

**MIDTOWN GREENWAY  
COMMUNITY SAFETY DESIGN**

**SECTION 1  
EXECUTIVE SUMMARY**

JUNE 2020



**Hennepin County**  
Regional Railroad Authority



**Hennepin County**  
Community Works



**MIDTOWN GREENWAY  
COMMUNITY SAFETY DESIGN**

MIDTOWN GREENWAY »

# 01/

## EXECUTIVE SUMMARY

The Executive Summary provides a brief and comprehensive overview of key highlights of the in-depth Midtown Greenway Community Safety Design report.

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# 01 /

# EXECUTIVE SUMMARY

## INTRODUCTION

The Midtown Greenway is an extraordinary achievement thanks to many committed partners. This prized urban bike and pedestrian trail serves over one million trips a year and connects destinations across Minneapolis from the Mississippi River to the east and the chain of lakes to the west.

While the trail is a safe place for biking and walking in the community, Hennepin County Regional Railroad Authority (HCRRA) property along the trail is facing growing challenges from illegal and unpermitted uses. Stakeholders, including residents, report an increase in a range of serious concerns including loose syringes, commercial sexual exploitation, drug dealing, encampments, hazardous waste, and excessive litter.

These challenges are deeply complex and pose public health risks, discourage biking and walking, incur added maintenance costs and staffing, and hinder the Greenway's effectiveness as a neighborhood asset. Neighboring communities already vulnerable with health and racial disparities are disproportionately bearing the burden of these challenges.

HCRRA has recently stepped up its response. Measures include additional Hennepin County funding to St. Stephen's Street

Outreach services, more robust vegetation removal, increased coordination with outreach agencies and the Minneapolis Police Department, and a biohazard vendor contract to safely clean up syringes and other hazardous waste.

Despite these efforts, the challenges persist. In search of new proactive and equitable strategies, HCRRA launched this Community Safety Design study. Rooted in research and stakeholder feedback, this study presents a menu of landscape design, maintenance and operations recommendations to:

- Improve sense of safety and welcoming for all community members.
- Make the physical environment safer.
- Deter crime and hazardous activities.
- Address barriers to maintenance.

Reaching these goals will require continued partnership with stakeholders across sectors. While design and maintenance strategies can support safety in the corridor, addressing the underlying system-level causes of challenges such as opioid use disorder and lack of affordable housing is outside the scope of land management.

# Project Scope

## PROJECT SCOPE

The Midtown Greenway occupies a former freight rail corridor stretching from the Mississippi River on its eastern edge to the Minneapolis city limits on its western border. It crosses north-south bicycle routes along its entire length and parallels Lake Street, one of the most iconic commercial corridors in Minneapolis.

The research area for this study focuses on the Midtown Greenway from the Chain of Lakes Regional Park to the Mississippi Gorge Regional Park to the east, specifically focusing on the corridor right-of-way as well as entrances and exits from the trail.

## HCRRA'S MISSION

The Hennepin County Regional Railroad Authority (HCRRA) was established in 1980 as a political subdivision and local government unit of Minnesota under Minnesota Statutes, Chapter 398A (Regional Railroad Authorities Act). The Railroad Authority currently owns 46 miles of corridors, including the Midtown Greenway, as well as seven sites suitable for future park-and-rides, stations, or transit-oriented development, and two railroad depots. Although acquired for future transportation needs, recreational trails have been constructed on these corridors as an interim use.

“There’s how safe you are and there’s how safe you feel – and they are both important”

– Joseph Collins, FAIA

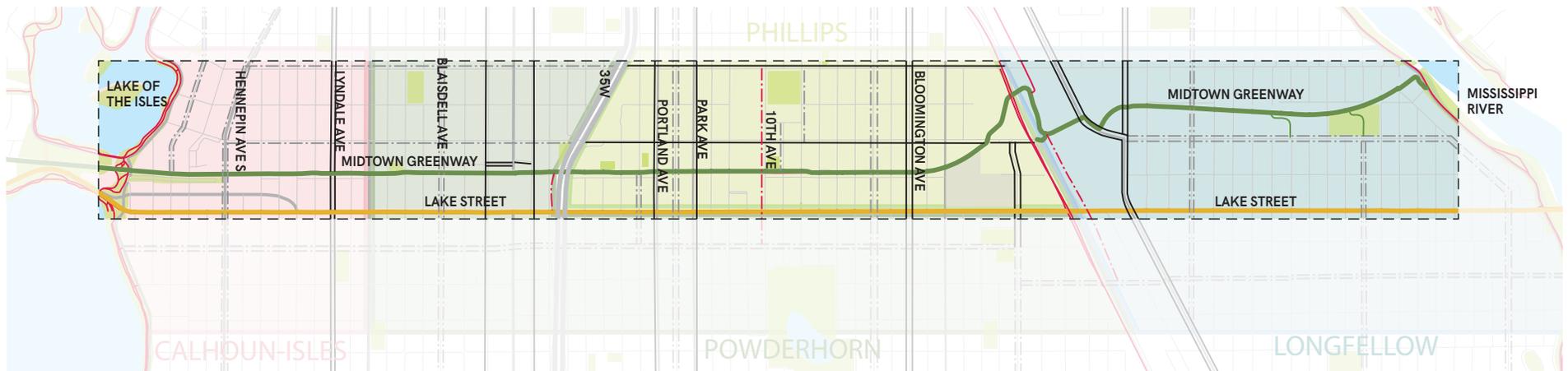


Fig. 1: Map of the Midtown Greenway





Fig. 3: A stakeholder workshop in September 2019

# Study Approach

## METHODOLOGY

The project team undertook a variety of methods to identify and understand the community safety concerns along the Midtown Greenway. The process was rooted in research and site analysis, stakeholder engagement, and an in-depth precedent study of similar greenway corridors across the United States.

## RESEARCH & SITE ANALYSIS

The initial stage of the study included review of relevant previous reports and planning studies. In addition, project team members traveled the Greenway by foot and bike to catalog and verify existing conditions and areas of particular concern. The team identified a number of locations where encampments, trash debris, and loose needles were particularly high. Areas of focus were also identified from feedback during the stakeholder engagement. The relevant research as well site analysis is shown in [Appendix B: Analysis and Research](#).

## STAKEHOLDER ENGAGEMENT

Since March 2019, HCRRA staff has connected with stakeholders, including community groups, social services agencies, other local government agencies, the Minneapolis Police Department, and local businesses to understand issues

and learn from different approaches. HCRRA staff have also been attending South Minneapolis Public Safety Coalition meetings. In addition, a stakeholder workshop was held in September 2019 to gather feedback in response to draft recommendations. The comments from the workshop were incorporated into the final recommendations and priorities ranking. See [Appendix C: Stakeholder Engagement](#) for the feedback from the stakeholder engagement sessions.

## PRECEDENT COMPARISON

This Community Safety Design project benefited by examining precedents of community safety planning along similar greenway corridors throughout the county. [Appendix D: Precedent Studies](#) is an evaluation of several national examples of comparable greenway corridors and their community safety, plans, policies, and best practices. The Midtown Greenway was analyzed in comparison to each of the precedents to evaluate current practices and areas of improvement that could contribute to the public safety of the Greenway and the communities it is located within. The five precedent trails that were evaluated in this report include: The Dequindre Cut, Detroit, MI, Atlanta Beltline, Atlanta, GA, Lafitte Greenway, New Orleans, LA, Katy Trail, Dallas, TX, and the 606 Trail, Chicago, IL.

## ISSUES IMPACTING THE MIDTOWN GREENWAY:

- \* Human Trafficking/  
Commercial Sexual  
Exploitation
- \* Opioid Crisis/  
Drug Sales
- \* Homeless  
Encampments
- \* Insufficient  
Lighting, especially  
under bridges
- \* Lack of orientation  
to get on and off  
the Greenway
- \* Bridges in various  
stages of disrepair
- \* Excess trash  
and debris
- \* Discarded needles
- \* No posted rules/  
code of conduct



Fig. 2: Graffiti and excess trash on the Midtown Greenway

# KEY LESSONS LEARNED

## Stakeholder Feedback

### VISION OF SUCCESS BY THE ADVISORY GROUP:

1. Safe for all users (including homeless, drug users, etc. on Greenway)
2. No loose needles
3. Environmental design that encourages appropriate and diverse use
4. More activation of space that leads to more, varied use
5. Place that prevents victimization instead of exacerbating it
6. Better sightlines, more defined open spaces, better planting plan
7. Individuals are taken care of not merely displaced, underlying issues are addressed
8. Safe and welcoming space for youth, path to school
9. Greenway neighbors have perception that it is a safe and comfortable place to go
10. Aesthetically pleasing
11. Clear set of permitted activities (lets police know what to enforce)

## Precedents Takeaways

### KEY TAKEAWAYS FROM PRECEDENT STUDIES:

1. **HOURS OF OPERATION**
  - All precedent corridors have hours of operation, closing for a portion of the night.
2. **Code of Conduct**
  - Posted code of conduct rules at all entrances to the trail, providing guidelines to users of the Greenway and are enforceable by security.
3. **Community Engagement**
  - Community engagement is prioritized. Organized and funded events are planned throughout the year.
  - Programs to engage adjacent neighborhood populations to bring people onto the Greenway.
4. **Public Art**
  - Mural and artist residency programs. Public sculptures are prioritized.
5. **Wayfinding/Geo-coding**
  - Trail markers are installed with mile markers/geo-coding for location identification.
  - Clear maps and signage for navigating the trail and getting onto the trail.
  - Brand trail with cohesive design.
  - Overhead bridges are labeled in a clear, cohesive way.
6. **Dedicated Funding and Support**
  - Phone apps and websites dedicated to trail corridors are a user-friendly way to engage with users.
  - Maintenance/programming managed entirely or co-managed by a non-profit.
  - Consistent funding mechanisms to support maintenance, security, and programming.
  - Non-profit financial/maintenance support.
7. **Security**
  - Regular patrolling by police or private security guards.
  - Geo-coding mile markers on the trail to tie into the Emergency Services of the City.

\*See [Section 2A: Recommendations](#) and [Section 2B: Design Solutions](#) for further details.

# Recommendations

## RECOMMENDATIONS AT FOUR SCALES

Recommendations for improving community safety on the Midtown Greenway are identified at four scales:

**1/**  
**SITE SPECIFIC** RECOMMENDATIONS FOR AREAS OF CONCERN

**2/**  
**GREENWAY-WIDE** INFRASTRUCTURE RECOMMENDATIONS

**3/**  
**SYSTEM-LEVEL** CHANGES

**4/**  
**PARTNERS** RECOMMENDATIONS FOR AGENCY PARTNERS

## RECOMMENDATIONS RANKING

The recommendations are prioritized and categorized in the following categories:

- cost from low to high (\$ to \$\$\$)
- priority (low to high), and
- the community safety design principles.

Design Solutions (highest priority) are further detailed in [Section 2B: Design Solutions](#). These strategies are further developed with more detailed recommendations.



# 1 // SITE SPECIFIC RECOMMENDATIONS FOR AREAS OF CONCERN

## 1.1: Stairs: Increase safety/visibility of stairs

- Provide strategies to increase the safety and visibility at 'hot spot' stair entrances (such as Bloomington).



## 1.4: Modify vegetation to aid surveillance/reduce maintenance

- Continue to maintain vegetation.
- Provide 'cues of care' with vegetation management; Phase in new planting regime (See Section 2B: Design Solutions).



## 1.7: Activate 29th Street Level

- Activate vacant space along 29th Street (between 17th & 18th Avenues) at street level (adjacent to Midtown Greenway) to support positive community uses,



## 1.2: Bridges: Improve safety under bridges

- Install rip rap and/or fencing under bridges to discourage loitering.



## 1.5: Entrances: Signage and other wayfinding

- Provide public realm improvements at entrances/exits.
- Provide signage, including wayfinding and code of conduct, at all entrances/exits.
- Clearly identify entrances.



## 1.3: New lighting in dark areas

- Provide consistent lighting along full Greenway.
- Install lighting under bridges.
- Improve lighting at entrances/exits.
- Provide pole lighting where there are gaps in lighting along trail.



## 1.6: Trash: Expanded refuse collection areas

- Expand refuse collection areas - more trash and recycling receptacles.



### RECOMMENDATION

### COST

### PRIORITY

1.1: Staircases

\$\$\$

●●●

1.2: Bridges

\$

●●●

1.3: Lighting

\$\$\$

●●●

1.4: Vegetation

\$\$\$

●●●

1.5: Entrances

\$

●●○

1.6: Trash

\$

●●●

1.7: Activate 29th

\$

●●●

# GREENWAY-WIDE 2/

INFRASTRUCTURE RECOMMENDATIONS

RECOMMENDATION	COST	PRIORITY
2.1: <u>Wayfinding</u>	\$\$\$	●●●
2.2: <u>New street signs</u> on bridges/ coordination with emergency services	\$	●●●
2.3: <u>Frequent Programming/Community Engagement</u>	\$\$	●●○
2.4: <u>Policy for Programming</u> - designate programmed areas	\$	●●●
2.5: Implement <u>Code of Conduct</u> (post signage)	\$	●●●
2.6: Expanded <u>Art Program</u>	\$\$	●●○

### 2.1: Clear Wayfinding Signage

- Provide clear wayfinding signage throughout the Midtown Greenway.
- Provide clear signage at entrances/exits.
- See previous report: “Making the Connection: Midtown to Lake Street”.



### 2.2: New Street Signs on Bridges

- Provide mile markers and/or geocode location markers to connect with emergency services and provide greater orientation for trail users.
- Install consistent bridge identification signage. The signs should be visible from the emergency blue phones.



### 2.3: Frequent Programming/Comm. Engagement

- Increase frequency of programming.
- Increase community engagement in neighborhoods adjacent to the Greenway (i.e. similar to the Ambassador Program by the LaFitte Trail).



### 2.4: Develop Policy for Areas of Programming

- Develop & implement policy designating areas for programming.
- Identifying areas that can and cannot be used.
- Support positive/welcoming activities.
- Identify acceptable temporary southside uses of the corridor.



### 2.5: Implement Code of Code/Hours of Operation

- Implement a code of conduct and hours of operation - see Appendix D: Precedent Studies for specific examples from other greenways.
- Post code of conduct and hours on signage at all entrances/exits.



### 2.6: Expanded Art Program

- Increase opportunities for art programming.
- Expand mural program.
- Identify federal/state art grants, similar to the Beltline and Dequindre precedents (see Appendix B).
- Revise art approval process.



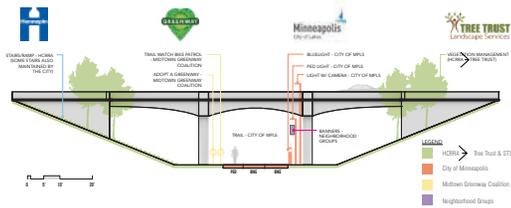
# SYSTEM-LEVEL CHANGES

RECOMMENDATION	COST	PRIORITY
3.1: <u>Regional Trail Designation</u>	N/A	●●●
3.2: <u>Dedicated Security Staff</u>	\$\$\$	●●●
3.3: <u>Dedicated Social Services</u>	\$\$\$	●●○

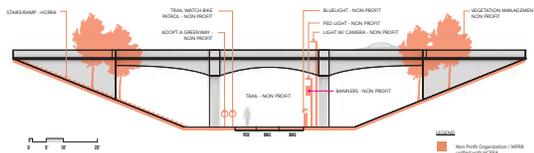
### 3.1: Regional Trail Designation

- Work with the Minneapolis Park and Recreation Board to apply for Regional Trail Designation classification for the Midtown Greenway. This would provide a more unified management approach by the Minneapolis Park and Recreation Board.

Current Management Spread Across Many Jurisdictions & Entities



A More Unified Management Approach with Regional Trail Designation



### 3.2: Dedicated Security/Regular Patrolling

- Establish dedicated Security Staff.
- Increase Minneapolis Police Department presence.
- Create a Dedicated Ambassadors program for safety and cleaning (i.e. like Downtown DID).
- Post hours of operation.
- Clearly post code of conduct expectations.
- Adopt Hennepin County's public space policy.



### 3.3: Dedicated Social Services

- Fund dedicated outreach workers.
- Post signs with information on available resources for help.



# PARTNERS 4/

RECOMMENDATIONS FOR AGENCY PARTNERS

The following recommendations were identified in the study but are outside of HCRRA's purview. Further action would need to be headed by partner agencies. Additional assessment of the effectiveness of these strategies is also needed.

RECOMMENDATION	COST	PRIORITY
4.1: <u>Cameras</u>	\$\$	●○○
4.2: <u>Safe needle collection</u>	\$	●●○
4.3: <u>Blue phones</u>	\$	●○○

### 4.1: Security Cameras: Adjust existing/Add more

- Adjust cameras with direction from the City of Minneapolis Police Department for best angles and to prevent glare from light poles.
- Provide more security cameras with direction from the City of Minneapolis Police Department.
- Add communication ability to some of the cameras at key locations.



### 4.2: Safe Needle Collection

- Review effectiveness of the City of Minneapolis' needle deposit box pilot program
- Place needle collection facilities, such as the ones pictured, in key places along the Midtown Greenway. Work with social services to identify best locations and quantity.



### 4.3: Confirm emergency blue phones are working

- Check all of the Emergency Blue Phones to make sure that they are in working order. Verify with the City of Minneapolis Police Department.

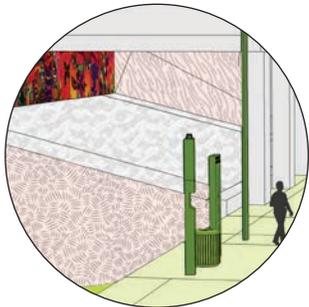


\*See **Section 2B: Design Solutions** for further details.

# Design Solutions

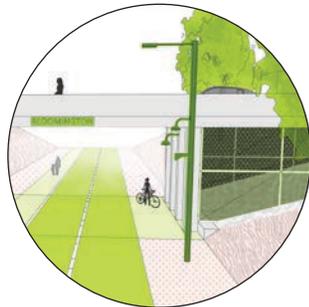
The study team developed landscape design solutions, shown here, to guide implementation of the recommendations.

## 1. BRIDGE TREATMENTS LOCATION SPECIFIC RECOMMENDATIONS



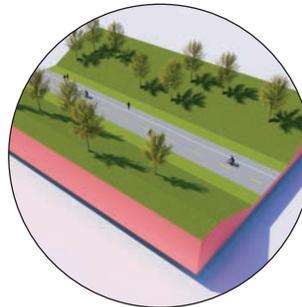
- B1** BRIDGE STRATEGY 1  
RIP RAP ON SLOPE PAVING
- B2** BRIDGE STRATEGY 2  
GABION BASKETS
- B3** BRIDGE STRATEGY 3  
FENCE

## 2. LIGHTING RECOMMENDATIONS FOR GAPS IN LIGHTING



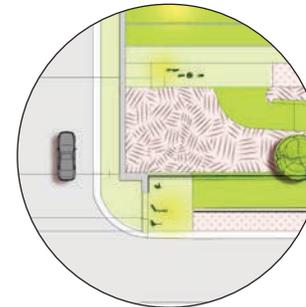
- L1** LIGHTING STRATEGY 1  
POLE LIGHT ON TRAIL
- L2** LIGHTING STRATEGY 2  
WALL LIGHT UNDER BRIDGE
- L3** LIGHTING STRATEGY 3  
STAIR/RAMP LIGHT

## 3. VEGETATION VEGETATION OPTIONS & RECOMMENDATIONS



- V1** VEGETATION STRATEGY 1  
NO-MOW GRASSES
- V2** VEGETATION STRATEGY 2  
STAIRCASE PLANTING
- V3** VEGETATION STRATEGY 3  
RAMP PLANTING

## 4. STAIRCASES REPLICABLE CASE STUDY AT BLOOMINGTON AVE STAIRCASE



- S1** STAIRCASE STRATEGY 1  
REPLACE WITH NEW RAMP
- S2** STAIRCASE STRATEGY 2  
UPGRADE STAIRS

## 5. ENTRANCES REPLICABLE CASE STUDY AT NICOLLET AVE ENTRANCE



- E1** ENTRANCES STRATEGY 1  
WAYFINDING
- E2** ENTRANCES STRATEGY 2  
VERTICAL BEACON
- E3** ENTRANCES STRATEGY 3  
CODE OF CONDUCT
- E4** ENTRANCES STRATEGY 4  
ENHANCE PUBLIC REALM

# Strategy 1: Bridge Treatments

## Bridge Treatments Strategies

Bridge Treatments strategies are recommended for bridges that cross the Midtown Greenway. By using natural access control principles, such as rip rap on slope paving, gabion walls, and fencing, there are clear uses for areas intended for gathering and those that are not. These low-maintenance strategies also deter the littering.

## Case Studies

The bridge strategies are applied to varying bridge types that cross the Midtown Greenway (see “Fig. 8: Map of bridge case studies.” in the Implementation Guide). The case study bridges were selected because they encompass a range of bridge styles that create varying conditions for the Greenway (i.e. slope paving slopes, wall heights, length and

width of bridge, etc.). The case study recommendations are to be applied to other bridges that cross the Midtown Greenway with similar conditions.

B1

### BRIDGE STRATEGY 1 RIP RAP ON SLOPE PAVING



B2

### BRIDGE STRATEGY 2 GABION BASKETS



B3

### BRIDGE STRATEGY 3 FENCE



\*See [Section 2B: Design Solutions](#) for further details.

# Strategy 2: Lighting

## Lighting Strategies

Three lighting strategies are recommended along the Midtown Greenway to improve safety:

- Lighting Strategy 1: provide pole lights on the trail where there are gaps,
- Lighting Strategy 2: providing lighting under all of the bridges, and
- Lighting Strategy 3: light all of the entrance and exits (at stairs and ramps).

## AASHTO Lighting Trail Standards

Trail lighting should meet the American Association of State Highway and Transportation Officials (AASHTO) standards for lighting. Depending on the location, average maintained horizontal illumination levels of 0.5 to 2 foot-candles (5 to 22 lux) should be considered. For personal safety, higher levels may be needed in some locations. Pedestrian-scale lighting is preferred to tall, highway-style lamps. Pedestrian-scale lighting is characterized by shorter light poles (standards about 15 ft [4.6 m] high), lower levels of illumination (except at crossings), closer

spacing of standards (to avoid dark zones between luminaries), and LED, high pressure sodium vapor, or metal halide lamps. At night, lighting in tunnels is important to provide security.

## Implementation

For implementation, all recommendations for lighting should be field verified on a site by site basis. Foot-candles should be measured to meet AASHTO standards.

**L1** LIGHTING STRATEGY 1  
POLE LIGHT ON TRAIL



**L2** LIGHTING STRATEGY 2  
LIGHT UNDER BRIDGES



**L3** LIGHTING STRATEGY 3  
STAIR/RAMP LIGHT



# Strategy 3: Vegetation Typologies

## New Vegetation Typologies

Strategy 3 provides new vegetation typologies for the Midtown Greenway. Maintaining the existing vegetation will continue to be an uphill battle, and renovation is recommended to stretch maintenance dollars as far as possible.

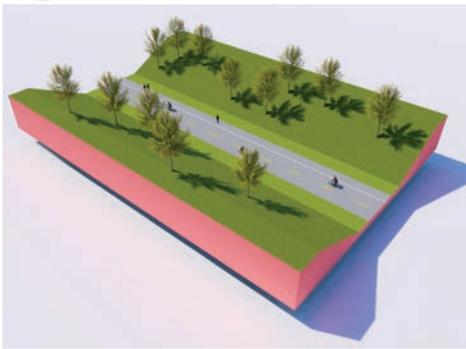
## Phase I: Pilot Project

A pilot project is recommended to compare the performance of typologies 1A (no-mow) and 1B (short-grass prairie) to evaluate the better option. The pilot project is recommended on both sides of the Bloomington Avenue bridge (see “Phase I: Pilot Project” on page 87).

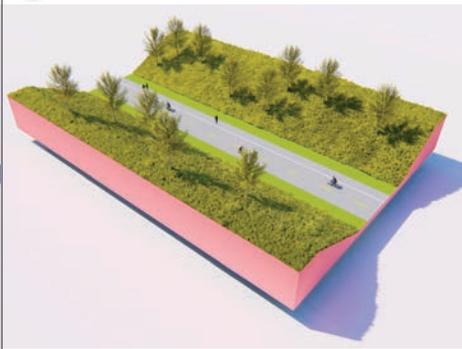
## Phase II: Phillips Neighborhood

The more successful installation will then be further tested in Phase II, an area in the Phillips Neighborhood from 10th Avenue to 16th Avenue (see “Phase II” on page 87). This area was selected in accordance with the guidelines for prioritizing investment in the “Making the Connection: Midtown Greenway to Lake Street” report, as the Phillips neighborhood is cited as an equity priority.

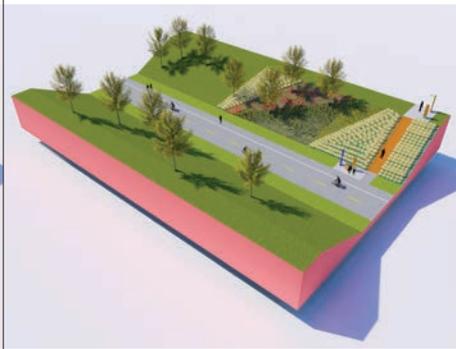
V1 TYPOLOGY 1A - TYPICAL GREENWAY  
NO-MOW & LIMBED-UP TREES



V1 TYPOLOGY 1B - TYPICAL GREENWAY  
SHORT GRASS PRAIRIE & LIMBED-UP TREES



V2 TYPOLOGY 2 - STAIR ENTRANCE  
STAIRS WITH MANICURED LANDSCAPE AREA



V3 TYPOLOGY 3 - RAMP ENTRANCE  
RAMP WITH MANICURED LANDSCAPE AREA



\*See [Section 2B: Design Solutions](#) for further details.

# Strategy 4: Stairs

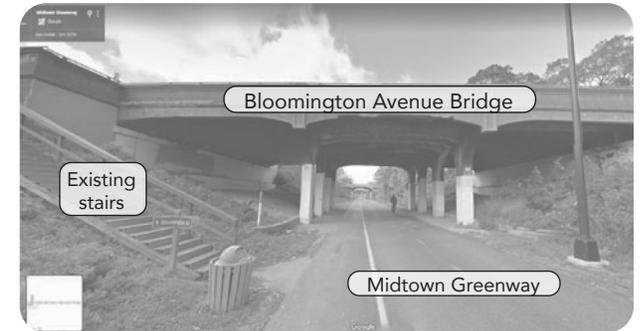
## Stair Improvement Strategies

Stair entrances and areas near stair entrances continue to be focus areas along the Midtown Greenway. An area that has needed the most attention in recent years is the staircase at Bloomington Avenue. This study uses this staircase as a case study and provides options for various levels of upgrades. The upgrades apply to the staircase, the entrance at street level, as well as the adjacent area under the Bloomington Ave bridge. See [Section 2B: Design Solutions](#) for further details.

Existing Conditions | Aerial



Existing Conditions | View on trail towards bridge



## HIGHLIGHTS

- Replaces stair with ADA accessible ramp
- Mural, rip-rap, camera, & lighting activate space below bridge
- Wayfinding on bridge provides orientation
- Provides vertical cue at entrance
- Provides code of conduct and wayfinding information

# Case Study | Replace Stairs with Ramp

The design recommendations in this manual shall be used as inspiration and guidance for future development and planning in the Midtown Greenway area. *Specific implementation and approval of designs will be determined on a project by project basis.*

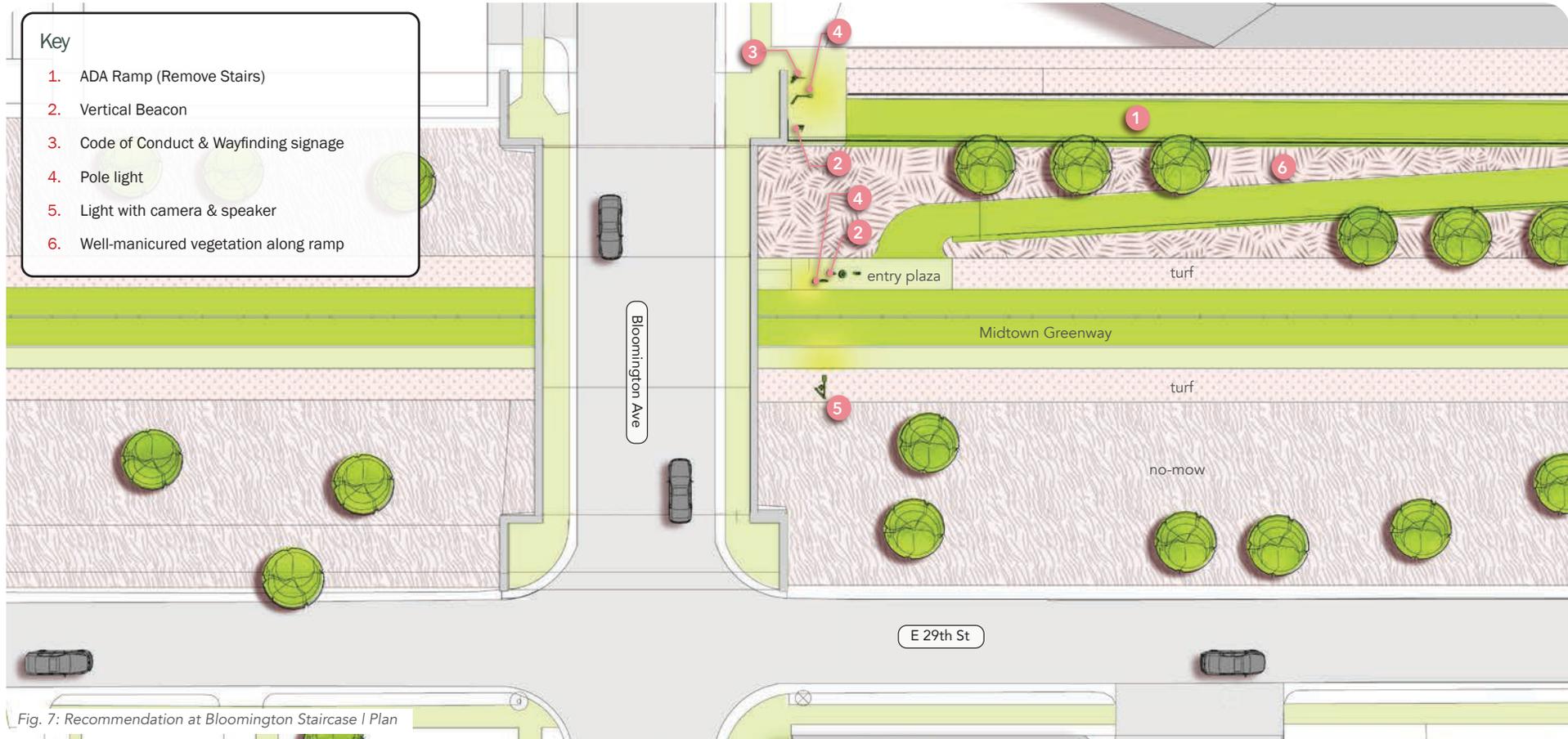
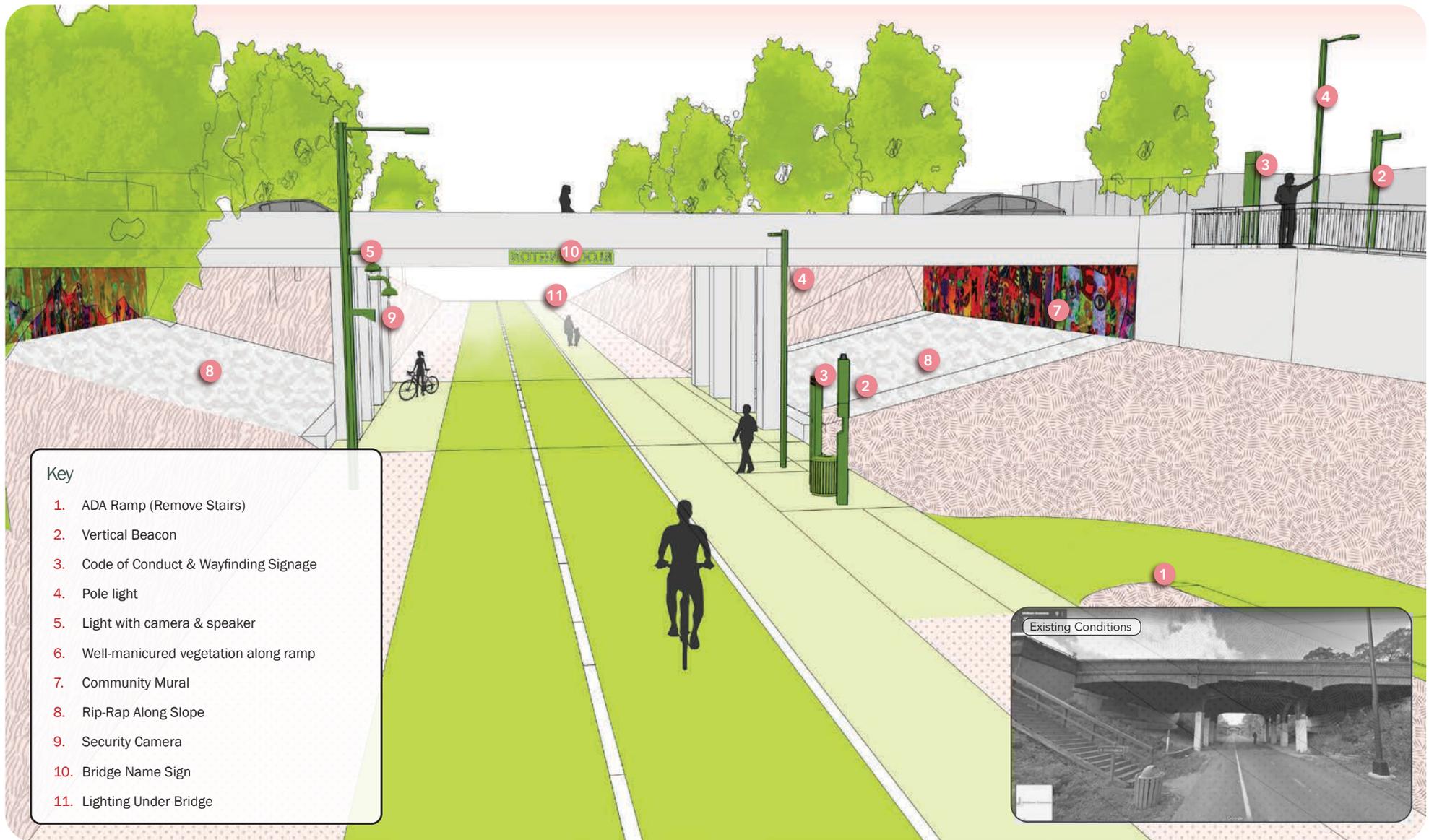


Fig. 7: Recommendation at Bloomington Staircase I Plan



Key

- 1. ADA Ramp (Remove Stairs)
- 2. Vertical Beacon
- 3. Code of Conduct & Wayfinding Signage
- 4. Pole light
- 5. Light with camera & speaker
- 6. Well-manicured vegetation along ramp
- 7. Community Mural
- 8. Rip-Rap Along Slope
- 9. Security Camera
- 10. Bridge Name Sign
- 11. Lighting Under Bridge

Fig. 8: Recommendation at Bloomington Staircase | Diagram of view under the bridge



Fig. 9: Rendered view of Bloomington recommendations

\*See **Section 2B: Design Solutions** for further details.

# Strategy 5: Entrances

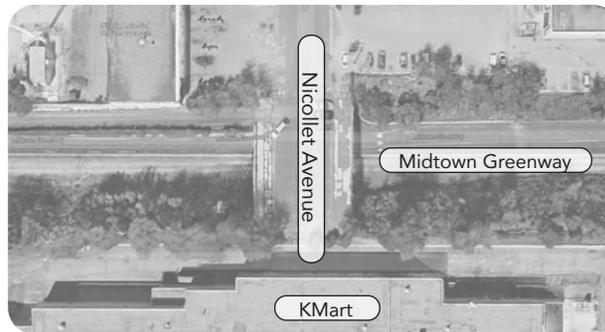
## Entrance Improvements

A case study of the Nicollet Avenue\* entrance was studied and strategies were replicated to increase the visibility of the Midtown Greenway and enhance visual and transit connections onto the trail. Many entrances could improve their visibility and provide a more welcoming entrance to neighbors, visitors, and businesses.

The recommendations raise the visibility of the Greenway and also recommend enhancing street crossings and streetscapes in collaboration with property owners and the City of Minneapolis.

*\*Note: This study was completed prior to the City of Minneapolis purchase of the Kmart site.*

Existing Conditions | Aerial



Existing Conditions | View towards the Greenway entrance



## HIGHLIGHTS

- Replaces jersey barriers with identity wayfinding
- Uses painted bikeways to orient on and off the Greenway
- Enhances the public realm for pedestrians and bikes
- Provides vertical cue at entrance
- Provides code of conduct and wayfinding information



# Case Study | Nicollet Entrance

The design recommendations in this manual shall be used as inspiration and guidance for future development and planning in the Midtown Greenway area. *Specific implementation and approval of designs will be determined on a project by project basis.*



Fig. 10: Recommendations for Nicollet Entrance | Plan



Fig. 11: Rendered view of Nicolle Ave entrance recommendations.