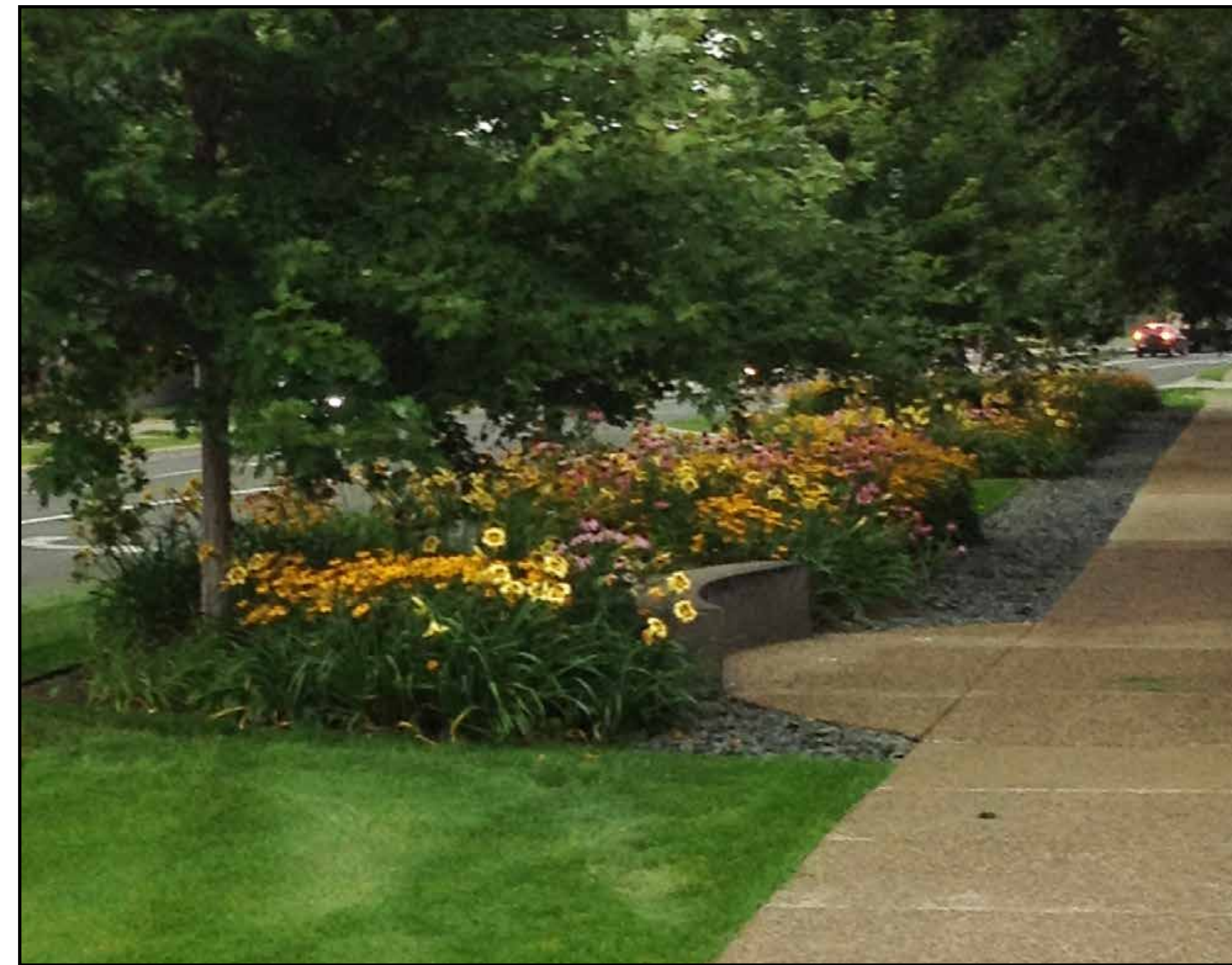
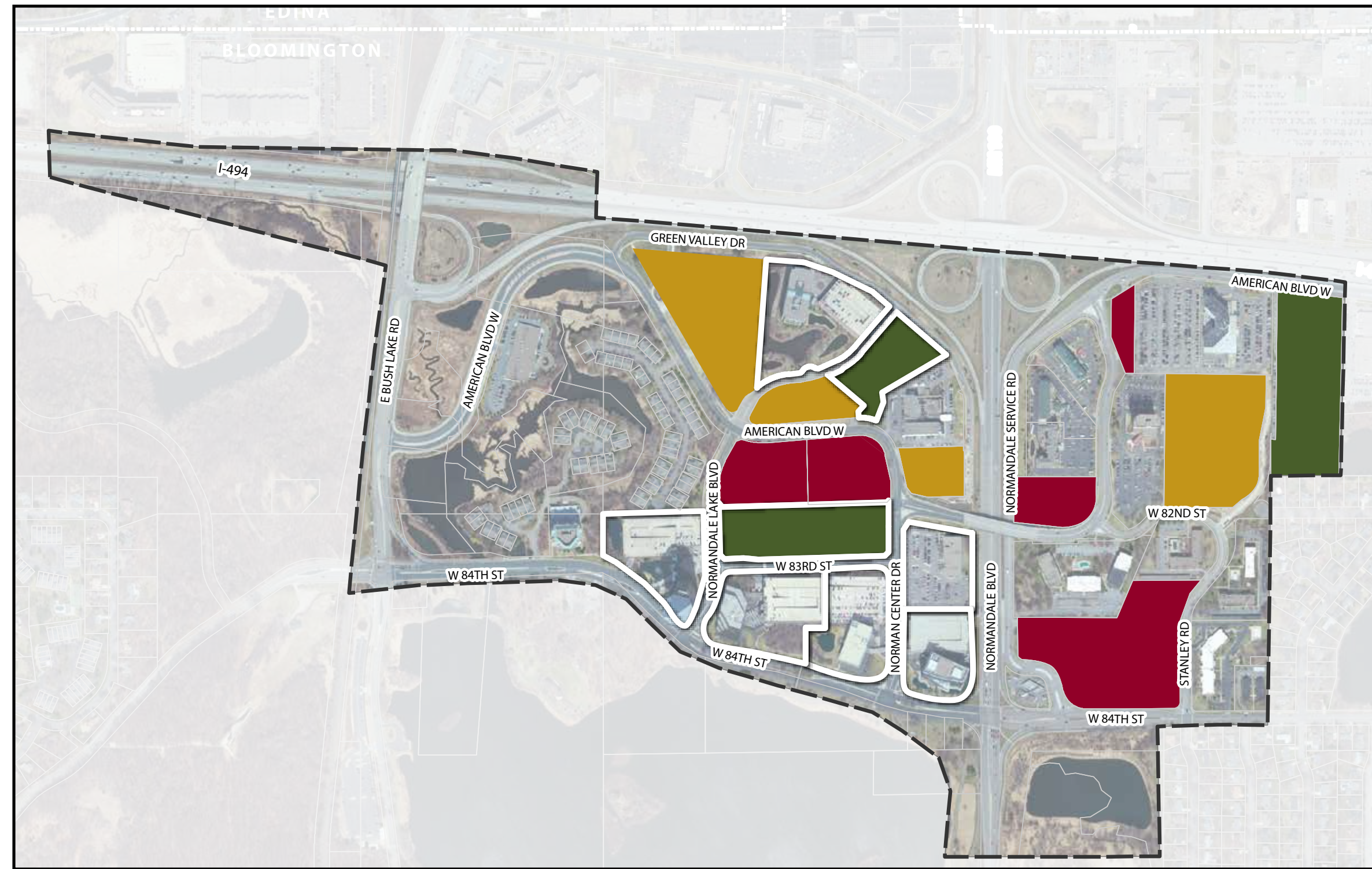


OPEN HOUSE

NORMANDALE LAKE

DISTRICT PLAN

2017 UPDATE



2008 Normandale Lake District Plan

Vision Statement

To position the entire District to gain maximum benefit from private and public investments, the vision for the District is to:

Continue to develop as a high quality, high density mixed use area in a manner that extends, reinforces and celebrates the natural environment.

Goals

1. Expand the park-like character.
2. Improve identity and connectivity.
3. Achieve a more visually cohesive built environment.

The Plan vision and goals set in the 2008 Normandale Lake District Plan will continue to guide the district and the 2017 Plan Update process.

What does the 2017 Plan update include?

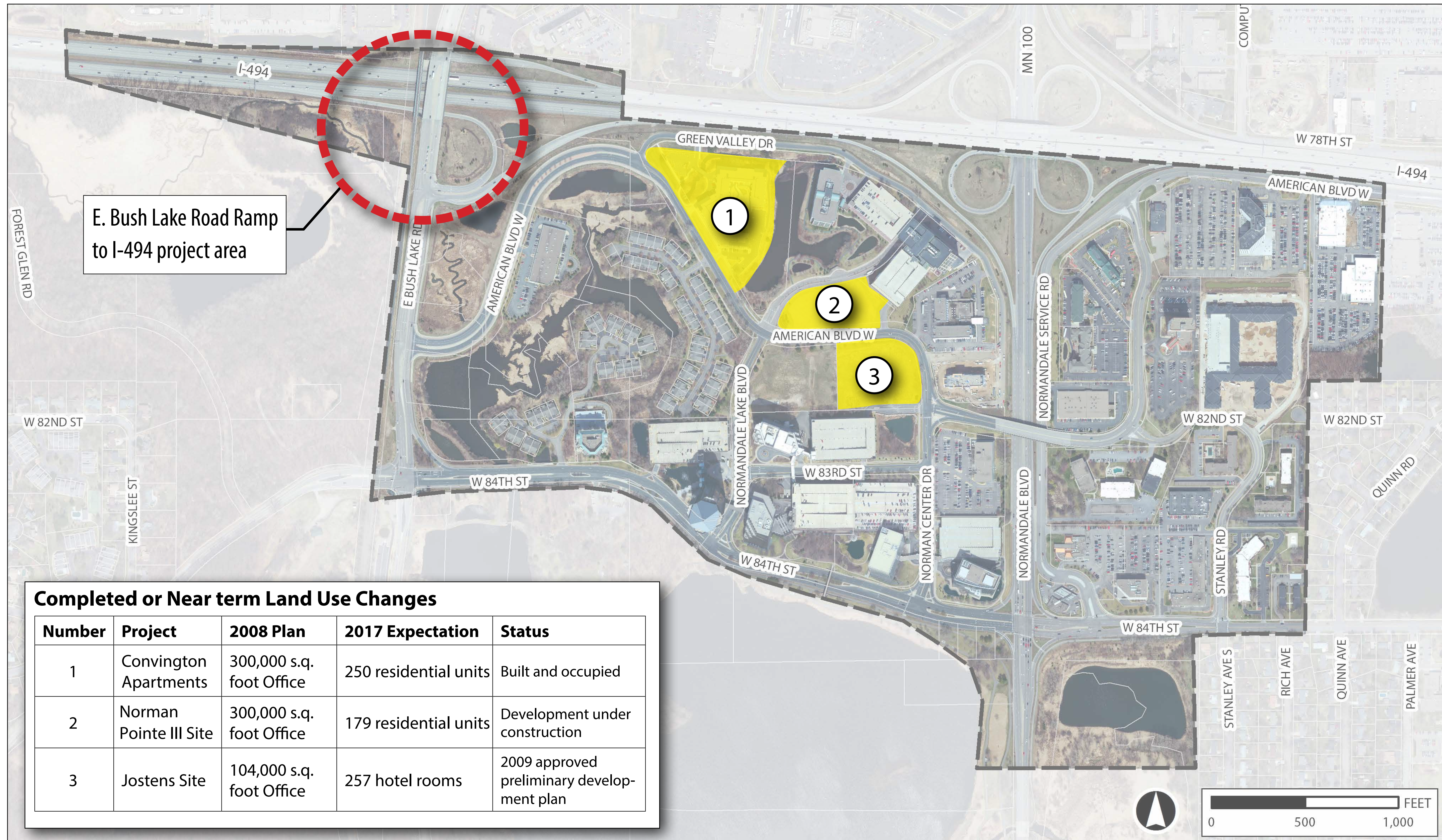
The update to the Normandale Lake District Plan include:

- Updating future land use assumptions.
- Updating traffic and utility modeling based on future land use assumptions.
- Updating the implementation plan based on model outcomes.
- Updating the funding strategy to pay for recommended public improvements in the district.

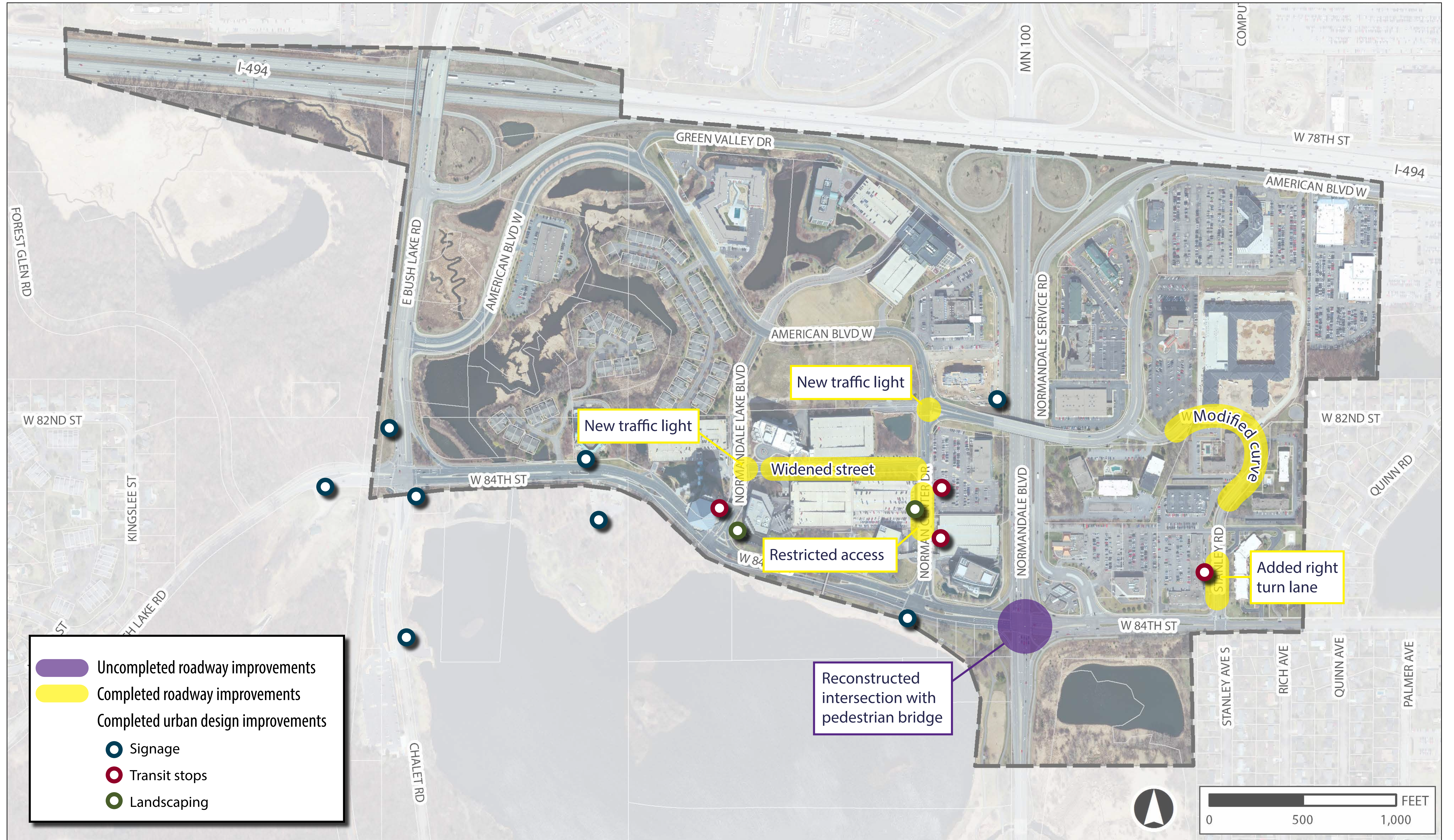
Why are we updating the 2008 Master Plan?

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

2. To incorporate the East Bush Lake Road/I-494 ramp into the district.



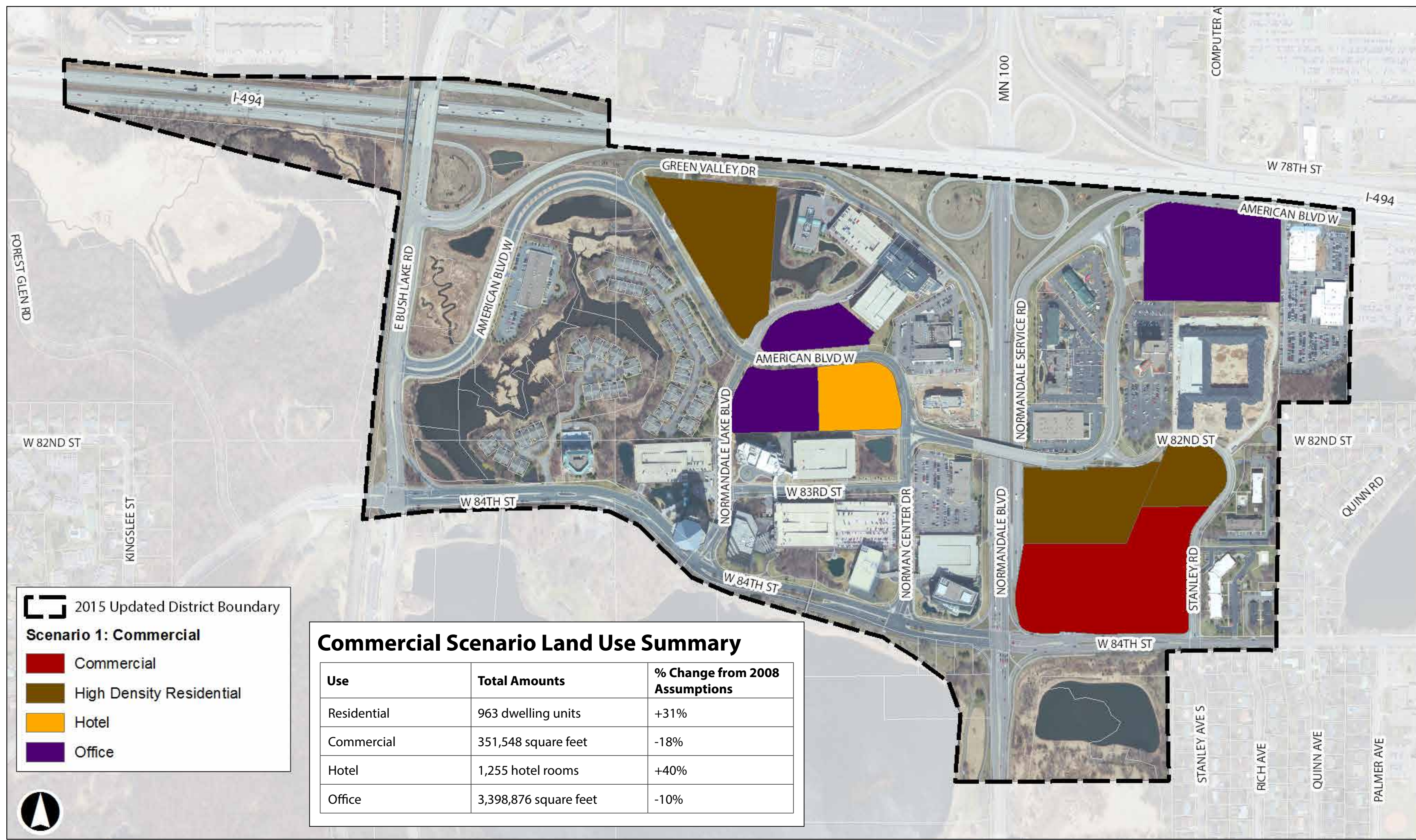
Status of Key 2008 Recommended Projects



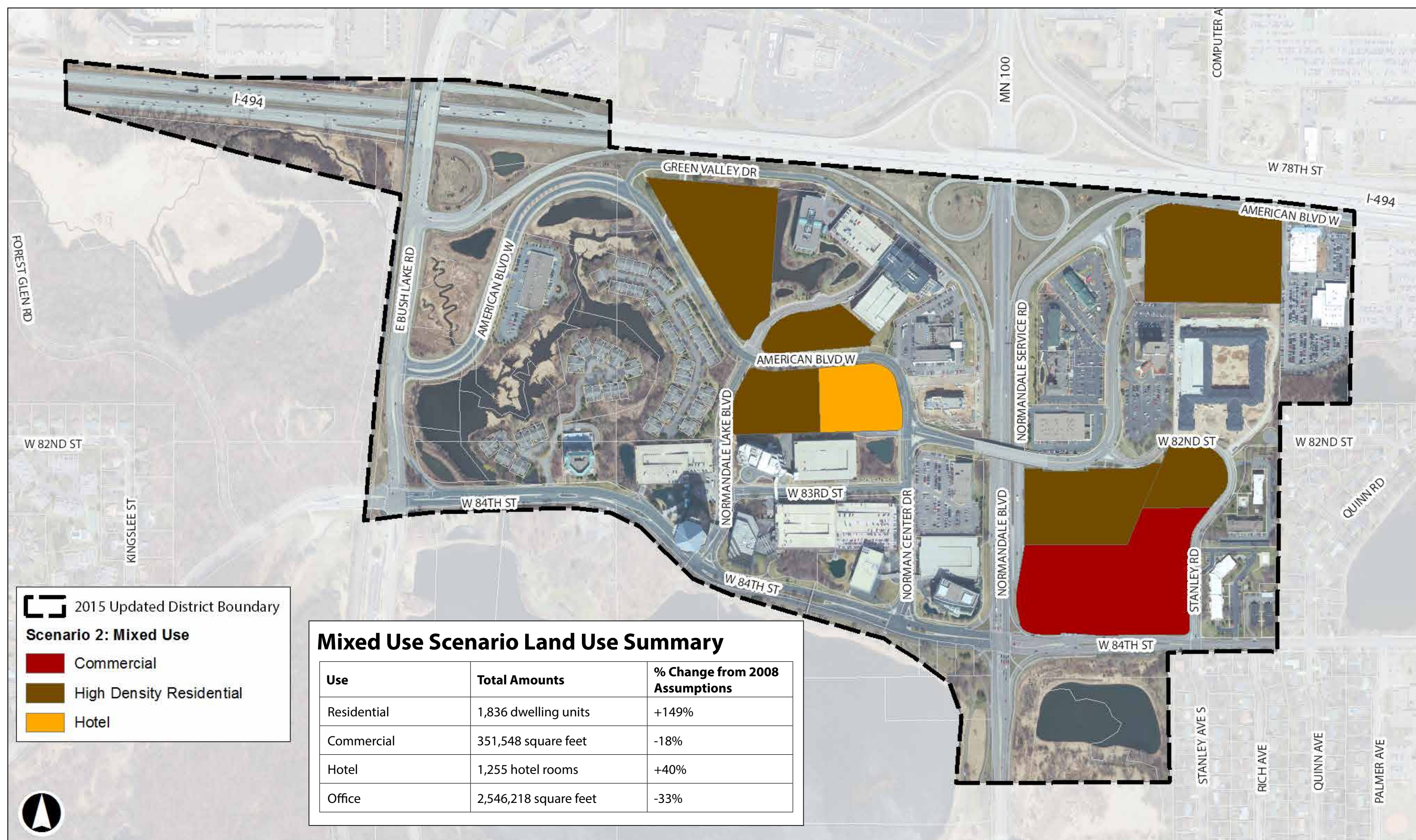
Traffic and Utility Scenario Modeling

Two land use scenarios were developed to model future traffic levels and utility needs.

Scenario 1: Commercial



Scenario 2: Mixed Use



Traffic Modeling Takeaways

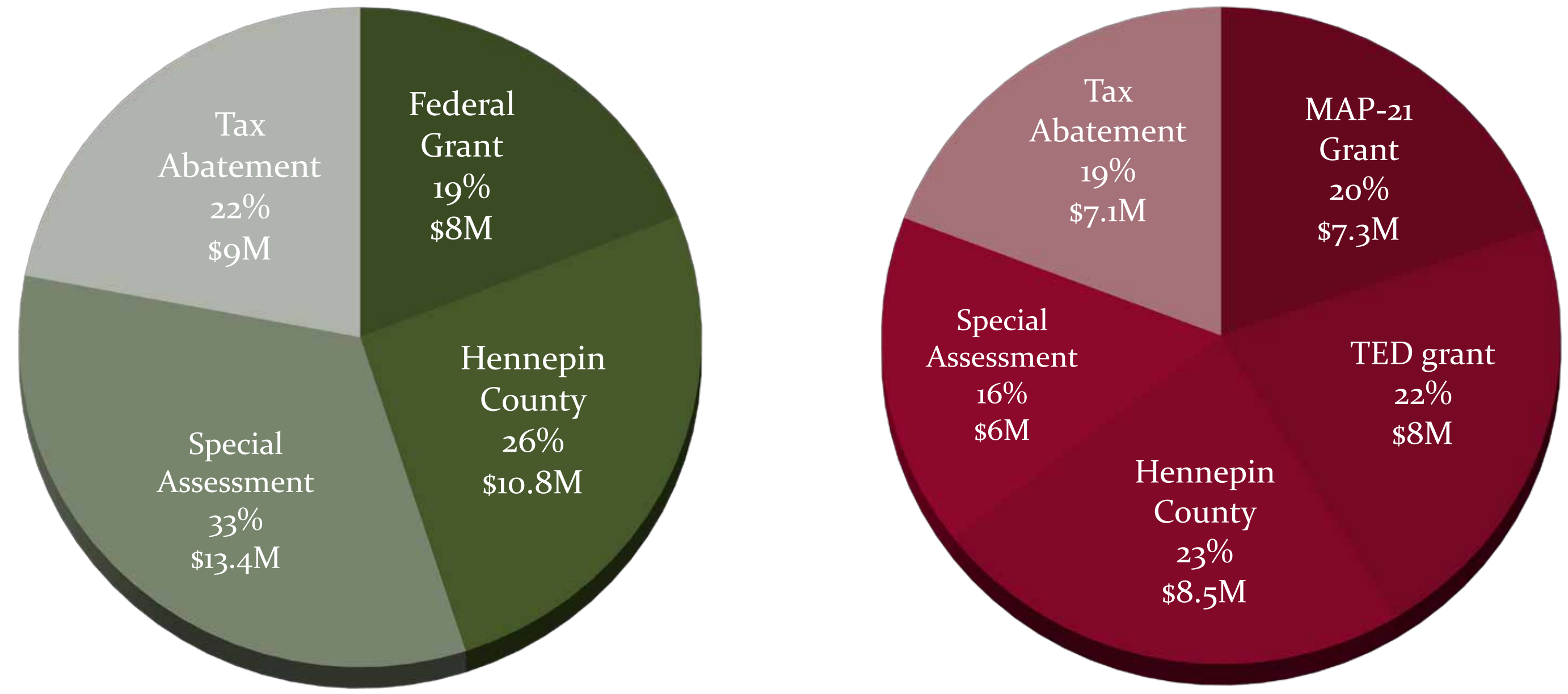
- Both scenarios had only minor future traffic impacts and the impacts are very similar in both scenarios.
- The same traffic improvements are recommended for both scenarios.
- The results demonstrated that the enlarged 84th St. and Normandale Blvd. intersection recommended by the 2008 District Plan is NOT needed.
- Therefore, the 2008 recommended pedestrian bridge over the enlarged intersection is also not needed.
- This change in priorities allows for other improvements to bicycle and pedestrian facilities within the district.

Utility Modeling Takeaways

- Future watermain and sanitary sewer upgrades are needed in both scenarios.
- The same upgrades are recommended for both scenarios.

Financial Model: 2008 vs 2017

2008: \$41.2 million **2017: \$36.9 million**



2008: Key financial model takeaways

- The full cost of the 2008 Implementation Project Plan was \$41.2 million.
- The Plan included the cost to enlarge the intersection of 84th St. and Normandale Blvd. and build a pedestrian bridge over Normandale Blvd.

2017: Key financial model takeaways

- The full cost of the draft 2017 Implementation Project Plan is \$36.9 million.
- The draft plan removes the cost of reconstructing the 84th St. and Normandale Blvd. intersection.
- It removes the special assessment funding associated with the intersection reconstruction.
- It includes the funding for the new I-494 westbound access ramp at East Bush Lake Rd.

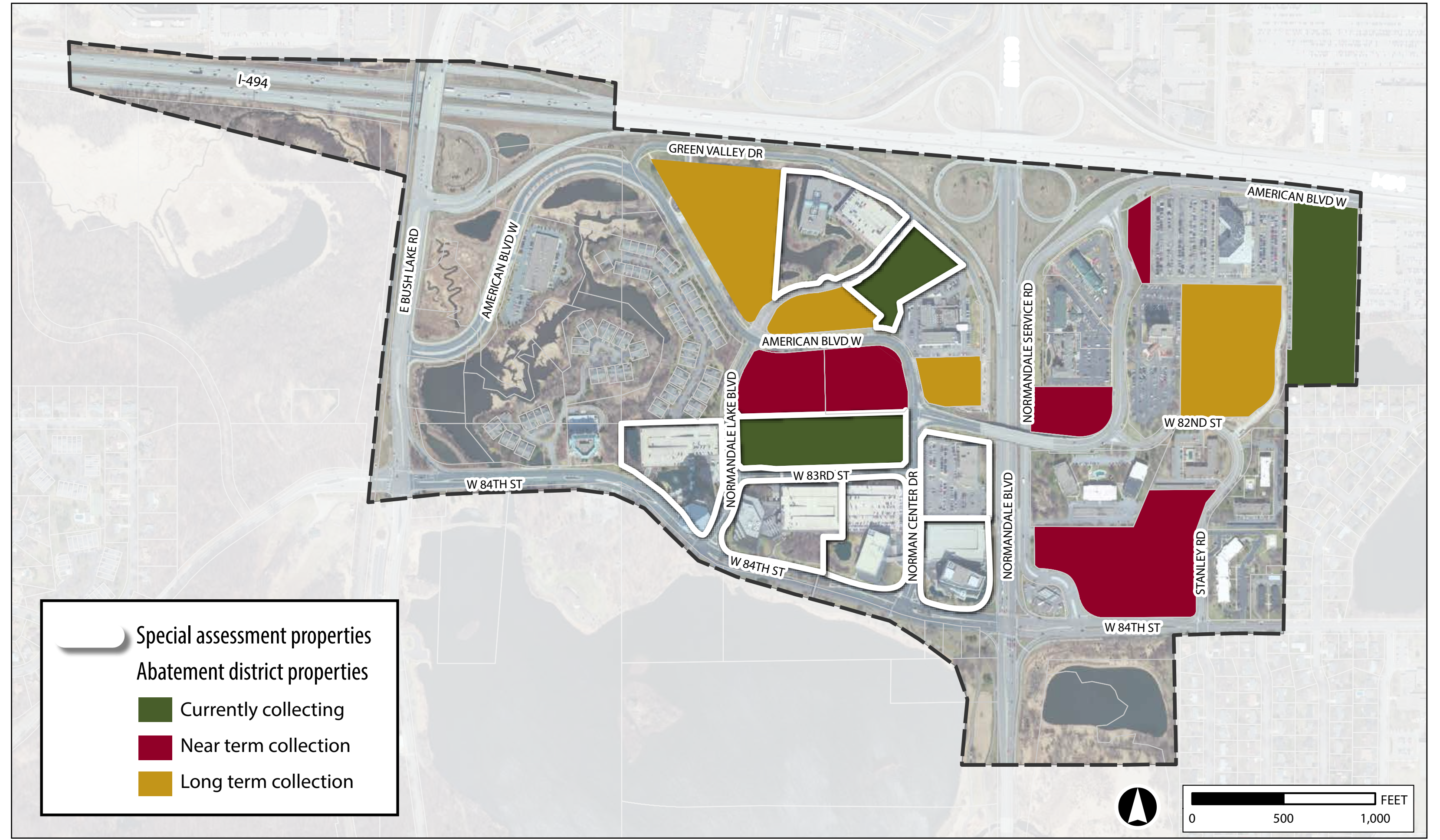
Financial Model: Tax Abatement

The City established the Normandale Lakes Abatement District as an outcome of the 2008 Plan. The abatement district allows the City to earmark a portion of the taxes collected from the district to fund public investments within the district.

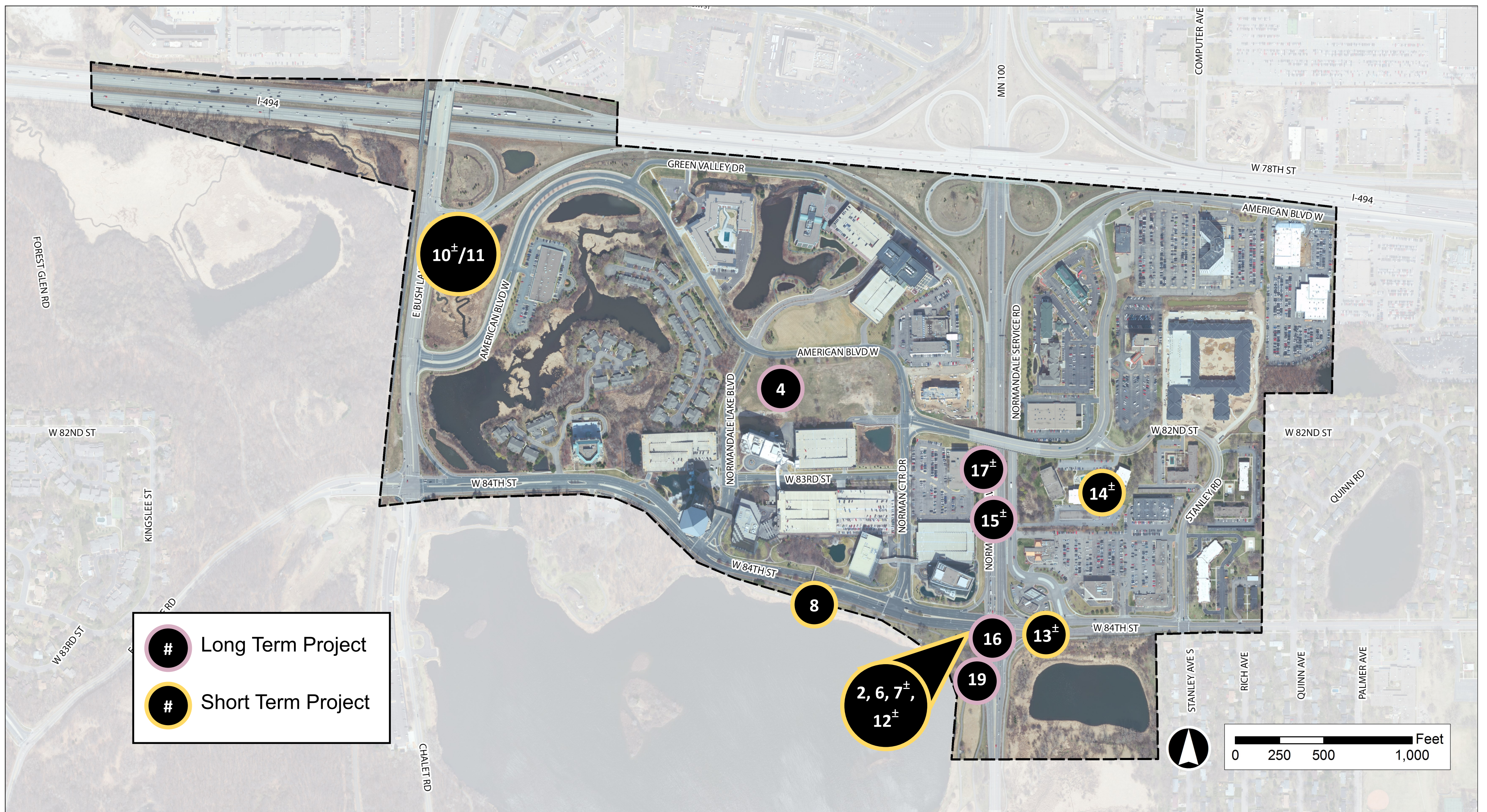
The term 'abatement' is misleading, as the tax is not forgiven. The tax is paid normally, but the amount of property tax levied by the City is used to fund the improvements instead of going into the general fund.

While the City has begun collecting abatement revenue, as of today the City has not used the Normandale Lake District Abatement District revenue to fund improvements.

The 2017 Plan Update proposes using \$7.1 million in abatement funding to complete the list of draft Implementations.



2017 Draft Implementation Projects



	Action/Task	Responsible Party	City Cost	Status
Streetscape Enhancements				
1*	Update aerial photos on all map signage	Bloomington	\$7,000	Short-term
2	Improved landscaping at W. 84 th St. and Normandale Blvd.	Bloomington	\$8,000	Short-term
3*	Design and construct mid-term urban design (trees, lighting, sidewalks, planted medians, enhanced bus stops)	Bloomington	TBD	Long-term
Transit Enhancements				
4	American Blvd. arterial BRT	Metro Transit	TBD	Long-term
Bicycle and Pedestrian Projects				
5*	Fill in sidewalk gaps	Private developer	No City Cost	As development occurs
6	North side of W. 84 th St. and Normandale Blvd. pedestrian crossing improvements	Bloomington	\$50,000	Short-term
7 [±]	South side of W. 84 th St. and Normandale Blvd. pedestrian crossing improvements	Bloomington	TBD	Short-term
8	Rehabilitate existing abutments on pedestrian bridge over W. 84 th St.	Bloomington	\$350,000	Short-term
9*	Perform baseline pedestrian and bicycle counts	Bloomington	Part of City Budget	Short-term
10 [±]	E. Bush Lake Rd. bicycle and pedestrian connection feasibility study. Study for a 1.5 mile con-	Bloomington	\$20,000	Short-term
11	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
12 [±]	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
13 [±]	Explore adding an island between the two northbound lanes at W. 84 th St. and Normandale Service Rd.	Bloomington	TBD	Short-term
14 [±]	Discuss interim pedestrian connection from W. 82 nd St. to Life Time Fitness with private property owners.	N/A	No Cost	Short-term
15 [±]	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	Long-term
16	Work with Hennepin County to study pedestrian crossing and other potential streetscape improvements to enhance the pedestrian realm at W. 84 th St. and Normandale Blvd.	Bloomington, Hennepin County	\$35,000	Long-term
17 [±]	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	Long-term
18*	Alternative Transportation Plan project recommendations and regional trails	Bloomington and regional partners	TBD	Long-term
19	Pedestrian bridge over Normandale Blvd. at W. 84 th St.	Bloomington	TBD	Long-term

± Added project from previous public meeting

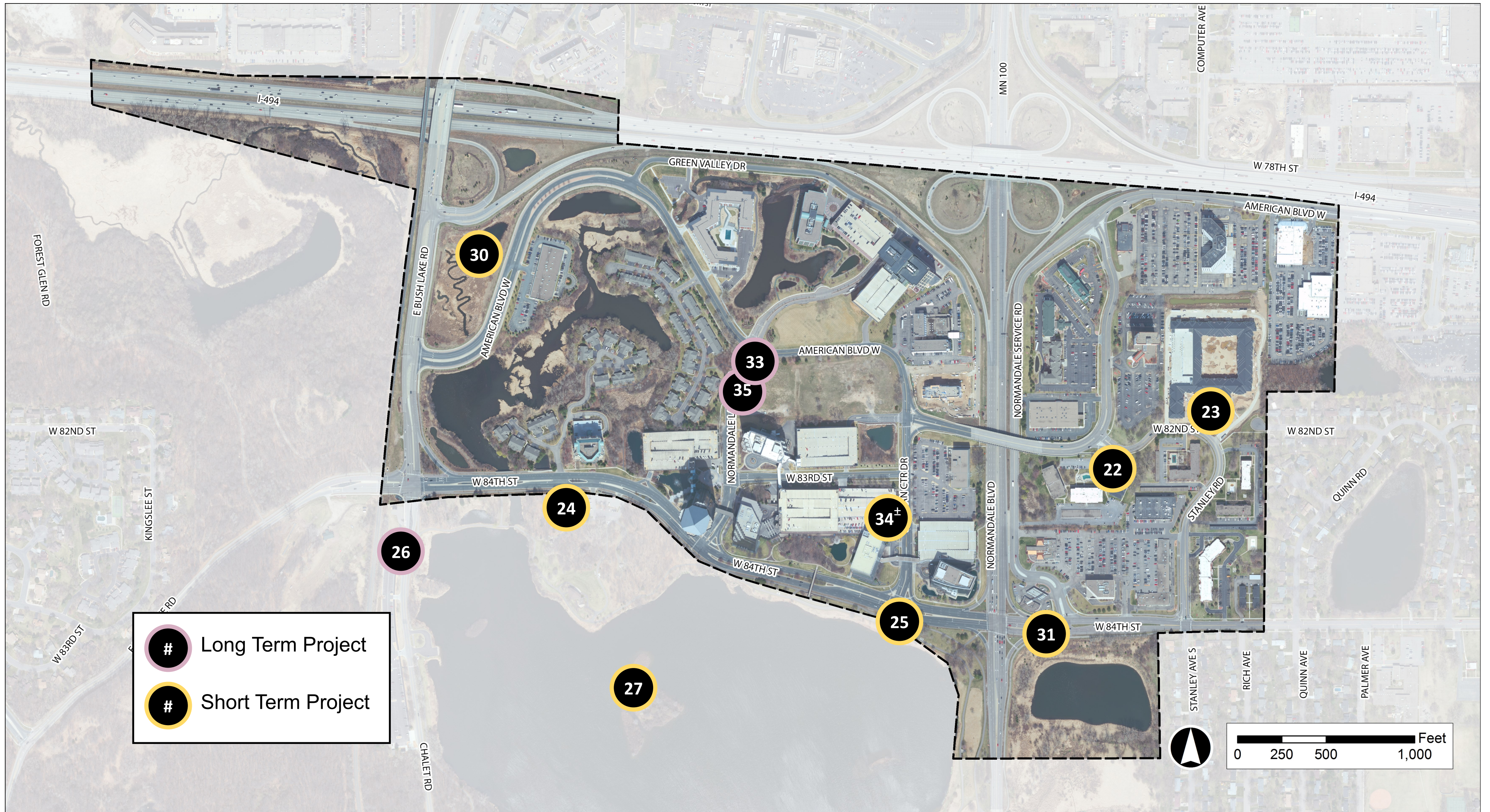
* Project is Districtwide and not depicted on map

NORMANDALE LAKE 2017

DISTRICT PLAN UPDATE



2017 Draft Implementation Projects

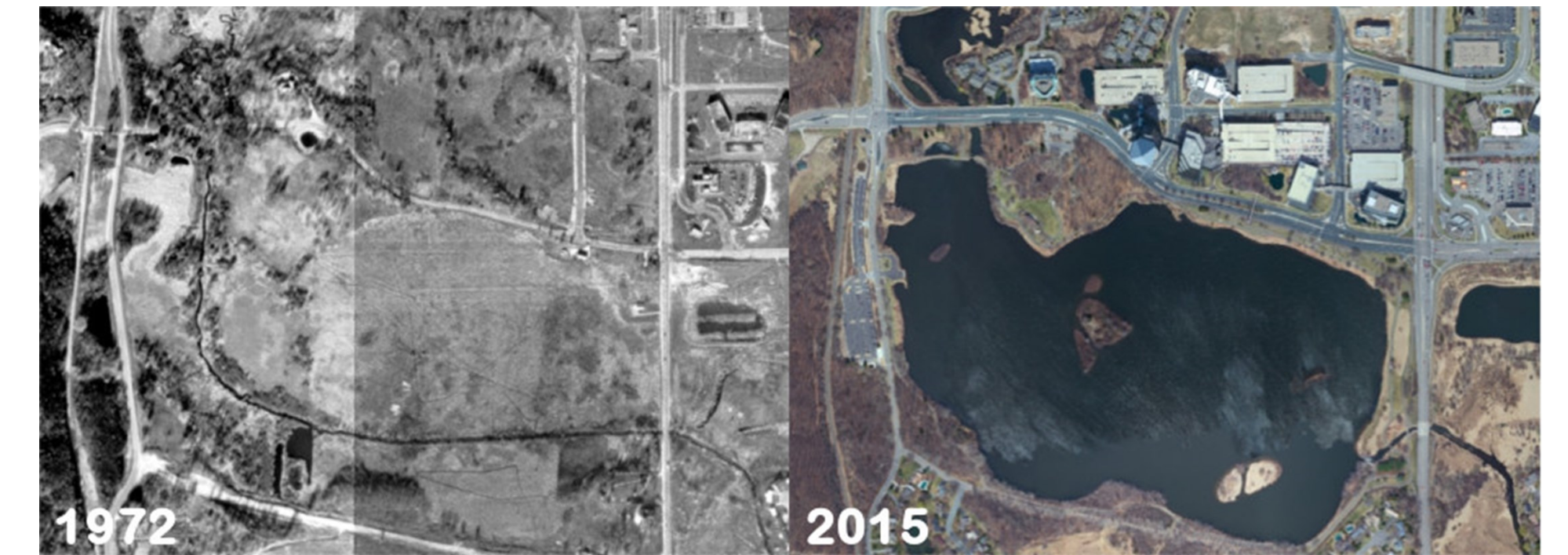


	Action/Task	Responsible Party	City Cost	Status
Utility Improvements				
20	Metropolitan Council Environmental Services Lift station	Metropolitan Council	No City Cost	Short-term
21	Metropolitan Council Environmental Services interceptor improvements	Metropolitan Council	No City Cost	Short-term
22	Increase water main from 6" to 8" under W. 82 nd St. between bridge and Luxembourg apartments	Bloomington	\$600,000	Short-term
23	Add 160' water main connection near Luxembourg apartments	Bloomington	\$85,000	Short-term
24	Increase sanitary sewer from 16" to 18" under W. 84 th St. between E. Bush Lake Rd. and Normandale condos	Bloomington	\$1,400,000	Short-term
25	Increase sanitary sewer from 10" to 12" and 12" to 15" under W. 84 th St. between Norman Center Dr. and Stanley Rd.	Bloomington	\$1,800,000	Short-term
26	Chalet lift station pumps	Bloomington	TBD	Long-term
Stormwater Management				
27	Normandale Lake Water Quality improvement project	Nine Mile Creek Watershed District	No City Cost	Short-term
28*	Update City's Comprehensive Surface Water Management Plan to include Low Impact Design (LID) techniques and criteria	Bloomington	Citywide Plan	Short-term
Engineering Studies				
29*	American Blvd. multi-modal corridor study: Analyze ways to balance walking, biking, and transit needs with vehicle traffic	Bloomington	\$120,000	Long-term
Roadway Improvements				
30	Construct access ramp to westbound I-494 at E. Bush Lake Rd.	MnDOT, Hennepin County, Bloomington	\$900,000	Short-term
31	Add left turn restriction signage during peak times at W. 84 th St. /Normandale Service Road	Bloomington	Minimal City Cost	Short-term
32*	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
33	Extend median south on Normandale Lake Blvd. towards American Blvd. Also move stop signs closer to American Blvd.	Private Developer	No City Cost	Long-term
34±	Adjust western curb line south of W. 83 rd St. along Norman Center Dr. to improve compliance with one-way operations	Bloomington	TBD	Long-term
35	American Blvd. and Normandale Lake Blvd. <ul style="list-style-type: none"> • Install a signal • Construct a northbound right turn lane 	Bloomington	\$315,000	Long-term

± Added project from previous public meeting
 * Project is Districtwide and not depicted on map

Normandale Lake

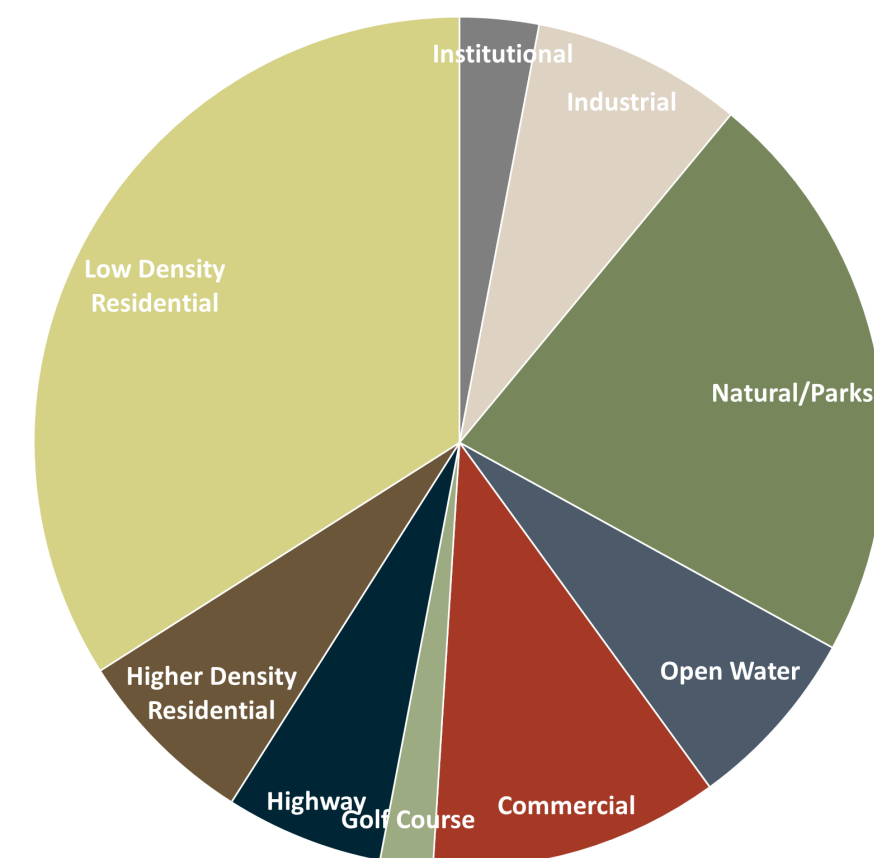
Normandale Lake is a 112-acre waterbody in Bloomington, providing opportunities for walking, biking, picnicking, and boating. Normandale Lake was created in 1979 to help control flooding. Nine Mile Creek flows through the lake on its way to the Minnesota River.



BACKGROUND AND HISTORY

- **BUILT FOR FLOOD CONTROL:** Normandale Lake
- Normandale Lake was created in 1979 as a flood control structure by the Nine Mile Creek Watershed District and the City of Bloomington. The lake is technically a wetland. Since its creation, it has prevented significant flooding in Bloomington
- In the 1987 superstorm, while parts of I-494 were under 13 feet of water, Normandale Lake prevented considerable damage downstream by helping to contain extra water.
- Given the large watershed, the relatively small size, and shallow depth of Normandale Lake, the lake is presented with several ecological challenges including large external phosphorus loads, internal phosphorus loading, excessive aquatic plant and filamentous algae growth, and other aesthetic issues.
- Growing concern with the level of nuisance biota in Normandale Lake has emphasized the need to reevaluate the root causes of ecological imbalances and to examine potential solutions.

WATERSHED CHARACTERISTICS



LAKE BASIN CHARACTERISTICS

- The lake has a water surface area of approximately 112 acres, a maximum depth of approximately 10 feet, and a mean depth of 4.2 feet at normal water surface elevation of 808.0. At this elevation the lake volume is approximately 465 acre-feet. The lake is shallow enough for aquatic plants to grow over the entire lake bed. The water level in the lake is controlled mainly by weather conditions (snowmelt, rainfall, and evaporation) and by the elevation of the outlet structure located at the east side of Normandale Lake.

AQUATIC PLANTS

- Aquatic plants are found throughout the entire lake. Plants are most dense near the inlet, western, and southern areas of the lake. Within the lake plants grow in an area known as the littoral zone. In general the littoral area extends from the shore to a depth of 15 feet. For Normandale Lake, the littoral zone represents the entire lake.
- Shallow water, abundant light, and nutrient-rich sediment provide ideal conditions for plant growth. More recently the lake has experienced a decrease in aquatic plant diversity and an increase in undesirable, invasive plant species, particularly curlyleaf pondweed.

Common Name	Plant Type	Estimated Density
Curlyleaf Pondweed	Submerged	Heavy
Narrow Leaf Pondweed	Submerged	Light/Moderate
Flagstem Pondweed	Submerged	Light
Coontail	Submerged	Heavy
Elodea	Submerged	Light/Moderate
Floating Leaf Pondweed	Floating Leaf/Submerged	Light
White Waterlily	Floating Leaf	Light/Moderate
Little Yellow Waterlily	Floating Leaf	Light
Cattail	Emergent	Light
Blue Flag Iris	Emergent	Light



Coontail

Filamentous Algae

Curlyleaf Pondweed

TREATMENT HISTORY

- Prior to its creation the lake area supported a significant population of wetland vegetation.
- Shortly after the lake was created the City began operating a weed harvester, but limited results led to the weed harvesting program being terminated in 1996.
- The City currently treats the vegetation on Normandale Lake with aquatic herbicides to the extent allowed under existing permits.
- Existing permits restrict aquatic vegetation treatment aquatic treatment to 15% of the 112 acre surface area and limit the City to two herbicide treatments per year.

WHAT'S NEXT?

- A meeting with Corps of Engineers staff will be scheduled shortly thereafter to discuss lake management concepts and initiate any necessary permit modifications to the existing Corps of Engineers permit on Normandale Lake.
- Currently the District is working on developing an ecological lake model to better account for the nutrient cycling process in Normandale Lake. The District will be modeling several different management scenarios over the next few weeks and will meet with city staff to discuss results.
- Throughout this summer the Nine Mile Creek Watershed District will be conducting some additional monitoring on Normandale Lake as part of its "targeted monitoring program" including:
 - Plant surveys to evaluate/verify plant growth rates.
 - Light penetration monitoring to confirm light limitations due to algae and aquatic plant communities.
- The District has acknowledged the importance of initiating a project on Normandale Lake by placing it as a high priority in the District's draft 10-year implementation plan.
- Regarding the schedule for project implementation, the District's draft 10-year implementation plan has expenditures for Normandale beginning in 2018.



CONTACTS AND ADDITIONAL INFORMATION

Visit the City of Bloomington Normandale Lake webpage:
<https://www.bloomingtonmn.gov/eng/normandale-lake>

Visit the Nine Mile Creek Watershed District web site
<https://www.ninemilecreek.org/> Keyword Search: Normandale Lake

Bryan Gruidl, Sr. Water Resources Manger
 City of Bloomington Public Works, Engineering
 952.563.4557 or bgruidl@bloomingtonmn.gov

Randy Anhorn, District Administrator
 Nine Mile Creek Watershed District
 952-835-2078 or ranhorn@ninemilecreek.org

2017 Draft Implementation Projects

Switch Back Ped Bridge



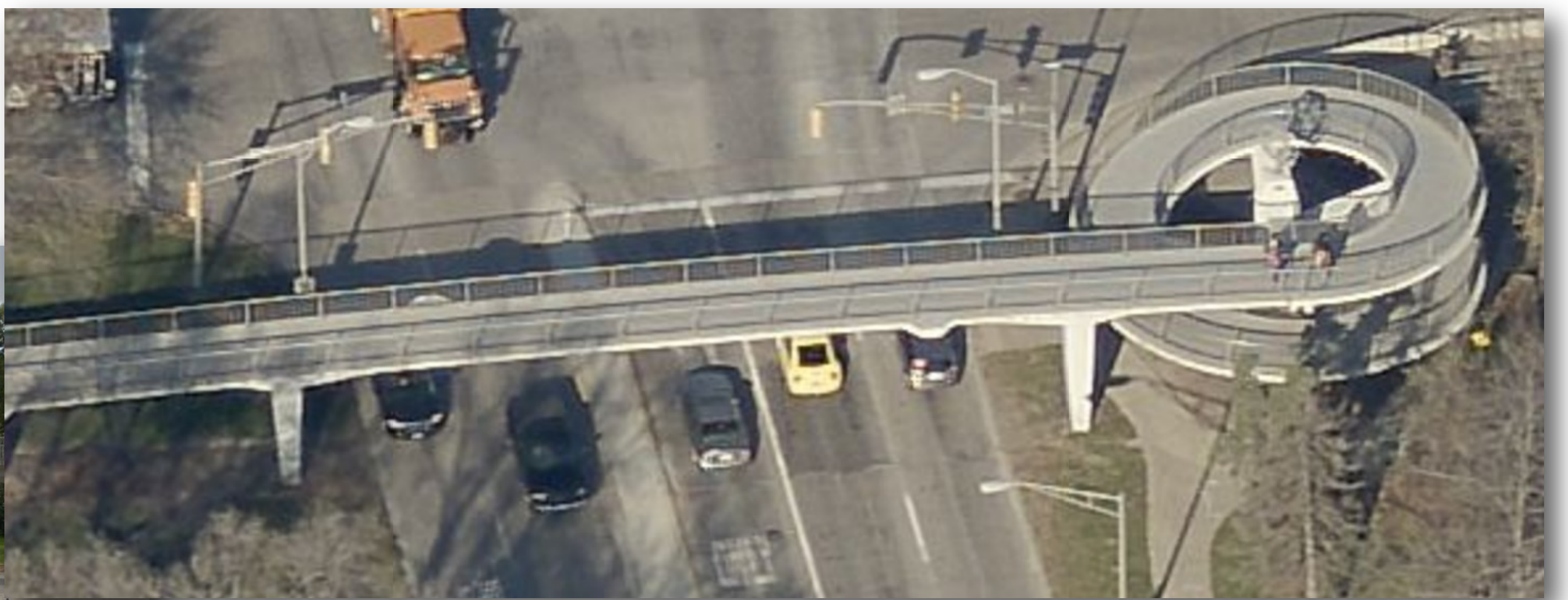
Pros

- . Can be easier to walk on than helix but harder to bike
- . Creates more direct connection

Cons

- . Long switch backs
- . Space might not accommodate
- . Expensive

Helix Ped Bridge



Pros

- . Requires minimal space
- . Creates more direct connection

Cons

- . Can be more difficult walk up but easier to bike than switch back
- . Expensive

Improved Underpass



Pros

- . Address needs of an existing amenity
- . Cost effective

Cons

- . Less direct route
- . Most useful for park not so much surrounding businesses

Next Steps

The next steps to complete the 2017 Plan Update are:

- Public hearing at Planning Commission to approve the draft final report
- Public hearing at City Council to approve draft final report
- Metropolitan Council review
- City Council adopts update

