City of Mankato

Leading the way...











# Transit Development Plan

October 2023

# Contents


**Executive Summary** ..... **4**

Introduction ..... 4

Research Approach ..... 5

Where we are today? ..... 5

How do we get there? ..... 10

Service Recommendations ..... 10

Increased frequency and reliability of fixed-route service ..... 10

Investments in transit infrastructure and access ..... 13

Improved marketing and outreach ..... 13

Service Implementation ..... 13

Immediate Actions (0-1 years) ..... 13

Medium Term (1-5 years) ..... 13

Long Term (5-10 years) ..... 13

Conclusion ..... 13

**Where We Are** ..... **14**

Goals, Objectives, and Transit System Design Guidelines ..... 14

Service Performance Review ..... 17

Service Modes ..... 17

Fixed-Route ..... 17

Kato Flex ..... 30

Mobility Bus Service ..... 34

Peer Agency Review ..... 39

First Round of Public Engagement ..... 45

Service Issues from Previous TDP ..... 46

**Where Do We Want to Go?** ..... **49**

Transit Market Analysis ..... 49

Job Distribution in Mankato Area ..... 50

Population Density ..... 54

Poverty & Median Income ..... 56

Senior Population Density ..... 58

Minority Population ..... 60

Origin-Destination Travel Analysis ..... 62

Conclusions ..... 67

Transit Supportive Land Use ..... 68

Transit Supportive Development ..... 68

Marketing and Communications ..... 81

Service Branding ..... 81

MTS Website ..... 83

Maps and Schedule ..... 84

Communication and Promotion of Service ..... 86

Outreach and Educational Programs, Campaigns ..... 86

Summary ..... 87

Organization and Staffing ..... 87

Current Organizational and Staffing Framework (2023) ..... 87

Recommendations ..... 88

Capital Improvement Needs ..... 90

Capital Assets Today ..... 90

Capital Asset Needs & Opportunities for Future Growth ..... 94

Financial Analysis and Projection ..... 97

Assumptions for Baseline Scenario ..... 97

**How Do We Get There?** ..... **102**

Service Change Recommendations ..... 102

Service Delivery Evaluation ..... 104

Service Design Principles ..... 112

Service Development Scenarios ..... 114

Second Round of Public Engagement ..... 119

Recommended Service Definitions and Service Standards ..... 121

Equity Impact Analysis ..... 122

Service Implementation Plan ..... 130

Immediate Actions ..... 131

Medium-term Actions ..... 132

Long-term actions ..... 133


*Information contained in this document is for planning purposes and should not be used for final design of any project. All results and commentary contained herein are based on limited data and information and on existing conditions that are subject to change.*

# Acknowledgments

This Transit Development Plan is shaped by many voices, community input from transit users, institutions, businesses, social support agencies and community partners. This Plan represents a strategy for how the Mankato Transit System can modify services to better serve the community, within the fiscal constraints it operates.

To the Mankato community and all those who participated in this effort – Thank You.

Special thanks to the MTS Operators for their participation and for all they do to serve the community day to day.

## THE CITY OF MANKATO

- Mankato City Council
- Mankato Transit System staff and operators

## PROJECT MANAGEMENT TEAM

- **Paul Vogel,** Mankato, Director of Community Development
- **Shawn Schloesser,** Mankato, Associate Director of Transportation Planning Services
- **Todd Owens,** Mankato, Transit Superintendent
- **Joey Penkert,** Mankato, Transit Administrative Supervisor
- **Nancy Bokelmann,** Mankato, Associate Director of Housing and Economic Development
- **Mark Konz,** Mankato, Associate Director of Planning and Development Services
- **Edell Fiedler,** Director, Communications and Engagement
- **Paula Van Zee,** Mankato, 311 Customer Services Supervisor
- **Michael McCarty,** Mankato, Assistant City Engineer
- **Christopher Talamantez,** Mankato/North Mankato Area Planning Organization, Transportation Planner
- **David Cowan,** Minnesota State University Mankato, Parking and Transportation Administrator
- **Matthew Lassonde,** North Mankato, City Planner
- **Voni Vegar,** MnDOT, Office of Transit and Active Transportation

## COMMUNITY ADVISORY PANEL

- Sarah Beiswanger
- Mandi True
- Nathan Robbins
- Barbara Payne
- Jay Hanke
- Robert Victorino
- Marcia Bahr
- Gretchen Mauerman
- Claudia Perkins
- Nathan Dawson
- Andrew Wilson
- Linda Hachfeld
- Christi Wilking

## CONSULTANT TEAM

TOOLE DESIGN

BOLTON & MENK

# Executive Summary

## Introduction

This update of the Mankato Transit System's Transit Development Plan (TDP) outlines a vision for the future of public transit in the Cities of Mankato and North Mankato. The plan builds on the goals, objectives, and transit system design guidelines established in the 2018 TDP. It makes recommendations for service changes to the fixed-route and Kato Flex systems, and a phased implementation of capital improvements and service changes, based on a comprehensive analysis of existing service performance and cost, community and stakeholder needs, and transit market analysis, with a focus on increasing service equity and access and cost effectiveness. The service change recommendations are designed to help ensure that MTS is a reliable, accessible, and affordable transportation option for all residents of Mankato and North Mankato.

# Research Approach

This report is broken into three parts that reflect the three phases of study – research and analysis, goals, vision and financial capacity, and development of recommendations, that we are calling: where we are today, where do we want to go, and how do we get there.

# Where we are today?

- This TDP conducted a comprehensive analysis of existing service modes (Citywide, University, Kato Flex, and Mobility Bus) to understand how the service is delivered every day and throughout the year, how many resources are required, whether it meets the needs of the residents of Mankato and North Mankato and the students of Minnesota State University – Mankato (MNSU), and whether resources are distributed in an equitable manner across service modes and across the service area.
- The feedback received from stakeholders and the community pointed to a general lack of service in the evenings and on weekends, not enough frequency of service, lack of bus stops along many important corridors and destinations, lack of amenities and safety-related issues at bus stops, and general difficulty of use because of limited service hours, access points, and route variations throughout the week and the year.
- A review of peer transit agencies shows that the MTS service offers a lower level of service than its peers, operating fewer hours of service per capita, and that it is spending more to transport each passenger than its peers. The system needs to attract more ridership to be effective.
- Even though the system's ridership has been rebounding from the pandemic, this is largely influenced by a rebound of activity at the MNSU-Mankato campus. The system has evolved over time to focus on the needs of students, while the service area has kept growing and increasing pressure on the fixed-route network to expand and cover more territory.
- This has resulted in a fixed-route network that although covers a lot of territory on the map, it cannot provide sufficient service hours to meet the needs of residents – particularly low-income residents, to travel to employment, service, and shopping opportunities in the periphery of the service area, as it is shown in the employment density and population density maps below.

**Figure ES-1.** Mankato Area Employment Density and Weekday Fixed-Route Service Network

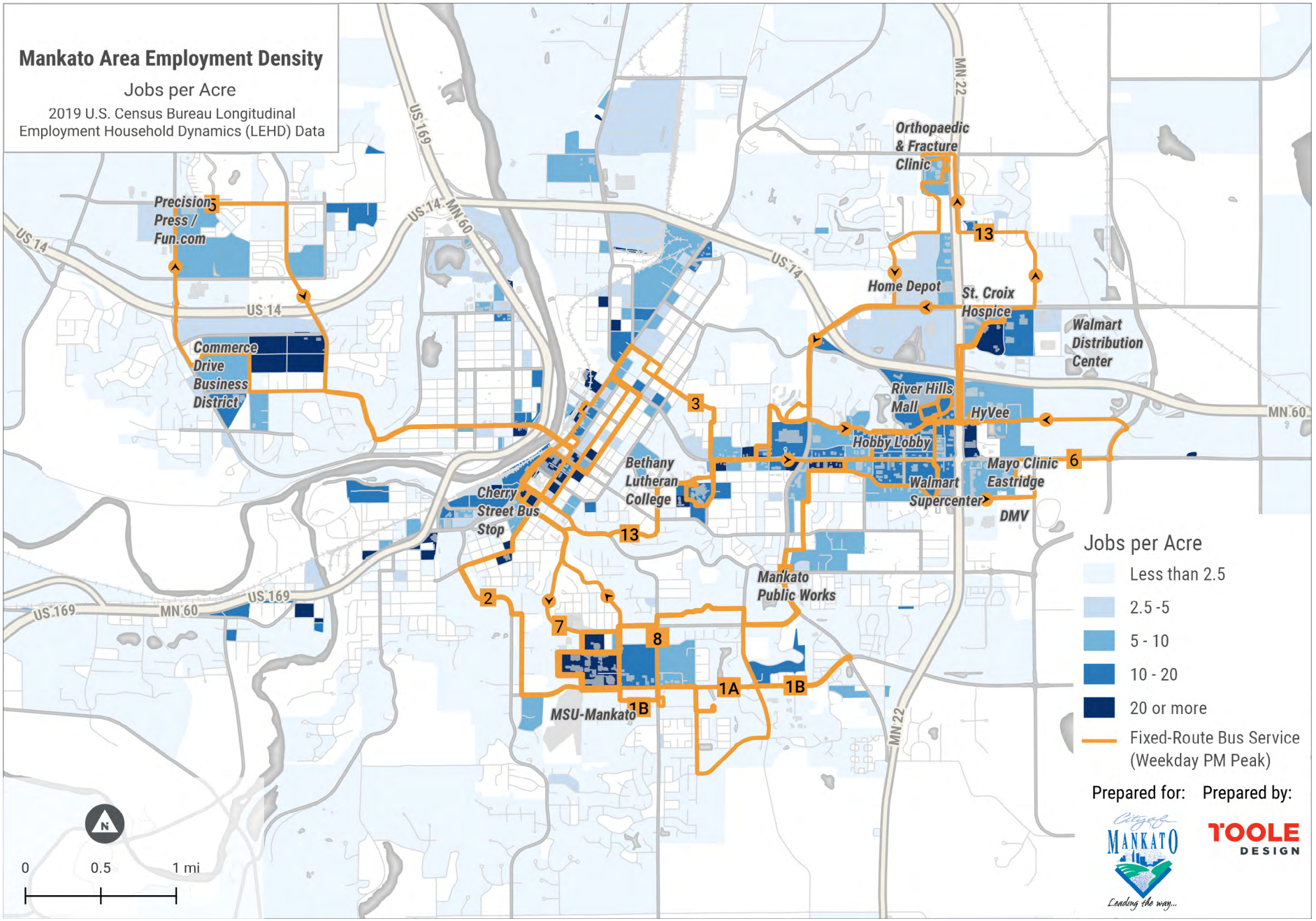
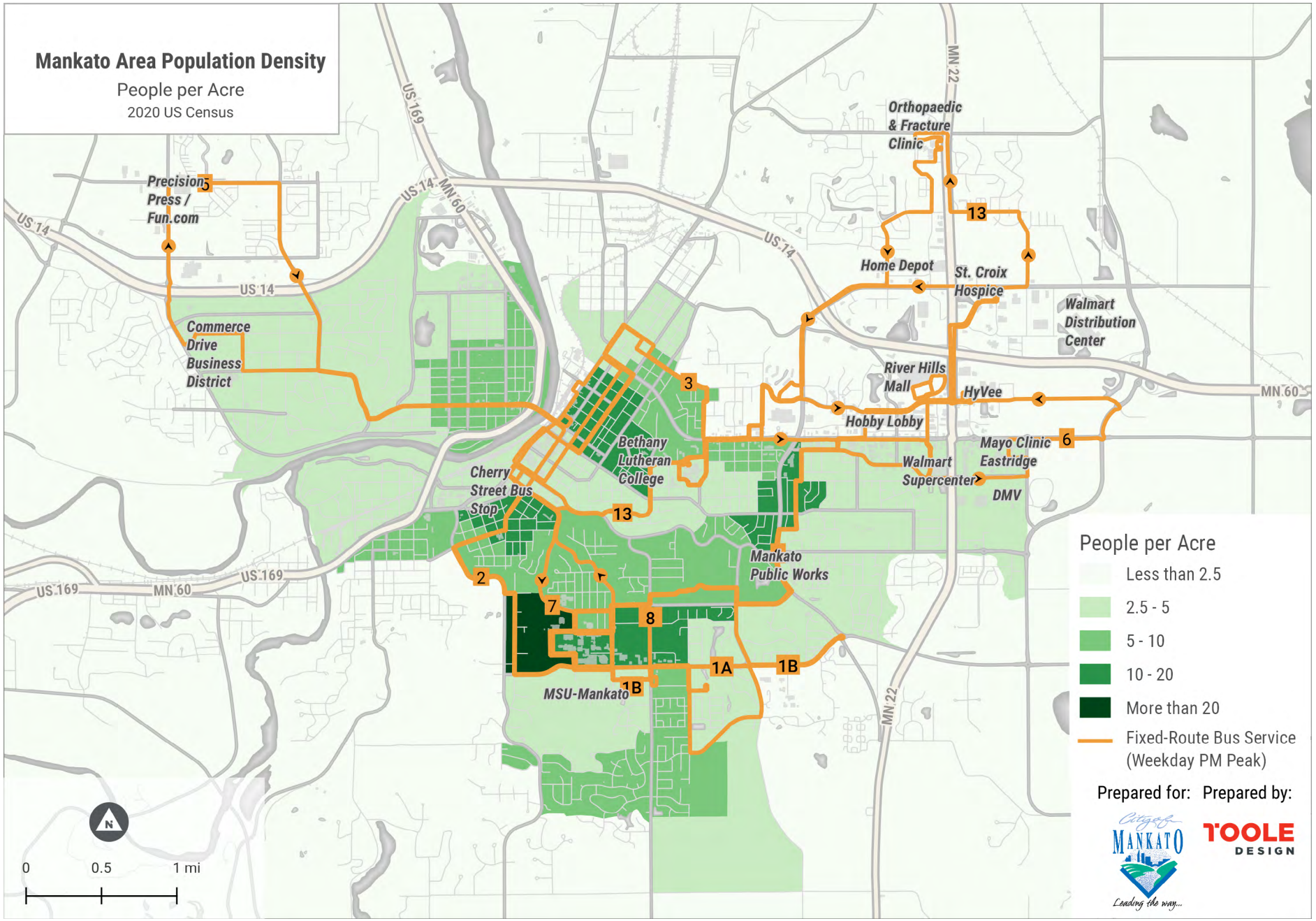


**Figure ES-2.** Mankato Area Population Density and Weekday Fixed-Route Service Network



# Where do we want to go?

- The TDP explored the demographic and socio-economic characteristics of the service area to analyze current transit markets, explored origin-destination travel patterns, and land use and development density along major corridors, to identify opportunities to grow ridership in the system, provide transit supportive development along major travel corridors, and increase access to service.
- On the map, the current MTS fixed-route transit service network runs through the areas with the highest concentrations of population, employment, and special disadvantaged groups – low-income households, minority populations, and seniors, and most residential neighborhoods that are not served by the fixed-route network are served via Kato Flex.
- However, the service hours and frequency of service provided, the lack of access points (bus stops) along long stretches of routes, and operational characteristics of routes (many providing indirect travel paths via long loops), reduce the attractiveness and usability of service.
- To make the service more attractive and easier to use MTS needs to provide an effective route network that covers areas of highest need, and it needs to provide sufficient service hours and frequency of service to meet the largest travel demand patterns through the week. This requires making capital and service improvements to the system in addition to changing how service is distributed across service modes and routes.
- The TDP conducted a detailed analysis of the financial position of MTS for the next five years, forecasting future revenue and costs to understand whether MTS can expand service hours or maintain them. The main finding of this analysis was that MTS cannot increase service hours unless it can get increased funding from existing sources or new funding sources.

**Figure ES-3.** Baseline Five-Year Forecast of Operating Expenses and Revenue

| | Current | Forecast | | | | |
|---|---|---|---|---|---|---|
| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
| **Operating Expenses (Baseline Scenario)** | | | | | | |
| Bus Service | $4,277,000 | $4,491,000 | $4,671,000 | $4,811,000 | $4,907,000 | $5,005,000 |
| Projected Fixed Route | $3,610,000 | $3,791,000 | $3,942,000 | $4,061,000 | $4,142,000 | $4,225,000 |
| Projected Flex | $667,000 | $701,000 | $729,000 | $751,000 | $766,000 | $781,000 |
| Paratransit Service | $1,422,000 | $1,493,000 | $1,553,000 | $1,599,000 | $1,631,000 | $1,664,000 |
| **Expenses Total** | **$5,699,000** | **$5,984,000** | **$6,224,000** | **$6,410,000** | **$6,539,000** | **$6,669,000** |
| **Operating Revenues (Baseline Scenario)** | | | | | | |
| Federal and State Operating Subsidies | | | | | | |
| Bus (5307 + MnDOT) Subsidy | $3,422,000 | $3,593,000 | $3,737,000 | $3,849,000 | $3,926,000 | $4,004,000 |
| Paratransit (MnDOT) Subsidy | $1,209,000 | $1,269,000 | $1,320,000 | $1,359,000 | $1,387,000 | $1,414,000 |
| Local Funding | | | | | | |
| City of North Mankato | $126,000 | $132,000 | $138,000 | $142,000 | $144,000 | $147,000 |
| City of Mankato Tax Levy | $415,000 | $415,000 | $415,000 | $415,000 | $415,000 | $415,000 |
| Farebox Revenue | | | | | | |
| Fares | $126,000 | $130,000 | $135,000 | $140,000 | $145,000 | $150,000 |
| MNSU Contribution | $556,000 | $556,000 | $556,000 | $556,000 | $556,000 | $556,000 |
| Non Farebox Revenue | $48,000 | $48,000 | $48,000 | $48,000 | $48,000 | $48,000 |
| **Revenue Total** | **$5,902,000** | **$6,143,000** | **$6,348,000** | **$6,509,000** | **$6,621,000** | **$6,735,000** |
| **Net Operating Revenue (Revenues-Expenses)** | **$202,000** | **$159,000** | **$124,000** | **$99,000** | **$82,000** | **$66,000** |

# How do we get there?

- The TDP identified service goals and network design principles to guide development of service change scenarios. Goals were developed in consideration of the last TDP, stakeholder and community feedback, and the technical analyses. Network design principles were developed in consideration of opportunities and tradeoffs, weighing the benefits and costs to a given change. This TDP proposes two service change scenarios: the Fiscally Constrained Scenario and the Illustrative Future Scenario.
- The Fiscally Constrained Scenario keeps the operating expenses of the transit system stable and maintains about the same amount of revenue service hours (within 1% of annual vehicle revenue hours). It assumes that resources continue at the same level they are today, but they are redistributed to meet revised service goals.
- The Illustrative Future Scenario imagines an increase in operating funding and resources. It assumes that resources are more than they are today (a 33% increase in vehicle revenue hours) and that they are applied to meet the new service goals.
- The Fiscally Constrained and Illustrative Future scenarios were evaluated to assess the impacts of the service changes on access to people and jobs, and also to disadvantaged population groups such as people of color, and people with low incomes. Both proposed service scenarios would provide consistent service levels throughout the week and the year and significantly increase access to more people and employment opportunities, especially during weekday evenings and weekends.
- A Service Implementation Plan was created to prioritize and stage the investments recommended in the Transit Development Plan. The service implementation plan outlines service change and activities in a phased manner through: Immediate Actions (within 1-3 years), Medium-Term Actions (within 5 years) and Long-Term Actions (within 10 years).

# Service Recommendations

The TDP recommends service changes and improvements to address these findings. These include:

# Increased frequency and reliability of fixed-route service

## Fiscally Constrained Scenario

- Service hours extended to 8:30 pm M-F, 7:30 pm Sat, and 6:30 pm Sun
- All-day 30-minute service on Route 5 to North Mankato, Mon-Sat
- Route 2 stays as overlay to Route 6 providing a combined 30-minute frequency between downtown and MNSU
- New service to Sibley Park neighborhood
- Year-round connections for MNSU & South-Central students throughout the urban area

## Illustrative Future Scenario

- Extend Sunday service to 7:30 pm, add Sunday service on Routes 5 and 13, and add Sat & Sun service on Route 1B
- 30-minute service on Routes 3, 5, and 6. No need for Route 2 overlay
- New fixed-route service to lower North Mankato, Germania Park, and southeast Mankato
- More neighborhoods in central part of urban area served with fixed-route and fewer with Kato Flex
- Kato Flex service in remaining areas extended to Sat & Sun

**Figure ES-4.** Proposed Service under Fiscally Constrained Scenario

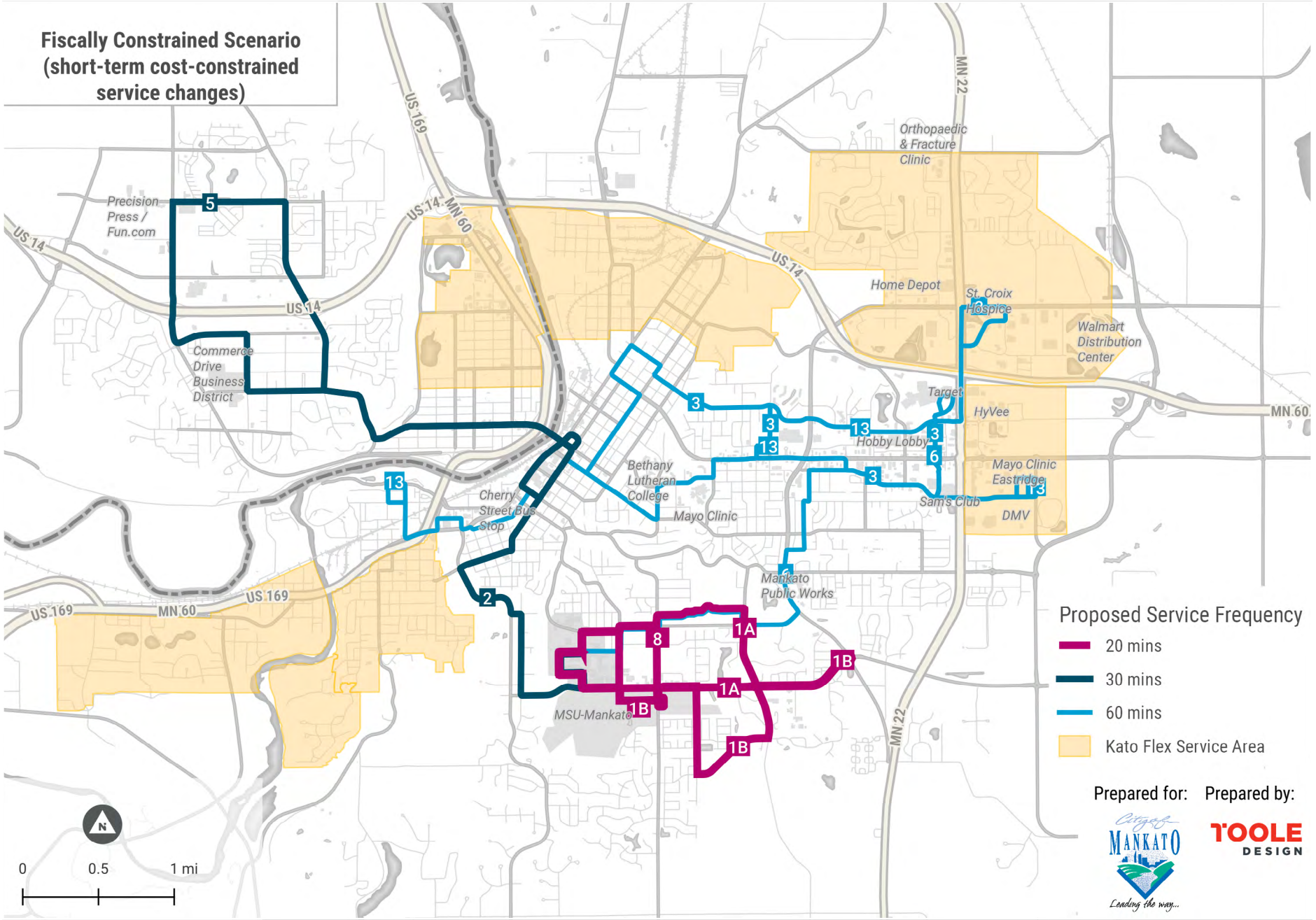
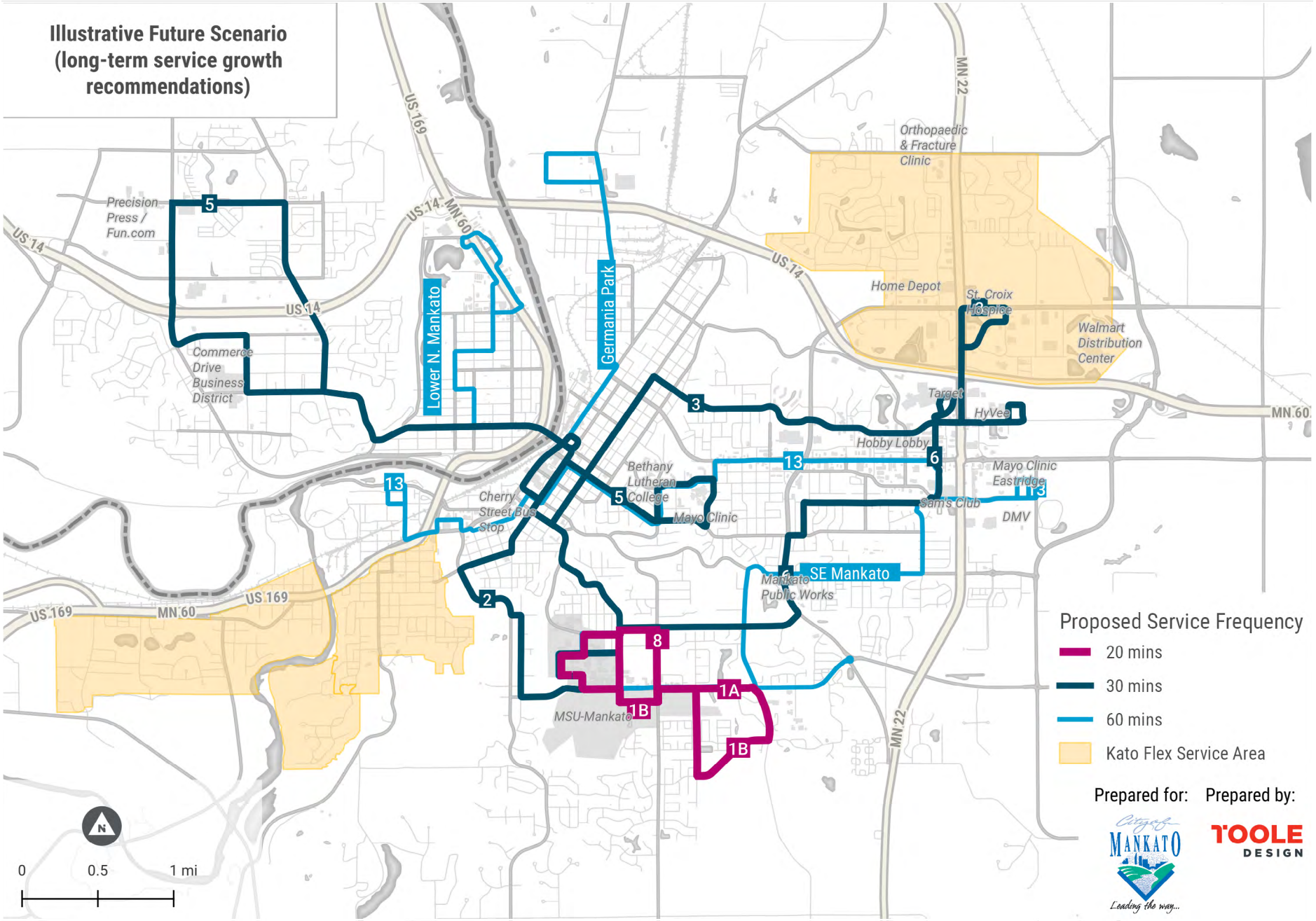


**Figure ES-5.** Proposed Service under Illustrative Future Scenario



# Investments in transit infrastructure and access

- Add new bus stop signs, benches, and shelters
- Identify and improve bus stop access and infrastructure along key service corridors
- Create new bus stop spacing policy
- Create minimum bus stop design standards that include ADA accessibility

# Improved marketing and outreach

- Provide unified branding online, in print, and all physical signage materials, including buses, stops, maps, schedules, and apps
- Engage with the public before any service changes

# Service Implementation

These service changes and improvements will be implemented in a phased manner as follows:

# Immediate Actions (0-1 years)

1. Conduct engagement for proposed service changes and develop a detail service change plan
2. Implement fixed-route service changes along the parameters of the fiscally constrained scenario
3. Implement changes to Kato Flex –service area, operations, and fare integration with fixed-route
4. Publish GTFS-RT data on the web to facilitate trip planning through common transit apps
5. Complete current bus stop improvement plan and develop a phased bus stop improvement plan for the new system
6. Implement temporary bus stops across new system to increase legibility and access of system (route signage and branding)

# Medium Term (1-5 years)

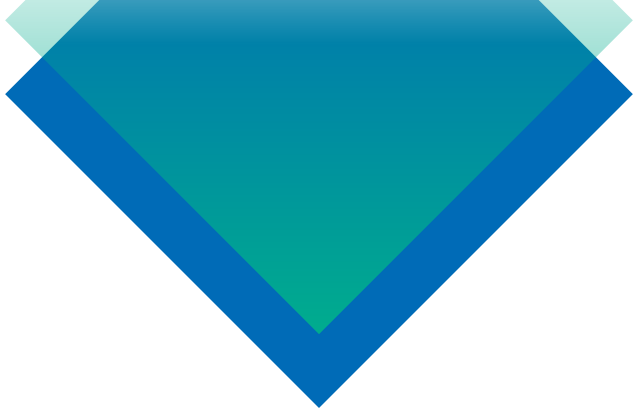
1. Implement phase two of bus stop improvement plan
2. Conduct a fare study to assess fare structure, fare payment media, and supporting systems to ensure fairness and equity
3. Pursue additional funds to grow service
4. Increase frequency on Routes 3 and 6 to every 30 minutes
5. Provide Sat & Sun service on Kato Flex

# Long Term (5-10 years)

1. Acquire new buses and equipment, according to fleet replacement schedule and asset management plan
2. Implement third phase of bus stop improvement plan to complete upgrade of system
3. Implement recommendations of fare study
4. Pursue additional funding and implement new fixed-route service, according to Illustrative Future scenario
5. Conduct a comprehensive review of system (2028-2033 TDP)

# Conclusion

The updated Mankato Transit Development Plan is a roadmap for the future of public transit in Mankato. Overall, the two recommended service scenarios represent a balancing of the priorities of the community with financial and operational considerations. The TDP's recommendations will help to ensure that MTS is meeting the needs of the community and providing a vital transportation option for residents, students, and visitors alike.



City of
MANKATO

*Leading the way...*