CHAPTER 8: TRANSPORTATION

Ensure connectivity, accessibility, and mobility throughout the City and region

Introduction

The transportation chapter is a critical piece of the comprehensive plan because it is a significant part of the City's infrastructure. The following analysis and recommendations will provide a brief description regarding the existing roadway system and will be followed by a generalized future transportation plan. The transportation plan provided in this chapter was developed to accommodate the proposed Future Land Use Plan. It is critical that the transportation plan consider the potential for increased population, more intense land uses, and the subsequent traffic resulting from both; to ensure that the system can handle the traffic in a safe and efficient way.

The City's transportation system is essential to understanding how people travel throughout the City. The transportation network allows people to navigate through the City and access major points of interests including businesses, schools, and residences. The Isanti network has a primary east-west arterial, County State Aid Highway (CSAH) 5, serving as the main east-west connection between Interstate 35 in North Branch and further west connecting in Princeton to US Highway 169. Minnesota Trunk Highway (TH) 65 provides for north-south travel through the community, connecting Isanti to numerous communities, and the larger Twin Cities Metropolitan Area. This corridor is a major commuter, commercial, and service corridor where much of the City's commercial land use is located.

The City of Isanti is intertwined with the surrounding cities, townships, and the County. As previously mentioned, two boundaries have been developed for the purposes of this report, the "planning boundary" and the "study area boundary". Transportation systems do not end at the city limits or the "planning boundary", but are extended into neighboring communities, townships, and Isanti County. These systems play a vital role in the overall growth and development of the City. As a result, a "study area boundary" has been identified, which allows the City the opportunity to look at physical factors that exist within a broader context, which contribute to the overall function of City systems, specifically transportation. The examination of both a "planning boundary" and a "study area boundary" will enable the City to grow in a more conscious manner, taking into consideration the effects that future planning, growth, and development will have on surrounding areas.

Transportation Goals and Objectives

Objectives

The following objectives support the Transportation Goals and Strategies identified in Chapter 1. These are objectives that relate to specific characteristics of the Plan.

- Provide and maintain a safe, convenient, and efficient local transportation system, for the movement of people and goods that is designed to support the overall physical, social, and economic goals of the City.

- Create and provide excellent north-south and east-west connections and movements throughout Isanti.
- Encourage and support the use of bicycle and pedestrian trails to move people within the City.
- Maintain a transportation system that is coordinated and cost-effective.
- Establish a strong multi-modal transportation plan to meet the community's current and future needs.
- Ensure transportation system integrity by incorporating Access Management Guidelines into land use decisions.
- Successfully integrate east and west sides of the TH 65 Corridor through transportation and open space linkage and pedestrian paths.
- Provide safe and convenient crossings at key locations along the TH 65 Corridor.
- Coordinate transportation with land use planning and environmental protection.

Transportation Elements

Transportation elements are divided into several sub-categories, each of which is an important piece of the overall transportation system. Several sub-categories are further divided into existing conditions followed by the analysis and recommendations.

A. Roadway Jurisdiction

Roadways are categorized under the agency that is responsible for their maintenance. The State is responsible for the Federal Interstate, US Highways, Minnesota Trunk Highways (TH), and State Park Roads. The County is responsible for County State-Aid Highways (CSAH) and County Roads. Other roadways, including Municipal State-Aid Streets, and Municipal roads are the responsibility of the City of Isanti. Figure 8-2A shows the current jurisdiction for the area roadways.

B. Roadway Functional Classification

Functional classification of a roadway system involves determining what function each roadway should be performing with regard to travel within and through the City. The intent of a functional classification system is the creation of a roadway hierarchy that collects and distributes traffic from local roadways and collectors to arterials in a safe and efficient manner. Such classification aids in determining appropriate roadway widths, speed limits, intersection control, design features, accessibility, and maintenance priorities. Functional classification helps to ensure that non-transportation factors, such as land use and development, are taken into account in planning and design of the roadway system.

A balanced system is desired, yet not always attainable due to existing conditions and characteristics. The criteria of the functional classification system are intended to be guidelines and are to be applied when plans are developed for the construction or reconstruction of a given classified route. It can, and does, occur that different roadways with very similar design characteristics may have different functional classifications. Some roadways, for a short segment, may carry higher volumes than a roadway with a higher classification. Spacing guidelines may not follow recommendations for a variety of reasons such as topography, environmental concerns, and land use type and density.

The two major considerations in the classification of roadway networks are access and mobility. Mobility is of primary importance on arterials, thus limitation of access is a necessity. The primary function of a local roadway, however, is the provision of access, which in turn limits mobility. The extent and degree of access control is a very important factor in the function of a roadway facility. The functional classification types utilized are dependent upon one another in order to provide a complete system of streets and highways. The relationship of functional classification with regard to traffic mobility and land access is shown on Figure 8-4A.

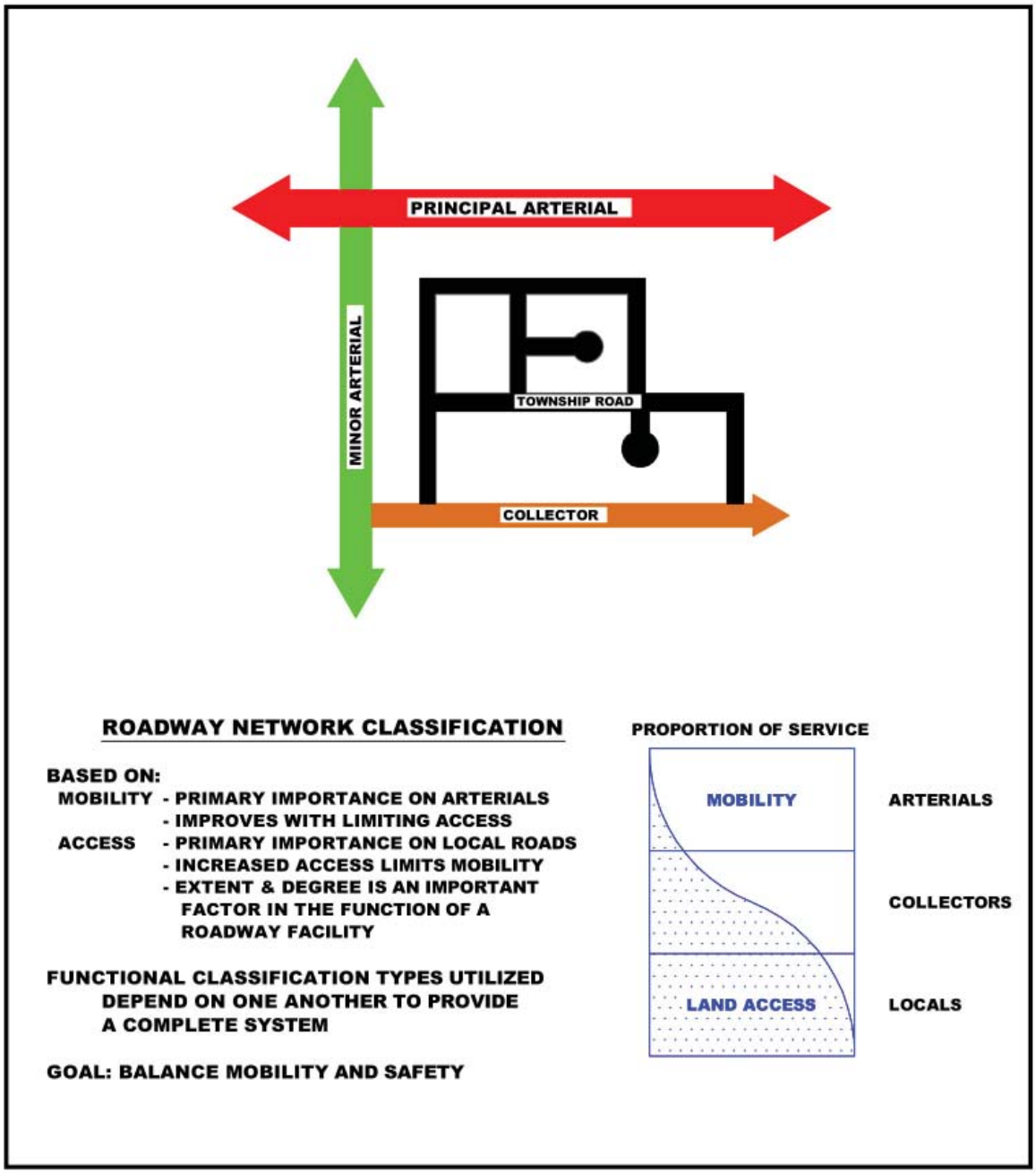

PRINCIPAL ARTERIAL
MINOR ARTERIAL
TOWNSHIP ROAD
COLLECTOR
ROADWAY NETWORK CLASSIFICATION
BASED ON:
MOBILITY - PRIMARY IMPORTANCE ON ARTERIALS
- IMPROVES WITH LIMITING ACCESS
ACCESS - PRIMARY IMPORTANCE ON LOCAL ROADS
- INCREASED ACCESS LIMITS MOBILITY
- EXTENT & DEGREE IS AN IMPORTANT FACTOR IN THE FUNCTION OF A ROADWAY FACILITY
FUNCTIONAL CLASSIFICATION TYPES UTILIZED DEPEND ON ONE ANOTHER TO PROVIDE A COMPLETE SYSTEM
GOAL: BALANCE MOBILITY AND SAFETY
PROPORTION OF SERVICE
MOBILITY
LAND ACCESS
ARTERIALS
COLLECTORS
LOCALS
Roadway Network Classification
City of Isanti Comprehensive Plan Update
Bonestroo

Figure 8-4A

A complete functional design system provides a series of distinct travel movements. Most trips exhibit six recognizable stages. These stages are as follows:

- Main movement
- Transition
- Distribution
- Collection
- Access
- Termination

It must be recognized that all intermediate facilities are not always needed for various trip types. The character of movement or service that is provided has a function, and these functions do not act independently.

Principal Arterials

Principal arterial roadways serve major activity centers, higher traffic volumes, longer trips and carry a higher proportion of total urbanized travel on a minimum of mileage. Along these facilities, access needs to be limited in order to preserve the ability of the roadway to accommodate the volumes and to maximize safety. The management criteria require that a 40 mph average speed be achieved during peak traffic periods. Also, little or no direct land access should be allowed within an urban area. Grade separated intersections are required for freeways and highly desired for other principal arterial roadways. Trunk Highway 65 is an example of a principal arterial through the City.

Minor Arterials

Minor arterial roadways connect the urban service area to cities and towns inside and outside the region and generally service medium to short trips. Minor arterials connect principal arterials, minor arterials, and collectors. The spacing ranges from ¼ to ¾ of a mile in metro centers to 1-2 miles in a developing area. The desired minimum average speed during peak traffic periods is 20 mph in fully developed areas and 30 mph in developing areas. There are currently no roads within the City limits that are classified as a minor arterial.

The emphasis for minor arterial roadways is on mobility rather than on land access. In urban areas, direct land access is generally restricted to concentrations of commercial/industrial land uses.

Collector Streets

Collector streets provide more land access than arterials and provide connections to arterials, although not in all cases. As is the case with any roadway system, there will always be exceptions to the planning guidelines that are used to classify a roadway system. Collectors serve a dual function of accommodating traffic and the provision of more access to adjacent properties. Mobility and land access are equally important and direct land access should predominately be to development concentrations. Collector road spacing ranges from ¼ to

¾ of a mile in a fully developed area to ½ to 1 mile in a developing area. Collectors can be broken down further into major and minor collectors.

Major collectors generally connect to minor arterials and serve shorter trips within the county or City. These roads supplement the arterial system in that mobility is slightly emphasized over access. County State Aid Highway (CSAH) 5 is classified as a major collector.

Minor collectors provide the connection between neighborhoods and commercial/ industrial areas and the major collector/minor arterial system. Access is slightly emphasized over mobility in minor collectors. County Road 23 is an example of a minor collector classification.

Local Streets

The lowest classification of roadways is the local roadway where access is provided with much less concern for control but land service is paramount. Spacing for local streets is as needed to access land uses. Local roadways generally have lower speed limits in urban areas and normally serve short trips. Local streets will connect with some minor arterials but generally connect to collectors and other local streets. The development of local streets will be guided by the location of the existing and proposed minor arterials and collectors as well as by development and the expansion of local utilities.

Proposed Functional Classification Plan

The proposed functional classification plan builds off of the Isanti County functional classification plan. Figure 8-6A shows the proposed functional classification of roadways in and around the City of Isanti. No new railroad crossings were created. One new crossing of TH 65 at the realignment of 273rd Avenue NE is proposed. Proposed corridors were developed in conjunction with the City, some of these new corridors include:

1. Realignment of CR 45 – involves the straightening of segments to create a smoother north-south corridor.
2. North-South Route Between 277th Avenue NE and Batsan Street NE – this corridor would extend north to an east-west route and ultimately connect with the extension of Fairway Boulevard.
3. E Dual Boulevard extension – this corridor would connect to the railroad crossing at 299th Avenue NE.
4. East-West connection between North-South corridor, east of golf course and extending to CR 45.
5. East-West connection between CR 23 near its intersection with 277th Avenue NW to the north-south corridor between CR 23 and Polk Street.

The precise location of the proposed corridors shown on Figure 8-6A should be determined in conjunction with City staff, land owners, and developers. The functional classification plan developed for the City attempted to balance north-south connections with east-west corridors throughout the City as it develops.

The City of Isanti has recently reached a population of just over 5,000, which is the threshold for becoming a State Aid City. Being a State Aid City means that the City is eligible for state aid funding to support its roadway network. Several streets have recently been designated as Municipal State Aid Routes. Figure 8-2A displays the 2007 Municipal State Aid Street map.

C. Access Management

The management of thoroughfare access along roadway systems, particularly arterial and collector roadways is a very important component of maximizing the capacity and decreasing the crash potential along those roadway facilities. As mentioned in a previous section, arterial roadways have a function of accommodating larger volumes of traffic and often at higher speeds. Therefore, access to such facilities must be limited in order to protect the integrity of the arterial function. Collector roadways provide a link from local streets to arterial roadways and are designed to provide more access to local land uses since the volumes and speeds are often less than arterial roadways.

MnDOT studies have shown that as the density of access increases, whether public or private, the traffic carrying capacity of the roadway decreases and the vehicular crash rate increases1. Businesses suffer financially on roadways with poorly designed access, while well designed access to commercial properties support long-term economic vitality.

As with many transportation related decisions, land use activity and planning is an integral part of the creation of a safe and efficient roadway system. Land use decisions have a major impact on the access conditions along the roadway system. Every land use plan amendment, subdivision, rezoning, conditional use permit, or site plan involves access and creates a potential impact to the efficiency of the transportation system. Properties have access rights and good design will minimize the deleterious effect upon the roadway system. Minnesota State Statutes state that "reasonable, convenient, and suitable" access to property shall be provided. Access management is a combination of good land use planning and effective design of access to property.

The granting of access is shared by the State, County, Cities, and Townships with each having the permitting process responsibility over roadways under their control. The aforementioned authorities may also require the following while examining access:

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

Using proper access guidelines helps all the agencies involved to be on the same page. However, access spacing is important not just for new developments, but for existing developments and accesses as well. Processes should be developed to deal with existing corridors that have allowed improper access spacing in the past. In these cases it is possible that the number of access points exceed the access spacing guidelines. These existing access points must be handled in a different manner than with new access points. It is desired to aggressively minimize any new accesses while consolidating, restricting and/or reducing existing access points as redevelopment occurs. It is important to remember that access spacing guidelines are long term goals and not absolute rules. Maintaining flexibility is important when promoting access consolidation, including consideration of existing conditions, physical barriers or constraints.

County Road 5 has several access points along the corridor. While the number and spacing of the access points may not be desirable, it will take time to address the spacing. As land use changes and redevelopment occurs or becomes necessary, the City should explore

1 "Toward An Access Classification System and Spacing Guidelines", Technical Study No. 4, MnDOT, February 1999.

the notion of closing access points, combining access points, or creating a frontage or backage road system along CR 5. These existing access points can be addressed as opportunity presents itself and in conjunction with access spacing guidelines that were developed as a part of this plan and the Isanti County Draft Transportation Plan.

The traveling public benefits from access spacing, whether using grade-separated crossings, frontage roads, right turn only entrances/exits, etc. Given the number of agencies potentially involved in reviewing plats and access points, access guidelines and corridor management practices should be implemented at the state, county, and City level.

When reviewing access points there are a few things that are important to consider[2] including:

- Adequate spacing of access points
- Protect the functional area of intersections
- Ensure adequate sight distance at entrances
- Avoid offset or dogleg intersections and entrances
- Encourage development of turn lanes and entrances
- Consider consolidating or relocating existing access points
- Encourage good driveway and intersection design characteristics such as:
    - Proper driveway width and turning radii
    - Proper corner clearance
    - Adequate approach grade
    - Alignment of intersections at right angles to maximize sight lines, minimize the time a vehicle is in the conflict area and facilitate turning movements
    - Proper grading of entrance slopes and culvert openings
    - Keep sight triangles and clear zones free of obstructions

MnDOT has developed guidelines for access management based upon their goals of safety, mobility, and statewide growth. As a part of their guidelines, four new categories were developed as an addition to the functional classification system:

- High Priority Interregional Corridors (IRC)
- Medium Priority IRC
- Regional Corridors
- Statewide Roads

These types of roadways link the state's primary trade centers and the Twin Cities Metro area to one another. MnDOT has further divided the primary categories into sub-categories based upon the specific facilities and land use patterns surrounding the roadway.

2 Tips from Draft Isanti County Transportation Plan, March 2007, and Minnesota's Local Road Research Board (LRRB)

Table 1 is an excerpt from the Isanti County Draft Transportation Plan and illustrates the access spacing guidelines to be used on the county roadway system.

Table 1
County Access Spacing Guidelines[1]

Type of Access	Minor Arterial			Collectors		
	Urban Core	Urbanizing	Rural	Urban Core	Urbanizing	Rural
Primary, Full Movement, Public Street	1/8-mile	1/4-mile	1/2-mile	1/8-mile	1/8-mile	1/2-mile
Conditional Secondary, Public Street	1/8-mile	1/8-mile	1/4-mile	1/16-mile	1/8-mile	1/4-mile
Traffic Signal Spacing	1/4-mile	1/4-mile	1/2-mile	1/8-mile	1/4-mile	1/2-mile
Site/Property Access	Permitted, Subject to Conditions	Not Permitted	Permitted, Subject to Conditions	Permitted, Subject to Conditions	Permitted, Subject to Conditions	Permitted, Subject to Conditions

Primary, Full Movement Public Street Access – These access types include other collector or arterial roadways that provide continuity in the roadway network and access to large geographic areas.

Conditional Secondary Public Street – These access types include other collector and other public (local) roadways. These accesses are subject to restricted movements, if needed, including right-in/right-out, left in.

Traffic Signal Spacing – Traffic signal installation requires a Signal Justification Report (SJR) and is subject to the warrants provided in the Minnesota Manual of Uniform Traffic Control Devices. Signal placement typically coincides with a Primary, Full Movement Public Street Access.

Site/Property Access – These access types include any public or private access to a specific adjacent property. Examples of these type of accesses include private residences, townhome association roadways, retail malls, industrial sites, public and private schools, government offices. Site/Property access that is permitted but subject to restrictions shall be at the discretion of the County engineer.

[1] These guidelines apply to County roadways only. MnDOT has access authority on all Principal Arterials and Minor Arterials under their jurisdiction.

Recommended spacing guidelines have been developed for each access category, including public intersections and private driveways and entrances. The City Access Spacing Guidelines presented in Table 2 are intended for use in the access permitting process. The guidelines are presented for functionally classified arterial and collector roadways without reference to the jurisdiction over these roadways. The basic references for the spacing guidelines are from MnDOT as well as guidelines used in other Minnesota cities and counties. The stated values are meant to be "minimum" values. Some existing connections, both public and private, may not meet these guidelines. It is also recognized that, due to various circumstances, access may need to be granted that cannot adhere to these guidelines. As shown in Table 2, the different roadway categories are divided into urban core, urban, and rural guidelines.

Table 2
City Access Spacing Guidelines

Functional Class	Median Treatment	Existing & Proposed Land Use	Typical Posted Speed (MPH)	Full Median Opening Spacing (Miles)	Minimum Signal Spacing (Miles)	Spacing Between
Minor Arterial	Divided	Rural Urban Urban Core	55 ≥40 <40	1/2 1/2 1/4	1/2 1/2 1/4	820 490 275
	Undivided	Rural Urban Urban Core	55 ≥40 <40	NA NA NA	1/2 1/2 1/4	820 490 350
Collector	Divided	Urban Urban Core	≥40 <40	1/4 1/8	1/4 1/8	435 275
	Undivided	Rural Urban Urban Core	55 ≥40 <40	NA NA NA	1/2 1/4 1/8	585 435 310
Other County Roads	Undivided	Rural Urban	≥40 <40	NA NA	1/2 1/4	550 400

[1] Distances are based upon spacing between connections (major roads, local public streets, and private driveways). Distances are minimum and greater spacing is beneficial.
NA – Not Applicable

D. Traffic Volumes

Existing Conditions

The most recent daily traffic volume information for the primary roadways in the City of Isanti was obtained from MnDOT. Figure 8-12A shows the most recent traffic volumes in Isanti.

Projected Traffic Volumes

Traffic projections, as shown on Figure 8-12B, are used as a planning tool to help test the ability of a roadway to accommodate future volumes. In addition to the number of lanes provided, the daily capacity of any individual roadway is based upon many factors. Number of access points per mile, number of signalized intersections per mile, percentage of truck traffic, and the physical grade of the roadway are examples of some of these factors. However, for planning purposes, a generalized ADT threshold for roadways is used. Table 3 shows the generalized ADT volume thresholds for a roadway type and number of lanes in terms of level of service. Level of service (LOS) is a qualitative measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six levels, LOS A to LOS F, are generally used for traffic analysis. LOS A is the best with free flow conditions and little to no delay. LOS F is the worst with congestion, long delays, and forced flow.

Table 3

Generalized Average Daily Traffic Volume Thresholds

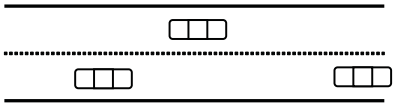
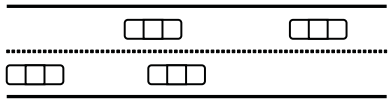
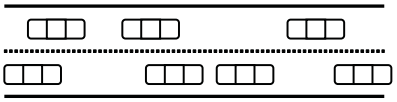
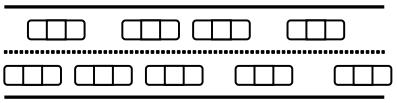
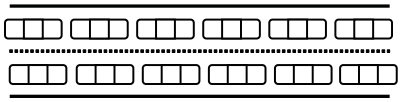
Facility Type	Maximum ADT Volume at Level of Service[1]				
	A	B	C	D[2]	E
2-Lane Roadway –					
Without Turn Lanes	3,000	4,500	6,500	8,500	10,000
With R Turn Lanes	4,750	7,200	10,300	13,500	15,900
With L Turn Lanes[3]	5,250	7,900	11,400	14,900	17,500
With L and R Turn Lanes[3]	7,500	11,250	16,250	21,250	25,000
4-Lane Roadway –					
Without Turn Lanes	7,100	10,700	15,400	20,100	23,700
With R Turn Lanes	9,600	14,400	20,700	27,100	31,900
With L Turn Lanes[4]	10,100	15,200	21,900	28,600	33,700
With L and R Turn Lanes[4]	12,600	18,900	27,200	35,600	41,900

[1] ADT Volumes above the LOS E maximum threshold would be considered LOS F.
[2] LOS D is usually the lowest acceptable LOS allowed by most agencies within the metro area.
[3] Also considered the planning capacity for a 3-lane roadway (one through lane in each direction with a center, two-way left turn lane) without or with a right turn lane.
[4] Also considered the planning capacity for a 5-lane roadway (two through lanes in each direction with a center, two-way left turn lane) without or with a right turn lane.

Note: Approximate values based upon several assumptions:

- Capacity assumptions per lane
- Peak hour percentages
- Directional orientation
- ¼ mile signal spacing

Table 4
Level of Service Description

Level of Service	Description	
A	Lower volumes Little to no delay Unimpeded movement	
B	Minor delays Reasonably unimpeded operation Slightly restricted movement	
C	Stable conditions More restricted movements Speeds controlled by higher volumes	
D	Higher density traffic Volumes near capacity Some noticeable congestion	
E	At capacity Major delays are common Lower speeds	
F	Failing condition Significant delays Very low speeds with stop and go traffic	

It is important to remember that these tables are for planning purposes only.

Figure 8-10A shows the existing average annual daily traffic (AADT) volumes from MnDOT. The existing AADT's are from 2003, except the volumes on TH 65 which are from 2002. Those are the most current traffic volumes on MnDOT's system.

Figure 8-10B shows the future traffic volumes as contained in the Isanti County Draft Transportation Plan, March 2007.

E. Transportation Issues

Discussions were conducted with representatives of the City. Through those discussions, several transportation related issues were outlined.

County State Aid Highway 5, the City's primary east-west corridor, is currently experiencing some congestion related problems. Congestion levels are expected to increase in the future with growth in and around the City continuing to occur. A traffic signal has been installed at the intersection of CR 5 and CR 23. A future signal is being planned for along the CR 5 corridor. The placement of this signal has not yet been finalized, but will be located between the intersections of CR 5 and CR 23 and the intersection of CR 5 and TH 65. These intersections will need to be monitored to determine the timing and necessity of future traffic signals. It should be noted that before any traffic control can be considered for an intersection, the intersection must meet traffic signal or multi-way stop warrants as outlined in the Minnesota Manual on Uniform Traffic Control Devices (MnMUTCD). Another signal has been suggested for the intersection of CR 5 and 8th Avenue, which is located east of TH 65.

The county will be embarking on a Rum River Crossing Feasibility Study. This study and the location for crossing the Rum River will likely have an impact on the City. The City should be aware of this venture and work to cooperate and coordinate with the county. This future connection could alleviate or create more traffic depending on the alignment of the Rum River Crossing.

County Road 45 is being considered for future realignment, by the county, as well. This project would remove the zig-zag route and create a straighter north-south route.

The City should also be cognizant of creating east-west corridors as well as north-south routes. It is important as the City grows that a good east-west roadway system is available to motorists as well.

The City is supportive of efforts to restore passenger rail service on the existing Burlington-Northern Santa Fe Railroad that runs north/south through the community. This service would be running between Minneapolis and Duluth with a possible stop in Isanti. This City's priority for such a stop would be in the downtown as shown on Figure 8-14A. A secondary stop has been proposed just north of the current City limits, between Cambridge and Isanti. A stop within the downtown brings a wealth of opportunity for new development and redevelopment within the downtown core as well as a wider mixed-use area surrounding it. Accessibility to goods, services, existing residential and new development is greater in downtown to support a passenger service than the site further north. The City will continue to monitor and support efforts for this existing passenger rail line opportunity.

Figure 8-14A illustrates the transportation issues.

F. Trail Systems

Pedestrian and Bicycle Ways

The Parks, Open Space, Natural Areas and Trails plan in Chapter 6 identifies the location of existing trails and sidewalks along with the location of proposed trails. The plan also identified walking loops that the City provides corresponding maps to residents for the encouragement and benefit of exercise. These identified walking loops are not designated sidewalks or trails. The trails plan is shown in Figure 6-4A in Chapter 6

The City has been actively installing sidewalks and trails as opportunity arises. Since 2001 the City has implemented sidewalks along county roads on typically the north or west side of the road, as right-of-way and space permits and trails along arterials, minor arterial collectors and minor collectors. In addition, the City is interested in incorporating a regional trail system.

The City is exploring funding options to construct a pedestrian bridge over TH 65, which bisects the community. The pedestrian bridge is proposed to be located at the Main Street extension over TH 65 as shown on the Parks, Open Space, Natural Areas and Trails plan in Chapter 6. This is an important pedestrian link to truly unite both sides of the community for park and recreation needs, commercial purposes, access to public facilities, and overall community connectivity.

It is preferable to develop off-road trails that provide facilities for both bicyclists and pedestrians where feasible. Trails along rivers and through parks and natural areas are always highly desirable routes if and when they can be attained, as they provide a more scenic experience for the user. An off-road trail is one that is physically separated from motorized vehicular traffic by an open space or barrier either within the roadway right-of-way or within an independent right-of-way. According to the American Association of State Highway and Transportation Officials (AASHTO) guidelines, the minimum width of a trail that provides for two-way bicycle traffic and allows for pedestrian use is eight-feet with two-foot shoulders on each side. Where traffic volumes are higher, a more desirable width for a bike path is ten-feet.

As it will not be financially feasible to construct every new trail as an off-road trail, the City will need to prioritize potential trails to determine which would benefit most by being separated from the roadway. Criteria should include:

- High traffic roadways
- Roadways with geometric deficiencies (narrow, poor pavement conditions, poor vertical or horizontal alignments)
- Sections of trail connecting residential areas to schools and parks

Even in roadway construction or reconstruction projects, adequate room is not always available within the existing road right-of-way for an off-road trail. Where it is necessary to develop continuous trail segments, it is recommended that the City work with residential developers and owners of commercial developments to obtain easements in areas where the roadway right-of-way is not adequate for an eight- or ten-foot off-road trail, or in areas where the topography does not allow the trail to be constructed within the existing right-of-way.

In cases where funding or right-of-way is limited, an on-road bicycle trail can present a more economical solution. The provision of an on-road bicycle trail can be accomplished

through the re-striping of existing roadways or with extra consideration during the design of a new roadway. Similar to a functional classification of roadways, bikeway facilities also have a hierarchy of structure. The following classification helps to define the different facilities available for on-road bicycle trails:

1. Bicycle Lanes – One-way bicycle facilities, which travel in the same direction as adjacent vehicle traffic. Two-way bicycle lanes located together on the same side of the roadway tend to promote bike travel against the flow of vehicle traffic. This type of bicycle lane should only be used for short connections when necessary.
2. Shared Bus/Bicycle Lanes – The grouping together of bicycles and buses may be considered if the average speed and traffic volumes are low.
3. Shared Lanes – Shared lanes consist of roadways with no special provisions for bicyclists. Shared lanes generally require vehicles to cross the center lane in order to pass bicyclists. These types of lanes are usually not signed and can be used in residential areas that have low traffic volumes and speeds of less than 30 mph.
4. Widened Curb, Wide Outside Lanes or Shoulders – Located adjacent to the outermost through traffic lane, experienced bicyclists who are not intimidated by high traffic volumes and speeds generally use this type of facility. Shoulders may be utilized by average experience cyclists depending upon the speed and amount of traffic on the adjacent roadway.
5. Local Roadways – Typical urban local or collectors can be used as routes for bicyclists and pedestrians. Traffic calming can be implemented to reduce the speed of motor vehicles.

A distinction can also be made between pedestrian/commuter trails and recreational trails. Pedestrian/commuter trails generally connect residential areas to commercial, retail or school facilities. They also tend to follow collector and arterial roadways, used by motor vehicles commuters, since the users of these trails generally seek out the most direct path to their destination.

Conversely, recreational trails tend to be off-road trails, which connect residential areas to parks, natural areas and/or greenway corridors. These trails can provide a connection between parks and neighborhoods, as well as meander within parks. Recreational trails generally do not travel a direct route and are often located along rivers and streams or contained within parks and greenway corridors.

However, some trails can fall into both categories. Categorizing proposed trails into either commuter/commercial or recreational can help to determine from where the appropriate funding should be derived.

Trail crossing locations of arterial and collector roadways should be carefully considered to maximize trail user safety. Appropriate consideration should be given to signed crosswalks, signals, or grade separated crossings at each trail crossing.

G. Transit Service

The City of Isanti is serviced by the Heartland Express transit service which includes dial-a ride and curb to curb service. All buses are handicap accessible and operate Monday through Friday from 5:00 a.m. to 6:00 p.m.

Transit Facility Improvements

In an area without fixed route service, park-and-pool lots can provide motorists with a car pool option. The City could develop these facilities as park-and-pool locations now, and add transit service to them in the future as planning and funding components for transit services are put into place. Park-and-pool activities have increased historically when dedicated parking facilities are provided. Therefore, if fixed route service is added, it is likely that the number of vehicles using the park-and-ride sites will be higher than the number of park-and-riders alone.

Coordination between the City, county, and transit service providers will help to determine suitable transit facilities and services. As an initial step in reducing single occupant vehicles and developing transit demand, the City could also promote vanpool programs, such as those available through Metro Commuter Services.

Additional park-and-ride or park-and-pool facilities should be located along major commuter routes. This allows easier integration into future transit routes. Approximately 1-3 acres of land is desirable at each site to provide for a 100-150 car location. This amount of land area eliminates the need for structured parking, which has significantly higher costs. For comparison purposes, a surface parking facility with a transit center building would cost between $1 million and $2 million to develop, whereas a structure parking facility would cost between $3 million and $5 million. Setting aside sufficient land for future park-and-rides and/or park-and-pools is clearly desirable from a development cost standpoint.

The feasibility of a commuter rail line along TH 65 from Isanti County to the Twin Cities Metro area is currently being explored. This commuter line would connect the Twin Cities and Duluth, with several stops along the way including one in either Isanti or Cambridge. Isanti County has expressed support to the legislature regarding this commuter rail line. The future line would be located on the existing BNSF rail corridor. The City's future land use identifies two potential locations for a rail stop within the City. This opportunity brings not only a new commuter opportunity to residents but economic development with the location of a station possibly located in the downtown area.

H. Railroads

The Burlington Northern Santa Fe (BNSF) railroad provides daily freight service to Isanti. The line currently serves approximately 14 trains per day traveling around 50 mph (Bonestroo is verifying). The rail line, which runs through the center of town, is loosely parallel to TH 65 and is approximately ¼ to ½ mile west of the highway. There are four at-grade crossings in Isanti located at South Passage, Main Street, CSAH 5, Isanti Parkway and 299th Street..

I. Air Service

Isanti is served by the Cambridge and Princeton Municipal airport. It provides charter, commercial, freight and jet service to the area and accommodates most light aircraft. The nearest regional airport is approximately 45 miles west of Isanti in St. Cloud and provides services for somewhat larger planes. The nearest major airport is the Minneapolis/St. Paul International airport.