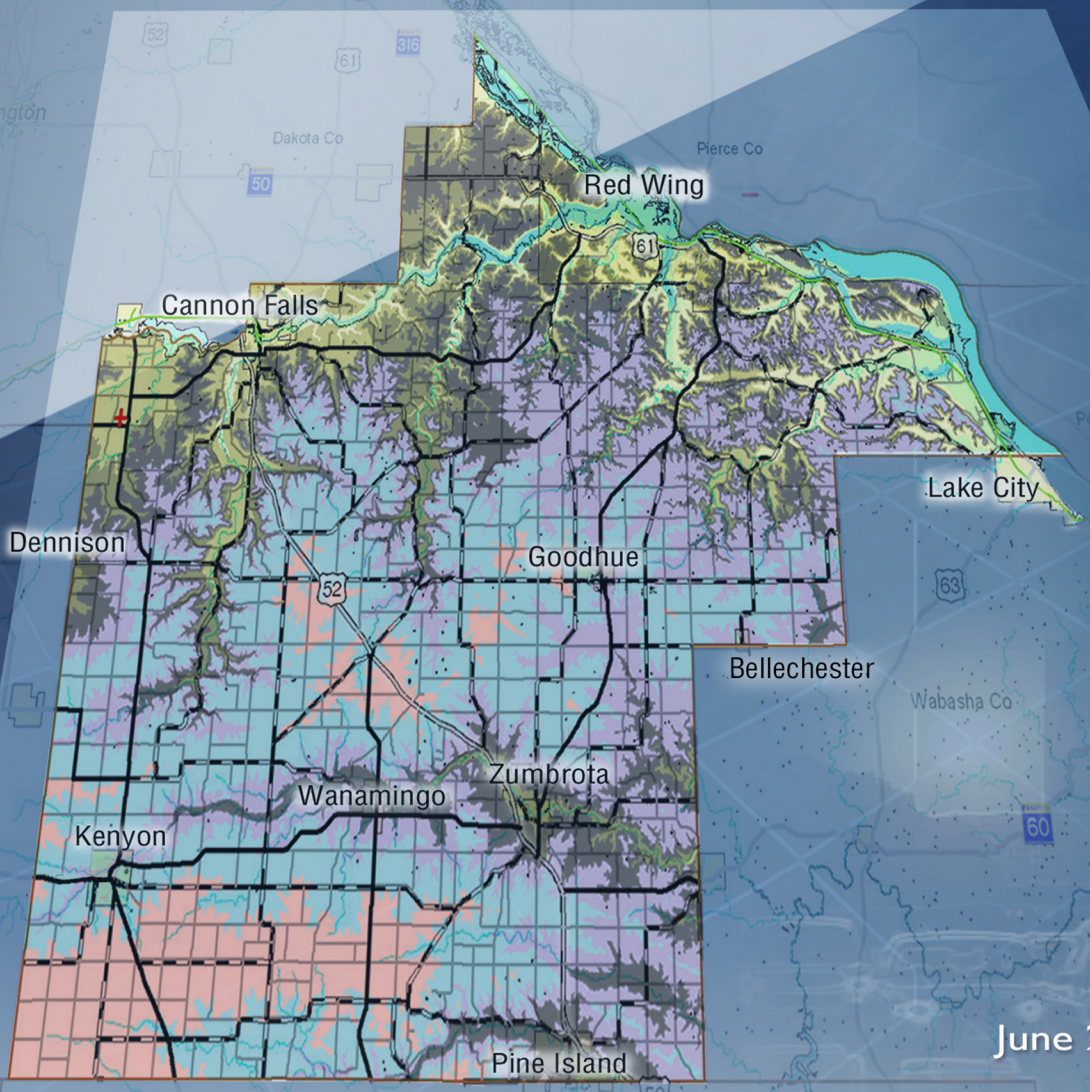
Goodhue County

Transportation Plan

(2004-2025)



June 2004

Prepared by:
Goodhue County Transportation Plan Steering Committee
in association with:

SRF Consulting Group, Inc.

GOODHUE COUNTY TRANSPORTATION PLAN (2004 - 2025)

Prepared By:

Goodhue County Transportation Plan Steering Committee:

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June 2004

Plan Consultant:

SRF Consulting Group, Inc.

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1.0 INTRODUCTION

1.1 STUDY LOCATION

Goodhue County is located in southeastern Minnesota (Figure 1) and is bounded by Dakota County to the north, the State of Wisconsin to the northeast, Wabasha County to the east, Dodge and Olmsted Counties to the south and Rice County to the west. The county is blessed with the scenic beauty of the Mississippi River Valley and Lake Pepin, and the historic charm of communities like Red Wing and Cannon Falls. Due to these attributes, it is a desirable place to live, work and recreate. In addition, Goodhue County is located within a convenient commuter distance for many jobs, services and products to dynamic metropolitan trade centers like the Twin Cities and Rochester.

Although Goodhue County is predominantly rural and agricultural in nature, its close proximity to large job concentrations in the Twin Cities and Rochester has led to steady growth in population. Between 1970 and 2000, population increased by 27 percent from 34,804 to 44,127, and the State Demographer projects it to increase by another 17 percent between 2000 and 2025.

1.2 PLAN PURPOSE

The purpose of the Goodhue County Transportation Plan is to help the county and other affected jurisdictions assess anticipated growth over the next twenty years, and to recommend a transportation system that addresses growth issues and current needs. This Plan will be used as a tool to guide major transportation investments and policy decisions. This planning effort has also been closely coordinated with the county's Comprehensive Plan Update in an effort to achieve both transportation and land use objectives.

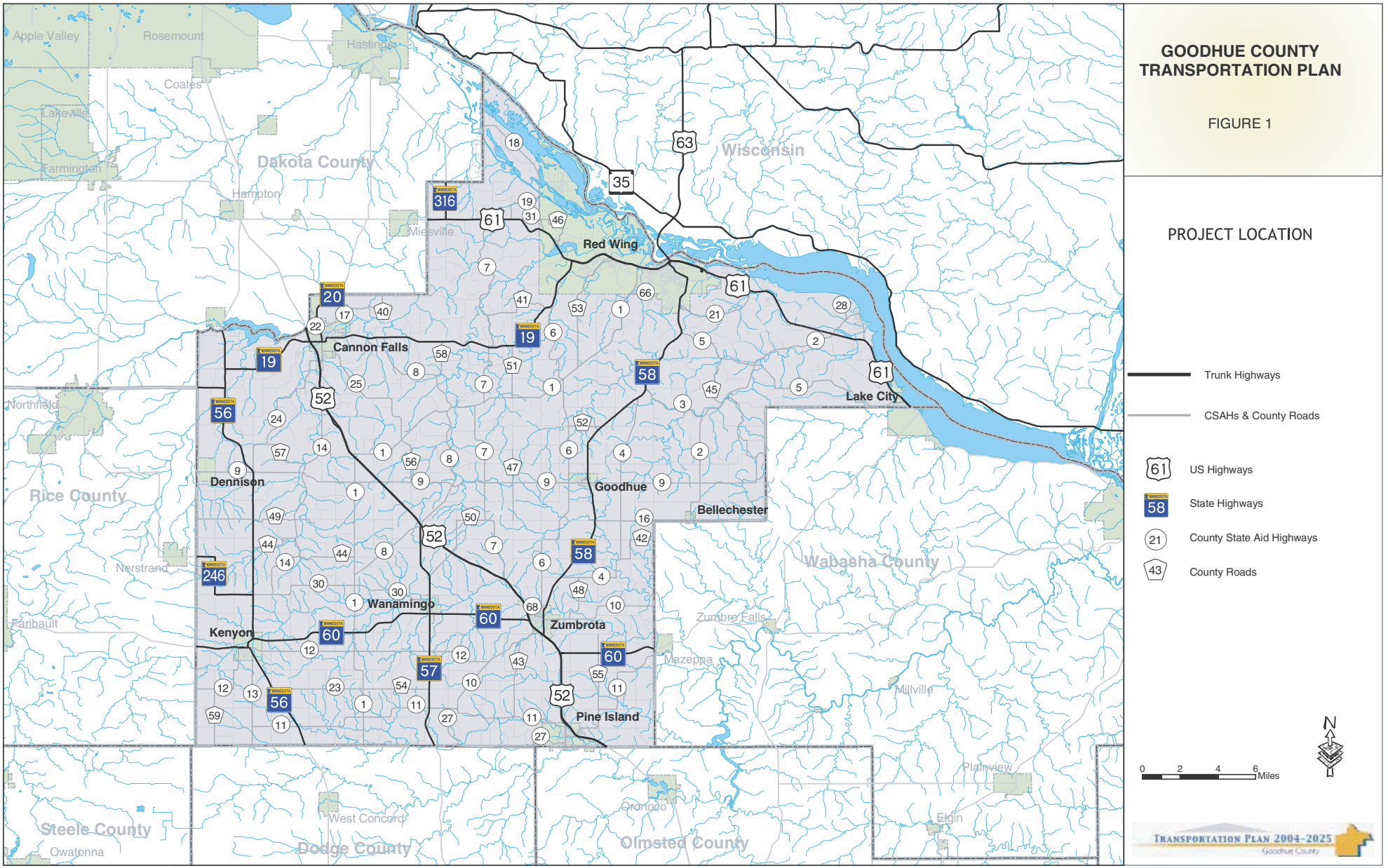
By pursuing the development of a 20-year transportation plan, Goodhue County will lay the foundation for a transportation system that can accommodate changing travel needs throughout the county. In addition, the planning process provides opportunities to enhance and develop planning partnerships between state, regional and local government agencies and the private sector.

After substantial public input, the following key goals and objectives of the Transportation Plan were adopted by the County Commission early in the study process:

GOAL 1: SAFETY

Develop and maintain a transportation network that promotes safety for its users by:

- Reviewing county roadway geometrics and identifying improvement needs
- Enforcing speed limits along principal arterial routes (e.g., US 52)
- Addressing problems at high-crash locations


GOODHUE COUNTY
TRANSPORTATION PLAN
FIGURE 1
PROJECT LOCATION
Trunk Highways
CSAHs & County Roads
US Highways
State Highways
County State Aid Highways
County Roads
0 2 4 6 Miles
N
Transportation Plan 2004-2025
Goodhue County
Red Wing
Cannon Falls
Lake City
Dennison
Goodhue
Bellechester
Wanamingo
Kenyon
Zumbrota
Pine Island
Dakota County
Rice County
Wabasha County
Steele County
Dodge County
Olmsted County
Wisconsin
Apple Valley
Rosemount
Hastings
Coates
Lakeville
Farmington
Hampton
Miesville
Northfield
Nerstrand
Faribault
Owatonna
West Concord
Oronoco
Elgin
Plainview
Millville
Mazeppa
Zumbro Falls

GOAL 2: EFFICIENT MOVEMENT

Strive to ensure that the transportation network promotes the efficient movement of people and goods by:

- Maintaining county roadway infrastructure.
- Providing roadways to serve new development areas and planning future urban routes with affected governments.
- Constructing improved county highway linkages to major state highway improvements.
- Reviewing the current functional classification system and proposing a new 2025 framework.
- Encouraging consistency between roadway jurisdiction, designation and functional classification.

GOAL 3: MULTIMODAL

Promote transportation mode choice as part of the county transportation system by:

- Preparing a countywide recreation trail system map that is coordinated with cities in the county.
- Utilizing the trail system plan to incorporate bicycle and pedestrian improvements into the appropriate county road upgrades.
- Establishing county connections to regional trails.
- Expanding major private employers' existing commuter transit programs for employees living in Goodhue County.
- Encouraging Mn/DOT to construct park-and-ride lots, as part of the US 52 reconstruction program, to promote ridesharing.
- Assuring good connectivity of agricultural product movement to the Port of Red Wing for rail and barge intermodal transfers.
- Evaluating the potential benefit of and, if feasible, supporting extension of the proposed Red Rock Commuter Rail System from Hastings to Red Wing.

GOAL 4: LAND USE/DEVELOPMENT

Recognize the linkage between Goodhue County's desired growth and its transportation system to ensure that decisions regarding transportation are fully integrated with locally approved land use planning and development policies by:

- Identifying and preserving potential transportation corridors by utilizing such tools as official mapping, footprinting and new subdivision requirements.
- Managing access along state and county arterial roadways, in accordance with local and state spacing guidelines.
- Identifying growth areas within the county and evaluating the impacts of proposed land use on the transportation system.

- Utilizing smart growth techniques to balance mobility and access, to promote economic development with system preservation and to support agricultural preservation with urbanization policies.
- Allowing the Goodhue County Public Works Department to provide input on land use, zoning and subdivision proposals during the development review process.

GOAL 5: COORDINATION BETWEEN JURISDICTIONS

Build cooperation and coordination among state and local jurisdictions by:

- Encouraging Mn/DOT to efficiently implement IRC improvement plans which are sufficiently coordinated with the county and its jurisdictions, so that local road connections can be planned.
- Seeking opportunities to coordinate roadway improvement plans with adjacent counties and the adjoining state.
- Reviewing and proposing logical jurisdictional modifications for discussion among affected governments.
- Promoting cooperative intergovernmental maintenance activities to increase the efficiency and effectiveness of services.

GOAL 6: ECONOMIC DEVELOPMENT

Recognize economic development issues when managing the transportation system's resources by:

- Preparing a system plan for ten-ton roadways.
- Developing a county trail system that supports economic development.
- Ensuring that the transportation system serves major economic development generators.

GOAL 7: INVESTMENTS AND USE OF FUNDING

Investigate opportunities to secure new funding for transportation needs and maximize the efficiency of current resources by:

- Preserving, maintaining and managing the existing highway system.
- Examining the current system designation and seeking changes in state assistance.
- Preparing an impact fee negotiation procedure with major private developers as part of the permitting process.
- Securing federal transportation funding for priority multimodal improvements.
- Encouraging joint-agency and/or public-private partnerships and cost sharing strategies.
- Updating the county's project priority list for incorporation into the Capital Improvement Plan.
- Exploring and developing new strategies to balance the realities of construction and maintenance needs with available financial resources.

1.3 PUBLIC PARTICIPATION

Public participation and agency coordination were an important element in developing the transportation needs and in building support for the overall Plan. The following approaches were used to accomplish these objectives:

- A Steering Committee was established to actively guide the development of the Plan. It included representatives of the Goodhue County Public Works Department, the Goodhue County Planning and Zoning Department and the Minnesota Department of Transportation (Mn/DOT). The Steering Committee met throughout the development of the Plan to review technical analyses and provide input on the Plan contents.
- Eight small-group focus meetings were held with representatives of cities, townships, elected officials, local business interests, agricultural/rural trucking, school districts and emergency responders. Issues and comments received at these meetings were documented and are included in the Transportation Plan.
- A public information meeting was held to gather input on transportation issues from the public.
- One meeting each was held with Mn/DOT, the County Park Board, the County Commission; individual sessions were held with local officials from 19 of the 21 townships and the four cities experiencing the largest impacts to discuss the preliminary alternatives report.
- Two public open-house meetings were held to obtain input from citizens, agencies and communities on the draft Plan's findings and recommendations. These meetings were held in conjunction with public meetings for the County Comprehensive Plan update.
- One meeting was held with the County Commission (Committee of the Whole) to discuss the final draft Plan and to assure continued coordination with the County Comprehensive Plan and the Transportation Plan.
- The County Commission held a final meeting to discuss adoption of the final Plan, at which time the Goodhue County Transportation Plan was approved.

2.0 EXISTING CONDITIONS

Land use, population and traffic growth trends, safety and multimodal uses were investigated during the Transportation Plan's development process to help define the county's future growth and transportation needs.

2.1 Land Use

Goodhue County's land use was reviewed to identify major trip generators, economic growth factors and the potential for additional growth and expansion.

Goodhue County evolved into an agricultural center because of its abundance of rich farmland and its proximity to the Mississippi River agricultural transshipment points. The county has placed a high value on these rural, agricultural areas by enacting and enforcing strong zoning policies, maintaining agricultural preservation policies and encouraging growth within existing communities.

The high value Goodhue County has put on agricultural land is evident in their zoning ordinance. The majority of the county is zoned as agricultural protection to maintain, conserve and enhance agricultural lands that are valuable for crop production, pasture and natural habitat for plant and animal life. The intent of this district is to encourage long-term agricultural uses and preserve prime agricultural farmland by restricting the location and density of non-farm dwellings and other non-farm uses.

Additionally, a general agricultural district covers a large portion of Goodhue County. Like the agricultural protection district, the purpose of the agricultural district is to conserve and maintain agricultural investments and prime agricultural farmland. However, the agricultural district allows a slightly higher density of dwellings than the agricultural protection district does.

The remainder of the land use in Goodhue County is contained within its cities, or in an urban fringe district surrounding the cities. The establishment of an urban fringe district allows urban expansion in close proximity to existing incorporated urban centers by conserving land for farming and other open space land uses until urban services are extended to the fringe area. Urban development is deferred in these areas until an orderly transition from farm to urban uses is achieved by annexation of areas adjacent to incorporated limits of existing urban centers.

Land use density in the county is directly related to the county's transportation needs. Future growth areas were identified during meetings with cities and townships. Significant growth is anticipated in the following areas:

- *City of Cannon Falls* – Future industrial growth is planned northwest of the existing city limits, while residential growth is anticipated east, west and south of existing city limits. In addition, a future rock quarry will be located north of the existing city limits.

- *City of Pine Island* – Future growth is most likely to the north and east of the existing city limits. A smaller growth area is expected along the western edge of the existing city limits. These areas will mostly be developed for residential use with limited commercial areas along US 52.
- *City of Zumbrota* – Future growth to the north and east of existing city limits will be mainly residential. Highway commercial and industrial growth is anticipated along US 52, to the west of existing city limits. Future residential growth is likely to the west of the highway commercial district.
- *City of Red Wing* – Future residential growth will most likely occur within the existing city limits between CSAH 1 (Bench Street) and TH 19, south of US 61.
- *Florence Township* – Residential growth is occurring, and is anticipated to continue, in this township near Lake City. Growth is most likely south of US 61.

2.2 POPULATION

Traffic growth, and growth in other transportation modes and services, is generally the result of changes in regional population, land use changes and changes in travel patterns. Examining historic population trends for the area is one of the first steps taken to estimate future traffic growth for the region.

Projected population changes for the study area were developed by using U.S. Census data, Minnesota State Demographer projections and population estimates from local agencies. Table 1 identifies historic growth trends and future projections. The following observations have been noted about growth trends in the area:

- Goodhue County's overall population growth since 1970 has been moderate. An annual growth rate of approximately 1.4 percent per year is roughly equivalent to a 27 percent increase in population over 30 years (1970 to 2000).
- The State Demographer projects that the county will continue to grow at approximately 1.4 percent per year between 2000 and 2025. This is roughly the same rate of growth as 1970 to 2000. This projection appears to be consistent with the rural nature of the county.
- The population of the county is aging. The growth in elderly population will increase demand for medical, recreational and community services that assist elderly populations.
- Future growth will continue to be focused in communities such as Red Wing, Zumbrota, Pine Island, Florence Township and Cannon Falls.

TABLE 1
HISTORIC POPULATION GROWTH AND PROJECTIONS

Government Unit	Historic Population				Population Estimates*		Annual Growth Rates	
	1970	1980	1990	2000	2010	2025	1970 to 2000	2000 to 2025
Bellechester	130	157	110	133	147	171	1.04	1.16
Dennison	203	176	152	159	176	204	-1.13	1.16
Goodhue	539	657	533	778	859	998	1.20	1.24
Kenyon	1,575	1,529	1,552	1,661	1,835	2,130	1.16	1.28
Lake City	376	470	502	620	685	795	1.20	1.23
Red Wing	12,834	13,736	15,134	16,116	17,802	20,668	1.31	1.40
Wanamingo	574	717	847	1,007	1,112	1,291	1.22	1.25
Zumbrota	1,929	2,129	2,312	2,789	3,081	3,577	1.25	1.31
Cannon Falls	2,072	2,673	3,232	3,795	4,192	4,867	1.28	1.32
Pine Island	1,640	1,977	2,125	2,337	2,582	2,997	1.24	1.30
Minneola Township	648	684	614	657	726	843	1.08	1.23
Belle Creek Township	628	518	403	437	483	560	-1.19	1.21
Vasa Township	784	847	889	872	963	1,118	1.16	1.25
Welch Township	529	689	678	697	770	894	1.19	1.24
Cannon Falls Township	1,023	1,373	1,369	1,236	1,365	1,585	1.20	1.26
Leon Township	683	902	916	942	1,041	1,208	1.20	1.25
Wanamingo Township	498	511	472	504	557	646	1.06	1.22
Cherry Grove Township	459	435	396	430	475	551	-1.12	1.21
Kenyon Township	500	472	420	437	483	560	-1.15	1.21
Warsaw Township	659	591	574	603	666	773	-1.14	1.23
Florence Township	796	1,123	1,196	1,450	1,602	1,860	1.24	1.27
Wacouta Township	252	350	398	410	453	526	1.18	1.21
Hay Creek Township	665	751	690	862	952	1,105	1.19	1.25
Belvidere Township	560	522	477	458	506	587	-1.17	1.21
Featherstone Township	646	800	811	785	867	1,007	1.18	1.24
Zumbrota Township	627	613	609	591	653	758	-1.13	1.23
Pine Island Township	559	634	673	628	694	805	1.15	1.23
Roscoe Township	674	735	662	784	866	1,005	1.17	1.24
Holden Township	466	504	445	457	505	586	-1.08	1.21
Stanton Township	722	918	838	1,080	1,193	1,385	1.22	1.26
Goodhue Township	554	576	661	530	585	680	-1.11	1.22
Goodhue County	**34,804**	**38,749**	**40,690**	**44,127**	***47,160***	***51,810***	**1.36**	**1.43**

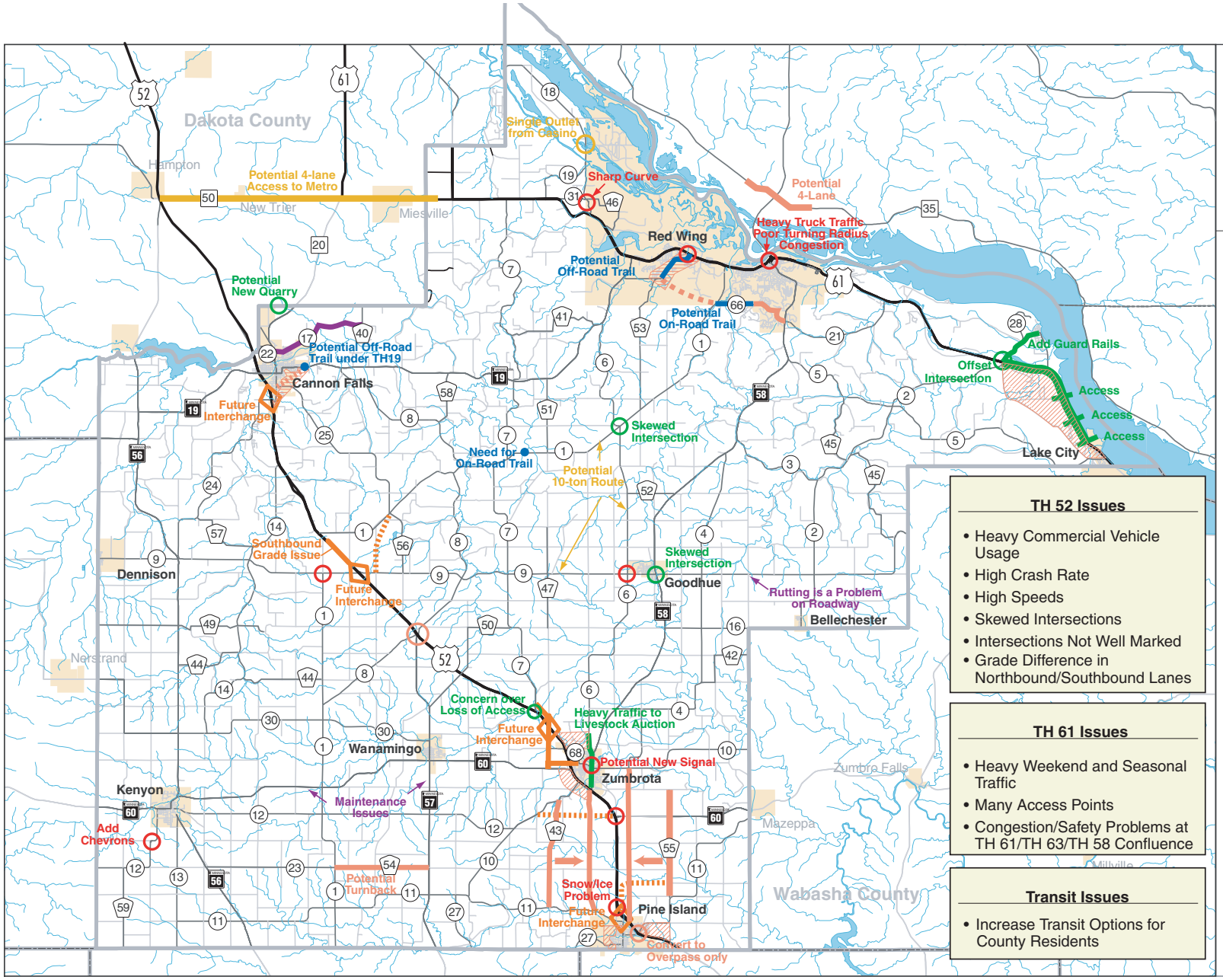
* Population Estimates were made using a 1% annual growth rate for all communities. State Demographer estimates were used for Goodhue County.

2.3 ISSUES IDENTIFICATION

One element of the planning process involved identifying and discussing transportation issues, and determining how to address them in the Plan. Issues were identified based on input from county staff, focus-group meetings, public meetings and issues raised by the consultant, as part of the analysis of existing and future conditions. These issues were documented and organized into the following categories:

- Administrative
- Jurisdiction
- Maintenance
- Management and Operations
- Reconstruction/Upgrade
- Safety
- System
- Trails
- Transit

These issues were then mapped and are shown in Figure 2. A comprehensive list of all issues identified is presented in Appendix C.



GOODHUE COUNTY TRANSPORTATION PLAN

FIGURE 2

ISSUES

TH 52 Issues

- Heavy Commercial Vehicle Usage
- High Crash Rate
- High Speeds
- Skewed Intersections
- Intersections Not Well Marked
- Grade Difference in Northbound/Southbound Lanes

TH 61 Issues

- Heavy Weekend and Seasonal Traffic
- Many Access Points
- Congestion/Safety Problems at TH 61/TH 63/TH 58 Confluence

Transit Issues

- Increase Transit Options for County Residents

LEGEND

- Safety
- Management & Operations
- System
- Reconstruction/Upgrade
- Maintenance
- Trails
- Transit
- Jurisdiction
- Growth Area

0 1 2 3 4 Miles

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Goodhue County

2.4 EXISTING TRAFFIC

Annual average daily traffic volumes (AADTs) on state highways and county routes were collected using historical data provided by Goodhue County and Mn/DOT and traffic counts from individual studies done in the county. Historical volumes for individual segments and their associated growth rates are shown in Appendix A.

In general, traffic volumes increase as they approach larger cities in the county, such as Red Wing, Cannon Falls and Zumbrota. For example, volumes on County State Aid Highway (CSAH) 1 just south of the city limits of Red Wing total 1,650 vehicles per day and increase to 5,200 vehicles per day as the roadway enters the City of Red Wing.

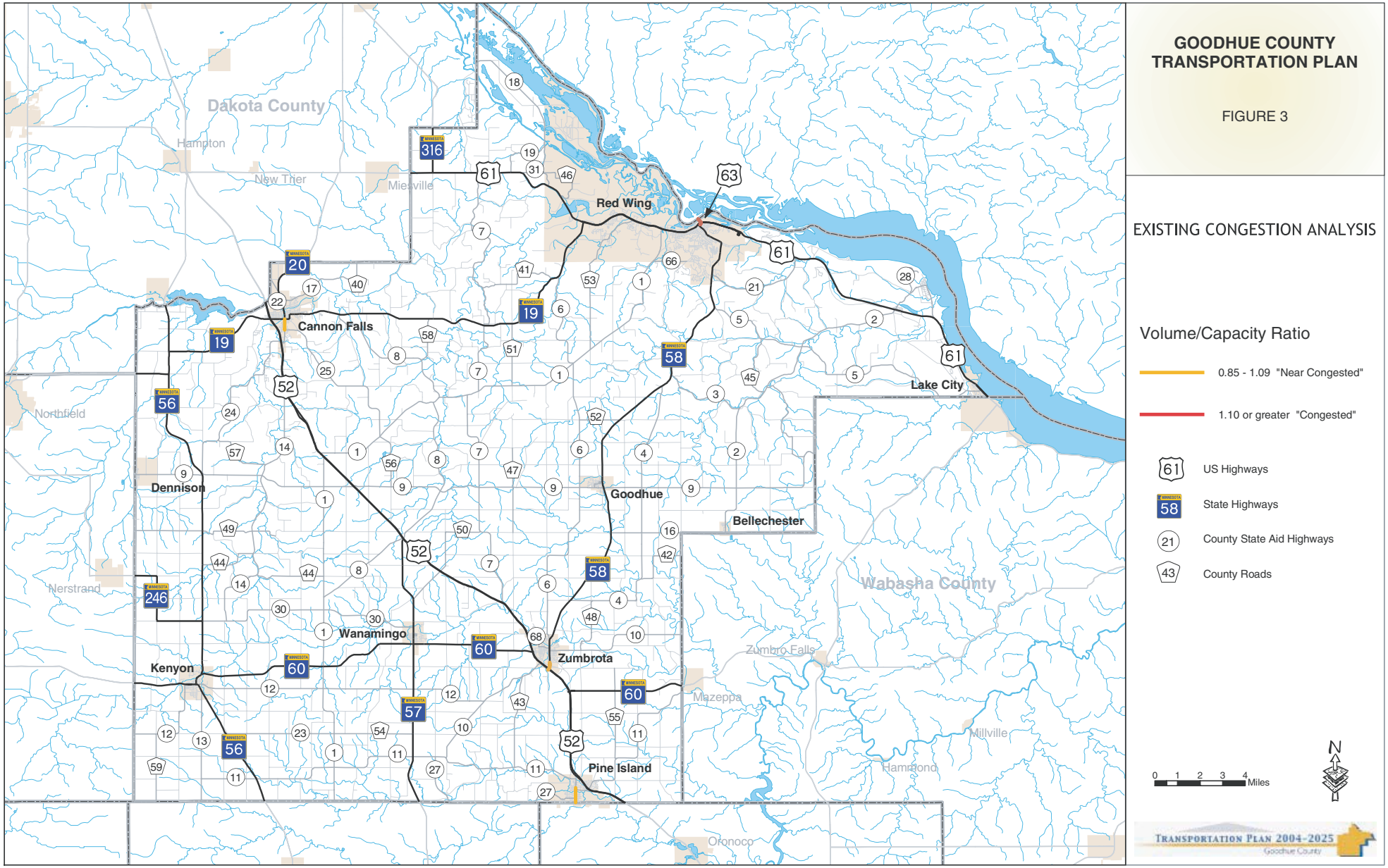
2.5 CONGESTION ANALYSIS

Existing average annual daily traffic volumes were reviewed to identify congested areas. By identifying segments with congestion or operational problems, improvement options can be investigated and planned (i.e., roadway improvements, intersection control changes, alternative routes, setback requirements, etc.). In addition, these corridors can be targeted for access controls and other management tools to improve their traffic operations until major improvements are completed.

For the purpose of this analysis, threshold volumes were developed for nine different types of roadways, using the Highway Capacity Manual (HCM) and typical traffic characteristics (e.g., percent peak hour, directional split, percent no passing, number of access points, signalized intersections per mile) for the different facility types. Threshold volumes are the volumes at which operational problems may occur (traffic backups, side street delays, slower speeds, etc.). Appendix A- Table 1 lists threshold volumes for four types of urban facilities and five types of rural facilities. These threshold volumes were compared to existing average annual daily traffic volumes for each roadway segment in the county and each segment was categorized as one of the following:

- *Uncongested* – The existing volume is less than 85 percent of the threshold volume, indicating a low probability of operational problems due to volume of traffic on the facility.
- *Near Congestion* – The existing volume is between 85 percent and 110 percent of threshold volumes, suggesting a moderate probability of operational problems due to traffic volume on the facility.
- *Congested* – The existing volume exceeds 110 percent of the threshold volume, indicating a high probability of operational problems due to volume of traffic on the facility.

Existing volume to capacity ratios on state and county routes in Goodhue County are presented in Figure 3. Information received during the focus-group meetings, and from Steering Committee members, suggests that congestion is not perceived as a major problem in the region. Analysis of the existing roadway system, and its corresponding daily traffic levels, indicated that US 63, from 0.16 miles north of US 61 to the county line, is the only existing roadway segment congested at this time. This heavily used segment funnels traffic from downtown Red Wing to the bridge over the Mississippi River into Wisconsin.



GOODHUE COUNTY TRANSPORTATION PLAN

FIGURE 3

EXISTING CONGESTION ANALYSIS

Volume/Capacity Ratio

- 0.85 - 1.09 "Near Congested"
- 1.10 or greater "Congested"

- 61 US Highways
- 58 State Highways
- 21 County State Aid Highways
- 43 County Roads

0 1 2 3 4 Miles

N

TRANSPORTATION PLAN 2004-2025
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Five segments were identified as nearing congestion levels:

- *TH 58 from US 52 to 12th Street in Zumbrota*
- *CSAH 24 from CSAH 25 to 0.11 miles north*
- *CSAH 24 from 0.11 miles north to West Park Street*
- *CSAH 24 from West Park Street to TH 19*
- *CSAH 62 from south limits of Pine Island to CSAH 11*

It should be noted that the methodology described above is a planning-level analysis that uses average daily traffic volumes and is not appropriate for abnormal traffic conditions. For example, traffic conditions that do not fit the average daily traffic criteria (e.g., holiday travel periods, fall agricultural volumes or special events) are likely to produce different levels of congestion. A good example of this is on US 61, between Red Wing and Lake City, during the fall. The rolling bluffs along the river valley draw many tourists into the area to view the changing leaf colors, and during the autumn, weekend traffic may exceed the roadway's capacity.

2.6 SAFETY AND CRASH ANALYSIS

Public safety is a high priority for all agencies responsible for improving and maintaining public transportation facilities. To evaluate potential safety problems in the county, a crash analysis was performed using Department of Public Safety (DPS) crash records from 1998-2002. Records from the DPS were collected for state trunk highways, county state aid highways and county roads. The crash database was imported into the county Geographic Information System (GIS) format so that the data could be viewed on a map of the study area.

Analysis of crash data focused on identifying problems at intersections and on roadway segments. The analysis is described in the following sections.

2.6.1 Intersection Crash Analysis

Using GIS technology and crash data from 1998 to 2002 identified intersections with potential problems. Because many intersection-related crashes do not occur directly at the intersection, a buffer was created around the intersections. All crashes within a 1,500-foot buffer in rural areas, and a 500-foot buffer in municipal areas were considered "intersection-related" and were included in the tally for each intersection.

Each intersection was categorized into one of four groups: intersections with over 25 crashes (more than five crashes per year); intersections with 20-25 crashes (four to five crashes per year); intersections with 15-19 crashes (three crashes per year); and intersections with less than 15 crashes (three crashes or less per year). The results of the analysis show that 17 intersections had more than 25 crashes during the five-year period. These intersections were defined as high-crash locations in the study.

High-crash intersections generally reflect areas with higher traffic volumes and/or a high number of access points. Of the 17 high crash locations, nine of them are located on US 52 and five are located on US 61. Each intersection with over 25 crashes during the five-year period between 1998 and 2002 was further evaluated in terms of crash type and severity. The results are summarized below, highlighted in Table 2 and shown in Figure 4:

US 52 Corridor: Nine of the high-crash locations are located on US 52. This portion of US 52 is a four-lane, rural expressway, 55-65 mph, with left and right turn-lanes at signalized intersections. Traffic volumes on this segment range from 16,536 to 24,440 vehicles per day. The highest number of crashes (62) occurred at the intersection of US 52 and TH 58 near the City of Zumbrota. To the north, at US 52 and CSAH 9, another 44 crashes were reported; and to the south at US 52 and TH 60, 37 crashes were identified. The high frequency of crashes at these three locations warrants further discussion.

The location with the highest crash rates, along US 52, is located at the intersection with TH 58. The majority of crashes at US 52 and TH 58 were right-angle and rear-end crashes (29 and 21 percent respectively). Although the majority of crashes at this location resulted in property damage, injuries were reported 31 percent of the time.

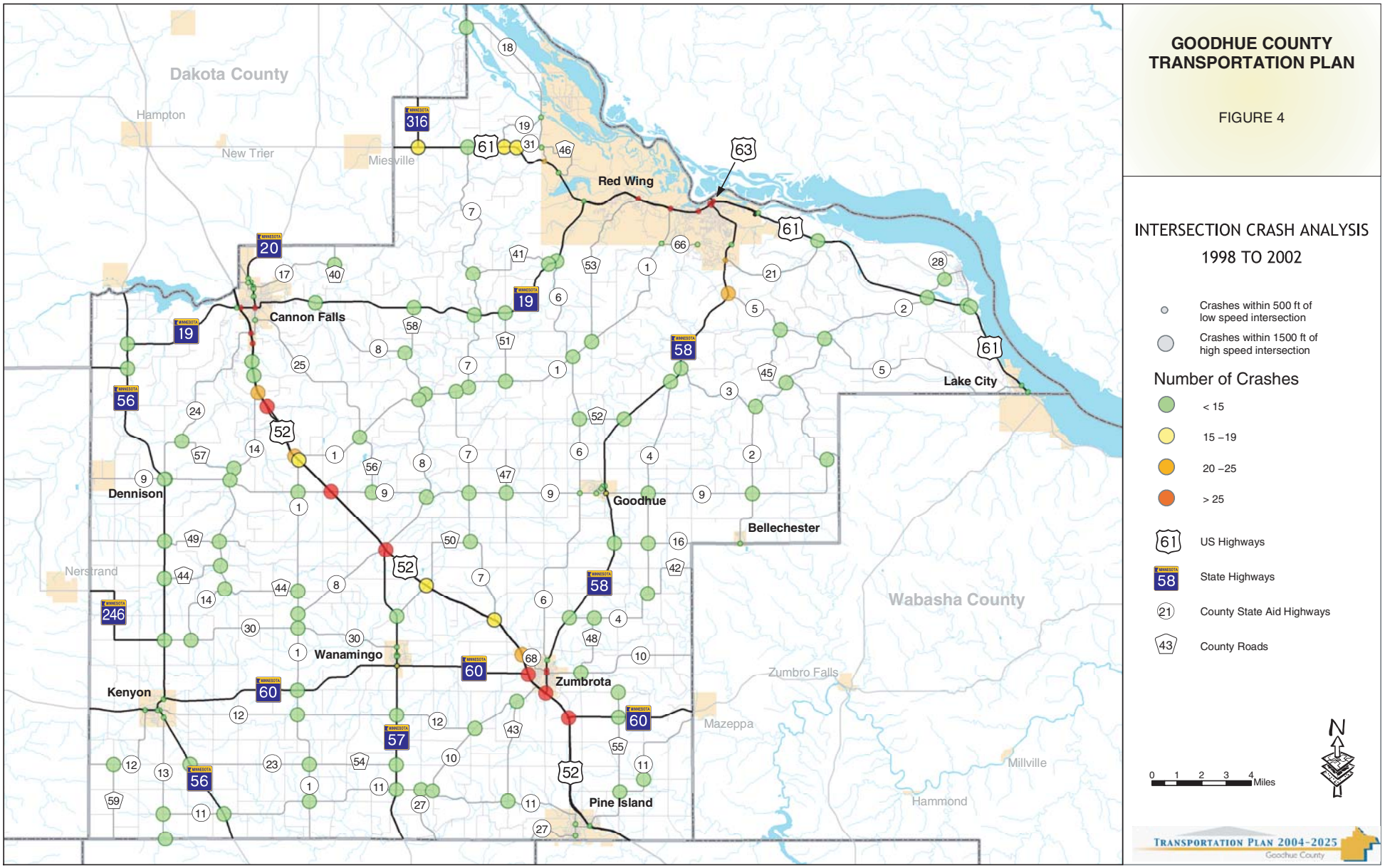
The second highest crash intersection along US 52 is located at US 52 and CSAH 9. This intersection is characterized by a high percentage (52 percent) of right-angle crashes. As noted in the US 52 Road Safety Audit, the vertical alignment difference between the northbound and southbound lanes is extreme and could be one of the key contributing factors to crashes at this intersection. The prevalence of right-angle crashes likely means that vehicles on CSAH 9 are pulling out onto US 52 into oncoming traffic. Grade differences hinder a vehicle's ability to see oncoming traffic or judge acceptable gaps in traffic. It is important to note that the majority of crashes at the intersection resulted in injury (64 percent), and two crashes resulted in severe injury. This location has been selected as a state demonstration project to evaluate ITS applications for rural uncontrolled intersections that exhibit serious safety hazards. The Rural Intersection Decision Support Study will test the use of electronic sensors and dynamic message boards to alert motorists on CSAH 9 that traffic along US 52 is approaching. The study objective is to warn CSAH 9 traffic, so it does not pull out into oncoming US 52 traffic.

The third highest crash intersection along the US 52 and TH 60 corridor has a high percentage of "run-off the road" crashes (54 percent). Public input suggests that a slight curve along US 52 at the location of the TH 60 interchange may be the cause of some of these crashes. A majority of the crashes resulted in property damage; however, injuries occurred 30 percent of the time and one fatal crash was reported.

Approximately 32 percent of all crashes reported on the US 52 corridor in Goodhue County resulted in injuries. Four fatalities and 10 severe injury crashes were reported. The remaining high-crash intersections for the US 52 corridor are presented in Table 2.

Table 2
Intersection Crashes

INTERSECTION INFORMATION		CRASH TYPE (PERCENT)						CRASH SUMMARY	
Intersection Location	Intersection Control	Rear End	Sideswipe	Right-Angle	Run off Road	Left-Turn Into Oncoming Traffic	Other	Total Crashes	Percent Injury Crashes
TH 19 and CSAH 24	Signal	22	14	22	0	19	22	36	28
US 52 and TH 58	Interchange	21	11	29	13	2	24	62	31
US 52 and TH 60 South	Interchange	0	8	16	54	0	22	37	30
US 52 and TH 60 North	Interchange	14	3	24	24	3	31	29	17
US 52 and TH 57	Stop sign	15	9	42	24	0	9	33	42
US 52 and CSAH 9	Stop sign	2	5	52	23	0	18	44	64
US 52 and Skunk Hollow Trail	Stop sign	3	3	13	45	0	35	31	19
US 52 and 320th Street/CSAH 24	Signal	38	14	17	10	3	17	29	38
US 52 and CSAH 24	Signal	59	3	21	3	0	14	29	38
US 52 and TH 19	Interchange	11	4	15	41	4	26	27	15
TH 58 and 4th Street	Stop sign	46	0	32	0	14	7	28	18
TH 58 and CSAH 68	Stop sign	18	7	32	7	11	25	28	29
US 61 and Carol Lane	Stop sign	16	3	53	3	9	16	32	28
US 61 and CSAH 1	Signal	46	4	19	4	21	6	48	38
US 61 and Cedar Street	Stop sign	61	4	21	4	4	7	28	39
TH 58 and 3rd Street	Stop sign	17	20	32	0	7	24	41	17
US 61 and TH 58	Signal	33	14	21	0	4	28	72	25
US 61 and US 63	Signal	19	14	14	0	0	53	36	25


Dakota County
Hampton
New Trier
Miesville
Red Wing
Cannon Falls
Lake City
Dennison
Goodhue
Bellechester
Nerstrand
Wanamingo
Kenyon
Zumbrota
Pine Island
Wabasha County
Zumbro Falls
Mazeppa
Millville
Hammond
316
61
63
20
19
58
56
52
60
57
246
GOODHUE COUNTY
TRANSPORTATION PLAN
FIGURE 4
INTERSECTION CRASH ANALYSIS
1998 TO 2002
Crashes within 500 ft of low speed intersection
Crashes within 1500 ft of high speed intersection
Number of Crashes
< 15
15 –19
20 –25
> 25
US Highways
State Highways
County State Aid Highways
County Roads
0 1 2 3 4 Miles
N
TRANSPORTATION PLAN 2004-2025
Goodhue County

US 52 Road Safety Audit

In response to concerns about safety issues resulting from several fatal and severe crashes along the US 52 corridor, the Department of Public Safety, in conjunction with Mn/DOT, assembled a Road Safety Audit (RSA) to study the expressway section of US 52 between Rochester and Inver Grove Heights, including Goodhue County. Mn/DOT recognized that conversion of US 52 to a freeway would likely occur in stages and not be complete for 20 years or more. Therefore, the RSA team focused on identifying short-term, easily implemented solutions to improve roadway safety that are consistent with the long-range goals for the corridor. The solutions and outcomes of the RSA are located in the *Minnesota Department of Transportation Department of Public Safety Road Safety Audit*. Goodhue County should refer to these solutions when planning any improvements or upgrades of roadways that intersect with US 52.

US 61 Corridor: Five of the high-crash locations are located along the US 61 corridor in the City of Red Wing. This portion of US 61 is a four-lane, urban expressway, 35-55 mph with left and right turn-lanes at most signalized intersections. Traffic volumes on this portion of US 61 range from 8,112 to 20,904 vehicles per day.

The majority of crashes on this corridor were rear-end or right-angle crashes. A high percentage of rear-end crashes occurred at CSAH 1, Cedar Street, TH 58 and US 63 (46, 61, 33 and 19 percent respectively). Right-angle crashes accounted for 53 percent of the crashes at Carol Lane. Crashes causing injury occurred approximately 31 percent of the time, and four of those crashes caused severe injury.

TH 58 corridor: Three of the high-crash locations are located along the TH 58 corridor. Two of these locations are in the City of Zumbrota, and the other intersection is in the City of Red Wing. The portion of TH 58 within Zumbrota is an urban two-lane arterial street with traffic volumes ranging from 6,968 to 8,632 vehicles per day. The majority of crashes at the Zumbrota locations are rear-end and right-angle crashes (46 and 32 percent respectively). Crashes that caused injuries occurred 24 percent of the time, and one severe injury crash was reported.

The majority (32 percent) of crashes at the intersection located in Red Wing are right-angle crashes. While most of the crashes resulted in property damage, injuries were reported 17 percent of the time.

TH 19 and CSAH 24: This high-crash intersection is located within the City of Cannon Falls. Trunk Highway 19 is an urban two-lane arterial, and traffic volumes range from 4,368 to 6,240. County State Aid Highway 24 is an urban two-lane street with traffic volumes of approximately 8,000 vehicles per day. The majority of crashes at this location are rear-end and right-angle crashes (22 percent each). Another 19 percent of crashes are characterized by left-turns into on-coming traffic. Injury crashes resulted 18 percent of the time, and one severe injury crash was reported.

A high percentage of rear-end crashes usually indicates that drivers are forced to make sudden stops. This can be caused by stop-and-go traffic in congested area, areas with many access points, areas along expressways or freeways with traffic signals and areas where drivers have a difficult time anticipating the maneuvers of other vehicles.

2.6.2 Segment Crash Analysis

Although most crashes occur at high-conflict locations such as intersections, it is also important to look at crashes along roadway segments to identify abnormally high-crash segments. While numerous factors (i.e., geometric or cross-section deficiencies, sight distance problems, excessive access, etc.) contribute to crashes, segment analysis identifies potential problems so that further investigations and analysis can be done. In addition, segments can be targeted for safety improvements and investments.

In order to identify segments with high crash rates, a comparison was made between average crash rates, by facility type, and the rates for each individual segment in the county (Table 3). Table 3 shows that Goodhue County's crash rates are below or similar to crash rates, per design type, for Mn/DOT District 6. The only exceptions are the urban four-lane roadway, at 30 mph (U-3) and the rural two-lane highways with poor geometrics or site distance issues (R-2) categories. Since only one segment of roadway within Goodhue County is categorized as a U-3, an inaccurate overall crash rate is portrayed for the category. For the R-2 facility type, Goodhue County exhibits almost double the District 6 rate. Nonetheless, for the remaining categories, County rates are similar to District 6 crash rates and slight variations between the two should not be of great concern.

TABLE 3
SEGMENT CRASH RATES

Type of Facility	Goodhue County Non-Junction Crash Rates	Comparison Non-Junction Crash Rates [2]
U-1 = Urban 2-lane Local	1.69	3.3
U-2 = Urban 2-lane Arterial	3.75	3.6
U-3 = Urban 4-lane (30 Mph)	0.6	7.7
U-4 = Urban 4-lane Expressway	1.96	3.6
R1-A = Rural 2-lane Trunk Hwy	1.19	1.0
R1 = Rural 2-lane Local	1.07	1.1
R2 = Rural 2-lane [3]	2.09	1.1
R3 = Rural 4-lane Expressway	0.84	0.9

[1] Goodhue County rates are based on analysis of Department of Public Safety Data for the Goodhue County area.
Averages were developed for different facility types within the county using 1998-2002 data.
[2] Comparison rates are based on 1999 to 2001 Mn/DOT District 6 average crash rates.
[3] Two-lane rural highways with limited sight distance and poor geometrics.
NA = information not available.

While the ratio of segment crash rates to average crash rates identifies areas with potential safety problems, it does not account for variations caused by short segment lengths and low traffic volumes. The Federal Highway Administration (FHWA) Hazard Elimination Safety (HES) program criteria require that four or more crashes per mile be correctable. For the purposes of this plan, high-crash segments have been identified as segments that have a crash ratio greater than the average crash rate per design type for Goodhue County and have a crash frequency of more than four crashes per mile, per year. Using these criteria, high crash segments have been identified and are shown on Figure 5.

When reviewing the high-crash segment map, it is important to remember the following:

- Short highway segments can result in high crash rates.
- Segments with low traffic volumes are subject to more variability (a small number of crashes can result in a high crash rate).

Different types of highway facilities have different crash rates. For example, the average crash rate for a rural, four-lane highway is 1.0 crash per million vehicles-miles, while a rural, two-lane, county facility has an average crash rate of 1.07.

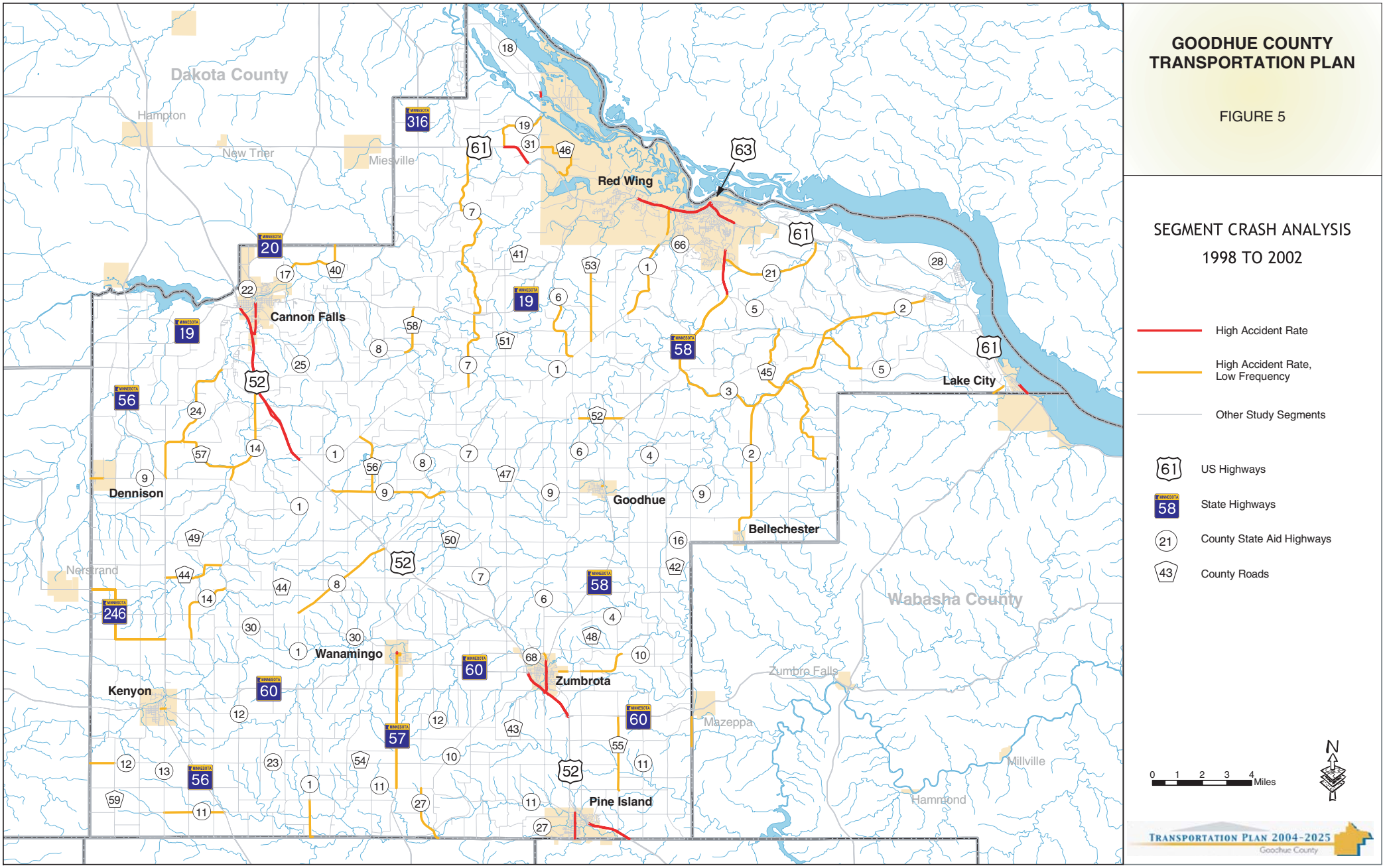

GOODHUE COUNTY
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FIGURE 5
SEGMENT CRASH ANALYSIS
1998 TO 2002
High Accident Rate
High Accident Rate, Low Frequency
Other Study Segments
US Highways
State Highways
County State Aid Highways
County Roads
Dakota County
Hampton
New Trier
Miesville
Red Wing
Cannon Falls
Lake City
Dennison
Goodhue
Bellechester
Nerstrand
Wanamingo
Kenyon
Zumbrota
Pine Island
Wabasha County
Zumbra Falls
Mazeppa
Millville
Hammond
0 1 2 3 4 Miles
N
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2.6.3 High Crash Locations on County System

As noted in Table 2 and Figure 5, the most serious safety issues, in terms of frequency and rates, are located along US and Trunk Highways in Goodhue County. For the most part, the solutions to these high crash locations will fall under Mn/DOT's jurisdiction. However, some locations on CSAH roads also exhibit safety needs. Table 4 identifies crash locations on the County system that would benefit from investments in safety measures. The 18 segments noted on Table 4 reflect sections of CSAH routes that exhibit at least ten crashes over the five-year analysis period, and that have crash rates that exceed the County's average rate per design type. Appendix A is the source for this data.

The table shows that the following seven roadways could benefit most from safety improvements:

- CSAH 6
- CSAH 7
- CSAH 11
- CSAH 18
- CSAH 19
- CSAH 24
- CSAH 62

TABLE 4
SEGMENT CRASH RATES ON GOODHUE COUNTY ROAD SYSTEM

GIS_ID	Roadway	TERMINI	Number of Crashes	Crash Rate	Goodhue County Average Crash Rate by Design Type
2007	CSAH 1	9.2 miles NE of CSAH 8 to south limits of Red Wing	18	1.75	1.07
2015	CSAH 2	CSAH 5 to TH 61	10	2.13	1.07
2042	CSAH 6	CSAH 1 to 2.6 miles N of CSAH 1	23	5.60	2.09
2047	CSAH 7	TH 19 to WELCH	24	6.99	2.09
2049	CSAH 7	2.6 MI S to TH 61	11	4.40	1.07
2062	CSAH 9	US 52 to 1.0 miles W of CSAH 7	10	1.79	1.07
2096	CSAH 11	Along the east county line from 0.3 miles S of TH 60 to 1.30 MI S	12	6.08	1.07
2112	CSAH 14	CSAH 9 to US 52	11	1.84	1.07
2113	CSAH 16	TH 58 to west limits of Bellechester	10	1.31	1.07
2123	CSAH 18	TH 61 to CSAH 19 on west limits of Red Wing-Eggleston	28	1.52	1.07
2124	CSAH 18	CSAH 19 to Sturgeon Lake Road	10	1.18	1.07
2128	CSAH 19	TH 61 to CSAH 18 at west limits of Red Wing	16	11.12	2.09
2135	CSAH 24	CSAH 9 to 4.7 miles north	10	3.82	2.09
2137	CSAH 24	North Cannon River to US 52	16	2.44	2.09
2138	CSAH 24	New US 52 to old US 52 (Cannonball Frontage)	17	15.13	1.69
2139	CSAH 24	New US 52 to CSAH 25	12	1.92	1.69
2144	CSAH 25	South limits Cannon Falls to CSAH 1	14	1.51	1.07
2157	CSAH 62	South Limits Pine Island to CSAH 11	31	3.46	1.69

2.7 MULTIMODAL USES

Goodhue County has a variety of modal transportation users and services including trucking, railroads, transit, bicyclists and pedestrians. The existing multimodal uses can be summarized as follows:

2.7.1 Trucking

In Goodhue County, the movement of agricultural goods, livestock, and commercial and industrial products are the major sources of truck traffic. Over-the-road trucks transport crops and milk for processing. Other agricultural truck traffic hauls grain and seed from local elevators to Red Wing where it is shipped elsewhere by barge. Other materials and products transported by truck include cement, custom molding and cold storage products. The Livestock Auction Market in Zumbrota draws heavy truck traffic on auction days. The primary truck routes in Goodhue County are US 52, US 61, TH 58, CSAH 1 and CSAH 9.

Trunk Highway 52 is an important truck route because it connects Goodhue County to both the Twin Cities metropolitan area and Rochester and because it connects the larger cities of Goodhue County, such as Pine Island, Zumbrota and Cannon Falls.

Trunk Highway 58 is an important truck route that provides a north-south connection to Red Wing. Trucks traveling on US 52 use TH 58 to travel to grain and barge terminals in Red Wing.

County State Aid Highway 1 is a parallel route to TH 58 that links most of the county to Red Wing. CSAH 1 runs the entire length of the county and provides access from rural elevators and farming communities to processors and barge and river shipping terminals near Red Wing.

County State Aid Highway 9 is a key truck route because it provides one of the few east-west connections from Rice County to Wabasha County. It also provides an alternative route from TH 58 to US 52.

2.7.2 Rail

Passenger and freight rail service is provided by Amtrak and the Canadian Pacific Railroad in Goodhue County. The operations of these railroads are described in more detail below.

Amtrak

Amtrak is the nation's largest provider of contract-commuter services for state and regional authorities. The passenger rail line serves more than 500 stations in 46 states. A small, unstaffed Amtrak station is located on Levee Street in Red Wing. Amtrak operates the Empire Builder (one daily train in each direction) that provides passenger service between Chicago and the Seattle/Portland area and utilizes Canadian Pacific trackage through Red Wing.

Canadian Pacific Railroad

The main line of the Canadian Pacific (CP) Railroad runs along the northern edge of Goodhue County between the Mississippi River and US 61. The trackage averages 28 trains per day, with speeds up to 79 mile per hour. Trains on the corridor include high-speed passenger trains (Amtrak), intermodal trains, lower-speed coal and commodity trains, general freight trains, and local freight trains.

2.7.3 Transit

Goodhue County partners with Wabasha County, through Three Rivers Community Action, Inc., to provide public transit within the county. Three Rivers Community Action, Inc. is a private, non-profit organization that works to address basic human needs of people in the service area. Public transportation is available via dial-a-ride service for individuals in Cannon Falls, Lake City and Frontenanc.

The City of Red Wing's public transportation system is called "The Ride." The Ride provides two regular bus routes and a flexible dial-a-ride service. The 17-passenger busses supply economical and convenient transportation to local workers, residents and visitors.

A potential source of public transit is an extension to the Red Rock Commuter Rail System. When complete, the Red Rock rail system will provide approximately 30 miles of commuter service from downtown Minneapolis and St. Paul to Hastings on existing (Canadian Pacific) freight railroad tracks. Discussions have taken place about the possible extension of this commuter rail system from Hastings to Red Wing to provide transit opportunities for county residents commuting to and from the Twin Cities metro area and for tourists traveling to Goodhue County.

Several park-and-ride lots exist within the county (Cannon Falls, Zumbrota and Pine Island). Currently, these park-and-rides primarily serve employees traveling to and from the Mayo Clinic in Rochester.

2.7.4 Bicycle/Pedestrian

Goodhue County has three existing regional trails within its boundaries, including the Cannon Valley Trail, the Goodhue Pioneer Trail and the Douglas State Trail (Figure 6).

The Cannon Valley Trail is a 19.7 mile-long multi-use trail running through the diverse scenery of the former Chicago Great Western Railroad line and connecting the cities of Cannon Falls, Welch and Red Wing. The Cannon Valley Trail parallels the Cannon River and is open year-round for bicycling, in-line skating, skateboarding, cross-country skiing, hiking and walking. Each year, approximately 100,000 people utilize the Cannon Valley Trail.

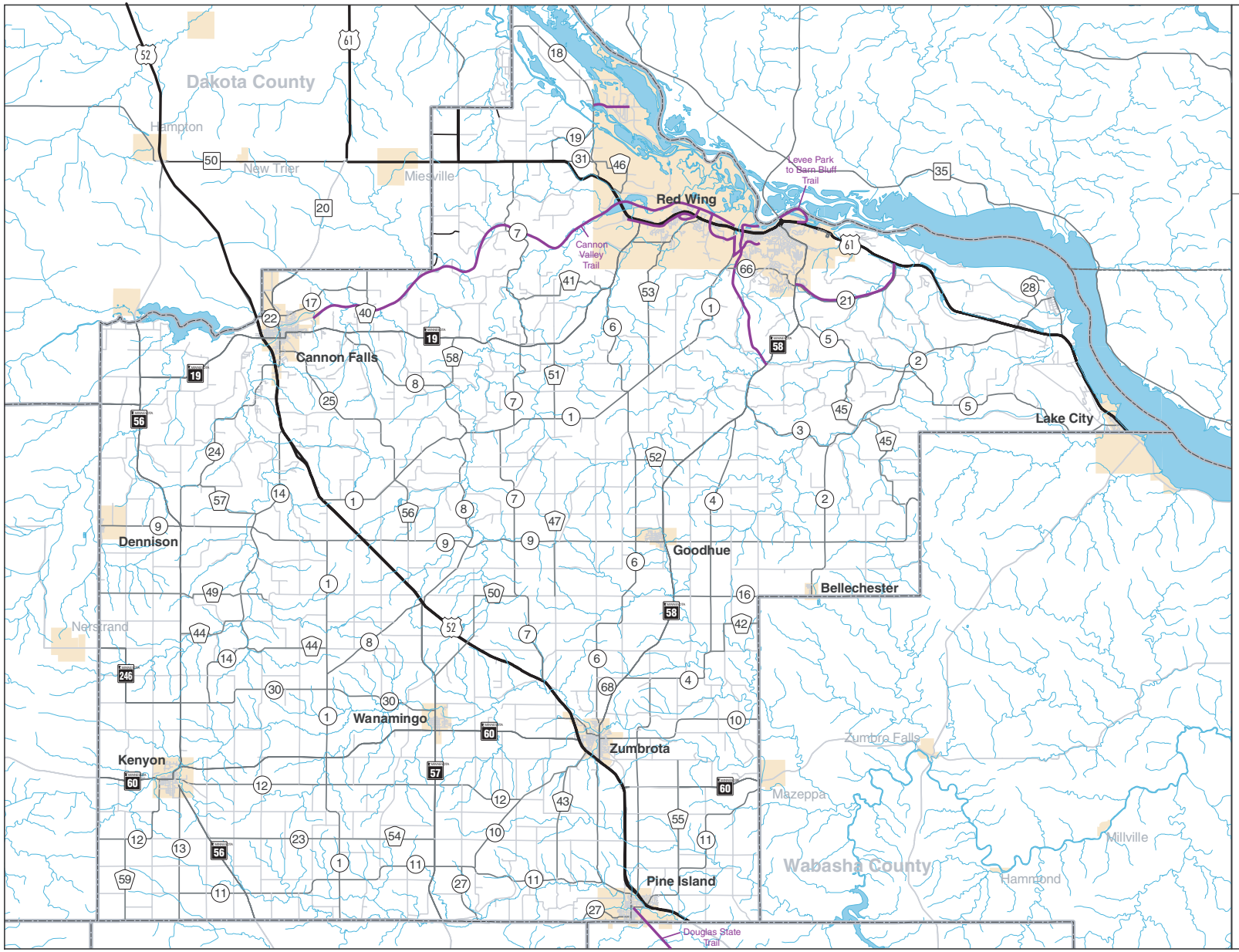

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FIGURE 6

EXISTING TRAILS

LEGEND

Existing Trails

0 1 2 3 4 Miles

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The Douglas State Trail is another regional trail that begins in Goodhue County. The trail is a multi-use state trail developed on the abandoned Chicago Northwestern Railroad grade. It provides two separate treadways, each of which is designed for different recreational activities. One treadway is surfaced with bituminous pavement for bicyclists, hikers and cross-country skiers; the other is a natural surface for horseback riders and snowmobilers. The completed trail begins at Pine Island City Park, travels through the town of Douglas (for which the Trail is named), and terminates in northwest Rochester.

The Goodhue Pioneer trail is a legislatively authorized 37-mile state trail which, when completed, will connect Red Wing, Goodhue, Zumbrota, Mazeppa, Bellechester and Pine Island. The four-mile section from Red Wing to Hay Creek has been constructed. It consists of one, crushed limestone treadway for use by bicycles, pedestrians, horseback riders and snowmobilers. The trail may be paved in the future.

A connected system of regional trails in Goodhue County is in the planning stages, or has been established. In developing a county-wide trail system, that connects to other regional trails, filling gaps between existing trail systems is critical. As bicycling and trail use becomes more widespread, avid bicyclists are looking for longer (20 to 40 mile) trails. Utilizing the opportunity to create a county-wide trail system that connects to regional trails, will draw tourists and trail users from other regions to the county. Such trail development will increase economic activity in communities located along the trails.

As indicated above, the focus of Goodhue County's trail plan should be on providing trail connections in areas that link to regional trails and/or local and regional park facilities. When planning transportation improvements, special consideration should be given to addressing bicycle and pedestrian needs. Numerous traffic operation factors (e.g., traffic volumes, speeds, sight distance, accesses, available space) and funding availability should be considered when determining the types of trail facilities (off-road versus on-road).

3.0 ANALYSIS OF FUTURE TRANSPORTATION NEEDS

3.1 TRAFFIC PROJECTIONS

Traffic projections for the year 2025 were prepared to identify future capacity or system deficiencies, and to provide traffic information for decision-making by state, county and city staff officials, and for businesses and residents.

A variety of data sources and methods were used to derive 2025 projections for highways and county road segments within the county. Sources included regional population growth trends, historic traffic growth trends, and consideration of anticipated highway and county road changes. In addition, traffic volume projections were reviewed from the US 61 Corridor Management Plan and the US 52 Interregional Corridor Study.

The first step was to identify population and development trends through a review of census data and discussions with local planning officials. Then, historical average daily traffic volumes and other traffic count sources were gathered from the county. Traffic volume inconsistencies were noted and investigated.

Four traffic projection methods were applied to historical volumes: compounded growth rate, linear regression, 1 percent per year and 2.5 percent per year. In general, the four methods for computing traffic growth provided a range of projected volumes; compounded rates were more aggressive, linear regression (slope) was more conservative and the 1 percent and 2.5 percent growth rates per year provided a statistical comparison for the other two methods. Growth projections were adjusted to reflect anticipated development trends and the potential for traffic diversion to new links. Potential development areas were identified through discussions with local officials, and segments were categorized into high-, medium- and low-growth areas. 2025 traffic projections for individual roadway segments in the county, by jurisdiction, are shown in Appendix A. For the majority of the CSAH and CR segments, the 2025 forecasts are based on the slope projection method, as determined by the Steering Committee. Footnotes on the tables in Appendix A explain deviations from this general rule. Details of the methodology used to develop state highway traffic forecasts are found in Appendix B.

Projected traffic volumes reflect a county-wide level of analysis. Traffic volumes on roadways within specific development areas may change, depending on the development densities. For this reason, specific study area forecasts should be completed when developing individual improvement projects. In addition, the county should periodically review land use and development/growth trends and adjust the projections accordingly.

3.2 FUTURE CONGESTION

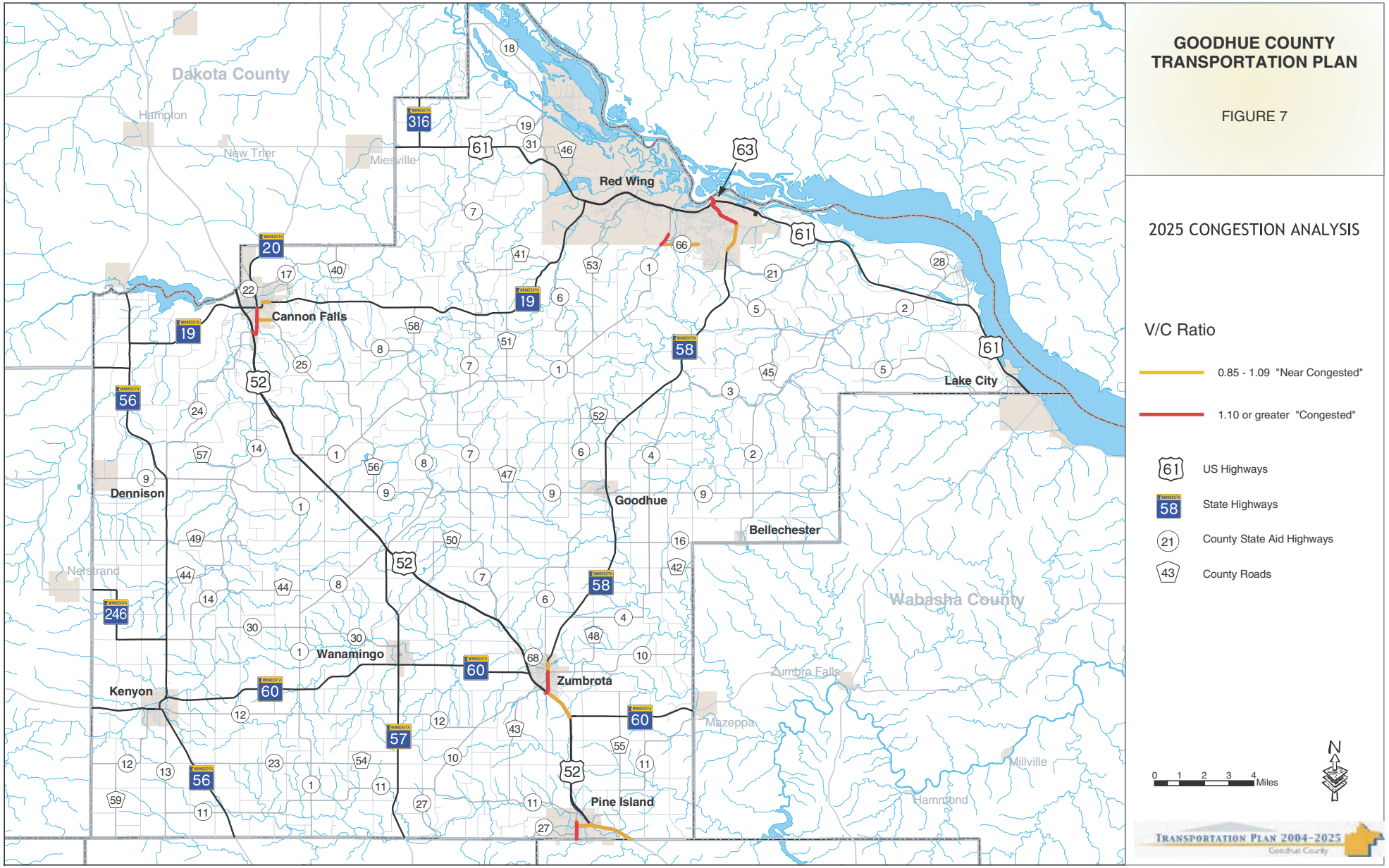
Forecast data, was used to identify future transportation system operational deficiencies. This information is ordinarily used to plan capacity improvements or to effectively manage the corridor through access controls, right-of-way preservation, setback requirements, and land use and development controls. The analysis followed the same procedure described in the existing conditions congestion analysis, except that 2025 daily traffic projections were compared with daily volume thresholds to establish future volume to capacity (V/C) ratios.

Over the next twenty years, thirteen segments are expected to become congested (e.g., V/C ratio over 1.1). These segments are shown in Figure 7 and are listed below:

ROUTE	FROM	TO	V/C RATIO
US 63	0.16 N of US 61	County line	1.5
TH 58	US 52	12 Street in Zumbrota	1.3
TH 58	12th Street in Zumbrota	3rd Street in Zumbrota	1.2
TH 58	Golflinks Drive	17th Street in Red Wing	1.2
TH 58	17th Street in Red Wing	13th Street in Red Wing	1.2
CSAH 1	South limits of Red Wing	0.1 miles north	2.0
CSAH 1	0.1 miles north	0.5 north of south limits Red Wing	1.6
CSAH 24	New US 52	Old US 52	1.5
CSAH 24	Old US 52	CSAH 25	1.75
CSAH 24	CSAH 25	0.11 miles north	2.0
CSAH 24	0.11 miles north of CSAH 25	Park Street	2.0
CSAH 24	Park Street	TH 19	2.0
CSAH 62	South limits Pine Island	CSAH 11	1.59

Additionally, Figure 7 presents roadway segments that are expected to be near congestion by 2025 (e.g., 0.85 - 1.09 V/C)

Capacity analysis is a planning-level tool used to identify potential problems based on the facility type and future volume projections. Although a segment may be shown as congested or near congestion, it is only one indication of a potential problem. Some segments can handle volumes higher than the threshold if they have little to no access points and relatively little cross traffic. As long as access remains limited, roadways noted in Figure 7 will likely operate better than the analysis indicates. While planning-level capacity analysis identifies potential problem areas, additional traffic information should be reviewed to confirm operational problems when specific improvements or operational changes are considered. This includes evaluating peak hour volumes, directional splits, and reviewing actual development and growth patterns for the area.



GOODHUE COUNTY TRANSPORTATION PLAN

FIGURE 7

2025 CONGESTION ANALYSIS

V/C Ratio

- 0.85 - 1.09 "Near Congested"
- 1.10 or greater "Congested"

- 61 US Highways
- 58 State Highways
- 21 County State Aid Highways
- 43 County Roads

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4.0 ROADWAY SYSTEM PLAN

4.1 FUNCTIONAL CLASSIFICATION

An important element of this Transportation Plan involved using data generated by the planning process to update the current functional classification plan for roadways in Goodhue County. The designated function of a road is defined by its role in serving the flow of trips through the roadway system. A formal process for determining urban and rural functional classification is outlined in FHWA's manual, *Highway Functional Classification – Concepts, Criteria and Practices,* March 1989. The concepts and guidelines in this manual were used to develop the updated functional classification plan for Goodhue County.

The functional classification process considered the following roadway and system characteristics:

- The trip length, type and size of traffic generators served, and continuity along the route.
- The route's ability to serve regional population centers, regional activity centers and major traffic generators.
- The route's spacing to serve different functions (need to provide access and mobility functions for entire area).
- The route's ability to provide continuity between or through individual travelsheds.
- The route's role in providing mobility or land access (number of accesses, access spacing, speed, parking and traffic control).
- The route's relationship to adjacent land uses (location of growth areas, industrial areas, and neighborhoods).

When considering the above factors it is important to understand the underlying characteristics of each functional classification category. The following rural functional classification rules/characteristics were applied to the Goodhue County roadway system to develop potential future functional classification changes:

Principal Arterials (e.g., US 52, US 61)

- Connect major activity centers
- Have significant continuity on a state-level
- Serve long, through-type trips
- Typically high-speed with limited access
- Serve very large travelsheds (regions)

Minor Arterials (e.g., TH 58, TH 19)

- Connect key activity centers
- Have significant continuity on county/multi-county area
- Serve longer- to medium-length trips
- Typically high-speed with limits on number of access
- Serve large areas

Collectors (e.g., CSAH 9)

- Connect local activity centers and/or connect to higher-order routes
- Have continuity on local level
- Serve short to medium length trips
- Can serve a variety of uses, and can therefore have a variety of speeds
- Have equal emphasis on access and mobility
- Route spacing allows service to smaller or localized areas

Local Routes (e.g., CR 47 or Township Roads)

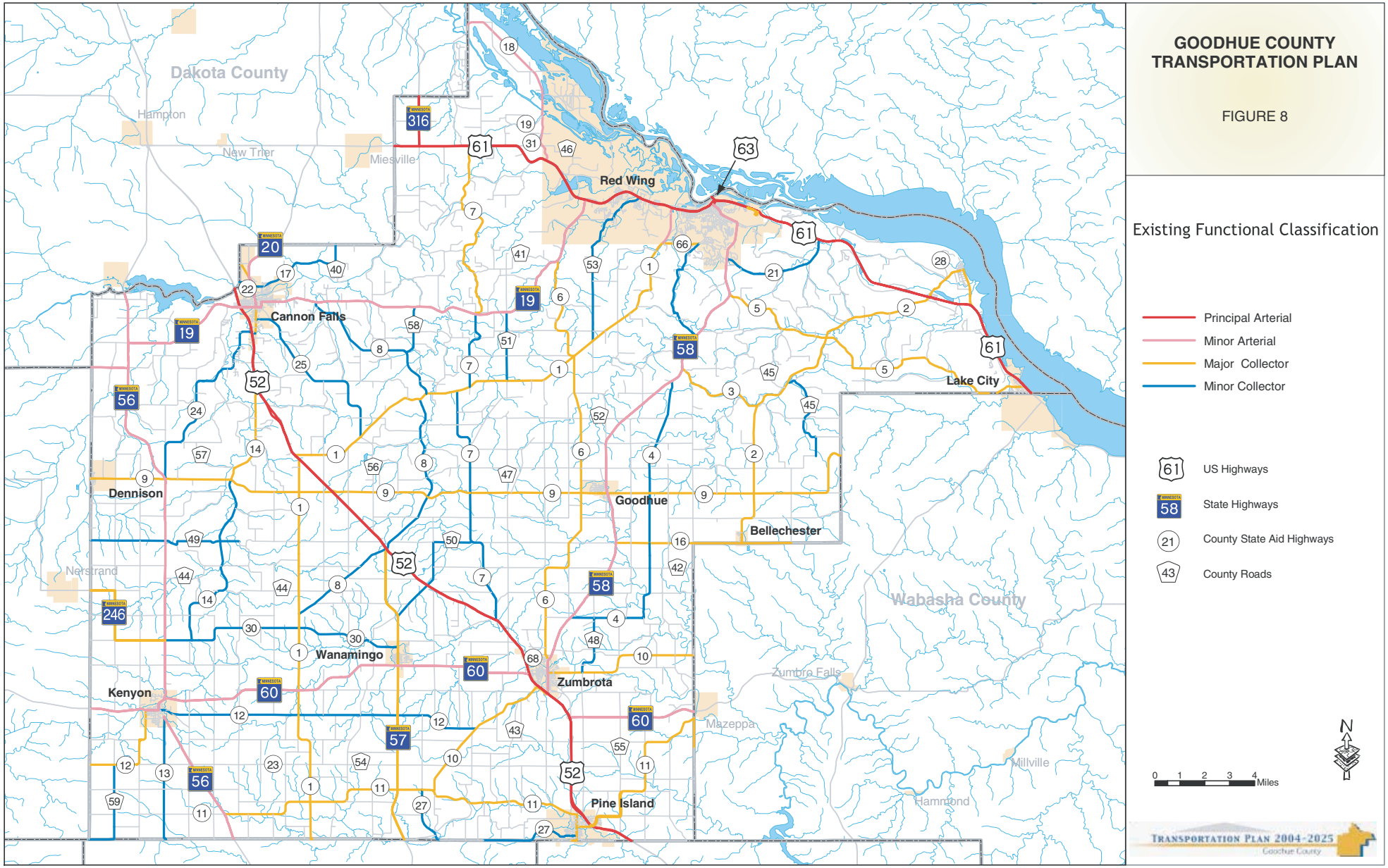
- Connect local neighborhoods, farms, small developments and higher-order streets/routes
- Have a low degree of continuity
- Have closely spaced access
- Provide direct access (no access control) to property
- Serve limited travelsheds (very few through trips)

The U.S. Census Bureau considers municipalities with populations over 5,000 "urban areas." Such cities may define an urban functional class roadway system and may obtain federal funds to maintain and construct their roadway system. The 2000 U.S. Census indicates that the City of Red Wing is the only municipality within Goodhue County with a population of more than 5,000. The boundary of the established urban area is shown in Figure 1. Established urban limits do not directly influence a route's function; however, urban limits trigger changes in functional classification terminology. Major collectors and minor arterials are commonly upgraded by one classification when they enter an urban area. For example, minor arterial routes that carry regional traffic into and out of an urban area become principal arterial routes when they enter urban areas, and major collector routes that feed traffic from the rural area into an urban area become minor arterial routes. Rural and urban areas also differ in their classification of collector streets. For example, in rural areas, collector routes are split into major collectors and minor collectors. Major collector routes are longer and connect smaller rural communities, carry intra-county traffic and connect to arterial routes. Minor collector routes are less important collector routes that connect less developed rural areas with major collector and arterial routes. Within the urban area there is a single classification called urban collectors. These routes feed traffic to the arterial routes and provide access to major traffic generators within the urban area.

The existing functional classification system was last updated in 1993 and is shown in Figure 8. A future functional classification system was developed using the above guidelines and is shown in Figure 9. Changes to the county functional classification system, based on the rules and characteristics of functional classification, are described below:

- County Road 59, from the Rice County line to CSAH 12, is recommended to be changed from a minor collector to a local road. This route serves a limited travelshed, has low growth, low volumes and has a gravel surface.

- CSAH 11, from CSAH 13 to TH 56, is recommended to be changed from a local road to a minor collector. This route serves short- to medium-length trips, has continuity on a local level and provides connections to higher-order routes.


GOODHUE COUNTY
TRANSPORTATION PLAN
FIGURE 8
Existing Functional Classification
Principal Arterial
Minor Arterial
Major Collector
Minor Collector
US Highways
State Highways
County State Aid Highways
County Roads
Dakota County
Wabasha County
Hampton
New Trier
Miesville
Red Wing
Cannon Falls
Lake City
Dennison
Goodhue
Bellechester
Nerstrand
Wanamingo
Kenyon
Zumbrota
Zumbra Falls
Mazeppa
Millville
Hammond
Pine Island
0 1 2 3 4 Miles
N
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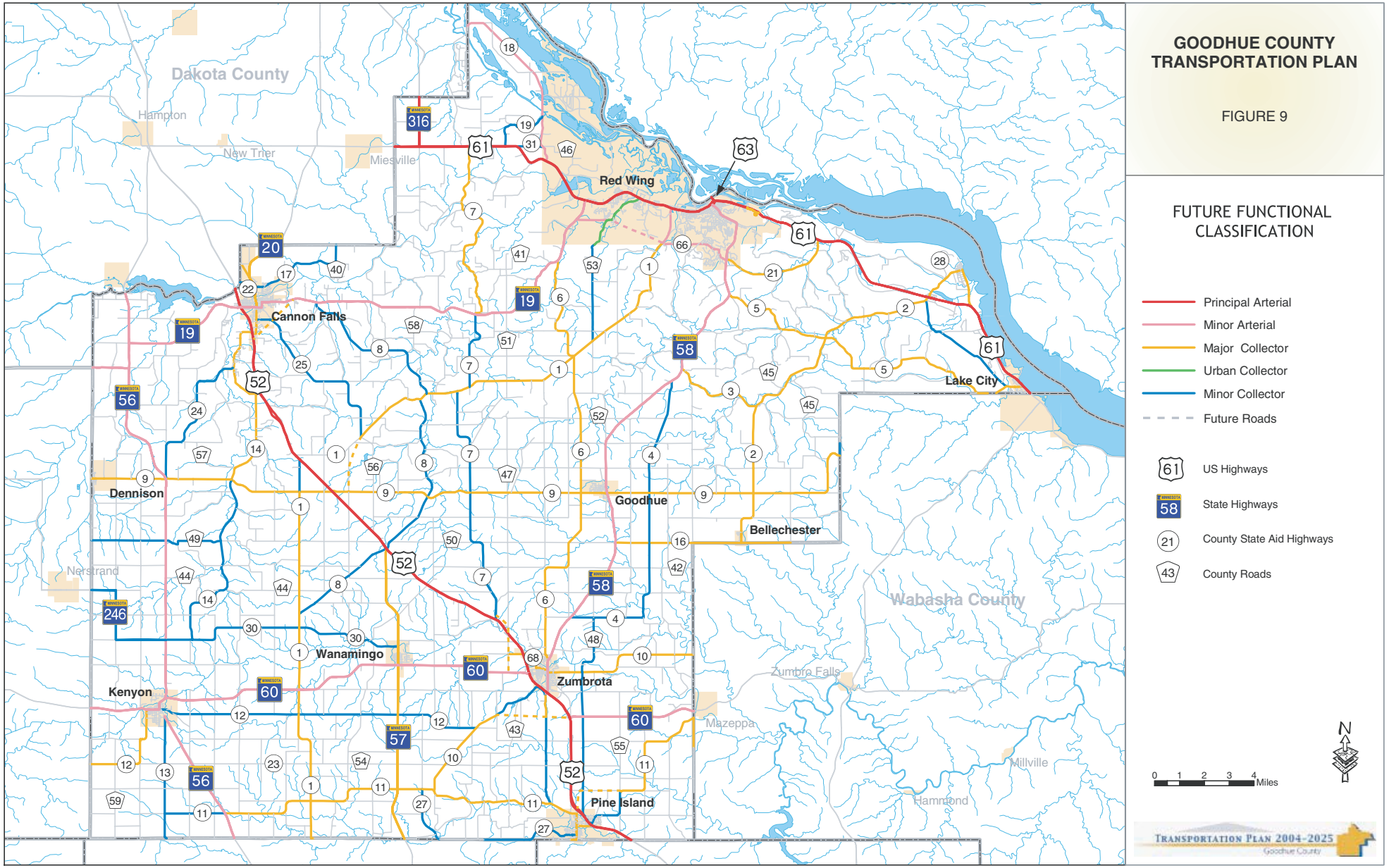
GOODHUE COUNTY
TRANSPORTATION PLAN
FIGURE 9
FUTURE FUNCTIONAL
CLASSIFICATION
Principal Arterial
Minor Arterial
Major Collector
Urban Collector
Minor Collector
Future Roads
US Highways
State Highways
County State Aid Highways
County Roads
Dakota County
Wabasha County
Red Wing
Cannon Falls
Lake City
Dennison
Goodhue
Bellechester
Wanamingo
Kenyon
Zumbrota
Pine Island
Hampton
New Trier
Miesville
Nerstrand
Zumbro Falls
Mazeppa
Millville
Hammond
0 1 2 3 4 Miles
N
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- 180th Avenue, from CSAH 11 to CSAH 10, is recommended to be changed from a local road to a minor collector due to the proposed jurisdictional transfer of this roadway to Goodhue County. Since this road will function as a parallel, backage route to US 52 from Pine Island to Zumbrota, it should be classified as a collector.

- 195th Avenue, from US 52 to CSAH 10, is recommended to be changed from a local road to minor collector due to the proposed jurisdictional transfer of this roadway to Goodhue County. This route will also function as a north-south parallel route to US 52 from Pine Island to Zumbrota and therefore, should be classified as a collector.

- CSAH 10, from 160th Avenue to TH 58, is recommended to be changed from a major collector to a minor collector due to the future realignment of CSAH 10 from 160th Avenue east to the US 52/TH 60 interchange. This realignment will cause this section of CSAH 10 to have lower levels of traffic and serve short- to medium-length trips.

- Future CSAH 10, from 160th Avenue to US 52/TH 60, interchange is recommended to be functionally classified as a major collector. This route will provide direct access to US 52, will have continuity on a local level and will serve short- to medium-length trips.

- TH 246, from the west Goodhue County line to TH 56, is recommended to be changed from a major collector to a minor collector. This change is due to its close spacing with another state highway (TH 56) and low volumes.

- County Road 49, from CSAH 14 to the Holden Township line, is recommended to be changed from a minor collector to a local road. This change complies with the proposed jurisdictional transfer of this roadway from Goodhue County to Warsau and Holden Townships. Further, this recommendation is made due to lack of continuity, gravel surface and low volumes on County Road 49. Finally, this section of County Road 49 would function better as a local road because it comes to a dead-end and serves a very limited travelshed.

- County Road 50, from TH 57 to CSAH 7, is recommended to be changed from a minor collector to a local road due to low volumes and close spacing with other collector routes. As US 52 is transitioned to a freeway, access to US 52 will be closed, and this will limit the function of this roadway as a collector.

- Future CSAH 1, from CSAH 25 to the future interchange at US 52/CSAH 9, is recommended to be functionally classified as a major collector. Realignment of this route will facilitate the efficient movement of people and goods, connect local activity centers and provide connections to higher-order routes.

- CSAH 1, from CSAH 25 to US 52, is recommended to be changed from a major collector to a local road due to the realignment of CSAH 1 for the future interchange at CSAH 9/US 52. This section of CSAH 1 is recommended for turnback to the township because closure of access to US 52 will limit its function a collector.

- CSAH 1, from US 52 to CSAH 9, is recommended to be changed from a major collector to a minor collector due to realignment of CSAH 1 for the future interchange at CSAH 9/US 52. Access to US 52 will be closed on this section of CSAH 1; however, it would stay on the county system as a minor collector due to the location of an existing business along this segment.

- County Road 45, from CSAH 9 to CSAH 2, is recommended to be changed from a minor collector to a local road due to low volumes, location in a low growth area and gravel surface. This roadway is currently functioning as a local road and should be classified as such.

- County Road 58, between CSAH 8 and TH 19, is recommended to be changed from a minor collector to a local road due to low volumes, limited travelshed, location in a low growth area, spacing and a gravel surface.

- The future Cannon Falls Perimeter Road is recommended to be functionally classified as a major collector. This route will connect local activity centers and provide connections to higher-order routes. The perimeter road will have continuity on a local level and will serve short- to medium-length trips.

- CSAH 24, from TH 19 to US 52, is recommended to be changed from a minor collector to a minor arterial. This route carries high volumes of traffic and connects key higher-order routes.

- County Road 53, from CSAH 1 to the Red Wing City Limits, is recommended to be changed from a local road to a minor collector. This roadway was recently paved and it functions as a collector connecting outlying rural areas and local traffic generators with the City of Red Wing.

- The future Red Wing Southern Boulevard, from Mill Road to CSAH 1, is recommended to be functionally classified as a minor arterial. This route will become part of a continuous route in the southern part of the city and will serve longer- to medium-length trips within a large urban area.

- County Road 53, from the Red Wing City Limits to US 61, is recommended to be changed from a minor collector to an urban collector.

- Pioneer Road, from CSAH 66 to CSAH 21, is recommended to be changed from a local road to a minor arterial because this section of Pioneer Road would be part of the future southern boulevard in the City of Red Wing and would act as a reliever to US 61.

- Mill Road, from CR 53 to TH 19, is recommended to be changed from a local urban road to a minor arterial. The route will provide continuity and serve longer- to medium-length trips as the western link to the future Southern Boulevard.

- CSAH 66, from CSAH 1 to Pioneer Road, is recommended to be changed from a major collector to a minor arterial as part of the future southern boulevard. It will provide continuity, carry higher volumes of traffic and serve a large area.

- CSAH 19, from US 61 to CSAH 18, is recommended to be changed from a local road to a minor collector due to the road's current function. It currently has characteristics of a collector route, including providing connections to higher order routes and serving short- to medium-length trips within a smaller or localized area.

- Hay Creek Trail, from TH 58 to CSAH 66, is recommended to be changed from a minor collector to a local road, as it has a limited travelshed, low volumes and a gravel surface.

- CSAH 21, from US 61 to TH 58, is recommended to be changed from a minor collector to a major collector. This change is recommended due to this roadway's role in the future southern boulevard of the City of Red Wing. When the southern boulevard is completed, higher volumes expected on CSAH 21 will justify its upgrade to a major collector.

- CR 51, from CSAH 1 to TH 19, is recommended to be changed from a minor collector to a local road. This route is surrounded by other collectors, thus its spacing is poor, is in a low growth area and has low volumes.

- CSAH 9, along the east line of Goodhue County, is recommended to be changed from a local road to a minor collector. This section provides connections to higher-order routes and serves a small or localized area.

- CSAH 31, from US 61 to CSAH 18, is recommended to be changed from a local road to a minor collector. This roadway provides connections to higher-order routes and serves short- to medium length trips.

- CSAH 64, from 2nd Street to Broadway, and from Broadway to 3rd Avenue is recommended to be changed from a minor collector to a local street. It is a circuitous route that encompasses a whole city block with the City of Goodhue. The segment remaining on the functional classification system would serve the fire station.

- CSAH 68, from US 52 to TH 58 in Zumbrota, is recommended to be changed from a local road to a major collector. This roadway is currently functioning like a collector by serving a variety of uses and its continuity on a local level and its spacing allows it to serve smaller or localized areas.

- Future CSAH 68, from 165th Avenue to US 52, on 445th Street, is recommended to be functionally classified as a major collector. This route will connect the future alignment of CSAH 7 to US 52. It has continuity on a local level and will serve short- to medium-length trips.

- Future CSAH 7, from existing CSAH 7 to TH 60, is recommended to be functionally classified as a major collector. This route provides significant continuity between the future interchange at US 52/CSAH 7 and TH 60. It will serve as an alternative parallel route to US 52 and will carry short- to medium-length trips.

- Future CSAH 11 (500th Street), from 500th Street to the new interchange at US 52 near Pine Island, is recommended to be functionally classified as a major collector. This route will provide access to a higher-order route (US 52) and will provide local continuity.

- Current CSAH 11, from 500th Street to US 52, is recommended to be changed from a major collector to a minor collector. This follows the designation change from a CSAH to a county road due to the new alignment of CSAH 11.

- Territorial Road, from CSAH 2 to CSAH 5, is recommended to be changed from a local road to a minor collector due to recent rural developments along this route. Upgrading this road to a county road as a minor collector will help minimize additional access along US 61 from these new developments. This route connects higher-order routes and will serve this smaller, more localized area.

- 57th Avenue, from CSAH 14 to CSAH 24, is recommended to be changed from a local road to a major collector, if the future US 52 improvements close the current CSAH 14 access to US 52 as expected. Upgrading this avenue to a major collector will recognize its future role as the new connection between CSAH 14 and CSAH 24.

- CSAH 24, from its juncture with new CSAH 14 (old 57th Avenue) to Cannon Falls, is recommended to be changed from a minor collector to a major collector after the US 52 improvements close CSAH 14 access, and the CSAH 14 traffic is directed via 57th Avenue (as noted above). Raising CSAH 24's classification, contingent on the above factors, will recognize its future role (i.e., carry both CSAH 24 and CSAH 14 traffic south of the city).

These proposed functional classification changes can be made at this time while keeping the county within the acceptable functional classification ranges, per AASHTO and Mn/DOT standards. As development increases and/or intensifies, additional local street mileage will increase and other functional classification changes may be needed to maintain relationships between local streets and collector and arterial routes.

4.2 JURISDICTIONAL TRANSFERS

The jurisdiction of roads is an important element in the Transportation Plan because it affects a number of critical organizational functions and obligations (regulatory, maintenance, construction and financial). The primary goal of reviewing jurisdiction is to match the roadway's function with the organizational level best suited to handle the route's function.

The following process was used to identify jurisdictional transfer candidates:

a. An updated functional classification plan was developed for the county.

b. Jurisdictional transfer candidates were identified by the Steering Committee and the functional classification study.

c. Guidelines were developed for route jurisdiction (Appendix D).

d. A jurisdictional system framework was established (Appendix E).

e. Jurisdictional transfer candidates were grouped by their similarities. The transfer groupings are defined as follows:

Group 1: Transfer candidate is linked with the Comprehensive Land Use Plan goal of protecting rural areas by directing growth to urban areas. Transportation facilities within and around urban areas, and especially in urban growth areas, were included in this grouping.

Group 2: Transfer candidates are located in rural areas and involve only the transferring and receiving jurisdictions.

Group 3: Transfer candidates are located in rural areas and involve more than two jurisdictions.

Group 4: Transfer involves state highways.

f. Jurisdictional transfer candidates were reviewed against the jurisdictional framework, and reasons for and against the jurisdictional changes were noted (Table 5).

g. Each jurisdictional transfer candidate was given a rating, based on the degree to which the route met transfer guidelines. These rankings and their rationale were discussed by the steering committee. The ratings are defined as follows:

Rating 1: Transfer candidate **definitely meets** transfer guidelines

Rating 2: Transfer candidate **substantially meets** transfer guidelines

Rating 3: Transfer candidate **marginally meets** transfer guidelines or the transfer candidate is **dependent on future growth** and development of the area

Rating 4: Transfer candidate does not meet transfer guidelines and therefore is not recommended as a future transfer

h. Upon review of the factors noted on Table 5, the timeframe for each transfer was proposed. The timeframes were divided into short range (2004-2008), medium-range (2009-2015), and long-range (after 2015). Approximately 60 percent of the transfers are proposed for the short-range period in part due to the results of meetings with city and township officials.

Based on the potential jurisdictional transfers discussed, a summary of the mileage impacts to each roadway system was developed (Table 6). The recommended transfer candidates are shown in Figure 10.

While the Plan recommends a number of potential transfers and provides a transfer timeframe, it is understood that not every candidate will actually be transferred as proposed in the Plan and that some revisions in the Plan may be made in the future, based on changing needs and situations.

Table 5
Potential Jurisdictional Transfers

Location	Route	Termini		Route Length	Net Mileage Gain			Existing Volume	Est. 2025 Volume	Future Functional Classification	Rationale For Change	Rationale Against Change	Transfer Grouping	Transfer Rating	Transfer Timeframe [1]
		From	To		Township/ City	County	State								
Kenyon Twp.	CR 59	Rice County line	CSAH 12	4.0	4.0	(4.0)		85	140	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	This route provides connection with Steele County CSAH 10.	3	1	Medium range - Will require multi-jurisdictional coordination, including Dodge County cooperation
	CSAH 23	TH 56	60th Avenue	1.9	1.9	(1.9)		140	220	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Needs tiling according to twp. officials	3	1	Short-range: While jurisdictional cooperation will be needed, this is critical CSAH mileage that can be freed-up for higher needs which can generate increased funding if mileage is assigned to more urban area locations
			TOTAL MILES		**5.9**	**(5.9)**									
Cherry Grove Twp.	CSAH 23	60th Avenue	CSAH 1	2.9	2.9	(2.9)		85	140	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface. As with all County to Twp turnbacks, local data indicates that overall taxpayer dollars can be saved by Twp assuming maintenance responsibilities due to Twp's lower roadway standards and associated costs	Township gains additional mileage on its system	3	1	Short-range: While jurisdictional cooperation will be needed, this is critical CSAH mileage that can be freed-up for higher needs which can generate increased funding if mileage is assigned to more urban area locations
	CR 54	CSAH 1	TH 57	3.5	3.5	(3.5)		105	120	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Township gains additional mileage on its system	2	1	Short-range: "Best-fit" as township roadway; has minimal interjurisdictional conflict
			TOTAL MILES		**6.4**	**(6.4)**									
Roscoe Twp.	CR 43	CSAH 11	CSAH 10	4.1	4.1	(4.1)		140	220	Local	Swap for 180th Avenue; Township is agreeable to change	CR 43 is a wide road that should be narrowed when it is turned back, per township request	1	1	Short-range: General agreement by affected jurisdictions
	180th Avenue	North of Pine Island Creek	US 52	2.2	(2.2)	2.2		185	[2]	Minor Collector	Swap for CR 43; 180th will provide north/south parallel route to US 52 from Pine Island to Zumbrota.	Because 180th is on twp. boundary, not all mileage reverting to the County can be credited to Roscoe Twp; approx. half will go to Pine Island Twp.	1	1	Short-range: General agreement by affected jurisdictions
	New CSAH 10	CSAH 10	180th Avenue	2.2		2.2		NEW	NEW	Major Collector	No impact to Township mileage from new alignment	Old CSAH 10 mileage will revert to a CR.	1	2	Short-range: Such a nonexistent segment can begin drawing needs for future construction as soon as the mileage is approved.
			TOTAL MILES		**1.9**	**0.3**									
Pine Island Twp.	180th Avenue	CSAH 11	North of Pine Island Creek	2.3	(2.3)	2.3		450	[3]	Minor Collector	Swap for CR 43; 180th will provide north-south parallel route to US 52 from Pine Island to Zumbrota. The swap is consistent with local plans	Overall, the County will end up with approx. 1.5 miles of additional mileage in the CR 43 - 180th Ave swap	1	1	Short-range: general agreement by affected jurisdictions
	CR 55	CSAH 11	460th Street	4.0	4.0	(4.0)		50-80	60-90	Local	Swap for 195th Avenue; Twp is agreeable and trade will reduce Twp mileage.	County needs to fix bridge before turnback to twp.	1	1	Short-range: general agreement by affected jurisdictions
	195th Ave	City of Pine Island	460th St.	4.7	(4.7) [4]	4.7 [4]		[3]	[3]	Minor Collector	Swap for CR 55; 195th will provide north/south route to US 52 from Pine Island to Zumbrota.	Overall, County will gain approx. 1.5 miles in complete CR 55 - 195th Ave. swap	1	1	Short-range: general agreement by affected jurisdictions
	New CSAH 10	180th Avenue	US 52	0.9		0.9		NEW	NEW	Major Collector	No impact to twp.; mileage from new alignment	Old CSAH 10 mileage will revert to CR.	1	2	Short-range: Such a non-existent segment can begin drawing needs for future construction as soon as the mileage is approved
	500th Street - (New CSAH 11)	195th Avenue	CR 55	1.5	(1.5)	1.5		425[5]	690[5]	Minor Collector	This is a potential future linkage to 195th Ave. when new US 52 interchange is in place; new CSAH 11 would partially be constructed on twp. road alignment, so current twp. mileage will revert to County	Overall, County will gain mileage on its system from CSAH 11 relocation	1	2	Short-range: While transfer will not be needed until US 52 construction period is closer, adding mileage will permit the County to draw increased need funds prior to relocation of new CSAH 11
	New Road (New CSAH 11)	US 52	195th Avenue	0.8		0.8		1000[6]	1910[6]	Minor Collector	No impact to twp.	Old CSAH 11 mileage will revert to CR.	1	2	same as 500th Street (above)
			TOTAL MILES		**(4.5)**	**6.2**									
Zumbrota Twp.	195th Ave	460th St.	CSAH 10	0.8	(0.8)	0.8		[3]	[3]	Minor Collector	Swap for CR 55; 195th will provide north/south route to US 52 from Pine Island to Zumbrota.	County gains mileage on its system	1	1	Short range: General agreement by affected jurisdictions
	CR 42	CSAH 4	Wabasha County	2.8	2.8	(2.8)		45	90	Local	This route serves a limited travelshed, has low growth, low volumes, a gravel surface and a lack of continuity. Route connects to a gravel twp. road in Wabasha County	Twp. gains maintenance responsibility	2	1	Short-range: "Best-fit" as township roadway
			TOTAL MILES		**2.0**	**(2.0)**									

Table 5
Potential Jurisdictional Transfers

Location	Route	Termini		Route Length	Net Mileage Gain			Existing Volume	Est. 2025 Volume	Future Functional Classification	Rationale For Change	Rationale Against Change	Transfer Grouping	Transfer Rating	Transfer Timeframe [1]
		From	To		Township/ City	County	State								
Minneola Twp.	445th Street (new CSAH 68)	165th Avenue	US 52	0.6	(0.6)	0.6		NEW	NEW	Major Collector	This is a planned, future alignment that will serve the future interchange at CSAH 7	County gains mileage on its system	1	3	Short-range: Adding mileage early to Co. system will permit it to draw increased need funds sooner; however, actual improvement implementation depends on city growth/development and US 52 improvement staging
	165th Avenue (new CSAH 7)	TH 60	Sherwood Trail	1.9	(1.9)	1.9		NEW	NEW	Major Collector	This is a planned future alignment to be added to the County system	County gains mileage on its system	1	3	same as 445th Street (above)
	New Sherwood Trail	CSAH 7	165th Avenue	0.9	0.5 [7]			NEW	NEW	Local	This is a potential future frontage road alignment, expected to be built by Mn/DOT to preserve access after US 52 improvements	Twp. gains maintenance responsibility on new segment	1	3	Long-range: Depends on Mn/DOT US 52 construction schedule
	New CSAH 7	US 52	165th Avenue	0.6	(0.3) [8]	0.6 [9]		370[13]	660[13]	Major Collector	This is a planned future alignment to be added to the County system	Small increase in mileage on County system	1	3	same as 445th Street (above)
			TOTAL MILES		**(2.3)**	**3.1**									
Wanamingo Twp.	CR 44	Holden Twp. Line	CSAH 1	2.4	2.4	(2.4)		75	80	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Township gains mileage on its system	3	1	Medium-range: Will require multi-jurisdiction coordination with Holden and Warsaw Twps.
			TOTAL MILES		**2.4**	**(2.4)**									
Holden Twp.	TH 246	Rice County	TH 56	5.0		5.0	(5.0)	240	350 [10]	Minor Collector	This route is short, does not serve major population centers, has poor continuity and therefore, does not function as a state highway; turnback would generate improvements that otherwise will not occur.	Mileage and maintenance responsibility would be added to County	4	1	Short-range: Seek turnback funds from Mn/DOT D-6, upgrade, then put on CSAH system to obtain resurfacing needs.
	CR 49	CSAH 14	Township Line	0.4	0.4	(0.4)		20	20 [10]	Minor Collector	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Small amount of mileage added to twp. system	2	1	Medium-range: Will require multi-jurisdictional coordination, including Wanamingo and Warsaw Townships
	CR 44	TH 56	CSAH 14	2.6	2.6	(2.6)		65	120	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	County needs to improve 2 bridges as part of turnback	2	1	Short-range: Best fit as a township roadway
	CR 44	CSAH 14	Holden Twp. Line	0.6	0.6	(0.6)		65	120	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Adds a small amount of mileage to twp. system	3	1	Medium-range: Will require multi-jurisdictional coordination including Wanamingo Twp.
			TOTAL MILES		**3.6**	**1.4**	(5.0)								
Warsaw Twp.	CR 49	CSAH 14	Township Line	0.4	0.4	(0.4)		20	20 [10]	Minor Collector	This route serves a limited travelshed, has low growth, low volumes and a gravel surface, probably no improvements needed to facilitate transfer	A bridge might need to be replaced, road would be multi-jurisdictional, and maintenance by which of the 3 twps would have to be determined	2	1	Medium-range: Will require multi-jurisdictional coordination including Holden and Wanamingo Twps.
	CR 57	CSAH 24	CSAH 14	2.8	2.8	(2.8)		70	90	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface, probably no improvements needed to facilitate transfer	Twp gains maintenance responsibility	2	1	Short-range: Best fit, generally agreeable to affected parties
			TOTAL MILES		**3.2**	**(3.2)**									
Leon Twp.	CSAH 1 - new alignment [11]	CSAH 25	CSAH 9	2.3	(1.1) [12]	2.3 [12]		NEW	NEW	Major Collector	This is the County's preferred new alignment to connect a street with a future US 52 interchange, County would reduce overall system mileage with this transfer	Might have to buy two houses for realignment of CSAH 1. Mn/DOT needs to address access and circulation when it closes access to US 52 in this area	2	3	Long-range: Implementation depends on US 52 improvement staging
	CSAH 1 [11]	CSAH 25	US 52	2.9	2.9	(2.9)		650	1140[13]	Local	This would be turned back to the twp. due to the new alignment.	Use current CSAH 1 and US 52 at-grade intersection for the site of the future interchange instead of this option	2	3	Same as above
			TOTAL MILES		**1.8**	**(0.6)**									
Belle Creek Twp.	CR 47	400th St.	CSAH 9	2.0	2.0	(2.0)		95	100	Local	This route serves a limited travelshed, has low growth, low volumes, gravel surface and a lack of continuity.	Road needs to be improved before it is turned back (has low areas)	2	1	Short-range: Best fit as a twp. road; general agreement among affected parties
			TOTAL MILES		**2.0**	**(2.0)**									
Goodhue Twp.	CR 52	CSAH 6	TH 58	1.8	1.8	(1.8)		95	150	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface, and bridge was recently improved	Township gains maintenance responsibility	2	1	Short-range: Best fit as a twp. road; general agreement among affected parties
			TOTAL MILES		**1.8**	**(1.8)**									
City of Goodhue	CSAH 64 (2 city blocks)	On 2nd Ave. (from 2nd St. to Broadway) and Broadway from (2nd Ave. to 3rd Ave)		0.1	0.1	(0.1)		800-1,350	900-1,890	Local	This circuitous route encompasses whole block in City of Goodhue, proposal would retain half of current CSAH mileage that serves the fire station	City gains 2 blocks of street maintenance	1	2	Medium-range: Best fit as a city street, but CSAH improvements were recently made
			TOTAL MILES		**0.1**	**(0.1)**									
Belvidere Twp.	CR 45	365th St.	Belvidere Twp. Line	3.6	3.6	(3.6)		125	180	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Township gains maintenance responsibility	3	1	Medium-range: Will require multi-jurisdictional coordination including Hay Creek Twp.
			TOTAL MILES		**3.6**	**(3.6)**									

Table 5
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Location	Route	Termini		Route Length	Net Mileage Gain			Existing Volume	Est. 2025 Volume	Future Functional Classification	Rationale For Change	Rationale Against Change	Transfer Grouping	Transfer Rating	Transfer Timeframe [1]
		From	To		Township/ City	County	State								
Florence Twp.	Territorial Road	CSAH 2	CSAH 5	5.1	(5.1)	5.1		160-1000	[2]	Minor Collector	Route spacing serves a growth travelshed, has high volumes, continuity and provides connections to higher-order routes. This upgrade will help serve the recent and proposed development in this area, and will deter additional access points along US 61. Twp. is agreeable.	Will need to be blacktopped in the future and bridge widening may be necessary. County gains mileage on its system, but can have a greater influence on access and land-use management.	2	1	Short-range: Impending development in this rural growth area encourages early action
			TOTAL MILES		**(5.1)**	**5.1**									
Hay Creek Twp.	CR 45	Belvidere Twp. Line	CSAH 2	1.0	1.0	(1.0)		125	180	Local	This route serves a limited travelshed, has low growth, low volumes, a gravel surface and past improvements were appreciated by twp.	Township gains maintenance responsibility	3	1	Medium-range: Will require multi-jurisdictional coordination including Belvidere Twp.
	CR 45	CSAH 2	CSAH 5	3.2	3.2	(3.2)		120	170	Local	This route serves a limited travelshed, has low growth, low volumes, a gravel surface and past improvements were appreciated by twp.	Township gains maintenance responsibility	3	1	Short-range: Best fit as a twp. road, and because of recent County improvements there is general agreement on turnback
			TOTAL MILES		**4.2**	**(4.2)**									
Featherstone Twp.	CR 41	Vasa Twp. Line	TH 19	0.3	0.3	(0.3)		145	280	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Township gains small amount of additional mileage on its system	3	1	Medium-range: Will require multi-jurisdictional coordination including Vasa Twp.
			TOTAL MILES		**0.3**	**(0.3)**									
Vasa Twp.	CR 58	CSAH 8	TH 19	2.0	2.0	(2.0)		65	70	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Twp. gains mileage on its system	2	1	Short-range: Best fit as a twp. road
	CR 41	CSAH 7	Vasa Twp. Line	3.3	3.3	(3.3)		145	280	Local	This route serves a limited travelshed, has low growth, low volumes and a gravel surface.	Twp. gains mileage on its system	3	1	Medium-range: Will require multi-jurisdictional coordination, including Featherstone Twp.
			TOTAL MILES		**5.3**	**(5.3)**									
Cannon Falls Twp.	Cannon Falls Perimeter Road	US 52	TH 19	2.1		2.1 [14]		NEW	NEW	Major Collector	This is a planned new alignment recommended to be added to the County system. Twp. and city support this option. This approach would allow County to control access and manage perimeter road.	This is a growing area and annexation may occur in the future. Further, it the City population grows to 5,000 people, the City will begin to receive MSA funds, and they could construct this road as a city collector, if area was annexed into the city.	1	3	Medium-range: County, City, Twp negotiation on implementation option will require time and growth of City will affect recommendation; however, during the short range, corridor planning should be accomplished and the corridor should be officially mapped to preserve ROW
	57th Avenue	Stanton Twp. Line	CSAH 14	0.8	(0.8)	0.8		[3]	[3]	Local, unless this transfer occurs	An upgrade of this roadway could provide continuity for a 3 twp. area when future US 52 improvements close current accesses.	County would add a small amount of mileage to its system	3	3	Long-range: Depends on US 52 improvement staging and 2 twps cooperation
	CR 40	CSAH 17	End of road	1.3	1.3	(1.3)		50	50	Local	This route serves a limited travelshed, has low growth, low volumes, but has a black-top surface.	Ditches need to be repaired before turnback	2	1	Short-range: Best fit as twp road
			TOTAL MILES		**0.5**	**1.6**									
City of Cannon Falls	CSAH 24	TH 19	US 52	1.2		(1.4)	1.4	4,000-8,000	12,000-16,000	Major Collector	This route has high ADTs and is in a continually growing area. This segment has higher ADTs than TH 20, and is the missing link in connecting two US highways (US 61 and US 52) via TH 20. MnDOT would find it much easier to add this short link than to try and turn back 7 miles of TH 20 to 2 counties and one city. Route is the old alignment of US 52	Because of continued growth and urban expansion, this route may be impacted by increased access, slower speeds and localized trips.	4	3	Medium-range: Either option, MnDOT accepting CSAH 24 or MnDOT turning back TH 20, will require negotiations and could be linked with decisions regarding TH 57 and TH 246 turnbacks
			TOTAL MILES		**0.0**	**(1.4)**	1.4								
Stanton Twp.	57th Avenue	CSAH 24	Cannon Falls Twp. Line	0.8	(0.8)	0.8		[3]	[3]	Local, unless this transfer occurs	This route would connect CSAH 14 to CSAH 24 and the Twp suggested that it be added as a CR	Approaches to CSAH 24 need work	3	3	Long-range: Depends on US 52 improvement staging and 2 twps cooperation
			TOTAL MILES		**(0.8)**	**0.8**									
Welch Twp.	Old CSAH 18	CSAH 18	CSAH 18	3.3	3.3	(3.3)		[3]	[3]	Local	This turnback is the last phase of the CSAH 18 improvement	Twp gains mileage on its system	1	1	Short-range: This route is in the process of being turned back
			TOTAL MILES		**3.3**	**(3.3)**									

Table 5
Potential Jurisdictional Transfers

Location	Route	Termini		Route Length	Net Mileage Gain			Existing Volume	Est. 2025 Volume	Future Functional Classification	Rationale For Change	Rationale Against Change	Transfer Grouping	Transfer Rating	Transfer Timeframe [1]
		From	To		Township/ City	County	State								
City of Red Wing	Red Wing Southern Boulevard [15]	CR 53	CSAH 66	2.3		2.3 [17]		NEW	NEW	Minor Arterial	This planned new southern boulevard is recommended to be added to the County system. This is supported by City staff	As an alternate, the southern boulevard could also be accomplished by the City accepting CSAH 66 and the City constructing the new alignment.	1	3	Medium-range: Either alternate will require negotiations and growth of City may affect recommendation; however, during the short range, corridor planning should be accomplished and the corridor should be officially mapped to preserve ROW
	CR 53 [15]	Mill Road	US 61	1.6	1.6	(1.6)		1,100-1,700	2,770	Urban Collector	This route is designated as a collector, has higher volumes than other city streets, and provides access to local generators.	City would gain mileage on its system	1	3	Medium-range: Either alternate will require negotiations and growth of City may affect recommendation
	Pioneer Road [15]	CSAH 66	TH 58	1.5	(1.5)	1.5 [17]		4,700-6,000	[2]	Minor Arterial	This segment will be part of Red Wing's future southern boulevard and will serve longer to medium-length trips.	Under the alternate proposal, Pioneer Road would remain under City jurisdiction	1	3	Medium-range: Either alternate will require negotiations and growth of City may affect recommendation
	Mill Road [15]	TH 19	CR 53	1.2	(1.2)	1.2 [17]		475-660	[2]	Minor Arterial	This segment will be part of Red Wing's future southern boulevard and will serve longer to medium-length trips.	Under the alternate proposal, Mill Road would remain under City jurisdiction	1	3	Medium-range: Either alternate will require negotiations and growth of City may affect recommendation
	CR 46	CSAH 18	US 61	2.8	2.8	(2.8)		135	190	Local	This route serves a limited travelshed, has a lack of continuity, low growth, low volumes, a gravel surface, and is located within city boundaries.	Mileage and maintenance responsibility would revert to City	1	1	Short-range
			TOTAL MILES		**1.7**	**0.6**									
Multi-jurisdictional	TH 57	Dodge County	US 52	12.0		12.0	(12.0)	970-2,750	1,500-4,190	Major Collector	Route does not connect major population centers and has low volumes for a state highway. TH 56, which runs parallel, serves the same purpose. Turnback would generate improvements that otherwise will not occur. Improvements should include upgrade of roadway to 10-ton status, per County Transportation Plan recommendations	Mileage and maintenance responsibility would be added to County	4	1	Short-range: Seek turnback funds from D-6, upgrade, and then put on CSAH to obtain resurfacing needs
			TOTAL MILES			**12.0**	**(12.0)**								
			TOWNSHIP TOTAL	35.5											
			CITY TOTAL	1.8											
			COUNTY TOTAL			**(11.4)** [16]									
			STATE TOTAL				**(15.6)**								

[1] Transfer Timeframe Definitions:
Short Range: 2004-2008 (5 years)
Medium Range: 2009-2015 (7 years)
Long-range: 2015

[2] Due to incomplete historical volumes, 2025 projections were not generated for some Township and City roads

[3] Volumes were unavailable for township and city roads

[4] 0.7 miles is part of the realignment of CSAH 11

[5] Future and existing volumes are for existing CSAH 11 (from the east limit of Pine Island to CR 55), volumes for a new alignment may differ

[6] Future and existing volumes are for existing CSAH 11 (from US 52 to the east limit of Pine Island), volumes for a new alignment may differ

[7] Part of the roadway is a realignment of existing Sherwood Trail

[8] It is expected that part of this realignment will follow the existing Sherwood Trail

[9] Future and existing volumes are for existing CSAH 7 (north of US 52), volumes for a new alignment may differ

[10] Due to declining volumes on the roadway, future volumes are based on a growth factor of 1.5 for THs and 1.0 for CRs

[11] These transfers will only happen together

[12] 1.1 miles of the realignment would follow existing 100th Avenue

[13] Future volume is projected for existing CSAH 1 alignment

[14] The exact mileage of this alignment will be determined when the roadway is designed; Goodhue County jurisdiction of the Perimeter Road is reflected; the alternative Cannon Falls jurisdiction would revise these net mileage figures (i.e. the 2.1 miles would be added to the Township/City column.)

[15] These transfers will only happen together

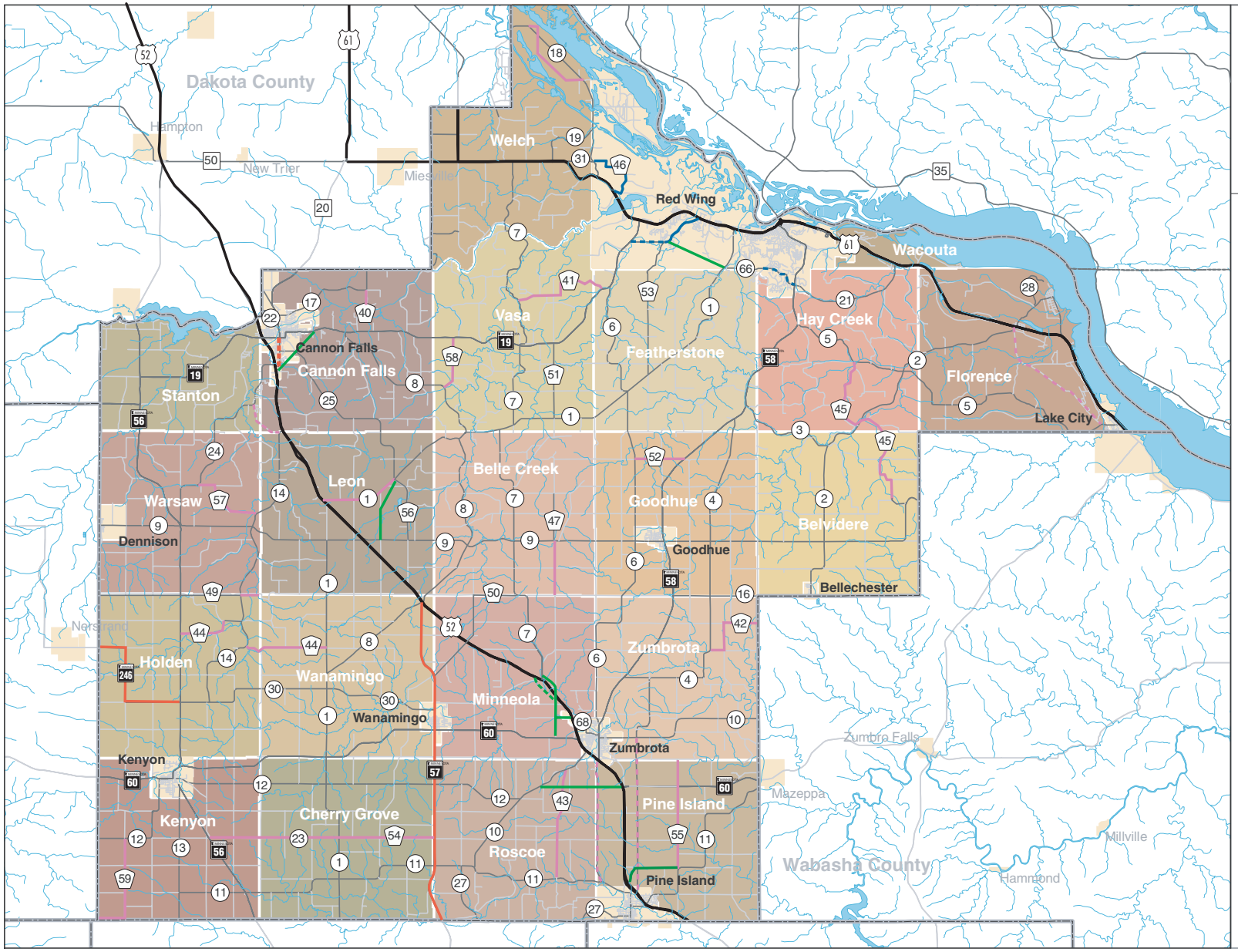
[16] Includes County Roads and CSAHs

[17] Reflects Goodhue County jurisdiction of the future Southern Boulevard; the alternative, Red Wing jurisdiction of the Boulevard would reviese these net mileage figures (i.e. new alignment - 2.3 miles and CSAH 66 - 1.5 miles would be added to City mileage, and Mill Road and Pioneer Road mileage would remain as city streets).

TABLE 6
JURISDICTIONAL TRANSFERS MILEAGE SUMMARY

	EXISTING MILEAGE	FUTURE MILEAGE	NET CHANGE
Trunk Highway	186.6	171.0	-15.6
CSAH[(1)]	324.0	340.7	+16.7
County Road	75.1	47.0	-28.1
Township Road	817.4	852.9	+35.5

(1) Mileage reflects one alternative (County jurisdiction) for the future South Boulevard in Red Wing and the future Perimeter Road in Cannon Falls. The jurisdiction of these new alignments will be subject to future negotiations between the County and the respective City. It is recommended that the final jurisdictional decision be either all CSAH or all MSAs for each future alignment.



GOODHUE COUNTY TRANSPORTATION PLAN

FIGURE 10

POTENTIAL JURISDICTIONAL TRANSFERS

LEGEND

- State to County
- County to State
- County to City
- City to County
- County to Township
- Township to County
- New Alignments to County
- New Alignments to Township

0 1 2 3 4 Miles

TRANSPORTATION PLAN 2004-2025
Goodhue County

4.3 SYSTEM DESIGNATION

The county highway system is divided into two categories, County State Aid Highways (CSAH) and County Roads. The difference in designation relates to the route's function and funding. The CSAH system originated in the mid 1950s to provide an integrated network of secondary roads servicing the state's rural transportation needs. Routes qualifying or designated as CSAHs are eligible to receive state funding for maintenance and construction activities, while County Roads are funded with local property tax dollars. Administration of the CSAH system is based on a detailed set of rules administered by the Minnesota Department of Transportation Office of State Aid. These rules outline requirements and responsibilities including designation, maintenance and reconstruction.

Reviewing the system designation ensures that demographic and transportation changes in the county have been adequately addressed through system designation changes. Route designation, as outlined in Chapter 8820.07 of the State-Aid Rules "Selection Criteria," parallels the functional classification criteria used to designate collector and arterial routes. State-aid criteria are summarized as follows:

- State-aid routes carry heavier traffic volumes or are functionally classified as collector or arterial routes on the county's functional classification system.
- State-aid routes connect towns, communities, shipping points and markets within a county or in adjacent counties; provide access to churches, schools, community meeting halls, industrial areas, state institutions and recreational areas; or serve as a principal rural mail route and school bus route.
- State-aid routes provide an integrated and coordinated highway system, consistent with projected traffic demands.

Using the above guidelines, the Goodhue County transportation system was reviewed to identify designation changes, based on functional classification changes, jurisdiction changes, proposed new roadway alignments and major construction projects. Table 7 shows a summary of proposed county state aid mileage changes.

TABLE 7
SUMMARY OF PROPOSED COUNTY STATE AID MILEAGE CHANGES [1]

Description of CSAH Change	Miles of CSAH Impacted
Proposed State Highway Turnbacks	+17.0
Proposed CSAH Transfers to State	-1.4
Proposed CSAH Transfers to County Road	-5.7
Proposed CSAH Transfers to City	-0.1
Proposed City Transfers to CSAH	+2.7
Proposed CSAH Transfers to Townships	-8.7
New CSAH Segments [2]	+12.9
Total Change to State Aid System	**+16.7**

[1] The table summarizes the mileage changes for the Goodhue County CSAH system based on functional classification changes and potential jurisdictional transfers identified in the study.

[2] Reflects the Goodhue County jurisdiction alternative for two new alignments (Red Wing South Boulevard and Cannon Falls Perimeter Road). The final jurisdiction will be negotiated between the Cities and the County. It is anticipated the final decision will result in each alignment being either all CSAH or all MSAs.

The proposed changes will increase state-aid mileage from 324.0 miles to 340.7 miles. The proposed system designation changes are described in detail below, and are shown in Figure 11.

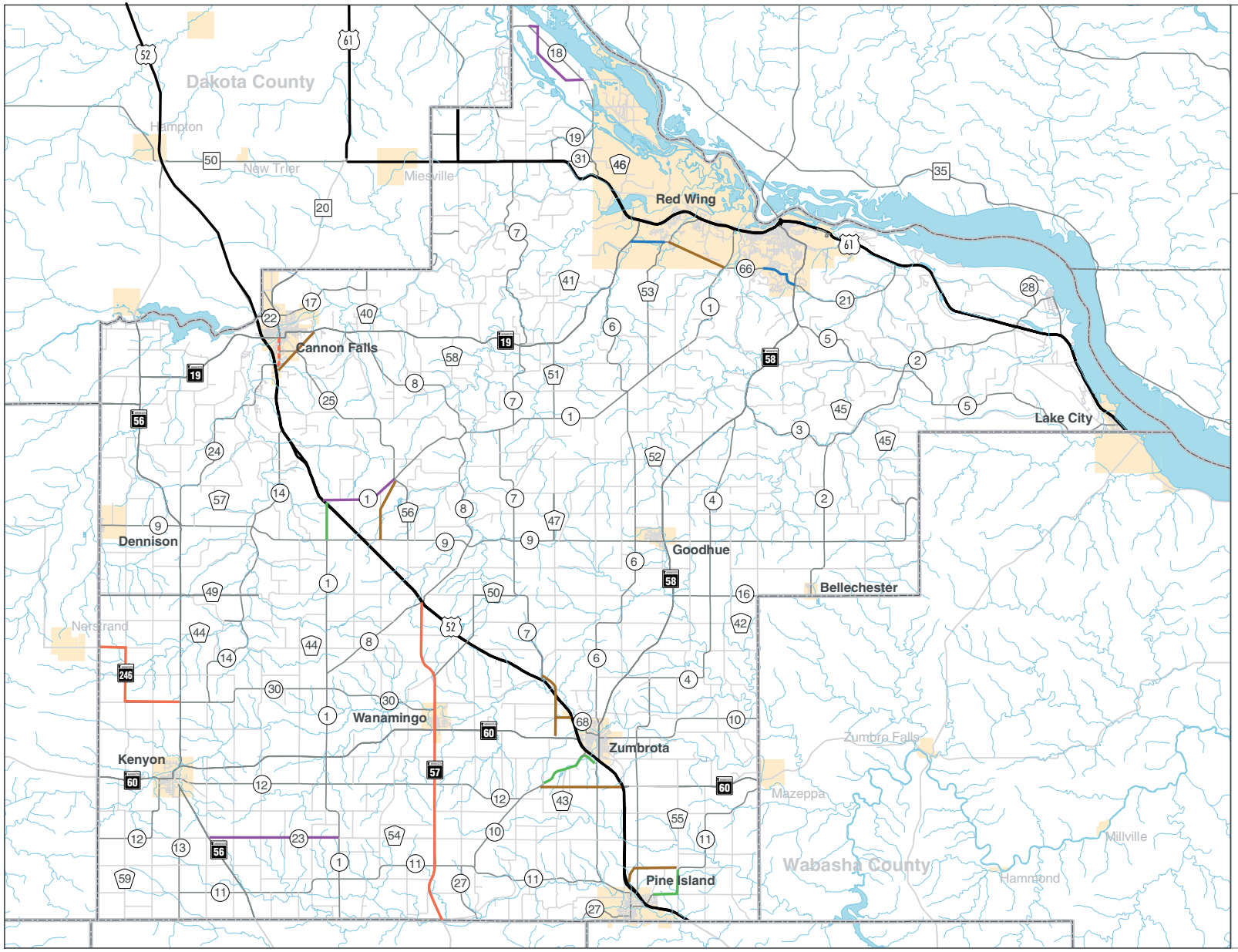
Proposed Designation Changes from State Highway to CSAH

TH 57 — TH 57 is a major collector route extending from US 52 to the southern county line. This route has low volumes, for a state highway, and does not connect major population centers. TH 56, which runs parallel, serves the north-south state highway function in this area.

TH 246 — TH 246 extends from the western county line to TH 56. This route does not function as a state highway because it is short, does not serve major population centers and has poor continuity. Based on these factors, this route is recommended to be transferred to the county as a CSAH route.

Proposed Designation Change from CSAH to State Highway

CSAH 24 — CSAH 24, from US 52 to TH 19, is recommended to be transferred to the state. This route has high volumes and connects two state highways (US 52 and TH 19). It is recommended that TH 20 be extended to US 52, using the existing alignment of CSAH 24. The extension of TH 20 would facilitate intra-county trips and connect two important state highways, US 52 and US 61.



GOODHUE COUNTY TRANSPORTATION PLAN

FIGURE 11

PROPOSED COUNTY STATE AID CHANGES

LEGEND

- CSAH to Township Road
- CSAH to County Road
- State Highway to CSAH
- CSAH to State Highway
- City Road to CSAH
- CSAH to City Road
- New Alignment to CSAH

0 1 2 3 4 Miles

TRANSPORTATION PLAN 2004-2025
Goodhue County

Proposed Designation Change from CSAH to County Roads

CSAH 10 — This segment of CSAH 10 extends from 160th Avenue to TH 58. Due to the proposed realignment of CSAH 10 to US 52, it is recommended that the CSAH designation transfer to the new alignment and this segment be changed to a county road.

CSAH 1 — This segment of CSAH 1 extends from US 52 to CSAH 9. Due to the proposed realignment of CSAH 1, north of US 52 to the future interchange at US 52/ CSAH 9, it was recommended that the CSAH designation follow the new alignment. Therefore, this section of CSAH is recommended to be changed to a county road to accommodate access to an existing business on the route.

CSAH 11 — This segment of CSAH 11 extends from the east limits of the City of Pine Island to the eastern county line. Due to the proposed realignment of CSAH 11, along 500th Street to the future interchange at US 52, this segment is recommended to be changed to a county road.

Proposed Designation Changes from CSAH to City Street

CSAH 64 — CSAH 64 extends from CSAH 9 to TH 58, and encompasses a city block in the City of Goodhue. It is recommended that two of these blocks (2nd Avenue and Broadway) be transferred to the city as a city street.

Proposed Designation Changes from a City Street to CSAH

Pioneer Road — Pioneer Road, from CSAH 66 to CSAH 21, is recommended to be changed from a City of Red Wing street to a CSAH. When this route is incorporated into the future southern boulevard, it will experience heavier volumes of traffic and will serve a larger area and longer- to medium-length trips. Actual jurisdiction and final designation will be determined by future County-City negotiations.

Mill Road — Mill Road, from CR 53 to TH 19, is recommended to be transferred from the City of Red Wing to a CSAH. When this route is incorporated into the future southern boulevard, it will experience heavier volumes of traffic and will serve a larger area and longer- to medium-length trips. Actual jurisdiction and final designation will be determined by future County-City negotiations.

Proposed Designation Change from CSAH to Township

CSAH 23	CSAH 23 extends from TH 56 to CSAH 1. This route serves a limited travelshed and has low growth, low volumes and a gravel surface. It is recommended that CSAH 23 be transferred to Kenyon and Cherry Grove Townships as a township road.
CSAH 1	This segment of CSAH 1 extends from CSAH 25 to US 52. Due to the future realignment of CSAH 1, this route is recommended to be transferred to Leon Township as a township road. Access to US 52 will be closed when the interchange at US 52/CSAH 9 is constructed and the road's function as a county state aid highway will be limited.
Old CSAH 18	Old CSAH 18 extends from the north end of the existing CSAH 18 to the south end of CSAH 18. Old CSAH 18 was transferred to Welch Township in November 2003.

Proposed New CSAH Designations

CSAH 10	This new alignment will connect existing CSAH 10 at 160th Avenue to the interchange with US 52/TH 60 south of the City of Zumbrota.
CSAH 1	This new alignment will extend from CSAH 25 to the future interchange at US 52/CSAH 9.
Cannon Falls Perimeter Road	This new alignment will extend from US 52 to TH 19, around the City of Cannon Falls. Under the Goodhue County jurisdiction option for the Perimeter Road, the new alignment would be on the CSAH system. However, this designation is under discussion and is open for negotiation.
CSAH 68	This new alignment will extend existing CSAH 68 over US 52 to connect with the realignment of CSAH 7 in the township of Minneola.
CSAH 7	This new alignment will extend existing CSAH 7 past the future interchange at US 52 to connect to TH 60, west of the City of Zumbrota.
CSAH 11	This new alignment will extend along 500th Street from the existing CSAH 11 to the future interchange north of the City of Pine Island.
Red Wing Southern Boulevard	This new alignment will extend from County Road 53 to CSAH 1 in the City of Red Wing. Under the Goodhue County jurisdiction option for the Southern Boulevard, the new alignment would be on the CSAH system. However, this designation is under discussion and is open for negotiation.

4.4 10-TON ROADWAY SYSTEM

Another major component of the county's system plan is the development of 10-ton roadway guidelines. Many vehicles that use the transportation system today are larger and heavier than their predecessors. In addition, the increased exporting of products to global markets requires mobility of goods throughout the year (i.e., transporting materials during spring restriction period), not just under ideal conditions. These factors require construction of a transportation system designated to withstand heavier loads. The current spring weight restriction map for the county is shown in Figure 11.

As part of this Plan, 10-ton roadway guidelines were developed to identify transportation surfacing and resurfacing needs, and to develop a consistent system of rural farm-to-market routes throughout the county. The 10-ton roadway guidelines developed for Goodhue County are as follows:

- Roadway is designated as major collector or higher
- Roadway provides connections to major grain elevators, agricultural business centers or freight terminals
- Roadway has higher levels of traffic
- Roadway is paved
- Roadway is coordinated with adjacent county's 10-ton route system

At present, the County has a program to upgrade its seven-ton roads to a nine-ton standard. The effect of upgrading the county's transportation system to reflect the 10-ton roadway guidelines noted above was assessed using the county's GIS system. This was done by comparing the existing weight restrictions, roadway functional classification, and roadway traffic volumes to the proposed 10-ton roadway guidelines. Upgrade mileages and estimated costs were calculated and are shown in Table 8. The future 10-ton roadway system, as determined by using these guidelines, is shown in Figure 12. It should be noted that several roads (27.63 miles within the county) are built to 10-ton standard but have not been designated as 10-ton routes. Figure 12 shows these roadways as upgraded regardless of whether they meet the 10-ton criteria outlined above.

TABLE 8
10-TON ROADWAY GUIDELINE IMPACTS

CURRENT SPRING WEIGHT	UPGRADE FROM	UPGRADE TO	MILES AFFECTED	COST PER MILE[1]	ESTIMATED COST
9-ton	9-ton	10-ton	25.20	$60,000	$1,512,000
7-ton	7-ton	9-ton[2]	23.45	$90,000	$2,110,500
	9-ton	10-ton	23.45	$60,000	$1,407,000

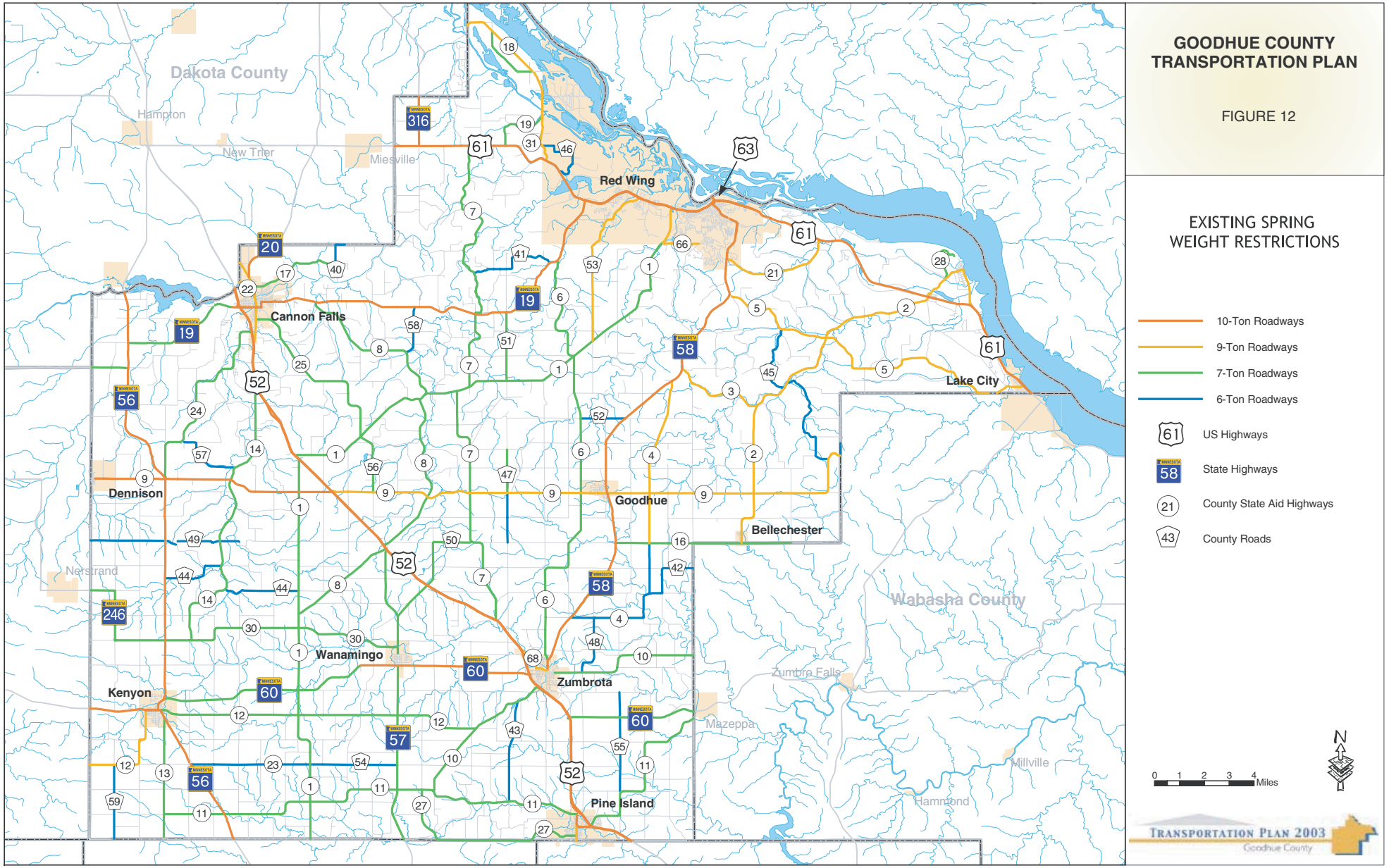
[1] The cost for each inch of bituminous is $30,000 per mile; upgrading a roadway from 7- to 9- tons requires 3-inch of bituminous, and upgrading from 9- to 10- ton requires 2-inch of bituminous. Therefore, upgrading roadways from 7-to 9-ton costs $90,000 per mile, and upgrading from 9- to 10-ton costs $60,000 per mile.

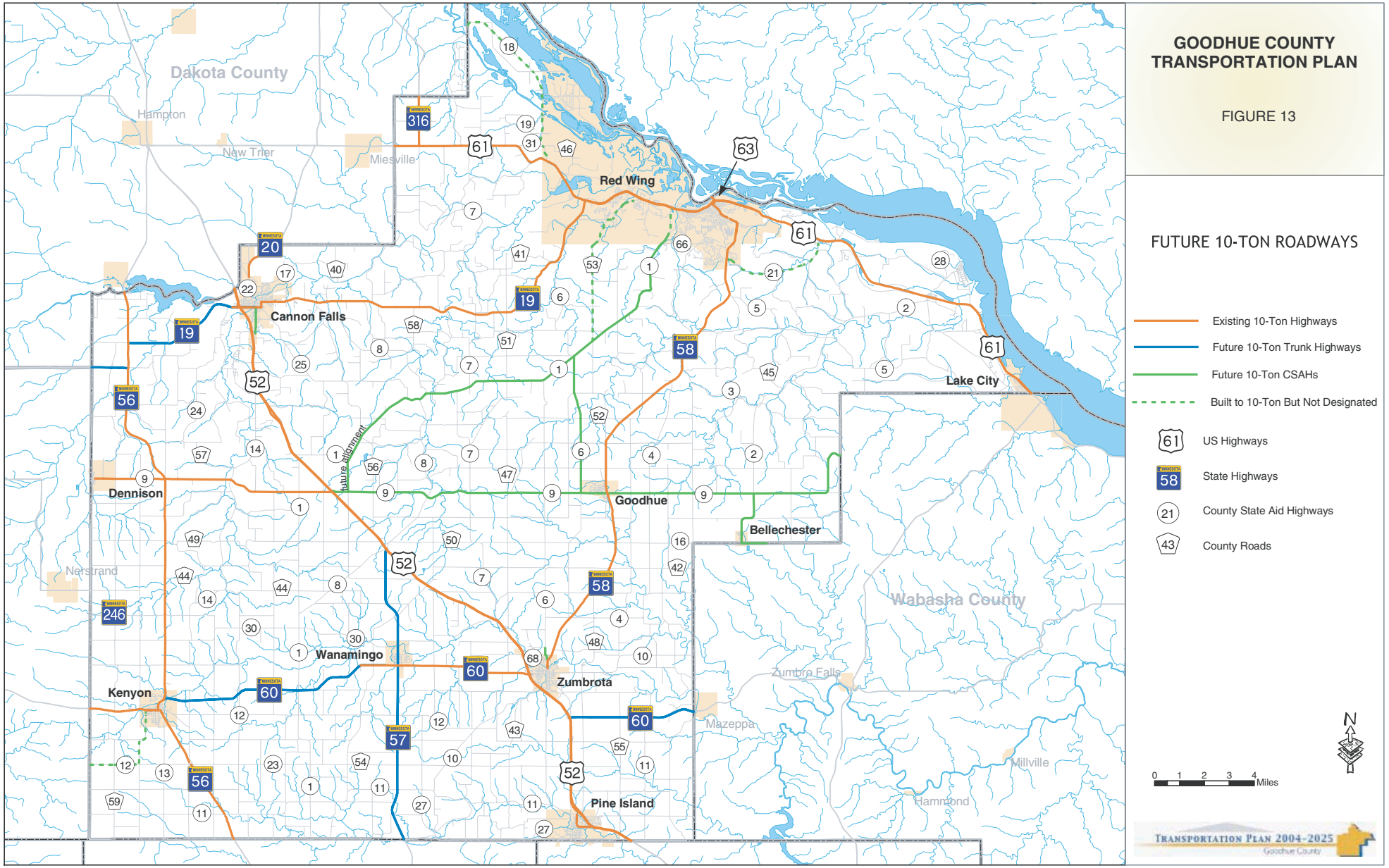
[2] Goodhue County is in the process of upgrading its 7-ton roads to 9-ton roads

Another important item to note is that sections of, or the entirety of, a few state highways within the county are not built to 10-ton standards. These roadways are as follows:

- TH 19, from US 52 to the west Goodhue County line
- TH 60, from TH 56 to 1.0 mile west of Wanamingo
- TH 57, from 1.0 mile south of TH 60 to the south Goodhue County line

To produce a uniform system of 10-ton roadways within the county, Goodhue County should encourage Mn/DOT to upgrade these state highways to 10-ton standards.


Dakota County
Hampton
New Trier
Miesville
Red Wing
Cannon Falls
Lake City
Dennison
Goodhue
Bellechester
Nerstrand
Wanamingo
Kenyon
Zumbrota
Pine Island
Wabasha County
Zumbra Falls
Mazeppa
Millville
Hammond
316
61
63
20
19
58
56
52
246
60
57
GOODHUE COUNTY
TRANSPORTATION PLAN
FIGURE 12
EXISTING SPRING
WEIGHT RESTRICTIONS
10-Ton Roadways
9-Ton Roadways
7-Ton Roadways
6-Ton Roadways
US Highways
State Highways
County State Aid Highways
County Roads
N
0 1 2 3 4 Miles
TRANSPORTATION PLAN 2003
Goodhue County


Dakota County
Hampton
New Trier
Miesville
Red Wing
Cannon Falls
Lake City
Dennison
Goodhue
Bellechester
Nerstrand
Wanamingo
Kenyon
Zumbrota
Wabasha County
Zumbra Falls
Mazeppa
Millville
Hammond
Pine Island
future alignment
316
61
63
20
19
58
52
56
246
60
57
GOODHUE COUNTY
TRANSPORTATION PLAN
FIGURE 13
FUTURE 10-TON ROADWAYS
Existing 10-Ton Highways
Future 10-Ton Trunk Highways
Future 10-Ton CSAHs
Built to 10-Ton But Not Designated
US Highways
State Highways
County State Aid Highways
County Roads
N
0 1 2 3 4 Miles
TRANSPORTATION PLAN 2004-2025
Goodhue County

4.5 TRAIL SYSTEM PLAN

In addition to its roadway system, Minnesota has approximately 225 miles of long-distance, off-road bicycle trails. In Minnesota, pedestrians and bicyclists make up a limited percent of transportation trips; roughly 0.4 percent of all trips are taken on bicycle and 3.3 percent of trips are taken by pedestrians. According to the 2000 Census, approximately 2 percent of Goodhue County residents bike to work, while approximately 3 percent walk to work.

Most of the past effort in developing the county's trail system focused on identifying and constructing off-road trail facilities; the construction of on-road bicycle facilities was not emphasized. A fully functional trail system will utilize different types of facilities to provide bicycle accommodation for all types of users.

To determine the appropriate highway design treatment to accommodate bicyclists, several factors associated with the specific route must be assessed:

- What types of bicyclists are the route most likely to serve?
- What type of facility will best serve each type of user?

User Types

Off-road trails may be used for recreation and leisure, while on-road facilities may be used for commuting and utilitarian trips. Further, trails connecting residential areas to schools may be used by children, while on-road facilities may be used by more experienced riders. Bicycle and pedestrian networks should be safe for all types of users and should include facilities which accommodate different trip lengths and purposes. A basic system for classifying types of users, outlined by the Bicycle Federation of America, is as follows:

- *Type A – Advanced Bicyclists***:** Experienced riders who are comfortable traveling in most traffic conditions. These persons, in general, prefer to travel at maximum speed with minimum delay, and travel on streets rather than mixed-use trails. These riders desire direct access to school, work, shopping and other destinations, and are best served by providing adequate width for bicycle travel on all roadways.

- *Type B – Basic Bicyclists***:** Persons who are casual or new adult and teen riders. These riders prefer safe and comfortable access to recreational or leisure-related destinations. Type B bicyclists are most comfortable where there is well-defined separation of bicycles and motor vehicles. They can be accommodated on a network of designated bicycle facilities and on low-volume neighborhood streets.

- *Type C – Children***:** Young riders (preteen), whose bicycle use is generally monitored by parents. They can be accommodated on the same facilities as Type B bicyclists. A strong emphasis should be made on providing safe connections between residential areas and key destinations such as schools and recreational areas.

On-Road Facilities

Once user types have been identified, bicycle facilities can be selected to facilitate the movement of these users to their preferred destinations. Four basic types of on-road facilities that are used to accommodate bicyclists include:

- *Shared lane:* Shared motor vehicle/bicycle use of a 12-foot "standard"-width travel lane (usually on a low volume city street).

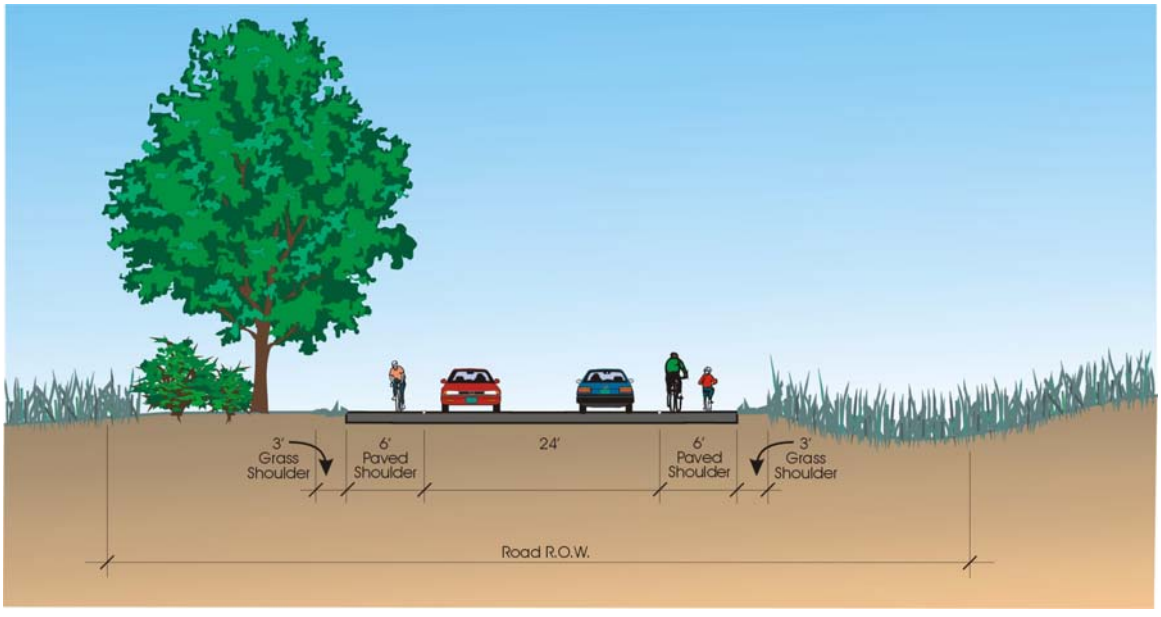
- *Wide outside lane:* A 14-foot outside travel lane, wider than a "standard" width travel lane, which accommodates both bicyclists and vehicles (usually on a higher volume city street).

- *Bike lane:* A portion of the roadway designated by striping, signing, and/or marking pavement for preferential or exclusive use of bicycles (usually along urban streets). Bike lanes should be at least 5 feet wide.

- *Shoulder:* A paved portion of the roadway, to the right of the edge strip, wide enough to accommodate bicyclists (usually along rural routes). Paved shoulders should be at least 6 feet wide. Shoulder width should increase as speeds, traffic volumes and the numbers of heavy commercial vehicles increase.

The AASHTO *Guide for the Development of Bicycle Facilities* notes that, in rural areas, "adding or improving paved shoulders often can be the best way to accommodate bicyclists." Several Goodhue County roadways are appropriate candidates for bicycle use. Widening the shoulders of existing low volume, rural highways, and signing these roadways as "bicycle routes" may be an effective method for filling gaps in the county's emerging recreational trail system. (See Figure 14)

FIGURE 14
WIDE SHOULDER FOR BICYCLE USE



It is important to note that bicyclists will only use shoulders if they are paved and maintained to the same surface standard as regular travel lanes. If wide shoulders are poorly paved, or filled with debris, bicyclists will tend to travel in the roadway. Therefore, a regular inspection and maintenance program should be followed to keep shoulders in good repair and free of debris.

Intentional surface irregularities such as rumble strips, textured paving, and raised lane markers and reflectors, can both increase and decrease bicyclist safety. These features keep drivers from using the portion of the roadway designated for bicyclists, but they can cause bicyclists to fall or to swerve into the travel lane. It is advised that they generally be avoided on routes intended for bicyclists. If rumble strips are necessary, they should be located as close to the vehicular travel lane as possible and a significant portion of the shoulder should remain clear for bicycle use. Other recommendations to improve rumble strips for bicyclists would be to decrease the depth of the grooves and to provide gaps to allow bicyclists to cross the rumble strip.

Off-Road Trails

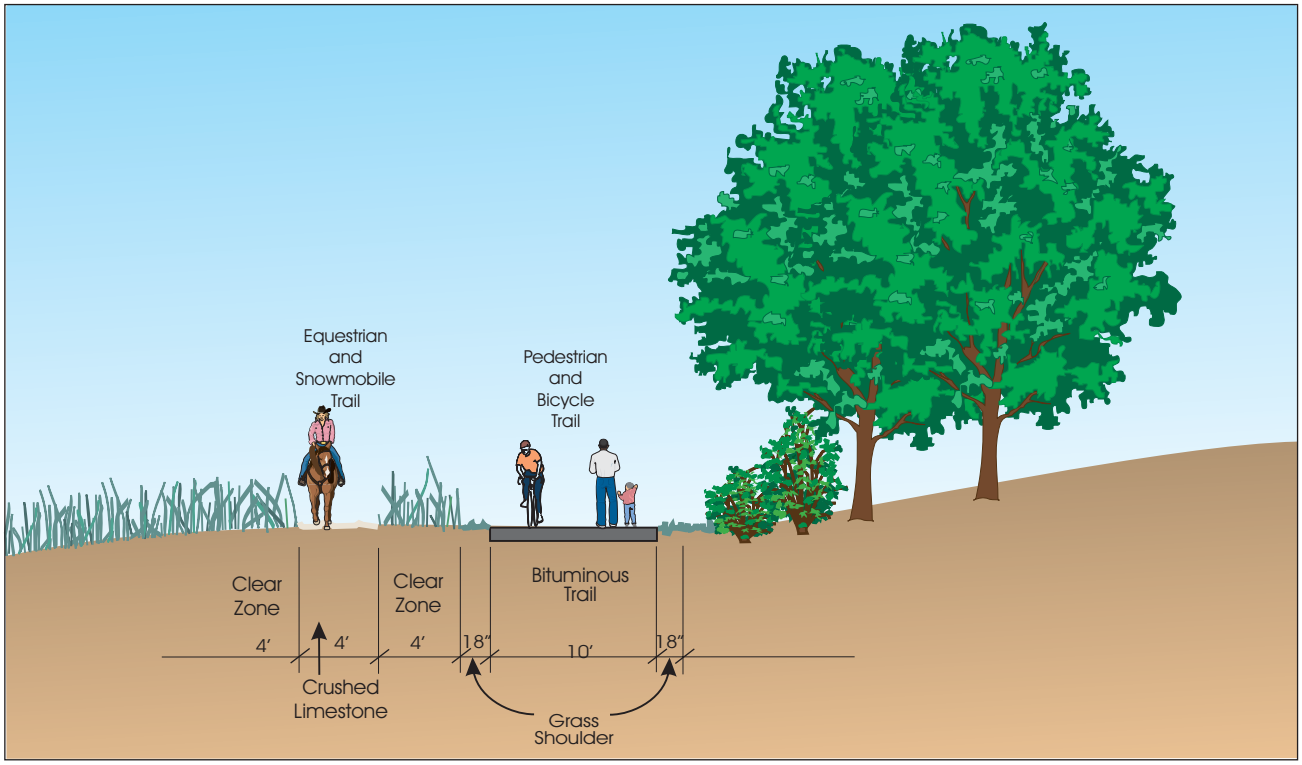
An off-street bicycle trail is a facility that is physically separated from the roadway, either in the road's right of way or in an independent corridor, and is intended for bicycle use.

Goodhue County has several regional, multi-use, off-road trails within its boundaries, including the Cannon Valley Trail, the Douglas State Trail and the Goodhue Pioneer Trail. The Goodhue Pioneer Trail is the only regional trail in Goodhue County that is not completely developed at this time.

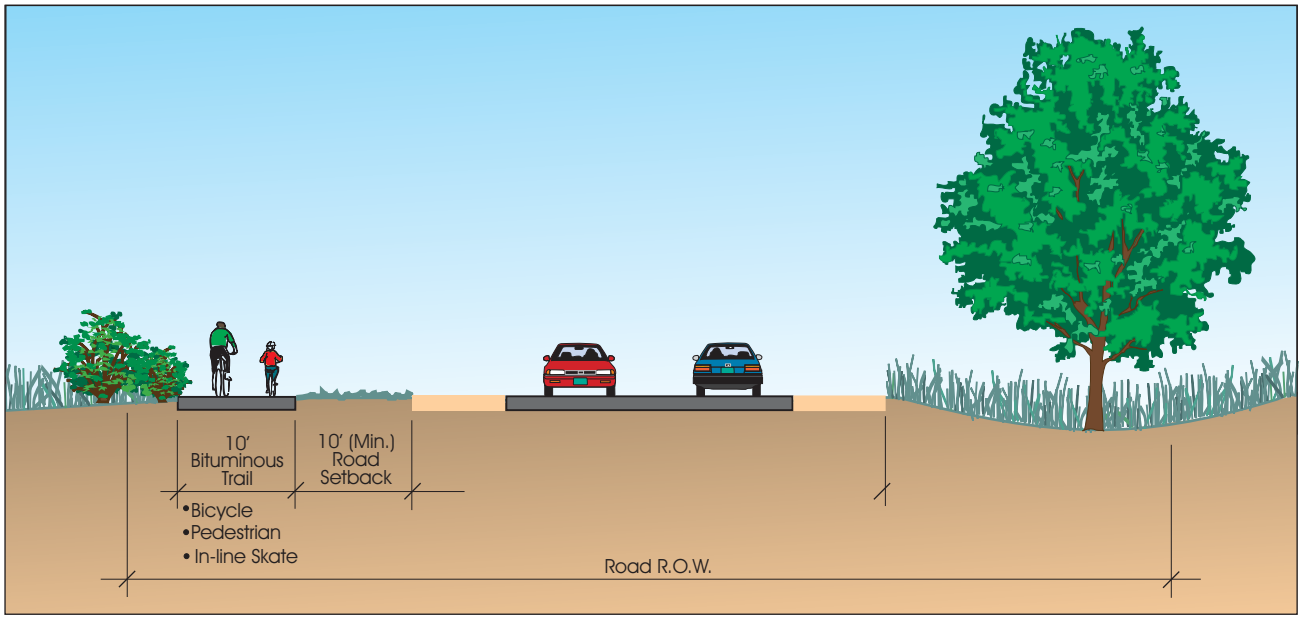
Off-road trails function best when they utilize existing railroad, utility, or other right-of-way not adjacent to a roadway. Trails along former railroad corridors work well because they are likely to have few intersections with roadways, and often have existing structures that provide grade-separated crossings. In contrast, trails that have frequent intersections with roadways and/or driveways require users to stop or yield at every crossing, and this creates potential conflicts with turning traffic.

Shared-use trails should be a minimum of 10-feet wide to accommodate multiple users traveling in both directions. Trails in urban areas, and trails with heavy use or large numbers of in-line skaters, may require additional width or the separation of uses. In addition to the width of the surfaced portion of the trail, two feet of clear space is recommended on either side of the trail so that users can safely avoid signs, shrubs, walls and other obstructions. The total width of the trail and adjacent clear space should be maintained through any tunnels, underpasses, bridges or overpasses. Figure 15 shows two types of off-road, multi-use trails.

Independent Corridor



Adjacent to Roadway



OFF-ROAD TRAILS

FIGURE 15

Future Trail System

The proposed trail system for Goodhue County is shown in Figure 16. This trail system plan represents logical connections between recreational routes to create a system that serves the entire county.

The Goodhue Pioneer Trail, once constructed, will become part of the Goodhue County trail system, connecting the Cannon Valley Trail in Red Wing and the Douglas State Trail in Pine Island.

For purposes of planning and development, the Goodhue Pioneer Trail is divided into six segments, five of which are in the planning stage:

- Red Wing to Hay Creek (COMPLETED)
- Hay Creek to Goodhue
- Goodhue to Bellechester
- Goodhue to Zumbrota
- Zumbrota to Mazeppa
- Mazeppa to Pine Island/Zumbrota to Pine Island

Preliminary planning efforts by the Goodhue Pioneer Trail Association have determined potential routes for the remainder of the trail that would be feasible to construct and would provide a good trail experience. Abandoned railroad rights-of-way will be utilized where possible, and elsewhere right-of-way must be acquired from willing sellers. Some trail gaps may be filled by diverting the trail off the rail corridor (if adjacent landowners are uncooperative) and by accommodating trail users on either wide shoulders or a separated path along CSAH 6.

A new trail group has been formed in the City of Kenyon to discuss potential local trails and connections to regional trails. Kenyon is in a prime location to connect regional trails, with the Cannon Valley Trail to the north, the Douglas State Trail to the east and the Sakatah Singing Hills Trail to the west. Descriptions of potential trail connections to Kenyon are listed below and are graphically portrayed in Figure 16.

Another important trail connection in active consideration is the Mill Towns Trail. This trail will link the Cannon Valley and the Sakatah Singing Hills Trail to create a 100-mile recreational resource. The Mill Towns Trail group is working to extend the trail to Lake Byllesby from the west and Goodhue County is working to extend the Cannon Valley Trail to Lake Byllesby where the two trails can connect.

Goodhue County recognizes the importance of establishing a county-wide trail system, but existing and future trail alignments only cover the north (Cannon Valley Trails) and east (Goodhue Pioneer Trail) sections of the county. This Plan has identified potential locations for southern and western trails to fill in gaps in the planned county-wide trail system.

At the writing of this report, the Goodhue County Park Board has identified the need for a new county park in the southern section of the county. Once the park location has been finalized, one of the following locations may be selected for a southern trail:

- The first trail area extends from the southern boundary of the county to CSAH 11, from Pine Island to Kenyon (see Figure 16). The future alignment could be an off-road facility or an on-road paved shoulder along CSAH 11.

- The second trail area follows the Zumbro River floodplain from Zumbrota to Kenyon, between CSAH 12 and CSAH 30 (see Figure 16). An off-road trail could be located along the floodplain, or an on-road paved shoulder could be added to CSAH 10 and CSAH 12.

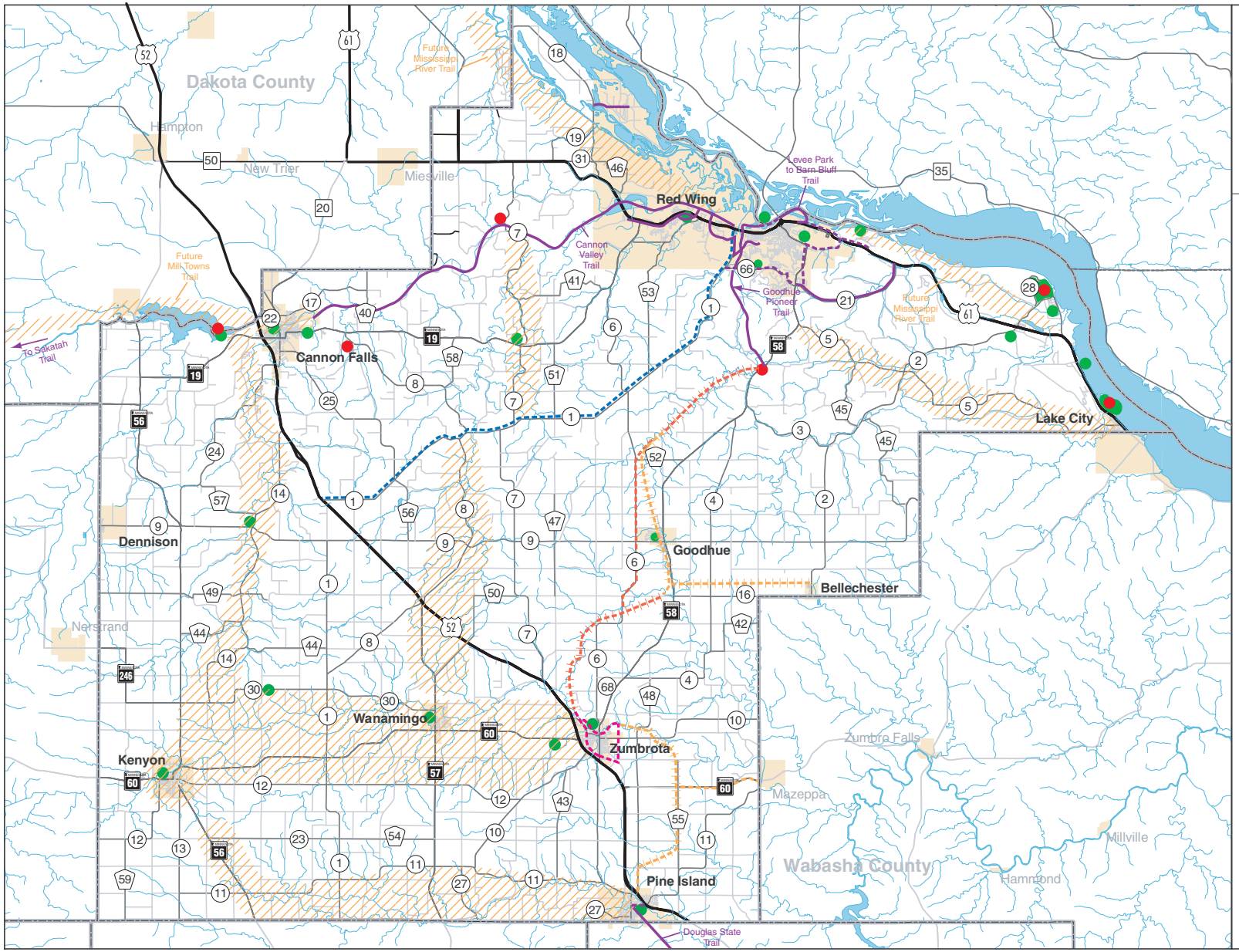
Both off-road and on-road facilities could be pursued in the development of a western trail area, running from Kenyon to Cannon Falls. The general trail route would follow TH 56 to the east, turn north to CSAH 14, continue along CSAH 14 to near US 52 and eventually follow township roads up to Lake Byllesby, where it would connect to the future Mill Towns Road.

It should be noted that potential trail areas are purposefully identified in Figure 16 as wide "bands," because specific alignments have not yet been identified. The purpose of identifying these general routes is to provide conceptual corridors for future trails, to take advantage of opportunities that may arise.

GOODHUE COUNTY TRANSPORTATION PLAN

FIGURE 16

EXISTING & FUTURE TRAILS



LEGEND

- Existing Trails
- Future Extensions of Existing Trails
- Future Goodhue Pioneer Trail (land already acquired)
- Gaps in Goodhue Pioneer Trail (abandoned railroad tracks - state owned)
- Gaps in Goodhue Pioneer Trail (abandoned railroad tracks - privately owned)
- Alternate Route to Goodhue Pioneer Trail
- Gap in Goodhue Pioneer Trail (connections or extensions)
- Future On-Road Trail
- Future On-Road or Off-Road Trail Area
- Campgrounds
- Parks

0 1 2 3 4 Miles

TRANSPORTATION PLAN 2004-2025
Goodhue County

5.0 IMPLEMENTATION PLAN

The previous sections of this report examined existing needs and future transportation opportunities in Goodhue County. Needs and opportunities were developed based on technical analysis and extensive local citizen and public official input. A transportation plan must be flexible enough to respond to current needs while providing proper guidance to address important long-term transportation system issues. This section of the report examines the steps necessary to implement this Plan.

5.1 TRANSPORTATION PLAN ADOPTION

The first step towards implementation of the Plan is for Goodhue County to adopt it. By adopting the Plan, the county will establish priorities and guidelines on which to base future transportation decisions. Ideally, all jurisdictions in the county should review the Plan to ensure that these entities support the county's efforts to implement the Plan. Citizens and members of the business community should understand the opportunities or limitations that the Plan provides. Giving all affected groups full knowledge of the county's transportation goals will help them see and understand how these goals are linked to land use elements shown in the county's comprehensive land use plan. Copies of the plan should be provided to cities, townships and public libraries in the area so that it can be accessed by the greatest number of people.

The county should periodically review and update the Transportation Plan, based on estimates of future development, population trends, changing financial resources, and citizen and local government input. Depending on the speed and degree of change in the county, it is recommended that the Plan be reviewed at least every five years.

5.2 JURISDICTIONAL REALIGNMENT PROCESS

The Transportation Plan identifies jurisdictional realignments of roadways, based on functional classification, system continuity, access control, and roadway traffic. The Plan identifies and groups jurisdictional transfer candidates, rates each roadway's suitability for transfer and estimates general timeframes for each transfer. Before addressing specific transfers, it is recommended that the county develop a Memorandum of Understanding (MOU) that outlines the process for negotiating potential jurisdictional changes. The memorandum would address issues such as:

1. Schedule or Timeframe of Proposed Transfers
    - A non-binding schedule (goal) for the jurisdictional transfer of identified routes within the 2025 timeframe.

2. System Issues and Legal Requirements
    - The ability to transfer mileage between the state-aid and local road system
    - The receiving agency's ability to use funding from turnback accounts for maintenance and improvements.

- The requirements if a route are to revert to a township (i.e., the county must meet the requirements set forth in Minnesota Statutes, which require a public hearing, completion of repairs or improvements to meet standards for comparable roadways in the town and continued maintenance for a two-year period before date of revocation).
- Further limitations on establishment, alteration, vacation or revocation of county highways as described in Minnesota Statutes Section 163.11.

3. Planning and Programming Issues
   - Any allocation of funds that will be made available from the transferring agency to the receiving agency.

4. Project Development, Design and Construction Issues
   - The process for development of projects, studies, right-of-way acquisition, design and construction of transferred routes.
   - The design and construction standards to be used for projects.
   - The process and framework for cost-sharing agreements.

5. Operational and Maintenance Issues
   - The responsibilities for utility permits, driveway access permits, changes to traffic controls and signing, and level of routine regular maintenance.

For jurisdictional transfers that also affect designation, the comprehensive approach taken by the Goodhue County Transportation Plan will greatly assist county staff in preparing for State Aid Screening Board review.

5.3 ACCESS MANAGEMENT

Access guidelines are important because they define a starting point for balancing property access, safety and mobility concerns. Transportation agencies regularly receive requests for additional access (e.g., new public street, commercial driveways, residential and field access). Because of the number of individuals and agencies often involved in reviews, access policies are sometimes applied inconsistently. This can result in confusion between agencies, developers and property owners, and can create long-term safety and mobility problems. Standard access guidelines can be used to improve communication, enhance safety and maintain the capacity and mobility of important transportation corridors. In addition, access guidelines may be used to respond to access requests and to promote good access practices such as:

- Aligning access with other existing access points
- Providing adequate spacing to separate and reduce conflicts
- Encouraging indirect access rather than direct access on high-speed, high-volume arterial routes

Whether it is accomplished through grade-separated crossings, frontage roads or right-in/right-out access, access management reduces the number of conflicts and results in improved safety. Various studies have demonstrated a direct relationship between the number of full access points and crash rates, including FHWA's Access Research Report No. FHWA-RD-91-044. Figure 17 shows this relationship.

The Minnesota State Statutes direct public road authorities to provide "reasonable, convenient, and suitable" access to property unless these access rights have been purchased. Courts have interpreted this to allow:

- Restrictions of access to right-in/right-out
- Redirection of access to another public roadway if the roadway is reasonable, convenient and suitable

In special circumstances, broader authority (police power) has been given to public agencies if the situation is deemed to jeopardize public safety. However, this is a very high standard to meet and is seldom used by public agencies.

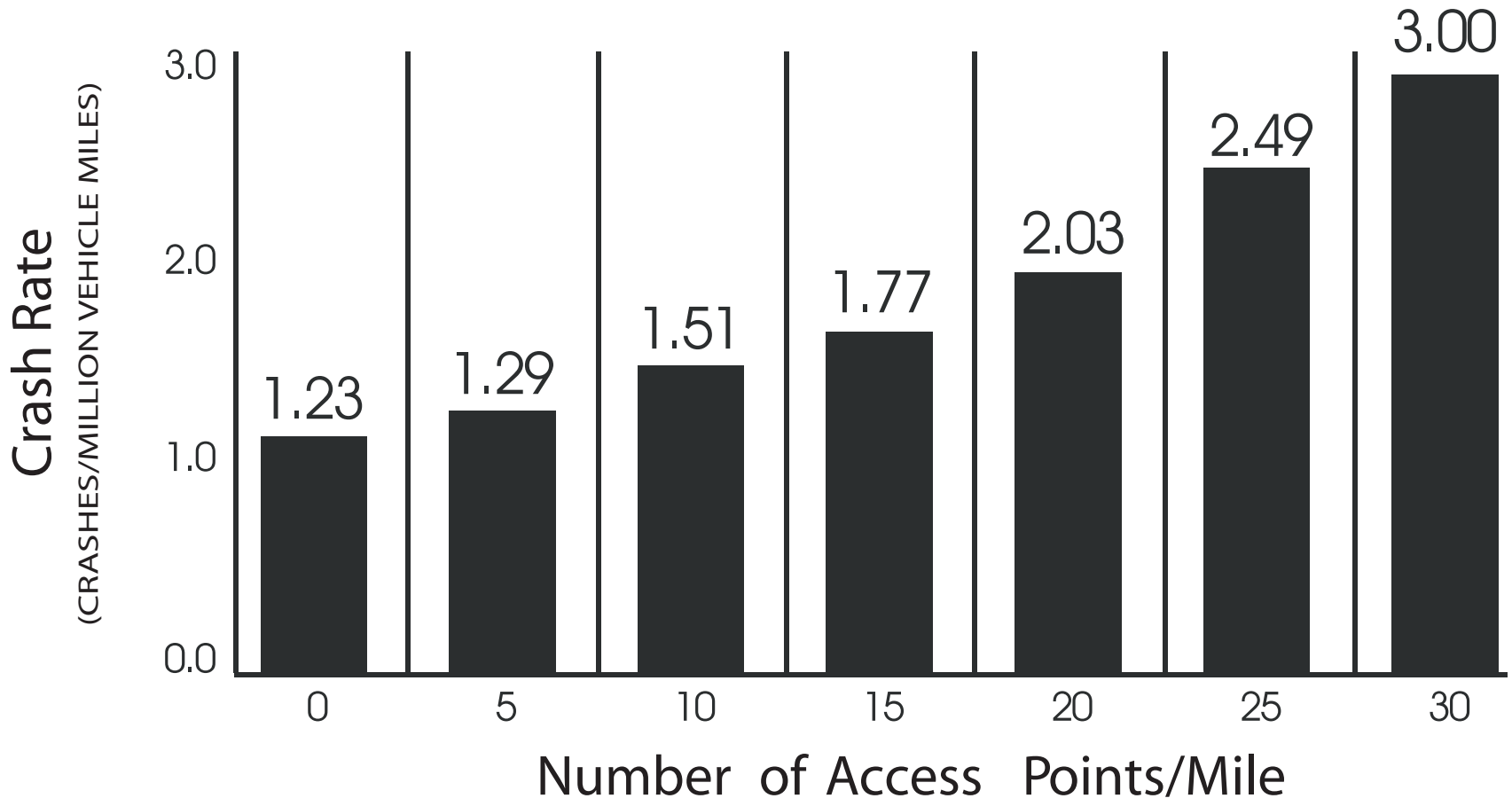
In addition to the above, land use authorities may exercise additional authority in limiting access through development rules and regulations. Land use authorities can require:

- Dedication of public rights-of-way
- Construction of public roadways
- Mitigation measures of traffic and/or other impacts
- Change in and/or development of new access points

These types of access controls are processed through local appointed and elected officials (e.g., planning commissions, town boards, City Councils and County Commissions).

Access guidelines and corridor management practices should be implemented at the county and city level because these units of government are usually involved at the planning stages of development proposals and because they have stronger land use and access controls. However, long-term benefits of access management require mutual support and effective communication at all governmental levels.

The rationale for managing access in rural areas differs from the rationale used in urban areas. Roadways in rural areas almost always serve low-density land uses and usually have volumes well below capacity thresholds. Managing rural access increases safety (e.g., sight distance, number of conflict areas, and severity of crashes when vehicles are run off the road) and minimizes operational/maintenance costs (e.g., snow removal, resurfacing and drainage).



Source : FHWA, Publication number FHWA-RD-91-044 (Nov. 1992)
Note: Study Data is from Two-Lane Highways in Minnesota

ACCESS-CRASH RELATIONSHIP

FIGURE 17

To address access in rural areas, Minnesota's Local Road Research Board (LRRB) developed the following best management practices:

- Establish an access policy – develop a formal policy that ensures that the agency has processes in place to determine the need for and evaluate the use, location, spacing and design characteristics of the requested access points.
- Encourage coordination during the zoning and platting process.
- Give access permits for specific use.
- Encourage adequate spacing of access points.
- Protect the functional area of intersections.
- Ensure adequate sight distance at entrances.
- Avoid offset or dogleg intersections and entrances.
- Encourage development of turn lanes and entrances.
- Consider consolidating access or relocating existing access.
- Encourage good driveway and intersection design characteristics such as:
  - Proper driveway width and turning radii
  - Proper corner clearance
  - Adequate approach grade
  - Alignment of intersections at right angles to maximize sight lines, minimize the time a vehicle is in the conflict area and facilitate turning movements
  - Proper grading of entrance inslopes and culvert openings
  - Keeping sight triangles and clear zones free of obstructions

These best practices should be considered and incorporated into any Goodhue County access management policy.

In addition to the LRRB's Best Practices for Rural Entrance Policy (2002), Mn/DOT completed a multi-year study in 2002 that developed access policies and access spacing guidelines for the Trunk Highway system. While Mn/DOT wrote the guidelines for the State Highway System, many of the recommendations can be applied to city and county systems. For example, access management guidelines promote coordination between land use and transportation strategies, and these issues affect decisions on the local city and county level. Establishing appropriate spacing between public streets and private driveways is an important step toward maintaining the safety and mobility of the traveling public without sacrificing the accessibility needs of local residents. Mn/DOT's Access Management Guidelines are shown in Table 9.

Based on a review of the LRRB and MnDOT access management guidelines, a set of comprehensive local access signal and private entrance standards were proposed by the Steering Committee. These are presented in Table 9.

TABLE 9
SUMMARY OF RECOMMENDED ACCESS SPACING

Category	Area or Facility Type	Typical Functional Class	Intersection Spacing		Signal Spacing	Private Entrances
			Primary Full Movement Intersection	Conditional Secondary Intersection		
1	**High Priority Interregional Corridors (e.g. US 52)**					
1F	Freeway	Principal Arterials	Interchange Access Only			
1A-F	Full Grade Separation		Interchange Access Only			
1A	Rural, Exurban & Bypass		1 mile	1/2 mile	INTERIM ONLY By Deviation Only[1]	By Deviation Only[1]
2	**Medium Priority Interregional Corridors (e.g. TH 50, US 61 to Red Wing)**					
2A-F	Full Grade Separation	Principal Arterials	Interchange Access Only			
2A	Rural, Exurban & Bypass		1 mile	1/2 mile	STRONGLY DISCOURAGED By Deviation Only[1]	By Exception or Deviation Only[1]
2B	Urban Urbanizing		1/2 mile	1/4 mile	STRONGLY DISCOURAGED By Deviation Only[1]	By Exception or Deviation Only[1]
2C	Urban Core		300 – 600 feet dependent upon block length		1/4 mile	Permitted Subject to Conditions
3	**High Priority Regional Corridors (e.g. US 61 east of Red Wing)**					
3A-F	Full Grade Separation	Principal and Minor Arterials	Interchange Access Only			
3A	Rural, Exurban & Bypass		1 mile	1/2 mile	1 mile	Permitted Subject to Conditions
3B	Urban Urbanizing		1/2 mile	1/4 mile	1/2 mile	By Exception or Deviation Only[1]
3C	Urban Core		300 – 600 feet dependent upon block length		1/4 mile	Permitted Subject to Conditions
4	**Principal Arterials (see Functional Class Map)**					
4A-F	Full Grade Separation	Principal Arterials	Interchange Access Only			
4A	Rural, Exurban & Bypass		1 mile	1/2 mile	1 mile	By Deviation Only[1]
4B	Urban Urbanizing		1/2 mile	1/4 mile	1/2 mile	By Exception or Deviation Only[1]
4C	Urban Core		300 – 600 feet dependent upon block length		1/4 mile	Permitted Subject to Conditions
5	**Minor Arterials (see Functional Class Map)**					
5A	Rural, Exurban & Bypass	Minor Arterials	½ mile	1/4 mile	1/2 mile	Permitted Subject to Conditions
5B	Urban Urbanizing		¼ mile	1/8 mile	1/4 mile	By Exception or Deviation Only[1]
5C	Urban Core		300 – 600 feet dependent upon block length		1/4 mile	Permitted Subject to Conditions

Category	Area or Facility Type	Typical Functional Class	Intersection Spacing		Signal Spacing	Private Entrances
			Primary Full Movement Intersection	Conditional Secondary Intersection		
6	**Collectors (see Functional Class Map)**					
6A	Rural, Exurban & Bypass	Collectors	½ mile	1/4 mile	1/2 mile	Permitted Subject to Conditions
6B	Urban Urbanizing		1/8 mile	NA	1/4 mile	
6C	Urban Core		300 – 600 feet dependent upon block length		1/8 mile	
7	**Local Roads/Streets**	Township Roads, non-functionally classed City Streets	NA		NA	No closer than 200' with adequate site distance, per LRRB 2002 Study

[1] Mn/DOT allows temporary exceptions and deviations in an effort to accommodate existing access needs while transitioning to a future system of access spacing.

Goodhue County should adopt the Access Management Guidelines presented in Table 9 for the following reasons:

- The county does not currently have comprehensive access management policies. By establishing these policies, the county can plan, design and implement land use and transportation strategies that control the flow of traffic between roadways and surrounding land uses.
- Access management guidelines are based on functional classification and surrounding development; therefore, adopting guidelines will parallel the functional classification update of this plan and any future developments or land use changes resulting from the Comprehensive Land Use Plan update. Appropriate sections of the guidelines could be incorporated into county zoning and subdivision ordinances.
- The proposed Access Management Guidelines in Table 9 identify access spacing recommendations based on functional classification rather than traffic volumes. This method provides a long-term understanding of how each corridor will function and operate and enables the county to protect access on roadways before traffic volumes reach specific thresholds.

As noted above, access guidelines can be implemented using different methods (e.g., land use regulations, subdivision regulations, access permit processes and access/transportation advisory committees). Any processes should also deal with situations outside the guidelines, such as hardship cases. In existing corridors where significant development has occurred, the number of existing access points usually exceeds access guidelines. Unless these areas are undergoing redevelopment, access management must be approached differently. The access management strategy for such areas should entail aggressively minimizing new accesses, while consolidating/reducing existing access points as redevelopment occurs.

It is important to consider the following points when reviewing the guidelines and addressing access issues:

- The guidelines apply to routes with a functional classification of collector or above; however, the guidelines may occasionally be used on local streets.
- The guidelines are long-term goals, not absolute rules.
- Maintaining flexibility is important in promoting access consolidation.
- The approach to implementation is as important as the guidelines themselves.
- Existing physical barriers or constraints need to be considered.

The following access suggestions provide alternatives for minimizing access and for addressing access problems when the guidelines cannot be met:

- **Encourage shared driveways and internal circulation plans:** If indirect access cannot be achieved during plat reviews, promote internal site circulation using shared access points.
- **Restrict turning movements to reduce conflicts:** If access points cannot be eliminated, consider turning movement restrictions (e.g., left-in or right-in/right-out only) through installation of raised medians or other channelization or signing. Eliminating a single turning movement can significantly reduce vehicle conflicts and crashes.
- **Develop good parallel street systems for carrying local traffic:** Make sure that important arterial routes have parallel street systems that provide local access and carry shorter local trips.
- **Develop proper setbacks for future frontage roads:** If frontage roads cannot be immediately justified (benefits do not outweigh costs), make sure that proper building and parking lot setbacks are established to minimize the impacts of future frontage roads.
- **Develop proper secondary street spacing:** Ensure that plats and new development proposals provide proper intersection spacing for future signals. Signalized intersections should be limited depending upon the type of street. Collector streets should provide continuity and connectivity with other street systems.
- **Encourage proper lot layout to minimize access points:** Promote direct residential access points onto local routes, instead of onto arterials or major collectors. Direct residential access onto arterial or collector routes slows traffic flow and can result in complaints when traffic levels increase. In rural areas, where farms have one access point per 40-acre entitlement and where lots are clustered in one portion of the farmstead, access points should be placed on local roads, not on high-speed, high-volume state or county roads.
- **Encourage connectivity between developments:** Streets in individual developments should be aligned to provide access to other developments, and right-of-way should be provided for future connections to adjacent developments. This promotes neighborhood connectivity, and provides quick and efficient routes for emergency vehicles, mail, garbage services and street maintenance activities.

- **Consider Official Mapping process for important corridors:** Important arterial corridors, or future interchange areas that are located in development-prone areas, can be protected through an official mapping process. Local agencies should revise zoning ordinances and subdivision regulations to dedicate officially mapped corridors at the time of platting.

5.4 PROJECT DEVELOPMENT AND ENVIRONMENTAL PROCESSES

Depending on the size and type of project, implementing improvements identified in the Transportation Plan may require additional public participation and environmental review. Because of Goodhue County's close proximity to the Mississippi River, cultural, historical, and archeological resources, as well as critical wildlife habitats (i.e., bald eagle nesting habitats, trout streams and other protected wildlife) exist in the county. Protected sites and/or species require attention so possible environmental impacts can be addressed early in the project development process. Federal environmental documents must be prepared if federal funding is involved in the project, with the type of document depending on the size of the project. If no federal funding is involved, state environmental review requirements and local ordinances or guidelines may apply. Additional requirements depend on the size of the project. Further, a variety of local, state and federal permits that regulate wetlands, water quality, air quality, noise and other environmental resources may be needed. Early coordination with environmental agencies and the State Historic Preservation Office (SHPO) can reduce delays in the project development process and in acquiring applicable permits.

5.5 RIGHT-OF-WAY PRESERVATION

When future expansion or realignment of a roadway is proposed, but not immediately programmed, agencies should consider right-of-way (ROW) preservation strategies to reduce costs and maintain the feasibility of the proposed improvement. Several different strategies can be used to preserve ROW for future construction, including advance purchase, zoning and subdivision techniques and official mapping. Before implementing ROW preservation strategies, local agencies should weigh the risks of proceeding with ROW preservation without environmental documentation. (Note: Mn/DOT policy requires environmental documentation prior to purchase.) If environmental documentation has not been completed, agencies risk preserving a corridor or parcel that has associated environmental issues.

Direct Purchase

One of the best ways to preserve ROW is to purchase it. Unfortunately, agencies rarely have the necessary funds to purchase ROW, and the public benefit of purchasing ROW is not realized until a roadway or transportation facility is built. Many agencies use any advance funding to prepare the environmental documentation needed to proceed with larger projects.

Planning and Zoning Authority

Local agencies have the authority to regulate existing and future land use. Under this authority, agencies have a number of tools for preserving right-of-way for transportation projects. These tools include:

Zoning

If the property is in a very low-density area (e.g., agricultural district), local agencies should try to maintain the existing zoning classification. Lower zoning classification limits the risk for significant development until funding becomes available for roadway construction.

Platting and Subdivision Regulations

Local platting and subdivision regulations give agencies authority to consider future roadway alignments during the platting process because most land must be platted before it is developed. Cities and counties can use their authority to regulate land development to influence plat configuration and the location of proposed roadways. In most instances, planning and engineering staff works with developers to develop a plat that accommodates the landowners/developers, and that conforms to a long-term community vision and/or plans. Local agencies can require ROW dedication as part of the platting and subdivision process.

Transfer of Development Rights

In addition to the above strategies, some agencies negotiate with property owners to transfer ROW dedication for future roadways needed to support increased development densities on remaining portions of the parcel. This enables the developer to get the same number of lots or units and also enables the agency to obtain the needed ROW.

Official Mapping

A final strategy to preserve ROW is to adopt an Official Map. An Official Map is developed by the local governmental unit and identifies the centerline and ROW needed for a future roadway. The local agency then holds a public hearing showing the location of the future roadway and incorporates the official map into its thoroughfare or community facilities plan. The official mapping process allows agencies to control proposed development within an identified area, and to influence development on adjacent parcels. However, if a directly affected property owner requests to develop his/her property, agencies have six months to initiate acquisition of the property to prevent its development. If the property is not purchased, the owner is allowed to develop it in conformance with current zoning and subdivision regulations. As a result, the official mapping process should only be used for preserving key corridors in areas with significant growth pressures. In some cases, official mapping key parcels/corridors may increase the agency's ability to find sources of funds to purchase at-risk parcels.

Additional information on the tools and techniques listed above can be found in Appendix J of Mn/DOT's *Interregional Corridors: A Guide for Plan Development and Corridor Management.* This guide also includes information on the environmental review and documentation process as it relates to right-of-way preservation.

5.6 TRAFFIC IMPACT FEES

Traffic impact fees are generated by traffic impact studies. A traffic impact study allows decision-makers to assess the transportation implications of site-generated traffic associated with a proposed development. In this time of growing financial constraints and budget issues, many cities and counties are unable to fund the infrastructure or improvements needed to support new developments. Negotiated traffic impact fees help alleviate financial pressure on cities and counties by making the developer responsible for a portion of the costs of improving existing or creating new roadways.

The purpose of the traffic impact study is to identify a proposed development's potential impacts on a roadway's capacity, level of service and safety. Traffic studies should identify what improvements, if any, are needed to:

- Ensure safe ingress to and egress from a site;
- Maintain adequate street capacity on public streets serving the development;
- Ensure safe and reasonable traffic operating conditions on streets and at intersections in the vicinity of a proposed development;
- Avoid creation of or mitigate hazardous traffic conditions;
- Minimize the impact of non-residential traffic on residential neighborhoods in the community; and
- Protect public investment in the existing street system.

Goodhue County can follow these basic procedures to establish an impact fee negotiation program:

1. Select a local government "control" tool or method (e.g., access permits for all new County road access requests and/or for a change in the land use associated with current access).
2. Establish a development threshold (e.g., number of units, trips generated and acres to be developed) which triggers the impact fee negotiation process, and possibly provide a waiver procedure when impact fees are not required.
3. Establish the purpose and content of the impact study (e.g., traffic operations, access spacing, circulation, pedestrian/bicycle facilities, street layout and design parameters, traffic volumes/flows, impact to public streets/intersections, roadway capacity, safety improvements, costs of public infrastructure improvements needed to accommodate development) and identify who completes/pays for the study (e.g., professional traffic engineering firm hired by or approved by the county and paid by the developer).
4. Explain the local review process and timeframe, and assign county personnel to negotiate with the developer.

5. Identify the approval process for the negotiated impact fee (e.g., county board approval of terms) and the approval mechanism (e.g., execution of developer's agreement between the county and the developer, and subsequent issuance of a permit to proceed).

5.7 SMART GROWTH/GROWTH MANAGEMENT

In communities across the nation, there is a growing concern that current development patterns – dominated by what some call "sprawl" – are not in the long-term interest of cities, existing suburbs, small towns and rural communities. Though supportive of growth, communities are questioning the economic costs of abandoning infrastructure in the city and rebuilding it further out. Factors such as demographic shifts, a strong environmental ethic, increased fiscal concerns, and more nuanced views of growth are fueling the Smart Growth movement.

Smart growth concentrates on investing in existing communities. By encouraging growth within communities where people already live and work, smart growth limits the encroachment of new development on farmland and open space, and makes existing communities more attractive by creating communities with a mix of housing, restaurants, parks and jobs. Taxpayer burdens are usually reduced because the need for new water, sewer and road infrastructure is minimized.

Goodhue County is best known for its rural agricultural nature. Citizen input provided during both the Transportation Plan and the Comprehensive Plan update processes strongly supports smart growth policies in the county. By investing and focusing growth in urban areas and areas contiguous to urban areas, farmland and open space can be preserved. Smart growth provides many options, but the following common-sense principles will help guide public decisions and achieve desired results:

- Stewardship – use land and natural resources wisely to sustain them for the future.
- Efficiency – make efficient, integrated public investments in transportation, housing, schools, utilities, information infrastructure and other public services.
- Choice – give communities smart growth options and choices
- Accountability – reinforce responsibility and accountability for development decisions.

Goodhue County should continue its strong, proactive planning efforts. The Transportation Plan focuses many of its short-range jurisdictional transfers and designation changes on urban areas, or on areas adjacent to existing urban areas. As the county continues to grow, this approach to planning will promote growth within urban areas while protecting the county's rural nature.

5.8 ORDERLY ANNEXATION

Annexation is the statutory mechanism by which land is brought into the corporate limits of a city to provide needed municipal services. This land may already be developed, or may be expected to be developed as residential, commercial, industrial or public property.

There are three forms of annexation: automatic, contested and negotiated. Automatic annexation is the most common form of annexation. Under this form, cities can annex land by filing an ordinance that annexes parcels into the city, as long as certain conditions are met. Negotiated, or orderly annexation, encourages joint planning by allowing the city and the township to cooperate. Contested annexation occurs when no orderly annexation agreements are in place, when annexation by city ordinance is not possible or when annexation is contested.

Orderly annexation is most desirable because it involves a cooperative, joint agreement negotiated and executed by a city and an adjacent township concerning an agreed upon unincorporated area (or areas), to be annexed under certain terms and conditions. Using this annexation method develops a mutually acceptable, consistent and predictable process for accomplishing immediate and future urban growth, annexations, and service provision, while avoiding the expense associated with bringing a contested case proceeding to court. Benefits of joint orderly annexation agreements include:

- Flexibility – an orderly annexation agreement provides flexibility regarding terms, conditions and timing of planned annexations that will best anticipate urban growth and municipal service needs of the whole community, including the affected city and surrounding townships.
- Certainty – an orderly annexation agreement provides certainty for property owners regarding the timing of annexation and the provision of services.
- Community Relations – an orderly annexation agreement provides terms and conditions that are jointly and cooperatively developed. When agreed to by involved parties, community relations are built based on a cooperative effort designed to plan for future development of the community.
- Hearing Avoidance – when parties negotiate terms and conditions of such agreements without need for a hearing, future consideration by the Minnesota Planning Agency is unnecessary.

5.9 REGIONAL PRIORITIES AND FUNDING

This Plan has focused on addressing major transportation needs and issues. Significant improvements to the transportation system in Goodhue County fall into seven general categories:

- Safety improvements on CSAH routes
- New CSAH alignments
- Upgrading 7-ton roadways to 9-ton roadways
- Upgrading 9-ton roadways to 10-ton roadways
- Repairs to Mn/DOT or county roads being considered for turnbacks (i.e., bridge, ditch and surface repairs).
- Capacity improvements to CSAH routes forecast to be congested by 2025
- Improvements along US 52

Table 10 proves project descriptions, cost estimates and general timeframes for important improvements identified by this planning process.

Table 10
Project Cost Estimates and Timeframe

Timeframe[1]	Route	Termini		Type of Project	Mileage	Scope	Estimated Cost[2]	Responsible Agency
		From	To					
Short Range	CSAH Route	N/A	N/A	Safety	county-wide	Complete annual improvements at high accident locations	$500,000/yr	Goodhue County
	County Roads	N/A	N/A	7-9 ton Upgrades	county-wide	Continue program to upgrade weight restrict roads	$250,000/yr	Goodhue County
	CSAH 1	CSAH 9	Red Wing	10-ton Upgrade	16.4	Regrade	$984,000	Goodhue County
	CSAH 9	US 52	Wabasha County	10-ton Upgrade	22.0	Add bituminous overlay	$1,320,000	Goodhue County
	TH 57	US 52	Dodge Co.	10-ton Upgrade	12.0	Resurface	$1,440,000	Mn/DOT - turnback funds (as part of transfer to Goodhue County)
	CSAH 2	CSAH 9	Wabasha County	10-ton Upgrade	4.4	Add bituminous overlay	$264,000	Goodhue County
	CSAH 6	Sugarloaf Parkway	TH 58	10-ton Upgrade	0.5	Add bituminous overlay	$30,000	Goodhue County
	CR 44	TH 56	CSAH 14	Turnback Improvements	-	Improve two bridges	$850,000	Goodhue County (as part of turnback to twp.)
	TH 246	Rice Co.	TH 56	Turnback Improvements	5.0	Regrade & realign sharp curves	$1,800,000	Mn/DOT - turnback funds (as part of transfer to Goodhue
	CSAH 7/68	445th St. US 52	TH 60 new CSAH 7	New Alignment	1.2	Complete design, official mapping, environmental studies, ROW acquisition, etc. and construct a rural 2-lane	$1,170,000	Goodhue County
	CSAH 11	CR 55	US 52	New Alignment	2.2	Complete design, official mapping, environmental studies, ROW acquisition, etc.	$495,000	Goodhue County
	CSAH 10	Existing CSAH 10	US 52	New Alignment	3.1		$697,500	Goodhue County
	CSAH 68	Future CSAH 7	US 52	New Overpass			$360,000	Goodhue County
	CSAH 1	CR 56	CSAH 9	New Alignment	2.3		$517,500	Goodhue County
	Red Wing Southern Boulevard	CR 53	CSAH 1	New Alignment	2.3		$3,450,000	Goodhue County and/or City of Red Wing
	Cannon Falls Perimeter Road	CSAH 24	TH 19	New Alignment	2.1		$2,100,000	Goodhue County
	CSAH 7 (new)	445th St.	Old CSAH 7	New Aligment	1.3		$292,500	Goodhue County
Medium-Range	CSAH 6	CSAH 1	CSAH 9	10-ton Upgrade	5.5	Add bituminous overlay	$330,000	Goodhue County
	CSAH 24	TH 19	US 52	Turnback Improvements	1.1	Regrade south of CSAH 25; resufrace north of CSAH 25	$1,600,000	To be negotiated with Mn/DOT as part of overall TH turnbacks
	CSAH 11 (new)	CR 55	US 52	New Alignment	2.2	Construct a rural 2-lane	$1,650,000	Goodhue County
	CSAH 10 (new)	Existing CSAH 10	US 52	New Alignment	3.1	Construct a rural 2-lane	$697,500	Goodhue County
	CSAH 68	Future CSAH 7	US 52	New Overpass	-	Build overpass of US 52	$1,200,000	Goodhue County
	US 52	South of Cannon Falls @ CSAH 24		New Interchange	-	Construct new interchange	$10,000,000	Mn/DOT
	US 52	North of Pine Island @ CSAH 11		New Interchange	-	Construct new interchange	$10,000,000	Mn/DOT
	CR 49	CSAH 14	Wanamingo Twp.	Turnback Improvements	-	Replace one bridge	TBD[3]	Goodhue County

Table 10

Project Cost Estimates and Timeframe

Timeframe[1]	Route	Termini		Type of Project	Mileage	Scope	Estimated Cost[2]	Responsible Agency
		From	To					
Long-Range	CSAH 62	CSAH 11	Olmsted Co. line	Capacity Improvements	0.6	Restripe 0.3 miles Reconstruct 0.3 miles (Bridge project programmed for 2006)	$700,000	Goodhue County
	CSAH 1	Featherstone Rd	CSAH 66	Capacity Improvements	1.0	Reconstruct an urban three-lane	$2,000,000	Goodhue County
	Red Wing Southern Boulevard	CR 53	CSAH 1	New Alignment	2.3	Construct an Urban 5-lane (with terrain issues)	$6,900,000	Goodhue County and/or City of Red Wing
	Cannon Falls Perimeter Road	CSAH 24	TH 19	New Alignment	2.1	Construct an Urban 2-lane with turn lanes	$4,200,000	Goodhue County
	CSAH 1	CR 56	CSAH 9	New Alignment	2.3	Construct a rural 2-lane	$517,500	Goodhue County
	CSAH 7 (new)	445th Street	Old CSAH 7	New Alignment	1.3	Construct a rural 2-lane	$975,000	Goodhue County
	US 52	North of Zumbrota @ CSAH 7		New Interchange	-	Construct new interchange	$10,000,000	Mn/DOT
	US 52	Hader Area		New Interchange	-	Construct new interchange	$10,000,000	Mn/DOT
	US 52	CSAH 9 Area		New Interchange	-	Construct new interchange	$10,000,000	Mn/DOT

[1] Short Range = 2004-2008
Medium Range = 2009-2015
Long Range = 2015+

[2] Cost Estimate Parameters (costs are in 2003 dollars; inflation will increase cost)

Construction costs:

- 5-lane urban section: $2,500,000/mile (add $500,000 for special terrain issues)
- 3-lane urban section: $2,000,000/mile
- 2-lane urban section with turn-lanes: $2,000,000/mile
- 2-lane rural section: $750,000/mile
- Interchanges: $10,000,000
- Bridges/overpasses: $90/square foot
- Standard overlay: $60,000/mile

Non Construction cost (engineering, design, official mapping, environmental studies, ROW-assumes it must be purchased)

- Rural roadways: 30% of construction cost
- Urban roadways: 50% of construction cost

[3] To be determined based on negotiations during turnback process. Funding may come from Town Bridge Account, and/or bridge bonding bill

5.10 COST SHARING POLICIES

Goodhue County currently does not have formal cost-sharing policies for its public works projects. By establishing cost-sharing policies, the county can set uniform and appropriate cost sharing arrangements for a variety of cooperative projects with Mn/DOT, townships and cities. The percentage of costs can be a function of the type of project or the size of the township or city (i.e., municipalities with populations less than 5,000 are not eligible for state aid, and therefore require more assistance from the county). A summary of policies established by other urbanizing counties in Minnesota can be viewed in Appendix F. With this information, Goodhue County public works staff can prepare a consistent set of cost sharing policies to encourage cooperation among its transportation partners.

APPENDIX A

Traffic Volume Spreadsheets

TABLE A1
TRAFFIC VOLUME SPREADSHEET KEY

Column Number | Definition

1 Roadway

2 Segment Termini
Beginning and ending locations.

3 Existing Segment Characteristics

- Func. Class - Functional Class

Code	Definition
PA	Principal Arterial
MA	Minor Arterial
Maj Coll	Major Collector
Coll	Minor Collector
Coll-Urban	Collector in Urban Boundary
Local	Local Street
Local-Urban	Local In Urban Boundary

- Length - Segment length in miles (mi).
- Posted Speed - In miles per hour (mph).
- Existing Traffic Lanes - Number of travel lanes.
- Design Type - Roadway cross-section design. Urban (U) or Rural (R).

Code	Definition	Volume Threshold (ADT)
	URBAN SECTIONS	
U-1	Two-lane at-grade local urban street at 30 mph.	8,000
U-2	Two-lane at-grade urban arterial street at 30 mph.	10,000
U-3	Four-lane at-grade 30 mph.	24,000
U-4	Expressway at 35-55 mph.	35,000
	RURAL SECTIONS	
R1-A	Two-lane trunk highway	14,000
R-1	Two-lane at-grade at 55 mph.	14,000
R-2	Two-lane reduced speed and capacity.*	8,000
R-3	Expressway at 55-65 mph.	45,000

**Two-lane rural design highways with limited visibility, poor geometrics and/or poor roadway surface (gravel or poor pavement quality).*

4 Historical Average Daily Traffic Volumes

- N/A - Information not available.
- Existing volumes based on data from current studies, flow maps, recent traffic counts, or data received from appropriate jurisdictions.
- Data for each jurisdiction varies on when counts were conducted or available studies.

Column Number | Definition

5 Historical Annual Growth
Annual growth rates were computed using historical information from Column 4 and using the following methods:

- Endpoints - Annual compounded percentage rate using on old value and the most current available count data.
- Vehs/Yr - Annual growth based on slope or number of vehicles per year. This rate is based on linear regression analysis.

*Note: Fields noted by **N/A** had insufficient data to compute growth rate.*

6 Volume Group
Segments were grouped based on the following:

- 1 = ADT less than 500 vehicles per day.
- 2 = ADT from 500 to 1,999 vehicles per day.
- 3 = ADT from 2,000 to 4,999 vehicles per day.
- 4 = ADT from 5,000 to 10,000 vehicles per day.
- 5 = ADT greater than 10,000 per day.

7 Existing Traffic Volume
Based on latest available volume data (1999 for CSAH/CR and 2001 for State Hwy). In some cases, data from different years was shown. These numbers are shown in *italics*.

8 2025 Comparison Volumes
Comparison volumes were developed/computed using the following methods:

- Compound - 2025 comparison volume using annual compounded percentage rate
- Slope - 2025 comparison volume using average number of vehicles per year
- 1%/Year - 2025 comparison volume using an annual compounded rate of 1 percent.
- 2.5%/Year - 2025 comparison volume using an annual compounded rate of 2.5 percent.

9 2025 Forecast

- Traffic Volume - 2025 forecast volume
- Percent Growth - Computed annual compounded rate based on growth of existing traffic volume to 2025 forecast volume.
- Growth Factor - Ratio of 2025 forecast volume to existing volume.
- Future Design Type - Same as Existing Design Type (Column 4).
- Future Functional Class – Same as Existing Functional Class (Column 4) except as noted in **bold text**.

Footnotes

A 2000 and 2025 volumes from TH 52 IRC Plan and TH 61 Corridor Management Plan.
B Segment located outside of study area (in Dakota County). Volumes from Mn/DOT Traffic Flow Maps.
D 1996 volume from Mn/DOT Traffic Flow Map.
E Assumed mistype and corrected volume from 7,700 to 770.
F Used collector Access Category for those segments categorized as “local” functional class.

Note: Column numbers are not sequential because some columns are not shown and are used for analysis only.

TABLE A1
TRAFFIC VOLUME SPREADSHEET KEY

Column Number	Definition
G	Factoring in full development of additional 9-holes and accompanying residential development to Zumbrota Golf Course.
H	Anticipated growth area per City of Zumbrota Future Land Use Plan.
I	Anticipated growth area (low-density residential) per City of Cannon Falls Future Land Use Plan.
J	Fully developed commercial area (frontage road to TH 52).
K	Planned 300-800 unit residential development.
L	Potential closure of Spring Garden Road (due to large 300-800 unit residential development) which would disperse traffic onto CSAH 24 and CSAH 25.
M	Anticipated residential development in 5-10 years per City of Pine Island Future Land Use Plan.
N	Anticipated industrial growth area per City of Cannon Falls Land Use Plan.
O	Corrected volume per Ken Bjornstad.
P	Proposed new roadway, acting as southern bypass from CSAH 24 to TH 19 outside City of Cannon Falls.
Q	Based on 500 units in development, using ITE trip generation rate of 9.57 trips per unit per day.
R	Assumed incorrect 1999 count and did not factor this number into 2025 projection.

Column Number	Definition

Note: Column numbers are not sequential because some columns are not shown and are used for analysis only.

TABLE A1
TRAFFIC VOLUME SPREADSHEET KEY

Column Number	Definition

Column Number	Definition

STATE HIGHWAYS - TRAFFIC VOLUME INFORMATION
Goodhue County Transportation Plan

(1) Roadway		(2)Termini		(3) Existing Characteristics			(4) Historical Average Daily Traffic Volumes					(5) Annual Growth		(6) Volume	(7) Recent	Existing	Existing	(8) 2025 Comparison Volumes				(9) 2025 Forecast				Future	Future	Access	Number of	Miles	Frequency	Days=1824	Goodhue Co.	2025 V/C	Futre
		Begpt	Endpt	Func. Class	Posted Speed	Design Type	1992	1995	1998	2000	2001	Endpoints	Vehs/Yr.	Group	Volume	Design Threshold	V/C Ratio	Compound	Slope	1%/yr	2.5%/yr	2025 Volume	Growth %	Growth Factor	Growth Index	Design Type	Func. Class	Category	Crashes		(#/Mile/Yr)	Crash Rate	Average CR Per Design Type	Ratio	Design Threshold
TH	52	65.33000	71.62400	PA	65	R-3	16,700	17,084	23,300	23,500	24,440	4.3%	965	5	24,440	45,000	0.543	73,030	49,530	31,660	46,440	40,000	1.9%	1.6	M	R-3	PA	1A-F	69	1.77	7.79	0.87	.84	0.8889	45,000
TH	52	71.62400	76.23200	PA	65	R-3	13,700	15,447	19,300	19,100	19,864	4.2%	715	5	19,864	45,000	0.441	57,890	38,450	25,730	37,750	35,000	2.2%	1.8	M	R-3	PA	1A-F	105	4.58	4.59	0.63	.84	0.7778	45,000
TH	52	76.23200	77.47900	PA	65	R-3	15,300	17,902	21,200	19,100	24,232	5.2%	795	5	24,232	45,000	0.538	90,530	44,900	31,390	46,050	40,000	1.9%	1.7	M	R-3	PA	1A-F	45	1.21	7.43	0.84	.84	0.8889	45,000
TH	52	77.47900	78.66900	PA	65	R-3	11,100	13,913	16,400	19,100	18,824	6.0%	909	5	18,824	45,000	0.418	85,640	42,460	24,380	35,770	34,000	2.3%	1.8	M	R-3	PA	1A-F	57	1.23	9.28	1.35	.84	0.7556	45,000
TH	52	78.66900	81.32900	PA	65	R-3	11,100	11,867	13,700	19,375	17,368	5.1%	865	5	17,368	45,000	0.386	63,300	39,860	22,500	33,000	33,000	2.5%	1.9	M	R-3	PA	1A-F	59	2.65	4.45	0.70	.84	0.7333	45,000
TH	52[a]	81.32900	86.60400	PA	65	R-3	10,500	12,071	12,900	19,375	16,536	5.2%	844	5	16,536	45,000	0.367	61,780	38,480	21,420	31,420	31,800	2.5%	1.9	L	R-3	PA	1A-F	93	5.26	3.54	0.59	.84	0.7067	45,000
TH	52[a]	86.60400	91.64200	PA	65	R-3	12,400	12,890	15,200	17,350	17,264	3.7%	611	5	17,264	45,000	0.384	44,400	33,150	22,360	32,810	33,000	2.5%	1.9	L	R-3	PA	1A-F	104	5.03	4.14	0.66	.84	0.7333	45,000
TH	52[a]	91.64200	98.44500	PA	65	R-3	14,000	14,322	15,200	18,475	19,136	3.5%	589	5	19,136	45,000	0.425	46,810	34,450	24,790	36,360	35,100	2.4%	1.8	M	R-3	PA	1A-F	239	6.78	7.05	1.01	.84	0.7800	45,000
TH	52[a]	98.44500	99.19800	PA	55	R-3	14,000	12,787	16,200	18,475	19,240	3.6%	673	5	19,240	45,000	0.428	48,260	36,740	24,920	36,560	35,100	2.3%	1.8	M	R-3	PA	1A-F	17	0.79	4.30	0.61	.84	0.7800	45,000
TH	61[a]	73.63400	74.08200	PA	30	U-4	9,400	9,541	8,900	9,100	9,880	0.6%	5	4	9,880	35,000	0.282	11,540	10,010	12,800	18,770	18,000	2.3%	1.8	L	U-4	PA	3C	15	0.47	6.41	1.78	1.96	0.5143	35,000
TH	61[a]	74.08200	76.91700	PA	55	R-3	7,300	6,597	7,200	9,100	7,904	0.9%	161	4	7,904	45,000	0.176	9,980	12,090	10,240	15,020	18,000	3.2%	2.3	M	R-3	PA	3B	33	2.82	2.34	0.81	.84	0.4000	45,000
TH	61[a]	76.91700	80.37000	PA	55	R-3	7,300	6,090	6,100	7,000	6,552	-1.2%	-36	4	6,552	45,000	0.146	4,790	5,620	8,490	12,450	16,000	3.5%	2.4	M	R-3	PA	3A	50	3.45	2.90	1.21	.84	0.3556	45,000
TH	61[a]	80.37000	88.29100	PA	55	R-3	7,900	8,729	6,100	7,100	6,552	-2.1%	-194	4	6,552	45,000	0.146	3,770	1,510	8,490	12,450	16,500	3.6%	2.5	L	R-3	PA	3A	137	7.94	3.45	1.44	.84	0.3667	45,000
TH	61[a]	88.29100	89.72200	PA	55	U-4	7,900	8,729	7,900	7,100	8,112	0.3%	-59	4	8,112	35,000	0.232	8,770	6,580	10,510	15,420	16,500	2.8%	2.0	L	U-4	PA	3B	30	1.38	4.36	1.47	1.96	0.4714	35,000
TH	61[a]	89.72200	89.82800	PA	55	U-4	7,900	8,323	7,900	12,000	8,112	0.3%	207	4	8,112	35,000	0.232	8,770	13,490	10,510	15,420	21,500	3.8%	2.7	L	U-4	PA	3C	5	0.10	10.00	3.38	1.96	0.6143	35,000
TH	61[a]	89.82800	89.89700	PA	55	U-4	8,200	8,323	8,500	12,000	8,424	0.3%	209	4	8,424	35,000	0.241	9,110	13,860	10,910	16,010	21,500	3.7%	2.6	L	U-4	PA	3C	27	0.08	72.00	23.43	1.96	0.6143	35,000
TH	61[a]	89.89700	90.06500	PA	55	U-4	14,800	16,544	13,500	12,000	16,744	1.4%	-97	5	16,744	35,000	0.478	24,040	14,220	21,690	31,820	21,500	1.0%	1.3	L	U-4	PA	3C	73	0.16	90.68	14.85	1.96	0.6143	35,000
TH	61	90.06500	90.28800	PA	55	U-4	21,700	22,939	19,100		23,400	0.8%	42	5	23,400	35,000	0.669	28,790	24,490	30,310	44,470	26,000	0.4%	1.1	L	U-4	PA	3C	60	0.23	51.72	6.06	1.96	0.7429	35,000
TH	61	90.28800	90.47700	PA	55	U-4	19,600	19,691	19,100		23,400	2.0%	360	5	23,400	35,000	0.669	39,160	32,760	30,310	44,470	26,000	0.4%	1.1	L	U-4	PA	3C	45	0.20	46.15	5.41	1.96	0.7429	35,000
TH	61	90.47700	91.61100	PA	55	U-4	19,600	19,691	19,900		20,800	0.7%	127	5	20,800	35,000	0.594	24,940	24,100	26,940	39,530	23,000	0.4%	1.1	L	U-4	PA	3C	99	1.12	17.66	2.33	1.96	0.6571	35,000
TH	61	91.61100	92.56100	PA	55	U-4	22,000	22,025	23,200		24,336	1.1%	273	5	24,336	35,000	0.695	32,340	31,430	31,520	46,250	26,000	0.3%	1.1	L	U-4	PA	2C	105	0.94	22.29	2.51	1.96	0.7429	35,000
TH	61	92.56100	92.97000	PA	55	U-4	17,800	18,777	18,900		20,904	1.8%	315	5	20,904	35,000	0.597	33,240	29,090	27,080	39,720	23,000	0.4%	1.1	L	U-4	PA	2B	41	0.41	20.00	2.62	1.96	0.6571	35,000
TH	61	92.97000	95.35500	PA	55	U-4	13,200	15,225	14,300		18,200	3.6%	469	5	18,200	35,000	0.520	45,650	30,390	23,570	34,590	20,000	0.4%	1.1	L	U-4	PA	2B	58	2.39	4.86	0.73	1.96	0.5714	35,000
TH	61	95.35500	98.35100	PA	55	U-4	9,600	8,627	15,300		17,368	6.8%	999	5	17,368	35,000	0.496	96,070	43,340	22,500	33,000	18,000	0.1%	1.0	L	U-4	PA	2B	90	3.06	5.89	0.93	1.96	0.5143	35,000
TH	61	98.35100	99.70800	PA	55	R-3	9,600	8,627	10,300		12,376	2.9%	333	5	12,376	45,000	0.275	26,020	21,030	16,030	23,520	16,000	1.0%	1.3	L	R-3	PA	2B	35	1.28	5.46	1.21	.84	0.3556	45,000
TH	61	99.70800	103.17800	PA	55	R-3	8,600	10,860	10,300		12,376	4.1%	359	5	12,376	45,000	0.275	35,180	21,710	16,030	23,520	16,000	1.0%	1.3	L	R-3	PA	2B	40	3.46	2.31	0.51	.84	0.3556	45,000
TH	61	103.17800	104.17200	PA	55	R-1A	4,300	4,364	5,700		7,280	6.0%	343	4	7,280	14,000	0.520	33,120	16,200	9,430	13,830	9,000	0.8%	1.2	L	R-1A	PA	2A	1	0.99	0.20	0.08	1.19	0.6429	14,000
TH	63	91.45700	91.52900	PA	30	U-2	9,600	8,286	8,800		8,112	-1.9%	-132	4	8,112	10,000	0.811	4,930	4,680	10,510	15,420	10,000	0.8%	1.2	L	U-2	PA	3C	41	0.16	50.93	17.21	3.75	1.0000	10,000
TH	63	91.52900	91.88100	PA	30	U-2	9,600	9,821	10,400		11,440	2.0%	203	5	11,440	10,000	1.144	19,140	16,720	14,820	21,740	15,000	1.0%	1.3	L	U-2	PA	3C	23	0.30	15.23	3.65	3.75	1.5000	10,000
																														60.22					
TH	19	178.06100	184.61700	MA	55	R-1A	2,450	1,790	2,950		2,444	0.0%	38	3	2,444	14,000	0.175	2,440	3,430	3,170	4,640	3,500	1.4%	1.4	L	R-1A	MA	5A	8	1.48	1.08	1.22	1.19	0.2500	14,000
TH	19	185.63900	189.64700	MA	55	R-1A	1,900	2,199	1,950		2,132	1.3%	15	3	2,132	14,000	0.152	2,980	2,520	2,760	4,050	3,000	1.3%	1.4	L	R-1A	MA	5A	24	3.98	1.21	1.55	1.19	0.2143	14,000
TH	19	189.64700	190.67400	MA	55	R-1A	3,100	3,427	3,050		3,484	1.3%	26	3	3,484	14,000	0.249	4,870	4,160	4,510	6,620	4,500	1.0%	1.3	L	R-1A	MA	5B	10	1.02	1.95	1.54	1.19	0.3214	14,000
TH	19	190.67400	190.84900	MA	30	U-2	5,250	5,115	5,200		5,512	0.5%	29	4	5,512	10,000	0.551	6,280	6,270	7,140	10,470	7,000	0.9%	1.3	L	U-2	MA	5B	7	0.19	7.37	3.66	3.75	0.7000	10,000
TH	19	190.84900	191.41300	MA	30	U-2	5,950	5,626	5,800		6,344	0.7%	45	4	6,344	10,000	0.634	7,610	7,510	8,220	12,060	8,000	0.9%	1.3	L	U-2	MA	5B	23	0.56	8.23	3.56	3.75	0.8000	10,000
TH	19	191.41300	191.77500	MA	30	U-2	3,650	3,683	3,500		4,368	2.0%	66	3	4,368	10,000	0.437	7,310	6,080	5,660	8,300	6,500	1.5%	1.5	L	U-2	MA	5C	11	0.36	6.09	3.82	3.75	0.6500	10,000
TH	19	191.77500	191.84700	MA	30	U-2	3,850	4,348	4,650		4,784	2.4%	103	3	4,784	10,000	0.478	8,860	7,460	6,200	9,090	7,000	1.5%	1.5	L	U-2	MA	5C	0	0.07	0.00	0.00	3.75	0.7000	10,000
TH	19	191.84700	192.13600	MA	30	U-2	5,250	5,422	5,500		6,240	1.9%	102	4	6,240	10,000	0.624	10,180	8,890	8,080	11,860	8,500	1.2%	1.4	L	U-2	MA	5C	7	0.29	4.90	2.15	3.75	0.8500	10,000
TH	19	192.13600	193.62400	MA	30	U-2	3,300	3,376	3,400		3,744	1.4%	45	3	3,744	10,000	0.374	5,370	4,910	4,850	7,110	4,000	0.3%	1.1	L	U-2	MA	5B	16	1.48	2.16	1.58	3.75	0.4000	10,000
TH	19	193.62400	200.70900	MA	55	R-1A	3,300	1,790	1,600		1,872	-6.1%	-149	2	1,872	14,000	0.134	360	-2,000	2,420	3,560	2,800	1.6%	1.5	L	R-1A	MA	5A	38	7.06	1.08	1.58	1.19	0.2000	14,000
TH	19	200.70900	205.12200	MA	55	R-1A	1,750	1,790	1,600		1,872	0.8%	6	2	1,872	14,000	0.134	2,300	2,030	2,420	3,560	2,800	1.6%	1.5	L	R-1A	MA	5A	17	4.41	0.77	1.13	1.19	0.2000	14,000
TH	19	205.12200	207.87700	MA	55	R-1A	2,500	2,813	3,550		4,108	5.7%	185	3	4,108	14,000	0.293	17,360	8,920	5,320	7,810	7,500	2.3%	1.8	M	R-1A	MA	5B	18	2.76	1.30	0.87	1.19	0.5357	14,000
TH	20	0.00000	0.18000	MA	30	U-2	7,250	7,672	6,600		7,384	0.2%	-22	4	7,384	10,000	0.738	7,780	6,810	9,560	14,030	8,000	0.3%	1.1	L	U-2	**Maj Col**	5C	18	0.18	20.00	7.42	3.75	0.8000	10,000
TH	20	0.18000	0.45700	MA	30	U-2	7,142	7,672	6,600		7,384	0.4%	-12	4	7,384	10,000	0.738	8,190	7,070	9,560	14,030	8,000	0.3%	1.1	L	U-2	**Maj Col**	5C	2	0.27	1.47	0.54	3.75	0.8000	10,000
TH	20	0.45700	0.76400	MA	30	U-2	7,575	7,672	6,600		7,384	-0.3%	-55	4	7,384	10,000	0.738	6,830	5,950	9,560	14,030	8,000	0.3%	1.1	L	U-2	**Maj Col**	5C	11	0.31	7.10	2.63	3.75	0.8000	10,000
TH	20	0.76400	1.27000	MA	30	U-2	4,600	4,706	4,750		5,720	2.5%	113	4	5,720	10,000	0.572	10,870	8,660	7,410	10,870	7,000	0.8%	1.2	L	U-2	**Maj Col**	5B	16	0.50	6.45	3.09	3.75	0.7000	10,000
TH	20	1.27000	3.06400	MA	55	R-1A	1,700	2,711	2,750		3,016	6.6%	133	3	3,016	14,000	0.215	15,890	6,470	3,910	5,730	5,000	2.0%	1.7	L	R-1A	**Maj Col**	5A	4	1.79	0.45	0.41	1.19	0.3571	14,000
TH	56	65.52800	74.47100	MA	55	R-1A	1,250	1,432	1,300		1,300	0.4%	1	2	1,300	14,000	0.093	1,440	1,330	1,680	2,470	2,000	1.7%	1.5	L	R-1A	MA	5A	13	5.30	0.49	1.03	1.19	0.1429	14,000
TH	56	74.47100	74.83300	MA	30	U-2	2,100	2,353	1,700		2,340	1.2%	2	3	2,340	10,000	0.234	3,190	2,390	3,030	4,450	3,000	1.0%	1.3	L	U-2	MA	5B	0	0.36	0.00	0.00	3.75	0.3000	10,000
TH	56	74.83300	74.91900	MA	30	U-2	4,050	3,836	4,400		3,692	-1.0%	-17	3	3,692	10,000	0.369	2,840	3,250	4,780	7,020	4,000	0.3%	1.1	L	U-2	MA	5C	2	0.08	5.33	3.96	3.75	0.4000	10,000
TH	56	75.47300	77.85600	MA	30	U-2	1,900	1,944	1,750		1,976	0.4%	1	2	1,976	10,000	0.198	2,190	2,000	2,560	3,750	2,200	0.4%	1.1	L	U-2	MA	5A	11	2.04	1.08	1.49	3.75	0.2200	10,000
TH	56	77.85600	84.36100	MA	55	R-1A	1,400	1,176	1,450		1,664	1.9%	36	2	1,664	14,000	0.119	2,710	2,600	2,160	3,160	2,000	0.7%	1.2	L	R-1A	MA	5A	14	6.48	0.43	0.71	1.19	0.1429	14,000
TH	56	84.36100	89.52400	MA	55	R-1A	1,200	1,330	1,600		1,716	4.1%	61	2	1,716	14,000	0.123	4,880	3,300	2,220	3,260	2,500	1.5%	1.5	L	R-1A	MA	5A	26	5.16	1.01	1.61	1.19	0.1786	14,000
TH	56	89.52400	90.54600	MA	55	R-1A	1,200	1,330	2,700		2,600	9.0%	186	3	2,600	14,000	0.186	24,440	7,440	3,370	4,940	4,000	1.7%	1.5	M	R-1A	MA	5A	1	1.01	0.20	0.21	1.19	0.2857	14,000
TH	56	90.54600	92.62700	MA	55	R-1A	1,200	1,586	1,950		1,924	5.4%	85	2	1,924	14,000	0.137	7,550	4,130	2,490	3,660	3,000	1.7%	1.6	M	R-1A	MA	5A	5	2.07	0.48	0.69	1.19	0.2143	14,000
TH	56	92.62700	93.39500	MA	55	R-1A	1,400	1,573	1,950		1,924	3.6%	65	2	1,924	14,000	0.137	4,830	3,610	2,490	3,660	3,000	1.7%	1.6	L	R-1A	MA	5A	1	0.32	0.62	0.88	1.19	0.2143	14,000
																														49.52					

STATE HIGHWAYS - TRAFFIC VOLUME INFORMATION
Goodhue County Transportation Plan

(1) Roadway		(2) Terminin		(3) Existing Characteristics			(4) Historical ADT					(5) Annual Growth		(6) Recent		Existing	Existing	(7) 2025 Comparison Volumes				(8) 2025 Forecast				Future	Future					Goodhue Co	2025 V/C	Future
		Begpt	Endpt	Functiona Class	Posted Speed	Design Type	1992	1995	1998	2000	2001	Endpoints	Vehs/Yr		Volume	Design Threshold	V/C Ratio	Compound	Slope	1%/yr	2.5%/yr	2025 Traffic Volume	Growth %	Growth Factor	Growth Index	Design Type	Func. Class	Access Category	Number o Crashes	Miles	Frequency	Days=182 Crash Rate	Average CR Per Design Type	Ratio	Design Threshold
TH	57	12.57500	14.71600	Maj Coll	55	R-1A	850	921	950		998	1.8%	16	2	998	14,000	0.071	1,590	1,410	1,290	1,900	1,500	1.6%	1.5	L	R-1A	Maj Coll	6A	6	2.14	0.56	1.54	1.19	0.1071	14,000
TH	57	14.71600	19.72500	Maj Coll	55	R-1A	880	870	990		1,144	3.0%	30	2	1,144	14,000	0.082	2,470	1,920	1,480	2,170	2,000	2.2%	1.7	L	R-1A	Maj Coll	6A	19	4.99	0.76	1.82	1.19	0.1429	14,000
TH	57	19.72500	20.16400	Maj Coll	55	R-1A	2,150	2,199	2,250		2,704	2.6%	57	3	2,704	14,000	0.193	5,270	4,190	3,500	5,140	3,800	1.3%	1.4	L	R-1A	Maj Coll	6A	7	0.44	3.18	3.23	1.19	0.2714	14,000
TH	57	20.16400	20.22400	Maj Coll	30	U-2	3,150	2,557	2,350		3,016	-0.5%	-20	3	3,016	10,000	0.302	2,650	2,500	3,910	5,730	4,000	1.1%	1.3	L	U-2	Maj Coll	6C	3	0.06	9.84	8.94	3.75	0.4000	10,000
TH	57	20.22400	20.72200	Maj Coll	30	U-2	1,550	1,381	1,600		1,924	2.4%	45	2	1,924	10,000	0.192	3,560	3,090	2,490	3,660	3,000	1.7%	1.6	L	U-2	Maj Coll	6C	2	0.49	0.81	1.15	3.75	0.3000	10,000
TH	57	20.72200	24.57800	Maj Coll	55	R-1A	980	1,074	1,150		1,508	4.9%	55	2	1,508	14,000	0.108	5,230	2,940	1,950	2,870	2,500	2.0%	1.7	L	R-1A	Maj Coll	6A	7	3.86	0.36	0.66	1.19	0.1786	14,000
TH	58	0.00000	0.35300	MA	30	U-2	5,700	6,445	7,700		8,632	4.7%	335	4	8,632	10,000	0.863	28,490	17,340	11,180	16,400	13,000	1.6%	1.5	L	U-2	MA	5C	32	0.37	17.53	5.57	3.75	1.3000	10,000
TH	58	0.35300	0.87500	MA	30	U-2	6,300	7,263	7,600		8,008	2.7%	182	4	8,008	10,000	0.801	16,010	12,740	10,370	15,220	12,000	1.6%	1.5	L	U-2	MA	5C	38	0.52	14.62	5.00	3.75	1.2000	10,000
TH	58	0.87500	1.40000	MA	30	U-2	4,400	5,729	6,900		6,968	5.2%	296	4	6,968	10,000	0.697	26,030	14,660	9,030	13,240	10,000	1.4%	1.4	L	U-2	MA	5C	37	0.49	15.20	5.98	3.75	1.0000	10,000
TH	58	1.40000	15.44700	MA	55	R-1A	1,800	2,455	3,100		3,224	6.7%	164	3	3,224	14,000	0.230	17,400	7,490	4,180	6,130	6,500	2.7%	2.0	L	R-1A	MA	5A	60	14.06	0.85	0.73	1.19	0.4643	14,000
TH	58	15.44700	19.21000	MA	55	R-1A	2,200	2,813	3,050		3,692	5.9%	157	3	3,692	14,000	0.264	16,390	7,770	4,780	7,020	7,000	2.5%	1.9	L	R-1A	MA	5A	68	3.75	3.62	2.69	1.19	0.5000	14,000
TH	58	19.21000	21.00800	MA	55	R-1A	5,300	5,064	5,200		6,760	2.7%	151	4	6,760	14,000	0.483	13,510	10,690	8,760	12,850	10,000	1.5%	1.5	L	R-1A	MA	5A	52	1.79	5.81	2.36	1.19	0.7143	14,000
TH	58	21.00800	22.23500	MA	30	U-2	6,100	5,064	5,200		6,760	1.1%	71	4	6,760	10,000	0.676	8,980	8,610	8,760	12,850	10,000	1.5%	1.5	L	U-2	MA	5B	40	1.21	6.62	2.68	3.75	1.0000	10,000
TH	58	22.23500	22.76400	MA	30	U-2	6,100	6,956	7,200		8,008	3.1%	199	4	8,008	10,000	0.801	17,710	13,180	10,370	15,220	12,000	1.6%	1.5	L	U-2	MA	5B	32	0.53	12.19	4.17	3.75	1.2000	10,000
TH	58	22.76400	23.46600	MA	30	U-2	8,600	6,956	7,200		8,008	-0.8%	-51	4	8,008	10,000	0.801	6,500	6,680	10,370	15,220	12,000	1.6%	1.5	L	U-2	MA	5C	76	0.73	20.85	7.14	3.75	1.2000	10,000
TH	60	162.79000	165.06200	MA	55	R-1A	2,150	2,302	2,700		3,068	4.0%	105	3	3,068	14,000	0.219	8,510	5,800	3,970	5,830	5,000	1.9%	1.6	L	R-1A	MA	5A	18	2.27	1.59	1.42	1.19	0.3571	14,000
TH	60	165.06200	165.38700	MA	30	U-2	3,750	3,939	4,300		4,212	1.3%	58	3	4,212	10,000	0.421	5,890	5,720	5,460	8,000	6,000	1.4%	1.4	L	U-2	MA	5C	9	0.33	5.42	3.53	3.75	0.6000	10,000
TH	60	165.38700	165.56300	MA	30	U-2	5,450	6,240	6,000		5,824	0.7%	29	4	5,824	10,000	0.582	6,980	6,580	7,540	11,070	7,500	1.0%	1.3	L	U-2	MA	5C	7	0.18	7.95	3.74	3.75	0.7500	10,000
TH	60	165.56300	166.11700	MA	30	U-2	4,050	3,836	3,550		4,108	0.2%	-4	3	4,108	10,000	0.411	4,330	4,000	5,320	7,810	5,000	0.8%	1.2	L	U-2	MA	5C	8	0.55	2.93	1.96	3.75	0.5000	10,000
TH	60	166.11700	175.52500	MA	55	R-1A	1,300	1,739	1,750		1,820	3.8%	52	2	1,820	14,000	0.130	4,800	3,170	2,360	3,460	3,000	1.9%	1.6	L	R-1A	MA	5A	52	9.38	1.11	1.67	1.19	0.2143	14,000
TH	60	175.52500	176.02100	MA	55	R-1A	1,750	2,199	2,050		2,392	3.5%	59	3	2,392	14,000	0.171	5,850	3,930	3,100	4,550	4,000	2.0%	1.7	L	R-1A	MA	5A	1	0.50	0.40	0.46	1.19	0.2857	14,000
TH	60	176.02100	181.36500	MA	55	R-1A	2,400	3,069	2,850		3,328	3.7%	86	3	3,328	14,000	0.238	8,560	5,560	4,310	6,320	5,000	1.6%	1.5	L	R-1A	MA	5B	23	5.36	0.86	0.71	1.19	0.3571	14,000
TH	60	183.80200	187.81900	MA	55	R-1A	1,200	1,432	1,500		1,612	3.3%	43	2	1,612	14,000	0.115	3,750	2,730	2,090	3,060	2,500	1.7%	1.6	L	R-1A	MA	5A	17	4.01	0.85	1.44	1.19	0.1786	14,000
TH	60	187.81900	188.87000	MA	55	R-1A	1,200	1,279	1,250		1,352	1.3%	14	2	1,352	14,000	0.097	1,890	1,720	1,750	2,570	1,800	1.1%	1.3	L	R-1A	MA	5A	2	1.05	0.38	0.77	1.19	0.1286	14,000
																														47.04					
TH	246	12.23200	18.22100	Maj Coll	55	R-1A	790	409	225		239	-12.4%	-61	1	239	14,000	0.017	10	-1,350	310	450	350	1.5%	1.5	L	R-1A	**Coll**	6A	4	4.99	0.16	1.84	1.19	0.0250	14,000
TH	292	0.00000	0.49300	Maj Coll	30	U-2	N/A	322	425		473	N/A	N/A	1	473	10,000	0.047	N/A	N/A	N/A	N/A	550	0.6%	1.2	L	U-2	Maj Coll	6C	1	0.55	0.36	2.11	3.75	0.0550	10,000
TH	292	0.50000	0.81400	Maj Coll	30	U-2	N/A	322	85		161	-10.9%	-27	1	161	10,000	0.016	10	-540	210	310	250	1.7%	1.6	L	U-2	Maj Coll	6C	0	0.31	0.00	0.00	3.75	0.0250	10,000
TH	316	0.00000	1.99900	PA	55	R-1A	4,500	6,854	5,200	4,700	4,888	0.9%	-47	3	4,888	14,000	0.349	6,170	3,670	6,330	9,290	6,000	0.8%	1.2	L	R-1A	PA	1A	12	1.99	1.20	0.67	1.19	0.4286	14,000
TH	50[b]	US 61	US 52	MA	55	R-1A	2,975	*3900*[c]	4,625	5,250		7.4%	282	N/A	5250	14,000	0.375	33,590	12,580	6,800	9,980	10,000	2.5%	1.9	L	R-1A	MA	5A	N/A	N/A	N/A	N/A	N/A	0.7143	14,000

[a] 2000 and 2025 volumes obtained from TH 52 IRC Plan and TH 61 Corridor Management Plan.

[b] Segment located outside of study area (in Dakota County). Volumes from Mn/DOT Traffic Flow Maps. Columns 5 - 9 based on data from 1992-2000.

[c] 1996 volume from Mn/DOT Traffic Flow Map.

COUNTY STATE AID HIGHWAYS - TRAFFIC VOLUME INFORMATION
Goodhue County Transportation Plan

GIS_ID	(1) Roadway	Segment	(2) TERMINI	(3) Existing Characteristics: Func. Class	Length	Posted Speed	Design Type	(4) Historical Average Daily Traffic Volumes: 1983	1987	1991	1995	1999	(5) Annual Growth: Endpoints	Group	Vehs/Yr	(7) Recent Volume	Existing Design Threshold	Existing V/C Ratio	(8) 2025 Comparison Volumes: Compound	Slope	1%/yr	2.5%/yr	(9) 2025 Forecast: 2025 Volume	2025 V/C Ratio	Future Design Threshold	Growth %	Growth Factor	Index	Future Design Type	Future Func. Class	Access Category	Number of Crashes	Miles	Frequency (#/Mile/Yr)	Days = 1824 Crash Rate	Goodhue Co. Average CR Per Design Type
2001	CSAH 1	10	S COUNTY LINE TO CSAH 11	Maj Coll	1.5	55	R-1	70	70	85	90	110	2.9%	1	3	110	14,000	0.0079	230	190	140	210	190	0.0136	14,000	2.1%	1.7	L	R-1	Maj Coll	6A	3	1.614	0.37	9.26	1.07
2002	CSAH 1	20	CSAH 11 TO TH 60	Maj Coll	4.8	55	R-1	150	165	185	300	450	7.1%	1	18	450	14,000	0.0321	2,680	920	580	860	920	0.0657	14,000	2.8%	2.0	L	R-1	Maj Coll	6A	3	4.827	0.12	0.76	1.07
2003	CSAH 1	30	TH 60 TO CSAH 9	Maj Coll	8	55	R-1	305	325	480	580	880	6.8%	2	35	880	14,000	0.0629	4,870	1,790	1,140	1,670	1,790	0.1279	14,000	2.8%	2.0	L	R-1	Maj Coll	6A		9.295	0.00	0.00	1.07
2169	CSAH 1	35	CSAH 9 to US 52	Maj Coll	1.3	55	R-1	305	325	480	580	880	6.8%	2	35	880	14,000	0.0629	4,870	1,790	1,140	1,670	1,790	0.1279	14,000	2.8%	2.0	L	R-1	Coll	6A					1.07
2168	CSAH 1	36	US 52 to CSAH 25	Maj Coll	2.8	55	R-1	360	325	480	520	650	3.8%	2	19	650	14,000	0.0464	1,710	1,140	840	1,240	1,140	0.0814	14,000	2.2%	1.8	L	R-1	Local	6A					1.07
2004	CSAH 1	40	CSAH 25 to CSAH 8	Maj Coll	3.6	55	R-1	360	325	480	520	650	3.8%	2	19	650	14,000	0.0464	1,710	1,140	840	1,240	1,140	0.0814	14,000	2.2%	1.8	L	R-1	Maj Coll	6A		6.263	0.00	0.00	1.07
2005	CSAH 1	50	CSAH 8 TO 7.3 MI NE	Maj Coll	7.3	55	R-1	275	300	480	1150	1250	9.9%	2	70	1,250	14,000	0.0893	14,550	3,070	1,620	2,380	3,070	0.2193	14,000	3.5%	2.5	L	R-1	Maj Coll	6A	15	7.383	0.41	0.89	1.07
2006	CSAH 1	51	7.3 MI TO 9.2 MI NE CSAH 8	Maj Coll	1.9	55	R-1	910	960	850	1450	1450	3.0%	2	39	1,450	14,000	0.1036	3,130	2,460	1,880	2,760	2,460	0.1757	14,000	2.1%	1.7	L	R-1	Maj Coll	6A	2	1.857	0.22	0.41	1.07
2007	CSAH 1	60	9.2 MI NE CSAH 8 TO S LIM RED WING	Maj Coll	3.7	55	R-1	1050	1000	1200	1450	1650	2.9%	2	41	1,650	14,000	0.1179	3,470	2,720	2,140	3,140	2,720	0.1943	14,000	1.9%	1.6	L	R-1	Maj Coll	6A	18	3.425	1.05	1.75	1.07
2008	CSAH 1[n]	61	S LIM RED WING TO 0.1 MI N	Maj Coll	0.1	30	U-1	1150	2845	4100	5100	5200	9.9%	4	259	5,200	8,000	0.6500	60,530	11,930	6,740	9,880	16,000	2.0000	8,000	4.4%	3.1	M	U-1	Maj Coll	6C	1	0.087	2.30	1.21	1.69
2009	CSAH 1[n]	70	0.1 MI N TO 0.5 MI N OF S LIM RED WING	MA	0.4	30	U-2	1150	2845	4100	5100	5200	9.9%	4	259	5,200	10,000	0.5200	60,530	11,930	6,740	9,880	16,000	1.6000	10,000	4.4%	3.1	M	U-2	MA	5C	4	0.444	1.80	0.95	3.75
2010	CSAH 1[n]	80	0.5 MI NO OF S LIM TO TH 61	MA	1	30	U-3	1150	2845	4100	5100	5200	9.9%	4	259	5,200	24,000	0.2167	60,530	11,930	6,740	9,880	16,000	0.6667	24,000	4.4%	3.1	M	U-3	MA	5C	6	1.045	1.15	0.61	0.6
2011	CSAH 2	10	CSAH 16 TO N LIM BELLECHESTER	Maj Coll	0.5	55	R-1	575	640	790	630	630	0.6%	2	3	630	14,000	0.0450	740	710	820	1,200	710	0.0507	14,000	0.5%	1.1	L	R-1	Maj Coll	6A	0	0.503	0.00	0.00	1.07
2012	CSAH 2	20	N LIM BELLECHESTER TO CSAH 9	Maj Coll	2	55	R-2	390	575	530	540	460	1.0%	1	3	460	8,000	0.0575	600	540	600	870	540	0.0675	8,000	0.6%	1.2	L	R-2	Maj Coll	6A	6	1.880	0.64	3.80	2.09
2013	CSAH 2[p]	30	CSAH 9 TO 0.2 MILES SOUTH OF CSAH 3	Maj Coll	3.4	55	R-1	325	325	380	540	460	2.2%	1	12	460	14,000	0.0329	810	770	600	870	540	0.0386	14,000	0.6%	1.2	L	R-1	Maj Coll	6A	5	3.342	0.30	1.78	1.07
2014	CSAH 2	40	0.2 MI SO OF CSAH 3 TO CSAH 5	Maj Coll	4.5	55	R-1	285	310	425	280	360	1.5%	1	3	360	14,000	0.0257	530	440	470	680	440	0.0314	14,000	0.8%	1.2	L	R-1	Maj Coll	6A	9	4.539	0.40	3.02	1.07
2015	CSAH 2	50	CSAH 5 TO TH 61	Maj Coll	4.8	55	R-1	500	415	500	510	550	0.6%	2	5	550	14,000	0.0393	640	680	710	1,050	680	0.0486	14,000	0.8%	1.2	M	R-1	Maj Coll	6A	10	4.688	0.43	2.13	1.07
2016	CSAH 2	55	W JCT TH 61 TO 0.40 M NE OF W JCT TH 61	Maj Coll	0.4	55	R-2	400	310	585	510	610	2.7%	2	16	610	8,000	0.0763	1,220	1,030	790	1,160	1,030	0.1288	8,000	2.0%	1.7	M	R-2	Maj Coll	6A	0	1.037	0.00	0.00	2.09
2017	CSAH 2	60	0.40 M NE OF W JCT TH 61 TO 0.70 M NE OF W JCT TH 61	Maj Coll	0.3	55	R-1	350	290	585	510	470	1.9%	1	12	470	14,000	0.0336	770	780	610	890	780	0.0557	14,000	2.0%	1.7	M	R-1	Maj Coll	6A	0	0.894	0.00	0.00	1.07
2018	CSAH 2	61	0.70 M NE OF W JCT TH 61 TO 0.1 M E OF CSAH 28	Maj Coll	0.5	55	R-1	350	240	585	510	470	1.9%	1	13	470	14,000	0.0336	770	810	610	890	810	0.0579	14,000	2.1%	1.7	L	R-1	Maj Coll	6A	1	1.213	0.16	0.96	1.07
2019	CSAH 2	62	0.1 M E OF CSAH 28 TO WESTERVELT AVE WAY	Maj Coll	0.3	55	R-1	220	290	585	510	410	4.0%	1	15	410	14,000	0.0293	1,140	800	530	780	800	0.0571	14,000	2.6%	2.0	L	R-1	Maj Coll	6A	0	0.421	0.00	0.00	1.07
2020	CSAH 2	65	WESTERVELT AVE WAY TO S LAKE AVE WAY	Maj Coll	1	30	U-1	400	310	325	410	470	1.0%	1	6	470	8,000	0.0588	610	630	610	890	630	0.0788	8,000	1.1%	1.3	L	U-1	Maj Coll	6C	0	0.380	0.00	0.00	1.69
2021	CSAH 2	68	S LAKE AVE WAY TO VILLA MAIN ENT	Maj Coll	0.4	30	U-1	290	240	420	410	470	3.1%	1	13	470	8,000	0.0588	1,040	810	610	890	810	0.1013	8,000	2.1%	1.7	L	U-1	Maj Coll	6C	0	0.859	0.00	0.00	1.69
2022	CSAH 2	70	0.7 MI N TO 0.4 MI N OF E JCT TH 61	Maj Coll	0.3	30	U-1	400	310	420	510	550	2.0%	2	13	550	8,000	0.0688	920	890	710	1,050	890	0.1113	8,000	1.9%	1.6	L	U-1	Maj Coll	6C	0	0.840	0.00	0.00	1.69
2023	CSAH 2	80	0.4 MI N OF E JCT TH 61 TO TH 61	Maj Coll	0.4	55	R-1	400	670	420	410	610	2.7%	2	4	610	14,000	0.0436	1,220	710	790	1,160	710	0.0507	14,000	0.6%	1.2	L	R-1	Maj Coll	6A	0	0.801	0.00	0.00	1.07
2024	CSAH 3	10	TH 58 TO CSAH 2	Maj Coll	3.8	55	R-1	280	345	330	490	445	2.9%	1	12	445	14,000	0.0318	940	760	580	850	760	0.0543	14,000	2.1%	1.7	L	R-1	Maj Coll	6A	6	3.791	0.32	1.95	1.07
2025	CSAH 4[q]	10	TH 58 to CR 48	Coll	0.9	55	R-2	130	115	110	150	140	0.5%	1	1	140	8,000	0.0175	160	170	180	270	170	0.0213	8,000	0.7%	1.2	M	R-2	Coll	6A	2	3.536	0.11	2.21	2.09
2026	CSAH 4	11	3.6 MII NE OF CSAH 10 TO 2.7 MI S OF CSAH 16 (N END BR25521	Coll	1.5	55	R-2	95	115	130	130	240	6.0%	1	8	240	8,000	0.0300	1,090	450	310	460	450	0.0563	8,000	2.4%	1.9	L	R-2	Coll	6A	2	2.207	0.18	2.07	2.09
2027	CSAH 4	30	2.72 MI SOUTH OF CSAH 16 (NORTH END BR. 25521) TO CSAH 16	Coll	2.7	55	R-2	80	85	95	130	240	7.1%	1	9	240	8,000	0.0300	1,430	470	310	460	470	0.0588	8,000	2.6%	2.0	L	R-2	Coll	6A	0	3.094	0.00	0.00	2.09
2028	CSAH 4	40	CSAH 16 TO TH 58	Coll	6.7	55	R-1	135	140	250	235	240	3.7%	1	8	240	14,000	0.0171	620	450	310	460	450	0.0321	14,000	2.4%	1.9	L	R-1	Coll	6A	1	6.675	0.03	0.34	1.07
2029	CSAH 5	10	TH 58 TO CSAH 2	Maj Coll	4.7	55	R-2	510	610	910	1100	1450	6.7%	2	59	1,450	8,000	0.1813	7,830	2,980	1,880	2,760	2,980	0.3725	8,000	2.8%	2.1	L	R-2	Maj Coll	6A	24	4.736	1.01	1.92	2.09
2030	CSAH 5	20	CSAH 2 TO 2.20 MI SE	Maj Coll	2.2	55	R-1	90	200	170	285	500	11.3%	5	23	500	14,000	0.0357	8,090	1,100	650	950	1,100	0.0786	14,000	3.1%	2.2	L	R-1	Maj Coll	6A	5	2.306	0.43	2.38	1.07
2031	CSAH 5	30	2.20 MI SE TO 4.9 MI SE CSAH 2	Maj Coll	2.7	55	R-1	130	265	160	285	500	8.8%	5	19	500	14,000	0.0357	4,480	990	650	950	990	0.0707	14,000	2.7%	2.0	L	R-1	Maj Coll	6A	3	2.690	0.22	1.22	1.07
2032	CSAH 5	40	4.9 MI SE OF CSAH 2 TO S CO LINE	Maj Coll	2.9	55	R-1	150	265	230	285	500	7.8%	5	18	500	14,000	0.0357	3,520	970	650	950	970	0.0693	14,000	2.6%	1.9	L	R-1	Maj Coll	6A	2	3.083	0.13	0.71	1.07
2033	CSAH 5	45	S CO LINE TO 0.23 MI W OF BR 25513	Maj Coll	0.7	55	R-1	200	265	260	460	670	7.8%	2	28	670	14,000	0.0479	4,720	1,400	870	1,270	1,400	0.1000	14,000	2.9%	2.1	L	R-1	Maj Coll	6A	5	0.502	1.99	8.15	1.07
2034	CSAH 5	50	0.23 MI W OF BR 25513 TO W LIM LAKE CITY (BR 25513)	Maj Coll	0.2	55	R-1	200	435	940	460	670	7.8%	2	24	670	14,000	0.0479	4,720	1,290	870	1,270	1,290	0.0921	14,000	2.6%	1.9	L	R-1	Maj Coll	6A	0	0.346	0.00	0.00	1.07
2035	CSAH 5	60	W LIM LAKE CITY (BR 25513) TO 0.19 MI W OF TH 61	Maj Coll	0.4	30	U-1	750	1035	940	1350	1750	5.4%	2	58	1,750	8,000	0.2188	6,870	3,260	2,270	3,330	3,260	0.4075	8,000	2.4%	1.9	M	U-1	Maj Coll	6C	2	0.347	1.15	1.81	1.69
2036	CSAH 5	70	0.19 MI (OAK ST) TO 0.09 MI W OF TH 61 (HIGH ST)	Maj Coll	0.1	30	U-1	750	895	1100	1350	1750	5.4%	2	61	1,750	8,000	0.2188	6,870	3,340	2,270	3,330	3,340	0.4175	8,000	2.5%	1.9	M	U-1	Maj Coll	6C	0	0.087	0.00	0.00	1.69
2037	CSAH 5	80	0.09 MI W TH 61 TO TH 61	Maj Coll	0.09	30	U-1	750	895	1100	1350	1750	5.4%	2	61	1,750	8,000	0.2188	6,870	3,340	2,270	3,330	3,340	0.4175	8,000	2.5%	1.9	L	U-1	Maj Coll	6C	0	0.070	0.00	0.00	1.69
2038	CSAH 6[bo]	10	TH 58 TO N LIM ZUMBROTA	Maj Coll	0.3	30	U-1	2600	2800	2900	2800	2250	-0.9%	3	-18	2,250	8,000	0.2813	1,780	1,780	2,910	4,280	2,480	0.3100	8,000	0.4%	1.1	L	U-1	Maj Coll	6C	3	0.269	2.23	2.72	1.69
2039	CSAH 6[b]	20	NO LIM ZUMBROTA TO CSAH 9	Maj Coll	7.7	55	R-2	540	810	950	1100	1100	4.5%	2	35	1,100	8,000	0.1375	3,450	2,010	1,420	2,090	3,000	0.3750	8,000	3.9%	2.7	M[b]	R-2	Maj Coll	6A	20	7.522	0.53	1.33	2.09
2040	CSAH 6	30	CSAH 9 TO N LIMS GOODHUE	Maj Coll	0.5	55	R-1	650	745	1000	1300	1600	5.8%	2	61	1,600	14,000	0.1143	6,930	3,190	2,070	3,040	3,190	0.2279	14,000	2.7%	2.0	L	R-1	Maj Coll	6A	2	0.507	0.79	1.35	1.07
2041	CSAH 6	35	N LIMS GOODHUE TO CSAH 1	Maj Coll	5.1	55	R-1	610	730	1300	1300	1600	6.2%	2	64	1,600	14,000	0.1143	7,640	3,260	2,070	3,040	3,260	0.2329	14,000	2.8%	2.0	L	R-1	Maj Coll	6A	6	5.043	0.24	0.41	1.07
2042	CSAH 6	40	CSAH 1 TO 2.6 MI NO OF CSAH 1	Maj Coll	2.6	55	R-2	240	260	1900	1300	850	8.2%	2	57	850	8,000	0.1063	6,600	2,330	1,100	1,620	2,330	0.2913	8,000	4.0%	2.7	L	R-2	Maj Coll	6A	23	2.651	1.74	5.60	2.09
2043	CSAH 6	50	2.6 MI NO OF CSAH 1 TO TH 19	Maj Coll	2	55	R-2	240	260	2500	700	850	8.2%	2	42	850	8,000	0.1063	6,600	1,940	1,100	1,620	1,940	0.2425	8,000	3.2%	2.3	L	R-2	Maj Coll	6A	2	1.950	0.21	0.66	2.09
2044	CSAH 7	10	US 52 TO CSAH 9	Coll	5.6	55	R-2	220	260	275	335	370	3.3%	1	9	370	8,000	0.0463	860	600	480	700	600	0.0750	8,000	1.9%	1.6	L	R-2	Coll	6A	4	5.633	0.14	1.05	2.09
2045	CSAH 7	20	CSAH 9 TO CSAH 1	Coll	4.5	55	R-2	145	170	190	180	345	5.6%	1	10	345	8,000	0.0431	1,420	610	450	660	610	0.0763	8,000	2.2%	1.8	L	R-2	Coll	6A	1	4.462	0.04	0.36	2.09
2046	CSAH 7	30	CSAH 1 TO TH 19	Coll	3.3	55	R-2	140	165	165	250	280	4.4%	1	9	280	8,000	0.0350	860	510	360	530	510	0.0638	8,000	2.3%	1.8	L	R-2	Coll	6A	6	3.256	0.37	3.61	2.09
2047	CSAH 7	40	TH 19 TO WELCH	Maj Coll	5.6	55	R-2	240	385	305	335	330	2.0%	1	3	330	8,000	0.0413	550	410	430	630	410	0.0513	8,000	0.8%	1.2	L	R-2	Maj Coll	6A	24	5.704	0.84	6.99	2.09
2048	CSAH 7	50	WELCH TO 2.6 MI SO OF TH 61	Maj Coll	0.1		U-1	440	580	580	435	570	1.6%	2	3	570	8,000	0.0713	860	650	740	1,080	650	0.0813	8,000	0.5%	1.1	L	U-1	Maj Coll	6C	1	0.305	0.66	3.15	1.69
2049	CSAH 7	60	2.6 MI S TO TH 61	Maj Coll	2.6	55	R-1	240	580	580	435	570	5.6%	2	13	570	14,000	0.0407	2,350	910	740	1,080	910	0.0650	14,000	1.8%	1.6	L	R-1	Maj Coll	6A	11	2.402	0.92	4.40	1.07
2174	CSAH 7		CSAH 7 to TH 60	---	3																									Maj Coll						
2050	CSAH 8	20	CSAH 1 TO US 52	Coll	4.4	55	R-1	105	210	210	225	260	5.8%	1	8	260	14,000	0.0186	1,130	470	340	490	470	0.0336	14,000	2.3%	1.8	L	R-1	Coll	6A	4	4.362	0.18	1.93	1.07
2051	CSAH 8	30	US 52 TO 0.3 MI N	Coll	0.3	55	R-2	400	295	400	510	620	2.8%	2	16	620	8,000	0.0775	1,270	1,040	800	1,180	1,040	0.1300	8,000	2.0%	1.7	L	R-2	Coll	6A	0	0.288	0.00	0.00	2.09
2052	CSAH 8	31	0.3 MI N US 52 TO CSAH 9	Coll	2.4	55	R-1	320	270	365	510	620	4.2%	2	21	620	14,000	0.0443	1,810	1,170	800	1,180	1,170	0.0836	14,000	2.5%	1.9	L	R-1	Coll	6A	4	2.456	0.33	1.44	1.07
2053	CSAH 8	40	CSAH 9 TO CSAH 1	Coll	4.2	55	R-1	320	325	365	400	395	1.3%	1	6	395	14,000	0.0282	550	550	510	750	550	0.0393	14,000	1.3%	1.4	L	R-1	Coll	6A	2	4.219	0.09	0.66	1.07
2054	CSAH 8	50	CSAH 1 TO TH 19	Coll	6.7	55	R-2	255	270	270	280	395	2.8%	1	7	395	8,000	0.0494	810	580	510	750	580	0.0725	8,000	1.5%	1.5	L	R-2	Coll	6A	7	6.650	0.21	1.46	2.09

COUNTY STATE AID HIGHWAYS - TRAFFIC VOLUME INFORMATION
Goodhue County Transportation Plan

				(3) Existing Characteristics				(4) Historical Average Daily Traffic Volumes					(5) Annual Growth			(7) Recent	Existing	Existing	(8) 2025 Comparison Volumes				(9) 2025 Forecast									Goodhue Co.
GIS_ID	(1) Roadway	Segment	(2) TERMINI	Func.	Length	Posted	Design	1983	1987	1991	1995	1999	Endpoints	Group	Vehs/Yr	Volume	Design	V/C	Compound	Slope	1%/yr	2.5%/yr	2025 Volume	2025 V/C Ratio	Future Design Threshold	Growth %	Growth Factor	Growth Index	Future Design Type	Future Func. Class	Access Category	Number of Crashes	Miles	Frequency (#/Mile/Yr)	Days = 1824 Crash Rate	Average CR Per Design Type
				Class		Speed	Type										Threshold	Ratio																
2055	CSAH 9	10	W CO LINE TO 0.09 MI E IN DENNISON	Maj Coll	0.09	30	U-1	1000	1120	1400	1100	1500	2.6%	2	25	1,500	8,000	0.1875	2,920	2,150	1,940	2,850	2,150	0.2688	8,000	1.4%	1.4	L	U-1	Maj Coll	6C	1	0.127	1.57	2.88	1.69
2056	CSAH 9	11	0.09 MI TO 0.23 MI E OF W CO LINE IN DENNISON	Maj Coll	0.14	30	U-1	1300	1345	1400	1100	1500	0.9%	2	4	1,500	8,000	0.1875	1,890	1,600	1,940	2,850	1,600	0.2000	8,000	0.2%	1.1	L	U-1	Maj Coll	6C	3	0.395	1.52	2.78	1.69
2057	CSAH 9	20	0.23 M E W C L TO E L DENNISON	Maj Coll	0.77	30	U-1	1300	1345	1335	1100	1300	0.0%	2	-6	1,300	8,000	0.1625	1,300	1,140	1,680	2,470	1,140	0.1425	8,000	-0.5%	0.9	L	U-1	Maj Coll	6C	0	0.501	0.00	0.00	1.69
2058	CSAH 9	30	E LIMITS DENNISON TO TH 56	Maj Coll	2	55	R-1	900	940	1100	890	1300	2.3%	2	19	1,300	14,000	0.0929	2,350	1,790	1,680	2,470	1,790	0.1279	14,000	1.2%	1.4	L	R-1	Maj Coll	6A	2	1.993	0.20	0.42	1.07
2059	CSAH 9	40	TH 56 TO BR NO 25541 AT SOGN W	Maj Coll	2.4	55	R-1	980	650	775	840	1050	0.4%	2	8	1,050	14,000	0.0750	1,160	1,260	1,360	2,000	1,260	0.0900	14,000	0.7%	1.2	L	R-1	Maj Coll	6A	2	2.484	0.16	0.42	1.07
2060	CSAH 9	45	BR NO 25541 TO CSAH 14 AT SOGN	Maj Coll	0.2	55	R-1	980	650	775	840	1050	0.4%	2	8	1,050	14,000	0.0750	1,160	1,260	1,360	2,000	1,260	0.0900	14,000	0.7%	1.2	L	R-1	Maj Coll	6A	0	0.166	0.00	0.00	1.07
2061	CSAH 9	50	CSAH 14 TO US 52	Maj Coll	4.3	55	R-1	680	555	525	840	1050	2.8%	2	26	1,050	14,000	0.0750	2,150	1,730	1,360	2,000	1,730	0.1236	14,000	1.9%	1.6	L	R-1	Maj Coll	6A	6	4.229	0.28	0.74	1.07
2062	CSAH 9	60	US 52 TO 1.0 MI. W OF CSAH 7	Maj Coll	4.7	55	R-1	420	370	390	550	650	2.8%	2	16	650	14,000	0.0464	1,330	1,070	840	1,240	1,070	0.0764	14,000	1.9%	1.6	L	R-1	Maj Coll	6A	10	4.725	0.42	1.79	1.07
2063	CSAH 9	70	1.0 MI. W OF CSAH 7 TO CSAH 6	Maj Coll	5.5	55	R-1	480	655	690	1300	1400	6.9%	2	62	1,400	14,000	0.1000	7,940	3,010	1,810	2,660	3,010	0.2150	14,000	3.0%	2.2	L	R-1	Maj Coll	6A	14	5.457	0.51	1.00	1.07
2064	CSAH 9	71	CSAH 6 TO 0.35 MI E	Maj Coll	0.35	55	R-1	1050	1300	1300	1300	1400	1.8%	2	18	1,400	14,000	0.1000	2,230	1,870	1,810	2,660	1,870	0.1336	14,000	1.1%	1.3	L	R-1	Maj Coll	6A	1	0.343	0.58	1.14	1.07
2065	CSAH 9	72	0.35 MI E OF CSAH 6 TO E LIM OF GOODHUE	Maj Coll	0.1	55	R-1	1150	1215	1200	2000	1100	-0.3%	2	17	1,100	14,000	0.0786	1,020	1,540	1,420	2,090	1,210	0.0864	14,000	0.4%	1.1	L	R-1	Maj Coll	6A	0	0.156	0.00	0.00	1.07
2066	CSAH 9[o]	80	W LIM GOODHUE TO TH 58	Maj Coll	0.5	30	U-1	1350	1215	1100	1200	1300	-0.2%	2	-3	1,300	8,000	0.1625	1,230	1,220	1,680	2,470	1,870	0.2338	8,000	1.4%	1.4	L	U-1	Maj Coll	6C	3	0.561	1.07	2.26	1.69
2067	CSAH 9	81	TH 58 TO E LIM GOODHUE	Maj Coll	0.5	30	U-1	870	1300	1100	1300	1300	2.5%	2	22	1,300	8,000	0.1625	2,470	1,870	1,680	2,470	1,870	0.2338	8,000	1.4%	1.4	L	U-1	Maj Coll	6C	0	0.452	0.00	0.00	1.69
2068	CSAH 9	73	E LIM TO W LIM OF GOODHUE OUTSIDE	Maj Coll	0.1	55	R-1	1000	1025	1000	1200	1300	1.7%	2	19	1,300	14,000	0.0929	2,020	1,790	1,680	2,470	1,790	0.1279	14,000	1.2%	1.4	L	R-1	Maj Coll	6A	5	2.985	0.34	0.71	1.07
2069	CSAH 9	90	E LIM GOODHUE TO CSAH 2	Maj Coll	5.5	55	R-1	530	840	605	820	610	0.9%	2	4	610	14,000	0.0436	770	710	790	1,160	710	0.0507	14,000	0.6%	1.2	L	R-1	Maj Coll	6A	1	2.459	0.08	0.37	1.07
2070	CSAH 9[p]	100	CSAH 2 TO E CO LINE	Maj Coll	4.9	55	R-1	160	225	355	450	610	8.7%	2	28	610	14,000	0.0436	5,340	1,340	790	1,160	710	0.0507	14,000	0.6%	1.2	L	R-1	Maj Coll	6A	3	4.925	0.12	0.55	1.07
2071	CSAH 9	110	ALONG E CO LINE	Local	0.5	55	R-1	160	275	225	365	470	7.0%	1	18	470	14,000	0.0336	2,730	940	610	890	940	0.0671	14,000	2.7%	2.0	L	R-1	Coll	6A[f]	0	0.501	0.00	0.00	1.07
2072	CSAH 10	10	CSAH 11 TO 2.9 MI N	Maj Coll	2.9	55	R-1	250	325	335	350	350	2.1%	1	6	350	14,000	0.0250	600	510	450	670	510	0.0364	14,000	1.5%	1.5	M[c]	R-1	Maj Coll	6A	0	2.859	0.00	0.00	1.07
2170	CSAH 10	15	2.9 mi N of CSAH 11 to 160th Avenue	Maj Coll	1	55	R-1	500	510	835	930	970	4.2%	2	34	970	14,000	0.0693	2,830	1,850	1,260	1,840	1,850	0.1321	14,000	2.5%	1.9	M	R-1	Maj Coll	6A					1.07
2073	CSAH 10	20	160th Avenue to W Lim Zumbrota	Maj Coll	2.1	55	R-1	500	510	835	930	970	4.2%	2	34	970	14,000	0.0693	2,830	1,850	1,260	1,840	1,850	0.1321	14,000	2.5%	1.9	M[c]	R-1	Coll	6A	4	3.101	0.26	0.73	1.07
2074	CSAH 10[m]	30	W LIM OF ZUMBROTA TO 0.2 MI NE	Maj Coll	0.2	55	R-1	600	620	835	930	970	3.0%	2	26	970	14,000	0.0693	2,090	1,650	1,260	1,840	1,650	0.1179	14,000	2.1%	1.7	M[c]	R-1	Coll	6A	1	0.229	0.87	2.47	1.07
2075	CSAH 10	31	0.2 MI NE OF W LIM TO S LIM ZUMBROTA	Maj Coll	0.35	55	R-1	740	620	835	930	970	1.7%	2	19	970	14,000	0.0693	1,500	1,460	1,260	1,840	1,460	0.1043	14,000	1.6%	1.5	M[c]	R-1	Coll	6A	0	0.339	0.00	0.00	1.07
2076	CSAH 10[a]	40	SO LIM ZUMBROTA TO TH 58	Maj Coll	0.1	55	R-1	740	775	835	930	770	0.2%	2	5	770	14,000	0.0550	810	900	1,000	1,460	900	0.0643	14,000	0.6%	1.2	M[c]	R-1	Coll	6A	0	0.133	0.00	0.00	1.07
2077	CSAH 10	50	TH 58 (MAIN ST) TO 0.3 MI E	Maj Coll	0.3	30	U-1	1500	1650	1700	1750	1800	1.1%	2	18	1,800	8,000	0.2250	2,390	2,270	2,330	3,420	2,270	0.2838	8,000	0.9%	1.3	L	U-1	Maj Coll	6C	1	0.285	0.70	1.07	1.69
2078	CSAH 10	60	0.3 MI TO 0.51 MI E OF TH 58	Maj Coll	0.21	30	U-1	700	775	1100	1600	1800	6.1%	2	76	1,800	8,000	0.2250	8,390	3,780	2,330	3,420	3,780	0.4725	8,000	2.9%	2.1	L	U-1	Maj Coll	6C	1	0.223	0.90	1.37	1.69
2079	CSAH 10	61	0.51 M E OF TH 58 TO E LIMS ZUMBROTA	Maj Coll	0.39	30	U-1	700	735	860	900	1150	3.2%	2	27	1,150	8,000	0.1438	2,610	1,850	1,490	2,190	2,000	0.2500	8,000	2.2%	1.7	M[c]	U-1	Maj Coll	6C	2	0.363	1.10	2.63	1.69
2080	CSAH 10	70	E LIM ZUMBROTA TO CSAH 4	Maj Coll	0.5	55	R-1	500	775	860	900	1150	5.3%	2	36	1,150	14,000	0.0821	4,400	2,090	1,490	2,190	2,090	0.1493	14,000	2.3%	1.8	M[c]	R-1	Maj Coll	6A	1	0.512	0.39	0.93	1.07
2081	CSAH 10	80	CSAH 4 TO 2.8 MI W OF E CO LINE	Maj Coll	2.2	55	R-1	385	545	540	600	820	4.8%	2	23	820	14,000	0.0586	2,770	1,420	1,060	1,560	1,420	0.1014	14,000	2.1%	1.7	L	R-1	Maj Coll	6A	6	2.141	0.56	1.87	1.07
2082	CSAH 10	90	2.8 MI W TO E CO LINE	Maj Coll	2.8	55	R-1	280	365	420	440	660	5.5%	2	21	660	14,000	0.0471	2,660	1,210	850	1,250	1,210	0.0864	14,000	2.4%	1.8	L	R-1	Maj Coll	6A	3	2.808	0.21	0.89	1.07
2083	CSAH 11	10	CSAH 13 TO TH 56	Local	2.4	55	R-1	140	155	170	110	80	-3.4%	1	-4	80	14,000	0.0057	30	-20	100	150	100	0.0071	14,000	0.9%	1.3	L	R-1	Coll	6A[f]	1	2.445	0.08	2.80	1.07
2084	CSAH 11	20	TH 56 TO CSAH 1	Maj Coll	3.8	55	R-2	230	335	325	290	330	2.3%	1	4	330	8,000	0.0413	600	430	430	630	430	0.0538	8,000	1.0%	1.3	L	R-2	Maj Coll	6A	7	3.790	0.37	3.07	2.09
2085	CSAH 11	23	CSAH 1 TO TH 57	Maj Coll	3.8	55	R-2	250	250	310	290	550	5.1%	2	16	550	8,000	0.0688	2,000	970	710	1,050	970	0.1213	8,000	2.2%	1.8	L	R-2	Maj Coll	6A	1	3.842	0.05	0.26	2.09
2086	CSAH 11	30	TH 57 TO CSAH 27	Maj Coll	1	55	R-1	510	465	515	350	710	2.1%	2	7	710	14,000	0.0507	1,220	890	920	1,350	890	0.0636	14,000	0.9%	1.3	L	R-1	Maj Coll	6A	2	1.000	0.40	1.54	1.07
2087	CSAH 11	40	CSAH 27 TO N LIM PINE ISLAND	Maj Coll	6	55	R-1	420	475	525	660	700	3.2%	2	19	700	14,000	0.0500	1,590	1,190	910	1,330	1,190	0.0850	14,000	2.1%	1.7	L	R-1	Maj Coll	6A	4	5.936	0.13	0.53	1.07
2088	CSAH 11[m]	50	NO LIM PINE ISLAND TO 3RD AVE NW	Maj Coll	0.45	30	U-1	620	560	600	1200	710	0.9%	2	21	710	8,000	0.0888	900	1,260	920	1,350	1,260	0.1575	8,000	2.2%	1.8	M	U-1	Maj Coll	6C	0	0.444	0.00	0.00	1.69
2089	CSAH 11[m]	60	3RD AVE NW TO MAIN	Maj Coll	0.28	30	U-1	620	410	600	1200	780	1.4%	2	28	780	8,000	0.0975	1,120	1,510	1,010	1,480	1,510	0.1888	8,000	2.6%	1.9	L	U-1	Maj Coll	6C	0	0.248	0.00	0.00	1.69
2090	CSAH 11	70	ON MAIN TO 3RD ST NW	Maj Coll	0.3	30	U-1	3500	3600	3800	1200	4900	2.1%	3	10	4,900	8,000	0.6125	8,410	5,160	6,350	9,310	5,160	0.6450	8,000	0.2%	1.1	L	U-1	Maj Coll	6C	8	0.311	5.14	2.88	1.69
2091	CSAH 11	80	ON 3RD ST NW - MAIN ST TO OLD C&GW RR	Maj Coll	0.3	30	U-1	3100	3100	2900	4600	4650	2.6%	3	115	4,650	8,000	0.5813	9,060	7,640	6,020	8,840	7,640	0.9550	8,000	1.9%	1.6	L	U-1	Maj Coll	6C	7	0.133	10.53	6.21	1.69
2092	CSAH 11[m]	90	OLD C & GW RR TO 0.24 MI E	Maj Coll	0.24	30	U-1	800	950	1000	5300	4650	11.6%	3	301	4,650	8,000	0.5813	80,670	12,480	6,020	8,840	7,640	0.9550	8,000	1.9%	1.6	M	U-1	Maj Coll	6C	0	0.242	0.00	0.00	1.69
2093	CSAH 11[j]	100	0.24 MI E OLD C GW RR TO US 52	Maj Coll	0.31	30	U-1	3000	3300	3300	4600	4650	2.8%	3	115	4,650	8,000	0.5813	9,530	7,640	6,020	8,840	7,640	0.9550	8,000	1.9%	1.6	M	U-1	Maj Coll	6C	0	0.351	0.00	0.00	1.69
2094	CSAH 11[n]	110	US 52 TO E LIM PINE ISLAND	Maj Coll	0.29	30	U-1	550	600	785	1080	1000	3.8%	2	35	1,000	8,000	0.1250	2,640	1,910	1,300	1,900	1,910	0.2388	8,000	2.5%	1.9	M	U-1	Maj Coll	6C	0	0.374	0.00	0.00	1.69
2095	CSAH 11[n]	120	E LIM PINE ISLAND TO E CO LINE	Maj Coll	7.2	55	R-2	295	300	325	430	425	2.3%	1	10	425	8,000	0.0531	770	690	550	810	690	0.0863	8,000	1.9%	1.6	L	R-2	Coll	6A	5	7.149	0.14	0.90	2.09
2096	CSAH 11	130	ALONG EAST COUNTY LINE FROM 0.3 MI S OF TH 60 TO 1.30 MI S	Maj Coll	1.3	55	R-1	480	690	800	875	920	4.1%	2	27	920	14,000	0.0657	2,620	1,620	1,190	1,750	1,620	0.1157	14,000	2.2%	1.8	L	R-1	Coll	6A	12	1.177	2.04	6.08	1.07
2097	CSAH 12	10	W CO LINE TO CO RD 59	Maj Coll	1	55	R-1	390	540	540	640	640	3.1%	2	15	640	14,000	0.0457	1,420	1,030	830	1,220	1,030	0.0736	14,000	1.8%	1.6	L	R-1	Maj Coll	6A	2	1.000	0.40	1.71	1.07
2098	CSAH 12	11	CO RD 59 TO S LIM KENYON	Maj Coll	2.6	55	R-2	535	560	670	640	640	1.1%	2	7	640	8,000	0.0800	850	820	830	1,220	820	0.1025	8,000	1.0%	1.3	L	R-2	Maj Coll	6A	3	2.770	0.22	0.93	2.09
2099	CSAH 12[o]	20	SO LIM KENYON TO 6TH ST	Maj Coll	0.34	30	U-1	810	645	700	640	640	-1.5%	2	-9	640	8,000	0.0800	430	410	830	1,220	900	0.1125	8,000	1.3%	1.4	L	U-1	Maj Coll	6C	0	0.355	0.00	0.00	1.69
2100	CSAH 12	30	SIXTH ST TO TH 60 AT 2ND KENYON	Maj Coll	0.34	30	U-1	1050	925	1000	1050	1050	0.0%	2	3	1,050	8,000	0.1313	1,050	1,130	1,360	2,000	1,130	0.1413	8,000	0.3%	1.1	L	U-1	Maj Coll	6C	0	0.349	0.00	0.00	1.69
2101	CSAH 12	40	TH 56 TO 0.09 MI E	Coll	0.09	30	U-1	1450	810	1200	1350	1650	0.8%	2	24	1,650	8,000	0.2063	2,030	2,270	2,140	3,140	2,270	0.2838	8,000	1.2%	1.4	L	U-1	Coll	6C	1	0.072	2.78	4.61	1.69
2102	CSAH 12	41	0.09 MI E TO 0.22 MI E OF TH 56	Coll	0.13	30	U-1	950	890	805	950	1100	0.9%	2	9	1,100	8,000	0.1375	1,390	1,330	1,420	2,090	1,330	0.1663	8,000	0.7%	1.2	L	U-1	Coll	6C	1	0.149	1.34	3.35	1.69
2103	CSAH 12	42	0.22 MI E TO 0.43 MI E OF TH 56	Coll	0.21	30	U-1	450	890	805	950	1650	8.5%	2	62	1,650	8,000	0.2063	13,760	3,260	2,140	3,140	3,260	0.4075	8,000	2.7%	2.0	L	U-1	Coll	6C	0	0.291	0.00	0.00	1.69
2104	CSAH 12	50	0.43 M SE TH 56 TO E LIM KENYON	Coll	0.28	30	U-1	380	380	420	465	650	3.4%	2	16	650	8,000	0.0813	1,550	1,070	840	1,240	1,070	0.1338	8,000	1.9%	1.6	L	U-1	Coll	6C	0	0.192	0.00	0.00	1.69
2105	CSAH 12	60	E LIM KENYON TO CSAH 1	Coll	4.9	55	R-1	300	360	400	465	650	5.0%	2	20	650	14,000	0.0464	2,310	1,170	840	1,240	1,170	0.0836	14,000	2.3%	1.8	L	R-1	Coll	6A	7	4.890	0.29	1.21	1.07
2106	CSAH 12	61	CSAH 1 TO TH 57	Coll	4	55	R-1	260	285	320	360	350	1.9%	1	6	350	14,000	0.0250	570	510	450	670	510	0.0364	14,000	1.5%	1.5	L	R-1	Coll	6A	3	3.999	0.15	1.18	1.07
2107	CSAH 12	70	TH 57 TO CSAH 10	Coll	3.3	55	R-1	190	215	250	265	255	1.9%	1	5	255	14,000	0.0182	420	390	330	480	390	0.0279	14,000	1.6%	1.5	L	R-1	Coll	6A	1	3.333	0.06	0.65	1.07
2108	CSAH 13	10	SO CO LINE TO SO LIMS KENYON	Coll	4.8	55	R-1	295	340	345	385	420	2.2%	1	7	420	14,000	0.0300	740	600	540	800	600	0.0429	14,000	1.4%	1.4	L	R-1	Coll	6A	2	4.635	0.09	0.56	1.07
2109	CSAH 13[o]	20	S LIMS KENYON TO TH 56	Coll	0.38	30	U-1	900	875	895	930	740	-1.2%	2	-7	740	8,000	0.0925	540	560	960	1,410	800	0.1000	8,000	0.3%	1.1	L	U-1	Coll	6C	0	0.372	0.00	0.00	1.69

COUNTY STATE AID HIGHWAYS - TRAFFIC VOLUME INFORMATION
Goodhue County Transportation Plan

				(3) Existing Characteristics				(4) Historical Average Daily Traffic Volumes					(5) Annual Growth			(7) Recent	Existing	Existing	(8) 2025 Comparison Volumes				(9) 2025 Forecast									Goodhue Co.
GIS_ID	(1) Roadway	Segment	(2) TERMINI	Func.	Length	Posted	Design	1983	1987	1991	1995	1999	Endpoints	Group	Vehs/Yr	Volume	Design	V/C	Compound	Slope	1%/yr	2.5%/yr	2025 Volume	2025 V/C Ratio	Future Design Threshold	Growth %	Growth Factor	Growth Index	Future Design Type	Future Func. Class	Access Category	Number of Crashes	Miles	Frequency (#/Mile/Yr)	Days = 1824 Crash Rate	Average CR Per Design Type
				Class		Speed	Type										Threshold	Ratio																
2110	CSAH 14	10	CSAH 30 TO CO RD 44 E	Coll	3.3	55	R-2	200	130	130	200	220	0.6%	1	3	220	8,000	0.0275	260	300	280	420	300	0.0375	8,000	1.2%	1.4	L	R-2	Coll	6A	5	3.199	0.31	3.90	2.09
2111	CSAH 14	20	CO RD 44 E TO CSAH 9	Coll	4.9	55	R-1	230	200	220	200	430	4.0%	1	10	430	14,000	0.0307	1,190	690	560	820	690	0.0493	14,000	1.8%	1.6	L	R-1	Coll	6A	4	4.723	0.17	1.08	1.07
2112	CSAH 14	30	CSAH 9 TO US 52	Maj Coll	4.2	55	R-1	590	600	660	390	810	2.0%	2	6	810	14,000	0.0579	1,360	970	1,050	1,540	970	0.0693	14,000	0.7%	1.2	L	R-1	Maj Coll	6A	11	4.050	0.54	1.84	1.07
2113	CSAH 16	10	TH 58 TO W LIM BELLECHESTER	Maj Coll	4.8	55	R-1	680	840	775	720	870	1.6%	2	7	870	14,000	0.0621	1,310	1,050	1,130	1,650	1,050	0.0750	14,000	0.7%	1.2	L	R-1	Maj Coll	6A	10	4.821	0.41	1.31	1.07
2114	CSAH 16	20	W LIM BELLECHESTER TO 0.1 MI E CSAH 2	Maj Coll	0.35	30	U-1	640	660	815	720	870	1.9%	2	13	870	8,000	0.1088	1,420	1,210	1,130	1,650	1,210	0.1513	8,000	1.3%	1.4	L	U-1	Maj Coll	6C	1	0.349	0.57	1.81	1.69
2115	CSAH 16	30	0.1 MI E CSAH 2 TO E LIM BELLECHESTER	Maj Coll	0.15	30	U-1	590	600	610	540	680	0.9%	2	3	680	8,000	0.0850	860	760	880	1,290	760	0.0950	8,000	0.4%	1.1	L	U-1	Maj Coll	6C	0	0.148	0.00	0.00	1.69
2116	CSAH 16	40	E LIM BELLECHESTER TO 0.8 MI E	Maj Coll	0.8	55	R-1	390	660	480	540	680	3.5%	2	12	680	14,000	0.0486	1,660	990	880	1,290	990	0.0707	14,000	1.5%	1.5	L	R-1	Maj Coll	6A	1	1.746	0.11	0.46	1.07
2117	CSAH 17	10	W LIM CANNON FALLS TO 8TH ST	Coll	0.37	30	U-1	1000	1060	1450	1400	1500	2.6%	2	34	1,500	8,000	0.1875	2,920	2,380	1,940	2,850	2,380	0.2975	8,000	1.8%	1.6	M	U-1	Coll	6C	1	0.382	0.52	0.96	1.69
2118	CSAH 17	20	8TH ST TO TH 20	Coll	0.12	30	U-1	930	1060	1400	1400	2000	4.9%	5	62	2,000	8,000	0.2500	6,940	3,610	2,590	3,800	3,610	0.4513	8,000	2.3%	1.8	M	U-1	Coll	6C[f]	1	0.111	1.80	2.47	1.69
2119	CSAH 17	30	TH 20 TO 0.86 MILE EAST	Coll	0.86	30	U-1	1350	1610	2000	2400	2400	3.7%	3	72	2,400	8,000	0.3000	6,170	4,270	3,110	4,560	4,270	0.5338	8,000	2.2%	1.8	M	U-1	Coll	6C	5	0.723	1.38	1.58	1.69
2120	CSAH 17[d]	35	0.86 MI E OF TH 20 TO E LIMS CANNON FALLS	Coll	0.43	30	U-1	930	720	370	440	460	-4.3%	1	-31	460	8,000	0.0575	150	-350	600	870	900	0.1125	8,000	2.6%	2.0	M	U-1	Coll	6C	0	0.635	0.00	0.00	1.69
2121	CSAH 17	40	E LIM CANNON FALLS TO 1.0 MI S OF N CO LINE	Coll	2.5	55	R-1	290	255	295	440	460	2.9%	1	13	460	14,000	0.0329	970	800	600	870	800	0.0571	14,000	2.2%	1.7	L	R-1	Coll	6A	7	2.314	0.61	3.61	1.07
2122	CSAH 17	50	1.0 MI S TO N COUNTY LINE	Coll	1	55	R-2	95	90	105	100	100	0.3%	1	1	100	8,000	0.0125	110	130	130	190	130	0.0163	8,000	1.0%	1.3	L	R-2	Coll	6A	2	0.774	0.52	14.17	2.09
2123	CSAH 18[o r]	10	TH 61 TO CSAH 19 ON W LIM OF RED WING -EGGLESTON	MA	1.88	55	R-1	1000	1435	3000	4500	5300	11.0%	4	292	5,300	14,000	0.3786	79,920	12,890	6,860	10,070	9,000	0.6429	14,000	2.1%	1.7	L	R-1	MA	6A	28	1.903	2.94	1.52	1.07
2124	CSAH 18[r]	20	CSAH 19 TO STURGEON LAKE ROAD	MA	0.86	55	R-1	315	610	3000	5000	5600	19.7%	4	374	5,600	14,000	0.4000	600,670	15,320	7,250	10,640	10,000	0.7143	14,000	2.3%	1.8	L	R-1	MA	6A	10	0.827	2.42	1.18	1.07
2125	CSAH 18[r]	30	STURGEON LAKE ROAD TO NW LIM RED WING	MA	0.13	55	R-1	450	610	3000	5000	5600	17.1%	4	367	5,600	14,000	0.4000	339,370	15,140	7,250	10,640	10,000	0.7143	14,000	2.3%	1.8	L	R-1	MA	6A	7	0.211	6.64	3.25	1.07
2126	CSAH 18[r]	40	NW LIM RED WING TO 0.50 MI E OF W CO LINE	MA	4.2	55	R-1	430	615	1550	5000	5300	17.0%	4	353	5,300	14,000	0.3786	314,130	14,480	6,860	10,070	9,000	0.6429	14,000	2.1%	1.7	L	R-1	MA	6A	9	3.608	0.50	0.26	1.07
2127	CSAH 18[r]	50	0.50 MI E TO W CO LINE	MA	0.5	55	R-1	330	645	1600	5000	5000	18.5%	5	342	5,000	14,000	0.3571	412,710	13,890	6,480	9,500	8,500	0.6071	14,000	2.1%	1.7	L	R-1	MA	6A	2	0.762	0.52	0.29	1.07
2128	CSAH 19	10	TH 61 TO CSAH 18 AT W LIM RED WING	Local	2.5	55	R-2	1000	1220	3000	450	310	-7.1%	1	-54	310	8,000	0.0388	50	-1,090	400	590	550	0.0688	8,000	2.2%	1.8	L	R-2	**Coll**	6A[f]	16	2.544	1.26	11.12	2.09
2129	CSAH 21	10	TH 58 TO 0.30 MI E	Coll	0.3	30	U-1	165	220	160	215	330	4.4%	1	8	330	8,000	0.0413	1,010	540	430	630	540	0.0675	8,000	1.9%	1.6	L	U-1	**Maj Coll**	6C	5	0.298	3.36	27.88	1.69
2130	CSAH 21	20	0.30 M E OF TH 58 TO CULVERT NO 25J18	Coll	2.2	55	R-1	165	220	160	215	330	4.4%	1	8	330	14,000	0.0236	1,010	540	430	630	540	0.0386	14,000	1.9%	1.6	L	R-1	**Maj Coll**	6A	5	2.110	0.47	3.94	1.07
2131	CSAH 21	30	CULVERT NO 25J18 TO 0.10 MI S OF TH 61	Coll	2.1	55	R-1	165	220	160	135	200	1.2%	1	0	200	14,000	0.0143	270	200	260	380	200	0.0143	14,000	0.0%	1.0	L	R-1	**Maj Coll**	6A	4	2.109	0.38	5.20	1.07
2132	CSAH 21	40	0.10 MI S OF TH 61 TO TH 61	Coll	0.1	55	R-1	165	220	160	135	200	1.2%	1	0	200	14,000	0.0143	270	200	260	380	200	0.0143	14,000	0.0%	1.0	L	R-1	**Maj Coll**	6A	0	0.096	0.00	0.00	1.07
2133	CSAH 22	10	CSAH 17 TO TH 20	Coll	0.47	30	U-1	1000	1085	1400	1600	1250	1.4%	2	25	1,250	8,000	0.1563	1,790	1,900	1,620	2,380	1,900	0.2375	8,000	1.6%	1.5	L	U-1	Coll	6C	0	0.526	0.00	0.00	1.69
2134	CSAH 23	10	TH 56 TO CSAH 1	Local	4.8	55	R-2	100	95	125	135	140	2.1%	1	3	140	8,000	0.0175	240	220	180	270	220	0.0275	8,000	1.8%	1.6	L	R-2	Local	6A[f]	1	4.804	0.04	0.82	2.09
2135	CSAH 24	10	CSAH 9 TO 4.7 MILES NO	Coll	4.7	55	R-2	130	250	280	395	300	5.4%	1	12	300	8,000	0.0375	1,180	610	390	570	610	0.0763	8,000	2.8%	2.0	L	R-2	Coll	6A	10	4.786	0.42	3.82	2.09
2136	CSAH 24	11	4.7 MI N OF CSAH 9 TO LITTLE CANNON RIVER	Coll	1.3	55	R-2	290	280	330	275	365	1.4%	1	4	365	8,000	0.0456	520	470	470	690	470	0.0588	8,000	1.0%	1.3	L	R-2	Coll	6A	5	1.194	0.84	6.29	2.09
2137	CSAH 24	20	NORTH CANNON RIVER TO US 52	Coll	2.3	55	R-2	800	935	1325	1550	1500	4.0%	2	50	1,500	8,000	0.1875	4,160	2,800	1,940	2,850	2,800	0.3500	8,000	2.4%	1.9	M	R-2	Maj Coll	6A	16	2.399	1.33	2.44	2.09
2138	CSAH 24[l f]	25	NEW US 52 TO OLD US 52 (CANNONBALL FRONTAGE)	Coll	0.13	30	U-1	3350	3115	3600	3900	3950	1.0%	3	50	3,950	8,000	0.4938	5,120	5,250	5,120	7,510	12,000	1.5000	8,000	4.4%	3.0	L[e]	U-1	Maj Coll	6A	17	0.156	21.79	15.13	1.69
2139	CSAH 24[l f]	30	NEW US 52 TO CSAH 25	Maj Coll	0.93	30	U-1	4300	4845	4650	6400	6000	2.1%	4	124	6,000	8,000	0.7500	10,300	9,220	7,770	11,400	14,000	1.7500	8,000	3.3%	2.3	H[f]	U-1	Maj Coll	6A	12	0.572	4.20	1.92	1.69
2140	CSAH 24[g l f]	40	CSAH 25 TO 0.11 MI N	Maj Coll	0.11	30	U-1	5500	5545	6350	8100	8300	2.6%	4	204	8,300	8,000	1.0375	16,180	13,600	10,750	15,770	16,000	2.0000	8,000	2.6%	1.9	M	U-1	Maj Coll	6C	1	0.108	1.85	0.61	1.69
2141	CSAH 24[l f]	50	0.11 MI N OF CSAH 25 TO PARK ST	Maj Coll	0.32	30	U-1	6150	5600	7300	8100	8300	1.9%	4	170	8,300	8,000	1.0375	13,540	12,720	10,750	15,770	16,000	2.0000	8,000	2.6%	1.9	L	U-1	Maj Coll	6C	9	0.309	5.83	1.92	1.69
2142	CSAH 24[l f]	60	PARK ST TO TH 19	Maj Coll	0.07	30	U-1	5900	5540	7600	8100	8300	2.2%	4	184	8,300	8,000	1.0375	14,620	13,080	10,750	15,770	16,000	2.0000	8,000	2.6%	1.9	L	U-1	Maj Coll	6C	3	0.070	8.57	2.83	1.69
	A[k]		CSAH 24 TO TH 19																																
2143	CSAH 25[l f]	10	CSAH 24 TO SO LIM CANNON FALLS	Coll	0.55	30	U-1	600	760	1000	770	730	1.2%	2	7	730	8,000	0.0913	1,000	910	950	1,390	7,000	0.8750	8,000	9.1%	9.6	H	U-1	Coll	6C	1	0.588	0.34	1.28	1.69
2144	CSAH 25	20	SO LIM CANNON FALLS TO CSAH 1	Coll	7	55	R-1	520	465	610	770	730	2.1%	2	18	730	14,000	0.0521	1,250	1,200	950	1,390	1,200	0.0857	14,000	1.9%	1.6	L	R-1	Coll	6A	14	6.961	0.40	1.51	1.07
2145	CSAH 27[h]	10	CSAH 11 TO S COUNTY LINE	Coll	2.3	55	R-1	85	65	85	105	110	1.6%	1	2	110	14,000	0.0079	170	160	140	210	160	0.0114	14,000	1.5%	1.5	L	R-1	Coll	6A	6	2.315	0.52	12.92	1.07
2146	CSAH 27[h]	20	SO CO LINE TO W LIM PINE ISLAND	Coll	2.7	55	R-2	160	200	265	290	380	5.6%	1	13	380	8,000	0.0475	1,570	720	490	720	720	0.0900	8,000	2.5%	1.9	L	R-2	Coll	6A	3	2.682	0.22	1.61	2.09
2147	CSAH 27[h]	30	W LIM PINE ISLAND TO 0.51 MI E	Coll	0.51	30	U-1	500	550	600	600	640	1.6%	2	8	640	8,000	0.0800	970	850	830	1,220	1,000	0.1250	8,000	1.7%	1.6	M[h]	U-1	Coll	6C	1	0.506	0.40	1.69	1.69
2148	CSAH 27[h]	40	0.51 MI E TO 0.93 MI E OF W LIM PINE ISLAND	Coll	0.42	30	U-1	650	700	400	910	1000	2.7%	2	23	1,000	8,000	0.1250	2,000	1,600	1,300	1,900	1,600	0.2000	8,000	1.8%	1.6	M	U-1	Coll	6C	2	0.438	0.91	2.50	1.69
2149	CSAH 27[h]	50	0.93 MI E OF W LIM PINE ISLAND TO CSAH 62	Coll	0.4	30	U-1	650	700	785	1200	1350	4.7%	2	48	1,350	8,000	0.1688	4,460	2,600	1,750	2,570	2,600	0.3250	8,000	2.6%	1.9	M	U-1	Coll	6C	0	0.376	0.00	0.00	1.69
2150	CSAH 28	20	CSAH 2 TO END OF PARK ROAD	Local	1.8	55	R-2	70	70	130	450	530	13.5%	2	33	530	8,000	0.0663	14,260	1,390	690	1,010	1,390	0.1738	8,000	3.8%	2.6	L	R-2	Local	6A[f]	0	1.847	0.00	0.00	2.09
2151	CSAH 29[i]	10	W COUNTY LINE TO TH 20	Maj Coll	0.7	30	U-1	1300	1670	1300	2000	2300	3.6%	3	58	2,300	8,000	0.2875	5,770	3,810	2,980	4,370	3,810	0.4763	8,000	2.0%	1.7	M[i]	U-1	Maj Coll	6C	0	0.623	0.00	0.00	1.69
2152	CSAH 30	5	TH 56 TO CSAH 1	Coll	5.8	55	R-2	180	210	250	330	520	6.9%	2	20	520	8,000	0.0650	2,950	1,040	670	990	1,040	0.1300	8,000	2.7%	2.0	L	R-2	Coll	6A	7	5.783	0.24	1.28	2.09
2153	CSAH 30	10	CSAH 1 TO W LIM WANNAMINGO	Coll	3.8	55	R-2	150	145	335	330	270	3.7%	1	11	270	8,000	0.0338	690	560	350	510	560	0.0700	8,000	2.8%	2.1	L	R-2	Coll	6A	4	3.757	0.21	2.16	2.09
2154	CSAH 30	20	W LIM WANNAMINGO TO TH 57	Coll	0.5	30	U-1	215	175	405	540	470	5.0%	1	22	470	8,000	0.0588	1,670	1,040	610	890	1,040	0.1300	8,000	3.1%	2.2	L	U-1	Coll	6C	0	0.484	0.00	0.00	1.69
2155	CSAH 31	10	TH 61 TO CSAH 18	Local	1	55	R-1	140	140	400	425	405	6.9%	1	20	405	14,000	0.0289	2,300	930	520	770	930	0.0664	14,000	3.2%	2.3	L	R-1	**Coll**	6A[f]	1	1.025	0.20	1.32	1.07

COUNTY STATE AID HIGHWAYS - TRAFFIC VOLUME INFORMATION
Goodhue County Transportation Plan

GIS_ID	(1) Roadway	Segment	(2) TERMINI	(3) Existing Characteristics				(4) Historical Average Daily Traffic Volumes					(5) Annual Growth			(7) Recent	Existing	Existing	(8) 2025 Comparison Volumes				(9) 2025 Forecast									Goodhue Co.
				Func.	Length	Posted	Design	1983	1987	1991	1995	1999	Endpoints	Group	Vehs/Yr	Volume	Design	V/C	Compound	Slope	1%/yr	2.5%/yr	2025	2025 V/C	Future Design	Growth			Future	Future	Access	Number of	Miles	Frequency	Days = 1824	Average CR
				Class		Speed	Type										Threshold	Ratio					Volume	Ratio	Threshold	%	Factor	Index	Design	Func. Class	Category	Crashes		(#/Mile/Yr)	Crash	Per Design
																													Type					Rate	Type
2156	CSAH 62[h]	10	ALONG S LIM PINE ISLAND	Maj Coll	0.09	30	U-1	1800	1870	1900	2600	2800	2.8%	3	68	2,800	8,000	0.3500	5,740	4,570	3,630	5,320	4,570	0.5713	8,000	1.9%	1.6	L	U-1	Maj Coll	6C	1	0.238	0.84	0.82	1.69
2157	CSAH 62[h]	20	S LIM PINE ISLAND TO CSAH 11	Maj Coll	0.77	30	U-1	4500	4700	4900	7100	7400	3.2%	4	205	7,400	8,000	0.9250	16,780	12,730	9,580	14,060	12,730	1.5913	8,000	2.1%	1.7	L	U-1	Maj Coll	6C	31	0.664	9.34	3.46	1.69
2158	CSAH 63[o]	10	TH 57 ON E 3RD ST TO & ON 3RD AVE TO & ON E 2ND ST TO TH 57	Local	0.33	30	U-1	630	490	625	650	500	-1.4%	5	-3	500	8,000	0.0625	350	420	650	950	600	0.0750	8,000	0.7%	1.2	L	U-1	Local	6C[f]	1	0.355	0.56	3.09	1.69
2159	CSAH 64	10	ON FIFTH ST FROM CSAH 9 TO 2ND AVE	Local	0.16	30	U-1	440	430	335	480	500	0.8%	5	4	500	8,000	0.0625	620	600	650	950	600	0.0750	8,000	0.7%	1.2	L	U-1	Local	6C[f]	0	0.161	0.00	0.00	1.69
2160	CSAH 64	20	ON 2ND AVE FROM 5TH ST TO 2ND ST	Local	0.2	30	U-1	570	740	580	580	650	0.8%	2	0	650	8,000	0.0813	800	650	840	1,240	650	0.0813	8,000	0.0%	1.0	L	U-1	Local	6C[f]	0	0.203	0.00	0.00	1.69
2161	CSAH 64	30	ALONG 2ND AVE, BROADWAY, 3RD AVE & 2ND ST BACK TO START	Local	0.25	30	U-1	680	825	850	680	820	1.2%	2	3	820	8,000	0.1025	1,120	900	1,060	1,560	900	0.1125	8,000	0.4%	1.1	L	U-1	Local	6C[f]	0	0.275	0.00	0.00	1.69
2162	CSAH 64	40	3RD AVE FROM BROADWAY TO TH 58	Local	0.09	30	U-1	1500	1075	1300	1500	1550	0.2%	2	13	1,550	8,000	0.1938	1,630	1,890	2,010	2,950	1,890	0.2363	8,000	0.8%	1.2	L	U-1	Local	6C[f]	1	0.091	2.20	3.89	1.69
2163	CSAH 66	10	CSAH 1 TO 0.37 MI E	Maj Coll	0.37	55	R-1	2400	2545	3350	5600	6100	6.0%	4	261	6,100	14,000	0.4357	27,750	12,890	7,900	11,590	12,890	0.9207	14,000	2.9%	2.1	M	R-1	MA	6A	6	0.406	2.96	1.33	1.07
2164	CSAH 66	20	0.37 M E OF CSAH 1 TO TWIN BLUFF ROAD IN RED WING	Maj Coll	1.05	55	R-1	2800	3000	3350	5600	6100	5.0%	4	230	6,100	14,000	0.4357	21,690	12,080	7,900	11,590	12,080	0.8629	14,000	2.7%	2.0	M	R-1	MA	6A	9	1.066	1.69	0.76	1.07
2165	CSAH 67	10	MONROE ST FROM GOODHUE WABASHA CO LINE TO TH 61	Local	0.08	30	U-1	600	870	1000	1350	980	3.1%	2	31	980	8,000	0.1225	2,170	1,790	1,270	1,860	1,790	0.2238	8,000	2.3%	1.8	L	U-1	Local	6C[f]	0	0.098	0.00	0.00	1.69
2171	CSAH 68	30	165th Avenue to US 52	---	0.6																									Maj Coll					
2166	CSAH 68	10	US 52 TO W 1ST ST	Local	0.86	30	U-1	2000	1300	2300	2750	2750	2.0%	3	74	2,750	8,000	0.3438	4,600	4,670	3,560	5,230	4,670	0.5838	8,000	2.1%	1.7	L	U-1	Maj Coll	6C[f]	1	0.867	0.23	0.23	1.69
2167	CSAH 68	20	JEFFERSON AVE TO TH 58	Local	0.55	30	U-1	2900	3000	3200	3850	3350	0.9%	3	44	3,350	8,000	0.4188	4,230	4,490	4,340	6,370	4,490	0.5613	8,000	1.1%	1.3	L	U-1	Maj Coll	6C[f]	2	0.483	0.83	0.68	1.69
												1421.71																							
2172	Cannon Falls Perimeter Rd		CSAH 25 to TH 19	---	2																									Maj Coll					
2173	Red Wing S. Blvd		Mill Road to CSAH 66	---	3																									MA					
2175	CSAH 1- new		CSAH 25 to CSAH 9		2.1																									Maj Coll					
2176	500th St. (CSAH 11)		500th St. to US 52 (future interchange)	---	2.5																									Maj Coll					

a Assumed mistype and corrected volume from 7,700 to 770.

b Factoring in full development of additional 9-holes and accompanying residential development to Zumbrota Golf Course.

c Anticipated growth area per City of Zumbrota Future Land Use Plan.

d Anticipated growth area (low-density residential development) per City of Cannon Falls Future Land Use Plan.

e Fully developed commercial area (frontage road to US 52).

f Planned 300-800 home residential development.

g Potential closure of Spring Garden Road (due to large 300-800 home development) would disperse traffic on this roadway to CSAH 24 and CSAH 25.

h Anticipated residential development in 5-10 years per City of Pine Island Future Land Use Plan.

i Anticipated Industrial growth per City of Cannon Falls Land Use Plan.

j Corrected 1999 ADT per Ken Bjornstad.

k Proposed new roadway, acting as southern bypass for City of Cannon Falls.

l Based on full development of 800 units using ITE trip generation rate of 9.57 trips per unit per day. EAW for proposed development shows addition of 7,500 cars per day.

m Corrected 1999 volume per Ken Bjornstad.

n 2002 counts on these segments show ADT of 9,600. Therefore, projections are greater than slope to relfect this growth. County unsure of accuracy of 1999 count, it seems low.

o Slope shows negative growth; therefore, the 2025 projection does not use slope.

p Due to the wide range of historical volumes, slope is not an accurate indicator of future volume and is not used for the 2025 projection.

q This will be paved in 2004.

r 2025 forecast volumes were adjusted down from the slope per Ken Bjornstad

COUNTY ROADS - TRAFFIC VOLUME INFORMATION
Goodhue County Transportation Plan

GIS			(2) Termini	(3) Existing Characteristics				(4) Historical Average Daily Traffic Volumes					(5) Annual Growth			(7) Recent	Existing	Existing	(8) 2025 Comparison Volumes				(9) 2025 Forecast								Access	Number of	Miles	Frequency	Days = 1824	Average CR
				Func.	Length	Posted	Design	1983	1987	1991	1995	1999	Endpoints	Group	Vehs/Yr	Volume	Design	V/C	Compound	Slope	1%/yr	2.5%/yr	2025	Future Design	2025 V/C	Growth			Future	Future	Category	Crashes		(#/Mile/Yr)	Crash	Per Design
ID	(1) Roadway			Class		Speed	Type										Threshold	Ratio					Volume	Threshold	Ratio	%	Factor	Index	Design Type	Func. Class					Rate	Type
3001	CR	40	0.5 Miles S of #17 to CSAH 17	Local	0.5	55	R-1	75	40	45	60	50	-2.5%	1	-1	50	14,000	0.0036	30	20	60	100	60	14,000	0.0043	0.7%	1.1	L	R-1	Local	6A	0	0.507	0.00	0.00	1.07
3002	CR	41	CSAH 7 to TH19	Local	3.7	55	R-2	70	90	98	130	145	4.7%	1	5	145	8,000	0.0181	480	280	190	280	280	8,000	0.0350	2.6%	1.9	L	R-2	Local	6A	1	3.676	0.05	1.03	2.09
3003	CR	42	CSAH 4 to E.C.L	Local	2.7	55	R-2	45	50	60	60	45	0.0%	1	0	45	8,000	0.0056	50	50	60	90	50	8,000	0.0063	0.4%	1.1	L	R-2	Local	6A	0	2.740	0.00	0.00	2.09
3004	CR	43	CSAH 11 to CSAH 10	Local	4.1	55	R-2	70	130	120	110	140	4.4%	1	3	140	8,000	0.0175	430	220	180	270	220	8,000	0.0275	1.8%	1.6	L	R-2	Local	6A	1	4.079	0.05	0.96	2.09
3005	CR	44	TH 56 to CSAH 14	Local	2.8	55	R-2	40	40	50	65	65	3.1%	1	2	65	8,000	0.0081	140	120	80	120	120	8,000	0.0150	2.4%	1.8	L	R-2	Local	6A	1	2.642	0.08	3.19	2.09
3006	CR	44[a]	CSAH 14 to CSAH 1	Local	3.2	55	R-2	80	115	45	55	75	-0.4%	1	-2	75	8,000	0.0094	70	20	100	140	80	8,000	0.0100	0.2%	1.1	L	R-2	Local	6A	0	3.052	0.00	0.00	2.09
3036	CR	45[c]	CSAH 9 to 365th St.	Coll	0.5	55	R-2	80	140	90	120	125	2.8%	1	2	125	8,000	0.0156	260	180	160	240	180	8,000	0.0225	1.4%	1.4	L	R-2	**Local**	6A					
3007	CR	45[c]	365th to CSAH 2	Coll	4.1	55	R-2	80	140	90	120	125	2.8%	1	2	125	8,000	0.0156	260	180	160	240	180	8,000	0.0225	1.4%	1.4	L	R-2	**Local**	6A	4	4.611	0.17	3.80	2.09
3008	CR	45[c]	CSAH 2 to CSAH 5	Local	3.0	55	R-2	80	140	65	120	120	2.6%	1	2	120	8,000	0.0150	230	170	160	230	170	8,000	0.0213	1.3%	1.4	L	R-2	Local	6A	6	3.153	0.38	8.69	2.09
3009	CR	46	CSAH 18 to US 61	Local	2.8	55	R-2	60	140	75	85	135	5.2%	1	2	135	8,000	0.0169	500	190	170	260	190	8,000	0.0238	1.3%	1.4	L	R-2	Local	6A	7	2.783	0.50	10.21	2.09
3010	CR	47[a]	2.0 Miles S of #9 to #9	Local	2.0	55	R-2	85	190	140	125	95	0.7%	1	-1	95	8,000	0.0119	110	70	120	180	100	8,000	0.0125	0.2%	1.1	L	R-2	Local	6A	0	2.004	0.00	0.00	2.09
3011	CR	47[e]	# 9 to 1.8 Miles N	Local	1.8	55	R-1	90	120	90	95	105	1.0%	1	0	105	14,000	0.0075	140	110	140	200	110	14,000	0.0079	0.2%	1.0	L	R-1	Local	6A	0	1.746	0.00	0.00	1.07
3012	CR	48[d]	CSAH 4 to CSAH 10	Local	3.6	55	R-2	140	185	250	235	300	4.9%	1	9	300	8,000	0.0375	1,040	530	390	570	530	8,000	0.0663	2.2%	1.8	L	R-2	Local	6A	0	1.001	0.00	0.00	2.09
3013	CR	49[b]	W.C.L to TH 56	Coll	3.0	55	R-2	55	70	90	170	105	4.1%	1	5	105	8,000	0.0131	300	240	140	200	240	8,000	0.0300	3.2%	2.3	L	R-2	Coll	6A	0	3.005	0.00	0.00	2.09
3014	CR	49[a]	TH 56 to CSAH 14	Coll	2.3	55	R-2	65	55	50	40	35	-3.8%	1	-2	35	8,000	0.0044	10	-20	50	70	40	8,000	0.0050	0.5%	1.1	L	R-2	Coll	6A	0	2.382	0.00	0.00	2.09
3015	CR	49[a]	CSAH 14 to 0.8 Miles E	Coll	0.8	55	R-2	45	40	40	40	20	-4.9%	1	-1	20	8,000	0.0025	10	-10	30	40	20	8,000	0.0025	0.0%	1.1	L	R-2	Coll	6A	0	1.156	0.00	0.00	2.09
3016	CR	50[a]	TH 57 to US 52	Coll	1.7	55	R-1	210	225	240	265	180	-1.0%	1	-1	180	14,000	0.0129	140	150	230	340	200	14,000	0.0143	0.4%	1.1	L	R-1	**Local**	6A	0	1.710	0.00	0.00	1.07
3017	CR	50	US 52 to CSAH 7	Coll	3.3	55	R-2	125	165	175	200	150	1.1%	1	2	150	8,000	0.0188	200	200	190	290	200	8,000	0.0250	1.1%	1.3	L	R-2	**Local**	6A	1	3.365	0.06	1.09	2.09
3018	CR	51	CSAH 1 to TH 19	Coll	2.8	55	R-1	90	200	180	315	320	8.3%	1	14	320	14,000	0.0229	2,540	680	410	610	680	14,000	0.0486	2.9%	2.1	L	R-1	**Local**	6A	1	2.760	0.07	0.62	1.07
3019	CR	52	CSAH 6 to TH 58	Local	1.8	55	R-2	75	80	105	110	95	1.5%	1	2	95	8,000	0.0119	140	150	120	180	150	8,000	0.0188	1.8%	1.6	L	R-2	Local	6A	1	1.798	0.11	3.21	2.09
3020	CR	53	CSAH 1 to Spring Creek	Coll	4.9	55	R-2	110	115	120	115	130	1.0%	1	1	130	8,000	0.0163	170	160	170	250	160	8,000	0.0200	0.8%	1.2	L	R-2	Coll	6A	3	2.832	0.21	4.47	2.09
3021	CR	53	Spring Creek to US 61	Coll	2.0	55	R-1	800	1700	845	1550	1700	4.8%	2	41	1,700	14,000	0.1214	5,750	2,770	2,200	3,230	2,770	14,000	0.1979	1.9%	1.6	M	R-1	**Urban Coll**	6A	9	3.976	0.45	0.73	1.07
3022	CR	54[a]	CSAH 1 to TH 57	Local	3.5	55	R-2	110	145	85	95	105	-0.3%	1	-2	105	8,000	0.0131	100	50	140	200	120	8,000	0.0150	0.5%	1.1	L	R-2	Local	6A	2	3.504	0.11	2.98	2.09
3023	CR	55[a]	Csah 11 to TH 60	Local	3.0	55	R-2	115	80	75	65	80	-2.2%	1	-2	80	8,000	0.0100	40	30	100	150	90	8,000	0.0113	0.5%	1.1	L	R-2	Local	6A	3	3.031	0.20	6.78	2.09
3024	CR	55[a]	TH 60 to 1 Mile N	Local	1.0	55	R-2	80	50	65	65	50	-2.9%	1	-1	50	8,000	0.0063	20	20	60	100	60	8,000	0.0075	0.7%	1.1	L	R-2	Local	6A	0	1.012	0.00	0.00	2.09
3025	CR	56[a]	CSAH 9 to CSAH 1	Local	2.5	55	R-1	200	160	135	175	170	-1.0%	1	-1	170	14,000	0.0121	130	140	220	320	190	14,000	0.0136	0.4%	1.1	L	R-1	Local	6A	2	2.495	0.16	2.59	1.07
3026	CR	57[a]	CSAH 24 to CSAH 14	Local	2.7	55	R-2	85	95	90	70	70	-1.2%	1	-1	70	8,000	0.0088	50	40	90	130	80	8,000	0.0100	0.5%	1.1	L	R-2	Local	6A	4	2.773	0.29	11.30	2.09
3027	CR	58[a]	CSAH 8 to TH 19	Coll	2.0	55	R-2	80	80	80	65	65	-1.3%	1	-1	65	8,000	0.0081	50	40	80	120	70	8,000	0.0088	0.3%	1.1	L	R-2	**Local**	6A	1	1.990	0.10	4.24	2.09
3028	CR	59	Rice Co.Line to CSAH 12	Coll	3.5	55	R-2	80	60	60	125	85	0.4%	1	2	85	8,000	0.0106	90	140	110	160	140	8,000	0.0175	1.9%	1.6	L	R-2	**Local**	6A	0	3.993	0.00	0.00	2.09
3029	180th	Ave.	CSAH 11 to CSAH 10 new	Local	3.3	55	R-2										8,000						8,000						R-2	**Coll**	6A					2.09
3030	195th	Ave.	US 52 to CSAH 10	Local	5.4	55	R-2										8,000						8,000						R-2	**Coll**	6A					2.09
3031	Pioneer	Road[f]	CSAH 66 to CSAH 21	Local	1.5							4700-6000																		**MA**						
3033	180th	Ave.	New CSAH 10 to CSAH 10	---	1.0																									**Maj Coll**						
3034	Mill	Road[f]	CR 53 to TH 19	Local	1.2							475-600																		**MA**						
3035	Sherwood	Trail	Sherwood Trail to US 52	---	1.5																									**Local**						
3037	Territorial	Road[f]	CSAH 2 to CSAH 5	Local	5.0							160-1000																		**Coll**						

a If slope shows decreasing volumes, 2025 projection is based on a 1.1 growth factor
b CR 49 1 mile east of TH 56 has been paved (church road).
c CR 45 from CSAH 9 to 365th St. has been paved (church road).
d This will be paved in 2004.
e This section of CR 47 is paved due to location of church.
f Recent counts were provided by the city; historic counts are unavailable

APPENDIX B

State Highway Methodology of Traffic Forecasting

State Highway Forecasting Methodology

The methodology used by SRF Consulting Group to forecast 2025 volumes involves a number of steps, calculations and close review of historical trends. This methodology is reflected on the State Highway Traffic Volume Information spreadsheet prepared as part of the Goodhue County Transportation Plan development process. The following paragraphs explain in detail how the 2025 volumes for state highways in Goodhue County were derived.

The first step in forecasting volumes was to gather all available studies and/or recent traffic counts done in the area. For Goodhue County, the projected volumes in the TH 52 IRC Study and the TH 61 Corridor Management Plan were referenced.

The next step was to obtain historical average daily traffic volumes from the local agencies. Since the discussion is on forecasting for state highways, Mn/DOT was contacted. Mn/DOT provided historical ADTs for 1992, 1995, 1998 and 2001. Additionally, volumes for the year 2000 were obtained for selected segments of TH 52 and TH 61 from the studies mentioned above. This data is presented in column 4 on the spreadsheet.

Column 5 of the state highways spreadsheet presents annualized growth. Annual growth rates were computed using two methods: the annual endpoint and vehicles per year methods. The endpoints method generates a compounded annual growth rate by calculating the volume change between the earliest historical value and the most current available count data and then compounding that over the historical period.

The vehicles per year method is based on linear regression analysis and accounts for all historical ADT values. The technique also provides annual growth based on the change in number of vehicles per year; however, annual growth is based on the slope of the best fit line drawn through all annual volumes, and not just the endpoint changes.

Column 6 of the spreadsheet is the volume group. This column groups segments based on recent volumes according to the following:

- 1 = ADT less than 500 vehicles per day.
- 2 = ADT from 500 to 1,999 vehicles per day.
- 3 = ADT from 2,000 to 4,999 vehicles per day.
- 4 = ADT from 5,000 to 10,000 vehicles per day.
- 5 = ADT greater than 10,000 vehicles per day.

This grouping allowed segments with higher ADTs to be treated differently than segments with lower ADTs when dealing with growth rates. For example, a four percent growth rate (factor of 2.19) is more significant to a segment with a recent volume of 20,000 (volume group of 5 equates to an additional 23,800 vehicles per day in twenty years) than to a segment with a recent volume of 450 (volume group of 1 which equates to an additional 535 vehicles per day in twenty years). Therefore, the volume group helps establish a basis for forecasting growth based on the current ADT of the segment.

Column 8 of the state highway spreadsheet shows the 2025 comparison volumes based on four projection techniques: compound, slope, 1 percent per year and 2.5 percent per year. The compound method uses the annual growth rate generated by the endpoints method described above and then compounds that rate over the twenty-year forecast. This method relies on the trend established from two numbers (the oldest historical ADT and the most recent ADT) and as a result is subject to variation anomalies. Therefore, the compound method tends to be a more aggressive forecast method.

The slope method uses the average number of vehicles per year. As noted earlier, this forecast is based on a linear regression analysis, and is considered more conservative. This is the method most widely used for rural forecasting.

The last two comparison methods provided are 1 percent and 2.5 percent per year annual growth techniques which are merely straight mathematical calculations applied to the most recent volume. These two comparisons can be useful and provide benchmarks for comparison to the selected 2025 volume's growth rate and growth factor.

The information in the 2025 Comparison Volumes Column was reviewed to predict a 2025 volume. The 2025 volume was selected using professional judgment, supplemented by local knowledge and the assigned growth index. The growth index is a subjective classification of growth based on local knowledge of plans, or anticipated growth in the area. The classification is broken down into low, medium and high growth areas. This index helps justify or flag areas where higher growth rates may be appropriate based on future development, versus the historic growth rate which may not have experienced the level of growth that is planned. The specific analysis process used to select the 2025 volume for each roadway segment included the following steps:

- Review data for consistency and look for trends in each segment across the historical ADTs.

- Review data for consistency and look for trends between segments of a road using the historical ADTs.

- Refer to the growth index to identify medium or high growth flags that may indicate a change in trend.

- Based on the volume group (magnitude of most recent year), review the compound and slope forecast of each segment; remembering that the compound method is usually more aggressive and can be influenced by anomalies and the slope method is a more conservative method that considers all historical data.

- Compare compound and slope forecasts to the 1 percent and 2.5 percent per year columns. Note; one percent is a fairly low growth rate (rural areas); 2.5 percent is a moderate growth rate.

- Consider other information available in the spreadsheet such as the endpoints annual growth rate, facility design threshold, speed, functional classification, etc., which may limit the possibility for growth.

- Consider any other information gained through local knowledge (i.e., a large retailer planning to relocate near the segment, plans for new roadway to active as reliever, etc.); in such cases ITE generation rates can be calculated based on the proposed use's acreage or square footage of development, and these rates can be added to the historical ADTs.

SRF's method of forecasting future volumes involves consideration of many different factors. It is not a straight computer application. Instead, by reviewing the four comparison volume choices as calculated, considering growth factors or other issues of importance, as well as evaluating historical ADT trends and trends between roadway segments, a credible 2025 volume can be established.

In most instances, the volumes provided in a previously adopted study should be used. However, after review of the TH 52 IRC Study, it was apparent to SRF staff that the 2025 volumes in the Goodhue County area seemed low. Based on historical trends and growth rates, and with an understanding of the growth that is occurring and is anticipated to occur along the corridor, SRF felt that the 2025 volumes shown for the Goodhue County area in the TH 52 IRC Study should be higher. Using the methodology outlined above, SRF projected new 2025 volumes for the TH 52 corridor in Goodhue County as part of the county's transportation plan development. The Mn/DOT representative on the plan's Steering Committee reviewed the information during the planning process, and after internal discussion within the District, has indicated a willingness to amend the TH 52 IRC Study to accept this more recent forecast data.

APPENDIX C

Issues Identified by Public Process

Issues from Focus Group Meetings
Goodhue County Transportation Plan

GOAL 1: SAFETY

- Concerned with county's hurry to fix the intersection of CSAH 6 and CSAH 1
  - Intersection is skewed
  - Many accidents
  - Heavy traffic on CSAH 6 crossing CSAH 1 to get to casino
- Last curve on CSAH 6 N before intersection with CSAH 1 is dangerous
- Skewed intersection at CSAH 9 and TH 58 – many accidents
- Tanker rolled over this week at intersection of TH 20 and CSAH 29
- Concern over intersection at TH 63/TH 61 in Red Wing
- Concern over CR 53 intersection with TH 61
- Bad intersection in town = TH 61/TH 58/TH 63, congestion, truck traffic
- Curve right before intersection of CSAH 18 and TH 61 is dangerous
- Need for traffic signal at either of the following intersections TH 58/CSAH 68 or TH 58 and 4th Street in Zumbrota – neither intersection has met warrants; however, Mn/DOT has not done traffic counts when school is in session or on Mondays when there are auctions at the Livestock market
- Improvements needed and planned for at northern TH 52 access point in Pine Island- confusing at-grade intersection
- Problem intersections noted:
  - CSAH 9 and CSAH 6
  - TH 52 and TH 60 (winter maintenance issues – bridges ices up quickly)
  - TH 52 and CSAH 9
  - TH 52 and CSAH 1
  - TH 52 and TH 57
  - TH 52 and CSAH 8
  - CSAH 14 and CSAH 9 (at Sogn)
- Higher percentage of out-of-town people in crashes at these problem intersections
- At CSAH 9 and TH 52, northbound crashes four times higher than southbound crashes – SB TH 52 grade issue has been identified.
- Highest number of crashes on TH 52 are at the traffic signals near Cannon Falls
- Commercial vehicles are overly represented in crashes on TH 52
- TH 52 between Zumbrota and Rochester has two times the expected fatality rate (see TH 52 Mn/DOT Safety Audit)
- TH 52 near Hader and Pine Island seem to ice up very fast and cause many accidents
- Dangerous intersection at CSAH 1 and CSAH 9, west of TH 52
- Concern about drainage ponds located by curve on CSAH 12 that were added after improvements were made to road – suggestion to put chevrons at this location
- CSAH 2 intersection with TH 61 is offset (off one block)
- Guard rails needed along CSAH 2 towards Lake City
- Safety issue CSAH 1/TH 52 – trucks avoid

Issues from Focus Group Meetings
Goodhue County Transportation Plan

- Many bicyclists use CSAH 1 – very dangerous
- Concern on CSAH 1/TH 52 intersection and planned improvements

GOAL 2: EFFICIENT MOVEMENT

- Cannon Falls School District concerned over future closure of Spring Garden Road with new development of 300-800 homes in the area. This closure would funnel all traffic to CSAH 24 and CSAH 25 in order to get to TH 52 and lead to many backups and delays
- Possible southeastern perimeter road in Cannon Falls from CSAH 24 to TH 19, near the school
- TH 61 corridor has conflicting interest groups which make road bad: tourists, leaf-watchers and professionals drivers trying to do their job
- Need for good connection between CSAH 1 and CSAH 9
- Concern over effectiveness of southern boulevard or alternative route for TH 61 through Red Wing – 2/3 traffic on TH 61 is local so alternative route would only alleviate 10 percent of traffic on highway
- Part of potential future southern boulevard is in place- from TH 58 to TH 61 on CSAH 21 (Flower Valley Road)
- City of Red Wing is considering a southern boulevard instead of a total reroute of TH 61 – will create a route parallel to TH 61
- Possible CSAH 53 realignment (see City of Red Wing map)
- Need for improvements on CSAH 68 (Old Highway 52) in Zumbrota- has curbs, no storm sewer
- City of Cannon Falls has endorsed the future interchange west of Super America (at CSAH 24)
- Major intersection problem at TH 58/TH 61/TH 63
- Truck trailers are getting longer which means standard equipment can no longer get around intersections like the one at TH 58/TH 61/TH 63
- Need for improvement on TH 61 through the City of Red Wing
- Need for roadways identified as connectors in Zumbrota Sub-Area Study to be planned for in county plan and not forgotten
- Importance of other major connections to Minneapolis/St. Paul Airport – cargo will not be able to handle increased growth without more connections
- Minneola Township concerned over future interchange at CSAH 7 and TH 52, due to the loss of direct access to the Shades of Sherwood Campground
- Sturgeon Lake Road is single outlet at railroad tracks for Treasure Island Casino
- Improvements needed on TH 57 and TH 60
- Concern over county roads that lead nowhere (i.e. CR 44, CR 52)
- Suggestion to reroute CSAH 1 to TH 19 via CR 51
- Suggestion for CSAH 6 and CSAH 1 to be ten-ton routes
- Rutting is a problem on CSAH 9
- TH 58 improvements needed
- CSAH 10 has a lot of truck traffic

Issues from Focus Group Meetings
Goodhue County Transportation Plan

- Many truck/trailers (75 to 100) through Zumbrota on TH 58 on Sundays and Mondays for Livestock Auction Market
- Need for preventative measures in road construction not just maintenance
- Question on future alignment of CSAH 5 and TH 58
- Suggestion to count traffic on township roads to verify traffic flow
- Lorenz bridge (5-ton) in Cannon Falls needs to be replaced
- Increasing truck traffic to grain terminal along CR 53
- Spread axel trailers becoming more prevalent – have wider turn radius and pushup blacktop in summer
- Possible CSAH 53 realignment (see City of Red Wing map)

GOAL 3: MULTIMODAL

- Need for bicycle trails throughout the county – many use CSAH 1 which is very dangerous
- Pioneer Road (City segment) future improvements include 3-lane with wide shoulder for trail; potential off road trail near Twin Bluff School
- Potential for future Spring Creek Trail (off-road trail)
- Need for regional/countywide trail system- important economic value for communities along trail
- Outside of Cannon Falls is only gap in future trail link to city from Northfield and Lake Billesby area
- DNR (Lori Young) has been working on Goodhue Pioneer Trail Plan
- County-wide trail plan in place will help with economic battle for funding
- Kenyon group recently formed to address need for trails – still in very early stages, no plans yet
- Kenyon trail group looking at trail encircling city, trail connecting to other regional trails and safety issues of trails along TH 56 and TH 60
- Kenyon has ability to connect to many regional trails (North = Cannon Valley Trail, East = Douglas Trail and West = Sakatah Trail
- Cannon Falls school district looking to create pedestrian trail under TH 19 (dangerous for children and other pedestrians at this time)
- Transit issues – need for better link between communities that have own systems running now

GOAL 4: LAND USE/DEVELOPMENT

- Concern over truck traffic from new quarry in northeast Cannon Falls – along County border
- Concern over new developments in Red Wing near Mill Road/Spring Creek Road/Charleston Creek
- New rural development along TH 61 from Frontenac to Lake City in Florence Township
- Florence Township is trying to direct development to the south side of TH 61 from Frontenac to Lake City

Issues from Focus Group Meetings
Goodhue County Transportation Plan

- New development has caused Florence Township to begin creating their own Comprehensive Plan
- Florence Township feels there is too much access along TH 61 in their jurisdiction
- New development by Staley Park Road and the Mn/DOT rest area (Florence Township)
- Moratorium in Florence Township on new development for one year or until Comprehensive Plan is completed

GOAL 5: COORDINATION BETWEEN JURISDICTIONS

- Need for sharing of resources between city/county/township (i.e. working together on snow plowing routes like CSAH 53 which has many city access points)
- Need for Red Wing to contract with county for bridge inspections
- Inquiry about the unimproved section of Bench Street (CSAH 1) – want better idea of future improvements to roadway to plan accordingly with land use and access management
- Jurisdictional issue – Cannon Falls is split between two Mn/DOT districts which makes coordination difficult sometimes
- City of Pine Island split between two counties – concern on coordination of counties on north-south connections (i.e. consistent functional classifications across county boundaries)
- Comments on possibility of jurisdictional transfers near Zumbrota/Pine Island area
- Roscoe Township feels 180th Street and 195th Street would be possible options for redesignation as a county road, since they both parallel TH 52 to Pine Island
- Roscoe Township does not have a problem with proposed realignment of CSAH 10 for the future interchange in Zumbrota, except for the loss of farmland
- Florence Township and railroad worked together: township gave up three crossings and railroad gated all other crossings (6)
- Looking for new methods/approaches to issues in County (e.g., cooperation across jurisdictions)
- CR 54 good option for turnback to township
- Wabasha County plans to improve CSAH 16 and would like Goodhue County to improve it to a ten-ton route to provide connection to TH 52
- CR 43 too wide – if township would take over jurisdiction it would have to be narrowed
- Concern on jurisdiction of east-west bypass or alternative route to TH 61 in Red Wing
- CSAH 17 is in need of repair – could be joint effort between two counties
- Concern over WisDOTs plan to make TH 35 four-lane until it reaches Red Wing's border and bridge which is two-lane
- Need for four-lane access between TH 61 and TH 52- to the Metro area

Issues from Focus Group Meetings
Goodhue County Transportation Plan

GOAL 6: ECONOMIC DEVELOPMENT

- Pine Island concerned with being shut off from TH 52 with future interchanges since TH 52 provides many economic opportunities
- Most important routes are CSAH 1 and CSAH 9
- Would like to see both CSAH 1 and CSAH 9, 10-ton routes
- Need wider shoulders on CSAH 1
- Main truck routes are traveling to Red Wing; few in southwest part of County
- Need for 10-ton access from Bellechester (either CSAH 9/2 or CSAH 16)
- Ranking of important road geometrics:
    - Shoulder width = least important on lesser traveled roads (i.e. it is still important on CSAH 1)
    - Vertical/horizontal curves = horizontal curves are more important of two
    - Strength of roads = Most important
- Need for four-lane access to the Metro area

GOAL 7: INVESTMENTS AND USE OF FUNDING

- Hate to see funding cut and have go to five and seven-ton routes
- Florence Township has included costs for road improvements into development agreements
- County needs to look at impact fees for roads and parks

APPENDIX D

Jurisdictional Transfer Guidelines

JURISDICTIONAL TRANSFERS

Methodology – Guidelines for Route Jurisdictional Designation

Issues and factors, which must be considered when determining potential jurisdictional change include: historical practices, type of trips served (purpose and length), traffic volumes, access controls, functional classification, legal requirements, and funding and maintenance issues. The following draft guidelines were developed to provide a basis to review the routes in Goodhue County for potential jurisdictional transfers. These guidelines will not determine if the jurisdictional transfers are feasible or politically acceptable, nor do they establish a timeframe under which transfers may occur. Instead, the guidelines define a common-sense approach for arriving at logical jurisdictional designations. Once there is agreement on how the jurisdictional designations should be established, an ongoing jurisdictional transfer process will need to be developed to address issues such as the financial implications for construction and maintenance of the facility, operational implications (perceived level of service, ability to maintain), perceived fairness in the distribution of route responsibilities, and timing of transfer.

It is not anticipated that all guidelines must be met in order for a jurisdictional designation to be recommended. However, a route meeting more criteria will have a stronger case for recommending a new route designation.

State Jurisdiction

Normally, state jurisdiction is focused on routes that can be characterized as follows:

- they are classified as either a principal arterial or minor arterial;
- they are typically longer routes serving statewide and interstate trips that connect larger population and business centers;
- they are spaced at intervals that are consistent with population density, such that all developed areas of the state are within reasonable distance of an arterial. (As a guide, rural arterial routes are considered to "serve" a community if it is within 10 miles or 20 minutes travel time on a minor arterial);
- they typically have design features (such as properly spaced access points) which are intended to promote higher travel speeds. They also accommodate more truck movements; and
- they typically carry the major portion of trips entering and leaving urban areas as well as the majority of trips bypassing central cities.

County Jurisdiction

Typically, county jurisdiction is focused on routes that can be characterized as follows:

Rural Areas

- they are functionally classified as a minor arterial, major collectors or minor collectors.
- they provide essential connections and links not served by the principal and other minor arterial routes. They serve adjacent larger towns that are not directly served by principal and minor arterial routes, and they provide service to major traffic generators that have intra-county importance;
- they are spaced at intervals that are consistent with population density so as to provide reasonable access to arterial or collector routes in developed areas; and
- they may provide links between local traffic generators and outlying rural areas.

Within Urban Boundaries

- they are classified as either principal arterial or minor arterial routes;
- they carry higher traffic volumes or they provide access to major regional traffic generators (shopping centers, education centers, major industrial complexes);
- they provide connections and continuity to major rural collector routes accessing the urban area and they provide continuity within the urban area, but do not divide homogeneous neighborhoods; and
- they emphasize higher mobility features than other local minor arterial routes (i.e., some form of access management or access control).

City Jurisdiction

Arterial routes, within the urban area, should be considered for city jurisdiction if they can be characterized as follows:

- they are short segments (less than 3 miles) with a moderate volume of traffic (3,000 to 8,000 ADT);
- they have higher local land access needs and close intersection spacing (promotion of local land access over mobility);
- they have close spacing with other arterial routes and shorter trip lengths such as found in Central Business District (CBD) areas;
- they provide no or very limited continuity to outlying rural areas. Urban arterials tend to have shorter trip lengths than rural arterials or collectors.
- they serve small geographic travelsheds; and

- they provide on-street parking or other amenities that discourage the use of the route as a regional route (promotion of local access and adjacent land use activities at the street edge).

Collectors and local streets that provide property access and local traffic circulation are normally under city jurisdiction. These streets typically constitute 65 to 80 percent of the entire urban system mileage and can be characterized as follows:

- they are shorter in length (less than 1.5 miles) and carry low to medium volumes of traffic (500 to 3,000 ADT);
- they provide land access and traffic circulation to residential neighborhoods and to commercial and industrial areas (high access low mobility functions); and
- they may divide homogeneous residential neighborhoods to distribute trips to arterial street system or their final trip destination.

Township Jurisdiction

Customarily, township jurisdiction is focused on rural routes that can be characterized as follows:

- they have low traffic volumes (less than 500 ADT);
- they are classified as local roadways on the functional classification system;
- they have minimal design features and most often are gravel surfaced;
- their primary purpose is to provide access to adjacent property;
- they link outlying rural areas to County Roads (CR) or County State Aid Highways (CSAH); and the route length is usually less than five miles between CR or CSAHs;
- they primarily serve farmsteads, small rural subdivisions, rural churches/cemeteries, and agricultural facilities
- they have irregular access spacing, but most often provide access to farms, field entrances, and they sometimes "T" with other roadways or dead-end.

APPENDIX E

Jurisdictional System Framework

Jurisdictional System Framework

1. Management of the facility should closely align with its function.

2. Align the route with the jurisdiction that is best suited to manage and maintain the facility (cost-efficiency). The following typical jurisdictional characteristics were utilized to determine transfer candidates:

   A. Characteristics of state system:

      1. statewide function
      2. multi-county facilities
      3. continuity
      4. inter-county through trips

   B. Characteristics of CSAH designation:

      1. higher levels of traffic
      2. designated school and principal mail routes
      3. designated collector or above
      4. paved routes

   C. Characteristics of County Road System:

      1. designated as minor collector or lower
      2. lower levels of traffic
      3. serves outlying rural areas and local traffic generators
      4. paved or gravel routes

   D. Characteristics of City MSA Routes:

      1. cities with populations greater than 5,000
      2. designated as collector or above on city functional classification system
      3. higher traffic volumes than other city streets
      4. provide access to local generators

   E. Characteristics of local jurisdiction:

      1. limited travelshed
      2. lack of continuity
      3. low growth
      4. low volume
      5. gravel surface

APPENDIX F

Comparison of Cost Sharing Policies

Comparison of Cost Sharing Policies of Urbanizing Counties (1996 Data)

Goodhue County Transportation Plan

Item	Anoka	Carver	Dakota	Scott	Washington
Right of Way	100(A1)	By negotiation	55- > 5,000; 100- < 5,000	100; 0-Requested parking lanes	Negotiable
Removals	100	100	55- > 5,000; 100- < 5,000	100	100
Travel Lanes	100(A2)	100	55- > 5,000; 100- < 5,000	100	100
Parking Lanes	100	100(C1)	55- > 5,000; 100- < 5,000	0 (City req.)	100
Shoulders	100	100	55- > 5,000; 100- < 5,000	100	100
Concrete Curb & Gutter (new)	50	0	55- > 5,000; 100- < 5,000	-	Negotiable
Concrete Curb & Gutter (replacement)	50	0	55- > 5,000; 100- < 5,000	100	Negotiable
Storm Sewer	% Eligible for State Aid(A3)	% Eligible for State Aid	55-Relay existing; 0-New	% Eligible for State Aid	% Eligible for State Aid
Culverts	100	100	55- > 5,000; 100- < 5,000	100	100
Water Main Modification	0	0	55- > 5,000; 100- < 5,000	100	100(W1)
Sanitary Sewer Modification	0	0	55- > 5,000; 100- < 5,000	100	100(W1)
Other Utilities	0	0	55- > 5,000; 100- < 5,000	0	100
Traffic Signals	50% of County legs(A4)	100% of County Legs	50	100% of County Legs	100% of County Legs
Intersecting Streets	100	100	-	100	100
Retaining Walls	-	-	-	-	0(W2)
Grading Behind Curb	100	100	55- > 5,000; 100- < 5,000	100	100
Sidewalks (new)	0	0	0	0	0

Comparison of Cost Sharing Policies of Urbanizing Counties (1996 Data)

Goodhue County Transportation Plan

Item	Anoka	Carver	Dakota	Scott	Washington
Sidewalks (replacement)	100	0	55- > 5,000; 100- < 5,000	100	100(W3)
Bituminous Bikepath (new)	-	-	0-Unless in County System	25 or 50	Negotiable
Bituminous Bikepath (replacement)	-	-	55- > 5,000; 100- < 5,000	100	100
Bituminous Overlay	100	100	100	100	100
Replace or Transplant Trees	100	-	55- > 5,000; 100- < 5,000	-	Part of R/W negotiation
Replacement Shrubs	100	-	55- > 5,000; 100- < 5,000	-	Part of R/W negotiation
Fencing Replacement	-	-	55- > 5,000; 100- < 5,000	-	Part of R/W negotiation
Seeding/Sodding	100	100	55- > 5,000; 100- < 5,000	100	100
Driveway Replacement	100	100-Bituminous 0-Concrete	55- > 5,000; 100- < 5,000	100; 50-New Concrete	100
Preliminary Engineering	(A5)	% of County Costs	55-Except storm sewer design; 100- < 5,000	By negotiation	100(W4)
Construction Engineering	(A5)	% of County Costs	55- > 5,000; 100- < 5,000	By negotiation	% of County Costs
Street Lights	-	-	0	100(S1)	0(W5)

(A1) In the event that the City requests purchase of right-of-way in excess of those ROWs required by County construction, the City participates to the extent an agreement can be reached in these properties. For instance, a City may request a sidewalk be constructed alongside a County roadway which would require additional ROW, in which case the City may pay for that portion of the ROW. Acquisition of ROW for new alignments shall be the responsibility of the City/Township requesting the alignment. In addition, any costs including ROW costs incurred by the County because a City/Township did not acquire sufficient ROW during the platting process or on new alignments shall be paid by the City/Township.

(A2) The County pays for %100 of a Standard Median Design, such as plain concrete. If a community requests decorative median, such as red brick, stamped concrete, or exposed aggregate concrete, the City will pay the additional cost above the cost of the standard median.

Comparison of Cost Sharing Policies of Urbanizing Counties (1996 Data)

Goodhue County Transportation Plan

(A3) In the event no State Aid is being used, drainage cost shares will be computed by proportions of total area to County area where the area of the road ROW is doubled prior to performance of the calculations.

(A4) In communities less than 5,000 people, the County pays for 100% of the cost of the traffic signal effective March 1986. The county collects on behalf of the cities (less than 5,000) "Municipal State Aid Dollars", since they do not themselves qualify for state aid funds. These funds are used to pay the City Share.

(A5) Engineering shall be paid by the Lead Agency except that any participating agency will pay construction engineering in the amount of 8% of the construction costs paid by that agency.

(C1) City pays for construction on 4-lane road with parking

(S1) 0% for continuous new installations

(W1) If required for construction.

(W2) 0, if for beautification; negotiable, if ROW reduced

(W3) If required for construction, negotiable, if in poor condition.

(W4) Negotiable with City if project is advanced in CIP or if a new project - not in CIP

(W5) 0% for continuous new installations