

Hilltop Planning Study

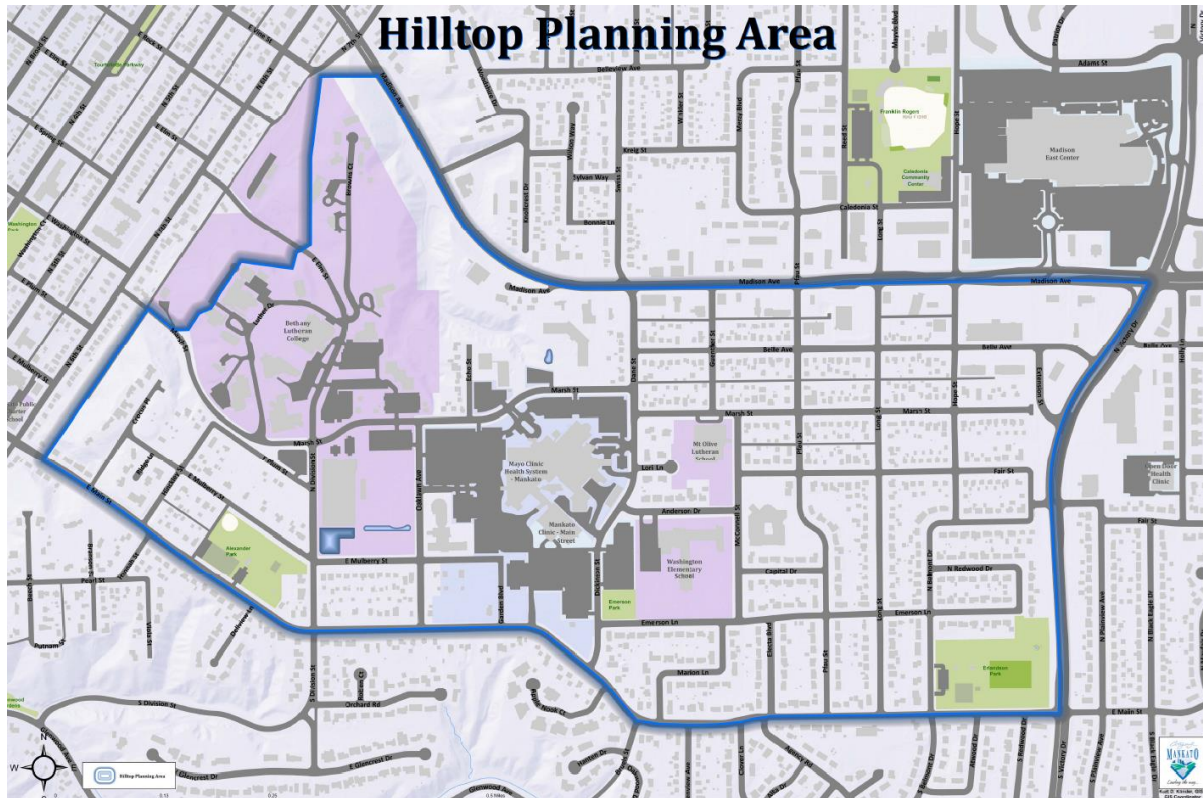
TABLE OF CONTENTS

Overview:	4
Executive Summary:	4
Recommended Actions	5
History	5
Community Engagement	6
SUMMARY	6
TOP COMMENTS/CONCERNS IDENTIFIED FOR FURTHER STUDY	7
Participant Voting Results	7
Additional Comments Received	8
Studies and Data Collection	9
TRANSPORTATION	9
Key Findings:	9
Focus Corridors:	10
Pedestrian System Considerations:	10
Recommended Actions:	10
LAND USE	11
Institution Overlay District Campus Plans	12
MAYO	13
BETHANY	14
MOUNT OLIVE	15
CHRIST THE KING CHURCH	15
OTHER INSTITUTIONAL USES	15
Growing Pressure for Redevelopment	15
Preservation of Existing Neighborhoods	16
RECOMMENDED ACTIONS:	20
Livability	20
CONNECTING THE WORK TO THE STRATEGIC PLAN:	21
GOAL 1: HOUSING	21
GOAL 2: SUSTAINABLE INFRASTRUCTURE	21
GOAL 3: COMMUNITY CONNECTION AND LIVABILITY	21
GOAL 4: COMMUNITY SAFETY	21
GOAL 5: ECONOMY	21
APPENDIX 1:	22
For Homebuyers:	22
MN Cities Participation Program (MCP)P	22
Housing Choice Voucher Homeownership	22
Partnership Community Land Trust	22
MN Housing Impact Fund	23

For Owner-Occupied Housing Rehabilitation:	23
City of Mankato Community Development Block Grant Loan Funds	23
Minnesota Housing Home Improvement Loans.....	23
MVAC Energy Related Repair	24
MVAC Housing Rehabilitation	24
MVAC Standalone Program (for water heaters & air conditioning)	24
APPENDIX 2:	25
Bolton and Menk Traffic Study:	25
Traffic Volumes	26
Pedestrian Crossing Locations and Transit Routes	26
Cut-Through Routes	27
Traffic Speeds	28
Intersection Operations.....	29
Crash History	30
Potential Transportation Design Treatments Toolbox.....	38
Corridor Recommendations	40

OVERVIEW:

On December 13, 2023, the Mankato City Council authorized a planning and engagement project for the Hilltop Planning Area. This area is bounded by Madison Avenue, Victory Drive, Main Street, and the bluff line west of Crocus Street. The project's purpose is to evaluate the Hilltop Planning Area, addressing issues and opportunities related to land use transitions and neighborhood traffic characteristics.



The planning area is characterized by significant transitions, including expansions of large institutions like Bethany Lutheran College and Mayo Health Systems. Smaller institutions, such as Mount Olive Church/School and Christ the King Church, have also expanded, often purchasing residential properties likely to be transitioned in the future. Other institutions, like Washington School and Hillcrest Nursing Home, have confined improvements within their property boundaries, yet these expansions impact on the surrounding areas.

Additionally, there is growing pressure for redevelopment of commercial properties along Madison Avenue, raising concerns about encroachments and impacts on existing residential properties.

EXECUTIVE SUMMARY:

On December 13, 2023, the Mankato City Council authorized the Hilltop Planning Area Study to evaluate land use transitions, neighborhood traffic concerns, and long-term preservation strategies for the area bounded by Madison Avenue, Victory Drive, Main Street, and the Crocus Street bluff line. The study responds to pressures from institutional expansion, commercial redevelopment, and transportation challenges that affect the stability and character of Hilltop neighborhoods.

Through a robust community engagement process—including five public meetings, online participation, and collaboration with institutional and commercial stakeholders, residents identified key priorities: pedestrian safety, traffic calming, preservation of affordable housing, neighborhood reinvestment, and balancing institutional growth with livability.

Transportation analysis confirmed concerns about cut-through traffic, speeding, and crash history along major corridors, while also highlighting opportunities for pedestrian system improvements and safer multi-modal connectivity. Land use review emphasized the importance of managing institutional growth under the Institutional Overlay District framework, addressing redevelopment pressures along Madison Avenue, and preserving housing stock critical to neighborhood affordability.

Recommended Actions

The study recommends the following strategies for implementation and integration into the City's Capital Improvement Plan:

- Prioritize Corridor Safety Improvements on Dane/Dickinson, Marsh, Long, and Belle Avenue, with emphasis on pedestrian crossings, sidewalks, and traffic calming.
- Integrate Traffic Calming and pedestrian safety features into the 2026 Long Street reconstruction and future capital projects.
- Expand the Pedestrian and Bicycle Network, filling sidewalk gaps, upgrading crosswalks, and improving Safe Routes to Schools.
- Preserve and Rehabilitate Housing Stock, targeting reinvestment dollars to maintain affordability and prevent displacement.
- Evaluate Parking Alternatives rather than remove affordable homes for institutional or commercial needs.
- Invest in Parks and Multi-Generational Amenities to enhance community livability, including potential splash pad installation and pet-friendly facilities.
- Advance Climate Action Goals by supporting multi-modal systems, EV charging infrastructure, and sustainable neighborhood design.
- Coordinate with Institutional Campus Plans to ensure growth is transparent, cooperative, and consistent with neighborhood stability.

By balancing growth pressures with neighborhood preservation, the Hilltop Planning Area Study provides a roadmap for maintaining livability, safety, and affordability while accommodating institutional and commercial needs in a responsible and sustainable manner.

HISTORY

The City of Mankato Land Use Plan, adopted in 1986, included a section on the Hilltop Planning Area. This area was described as a stable residential zone primarily composed of single-family dwellings built between 1920 and 1960. The plan highlighted that the area was well-served by schools, parks, and shopping facilities. It proposed three key concepts regarding potential changes to the area:

1. **Public and Semi-Public Facilities:** Numerous facilities are dispersed throughout the planning area. Although these facilities are expected to remain, expansion or changes in land use may occur. For instance, Immanuel-St. Joseph's Hospital may need to expand due

to space restrictions. Loyola Field and Bethany College occupy large tracts of land, and their land use may change in the future. The Land Use Plan should be flexible to accommodate such changes.

2. **Commercial Development:** Commercial development has taken place along Madison Avenue, with some pressure for expansion, particularly along Belle Avenue. To protect the residential area, commercial development should not extend beyond its current location. Parcels of land with access to Madison Avenue used for commercial purposes should have their zoning changed from R-1 to B-2 to eliminate non-conformity status.
3. **Environmental Protection:** The ravines and bluffs in the area should be protected from development.

Since 1996, institutional uses with cumulative building areas of 50,000 square feet or more must establish an Institutional Overlay District (IO District) if expansion is proposed. This process encourages cooperative planning among large institutional uses, the city, and neighboring property owners.

The process involves two main components:

1. **Campus Plan Development:** This shows properties to be developed or redeveloped and those proposed for future acquisition. It was introduced to provide transparency to neighboring property owners about the institutions' future intentions. *Note: Approval of the campus plan does not change the zoning designation of properties, nor does it compel property owners to sell to the institution.*
2. **Institutional Overlay District Establishment:** This includes near-term development and redevelopment projects on properties currently owned by the institution within the campus plan. Engagement with area property owners and residents, along with City participation, is required before formal submission to the Planning Commission and consideration by the City Council. These processes have been undertaken for both Mayo Health Systems and Bethany Lutheran College.

COMMUNITY ENGAGEMENT SUMMARY

To address planning awareness in the area and undertake a scoping process for plan updates, staff proposed a neighborhood engagement/planning process in 2024 in coordination with the overall update to the Land Use Plan. This neighborhood planning process occurred within the Hilltop Planning Area boundaries and began with resident engagement. The engagement helped to define the remainder of the process by providing valuable insights that shaped the scope for the work to be undertaken. Besides the residents, other stakeholders were included, such as the institutional uses discussed earlier and the commercial property owners. Those stakeholders used this as an opportunity to provide updates on their plans and provide a forum for resident feedback. Based on the results of the engagement, additional traffic information and analysis were also incorporated.

Four community engagement events were held in 2024:

- May 16, 2024: Washington Elementary (17 marked map locations, 19 comment cards completed)
- June 11, 2024: Erlandson Park (32 marked map locations, 18 comment cards completed)

- August 21, 2024: Alexander Park (29 marked map locations, 22 comment cards completed)
- November 14, 2024: Bethany Lutheran College (Voting on comments/concerns for further study)
- April 29, 2025: Bethany Lutheran College (Review of recommendations)

Council Work Session

- May 27, 2025: Council Work Session: (Overview of the Hilltop Planning transportation elements)

Online Engagement:

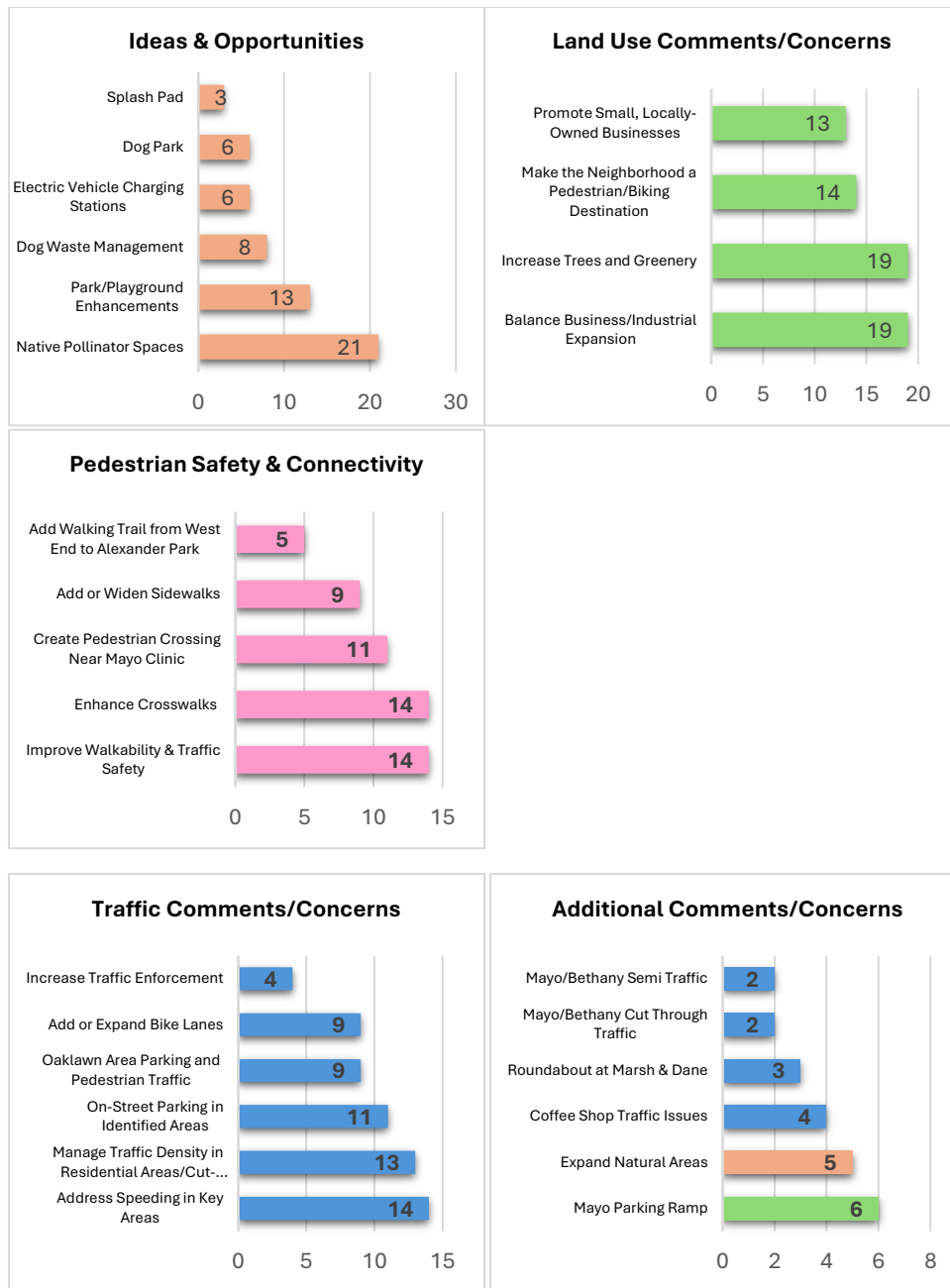
The Hilltop Planning Area Study launched on Every Voice Mankato in May 2024 to collect public comments: <https://everyvoice.mankatomn.gov/>. Participants had the option to view the area map and drop pins to add comments on specific areas of the neighborhood. Additionally, community comments were logged, and users had the opportunity to vote to add support for comments submitted and provide additional feedback.

TOP COMMENTS/CONCERNS IDENTIFIED FOR FURTHER STUDY

Items identified for study based on community input received through in-person and online engagement were organized into four focus areas and presented at an engagement on Nov. 14, 2024, to help prioritize the study and data collection phase. Items were organized into four main topics. Participants also had the opportunity to share any new comments/concerns or bring forward items not listed on the four focus area boards they felt should be included. Items were organized into four main topics.

- Ideas & Opportunities
- Land Use Comments/Concerns
- Pedestrian Safety and Connectivity
- Traffic Comments/Concerns
- What's Missing?

Participant Voting Results



Additional Comments Received

PEDESTRIAN SAFETY:

- Oaklawn/Mayo area concerns regarding crosswalks, sidewalk solutions and parking impacting visibility.
- Sidewalk Solution: Connect Mayo/Mankato Clinic to Main Street/Oaklawn/E. Mulberry/Garden Blvd. for improved pedestrian paths.
- Marsh & Dane: Need more visible crosswalk as traffic does not stop for pedestrians.
- Need for safe crossing points for pedestrians and bikers on E. Main (Hannah St./E. Main & Dellview Lane)
- E. Main Street: Residents feel unsafe biking due to increased traffic.

TRAFFIC CONCERNS:

- E. Mulberry "No Parking" Area: Underutilized for tournaments, suggesting a reduction in size.
- Visibility at Mayo and Oaklawn Exits: Suggest no parking on the right side of Oaklawn Ave. to improve visibility, especially in winter.
- Pothole repairs needed on Mulberry Street.
- E. Main St/Dickinson Street: Difficult left turns and high pedestrian traffic.
- Marsh & Dane Intersection: Left turns from Marsh on to Dane are problematic.

STUDIES AND DATA COLLECTION

TRANSPORTATION

The Hilltop Planning Area is framed by two heavily traveled minor arterial roadways—Madison Avenue and Victory Drive—each carrying more than 16,000 vehicles per day. Main Street, on the southern boundary, functions as a major collector with over 9,000 vehicles daily. Within the neighborhood, Dane/Dickinson Street, Marsh Street, and Long Street serve as collector routes and play a critical role in traffic circulation and neighborhood connectivity.

To better understand traffic and pedestrian dynamics in the Hilltop area, the City partnered with Bolton and Menk, Inc. (report included) to conduct a comprehensive transportation analysis. Data was collected using StreetLight Insight, which compiles information from connected vehicles, mobile devices, and sensors. The analysis focused on traffic volumes, cut-through patterns, speeds, pedestrian crossings, and crash history.

Key Findings:

- **Traffic Volumes and Speeds:** The highest volumes were observed along Dane/Dickinson Street, Marsh Street, and Long Street. These same corridors, along with Division Street, also experienced the highest relative speeds, which aligns with neighborhood concerns regarding speeding.
- **Cut-Through Traffic:** Nearly half of the trips on Long Street (47%) were cut-through in nature, meaning vehicles entered and exited the study area without stopping. Dane/Dickinson Street (18%), Pfau Street (15%), and Belle Avenue (9%) also carried notable levels of cut-through traffic.
- **Pedestrian Activity:** The greatest concentrations of pedestrian crossings occurred at Madison Avenue (near Dane and Long Streets), Marsh Street (between the Mayo Hospital and parking lots), Dickinson Street (near Emerson Lane and the Mankato Clinic crossings), and Main Street (at Pfau and Long Streets).
- **Intersection Operations:** Analysis of the Dane/Marsh intersection showed it currently operates at a high level of service, with minimal delays during peak hours.
- **Crash History:** While overall crash rates were within statewide expectations, several corridors—Long Street, Pfau Street, Belle Avenue, Division Street, and Marsh Street—had higher crash frequencies. Four bicycle- or pedestrian-related crashes have occurred over

the past decade, highlighting the need for improved pedestrian safety measures. A fatal crash occurred at Madison Avenue and Hope Street in 2023.

Focus Corridors:

Based on data analysis and community engagement, four corridors emerged as priorities for further study and improvements:

- **Dane/Dickinson Street:** Recommended enhancements include new pedestrian crossings (with consideration of Rectangular Rapid Flashing Beacons), filling sidewalk gaps, improving sightlines at key intersections, and introducing traffic calming measures such as lane narrowing and bike lanes.
- **Marsh Street:** Improvements focus on safer pedestrian crossings at Mayo Clinic parking areas, vegetation trimming for sightlines, and speed feedback signs to encourage compliance.
- **Long Street:** A scheduled 2026 reconstruction project presents an opportunity to incorporate corridor-wide traffic calming, pedestrian crossing upgrades at Main and Madison, enhanced signage, and potential design features such as raised medians, mini roundabouts, or chicanes to discourage speeding and cut-through traffic.
- **Belle Avenue:** While warrants for an all-way stop were not met, a temporary stop sign has been installed at Guenther Street. Recommendations include a new sidewalk on the north side of the corridor, vegetation trimming, improved signage, and exploring mini roundabouts or other calming designs at Belle/Long Street.

Pedestrian System Considerations:

The study confirmed the need to expand and improve the pedestrian and bicycle network. Key strategies include completing missing sidewalk links, widening narrow sidewalks, upgrading crosswalks, and exploring connections that better link residential areas to parks, schools, and major institutions such as Mayo Health System and Bethany Lutheran College. Safe Routes to School and enhanced bicycle facilities should be prioritized to reduce conflicts between vehicles and vulnerable users.

Together, these findings emphasize the importance of a “complete streets” approach in the Hilltop area—balancing the needs of motorists with those of pedestrians, bicyclists, and transit riders. Corridor-specific recommendations provide a roadmap for targeted improvements while aligning with the City’s broader goals of safety, livability, and connectivity.

Recommended Actions:

Based on the analysis, the following actions are recommended for the City to consider as part of implementation and future capital planning:

1. **Prioritize Corridor Safety Improvements** – Advance design and funding for targeted improvements on Dane/Dickinson, Marsh, Long, and Belle Avenue, with emphasis on pedestrian crossings, sidewalks, and traffic calming.

2. **Reduce crashes and injuries:** Incorporate Traffic Calming into Planned Projects – Integrate speed reduction and pedestrian safety features into the 2026 Long Street reconstruction and any future capital projects within the study area.
3. **Expand the Pedestrian and Bicycle Network** – Fill critical sidewalk gaps, improve crosswalk visibility, and expand bicycle accommodations, focusing on Safe Routes to Schools and connections to parks and institutions.
4. **Continue Monitoring Temporary Measures** – Evaluate the effectiveness of the temporary stop sign at Belle/Guenther and adjust long-term traffic control strategies as needed.
5. **Enhance Public Engagement and Education** – Partner with residents, institutions, and schools to improve awareness of pedestrian safety, bicycle routes, and neighborhood traffic calming initiatives.
6. **Coordinate with Institutional Campus Plans** – Ensure transportation and pedestrian improvements align with the growth and expansion of major institutions in the Hilltop area, particularly Mayo Health System and Bethany Lutheran College.
7. **Integrate into the Community Investment Plan (CIP)** – Use the findings and recommendations from this study to inform CIP updates, ensuring that priority improvements are advanced systematically and equitably.

LAND USE

The planning area is characterized by “transition” as it contains a mix of single-family dwellings and several large expanding institutions (Bethany Lutheran College and Mayo Health Systems) and smaller institutions.

The residential areas are primarily comprised of single-family dwellings built in the 40-year period between 1920 and 1960. Although the property values vary considerably due to the size of structures, most homes are in sound condition. The area is well served by schools, parks, and shopping facilities.

Since 1996, institutional uses comprising 50,000 square feet or greater of cumulative building area are required to establish an Institutional Overlay District (IO District) if expansion is proposed. The process is intended to promote cooperative planning among the larger institutional uses, City, and neighboring property owners. The process involves two important components. First, development of an overall campus plan showing the properties to be developed/redeveloped, but also including properties proposed for acquisition and redevelopment in the future. This was included as a requirement due to feedback from neighboring property owners that desired full disclosure from the institutions on their future intent so they could plan accordingly if their home was targeted for acquisition. Note, approval of the campus plan does not change the zoning designation of properties, nor does it compel property owners to sell to the institution. The second part of the process is the establishment of an IO District in which near term development and redevelopment projects will be undertaken by the institution on properties they currently own and

Institution Overlay District Campus Plans

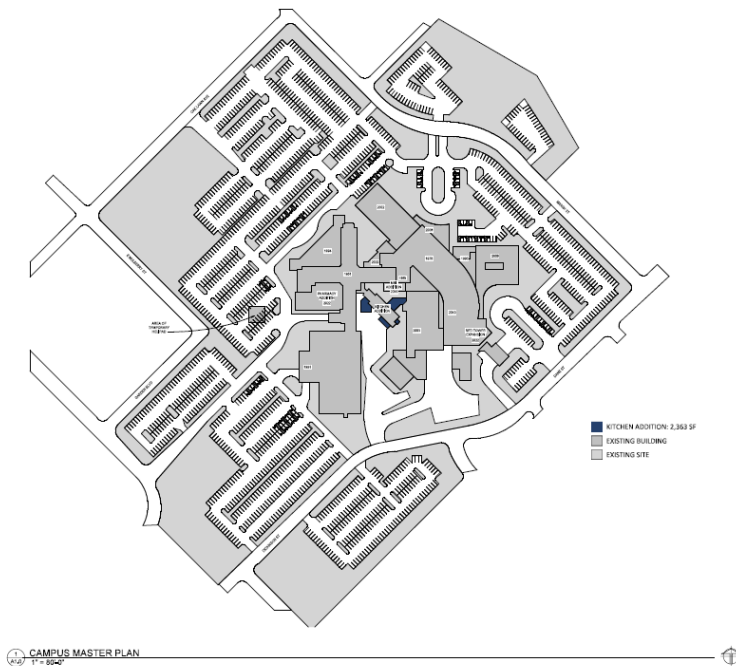
MAYO

The Mayo Clinic Health Clinic Health Systems Institutional Overlay District is centrally located within the Hilltop Planning Area. The area extends from Main Street (south) to Marsh Street (north) and from Dickenson/Dane Street (east) to Oaklawn Avenue/Garden Boulevard (west).

Beginning in the early 2000s, the City approved the application of the Institutional Overlay District (I-O District) to the Mayo Clinic Health Systems campus, enabling a flexible planning framework for long-term institutional growth. This overlay allowed for coordinated development through Institutional Overlay District Campus Plans, which were periodically updated to reflect evolving healthcare needs and facility expansions. In the early 2000s, Mayo Clinic Health Systems (then Immanuel St. Joseph's Hospital) did expand the institutional overlay district by acquiring properties adjacent to the hospital and/or campus plan boundaries. The acquisitions did remove several homes to allow for the facility and parking expansions to occur. During this time, a portion of Marsh Street was rerouted to allow for additional campus expansion flexibility.

Key zoning actions included major expansions that added a new emergency department, surgical suites, radiology clinic, oncology clinic and inpatient bed areas, significantly increasing the hospital's capacity. Recent campus activities included construction of a multi-story bed tower, pharmacy, and kitchen area.

Traffic volumes and speeds, parking, stormwater, and preservation of homes have been common themes during the review of projects at the Planning Commission and City Council meeting.



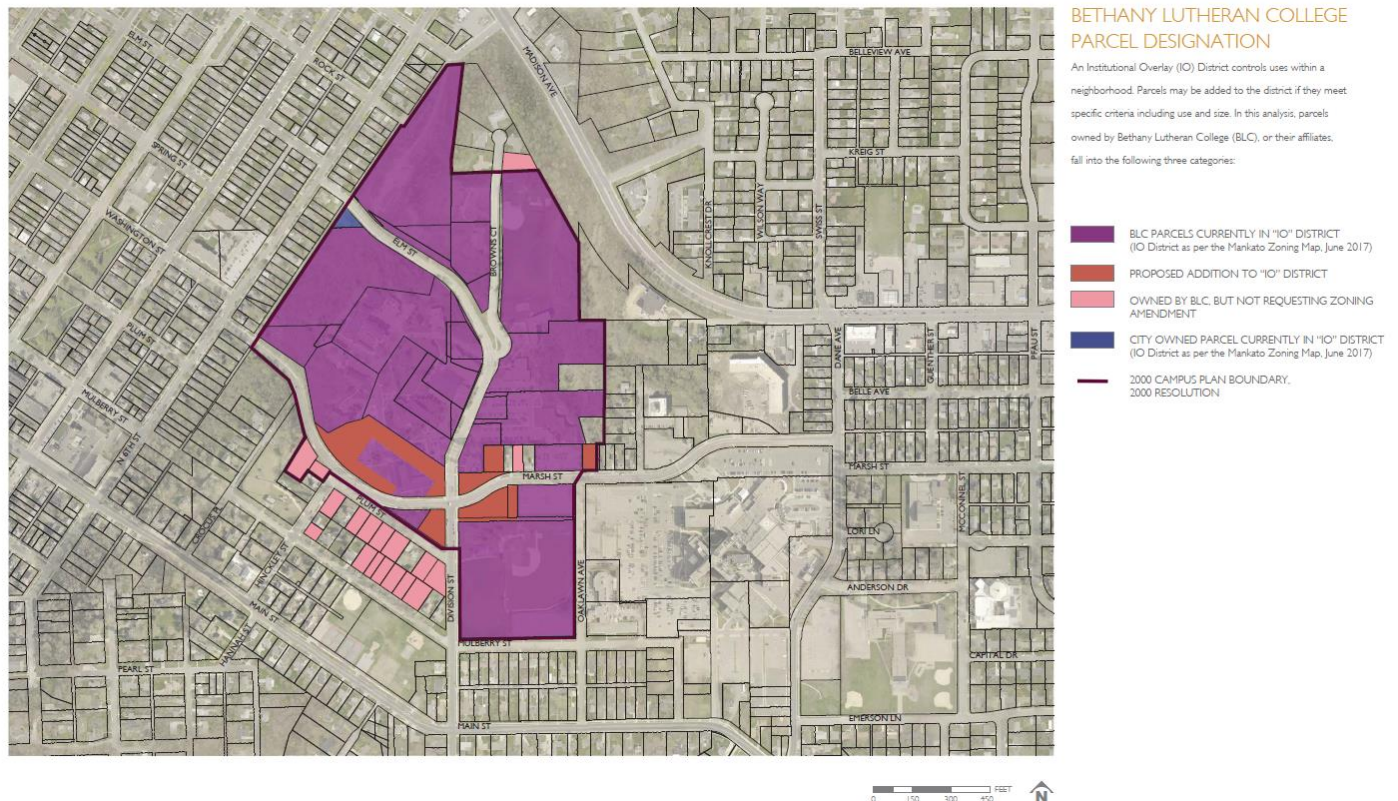
BETHANY

The Bethany Lutheran College Institutional Overlay District is located in the northwestern corner of the Hilltop Planning Area. The area extends from Mulberry/Plum Street (south) to Madison Avenue/Browns Court (north) and from Oaklawn Avenue (east) to the bluff (west).

Beginning in the early 2000s, the City approved the application of the Institutional Overlay District (I-O District) to the Bethany Lutheran College campus, enabling a flexible planning framework for long-term institutional growth. As with Mayo Clinic Health Systems, this overlay allowed for coordinated development through Institutional Overlay District Campus Plans, which were periodically updated to reflect evolving education needs and facility expansions. In the 2000s and 2010s, Bethany did expand the institutional overlay district by acquiring properties adjacent to the college and/or campus plan boundaries. The acquisitions did remove several homes to allow for the educational building, activities growth, and parking expansions to occur.

Key zoning actions included major expansions that added a new education building (Honsey Hall), dormitories, Student Activities Center, and the construction of a new soccer facility which facilitated enrollment growth. The most recent campus activities included construction of a Student Activities Center and the soccer complex.

Parking, traffic volumes and speeds, refuse, environmental concerns, stormwater, and preservation of homes have been common themes during the review of projects at the Planning Commission and City Council meeting.



The area also contains smaller institutional uses that have expanded in the past such as Mount Olive Church/School and Christ the King Church. All the institutions have purchased properties that at this time remain residential, but it is likely that those properties will be transitioned as well.

MOUNT OLIVE

Mount Olive was originally constructed in 1970. The original layout for the property includes the church sanctuary and classrooms. In 2001, the church expanded to provide additional classrooms in the K-6 school, a gymnasium/ fellowship hall, and church office spaces located on-site. A second expansion occurred in 2018. The 2018 expansion included a vestibule, narthex area, lobby, offices, conference rooms, restrooms, youth/multi-purpose room, workstations, and classroom space. Exterior work included the construction of a canopy and the relocation of parking to the south side of the property.

In 2018, Mount Olive constructed an addition on the eastern side of the building for the purpose of adding offices and classrooms.

CHRIST THE KING CHURCH

Christ the King church's building development occurred through a series of building projects and renovations that reflect the congregation's growth and evolving needs. Contracts for the construction of original church facility and the parsonage were executed in February 1960. In 1964, the education wing was dedicated, providing dedicated space for religious instruction and fellowship. Continued expansion led to the completion of a major addition in 1969, which introduced the current main worship space, a library, and the Fireside Room. In 1995, the church underwent extensive remodeling and enlargement, which included the creation of a Community Room, a new Fireside Room, and the installation of air conditioning. The most recent phase of improvement occurred in 2004, when many of the halls and classrooms were redesigned to support a "rotation model" Sunday school, ensuring that the church's facilities remained responsive to the needs of its educational programs.

The church's expansion has not required the acquisition of properties in recent years. In 2004, the church did vacate right-of-way.

OTHER INSTITUTIONAL USES

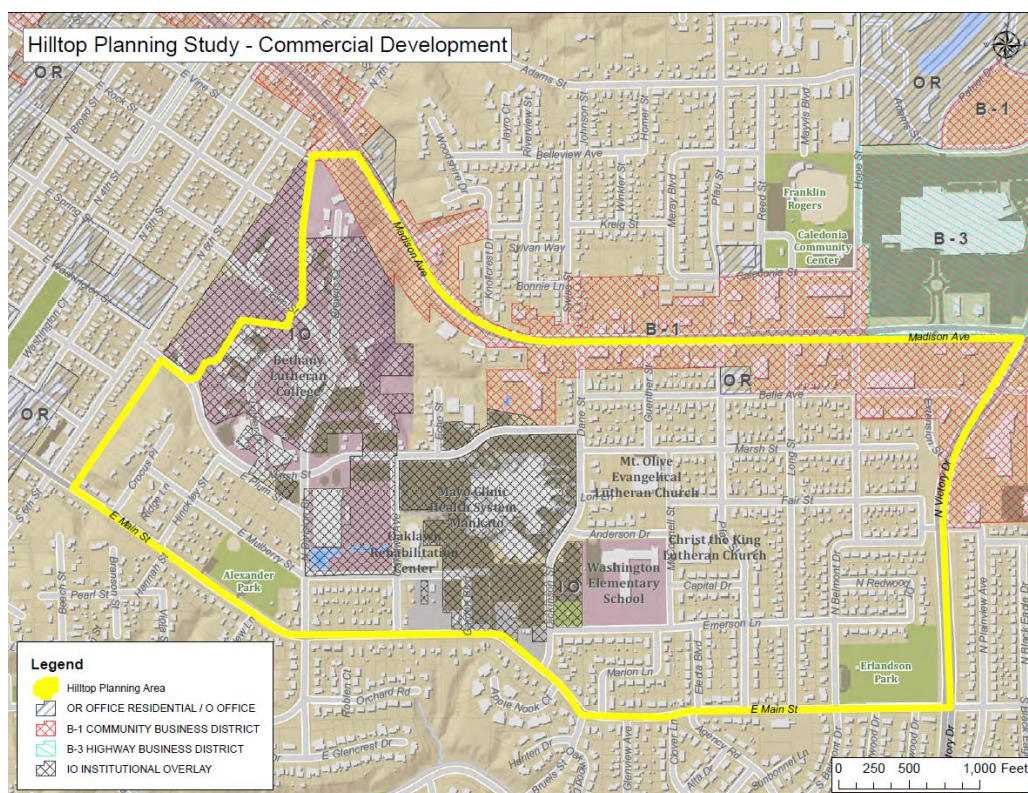
Other institutional uses, such as Washington School and Oaklawn Nursing Home, have also seen improvements over the years but have confined those to their existing property boundaries, but the expansions do have impacts on the surrounding area.

Growing Pressure for Redevelopment

Commercial development, depicted as a B-1 area in the maps below, has occurred in the northern part of the planning area along Madison Avenue. A certain amount pressure for commercial expansion exists particularly along Belle Avenue. Commercial expansion should be promoted and supported in areas designed for commercial use such as the Madison Avenue Corridor. New commercial development should be evaluated on the potential impacts to the neighborhood (traffic, noise, lighting, etc.) Complimentary uses to the neighborhood should be considered. This

area could be targeted for commercial rehabilitation dollars to assist in building maintenance and appearance. The commercial expansion should not be limited beyond the present location unless previous concepts reviewed by the City Council support the change.

There is also growing pressure for redevelopment of the existing commercial properties along Madison Avenue. As those properties redevelop, there are concerns in the area regarding encroachments and impacts on existing residential properties. Recent examples include the redevelopment of the southwest corner of Dane Street and Madison Avenue and the redevelopment of the southwest corner of Long Street and Madison Avenue. The redevelopment of each of those parcels did expand the commercial areas/square footage adjacent to the residential neighborhood.



Preservation of Existing Neighborhoods

Preserving the neighborhoods located in the Hilltop Planning is essential to maintaining the area's character, housing diversity, and long-term stability. This neighborhood serves as a critical link between the city's historic core and its expanding commercial corridors, providing a mix of older, affordable housing stock alongside newer reinvestment. The Hilltop Areas continues to face pressure from encroachment by nearby commercial uses and the institutional expansion of Bethany Lutheran College, Mayo Clinic Health Systems, Mount Olive Church, Christ the King Church, and Washington Elementary School. This growth can erode the availability of affordable housing, displace long-term residents, and undermine the neighborhoods' connectivity and livability.

Preservation efforts should emphasize reinvestment in existing housing, infrastructure improvements, and strategies that maintain affordability, preserve and enhance multi-modal

neighborhood connectivity. Parking alternatives should be evaluated and prioritized over the continued removal of affordable homes to accommodate institutional or commercial needs. By balancing growth pressures with thoughtful preservation and innovative parking solutions, the City can ensure these neighborhoods remain vibrant, stable, and integral to Mankato's overall community fabric.

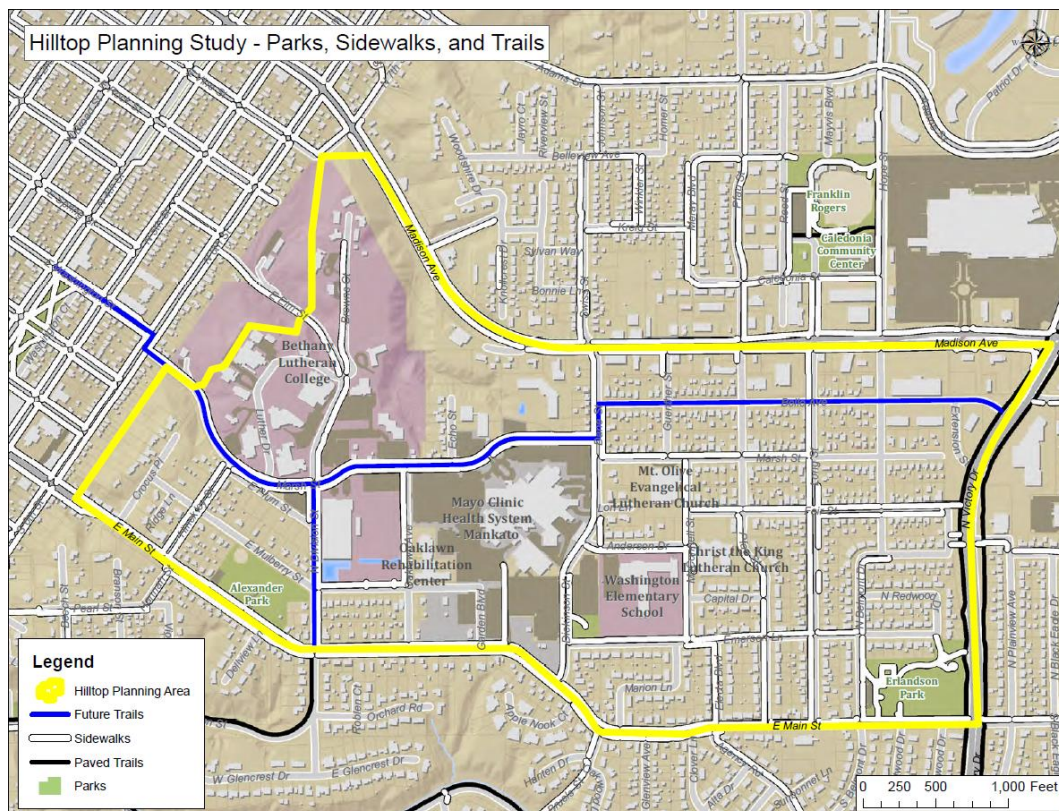
The recently adopted Housing Study indicates that a typical household can afford to pay 3.0- 3.5 times their annual income on a single-family home. Based on this information a family of 4 at 80% Area Median Income, approximately \$83,750, can afford a home priced at or below \$293,125. A family of 4 at 100% of Area Median Income, approximately \$104,700, can afford a home at or near \$350,000.

A valuation map of the area, using Blue Earth County assessed value information, depicts a majority of the single-family dwellings in the range at or below \$293,125. A small percentage of the dwellings are between the range of \$293,125 and \$350,000. Many of the properties above the \$350,000 value are commercial/institutional uses.



In addition to housing, the neighborhood discussed the importance of the parks and open spaces in the Hilltop Planning Area. The Hilltop Planning is served by Alexander Park (on the western side), Emerson Park (centrally located) and Erlandson Park (on the eastern side). Recent updates have been made to Erlandson and Alexander Parks. Comments received from the residents included a need to have more amenities for small children and pets.

Trails and connectivity is also crucial to the neighborhood. The Hilltop Planning Area does contain locations of interrupted sidewalk segments that limit the walkability of the neighborhood. Expansion of the sidewalk to underserved areas will better connect the neighborhood to the trail system on Victory Drive. The City of Mankato Sidewalk and Trail Map also discusses potential future trails. The first connection the from the Washington Park Neighborhood through the Hilltop Neighborhood to the trail on Victory Drive. A secondary north/south trail is proposed to connect from Bethany Lutheran College/Marsh Street connected to Main Street which then provides a connection to the Warren Street trail.



Hilltop Planning Area

Map showing various land use designations and potential areas for native plantings:

- Limit Expansion of BLC** (Blue Line Corridor)
- Limit Expansion of Commercial Areas** (Yellow outline)
- Limit Expansion of Hospital Area** (Blue outline)
- Retain & Enhance Residential Areas** (Purple outline)
- Potential Areas for Native Plantings** (Green outline)

Key locations and landmarks include:

- Madison East Center
- Madison High School
- Madison Elementary School
- Madison Middle School
- Madison Junior High School
- Madison Senior Center
- Madison Community Center
- Madison Park
- Madison Lake
- Madison River
- Madison Creek
- Madison Hill
- Madison Valley
- Madison Ridge
- Madison Point
- Madison Bend
- Madison Turn
- Madison Fork
- Madison Branch
- Madison Tributary
- Madison Confluence
- Madison Delta
- Madison Mouth
- Madison Estuary
- Madison Bay
- Madison Sound
- Madison Strait
- Madison Trench
- Madison Shoal
- Madison Bank
- Madison Spit
- Madison Point
- Madison Head
- Madison Neck
- Madison Peninsula
- Madison Isthmus
- Madison Promontory
- Madison Headland
- Madison Point
- Madison Neck
- Madison Peninsula
- Madison Isthmus
- Madison Promontory
- Madison Headland

Map scale: 1 inch = 1 mile

Map source: Hilltop Planning Area

Map date: 2010

Map author: Hilltop Planning Area

Map title: Hilltop Planning Area

Map legend:

- Blue Line Corridor
- Yellow outline
- Blue outline
- Purple outline
- Green outline

RECOMMENDED ACTIONS:

Based on the analysis, the following actions are recommended for the City to consider as part of implementation and future capital planning:

Livability

1. Access to safe, well-maintained park and recreation assets for all- Continue to make park enhancements in the Hilltop Areas. This includes the maintenance and enhancement of the existing resources like the tennis courts, basketball courts, field space, restrooms, and equipment. The improvements should consider multi-generational amenities to encourage all users to frequent the parks. The play system amenities should consider pieces for children under the age of 5, teen amenities, safe walking areas, and evaluate the placement of a splash pad in the area.
2. Enhancements discussed by the residents included installation of open spaces and public areas with native plantings in public spaces throughout the neighborhood.
3. Placement of pet waste facilities for people that walk dogs in park areas. Also, the consideration of areas to bring pets for safe, off-leash recreation.
4. Well maintained transportation assets. Further evaluate and implement the appropriate concepts suggested in Bolton and Menk Study. In addition, provide neighborhood access to the transit system. As part of the bus stop improvement program, bus stop locations should be strategically placed in the neighborhood to allow for transportation alternatives that encourage less parking and greater mobility.
5. Create a clear vision on climate change- follow the guidance in the recently adopted Climate Action Plan.
6. Better and safer multi-modal systems for all users to improve connectivity across the community- Consider the installation EV Charging stations for e-bikes and other multi-modal electric transportation methods. The charging stations could be encouraged in commercial areas or bike charging resources may be considered in park areas.

Housing

1. Integrate speed reduction and pedestrian safety features into the 2026 Long Street reconstruction and any future capital projects within the study area.
2. Promote preservation of existing housing stock. The preservation of the existing housing stock provides affordable housing opportunities to the City.
3. Target rehabilitation dollars to assist with maintenance of the existing housing stock.

CONNECTING THE WORK TO THE STRATEGIC PLAN:

GOAL 1: HOUSING

Preserve the existing affordable housing stock:

4. Make strategic City investments in neighborhood enhancements (*Goal: 1 Action 4*)

GOAL 2: SUSTAINABLE INFRASTRUCTURE

Well-maintained transportation assets:

2. Strategic City investments in neighborhood enhancements (*Goal 2, Action 2*)
3. Better, safer multi-modal opportunities for all users (*Goal 2, Action 3*)
4. Improve connectivity across community (*Goal 2, Action 4*)

Clear vision on the city's work to protect the climate:

13. Develop a climate action plan and prioritize the initiatives (*Goal 2, Action 13*)
14. Create education program to help people understand how to support environmental initiatives (*Goal 2, Action 14*)

Better and safer multi-modal systems for all users to improve connectivity across the community:

19. Develop education and awareness campaigns for drivers, pedestrians, bikes, and e-bike safety (*Goal 2, Action 19*)

GOAL 3: COMMUNITY CONNECTION AND LIVABILITY

Access to safe, well-maintained park and recreation assets for all:

5. Develop a park and recreation system plan that inventories assets and conditions and identifies investments and policies (*Goal 3, Action 5*)
6. Update the Parks and Open Spaces Operations and Capital Plan Projects plan based on community needs and trends and educate the community (*Goal 3, Action 6*)

GOAL 4: COMMUNITY SAFETY

Reduce crashes and injuries:

5. More targeted enforcement based on crash data (*Goal 4, Action 5*)
6. Continual engagement to inform data-based traffic safety improvements and necessary educational outreach (*Goal 4, Action 6*)
7. Review and prioritize infrastructure and design improvements for high crash areas (*Goal 4, Action 7*)

GOAL 5: ECONOMY

Mankato's business community is thriving and can grow:

10. Analyze available land for business development and redevelopment opportunities (*Goal 5, Action 10*)

Shared goals with community partners to advance economic development for Mankato:

11. Align partnerships around the City's goals for economic development (*Goal 5, Action 11*)



APPENDIX 1:

For Homebuyers:

Locally there are several affordable gap funding programs available for home buyers. These can be used independently or layered together to meet homebuyer needs:



MN Cities Participation Program (MCP)

Contact: Mankato EDA, Associate Director of Housing, 507-873-8623

Helpful link: <https://www.mankatomn.gov/residents/housing/homeownership-resources>



Participating Lenders: <https://www.mnhousing.gov/lender-directory.html>

Program description: Program through MN Housing and administered directly through MN Housing participating banks. They have start up and step up programs with income limits up to \$142,800 and home purchase prices up to \$604,400, including down payment assistance up to \$53,000.

Housing Choice Voucher Homeownership



Contact: Mankato EDA, Housing Coordinator, 507-387-8675

Helpful link: <https://www.mankatomn.gov/residents/housing/housing-programs/housing-choice-voucher-program/hcv-homeownership-program>

Program description: For participants in Blue Earth County receiving Housing Choice Voucher rental assistance can transition into owning their own home. Housing subsidies can be used to support mortgage payments. The EDA has up to \$5,000 in down payment assistance for participants on the HCV homeownership program if needed to qualify for homeownership.

Partnership Community Land Trust



Contact: Southwest MN Housing Partnership, Director of Resources and Program Development, 507- 836-1621

Helpful link: <https://www.swmhp.org/buy-a-home/partnership-community-land-trust/>

Program description: Administered through the Southwest MN Housing Partnership to create affordability by separating the cost of the land from the cost of the home. The nonprofit retains ownership of the land, leasing it to the homeowner for a small fee.

MN Housing Impact Fund

Contact: Southwest MN Housing Partnership, Housing Counselor, 507-836-1620.

Program description: Provided by Southwest MN Housing Partnership - affordable gap funding through MN Housing to assist homebuyers with up to \$20,000 and is used in partnership with the Partnership Community Land Trust.

For Owner-Occupied Housing Rehabilitation:

City of Mankato Community Development Block Grant Loan Funds



Contact: Mankato EDA, Economic Development Coordinator, 507-387-8711

Helpful link:

<https://www.mankatomn.gov/home/showpublisheddocument/14361/638503504312270000>

Helpful link:



<https://www.mankatomn.gov/home/showpublisheddocument/12952/638175188971430000>

Program description: Community Development Block Grant (CDBG) loan funds available to assist owner-occupied properties with required exterior, energy efficiency and building code improvements. Eligible applicants must be low to moderate income (80% AMI or less) owner-occupied property owners within one of the targeted neighborhoods. Eligible property owners may apply for a loan of up to \$35,000 per property. The loans will be provided at 0.0% interest and will require no monthly payments. The loans are secured with a mortgage on the property to be improved and are forgiven after a 10-year period; provided the property ownership is not transferred and the use of the property as an owner-occupied residence does not change. If property ownership is transferred or the use of the property changes during the 10-year commitment period, the loan must be repaid to the City of Mankato on a pro-rated basis.

Minnesota Housing Home Improvement Loans



Contact: Minnesota Valley Action Council, Loan Department, 507-345-2438

Bank Vista, 507-344-3505

Frandsen Bank & Trust, 507-345-5043

Helpful link: <https://www.mnhousing.gov/homeownership/improve-your-home.html>

Program description: Minnesota Housing offers a variety of loan programs to help make necessary repairs or updates to your home. Minnesota Housing works with local participating lenders who can answer questions about program eligibility and help you learn about the features of the programs.

MVAC Energy Related Repair



Contact: Minnesota Valley Action Council, Energy Department, 507-345-2430

Helpful link: <https://www.mnvac.org/programs/energy/weatherization/>

Status: Program runs October 1st - May 30th

Program description: For homeowners who are Energy Assistance eligible. Provides repairs or replacements of primary heating units in emergency no-heat situations.

MVAC Housing Rehabilitation



Contact: Minnesota Valley Action Council, Loan Department, 507-508-0826

Helpful link: <https://www.mnvac.org/programs/housing/home-improvement-loans/>

Program description: Loan & grant programs help very low-income people to address health and safety improvements. Funds may be used for basic home improvements that directly affect the home's safety, habitability, or energy efficiency to homeowners. Additionally, there are loan programs designed to address emergency home improvements and essential accessibility improvements. Loans are deferred loans– this means no monthly payments or interest, but there is a lien on the home. You must remain in the home for 15 years to be forgiven (10 years if it is a mobile home in a park).

MVAC Standalone Program (for water heaters & air conditioning)



Contact: Minnesota Valley Action Council, Loan Department, 507-345-2438

Helpful link: <https://www.mnvac.org/programs/energy/weatherization/>

Program description: For owners & renters who are Energy Assistance eligible. Provides repair/replacement of water heaters and air conditioners without going through the entire Weatherization process. See notes in Appendix.

APPENDIX 2:
Bolton and Menk Traffic Study:

MEMORANDUM

Date: July 2, 2025

From: Angie Bersaw, AICP and Jennifer McCoy, PE, PTOE

Subject: Mankato Hilltop Planning Area Study – Transportation Analysis
City of Mankato, MN
Project No.: 25X137882000

I. Introduction

The purpose of the Hilltop Planning Area Study is to evaluate the Hilltop Planning Area, addressing issues and opportunities related to land use transitions and neighborhood traffic characteristics. The key elements of the study include:

- Identify existing issues and concerns through:
 - Neighborhood and public input
 - Traffic and pedestrian data collection
 - Crash history
- Develop a future land use plan
- Identify transportation improvement options

The purpose of this memorandum is to summarize the traffic, pedestrian, and bicycle data collection that was conducted to identify transportation issues, focus areas, and improvement recommendations in the Hilltop Planning Area.

II. Transportation Data Collection

Several types of transportation data were collected to understand traffic volumes, speeds, cut-through routes, intersection operations, pedestrian crossing locations, transit routes, and crash history.

Vehicle and pedestrian data were gathered using StreetLight Insight. StreetLight Insight uses data from connected vehicles, mobile devices, and sensors to provide insights about traffic patterns, volumes and behaviors without the need for field data collection.

The most recent available StreetLight Insight data was used for vehicles (2023-2024) and for pedestrians (2021-2022). The analysis window for both vehicles and pedestrians focused on the months of April-May

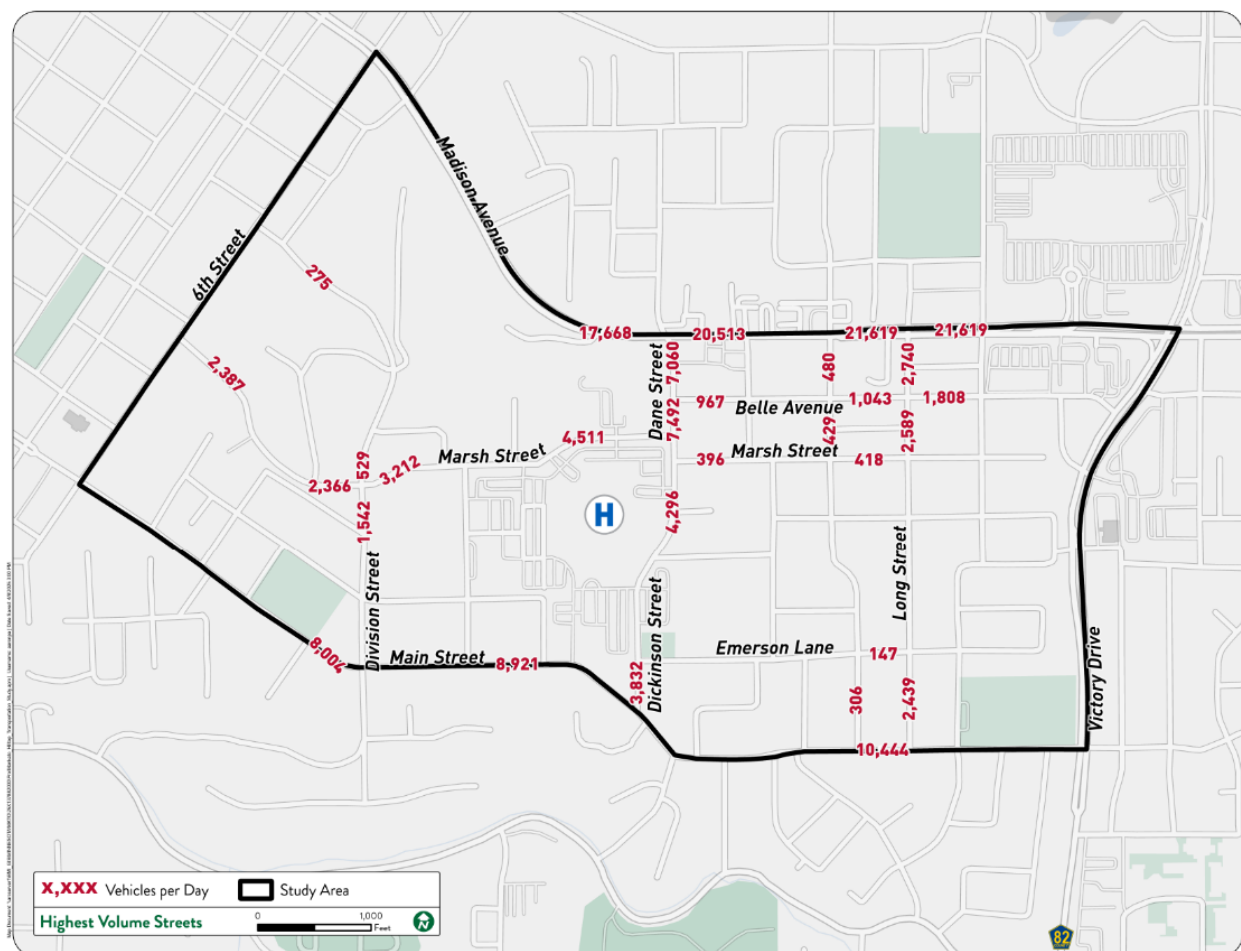
and September-October. These months were chosen to avoid any major changes in traffic patterns due to seasonality and included weekday school traffic.

The following summarizes the data sources and results of the data analysis.

TRAFFIC VOLUMES

Figure 1 illustrates the traffic volumes on key corridors through the study area. The corridors carrying the highest traffic volumes include Dane Street/Dickinson Street, Marsh Street (from Division Street to Dane Street) and Long Street.

Figure 1. Highest Traffic Volume Streets



PEDESTRIAN CROSSING LOCATIONS AND TRANSIT ROUTES

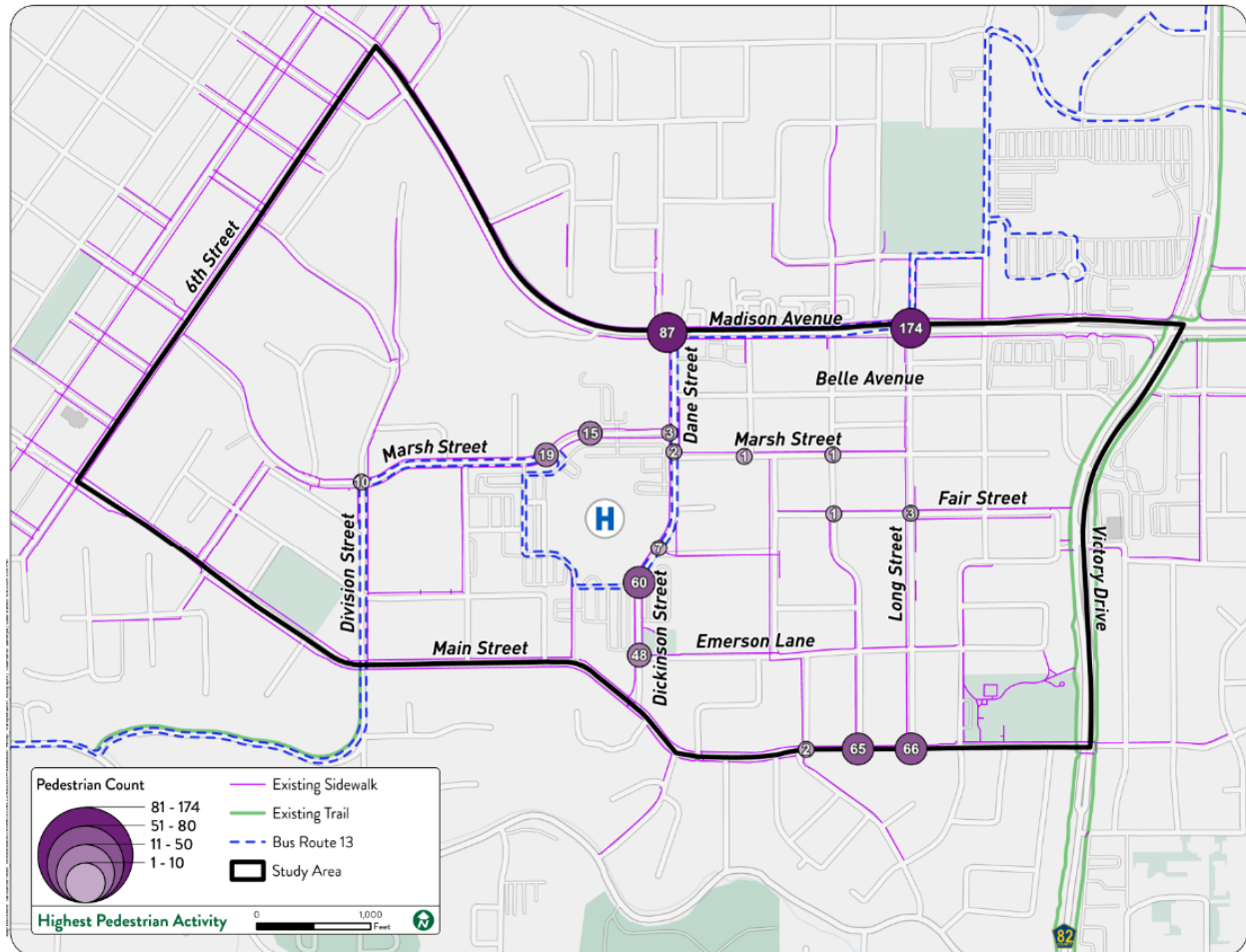
The existing pedestrian network (sidewalks and trails) and the existing transit network was mapped to compare to areas with pedestrian activity in the study area as shown in **Figure 2**. It should be noted that StreetLight Insight data only captures pedestrian activity where mobile devices and sensors are recording that activity. Therefore, lack of pedestrian activity at an intersection does not necessarily mean there were no pedestrians, rather it could be an indication of a lack of data.

The results of the analysis showed the highest pedestrian activity at:

- Madison Avenue – at Dane Street and Long Street

- Marsh Street – between the Mayo Hospital and employee parking lots
- Dickinson Street – at the Emerson Lane intersection and the crossing between the Mankato Clinic parking lot and employee parking lot
- Main Street – at Pfau Street and Long Street

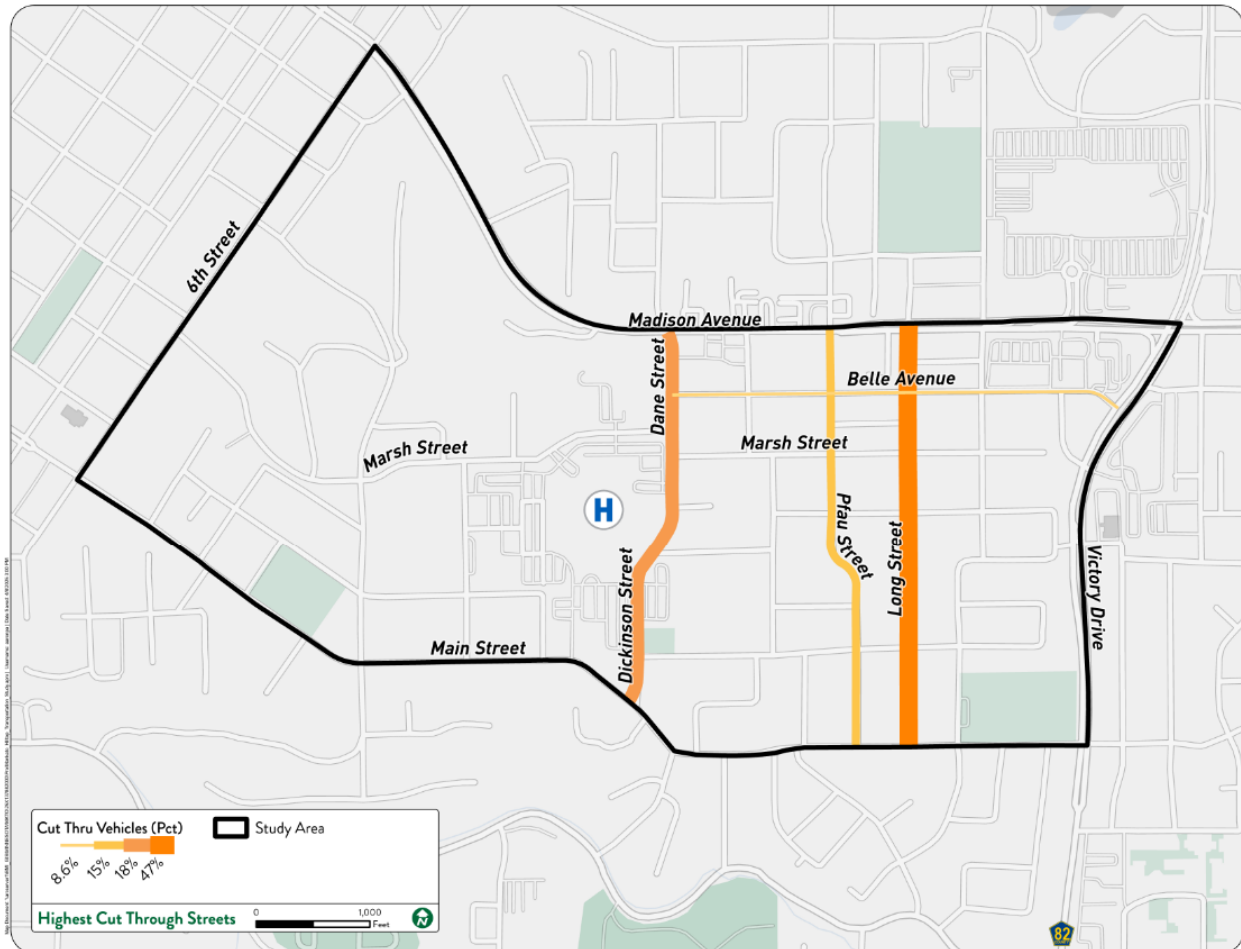
Figure 2. Highest Pedestrian Activity



CUT-THROUGH ROUTES

StreetLight Insight data was used to identify cut-through trips, or trips that entered and exited the study area on the same roadway. **Figure 3** illustrates the highest cut-through corridors in the neighborhood. These include 47% of the trips on Long Street, 18% of the trips on Dane Street/Dickinson Street, 15% of the trips on Pfau Street, and 9% of the trips on Belle Avenue.

Figure 3. Highest Cut-Through Streets

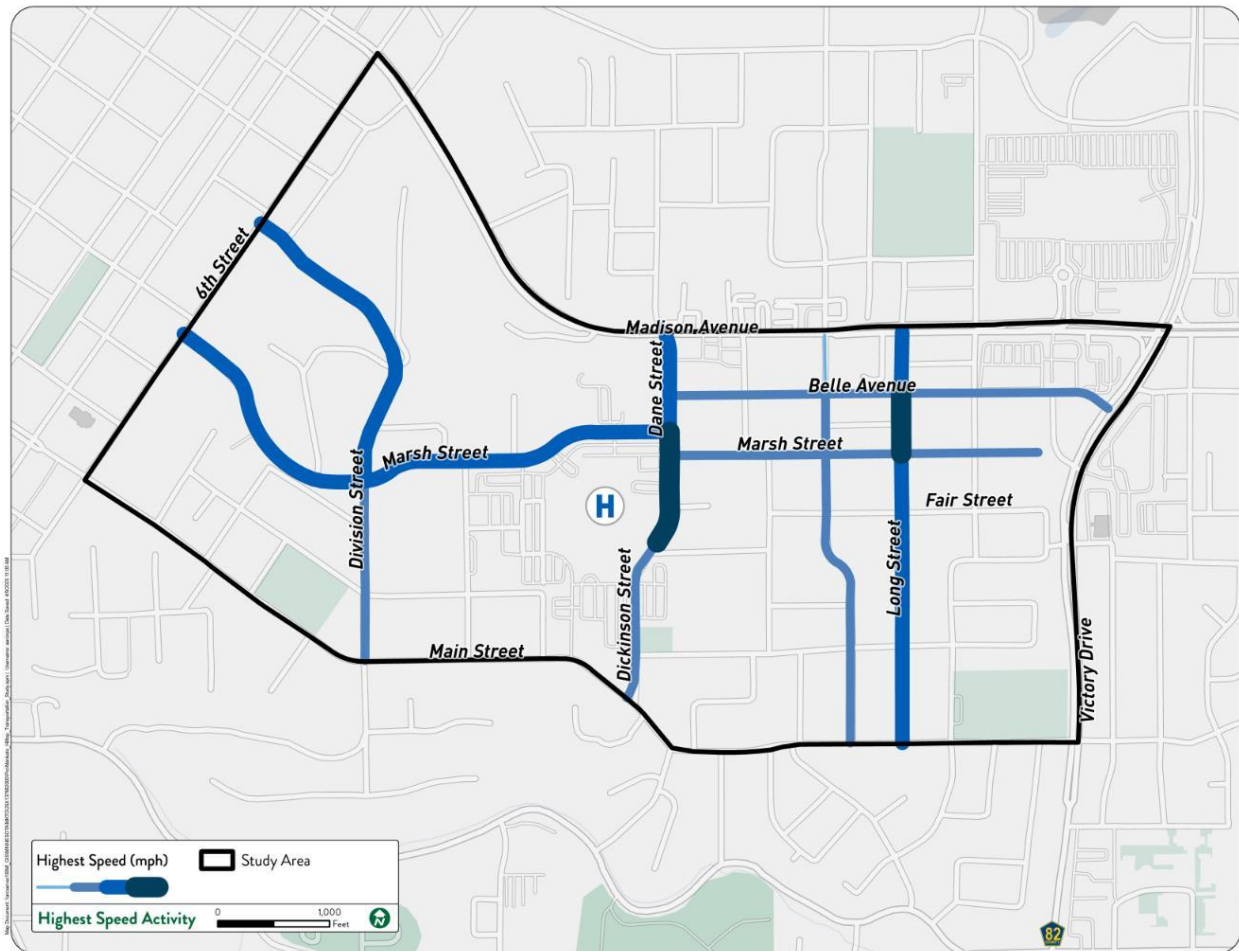


TRAFFIC SPEEDS

StreetLight Insight data was used to understand traffic speeds occurring on each study corridor, relative to other study corridors in the neighborhood. This method identifies high-speed areas in the neighborhood and allows comparison to the public feedback on speeding issues. StreetLight Insight data is not a replacement for traditional data collection measures that capture vehicle speeds in miles per hour, as StreetLight Insight data averages the speeds of all vehicles passing through an analysis point. This means the averages in areas near intersections or driveways can be skewed as vehicles are slowing down or speeding up from a stopped condition. However, the data is still a useful tool for a relative comparison across corridors in a planning analysis like this.

Figure 4 shows the highest speed activity in the neighborhood was found along Dane Street/Dickinson Street, Long Street, Marsh Street, and Division Street (north of Marsh Street). Belle Avenue was another corridor near the top of highest speed activity in the neighborhood.

Figure 4. Highest Speed Activity



INTERSECTION OPERATIONS

Turning movement traffic data from StreetLight Insight was collected for the intersection of Dane Street and Marsh Street in the AM and PM peak hours. The peak hours were determined to be 7:15-8:15 AM and 3:30-4:30 PM. The intersections were modeled in the analysis software Trafficware Synchro and the volumes were used to determine how the existing intersection operates today.

The average vehicle delays were reported as a Level of Service (LOS) ranging from A to F. These letters serve to describe a range of operating conditions for different types of facilities. Levels of Service are calculated based on the Highway Capacity Manual which defines the LOS, based on control delay. Control delay is the total delay experienced by vehicles slowing down as they are approaching the intersection, the wait time at the intersection, and the time for the vehicle to speed up through the intersection and enter the traffic stream. The average intersection control delay is a volume-weighted average of delay experienced by all motorists entering the intersection on all intersection approaches.

A LOS D or better is commonly taken as an acceptable LOS. The level of service and its associated intersection delay for an unsignalized intersection is presented in **Table 1**.

Table 1 - Level of Service Criteria

	Unsignalized Intersection
LOS	Control Delay per Vehicle (sec.)
A	≤ 10
B	>10 and ≤ 15
C	>15 and ≤ 25
D	>25 and ≤ 35
E	>35 and ≤ 50
F	>50

The operations of the intersection of Marsh Street and Dane Street were evaluated using the PM peak as it had the highest volume. The results of the analysis are shown below in **Table 2**. Synchro analysis demonstrates that the intersection operates at LOS A for all scenarios in the PM peak hour.

Table 2 – Dane St/Marsh St Level of Service Analysis Results

Intersection	Intersection Delay (1.)		Maximum Delay-LOS (2.)		Limiting Movement (3.)	Highest Approach Queue			
						95th % Queue (ft)			
						EB	WB	NB	SB
EB Marsh St/Dane St <i>Existing PM Peak</i>	4	A	9	A	EB	10	N/A	0	0
WB Marsh St/ Dane St <i>Existing PM Peak</i>	1	A	9	A	WB	N/A	0	0	0

1. Maximum delay and LOS on any approach and/or movement

2. Limiting Movement is the highest delay movement

The Dane Street/Marsh Street intersection was found to be operating at a LOS A for both peak hours today, which corresponds to less than 10 seconds of delay.

CRASH HISTORY

Crash data from the last five complete years (2020-2024) was reviewed using Minnesota's Crash Mapping Tool (MnCMAT2) and the City of Mankato crash data. The analysis focused on identifying safety concerns at study intersections and segments. Crash rates at intersections are measured as crashes per million entering vehicles (MEV), while segment crash rates are measured as crashes per million vehicle miles traveled (MVMt). The critical crash rate is a statistical value unique to each site, based on vehicular exposure and statewide averages. If the observed crash rate exceeds the critical rate, it indicates a potential safety concern. According to MnDOT's Traffic Safety Handbook, a critical index above 1.0

suggests a high probability that site conditions contribute to the higher crash rate, whereas a value at or below 1.0 indicates performance within expectations.

The analysis revealed that all study intersections are performing as expected based on the critical crash index. However, there have been four bike or pedestrian-related crashes at these intersections over the past decade. Specifically, the Marsh Street/Dane Street intersection had one possible injury crash involving a vehicle making an eastbound left turn hitting a northbound bicyclist. The Madison Avenue/Dane Street intersection experienced two minor injury crashes: one due to a failure to yield to the right-of-way during a northbound left turn, and another where a vehicle making a northbound right turn hit a westbound scooter. The Madison Avenue/Long Street intersection had one minor injury crash caused by a failure to yield to the right-of-way during a southbound right turn.

Figure 5 illustrates the Hilltop Planning Area highest crash streets including Long Street, Pfau Street, Belle Avenue, Division Street, and Marsh Street. A fatal crash occurred in the study area at Madison Avenue and Hope Street in 2023. The most common factors contributing to crashes were failure to yield to the right-of-way and following too closely. Marsh Street had a high number of single-vehicle run-off-road crashes at the curve.

Figure 5. Highest Crash Streets

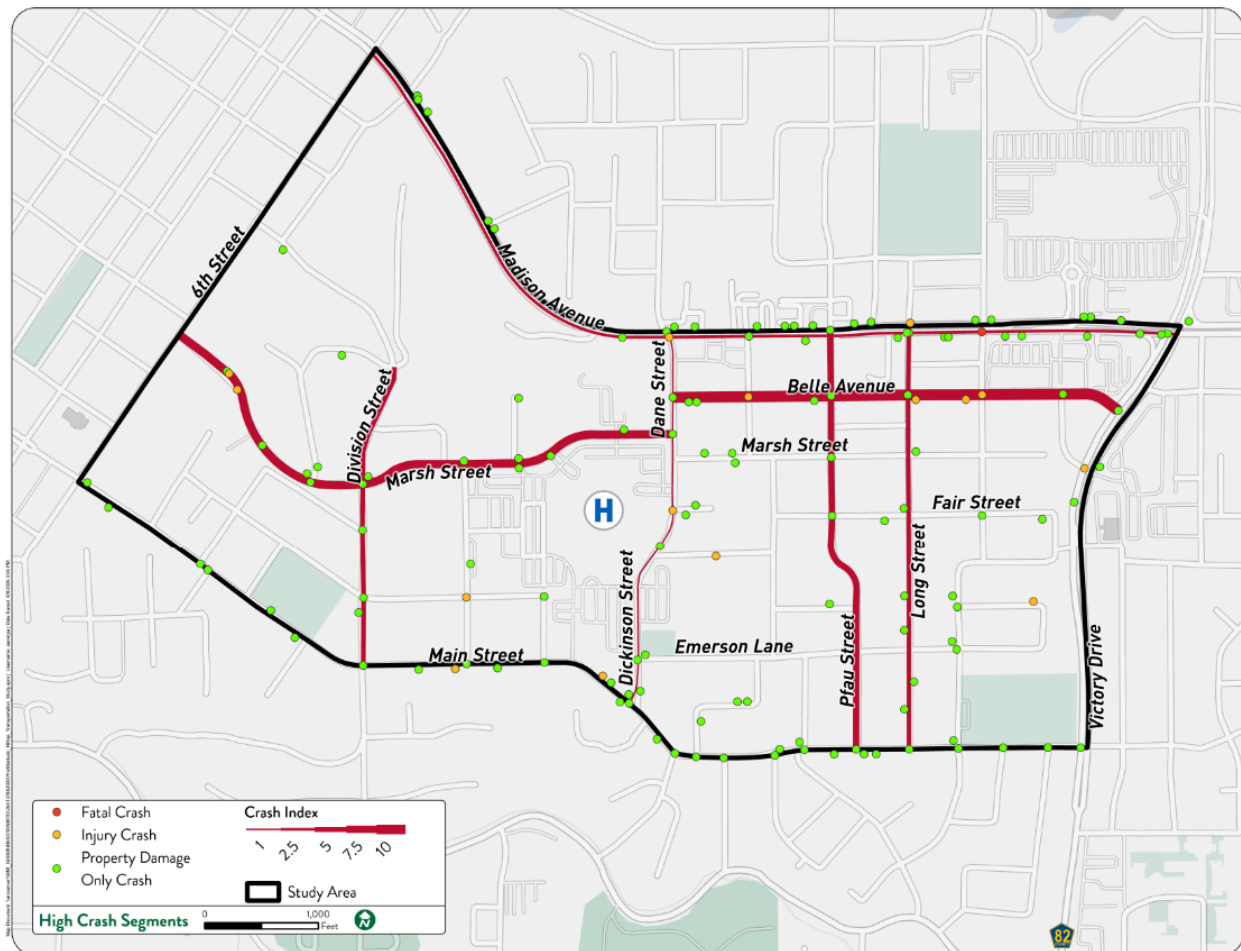


Figure 6 and **Figure 7** provide additional details on the crash types and crash severity for crashes occurring between 2020-2024.

Figure 6. Crash Types (2020-2024)

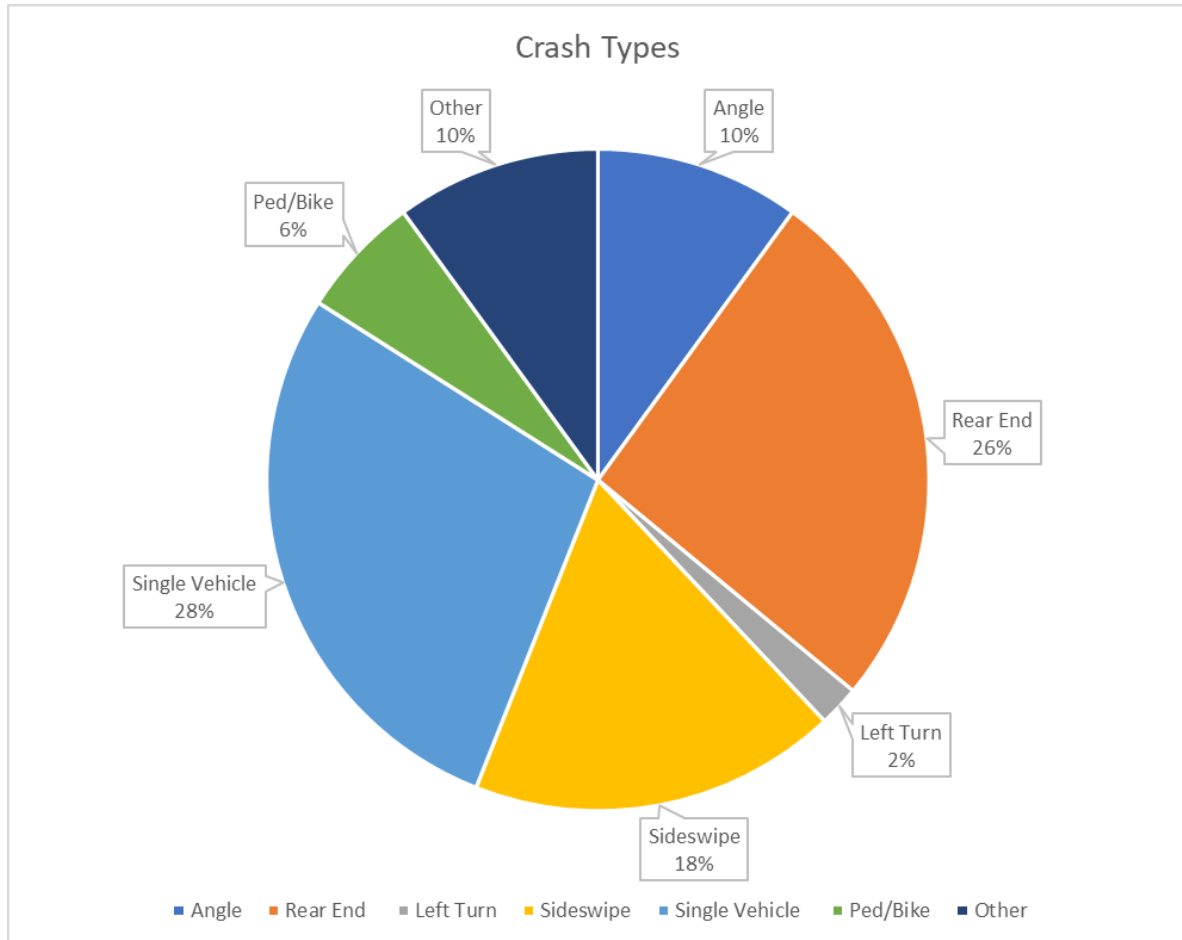
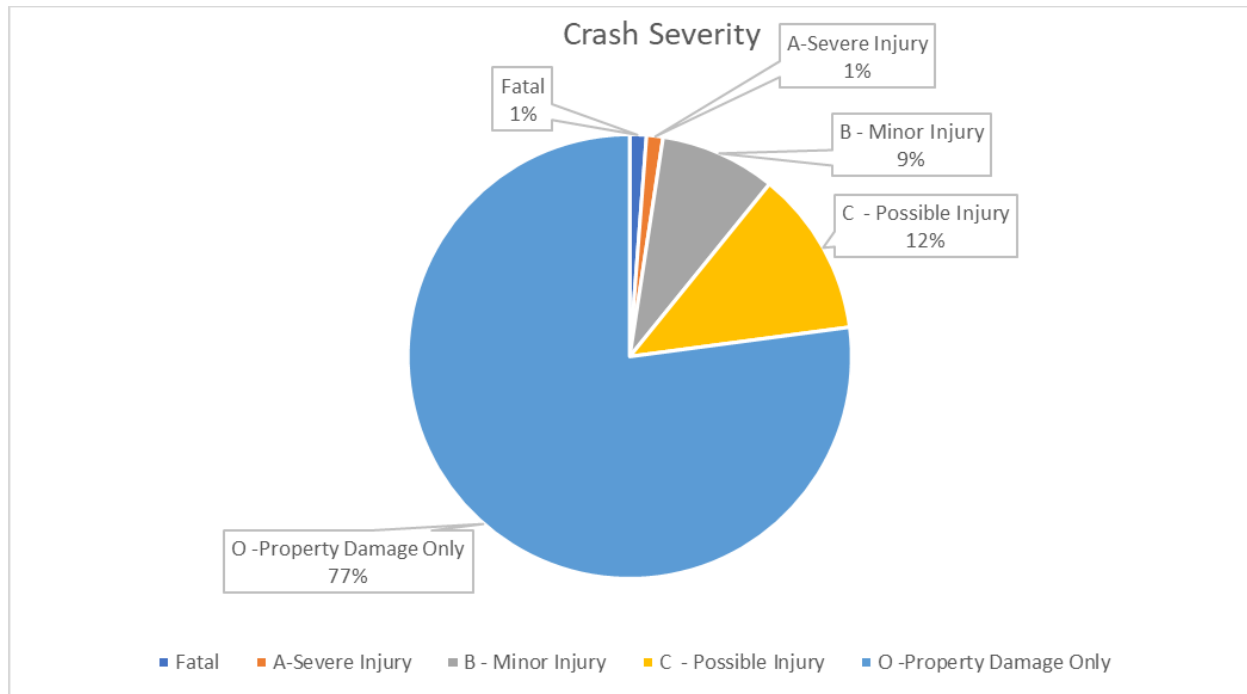


Figure 7. Crash Severity (2020-2024)



Tables 3-6 summarize segment and intersection crash data for the intersections and segments based on MNCMAT2 and City of Mankato data. **Tables 7-8** summarize the crash types observed based on MNCMAT2 data.

Table 3: MNCMAT2 Intersection Crash Data Analysis (2020-2024)

Intersection	Traffic Control	Total Crashes (5 Years)	Total Crash Rate			
			Observed	Statewide Average	Critical Rate	Crash Index
Marsh St & Dane St	Thru-Stop	2	0.09	0.15	0.38	0.24
Belle Ave & Dane St	Thru-Stop	1	0.07	0.15	0.43	0.15
Madison Ave & Dane St	Signal	17	0.40	0.69	1.03	0.39
Madison Ave & Long St	Signal	14	0.33	0.69	1.03	0.32

Table 4: MNCMAT2 Segment Crash Data Analysis (2020-2024)

Segment	Length (Miles)	# Lanes	Total Crashes (5 Years)	Total Crash Rate			
				Observed	Statewide Average	Critical Rate	Crash Index
Madison Ave from 7th to Victory Dr	1.05	5	50	1.28	0.57	0.89	1.44
Belle Ave from Dane St to Victory Dr	0.49	2	4	3.51	0.35	2.02	1.58
Dane St/Dickinson St from Madison Ave to Main St	0.49	2	6	1.18	0.32	1.17	1.01
Marsh St from Dickinson St to Bethany Luther College	0.65	2	7	1.89	0.32	1.20	1.58
Long St from Madison Ave to Main St	0.49	2	6	2.59	0.32	1.48	1.75
Division St from Main St to Bethany Luther College	0.56	2	4	5.02	0.35	2.67	1.87
Pfau St from Madison Ave to Main St	0.49	2	4	11.04	0.35	4.25	2.60

Table 5: City of Mankato Intersection Crash Data Analysis (2020-2024)*

Intersection	Traffic Control	Total Crashes (5 Years)	Total Crash Rate			
			Observed	Statewide Average	Critical Rate	Crash Index
Marsh St & Dane St	Thru-Stop	5	0.23	0.15	0.38	0.60
Belle Ave & Dane St	Thru-Stop	4	0.27	0.15	0.43	0.62
Madison Ave & Dane St	Signal	25	0.59	0.69	1.03	0.57
Madison Ave & Long St	Signal	39	0.92	0.69	1.03	0.90

*Assumed the same statewide average and critical rate as the MnCMAT2 analysis in Tables 3 and 4 since these are based on comparison groups.

Table 6: City of Mankato Segment Crash Data Analysis (2020-2024)*

Segment	Length (Miles)	# Lanes	Total Crashes (5 Years)	Total Crash Rate			
				Observed	Statewide Average	Critical Rate	Crash Index
Madison Ave from 7th to Victory Dr	1.05	5	93	2.43	0.57	0.89	2.73
Belle Ave from Dane St to Victory Dr	0.49	2	27	23.71	0.35	2.02	11.74
Dane St/Dickinson St from Madison Ave to Main St	0.49	2	7	1.38	0.32	1.17	1.18
Marsh St from Dickinson St to Bethany Luther College	0.65	2	39	10.54	0.32	1.20	8.78
Long St from Madison Ave to Main St	0.49	2	15	6.47	0.32	1.48	4.37
Division St from Main St to Bethany Luther College	0.56	2	10	12.51	0.35	2.67	4.68
Pfau St from Madison Ave to Main St	0.49	2	10	27.60	0.35	4.25	6.49

*Assumed the same statewide average and critical rate as the MnCMAT2 analysis in Tables 3 and 4 since these are based on comparison groups.

Table 7: Intersection Crash Types (2020-2024)

Intersection	Crash Severity					Crash Type									
	Fatal	A Injury	B Injury	C Injury	PDO	Angle	Rear End	Left Turn	Sideswipe (Same)	Sideswipe (Opposing)	Single Vehicle Runoff Road	Single Vehicle Other	Pedestrian	Other	Total
Marsh St & Dane St	0	0	0	0	2	1	0	0	0	0	0	0	0	0	2
Belle Ave & Dane St	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Madison Ave & Dane St	0	0	3	2	12	2	5	3	1	1	1	0	2	2	17
Madison Ave & Long St	0	0	5	3	6	4	2	0	1	0	2	3	1	1	14

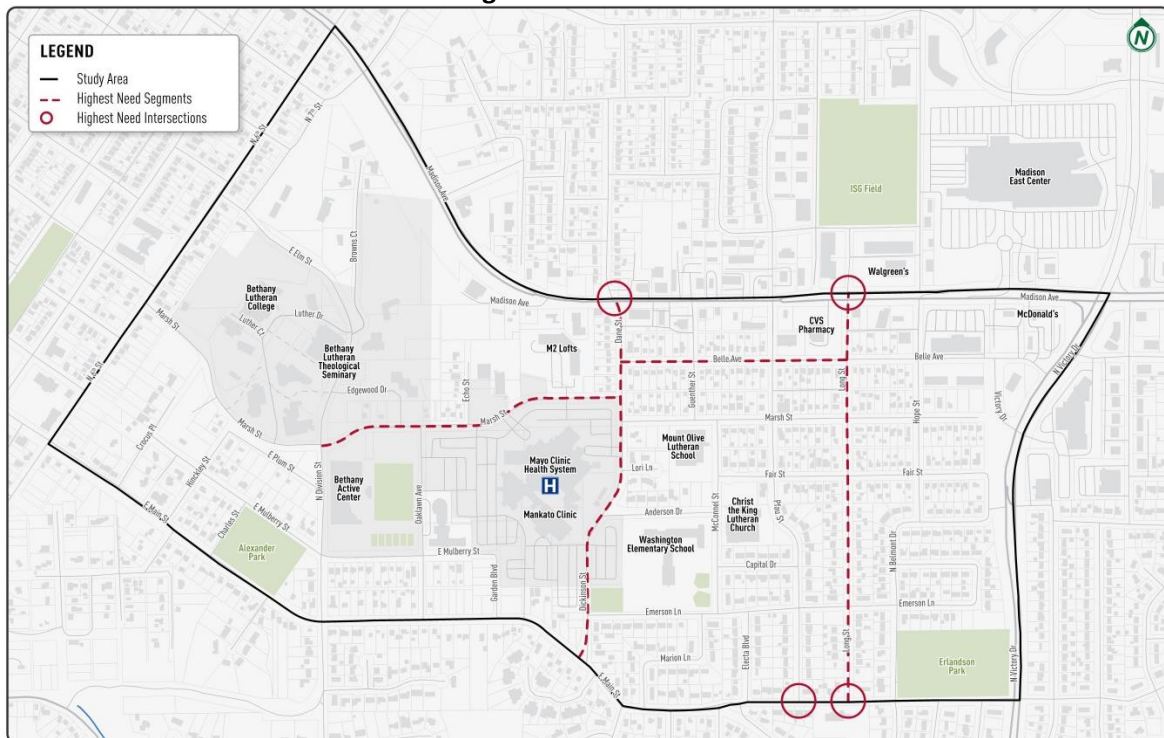
Table 8: Segment Crash Types (2020-2024)

Segment	Crash Type										
	Angle	Rear End	Left Turn	Sideswipe (Same)	Sideswipe (Opposing)	Single Vehicle Runoff Road	Single Vehicle Other	Pedestrian	Bike	Other	Total
Madison Ave from 7th to Victory Dr	5	13	1	8	1	11	3	2	1	5	50
Belle Ave from Dane St to Victory Dr	2							1		1	4
Dane St/Dickinson St from Madison Ave to Main St	2	2	1			1					6
Marsh St from Dickinson St to Bethany	1					5				1	7
Long St from Madison Ave to Main St	1			1	1	0	0			3	6
Division St from Main St to Bethany Luther	2									2	4
Pfau St from Madison Ave to Main St	2									2	4

III. Focus Areas

City staff and consultant team used the transportation data analysis results and the public and neighborhood input from 2024 to identify focus areas. Four corridors emerged from this exercise due to their higher speeds, higher pedestrian activity, higher rates of crashes, higher pedestrian activity, and more cut-through trips. These include Dane Street/Dickinson Street, Marsh Street, Long Street, and Belle Avenue as shown in **Figure 8**.

Figure 8. Focus Areas



Figures 9-12 provide a summary of each of the focus corridors compiling the takeaways from the data analysis and community input along with a location map.

Figure 9. Dickinson St./Dane St. Focus Area Summary

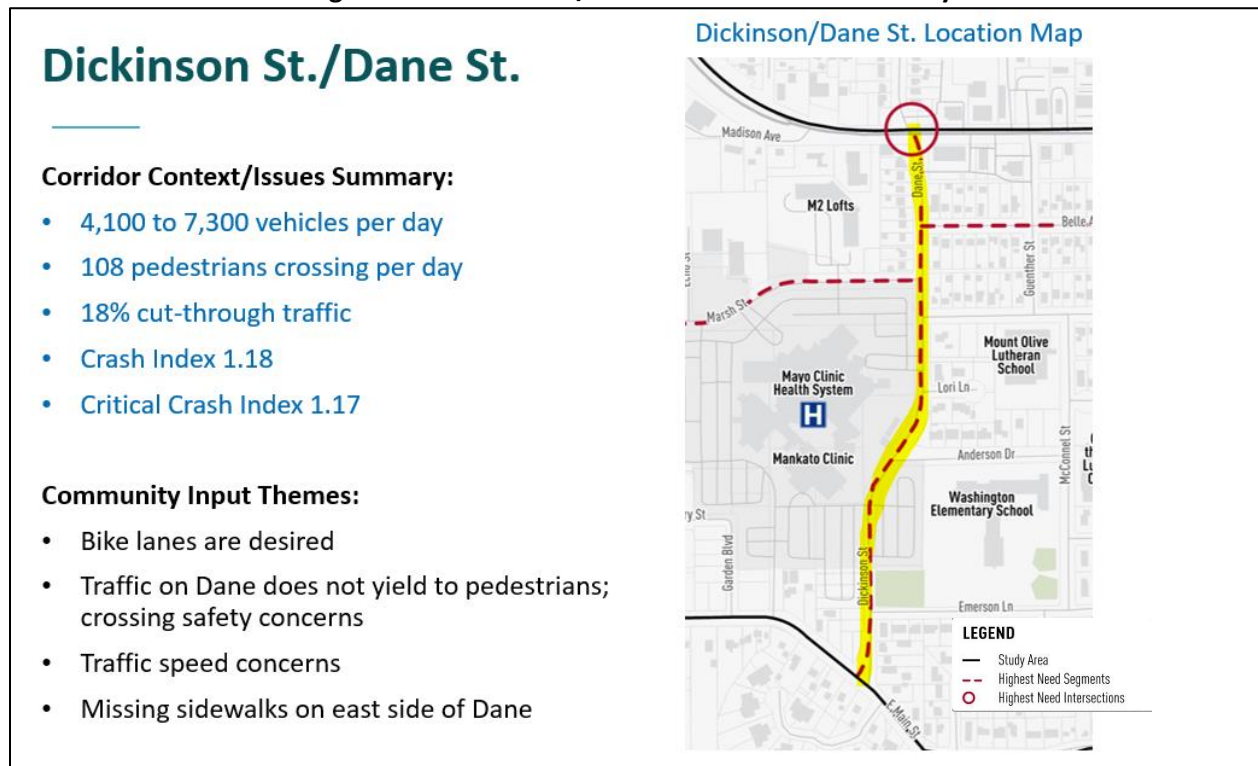


Figure 10. Marsh Street Focus Area Summary

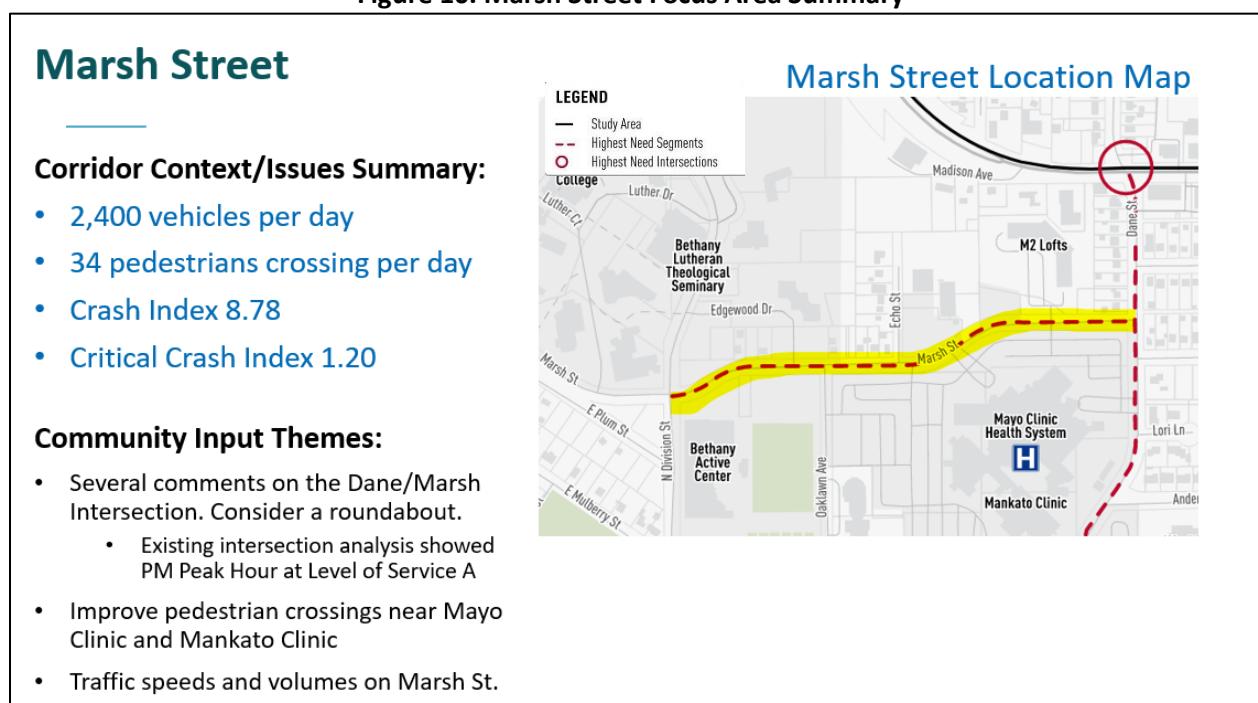


Figure 11. Long Street Focus Area Summary

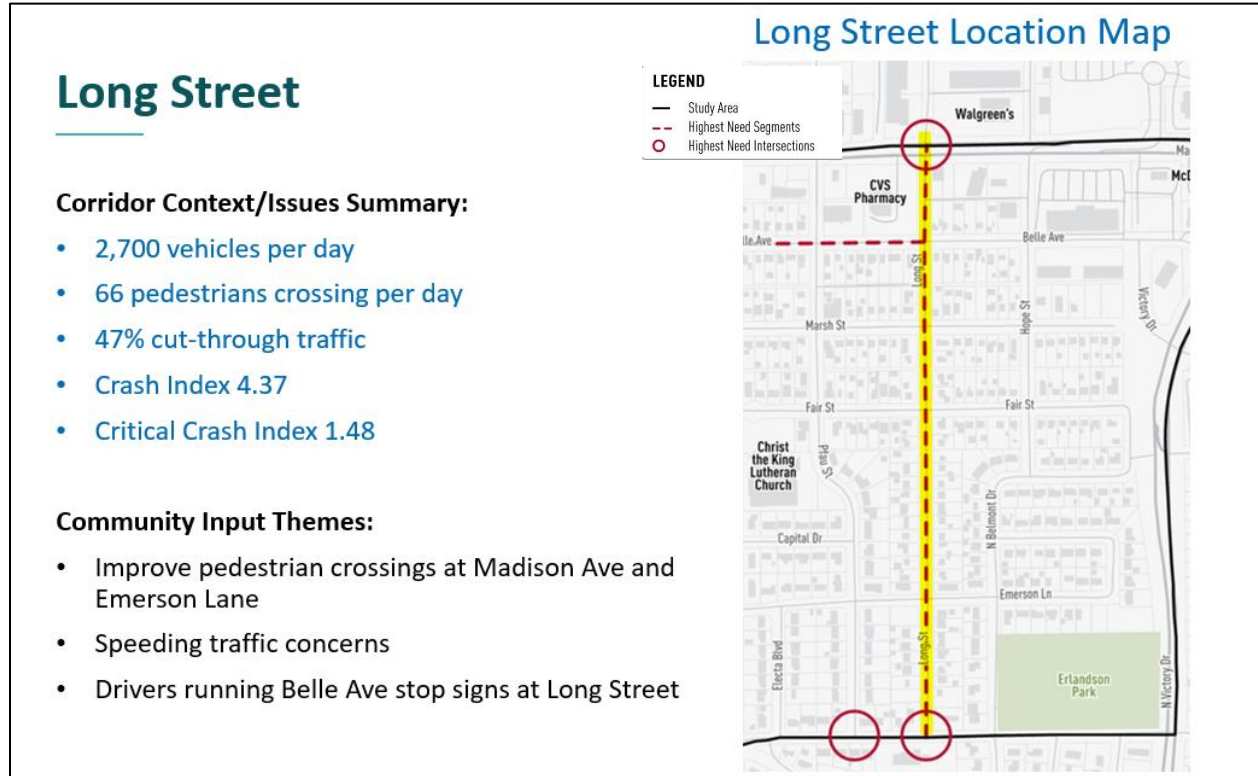
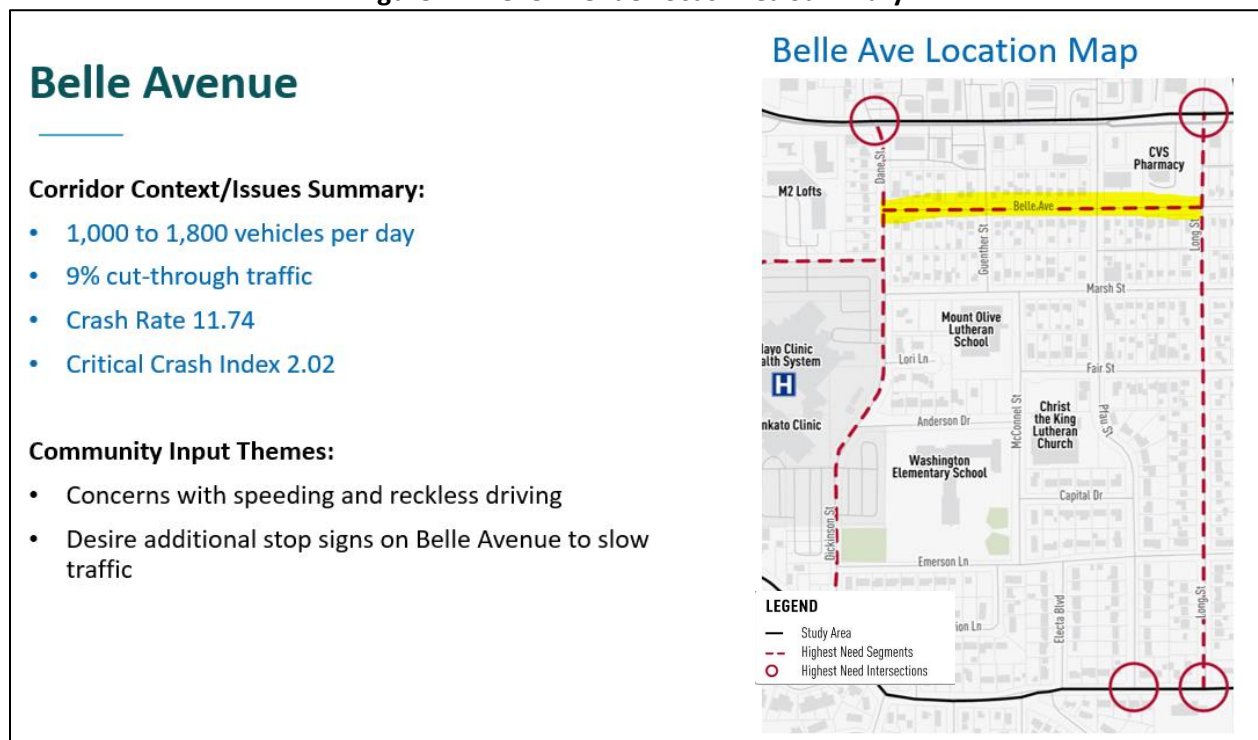


Figure 12. Belle Avenue Focus Area Summary



IV. Recommendations

POTENTIAL TRANSPORTATION DESIGN TREATMENTS TOOLBOX

The toolbox in **Figures 13-15** includes potential transportation design treatments that can be applied to focus corridors in the Hilltop Planning Area Study. Each treatment is categorized by its primary purpose including pedestrian crossing enhancements, active transportation enhancements, and traffic safety enhancements. Design treatments can be applied individually or in combination for greater impact.

Figure 13. Potential Design Treatments Toolbox – Pedestrian Crossing Enhancements

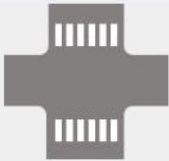
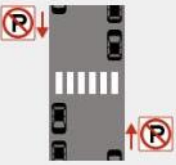
PEDESTRIAN CROSSING ENHANCEMENTS		
	Treatments	Benefits
	High Visibility Striping are bold and reflective pavement markings that make crosswalks more noticeable to drivers and pedestrians.	Visibility Minimal Infrastructure Higher Yield Rate
	Advanced Warning Signs can be placed ahead of pedestrian crossings to alert drivers of an upcoming crosswalk.	Visibility Minimal Infrastructure
	Rectangular Rapid Flashing Beacon (RRFB) are pedestrian-activated warning lights that alert drivers to yield at crosswalks. Typically used in conjunction with warning signs.	Safety Visibility Significantly Higher Yield Rates
	Daylighting involves removing visual obstructions such as parked cars and vegetation near crosswalks to improve sight distance for drivers and pedestrians.	Safety Visibility & Sight Distance Minimal Infrastructure Higher Yield Rates
	Raised Crosswalks are elevated sections of roadway at pedestrian crossings that are level to the curb and function similarly to a speed hump.	Safety Visibility Reduced Vehicle Speeds Higher Yield Rate

Figure 14. Potential Design Treatments Toolbox – Active Transportation Enhancements

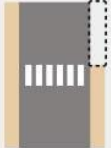
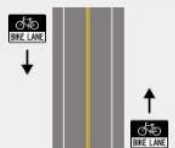
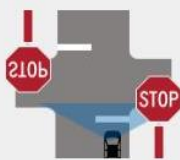
ACTIVE TRANSPORTATION ENHANCEMENTS		
Treatments	Benefits	
	Complete Sidewalk Connections allow for uninterrupted pedestrian pathways across neighborhoods, reducing crossing needs, and better connect existing destinations.	Pedestrian Safety Pedestrian Connectivity
	Bike Lanes can replace on-street parking spaces on one or both sides of the road and provide dedicated street space for cyclists.	Bike Safety Bike Connectivity

Figure 15. Potential Design Treatments Toolbox – Traffic Safety Enhancements

TRAFFIC SAFETY ENHANCEMENTS		
Treatments	Benefits	
	Pavement Striping clearly defines street space for specific uses including travel lanes, bike lanes, and parking spaces.	Visibility Vehicles Stay in Lane Minimal Infrastructure
	Pinch Points are features that narrow the width of travel lanes at specific locations to reduce vehicle speeds and can be created out of pavement markings or permanent curb extensions.	Reduced Vehicle Speeds Flexible Design
	Intersection Visibility Improvements include reviewing and trimming vegetation to improve sightlines and enhancing visibility of existing traffic control devices with additional reflective tape or flags.	Intersection Safety Visibility Minimal Infrastructure
	Speed Feedback Signs are displays that show drivers their current speed in real time and can display a "slow down" message if the limit is exceeded.	Reduced Vehicle Speeds Minimal Infrastructure
	Speed Cushions are raised, spaced traffic calming devices designed to slow vehicles while allowing emergency vehicles and bikes to pass through unaffected.	Reduced Vehicle Speeds Targetted Traffic Calming

CORRIDOR RECOMMENDATIONS

The following pages of this memorandum include a summary of each focus corridor that includes improvement recommendations for the city's consideration as projects are programmed over time.

Dickinson Street/Dane Street

This corridor is a Municipal State Aid System (MSAS) route that provides a continuous north-south connection between Main Street and Madison Avenue. There is no reconstruction project programmed on this corridor in the city's 2025-2029 Community Investment Plan (CIP). **Figure 16** illustrates the range of potential improvements on Dickinson St/Dane St which include:

- Pedestrian crossing enhancements at Madison Avenue, the Mankato Clinic parking lot crossing, and at Emerson Lane. Also consider a Rectangular Rapid Flashing Beacon (RRFB) at the crossing from the employee parking lot to the Mankato Clinic entrance.
- Addition of sidewalk on the east side of the corridor between Main Street and Emerson Lane, the Mankato Clinic employee parking lot and Marsh Street, and Dane Street to Madison Avenue.
- Improve sight distance through vegetation trimming at Emerson Lane, Mankato Clinic entrance, Anderson Drive, Lori Lane, Marsh Street (west), Marsh Street (east), and Belle Avenue.
- Consider striping and/or typical section adjustments to encourage traffic calming and bicycle accommodations such as: adding a white parking stripe, narrowing travel lanes, and adding a bike lane from Main Street to Belle Avenue.

Figure 16. Dickinson St./Dane St. Recommendations



Marsh Street

This corridor is a Municipal State Aid System (MSAS) route between Division Street and Dane Street. There is no reconstruction project programmed on this corridor in the city's 2025-2029 Community Investment Plan (CIP). **Figure 17** illustrates the range of potential improvements on Marsh Street which include:

- Enhanced crosswalks at the Mayo Clinic patient/visitor/staff parking lot crossings of Marsh Street.
- Improve sight distance through vegetation trimming at Division Street, Oaklawn Avenue, and Echo Street.
- Install speed feedback signs on both ends of the corridor to encourage speed limit compliance in both directions.

Figure 17. Marsh St. Recommendations



Long Street

This corridor is a Municipal State Aid System (MSAS) route that provides a continuous north-south connection between Main Street and Madison Avenue. The city has a 2026 reconstruction project planned on Long Street between Main Street and Fair Street in the Community Investment Plan (CIP).

The Hilltop Planning Area Study recommends extending the 2026 reconstruction project to Madison Avenue to include traffic calming elements the entire length of the Long Street corridor from Main Street to Madison Avenue. Additional considerations for the design phase of this reconstruction project are outlined below.

Figure 18 illustrates the range of potential improvements on Long Street which include:

- Pedestrian crossing enhancements at Main Street and Madison Avenue.
- Improve sight distance through vegetation trimming at Emerson Lane, Fair Street, and Belle Avenue.
- Addition of “No Parking Here to Corner” signs to improve sight distance at the Long Street/Emerson Lane intersection.
- Enhance stop signs at Long Street and Belle Avenue for increased compliance.

Reducing speeds and cut-through traffic are two priorities for Long Street improvements. The following traffic calming measures are recommended for further analysis in the design phase of the 2026 Long Street reconstruction project:

- Install speed feedback signs on both ends of the corridor to encourage speed limit compliance in both directions.
- Consider reconfiguring the typical section. Below are a range of ideas discussed during the study phase. Some of these may be paired together but most are independent solutions. All require further design analysis to determine feasibility and benefit versus cost.
 - Add a white parking stripe and narrow travel lanes from Main Street to Belle Avenue.
 - Add a raised median planter at some intersection approaches to provide traffic calming. **Figure 19** shows an example from Warren Street near Maywood Avenue. Additional analysis is needed to determine if adequate width exists on Long Street to accommodate this type of treatment without restricting driveways or street intersections.
 - Investigate the feasibility of mini roundabouts at Emerson Lane, Fair Street, and Belle Avenue.
 - investigate the feasibility of a “Chicane” corridor where travel lanes are narrowed and shifted through intersections to encourage lower speeds (see **Figure 20** for example).

Figure 18. Long St. Recommendations



Figure 19. Warren Street Raised Planter Example

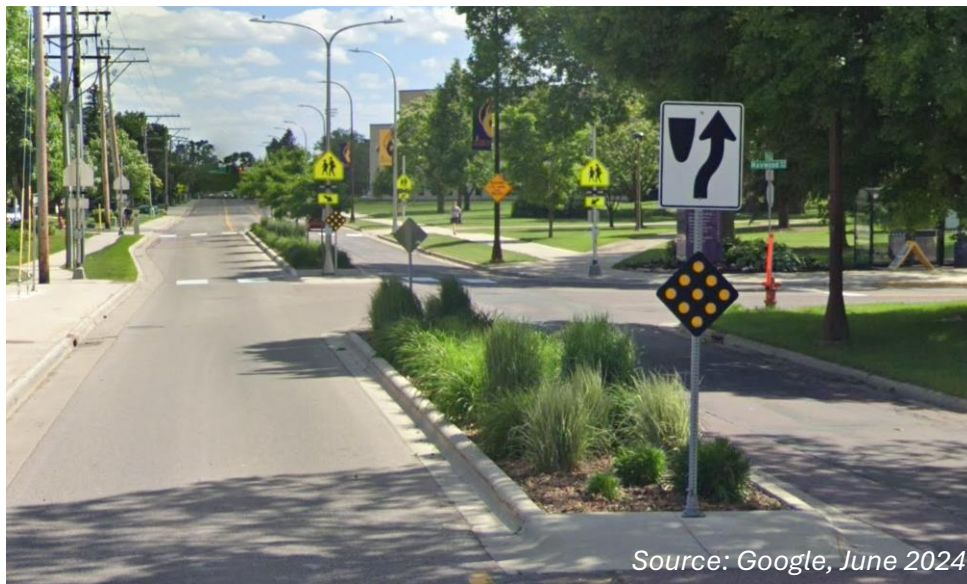


Figure 20. Chicane Corridor Example



Belle Avenue

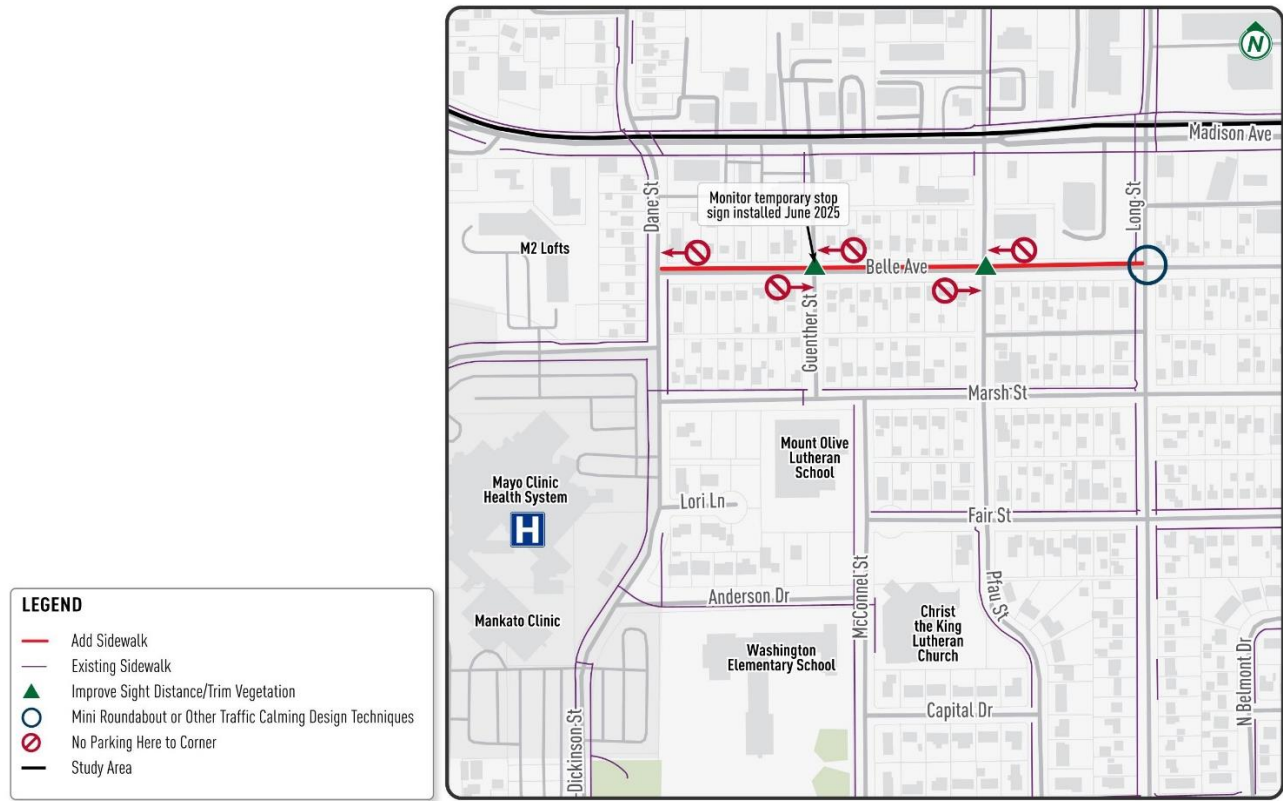
Belle Avenue provides an east-west connection in the Hilltop Neighborhood between Dane Street and Victory Drive. The focus area for this study was from Dane Street to Long Street based on identified issues. An all-way stop traffic warrant analysis was conducted based on resident requests for the addition of a stop sign on Belle Avenue to slow speeds. The analysis showed traffic warrants were not met for an all-way stop on Belle Avenue based on existing traffic volumes.

In June 2025, the Mankato City Council passed a resolution to install a temporary stop sign at the Guenther Street/Belle Avenue intersection for speed control purposes in response to resident requests. The study team recommends continued monitoring of intersection operations and traffic speed data to evaluate the effectiveness of the stop sign and long-term plan for traffic control at this intersection.

There is no reconstruction project programmed on this corridor in the city's 2025-2029 CIP. **Figure 21** illustrates the range of potential improvements on Belle Avenue which include:

- Add a sidewalk on the north side of Belle Avenue Between Dane Street and Long Street.
- Improve sight distance through vegetation trimming at Guenther Street and Pfau Street.
- Addition of "No Parking Here to Corner" signs to improve sight distance at the Belle Avenue intersections with Dane Street, Guenther Street, and Pfau Street.
- Investigate feasibility of a mini roundabout or other traffic calming design techniques at the intersection of Belle Avenue and Long Street as described above in the Long Street recommendations.

Figure 21. Belle Ave. Recommendations



V. Next Steps

The City of Mankato is working on an update to their Community Investment Plan to consider implementation timelines for improvement recommendations from the Hilltop Planning Area Study. These recommendations will likely occur through future planned reconstruction projects and independent spot improvements over time.