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BLOOMINGTON

 CITY OF
BLOOMINGTON
MINNESOTA

**NORMANDALE LAKE
DISTRICT PLAN**

OCTOBER XX, 2017



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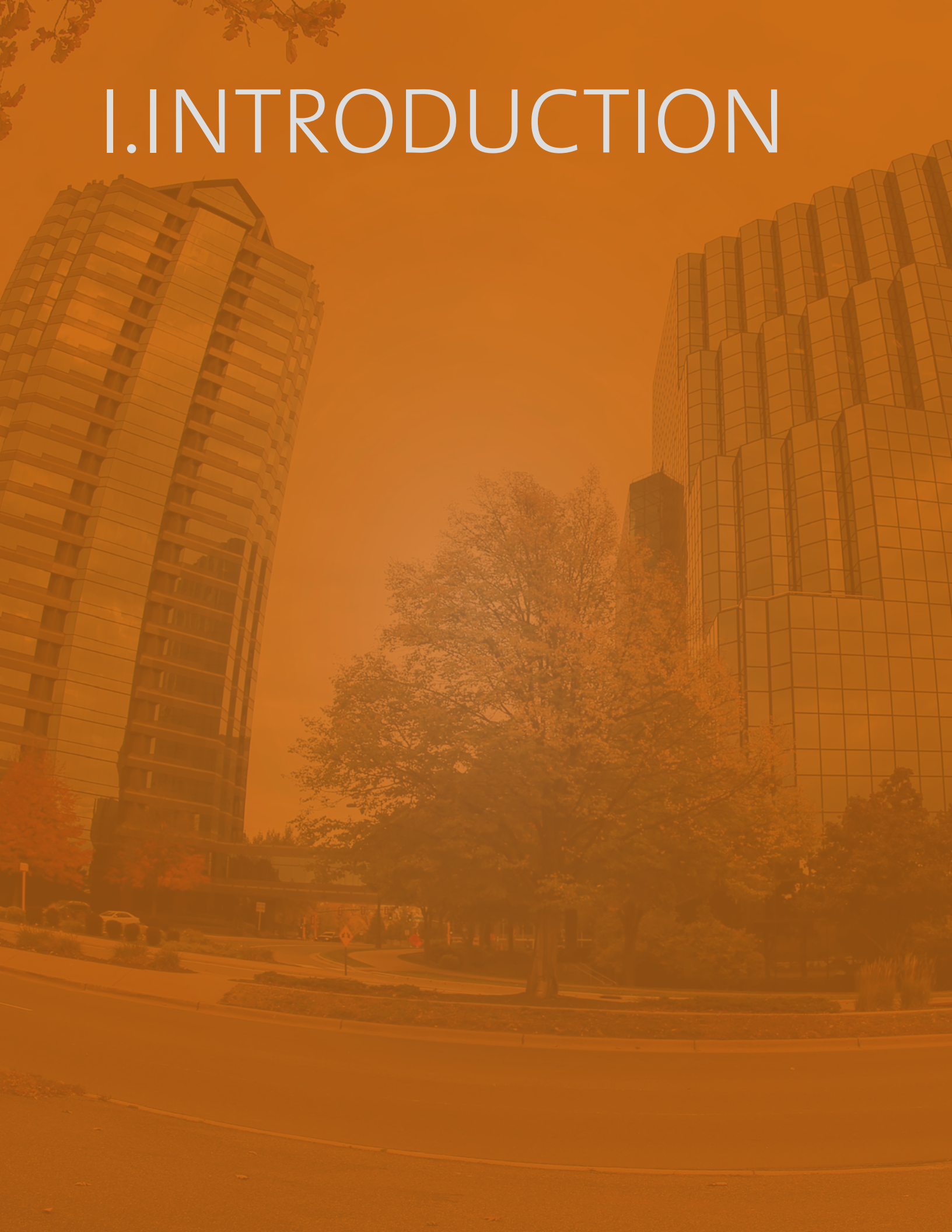
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I. INTRODUCTION





Introduction

The Normandale Lake District is the City of Bloomington’s western gateway. Mixing natural elements with commercial and residential uses, the area continues to evolve and develop. Previous plans recognized the area as an important commercial and employment center for the City and the Region. The Normandale Lake District Plan builds on previous plans to help guide the District’s growth and identify development opportunities. Through careful planning the District has emerged as a distinctive destination that attracts a variety of users. The 2008 Normandale Lake District Plan (NLDP) established a unified vision for the area and identified a funding mechanism to implement that vision. The plan has helped guide development and reinforced the District’s identity and assets. It emphasized that transportation decisions consider enhancing connectivity for all user groups including pedestrians, bicyclists, and transit riders. It also highlighted the area’s natural amenities like the Hyland-Bush-Anderson Lakes Regional Park Reserve including Normandale Lake Park, embracing them as community assets.

Since 2008, the market has changed, prompting reconsideration of the 2008 NLDP’s original development assumptions. Whereas high quality office was the predominant land use assumed in the 2008 NLDP there has been recent construction and increasing interest in high density residential. This plan, the 2017 NLDP, will update the 2008 NLDP to reflect market changes and modify the list of recommended public improvements to implement the vision.

What is the Normandale Lake District Plan?

The NLDP was completed in 2008 and was incorporated in the City’s 2008 *Comprehensive Plan*. It was one of three identified development districts in the City as shown in Figure 1.



Figure 1: City of Bloomington Development Districts

The 2008 NLDP set a vision, goals, and an implementation plan for the District. The District boundary for the 2008 NLDP is shown in shown in Figure 2. The plan utilized market trends and traffic forecasts to identify policy and project recommendations related to land use,

design, transportation, and utilities. The forecasted increase in office resulted in a significant increase traffic in the District requiring major infrastructure improvements at the intersection of Normandale Boulevard and West 84th Street.



Figure 2: 2008 Normandale Lake District Planning Area

Why update the Normandale Lake District Plan?

There are three main drivers of the 2017 NLDP update process:

1. To evaluate the impact of land use changes on public infrastructure needs and priorities.

The 2008 NLDP envisioned that the majority of the District’s undeveloped or underdeveloped land would be developed into office space, as shown in Figure 3. However, a significant decline in the office development market coupled with increased developer interest in residential have resulted in high density residential projects in locations previously envisioned for office towers. The 2017 NLDP evaluates the impacts the changing land use vision will have on District infrastructure needs and priorities.

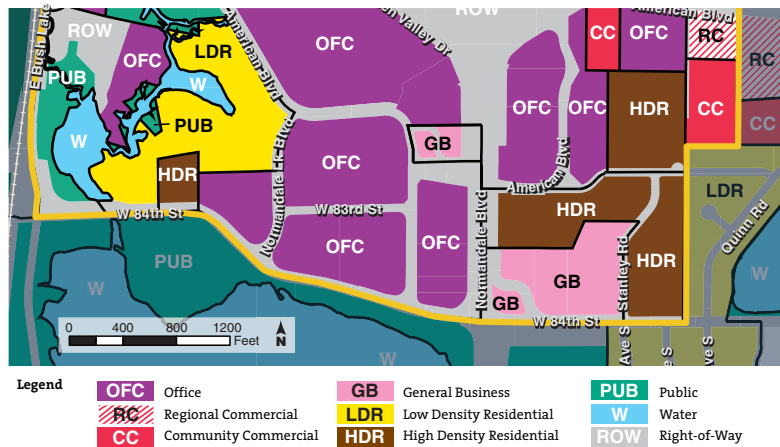


Figure 3: 2008 Normandale Lake District Plan Proposed Land Use Guide Plan

2. To reflect the impacts of the East Bush Lake Road/I-494 Ramp Project.

The interchange at East Bush Lake Road has been without a westbound I-494 on-ramp since it was constructed in 1960 shortly after the I-35W/I-494 interchange was completed. Adding a westbound access



3. To update the District implementation Plan to reflect work completed since 2008.

Many of the projects from the 2008 NLDP implementation plan have been completed. This 2017 NLDP update will review the status of projects recommended in the 2008 NLDP. In addition to the 2015 traffic study, utility models were updated to evaluate infrastructure needs to accommodate the changing land uses. These infrastructure improvement projects will be incorporated into an updated Implementation Plan.

How to Use This Document

The 2017 NLDP update focuses on the public improvements needed to accommodate changes in land use patterns. It does not change or adjust the vision, goals and objectives set in the 2008 NLDP; however some of the specific projects described in the Implementation Plan have been changed or adjusted. To see the full discussion regarding the District's vision, goals and objectives please see page 4.1 of the 2008 NLDP. The next chapter, *Progress Since 2008, Other Considerations, and Recommendations*, provides an overview of the projects recommended in the 2008 NLDP. Each project type has three sections. The first section summarizes the status of the projects. The second section briefly explains the impacts of the completed projects as well as other changes that have occurred since the 2008 NLDP. The third section discusses recommendations for the District in light of changes since the 2008 NLDP. The final chapter of this report is the Implementation Plan. It takes the recommendations from the previous chapter and assigns a timeline priority and identifies responsible implementation parties. It also discusses the strategy to fund the projects. The projects are divided into short term and future project timeframes. Some will be implemented immediately while others may require additional study or may never be completed if unanticipated changes in the market occur. The NLDP should continue to be updated periodically to evaluate progress and market changes.

Path near Covington Apartment and Norman Point



An example of expanding upon the park-like character of the district.

The vision and goals for the District were set during the 2008 planning process. The 2017 NLDP Update was guided by this work. A summary of the vision and goals is provided below. To see a full discussion of the goals, vision, and objectives see page 4.1 of the 2008 NLDP (under separate cover).

Vision: The Big Idea

Continue to develop as a high quality, high density mixed use area in a manner that extends, reinforces and celebrates the natural environment. Three primary goals to achieve this vision include:

- a. Expand the park-like character.
- b. Improve identity and connectivity.
- c. Achieve a more visually cohesive built environment



II. PROGRESS SINCE 2008, OTHER CONSIDERATIONS AND RECOMMENDATIONS



Progress Since 2008, Other Considerations and Recommendations

The 2008 Normandale Lake District Plan includes a comprehensive implementation plan with short, mid, and long-term recommendations. These recommendations were broken down by the type of project including land use, urban design, movement and circulation, utilities, stormwater management, and projects outside the District. The full list of projects and status from the 2008 NLDP can be found in Appendix A.

Normandale Lake Office Park



The district integrates urban and natural elements to create a unique feel and destination.

Land Use and Development

Existing land use in the District continues to consist of a mix of office, hotels, freeway-oriented commercial, neighborhood-oriented retail, and multiple-family development. The District also continues to contain one of the largest concentration of Class A office space in the Twin Cities metropolitan region. Furthermore, new development projects have brought more residents and jobs to the area, as shown in Table 1.

	2008	2014
Residents	243	438
Workers	2,590	5,523

Table 1: Employment and Residential Changes

Source: U.S. Census Bureau. 2016. LODES Data. Longitudinal-Employer Household Dynamics Program. <http://lehd.ces.census.gov/data/lodes/>

Progress Since 2008

The 2008 NLDP recommended several land use changes and rezonings which encouraged a greater mix of uses. These changes in land use and zoning were designed to accommodate the changing market. The changes to zoning and land use and market changes are discussed in depth below.

Land Use Category Change and Rezonings

All of the land use category changes and rezonings recommended by the 2008 NLDP have been completed. These changes were completed to facilitate redevelopment of aging properties within the District as well as to align land use categories and zoning with existing uses. Also, most zoning changes were made to facilitate phasing out older commercial zoning districts and replacing them with updated commercial zoning districts. These changes did not significantly impact the uses of these properties. However, rezonings on a few parcels did allow significantly different uses. An example being 5800 West American Boulevard. This property was redesignated with a land use of High Density Residential from Office. It also was rezoned to RM-50 to accommodate multifamily residential development. A summary of land use category changes and zoning changes can be found on pages 5.8-5.9 and 5.12 of the 2008 NLDP (under separate cover). The current land use guide plan and zoning for the District are shown in Figure 6 and Figure 7.

The 2008 NLDP identified several parcels to be reclassified and rezoned. In some cases it was to rectify inconsistent land uses such as areas classified for office despite being used as conservation and water retention. In other cases land was rezoned and reclassified to accommodate future development demand. Outdated zoning districts were replaced with recently updated zoning districts to better accommodate redevelopment efforts in the District.

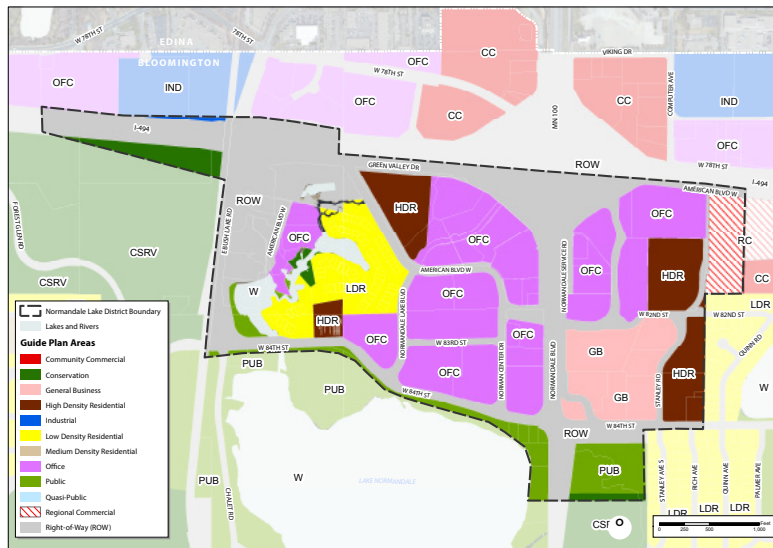


Figure 6: Existing Normandale Lake District Land Use Guide Plan

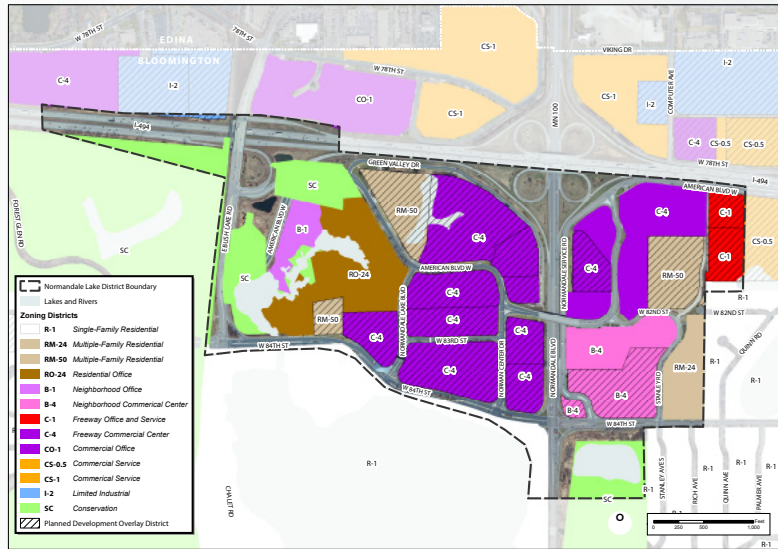


Figure 7: Existing Normandale Lake District Zoning

Development Projects Completed

Since the 2008 NLDP was adopted, several multi-family housing projects have been approved and/or constructed. Market demand for office significantly declined after 2008 while the market for multifamily residential has increased across the Twin Cities and beyond. As a result several parcels previously guided and zoned for office development have been reguided and rezoned to allow residential uses. These include:

- Covington Apartments at 5800 American Boulevard West was reguided High Density Residential (HDR) and rezoned to RM-50 to allow a 250 unit luxury apartment building (opened in 2014).
- "Duke III" site formally known as the Preserve at 8101 Normandale Lake Boulevard, a 179 unit apartment building is under construction. The C-4 zoning district permits residential as long as part of the site is slated for commercial uses, so rezoning was not necessary. Existing office buildings in the "Duke" development provide the necessary commercial use.
- Two developable parcels remain in the District. These parcels, commonly referred to as the "Jostens site," are currently zoned C-4 and have a land use guide plan designation for office. A preliminary development plan was approved for a hotel and an office on the two parcels. This information was considered in defining the two new development scenarios for the District discussed below.

Covington Apartments at 5800 American Boulevard West



A 250 unit apartment building that recently opened.

The Preserve Apartments at 8101 Normandale Lake Boulevard



A 179 unit apartment building under construction.





The Jostens Site



Two vacant parcels available for development.

Other Considerations

Taking into consideration development that has occurred since 2008 and interest expressed by developers, two future (2040) development scenarios were created. The development scenarios were used to forecast future traffic in a 2015 traffic study for the District and also to model utility (sewer, water) needs. The two scenarios include: a 2040 Commercial Intensive scenario and a 2040 Mixed-Use Intensive scenario. These scenarios include the following assumptions, which are keyed to sites illustrated on Figure 8 and Figure 9:

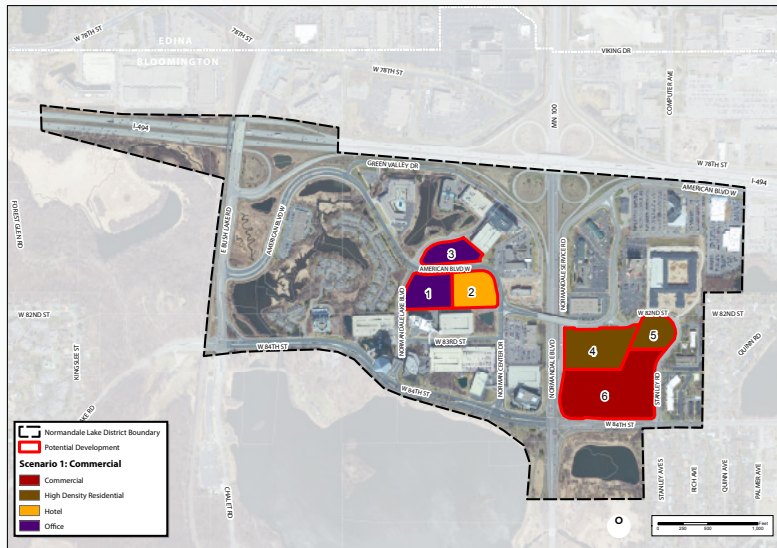


Figure 8: Commercial Scenario

Use	Total Amounts	Percent change from 2008 assumptions
Residential	963 d.u.	+31%
Commercial	351,548 sf.	-18%
Hotel	1,255 rooms	+40%
Office	3,398,876 sf.	-10%

Table 2: Changes from 2008 Assumptions – Commercial Scenario



flux. Even as this plan was updated new development has occurred. Site number three (8101 Normandale Lake Boulevard) as described will have 179 units of residential. While this is different from the Commercial Intensive scenario it is in line with the Mixed Use Scenario. This plan uses the two scenarios or a combination of both to ensure that a range of development can be adequately served by city infrastructure.

Land Use and Zoning Recommendations

No amendments to either land use or zoning are proposed with this update. The 2008 NLDP recommended zoning and land use changes that were put into place and can sufficiently accommodate the uses described in the two land use scenarios.

Urban Design

Progress Since 2008

Design guidelines for the Normandale Lake District were created and adopted in 2009 as recommended in the 2008 NLDP. These design standards were outlined on pages 5.22 – 5.29 of the 2008 NLDP. A full design plan was created for implementing streetscaping improvements. These improvements were designed to expand the park-like character of the District; one of the key plan goals. These guidelines also helped achieve the objectives to maintain and enhance the public realm, ensure visual and functional continuity, create a distinct district identity, and emphasize quality, comfort, and safety. Plantings, transit stops, and wayfinding signage were designed and installed in accordance with the 2008 NLDP recommendations. Figure 10 illustrates where the improvements described in Table 4 were implemented. Most of the urban design and streetscaping elements recommended in the 2008 NLDP have been installed and have helped strengthen the identity of the District.



Figure 10: 2008 Normandale Lake District Plan Completed Urban Design Projects

Streetscape Enhancements	
Design and construct short term urban design with 2008 planned projects	Completed in 2009
Wayfinding Signs	
Coordinate sign design with Three Rivers Park District, MnDOT, Hennepin County	Completed in 2009
Design, Fabricate and install wayfinding signs, District street signs, and prepare implementation program	Completed in 2009

Table 4: 2008 Normandale Lake District Plan Streetscaping and Wayfinding Improvements

Other Considerations

The comprehensive nature of the streetscape enhancements and signage program have helped to develop the District’s sense of place. The design standards have and will continue to enhance the streetscape as new developments and redevelopments come online. There are several new developments that should be incorporated into the wayfinding sign system. As street level projects are completed it will be important to build upon the branding efforts and expand the streetscaping elements.

Normandale Lake District Kiosk



The map kiosks need updating as new development has occurred.

Recommendations

Many of the projects were completed shortly after the 2008 NLDP was adopted. As a result some of the streetscape features are in need of updates, such as outdated maps in the kiosks. These updates are mostly short term projects that are easily completed and relatively inexpensive. Additionally, some streetscaping features will require design and construction and are considered future projects. These new elements will be identified as needed as development occurs in the District. These streetscape enhancements benefit all users and support the vision and



The 2008 NLDP highlighted the importance of streetscape elements in creating a sense of place. Various elements were designed to create a cohesive visual environment that enhances the park-like feel of the District and facilitates wayfinding.

goals for the District. Recommended upgrades include:

- Update wayfinding signage maps of the District. The aerial photo used for the signs needs to be updated with a current aerial photo and landmarks identified.
- Landscaping at West 84th Street and Normandale Boulevard is recommended. This area has recently been improved for pedestrians with a newly constructed sidewalk. Adding plantings will create a more pleasant environment for pedestrians and help enhance the District’s entrance.
- Review remaining streetscaping projects to construct in conjunction with the Normandale Lake District Urban Design Plan. This could include installing additional trees, lighting, repairing sidewalks, adding new pedestrian connections and installing additional planted medians.

Corner of West 84th Street and Normandale Boulevard



Landscaping can help create a more inviting atmosphere for pedestrians

Movement and Circulation Patterns

A major consideration of the 2008 NLDP was transportation, both internal to the District and to the Region. With land projected to be utilized for high density office uses the District was forecast to generate a high volume of peak-hour traffic. Recommendations from the 2008 NLDP centered on road and circulation improvements, transit improvements, and bicycle and pedestrian improvements, which can be found on pages 5.15-5.17 and 5.20-5.22 of that document. The location of completed projects is shown on Figure 11. The project status and impacts are explained by project type in the following section.



Figure 11: 2008 Normandale Lake District Plan Completed Transportation Projects

Roadway Improvements Progress

Most of the 2008 NLDP recommended road improvement projects were completed as originally proposed. A summary of the improvements completed is provided in Table 5. The 2008 NLDP identified the need for reconstruction of the West 84th Street and Normandale Boulevard intersection. The intensity of proposed land uses (particularly high density office) and the limited options to access the regional road system (e.g., I-494 and Hwy 100) resulted in a recommendation for a triple left turn lane at this intersection. This would bring the intersection from a projected unacceptable Level of Service (LOS) F to an acceptable LOS D. However, since then, another solution arose that would enhance access to I-494. An inverted loop providing westbound access to I-494 from East Bush Lake Road will shift trips away from the West 84th Street and Normandale Boulevard intersection. This reduces congestion at the intersection sufficiently to alleviate the need for reconstruction and expansion. Other improvements completed to improve traffic flow include: modifying and widening roadways, adding traffic signals, adding a right turn lane, and converting a road to one-way. These improvements improved internal vehicular movement throughout the District.

Norman Center Drive



Converted to One-Way to improve traffic operations





Road Improvements	
Widen W. 83rd St.	Completed in 2009
Install access restriction on Norman Center Dr. between W. 83rd St. and W. 84th St.	Completed in 2009
Install signal at American Blvd. and Norman Center Dr.	Completed in 2009
Install signal at W. 83rd St. and Normandale Lake Blvd.	Completed in 2009
Modify curve at W. 82nd St. and Stanley Rd.	Completed in 2009
Add right turn lane (SB) and signal modification on Stanley Rd. and W. 84th St.	Completed in 2009
Apply for grants for intersection	Attempted but unsuccessful
Reconstruct intersection of W. 84th St. and Normandale Blvd.	Deleted

Table 5: 2008 NLDP Roadway Improvements

Other Considerations

A traffic study was conducted in 2015 to study the traffic implications resulting from shifts in land use and construction of the East Bush Lake Road access to westbound I-494. The traffic study modeled the commercial scenario and mixed-use scenario outlined in the land use section of this plan for the years 2018 and 2040. Generally, the commercial scenario results in higher volumes of peak hour traffic while the mixed-use scenario has lower peak hour traffic. This is because residential uses in the mixed-use scenario tend to generate trips that go in the opposite direction during peak hours than employees working in the offices. The land use scenarios are expected to generate the following additional trips compared to existing conditions:

Scenario	A.M. Peak Hour	P.M. Peak Hour	Daily Trips
Commercial scenario	930	1,402	11,624
Mixed-use scenario	564	966	11,827

Table 6: Year 2040 Traffic Volumes

Results of the year 2040 operations analysis indicate that all of the intersections studied are expected to operate at an acceptable overall LOS D or better during the A.M. and P.M. peak hours, with implementation of the recommended improvements under year 2018 conditions. This was similar in operation to the 2008 recommendations which did not include the westbound I-494 on-ramp at East Bush Lake Road. However, the 2015 traffic study identified an issue at West 84th Street and Normandale Service Road intersection. This intersection is expected to operate LOS F for both peak hours under both land use scenarios. The study identified a series of recommendations that will help improve overall operations in the District. The full study can be found in Appendix B.

Median at Normandale Lake Boulevard



The median should be extended closer to intersection and when development occurs the intersection may warrant a signal.

Roadway Improvements Recommendation

Given shifts in land use and traffic patterns the list of roadway improvements and priorities needed to be updated. The construction of westbound on-ramp to I-494 at East Bush Lake Road will shift priority away from the West 84th Street and Normandale Boulevard intersection improvement. Additional treatments are also recommended to improve internal circulation for vehicles and pedestrians/bicyclists. The updated list of roadway improvements includes:

- Construct westbound ramp to I-494 at East Bush Lake Road. Funding has been secured to proceed with construction in 2017-2018. This project reduces 2040 projected congestion at West 84th Street and Normandale Boulevard, eliminating the need for improvements at that intersection.
- Add left turn restrictions signage during peak times at West 84th Street and Normandale Service Road. This intersection was shown to operate at a LOS F during peak hours which is not acceptable under normal conditions. To address this issue and help with circulation, consideration should be given for restricting left turns during peak periods of 7:00 A.M. to 9:00 A.M. and 4:00 P.M. to 6:00 P.M. Although it will not completely resolve the issue, it will reduce delays.
- Signal timing modifications are recommended on East Bush Lake Road, Norman Center Drive, American Boulevard, Normandale Lake Boulevard, and West 84th Street. These could potentially include a leading pedestrian signal that provides time for pedestrians to enter the intersection before vehicles.
- Extend the median on the north side of Normandale Lake Boulevard and American Boulevard intersection. The median located on Normandale Lake Boulevard ends before it reaches the intersection which can cause issues for turning vehicles. This could be completed by the property owner as development occurs.
- Adjust western curb line south of West 83rd Street along Norman Center Drive to improve compliance with one-way operations. Norman Center Drive was not originally designed to be a one way.



Traffic congestion relief was the driving force for major improvements in the 2008 NLDP. Shifts in land uses and providing westbound access to I-494 from East Bush Lake Road have changed traffic patterns and thus, the District’s roadway needs. An updated traffic study has shifted investment priority from major improvements at the intersection of Normandale Boulevard and West 84th Street to smaller improvements at other areas throughout the District.

It was converted to improve traffic operations at West 84th Street. This improvement would help complete the conversion and create addition green space to enhance the park-like character with potential use for events in the District.

- Install signal at American Boulevard and Normandale Lake Boulevard. This intersection is located adjacent to the District’s two vacant development sites and near the entrance to the Normandale Lake Townhomes. As these sites are developed, additional traffic will be generated which may warrant a signalized intersection. To assist operation of a signalized intersection a right turn lane should be constructed. Signal construction and operation costs will need to be shared between the private developments to the north since the northern leg of the intersection is a private road.

Normandale Boulevard Pedestrian Bridge	
Design and construct pedestrian bridge	Not Required
Work with MnDOT to integrate east ramp approach into berm around Goldman Pond	Not Required
Work with Three Rivers Park District to integrate west ramp with park trails	Not Required
Trails	
Work with MnDOT to develop a plan for trails around Goldman Pond connecting to creek underpass tunnel	Not completed
Improve sidewalk/trail on American Blvd. Bridge	Not completed (Bridge was not Reconstructed)
Remove sidewalks on W. 84th St. at Normandale Blvd.	Delete

Table 7: 2008 Normandale Lake District Plan Pedestrian Bridge Improvements Bicycle and Pedestrian Progress since 2008

The 2008 NLDP recommended trail and sidewalk improvements to facilitate pedestrian and bicycle connections throughout the District as described in Table 7 below. In coordination with streetscaping most trail and sidewalk projects were installed except along a few remaining parcels that do not have a trail or sidewalk connection.

A pedestrian bridge over Normandale Boulevard was required as part of the West 84th Street and Normandale Boulevard intersection improvements. To keep the intersection operating at optimal levels for traffic flow (i.e., LOS D or better), at-grade pedestrian crossings needed to be removed from the intersection. This included removing sidewalks along West 84th Street to discourage pedestrian movements and enhancing access through the Nine-Mile Creek underpass below Normandale Boulevard. The pedestrian bridge and underpass improvements were not completed because intersection improvements were not required, as discussed in the previous section. However, since 2008, improvements to the intersection, including sidewalks, were added to provide better pedestrian accommodation. The median at

Normandale Service Road at West 84th Street was also extended to create a refuge island for pedestrians.

Other Considerations

The installed trails and sidewalks created an extensive pedestrian network throughout the district. However, despite the improvements, wide roadways, wide turning radii, and fast vehicles continue to impede pedestrian movements. These features deter pedestrian and bicycle access. Improvements can be designed to help enhance existing connections and create an inviting pedestrian experience. For example, sidewalks were installed in the islands at the corner of West 84th Street and Normandale Boulevard. However, despite being safer for pedestrians the crossing still connotes a space intended for vehicles not pedestrians. Minor improvements such as rapid flashing beacons or plantings in the island can soften the space and signal to vehicles that this spaces is intended for pedestrians.

As the District has grown in employment and residents it is important to encourage walking and biking to nearby destinations and discourage unnecessary vehicular trips that cause congestion. Both development scenarios project growth to continue which will likely result in more vehicle trips to and from and within the district. Vehicular congestion can be reduced through encouraging alternative transportation modes, especially for short trips that do not require a vehicle.

Redevelopment of the commercial areas will benefit from improved pedestrian and bicycle connections. Convenient pedestrian and bicycle access to office and residential uses benefit the commercial businesses. Similarly, residents and employees will benefit from improved access to commercial areas as well as the various parks and amenities in and adjacent to the District.

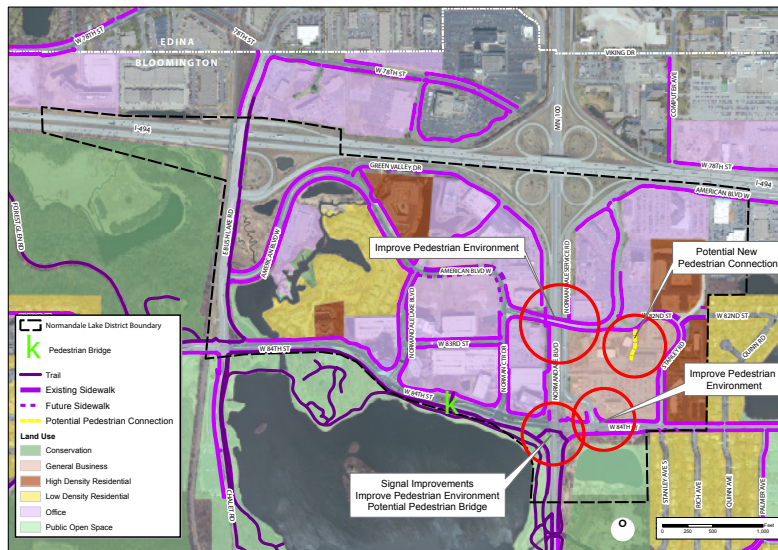


Figure 12: 2008 Normandale Lake District Plan Pedestrian Improvements



Pedestrian Bridge

Much of the need for the pedestrian bridge that was proposed in the 2008 plan was driven by the need for triple left turn lanes, but those are no longer necessary. However, the intersection still remains a barrier to pedestrians and bicyclists. These roadways are wide, carry a large number of vehicles, and can be difficult to safely navigate. Pedestrians and bicyclist would benefit from an improved crossing experience at this intersection and an elevated pedestrian crossing.

Important pedestrian destinations are Normandale Lake and the retail center on the east side of Normandale Boulevard. The office park, townhomes, condos, apartments, and hotels in the northwest quadrant of Normandale and 84th Street can utilize the existing pedestrian bridge over 84th Street, as well as the at-grade crossings of 84th Street to gain access to Normandale Lake Park. The northwest quadrant, however, does not have convenient and safe pedestrian access to the retail center east of Normandale Boulevard. The current crossings are the existing at-grade crossing of Normandale Boulevard/TH-100 and the existing American Boulevard bridge over TH-100. When redevelopment occurs on the east side of Normandale Boulevard, a pedestrian bridge or skyway connecting building or parking ramps north of 84th Street should be studied.

For access to Normandale Lake Park for those crossing on the south side of the intersection of 84th Street and Normandale Boulevard, there is an underpass south of the district at Normandale Boulevard along Nine Mile Creek. This underpass is in need of upgrades to enhance the user experience. The underpass is a quarter mile south of the intersection, which is not convenient for those traveling east and west on 84th Street. The sidewalks are frequently flooded and the pavement is beginning to deteriorate.

Underpass at Nine Mile Creek under Normandale Boulevard



The underpass is located a quarter mile south of West 84th Street and Normandale Boulevard. This picture highlights how high the water can get on a normal afternoon.

Underpass condition



The underpass is in need of upgrades. Water often creeps above the embankment and has started to deteriorate the pavement.

An east/west pedestrian bridge can provide a more direct connection over the intersection. However, because of the limited right of way the cost of the bridge is high. Additionally, to comply with the Americans with Disabilities Act (ADA), the bridge would either be a switchback style bridge or helix style on the approaches. The added approach lengths could create an inefficient route if it's perceived to take walkers longer than crossing at street level. Additional study will be needed to determine the appropriate placement and style of a pedestrian bridge. A pedestrian bridge at this location has potential to create a regional bicycle network connection. If a bicycle connection can be made along East Bush Lake Road and Edina Industrial Boulevard to Nine Mile Creek Trail there is potential to connect to the multiuse trail along France Avenue. West 84th Street has been identified as a Tier 2 Alignment for the Metropolitan Council's Regional Bicycle Transportation Network. This potential to link regional trails makes the bridge attractive for grant opportunities which could assist in funding the bridge.





Figure 13: Potential Regional Bicycle Route Connection

American Boulevard

American Boulevard runs east and west providing one of the main connection through the district. Sidewalks are available however there is not a dedicated bikeway. Furthermore, the bridge over Normandale Boulevard, while functionally safe, is underutilized. The corridor has opportunity to be an east-west multimodal thoroughfare.

The City's Alternative Transportation Plan identifies American Boulevard as a potential bikeway. It recommends an off-street bicycle facility. While long-term efforts will continue to support the installation of an off-street bicycle facility in the short-term there is potential for on-street bike lanes. Today's traffic volumes suggest that there is potential to install bike lanes and reconfigure the roadway. A reconfigured roadway could improve safety for vehicles and pedestrians by reducing the number of conflict points and increase sightlines. A comprehensive multimodal study of American Boulevard should be considered before such a conversion as new developments are expected to come online increasing traffic volume. The study should identify short term and long term recommended improvements to improve pedestrian and bicycle access while ensuring safe travel for vehicular traffic.

Additionally, it is important to promote pedestrian usage of the American Boulevard Bridge. This connection offers the same walking distance and time for the office and residential buildings west of Normandale Boulevard to the commercial center to the east. Promoting this could sway those to take the safer route rather than crossing at West 84th Street. Wayfinding signage, public art, and railings can entice those on the west to use the existing overpass. Furthermore, there might be potential for an easement to allow pedestrians more direct access to the commercial center through the Normandale Lake Estates' common space. This route would provide a pedestrian shortcut benefiting the surrounding office, hotel, residential, and commercial uses.

Easement potential



A hotel occupant was observed cutting through the Normandale Estates' property to access the commercial center.

American Boulevard Bridge over Normandale Boulevard



Bridge looking west over Normandale Boulevard.



Bridge looking east over Normandale Boulevard.

Recommendations

The most significant pedestrian/bicycle improvement recommended in the 2008 NLDP was the pedestrian bridge over Normandale Boulevard at West 84th Street (see Figure 12). However, it was not constructed and is no longer required. Sidewalk improvements were combined with streetscape enhancements to create a park-like feel in the District. However, better pedestrian and bicycle accommodations are needed to truly make the District walk/bike friendly. Opportunities exist to improve pedestrian safety and enhance the pedestrian experience. Additionally, pedestrian and bicycle circulation can be improved through construction of new sidewalks and trails and improvements to existing bridges. Studies should also be conducted to assist in determining additional pedestrian and bicycle connections both internally to the District and to the Region.





Safety and Improved Pedestrian Experience

- North side of West 84th Street and Normandale Boulevard pedestrian crossing improvements including:
 - Install new curb ramps and pedestrian actuated signals to meet ADA standards
 - Remove section of median that encroaches into crosswalk. These improvements will enhance safety for all users.
- Consider installing a rectangular rapid flash beacon (RRFB) to warn drivers of potential pedestrians crossing at southbound right turning movement off of Normandale Boulevard. This could help calm traffic which could provide a safer environment for pedestrians to cross.
- Evaluate the benefit of adding an island between the two northbound lanes at West 84th Street and Normandale Service Road. The street is wide for pedestrians to cross.
- Improve sidewalk and trail on American Boulevard Bridge over Normandale Boulevard. Consider adding public art or other enhancements to the bridge to create a gateway effect and enhance the pedestrian experience.
- Improve pedestrian crossing on the south side of West 84th Street and Normandale Boulevard to create a safer more pedestrian friendly environment.
- Install lighting at the existing pedestrian bridge over West 84th Street.

Improved Connection

- Fill gaps in the sidewalk network. A sidewalk should be installed along the south side of American Boulevard when the adjacent property (“Jostens’s site”) develops.
- Rehabilitate existing abutments on pedestrian bridge over West 84th Street. The bridge is in need of rehabilitation.
- East Bush Lake Road bicycle and pedestrian connection between Normandale Lake Park (Hyland-Bush-Anderson Lakes Regional Park Reserve) and Nine Mile Creek Regional Trail in Edina.
- Explore potential to create a sidewalk connection on the west side of Normandale Service Road from Hilton/Pacer Center area south toward West 84th Street.
- Implement Alternative Transportation Plan project recommendations and regional trails such as the American Boulevard off road trail.
- The pedestrian bridge over Normandale Boulevard at West 84th Street while no longer required, should be retained as a potential future, long-range project to facilitate a safer environment for pedestrians and bicycles.

Additional Study

- Perform baseline pedestrian and bicycle counts in the District.
- Continue to participate in Three Rivers Park District feasibility study for an East Bush Lake Road bicycle and pedestrian connection to evaluate the feasibility of a trail connection between Normandale Lake Park (Hyland-Bush-Anderson Lakes Regional Park Reserve) and Nine Mile Creek Regional Trail in Edina.
- Discuss interim pedestrian connection from West 82nd Street to Life Time Fitness with private property owners. This could significantly reduce walking distance between the east and west halves of the District and encourage more pedestrian activity.
- Work with Hennepin County to study pedestrian crossing and other potential streetscape improvements to enhance the pedestrian realm at West 84th Street and Normandale Boulevard.

Transit Progress

The 2008 NLDP focused on creating a more transit friendly environment through enhanced bus stops and improved service. Working with Metro Transit, routes have been modified to improve access and increase efficiency. The 589 Route provides express service from the District to downtown Minneapolis. Additional east/west service is provided by the 542 and 540 routes. All three routes generally operate every 15-30 minutes.

To improve the user experience two enhanced bus stops were constructed in areas that experience high ridership. The bus stop enhancements included a shelter and decorative concrete pad that matches the streetscape design. Additionally, two stops have been outfitted with a decorative concrete pad. Almost every stop directly connects to a sidewalk. This helps users navigate to and from the stops. A summary of project status is provided in Table 8 with locations shown in Figure 14.

Pictures of Transit Improvements



Decorative concrete pad



Enhanced bus stop with shelter.

Incremental improvements made in conjunction with new road and development projects have resulted in a comprehensive sidewalk and trail network. The 2008 NLDP focused on creating a needed pedestrian and bicycle connection over Normandale at West 84th Street as part of the proposed intersection improvements. Since the intersection improvements are no longer deemed necessary, the need for a pedestrian bridge is greatly reduced. Focus can be shifted towards enhancing the sidewalk and trail network and addressing existing barriers such as improving crosswalks.



Transit Enhancements	
Work with Metro Transit to modify routes serving the District to improve access and efficiency.	Completed
Expand AM and PM reverse commute trips between downtown Minneapolis and Normandale Lake Office Park.	Completed
Enhance design of existing bus stops. Coordinate with streetscape enhancements.	Designed and partially installed in 2009
Design and construct an enhanced transit stop to serve the east side of the District.	Designed
Work with Metro Transit to improve east-west transit service along American Blvd.	Completed

Table 8: Status of 2008 Normandale Lake District Plan Transit Enhancement Projects

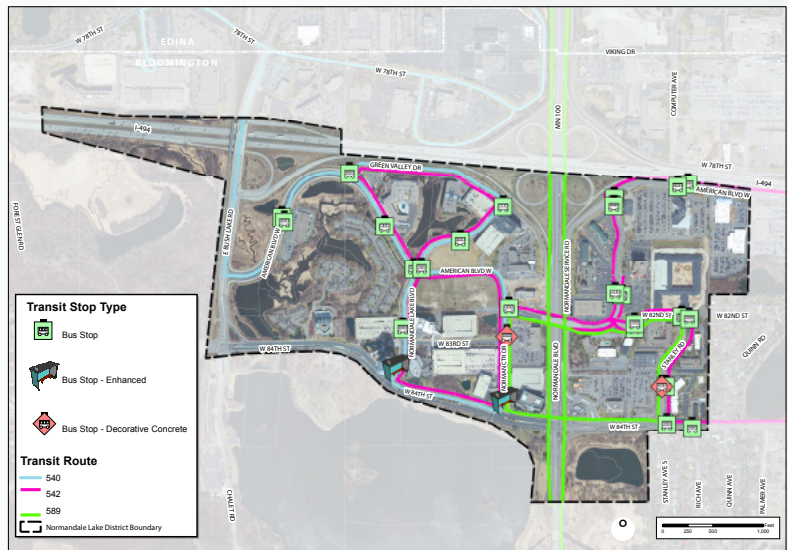


Figure 14: Transit Enhancements

Other Considerations

The District has experienced growth in residential units and is projected to continue to attract a mix of uses as it redevelops. This increased mix of uses will change transit needs. Current and future residents will demand transit service that connects them to work centers in other areas of Bloomington and the Region. Likewise, with a significant concentration of office space, the District will remain a regional employment center with workers desiring convenient transit access. The number of commuters using specific transit stops will fluctuate as new development occurs. The current locations of transit stops provide excellent access to transit. No part of the District is further than a quarter mile walking distance to a transit stop. Ridership demand is an important factor in determining what, if any, additional transit stop enhancements are recommended. Given that transit service is well distributed throughout the District the quality of transit will be an important factor to encourage transit ridership. This includes the frequency of trips as well as the quality of transit facilities (i.e. shelters, concrete pads, heaters).

Proposed transitways outside the District may have implications on transit service to the District. The construction and completion of the Orange Line Bus Rapid Transit and Southwest Light Rail may have stations that could be easily accessible to the District through coordinated transit service. Coordination with Metro Transit and Southwest Transit will be important as these projects move forward.

Recommendations

Transit needs will continue to evolve as development and redevelopment occurs. The City should continue to work with Metro Transit to improve access and promote transit ridership. Transit ridership directly contributes to a reduction in commuter congestion. To support transit, the City will continue to explore, with Metro Transit, the feasibility of Arterial Bus Rapid Transit along American Boulevard. The City should also continue its collaboration with the I-494 Corridor Commission. The Commission advocates for congestion relief of I-494 through improved transit access to important destinations along the corridor. Other improvements such as route adjustments and enhanced bus stops should be addressed as needed as the District continues to develop.

Utilities

Progress Since 2008

Sanitary sewer and water services are provided by the City of Bloomington and were reviewed as part of the 2008 NLDP. The plan found that while available water service would accommodate the anticipated growth there would likely be issues related to sanitary sewer, particularly on the east side of the District. The City has worked with the Metropolitan Council Environmental Services (MCES) to identify potential improvements to the system, which are described in Table 9. The 2008 NLDP did not find any issues or recommend projects pertaining to the water system infrastructure. The utilities section can be found on page 5.17-5.18 of the 2008 NLPD.

Utility Improvements — Sanitary Sewer	
Work with MCES and Edina to address capacity constraints in 3-BN-499 interceptor	Temporary fix done in 2009
MCES interceptor improvements	TBD by Met Council
Improvements to water and sanitary systems	None needed

Table 9: 2008 Normandale Lake District Plan Utility Improvements

Other Considerations

Primary land use can impact the needs for different utilities. Residential uses create higher demand for sanitary sewer and water service than office uses especially during the evening. The mixed-use and commercial development scenarios were used to model sanitary and water system needs. The models show similar needs between the two

Transit plays an important role in enhancing access to the District and helping to reduce peak hour congestion. Changes to service and modifications to routes impact ridership. The City should continue to work with Metro Transit to ensure the District residents and employees are well served.



scenarios for sanitary and water improvements. Redevelopment in the eastern section of the District will have the greatest impacts on the existing water and sanitary sewer systems. The results of the utility system models are explained below. Stormwater management will be addressed in the next section of this document.

Water

Water service needed to accommodate future development was modeled for the mixed use and commercial land use scenarios and found to be substantially adequate under both scenarios for commercial and domestic water use. Both scenarios, however, result in fire flow deficiencies in this area primarily because the recently opened Luxembourg Apartments uses most of the domestic capacity of the 6 inch supply lines on West 82nd Street and Stanley Road. The deficiency is more pronounced beyond the eastern boundary of the District, but is less critical because affected properties are mostly single family as compared to multifamily and commercial.

Locations with water capacity for fire protection deficiencies are illustrated on Figure 15. These are the deficiencies anticipated if all projected (2040) development occurs and no additional system improvements are made.



Figure 15: Year 2040 Water Capacity without Improvements

Recommendations

A minor but critical water main improvement is the completion of the link from the northwest corner of the recently completed Luxembourg development to the water main in the Stanley Road extension that connects to the 8 inch main on American Boulevard as shown in Figure 16. New additional demand originating from development in the area bounded by Normandale, West 82nd Street, West 84th Street, and Stanley Road could be supported by a new internal private loop originating from either Normandale Boulevard or West 84th Street and connecting to West 82nd Street at the Luxembourg development or by increasing the main size on either West 82nd Street or on Stanley Road. The most efficient supply option to relieve the deficiencies would be to increase the size of the main in West 82nd Street from Normandale Boulevard to the southwest corner of the Luxembourg site. No additional development demands should be placed on the 6 inch

main on West 82nd Street without upgrading it to the minimum size of 8 inches needed for higher density or commercial areas. If the water main improvements on West 82nd Street and north of Luxembourg are installed, the fire flow for the District is fully compliant as shown in the model results in Figure 16.



Figure 16: Year 2040 Water Capacity with Improvements

Whether the future development proceeds in accordance with the commercial scenario or mixed-use scenario, some localized water main improvements are recommended. The following infrastructure improvement projects have been identified to support both land use scenarios:

- Install 140 feet of new 8 inch water main north of Luxembourg and 950 feet of 8 inch water main replacement in West 82nd Street. This will alleviate water service issues in the eastern part of the District.
- An alternative to the 950 feet of water main replacement would be installing 2000 feet of 12 inch water main replacement concurrently with the sewer and force main work planned by the Metropolitan Council on American Blvd W. and W. 82nd St.
- Install a private loop system if it can be coordinated with potential redevelopment south of West 82nd Street.
- Continue to collaborate with the Metropolitan Council Environmental Services to improve the area’s lift station and complete interceptor improvements.
- Add a 160 foot water main connection near Luxembourg Apartments.
- Upgrade the Chalet Lift Station Pumps (future project).

Sanitary Sewer

Sanitary sewer needs were also modeled under the mixed-use and commercial scenarios and both scenarios resulted in similar outcomes regarding future sanitary sewer demand. In both scenarios, the same pipe segments exceed the flow thresholds, however the mixed-use scenario was slightly worse; exceeding the commercial scenario by less than 10 percent.

Modeling indicated that several existing pipes will have peak flow levels that exceed the City’s maximum threshold. The models indicated surcharging may occur.





Since the peak flow levels modeled exceed the City's threshold, the Utilities staff will continue to monitor and evaluate the actual flow during peak periods. Staff will use that information to evaluate new development and determine their impacts as they come on line. Development that contributes to excessive sewer system flow levels may need to participate in necessary system replacement costs. A potential solution is to upsize several pipes. The specific improvements are discussed below.

Recommendations

Projects in the short term and mid-term have been identified to address potential sanitary sewer needs. Modeling has identified some system deficiency when development reaches full build out in 2040. To address those issues the following infrastructure improvement projects have been identified:

- Increase sanitary sewer to 21 inches under West 84th Street between East Bush Lake Road and Normandale Lake Condos.
- Increase portions of the sanitary sewer to 15 inches under West 84th Street between Norman Center Drive and Stanley Road.

Stormwater Management

Progress Since 2008

Stormwater can impact the quality of water in lakes, streams, and rivers and in heavy rain events cause flooding of roads and even structures. The City of Bloomington addresses stormwater management through its Local Surface Water Management Plan (LSWMP). Many of the recommendations in the 2008 NLDP were to continue enforcing the City's existing stormwater management strategies and update the LSWMP. Specific stormwater improvement projects were identified in the 2008 NLDP on pages 5.18-5.19 and 6.2. Completion of these projects is on-going and is typically coordinated with road improvements or construction projects. There has not been any additional need for significant storm sewer infrastructure improvements in the District. More recent development in the area currently meets the City's LSWMP goals; while future redevelopment will be required to implement stormwater management as part of the redevelopment project. The City's LSWMP is in the process of being updated to accurately reflect the City's goals for water resource management and provide direction towards achieving those goals through policies and standards such as the incorporation of low impact design (LID) techniques. The Normandale Lake water quality improvement project is currently under way. The City and Nine Mile Creek Watershed District are working with the Army Corps of Engineers to develop and implement lake management concepts aimed at improving the ecological function and water quality within the lake. Normandale Lake is a manmade lake created to provide flood control and protect human life and structures. The watershed area that drains to Normandale Lake is over 21,000 acres and 27% is within Bloomington. Other areas include portions of Hopkins, Edina, Eden Prairie, and Minnetonka. Due to the large urban watershed, the lake is subject to significant inputs of stormwater

runoff and upstream nutrient loading. The City currently treats the vegetation on Normandale Lake with aquatic herbicides under a permit from the Minnesota Department of Natural Resources and the Corps of Engineers. During the permitting process to create Normandale Lake, a condition was placed on the lake prohibiting vegetation control on the west half of the lake. Thus, only the east half of the lake can currently be managed for aquatic vegetation. Additional restrictions limit what can be treated on the east side of the lake to 15% of the 112 acre surface area. Closely tied to water quality and overall ecosystem health is an aquatic plant population diversity. Any potential future management techniques will be centered on developing a plan for controlling invasive plant species and reintroducing and re-establishing a more diverse and expansive native plant community within the lake with the goal of improving and protecting water quality.



Stormwater Management	
Water quality and storm sewer infrastructure improvements as needed to meet City's Comprehensive Surface Water Management Plan (CSWMP) goals, NPDES MS4 permit requirements or TMDL implementation plan requirements	No particular projects to note
Normandale Lake Water Quality improvement project	2018-2019
Update City's LSWMP to accurately reflect the City's goals and policies for water resource management	2016-2018

Table 10: 2008 Normandale Lake District Plan Stormwater Management Improvements

Other Considerations

Policies provide an effective tool for stormwater management and are typically realized during site design. The 2008 plan identified several policy improvements that the City is currently working on. These include best management practices for LID techniques, evaluation of stormwater as part of the project application review, and requiring stormwater management plans in coordination with project approval. Since the development of the NLDP, both development assumptions and stormwater management requirements have changed. In 2015, Section IV of the LSWMP was amended to include additional requirements for post construction stormwater runoff management including: promoting green infrastructure techniques, additional volume control requirements, infiltration area restrictions, and long-term maintenance. Regardless of land use, development sites are required to be designed to appropriately accommodate anticipated stormwater quantity and also address water quality.



Recommendations

Stormwater management is required as part of each site design regardless of land use. Policy has helped guide the standard design principles that are required for site level stormwater management. No major upgrades to stormwater infrastructure have been identified to accommodate forecast development in the District. Recommendations to better manage stormwater include:

- Continue to improve and update the City's Local Surface Water Management Plan to include promoting green infrastructure techniques, additional volume control requirements, infiltration area restrictions, and long-term maintenance.
- Collaborate with the Nine Mile Creek Watershed District on water quality improvement efforts for Normandale Lake.

Normandale Lake



Normandale Lake is a shallow lake with abundant aquatic plant growth, including Curlyleaf Pondweed, which is an aquatic invasive species.

Projects outside of the District

Progress Since 2008

Several projects were identified as part of the 2008 NLDP that were outside of the study area boundary. These projects helped to alleviate traffic issues, create a sense of place when entering the District, and supported efforts to create a welcoming environment around the District's boundaries. Nearly every project recommended in the 2008 NLDP has been completed or is under construction (see Table 11). One exception is the westbound I-494 Entrance ramp off East Bush Lake Road, which was not included in the 2008 NLDP as funding was deemed very speculative at the time. That project has now been fully funded and construction began in 2017. As noted previously, the ability to implement this project is one of the key drivers of this update as it has significant impacts on traffic flow and congestion, and alleviates the need for major reconstruction of the intersection of West 84th Street and Normandale Boulevard.

Outside the District Improvements	
Construct median in Normandale Blvd. between Nine Mile Creek and 94th Street to create protect turn lanes	Under Construction
Identify traffic management measures for residential area south of W. 84th St., east of Stanley Rd.	Completed
Install traffic calming measures in neighborhood south of W. 84th St., east of Stanley Rd.	Completed
Construct access ramp to WB I-494 at E. Bush Lake Rd.	Under Construction
Remove house on Sharrett property (north side of Normandale Lake)	Completed
Miscellaneous path improvements and maintenance in Normandale Lake Park	Completed
Design and install kiosks and identification signs in Normandale Lake Park	Completed

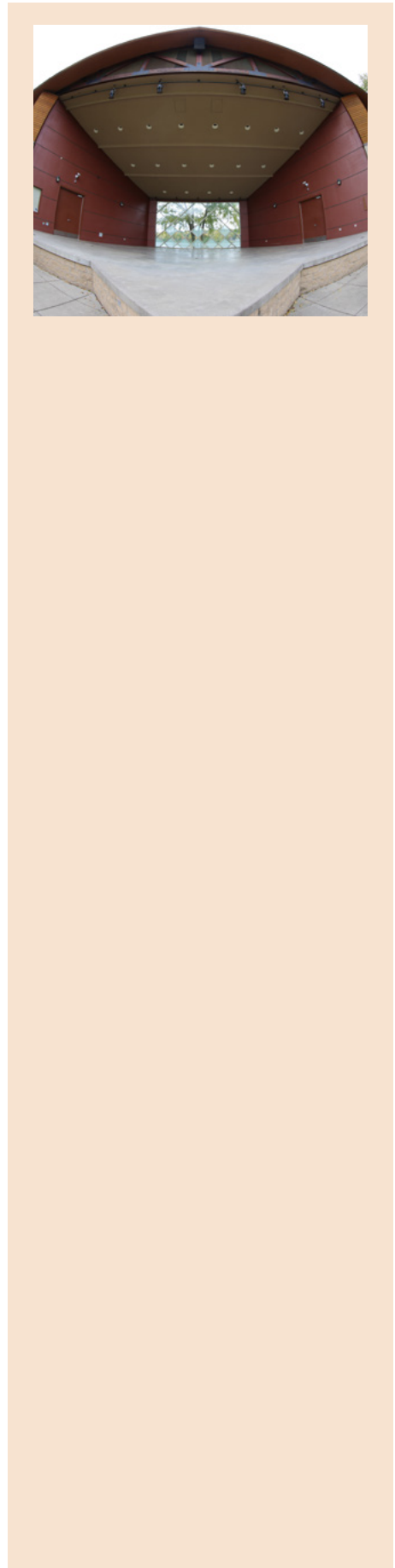
Table 11: 2008 Normandale Lake District Plan Other Improvements Outside the District

Normandale Lake District Sign



This sign incorporates the district brand while directing to amenities outside the district.

Additionally, an off road multiuse trail has been included as part of the construction along Normandale Boulevard south of the District. This trail will connect the District’s trail network to the West 94th Street Bikeway. The west 94th Street Bikeway provides an east-west connection into Hyland-Bush-Anderson Lakes Regional Park Reserve to the west connecting to the Normandale Boulevard Trail. It is a major east-west bikeway. The Normandale Boulevard Trail is included in the City’s Alternative Transportation Plan (ATP) and will eventually connect with the completed trail segment south of W. Old Shakopee





Road that turns west along Auto Club Road and provides access to the Minnesota River Valley. It is identified as a Community Corridor which provides intra-city connections to local destinations in the city as well as access to regional trails. Local destinations may include recreational, institutional, and commercial uses, as well as transit facilities, all of which are found in the District.

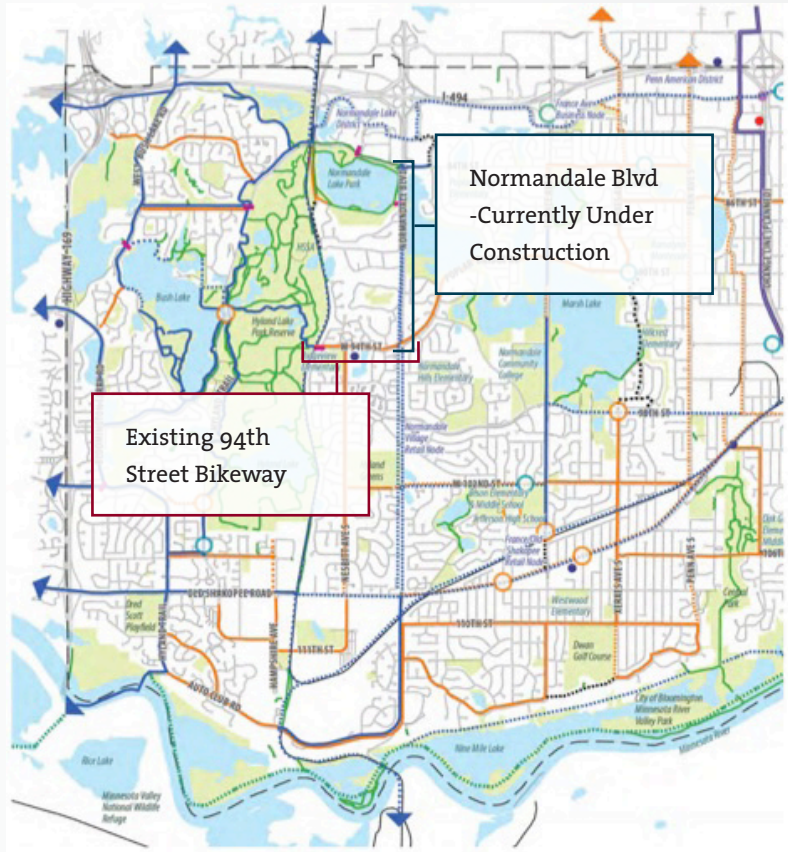


Figure 17: Alternative Transportation Plan Proposed Projects

Additional Considerations

The District boundary was expanded for this update to incorporate the I-494/East Bush Lake Road interchange. However, there are still areas outside the District that are impacted by development in the District. Most notably is East Bush Lake Road north of I-494. The additional I-494 entrance ramp will generate traffic and impact the adjacent road network.

Similarly projects outside the District may impact the District. An example being the newly constructed Nine-Mile Creek Regional Trail. This trail runs east and west just north of the District in Edina. The close proximity to the District and Hyland-Bush-Anderson Lakes Regional Park Reserve could potential increase bicycle and pedestrian traffic. East Bush Lake Road provides the nearest connection over I-494 to connect to the Nine Mile Creek Trail. Signs that this will become an informal route.

Recommendations

Projects outside the District can influence the District and similarly projects inside the District have influence outside the District. Projects that influence the area include the Nine-Mile Creek Regional Trail,

American Boulevard Corridor Study, and East Bush Lake Road On-Ramp. The Nine-Mile Creek Trail Regional Trail will connect the Minnesota Valley Refuge to Hopkins through Bloomington, Richfield, Minnetonka, and Edina. Segments have been completed in Edina just north of the District. East Bush Lake Road has potential to become a popular bike route connecting to the trail. Pedestrian and bicycle movements should be monitored. Additional safety considerations might become necessary if there is a significant increase in pedestrian and bicycle travel. There is potential to make a formal connection from the Nine-Mile Creek Regional Trail to the District and Bloomington's trails. This will provide regional bicycle access to the District from neighboring communities to the north. A feasibility study for connection between Hyland-Bush-Anderson Lakes Regional Park Reserve is recommended.

Bicyclist on East Bush Lake Road



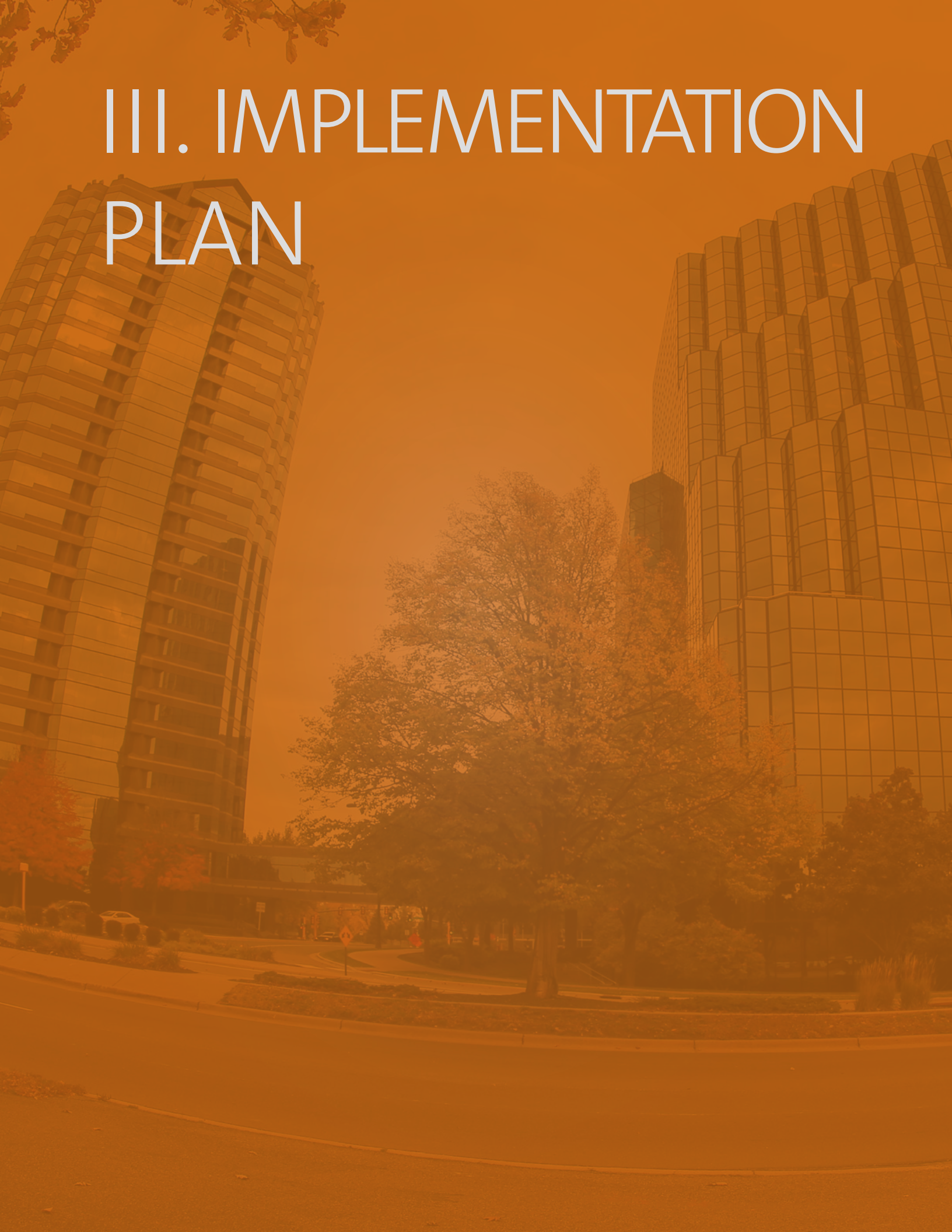
These bicyclists were observed riding on East Bush Lake Road trail west of Chalet Road along East Bush Lake Road over I-494 presumable to connect to the recently opened Nine Mile Creek Trail.

An American Boulevard Corridor Study is proposed to understand how best to utilize the existing corridor. American Boulevard acts as a reliever to I-494 and connects to the Penn American District and South Loop District. Preliminary traffic analysis shows potential to incorporate a multimodal approach to the corridor. Additional study is proposed to evaluate the corridor's potential.

The improved access to I-494 at East Bush Lake Road will ease traffic congestion at Normandale Boulevard and West 84th Street but will also increase traffic at East Bush Lake Road and 78th Street. As part of the construction of the on-ramp or shortly thereafter improvements should be made to the East Bush Lake Road and 78th Street. This will need to be coordinated with the City of Edina because the intersection is located on the border between the two cities.

Projects outside the District affect how people get to the District and know when they have arrived. Working with partners such as Three Rivers Park District, MnDOT, and the City of Edina is crucial to ensure a well-connected District that services both Bloomington and their respective interests.

III. IMPLEMENTATION PLAN





Implementation Plan

Summary of Plan Recommendations

The recommendations described in the previous chapter are summarized in Table 12: Proposed Public Improvements in the District. The anticipated time frame and responsible agency or partner for the implementation of each is task is identified.

Action/Task	Responsible Party	City cost	Status
Engineering Studies			
American Blvd. multi-modal corridor study: Analyze ways to balance walking, biking, and transit needs with vehicle traffic	Bloomington	\$120,000	Future project
Roadway Improvements			
Construct access ramp to westbound I-494 at E. Bush Lake Rd.	MnDOT, Hennepin County, Bloomington	\$530,000	2017-2018
Add left turn restriction signage during peak times at W. 84th St. /Normandale Service Road	Bloomington	Minimal City Cost	Short-term
Signal timing modifications <ul style="list-style-type: none"> Study on E. Bush Lake Rd. between 78th St. and W. 84th St. Norman Center Dr. and American Blvd. Normandale Lake Blvd. and W. 84th St. Explore leading pedestrian signals where applicable 	Bloomington /Hennepin County	\$12,000	Short-term
Extend median south on Normandale Lake Blvd. towards American Blvd. Also move stop signs closer to American Blvd.	Private Developer	No City Cost	Future Project
Adjust western curb line south of W. 83rd St. along Norman Center Dr. to improve compliance with one-way operations	Bloomington	\$120,000	Future Project

* Project contingent on funding partnership with Hennepin County, Three Rivers Regional Park District, and City of Edina.

**Project contingent on funding partnerships with Hennepin County, Three Rivers Regional Park District, and City of Edina as well as Federal and/or other regional grant dollars.

NORMANDALE LAKE DISTRICT PLAN UPDATE

American Blvd. and Normandale Lake Blvd.			
<ul style="list-style-type: none"> • Install a signal • Construct a northbound right turn lane 	Bloomington	TBD	Future Project

Bicycle and Pedestrian Projects

Fill in sidewalk gaps	Private developer	No City Cost	As development occurs
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North side of W. 84th St. and Normandale Blvd. pedestrian crossing improvements			
<ul style="list-style-type: none"> • Install new ramps and pedestrian actuated signals to meet ADA standards • Remove median nose 	Bloomington	\$50,000	Short-term

South side of W. 84th St. and Normandale Blvd. pedestrian crossing improvements	Bloomington	\$50,000	Short-term
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Rehabilitate existing abutments on pedestrian bridge over W. 84th St. and install lighting	Bloomington	\$520,000	Short-term
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Perform baseline pedestrian and bicycle counts	Bloomington	City Budget	Short-term
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E. Bush Lake Rd. bicycle and pedestrian connection feasibility study. Participate in Three Rivers Park District Study for a 1.5 mile connection between Hyland Park and Nine Mile Creek Regional Trail in Edina*	Bloomington	\$10,000	Short-term
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E. Bush Lake Rd. bicycle and pedestrian connection between Hyland Park and Nine Mile Creek Regional Trail. Funds would be used as a match for Federal and/or other regional grant funding**	Bloomington	\$500,000	Short-term
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* Project contingent on funding partnership with Hennepin County, Three Rivers Regional Park District, and City of Edina.

**Project contingent on funding partnerships with Hennepin County, Three Rivers Regional Park District, and City of Edina as well as Federal and/or other regional grant dollars.





Explore a rectangular rapid flash beacon (RRFB) to help pedestrians cross southbound right turning movement off of Normandale Blvd.	Bloomington, Hennepin County	\$50,000	Short-term
Explore adding an island between the two northbound lanes at W. 84th St. and Normandale Service Rd.	Bloomington	TBD	Future Project
Discuss interim pedestrian connection from W. 82nd St. to Life Time Fitness with private property owners.	N/A	No Cost	Short-term
Explore sidewalk connection on the west side of Normandale Service Rd. from Hilton/ Pacer Center area to make another pedestrian connection to Poor Richards, etc.	Bloomington	TBD	Future Project
Work with Hennepin County to study pedestrian crossing and other potential streetscape improvements to enhance the pedestrian realm at W. 84th St. and Normandale Blvd.	Bloomington, Hennepin County	\$35,000	Future Project
Improve sidewalk/trail on American Blvd. bridge over Normandale Blvd. Explore adding public art, etc. to the bridge to create a gateway effect	Bloomington	TBD	Future Project
Alternative Transportation Plan project recommendations and regional trails	Bloomington and regional partners	TBD	Future Project
Pedestrian bridge over Normandale Blvd. at W. 84th St.	Bloomington	TBD	Future Project

* Project contingent on funding partnership with Hennepin County, Three Rivers Regional Park District, and City of Edina.

**Project contingent on funding partnerships with Hennepin County, Three Rivers Regional Park District, and City of Edina as well as Federal and/or other regional grant dollars.

NORMANDALE LAKE DISTRICT PLAN UPDATE

Streetscape Enhancements			
Update aerial photos on all map signage	Bloomington	\$10,000	Short-term
Improved landscaping at W. 84th St. and Normandale Blvd.	Bloomington	\$8,000	Short-term
Design and construct mid-term urban design (trees, lighting, sidewalks, planted medians, enhanced bus stops)	Bloomington	TBD	Future Project
Transit Enhancements			
American Blvd. arterial BRT	Metro Transit	TBD	Long-term
Utility Improvements			
Metropolitan Council Environmental Services Lift station	Metropolitan Council	No City Cost	Short-term
Metropolitan Council Environmental Services interceptor improvements	Metropolitan Council	No City Cost	Short-term
Increase water main from 6" to 8" under W. 82nd St. between bridge and Luxembourg apartments	Bloomington	\$600,000	Short-term
Add 160' water main connection near Luxembourg apartments	Bloomington	\$85,000	Future Project
Increase sanitary sewer from 16" to 21" under W. 84th St. between E. Bush Lake Rd. and Normandale condos	Bloomington	\$1,400,000	Future Project
Increase sanitary sewer from 10" to 15" and 12" to 15" under W. 84th St. between Norman Center Dr. and Stanley Rd.	Bloomington	\$1,800,000	Future Project
Chalet lift station pumps	Bloomington	TBD	Future Project





Stormwater Management			
Normandale Lake Water Quality improvement project	Nine Mile Creek Watershed District	No City Cost	Short-term
Update City's Comprehensive Surface Water Management Plan to include Low Impact Design (LID) techniques and criteria	Bloomington	Citywide Plan	Short-term

Table 12: Proposed Public Improvements in the District

Phasing Plan

The implementation of the plan recommendations is expected to occur over three phases. The short term and future projects relate to the readiness of the project. The readiness of the project may be influenced by funding needs, the design needs, and the readiness of related projects.

Short-Term (2018 – 2020)

Short-term projects are anticipated to be completed in the first three years after the plan update is adopted. They are either fairly easy to implement, relatively inexpensive, or have already been studied, planned, and designed. These projects include pedestrian upgrades, traffic control signage, map signage updates, and water main replacement. Additionally, studies have been identified to assist with the planning of future projects.

Future Projects (2021+)

Future projects are anticipated to be completed four or more years after the plan update is adopted. They may require additional study, design, and partner coordination. Resources for these improvements are not always included in the proposed financing strategy but will be identified in relation to future road improvement projects.

Funding Scenario

2008 Funding

The funding strategy developed for the 2008 NLDP improvements included a combination of Special Assessments, Tax Abatement, Hennepin County funds, and Federal grants for a total financial package of \$41.2M (see Figure 18). Springsted, Inc., the City's financial consultant for the 2008 NLDP, prepared a comprehensive cash flow funding model for the proposed public improvements. For the short term improvements, consisting of local road improvements, urban design enhancements, and district signage, the only funding tool used was Special Assessments. For the 2008 NLDP mid-term improvements, consisting of the widened intersection at West 84th Street and

Normandale Boulevard and the pedestrian bridge over Normandale Boulevard, the funding strategy was to use a combination of Special Assessments, Hennepin County Funds, Tax Abatement, and Federal grants. The mid-term projects relied on the City obtaining an \$8M Federal grant. Although the City applied for Federal grants twice for the West 84th Street and Normandale intersection improvement, both times were unsuccessful. Without the Federal grant, the mid-term improvements could not be adequately funded and were placed on hold.

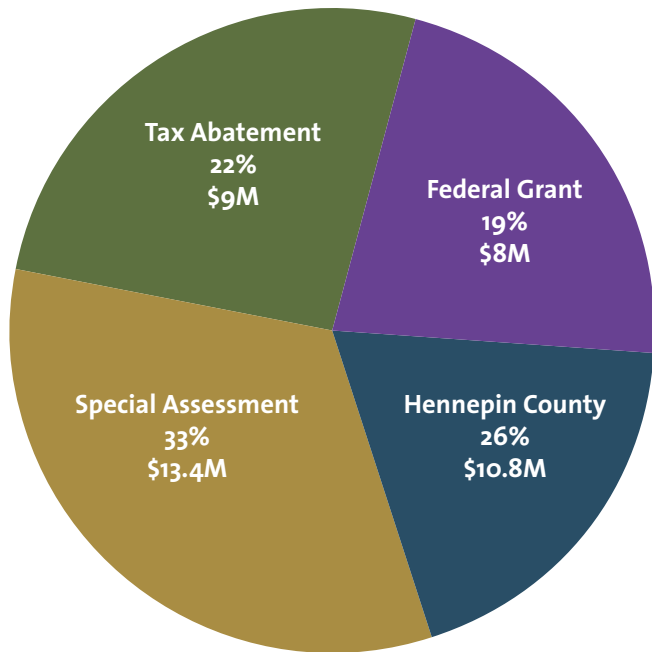


Figure 18: 2008 Funding Strategy

Updates to Funding Scenario

The City began to explore the possibility of a westbound on-ramp to I-494 at East Bush Lake Road and in 2015, the City applied for two grants to fund the on-ramp project and was successful in obtaining funds from both the State-level Transportation and Economic Development (TED) grant and Federal Moving Ahead for Progress in the 21st Century (MAP-21) grant. Those two grants coupled with Hennepin County funds are estimated to nearly fully fund the westbound on-ramp to I-494 at East Bush Lake Road project.

After updating the other proposed improvements in the Normandale Lake District, the estimated total cost (including the on-ramp project) is approximately \$36.9M (Figure 19) City Finance Staff updated the financial models originally created by Springsted, Inc. and determined that no additional Special Assessments are needed to fund the future projects. All of the future improvements are anticipated to be able to be funded completely with Tax Abatement funds.



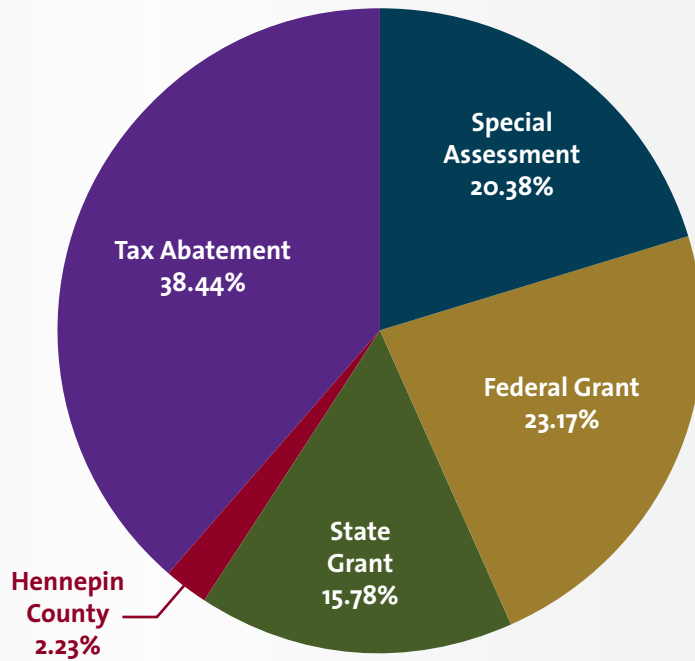


Figure 19: 2017 Funding Strategy

Federal Grant

In 2014, the City applied for and was awarded the MAP-21 Federal grant in the amount of \$7.28M for the westbound on-ramp to I-494 at East Bush Lake Road.

State Grant

In 2015, the City applied for and was awarded the TED grant in the amount of \$5M for the westbound on-ramp to I-494 at East Bush Lake Road.

Hennepin County

East Bush Lake Road is a County Road. The City requested that Hennepin County pay a portion of the design and construction of the westbound on-ramp to I-494 at East Bush Lake Road. Hennepin County has committed to funding up to \$700k for the project.

Commercial Property Owners

The office owners and developers in the northwest quadrant of West 84th Street and Normandale Boulevard entered into special assessment agreements with the City based on the 2008 plan improvements and funding scenario. In 2009, the short-term public improvements were completed and 100% of those costs were assessed to the commercial property owners who had signed agreements. The second phase of the special assessment agreement was for the mid-term improvements to be partially funded with special assessments. With the update to the NLDP, the 2008 mid-term improvements are no longer viable and the westbound on-ramp to I-494 at East Bush Lake Road will serve as traffic mitigation for the District. The updated public improvement costs were analyzed and it was determined that the City will be able to terminate

those special assessment agreements, since this source of funding is no longer needed to fund upcoming improvement projects in the District. In total, approximately \$6.4M was collected from Special Assessments to pay for the 2009 public improvements.

City of Bloomington

The City has committed to use its property tax abatement authority for new development occurring in the District. Several parcels that are estimated to redevelop in the future were selected for inclusion in the tax abatement revenue collection. The first tax abatement resolution for the District was adopted by the City Council in 2007. Since then, there have been updates in 2008, 2010, and 2017, where updates have been made to the resolution. With each tax abatement resolution update, the Bloomington School District and Hennepin County are invited to participate and in all cases, they both have declined. Under State law, the City may collect tax abatement for 20 years on each parcel included in the tax abatement district. It is anticipated that \$12M of property tax abatement funding will be spent on upcoming District improvements. Staff modeled the tax abatement district and it is estimated that up to \$18.6M will be available in tax abatement revenue through the year 2027. Should the District not require any additional public improvements, the City Council may elect to terminate the tax abatement district at any time. However, once terminated, the tax abatement will be exhausted as a funding mechanism in the District in the future.

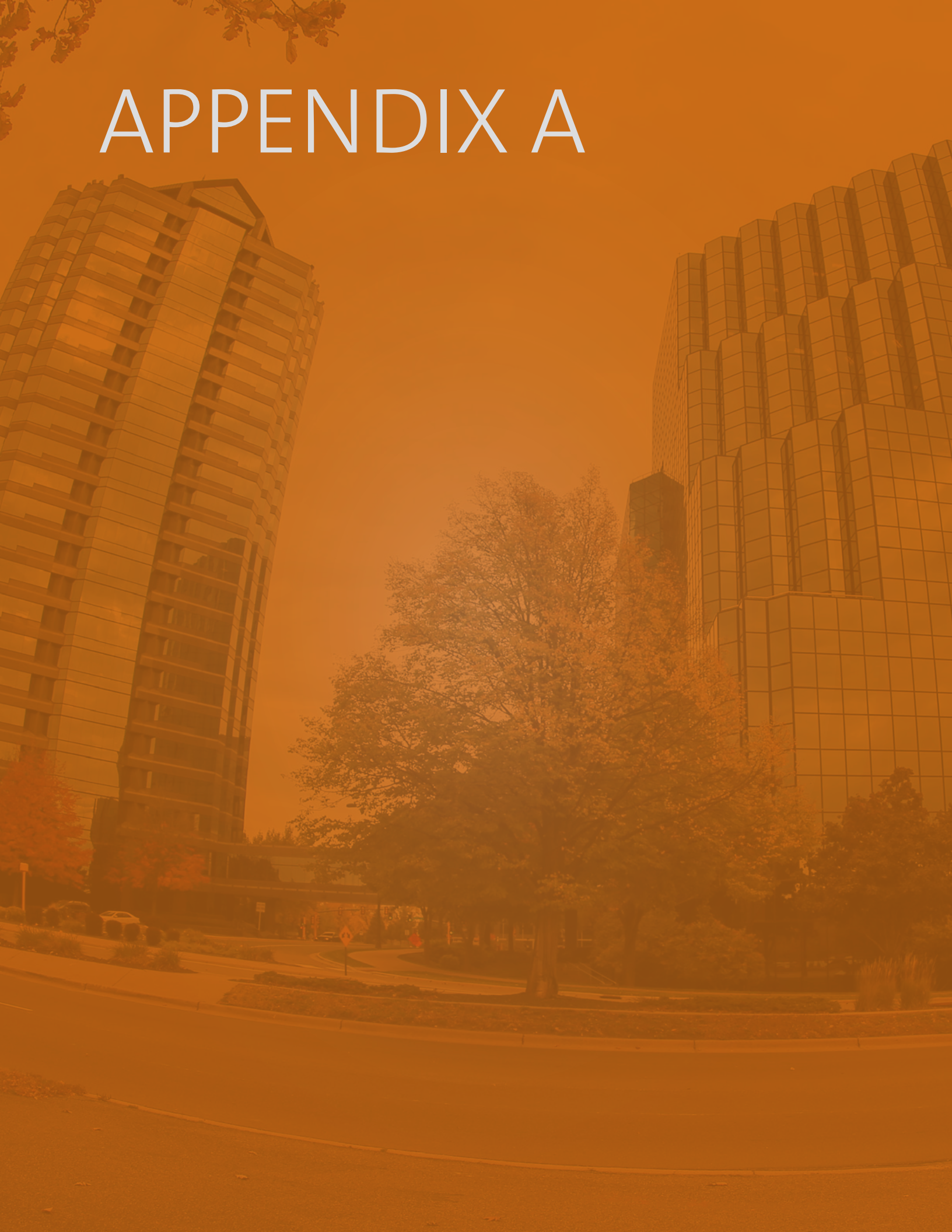


Figure 20: Tax Abatement Areas

Project Element	Total Construction Cost (at year of Construction)	Federal Grant (MAP-21)	State Grant (TED)	Hennepin County	Commercial Property Assessment	Tax Abatement
2009 Projects	\$6.4 M				\$6.4 M	
On-Ramp	\$13.3 M	\$7.3 M	\$5.0 M	\$0.7 M		\$0.4
Future local improvements	\$11.7 M					\$11.7 M
TOTAL	\$31.4 M	\$7.3 M	\$5.0 M	\$0.7 M	\$6.4 M	\$12.1 M
% Share	100%	23%	16%	2%	20%	39%

Table 13: Projected Budget

APPENDIX A



Appendix A: 2008 Normandale Lake District Plan Project Progress

Normandale Lake District Plan Section 6 Implementation Plan

Action/Task	Status
Road Improvements	
Widen W. 83rd St.	Completed in 2009
Install access restriction on Norman Center Dr. between W. 83rd St. and W. 84th St.	Completed in 2009
Install signal at American Blvd. and Norman Center Dr.	Completed in 2009
Install signal at W. 83rd St. and Normandale Lake Blvd.	Completed in 2009
Modify curve at W. 82nd St. and Stanley Rd.	Completed in 2009
Apply for grants for intersection	Failed to receive grant
Reconstruct intersection of W. 84th St. and Normandale Blvd.	Improvement no longer needed
Road Pedestrian Bridge Improvements	
Design and construct pedestrian bridge	Not Required
Work with MnDOT to integrate east ramp approach into berm around Goldman Pond	Not Required
Work with Three Rivers Park District to integrate west ramp with park trails	Not Required
Utility Improvements	
Work with MCES and Edina to address capacity constraints in 3-BN-499 interceptor	Temporary fix done in 2009
MCES interceptor improvements	TBD by Met Council
Improvements to water and sanitary systems	None Completed
Stormwater Management	
Water quality and storm sewer infrastructure improvements as needed to meet City's Comprehensive Surface Water Management Plan (CSWMP) goals, NPDES MS4 permit requirements or TMDL implementation plan requirements.	No projects identified
Normandale Lake Water Quality improvement project (by Nine Mile Creek Watershed District)	Fall 2018-Winter 2019





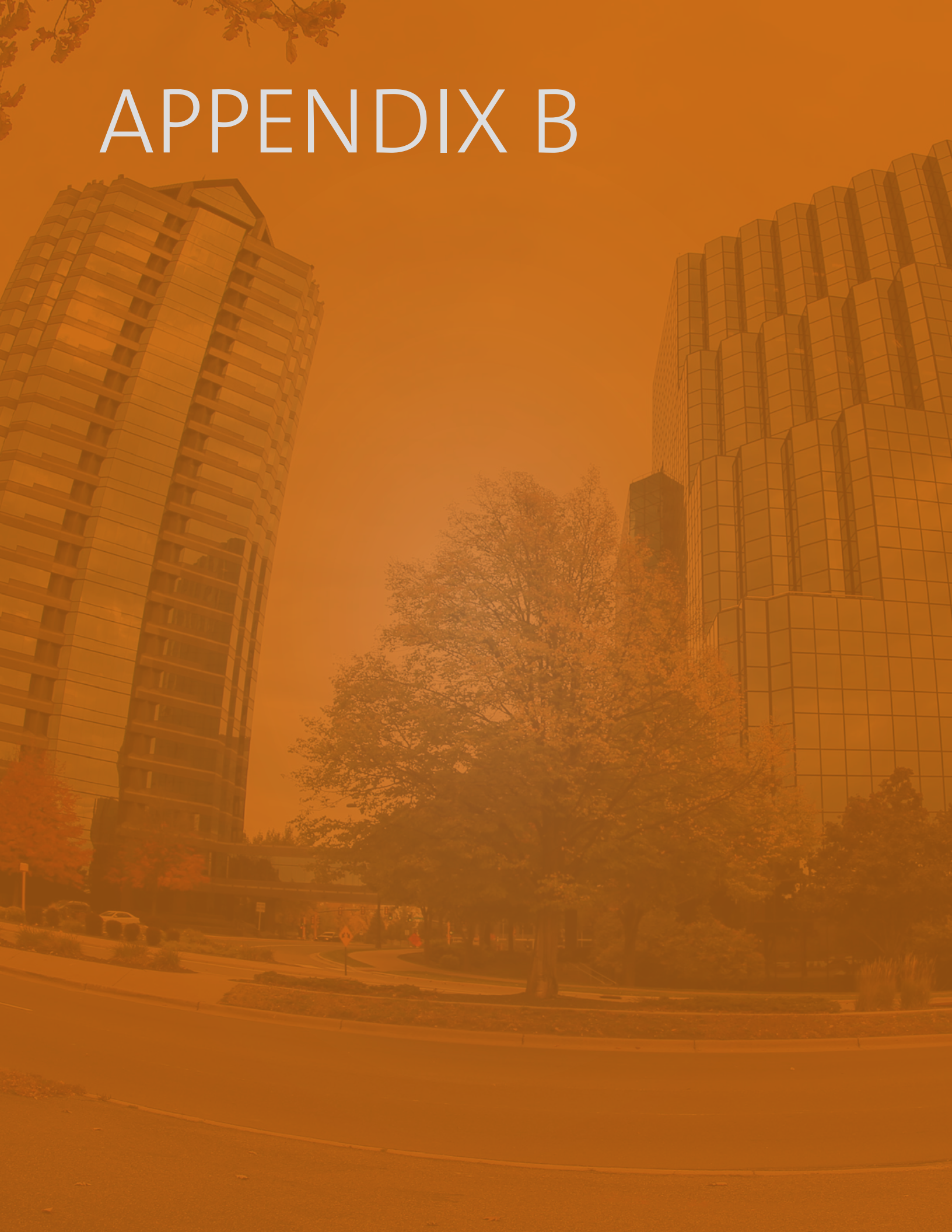
Update City's CSWMP to include Low Impact Design (LID) techniques and criteria.	2016 - 2017
Trails	
Work with MnDOT to develop trails around Goldman Pond connecting to creek underpass tunnel.	Delete
Improve sidewalk/trail on American Blvd. bridge	Not Completed
Remove sidewalks on W. 84th St. and Normandale Blvd.	Delete
Streetscape Enhancements	
Design and construct short term urban design with 2008 planned projects.	Completed in 2009
Design and construct mid-term urban design (trees, lighting, sidewalks, planted medians)	Green streets in map below are complete, all others remain.
Wayfinding Signs	
Coordinate sign design with TRPD, MnDOT, Hennepin County	Completed in 2009
Design wayfinding signs, District street signs, and prepare implementation program	Designed in 2009
Fabricate and install wayfinding signs	Partially installed in 2009
Transit Enhancements	
Work with Metro Transit to modify routes serving the District to improve access and efficiency.	Completed
Expand AM and PM reverse commute trips between downtown Minneapolis and Normandale Lake Office Park.	Completed
Enhance design of existing bus stops. Coordinate with streetscape enhancements.	Designed and partially installed in 2009
Design and Construct an enhanced transit stop to serve the east side of the District	Designed
Work with Metro Transit to improve east-west transit service along American Blvd.	Completed
Land Use and Zoning	
Amend Comprehensive Guide Plan	Completed
Amend zoning	Completed
Develop and adopt District urban design guidelines	Completed

NORMANDALE LAKE DISTRICT PLAN UPDATE

Redevelopment	
Work with property owner to address redevelopment issues (lot consolidation)	On Going
Outside the District Improvements	
Construct median in Normandale Blvd. between Nine Mile Creek and 94th Street	Under Construction
Identify traffic management measures for Poplar Bridge neighborhood	Completed
Install traffic calming measures in Poplar Bridge Neighborhood	Completed
Construct access ramp to WB I-494 at E. Bush Lake Rd.	2018
Remove house on Sharrett property (north side of Normandale Lake)	Completed
Miscellaneous path improvements and maintenance in Normandale Lake Park	Completed
Design and install kiosks and identification signs in Normandale Lake Park	Completed



APPENDIX B





Appendix B

2015 Normandale Lake District Traffic Study