

ROSEMOUNT TRANSPORTATION PLAN

April 2008

(Revised April, July 2009)

Prepared by:

**WSB & Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
(763) 541-4800
(763) 541-1700 (Fax)**

Table of Contents

1.0	INTRODUCTION	1
1.1	Background.....	1
1.2	Purpose.....	1
1.3	Transportation Goals.....	2
1.4	Public Involvement and Coordination	3
1.5	Agency Review.....	3
2.0	EXISTING CONDITIONS.....	4
2.1	Roadways.....	4
2.1.1	Functional Classification	4
2.1.2	Jurisdictional Classification	6
2.1.3	Existing Traffic Levels	6
2.1.4	Safety, Capacity, Functional Conflicts	6
2.2	Other Transportation Services, Facilities, Issues.....	9
3.0	TRANSPORTATION TRENDS AND OTHER PLANNING DOCUMENTS	12
3.1	General Transportation Trends	12
3.2	Other Jurisdictional Planning Documents	13
4.0	FUTURE TRANSPORTATION NEEDS	17
4.1	Land Use Projections	17
4.2	Forecast 2030 Traffic Levels	18
5.0	TRANSPORTATION PLAN	19
5.1	Financial Resources	19
5.2	Roadway Improvements	19
5.2.1	Investment Strategies	19
5.2.2	Pavement Maintenance	20
5.2.3	Future Improvement Projects.....	20
5.2.4	Access Management	21
5.2.5	Roadway Functional Classification	24
5.2.6	Roadway Jurisdictional Classification.....	24
5.2.7	Future Right-of-Way Needs.....	25
5.3	Transit and Non-Motorized Transportation	26

List of Tables

Table 5.1	Future Roadway Improvement Projects.....	20
Table 5.2	Rosemount Access Management Guidelines.....	22
Table 5.3	Dakota County Access Management Guidelines.....	23
Table 5.4	Rosemount Right-of-Way Guidelines.....	25
Table 5.5	Dakota County Right-of-Way Guidelines.....	25

List of Figures

Please note that all figures are compiled together at the end of the text.

Figure 1.1	Regional Location Map
Figure 2.1	Rosemount Aerial Photograph
Figure 2.2	Existing Roadway Functional Classification
Figure 2.3	Existing Roadway Jurisdictional Classification
Figure 2.4	Current Traffic Volumes
Figure 2.5	Crash Analysis
Figure 2.6	Existing and Future Pedestrian & Bicycle Ways
Figure 2.7	Rosemount Interpretive Trail Corridor
Figure 2.8	Railroad Lines
Figure 4.1	2030 Land Use Map
Figure 4.2	2030 Forecast Traffic Levels
Figure 5.1	Future Capital Improvement Projects
Figure 5.2	42/52 Study – CSAH 42 Access Spacing Plan
Figure 5.3	2030 Roadway Functional Classification
Figure 5.4	2030 Roadway Jurisdictional Classification

Appendices

Appendix A	Agency Comments on Draft Transportation Plan Plus Responses
Appendix B	Traffic Forecasting Model and Methods
Appendix C	Transit Plan

1.0 INTRODUCTION

1.1 Background

The City of Rosemount is located in the southeastern portion of the Minneapolis/St. Paul metropolitan area, approximately 15 miles from downtown St. Paul and 20 miles from downtown Minneapolis (*Figure 1.1*). Rosemount was founded in the mid 19th century and historically was an economic center for the surrounding farming community. In the 1950s, production began within the city limits at the Great Northern Oil Refinery, which is currently the Flint Hills Resources Refinery. Flint Hills Resources, along with the University of Minnesota, owns approximately 3,200 acres within the City, which are used as an agricultural research facility, and are the two largest landowners in the City.

Since the 1970s, Rosemount has seen significant growth, largely due to its proximity to Minneapolis and St. Paul. Census data for Rosemount's population over the past 30 years is as follows:

- 1970 – 4,034
- 1980 – 5,083
- 1990 – 8,622
- 2000 – 14,619

This general trend is anticipated to continue. According to the Metropolitan Council, Rosemount will likely be one of the top ten growing cities in the metropolitan area through 2030. With a land area of 36 square miles, there is much undeveloped land within the City limits. The primary north/south regional roadways accessing Rosemount are Trunk Highway (TH) 3 and TH 52/55. The primary east/west regional roadway accessing Rosemount is County State Aid Highway (CSAH) 42.

1.2 Purpose

With Rosemount's anticipated future development, meeting ever-growing travel demand will be an increasingly important factor in prioritizing transportation projects. There are numerous transportation issues which the City must face for the near term (less than five years) and the long term (20 to 25 years). The purpose of this Transportation Plan (Plan) is to identify these issues and begin the process of addressing them. More specifically, the tasks of this Plan intended to accomplish are listed below.

- Identify broad transportation goals and strategies for the City (Section 1.3).
- Identify and characterize the existing transportation network (Section 2.0).
- Discuss broad planning issues, including general transportation trends as well as individual planning documents of other government jurisdictions (Section 3.0).
- Analyze and identify future transportation deficiencies and needs (Section 4.0).

- Prepare a comprehensive Transportation Plan (Section 5.0), addressing a broad range of issues including:
 - Necessary roadway improvements
 - Funding needs/issues
 - Functional and jurisdictional classification
 - Right-of-way needs
 - Appropriate access management guidelines
 - Transit issues
 - Others

1.3 Transportation Goals

The City's primary transportation goals are:

- Maximize the safety of roadways.
- Increase the operational capacity of existing roadways.
- Selectively expand the roadway system in order to relieve pressure from roads near or over capacity.
- Encourage transit use.
- Support non-motorized transportation.

The primary strategies to meet these goals are:

- Use the appropriate access management guidelines. Coordinate effectively with other governmental jurisdictions on this issue.
- Plan roadway projects with central consideration given to the roadway functional classification system. This will help optimize capacity, operational, and safety characteristics of the overall network. Coordinate with other government organizations such as Mn/DOT, Dakota County, and neighboring jurisdictions in the planning and implementation of arterial and collector roadways.
- Review network needs assessment on an on-going basis regarding potential deficiencies. Use the analysis and prioritization principals from this Plan as the basis for this review. Assess these needs against available funding.
- Proactively dedicate roadway right-of-way for future network needs to minimize long-term economic and property-owner impacts.
- Require traffic impact studies for larger residential, commercial, or development projects, or where projects are unable to meet standards established in this Comprehensive Plan.
- Work with Minnesota Valley Transit Authority and Met Council Transit services to maximize transit use and to coordinate potential transit facilities.
- Provide off-road, paved bike/pedestrian facilities on either side of collector and higher level roadways.

1.4 Public Involvement and Coordination

A public involvement program was an important part of the preparation of this Plan. Early in the plan preparation process, a stakeholders group was formed to discuss transportation issues for the City and have input into the planning process. Beyond the City of Rosemount, this group was made up of representatives of the following:

- Minnesota Department of Transportation (Mn/DOT)
- Dakota County
- City of Apple Valley
- City of Inver Grove Heights
- Flint Hills Resources
- University of Minnesota

This group met on two occasions to discuss the work being performed to prepare this Plan. This gave the interested parties a chance to voice their issues and understand other perspectives.

Two public meetings were held in the early phases of preparing the Transportation Plan using an open house format. A presentation was made by WSB & Associates (WSB), followed by open time for visitors to review displayed information and discuss issues informally with representatives of the City and WSB. Comment cards were provided for visitors to make comments on issues.

As will be discussed in greater detail in Section 4.2 of this Transportation Plan, the City has recently prepared and adopted a “42/52 land-use plan.” This work was initiated to evaluate future development and transportation needs in the area of the TH 52/CSAH 42 interchange, and more generally, in the eastern portion of the City. To develop this plan, the City formulated a 42/52 Land-Use Group, including City representatives and property owners, which met on six occasions. In addition, two public information meetings were held in January and February of 2005 specifically to address land use and transportation planning issues for the eastern portion of the City. In July 2005, addressing issues raised during the public involvement process, the City Council approved the 42/52 future land-use plan, which is incorporated on *Figure 4.1* of this Transportation Plan

1.5 Agency Review

During the preparation of this Transportation Plan, the City of Rosemount distributed drafts of the document to Dakota County and neighboring communities for review and comment. Comments were received by the following agencies:

- Dakota County
- City of Eagan
- Nininger Township

These comments, and the City of Rosemount responses to them, are included in *Appendix A* of this Transportation Plan.

2.0 EXISTING CONDITIONS

2.1 Roadways

Figure 2.1 provides an aerial photograph of the City identifying major roadways. More detailed information on the roadway network is provided under the following headings:

2.1.1 Functional Classification

Roadways serve two primary purposes: mobility (long trips, relatively high speeds) and access (short trips, direct connection to many land uses). These are generally competing functions. For example, a roadway with many driveways will not serve regional high speed trips efficiently or safely. However, the whole purpose of the roadway network is to ultimately provide access between land uses. The basis of a functional hierarchy system is to categorize different roadways by the degree to which they serve one of the two core functions versus the other. Establishing a network with roadways serving different functions allows the most efficient overall movement and connection within the system. Roadways in differing functional categories will have different design and operational features as dictated by how they are used. The Metropolitan Council is the Metropolitan Planning Organization (MPO) for the Twin Cities Metropolitan area. The Metropolitan Council has established a functional hierarchy which Dakota County and the City of Rosemount utilize. It is summarized below:

Principal Arterials

Principal arterials include all interstate freeways plus some non-interstate roadways. The primary function of principal arterials is mobility, and access is minimal. These roads connect the region with other areas in the state and other states. They also connect the Twin Cities metro centers to regional business concentrations. They only connect with other principal arterials and select minor arterials and collectors.

Functional classification information for roadways in Rosemount is provided on *Figure 2.2*. The Principal Arterials in Rosemount are:

- Trunk Highway (TH) 52
- TH 55
- County State Aid Highway (CSAH) 42

Minor Arterials

The primary function of minor arterials is mobility, but they provide for and allow more access than principal arterials. The minor arterial system connects the urban service area to cities and towns inside and outside the region. These roads interconnect the rural growth centers in the region to one another as well as to similar places just outside the region. Minor arterials should connect to principal arterials, other minor arterials, and collectors. They generally service medium to short trips.

As depicted on *Figure 2.2*, the Minor Arterials in Rosemount are:

- TH 3 (A Minor)
- CSAH 71 (A Minor)
- CSAH 38 west of TH 3 (A Minor)
- CSAH 46 (A Minor)
- CSAH 33 (B Minor)

Collector Streets

The collector system provides connection between neighborhoods and from neighborhoods to minor business concentrations. It also provides supplementary interconnections of major traffic generators within the metro centers and regional business concentrations. Mobility and land access are both important functions for collector streets.

As depicted on *Figure 2.2* the collectors in Rosemount are:

- Shannon Parkway
- Chippendale Avenue
- Biscayne Avenue from Connemara Trail to CSAH 46
- Bacardi Avenue between Gun Club Road and 135th Street
- County 73 (Akron Avenue) north of CSAH 42
- Fahey Avenue E.
- Pine Bend Trail
- Bonaire Path from S. TH 3 to CSAH 71 (Blaine Avenue)
- Connemara Trail from western City limit to Auburn Avenue
- 140th Street from CSAH 71 to CSAH 42
- 145th Street from Diamond Path to CSAH 42
- 151st Street from Shannon Parkway to Chippendale Avenue
- Evermoor Parkway
- Dodd Boulevard from Shannon Parkway to Chippendale Avenue
- Auburn Avenue
- Autumn Path

Local Streets

Local streets connect city blocks and individual land parcels. They serve the access function rather than the mobility function. In most cases, they will connect to other local streets and collectors.

All roadways in Rosemount not addressed in the preceding categories are local streets.

2.1.2 Jurisdictional Classification

Roadways are classified on the basis of which level of government owns or has jurisdiction over them. For Rosemount, the levels of government are: the State of Minnesota (Mn/DOT), Dakota County, and the City. Mn/DOT maintains the Interstate and Trunk Highway System. Dakota County maintains the County State Aid Highway (CSAH) and County Road (CR) systems. The remaining streets and roadways located within the City are the responsibility of the City of Rosemount with the exception of privately owned and maintained roads. *Figure 2.3* depicts the jurisdictional classification for roadways serving Rosemount.

2.1.3 Existing Traffic Levels

Figure 2.4 presents existing traffic levels for the City of Rosemount. This is 2004/5 Mn/DOT data.

2.1.4 Safety, Capacity, Functional Conflicts

Existing Safety Issues

Historical crash data for the years 1999-2002 and 2004 were reviewed in the preparation of this Plan. Year 2003 crash information was not used because of potential problems with the State data set. Analysis focused upon interchanges or intersections which were selected according to one or more of the following criteria:

- The location was identified by the City as an area of concern.
- The location was identified in the public involvement process as an area of concern.
- Relatively high volume intersections and/or intersections involving collector or higher level roadways.
- Scan of all crash data for the city for accident patterns or clusters.

In the years 1998-2002, there were a total of 1,094 crashes in Rosemount according to Mn/DOT records. The majority of these were relatively minor, with property (automobile) damage only. However, there were a total of five fatalities during this timeframe. *Figure 2.5* shows locations and corresponding number of crashes for all locations which had five or more crashes during the study period.

The primary observations to be made from reviewing the summary 1999 through 2002, 2004 Rosemount crash information are provided below:

The highest ranking locations are the TH 55/52 and TH 52/CSAH 42 interchanges. This is not a surprising result since these are high traffic locations and currently have design deficiencies. Mn/DOT intends to realign TH 55 along TH 52 south to the TH 52/CSAH 42 interchange and to reconstruct this interchange. This project is not scheduled to receive Mn/DOT funding until the 2018-2025 timeframe. Thus, Dakota County has taken the lead on advancing this project, which has an approved Environmental Assessment and a Mn/DOT staff-approved layout. With this overall realignment/reconstruction work, the TH 52/TH 55 interchange will be eliminated, and the operational and safety characteristics of the TH 52/CSAH 42 interchange will be substantially upgraded. Further information can be referenced in Mn/DOT's *Highway 52 Interregional Corridor Management Plan* (2002), and *Highway 52/42/55 Study Report* (2002).

There are high numbers of accidents along CSAH 42 between the western City boundary and TH 3. This observation reflects the competing functions that CSAH 42 serves along this segment—both mobility and access. CSAH 42 is a principal arterial but also supports substantial development. The high accident levels for this segment reinforce the need for appropriate access management guidelines. Access management is one of the key issues addressed in the 1999 *County Highway 42 Corridor Study* (see Section 5.2.3 of this Plan).

There is a relatively high number of accidents at Chippendale and 151st St. The number of crashes at this location have been increasing in recent years:

- 1999 – 1 crash
- 2000 – 3 crashes
- 2001 – 5 crashes
- 2002 – 5 crashes
- 2004 – 7 crashes
- Total (5-year study period) – 21

In 2003, a four-way stop configuration was implemented at this intersection to address safety and operational concerns. The above data suggest that further study of this location is required, with potential future signalization of the intersection.

There is a surprising number of accidents on TH 3 south of Canada Avenue (see **Figure 2.5**). Nineteen of these were recorded as being approximately 200 feet south of Canada Avenue, and another six approximately 140 feet south of the bowling alley driveway. The City will provide this information to Mn/DOT and request that they investigate it further.

Existing Capacity/Operational Issues

Roadway capacity deficiencies are currently not a substantial problem for the City. The only collector or arterial roadway segment identified in relevant state, regional, and county documents as approaching or exceeding capacity is the eastern-most portion of TH 55. It may be noted the Dakota County Transportation Plan projects two roadway locations in Rosemount to be over capacity in 2025: CSAH 38, west of Danbury Way, and CSAH 42, west of TH 3. The County plan

also identifies that the CSAH 42/TH 3 intersection will likely have to be replaced with a grade-separated interchange in the future. Please refer also to Section 3.2 information.

While roadways in the City generally have adequate current capacity, there are some locations which do not operate at desirable levels and/or are starting to become problematic. These include:

1. Shannon Parkway/CSAH 46 to CSAH 38: While this segment of roadway does not have a specific capacity issue, lane continuity and pedestrian access is an issue. Currently, the roadway switches between two lanes and four lanes throughout different segments of the corridor. Initial study indicates that this roadway could be converted to a three-lane section with a center left turn lane. In those segments where four lanes currently exist, a wider shoulder would be available. Additional study needs are required regarding issues related to driveway access, specifically north of Connemara Trail, and pedestrian crossings along the corridor.
2. Chippendale Avenue/CSAH 42 to 145th Street: This segment of roadway has a current (2003) volume of approximately 3,350 vehicles per day. This roadway is projected to increase to close to 9,400 vehicles per day as the City continues to grow. With the large number of street accesses in this segment of roadway, a safety improvement to provide left turn lanes (i.e., three-lane section) should be considered to both improve capacity and operation.
3. 151st Street at Chippendale Avenue: This intersection has been identified with an excessive number of crashes between 1999 and 2004. In 2003, an all-way stop sign was installed, but the number of crashes actually increased in 2004 relative to previous years (please refer to information under the “Existing Safety Issues” heading, above). This intersection should be studied to determine the potential cause of these crashes and whether signalization or other operational/safety improvements should be considered.
4. 145th Street at Chili Avenue/Chippendale Avenue: Traffic levels at this intersection are continuing to increase, specifically relating to traffic entering the high school via Chili Avenue. As this traffic continues to grow, the operation of the intersection as an all-way stop will begin to see longer delays. Future consideration of signalizing this intersection should be studied.
5. Trunk Highway 3 at 132nd Street (Old County Road 38): 132nd Street (old CR 38) is a major street access to the developing area north of CSAH 42 and east of TH 3. As traffic continues to grow, access to TH 3 will become more and more difficult. Signalization of this intersection should be considered in the future, as this traffic grows and when traffic signal warrants are met.
6. Trunk Highway 3 at the High School Entrance/142nd Street: This intersection is the main access to the Rosemount High School. As traffic continues to grow on TH 3, this intersection will become more and more of an issue for safe access to TH 3. Signalization of this intersection should be considered as soon as traffic signal warrants are met. It may

be noted that advancing a signal at this location will require funding participation from School District 196 and Mn/DOT.

7. Chili Avenue North of 145th Street: With the increased traffic on TH 3, traffic to the high school will likely begin to use Chili Avenue as an alternate access. With this in mind, this roadway should continue to be monitored and considered for possible capacity and safety improvements.
8. Trunk Highway (TH) 3: Through the City of Rosemount, TH 3 is currently a two or three lane facility, with center left turn lanes throughout the primary downtown area and at other specific intersections. The traffic projections for 2025 indicate that this roadway will be over 20,000 vehicles per day. This capacity far exceeds the typical three lane operation. The City will need to work with Mn/DOT and/or Dakota County on improvements to TH 3 in the future to help alleviate these capacity issues. Physical and right-of-way constraints are substantial through the downtown area; the City will coordinate with Mn/DOT and/or Dakota County as needed to assess potential TH 3 bypass alternatives.

Mobility/Access Conflicts

There are currently two roadways within the City which experience substantial potential for conflict between mobility and access functions: CSAH 42 and TH 3. These are arterial roadways which carry relatively high levels of through traffic. However there are also increasing levels of development adjacent to and/or accessing these roadways, so conflicts are becoming more of an issue. The crash information summarized on **Figure 2.5** suggests that this is particularly true for CSAH 42 between the western City boundary and TH 3. The City intends to help address mobility/access conflicts through the following approaches:

- On-going coordination with Mn/DOT and Dakota County regarding roadway design and land use issues. This includes working with recommendations and guidelines in the *County Highway 42 Corridor Study*.
- Implement City access management guidelines (see Section 5.2.4).
- Improve intersections where appropriate.
- Provide parallel reliever and/or frontage roadways where appropriate.
- As development occurs west of TH 3 along CSAH 42, the City will work with Dakota County to identify opportunities for the reasonable acquisition of right-of-way for a future six-lane roadway.

2.2 Other Transportation Services, Facilities, Issues

Transit

A detail transit plan, including exiting transit services, is included in *Appendix C*.

Bikeways and Pedestrian Facilities

The City of Rosemount recognizes the importance of non-motorized transportation for City residents. This serves a recreational, as well as a mobility, function. **Figure 2.6** shows current and future bike routes in the City in existing, developed areas. It is the City practice to include off-road, paved bike/pedestrian ways (dual facilities, one on either side of roadway) on all new construction of collectors and arterials. Thus, the network identified on **Figure 2.6** will be expanded as new areas are developed and supporting roadways are constructed.

Dakota County has expressed an interest in working with the City to ensure that City bikeways and pedestrian facilities will connect to the County system so that access is improved for residents in Rosemount and throughout Dakota County. One project which will be important regarding this coordination with Dakota County is the proposed Rosemount Interpretive Trail Corridor. Information on this project, which would connect downtown with the Spring Lake Park Reserve on the Mississippi River, is presented on **Figure 2.7**. Further information is provided in Section 5.3 of this Transportation Plan.

Railways

Three rail carriers operate in Rosemount: Union Pacific, Canadian Pacific, and Progressive Rail. **Figure 2.8** shows the location of the railroad tracks within the City. On average, the Union Pacific Railroad operates approximately 11 trains per day through Rosemount; the Canadian Pacific Railway two trains per day, and Progressive Rail one train per day, plus some local switching.

Railroad noise and safety issues represent planning challenges for the City. The City limits the number of at-grade crossings over the tracks, and attempts to take the railroads into consideration when approving residential developments and roads. The City, in cooperation with Mn/DOT, Federal Railroad Authority (FRA), Dakota County, and the railroad companies (UP, CP, and Progressive) are pursuing a Quiet Zone between 160th Street (CSAH 46) and Akron Avenue (CR 73). Improvements are being proposed at each crossing to meet the FRA requirements. It is anticipated that by early 2009, the Quiet Zone will be in effect. The conflict between trains and other forms of transportation is most notable at the at-grade railroad crossing of CSAH 42 at TH 3. This has been an ongoing area of safety concern for the City. In its *2025 Transportation Plan*, the County identifies this intersection as a roadway deficiency likely requiring reconstruction as a grade separated interchange. The railway would be grade separated from CSAH 42 under this project.

The City will continue to encourage Mn/DOT, Dakota County, and the City to investigate alternatives to complete a grade-separated crossing east of the TH 3/CSAH 42 intersection. Such a project could necessitate reconstructing the intersection as identified in the *County Highway 42 Corridor Study* and the *Dakota County 2025 Transportation Plan*.

Aviation

The City of Rosemount has no public airport or any heliport facilities within its jurisdiction. A small private airstrip, Jensen Field, is located on the University of Minnesota Agricultural Research Center campus, just south of the Dakota County Technical College. The nearest airports to Rosemount are Fleming Field (South St. Paul) and Airlake Airport (Lakeville). The City does lie

within the Critical Airspace Policy Area. The FAA and Mn/DOT should be notified at least 30 days prior to any proposed project over 200 feet above ground level using Form 7460.

Commercial Waterways Navigation

Flint Hills Resources (formerly Koch Refining) operates a barge terminal that generates approximately two to three dockings per week. CF Industries transfers bulk fertilizer from barges onto approximately 80 trucks per day. All barge activities take place within the Mississippi Critical Area corridor.

Snowmobiles

The use of snowmobiles is permitted within the City subject to restrictions in the City Code. Snowmobiles are not permitted on trails/sidewalks or boulevards, and must not exceed 10 miles per hour.

Other Vehicles

Other motorized vehicles such as those listed below must be operated in accordance with applicable local ordinances and state statutes:

- All terrain vehicles (ATVs)
- Motorized scooters and minibikes
- Segues
- Golf carts
- Other unlicensed motorized vehicles

3.0 TRANSPORTATION TRENDS AND OTHER PLANNING DOCUMENTS

3.1 General Transportation Trends

In the *2003 Statewide Transportation Plan*, the Minnesota Department of Transportation identifies and addresses major transportation-related trends. Relative to Rosemount transportation planning, the most significant trends and their implications are summarized below:

Demographic

- Minnesota's growing population will increase the number of transportation system users.
- Concentrations of population in the Twin Cities Metropolitan Area and in Regional Trade Centers will increase congestion on roadways and demand for transit in and around these centers.
- Population growth in all areas of the state will increase vehicle miles of travel.
- The aging of the population and increasing share of residents over 65 may necessitate changes in highway design and traffic engineering, and retraining.
- The growth in elderly population will increase the demand for travel alternatives as these individuals discontinue driving.
- Environmental justice will continue to be important when planning transportation projects due to the growth in low income and minority populations in the state.

Economic

- Minnesota's economic growth will result in increased travel and goods shipments.
- Concentrations of employment and economic activity in the Twin Cities Metropolitan Area will increase vehicle miles of travel congestion and demand for cost-effective transit to serve major employment concentrations.
- Concentrations of employment and economic activity in Regional Trade Centers will increase vehicle miles of travel and transit demand in and around these centers and on Interregional Corridors (interregional corridors in the vicinity of Rosemount are TH 52 and TH 55).
- Rising incomes may increase disposable income and the number of vehicles, contributing to increasing vehicle miles traveled.

Transportation

- Travel is increasing on Minnesota roadways—between 1980 and 2000, total vehicle miles traveled (VMT) in Minnesota increased by approximately 74 percent. This compares with an increase in population of 21 percent over the same timeframe. The average annual increase in total Minnesota VMT between 1990 and 1995 was 2.5 percent, as compared with

3.6 percent from 1995 and 2000. Increased travel on Minnesota's transportation system will continue to exacerbate congestion and other service problems.

- Highway travel is becoming more concentrated on principal arterials. This suggests that average trip lengths are increasing. This trend reflects Mn/DOT's focus upon primary interregional corridors (including TH 52) connecting economic centers throughout the state.
- Congestion is increasing at a relatively rapid rate in the Twin Cities Metropolitan area. Based on analysis by the Texas Transportation Institute, the Twin Cities Metropolitan Area was the 15th most congested metro area out of 68 metro areas in the United States in 2001. This compares with a ranking of 34th in 1990.
- Travel is increasing in Minnesota's large urbanized areas faster than the addition of miles of roadway. From 1993 to 2000, VMT grew by 25.4 percent in the Minneapolis-St. Paul urbanized area, while roadway miles grew by just 8.1 percent.
- Truck travel continues to rise—recent estimates indicate that between 1994 and 2000, total truck vehicle miles traveled (excluding pick-ups and vans) increased about 2.0 percent per year. On some routes, truck traffic is increasing at many times this rate.
- New technologies and business practices place increasing demand on the transportation network. Electronic commerce, via the Internet and other means, will increase the demand for consumer based package delivery and result in more delivery trucks on our highways. Also, the increasing “just-in-time delivery” approach to reducing inventory needs heighten the demand for an efficient, reliable, and safe transportation network.
- Traffic fatality rates have declined—the fatality rate per hundred million miles traveled declined from 1.47 in 1990 to 1.19 in 2000. In 1980, the rate was 3.03. In spite of these rate decreases, the total number of fatalities appears to be increasing by somewhat less than one percent per year.

3.2 Other Jurisdictional Planning Documents

Planning studies and documents prepared by other levels of government and jurisdictions were reviewed to help ensure that Plan is compatible with regional policies and projects. These documents are identified below and the key elements of them from the perspective of this Plan are summarized.

Rosemount/Empire/Umore Area Transportation System Study (in progress)

In early 2009, a study was initiated by Dakota County, the City of Rosemount, Empire Township, the University of Minnesota, and the Department of Natural Resources to study and plan for the future transportation needs in the Umore and Vermillion Highlands area. A key transportation factor driving this study is the future development of Umore Park, a 5,000 acre area generally bounded by CSAH 42, Biscayne Avenue, 190th Street, and Clayton Avenue. The University of Minnesota is currently considering residential, industrial, and commercial uses that would support up to 30,000 people in the future in this area. The Transportation System Study is anticipated to be completed by the end of 2009.

Dakota County 2025 Transportation Plan (2004)

- A primary planning issue which the county is facing is growth and impacts of that growth on the transportation system. Between 2000 and 2020, the population of Dakota County is anticipated to grow by 28 percent, and the vehicle miles traveled is estimated to grow by 40 percent. This is an example of the Mn/DOT trend information summarized in Section 3.1.
- Most County roadways fall into the functional classification of minor arterial highways. The emphasis of arterial highways is on mobility, with limited local access. With the increasing levels of development and access demand for the county, "...local supporting roadway networks are essential to provide appropriate access to and from the County highway system and to handle local traffic."
- Funding for necessary improvements is anticipated to be limited, so management techniques will be very important.
- For 2025, CR 38 between CR 73 and TH 3 is identified as being overcapacity without improvements. Since the completion of the Dakota County 2025 Transportation Plan, old County Road 38 east of TH 3 has been turned back to the City of Rosemount. The City completed an upgrade to old CR 38 (Bonaire Path/135th Street) in 2007.
- For 2025, the following County Roadways are identified as being over capacity in 2025 without improvements: CSAH 38, west of Danbury Way; CSAH 42, west of TH 3. The following roadways are identified as approaching capacity (75 percent of the highway capacity design): CSAH 33, north of Connemara Trail; CSAH 38 between TH 3 and Danbury Way, CSAH 42 between TH 52/55 and TH 3; CR 73, north of 135th Street.
- The CSAH 42/TH 3 intersection and the CSAH 42/TH 52 interchange are identified as being deficient in the future without improvements. For the CSAH 42/TH 3 intersection, this necessitates reconstruction as a grade-separated interchange. For the CSAH 42/TH52 interchange, design work and right-of-way acquisition from willing sellers is underway. The timeline for construction activities on this project will be determined ultimately by Dakota County, who has taken the lead on advancing the project as discussed previously.
- A potential need for a North-South Principal Arterial Study is identified in Chapter 7 (page 85). The study area would extend from I-494 to CSAH 42 between CSAH 31/33 and CSAH 73. The County Transportation Plan identifies that the distance between principal arterials (TH 77 and TH 52/55) is currently approximately nine miles, and that non-freeway principal arterial guidelines call for significantly closer spacing. Making TH 3 a principal arterial south of CSAH 42 is identified as an issue to be considered and evaluated (page 82).

County Highway 42 Corridor Study (Dakota County, 1999)

- CSAH 42 is the only continuous east-west roadway serving travel across central Dakota and northern Scott Counties. With intensive commercial development along CSAH 42, there a growing conflict between mobility and access functions for the roadway.

- The Counties and cities in the corridor should adopt consistent access spacing guidelines for the entire corridor. Please refer to Section 5.2.4 of this Transportation Plan for further information on access management.
- An enhanced system of supporting roadways should be provided in order to limit local trips on CSAH 42 and improve overall operations in the CSAH 42 corridor. The improvement identified for the Rosemont area is the extension of 140th Street (Connemara Trail) from Shannon Parkway east to CSAH 71.
- Specifically within Rosemont, the following recommendations are made:
 - Add cross street and mainline auxiliary lanes at CSAH 42/Chippendale (3-5 year timeframe) – *this project has been completed as of 2005*
 - Modify the CSAH 42/Chippendale traffic signal phasing (3-5 year timeframe) – *this project has been completed as of 2005*
 - Modify the CSAH 42/TH 3 traffic signal phasing (1-2 year timeframe)
 - Add auxiliary lanes on CSAH 42 at the CSAH 42/ TH 3 intersection (3-5 year timeframe)
 - Add cross-street and mainline auxiliary lanes at the CSAH 42/Biscayne intersection (3-5 year timeframe)
 - Provide a grade-separated crossing of the existing railroad tracks east of the CSAH 42/TH 3 intersection (6 years-plus timeframe)
 - Re-route TH 55 south on TH 52 and east on CSAH 42. This assumes that the TH 52/CSAH 42 interchange will be rebuilt as a new single-point urban interchange (6 years plus timeframe)
- The City of Rosemont, in conjunction with Dakota County, requested and had approved modifications to the CSAH 42 Corridor Study. The modifications included revised access across locations between 145th Street and TH 52. Additional discussions of these modifications are included in Section 5.

Highway 52 Interregional Corridor Management Plan (Mn/DOT, 2002)

Recommendations of this document relevant to Rosemont transportation planning include the following (from north to south, all by 2015—all recommendations below summarized in Executive Summary Table, page ES-5 of *TH 52 IRC Management Plan*):

- Construct 117th Street Interchange (this project has been completed).
- Close access at Koch Refinery frontage road.
- Close Pine Bend Trail access after reconstructing the CSAH 42/TH 52 interchange.
- Close all remaining at-grade access in the Inver Grove Trail area.
- Reconstruct TH 52/CSAH 42 interchange.
- Construct trail with extension of 140th Street under TH 52.

Apple Valley Comprehensive Plan (1999)

The information in the Transportation section of the 1999 Apple Valley Comprehensive Plan is consistent with Rosemont's intentions for transportation planning and development in the future. The functional classifications for the east-west roadways which the cities share are consistent.

4.0 FUTURE TRANSPORTATION NEEDS

4.1 Land Use Projections

Background

In 2000, the City of Rosemount adopted its *2020 Comprehensive Plan*. This document provided a 2020 land use plan, as well as 2020 population projections. The future land use plan and population projections have since been updated with the CSAH 42/TH 52 land use study and plan as summarized below.

The City of Rosemount initiated a land use study in June 2004 to begin looking at future land uses along CSAH 42 near its intersection with TH 52. A small task force was assembled, comprised of property owner representatives, Planning Commission members and a City Council representative. The reasons for initiating the project were many. One was the State and County plans to upgrade the CSAH 42/TH 52 interchange. Another was the recent higher rate of growth in the community and the need for a MUSA expansion. Before this expansion was initiated, it was decided that the land uses should first be evaluated. There was also a concern that there was not enough Business Park and Commercial land in the community, and more opportunities could occur for these uses along County Road 42. Finally, the Council wanted to ensure that there was an adequate and steady supply of land to permit orderly, managed growth.

The 42/52 Land Use Group met on six occasions and developed a land use concept plan and a transportation concept plan. Two public information meetings were held in January and February of 2005 with approximately 100 property owners in attendance.

The Concept Plan was forwarded to the Planning Commission in May and June for further discussion and to take formal comments during the formal public hearing. The Commission also held five public meetings to permit discussion of the Task Force recommendation. There have been some modifications from the initial Land Use Group recommendation although the general location of different land uses has not changed significantly. Much of the discussion has been regarding the land uses between Akron Avenue and Hwy 52 on the north side of County Road 42.

In July 2005, the City Council approved the 42/52 future land use plan. Since that time, staff has initiated the approval process by the Metropolitan Council for a 2000 acre Municipal Urban Service Area (MUSA) expansion north of County Road 42 and west of Hwy 52.

It may be noted that the CSAH 42/TH 52 interchange reconstruction design has been officially mapped to preserve right-of-way. Interchange modifications will require additional mapping.

2030 Future Land Use Plan and Roadway Network

To forecast traffic levels, it is necessary to assume future land use patterns associated traffic generation levels and distribution patterns. The 2030 land use assumed in this Transportation Plan is depicted on *Figure 4.1*. This is a combination of the land use map from the *2020 Comprehensive*

Plan, along with the 42/52 land use plan referenced above. The 42/52 work also established a planned network of new roadways in the eastern portion of the City. The traffic forecasts, as discussed in Section 4.2, assumed these new roadways. The locations of the new roadways on Figure 4.1 are conceptual. The intent of the roadways in the vicinity of CSAH 42 in the 42/52 study area is to allow access to development adjacent to CSAH 42, thereby supporting access management on CSAH 42.

4.2 Forecast 2030 Traffic Levels

The traffic modeling performed for this Transportation Plan utilized a widely used traffic forecasting program called Viper. The Rosemount transportation forecasting was set up to be consistent with the Metropolitan Council Regional Transportation Model and Dakota County traffic projections.

Traffic forecasting involves breaking the study area into individual Traffic Analysis Zones (TAZs), and identifying land use information for each. Each TAZ will have trip generation and attraction characteristics based on future land uses assumed. Using the Viper program, trip productions are matched with attractions routed through the roadway network, and external trips (those originating and or terminating outside the study area) are also accounted for.

Based on the methods summarized above, the forecast 2030 traffic levels are depicted on **Figure 4.2**. Additional information regarding how the model was set up and used for this Plan Update is provided in **Appendix B**.

5.0 TRANSPORTATION PLAN

5.1 Financial Resources

Funding for construction and reconstruction can be obtained from a variety of sources. Further information is provided below.

General Ad Valorem (Property) Taxes – transportation projects can be funded with the general pool of municipal revenues raised through property taxes.

Assessments – Properties that benefit from a roadway scheduled for improvement may be assessed for the cost of construction. In order to assess the owner, it must be demonstrated that the value of their property will increase by at least the amount of the assessment.

Municipal State Aid – Cities with populations of greater than 5,000 are eligible for funding assistance from the highway user Task Distribution Fund (gas tax and vehicle registration tax). These funds are allocated to a network of Municipal State Aid (MSA) streets. Currently, the City of Rosemount receives an apportionment per year for improvements to their MSA streets.

Cooperative Agreements with Mn/DOT and/or Dakota County - Different levels of government can cooperate on planning, implementing, and financing transportation projects which provide benefits to all the concerned agencies. The financial terms and obligations are generally established at the front end of the projects.

Tax Increment Financing (TIF) – This is a method of funding improvements that are needed immediately by using the additional tax revenue anticipated to be generated because of the given project's benefits in future years. The difference between current tax revenues from the targeted district and the increased future tax revenues resulting from the improvements is dedicated to retiring the municipal bonds used to finance the initial improvement(s).

5.2 Roadway Improvements

5.2.1 Investment Strategies

The bulk of City transportation investments will go for roadway projects. Roadway investments are made to meet the following basic types of needs:

- Maintenance—the existing system must be maintained, or it will not effectively meet user needs over time. (Please refer to Section 5.2.2)
- Access—newly developed and redeveloping areas need efficient connection to the local and regional transportation network.

- Safety—as traffic levels increase, or as required by specific development projects, infrastructure improvements must sometimes be made to maintain or improve existing safety levels; this includes vehicular and pedestrian safety.
- Capacity and operations—as travel demand increases with local and regional growth, roadways must be improved to be able to carry more traffic with acceptable operational characteristics.

Roadway projects are best planned and programmed within a systematic, forward-looking framework that has an appropriate balance of meeting the needs identified above.

Transportation investments also need to address transit and non-motorized transportation issues (i.e. sidewalks and trails). Investment strategies for these types of projects should reflect community needs and priorities.

5.2.2 Pavement Maintenance

The City has implemented a pavement maintenance program that is designed to protect and extend the useful life of paved surfaces throughout the City in a systematic, cost-effective manner. This program uses ICON, a specialized software application which allows staff to track and inventory the growth of the streets system, its structural performance, and overall condition. The basis of this approach is that the cost of maintaining or repairing roads can increase dramatically if they are allowed to deteriorate past certain levels (better to pay a little now vs. a lot later).

On-going field inspections, every three years for individual street sections, are used to rate the physical conditions of the sections. This information is used to calculate a Pavement Condition Index (PCI) for each section. The ICON program uses the PCI information, combined with maintenance policy objectives set by the City, to schedule maintenance projects in such a manner as to minimize life-cycle maintenance costs over an extended planning period. The primary types of projects included in the pavement management program are sealcoating, mill, and overlay (resurfacing), reclaim/recycle the roadway pavement, and complete roadway reconstruction.

Through the City's Pavement Management Program, a five-year Capital Improvement Plan (CIP) is reviewed annually for the identification of individual street projects and budgeting.

5.2.3 Future Improvement Projects

Based upon anticipated future land use development and travel demand as discussed in previous sections of this Transportation Plan, key roadway extension and/or improvement projects are identified in *Table 5.1*, below.

**Table 5.1
Future Roadway Improvement Projects**

Roadway	Segment	Improvement
2008 – 2015		
1. Akron Avenue (CR 73)	CSAH 42 to North City Limit	Widen/pave 4-lane or 3-lane section
2. TH 3 at high school entrance	Intersection	Signalization ⁽¹⁾
3. Shannon Parkway	CSAH 46 to CSAH 38	Reconfigure for lane continuity
3.a Shannon Parkway at CSAH 42	Intersection	Intersection alignment improvement
4. Chippendale Ave at 151 st Street	Intersection	Signalization
5. TH 52/TH 55/CSAH 42	Interchange area	Construct frontage roads and other supporting roadways to support the new interchange ⁽²⁾
6. TH 3 at 132 nd Street	Intersection	Signalization
7. Chippendale Avenue	CSAH 42 to 145 th Street	Capacity improvements
8. 145 th at Chippendale/Chili	Intersection	Capacity improvements
9. Chili Avenue	145 th Street to high school	Capacity improvements
2016 – 2030		
10. 145 th Street	Shannon Parkway to TH 3	Capacity improvements
11. TH 3	CSAH 46 to CSAH 38	Evaluate capacity/safety improvements

⁽¹⁾ This project would be suggested by the City, but would be implemented at the initiative of School District 196.

⁽²⁾ Design and right-of-way activities for the interchange reconstruction project are underway; the final construction schedule to be determined by Dakota County pending federal funding availability).

The locations of these future roadway improvement projects are depicted graphically on *Figure 5.1*.

5.2.4 Access Management

General

As discussed in Section 2.1.1, roadways serve some combination of two functions: mobility and access. Principal arterials primarily serve the mobility function, local streets primarily provide the access function, and minor arterials and collectors serve a combination of the functions.

Appropriate management of access to arterials and collectors is necessary to achieve operational, capacity, and safety objectives.

In Rosemount, access to adjacent roadways is overseen by three primary jurisdictions: Mn/DOT along state highways, Dakota County along county roads, and the City of Rosemount along City

collector roadways, local streets, and private streets. The plat approval process is the point in the land development process that allows control by Dakota County and City of Rosemount for their respective roadways.

Table 5.2 presents City of Rosemount access management guidelines, which are based on Mn/DOT guidelines. Different land use categories are used that apply to existing and future development in Rosemount. “Rural” should be applied to those roadway segments not planned for urbanization within the next twenty years, including agricultural or sparsely developed areas. “Urban” should be applied for those areas that are either currently urbanized or planned for urbanization within the next twenty years, including most suburban-type development. “Urban Core” should be applied to those areas of cities that are fully developed in a dense, compact, pedestrian-oriented manner, including typical downtown districts.

Rosemount intends to use the Mn/DOT access management guidelines for plat and site plan reviews. Since these guidelines are provided within a planning framework rather than by city ordinance, some discretion is expected for each site. However, access control can best be enforced through an early review mechanism that is coordinated with all interested jurisdictions.

Dakota County has identified access management guidelines in its *2025 Transportation Plan*, 2004). These guidelines are presented in **Table 5.3**. The City of Rosemount will continue to work with Dakota County as access is requested along County roadways.

CSAH 42

The roadway with the most significant access management issues in Rosemount is CSAH 42. This is a principal arterial roadway, yet has much development taking place adjacent to it and this trend is anticipated to continue. The 1999 *County Highway 42 Corridor Study* identified recommendations including the following regarding access to CSAH 42:

- A target of one-half mile average spacing between full access, signalized intersections.
- One-quarter mile spacing for three-quarter access locations.
- One-eighth mile spacing for right-in/right-out locations.

The study also identified specific access locations along the corridor; for Rosemount these locations are depicted on Figure 8-18 and 8-19 of that document. Some of the access locations identified east of TH 3 (Figure 8-19) show spacing distances greater (more restrictive) than those identified above. The City’s acceptance and adoption of the *County Highway 42 Corridor Study* in 1999 was conditional as noted in Council Resolution 1999-11.

Based on the CSAH 42/TH 52 Area Study referenced in Section 4.1 of this Transportation Plan, the City of Rosemount has proposed a system of access points of CSAH 42 between 145th Street and TH 52 which has some spacing of intersections closer than what is depicted on Figure 8-10 in the *County Highway 42 Corridor Study*. The City felt that its proposed system of access onto CSAH 42 east of 145th Street is consistent with the overall access management goals and guidelines as recommended in the CSAH 42 study, as well as the Dakota County access management guidelines identified in Table 5.3.

This plan has been reviewed with Dakota County staff, and approved by both the City and County.

Figure 5.2 depicts the CSAH 42 Access Plan for Rosemount. From TH 3 to the west, the information is taken directly from the County Highway 42 Corridor Study. East of TH 3, it is taken from the 42/52 Study referenced previously.

**Table 5.2
Rosemount Access Management Guidelines**

Functional Class	Median Treatment	Land Use	Typical Posted Speed	Full Median Opening Spacing (Miles) ¹	Minimum Spacing Between Connections ²	Maximum Connection Points Per Mile ³
Minor Arterial	Full	Rural	55	1/2	820	12
		Urban	≥40	1/4	490	20
		Urban Core	<40	1/4	275	32
	None	Rural	55	1/2	820	12
		Urban	≥40	1/4	490	20
		Urban Core	<40	1/4	350	24
Collector	Full	Urban	≥40	1/4	490	16
		Urban Core	<40	1/8	275	32
	None	Rural	55	1/2	820	12
		Urban	≥40	1/4	490	16
		Urban Core	<40	1/8	310	32

¹ If route has no median control, the spacing refers to the minimum distance between traffic signals.

² Distances are based upon spacing between connections (major roads, local public streets, and private driveways).

³ Connections are counted by adding each public and private approach as they occur along the roadway (for example: a full intersection is counted as two connections while a right-in right-out driveway is counted as one).

**TABLE 5.3
Dakota County Access Management Guidelines**

Functional Classification	Divided Highways			Undivided Highways		
	Principal Arterial	Non-P.A.	Non-P.A.	Non-P.A.	Non-P.A.	Non-P.A.
2025 Projected ADT	All	>35,000	15,000 to 35,000	15,000 to 22,000	<15,000	<3,000
Full Movement Public Street Intersections (a)	½ mile	½ mile	¼ mile (c)	¼ mile (c)	⅛ mile (c), (d)	(b), (d)
¾ Public Street Access (a)	¼ mile (a)	¼ mile (a)	⅛ mile Right-in/ Right-out only (c)	N/A	N/A	N/A

Source: Dakota County 2025 Transportation Plan

Roadway type refers to the anticipated cross section. Divided section must be in place for conditional intersection (right-in/right-out or ¾ intersection) to be built.

- (a) Median access points may be removed or modified to address safety and operational issues identified through engineering review.
 - (b) Determined based on engineering review, judgment considering location, distance from other driveways, nearby intersections, alignment with other access points, visibility and other operation/safety issues.
 - (c) Multiple commercial access permitted.
 - (d) Private residential or individual commercial access permitted.
- N/A – Not applicable to undivided roadway segments.

5.2.5 Roadway Functional Classification

The concept of roadway function classification was discussed detail in Section 2.1.1 of this Transportation Plan. The primary classes of roadway to serve Rosemount will be:

- Principal Arterial
- Minor Arterial (A and B)
- Collector (major and minor)
- Local

Each of these classes has its own set of design standards and access management guidelines reflecting the differing transportation functions which they provide.

Figure 5.3 depicts the proposed 2030 roadway function classification system for Rosemount. It can be seen that the network of local collector roadways is significantly expanded to accommodate anticipated future land use development. This figure also includes the anticipated number of lanes on each arterial and above roadway.

5.2.6 Roadway Jurisdictional Classification

In general, roads which serve higher mobility functions are under the jurisdiction of higher levels of government. Conversely, roadways which serve relatively short trips and local access needs are

under the jurisdiction of local municipalities. The existing jurisdictional classification system was discussed in Section 2.1.2 of this Plan and is depicted on *Figure 2.3*.

The Mn/DOT Metro Division *2008 -2030 Transportation System Plan* (Appendix B, “Draft Jurisdiction Plan”) identifies the fiscally unconstrained goal of assuming jurisdiction over principal arterials from metro counties. This includes CSAH 42 in Scott and Dakota Counties. However, sufficient funding has not been identified, and the fiscally constrained jurisdictional transfer plan in Appendix B of the TSP does not show CSAH 42 being transferred to Mn/DOT.

The Dakota County *2025 Transportation Plan* has identified the following roadways as part of its County Jurisdictional Transfer Plan (Table T-18):

- County Road 38 between TH 3 and CSAH 71—transfer from county to city jurisdiction; this transfer has taken place (2005).
- Blaine Avenue from CSAH 42 to southern municipal boundary—transfer from University of Minnesota to County jurisdiction.
- CSAH 42 from TH 52 to TH 55—transfer from county to state jurisdiction.

The anticipated 2030 jurisdictional classification network is depicted on *Figure 5.4*.

5.2.7 Future Right-of-Way Needs

It is advisable for the City to purchase right-of-way for future or to-be-expanded roadways as early as practicable. This helps to limit future high costs and unforeseen purchase issues as on-going development occurs in the areas of the roadways. *Table 5.3* shows right-of-way requirements for different types of roadway cross sections. These guidelines should be considered for inclusion in the City’s relevant ordinance sections. The identified right-of-way widths could vary with topography and requirements for sidewalks or off-street facilities, and are intended to provide minimum street needs and green space. *Table 5.4* Dakota County’s right-of-way guidelines for its roadways.

**TABLE 5.4
Right-of-Way Guidelines – City Streets⁽¹⁾**

Functional Classification	ADT	Lanes	Right-of-Way Required	
			Urban	Rural
Minor Arterial	15,000-30,000	4 - Lane Divided	120 to 150 ft	150 to 200 ft
Major Collector	7,500-18,000	4 - Lane Undivided	100 ft ⁽²⁾	100 ft
	10,000-25,000 +	4 - Lane Divided	100 ft ⁽²⁾	150 ft
Minor Collector	2,000-8,000	2 – Lane	80 ft	100 ft
	4,000-16,000	3 – Lane	80 ft	100 ft
	7,500-18,000	4 - Lane Undivided	100 ft ⁽²⁾	100 ft
Local	0-9,000	2 – Lane	60 ft	80 ft

⁽¹⁾ Mn/DOT and Dakota County right-of-way requirements apply for Trunk Highways and County roadways, respectively.

⁽²⁾ Additional R.O.W. may be required on a case-by-case basis for channelized turn lanes at intersections.

**TABLE 5.5
Right-of-Way Guidelines – Dakota County⁽¹⁾**

Roadway Type	Right-of-Way Required
2-Lane Urban/Rural	100/110 ft
4-Lane Undivided	120 ft
4-Lane Divided	150 ft
6-Lane	200 ft

⁽¹⁾ Source: Dakota County Road Plat Review Needs (11/22/2005)

5.3 Transit and Non-Motorized Transportation

Transit

A detail Transit Plan is included as *Appendix C*.

Non-Motorized Transportation

Ensuring pedestrian safety is a critical goal for the City. In general, most pedestrian accidents and injuries take place at roadway intersections; thus, intersections must be properly designed to accommodate both vehicular and pedestrian movements.

At this time, there do not appear to be undue pedestrian safety issues at roadway intersections in Rosemount. However, with the anticipated growth of the City as discussed in Section 4.0,

vehicular and pedestrian traffic levels will increase, and safety conditions will have to be reviewed on an on-going basis. Should given intersections become problematic, safety measures including the following will be assessed and implemented as-needed:

- Installation of new traffic control signals
- Revised timing of existing signals
- Revised roadway geometry (layout and design of lanes)
- Curb bump-outs
- Traffic calming measures

Another way to promote pedestrian safety, as well as access, is to provide a coordinated network of sidewalks and trails. It is the City's practice to provide (or require developers to provide) paved, off-road bike/pedestrian ways on either side of collector level and higher roadways. This means, at minimum, an eight foot trail on one side and a five foot sidewalk on the other, or eight foot trails on both sides of the roadway.

Trails

The City is committed to providing a comprehensive and coordinated series of trails, which provide transportation as well as recreational value. *Figure 2.6* depicts existing and anticipated future trails and sidewalks within currently developed areas. This network will expand as future roadways are constructed in currently undeveloped portions of the City. The City will continue its practice of providing bike/pedestrian facilities on both sides of all collector level and higher roadways (please refer to information under the previous heading). The City will continue to coordinate with Dakota County to allow the local trail network to tie in with regional trails to the greatest degree feasible.

Figure 2.7 includes a conceptual corridor for the Rosemount Interpretive Trail Corridor. This would be a trail from downtown Rosemount to the Spring Lake Park Preserve. It is envisioned to be an off-road trail with its own alignment in some locations, and roadway alignments in others. The City intends to construct this trail over the next 5-10 years as development occurs and additional right-of-way is secured. The design standards which will be used are not known at this time. The City would like to build the trail with ten-foot width where possible, but environmental and local impact issues must be carefully addressed.

Transportation Demand Management (TDM)

The primary emphasis of Transportation Demand Management (TDM) is to reduce the number of vehicular trips on congested roadways during peak travel times. Since many or most these trips are commuter (work) trips, TDM strategies primarily involve the workplace context and associated travel behavior.

The primary methods or strategies are identified below:

- transit
- car/van-pooling
- telecommuting

- flex-time
- non-motorized commuting

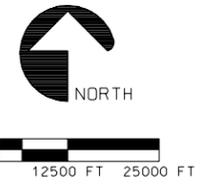
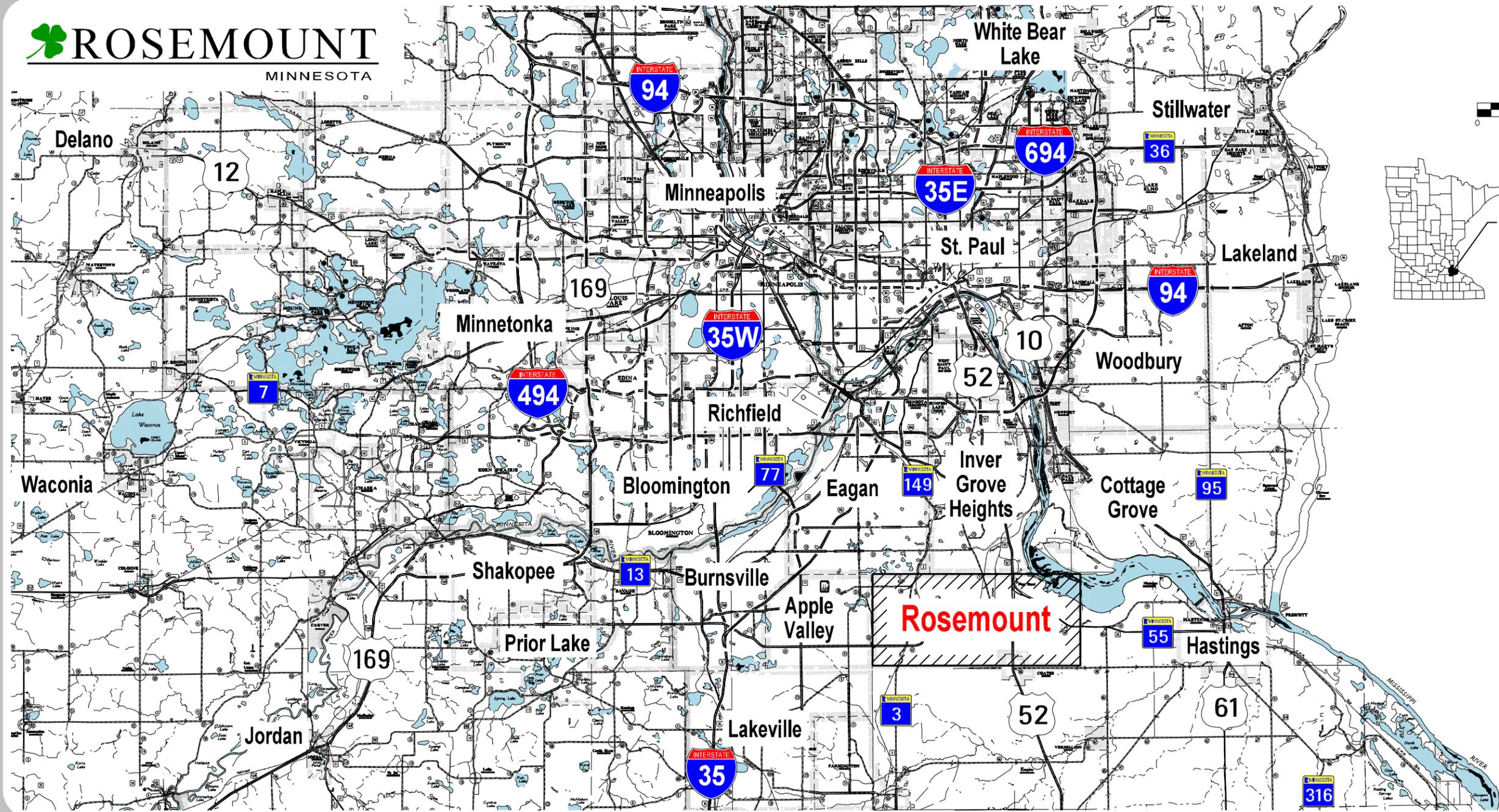
In general, the policies or incentives to promote TDM activities are provided through employers. For example, employers can provide monthly discounts or passes to employees to use transit. They can provide coordination services to match up individuals for car/van pooling activities. They can allow or promote telecommuting, particularly in various industries for which face-to-face contact is not important for task performance. Similarly, employers can allow or promote flex time, which enables employees to travel to/from work at non-peak travel times. Regarding non-motorized commuting, the provision of shower and changing facilities is often helpful to promote bicycle commuting.

There are a number of reasons for employers to promote TDM activities. In some cases, vehicle parking is at a premium and anything they can do to reduce parking requirements is beneficial. Another example may be a large employer or group of employers accessed by congested road systems. If these employers can reduce rush hour trips into their facilities and associated congestion, it benefits their workers and makes their places of business more attractive places to work. Some employers wish to reduce vehicle trips to their facilities simply because it is “the right thing to do” for environmental reasons.

Cities can increase TDM activities through promotional activities and by coordinating with key employers to identify and implement TDM plans. Cities may require TDM plans for new developments if they are large enough to have significant traffic impacts. The City of Minneapolis actively uses this approach, for example. Cities can also form or coordinate the formation of Transportation Management Organizations (TMOs). These organizations pool resources and strategies to get the biggest “bang for the buck” for reducing traffic levels in a given area.

It is difficult to project the quantitative benefits of Transportation Demand Management activities with confidence. However, as fuel prices and congestion on major roadways in the metro region increase into the future, the demand for and potential of this approach will increase accordingly.

The City of Rosemount currently does not require businesses to prepare and implement TDM plans. However, it will review the option of requiring proposers of new development projects over a given threshold in terms of traffic generation, to submit a TDM plan as part of the plat approval process. It will also review the option of working with existing larger employers to promote and facilitate TDM activities.



PROJECT LOCATION
COUNTY: DAKOTA
DISTRICT: METRO

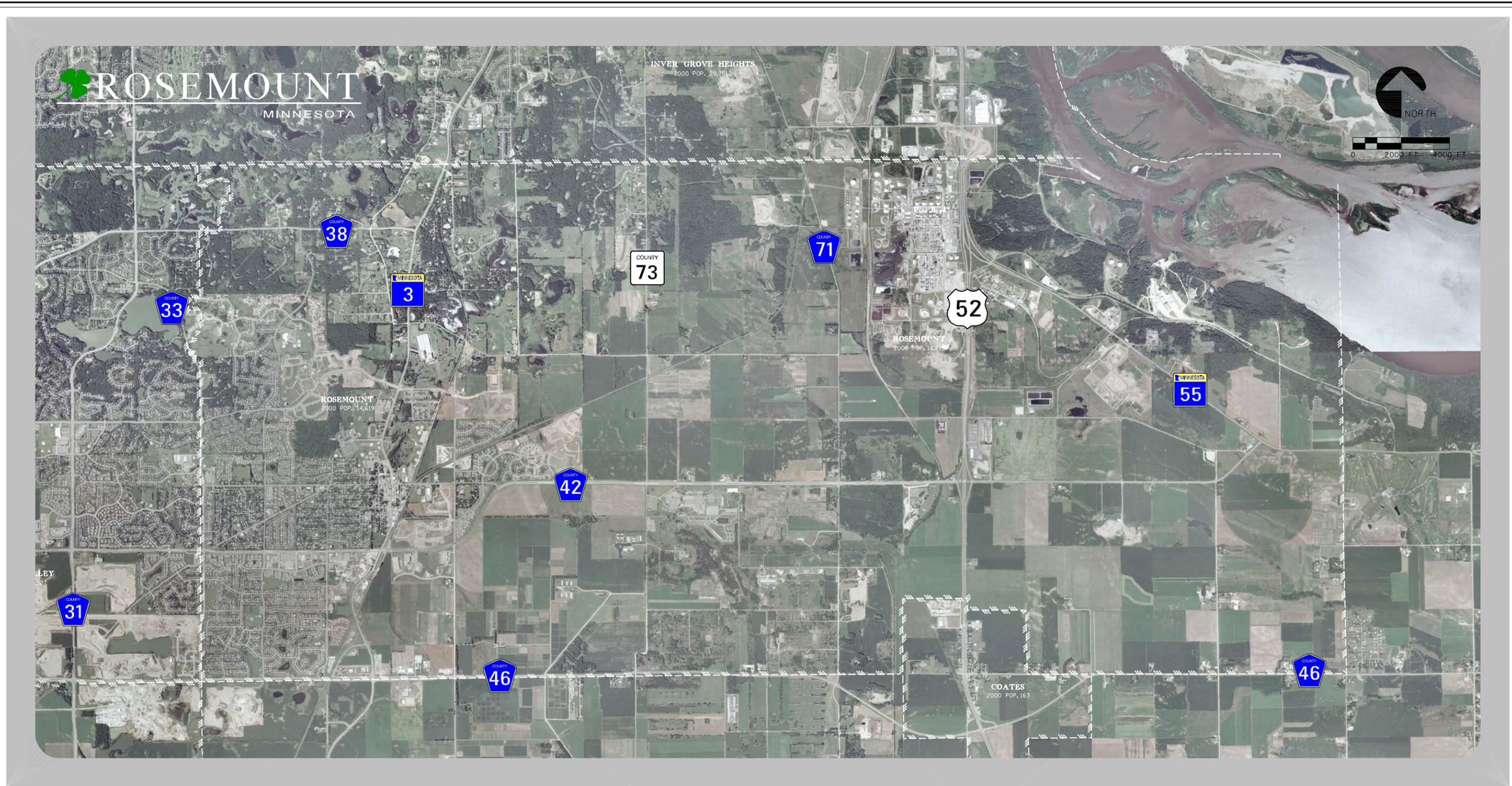
City of Rosemount, Minnesota Transportation Plan

Regional Location Map

Figure 1.1

Prepared by:

WSB
Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com
763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION



City of Rosemount, Minnesota Transportation Plan

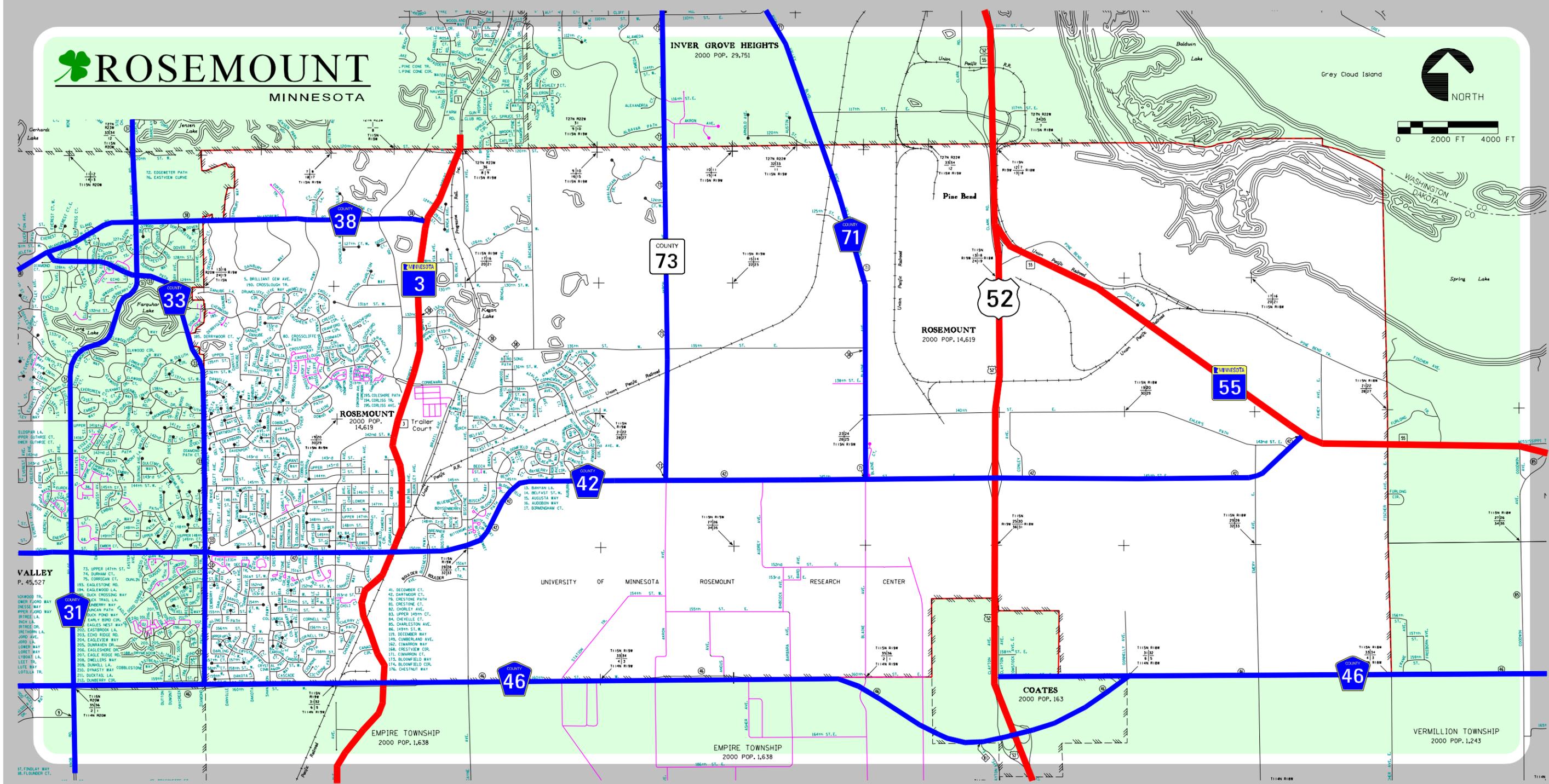
Rosemount Aerial Photo

Prepared by:

WSB
 & Associates, Inc.
 701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com
 763-541-4800 • Fax 763-541-1700
 INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

Figure 2.1

ROSEMOUNT MINNESOTA



City of Rosemount, Minnesota Transportation Plan

Legend

- Minnesota Department of Transportation
- Dakota County
- City of Rosemount
- Private Road

Existing Roadway Jurisdictional Classification

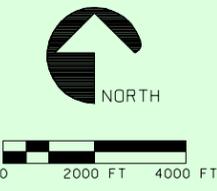
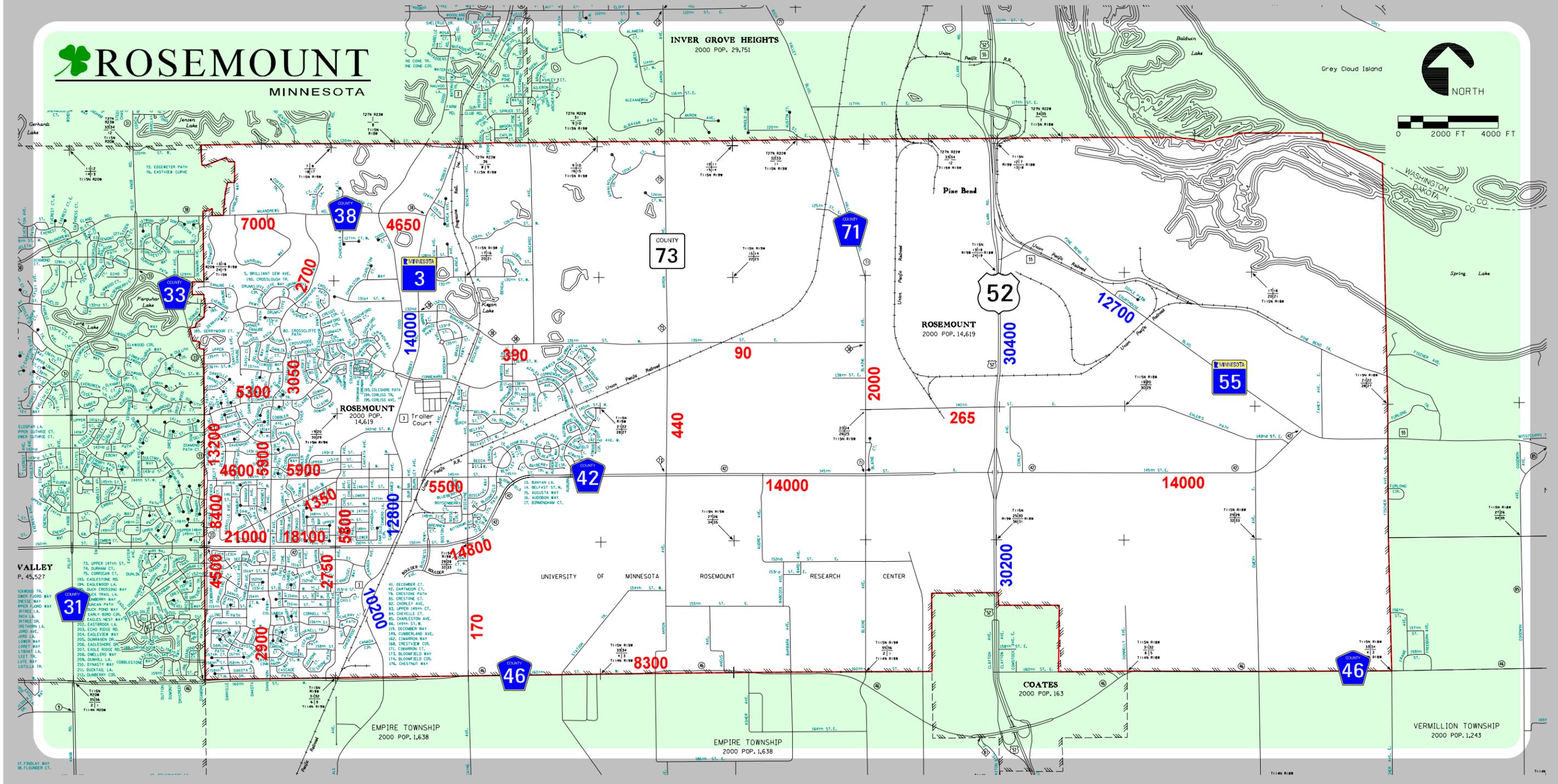
Figure 2.3

Date: Printed: 8/13/2008
WSB Filename: T:\01005-57\Cad\fig-02-3.dgn

Prepared by:

WSB
Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com
763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

ROSEMOUNT MINNESOTA



City of Rosemount, Minnesota Transportation Plan

Legend

Source: Minnesota Department of Transportation

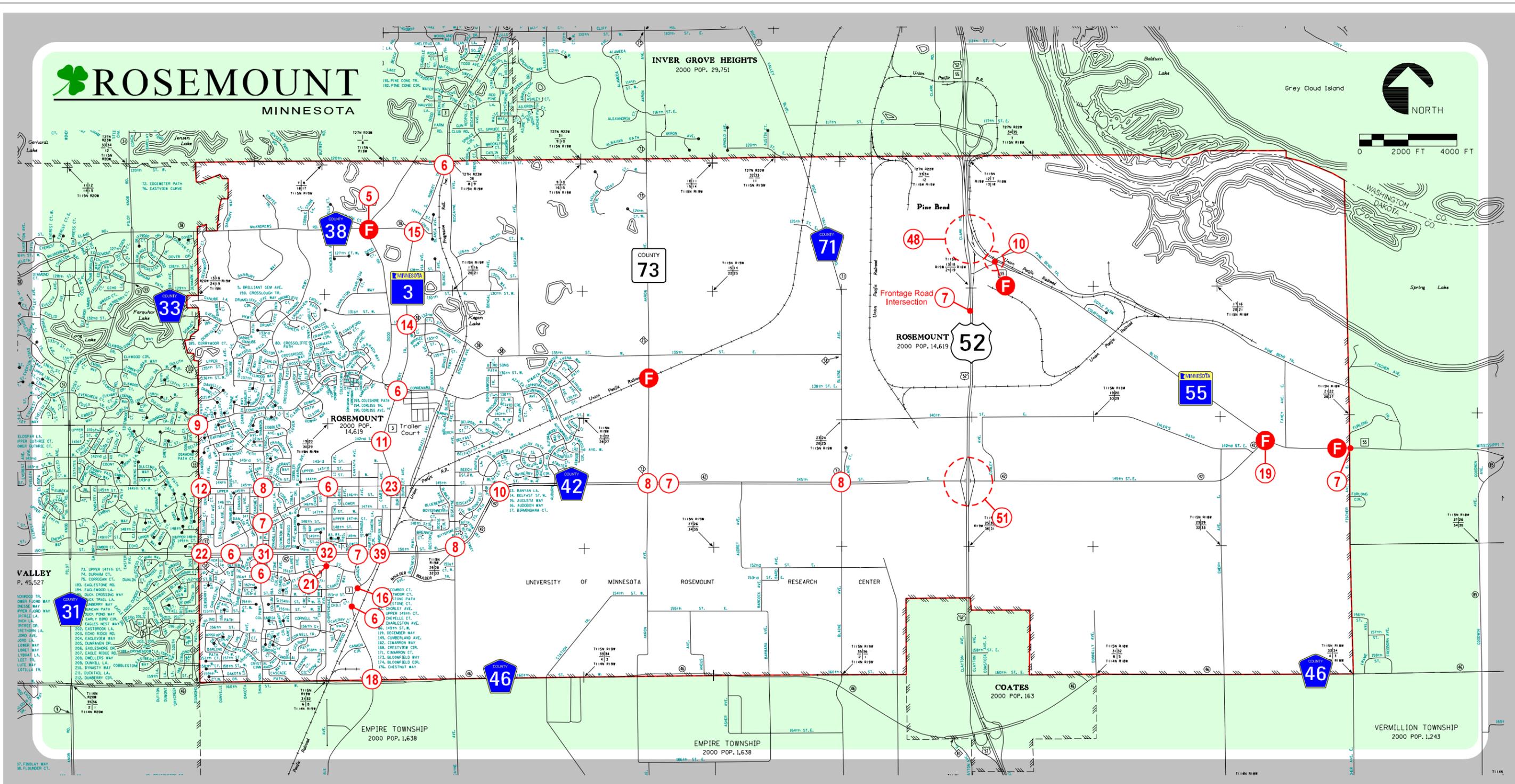
- xxx 2005 Average Daily Traffic
- xxx 2004 Average Daily Traffic

Current Traffic Volumes

Figure 2.4

Prepared by:

WSB
Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbg.com
763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION



City of Rosemount, Minnesota Transportation Plan

Legend

- N Number of Accidents
- F Fatality

Crash Analysis

1999 - 2002, 2004 Mn/DOT Data

Notes:
 1. The identified accidents are only a portion of all accidents in Rosemount during the Study Period. Please refer to text for further information.
 2. 2003 information was not used because of potential Mn/DOT data problems.

Figure 2.5

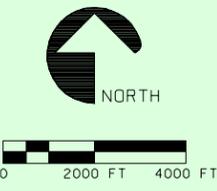
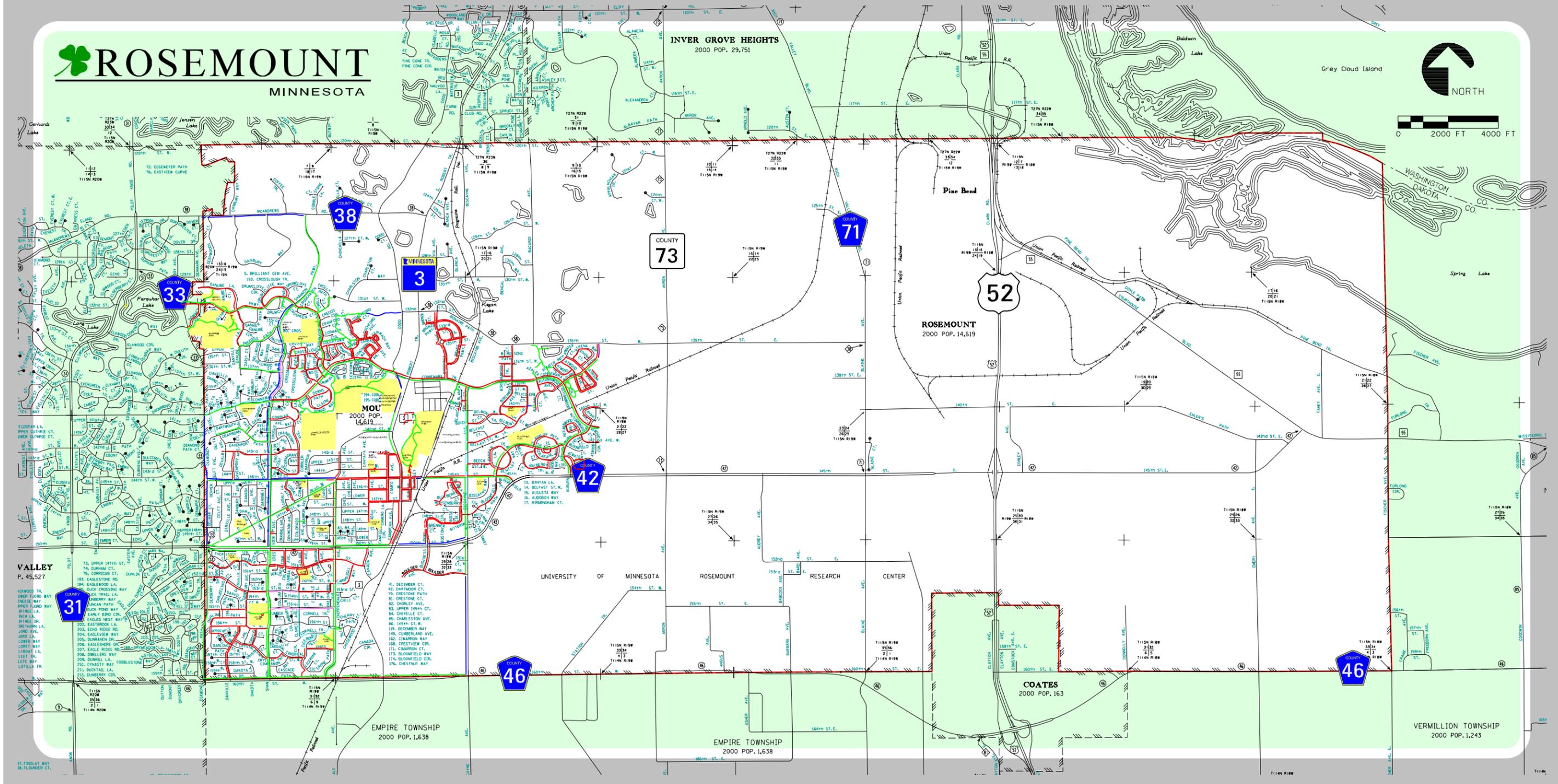
Date: Printed: 8/13/2008
 WSB Filename: T:\01005-57\Cad\fig-02-5.dgn

Prepared by:

701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com

763-541-4800 • Fax 763-541-1700
 INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

ROSEMOUNT MINNESOTA



City of Rosemount, Minnesota Transportation Plan

Prepared by:
WSB
 & Associates, Inc.
 701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsben.com

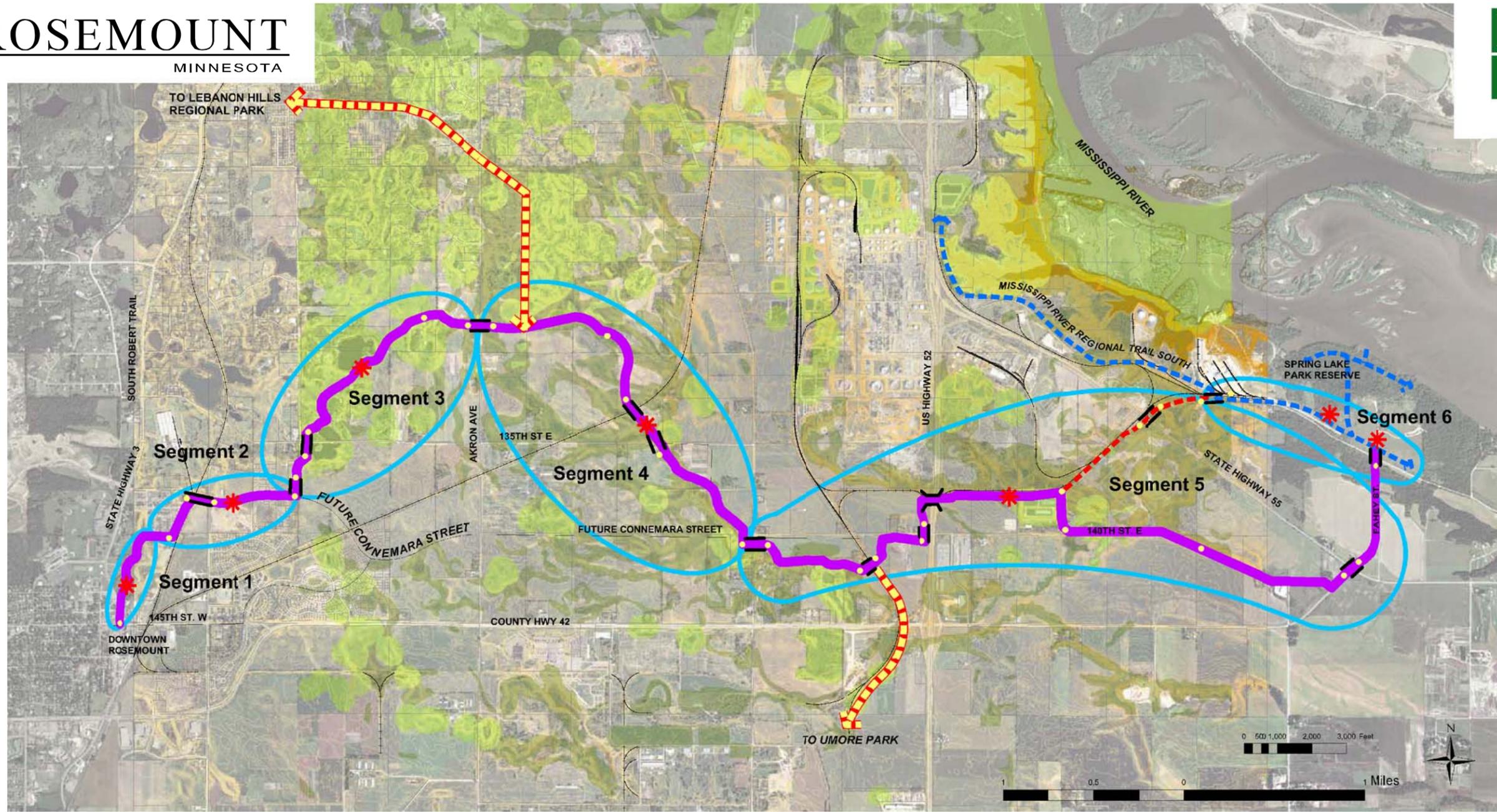
Note: Pedestrian and bicycle way network will be expanded as roadway network is expanded (see Section 2.2 text)

Legend

- Existing Bituminous Path
- Existing Concrete Walk
- Proposed Bituminous Path
- Proposed Concrete Sidewalk
- Existing Bituminous Path to be Replaced with Concrete Walk

Existing and Future Pedestrian & Bicycle Ways

Figure 2.6



City of Rosemount, Minnesota Transportation Plan

Rosemount Interpretive Trail Corridor

TRAIL CORRIDOR OPPORTUNITIES

- TRAIL ROUTE
- - - LONG TERM FUTURE ALTERNATE ROUTE

TRAIL CONNECTIONS

- - - LINKS
- - - MISSISSIPPI RIVER REGIONAL TRAIL INTERPRETATION

- * INTERPRETIVE STOPS
- WAY-FINDING MARKER

CROSSINGS

- = AT GRADE CROSSING
- = SEPARATED CROSSING

GREENWAY PRESERVATION OPPORTUNITIES

- HIGH LANDSCAPE SENSITIVITY AREAS
- LOW LANDSCAPE SENSITIVITY AREAS

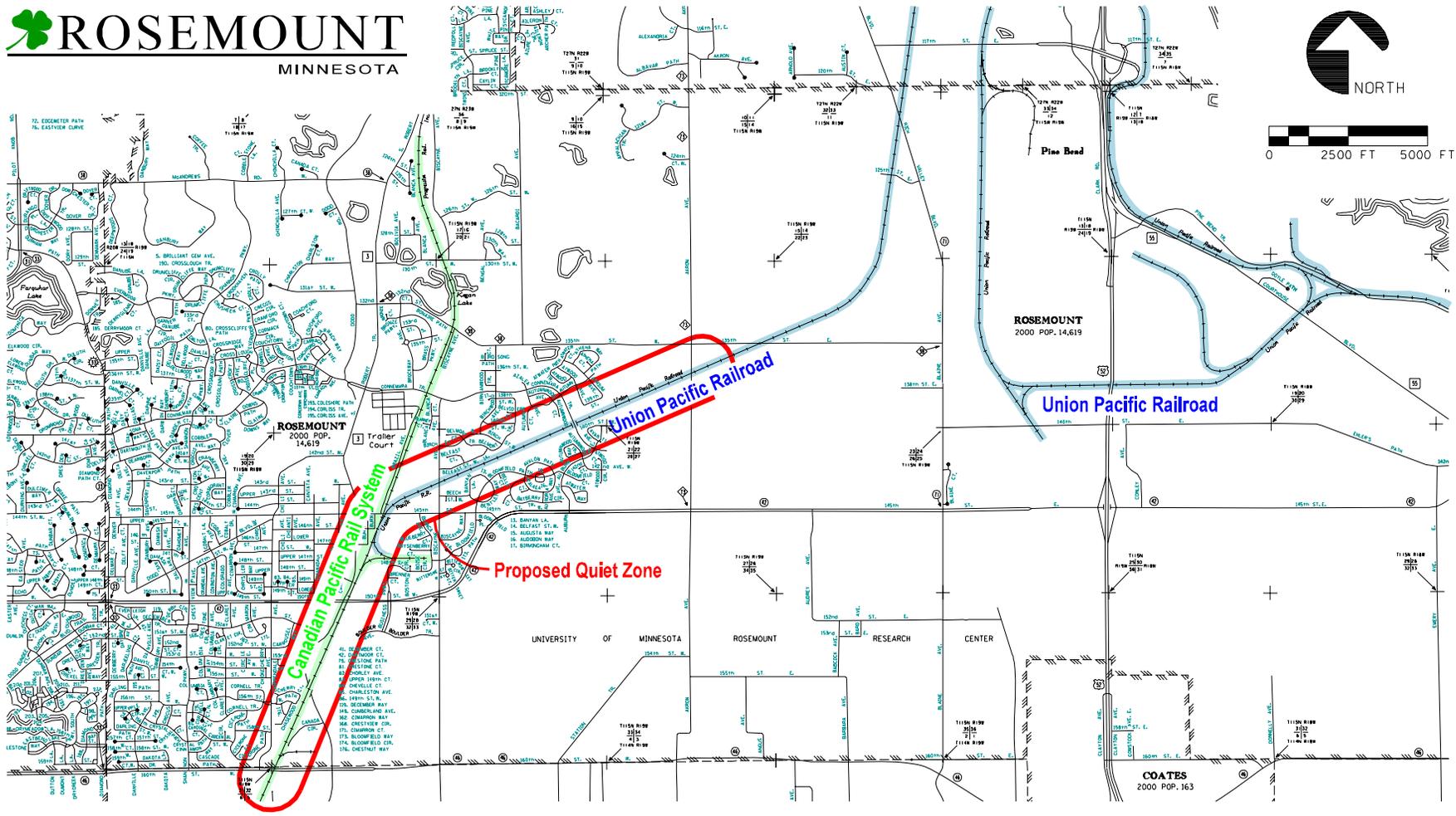
ELEVATION	900-998	700-798
	800-898	600-698

Prepared by:

701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

Figure 2.7



City of Rosemount, Minnesota Transportation Plan

Prepared by:

WSB
Associates, Inc.

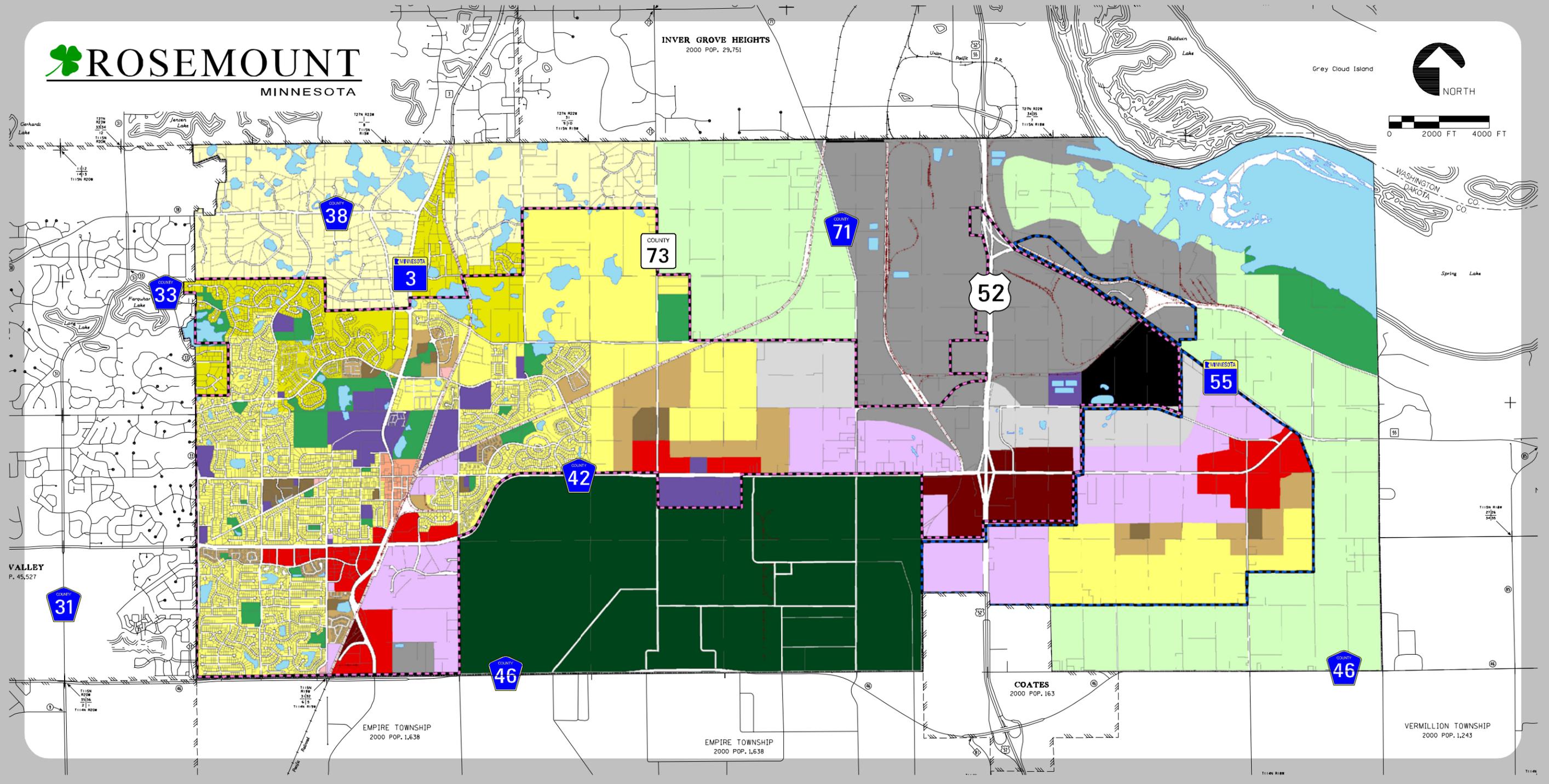
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbg.com

763-541-4800 • Fax: 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

Railroad Lines

Figure 2.8

Date: Printed: 8/13/2008
WSB Filename: T:\01005-57\Cad\fig-02-8.dgn



City of Rosemount, Minnesota Transportation Plan

Legend

- | | | | |
|----------------------------|--------------------------------|------------------------------|-----------------------|
| AG Agriculture | AGR Agricultural Research | HDR High Density Residential | GI General Industrial |
| DT Downtown | RR Rural Residential | PI Public/Institutional | WM Waste Management |
| NC Neighborhood Commercial | LDR Low Density Residential | PO Existing Parks/Open Space | 2020 Musa Line |
| RC Regional Commercial | TR Transitional Residential | BP Business Park | 2030 Musa Line |
| CC Community Commercial | MDR Medium Density Residential | LI Light Industrial | |

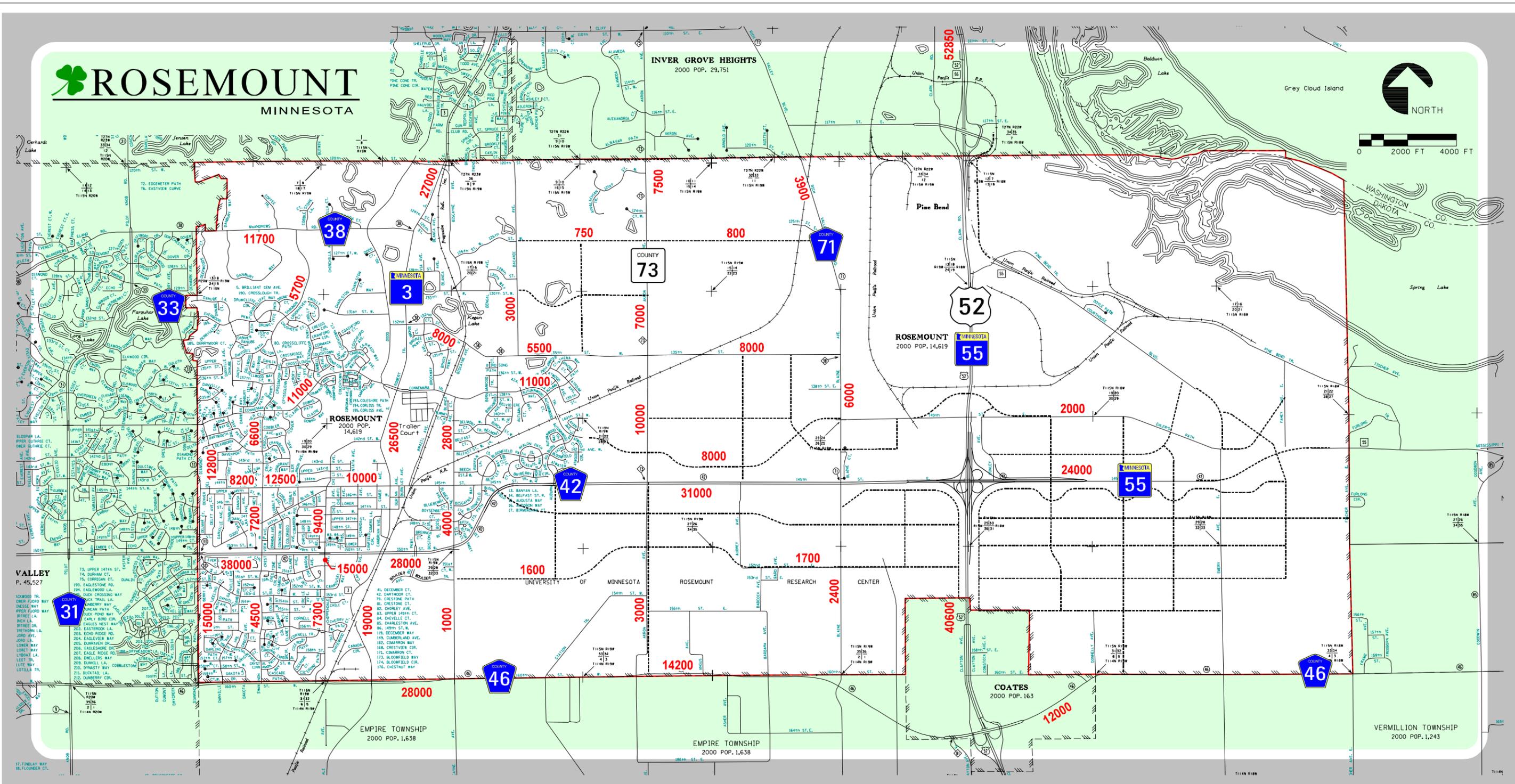
2030 Land Use Plan Map

Note: Source: 2030 Comprehensive Plan Update City of Rosemount plus 42/52 Land Use Plan.

Figure 4.1

Prepared by:

WSB
Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com
763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION



City of Rosemount, Minnesota Transportation Plan

Legend

 Future Roadways

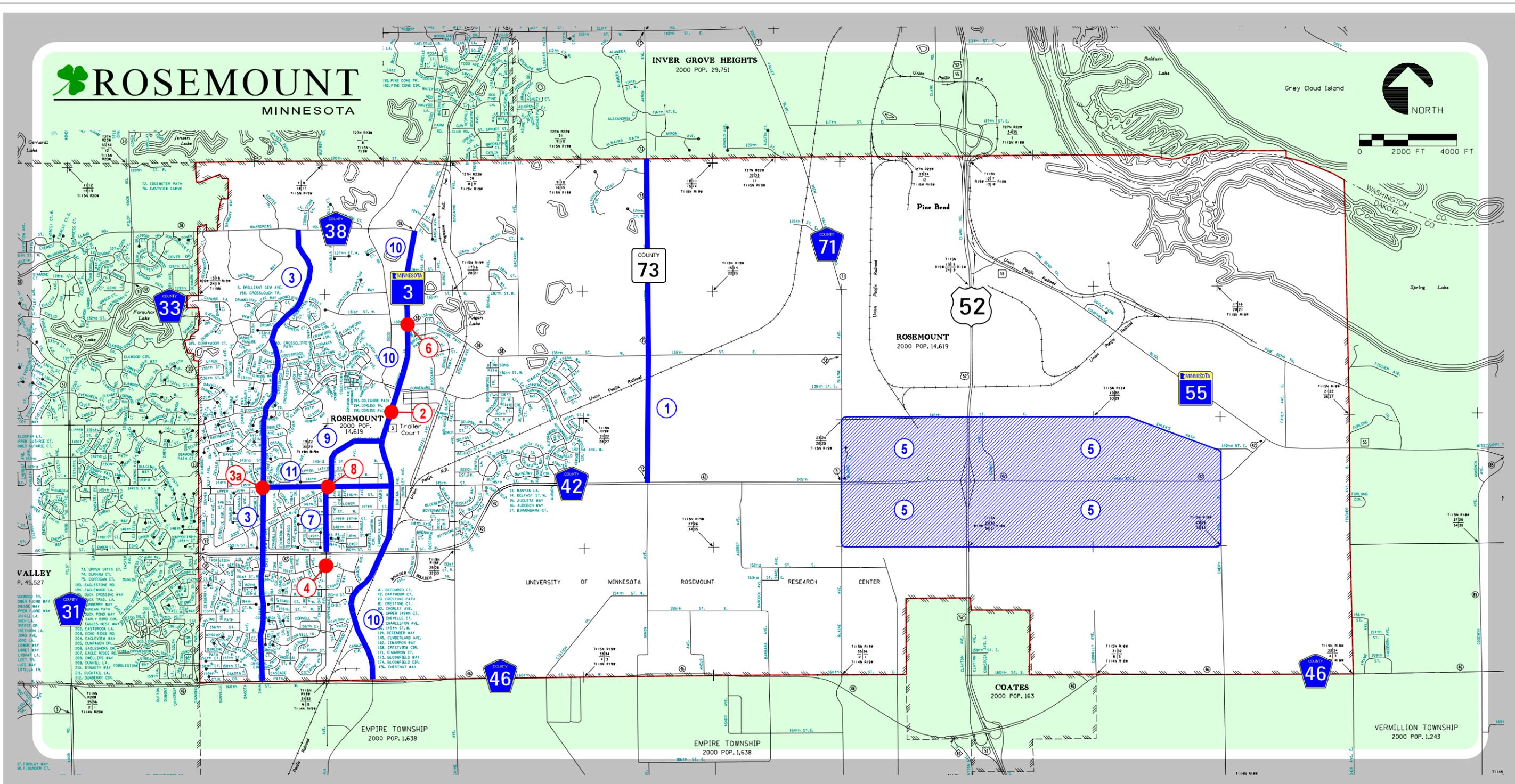
2030 Forecast Traffic Levels

Figure 4.2

Prepared by:

WSB
 & Associates, Inc.
 701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com
 763-541-4800 • Fax 763-541-1700
 INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

Date: Printed: 8/13/2008
 WSB Filename: T:\01005-57\Cad\fig-04-2.dgn



City of Rosemount, Minnesota Transportation Plan

Legend

- N Improvement Project
- N Intersection Improvement Project

Notes:
The numbers correspond to the information provided in Table 5.1 of the Transportation Plan text.

Future Capital Improvement Projects

Figure 5.1

Date: Printed: 8/13/2008
WSB Filename: T:\01005-57\Cad\fig-05-1.dgn

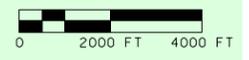
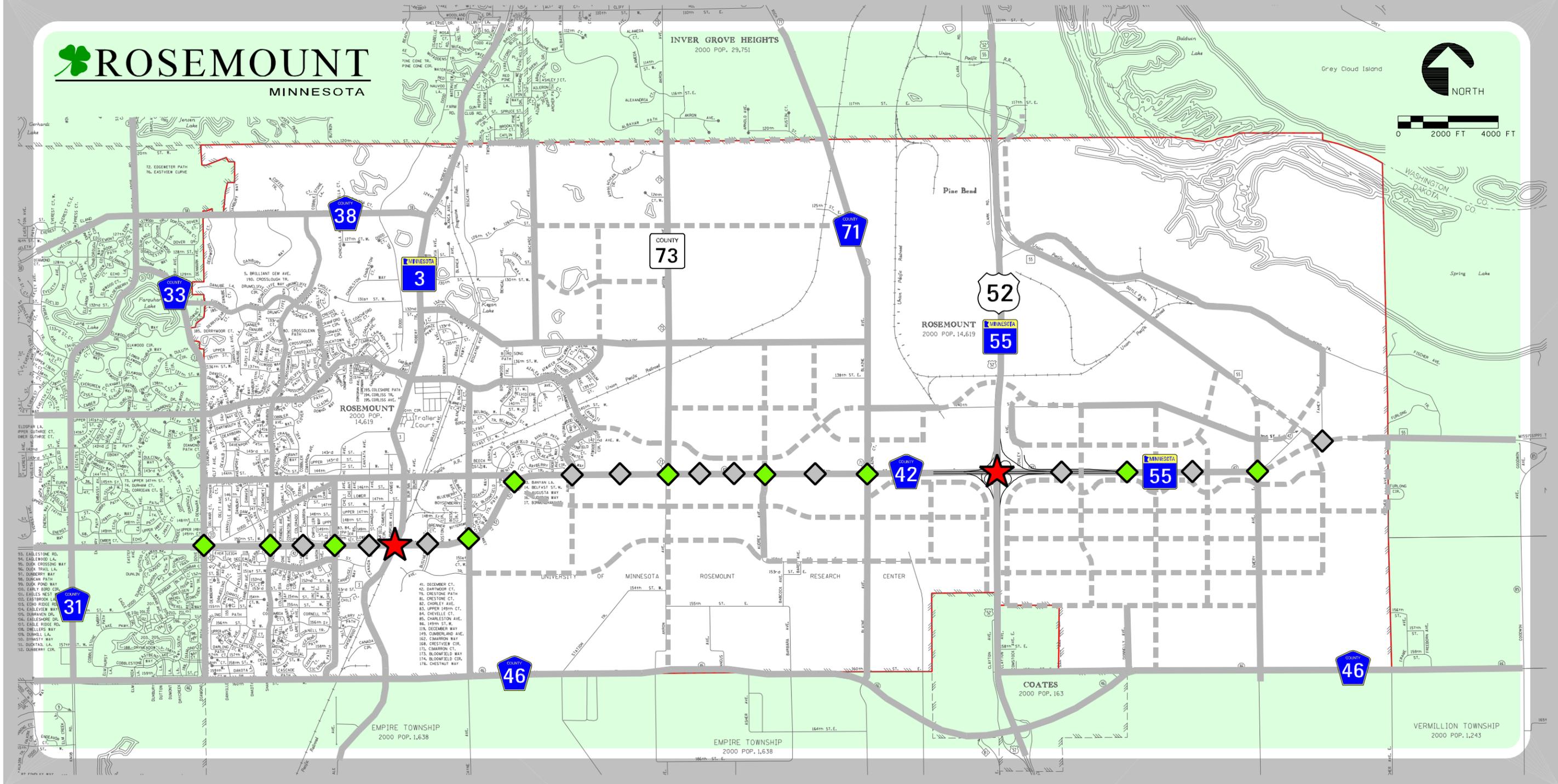
Prepared by:



701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com

763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

ROSEMOUNT MINNESOTA



City of Rosemount, Minnesota Transportation Plan

Legend

- ★ Interchange
- ◆ Full Access
- ◇ Partial Access
(Right-In / Right-Out or 3/4)

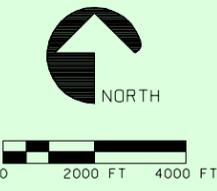
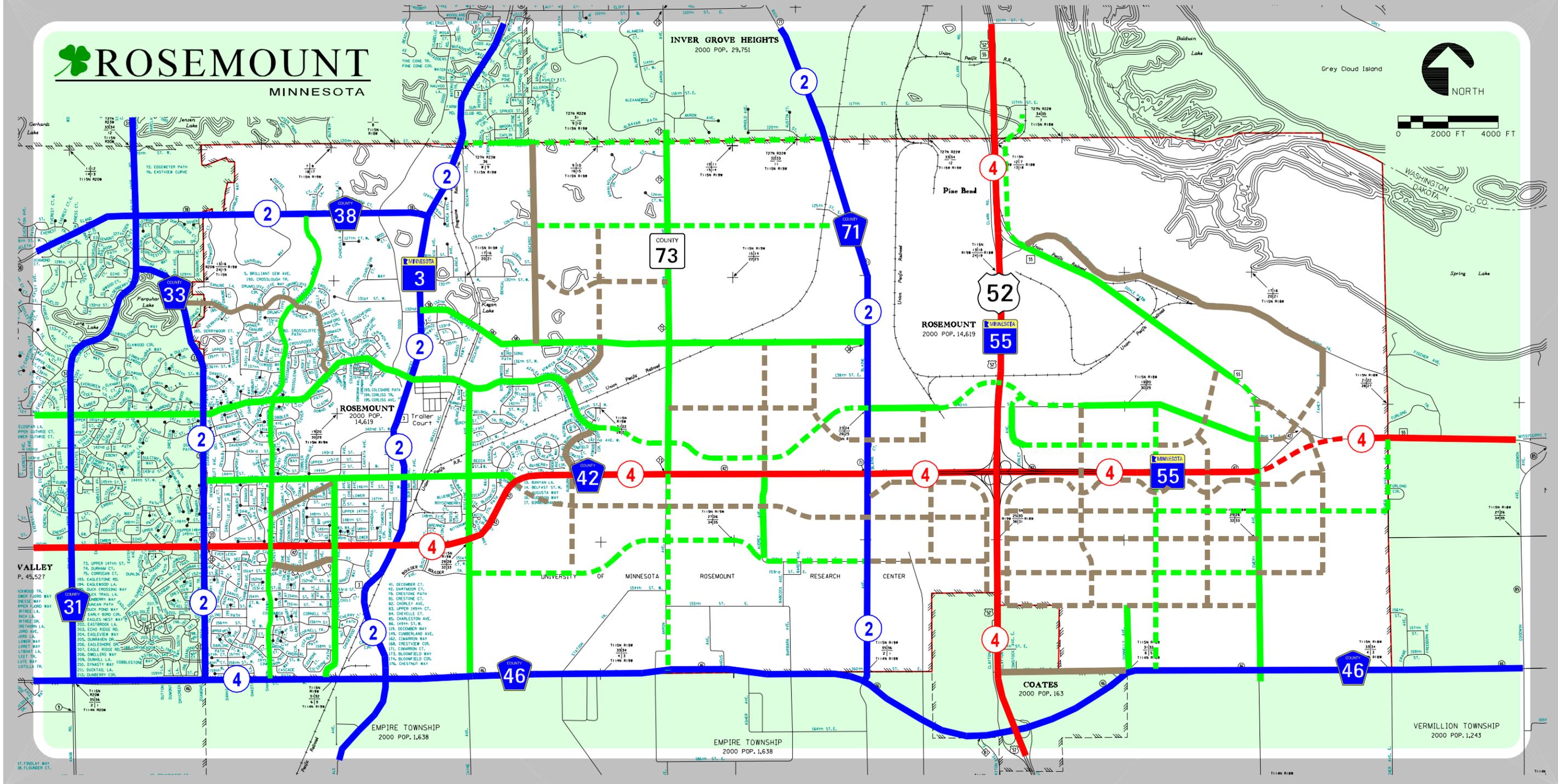
CSAH 42 Access Plan

Figure 5.3

Prepared by:

WSB
Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbeng.com
763-541-4800 • Fax 763-541-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

Date: Printed: 4/23/2009
WSB Filename: T:\01005-57\Cod\CSAH 42 Access Plan.dgn



City of Rosemount, Minnesota Transportation Plan

Prepared by:



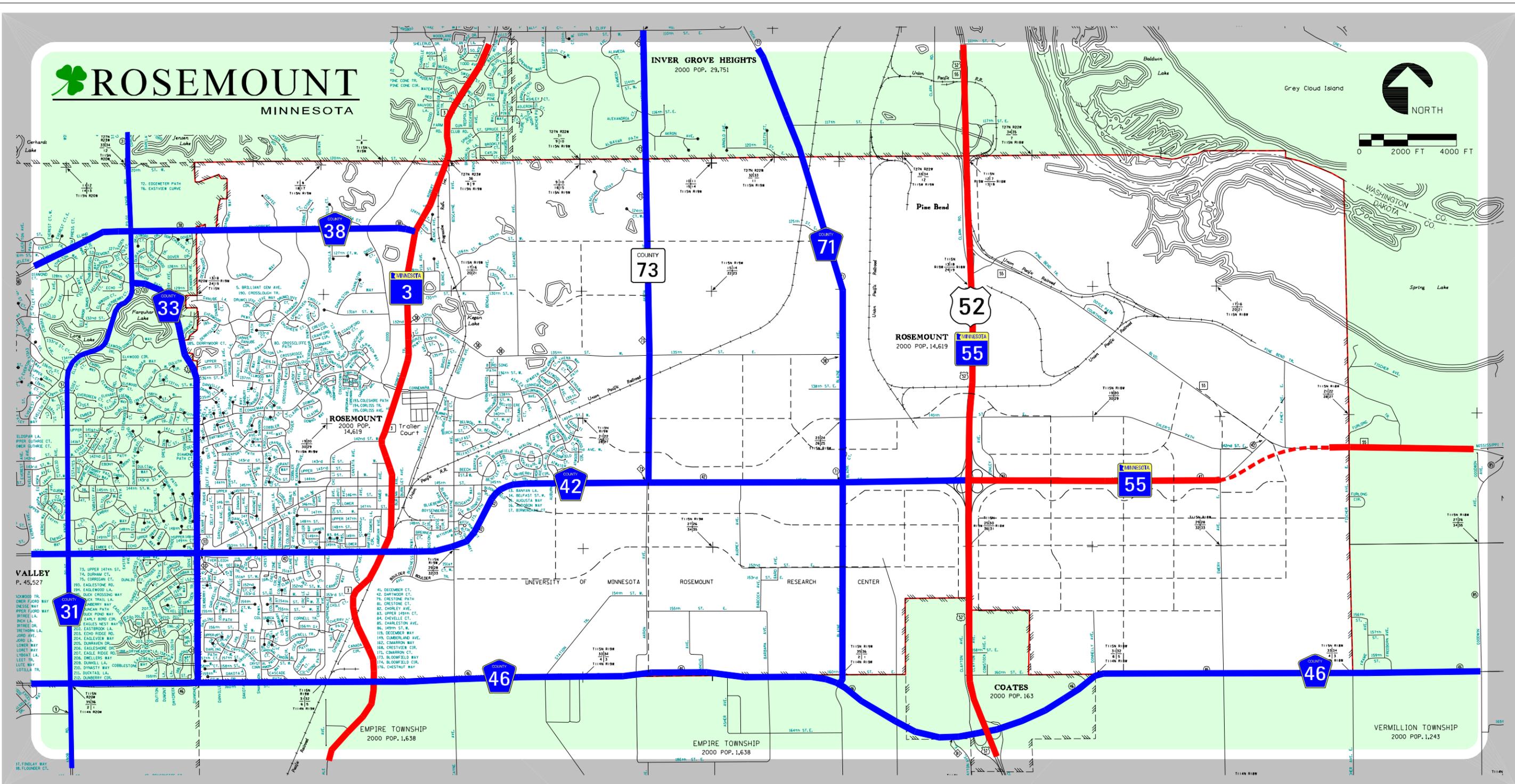
Legend

- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- - - Minor Collector (future roadway)
- - - Principal Arterial (future roadway)
- - - Major Collector (future roadway)
- N Number of Lanes

2030 Roadway Functional Classification

Figure 5.3

Date: Printed: 8/13/2008
WSB Filename: T:\01005-57\Cad\fig-05-3.dgn



City of Rosemount, Minnesota Transportation Plan

Legend

- Minnesota Department of Transportation
- - - Minnesota Department of Transportation (future roadway)
- Dakota County
- City of Rosemount
- - - City of Rosemount (future roadway)

2030 Roadway Jurisdictional Classification

Figure 5.4

Prepared by:

WSB
 & Associates, Inc.
 701 Xenia Avenue South, Suite 300
 Minneapolis, MN 55416
 www.wsbeng.com
 763-541-4800 • Fax 763-541-1700
 INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

Date: Printed: 8/13/2008
 WSB Filename: T:\01005-57\Cad\fig-05-4.dgn

APPENDIX A

**AGENCY COMMENTS ON DRAFT TRANSPORTATION PLAN AND
CITY RESPONSES**



Office of Planning
Lynn G. Moratzka, AICP
Planning Manager

Dakota County
Western Service Center
14955 Galaxie Avenue
Apple Valley, MN 55124

952.891.7030
Fax 952.891.7031
www.co.dakota.mn.us

February 1, 2006

Andy Brotzler
City of Rosemount
2875 145th Street West
Rosemount, MN 55068

RE: City of Rosemount Draft Transportation Plan

Dear Mr. Brotzler:

Thank you for the opportunity to review and comment on the Draft Transportation Plan for the City of Rosemount. The draft plan has been reviewed by staff in the Physical Development Division. Our comments are attached to this letter.

We look forward to working with you and other City staff as new developments that need access to County roads are proposed in Rosemount.

If you have any questions, please call me at (952) 891-7033.

Sincerely,

Lynn Moratzka, Manager
Office of Planning

Encl

- c: Willis E. Branning, Dakota County Commissioner – District 7
- Brandt Richardson, County Administrator
- Greg Konat, Director, Physical Development Division
- Phyllis Hanson, Manager, Metropolitan Council
- Lisa Freese, South Area Manager, MnDOT Metro District

DAKOTA COUNTY COMMENTS – City of Rosemount Transportation Plan

General Comment

County staff support a continued close coordination between Dakota County and the City of Rosemount on the CSAH 42/TH 52 land use plan and necessary highway and interchange improvements.

Section 2.0 – Existing Conditions

Part 2.1, Roadways (page 4)

2.1.1 – Functional Classification

① → Figure 2.2 Existing Roadway Functional Classification shows CSAH 31 (Pilot Knob Road) as a Local Road; however, it should be shown as a Minor Arterial highway. Please revise the map.

Part 2.2, Other Transportation Services, Facilities, Issues (page 9)

Bikeways and Pedestrian Facilities

② → County staff have talked with Rosemount Parks staff about the omission of the City's trail to the Mississippi River from downtown through the Flint Hills property. Other city trails are included on maps in the draft plan, but this project was not. County staff suggest that this trail be added to the final plan in the text and on Figure 2.6.

↳ In another section of the plan (page 25), the City indicates that it "will continue to coordinate with Dakota County to allow the local trail network to tie in with regional trails to the greatest degree feasible." The City's trail would connect to the County's Mississippi River Regional Trail and to other City trails. Dakota County is considering a new trail connection from Lebanon Hills Regional Park to this proposed City trail. In discussions with City staff, County staff have suggested that Rosemount could build the City trail to regional standards, so it could become the regional trail connection between Lebanon Hills Regional Park and Spring Lake Regional Park Preserve. County staff are willing to meet with City staff to further discuss this possibility.

Part 2.1.4, Safety, Capacity, Functional Conflicts (Page 7)

Existing Capacity/Operational Issues

The draft plan states: "The only collector or arterial roadway segment identified in relevant state, regional, and county documents as approaching or exceeding capacity is the eastern-most portion of TH 55 (east of CSAH 42)." County staff note that the Dakota County 2025 Transportation Plan does not identify any current capacity deficiencies on County highways within Rosemount. However, the County plan does forecast the following capacity deficiencies in 2025.

③ → Over Capacity: CSAH 38 (McAndrews Road), west of Danbury Way; CSAH 42, west of TH 3.

↳ Approaching Capacity (75 percent of the maximum highway capacity design): CSAH 33 (Diamond Path), north of Connemara Trail; CSAH 38 (McAndrews Road), between TH 3 and Danbury Way; CSAH 42, between TH 52/55 and TH 3; CR 73 (Akron Ave.), north of 135th Street.

Deficient Intersections: Interchanges and high capacity controlled intersections are the nodes that interconnect the most important, heavily traveled, principal and minor arterial highway segments of the system. As traffic volumes increase, the need for an interchange to provide safe and efficient operation of opposing traffic grows in importance. The following locations on the County system are likely to require an interchange or interchange improvement in the future: the proposed TH 52/55/CSAH 42 interchange; and the TH 3 and CSAH 42 intersection.

3

The draft plan adequately identifies the needs associated with the proposed TH 52/55/CSAH 42 interchange. Although it is identified in Section 3.2, Other Jurisdictional Planning Documents, County staff request that the City also identify the need for an interchange at TH 3 and CSAH 42 (based on the County's projected traffic volumes) in this section of the final plan.

County staff suggest that these forecasted capacity deficiencies be added to the final plan.

Section 4.0 – Future Transportation Needs

4.1, Land Use Projections (page 15)

2025 Future Land Use Plan and Roadway Network

4

The plan states that "The 2025 land use assumed in this Transportation Plan is depicted on Figure 4.1." Figure 4.1 shows an area south of CSAH 42 and east of US TH 42 as "Air Cargo". However, there is no discussion of the proposed Regional Distribution Center (air cargo facility) in the text of the draft plan. County staff are unable to determine whether any of the City's traffic forecasts are taking this proposed facility into account. The proposed air cargo facility could have a very large impact on County roads, as well as city and state roadways. The maps in the draft plan do indicate a number of new streets in this location, but roadway access issues from an air cargo facility site to CSAH 42 or US TH 52 are not specifically discussed.

5

The draft plan indicates that the City is proposing a number of new east/west roadways located east of Akron Avenue (County Road 73) to accommodate the new commercial and industrial growth that they have planned. The opinion of County staff is that these are good roads, but they will not help the County with future roadway access issues along CSAH 42.



County staff recommend that the City consider re-configuring some of these roadways so they can act as frontage/backage roads for CSAH 42, at least on the north side of CSAH 42 between Akron Avenue and US TH 52. County staff believe that the City would not need to plan for more roads, but just move the proposed roads closer to CSAH 42, so they can service landlocked parcels. Without this proposed reconfiguration, it will be difficult for the County to maintain its access spacing guidelines along CSAH 42 in this area of Rosemount.

Section 5.0 – Transportation Plan

Part 5.2.3, Access Management (Pages 19 - 22)

Table 5.2 presents the City of Rosemount's access management guidelines, which are based on MnDOT guidelines. The draft plan states that "Rosemount intends to use the MnDOT guidelines for plat and site plan reviews." The plan also notes that "Dakota County has identified access management guidelines in its 2025 Transportation Plan", and presents these guidelines in Table 5.3. The plan further states that "The City of Rosemount will continue to work with Dakota County as access is requested along County roadways."

County staff note that the *Dakota County Road Plat Review Needs Map* identifies the following needs in Rosemount that are of concern:

6

• The need of 120 feet of right-of-way is required for 4-lane undivided County highways. Currently, this applies to CSAH 33 (Diamond Path) and CSAH 38 (McAndrews Road) in Rosemount. The draft plan identifies a need for 100 feet of right-of-way.

• The need of 200 feet of right-of-way is required for 6-lane highways. Currently, this applies to CSAH 42, west of TH 3.

7

• Full access spacing of 1/4 mile is required for the entire segment of CSAH 42 within Rosemount.

County staff suggest that the City address these access management needs in the final plan.

Rosemount Transportation Plan
Response to Dakota County Comments on January 2006 Draft

- Comment 1: *Figure 2.2 has been revised as suggested.*
- Comment 2: *Information has been added to Section 2.2 and Section 5.3 to address the Rosemount Interpretive Trail Corridor. In addition, a new Figure 2.7 has been created to provide further information on this corridor.*
- The City has had discussions with Dakota County regarding using design standards for regional trail facilities for this project. The City would like to use this approach, but it may not be feasible due to environmental and/or local impact issues. The City will continue these discussions with the County, and will be addressing it further in an upcoming update of its Parks Master Plan.*
- Comment 3: *The volume/capacity and interchange need information from the Dakota County Transportation Plan noted has been included in Section 2.1.4 (Existing Capacity/Operational Issues heading) and Section 3.2 (Dakota County 2025 Transportation Plan heading)*
- Comment 4: *The traffic forecasts shown on Figure 4.2 do not assume the potential Air Cargo facility. Text has been included in Section 4.2 to give background on this issue.*
- Comment 5: *The roadway locations depicted on Figure 4.1 in the vicinity of the CSAH 42/TH 52 interchange are conceptual and not intended to show precise alignments. The roadways parallel to CSAH 42 east of CR 73 are intended to provide access to land uses adjacent to CSAH 42, and therefore to promote access management for this facility.*
- Comment 6: *Information has been added to Section 5.2.6 to clarify that the City right-of-way guidelines apply to City streets, and that Mn/DOT and Dakota County have their own right-of-way standards. The County right-of-way standards have been added as Table 5.5.*
- Comment 7: *Information on the City's position regarding access spacing on CSAH 42 had been previously provided in the January 2006 Draft Rosemount Transportation Plan. This information has been carried forward in the final document, and has been enhanced with a new graphic, Figure 5.2 (42/52 Study – Access Spacing Plan). This plan has been discussed with Dakota County staff, and it appeared that general agreement on this approach had emerged during the 42/52 study process.*



city of eagan

Post-it® Fax Note	7671	Date	3/13	# of pages	2
To	PATEL L.		From	ANDY B.	
Co./Dept.			Co.		
Phone #			Phone #		
Fax #			Fax #		

PAT GEAGAN

Mayor

PEGGY CARLSON

CYNDEE FIELDS

MIKE MAGUIRE

MEG TILLEY

Council Members

THOMAS HEDGES

City Administrator

Municipal Center:

3830 Pilot Knob Road

Eagan, MN 55122-1897

Phone: 651.675.5000

Fax: 651.675.5012

TDD: 651.454.8535

Maintenance Facility:

3501 Coachman Point

Eagan, MN 55122

Phone: 651.675.5300

Fax: 651.675.5360

TDD: 651.454.8535

www.cityofeagan.com

THE LONE OAK TREE

The symbol of strength

and growth in our

community

Mr. Andy Brotzler
City Engineer
City of Rosemount
2875 145th Street West
Rosemount, MN 55068

March 9, 2006

Re: Eagan's comments to Rosemount Draft Transportation Plan

Dear Mr. Brotzler:

Thank you very much for the opportunity to comment on the Draft Rosemount Transportation Plan. In the recent past, the City has submitted the following general comment when given the opportunity to review proposed Comprehensive Guide Plan Amendments in the City of Rosemount:

The City of Eagan recognizes that pressure for development will result in continued development in the City of Rosemount and other communities to the south and east of Eagan. The City is concerned about the traffic impacts of continued development that will affect Highway 3, Highway 52, Highway 55, and Highway 149 and believes that there is a need for the cities, Dakota County, the region, and the state to cooperatively address the need for transportation improvements in this part of the County and region between County Road 42 and I-494.

Expanding upon these previous general comments, we would like to submit the additional following comments for consideration regarding the draft Rosemount Transportation Plan:

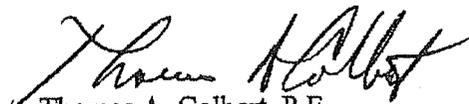
1. CSAH 71 is indicated as a future Minor Arterial (Figure 5.2). However, the 2025 forecast volume (Figure 4.2) is only 2100-3900 vpd. This forecasted volume is inconsistent with this future classification and other Collector Street classifications with higher volumes (i.e. Co. Rd. 73 at 3000-7500 vpd).
2. The draft plan does not mention the future North/South Principal Arterial Study identified in the *Dakota County 2025 Transportation Plan* (Chapter 7, Goal 3, pg 82/85 & Figure T-16; and Chapter 9, Goal 5, pg 112 & Figure T-22). This possible north/south principal arterial would be constructed in a corridor extending from I-494 to CSAH 42 (8½ miles) through the middle of Rosemount between CSAH 31/33 and CSAH 73. The construction of such a principal arterial is at the heart of Eagan's concerns with traffic generated by development in Rosemount and other communities further to the south and east.

Eagan's comments to Rosemount Draft Transportation Plan
3-09-06, Page 2

3. The *Dakota County 2025 Transportation Plan* also suggests that the TH 3 corridor south of CSAH 42 be considered as a Principal Arterial. Also, the segment between Inver Grove Heights and Farmington is expected to experience a capacity deficiency over the next 20 years, assuming no additional highway improvements are made. Although the Rosemount's draft plan identifies capacity improvements to TH 3 within its borders, from CSAH 46 to CSAH 38, this only addresses a portion of the forecasted deficiency. This further highlights the need for a broader study for a possible north/south arterial as suggested by the *Dakota County 2025 Transportation Plan*.
4. The draft Transportation Plan does not mention the possible International Air Cargo facility which is currently being discussed. Should this proposal materialize, significant burdens would be placed on the TH 55 and TH 3 corridors in the City of Eagan. While Eagan has no objections to the construction of an International Air Cargo facility in Rosemount, the regional impact of such a facility must be addressed.
5. The draft Transportation Plan identifies Bacardi Ave and Gun Club Rd as a Minor Collector street with a future extension and connection to TH 3 near 120th St. This collector designation along Gun Club Rd. (shared jurisdiction) is inconsistent with the City of Eagan's classification of it as a local residential street. Further dialogue is necessary to coordinate an appropriate functional classification from both Cities' perspective.

Thank you for the opportunity to review and comment on your draft Transportation Plan. Please let us know if we need to clarify or expand on any of our comments. We will look forward to working with the City of Rosemount on those issues of common and/or regional significance.

Sincerely,


Thomas A. Colbert, P.E.
Director of Public Works

Rosemount Transportation Plan

Response to City of Eagan Comments on January 2006 Draft

- Comment 1: *The functional classification information for CSAH 71 was taken directly from the Metropolitan Council functional classification network.*
- Comment 2: *Information on the Dakota County identification of a potential need for a North-South Principal Arterial Study has been added to Section 3.2 under the Dakota County 2025 Transportation Plan heading.*
- Comment 3: *Information on the Dakota County identification that TH 3 south of CSAH 42 could be considered to become a principal arterial has been added to Section 3.2 under the Dakota County 2025 Transportation Plan heading. Remainder of comment noted, but beyond the scope of a City of Rosemount response.*
- Comment 4: *The traffic forecasts shown on Figure 4.2 do not assume the potential Air Cargo facility. Text has been included in Section 4.2 to give background on this issue.*
- Comment 5: *The identification of Gun Club Road on Figure 5.2 as a collector roadway is predicated on the assumption that it will ultimately be extended to the west and east to connect with TH 3 and CSAH 71, respectively. These are "A" minor arterial roadways, and the roadway spacing depicted on Figure 5.2 suggests this would be a logical location for a collector roadway. The City looks forward to coordinating further with the City of Eagan on this issue.*

TANNER, HAMILTON & ASSOCIATES, P.A.

Attorneys and Counselors at Law

DAVID E. TANNER+
MICHAEL G. HAMILTON*

755 Westview Drive
P.O. Box 65
Hastings, MN 55033

TELEPHONE (651) 437-8037
FAX (651) 437-1731

January 24, 2006

Mr. Andy Brotzler
Rosemount City Hall
2875 145th Street West
Rosemount, MN 55068-4997

RE: Comprehensive Plan Amendment - Rosemount Transportation Plan

Dear Mr. Brotzler:

As I discussed with you by telephone yesterday, our office represents Nininger Township. In that capacity we have reviewed the Rosemount Transportation Plan and find it to be in order except for a concern about the Highway 52 inter-regional corridor outlined on page 13 of the January draft. One of the recommendations in that document is to close the Pine Bend Trail access after reconstructing the CSAH 42/TH 52 interchange. I am not quite sure what this means, but assume it means that the Pine Bend Trail intersection at Highway 55 would be closed. I am concerned that traffic on Pine Bend Trail would be greatly impacted. As I read the map and drive the road, there are currently only three (3) exits for Pine Bend Trail, the westerly most at the Highway 52/55 intersection, one at Fahey Avenue and the easterly most at Highway 55 between Goodwin and Fisher Avenue. The effect of closing the westerly most intersection would be to divert all traffic to either Fahey Avenue or Pine Bend at 55 by the Emerald Greens Golf Course. Neither Fahey nor Emerald Greens would be a favorable intersection because of the heavy industrial traffic generated at the commercial properties on Pine Bend Trail. I assume that there is some other alternative to closing the westerly most end of Pine Bend Trail, but it is not indicated on the Plan. Would you please review this matter and take it into consideration when further revising your Transportation Plan.

If you have any questions please feel free contact me.

Very truly yours,

DET

David E. Tanner

DET:kss

File No. 4118.0006

cc: WSB & Associates, Inc.

Bob Rotty

+ qualified neutral under Rule 114 of the Minnesota General Rules of Practice

* also admitted in Maryland

Rosemount Transportation Plan
Response to Nininger Township Comments on January 2006 Draft

General: *It is correct that closure of access to TH 52 at Pine Bend Trail as recommended in Mn/DOT's TH 52 Interregional Corridor Management Plan means that the Pine Bend Trail intersection at TH 52 would be closed upon reconstruction of the CSAH 42/TH 52 interchange. Information has been added to the Rosemount Transportation Plan to further clarify that the source of this recommendation is Mn/DOT's document. The City of Rosemount can discuss this matter further with Nininger Township, but it is really an issue under Mn/DOT's control.*

APPENDIX B

TRAVEL FORECASTING MODEL AND METHODS

TRAVEL FORECASTING MODEL AND METHODS

Travel forecasting is based upon computer modeling which uses land use and population data in conjunction with transportation network information to determine future roadway deficiencies and needs. The projections for this Transportation Plan were performed by WSP & Associates, Inc. (WSB) using a software program by Citilabs called Viper. This is the most recent version of a TranPlan, which has been one of the most widely used travel forecast software products available.

Viper can be used to simulate current and future traffic conditions. For this Plan, it was used to prepare city-wide model allowing traffic projections on a system-wide basis. The model is dynamic, such that assumptions can be revised as future land uses are developed and new roadways are constructed. For use in this Plan, the development and use of the Rosemount travel forecasting model involved the steps discussed under the headings below.

Data Collection

The data used for the analysis in this Plan was collected by WSB staff. This included existing traffic data and information on the existing and anticipated roadway network. Information regarding existing and future land use and population was generated based upon a 2030 land use plan for the City of Rosemount (*Figure 4.1* of the main document). This plan is a combination of the 2020 land use plan for Rosemount found in the *2020 Comprehensive Plan*. Regional traffic forecast information was obtained from Dakota County, Met Council, and Mn/DOT sources.

Traffic Analysis Zone System

Land use and population data for the transportation planning process is organized and assigned according to Traffic Analysis Zones (TAZs). The system used was based upon the Metropolitan Council zones, with some refinement appropriate to the local analysis. Each TAZ has trip generation and attraction characteristics determined by the data assigned to it as referenced above. *Figure C-1* illustrates the current TAZ boundaries. *Table C-1* outlines the population, household, and employment data by TAZ.

Table C-1 Rosemount TAZ Data

Year 2000				
TAZ	Population	Households	Retail Employment	Non-Retail Employment
221	4,592	1,439	117	1,029
222	8,074	2,549	41	1,087
223	1,682	663	65	792
224	40	16	0	1,065
225	64	25	0	973
226	53	17	0	487
227	277	97	18	669
Year 2030				
TAZ	Population	Households	Retail Employment	Non-Retail Employment
221	4,530	1,665	400	932
222	10,575	3,820	125	1,264
223	22,075	8,220	343	1,800
224	14	5	111	2,110
225	55	20	25	1,413
226	41	15	106	2,538
227	4,710	1,805	93	940

Trip Generation

Vehicle trips are classified into purpose categories: Home Based Work (HBW), Home Based Nonwork (HBN), Home Based Other (HBO), and Non-Home Based. The differing types of trips have significance in how the model relates trip productions and attractions to each other and, accordingly, how it matches origins with destinations for individual trips. The primary trip types determined as part of this forecasting process are:

Through trips—these trips do not have origins or destinations within the study area (the City). These trips, for the purposes of this study, were based on regional forecasts by Dakota County, Mn/DOT, Met Council, as well as historical trend analysis of traffic levels in the overall project area.

Internal trips—these trips begin and end within the study area. The numbers of trips produced and attracted are based on the population and land use data assigned to each TAZ.

External to internal trips—these are trips generated from outside the study area but have destinations within the City. These trips are based upon the number of “attractions” within the City balanced against internal trip productions and external trips which would not pass completely through the City based upon Met Council forecast information.

Internal to external trips—these are trips generated inside the City with destinations elsewhere. These are based upon trip productions within the City balanced against internal “demand” for these trips and regional traffic patterns.

Transportation Network

The roadway network used in the model includes all arterial and collector roads as well as primary local streets. For 2025 analysis, the network used included all existing roadways plus primary anticipated improvements included on *Figure 4.2* of the main document.

Trip Distribution/Route Assignment

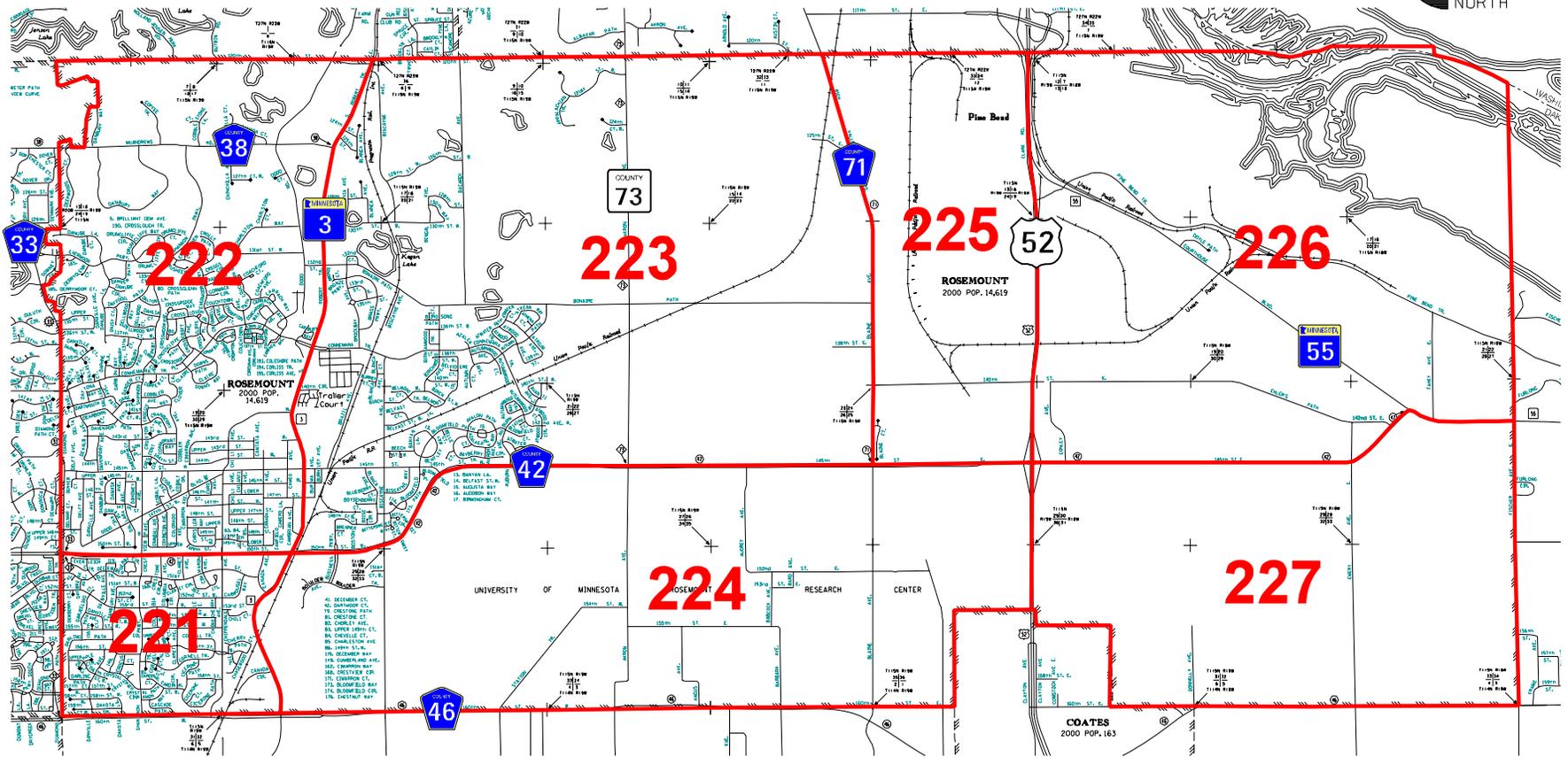
For individual trips, origins and destinations are matched between TAZ areas, based primarily on a system-wide balance between trip generations and trip attractions, and relative distances between them. Once the trips are distributed between TAZ areas, they are assigned to individual routes (streets) in a way which minimizes delays on the network. This assumes that motorists will choose the route between origin and destination which minimizes travel time. The model performs iterations to balance all trip productions and attractions and minimize delays.

Model Calibration

The National Council of Highway Research Program (CHRP) Circular 255 was used to determine the maximum allowable difference between modeled trip volumes/route assignments and actual traffic counts. In the analysis used for this Plan, the modeled outputs for 2000 were compared with observed traffic counts. Some adjustments to road capacity and vehicle travel speeds were made to calibrate the model results to observed conditions.

Future Traffic Levels

Once the travel model for the City was established and calibrated as described in the preceding steps, it was ready to be used for forecasting purposes. To perform forecasting, future land use and population information data (as discussed above) was loaded into to the model, organized according to TAZ areas. The model performs iterations to generate, distribute, and assign total trips throughout the overall network.



City of Rosemount, Minnesota Transportation Plan

Prepared by:

WSB
Associates, Inc.
701 Xenia Avenue South, Suite 300
Minneapolis, MN 55416
www.wsbg.com
763-544-4800 • Fax: 763-544-1700
INFRASTRUCTURE • ENGINEERING • PLANNING • CONSTRUCTION

Traffic Analysis Zones

Figure B-1