TRANSPORTATION

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TRANSPORTATION SYSTEM ANALYSIS

One of the most essential public facilities for promoting sound urban growth, economic development, and a high quality of life is a functional, efficient, and safe transportation system. The core of the City of Hastings' transportation system is Minnesota Trunk Highway (TH) 55 and US 61 (Vermillion Street). These two highways have served Hastings for many decades and allowed the community to grow from a rural agriculturally-oriented community to one with a diversity of commerce and present-day population of approximately 22,800.

These two roads originally provided access to the City's Central Business District, located on the south shore of the Mississippi River, and residential land uses within the traditional core area of Hastings. Over the years, extensions off these two core streets were constructed in a logical manner to accommodate the development of residential, institutional, commercial, and industrial land uses outside the core area of the community.

The transportation element of the City of Hastings Comprehensive Plan first considers the transportation system's existing conditions; it's spatial geography, jurisdictional and functional classifications, daily travel demand, and capacity and deficiencies. Based on analysis of the existing transportation system, the community's current land use, future growth and development goals, and regional requirements, the transportation element of the plan will then identify transportation needs and issues, goals and objectives, policies, and specific improvements that should be implemented by 2040.

The transportation element of the comprehensive plan should function as a guide to:

- » Identify the City's existing and proposed transportation network
- » Rank in priority its major investments to meet transportation needs
- » Support the City's land use goals and objectives.

Road System

The existing system serving the City of Hastings largely consists of a basic grid of north/south and east/west streets and highways. There are only a few facilities that depart from the north/south, east/west orientation. The integrity of the grid is interrupted by natural features, e.g., topography, steep slopes, and the Vermillion River on the west side of TH 61 and the Vermillion and Mississippi Rivers on the east side. Maintaining the grid through these obstacles would have been impossible.

The grid street system provides a strong and logical foundation for future development, the organization of land uses, and the extension of utilities. As new streets are identified to accommodate future development, they will, to the extent possible, be spatially organized to reinforce the grid system.

The Metropolitan Council's Regional Transportation System – Functional Class Road map identifies roadways in the City of Hastings, including their jurisdiction and "functional classification". These roadways are under the jurisdiction of the State, County and the City. Limited access roadways that carry larger volumes of traffic at higher speeds tend to be under the jurisdiction of the State of Minnesota (e.g., Interstates, U.S. Highways and State Trunk Highways). Roads that carry mostly local traffic are under the jurisdiction and are the responsibility of the City. Dakota and Washington Counties have jurisdiction of roads that carry intermediate levels of traffic and which provide connections among communities in these counties. County roadways include those that receive direct aid from the State of Minnesota, which are called County State Aid Highways. Roadways in the City Hastings are described by their functional classifications in the sections that follow.

Principal Arterials - Highways TH 55, TH 61 and TH 316

The metropolitan highway system is made up of roads called "principal arterials". They include all interstate freeways and other major roadways that provide long distance connections within the metropolitan area. Connections with other roadways are limited to other principal arterials and to a minimal number of other roads. Highways TH 55, TH 61, and TH 316 are the principal arterials that serves the City of Hastings. These highways provide important connections between Hastings and the rest of the metropolitan area to the north and northwest and southeast.

These roadways are under the jurisdiction of the Minnesota Department of Transportation (MNDOT) but no major planned improvements are noted on the Metropolitan Council's Identified Projects Map. TH 316 is currently scheduled to be milled and overlaid from its intersection at US 61 within Hastings south to its intersection with US 61 near Red Wing in 2021. However, City is currently working with MNDOT on a scoping study of the section of TH 316 within the City of Hastings to determine whether other roadway design and access modifications, including pedestrian facility additions, can be incorporated with this project.

A-Minor (Arterial) Connectors – CSAH 46, CSAH 47, and TH 61

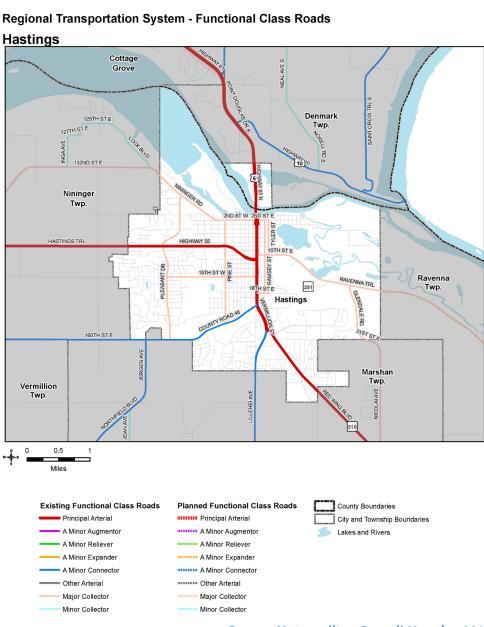
"Minor Connectors" are roadways that generally provide mobility for shorter distances than principal arterials, providing interconnection between other arterial roadways, neighboring communities and regional business concentrations. They often supplement principal arterials. County State Aid Highway (CSAH) 46, CSAH 47 and US 61 south of the TH 316/US 61 intersection are all A-Minor (Arterial) Connectors located in the City, with CSAHs 46 and 47 being under the jurisdiction of Dakota County, and US 61 being under the jurisdiction of the State.

Major Collectors

"Major Collectors" are roadways that are designed to serve shorter trips. Their function is to collect and distribute automobile traffic from neighborhoods and commercial/ industrial areas onto the reliever roadway system. These roads are designed to provide access as much as mobility. There are many Major Collectors located within and around the City of Hastings, these are detailed in the following Metropolitan Council Functional Roadway Classification Chart.

Local Streets

All other roadways in Hastings are under the jurisdiction of the City of Hastings and are classified as local streets. Local streets primarily provide access to individual properties rather than long distance or direct travel; and speed limits are kept low to ensure safety. Most residential neighborhood streets are local.



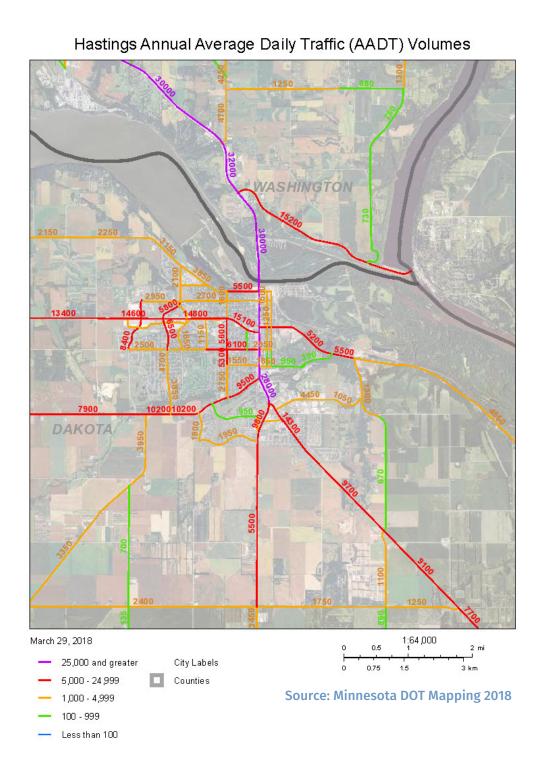
Source: Metropolitan Council Mapping 2018

Metropolitan Council Functional Roadway Classification Chart

Roadway	Jurisdiction	Running Mileage	Existing/Future Lanes
Principal Arterials			
TH 55	MNDOT	2.1	4/4
TH 61 – South to TH 316	MNDOT	1.9	4/4
TH 316	MNDOT	1.2	2/4
Minor Connectors			
CSAH 47	Dakota County	1.7	2/2
CSAH 46	Dakota County	0.6	2/2
TH 61 south of TH 316 Intersection	Dakota County	0.7	2/2
Major Collectors			
E 18 th Street	City	1.2	2/2
CSAH 42/2 nd Street	Dakota County	1.8	2/2
CSAH 54 - E 18 th Street to Eastern City Limits	Dakota County	.86	2/2
2 nd Street East (US 61 to Tyler)	City	0.2	2/2
4 th Street (Tyler to General Sieben Drive)	City	2.0	2/2
10th St. (US 61 to E 18th Street)	City	1.25	2/2
15 th Street (Tyler Street to General Sieben	City	2.22	2/2
Drive)	, 27%		6 6794
18 th Street West (Pine to TH 61)	City	0.49	2/2
31st Street East (TH 316 to Spiral Blvd)	City	1.05	2/2
31st Street West (from CSAH 46 to Cannon	City	0.82	2/2
Street)			
33 rd Street (TH 61 to TH 316)	City	0.29	2/2
36 th St. (TH 61 to Village Trail)	City	0.98	2/2
Cannon Street (TH 61 to 31st St W)	City	0.23	2/2
General Sieben Drive (CSAH 46 to	City	2.16	2/2
Featherstone)	Cit.	0.47	2/2
Lyn Way (South Frontage Road to 15 th St)	City	0.47	2/2
North Frontage Rd (Pleasant to TH 55)	City	0.69	2/2
Northridge Drive	City	0.8	2/2
Pine Street	City	1.64	2/2
Pleasant Drive	City	2.4	2/2
Ramsey Street (10 th St to 2 nd St)	City	0.9	2/2
River Street (CSAH 42 to TH 55)	City	0.4	2/2
South Frontage Road (TH 55 to River)	City	1.62	2/2
Spiral Boulevard (TH 316 to CSAH 91)	City	1.43	2/2
Tyler Street (10 th St to 2 nd St)	City	0.9	2/2
Village Trail (36 th St. to CSAH 46-47)	City	0.45	2/2
Westview Drive (Southview to Pleasant)	City	1.58	2/2
Subtotal	City	30.47	2/2

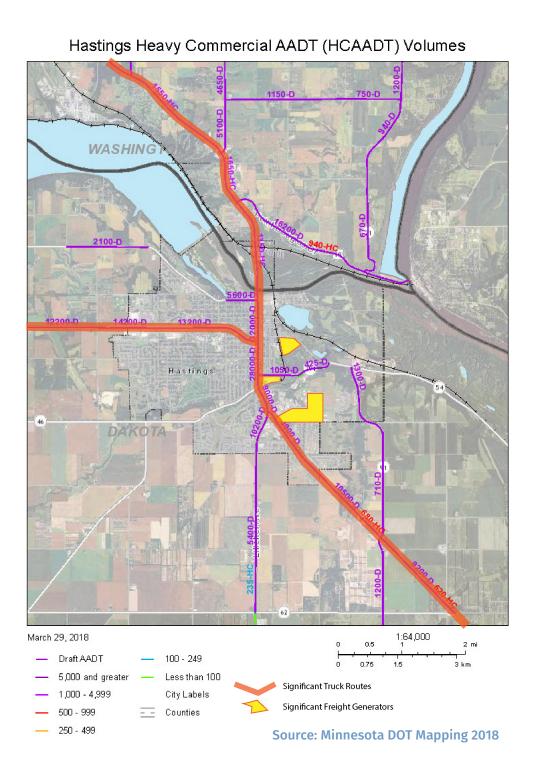
Motorized Vehicle Traffic Volumes

A map of the most currently available traffic counts for the City of Hastings, published by MNDOT is included to show the Annual Average Daily Traffic counts (AADT) for the community. AADT is theoretical estimate of the total number of vehicles using a specific segment of roadway (in both directions) on any given day of the year. This estimate represents the total number of cars per year divided by 365 and is developed using factors to adjust for season, day of the week, and vehicle type.



Heavy Commercial Vehicle Traffic Volumes

A map of the most currently available heavy commercial vehicle traffic counts for the City of Hastings, published by MNDOT is included to show the Heavy Commercial AADT (HCAADT) for the community. HCAADT is a theoretical estimate of the total number of heavy commercial vehicles using a specific segment of roadway (in both directions) on any given day of the year. This estimate represents the total number of heavy commercial vehicles per year divided by 365 and is developed using factors to adjust for season, day of the week, and vehicle type.



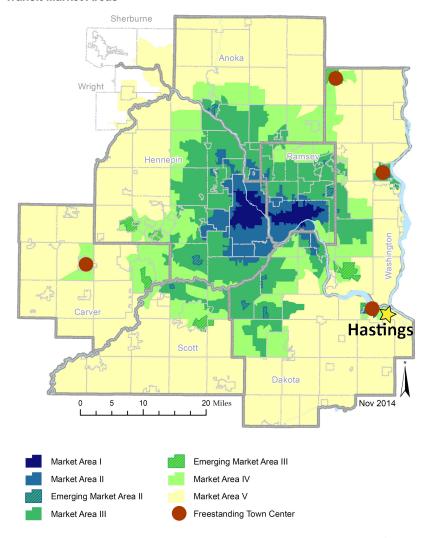
5-8 | Hastings 2040 Comprehensive Plan

Transit System

The City of Hastings is outside the Metropolitan Council's Transit Taxing District. Hastings is a Freestanding Town Center in Market Area III and is in the area of potential of transit service expansion. Transit Market Area III has moderate density but tends to have a less traditional street grid that can limit the effectiveness of transit. It is typically urban with large portions of Suburban and Suburban Edge communities. Transit service in this area is primarily commuter express bus service with some fixed-route local service providing basic coverage. General public dial-a-ride services are available where fixed-route service is not viable.

Freestanding Town Centers are areas that historically grew independently of Minneapolis and St. Paul and are still separated from the urban and suburban areas of the metro by rural land. Because of their concentrated downtowns laid out in a traditional urban form, these areas have a Transit Market Index value that would indicate Market Area III or higher. However, their relatively small population and land area, as well as their distance from other transit-supportive land uses, limits the potential for local fixed-route transit.

Transit Market Areas



2040 TRANSPORTATION POLICY PLAN | METROPOLITAN COUNCIL Figure 6-3

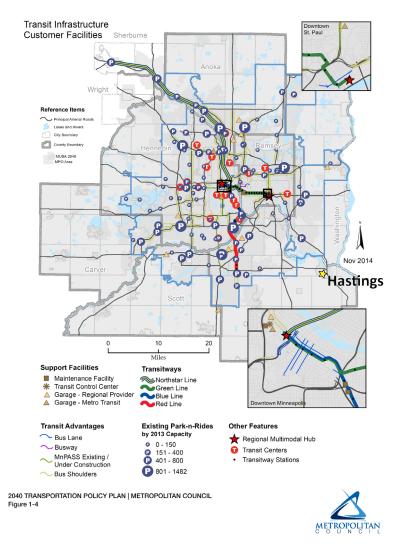


Transit Services

There is no daily regular route transit service in the City today. The LOOP, a service provided by DARTS, provides circulator bus service on a fixed route around the city with scheduled stops and the flexibility to request a stop nearby. This service operates every Tuesday from 9am to 2pm.

Public transportation for the Hastings area is available through Transit Link, a Regional dial-a-ride service provided by the Metropolitan Council in the seven-county metro area. Transit Link is the Twin Cities dial-a-ride minibus or van service for the general public, where regular route transit service is not available.

To comply with regional planning for transit service, the City should list transit corridors (express commuter bus corridors and dedicated right-of-way corridors) and identify opportunities to promote higher density initiatives along dedicated transit corridors. Transit corridors identified by the Metropolitan Council are shown on the Transit Infrastructure Customer Facilities map.

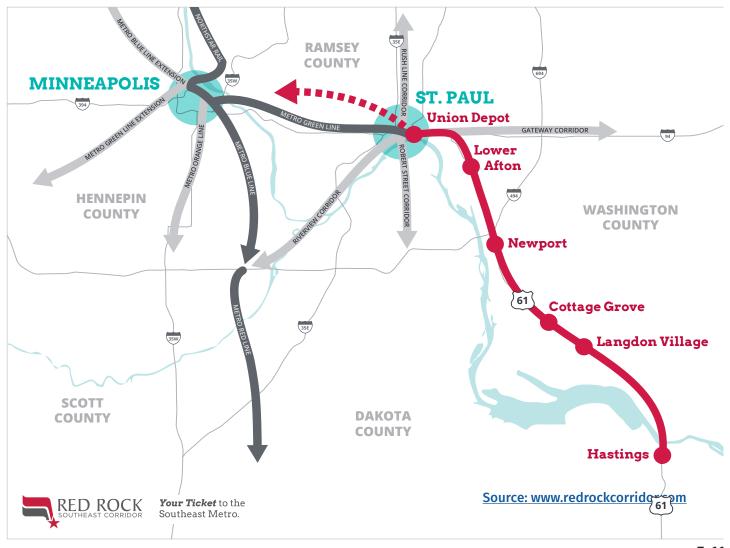


As the economy rapidly changes there are continual advancements in E-commerce and increased accessibility to good and services. These changes are impacting the current methods of transportation for both people and goods. For instance, online grocery ordering and residential delivery is available across Hastings from Cub Foods, Coborn's, Instacart, Amazon, Schwan's, Lunds & Byerlys, and other retail establishments. Uber and Lyft both offer rideshare services to Hastings and across the Twin Cities Metro.

Red Rock Southeast Corridor

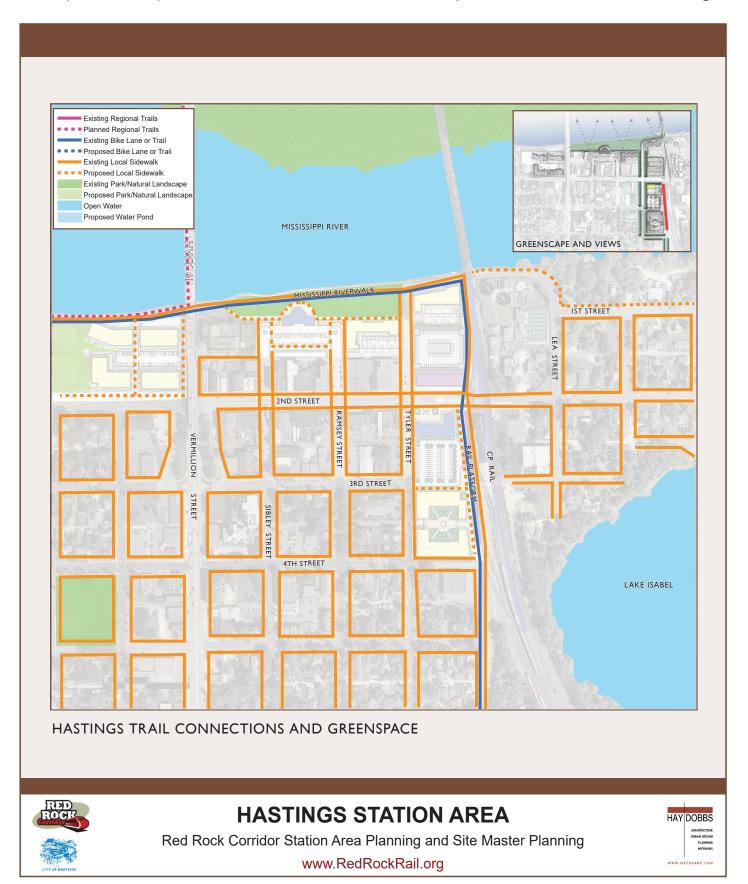
The need for better public transit within Hastings with connections to the metro was a concern brought up many times during the 2040 comprehensive planning process. Development of Red Rock Corridor bus rapid transit is underway and recently an implementation plan was approved by the Red Rock Corridor Commission. The Red Rock Corridor Implementation Plan describes a proposed 20-mile transit-way, connecting the Twin Cities' southeastern suburbs to St. Paul and Minneapolis. The transit-way will originate in Hastings and stop in Cottage Grove, Newport and St. Paul's Battle Creek neighborhood before connecting to the St. Paul Union Depot. Before an investment can be made in bus rapid transit, potential ridership numbers must increase, especially within Hastings.

Expansion of transit through development of the Red Rock Southeast Corridor remains a priority for the community. The potential positive impacts on transit, land use, commuting and economic growth far outweigh the negative connotations that have occasionally surrounded the topic of connecting Hastings by bus to the metro area. One of the primary goals of the project is to "Increase opportunities for community and economic development throughout the corridor". The plan included two phases, the first being to increase local and express bus services along the corridor. The City will need to work with Metro Transit and support the development of the Red Rock Corridor. However, the thoughtful, transit-oriented design in and near any proposed station/Park & Ride facilities will be critical to minimizing the negative impact of parking and traffic while maximizing the social, aesthetic, and economic impacts.

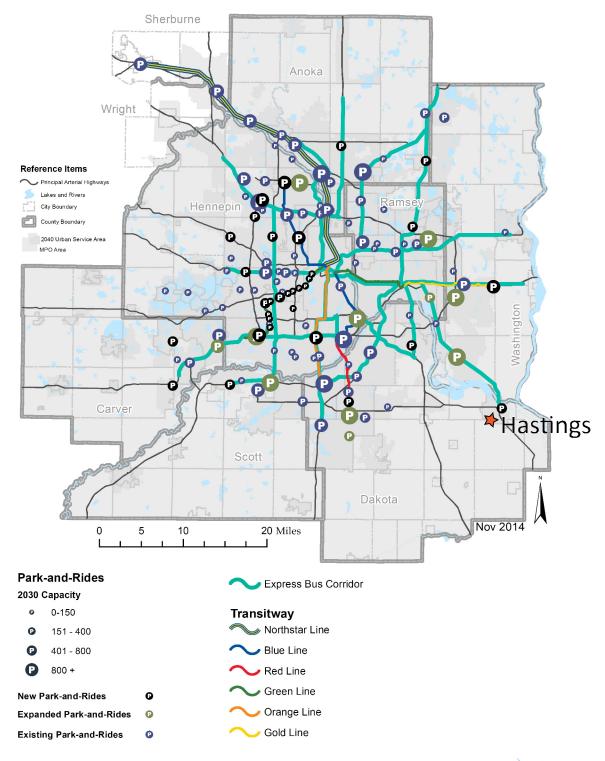


Red Rock Southeast Corridor

This map shows the pedestrian and bike connection availability to the Red Rock Station in Hastings



2030 Park-and-Ride System and Express Bus Corridors



2040 TRANSPORTATION POLICY PLAN | METROPOLITAN COUNCIL Figure 6-5



Bicycling and Walking

The City of Hastings is committed, through its policies and through administration and enforcement of its City Code, to create reasonable biking and pedestrian facilities to serve residential and commercial areas of the City.

Sidewalks

Sidewalks are an essential element of the public infrastructure that provide a number of functions in growing connected communities. First, they provide a protected and safe environment for pedestrian circulation. Secondly, they provide a clear definable border between public and private property and define what is referred to as a property owner's "defensible space." A sense of "defensible space" contributes to property owners' sense of responsibility, and, as a result, property owners take better care of their yards and take steps to ensure cleanliness and a safe environment

The buffer that sidewalks provide between the pedestrian and automobile realms is not only physical; it is also a psychological buffer. Sidewalks facilitate pedestrian circulation, despite the fact that a one-ton mass of steel is traveling at 30 miles per hour (or more), only feet away. Imagine how a lack of sidewalks might affect pedestrian circulation in the traditional CBD

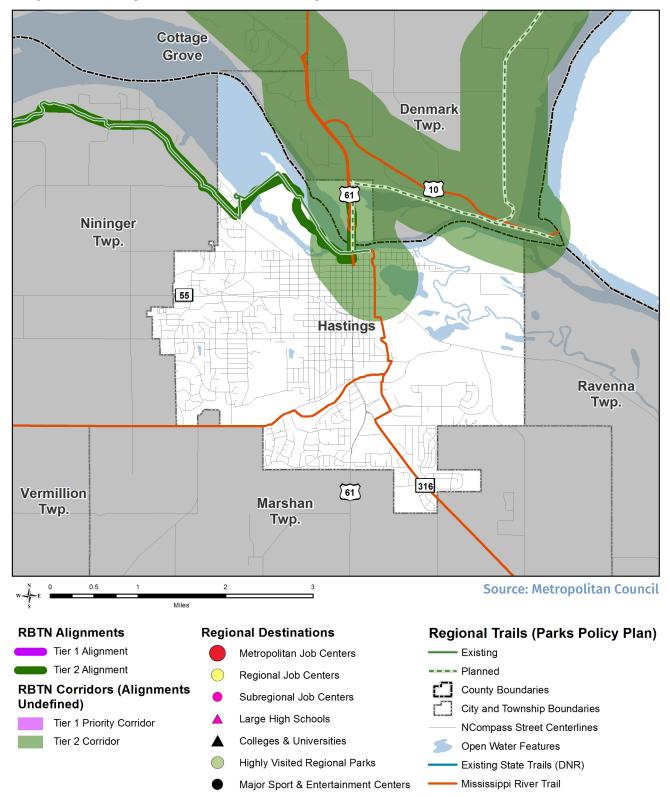
Some areas of the City are supplied with adequate sidewalks and others are not. The City has included sidewalk or trail construction along all arterial and Collector Street construction and on local streets serving parks or other regional facility needs or to provide interconnections with facilities along collector or arterial routes.

Bicycling Routes and Trails

Over the last twenty years, the City has developed a fairly extensive trail system designed for pedestrians, bicyclists and other non-motorized recreational activities. The system is comprised of offstreet trails, parkways containing side-street trails, and on-street bike lanes. The trail system links neighborhoods to community attractions and provides recreational opportunities. The Existing & Planned Trails and Sidewalks map and the Metropolitan Council's Regional Bicycle Transportation Network map show the current and planned extent of Hastings' sidewalk and trail system.



Regional Bicycle Transportation Network (RBTN) City of Hastings, Dakota & Washington Counties



Non-Vehicular Movement of People, Freight, and Goods

Rail freight and commercial barge traffic on the Mississippi River are no longer as important to the economic vitality in the City as it was in the past. However, the City continues to support the facilities that are utilized for commercial transportation modes.

Mississippi River Traffic

The City of Hastings recognizes the importance of commercial barge traffic to the vitality of the region. Lock and Dam No. 2 located in the northwestern corner of Hastings is an integral facility to supporting the commercial barge traffic as well as recreational opportunities along the river.

Fleeting or storage of barges is not feasible in Hastings because of the narrow channel, the adjacent public land uses, and the location of the downtown. The closest permanent barge fleeting location is on the southeast side of Prescott Island, south of Hastings. However, temporary barge fleeting caused by barge traffic delays at Lock and Dam No. 2 can be accommodated on a limited basis without causing land or water use conflicts.

Although commercial barge traffic along the Mississippi River is significant, there is little traffic that directly affects Hastings. There are no barge facilities in the Hastings portion of the Mississippi River corridor since the last terminal was removed on the Koch Refining property in 1993.

Four commercial marinas operate in the Hastings Mississippi River corridor. The largest is Kings Cove, a private marina that is partially in the City of Hastings and partially in Denmark Township. The marina is located at the west end of Conley Lake, with roadway access east from TH 61. The capacity of Kings Cove marina is 450 boats; access to the river is through the outlet channel at the eastern end of Conley Lake. The second is the Hastings Marina located to the east of downtown with access to the Mississippi River via the Vermillion River. The third is Hub's Landing and Marina, a private marina with limited docking located on the north shore of the Mississippi River, just upstream of the TH 61 Bridge, with road access west from TH 61. The fourth is Captain's Bay Marina, a private marina located just north of Hub's Landing, west of TH 61.

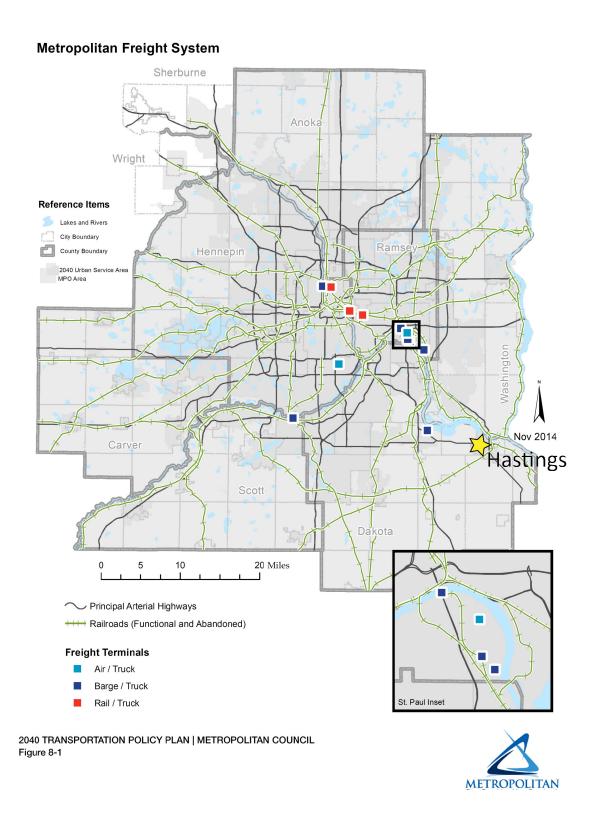
Canadian Pacific Railroad

The Canadian Pacific Railroad serves Hastings, extending along and over the Mississippi River into Washington County. Service is provided to the Burlington Northern system in St. Paul. The railroad serves commercial freight needs and there is no passenger service available in the City. (Amtrak runs through Hastings but does not stop.) The one rail line traversing the City and the spur that serves Ardent Mills bypasses most residential areas and there are few land use conflicts. A spur track extends south along the east side of Bailly Street to serve Ardent Mills facility along the Vermillion River at US 61.

There are several at-grade crossings of the main and spur lines at 2nd Street east of Highway 61. The crossings are in areas of relatively low traffic volumes (fewer than 1,000 vehicles per day) and are equipped with crossing lights and, in some cases, arms. The Ardent Mills spur line also has crossing at 6th, 7th, 8th, and 10th Streets and at E 18th Street (Veterans Drive)). No crossing signals are installed at 6th, 7th, and 8th Streets (just warning signs). Crossing signals only are installed at 10th St. and Highway 291.

Freight

There are two principal arterial freight routes through Hastings and one A-minor connector. All of the bridges within the city limits are rated for high load capacity and have wide and high enough clearance according to bridge inspections done by MnDOT. All the active rail crossings are protected and all intersections have adequate turning radius.



Aviation

There are no existing or planned aviation facilities in Hastings. The closest public airports are the South St. Paul Airport in northern Dakota County and Airlake facility in southern Lakeville.

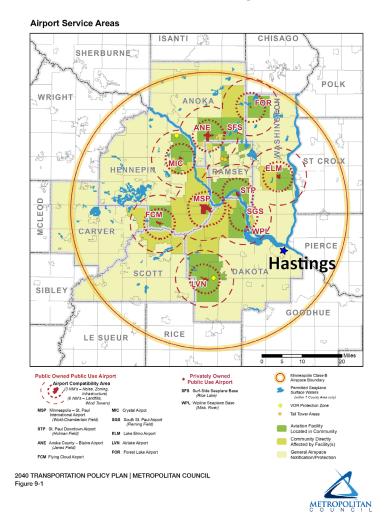
However, the airspace over Hastings is used by aircraft operating from metropolitan airports and other airports. Hastings is located approximately 25 miles from the Twin Cities International Airport and 22 miles from Holman Field, the downtown St. Paul airport. Holman Field is identified in the Aviation Policy Plan as a reliever airport for Minneapolis-St. Paul International Airport.

Structures that are 200 feet or higher above ground level may pose hazards to air navigation. The only structure exceeding 200 feet is the KDWA radio tower located at 1700 East 4th Street. The tower is equipped with a red beacon hazard light.

Hastings does not permit such structures under its zoning ordinance, and has no plans to permit such structures in the future. Any applicant who proposes to construct such a structure shall notify the City and the Commissioner of the Minnesota Department of Transportation at least 30 days in advance and the Federal Aviation Administration 45 days prior as required by law.

Regina Hospital in Hastings has a heliport that is used for emergency helicopter transport. Future proposals for heliports should only be considered in areas where they would not disrupt adjoining land uses.

Seaplane operations are prohibited because of the narrow channel, the location of Lock and Dam No. 2 and the close proximity of downtown Hastings.



TRANSPORTATION SYSTEM PLAN



Transportation Analysis Zones (TAZ's)

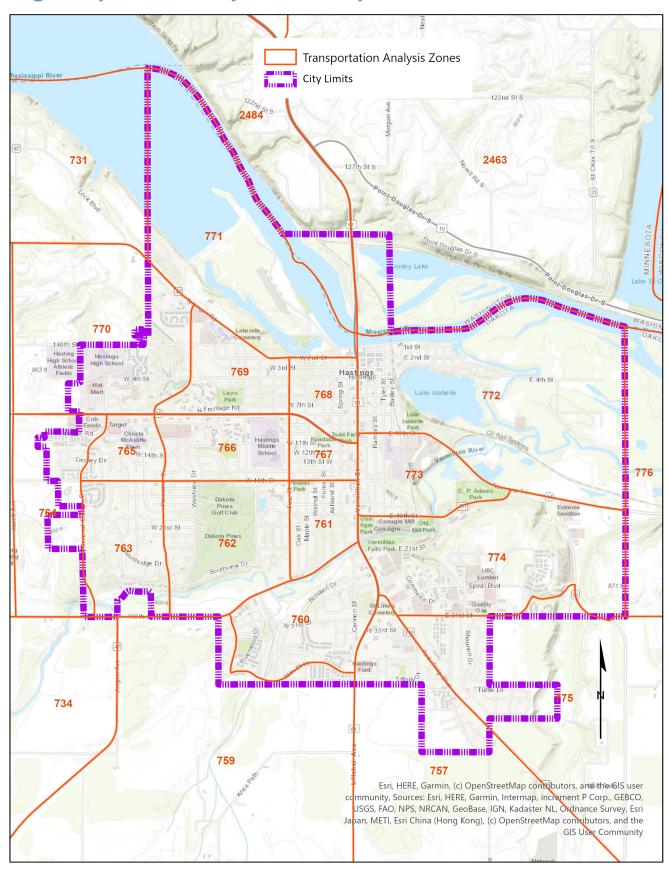
The Metropolitan Council conducts research on travel behavior and forecasts future transportation conditions as a result of regional growth. They maintain a regional travel demand model. The geographic unit for this analysis is the Transportation Analysis Zone, or TAZ. While they allocate a portion of the forecasted regional growth to each community, the distribution of that growth within each community depends on local land use decisions. Metropolitan Council requires each community to allocate forecasted future growth of population, households, and employment to each TAZ, reflecting the community's land use planning efforts.

The following TAZ map and the accompanying TAZ tables identify the City's 20 TAZ's and details the forecasted growth of population, households and employment by zone for the City of Hastings through 2040. Hastings' Future Land Use Map for 2040, located in Chapter 4 of this plan, allocates corresponding residential and commercial growth to areas accessible by the TAZ's existing and planned roadways, also detailed on the Future Land Use Map. Because Hastings is a developing community, the trips generated within the TAZ's can be expected to change during the period of this plan. Planned development will be well served by existing and planned roadway improvements.

Growth by TAZ 2010-2040													
TAZ #	Population	% Δ	Households	% Δ	Employment	% Δ							
757	-98	-8.3	19	4.5	-314	-41.6							
759	245	23.8	135	38.1	7	70.0							
760	1169	59.4	541	68.5	36	19.5							
761	549	37.5	285	49.3	102	77.9							
762	879	50.8	426	65.7	22	8.7							
763	285	22.0	212	49.8	23	63.9							
764	53	9.5	37	16.2	40	10.7							
765	361	39.8	179	48.5	-147	-60.2							
766	773	44.9	296	34.8	23	3.1							
767	212	29.7	111	39.4	162	37.4							
768	187	16.3	167	39.6	244	147.9							
769	741	42.2	369	45.6	-72	-5.8							
770	609	39.1	297	53.3	735	72.1							
771	50	14.0	59	52.7	-18	-41.9							
772	181	14.9	76	13.8	224	29.7							
773	-32	-3.6	9	2.6	-325	-43.4							
774	45	5.1	16	5.3	238	17.5							
775	-81	-4.5	32	4.6	-8	-34.8							
2463	0	0.0	0	0.0	33	51.6							
2484	0	0.0	0	0.0	3	0.0							
Total	6128	27.6	3266	37.4	1008	11.7							

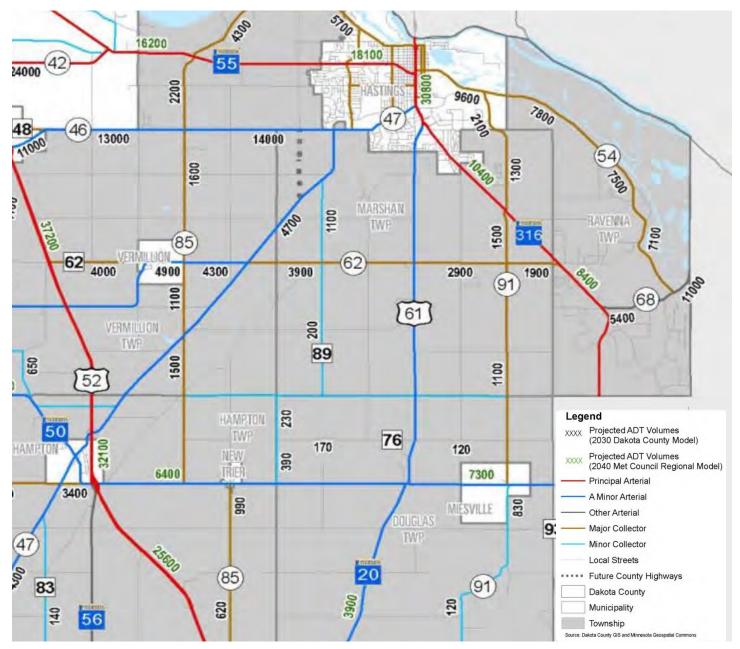
Data Source: Metropolitan Council

Hasting Transportation Analysis Zones Map



Data Source: Metropolitan Council

Average Daily Traffic (ADT) Forecast for 2040 for Hastings



2040 Traffic Forecast for Principal and A-Minor Arterials

Below are the forecasted Average Daily Traffic (ADT) rates for Hastings' Principle and A-Minor Arterials for 2040 according to the Dakota County 2040 Comprehensive Plan:

- Highway 61 to the Mississippi River/County Line 30,800 ADT
- Highway 55 at City limits to Highway 61 18,100 ADT
- Highway 316 from City Limits to Highway 47 10,400 ADT

Source: Dakota County 2040 Comprehensive Plan: https://www.co.dakota.mn.us/Government/Planning/CompPlan/Documents/DakotaCounty2040ComprehensivePlan.pdf

									Н	astir	ngs Ti	ransp	ortati	on An	alysis	Zone	Fore	casti
2010 2020								owth	by T	AZ 20	10-20	20		Growth by TA				
TAZ Zone	POP	нн	EMP	POP	HH	EMP	POP	% Δ	нн	% Δ	EMP	% Δ	POP	HH	EMP	POP	% Δ	нн
757	1183	418	755	1069	416	438	-114	0.0	-2	-0.5	-317	-42.0	1076	426	438	7	0.65	10
759	1031	354	10	1006	375	5	-25	0.0	21	5.9	-5	-50.0	1130	429	10	124	12.33	54
760	1968	790	185	2107	857	142	139	7.1	67	8.5	-43	-23.2	2566	1073	180	459	21.78	216
761	1463	578	131	1531	626	191	68	4.6	48	8.3	60	45.8	1777	751	221	246	16.07	125
762	1729	648	254	1826	708	218	97	5.6	60	9.3	-36	-14.2	2196	885	256	370	20.26	177
763	1297	426	36	1191	446	51	-106	-8.2	20	4.7	15	41.7	1348	526	55	157	13.18	80
764	560	229	373	567	236	324	7	1.3	7	3.1	-49	-13.1	589	251	371	22	3.88	15
765	907	369	244	966	400	95	59	6.5	31	8.4	-149	-61.1	1122	478	95	156	16.15	78
766	1723	850	746	2050	916	706	327	19.0	66	7.8	-40	-5.4	2317	1057	752	267	13.02	141
767	715	282	433	749	305	460	34	4.8	23	8.2	27	6.2	849	355	557	100	13.35	50
768	1148	422	165	1103	449	149	-45	-3.9	27	6.4	-16	-9.7	1227	523	288	124	11.24	74
769	1755	810	1251	1955	864	1073	200	11.4	54	6.7	-178	-14.2	2231	1023	1141	276	14.12	159
770	1559	557	1020	1656	595	1407	97	6.2	38	6.8	387	37.9	1904	718	1718	248	14.98	123
771	356	112	43	316	120	13	-40	-11.2	8	7.1	-30	-69.8	359	144	13	43	13.61	24
772	1212	549	753	1289	554	751	77	6.4	5	0.9	-2	-0.3	1343	590	883	54	4.19	36
773	878	341	749	842	340	411	-36	-4.1	-1	-0.3	-338	-45.1	850	347	415	8	0.95	7
774	891	304	1361	889	303	1578	-2	-0.2	-1	-0.3	217	15.9	916	312	1599	27	3.04	9
775	1797	696	23	1689	692	10	-108	-6.0	-4	-0.6	-13	-56.5	1703	710	10	14	0.83	18
2463	0	0	64	0	0	77	0	0.0	0	0.0	13	20.3	0	0	97	0	0.00	0
2484	0	0	0	0	0	3	0	0.0	0	0.0	3	0.0	0	0	3	0	0.00	0
Totals	22172	8735	8596	22801	9202	8102	629	2.8	469	5.3	-177	-5.7	25503	10598	9102	2702	11.9	1386

Transportation Goals and Strategies

Goal 1: Provide a safe, efficient, and well-maintained transportation infrastructure network that safely accommodates local and regional movement while supporting the land use and urban design aims of the comprehensive plan.

Strategies:

- 1. Provide a balanced, safe, and efficient transportation network that maximizes use of existing investments and plans for future needs.
- 2. Manage access and design of transportation network in order to effectively maintain the safety and functional integrity of City streets.
- 3. Plan for future Bus Rapid Transit (BRT) that will connect Hastings to downtown Saint Paul, Minneapolis and other transportation hubs (i.e. Apple Valley, Fort Snelling, etc).
- 4. Maintain safe facilities that allow for the movement of goods via rail lines, the Mississippi River and the highway system to serve Hastings and the larger Twin Cities metropolitan area.
- 5. Ensure the new street networks, adjacent to existing neighborhoods, allow for access to and from the established community and surrounding neighborhoods.
- 6. Continue to consider feasibility and applicability of Complete Streets concepts in planning roadway improvement projects and consider adoption of a Complete Streets policy applicable to roadways constructed with new developments.
- 7. Continually evaluate the need to address alternative transportation modes such autonomous vehicles, and bus routes as the city grows and adds new infrastructure.
- 8. Continually support the efforts of regional and state transportation authorities to improve regional transit and highway systems for Hastings' residents and visitors.
- 9. Ensure transportation connections within areas of the city.

ng -	ng - Population, Households and Employment																	
Z 20	20-203	30			Gr	owth	by TA	Z 203	30-204	40	Growth by TAZ 2010-2040							
% Δ	EMP	% Δ	POP	HH	EMP	POP	% Δ	HH	% Δ	EMP	% Δ	TAZ Zone	POP	% Δ	HH	% Δ	EMP	% Δ
2.4	0	0.0	1085	437	441	9	0.8	11	2.6	3	0.7	757	-98	-8.3	19	4.5	-314	-41.6
14.4	5	100.0	1276	489	17	146	12.9	60	14.0	7	70.0	759	245	23.8	135	38.1	7	70.0
25.2	38	26.8	3137	1331	221	571	22.3	258	24.0	41	22.8	760	1169	59.4	541	68.5	36	19.5
20.0	30	15.7	2012	863	233	235	13.2	112	14.9	12	5.4	761	549	37.5	285	49.3	102	77.9
25.0	38	17.4	2608	1074	276	412	18.8	189	21.4	20	7.8	762	879	50.8	426	65.7	22	8.7
17.9	4	7.8	1582	638	59	234	17.4	112	21.3	4	7.3	763	285	22.0	212	49.8	23	63.9
6.4	47	14.5	613	266	413	24	4.1	15	6.0	42	11.3	764	53	9.5	37	16.2	40	10.7
19.5	0	0.0	1268	548	97	146	13.0	70	14.6	2	2.1	765	361	39.8	179	48.5	-147	-60.2
15.4	46	6.5	2496	1146	769	179	7.7	89	8.4	17	2.3	766	773	44.9	296	34.8	23	3.1
16.4	97	21.1	927	393	595	78	9.2	38	10.7	38	6.8	767	212	29.7	111	39.4	162	37.4
16.5	139	93.3	1335	589	409	108	8.8	66	12.6	121	42.0	768	187	16.3	167	39.6	244	147.9
18.4	68	6.3	2496	1179	1179	265	11.9	156	15.2	38	3.3	769	741	42.2	369	45.6	-72	-5.8
20.7	311	22.1	2168	854	1755	264	13.9	136	18.9	37	2.2	770	609	39.1	297	53.3	735	72.1
20.0	0	0.0	406	171	25	47	13.1	27	18.8	12	92.3	771	50	14.0	59	52.7	-18	-41.9
6.5	132	17.6	1393	625	977	50	3.7	35	5.9	94	10.6	772	181	14.9	76	13.8	224	29.7
2.1	4	1.0	846	350	424	-4	-0.5	3	0.9	9	2.2	773	-32	-3.6	9	2.6	-325	-43.4
3.0	21	1.3	936	320	1599	20	2.2	8	2.6	0	0.0	774	45	5.1	16	5.3	238	17.5
2.6	0	0.0	1716	728	15	13	0.8	18	2.5	5	50.0	775	-81	-4.5	32	4.6	-8	-34.8
0.0	20	26.0	0	0	97	0	0.0	0	0.0	0	0.0	2463	0	0.0	0	0.0	33	51.6
0.0	0	0.0	0	0	3	0	0.0	0	0.0	0	0.0	2484	0	0.0	0	0.0	3	0.0
15.2	1000	12.3	28300	12001	9604	2797	11.0	1392	13.2	499	5.5	Total	6128	27.6	3266	37.4	1008	11.7

Data Source: Metropolitan Council

Goal 2: Ensure that all areas of the community are accessible by a network of sidewalks and trails.

Strategies:

- 1. Provide opportunities for people to bicycle and walk in their neighborhoods for exercise and as an alternative to driving.
- 2. Establish trail linkages to important community facilities and neighborhoods.
- 3. Continue street improvement program to upgrade existing streets, trails and sidewalks in the City.
- 4. Enforce sidewalk maintenance ordinance to improve existing sidewalk conditions and continue to encourage sidewalk installation where gaps are present.
- 5. Ensure installation of sidewalks in new subdivisions and with redevelopment in existing neighborhoods.

Goal 3: Expand Access Between Downtown/Riverfront and Mississippi River to Further Develop Hastings as a Regional Destination

Strategies:

- 1. Encourage the development of rear building facades adjacent to Levee Park.
- 2. Explore opportunities to better connect the regions marina's and Downtown Hastings; focus on close proximity, ease of access to/from Mississippi, and secure docking so that boaters feel at ease spending time in Downtown while their boats are docked nearby.

Transportation Objectives and Policies

The Transportation Plan's objectives and policies respond to the previously identified issues goals, and strategies.

Objective 1: Provide a balanced, safe, and efficient transportation network that maximizes use of existing investments and plans for future needs.

Policies:

Functional Classification Plan

Improve key existing roads and build new roads to accommodate growth in accordance with the Street Functional Classification Plan.

The functional classification system of roadways provides the primary guidance for decisions concerning the design, management and funding of the transportation system. It is based upon the need to provide overall mobility and to support the overall growth strategy of the metropolitan area. On the local level, the roadway system is designed to support the existing and planned land uses within a community.

A functional classification system assists the City in achieving:

- · A logical overall pattern of community growth and placement of land uses
- · Reasonable access to land uses
- · Inter and intra community access and circulation
- · A rational distribution of traffic volumes.

As the urban service area of the City continues to expand, the location and function of new roadways will accommodate new growth and development, and alleviate certain existing transportation problem areas. Additionally, as the local transportation system is completed, the ability to attract local trips from the regional system will increase.

The functional classification system should follow an orderly pattern with appropriate spacing, access controls, traffic capacity, and speeds to accommodate planned land use densities and provide for safe and efficient use of the system.

For major collector roads special efforts will be made to foster intergovernmental cooperation in the design of the transportation facilities and in the planning of adjacent land uses. This coordination will help maintain the roadways function and protect the substantial public investments required. The majority of the proposed changes in the future classification are the result of the City's planned expansion into the future growth areas in the south and west portions of the City and are illustrated in the Future Street Classification Map.

Planned expansion of Principal Arterial roads:

• TH 55 west of General Sieben Drive – expand from 2 lanes to 4 four (This is not part of a fiscally constrained Transportation Policy Plan or MnDot Plan).

Planned new Minor Connector roads:

· Jacob Avenue south of Highway 55 to an intersection with 170th Street (new). This link, in combination

with the planned new 170th This link will provide sub-regional movement (within five to ten miles of Hastings), somewhat relieve Vermillion Street and TH 316, as well as carry traffic to and from the perimeter of future residential neighborhoods.

- 170th Street between Jacob Avenue (extended) to Highway 316.
- Seek to designate Jacob Avenue south of TH 55 as CSAH 47 and extend it south of 170Street to link to the existing CSAH 47 in Marshan Township must meet Dakota County requirements for regional significance and functional classification designation

Planned new Major Collector roads:

- · Century Drive extended south to planned 170th
- · General Sieben Drive extended north to CSAH 42
- · General Sieben Drive extended south to the planned 170th Street
- · Jacob Avenue between TH 55 and CSAH 42.
- · North Frontage Road (TH 55) west to Jacob Avenue
- · Northridge Drive west to Jacob Avenue.
- · Pleasant Drive extended south to planned 170th Street
- · South Frontage Road (TH 55) west to Jacob Avenue
- Tuttle Drive extended west to planned General Sieben Drive
- · Village Trail south to planned 170th Street
- · 4th Street west to Jacob Avenue
- · 36th Street extended west to planned General Sieben Drive
- A new north-south collector between CSAH 42 on the north and CSAH 46 on the south, approximately halfway between Jacob Avenue and General Sieben Drive, with movement at Highway 55 restricted to right-in / right-out only.

These facilities should be actively managed in the interim for their planned future functional classification. The majority of these functional classification changes would not occur until the surrounding land uses develop more intensely and have a need for urban services.

Future Studies

The City of Hastings, Dakota County and MNDOT will cooperate on these two roadway studies:

• Eastern Connector: Study CSAH 91 (Glendale Road), CSAH 54 (Ravenna Trail) and 10th Street as a possible future Minor Connector between Highway 61 (at 10th Street) on the north and a future connection with Highway 316 on the south.

This improved route could help relieve the traffic volume and congestion experienced at (a) the Vermillion River crossing at Highway 61 as well as (b) Vermillion Street north of the river. It is difficult to improve those conditions because of (a) the environmental sensitivity of the river floodplain and (b) the land development and access needs along Vermillion Street north of the river.

- South Triangle: A study is scheduled to be completed reviewing the triangle of roads consisting of Highway 316 (Red Wing Boulevard), Highway 61 and 170th Street. Evaluate whether to convert those segments of Highway 61 and 170th Street to Principal Arterials while disconnecting Highway 316 north of 170th Street and converting it to a Minor Connector or Major Collector between Tuttle Drive and 170th Street and a Local between Tuttle Drive and Spiral Boulevard. Spiral Boulevard would be connected directly to Highway 61.
- Southwest Corner: Prior to building Principal Arterials roads in the 170th Street and the Jacob Avenue corridors, the City will work with Dakota County to determine whether the dominant alignment should be the 170th and Jacob "ring route" or the CSAH 47 north-south route. As opposed to the configuration shown in the Functional Road Classification map, it will be determined whether a

FUTURE STREET CLASSIFICATION MAP



New or altered A-minor arterials must be approved by the Transportation Advisory Board (TAB)

curving road should be built from the intersection of 170th and General Sieben Drive across the Vermillion River onto the Jacob Avenue corridor with CSAH 47 intersecting at 90 degrees. This design could continue to provide just a single river crossing but improve movement between the western and southeastern parts of the urban area.

System Planning and Regional Forecasts

The City of Hastings adopts the Metropolitan Council's forecasts of population, households and employment. Consequently, the City also adopts the agency's 2040 regional traffic forecasts.

Design Standards

Design standards for the existing or future roads in Hastings are established by the unit of government that has jurisdiction. The City of Hastings has ownership of and control over all Local Roads and Collector Roads that are not identified as County or State Highways. The City will adopt, keep current and enforce the Functional Classifications Map as an Official Map of road rights-of-way based on the Transportation Plan and more detailed alignment studies. The major design standards for municipal roads are described in the City's subdivision regulations.

Residential development has generally followed a modified grid street system that allows for roadway continuity. Curvilinear streets and cul-de-sacs have been introduced in neighborhood design to add interest and promote neighborhood cohesiveness without compromising roadway continuity. However, a significant growth in the number of cul-de-sacs can contribute to increased traffic on neighborhood through streets and eventually create negative impacts to the transportation system. Additionally, a lack of appropriately spaced collector routes would force non-local traffic onto neighborhood streets that are not planned for increased volumes.

Jurisdictional Classification Plan

Hastings has prepared a jurisdictional classification plan that is consistent with the Metropolitan Council's 2040 Transportation Policy Plan. The City of Hastings has ownership of and control over all Local Roads and Collector Roads that are not identified as County Highways as indicated on the Jurisdiction Classification Plan.

Relationship of Land Use and Roads

The Hastings Comprehensive Plan calls for additional land development to accommodate the regional forecasts for population, households and employment. The plan accepts and adopts those regional forecasts.

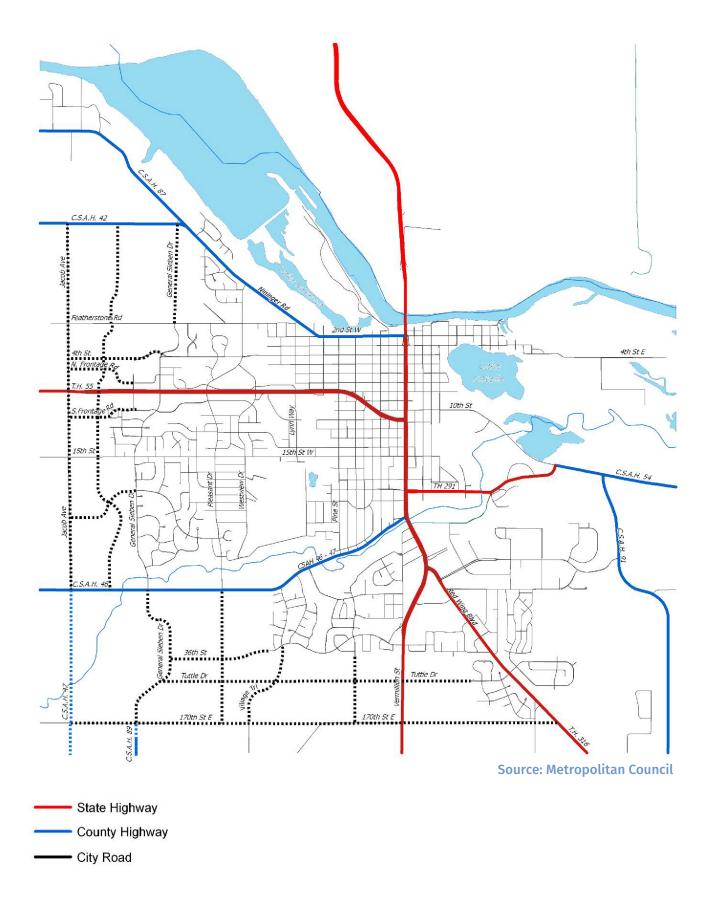
Some of the growth is expected to occur in infill locations but most of it is planned to occur on the western and southern perimeter of the urban area.

The Comprehensive Plan also includes a plan for staging land development in coordination with wastewater, water supply and local road improvements. In conjunction with land development approvals, adequate local, county or state transportation improvements and supporting infrastructure will be required to either existing roads or be programmed for the near future. In all cases, growth will be regulated to be compact and contiguous to prior growth.

Hastings will coordinate with Dakota County and MNDOT to ensure that locally generated trips do not exceed the capacity of local or regional transportation facilities.

Hastings will require that a traffic study for any development that has the potential to have a significant

JURISDICTIONAL CLASSIFICATION MAP



negative effect on the transportation system.

The City will require developers to build roads sufficient to accommodate anticipated traffic at a reasonable level of service within the functional classification criteria of adjacent roadways.

The City will strive to design road projects to minimize adverse effects on nearby neighborhoods. Landscaping, berming and other aesthetic treatments shall be incorporated into road improvement projects located adjacent to existing or planned residential neighborhoods.

Hastings will regulate land development to reduce the total number of automobile trips on County or State roads. To do so, the City will require that:

- · Local streets are interconnected to the extent feasible
- · Cul-de-sac streets are used only to serve land otherwise inaccessible
- · Sidewalk are built along one-side of all future streets
- Trails are build along one-side of all future Collector and Arterial streets (opposite side of sidewalks)

Safety and Efficiency

Several specific traffic safety problems have been identified in Hastings. These are listed below along with the potential means of resolving each.

South of the Vermillion River: Access management improvements in the TH 61/23rd Street intersection area would improve safety along TH 61. Improvements may include:

- The extension of 23 Street east across US 61 with connection to E 21st Street and closure of E 21st Street at its intersection with US 61.
- Construction of a backage road parallel to US 61 extending south from the new E 23rd Street to provide access to existing businesses on the east side of US 61.

Access management improvements would also benefit the portion of TH 61 south of the TH 316 intersection. These may include:

- The relocation of the Cannon Street access to align with existing commercial property access between 33rd Street and 36th on the west side of TH 61.
- Construction of a frontage road on the east side of TH 61 from 36 Street on the west side of TH 61. The existing TH 61 driveways serving the two residential properties should be eliminated when these properties redevelop with access provided by the proposed frontage road.

These improvements would protect the integrity of TH 61 in the event the functional classification of this portion of the road would change to a principal arterial. Cannon Street will serve as a frontage / backage road for commercial and residential development along TH 61 from 36th Street to 22nd Street. The east frontage road would provide access to properties south of 33rd Street.

Highway 316: Highway 316 (Red Wing Boulevard) currently experiences congestions and safety issues and contributes to the congestion of the Highway 61 corridor. The ability to improve the section of Highway 316 between 31st Street and Tuttle Drive is severely limited by existing housing and the narrow public right-of-way.

To improve safety along the existing Highway 316 corridor, east-west connections from Highway 61 to Jacob Avenue (extended) will be studied. Two routes for this movement are possible:

· A new minor arterial road, possibly under Dakota County's jurisdiction, along the alignments of

- 170th Street (east-west) and Jacob Avenue (north-south). This road will be primarily devoted to subregional traffic but will also serve future residential neighborhoods.
- The extension of 36th Street west to General Sieben Drive (extended) but not further west across the Vermillion River. This road will serve local traffic only.

Fourth Street East Bridge: The existing Fourth Street East bridge is susceptible to flooding. When the bridge was rebuilt in 1987, the decision was made to construct it to accommodate a ten-year flood in light of the fact that it serves only six houses. Additional housing east of this bridge should not be allowed until the bridge has been raised to accommodate a 100-year flood.

Access Management

The City of Hastings will:

- Cooperate with Dakota County and the Minnesota Department of Transportation in following the county and state guidelines for managing access to major roads.
- Amend the zoning and subdivision ordinance to allow the City to establish minimum access spacing requirements for roads and driveways in the zoning and subdivision ordinances.
- · Prohibit residential driveway access onto all new collector roads and future collector roads.
- Require the issuance of access permits from the City Engineer for new or reconfigured roads and driveways.
- · Coordinate the location of curb cuts on County and State roads with Dakota County and MNDOT.
- Require developments to obtain access permits for curb cuts onto County and State roads before commencement of development.

Transportation System Coordination

The City will review all road and transportation related improvements initiated by the State and County to determine impacts upon the local transportation network. Furthermore, the City will participate in regional and County corridor studies, task forces and other similar groups to plan, coordinate and/or implement transportation projects. The City shall coordinate the development of all transportation systems with adjacent communities, county and state systems.

The location and design of planned City, County and State transportation projects affect the overall transportation system and adjacent land uses of the City. Therefore, it is imperative that the planning for system improvements be coordinated between the various jurisdictions as early as possible. The City of Hastings can influence the design and characteristics of planned County and State roadways to provide reasonable access to affected properties, mitigate impacts and accommodate future planned growth. Likewise, it is important for the City to discuss local transportation system improvements with other jurisdictions that may be affected by the improvement.

Road Improvement Priority

A priority system for transportation improvements (exclusive of developer constructed roadways) is designed to assist the City in funding transportation projects. Revenues are anticipated to fall short of costs needed to fund all road construction, maintenance and system improvements. Additionally, improvements to the arterial and a portion of the collector roadway system are outside of the control of the City and are the responsibility of MNDOT and the County. Difficult choices will need to be made to determine the priorities for roadway improvement projects over the next several years.

The City will follow these guidelines to establish priorities:

• **Safety -** Intersections, road sections and access points that are hazardous to the driver or pedestrian will receive high priority. Additionally, road connections to reduce emergency response

time for emergency, fire, police and medical calls will be given special priority.

- **Capacity Deficiencies** Roadways where the level of service is low due to high traffic volumes in relation to road design, excess access and function should be given a high priority.
- **Local Streets** Street connections to improve roadway continuity in the urban area of Hastings will be given priority over street connections in undeveloped or premature development areas.
- **Major Employment/Service Areas** Transportation projects which support local business centers such as the downtown, the Westview Mall, and the County Crossroads area, and the Hastings Business and Industrial Park will be given a high priority especially if new or redevelopment is imminent.
- **Modes of Travel –** Roadway improvements that include provisions for needed sidewalks and trails will be given priority over projects that serve only one mode of travel.
- Maintenance Roadway projects designed to reduce high maintenance costs will be given a high priority.

Funding

The primary sources of money for improvements to the arterial and collector road systems are State and County funding with some City participation. Hastings will continue to seek County, State and Federal funding for major transportation improvements.

The County has adopted cost sharing policies with its cities for right-of-way, road construction and related improvements. The County's cost sharing policy requires cities with population greater than 5,000 to contribute to roadway improvement costs dependent on the types of improvements being made.

New roadway extensions as part of new developments are anticipated to continue to occur. Land developers are required to finance all new streets and related facilities that are required to serve private projects. New developments will be required to pay for their fair share (as determined by the City) of transportation improvements.

It is anticipated that street reconstruction priorities will be adopted as part of the Pavement Management Program (see above). The City funding policy for the reconstruction of City streets is that improvements be financed by special assessment, MSA funds (if appropriate) and City debt levy.

Objective 2: Provide opportunities for people to bicycle and walk in their neighborhoods for exercise and as an alternative to driving.

Policies:

Active Transportation System

Sidewalks and trails serve a variety of functions in Hastings such as recreation, transportation, education and/or environmental protection. The sidewalk and trail system should be designed in relation to the sidewalk/trail user and the characteristics of the adjacent land uses or roadways.

The implementation of the sidewalk and trail plans should result in continuity to fulfill overall community needs. Disruptive gaps and dead-ends in the system should be eliminated to allow for a looped system that is convenient to users. The connections to the Dakota County bikeway system through Nininger, Marshan and Ravenna Townships will allow for increased regional recreational opportunities Hastings residents.

To be effective, the sidewalk and trail system must be safe and maintained on a continual basis. Minimum design standards that are based upon the function of the sidewalk and trail need to be followed in the design, construction and maintenance of the facility. Further, long-range commitment for development and maintenance of the sidewalk/trail system needs to be recognized in the annual budgeting and capital improvement programming activities of the City.

Currently, the City has offers following connections over major regional barriers:

- · Protected off-street trail along the east side of the Highway 61 Mississippi River Bridge.
- · Off-street trail connection beneath the Highway 61 Mississippi River bridge.
- · At-grade trail and an at-grade sidewalk crossing of the rail lines at 2nd Street East.
- · At-grade crossing of rail line at 18th Street East.
- · Sidewalks on both sides of the bridge over the Vermillion River at Vermillion Street.
- · Sidewalks on either side of the bridge over the Vermillion River at Vermillion Road.

Off-Road Multiple-Use Paths

Extend the Hastings trail system by building paths as outlined in the Existing & Planning Sidewalks and Trails Map.

That plan envisions off-road paths winding through future neighborhoods, along the rivers southeast along a combination of Bailly Parkway, 10th Street and Ravenna Trail.

The paths through the neighborhoods would be created during the subdivision process. The Park, Trails and Open Space Plan along described design standards for those paths, which may be used by bicyclists, pedestrians and skaters.

Sidewalks

Require that developers include a five-foot-wide concrete sidewalk on at least one side of each new local street. Require that future collector streets have a five-foot concrete sidewalk on one side and a ten-foot-wide bituminous multiple-use path on the other.

Objective 3: Plan for future the Red Rock transit line that will connect Hastings to downtown Saint Paul.

Policies:

Fixed-Route Transit Service

The City will explore options with the Metropolitan Council to provide Hastings with transit services as Hastings grows and congestion on the area's road networks increases. Currently, there is no fixed-route transit in Hastings. Hastings is in Metropolitan Council's Market Area III and is deemed as an area for future transit service. It is assumed that the first stage of transit service would be commuter bus transit as a precursor to the Red Rock commuter rail line.

Red Rock Transitway

Work with the Metropolitan Council and MNDOT to plan for the Red Rock Line corridor that could potentially bring bus rapid transit services to Hastings.

Design considerations for the rail station site and vicinity are contained in Heart of Hastings Plan. It is anticipated that commuter bus service will be initiated before rail service in order to build the practice of riding transit as well as to reduce congestion on Highways 10 and 61.

Dial-a-Ride

Transit Link is the Twin Cities dial-a-ride minibus or van service for the general public, where regular route transit service is not available. The City should continue to support Transit Link.

Objective 4: Maintain safe facilities that allow for the movement of goods via rail lines, the Mississippi River and the highway system to serve Hastings and the larger Twin Cities metropolitan area.

Policies:

Commercial and Recreational Navigation

The City will cooperate with regional planning efforts to improve rail and water transportation systems.

The City will continue to support the maintenance of the 9-foot deep navigation channel and Lock and Dam No. 2 for barge and recreational traffic.

The City will allow limited and temporary barge fleeting during periods of barge delay at Lock and Dam No. 2.

Railroads

The City supports installation of the latest technologies to improve safety at the on-grade railroad crossings especially in the downtown area and lessen noise impacts to residential areas.

The City will work with the Canadian Pacific Railway and MNDOT to provide safe on-grade railroad crossings on City streets. The City will coordinate improvements to limit noise complaints from railroad operations with the Canadian Pacific Railroad representatives.

Aviation

The Hastings zoning ordinance regulates the height of structures so they will not pose a hazard to air navigation including electronic interference. If needed, the City will notify the FAA as defined under code of federal regulations CFR – Part 77, using the FAA Form 7460-1, "Notice of Proposed Construction or Alteration.

