

## Chapter 7

# Transportation

- ♦ Introduction
- ♦ Background & Purpose of Transportation Plan
- ♦ Goals, Objectives, & Policies
- ♦ Issue Analysis & Needs Assessment
- ♦ Future Transportation System Plan

## Acknowledgements

### City Council

Linda R. Loomis, Mayor  
 Mike Freiberg  
 Paula Pentel  
 DeDe Scanlon  
 Bob Shaffer

### Planning Commission

David Cera  
 Les Eck  
 Don Keysser, Chair  
 John Kluchka  
 Dean McCarty  
 Steve Schmidgall  
 Cathy Waldhauser

### Environmental Commission

Tracy Anderson  
 Richard Baker  
 Ryan Chandlee  
 Dawn Hill  
 Jon Pawluk, Chair  
 Siah St. Clair

### City Staff

Thomas Burt, City Manager  
 Jeanne Andre, Assistant City Manager  
 Mark Grimes, AICP, Director of Planning and Development  
 Joe Hogeboom, City Planner  
 Jeannine Clancy, Director of Public Works  
 Jeff Oliver, City Planner  
 Eric Eckman, Public Works Specialist  
 Lisa Wittman, Administrative Assistant  
 Cheryl Weiler, Communications Coordinator  
 Kristi Bucher, Graphic Designer

### Consultants

SEH, Inc.  
 Mike Kotila and Mark Ray

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photo by City staff

## Section 1: Introduction and Authority

The transportation component of the City of Golden Valley's Comprehensive Plan expresses the location, limits, function, and capacity of all transportation facilities in Golden Valley, including streets and highways, trails and sidewalks, transit facilities, and airport accessibility. It was developed to provide planning guidance over the next 10 years based on needs anticipated through 2030.

The State of Minnesota, through the enactment of the Metropolitan Land Planning Act (M.S. 473.859, Subd.3(1)), requires the Metropolitan Council to review each metropolitan community transportation plan to assure conformity with the regional development framework. The Metropolitan Council's 2030 Transportation Policy Plan provides guidance for policies and strategies included in Golden Valley's Comprehensive Plan. 🌟





photo by City staff

## Section 2: Background and Purpose

The City of Golden Valley recognizes the changing travel needs of residents, commuters, visitors, commercial transporters, pedestrians, and cyclists making trips through the community. To provide for safe, multimodal transportation facilities that offer adequate capacity (existing and future) with a high level of mobility, the City must adopt and implement a transportation improvement plan that corresponds to the overall Comprehensive Plan.

The 2030 Golden Valley Transportation Plan describes, designates, and schedules the location, extent, function, and capacity for all transportation modes within the community. To be consistent with the regional policy, the 2030 Golden Valley Transportation Plan includes:

- ♦ an assignment of socioeconomic forecasts (population, households, and employment) to traffic analysis zones
- ♦ a street and highway plan that maps and describes existing roads and planned improvements, analyzes traffic volumes, and addresses safety and capacity issues
- ♦ a bicycle and pedestrian plan
- ♦ a transit plan for facilities and service
- ♦ an aviation plan that identifies aviation-related facilities and addresses airspace protections
- ♦ Sub-area Transportation Plans that coincide with the City's redevelopment initiatives, including conceptually-illustrated improvements for transportation facility safety, capacity, mobility, and access management improvements.







photo by City staff

## Section 3: Goals, Objectives, and Policies

**B**efore developing the 2030 Transportation Plan, the City updated transportation planning goals and policies prepared in 1999 and included transportation themes extracted from the community's Envision process that was started in 2002.

Each of the statements provide guidance and policy direction for the long-term future of the City's transportation investments, either as a publicly-maintained local system or in partnership with regional or state transportation agencies. The objectives provide a means to measure the performance of the transportation system over time and, as necessary, an opportunity to reassess, revise, and/or supplement the desires of the community.

### Goal 1: Preserve and Enhance the Transportation System

#### Objectives:

- ♦ Maintain the existing transportation system by making scheduled improvements to replace worn or obsolete components.
- ♦ Seek opportunities to improve existing local streets by re-development opportunities and by coordinating improvements with county and state roadway partners and their funding programs.
- ♦ Implement environmentally-conscious designs, if possible, in reconstruction projects.



City photo

*Typical local residential street in Golden Valley*

### Policies

1. As the greatest investment priority, the City will preserve its existing transportation system in the highest order of operating condition.
2. The City will continue to maintain pavement and permanent right-of-way fixtures associated with the local roadway, bridge, trail, and sidewalk system using routine inspections and maintenance and improvement programs.
2. The City will coordinate regional roadway preservation improvements with other transportation system partners in the community, including MnDOT, Hennepin County, Metro Transit, and school transit providers in the community.
3. The City will work with its local permitting partners to develop environmentally-sound practices for constructing public roadway infrastructure, including innovative drainage design and contaminant protection.

## Goal 2: Improve the Functionality and Safety of the Transportation System

### Objectives

- ♦ Analyze the current transportation system and assess its performance.
- ♦ Identify system deficiencies by examining trend data, including safety (crashes), forecast traffic volumes (capacity), and accessibility (mobility).

### Policies

1. The City will conduct vehicle speed audits to assess locations where enforcement is an issue and consideration could be given to infrastructure or traffic control changes.

2. The City will encourage the study of reasonable traffic management techniques where documented safety issues exist.
3. The City will monitor crash statistics for trends and tailor crash reduction improvements for targeted areas.
4. The City will capture opportunities to implement local and regional roadway improvements with proposed redevelopment projects.
5. The City will implement transportation system management policies and performance requirements to measure impacts and assess mitigation needs for redevelopment projects.
6. The City will continue to work with regional roadway partners and private property owners on access management solutions along principal and minor arterial corridors.
7. The City will integrate state-of-the-art safety features in pedestrian and bicycle facility improvements, especially at street crossings and in non-exclusive lanes.

## Goal 3: Implement Bicycle and Pedestrian Facility Improvements

### Objectives

- ♦ Encourage healthy lifestyles by providing appropriately sized and located facilities that connect recreational and other congregating centers.
- ♦ Recognize changing modal choices, environmental conservation, and the growth of bicycle-to-work commuting.



City photo

*Golden Valley's roadway system serves non-motorized commuters.*

## Policies

1. The City will assess the condition, safety, and improvement needs of current bicycle and pedestrian facilities.
2. The City will work with residents, businesses, and partnering agencies to improve the connectivity of existing facilities by providing links through gap areas that warrant new facilities.
3. The City will assess the greatest potential generators for pedestrian and bicycle trips (eg, downtown Golden Valley) and implement designs that consider safe year-round accessibility for these modes.
4. The City will work with members of the public to develop safe and maintainable pedestrian and bicycle system improvement plans designed in context with the adjacent land uses.
5. The City will coordinate implementation plans with regional trail partners (eg, Three Rivers Parks District, Minneapolis Park Board, and Hennepin County) and determine efficiencies between local and regional systems.
6. The City will, if appropriate, integrate future pedestrian and bicycle facilities with roadway improvements to re-

duce construction costs, maintenance issues, and private property impacts.

7. The City will partner with other agencies to study bicycle commuter needs through the community and coordinate commuter improvements with these agencies (eg, Three Rivers Parks District, Minneapolis Park and Recreation Board, and neighboring local jurisdictions).

## Goal 4: Improve Community Connectivity

### Objectives

- ♦ Assess the current transportation system for connectivity issues and develop potential solutions.
- ♦ Anticipate consequences of potential connectivity improvements.
- ♦ Provide solutions for all modes of travel that demonstrate connectivity concerns.

### Policies

1. The City will work with residents, businesses, and partnering agencies to provide linkages for logical connec-



*I-394 MnPASS lanes serve HOVs with congestion pricing for single occupant vehicles.*



City photo

*Transit stop on Golden Valley Rd near  
the Courage Center*

tions that currently represent local and regional system gaps, especially to help reduce crashes, relieve regional system demands, and maintain local system continuous travel to minimize unnecessary freeway/expressway trips.

2. The City will assess and improve the connectivity of major community facilities, including the downtown area, parks, and employment and institutional centers.
3. The City will look for opportunities with neighboring jurisdictions to enhance local street connectivity between communities and reduce the demand on regional facilities.

## Goal 5: Enhance Transit Usage

### Objectives

- ♦ Support local and regional transit provider plans and programs that benefit residents and visitors in the community.
- ♦ Continually assess and report the changing transit needs of area residents and visitors by implementing community outreach surveys to supplement the outreach efforts of local and regional providers.
- ♦ Ensure that existing high transit user areas and planned redevelopment projects are served with optimal transit facilities and services.

### Policies:

1. The City will coordinate with Metro Transit and other transit service providers to continually assess the existing transit system and adapt to changing needs.

2. The City will continue to integrate transit-friendly infrastructure in redevelopment areas, along existing and future transit corridors, and hub locations, such as the I-394 Corridor, Downtown Golden Valley, and also employment centers (eg, General Mills, Honeywell, Tennant, United Health Care, etc).
3. The City will provide improved multimodal accessibility and connections between roadways, bicycle and pedestrian facilities, and local/regional transit services, and work with local employers to improve facilities that will support improved accessibility and connections (eg, bike lockers, registered walk-to-work programs, etc).

## Goal 6: Visually Integrate the Transportation System

### Objectives:

- ♦ Unify community themes in public rights-of-way and work with local and regional transportation system partners and business community to incorporate the community's identity.
- ♦ Provide aesthetic treatments in public rights-of-way that are appropriate for the scale of the area, conform with selected community themes, and can be maintained within the City's financial resources.

### Policies:

1. The City will assess the condition of existing landscaping, aesthetic, and lighting treatments of roadway, bicycle, and pedestrian facilities and determine maintenance needs and opportunities for improvements.
2. The City will apply uniform landscaping, safety/identification signage, and lighting treatments for use in new construction areas and as replacements are warranted elsewhere in the community.
3. The City will work with regional transportation partners to incorporate local design and aesthetic treatment themes chosen by the community.
4. The City will incorporate public art, architecture, seating, monuments, and seasonal foliage in appropriate public boulevard or median areas visually and/or physically accessible by roadway, bicycle, and pedestrian facility users. 🌈



City photo

## Section 4: Issue Analysis and Needs Assessment

The issue analysis and needs assessment examines Golden Valley's transportation system and documents current and future deficiencies. Future deficiencies are based on how long-range (2030) travel demand forecasts will affect the current system.

The transportation system analysis includes:

- ♦ 2030 travel demand forecasts from a traffic model developed for Golden Valley from the Metropolitan Council's regional forecasting model and updated Transportation Analysis Zone (TAZ) data
- ♦ an inventory and assessment of the roadway system's existing and future capacity and safety using travel demand forecasts
- ♦ an inventory, and determination of suitability, of the current functional classification and jurisdictional designations of Golden Valley's local and regional roadway system with 2030 forecasts

### Issues and Needs Assessment

Before examining the roadway and trail network to assess current and future needs, the City prepared a summary of transportation issues (see Figure 7.1) using concerns compiled by the City's engineering staff and public safety personnel. These transportation issues were grouped by capacity, safety, and mobility.



City photo

*Hwy 169 experiences daily congestion.*

**Capacity**

Capacity issues are noted on the freeway and expressway systems that pass through Golden Valley. US Hwy 169 is severely congested, and traffic demand growth is especially evident on Interstate 394 and State Trunk Hwy 55. Long-term congestion on the freeway system in particular causes motorists to look for alternative routes using the city’s minor arterial and collector roadway system.

Daily morning peak period capacity issues are evident at locations such as eastbound Hwy 55 at Boone Ave and Winnetka Ave, where traffic demand results in delays for all users.

Collector routes are subjected to overflow traffic demands during peak periods. An example is Medicine Lake Rd (County Rd 70) and Mendelssohn Ave, which combine to serve as an alternative to Hwy 169 during congested periods. These are intended to serve a combination of local and longer trips, but freeway congestion periodically results in an undue level of regional trips on the local system. Added demand on the local roadway system results in issues related to access man-

agement, intersection control, street continuity/connectivity, and neighborhood livability.

**Safety**

Safety issues are also noted primarily on the freeways and expressway routes that pass through Golden Valley. Substandard interchange ramp design and spacing on Hwy 169, for example, leads to vehicle weaving and congestion on the highway. In addition, there are several examples of roadway design issues, particularly at intersections along Hwy 55 and minor arterials (such as Winnetka and Douglas Dr), where delays and congestion contribute to the frequency of crashes.



City photo

*Douglas Dr at Hwy 55 experiences a high frequency of crashes.*

**Mobility**

Mobility issues in Golden Valley relate to the balance that must occur to preserve the character of the community’s established neighborhoods with new investments and redevelopment projects in the community. Opportunities for new commercial and residential development present increasing demands on the existing transportation system and need to be carefully monitored to assess impacts and the need for potential mitigation. In addition, local trips should be accommodated on an efficient system of minor arterial and collector streets to reduce congestion on the freeway system. Providing attractive transit facilities and services where they are needed most, and enhancing non-motorized vehicle alternatives (for pedestrian and bike-way commuting), will also improve mobility in the community.

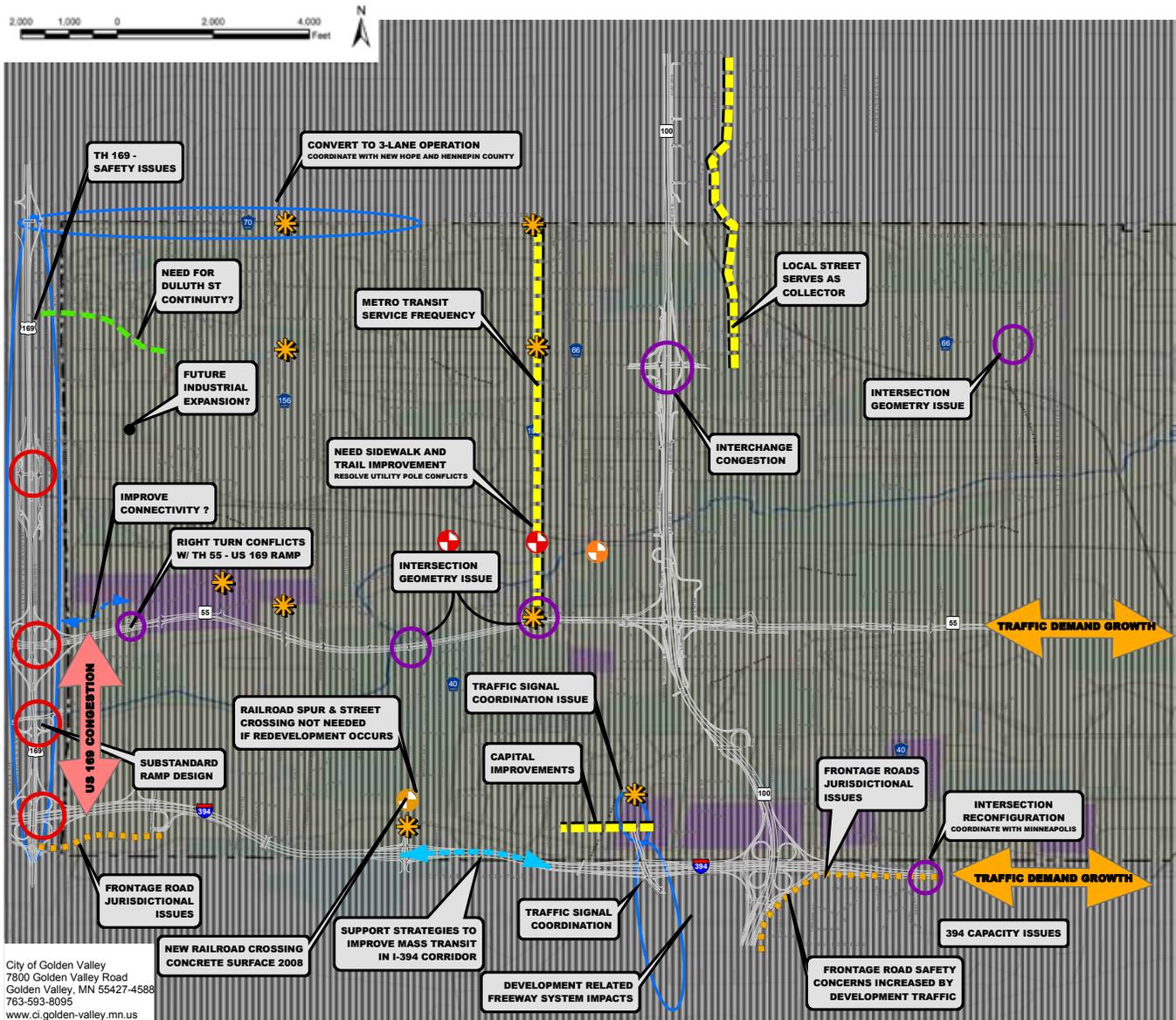
In the next sections, these issues have been paired with an examination of the city’s existing roadway functional classifications, traffic volumes (current and forecasted), capacity and safety analyses, and an assessment of other modes, including freight and railroads, commercial trucks, and trails.



City photo

*Shoulders along Glenwood Avenue are utilized by bicyclists*

Figure 7.1: Transportation Issues



- Safety Issues
- Closely Spaced Interchanges
- New Railroad Signal 2008
- New Railroad Signal 2009
- Potential Redevelopment Area—New Trip Generators
- Community Park
- Water
- Creek
- City Limits

Date: May 1, 2008

Sources: SEH for issues layers, MnDOT for neighboring city streets, City of Golden Valley for all other layers

## Existing Functional Classification and Current Traffic Volumes

Functional classification groups streets and highways into classes, or systems, according to the character of service they are intended to provide. Individual streets and highways do not function independently—most travel involves movement through a network of roadways. It becomes necessary to determine how this travel demand can be served logically and efficiently by a hierarchy of roadways within the transportation network. Functional classification defines the hierarchical role any street or highway plays in serving the flow of trips through the transportation network.

There are four functional classifications of streets and highways in Golden Valley: principle arterials, minor arterials, collectors, and local streets (see Figure 7.2). For existing (2005) daily traffic demands served by arterial and collector roadways in Golden Valley, see Figure 7.3.

### Principal Arterials

Urban principal arterial roadways carry the highest traffic volumes and serve the majority of trips entering or leaving Golden Valley. They are high-speed facilities (up to 60 mph posted speeds) and usually have controlled or restricted access via expressway (at-grade intersections) or freeway (grade-separated interchange) design. Principal arterials typically connect regional business districts, employment centers, and residential districts and serve primary bus transit routes.

Interstate 394, US Hwy 169, State Trunk Hwy 100, and State Trunk Hwy 55 are classified as principal arterial highways according to the Metropolitan Council’s 2007 functional classifi-



City photo

*Hwy 100 serves as a north-south principal arterial.*

cation system. Golden Valley has approximately 14.5 miles of principal arterial highways.

I-394 through Golden Valley is a six-lane concrete-barrier-divided freeway running east-west along the southern boundary of the community. In 2004, traffic volumes ranged from 132,000 vehicles per day (vpd) at Hwy 169 to 151,000 vpd east of Hwy 100. One lane of traffic in each direction on I-394 west of Hwy 100 operates as a dedicated high occupancy vehicle (HOV) lane that is also open for use by single occupant vehicles on a pay-for-use basis under the MnPASS program. Cost for use of the MnPASS lane by non-HOV drivers varies depending on the level of congestion in I-394’s general purpose lanes.

Hwy 169 through Golden Valley is a four-lane concrete-barrier-divided roadway that runs north-south along the west city limits. In 2004, traffic volumes ranged from 100,000 vpd at

I-394 to 89,000 vpd south of Medicine Lake Rd.

Hwy 100 runs north-south through the eastern center of Golden Valley and is a six-lane concrete-barrier-divided highway. In 2004, traffic volumes ranged from 115,000 vpd south of I-394 to 71,000 vpd north of Duluth St. Capacity improvements on Hwy 100 through Golden Valley and neighboring Crystal and Robbinsdale were completed in 2004. Temporary capacity improvements on Hwy 100 through neighboring St Louis Park were com-



City photo

*Hwy 55 is a signalized urban expressway.*



*Winnetka Ave north of Hwy 55 is an A-minor arterial reliever.*

pleted in 2006. Traffic delays on Hwy 100 have been greatly reduced, resulting in increased daily demand on Hwy 100 through Golden Valley.

Hwy 55 runs east-west through the south center of Golden Valley and is a four-lane divided expressway with a median ditch through most of the community. Full access intersections along the expressway are controlled by traffic signals. In 2004, traffic volumes ranged from 40,000 vpd between General Mills Blvd and Winnetka Ave to 23,000 vpd east of Theodore Wirth Parkway.

### Minor Arterials

Urban minor arterial roadways interconnect with principal arterial roadways. They serve trips of moderate length at a somewhat lower level of travel mobility in a smaller geographic service area than principal arterials. Minor arterials also typically carry lower traffic volumes and place more emphasis on land access than principal arterials. These roadways are suitable to carry bus transit routes but ideally do not penetrate local neighborhoods. Posted speeds in urban areas are usually lower than principal

arterial roadways (from 30 to 50 mph). Golden Valley has approximately 13.3 miles of minor arterial roadways.

The Metropolitan Council has further refined classification of minor arterial roadways in the Twin Cities metropolitan area. A-minor arterials are classified as “relievers,” “augmenters,” “expanders,” and “connectors.” B-minor arterials do not perform the functions of A-minor arterials, are often at a lower priority for planned changes, and are not eligible for federal funding.

Golden Valley has two A-minor arterial augmenter roadways—Medicine Lake Rd (County 70) and Duluth St (County 66). Such roadways within the I-494/I-694 beltway augment the function of a principal arterial and, in cases where a principal arterial doesn't exist, provide a similar function. Medicine Lake Rd runs east-west along the north city limits of Golden Valley. Existing (2005) traffic volumes ranged from 13,000 vpd near Hwy 169 to 8,000 vpd at Douglas Dr. Duluth St runs east-west and had 2005 traffic volumes that ranged from 16,500 vpd between Hwy 100 and Noble Ave to



*Duluth St is an “A” minor arterial augmentor.*



*Winnetka Ave south of Hwy 55 is a B-minor arterial.*

8,650 vpd east of Noble Ave.

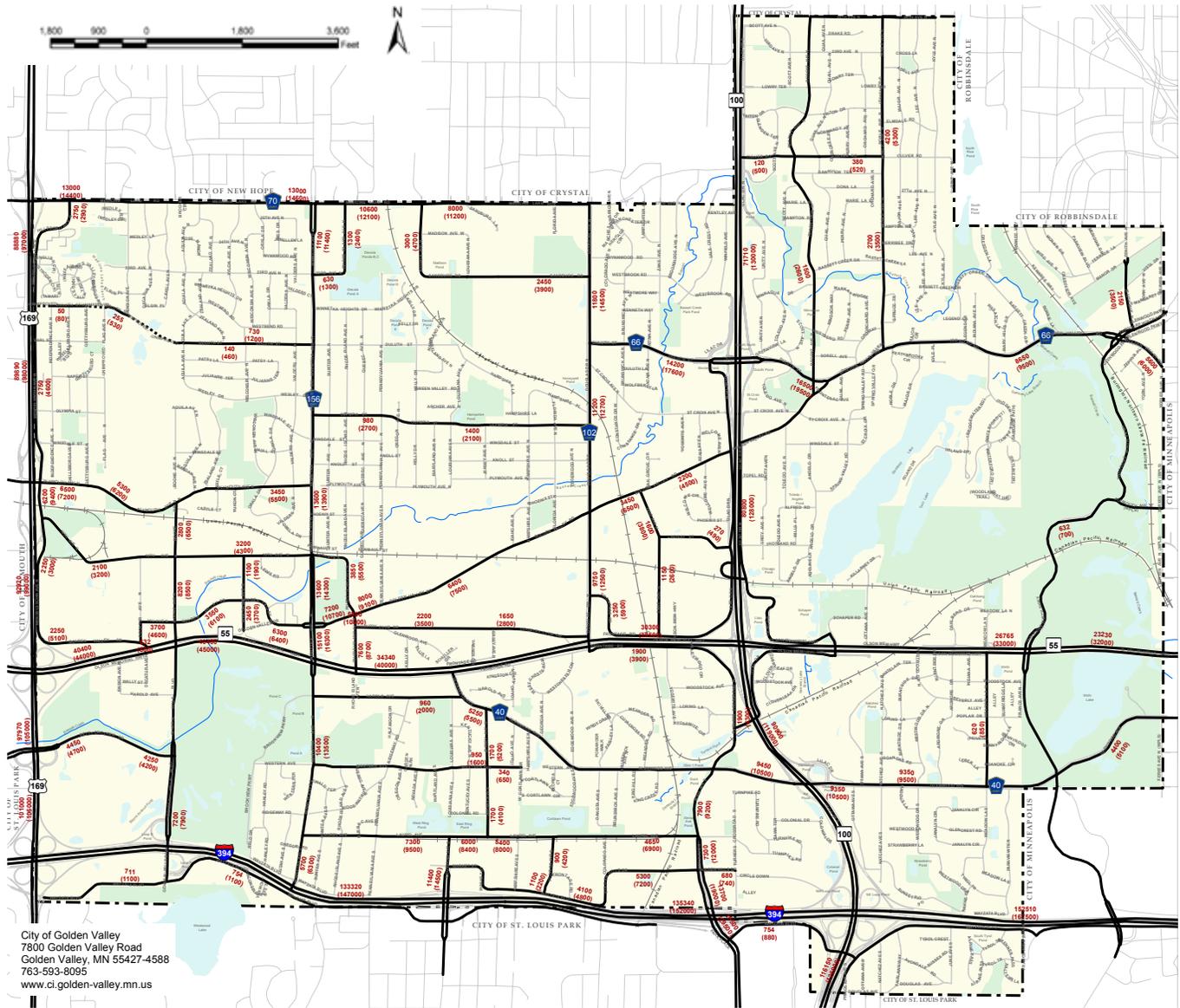
Winnetka Ave north of Hwy 55 (County 156), Douglas Dr (County 102), and Glenwood Ave (County 40) are classified as A-minor arterial reliever roadways. These roadways deliver “relief” specifically to the parallel principal arterial highways and are meant to accommodate medium length trips of eight miles or less.

Winnetka Ave and Douglas Dr are both north-south routes whose minor arterial status begins at Hwy 55 and extends northerly into New Hope and Crystal. In 2005, Winnetka Ave traffic volumes ranged from 15,100 north of Hwy 55 to 11,100 vpd south of Medicine Lake Rd. In 2005, Douglas Dr traffic volumes ranged from 9,750 vpd south of Golden Valley Rd to 14,500 vpd north of Duluth St.

Glenwood Ave is an east-west A-minor reliever roadway that connects Hwy



Figure 7.3: Existing and 2030 Forecast Traffic Volumes



City of Golden Valley  
 7800 Golden Valley Road  
 Golden Valley, MN 55427-4588  
 763-593-8095  
 www.ci.golden-valley.mn.us

- Community Park
- Water
- Creek
- City Limits
- 0000 Existing Traffic Volume\*
- (0000) 2030 Forecast Traffic Volume\*

\*Average Annual Daily Traffic (AADT)

Date: May 21, 2008

Sources: SEH for 2030 forecast traffic volumes, Met Council for existing functional classification, MnDOT for neighboring city streets and existing traffic volumes, City of Golden Valley for all other layers



City photo

*Boone Ave north of Hwy 55 is a major collector.*



City photo

*Meadow Lane is a minor collector.*



City photo

*Golden Valley Rd east of Douglas Dr was recently reconstructed and serves as a minor collector.*

55 in Golden Valley with Hwy 55 (7th St) in Minneapolis. In 2005, Glenwood Ave served 4,400 vpd in Theodore Wirth Regional Park and 9,450 vpd west of Hwy 100.

South of Hwy 55, Winnetka Ave is

Golden Valley's only B-minor arterial roadway. This segment of Winnetka Ave connects Hwy 55 with Wayzata Blvd with a grade-separated crossing of I-394. Traffic volumes in 2005 ranged from 10,400 just south of Hwy

55 to 5,700 just north of I-394.

**Collector Streets**

The Metropolitan Council's functional classification system provides for two types of collector streets (major and

**Table 7.1: Golden Valley Collector Streets**

Major Collectors		
<ul style="list-style-type: none"> <li>Golden Valley Rd (Winnetka Ave to Hwy 100)</li> <li>Plymouth Ave (Winnetka Ave to Hwy 169)</li> </ul>	<ul style="list-style-type: none"> <li>Theodore Wirth Parkway</li> <li>Noble Ave</li> <li>Xenia Ave N</li> </ul>	<ul style="list-style-type: none"> <li>General Mills Blvd (Betty Crocker Dr to Wayzata Blvd)*</li> <li>Louisiana Ave (Laurel Ave to Wayzata Blvd)*</li> </ul>
Minor Collectors		
<ul style="list-style-type: none"> <li>Mendelssohn Ave (Medicine Lake Rd to Golden Valley Rd)</li> <li>Duluth St (Independence Ave to Winnetka Ave)</li> <li>Rhode Island Ave (Medicine Lake Rd to 23rd Ave)</li> <li>23rd Ave (Winnetka Ave to Rhode Island Ave)</li> <li>Nevada Ave (Medicine Lake Rd to Sandburg Rd)</li> <li>Sandburg Rd (Nevada Ave to Douglas Dr)</li> <li>Olympia St (Winnetka Ave to Douglas Dr)</li> <li>10th Ave (Mendelssohn Ave to Rhode Island Ave)</li> <li>Rhode Island Ave (10th Ave to Hwy 55)</li> <li>Golden Valley Rd (Mendelssohn Ave to Winnetka Ave)</li> </ul>	<ul style="list-style-type: none"> <li>Wisconsin Ave (10th Ave to Hwy 55)</li> <li>Harold Ave (Winnetka Ave to Glenwood Ave)</li> <li>Western Ave (Winnetka Ave to Jersey Ave)</li> <li>Jersey Ave (Glenwood Ave to Laurel Ave)</li> <li>Laurel Ave (Winnetka Ave to Xenia Ave)</li> <li>Market Str (Louisiana Ave to Wayzata Blvd)</li> <li>Wayzata Blvd (Market St to Golden Hills Dr)</li> <li>Florida Ave (Laurel Ave to Wayzata Blvd)</li> <li>Colorado Ave (Wayzata Blvd to Golden Hills Dr)</li> <li>Golden Hills Dr (Colorado Ave to Turners Crossroad)</li> <li>Country Club Dr (Rhode Island Ave to Douglas Dr)</li> </ul>	<ul style="list-style-type: none"> <li>North Hwy 55 Frontage Rd (Douglas Dr to Lilac Dr)</li> <li>South Hwy 55 Frontage Rd (Douglas Dr to Turners Crossroad)</li> <li>Zane Ave (Golden Valley Rd to North Hwy 55 Frontage Rd)</li> <li>Lindsay St (Zane Ave to Lilac Dr)</li> <li>Turners Cross Rd (Glenwood Ave to South Hwy 55 Frontage Rd)</li> <li>Lilac Dr (Turners Crossroad to Holiday Lane)</li> <li>Wayzata Blvd (Park Place to France Ave)</li> <li>Quentin Ave (Douglas Ave to Wayzata Blvd)</li> <li>Meadow Lane (Hwy 55 to Glenwood Ave)</li> <li>Zenith Ave (26th Ave to Theodore Wirth Parkway)</li> <li>Culver Rd (Lilac Dr to Noble Ave)</li> </ul>

\* Collector streets previously identified as minor collectors that are now proposed as major collectors

minor). These streets provide a balance between land access and mobility and move local street traffic to the arterial roadway system. Major collector streets have reasonable continuity and channel traffic between arterials and from other collector streets to the arterial system. Such a street may sustain retail or other commercial establishments along its route and may carry relatively high traffic volumes.

Golden Valley has approximately 9.8 miles of major collector streets (see Table 7.1). In 2005, traffic volumes on these roadways ranged from 3,450 vpd on Plymouth Ave west of Winnetka Ave to 13,700 vpd on Xenia Ave north of I-394. Collector streets previously identified as minor collectors that are now proposed as major collectors include General Mills Blvd from Betty Crocker Dr to Wayzata Blvd and Louisiana Ave from Laurel Ave to Wayzata Blvd.

Minor collector streets have reasonable continuity and channel traffic between arterials and from other collector streets to the arterial system. Such a street may sustain retail or other commercial establishments along its route, and may carry relatively high traffic volumes. Golden Valley has approximately 19.8 miles of minor collector streets (see Table 7.1).

### Local Streets

All other public and private streets within Golden Valley are classified as local streets. Local streets provide the highest level of direct access and therefore carry the lowest traffic volumes at the lowest speeds.

Golden Valley has approximately 90 miles of local streets. These streets typically provide private property access in low-density residential areas.

## 2030 Traffic Forecasts

### Methodology

The City prepared traffic forecasts for 2030 using the Metropolitan Council's Transportation Analysis Zone (TAZ) socioeconomic data for the community. The TAZ data includes population, household, and employment (retail and non-retail) forecasts reported by the Metropolitan Council's regional forecast model (see Figure 7.4). Table 7.2 outlines TAZ socioeconomic data.

Traffic forecasts were prepared based on a combination method that involved the The Twin Cities Regional Model (TCRM) and historical trend analysis. The TCRM includes most of the major roadways within Golden Valley. Therefore, TCRM forecasts were used for the major streets and historical trend analysis was used for the minor streets within the city.

The historical data from MnDOT includes traffic volumes from 1995 to 2005. The volumes were reviewed and a 10-year trend was developed from the data and extended as a historically based forecast.

In addition, the City considered specific developments. When specific development forecasts were available, the City used them to modify the regional model and historical trend line results.

The methodology for TCRM forecasts is based on methods and procedures as described in the MnDOT Metro District guidelines, "Twin City Travel Demand Forecast prepared for MnDOT Metro." These guidelines cover:

- ♦ model requirements (using the current version of the TCRM for Metropolitan Council and using

the 2030 regional model for Golden Valley)

- ♦ model and parameter adjustments to model inputs
- ♦ model output checks for reasonableness and post-processing adjustments
- ♦ documentation of forecasts

The City used the most recent release of the TCRM (August 2006) to develop traffic forecast for the major roadways within Golden Valley. The specific process used the following steps to develop traffic forecasts for this study:

1. Review the base model and identify and correct obvious network discrepancies.
2. Identify relevant network modifications in the base year model and apply them to the 2030 network.
3. Review the land use and socioeconomic data for 2030.
4. Adjust 2030 model outputs using post-processing guidelines.
5. Evaluate traffic forecasts for reasonableness.

Traffic forecasts from the TCRM are in part based on demographic data by land area. Land uses in the TCRM are represented in terms of population, households, and employment statistics. Employment is broken into two types: commercial retail and other. The TCRM converts that information into trip generation and ultimately assigns the trips to the region. Understanding what the Metropolitan Council of Governments has assigned to growth in population and employment is essential in understanding the traffic forecasts within Golden Valley.

The City used historical traffic and trend line analysis to project traffic levels on minor roadways. Historical

data was received from MnDOT and include traffic volumes from 1995 to 2005. The volumes were reviewed for reasonableness, and a 10-year trend was developed from the data and extended as a historically based 2030 forecast.

**Findings**

The forecasting exercise based on comparison of 2005 and 2030 Met Council TCRM (see Figure 7.3 for projected 2030 traffic levels) found that:

- ♦ regionally, Twin Cities metro area trips are anticipated to increase by 24 percent through 2030

- ♦ approximately 270,000 vehicle trip ends originate or terminate within the City of Golden Valley on an average day
- ♦ trips that begin or end in Golden Valley are expected to increase by approximately 8 percent by 2030
- ♦ for trips served by all roads in Golden Valley, approximately 37 percent originate or terminate in the city and 63 percent pass through Golden Valley without stopping

According to the above forecast model findings:

- ♦ regional routes through Golden Valley will experience greater travel demand increases than local routes
- ♦ during peak periods, excess demand will spill over onto local roadways if regional routes cannot serve the volumes

**Capacity Assessment**

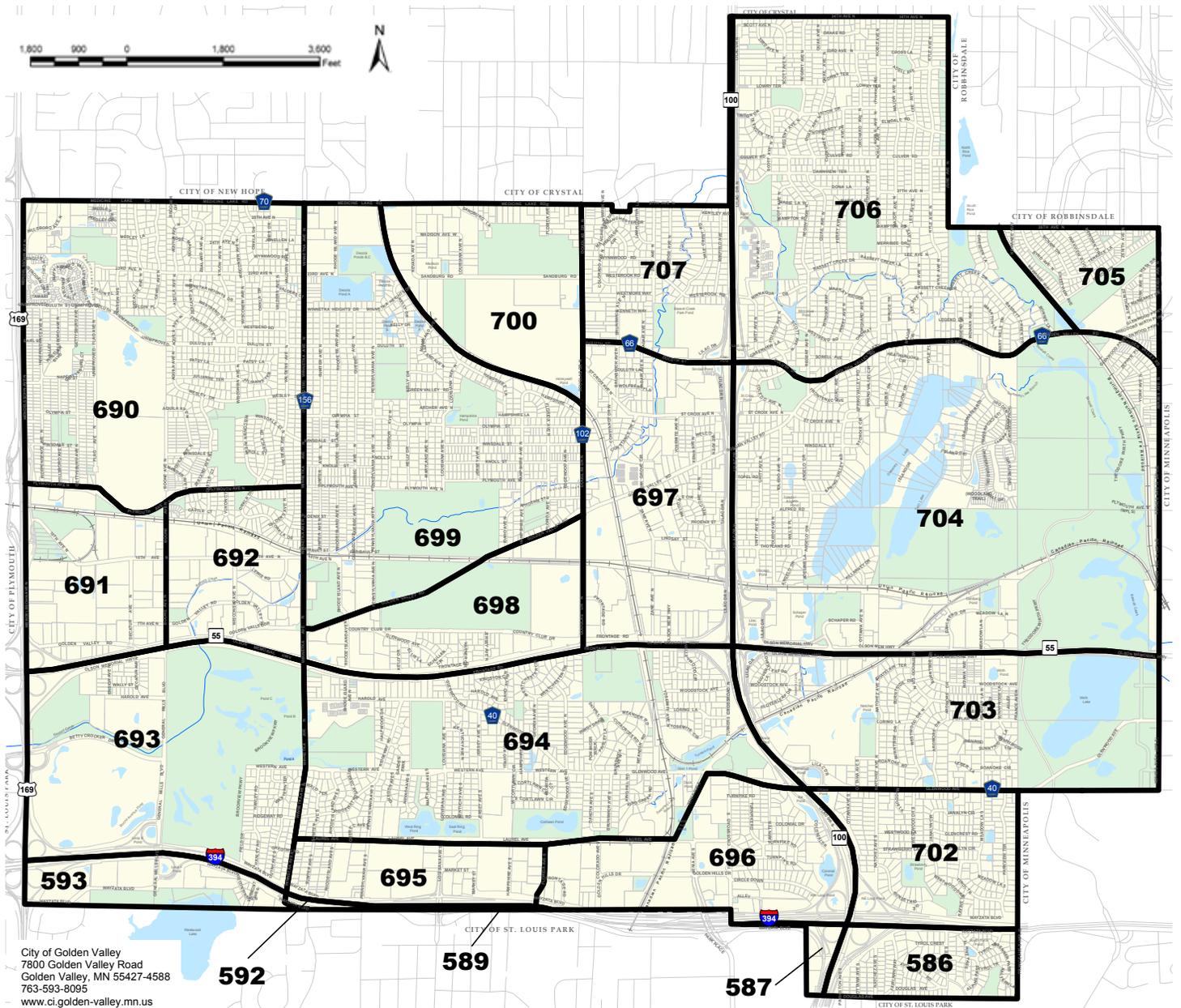
Using the traffic forecasts, the City prepared a capacity assessment to illustrate future (2030) transportation system capacity deficiencies for Golden Valley’s principal arterial, minor

**Table 7.2: Socio-Economic Data by TAZ from Twin Cities Regional Model  
City of Golden Valley, Minnesota**

TAZ Number	Population				Household				Retail Employment				Non-Retail Employment			
	2000	2010	2020	2030	2000	2010	2020	2030	2000	2010	2020	2030	2000	2010	2020	2030
586	428	465	470	490	168	175	175	180	0	0	0	0	0	0	0	0
587	0	0	0	0	0	0	0	0	51	50	53	55	399	430	447	545
593	21	25	25	15	10	10	10	10	163	163	169	175	0	237	321	425
690	3,399	3,775	3,825	3,990	1,339	1,450	1,450	1,600	26	26	27	28	1,208	1,224	1,273	1,372
691	94	105	110	115	54	55	55	55	307	307	318	328	2,655	2,663	2,662	2,672
692	452	600	610	635	219	350	410	440	149	150	154	160	1,651	1,800	2,346	2,490
693	468	500	510	535	205	205	210	220	0	0	0	0	2,949	3,200	3,300	3,600
694	2,375	2,680	2,715	2,835	948	970	970	980	214	215	222	230	3,869	3,885	3,878	3,870
695	82	85	85	90	35	35	40	50	784	785	812	840	1,271	1,312	1,288	1,260
696	500	665	675	705	247	300	310	350	26	26	27	27	2,268	2,274	2,473	2,673
697	1,334	1,560	1,580	1,650	600	690	745	800	610	610	632	650	2,173	2,390	2,468	2,880
698	593	650	660	690	179	180	180	180	99	100	103	105	1,316	1,700	1,797	1,845
699	3,025	3,200	3,240	3,380	1,371	1,380	1,380	1,400	15	15	15	15	607	635	665	675
700	107	100	100	105	41	40	40	45	15	15	16	15	1,679	1,835	1,984	2,035
702	676	740	750	780	272	275	275	280	0	0	0	0	91	50	0	0
703	886	985	1,000	1,045	384	390	400	400	26	26	27	30	215	224	223	220
704	1,528	1,825	1,850	1,930	606	700	740	750	399	400	413	430	4,024	4,000	3,987	3,870
705	512	560	570	595	215	220	220	230	0	0	0	0	23	70	100	100
706	3,157	3,475	3,510	3,660	1,296	1,310	1,325	1,350	0	0	0	0	229	230	230	230
707	644	705	715	745	260	265	265	280	12	12	12	12	619	638	638	638
<b>TOTAL</b>	<b>20,281</b>	<b>22,700</b>	<b>23,000</b>	<b>24,000</b>	<b>8,449</b>	<b>9,000</b>	<b>9,200</b>	<b>9,600</b>	<b>2,896</b>	<b>2,900</b>	<b>3,000</b>	<b>3,100</b>	<b>27,246</b>	<b>28,800</b>	<b>30,100</b>	<b>31,400</b>

Notes:  
 1. TAZ 690, 691, 693, 694, 695, 696, 697, 698, 699, 700, 702, 703, 704 are entirely within Golden Valley.  
 2. TAZ 586, 587, 593, 705, 706, and 707 are partially within Golden Valley; however, table information reflects Golden Valley data only.

Figure 7.4: TAZ Boundaries



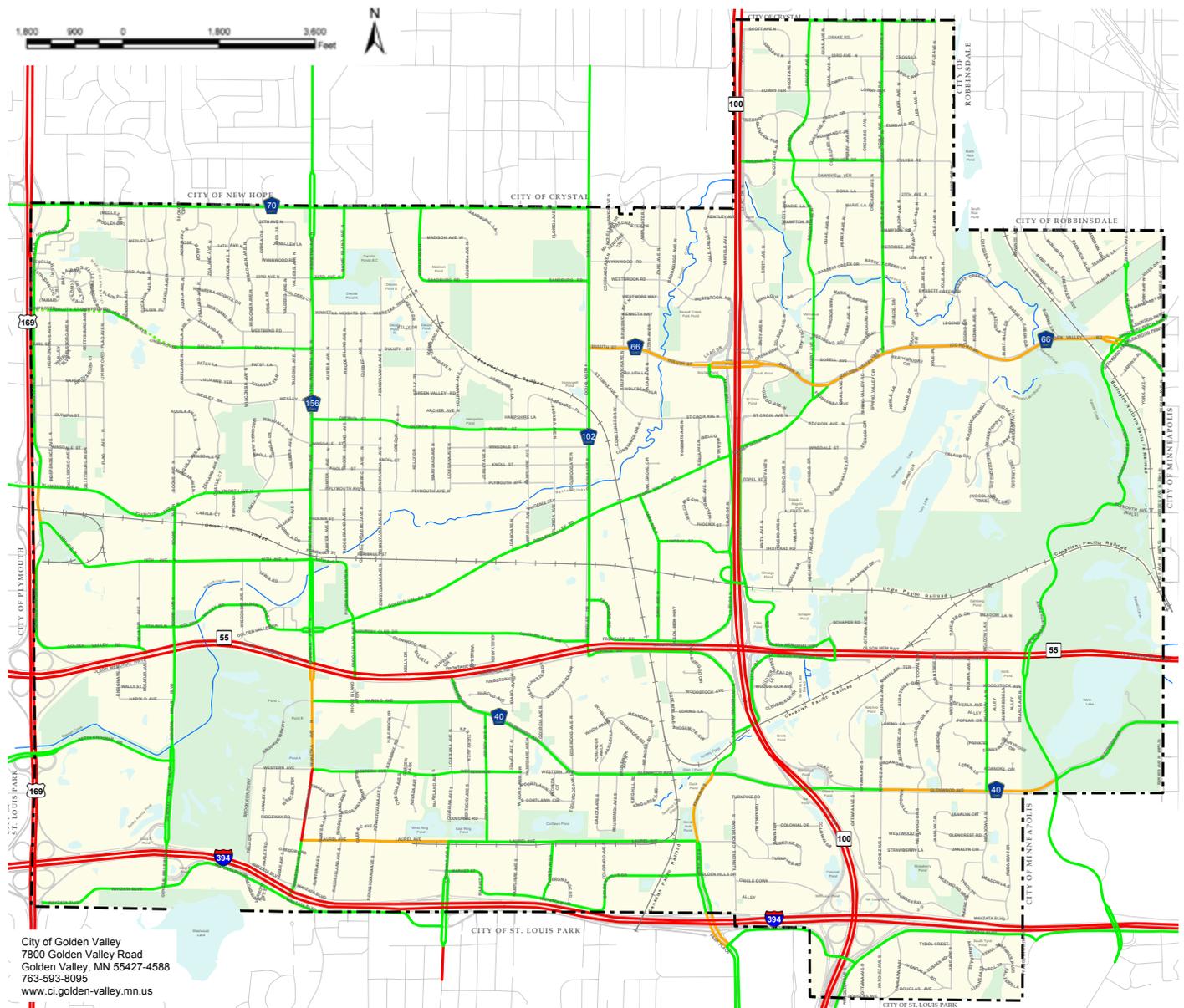
City of Golden Valley  
 7800 Golden Valley Road  
 Golden Valley, MN 55427-4588  
 763-593-8095  
 www.ci.golden-valley.mn.us

- XXX** TAZ Boundary—Census corrected with TAZ ID
- Community Park
- Water
- Creek
- City Limits

Date: May 1, 2008

Sources: MnDOT for TAZ boundaries and neighboring city streets, Hennepin County Surveyor's Office for Property Lines (2006), City of Golden Valley for all other layers

Figure 7.5: 2030 Capacity Deficiencies



City of Golden Valley  
 7800 Golden Valley Road  
 Golden Valley, MN 55427-4588  
 763-593-8095  
[www.ci.golden-valley.mn.us](http://www.ci.golden-valley.mn.us)

- Under Capacity
- Near Capacity
- Over Capacity
- Community Park
- Water
- Creek
- City Limits

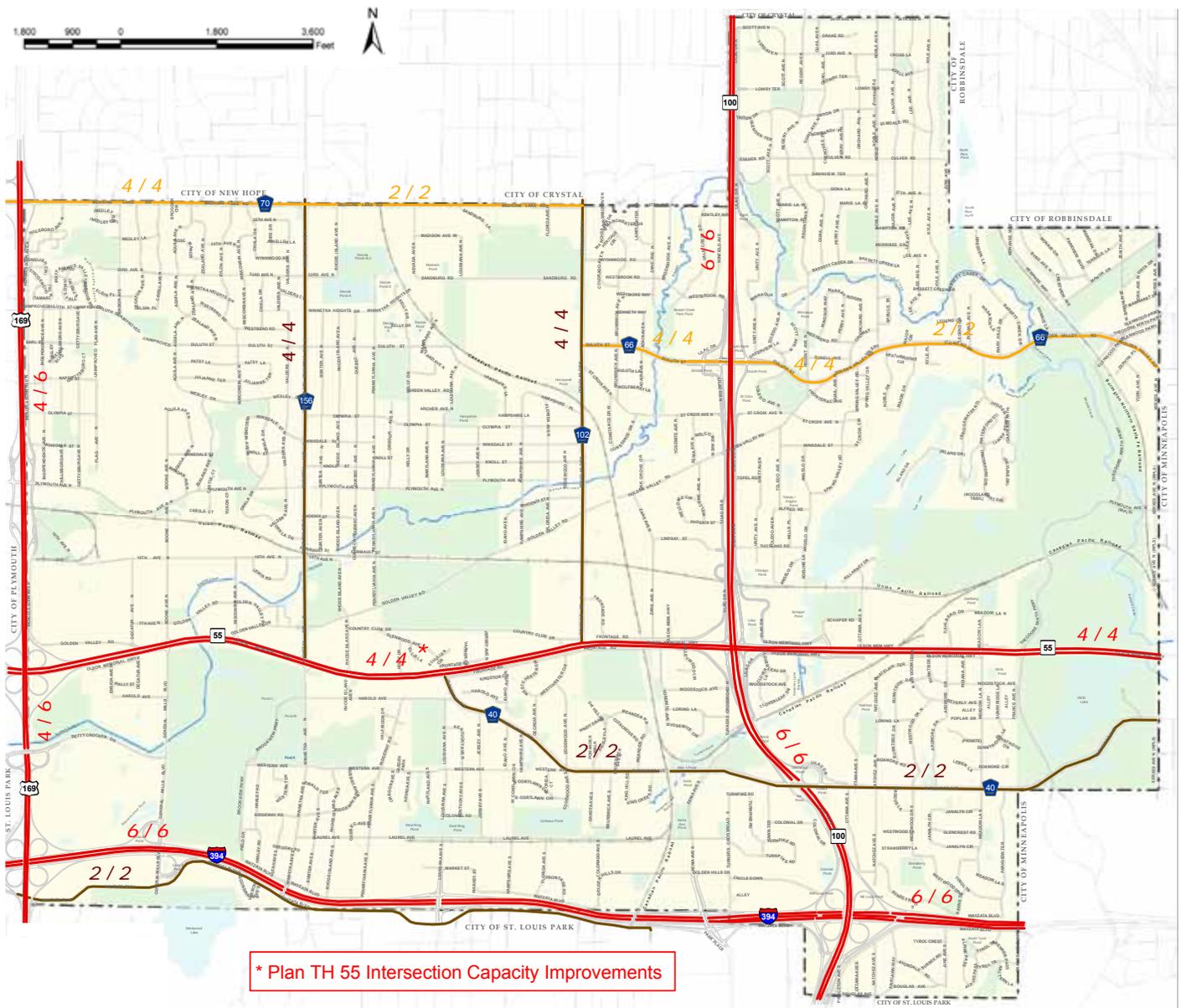
**Notes:**

- 1) Capacity assessment shown for collector and arterial streets only
- 2) Under Capacity: Volume/Capacity Ratio less than 0.75
- 3) Near Capacity: Volume/Capacity Ratio 0.75 - 0.9
- 4) Over Capacity: Volume/Capacity Ratio greater than 0.9

Date: May 21, 2008

Sources: SEH for volume to capacity ratio, MnDOT for neighboring city streets, City of Golden Valley for all other layers

Figure 7.5A: Existing and Proposed Number of Lanes



**Functional Class & Number of Lanes**

Existing Number of Lanes  
Proposed Number of Lanes

X / X Principal Arterial

Existing Number of Lanes  
Proposed Number of Lanes

X / X A Minor Augmentor

Existing Number of Lanes  
Proposed Number of Lanes

X / X A Minor Reliever

Community Park

Water

Creek

City Limits

Date: July 31, 2009

Sources: SEH for proposed functional classification, Met Council for existing functional classification MnDOT for neighboring city streets, City of Golden Valley for all other layers



*Congestion on the freeway system often results in increased traffic on parallel collector routes.*

arterial, and collector roadways (see Figure 7.5). Forecasted roadway volumes are reported as being either under, near, or over capacity. Figure 7.5 illustrates that the principal arterial system (I-394, Hwy 169, Hwy 55, and Hwy 100) will clearly be over capacity by 2030. Winnetka Ave between Laurel Ave and Western Ave is the only minor arterial roadway in the city that is expected to be operating in an over-capacity condition. A few segments of Golden Valley’s minor arterial system will be near capacity, specifically portions of Duluth St, Glenwood Ave, Winnetka Ave, Xenia Ave, and Laurel Ave. The general capacity guidelines and volumes used in these calcula-

tions are from the 2030 forecast (see Figure 7.3).

### Safety Assessment

The City used the Minnesota Department of Transportation’s crash mapping software (MnCMAT) to identify Golden Valley crash locations and statistics for the five years from 2002 through 2006 (see Figure 7.6). By analyzing the highest frequency crash locations, the City identified locations with a crash rate (crashes per million entering vehicles) higher than average for the type of traffic control at that intersection. Those intersections having a crash rate higher than average



*The intersection at Douglas Drive and Duluth Street experiences an above average crash rate*



*A mix of freeway ramp traffic and local shopping center traffic results in safety concerns along Duluth Street*

are marked with a red bubble on the map and are reviewed and discussed in greater depth in this section.

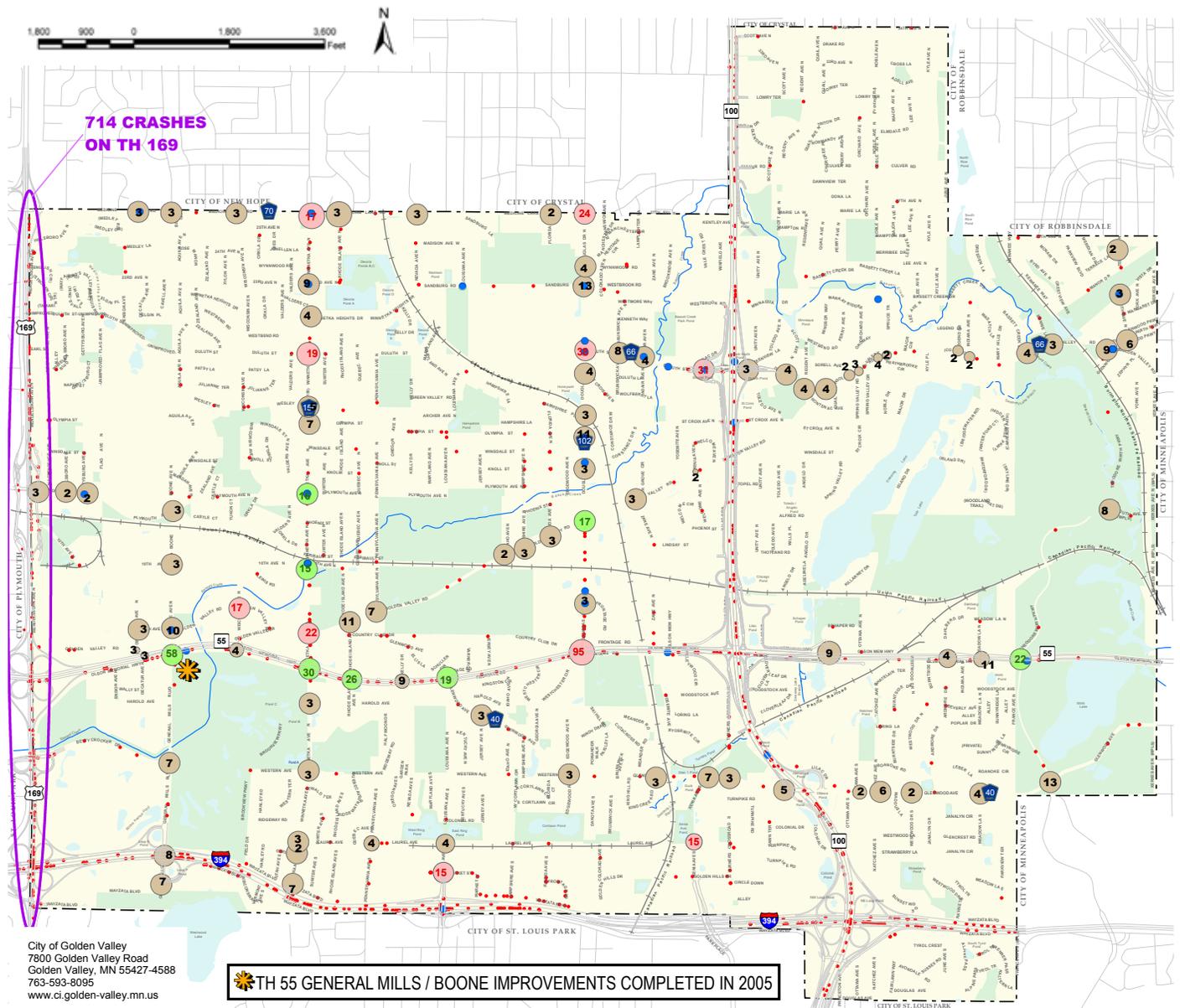
Over the past five years, Golden Valley has had between 450 and 710 crashes per year. The data indicates a downward trend in crash frequency in the most recent years. However, this variation may have many contributing factors, such as possible milder winters (less slippery road conditions) or reduced congestion resulting from construction improvements such as the work on Hwy 100.

General crash trends indicate the vast majority of crashes involve two or more vehicles, followed by single vehicle crashes with fixed objects. Since major highways and interstates serve commuter traffic that passes through Golden Valley, most of the crashes occur during the morning (6 am–10 am) and evening (3 pm–7 pm) rush hour periods. The highest frequency of crash occurrences has been on Fri-

**Table 7.3: General Capacity by Roadway Type**

Facility Type	# Lanes	Estimated Capacity
Two Lane Roadway	2	12,000
Two Lane with Turn Lanes (3-Lane)	3	17,000
Four Lane Undivided	4	23,000
Four Lane Divided	4	35,000
Four Lane Metered Freeway	4	85,000
Six Lane Divided	6	55,000
Six Lane Metered Freeway	6	125,000

Figure 7.6: 2002–2006 Crashes



- 3 or More Crashes Per Year but Equal to or Below Average Rate (x indicates number of crashes in all locations.)
- Above Average Crash Rate for Intersection Control Type
- Multiple Crash Locations
- Single Crash Locations
- Pedestrian Crash Locations
- Community Park
- Water
- Creek
- City Limits

Date: May 21, 2008

Sources: SEH, MnDOT for crash data and neighboring city streets, Hennepin County Surveyors Office for Property Lines (2006), City of Golden Valley for all other layers

days. Crash frequencies on Mondays through Thursdays were similar to one another.

The majority of crash types were rear-end collisions, followed by right angle crashes, and then sideswipes. There were six fatal crashes in the five-year period of crash data reviewed, two of which involved pedestrians. December experienced the most crashes, followed by January. May, on average, had the fewest crashes. The remaining months have fairly comparable crash frequencies.

More than 50 percent of all the crashes within Golden Valley city limits occur on the principal arterial roadways.

Table 7.4 highlights general crash trend issues and needs for principal and minor arterial roadways in Golden Valley.

### Transit System

Golden Valley is located within the Metropolitan Transit Taxing District and is classified as Market Area II. Service options for Market Area II include regular-route local service, all-day express service, small vehicle circulators, special needs paratransit (Americans with Disabilities Act-compliant and for Senior Citizens), and ridesharing.

Metro Transit currently operates several bus routes along Golden Valley’s principal and minor arterial routes. Current (2007) routes include 7, 9, 14, 643, 652, 675, 755, 756, and 758. Bus service is more frequent during the morning and afternoon peak commute times.

Metro Transit operates two park and ride facilities in Golden Valley. One is located at Wayzata Blvd and General Mills Blvd and served by bus routes 652 and 675. The parking lot has 111 spaces and is filled to capacity on an average weekday (2004 Metropolitan Council Park and Ride Survey). A second park and ride facility is located along Duluth St, just west of Hwy 100, and is served by bus routes 758 and 14. The parking lot has 50 spaces and is filled to roughly 50 percent capacity on an average weekday, according to the Metropolitan Council Park and Ride Survey.

Unique transit needs in the community are presented by populations housed in group quarters and facilities that offer specialty care services for temporarily or permanently disabled populations, such as patients at the Courage Center. The varied transit needs of these populations are typically provided by specialized paratransit providers that offer express or demand-response services, such as

the Metro Mobility program administered by the Metropolitan Council.

Other providers offer the general population specialized transit services with donated fares. The Five Cities Transportation Program provides senior citizen with demand response transit services from personal dwelling units to shopping, social activities, and senior program events. PRISM Express offers bus, van, and car rides to the general public residing in Golden Valley for various destinations within Hennepin County, with priority for medical and dental appointments.

Figure 7.7 illustrates current transit system routes, stops, and support facilities in Golden Valley.

### Bicycle and Pedestrian System

Golden Valley has 129 miles of constructed local and regional trails and sidewalks, including those located in Wirth Park. These facilities are for non-motorized vehicle and pedestrian use. Some sidewalks are denoted for pedestrian only use. Many local sidewalks and trails connect to the Minneapolis Park and Recreation Board’s trails in Wirth Park and Three Rivers Park District regional trails in the community. Hennepin County has also designated a series of primary and secondary regional bikeways (on/off roadway) in Golden Valley.

Figure 7.8 identifies current and proposed pedestrian and bicycle facilities in Golden Valley. It also illustrates a composite of trails and sidewalks from current and previous planning studies by Golden Valley and its regional trail partners.

The City is studying a detailed inven-



City photo

*Metro Transit operates this park-and-ride on Wayzata Blvd near General Mills Blvd.*



City photo

*On demand transit providers serve senior citizens and handicapped individuals.*

Table 7.4: Principal and Minor Arterial Roadway Crash Analysis

Principal Arterial Corridor/Intersection		Intersection Crashes* 2002-2006	Crash Issues/Analysis	Indications/Needs
Trunk Highway 55		NA	<ul style="list-style-type: none"> <li>• Predominantly rear-end collisions, followed by intersection right angle crashes</li> <li>• Most occur in the afternoon peak, followed by morning peak</li> </ul>	Likely congestion-related and due to signalized traffic control on a high-speed roadway. Mn/DOT has identified Hwy 55 expansion in Golden Valley as an “unmet need.”
US Highway 169		NA	<ul style="list-style-type: none"> <li>• Predominantly rear-end crashes, followed by sideswipe crashes for vehicles traveling in the same direction</li> <li>• Most are near interchanges</li> <li>• Most occur in the afternoon peak</li> </ul>	Congestion-related and due to substandard geometric design (substandard acceleration/deceleration lanes, and close proximity of interchanges at I-394, General Mills Blvd, and Hwy 55)
Interstate 394		NA	<ul style="list-style-type: none"> <li>• Predominantly rear-end crashes, followed by sideswipe crashes for vehicles traveling in the same direction</li> <li>• Most occur in the afternoon peak</li> </ul>	Related to severe congestion on I-394/I-94 in Minneapolis
Trunk Highway 100		NA	<ul style="list-style-type: none"> <li>• Predominantly rear-end crashes, followed by sideswipe crashes for vehicles traveling in the same direction</li> <li>• Crash frequency similar in morning and afternoon peak hours</li> </ul>	New freeway section operating safely with “normal” range of crashes associated with peak-hour congestion
Winnetka Ave and	Medicine Lake Rd	17	<ul style="list-style-type: none"> <li>• These intersections need to be studied to define contributing factors for these crashes, including a geometric review of the intersection to check design and sight distance and the appropriateness of existing intersection traffic control.</li> </ul>	To be determined
	Duluth St	19		
	Golden Valley Rd	22		
Douglas Dr and	Medicine Lake Rd	24	<ul style="list-style-type: none"> <li>• This intersection needs to be studied to determine contributing factors. Signal operation and geometric review of the intersection needs to be completed.</li> </ul>	To be determined
	Duluth St	38	<ul style="list-style-type: none"> <li>• The Honeywell facility is a large traffic generator near this intersection.</li> </ul>	Capacity and safety improvements on both roadways approaching this intersection should be considered.
	Hwy 55	95	<ul style="list-style-type: none"> <li>• This intersection needs to be studied to define contributing factors for these crashes, including a geometric review of the intersection to check signal operations, design, and sight distance.</li> </ul>	Concept design solution appears in Appendix 7-A. Additional review of the frontage road approaches south of Hwy 55 should also be performed.
Wisconsin Ave/ Golden Valley Rd		17	<ul style="list-style-type: none"> <li>• Recently converted from two-way to all-way stop control, with a center median island on the west leg</li> </ul>	Recent changes should be monitored to assess effectiveness. Additional channelization of Golden Valley Rd between Boone Ave and Wisconsin will improve lane continuity and safety.
Duluth St/Lilac Dr		31	<ul style="list-style-type: none"> <li>• This intersection needs to be studied to define contributing factors.</li> </ul>	Concept design solution appears in Appendix 7-A.

(Table 7.4 continued on next page)

Table 7.4 (continued): Principal and Minor Arterial Roadway Crash Analysis

Principal Arterial Corridor/Intersection	Intersection Crashes* 2002-2006	Crash Issues/Analysis	Indications/Needs
Louisiana Ave/Market St	15	<ul style="list-style-type: none"> <li>High-volume driveways are operating in close proximity to the intersection, adding to congestion and safety issues in the area.</li> </ul>	Opportunities to relocate access points and add capacity to Market St should be considered as new land uses are evaluated.
Xenia Ave/Laurel Ave	15	<ul style="list-style-type: none"> <li>This intersection is planned for reconstruction in 2008 in conjunction with capacity improvements on Xenia Ave and Golden Hills Dr.</li> </ul>	Signal operation and lane geometry improvements are planned to accommodate more intense redevelopment projects in the area.
General Mills Blvd/ Wayzata Blvd	Observed conflicts and complaints	<ul style="list-style-type: none"> <li>Pedestrian conflicts (sight distance on Wayzata Blvd crossing between transit stop and park and ride lot)</li> </ul>	Concept design solution appears in Appendix A, including westbound right turn lane and pedestrian safety crossing improvements.

\* Crash frequency alone is not a meaningful indicator to compare intersection safety. Intersections listed have crash rates (number of crashes per million entering vehicles that have been above average for the specific type of intersection traffic control). See Figure 7.6.

tory of these bicycle and pedestrian facilities and long-range planning for them in relationship to the community’s recreational assets. Results of the inventory, and findings related to condition, ADA compliance, and safety, will be maintained by the City and used to prioritize maintenance and improvement planning.

**Local Sidewalks and Trails**

Paved local sidewalks and paved/unpaved trails are located within or adjacent to each of the community’s parks and recreation areas. There are generally limited trail connections to these facilities via local paved sidewalks and regional trails. Paved trails and sidewalks also typically adjoin the city’s minor arterial and collector roadways.

Golden Valley’s Sidewalk Committee periodically review the network of sidewalks and trails within the community and to make recommendations to the City Council regarding locations of new sidewalks. The Sidewalk Committee consists of Public Works staff and members assembled from

the Golden Valley Planning Commission, Open Space Commission, Environmental Commission. The City will continue to prioritize future sidewalk expansion locations based on input from the Sidewalk Committee, City Council, City staff, and residents.

**Regional Trails and Bikeways**

Existing off-street regional trails in Golden Valley are maintained by the City of Golden Valley, Three Rivers Parks District, and the Minneapolis Park and Recreation Board (for trails located in Theodore Wirth Regional Park). Off-road trails in Wirth Park enter Golden Valley at the north end of



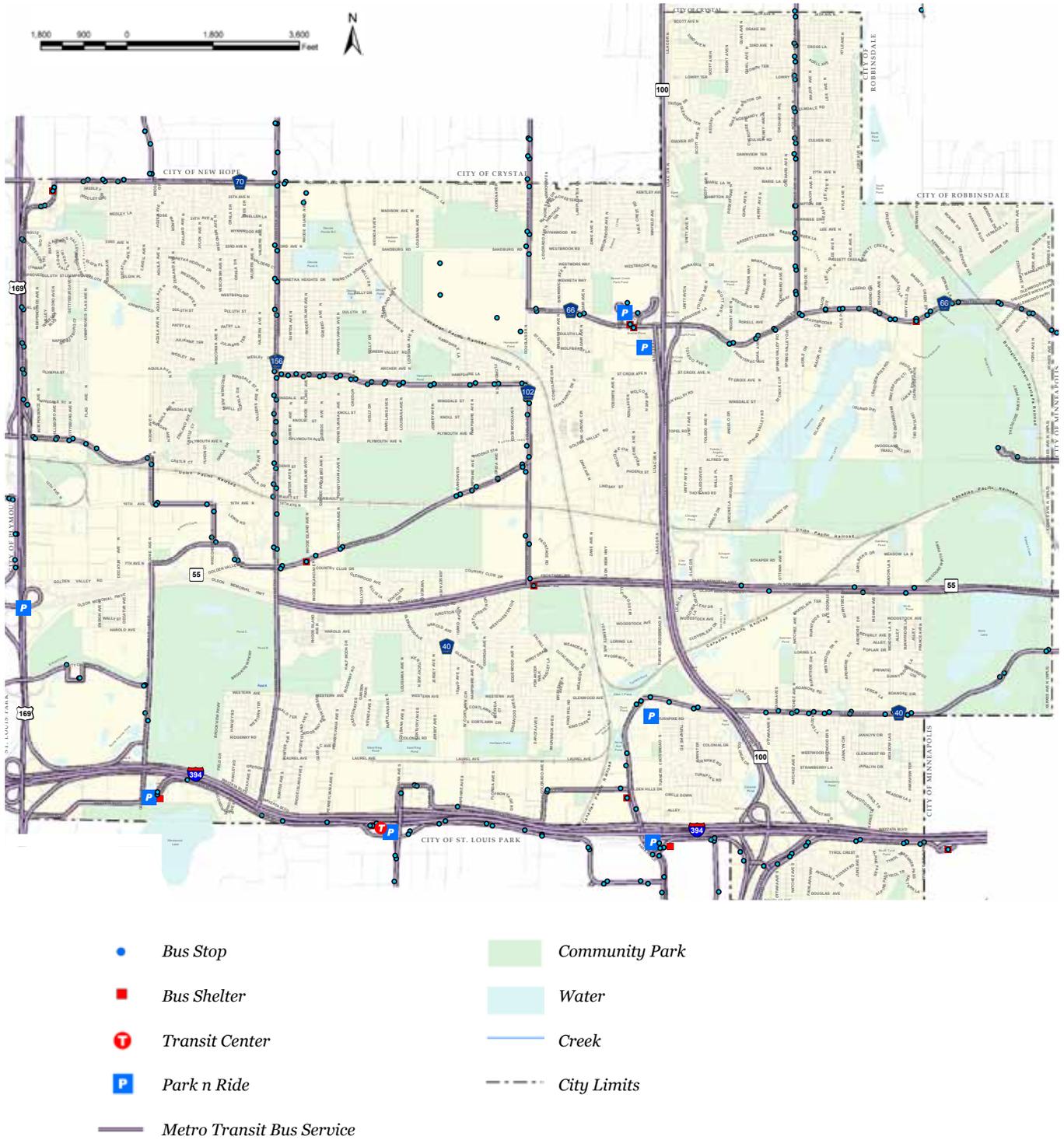
City photo



City photo

*Sidewalks constructed to standards are safe and accessible for all users.*

Figure 7.7: Transit Map



Date: May 1, 2008

Sources: SEH, MnDOT for neighboring city streets, MetroTransit for transit layers, Hennepin County Surveyors Office for Property Lines (2006), City of Golden Valley for all other layers



City photo

*Three Rivers Park District will complete the Luce Line Trail through Golden Valley by 2010.*

Wirth Park near Golden Valley Rd and follow Theodore Wirth Parkway through the park. A new off-road trail connects to a pedestrian bridge over Hwy 100 adjacent to Unity Ave near Briarwood Nature Area. This regional trail connects west and north from the pedestrian bridge to the trail system in Bassett Creek Park and adjacent residential neighborhoods in Crystal.

Hennepin County has identified several routes through Golden Valley as planned on- or off-road bikeway corridors, including:

- ♦ Wayzata Blvd (south I-394 frontage road). The bike route would emanate from the Cedar Lake Trail and Theodore Wirth Parkway Trail system (east of the Golden Valley city limits) westerly along the frontage road through Golden Valley and St Louis Park to the west city limits and under Hwy 169 into Minnetonka. The segment of Wayzata Blvd between Theodore Wirth Parkway and Hwy 100 has been considered for off-street trail im-

provements in conjunction with street narrowing for traffic calming.

- ♦ Glenwood Ave from Theodore Wirth Regional Park westerly to Hwy 55, then northerly across Hwy 55 along Glenwood Ave, joining with a segment of the Luce Line Trail and continuing along a route that generally follows Pennsylvania Ave to the north city limit at Medicine Lake Rd
- ♦ Golden Valley Rd from Minneapolis and Theodore Wirth Regional Park Trails westerly along Golden Valley Rd and Duluth St to Douglas Dr
- ♦ Douglas Dr from the Luce Line trail northerly to Medicine Lake Rd
- ♦ Medicine Lake Rd from Douglas Dr westerly to Hwy 169

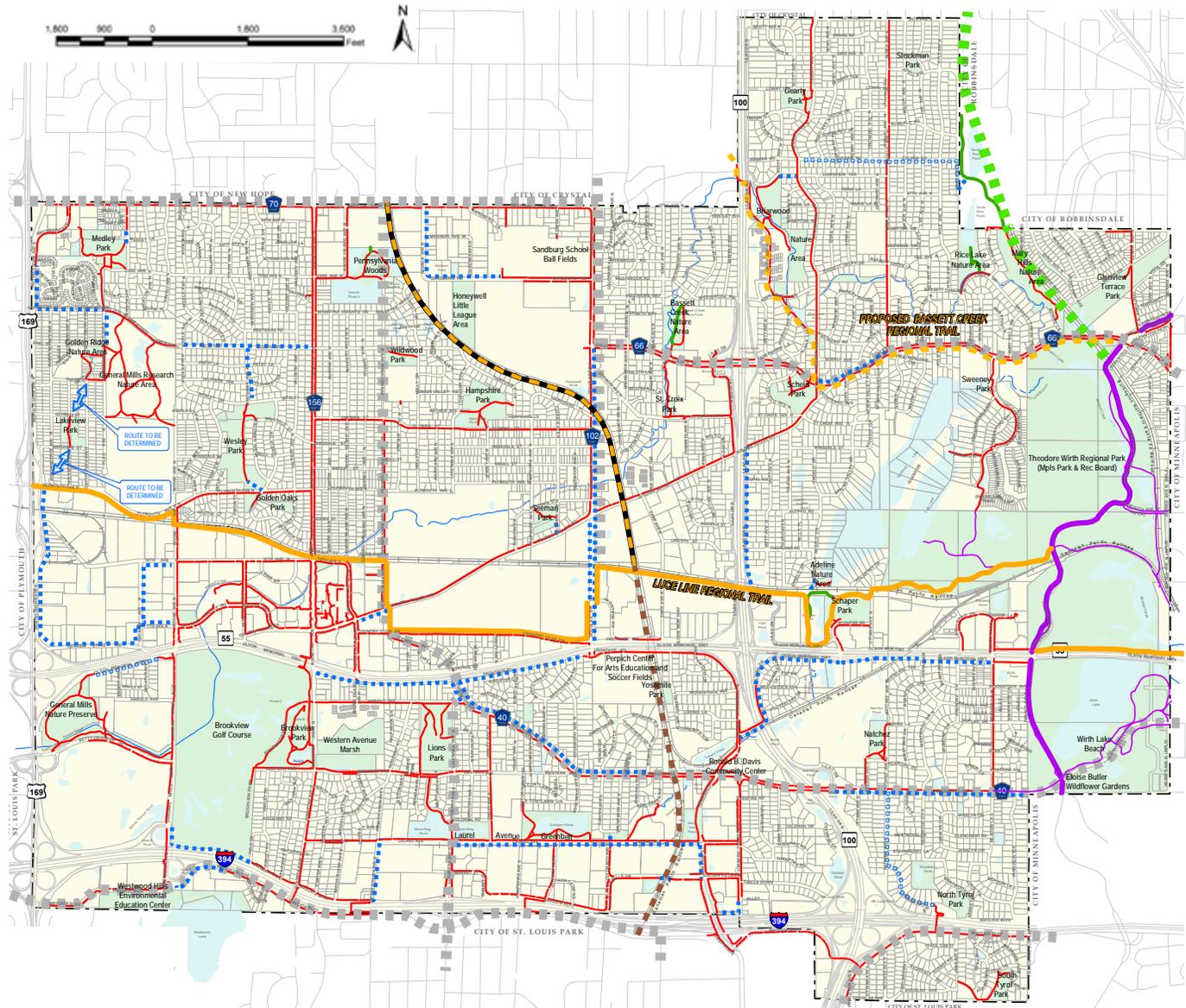
The Three Rivers Parks District is planning and managing the following regional trail routes through Golden Valley: the Luce Line Trail, the proposed

Bassett Creek Regional Trail, and an additional north-south trail corridor through Golden Valley.

- ♦ The Luce Line Trail is the longest east-west regional trail crossing Golden Valley. The existing (built) portion of the trail enters the city from the west along Plymouth Ave at Hwy 169. It follows segments of Plymouth Ave, Boone Ave, the Union Pacific/Canadian Pacific Railroad (UP/CP RR) corridor, Rhode Island Ave N, Country Club Dr, and Douglas Dr N. Extension of this trail to the east of Douglas Dr, along the UP/CP RR corridor through Golden Valley's Schaper Park and beyond to Theodore Wirth Regional Park, is scheduled for completion by 2010.

- ♦ Three Rivers Park District has a long-range goal of completing the proposed Bassett Creek Regional Trail through Golden Valley. The City and the Parks District have had preliminary discussions regarding the trail but have not determined final alignment. In general, the trail corridor within Golden Valley begins on the east side of the Hwy 100 pedestrian bridge, travels southerly along Unity and Scott Aves, southeasterly along Westbend Rd to Regent Ave, continues southerly along Regent Ave to County Rd 66, then easterly along County Rd 66 to Theodore Wirth Parkway. The City needs additional discussion with the Park District before it endorses this trail proposal.
- ♦ Three Rivers Park District is interested in the feasibility of an additional north-south trail corridor following the Canadian Pacific Railroad line through Golden Valley. The corridor crosses I-394 westerly of Xenia Ave and contin-

Figure 7.8: Existing and Proposed Trails and Sidewalks



**Existing Trails & Walks**

- Paved
- Unpaved
- - - - Proposed Trail
- □ □ □ □ □ Proposed On-Street Pedestrian/Bike Route "SHARE THE ROAD"
- - - - Potential North/South Corridor

**Three Rivers Park District Trails**

- Existing
- - - - Proposed
- - - - Potential North/South Regional Corridor (feasibility study underway, responsibility for implementation not determined)

**Proposed Hennepin County Trails**

- - - - Primary System: Bikeway (on/off roadway)
- - - - Secondary System

**Minneapolis Park & Recreation Board Trails**

- "Grand Rounds"—Theodore Wirth Byway District
- Local Trails
- Parks and Open Space
- Water
- Creek
- - - - City Limits

Date: July 30, 2009

Sources: SEH for proposed trail layer, MnDOT for neighboring city streets, Hennepin County Surveyors Office for Property Lines (2006), City of Golden Valley for all other layers

ues north and northwesterly to the Luce Line Trail.

crossings in Golden Valley, 21 are at grade and 11 are grade separated (see Table 7.5 for details).

south line has 12 crossings and serves about four trains per day at speeds up to 25 miles per hour. This line connects with other CP lines in Crystal and Savage. The east-west line is an industrial spur running parallel to Laurel Ave. It has five crossings and

### Railroads

Three railroads have active lines in Golden Valley. Of the 32 railroad

The Canadian Pacific (CP) Railway, formerly the Soo Line, operates two lines in Golden Valley. The north-

Table 7.5: Railroad Crossings

Street Name	Inventory No.	ADT	Trains per Day	Warning Device	Comments
<b>Canadian Pacific Railroad</b>					
Medicine Lake Road	854368L	10,600	4	Railroad Signals with Gates	
Douglas Drive North	854224G	11,200	4	Railroad Signals	
Golden Valley Road	854367E	3,450	4	Bridge RR over	New bridge in 2007
Hwy 55	854365R	30,000	4	Bridge RR under	
Glenwood Avenue	854364S	5,250	4	Bridge RR over	12' 7" clearance; bridge constructed in 1926
Laurel Avenue	908832E	4,650	4	Railroad Signals with Gates	
Golden Hills Drive	696372P	5,300	4	Railroad Signals with Gates	
I-394	854334S	134,000	4	Bridge RR over	
Turners Crossroads	854225N	2,200	2	Railroad Signals	
Hwy 100	854332D	90,000	2	Bridge RR under	
Hwy 55	854331W	26,500	2	Bridge RR under	
Wirth Parkway	854375W	3,000	2	Bridge RR under	
Laurel Avenue	908832E	4,650	2	Railroad Signals with Gates	
Colorado Avenue	908830R	1,260	2	Crossbucks	
Florida Avenue	854303T	2,000	2	Crossbucks	
Hampshire Avenue	854302L	540	2	Crossbucks	
Louisiana Avenue	854238P	11,400	2	Crossbucks	Surface replacement scheduled in 2008
<b>Union Pacific Railroad</b>					
Ottawa Avenue	185030D	540	2	Crossbucks & Stop Signs	
Hwy 100	185031K	80,000	2	Bridge RR under	
Zane Avenue	185033Y	1,150	2	Railroad Signals with Gates	New concrete surface in 2006 New Railroad Signals with Gates in 2008
Douglas Drive	185034F	9,750	2	Railroad Signals	New Railroad Signals with Gates in 2008
Golden Valley Road	185036U	6,400	2	Railroad Signals	New Railroad Signals with Gates in 2010
Pennsylvania Avenue	185039P	1,200	2	Crossbucks and Stop Signs	
Winnetka Avenue	185040J	13,600	2	Railroad Signals	
Boone Avenue	185041R	2,800	2	Crossbucks	
10th Avenue	185042X	2,100	1	Crossbucks	
10th Avenue	185043E	2,100	1	Crossbucks	
10th Avenue	184044L	2,100	1	Crossbucks	
Hwy 169 Frontage Rd	185045T	6,200	2	Railroad Signals	
<b>BNSF Railway</b>					
Plymouth Avenue	095618A	3,000	2	Bridge RR under	
Wirth Parkway	095619G	3,000	2	Bridge RR under	
Golden Valley Road	095620D	10,300	2	Bridge RR under	



*The Canadian Pacific Railroad bridge over Golden Valley Rd*

serves up to two trains per day at speeds of 10 miles per hour.

The Union Pacific (UP) Railroad operates an east-west line that runs parallel to Hwy 55 and terminates in Plymouth. It has 12 street crossings and serves two trains per day at speeds up to 10 miles per hour. The UP has been upgrading the track over the past few years and anticipates that train speed may increase in the future.

The BNSF Railway operates a line in

the far eastern part of the City that serves two trains per day at speeds up to 25 miles per hour. The line begins in Minneapolis and terminates in Monticello, Minnesota, and it has three grade-separated roadway crossings in Golden Valley. This line was identified as a possible future commuter rail route but is not a high priority.

The railroad industry nationwide is healthy because of the high energy costs related to the trucking industry.

Railroad operations in Golden Valley will remain active through 2030. However, significant change in train traffic is not expected because the rail lines provide local rather than long distance service.

**Rail Crossings**

The City, Hennepin County, and the railroads have been cooperating on crossing improvement projects each year. In 2007, Golden Valley Rd was rebuilt under the CP line and the railroad bridge was replaced, eliminating a clearance issue for trucks on Golden Valley Rd. In 2009, the railroad signals on Golden Valley Rd near the Country Club will be replaced. Douglas Dr signals will be replaced in 2009 as part of a Hennepin County project.

Golden Valley has 21 at-grade railroad crossings, and trains are required to sound their horns at all public at-grade crossings. Train horn use is regulated by the Federal Railroad Administration (FRA). The rules are based on risk factors and have a provision that allows local communities to enact quiet zones. The minimum safety devices at crossings in a quiet zone are railroad signals with gates. Additional information can be found at [www.fra.dot.gov](http://www.fra.dot.gov).

Train volume in Golden Valley is relatively light and train horns have not been a major issue. As the railroad signals are upgraded and replaced, railroad signals with gates will be installed. Quiet zones can be evaluated as these projects are completed.



City photo

*The Union Pacific Railroad crossing at Douglas Dr is scheduled for signal and gate arm improvements in 2009.*



City photo

*The Union Pacific Railroad crossing at Golden Valley Rd was recently improved in conjunction with a realigned trail crossing.*

**Airport/Heliport/Seaplane Facilities**

No airports, heliports, or seaplane operations are located, or planned to be

constructed, within the city limits of Golden Valley.

### Airspace

Although there are no airport facilities in Golden Valley, the community is located northwest of the Minneapolis/St Paul International Airport and south of the Crystal Airport, both of which are owned and operated by the Metropolitan Airports Commission (MAC). These airports each distribute air traffic over Golden Valley. The safety of the air traffic over Golden Valley is a concern for local officials, and protection of airspace travel lanes is included as part of construction authorization.

### Airspace Protection

The Federal Aviation Administration's (FAA) Federal Aviation Regulations Part 77 states that any construction exceeding 200 feet above ground level must file Form 7460-1. As part of the design process, any new construction that is planned to exceed 200 feet above ground level must be approved by the FAA as well as the Minnesota Department of Transportation under MN State Statutes 360.

Existing structures within Golden Valley that exceed 200 feet in height are limited and include utility and telecommunications towers at scattered locations in the community. The tallest structure in Golden Valley is a 400 foot communications tower in the northwest quadrant of the community owned and operated by Hennepin County. There are no commercial or residential buildings in the community that currently exceed 200 feet.

The other requirements of Part 77 apply to construction within 20,000 feet of an airport with a runway longer than 3,200 feet. All runways at Min-

neapolis-St Paul International Airport (MSP) are farther than 20,000 feet from the city limits of Golden Valley.

### Airport Influence Areas

The MSP is the closest commercial airport that serves Golden Valley. One of two main runways at MSP, 12L-30R, distributes arriving and departing aircraft in airspace over Golden Valley. Depending on weather conditions and the time of the year, air traffic over Golden Valley can exceed 400 commercial operations daily. Golden Valley's distance from MSP buffers it from being included in the MAC's 2007 noise policy area. Golden Valley is also outside the MAC's 2007 noise policy area for its reliever airport in Crystal.

## Freight and Heavy Commercial Vehicles

According to a recent MnDOT report entitled "Trucks and Twin Cities Traffic Management," one of the top-ranking strategies to reduce congestion for trucks traveling within and through the Twin Cities is to provide design guidance to local governments for accommodating trucks on local roads. MnDOT adopted the strategy, which includes ongoing guidance updates and training. The intent is to help local governments identify locations where land uses currently (or are likely to) generate heavy truck movements, present unique traffic control needs, and demonstrate concerns for local street pavement and geometric design to accommodate heavy truck dimensions and weight. The guidance can be used to improve truck, motorist, and non-motorized vehicle safety and traffic flow.

Typical examples include driveways or approaches to loading zones for retail



City photo

*Truck mobility and access is critical to successful commerce within Golden Valley.*

stores or industrial buildings, where inadequate maneuvering and turning space may cause safety conflicts. Pedestrians approaching a driveway intersection on a sidewalk may not suspect a truck's approaching off-tracked rear tires. In addition, such maneuvering can also result in damages to public infrastructure (broken curbs and landscaping destruction). Inadequate truck queuing can also be a problem, requiring temporary on-street parking.

To promote safety and operational efficiencies, and to preserve infrastructure, the City should assess industrial and commercial truck ingress/egress areas in Golden Valley for properties where such issues have been observed. In addition, the guidance will provide support to the City in conducting site plan reviews for potential new developments. 🌟

photo by City staff



## Section 5: Future Transportation System Plan

A long-range plan has been developed for each management element of the Golden Valley Transportation System. This plan is based on deficiencies, needs, and desires expressed in Sections 3 (Goals, Objectives, and Policies) and 4 (Issue Analysis and Needs Assessment). The plan provides guidance for:

- ◆ Pavement Management Program (local streets)
- ◆ future functional classification
- ◆ safety improvements
- ◆ access management
- ◆ transit
- ◆ sub-area plans
- ◆ pedestrians and bicycles
- ◆ traffic impact management

### Pavement Management Program

Golden Valley's Pavement Management Program (PMP) is a systematic program for local roadway improvements to meet existing and future demands. Funding for the pavement management program integrates City resources, special assessments, and Municipal State Aid Street (MSAS) system re-



City photo



City photo

*Typical local streets before and after PMP improvements*

sources. Figure 7.9 illustrates the local streets planned for reconstruction as part of the PMP from 2008 through 2014.

The City should also continue to evaluate the condition of utilities located within the rights-of-way of streets programmed for reconstruction and coordinated multiple projects if needed. In addition, the City will continue to consider integrating intersection safety improvements, sidewalk and trail improvements, or other infrastructure improvements into the PMP projects to improve overall transportation network safety and maximize cost effectiveness of building these elements as part of a larger project.

### Future Functional Classification

The proposed future functional classification system for Golden Valley is based on the Federal Highway Administration’s Functional Classification Manual criteria, Metropolitan Council guidance, and a number of other factors, including:

- ♦ estimated trip length
- ♦ trip type
- ♦ connections to activity centers
- ♦ spacing
- ♦ continuity
- ♦ mobility
- ♦ accessibility
- ♦ speed

Future functional classification recommendations are based on the overall Comprehensive Plan update elements (eg, future policy and land use recommendations), regional facility and adjacent community plans and functional classification changes, public and partnership organizations, and federal and state system mileage guidelines.

Functional classification system changes proposed in Golden Valley include portions of Duluth St, Regent Ave, and General Mills Blvd.

#### Duluth St

Duluth St between Mendelssohn Ave and Winnetka Ave is currently not continuous, but the corridor has been preserved to serve as a potential minor collector. Segments of this alignment have platted right-of-way but no roadway today. Local street reconstruction is planned in the immediate area in 2012–2014 as part of the City’s PMP. Duluth St segments that are not in place along this dedicated right of way include:

- ♦ Mendelssohn Ave to Independence Ave
- ♦ Gettysburg Ave to Flag Ave
- ♦ Ensign Ave to Aquila Ave

The need for a Duluth St to become a continuous roadway is dependent on the density of potential residential and/or industrial development in the immediate area and ability of alternative routes to provide sufficient access and mobility for the existing and future land uses. This corridor should be preserved as a potential collector roadway to serve existing and potential new uses in the area.

#### Regent Ave

Regent Ave from Golden Valley Rd to 34th Ave is proposed for reclassifica-



City photo

*General Mills Blvd is proposed to be a major collector.*



City photo

*Golden Valley Rd meets Theodore Wirth Parkway in a complex intersection with trail crossings and local street access issues.*



City photo

*Golden Valley will work with Metro Transit to improve safety at this park and ride pedestrian crossing.*

tion and is being upgraded from a local street to a minor collector.

**General Mills Blvd**

General Mills Blvd between Wayzata Blvd and Betty Crocker Dr is proposed for reclassification from a minor collector to a major collector to reflect the importance of its connectivity to the regional roadway system at I-394.

Figure 7.2 illustrates the proposed classification changes. These sequencing of these changes and order of priority are presented in Section 6 (Implementation).

**Safety Improvements**

To address some of the safety and operational issues identified, the City developed targeted intersection and roadway improvement sketches. Recommendations range from adding turn lanes, improving sight distance, and managing access. A compilation of these roadway improvements is outlined below and illustrated in Appendix 7-A.

**Golden Valley Rd/Theodore Wirth Parkway Intersection**

As shown in Appendix 7-A-1, intersection improvements would eliminate free right turn movements and unexpected local street access points within them. The concept would also

reduce the number of trail crossings. Hennepin County Public Works and Minneapolis Parks Board staff expressed support for improvements at this location when they were considered in 2007 as part of the City’s PMP program. However, no funding was available from the partnering agencies and improvements were not made. A roundabout solution may also be a viable alternative to consider.

**General Mills Blvd/Wayzata Blvd Intersection (And Metro Transit Park And Ride Pedestrian Crossing)**

At General Mills Blvd and Wayzata Blvd, the pedestrian crossing that links the park-and-ride lot to the bus stop needs sight distance improvements. See Appendix 7-A-2 for a preliminary concept. Capacity improvements include the addition of a westbound right turn lane.

For the pedestrian crossing, an overhead flashing warning signal should be installed. The westbound curb line of Wayzata Blvd could be shifted south to provide better sight distance around the concrete barrier between Wayzata Blvd and the ramp to I-394. The City supports and encourages Metro Transit to move forward with this safety improvement.

**Douglas Dr From Hwy 55 To Duluth St**

As shown in Appendix 7-A-3 and 7-A-4, improvements in the Douglas Dr corridor should be made to increase capacity, reduce turning vehicle conflicts, and provide off-street facilities for pedestrians. A proposed center median would run continuously along the corridor, with breaks for left turns at selected public street locations. Many intersections and driveways that currently have full access would be limited to right-in right-out movements. A walk or trail is proposed for both sides of Douglas Dr. Additional consideration should be given to improve the northbound approach to Hwy 55 from the frontage road.

**Hwy 55 At Glenwood Ave (South Frontage Rd)**

The south frontage road intersection with Glenwood Ave occurs immediately south of the Hwy 55 intersection.



City photo

*Intersection safety, access management, and trail improvements are proposed for the Douglas Drive Corridor.*



City photo

*Movements between Glenwood Ave and the Hwy 55 frontage road are often blocked by vehicles waiting at the traffic signal.*

Vehicles waiting to enter Hwy 55 block access to or from the frontage road. The intersection geometry should be reviewed to identify potential improvement alternatives.

### Duluth St From Douglas Dr To Hwy 100

On Duluth St from Douglas Dr to Hwy 100, intersection and corridor improvements are recommended to improve safety and capacity (see Appendix 7-A-5). As shown in 7-A-5, future traffic demands on Duluth are expected to be near the capacity of the existing four lane undivided roadway. A center median island is recommended that would run continuously along the corridor, with breaks at selected public street intersections. Some intersections and driveways that currently have full access would be limited to right-in right-out movements. Private property access modifications and trail improvements on Duluth St should be coordinated to compliment improvements planned for Douglas Dr.

### Xenia Ave, Golden Hills Dr, And Laurel Ave

Improvements on Xenia Ave from Golden Hills Dr to Laurel Ave and on Golden Hills Dr east and west of Xenia Ave are recommended. These



City photo

*Private development initiatives have spurred capacity and safety improvement planning for Xenia Ave and Golden Hills Dr.*

improvements are currently under design and planned for implementation as development occurs and traffic conditions warrant.

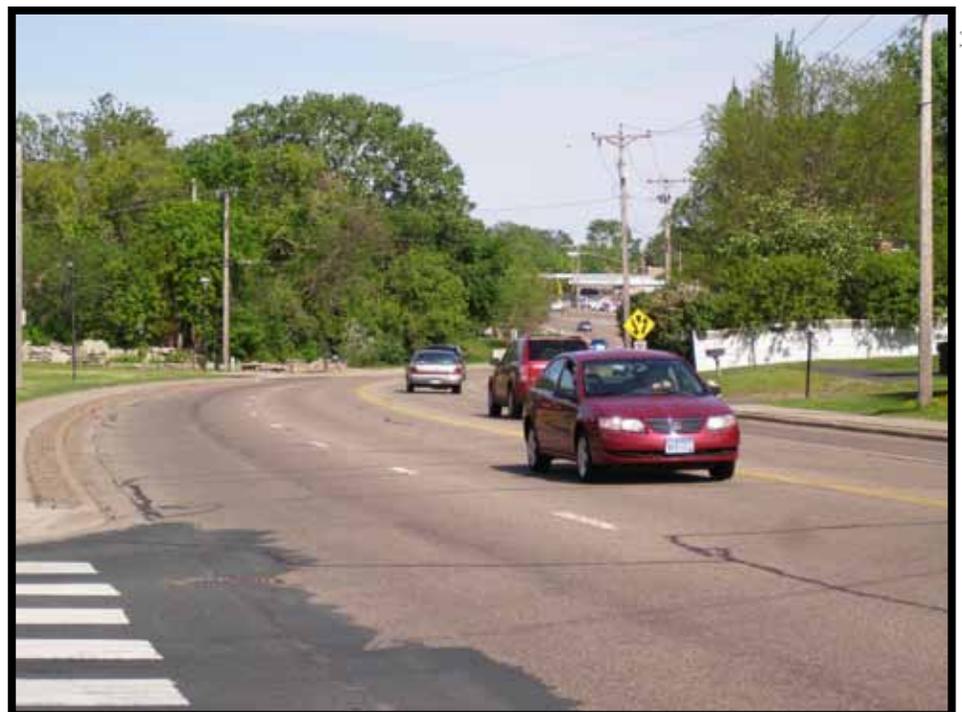
The traffic signal at Golden Hills Dr and Xenia should be reconfigured to operate under eight-phase control. Traffic signal interconnection should be installed along Xenia Ave between Laurel and the I-394 ramp interchange signals. Two westbound lanes on Golden Hills Dr should be extended beyond the railroad track crossing,

and a railroad signal and crossing gate system should be installed. Sidewalk improvements should be extended across the railroad tracks on both sides.

## Access Management Plan

Key transportation corridors are important to the overall flow and ease of travel within and through Golden Valley. Principal arterials, minor arterials, and collector streets function best with proper access spacing. In 2002, Mn/DOT developed access management guidelines for access spacing for use by local governments as well as Mn/DOT roadway management. Golden Valley will continue to observe these guidelines in its long-range transportation system planning.

Each of the Interstate, US and Minnesota Trunk highways that pass through Golden Valley are major transporta-



City photo

*Duluth St between Douglas Dr and Hwy 100 will experience greater capacity and safety issues as traffic demands grow.*

tion corridors in the Metro Area. Access management along these principal arterial corridors is essential in maintaining the ease of flow and speed continuity along the roadways. Ramp metering is used along I-394, Hwy 169, and Hwy 100 to manage traffic entering the highways. Access points along these corridors have been consolidated over time, and all points of access are controlled and allowed only at interchanges. Access points along Hwy 55 include the use of traffic signals at all full access points and partial access at other intersections.

Minor arterial roadways in the community observe more permissive access and traffic signal standards than principal arterial roadways. One-quarter mile access and signal spacing is considered to be acceptable. Collector roadways are desirably served by access spacing at one-eighth mile and traffic signal spacing at one-quarter mile. Table 7.6 illustrates applicable Mn/DOT access spacing guidelines adopted for use in Golden Valley's transportation system.

**Corridors**

Corridors in Golden Valley that need additional access management considerations include Hwy 169, Hwy 55, Douglas Dr, Winnetka Ave, Golden Valley Rd, and Noble Ave. These corridors were fully developed before the adoption of access management standards, and most of the accessibility issues have been addressed with minor improvements over time. Major improvements, such as Hwy 169's inadequate interchange access spacing between Hwy 55, Betty Crocker Dr, and I-394, and other intersections that present safety and congestion problems related to excessive access, remain as unmet needs.

When opportunities occur to redevelop private properties along Golden Valley's principally commercial districts, multiple driveway entrances on commercial and industrial properties should be carefully monitored and reduced if possible to better manage property access ingress and egress. Considerations should include driveway spacing, truck and delivery traffic needs, and trip generation/ peak hour

turning movement characteristics. In addition, as sidewalks and trails are retrofitted to minor arterial and collector corridors, accessibility concerns for pedestrians and bicyclists should also be considered.

**Transit Plan**

The Transit Plan is divided into responses to two functional areas: service needs and passenger and support facility needs.

Service needs include modifications to existing Metro Transit routes and scheduled stop locations and frequencies. Ridership frequency is down approximately 20 percent from historic levels. Golden Valley supports restoring the frequency and bringing service to areas that are not currently served. Residents in the community have noted the most common deficiency is a need to improve north-south service frequency along minor arterials (Winnetka Ave, Douglas Dr) and adjustments to scheduled stop locations, if necessary, to reflect user demands. Other service improvements should

**Table 7.6: Access and Signal Spacing Guidelines**

Mn/DOT Access Category and Subcategory	Functional Classification	Intersection Spacing		Signal Spacing	Example Corridors in Golden Valley
		Primary Full Movement Intersection	Conditional Secondary Intersection		
Category: 4 Subcategory: B (Urban)	Principal Arterials (Expressway)	1/2 Mile	1/4 Mile	1/2 Mile	TH 55
Category: 4 Subcategory: B (Urban)	Principal Arterials (Freeway)	1 Mile Interchange		N/A	I-394, US 169, TH 100
Category: 5 Subcategory: B (Urban)	Minor Arterials	1/4 Mile	1/8 Mile	1/4 Mile	Douglas Drive, Winnetka Avenue North
Category: 6 Subcategory: B (Urban)	Collectors	1/8 Mile	Not Applicable	1/4 Mile	Golden Valley Road, Noble Avenue

Source: Mn/DOT Office of Investment Management Access Category System and Spacing Guidelines (Appendix 7-A) March 2002



Photo by City staff

*Commuters board the Metro Transit bus on Golden Valley Rd.*

be included with redevelopment projects planned along the I-394, Hwy 169, and Hwy 100 corridors.

Passenger and support facility improvement needs should be continuously monitored. These facilities include shelters, transit stations, and park-and-ride lots. Currently, Golden Valley's existing park-and-ride lots located at I-394 and General Mills Blvd and Hwy 100 and Duluth St are typically at capacity during weekdays. According to the Metropolitan Council's Park-and-Ride Facility Site Location Plan, demand for additional park-and-ride spaces has been identified at the Hwy 100 and Duluth St facility. The Metropolitan Council plans to expand this facility to a capacity of 350 spaces by 2010. Additional space demands have been identified in areas adjacent to Hwy 55 and Hwy 169.

At General Mills Blvd and Wayzata Blvd, the pedestrian crossing that links the park-and-ride lot to the bus stop needs sight distance improve-

ments (see Appendix 7-A-2 for a preliminary concept). Improvements include the addition of a westbound right turn.

For the pedestrian crossing a pedestrian actuated flashing light should be installed. The north curb line of Wayzata Boulevard should be shifted south to provide better sight distance around the concrete barrier between Wayzata Blvd and the ramp to I-394.

The I-394 Corridor has been identified by the Metropolitan Council's Transportation Policy Plan as a 2030 Transitway in the Twin Cities region. Along with the Hiawatha LRT Corridor, its status as a dedicated right-of-way High Occupancy Vehicle (HOV) facility for buses, multiple-occupant, and MnPASS-tolled vehicles makes it one of the first fully operational Transitways implemented in the Twin Cities Metropolitan Area.

In December 2006, the Metropolitan Council approved the Northwest Met-

ro Transit Study, a plan to improve transit service in North Minneapolis and the northwestern suburbs, including Golden Valley. Service changes to urban local and most express routes were implemented in 2007, and most of the suburban route changes (Phase II) occurred in 2008 with the completion of the Starlite Transit Center expansion in Brooklyn Park. Metro Transit implemented changes to Routes 705, 755, and 756 through Golden Valley in mid-2008 with the anticipated completion of the Starlite Transit Center facility. Route 705 will connect the Starlite Transit Center to the Louisiana Ave Transit Center in St Louis Park via Winnetka Ave through Golden Valley and will include week-day and weekend service. Routes 755 and 756 will use Boone Ave N, Medicine Lake Rd, and Hwy 55 in Golden Valley and provide express bus/limited stop service. Additional Phase II service improvements will include Route 758 (which uses Douglas Dr, Duluth St, Noble Ave, and Hwy 100 in Golden Valley) and additional express bus service by 2010, and will serve the proposed larger park-and-ride facility located at Hwy 100 and Duluth St.

In late 2007, Mn/DOT and a consortium of study partners (including the City of Golden Valley) began studying Phase II of the I-394 MnPASS project, which could include transit, land use, and operational strategies to optimize I-394's level of service for all users. Transit advantages being studied include service and technology enhancements and a station analysis.

## Sub-area Plans

City of Golden Valley has developed sub-area plans (see Figure 7.1) with transportation or access improvement guidance for key redevelopment ar-

eas. These four areas include:

- ♦ the southeast quadrant of Winnetka Ave and Hwy 55
- ♦ the northeast quadrant of the Hwy 169/Hwy 55 interchange
- ♦ the I-394 Corridor
- ♦ the northwest quadrant of the Hwy 100/Hwy 55 interchange.

### **Winnetka Avenue/Hwy 55 Sub-area (Southeast Quadrant)**

The City's 2030 Land Use Plan indicates a change to high-density residential land use. It identifies Winnetka Ave south of Hwy 55 as a roadway that will need to serve a demand that is "near capacity" (see "2030 Traffic Forecasts" on page 7-17 and Figure 7.5). Access management guidelines should be observed and enforced to avoid impacts to traffic safety and flow on a roadway that already experiences congested flow during the peak periods. Direct access to Winnetka should not be allowed. Site access should be planned to Harold Ave.

### **Hwy 169/TH 55 Interchange Sub-area (Northeast Quadrant)**

The future land use plan developed as part of this Comprehensive Plan update identifies the potential for new land uses to be defined in the east of Hwy 169, north of Hwy 55, and west of Boone Ave. Redevelopment within this area presents the opportunity to implement transportation improvements. Existing system improvements could include extension of Golden Valley Rd westerly from Boone Ave to eliminate the existing collector roadway discontinuity that occurs at Decatur Ave. The right-in/right out access to/from the north frontage road should be eliminated to improve safety and capacity of westbound Hwy 55 between Boone and the northbound entrance ramp to Hwy 169. Long-term planning should be used to identify improvements to interchange configurations on Hwy 169. Solutions to the existing closely spaced interchange issue could include a collector-distributor (C-D) type roadway paralleling northbound Hwy 169. The existing

Hwy 169 frontage road (Mendelssohn Ave) would be displaced by such a C-D road. Therefore, a new north-south aligned collector roadway should be planned between Golden Valley Rd (extended) and 10th Ave, and possibly through to Plymouth Ave, to serve new land uses and replace the lost function of Mendelssohn Ave as a collector route.

### **I-394 Corridor Sub-area**

The City engaged in a sub-area land use planning exercise in the I-394 corridor in 2006. The study area included parcels located north of I-394 near the Louisiana Ave interchange. The planned land use changes will increase the number of residential units and square feet of office space while decreasing the commercial land uses.

Overall, the number of daily trips generated by the study sites will increase by approximately 18 percent. However, the changed land uses will have different trip generation and distribution characteristics by direction and by time of day. Future traffic patterns will tend to gravitate to and from the regional roadway system (I-394) and be less dependent on the local arterials. The result of this shift in traffic patterns is that the Louisiana Ave/I-394 interchange will experience a significant increase over current traffic volumes while the Xenia Ave/I-394 interchange will experience only a small increase over current traffic volumes.

As land use changes occur, capacity and safety improvements should be planned for the roadway and intersections of Louisiana Ave between the I-394 ramps and Laurel Ave and for the intersection of Market St/Louisiana Ave.



City photo

*Winnetka/Hwy 55 Sub-area*

### Hwy 100/Hwy 55 Interchange Sub-area (Northwest Quadrant)

Land use changes are planned in this area to accommodate potential industrial expansion. Area roadways operate within their capacities today and are still expected to in 2030. As new land uses in this area are defined, access planning and site layout guidelines should be employed so new problems are not created. Problems reported in the area due to existing uses include issues with:

- ♦ pedestrian crossing between existing industrial sites
- ♦ on-street parking
- ♦ driveway location
- ♦ truck access

Best practices for site design and access management should be followed to correct existing deficiencies and avoid new operational and safety issues on the streets.

### Hwy 100/I-394 Interchange Sub-area (Southwest Quadrant)

The City of St Louis Park is facilitating a large mixed-use redevelopment plan called the Shoppes at West End, and a portion of the land area proposed for redevelopment lies within Golden Valley. A study of traffic impacts related to the proposed development identified several improvement needs that affect traffic operations in Golden Valley. Therefore, the City of Golden Valley should continue to coordinate with the developer and the City of St Louis Park to mitigate traffic impacts. Specific improvement elements should include:

- ♦ traffic calming, safety, and trail improvements on Wayzata Blvd between Quentin Ave and France Ave



City photo

West End

- ♦ trail improvements along Wayzata Blvd under Hwy 100
- ♦ improvements to the I-394 eastbound entrance ramp to maximize capacity of the I-394/Hwy 100 interchange and collector-distributor roadway
- ♦ traffic signal improvements along Park Place Blvd and Xenia Ave
- ♦ interconnection and coordination (timing plans) of traffic signals on Park Place Blvd and Xenia Ave

### Traffic Impact Plan

Golden Valley is committed to creating and maintaining a transportation system that is safe and efficient for all users. Any holder of a commercial or residential building permit application that will result in added traffic must submit a traffic impact analysis statement to the City. The statement must outline the type of development and types of traffic associated with the new development. If the City de-

termines the traffic impact on the surrounding transportation network will be significant, the City may request that the applicant complete a Travel Demand Management Plan for the proposed development.

If a new development generates more than 1,000 trips per day or 100 trips in the morning or afternoon peak hour, the developer should provide the City with a traffic impact study.

### Travel Demand Management Plan Guidelines

Any construction within the Golden Valley city limits that significantly changes traffic volumes and directional flow on the development's surrounding transportation network, as determined through the traffic impact plan process, must provide a Travel Demand Management Plan (TDMP) to the City for approval.

### Requirements

Each TDMP must include a site plan, proposed square footage or units of

each use type, forecasted trips at full build-out, and operational measures of the surrounding transportation network.

### Traffic Mitigation Methods

Different methods may be used to reduce the impact of a new development on the surrounding transportation network. Examples include, but are not limited to:

- ♦ connection to transit
- ♦ carpool parking spots
- ♦ bike lockers
- ♦ flexible work hours
- ♦ telecommuting
- ♦ restricted hours of operation

- ♦ construction of additional traffic lanes
- ♦ construction of traffic signal
- ♦ installation of traffic signage

It is important to note that while possible methods are listed here, they may not apply to a development, reduce the traffic impact, or be feasible and therefore will not be considered as a trip-reducing mitigation method.

### Approval Process

The TDMP must be submitted to the City for approval. The City will respond by either approving the TDMP or requesting further information. Applicants may respond to the City's

request for further information or withdraw their TDMP from consideration.

### Effectiveness of Traffic Mitigation Measures

If a development has a significant impact on the surrounding transportation network and if mitigation measures were included as part of the approved TDMP, then follow-up data must be collected to verify the development is in compliance with limits set by the approved TDMP. 





photo by City staff

## Section 6: Implementation

The implementation section of the Transportation Plan identifies improvement projects for inclusion in the City's Capital Improvement Plan, priorities, and potential funding sources for recommended improvements.

### Improvement Projects and Priorities

Improvements have been categorized as short-, medium-, and long-range projects based on established program schedules, immediacy of the need, expected action by other parties (neighboring cities and or developers), need for interagency coordination, and magnitude of cost given known transportation funding constraints (see Figure 7.9 for a map of planned improvement projects).

#### Short Range (0-5 years)

##### *Pavement Management Program (PMP)*

The PMP includes local street reconstruction projects programmed within the next five years (2008 through 2012). Collector street and sidewalk or trail improvements identified within each project area should be implemented simultaneously.

##### *Administrative Tasks*

Make the following functional classification changes:

- ♦ Upgrade the status of Regent Ave from Golden Valley Rd to 34th Ave to be a minor collector.
- ♦ Upgrade the status of General Mills Blvd from Wayzata Blvd to Betty Crocker Dr to be a major collector.

*Interagency Administrative and Planning Issues*

- ♦ Work with MnDOT to clarify operational and maintenance responsibilities for frontage roads along I-394 and along Hwy 100.
- ♦ Work with Minneapolis Park Board staff to clarify operational and maintenance issues on Theodore Wirth Parkway.

*Railroad Crossing Safety Improvements*

- ♦ Douglas Dr at UP RR (south of Golden Valley Rd)—Install new RR signals and gates in 2009.
- ♦ Golden Valley Rd at UP RR (west of Idaho Ave)—Install new RR signals with gates in 2010.

*Safety and Capacity Improvements*

- ♦ General Mills Blvd at Wayzata Blvd—Work with Metro Transit to improve park-and-ride pedestrian crossing and add a westbound right turn lane
- ♦ Hwy 55 South Frontage Rd intersection at Douglas Dr and also at Glenwood Ave— Develop improvement concept and consider submitting to MnDOT as a Cooperative Agreement or Access Management project. Consider coordination of work with frontage road improvements as part of the 2010 Pavement Management Program project.

*Improvements Associated With Development Initiatives*

- ♦ Xenia Ave, Golden Hills Dr, and Laurel Ave
- ♦ Xenia Ave traffic signal interconnect and timing optimization/coordination
- ♦ Wayzata Blvd frontage road safety improvements east of Hwy 100

*Transit Improvements*

Coordinate with Metro Transit on planned service and facility changes.

**Medium Range (5-20 years)***Pavement Management Program (PMP)*

This includes PMP projects programmed beyond the next five years (2013 and 2014). Collector street and sidewalk or trail improvements identified within each project area should be implemented simultaneously.

*Safety and Capacity Improvements*

Coordinate with Hennepin County (and other agencies as needed) to develop and program the following projects:

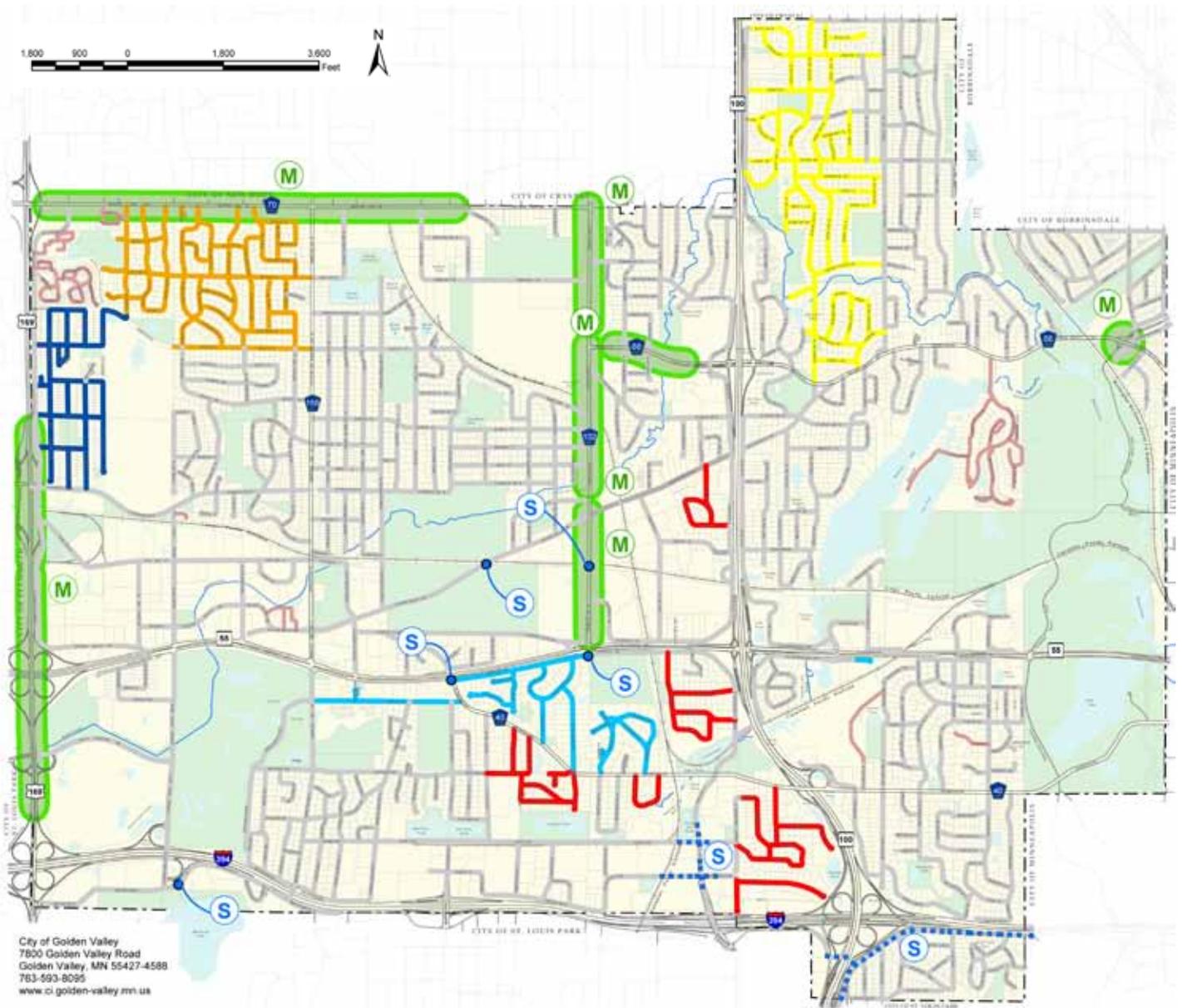
- ♦ Douglas Dr (CSAH 102) from Hwy 55 to Golden Valley Rd
- ♦ Douglas Dr (CSAH 102) from Golden Valley Road to Duluth St
- ♦ Douglas Dr (CSAH 102) from Duluth Street to Medicine Lake Rd
- ♦ Duluth St (CSAH 66) from Douglas Drive to Hwy 100
- ♦ Medicine Lake Rd (CSAH 70) from Hwy 169 to Louisiana Ave
- ♦ Golden Valley Rd (CSAH 66) and Theodore Wirth Parkway intersection

Promote and coordinate Hwy 169 interchange and/or collector-distributor improvements with neighboring cities, Hennepin County, and MnDOT.

*Transit Improvements*

Coordinate with MnDOT, Metro Transit, and others on planned service and facility changes associated with the MnPASS Phase II project on I-394. 

Figure 7.9: Transportation Plan Implementation



City of Golden Valley  
 7800 Golden Valley Road  
 Golden Valley, MN 55427-4588  
 763-593-8095  
 www.ci.golden-valley.mn.us

**Implementation Schedule**

- S ● --- Short Range (0-5 years)
- M ○ --- Medium Range (5-20 years)
- L ○ --- Long Range (20+ years)

**Year Programmed**

- 2008-2009 (7.5 miles local, 0.5 miles MSA)
- 2010 (2.7 miles local, 0.5 miles MSA)
- 2011 (4.3 miles local, 0.2 miles MSA)
- 2012-2013 (6.3 miles local, 0.5 miles MSA)
- 2014 (3.0 miles local, 0.2 miles MSA)

- Streets Built to Standard
- Other Agency's Jurisdiction
- Private Streets
- Community Park
- Creek
- Water
- City Limits

Date: May 1, 2008

Sources: SEH for implementation schedule, MnDOT for neighboring city streets, Hennepin County Surveyors Office for Property Lines (2006), City of Golden Valley for all other layers