.
   1. ______________________________________________________________________________________
   2. ______________________________________________________________________________________
   3. ______________________________________________________________________________________

Walking in Brooklyn Center

2. During the summer months, how often do you walk in or around Brooklyn Center?
   - Never
   - Less than 1 time a week
   - 1 to 2 times a week
   - More than 2 times a week, but not every day
   - Every day

3. I mainly walk to (check one):
   - Have fun
   - Exercise
   - Go places instead of driving a car
   - Get to work
   - Other [open ended]
   - I don’t walk.

4. What places do you walk to in or around Brooklyn Center? Please list up to your top 3 places.
   1. ______________________________________________________________________________________
   2. ______________________________________________________________________________________
   3. ______________________________________________________________________________________

5. What would help you to walk to places in or around Brooklyn Center more often? For Example, is there a specific location that does not have sidewalk or trail facilities that enable you to get where you want? Is there a roadway that you are afraid to cross?
   ______________________________________________________________________________________
   ______________________________________________________________________________________
   ______________________________________________________________________________________
   ______________________________________________________________________________________
   ______________________________________________________________________________________
   ______________________________________________________________________________________
6. What would help you get to your destination? For example, do you need signs to help you figure out where you are or where trails/sidewalks go to?

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

7. Which places in or around Brooklyn Center do you wish you could walk to more easily? Please list up to 3 destinations.
1. ____________________________________________________________________________________
2. ____________________________________________________________________________________
3. ____________________________________________________________________________________

**Bicycling in Brooklyn Center**

8. During the summer months, how often do you bike in or around Brooklyn Center?

- Never
- Less than 1 time a week
- 1 to 2 times a week
- More than 2 times a week, but not every day
- Every day

9. I mainly bike to (check one):

- Have fun
- Exercise
- Go places instead of driving a car
- Get to work
- Other [open ended]
- I don’t bike.

10. What places do you bike to in or around Brooklyn Center? Please list up to your top 3 places.
1. ____________________________________________________________________________________
2. ____________________________________________________________________________________
3. ____________________________________________________________________________________

11. What would help you to bike to places in or around Brooklyn Center more often? For example, is there a specific road way that does not have trail facilities that enable you to get to where you want? Is there a roadway that is hard to cross or an intersection where it is challenging to ride a bike?

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
12. What would help you get to your destination? For example, do you need signs to help you figure out where you are or where trails/sidewalks go to?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

13. Which places in or around Brooklyn Center do you wish you could bike to more easily? Please list up to 3 destinations.
1. ____________________________________________________________________________________
2. ____________________________________________________________________________________
3. ____________________________________________________________________________________

Additional Comments
12. Please provide any additional information or ideas that you think could help increase walking or biking in Brooklyn Center
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

Optional
The Draft Pedestrian and Bicycle Plan for the City of Brooklyn Center will be available at the end of summer 2013. If you want to continue to be involved in this process and hear more about the study, please provide either an email address and/or residential address.

Name _______________________________________________
Email _______________________________________________
Residential Address ____________________________________________________________________________________
Street __________________________ City __________ State __ Zip __________

Thank you for your time in helping to make Brooklyn Center a great place for walking and biking!

This survey is also available online through July 1, 2013.
www.surveymonkey.com/s/BCPedBikeStudy

-or-
Submit this survey via mail to:
Zan Associates
105 5th Ave. S, Suite 490
Minneapolis, MN 55401

For more information or questions about the study:
Steve Lillehaug
City of Brooklyn Center
(763) 569-3340
publicworks@ci.brooklyn-center.mn.us
Lus Nug Sojntsuam

Peb xav ua kom Brooklyn Center yog ib lub nroog nyob lomzem, zoo ua haujlwm thiab uasi. Ib txoj kev uas yuav ua tau li no yog yuavtsum ua kom lub nroog muaj kev taug kotaw uasi thiab caij tsheb ob lub log! Daim ntawv sojntsuam no yog ib feem ntawm txoj kev npaj los tsi m Kev Rau neeg Taug Kotaw thiab Caij Tsheb Ob Lub Log rau lub nroog Brooklyn Center kom pab lub nroog dhau mus ua tau lub jezjog uas tsis muaj kev ntshais taug kotaw thiab caij tsheb ob lub log.

Thaum teb cov lus nug hauv qab, koj yuav lub peb totaub koj cov tswwyim thiab tej kev txhawj txog kev taug kotaw mus los thiab kev caij tsheb ob lub log nyob nroog Brooklyn Center. Koj cov lus teb peb yuav ceev tsis muab qhia rau leej twg.

Ua koj tsaug uas pab koomtes!

Kev Taug Kotaw nyob Brooklyn Center

1. Yam dabtsis koj nyiam ua tshaj hais txog kev pab rau koj kom nyob keeg hlo tsis muaj mob nkeeg? Thov sau koj peb yam uas koj xaiv tias zoo tshaaj.
   1. ____________________________________________________________
   2. ____________________________________________________________
   3. ____________________________________________________________

2. Sijhawm cov hli nyob lub caij ntuj so, koj mus taug kotaw ncig Brooklyn Center npaum cas?
   □ Tsis taug mus kiaj li
   □ Tsawg tshaj ib zaug ib asthiv
   □ 1 rau 2 zaug ib asthiv
   □ Ntau tshaj 2 zaug ib asthiv, tiamsis tsis yog txhua hnub
   □ Txhua txhia hnub

3. Feem ntau, thaum kuv taug kotaw, yog kuv taug kev mus (ko ib qho):
   □ Ncig uasi lomzem
   □ Ua esxawsxais (exercise)
   □ Rau lwv qhov chaw, tsis xav tsav tsheb
   □ Ua haujlwm
   □ Lwm qhov/yam _____________________________________________
   □ Kuv tsis mus taug kev kotaw

4. Qhov chaw twg yog chaw uas koj nyiam mus taug kotaw nyob hauv lossis nyob ib ncig Brooklyn Center? Thov sau txog li 3 qhov chaw uas koj nyiam mus taug kotaw tshaj.
   1. ____________________________________________________________
   2. ____________________________________________________________
   3. ____________________________________________________________

5. Yuav ua cas pab (pab dabtsis?) koj thiaj yuav mus taug kotaw lossis taug kotaw mus rau tej chaw nyob hauv lossis nyob ib ncig Brooklyn Center heev tsi tseg tsi tu? Pivsam li, puas muaj ib qhov chaw twg uas tsis muaj sab kev taug kotaw lossis txoj lw taug kev uas koj xav tau kom mus tau rau qhov chaw koj xav mus? Puas muaj txoj kev tsheb twg uas koj tshai hla?
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
6. Yuav ua cas pab (pab dabtsis?) koj thiaj mus txog rau koj qhov chaw mus? Pivsam li, koj puas xav tau kom muaj daim paib qhia kev pab kom koj paub tias koj nyob qhov twg lossis tias txoj lw taug mus rau twg?

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

1. ____________________________________________________________________________________
2. ____________________________________________________________________________________
3. ____________________________________________________________________________________

Kev Caij Tsheb Ob Lub Log nyob Brooklyn Center

8. Sijhawm caij ntuj so, koj caij tsheb ob lub log nyob hauv lossis nyob ib ncig Brooklyn Center heev npaum cas?

☐ Tsis caij kiaj li
☐ Tsawg tshaj ib zaug ib asthiv
☐ 1 rau 2 zaug ib asthiv
☐ Ntau tshaj 2 zaug ib asthiv, tiamsis tsis yog txhua hnub
☐ Txhua txhia hnub

9. Feem ntau, thaum kuv caij tsheb ob lub log, yog kuv mus (ko ib qho):

☐ Ncig uasi lomzem
☐ Ua esxawsxais (exercise)
☐ Rau lwem qhov chaw, tsis xav tsav tsheb
☐ Ua haujlwem
☐ Lwm qhov/yam
☐ Kuv tsis caij tsheb o blub log

10. Qhov chaw twg yog chaw uas koj nyiam mus caij tsheb ob lub log nyob hauv lossis nyob ib ncig Brooklyn Center? Thov sau txog li 3 qhov chaw uas koj nyiam mus tshaj.
1. ____________________________________________________________________________________
2. ____________________________________________________________________________________
3. ____________________________________________________________________________________

11. Yuav ua cas pab (pab dabtsis?) koj thiaj yuav caij tsheb ob lub log mus rau tej chaw nyob hauv lossis nyob ib ncig Brooklyn Center heev tsis tseg tsis tu? Pivsam li, puas muaj ib qhov chaw twg uas tsis muaj tsev so raws txoj lw taug kev uas yuav pab tau kom koj mus txog qhov chaw koj xav mus? Puas muaj txoj kev tsheb uas nyuab hla lossis ntu kev tshuam uas nyuab rau caij tsheb o blub log?

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
12. Yuav ua cas pab (pab dabtsis?) koj thiaj mus txog rau koj qhov chaw mus? Pivsam li, koj puas xav tau kom muaj daim paib qhia kev pab kom koj paub tias koj nyob qhov twg lossis tias txoj lw taug/sab kev taug mus rau twg?

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

   1. __________________________________________________________
   2. __________________________________________________________
   3. __________________________________________________________

Lwm Yam Lus Xa Hais Ntxiv
14. Thov sau yog muaj lwm yam ntxiv lossis tswyim uas koj xav tias yuav pab txhawb kev taug kotaw lossis caij tsheb ob lub los nyob hauv Brooklyn Center.

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

Nyob ntawm nyiam, teb los tau, tsis teb los tsis ua cas
Daim ntawv ua thawj zaug txog Kev Npaj Kev Taug Kotaw thiar Caij Tsheb Ob Lub Log hauv Nroog Brooklyn Center yuav tiaw pub rau sawvdaws sijhawm xaus caij ntuj sov 2013. Yog koj xav koomtes mus ntxiv lossis xav nov ntxiv txog qhov kev tshawb xyuas, thov muab koj npe thiab email lossis chaw nyob.

Npe __________________________________________________________
Email _________________________________________________________
Chaw Nyob ____________________________________________________
Street _______________ City __________ State ______ Zip __________

Ua tsaug rau koj lub sijhawm thiar kev pab kom Brooklyn Center yog lub chaw zoo taug kotaw thiar caij tsheb ob lub log!

______________________________________________________________________________________

This survey is also available online through July 1, 2013.

www.surveymonkey.com/s/BCPedBikeStudy

-or-
Submit this survey via mail to:
Zan Associates
105 5th Ave. S, Suite 490
Minneapolis, MN 55401

For more information or questions about the study:

Steve Lillehaug
City of Brooklyn Center
(763) 569-3340
publicworks@ci.brooklyn-center.mn.us
**Preguntas de la encuesta**

Deseamos hacer de Brooklyn Center un lugar divertido para vivir, trabajar y jugar y, una manera de hacerlo es convertir a la ciudad en un lugar genial para caminar y andar en bicicleta. Esta encuesta es parte de un proyecto para desarrollar un Plan de Brooklyn Center para Ciclistas y Peatones para la Ciudad, a fin de ayudar a que esta se torne en una comunidad donde se pueda caminar y andar en bicicleta sin problemas.

Al responder a las siguientes preguntas, usted nos ayudará a entender sus ideas y lo que le preocupa acerca de caminar y andar en bicicleta en Brooklyn Center. Mantendremos sus respuestas en forma confidencial.

¡Gracias por participar!

**Actividad General**

1. ¿Qué le gusta hacer para estar activo(a)? Por favor enumere las tres cosas que más le gustan.
   
   1. ______________________________________________________________________________________
   
   2. ______________________________________________________________________________________
   
   3. ______________________________________________________________________________________

**Caminar en Brooklyn Center**

2. Durante los meses de verano, ¿con qué frecuencia camina en Brooklyn Center o en sus alrededores?
   
   - Nunca
   - Menos de 1 vez por semana
   - De 1 a 2 veces por semana
   - Más de 2 veces por semana, pero no todos los días
   - Todos los días

3. Camino principalmente para: (marque una opción):
   
   - Divertirse
   - Hacer ejercicio
   - Visitar lugares en vez de ir en automóvil
   - Ir al trabajo
   - Otro ________________________________________________________________________________
   - No camino.

4. ¿Por qué lugares camina usted en Brooklyn Center o en sus alrededores? Por favor, enumere los 3 lugares que le gustan más:
   
   1. ______________________________________________________________________________________
   
   2. ______________________________________________________________________________________
   
   3. ______________________________________________________________________________________

5. ¿Qué sería lo que le ayudaría a caminar más seguido hacia lugares que estén en Brooklyn Center o en sus alrededores? Por ejemplo, ¿hay algún lugar en especial, que no tenga aceras o sendas que le permitan llegar adonde desea? ¿Hay algún camino que usted tema cruzar?
   
   ______________________________________________________________________________________
   
   ______________________________________________________________________________________
   
   ______________________________________________________________________________________
   
   ______________________________________________________________________________________
   
   ______________________________________________________________________________________
6. ¿Qué sería lo que le ayudaría para llegar a su destino? Por ejemplo, ¿necesita carteles que le ayuden a saber dónde está o hacia dónde van las sendas/aceras?

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

7. ¿En qué lugares de Brooklyn Center o de sus alrededores desearía caminar con mayor facilidad? Por favor, enumere hasta 3 destinos.
1. ____________________________________________________________________________________
2. ____________________________________________________________________________________
3. ____________________________________________________________________________________

Andar en bicicleta por Brooklyn Center

8. Durante los meses de verano, ¿con qué frecuencia anda usted en bicicleta en Brooklyn Center o en sus alrededores?
   - Nunca
   - Menos de 1 vez por semana
   - De 1 a 2 veces por semana
   - Más de 2 veces por semana, pero no todos los días
   - Todos los días

9. Ando en bicicleta principalmente para: (marque una opción):
   - Divertirme
   - Hacer ejercicio
   - Visitar lugares en vez de ir en automóvil
   - Ir al trabajo
   - Otro
   - No ando en bicicleta.

10. ¿En qué lugares de Brooklyn Center o de sus alrededores anda usted en bicicleta? Por favor enumere los 3 lugares que más le gustan.
    1. ____________________________________________________________________________________
    2. ____________________________________________________________________________________
    3. ____________________________________________________________________________________

11. ¿Qué sería lo que le ayudaría a ir en bicicleta con mayor frecuencia, hacia lugares de Brooklyn Center o sus alrededores? Por ejemplo, ¿hay algún lugar en especial que no tenga sendas que le permitan ir adonde usted desea? ¿Hay algún camino que sea difícil de cruzar o una intersección donde sea peligroso andar en bicicleta?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
12. ¿Qué sería lo que le ayudaría para llegar a su destino? Por ejemplo, ¿necesita carteles que le ayuden a saber dónde está o hacia dónde van las sendas/aceras?

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

13. ¿En qué lugares de Brooklyn Center o de sus alrededores desearía que se pudiera andar en bicicleta con mayor facilidad?  
Por favor, enumere 3 destinos.

1. ____________________________________________________________________________________

2. ____________________________________________________________________________________

3. ____________________________________________________________________________________

Comentarios adicionales

14. Por favor, brinde cualquier otra información o idea que usted piense que mejoraría el hecho de caminar o andar en bicicleta en Brooklyn Center:

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

Opcional

El borrador del Plan de Brooklyn Center para Ciclistas y Peatones para la Ciudad estará a su disposición a fines del verano de 2013. Si desea continuar involucrado en este proceso y saber más cosas sobre el estudio, sírvase indicar una dirección de correo electrónico o una dirección residencial.

Nombre _________________________________________________________________
Correo Electrónico ________________________________________________________
Dirección Residencial Street     City     State     Zip

¡Gracias por su tiempo de ayuda para hacer de Brooklyn Center un lugar genial para caminar y andar en bicicleta!

This survey is also available online through July 1, 2013.

www.surveymonkey.com/s/BCPedBikeStudy

- or -

Submit this survey via mail to:

Zan Associates
105 5th Ave. S, Suite 490
Minneapolis, MN 55401

For more information or questions about the study:

Steve Lillehaug
City of Brooklyn Center
(763) 569-3340
publicworks@ci.brooklyn-center.mn.us
APPENDIX C – SURVEY SUMMARY

Survey Summary

Pedestrian and Bicycle Plan for the City of Brooklyn Center

The survey for the Brooklyn Center Pedestrian and Bicycle Plan consisted of 13 questions related to walking and biking in the city, with an opportunity for additional comments at the end. The survey was open and available for several months and publicized via news releases and website updates, at events and displays at public locations, and through local community members. A total of 165 people completed the survey; a general summary of the responses to each question is below.

Walking in Brooklyn Center

1. What do you like to do most to be active? Please list your top three choices.
   Frequent responses included:
   - Walk/Run
   - Bike
   - Team sports (soccer, basketball, etc.)
   - Go to the gym (weight lifting, fitness classes)
   - Rollerblade
   - Swim
   - Golf
   - Go to the park
   - Yard work

2. During the summer months, how often do you walk in or around Brooklyn Center?
   - Never
   - Less than 1 time a week
   - 1 to 2 times a week
   - More than 2 times a week, but not every day
   - Every day
   Response results:
3. I mainly walk to (check one):
   - Have fun
   - Exercise
   - Go places instead of driving a car
   - Get to work
   - Other [open ended]
   - I don’t walk

Response results:

4. What places do you walk to in or around Brooklyn Center? Please list up to your top 3 places.
   Frequent responses included:
   - Local parks (Grandview Park, Central Park, Palmer Lake Park, Centennial Park, Evergreen Park)
   - Around one’s neighborhood
   - Community Center
   - Local libraries
   - Local gas stations
   - Mississippi River Walk
   - Large retail/grocery stores (Walmart, Target, Cub Foods)
   - Fast food locations (Subway, Cherry Berry, Culver’s)
5. **What would help you to walk to places in or around Brooklyn Center more often?** For example, is there a specific location that does not have sidewalk or trail facilities that enable you to get to where you want? Is there a roadway that you are afraid to cross? [open ended]

Frequent responses/themes included:

- Improving intersections and roadways that are difficult/uncomfortable to walk along/across:
  - Shingle Creek Pkwy/Earle Brown Drive
  - 73rd Avenue N. from Camden to Dupont Ave
  - Drew Ave from 67th Ave N. to 65th Ave N.
  - Hwy 252
  - Brooklyn Blvd
  - Bass Lake Road
- Adding more lights for safety (on trails as well as local streets)
- Adding ‘watchdog’ cameras at identified dangerous intersections
- Extend the trail from the Sears parking lot north
- Add sidewalks to local streets and residential areas
- Add pavement markings to trails to designate which direction people should be walking/biking
- Widen paths to allow room for both pedestrians and bicyclists
- Raise trails vertically to avoid flooding near the lakes
- Better snow/ice removal on trails and sidewalks
- Work with local businesses to promote ability of employees to walk during breaks

6. **What would help you get to your destination?** For example, do you need signs to help you figure out where you are or where trails/sidewalks go to? [open ended]

Frequent responses/themes included:

- Additional trails/sidewalks
- Maps along trails
- Additional directional signage along trails, particularly at trail intersections
- Directional signs to major destinations
- Mobile app for city trails
- Distance markers along trails
- Pedestrian bridges over busy/dangerous intersections

7. **Which places in or around Brooklyn Center do you wish you could walk to more easily? Please list up to 3 destinations.**

Frequent responses included:

- Local parks (Grandview Park, Central Park, Palmer Lake Park, Centennial Park, Evergreen Park)
- Community Center
- Movie theater
- Local libraries
- Local gas stations
- Large retail/grocery stores (Walmart, Target, Cub Foods)
- Fast food locations (Subway)
Bicycling in Brooklyn Center

8. During the summer months, how often do you bike in or around Brooklyn Center?
   - Never
   - Less than 1 time a week
   - 1 to 2 times a week
   - More than 2 times a week, but not every day
   - Every day

Response results:
9. *I mainly bike to (check one):*
   - Have fun
   - Exercise
   - Go places instead of driving a car
   - Get to work
   - Other [open ended]
   - I don’t bike

Response results:

10. *What places do you bike to in or around Brooklyn Center? Please list up to your top 3 places.*
    Frequent responses included:
    - Local parks (Grandview Park, Central Park, Palmer Lake Park, Centennial Park, Evergreen Park)
    - Around one’s neighborhood
    - Community Center
    - Local libraries
    - Local gas stations
    - Mississippi River Walk
    - Large retail/grocery stores (Walmart, Target, Cub Foods)
    - Fast food locations
    - Coon Rapids Dam
    - Local schools
11. What would help you to bike to places in or around Brooklyn Center more often? For example, is there a specific location that does not have trail facilities that enable you to get to where you want? Is there a roadway that is hard to cross or an intersection where it is challenging to ride a bike?
[open ended]
Frequent responses/themes included:
- Additional trails and trail connections
- Additional bike racks at popular destinations
- Wider trails that accommodate both bicyclists and pedestrians
- Make busy intersections easier/safer to cross
- Smoother trail surfaces

12. What would help you get to your destination? For example, do you need signs to help you figure out where you are or where trails/sidewalks go to?
[open ended]
Frequent responses/themes included:
- Additional maps along trails
- Additional directional signage
- Additional trails, particularly near popular destinations
- Signs to warn motorists of pedestrian/bicycle crossings

13. Which places in or around Brooklyn Center do you wish you could bike to more easily? Please list up to 3 destinations.
Frequent responses included:
- Movie theater
- Local schools
- Local parks (Grandview Park, Central Park, Palmer Lake Park, Centennial Park, Evergreen Park)
- Brookdale Center
- Local libraries
- Large retail/grocery stores (Walmart, Target, Cub Foods)

Additional Comments
14. Please provide any additional information or ideas that you think could help increase walking or biking in Brooklyn Center:
[open ended]
Response themes included:
- Desire for bike rental program (such as Nice Ride)
- Reiteration of desire for more trails and sidewalks in general
- Desire for audible crosswalk indicators
- Desire for longer crossing times at busy intersections
- Desire for safety improvements—more lighting, pavement markings
- More enforcement of traffic laws
- Educational campaigns needed for motorists and bicyclists
- Organize more biking/walking events
- Improve maintenance of trails (snow/ice and trash removal, etc.)
APPENDIX D – PRESS RELEASES

FOR IMMEDIATE RELEASE
April 30, 2013 (Brooklyn Center, MN)

ONGOING STUDY HOPES TO HELP INCREASE BIKING AND WALKING IN BROOKLYN CENTER

Hennepin County and the City of Brooklyn Center are working together to conduct a pedestrian and bicycle study. This study is identifying different methods to increase biking and walking in Brooklyn Center. The primary goals of this study are to improve the health of residents, increase the safety of biking and walking in the community, and increase overall biking and walking.

The pedestrian and bicycle study is gathering input from Brooklyn Center residents to help identify existing conditions, where people walk and bike, safety concerns, and gaps in the current sidewalk and trail facilities. The information collected will be used to develop a Pedestrian and Bicycle Plan for the City of Brooklyn Center that will include recommendations for improving biking and walking throughout the city.

An online survey is available to gather public input through July 1, 2013. All residents are encouraged to participate by taking the survey at: www.surveymonkey.com/s/BCPedBikeStudy. A hard copy of the survey and translated surveys in Hmong and Spanish are available upon request.

For more information and questions on the study or to request a hardcopy or translated survey, contact Steven Lillehaug, City of Brooklyn Center Director of Public Works: 763-569-3340 publicworks@ci.brooklyn-center.mn.us
FOR IMMEDIATE RELEASE
June 17, 2013 (Brooklyn Center, MN)

PUBLIC SURVEY FOR BROOKLYN CENTER PEDESTRIAN AND BICYCLE PLAN ENDS JULY 1

The online survey for the Brooklyn Center Pedestrian and Bicycle Plan will end July 1, 2013. All residents are encouraged to participate by taking the survey at: www.surveymonkey.com/s/BCPedBikeStudy. A hard copy of the survey and translated surveys in Hmong and Spanish are available upon request.

The survey is part of ongoing outreach efforts by Hennepin County and the City of Brooklyn Center to conduct a pedestrian and bicycle plan. This plan is identifying different methods to increase biking and walking in Brooklyn Center. The primary goals of this plan are to improve the health of residents, increase the safety of biking and walking in the community, and increase overall biking and walking.

The pedestrian and bicycle survey will assist in gathering input from Brooklyn Center residents to help identify existing conditions, where people walk and bike, safety concerns, and gaps in the current sidewalk and trail facilities.

For more information and questions on the study or to request a hardcopy or translated survey, contact Steven Lillehaug, City of Brooklyn Center Director of Public Works: 763-569-3340 publicworks@ci.brooklyn-center.mn.us