



**Comprehensive Plan Background Report (draft)**

**City of Minot**

**October 2010**

**Project No. 005459-01000-1**

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October 11, 2010



Donna Bye, City Planner  
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Re: Minot Comprehensive Plan  
Client Name: City of Minot  
Client Project No.: 5459  
Bonestroo File No.: 5459-10001

Dear Donna:

We are pleased to submit the comprehensive Plan background report for staff and Steering Committee review and comment. We will be presenting this report at our upcoming meetings on October 19<sup>th</sup> and 20<sup>th</sup>. If you have any questions regarding the content please do not hesitate to call. Thank you and I look forward to seeing you on the 19<sup>th</sup>.

Sincerely,

BONESTROO

A handwritten signature in blue ink that reads "Tina Goodroad".

Tina Goodroad  
Associate

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# BACKGROUND OVERVIEW

## INTRODUCTION

The purpose of the background report is to understand existing community characteristics and challenges facing the City of Minot. This information will inform the comprehensive planning process and provide a guide for making decisions concerning the community's future. To facilitate effective and meaningful planning efforts, it is important to understand current conditions in the City. The following sections will discuss demographics, land use, community facilities, parks and trails, water resources, and the transportation system in an effort to better understand the key issues and challenges of the community. This background will serve as a guide for participants in the planning process.

The City's last update to the Comprehensive Plan was officially adopted in 1995. The City has seen many changes, especially in terms of population growth and development since the adoption of the last Comprehensive Plan. The 2030 Comprehensive Plan will focus on planning and guiding development and redevelopment for the next 20 years.

## ABOUT MINOT

The City of Minot is located in north central North Dakota situated on the Souris River with a population of approximately 37,000. It is the fourth largest City in the state (17.58 sq. mi.), the county seat for Ward County, and serves as the regional trade area for adjacent McHenry and Renville counties and a large portion of northern North Dakota, southwestern Manitoba and southeastern Saskatchewan. Through the years, Minot has been a railhead and military center. Today, the city is strong and diverse in economic sectors of agriculture, energy, healthcare, education, tourism, business and retail activity.

Minot was founded in 1886 (incorporated June 28, 1887) when James J. Hill's Great Northern Railway ended its push through the state for the winter, after having difficulty constructing a trestle across Gassman Coulee. A tent town sprung up over night, as if by "magic," thus the city came to be known as the Magic City and in the next five months, the population increased to over 5,000 residents.

The town site was chosen by the railroad to be placed on the land of then homesteader Erik Ramstad. Mr. Ramstad was convinced to relinquish his claim, and became one of the city leaders. The town was named after Henry Davis Minot, a railroad investor and friend of James J. Hill.

Minot was a typical western boom town in its early years. The 1950's saw a large influx of federal funding into the region with the construction of the Minot Air Force Base, an Air Defense Command Base that later became a Strategic Air Command Bomber and Minuteman missile base. In 1969 a severe flood on the Souris River devastated the city. Following this, the Army Corps of Engineer's straightened the path of the river through the city and built several flood control structures in Canada.

## **AIR FORCE BASE**

The Minot Air Force base is located 8 miles north of the city limits. Construction first began in 1954 when the City of Minot sold the Air Force on becoming a site for a new base in 1954. The base is home to 6,000 airmen and approximately 550 civilians and an additional 500 contractors. Approximately half of the airmen live on base in dormitories or single family style housing, while the other half live in Minot. The base is an integral part of the city's economy and both the base and city have a good working relationship.

Minot Air Force Base is home to two major Air Force units: the 5th Bomb Wing and the 91st Missile Wing. The 5th Bomb Wing and 91st Missile Wing are Air Force Global Strike Command units. The 5th Bomb Wing is the host wing.

## **PLANNING HISTORY**

### **PRELIMINARY REPORT – SCHOOLS AND PARKS – PART OF THE CITY PLAN - MINOT, NORTH DAKOTA**

(Harland Bartholomew and Associates, January 1959)

The Schools and Parks report, part of Minot's first City Plan, involved "long range plans for developing the school and park system in accordance with modern standard and future requirements." The Plan was prepared at a time when Minot was growing rapidly, having added almost 15,000 population in twenty years – about double – and when projections in the Plan assumed it would add another 15,000 population, or another 50% increase, in the next twenty years. The Plan proposed five new elementary school sites, a new junior high school site and a new senior high school site, as well as major additions and remodeling to existing schools in the system. Minot's population by 1980 was assumed to reach about 45,000 – more than it actually is today (2010 estimate: 42,515). Instead of a continuation of this rocket-fast post World War II growth spurt, Minot was actually on the cusp of a moderate but steady growth streak that would extend another forty years.

The proposed Parks Plan included one new large park, significant additions to two other large parks, five new neighborhood parks in outlying areas, and two neighborhood parks at existing school sites.

### **MINOT NORTH DAKOTA COMPREHENSIVE PLAN**

(Harland Bartholomew and Associates, March 1969)

The 1969 Plan represents the first truly comprehensive planning effort undertaken by the City and is a textbook example of the many "701" plans, prepared pursuant to Section 701 of the Federal Housing Act of 1954, administered by HUD, in the 1950s, 60s and 70s. The 1969 Plan continued the same optimistic outlook for Minot's growth potential, predicting a population of 50,000 by 1990, bolstered by its role as a transportation center, "vast agricultural resources", "considerable mineral resources" and the Air Force Base. The Plan recognized Minot's role as a railroad hub, but tempered its growth potential citing declining rural population, displacement of railroad workers by modern equipment, and limited expansion of manufacturing.

The Plan cited a 1962 Special Census and a 1966 survey, both showing population very near to the 32,900 number that was eventually counted in the full 1970 Census. Minot had entered the

moderate growth era, but the planners were still predicting rapid growth. Major residential growth was expected in the northwest quadrant of the City north of the Souris River and west of Broadway. An expansion plan for Minot international Airport was included in the Plan, and the airport was eventually expanded, but not exactly as recommended in the 1969 Plan. The east-west runway was extended, but not as far to the east, and the NW-SE runway was extended further SE than depicted in the Plan.

A significant element of the 1969 Plan was a Central Business District Plan, one feature of which was the closing of Main Street between Central Avenue and Third Avenue South. The southern two blocks would have been turned into a pedestrian plaza – as was the fashion in many cities at the time – and the northern block would have been developed in a suburban style collection of retail shops behind a parking lot. Thankfully, those plans never saw the light of day, as most pedestrian malls have proven to be a disaster for the economic and social life of downtown areas (Minneapolis's Nicollet Mall being the exception that proves the rule – but there, buses and taxis still provide significant traffic and access).

#### MINOT URBAN AREA TRANSPORTATION STUDY

(North Dakota State Highway Department, Planning and Research Division, August 1969)

In conjunction with the 1969 Comprehensive Plan, a transportation study was prepared to handle the 75% growth in traffic anticipated by the year 1990. The west bypass was proposed in this study, as well as additional lanes on the south bypass. In the NW part of the City, 16th Street and 21st and 30th Avenues NW were proposed as new roads, as was 3rd Street NE continuing from north of downtown to the airport. An extension of 8th Street SW across the railroad and either side of Burdick Expressway was proposed but never built. An extension of 11th Avenue SE east across the railroad and the Souris River connecting to 8th Avenue SE and the Fairgrounds was also proposed but never built. Numerous intersections in all parts of the City are also recommended in the Study.

#### MINOT URBAN UTILITIES STUDY

The urban Utilities Study analyzed sanitary sewer, water distribution, and storm drainage systems in Minot and the surrounding developing area. The study was prepared for the Ward County Planning Commission and covered areas expected to develop by the year 2000. Projected growth in the study relied on previous projections by others and continued an optimistic upward trend, although not quite as much as previous studies, since the 1970 Census had been done and its numbers tempered the analysis.

To encourage efficient land use the study recommends development policies including minimum five-acre residential lot size for areas outside the proposed development area and allowing lot sizes as small as 6,000 square feet inside the urbanized area. The study goes so far as to suggest that "city and county land use controls (zoning and subdivision regulations) should be re-evaluated . . . to channel development to areas where urban services can be provided most efficiently and to discourage or prohibit urban development elsewhere."

The sewage system part of the study identifies eight small lagoons used to treat sewage at the edges of the city and well water pollution near areas with a significant number of individual septic systems. The study concludes that extending the Minot municipal system is "substantially more economical" than other alternatives for dealing with the issue.

#### **CITY OF MINOT – COMPREHENSIVE PLAN BACKGROUND REPORT**

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The water system analysis revealed low water pressure in several areas at peak demand times, due to increased water usage and deterioration of some parts of the system. The study identified future service areas out to the year 2000, with recommended significant improvements and additions to the system in the NW, South and East areas of Minot, including new pumping and storage facilities, and extensions of distribution mains.

The storm drainage system analysis noted significant areas along and either side of the Souris River – roughly east-west through the heart of Minot – as prone to flooding. The study included the same growth areas out to the year 2000 as in the other parts of the study. The study recommends that all new development of a certain size maintain pre-development rates of runoff, that a new subdivision be able to pass through drainage from upstream, and that all projects have plans prepared by a qualified engineer – regulations that would be ideal to enforce today. Improvements recommended by the study include the Souris River channel cutoffs proposed by the Army Corps of Engineers, and alternatives for numerous trunk storm interceptors and major detention basin projects.

#### **LAND USE GUIDELINES – PROPOSED AMENDMENTS TO THE LAND USE PORTION OF THE CITY COMPREHENSIVE PLAN**

(Community Development Citizen Committee, November, 1979)

The amendments proposed in 1979 are policies and guidelines, not land use map changes. They address what were identified as four main problems: traffic congestion, demand for single-family residential at the edges of Minot, leap-frog development caused by rapid growth, and conflicts between incompatible land uses. The guidelines proposed detailed policy solutions and represent a commitment to good planning by the City ten years after the last major comprehensive plan effort.

#### **MINOT URBAN TRANSPORTATION STUDY**

(BRW, Inc., August, 1986)

The transportation study included short-range, mid-range, and long-range recommended improvements to the roadway system in Minot. Key recommendations included improved access to downtown and widening portions of Broadway, Upgrading the U.S 2/52 Bypass, adding new arterial streets to complement Broadway and Burdick Expressway, and other local operational and safety problems.

The study recognized the uncertainty of projecting growth in population and employment (and therefore traffic) and adopted both low- and high-growth assumptions into the study. Those assumptions are the most realistic of the several summarized in this background of historical planning documents.

#### **CITY OF MINOT COMPREHENSIVE PLAN**

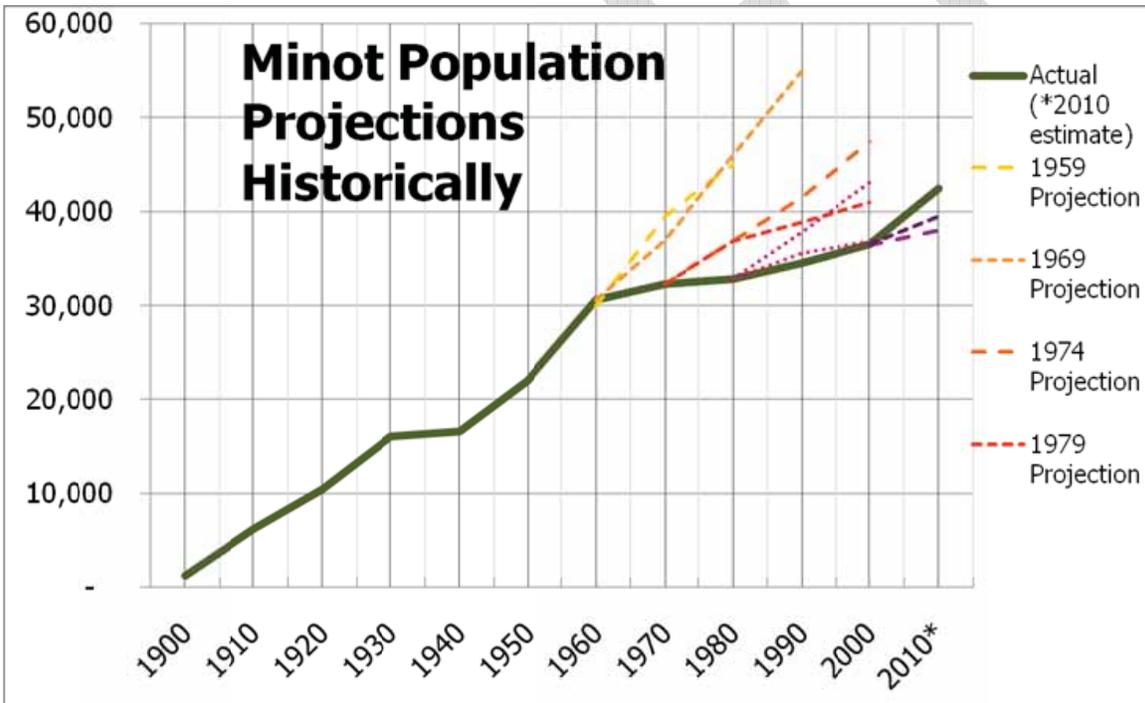
(Minot Planning Commission and City Staff, April, 1995)

The 1995 plan included a significant public participation process to identify issues and goals for the City. It laid out a land use plan including ambitious growth areas outside the existing city and expected significant new industrial growth. The plan included more single family residential land and also identified public parks and open space.

CITY OF MINOT LAND USE AND TRANSPORTATION PLAN  
 (Olsson Associates, November 2002)

The 2002 plan was largely a transportation plan to identify new roadways and needed improvements, but it had some important land use considerations as well. First, it suggested that there was enough land guided for non-residential uses (commercial, industrial, institutional, park, green space, etc.) in the existing (1995) Land Use plan; second, it introduced two new elements: Gateways - areas around major city entrances – and Town Centers – nodes of more intense mixed land use away from downtown. Third, it identified green space corridors to provide trail linkages and amenity in significant areas around the City. Fourth, it emphasized that development in land at the fringes of Minot must show that it can be readily served with urban services at some point, instead of being a barrier to such development.

The graphic below illustrates historic population projections as depicted in the various plans summarized above.



## DEMOGRAPHICS

The identification of trends in population growth and other demographic data is a very important part of the comprehensive planning process. It can provide clues to future growth patterns and indicate what types of housing and public facilities may be needed in the future. For example, an increase in young couples with children would require starter housing, new parks and schools, and new or upgraded community facilities; whereas, an increase in the elderly population would lessen the need for schools and increase the need for specialized housing. This chapter of the background report contains information on Minot's population including age, income, and household structure.

### HISTORIC POPULATION TRENDS

Table 1 shows the changes in population that have taken place in Minot and its surrounding trade areas between 1980 and 2000. Comparisons are also made to the state and the nation. During the 1980s, Minot experienced a growth rate of 5.2 percent, which was counter to the statewide trend of population decline. Moreover, Minot was at the center of a region that experienced significant population decline during this time. Many of the counties surrounding Minot declined in population by more than 10 percent, and in some instances more than 20 percent.

The 1990s generally saw a continuation of the same growth trends experienced in the 1980s. Minot's population grew by nearly six percent increasing to over 36,500, yet its surrounding counties and tertiary trade areas in Montana and Canada continued to experience significant population decline.

Although the region surrounding Minot experienced significant population decline during the 1980s and 1990s, there are indications that northwestern North Dakota is once again growing in population as workers are being attracted to job opportunities in the oil and rail industries as well as a result of expansion of the Minot Air Force Base. Because much of the recent economic expansion in the region has occurred toward the latter half of the 2000s, many of the agencies that compile demographic data, such as the US Census and the North Dakota State Data Center, have yet to accurately reflect these emerging growth trends in their statistics. Therefore, the exact nature of the growth remains somewhat unclear until data from the 2010 Census is released, which is likely to occur sometime in mid-2011.

**TABLE 1**  
**Historic Population Trends 1980-2000**  
**Minot and Surrounding Trade Areas**

Area	1980	1990	2000	Change 1980-1990		Change 1990-2000	
				Number	Percent	Number	Percent
Minot	32,843	34,544	36,567	1,701	5.2%	2,023	5.9%
Minot Airforce Base	9,880	9,095	7,599	-785	-7.9%	-1,496	-16.4%
Ward County	58,392	57,921	58,795	-471	-0.8%	874	1.5%
Bottineau County	9,239	8,011	7,149	-1,228	-13.3%	-862	-10.8%
Burke County	3,822	3,002	2,242	-820	-21.5%	-760	-25.3%
Divide County	3,494	2,899	2,283	-595	-17.0%	-616	-21.2%
McHenry County	7,858	6,528	5,987	-1,330	-16.9%	-541	-8.3%
McKenzie County	7,132	6,383	5,737	-749	-10.5%	-646	-10.1%
McLean County	12,383	10,457	9,311	-1,926	-15.6%	-1,146	-11.0%
Mountrail County	7,679	7,021	6,631	-658	-8.6%	-390	-5.6%
Pierce County	6,166	5,052	4,675	-1,114	-18.1%	-377	-7.5%
Renville County	3,608	3,160	2,610	-448	-12.4%	-550	-17.4%
Rolette County	12,177	12,772	13,674	595	4.9%	902	7.1%
Sheridan County	2,819	2,148	1,710	-671	-23.8%	-438	-20.4%
Williams County	22,237	21,129	19,761	-1,108	-5.0%	-1,368	-6.5%
Primary & Secondary Trade Area Subtotal	157,006	146,483	140,565	-10,523	-6.7%	-5,918	-4.0%
NW Montana <sup>1</sup>	49,278	44,391	40,662	-4,887	-9.9%	-3,729	-8.4%
SE Saskatchewan <sup>2</sup>	31,519	32,181	30,238	662	2.1%	-1,943	-6.0%
SW Manitoba <sup>3</sup>	14,561	15,026	13,848	465	3.2%	-1,178	-7.8%
Tertiary Trade Area Subtotal	95,358	91,598	84,748	-3,760	-3.9%	-6,850	-7.5%
North Dakota	652,717	638,800	642,200	-13,917	-2.1%	3,400	0.5%
United States	226,545,805	248,709,873	281,421,906	22,164,068	9.8%	32,712,033	13.2%

Source: US Census; Canada Census

<sup>1</sup> Includes the counties of Daniels, McCone, Phillips, Richland, Roosevelt, Sheridan, and Valley

<sup>2</sup> Canadian Census Division 1, Census years 1991 and 2001

<sup>3</sup> Canadian Census Division 5, Census years 1991 and 2001

**POPULATION ESTIMATE**

The North Dakota State Data Center estimates the 2008 population for Minot was 35,419, which is a decline of over 1,100 persons or -3.1 percent since the 2000 Census. Based on construction trends in the City of Minot, this does not appear to be an accurate estimate of Minot's current population. Accurate population estimates are an important way for a community to stay abreast of changes. This is especially critical when unforeseen change occurs rapidly, which can result in such adverse impacts as housing shortages, traffic congestion, unnecessary pollution, or school crowding.

In order to get a more accurate estimate of the current population, building permit data and housing vacancy rates were analyzed to better understand the increase in households, and subsequently population, since 2000. According to Minot records, 2,094 new housing units were permitted for construction from 2000 to 2009, while 57 units were permitted for demolition, leaving a net gain of 2,037 new units. Given an average household size of 2.27 in Minot, this would translate to approximately 4,600 new persons.

Furthermore, according to the 2000 US Census about six percent (or 960) of all housing units were vacant. Anecdotal evidence indicates that the number of vacant housing units has declined substantially since 2000. Assuming that the overall vacancy rate has declined to two percent, this would result in an additional 400 households or roughly 900 persons. Below is a description of how the 2010 population estimate for Minot was calculated.

1. Minot Housing Units in 2000 = 16,485
2. New Housing Units Constructed from 2000 to 2009 = 2,094
3. Demolished Housing Units from 2000 to 2009 = 57
4. Minot Housing Units in 2010 = 18,522 (16,485 + 2,094 - 57)
5. Estimated Housing Units Occupied = 98%
6. Estimated Households = 18,152 (18,522 x 98%)
7. Persons Per Household from most recent Census = 2.27
8. Population in Households = 41,205 (18,152 x 2.27)
9. Population in Group Quarters from most recent Census = 1,310
10. Estimate of Total Population = 42,515 (41,205 + 1,310)

**POPULATION PROJECTIONS**

According to Table 2, which shows population projections for Minot, the city is expected to have considerable growth over the next 20 years. Four formulas were used to calculate these projections. The first method is based on actual population counts for the City of Minot for the years 1980 to 2000. It is assumed that growth will return to these trends through 2030. The other three formulas are based on residential construction rates over the past decade. The formulas are as follows:

**Historic Growth Rates:** This method uses the average rate of growth the city saw per decade between 1980 and 2000. This calculation reveals that the city grew by 5.2 percent during the 1980s and 5.9 percent during the 1990s. Thus, the city’s 2020 and 2030 populations were calculated by increasing the population by 5.5 percent each decade beginning with the 2010 estimate.

**Straight Line (low):** This method uses the average number of new households based on construction trends from 2000 to 2004. From 2000 to 2004, the city added approximately 150 new households each year. Thus, the city’s 2020 and 2030 populations were calculated by adding roughly 340 people each year to its 2010 base population.

**Straight Line (medium):** This method uses the average number of new households based on construction trends from 2000 to 2009. From 2000 to 2009, the city added approximately 200 new households each year. Thus, the city’s 2020 and 2030 populations were calculated by adding roughly 450 people each year to its 2010 base population.

**Straight Line (high):** This method uses the average number of new households based on construction trends from 2005 to 2009. From 2005 to 2009, the city added approximately 275 new households each year. Thus, the city’s 2020 and 2030 populations were calculated by adding roughly 625 people each year to its 2010 base population.

As shown, in Table 2, Minot is expected to grow to a population of between 47,400 and 54,900 by 2030. This represents an 11.5 to 29.1 percent increase over the 2010 population that will add between 4,900 and 12,400 new residents.

**TABLE 2**  
Population Projections 2010-2030  
City of Minot

Projection Method	Estimate	Projections		Change 2010-2020		Change 2020-2030	
	2010	2020	2030	Number	Percent	Number	Percent
Historic Growth Rate (0.55% per year)	42,515	44,900	47,400	2,385	5.6%	2,500	5.6%
Straight Line (low)	42,515	45,800	49,000	3,285	7.7%	3,200	7.0%
Straight Line (medium)	42,515	46,900	51,300	4,385	10.3%	4,400	9.4%
Straight Line (high)	42,515	48,700	54,900	6,185	14.5%	6,200	12.7%

Source: Bonestroo, Inc.

**POPULATION BY AGE**

Table 3 shows Minot's population breakdown by age for the years 2000 and 2010. Twenty to 24 year-olds make up the largest population segment in Minot, comprising 9.4 percent of the city's total population. Between 2000 and 2010 the city saw its largest population gain in the 55 to 59 year-old range, which gained 1,153 persons for a 76.6 percent increase. In terms of percent growth, the 60 to 64 and 30 to 34 year-old groups saw the next highest increases with 45 percent and 41 percent growth, respectively. However, the 60 to 64 group still comprises a relatively small segment of the city's total population. In terms of absolute numbers, the 25 to 29 and 50 to 54 year-old groups also saw significant increases of 731 and 642, respectively. The 40 to 44 year-old group was the only age group to decline from 2000 to 2010.

The 20 to 29 year-old age group is typically the group that is starting out on its own and putting stakes into the community. Members of this age group, particularly in the upper end, are beginning to enter the family formation years, thus continued growth in this age group may indicate increasing school enrollments in the near future. In addition, this is typically the age when many are seeking higher education and broader employment opportunities.

The 30 to 49 year-old age groups are often looked at as the new generation of community leaders and business owners, and their children are found throughout the school system from kindergarten to 12th grade. These age groups also tend to be active in the community and demand high quality services for their children and families. However, these age groups also tend to be highly mobile and may move away from a community to find better opportunities. Within this population range, the 30 to 34 year-olds are typically first-time homebuyers while the 35 to 49 year-olds are typically included in the move-up homebuyer market. There are mixed indicators among these age groups in Minot. There have been population increases in the lower age cohorts within this population range, but a decrease in the 40 to 49 year-old group.

Persons in the 50 to 64 year age group tend to be empty nesters and may move to smaller homes while young seniors aged 65 to 74 often seek a variety of housing options. Empty nesters in these age groups begin to abandon homes with several bedrooms and two or more stories for lower maintenance, two bedroom units, often on one story. All of the cohorts within this population range increased in Minot from 2000 to 2010.

**TABLE 3**  
 Population by Age 2000 & 2010  
 City of Minot

Age Cohort	2000		2010 (estimate)		Change 2000-2010	
	Number	Percent	Number	Percent	Number	Percent
Under 5	2,418	6.6%	2,778	6.5%	360	14.9%
5-9	2,227	6.1%	2,643	6.2%	416	18.7%
10-14	2,314	6.3%	2,521	5.9%	207	9.0%
15-19	2,837	7.8%	2,863	6.7%	26	0.9%
20-24	3,571	9.8%	4,014	9.4%	443	12.4%
25-29	2,717	7.4%	3,448	8.1%	731	26.9%
30-34	2,182	6.0%	3,085	7.3%	903	41.4%
35-39	2,512	6.9%	2,691	6.3%	179	7.1%
40-44	2,617	7.2%	2,260	5.3%	-357	-13.7%
45-49	2,602	7.1%	2,604	6.1%	2	0.1%
50-54	2,054	5.6%	2,696	6.3%	642	31.3%
55-59	1,505	4.1%	2,658	6.3%	1,153	76.6%
60-64	1,393	3.8%	2,022	4.8%	629	45.1%
65-69	1,289	3.5%	1,461	3.4%	172	13.3%
70-74	1,357	3.7%	1,386	3.3%	29	2.2%
75-79	1,107	3.0%	1,145	2.7%	38	3.4%
80-84	927	2.5%	1,119	2.6%	192	20.7%
85+	938	2.6%	1,121	2.6%	183	19.5%
Total	36,567	100.0%	42,515	100.0%	5,948	16.3%

Sources: US Census; Bonestroo, Inc.

**HOUSEHOLDS**

The character of households can change over time in two ways as it relates to a city’s population growth: by number and by size. If over time, population growth is coupled with an increase in both the number and size of households, then it generally tends to indicate a community growing from within, i.e. a high birth rate. However, if population growth is reflected by an increase in the number of households and a decrease in the size of the household, then it may indicate that the community is growing due to an influx of new residents.

Table 4 shows that the number of households increased in Minot between 1990 and 2000, but the size of households decreased, indicating a community growing from an influx of new residents. The number of households increased in the city by 11.1 percent from 1990 to 2000 while its population increased by 5.9 percent. On average, there were 2.39 persons per household in 1990 and 2.27 in 2000. This represents a decrease of 5.0 percent. Though consistent with the national trend of smaller families and more single person households, it represents a sharper decline than the national rate of change.

**TABLE 4**  
 Household Characteristics 1990 & 2000  
 City of Minot, Ward County, North Dakota, and US

Area	1990		2000		1990-2000			
	Households	PPH	Households	PPH	Households		PPH	
					Change	Percent	Change	Percent
City of Minot	13,965	2.39	15,520	2.27	1,555	11.1%	-0.12	-5.0%
Ward County	21,485	2.59	23,041	2.46	1,556	7.2%	-0.13	-5.0%
North Dakota	240,878	2.55	257,152	2.41	16,274	6.8%	-0.14	-5.5%
United States	91,947,410	2.63	105,480,101	2.59	13,532,691	14.7%	-0.04	-1.5%

Source: US Census

**HOUSEHOLD INCOME**

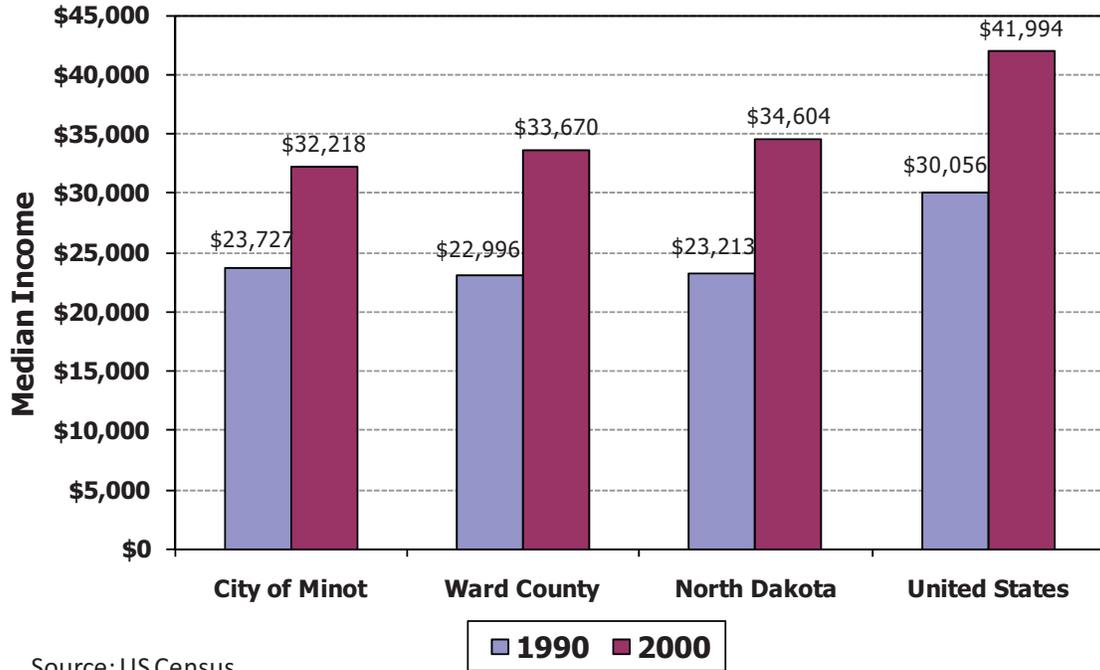
Table 5 and Figure 1 show the median household income in Minot, Ward County, North Dakota, and the nation. Household income in North Dakota tends to lag the nation as a whole. This is somewhat due to the fact that the state’s population is slightly older than most parts of the country and, therefore, consists of more retirees who are no longer in their peak earning years. Nonetheless, the state as well as Ward County managed to experience a significant increase in median incomes between 1990 and 2000 compared to the national rate of growth. However, the median income in Minot did not manage to achieve a similar rate of growth, and, though the median income increased, it was substantially below that of the state and the nation.

**TABLE 5**  
 Median Household Income 1990 & 2000  
 City of Minot, Ward County, North Dakota, and US

Area	1990	2000	Pct. Chg. 1990-2000
City of Minot	\$23,727	\$32,218	35.8%
Ward County	\$22,996	\$33,670	46.4%
North Dakota	\$23,213	\$34,604	49.1%
United States	\$30,056	\$41,994	39.7%

Source: US Census

**FIGURE 1**  
 Median Household Income 1990 & 2000  
 City of Minot, Ward County, North Dakota, and US



Source: US Census

**HOUSEHOLD TYPE**

Changes in household type can impact the types of housing and services demanded in a community. For example, declines in the number of families with young children will not only impact local school systems but will also mean less demand for typical detached, single family housing and parks with active recreational spaces, such as ball fields and playgrounds. For several decades there has been a noticeable decline in the number of families with young children and a commensurate increase in the number of single-person households and non-traditional families. Table 6 and Figure 2 illustrate how the structure of Minot households compares to Ward County, North Dakota, and the nation. Since Minot is an important regional center for education and air defense, there is a significant concentration of single-person households who stay in the area for short periods of time, which would explain the higher than average percentage of single-person households and other, or roommate, households. Rapid growth in the last few years will likely exacerbate this condition as many single persons are likely moving into the area for work in the nearby oil fields.

**TABLE 6**

Household Type 2000  
City of Minot, Ward County, North Dakota, and US

Area	Number of Households					
	Married w/child	Married w/o child	Other Family	Singles	Other	Total
City of Minot	3,110	4,129	2,026	5,046	1,209	15,520
Ward County	6,139	6,585	2,646	6,266	1,405	23,041
North Dakota	62,002	75,431	28,717	75,420	15,582	257,152
United States	24,835,505	29,657,727	17,294,115	27,230,075	6,462,679	105,480,101

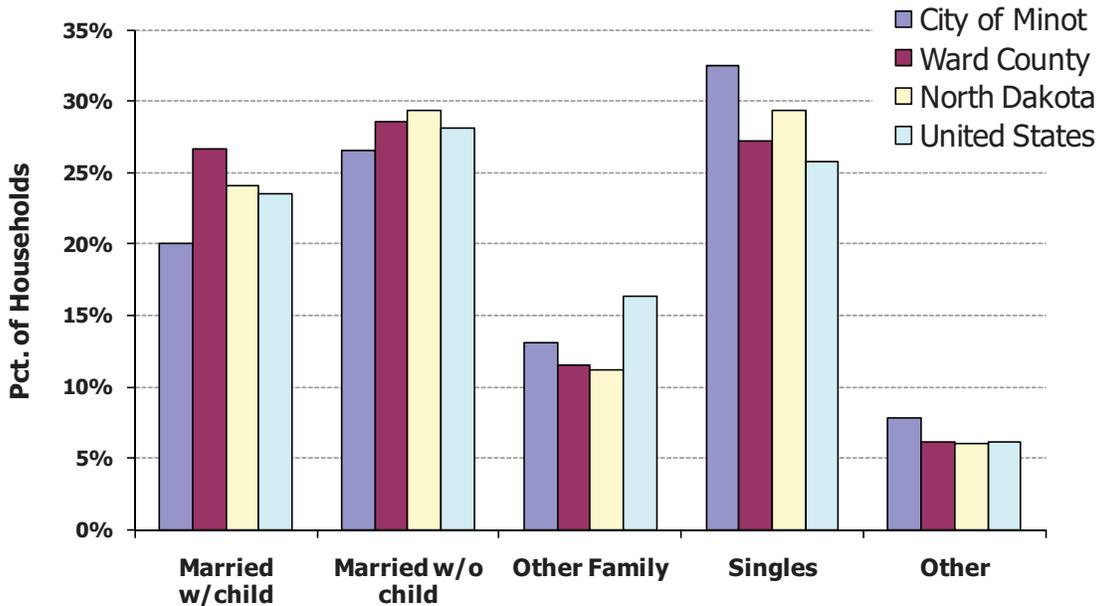
  

Area	Percent of Households					
	Married w/child	Married w/o child	Other Family	Singles	Other	Total
City of Minot	20.0%	26.6%	13.1%	32.5%	7.8%	100%
Ward County	26.6%	28.6%	11.5%	27.2%	6.1%	100%
North Dakota	24.1%	29.3%	11.2%	29.3%	6.1%	100%
United States	23.5%	28.1%	16.4%	25.8%	6.1%	100%

Source: US Census

**FIGURE 2**

Household Type 2000  
City of Minot, Ward County, North Dakota, and US



Source: US Census

# Economic Overview

Economic health is an important component of a healthy and thriving community. A strong commercial and industrial base provides jobs to community residents, contributes to a city’s tax base, and can be a source of psychological strength to a community. This can best be explained when one compares a downtown area consisting of boarded up buildings with one that has a thriving business sector. The community with the vacant or boarded up buildings appears listless and drab, while the one with the strong downtown community is lively, busy and thriving.

Minot has a strong economy. The city’s existing commercial and industrial base is thriving while new commercial and industrial establishments continue to move into the city.

## EMPLOYMENT

Table 7 shows the major employers in Minot and the products or services they provide. The Minot Air Force Base is the largest employer in the Minot area with 4,435 employees followed by Trinity Health. Of the top 13 employers, five are government related, three provide social service assistance, two provide medical/health care services, and one is in hospitality. None of the largest employers in the Minot area are involved in manufacturing.

**TABLE 7**  
Major Employers 2010  
Minot Area

<u>Major Employer</u>	<u>Product or Service</u>	<u>Employees</u>
Minot Air Force Base	Armed Services	4,435
Trinity Health	Health Care Facilities and Clinics	2,720
Minot Public Schools	Education	1,419
Minot Vocational Adjustment Workshop	Social Services	553
Minot State University	Education	510
Dakota Boys & Girls Ranch	Social Services	452
MLT, Inc.	Hospitality	349
City of Minot	Local Government	311
Ward County	Local Government	216
SRT Communications	Telecommunications	206
Manor Care	Health Care Facilities and Clinics	150
Burdick & Corps Center	Social Services	125
Westlie Motors	Automotive Sales	122

Source: Minot Chamber of Commerce

Table 8 and Figure 3 on the following page shows the number of jobs located in Ward County and the state by industry for 2000 and 2009. Ward County added just over 2,800 jobs between 2000 and 2009, which was a job growth rate of nearly 11 percent. This rate of job growth slightly lagged the state’s growth rate during this time, which was 13 percent.

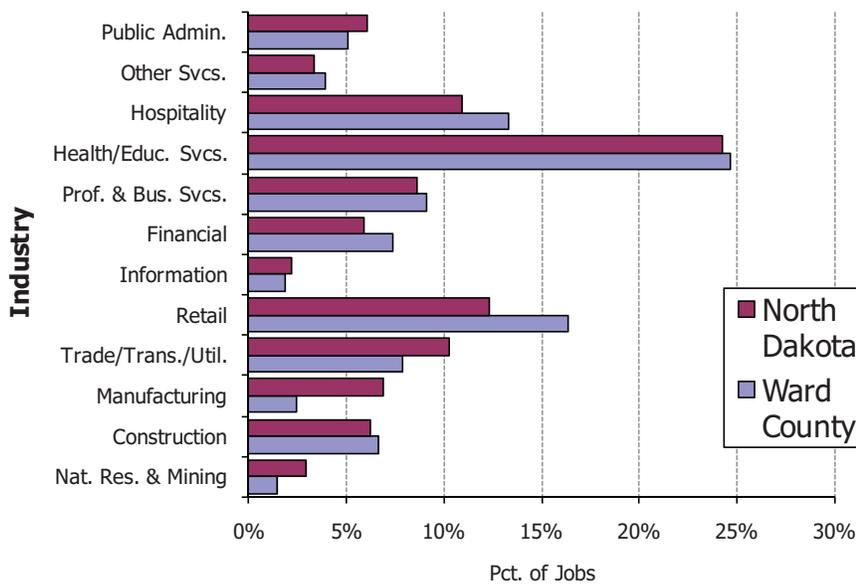
Ward County’s distribution of jobs mirrors that of the state. Industries accounting for the most jobs are Health and Educational Services (25%), Retail Trade (16%), and Leisure and Hospitality (13%). Rapidly growing industries, however, include Mining (72%), Construction (42%), Leisure and Hospitality (27%), and Financial Activities (22%). In terms of overall job creation, though, biggest job producers were Leisure and Hospitality (828 jobs), Health and Education Services (619 jobs), and Construction (569 jobs).

**TABLE 8**  
Employment by Industry 2000 & 2009  
Ward County and North Dakota

INDUSTRY	Ward County		Change 00-09		Distribution		North Dakota		Change 00-09		Distribution	
	2000	2009	No.	Pct.	2000	2009	2000	2009	No.	Pct.	2000	2009
<b>Goods Producing Domains</b>												
Natural Resources & Mining	244	419	175	71.7%	0.9%	1.4%	5,850	10,389	4,539	77.6%	1.9%	3.0%
Construction	1,351	1,920	569	42.1%	5.2%	6.6%	16,908	21,714	4,806	28.4%	5.5%	6.2%
Manufacturing	658	707	49	7.4%	2.5%	2.4%	24,360	23,972	(388)	-1.6%	7.9%	6.9%
<b>Service Producing Domains</b>												
Wholesale Trade, Transp., & Util.	2,196	2,276	80	3.6%	8.4%	7.8%	32,159	35,994	3,835	11.9%	10.4%	10.3%
Retail Trade	4,605	4,740	135	2.9%	17.6%	16.3%	41,352	43,068	1,716	4.1%	13.4%	12.3%
Information	608	551	(57)	-9.4%	2.3%	1.9%	8,600	7,687	(913)	-10.6%	2.8%	2.2%
Financial Activities	1,747	2,136	389	22.3%	6.7%	7.4%	16,917	20,512	3,595	21.3%	5.5%	5.9%
Professional & Business Services	2,720	2,636	(84)	-3.1%	10.4%	9.1%	25,898	30,069	4,171	16.1%	8.4%	8.6%
Health & Education Services	6,527	7,146	619	9.5%	24.9%	24.6%	74,072	84,903	10,831	14.6%	24.0%	24.3%
Leisure & Hospitality	3,033	3,861	828	27.3%	11.6%	13.3%	33,167	38,302	5,135	15.5%	10.7%	11.0%
Other Services	1,136	1,132	(4)	-0.4%	4.3%	3.9%	11,616	11,635	19	0.2%	3.8%	3.3%
Public Administration	1,362	1,471	109	8.0%	5.2%	5.1%	18,325	21,317	2,992	16.3%	5.9%	6.1%
<b>Total, All Industries</b>	<b>26,187</b>	<b>28,995</b>	<b>2,808</b>	<b>10.7%</b>	<b>100%</b>	<b>100%</b>	<b>309,224</b>	<b>349,562</b>	<b>40,338</b>	<b>13.0%</b>	<b>100%</b>	<b>100%</b>

Source: Job Service North Dakota

**FIGURE 3**  
Employment by Industry 2000 & 2009  
Ward County and North Dakota



Source: Job Service North Dakota

**UNEMPLOYMENT**

Table 9 and Figure 4 display the size of the Ward County labor force and the number of employed persons from 1990 to 2010. Over the last 20 years, Ward County and North Dakota have maintained an unemployment rate that has been well below that of the nation. More recently, though, it is striking that the region has continued to maintain an unemployment rate at or below 3.0 percent, whereas the nation has been gripped by the worst recession in 60 years and is currently experiencing an unemployment rate near 10 percent. This low unemployment rate in light of the national recession is resulting in many new arrivals into the Minot area looking for employment. As noted previously, job growth has been occurring in several industries.

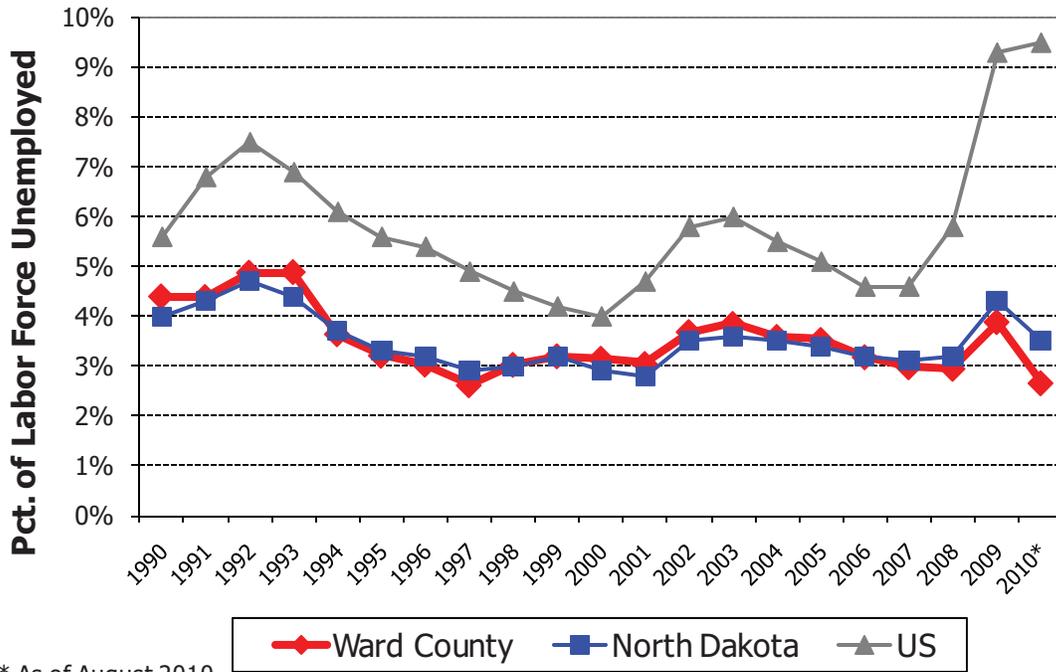
**TABLE 9**  
Labor Force/Employment Trends 1990-2010  
Ward County

Year	Labor Force	Employed	Unemployed		Unem. Rate	
			No.	Pct.	ND	US
1990	26,484	25,319	1,165	4.4%	4.0%	5.6%
1991	26,161	25,013	1,148	4.4%	4.3%	6.8%
1992	26,851	25,543	1,308	4.9%	4.7%	7.5%
1993	27,147	25,821	1,326	4.9%	4.4%	6.9%
1994	28,890	27,837	1,053	3.6%	3.7%	6.1%
1995	29,171	28,233	938	3.2%	3.3%	5.6%
1996	29,508	28,611	897	3.0%	3.2%	5.4%
1997	29,631	28,853	778	2.6%	2.9%	4.9%
1998	29,473	28,579	894	3.0%	3.0%	4.5%
1999	29,331	28,391	940	3.2%	3.2%	4.2%
2000	28,238	27,347	891	3.2%	2.9%	4.0%
2001	28,244	27,382	862	3.1%	2.8%	4.7%
2002	28,004	26,971	1,033	3.7%	3.5%	5.8%
2003	27,998	26,920	1,078	3.9%	3.6%	6.0%
2004	28,038	27,031	1,007	3.6%	3.5%	5.5%
2005	28,152	27,158	994	3.5%	3.4%	5.1%
2006	28,274	27,373	901	3.2%	3.2%	4.6%
2007	29,247	28,374	873	3.0%	3.1%	4.6%
2008	29,185	28,323	862	3.0%	3.2%	5.8%
2009	29,511	28,364	1,147	3.9%	4.3%	9.3%
2010*	31,199	30,367	832	2.7%	3.5%	9.5%

\* As of August 2010

Source: Job Service North Dakota

**FIGURE 4**  
 Unemployment Trends 1990-2010  
 Ward County, North Dakota, and US



\* As of August 2010  
 Source: Job Service North Dakota

## Market Analysis

### HOUSING

Available, affordable and safe housing is necessary for a community to accommodate the growth of all segments of the population. It provides a vital link between the community's population growth, economic development goals and its land use priorities. In order to encourage growth in the population and economy, housing will be needed in Minot for residents of differing income levels, for multi-family and single-family units, and for purchase and rent.

Table 10 and Figure 5 compares the Minot homeownership rate by age to North Dakota and the nation in 1990 and 2000. Typically, homeownership rises sharply until householders reach about age 40 then it rises more slowly until it peaks around age 60. At that point, as households begin to retire and downsize, homeownership begins to decline as householders age. Although this holds true in Minot, there are some important differences to national trends. Namely, the percentage of homeowners under age 25 and over age 65 is significantly less than the national average. The difference among younger householders is likely explained by the impact of the Minot Air Force Base, which draws in many younger persons into the Minot area who are here for a short period of time and would understandably not own their housing. At the other end of the spectrum, however, are older householders who apparently do not own their housing at the same rates as their national counterparts. Although the 1990s was a decade in which the homeownership rate increased substantially in Minot among younger and older households, it still remained well below the national average.

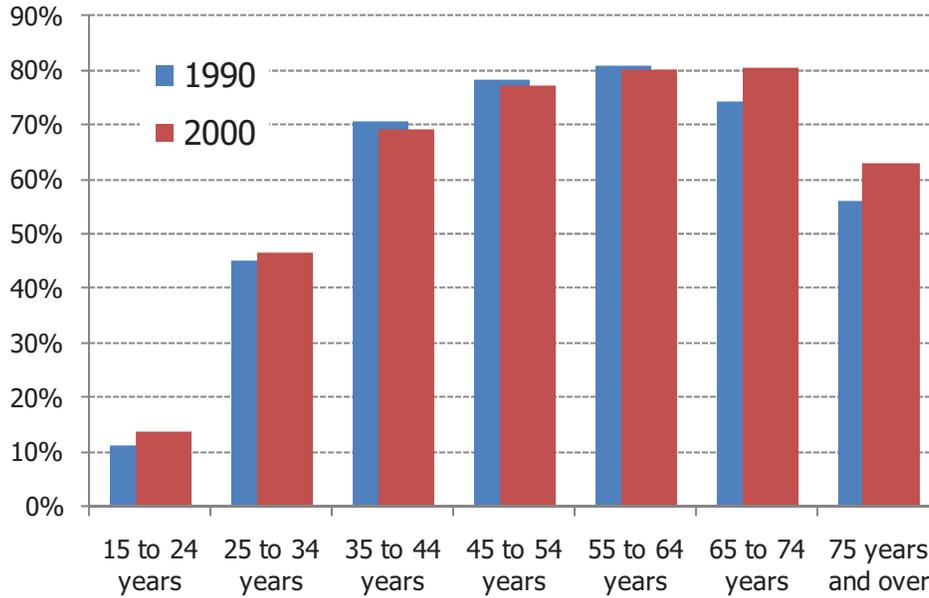
**TABLE 10**

Homeownership Rate by Age 1990 & 2000  
City of Minot, North Dakota, and US

Householder Age	1990			2000			Change 1990-2000		
	Minot	ND	US	Minot	ND	US	Minot	ND	US
15 to 24 years	11.3%	11.9%	17.1%	13.6%	13.1%	17.9%	2.3%	1.2%	0.8%
25 to 34 years	45.2%	47.3%	45.3%	46.6%	48.2%	45.6%	1.5%	0.9%	0.2%
35 to 44 years	70.6%	72.5%	66.2%	69.2%	71.7%	66.2%	-1.4%	-0.9%	0.0%
45 to 54 years	78.1%	80.6%	75.3%	77.1%	79.6%	74.9%	-1.0%	-1.0%	-0.4%
55 to 64 years	80.9%	83.8%	79.7%	80.2%	82.2%	79.8%	-0.7%	-1.5%	0.1%
65 to 74 years	74.2%	80.6%	78.8%	80.5%	81.0%	81.3%	6.2%	0.5%	2.5%
75 years and over	56.0%	67.2%	70.4%	63.1%	67.6%	74.7%	7.1%	0.4%	4.4%

Source: US Census

**FIGURE 5**  
Homeownership Rate by Age 1990 & 2000  
City of Minot



Source: US Census

Table 11 shows the total number of housing units by type, including vacant units, in the city for the years 1990, 2000, and 2010. During the 1990s, Minot gained over 1,400 new housing units, the vast majority of which were single-family homes, which accounted for nearly 1,000 of the new homes. Although construction of new single-family units remained robust in the 2000s, the number of new townhomes/condos and apartments units increased significantly.

**TABLE 11**  
Housing Type (Total Units) 1990-2010  
City of Minot

Structure Type	1990		2000		2010		1990-2000		2000-2010	
	Number	Percent	Number	Percent	Number	Percent	Change	Percent	Change	Percent
Single-Family	8,211	55%	9,197	56%	10,114	55%	986	12%	917	10%
Townhomes/Condos	1,275	8%	1,431	9%	1,992	11%	156	12%	561	39%
Apartments	4,087	27%	4,293	26%	4,852	26%	206	5%	559	13%
Mobile Homes	1,467	10%	1,564	9%	1,564	8%	97	7%	0	0%
Total	15,040	100%	16,485	100%	18,522	100%	1,445	10%	2,037	12%

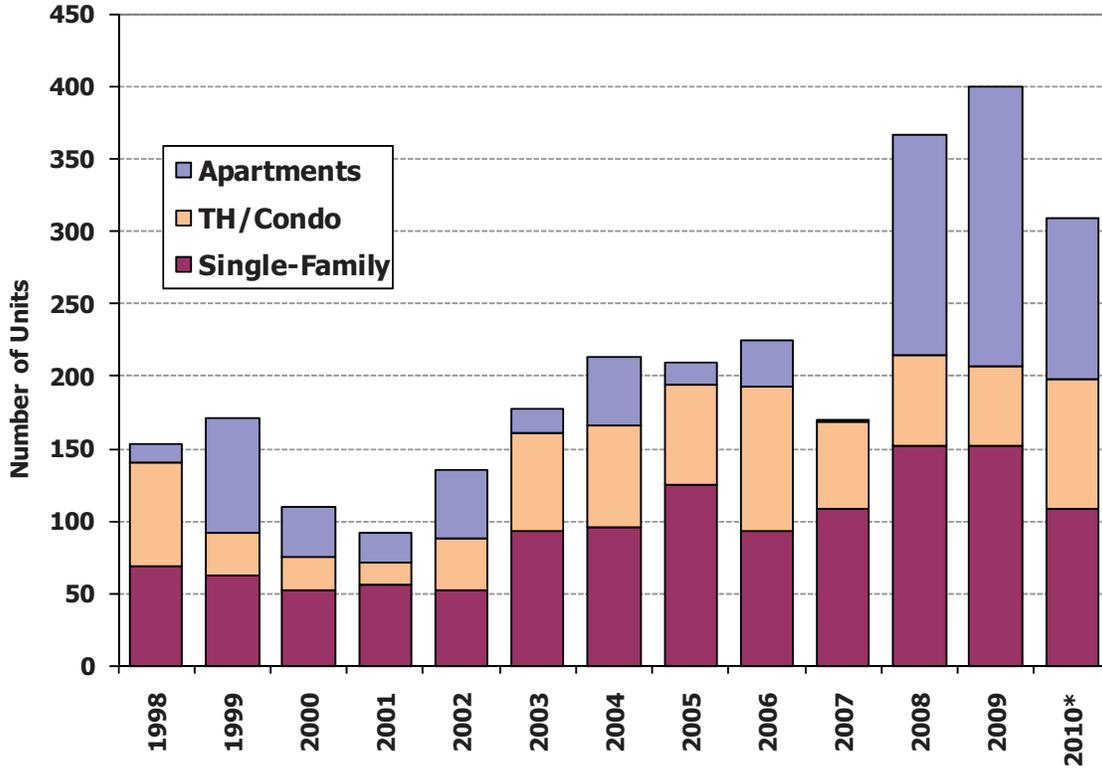
Source: US Census; City of Minot

According to Table 12 and Figure 6, over 2,700 new housing units were permitted for construction between 1998 and the early part of 2010. This is an annual average of 210 housing units per year. However, the rate of construction has not been evenly distributed over the past 10 to 12 years. Figure 6 illustrates how the year-to-year differences. During the late 1990s and early 2000s, annual construction averaged closer to 150 units per year. Then it increased to around 200 units per year during the middle of the 2000s. Since 2008, however, the annual average has been closer to 350 units per year. This is a clear reflection how much the local economy has grown in recent years with expansion of oil drilling in nearby counties, growth of the rail industry, and expansion of the Minot Air Force Base. It should be noted, though, that some of the recent housing construction in Minot may be indirectly related to the rehabilitation of the existing housing stock on the Minot Air Force Base. The Air Force Base has approximately 2,500 housing units and has been systematically rehabilitating them in phases. When the rehabilitation is completed the base will likely have approximately 300 fewer units. As a result, the Minot housing market has been expected to absorb the loss of these units.

**TABLE 12**  
Residential Units Permitted for Construction 1998-2010  
City of Minot

Year	Single-family Units	Multifamily Units			Total Units
		Town-homes	Condos	Apts	
1998	68	26	46	13	153
1999	62	13	16	79	170
2000	52	5	18	34	109
2001	55	4	12	21	92
2002	52	14	21	48	135
2003	93	34	34	16	177
2004	95	26	45	47	213
2005	124	30	40	15	209
2006	93	16	84	31	224
2007	108	8	52	1	169
2008	151	8	55	152	366
2009	151	9	46	194	400
2010*	108	18	72	111	309
Total '98-'10	1,212	211	541	762	2,726
Annual Avg.	93	16	42	59	210
* Year end estimate based on activity Jan thru Apr					
Source: City of Minot					

**FIGURE 6**  
Residential Units Permitted for Construction 1998-2010  
City of Minot



\* Year end estimate based on activity January thru April  
Source: City of Minot

Housing affordability is an important component of the quality of life for a community's residents. Housing is often considered affordable if a household doesn't have to spend more than 30 percent of its income on housing. Table 13 shows that in 2000, 24 percent of Minot's residents spent 30 percent or more on housing. This statistic should be watched closely when the 2010 Census data is released because rapid growth in a community can lead to sharp spikes in the cost of housing, which can result in additional burdens on households, especially those with fixed incomes such as senior citizens or those in rental housing.

**TABLE 13**

Percent of Income Spent on Housing 2000  
City of Minot

Percent of Income Spent on Housing	Owners		Renters		Total	
	Number	Percent	Number	Percent	Number	Percent
Less than 20	5,058	66%	2,082	37%	7,140	54%
20 - 24	875	11%	819	15%	1,694	13%
25 - 29	609	8%	609	11%	1,218	9%
30 - 34	327	4%	371	7%	698	5%
35 or more	755	10%	1,725	31%	2,480	19%

Source: US Census

**FOR SALE HOUSING MARKET**

Table 14 shows homes sales statistics from the Minot Board of Realtors from 2005 to 2010 for the City of Minot. Although the Minot Board of Realtors does not track every home sale, it often accounts for the vast majority of sales and, therefore, provides a fairly accurate assessment of the health of the local for-sale housing market. Since 2005, the for-sale market in Minot has been very strong. There have been between 600 and 700 sales each year, and based on nine months of activity in 2010, Minot may eclipse 700 sales by the end of the year. Meanwhile, the average sales price has increased every year since 2005, with very strong increases experienced in 2006, 2008, and especially 2009 when it increased nearly 15 percent. Since 2005, the average sales price has increased nearly 50 percent. If such strong price increases continue into the foreseeable future, this will have an impact on residents as some households will eventually be priced out of the for-sale market altogether.

**TABLE 14**

Home Sales Trends 2005-2010  
City of Minot

Year	Sales	Volume	Average	Pct. Chg.
2005	699	\$81,657,180	\$116,820	--
2006	600	\$76,090,800	\$126,818	8.6%
2007	666	\$84,919,662	\$127,507	0.5%
2008	695	\$99,749,875	\$143,525	12.6%
2009	673	\$110,761,667	\$164,579	14.7%
2010*	544	\$93,233,440	\$171,385	4.1%

\* Sales data are January thru September

Source: Minot Board of Realtors

Table 15 compares the average sales price of homes in Minot to the nation between 2005 and 2010. Average sales prices in Minot have bucked national trends over the last several years. Between 2005 and 2010, the national average dropped an unprecedented 26.7 percent. In sharp contrast, Minot’s average sales price increased nearly 50 percent during this time (Figure 7). As noted previously, rapidly rising home prices will eventually price some households out of the for-sale housing market. However, rapid price increases will also create incentive for developers to build more housing, which can help temper price increases by increasing the supply of housing.

**TABLE 15**

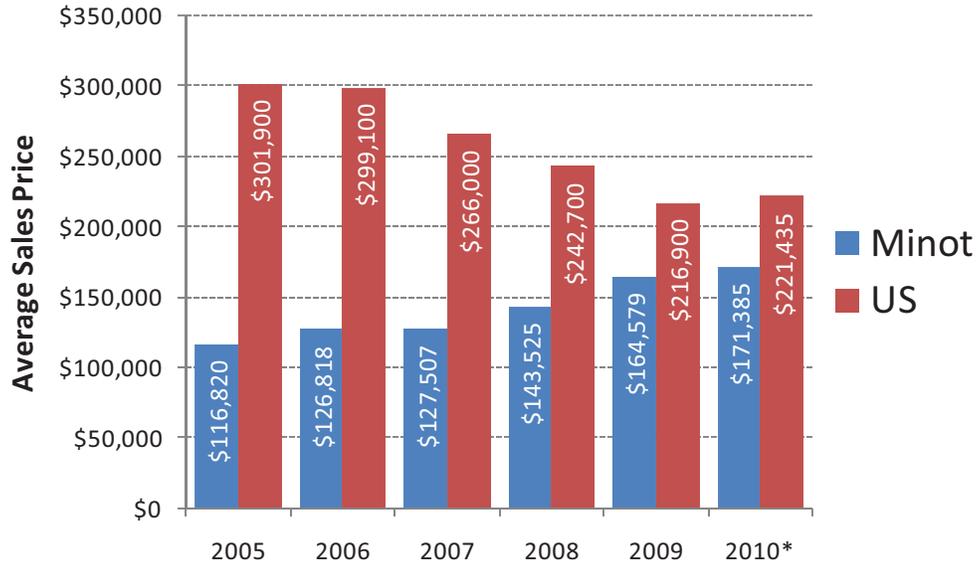
Average Home Sales Price 2005-2010  
City of Minot and US

Year	Average Sales Price		Annual Pct. Increase	
	Minot	US	Minot	US
2005	\$116,820	\$301,900	--	--
2006	\$126,818	\$299,100	8.6%	-0.9%
2007	\$127,507	\$266,000	0.5%	-11.1%
2008	\$143,525	\$242,700	12.6%	-8.8%
2009	\$164,579	\$216,900	14.7%	-10.6%
2010*	\$171,385	\$221,435	4.1%	2.1%

\* Sales data are January thru September  
Sources: Minot Board of Realtors; National Association of Realtors

**FIGURE 7**

Average Home Sales Price 2000-2009  
City of Minot and US



\* Sales data are January thru September  
Sources: Minot Board of Realtors; National Association of Realtors

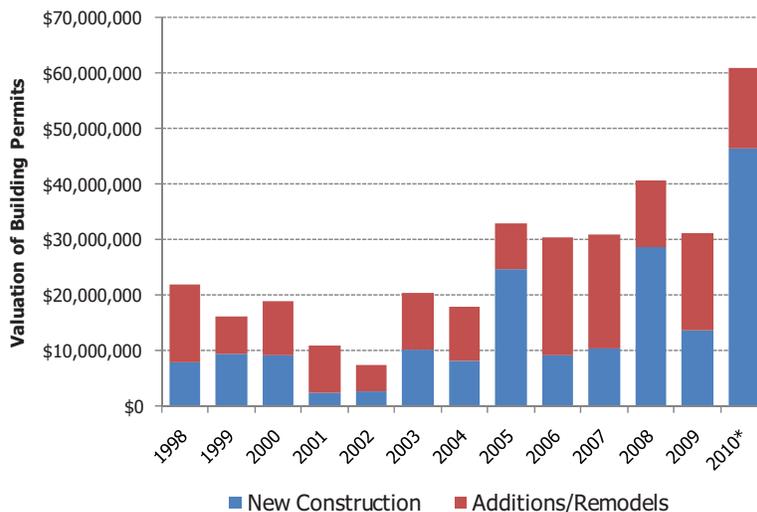
**RENTAL HOUSING MARKET**

According to the 2000 US Census, there were approximately 350 vacant rental units in Minot, which was 5.5 percent of all rental units. Although nearly 600 new apartment units have been constructed since 2000, anecdotal evidence indicates that the vacancy rate has fallen to under one percent. Typically, a healthy housing market is characterized by an overall vacancy rate around 5.0 percent. This “wiggle” room in the market has several benefits: 1) it helps keep rents from rising too quickly and becoming a burden on households; 2) it helps reduce overcrowding, which can lead to rapid wear-and-tear on units; 3) it allows a certain amount of turnover in a timely manner so that landlords can adequately maintain their properties and make necessary reinvestments; and 4) it helps maintain adequate cash flow so that landlords have the capital to reinvest. With the overall vacancy rate below one percent, some landlords are definitely benefitting in the short term as they are able to raise rents appreciably without losing tenants. However, this is likely resulting in overcrowding, creating a huge burden on some households, or pushing other households out of the market altogether by forcing them to search for housing in other communities. In 2000, the average rent was between \$350 and \$400 per month. Based on a survey of apartment advertisements in 2010, the average rent has more than doubled since 2000.

**COMMERCIAL/INDUSTRIAL MARKET**

Figure 8 shows the amount of investment in commercial and industrial construction since 1998. During the late 1990s and early 2000s, construction in these areas averaged about \$15 million per year. Starting in about 2005, however, the annual average jumped to about \$30 million per year. More impressively, though, if construction through the first quarter of 2010 keeps up until the end of the year, Minot will see more than \$60 million worth of commercial/industrial construction.

**FIGURE 8**  
Valuation of Commercial/Industrial Development 1998-2010  
City of Minot



Source: City of Minot  
\* Year end estimate based on activity thru April 2010

Table 16 breaks down the valuation of new commercial/industrial development from 1998 to 2010 by the type of use. In terms of construction value, stores and warehouses have accounted for one-third of all new commercial/industrial construction since 1998. The next highest types of uses are hotels at 11.8 percent and offices and banks at 11.5 percent. This suggests that Minot’s growth has been heavily tied to its position as a regional center for commercial activity, such as retailing, as opposed to other more industrial activities.

**TABLE 16**  
Valuation of New Commercial/Industrial Development by Use 1998-2010  
City of Minot

Commercial/Industrial Use	Total Valuation	Percent
Hotels and Motels	\$17,906,000	11.8%
Amusement, Social, Recreational	\$11,780,000	7.7%
Churches and Other Related	\$4,319,000	2.8%
Industrial and Manufacturing	\$11,963,000	7.9%
Parking Garages	\$13,000	0.0%
Service Stations and Repair Garages	\$408,000	0.3%
Hospitals and Institutions	\$10,531,000	6.9%
Offices, Banks, and Professional	\$17,486,000	11.5%
Public Works and Utilities	\$10,780,000	7.1%
Schools and Educational	\$3,088,000	2.0%
Stores, Customer Services, and Warehouses	\$50,129,000	33.0%
Misc. Non-Residential Buildings	\$4,632,500	3.0%
Structures other than Buildings	\$8,589,000	5.6%
Misc. Moved or Relocated Buildings	\$494,000	0.3%
Total	\$152,118,500	100%

Source: City of Minot

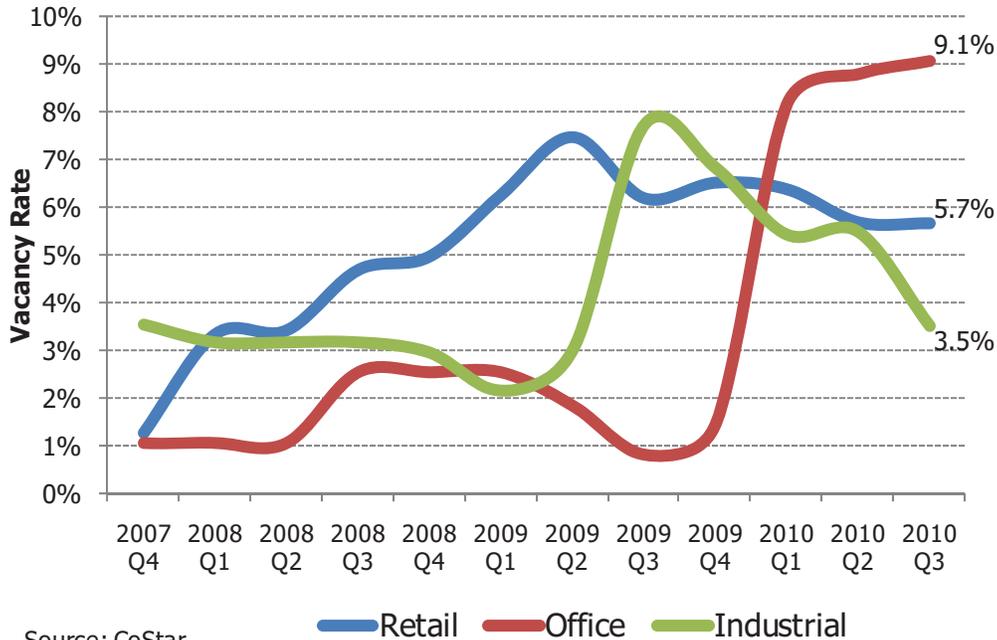
Table 17 and Figure 9 on the following page show the vacancy rates and rental rates for retail, office, and industrial properties in the City of Minot by quarter over the last three years. The information in Table 17 does not necessarily represent the entire universe of commercial and industrial properties in Minot. However, the information comes from a database that is maintained by real estate agents and brokers who work primarily with commercial and industrial properties in the Minot area. Therefore, it represents a fairly accurate picture of recent trends in availability and rents. Following the table is a brief summary of the current condition of Minot’s retail, office, and industrial markets.

**TABLE 17**  
 Commercial/Industrial Vacancy and Average Rent  
 City of Minot  
 2007 Q4 thru 2010 Q3

Time Period	Retail				Office				Industrial			
	Total Space	Available Space	Vacancy Rate	Average Rent/SF	Total Space	Available Space	Vacancy Rate	Average Rent/SF	Total Space	Available Space	Vacancy Rate	Average Rent/SF
2007 Q4	2,229,284	28,603	1.3%	\$8.31	431,020	4,500	1.0%	\$7.20	559,500	19,856	3.5%	na
2008 Q1	2,229,284	74,719	3.4%	\$9.91	431,020	4,500	1.0%	\$7.20	559,500	17,776	3.2%	na
2008 Q2	2,229,284	76,511	3.4%	\$8.50	431,020	4,500	1.0%	\$7.20	559,500	17,776	3.2%	na
2008 Q3	2,236,676	105,119	4.7%	\$10.67	431,020	10,900	2.5%	\$7.20	559,500	17,776	3.2%	na
2008 Q4	2,236,676	111,437	5.0%	\$13.42	431,020	10,900	2.5%	\$7.20	559,500	16,576	3.0%	na
2009 Q1	2,280,992	143,137	6.3%	\$13.28	431,020	10,900	2.5%	\$9.22	559,500	12,095	2.2%	na
2009 Q2	2,280,992	170,830	7.5%	\$13.36	431,020	7,900	1.8%	\$9.22	569,500	17,095	3.0%	na
2009 Q3	2,280,992	141,601	6.2%	\$9.14	431,020	3,450	0.8%	\$9.66	569,500	44,005	7.7%	\$10.67
2009 Q4	2,280,992	149,009	6.5%	\$9.14	431,020	6,150	1.4%	\$11.29	569,500	38,955	6.8%	\$10.69
2010 Q1	2,280,992	145,885	6.4%	\$9.16	431,020	35,094	8.1%	\$10.52	569,500	30,955	5.4%	\$10.69
2010 Q2	2,328,798	132,777	5.7%	\$6.81	441,920	38,794	8.8%	\$10.59	580,794	31,910	5.5%	\$10.69
2010 Q3	2,352,847	133,677	5.7%	\$7.21	441,920	40,014	9.1%	\$10.59	622,539	21,910	3.5%	\$10.69

Source: CoStar

**FIGURE 9**  
 Commercial/Industrial Vacancy Rates  
 City of Minot  
 2007 Q4 thru 2010 Q3



Source: CoStar

## **RETAIL**

Minot is a regional center for retail with a trade area that includes most of northwestern North Dakota, northeastern Montana, and portions of southeastern Saskatchewan and southwestern Manitoba. It is common for families to travel from as far away as Glasgow, Montana, which is 270 miles to the west, for semi-annual trips to shop at the Dakota Square Mall and other area retailers. Therefore, for a community of its size, Minot has a significant amount of retail space.

Minot has approximately 2.4 million square feet of leasable retail space, of which 5.7 percent or 134,000 square feet is currently available for lease. The average rent for retail space is \$7.21 per square foot. Because Minot has such a well-developed retail economy, there is a lot of choice in the marketplace for retailers who want to locate in Minot. As a result, average rents appear somewhat low. However, at prominent shopping centers and newer developments, retail rents can be as high as \$20 per square foot. This is evident from Table 17 on the following page where the average rents in 2008 and 2009 were much higher, over \$13 per square foot. This is because a new center was completed at that time skewing average rents higher.

It should also be noted that the vacancy rate for retail has recently been as low as 1.3 percent, which is phenomenally low for commercial space. Recent construction has helped add supply, and thus pushed up vacancy rates slightly, but it clearly indicates that there currently is strong demand for new retail space.

## **OFFICE**

The office market in Minot is not as diverse as the retail market. Unlike retail, there is not a significantly supply of office space. As a result, small changes in the amount of vacant space can be reflected as a large change in the vacancy rate. For example, in early 2010, two modest-sized office buildings were put on the market causing the vacancy rate to rise sharply from 1.4 percent to 9.1 percent. Despite this sharp rise in overall vacancy, there clearly is a very strong demand for additional office space in Minot. First of all, a vacancy rate under 10 percent for office space indicates a strong level of pent-up demand because office buildings experience a higher rate of turnover than other retail or industrial properties. Secondly, the average rent for office space is over \$10 per square foot, which is very strong. Both of these factors suggest that there is very strong demand for office space in Minot.

## **INDUSTRIAL**

Industrial buildings come in a lot wider variety of types than office or retail buildings. Because of this variation, industrial properties generally command much lower rents than office or retail properties. In Minot, however, industrial rents appear to match or even exceed office and retail rents. The only explanation for this is that there is very little supply of available industrial space in Minot. Therefore, in order to avoid businesses from moving out of town because they have no room to grow, it will be important to make sure there is enough desirable industrial space in Minot.

## LAND USE

### INTRODUCTION

The purpose of the land use inventory is to identify existing development in the city. From this inventory, and the other background information that is compiled, areas of potential development or redevelopment can be analyzed. The inventory can also help classify areas, reveal development patterns, density and trends that can provide direction for future development and redevelopment. This will be particularly important as future land use alternatives are explored later in the comprehensive plan process.

### EXISTING LAND USE

Table 18 identifies the existing land uses (as it is actually used) within the City and the percentage of the overall land which is dedicated to that specific use. Figure 10 displays these uses as the Existing Land Use Map. The table gives the gross acreage of each land use, which includes wetlands, water and right-of-way and net acres which excludes these. The current acreage of the City is approximately 11,251 acres. Just over 29% of the total existing land uses are residential uses, in particular low-density. Over 18% is dedicated to commercial/industrial uses with over 13% as public/semi public including the airport, schools, and other public facilities. Parks, golf courses, open space total 4.4%. Vacant land within the city limits totals 11.7%.

**TABLE 18- EXISTING LAND USE**

Existing Land Use	Gross Acres	Net Acres	Percent/Gross	Percent/Net
Low Density Residential	2,362.07	2,356.45	21.0%	20.9%
Medium Density Residential	554.39	549.54	4.9%	4.9%
High Density Residential	78.20	78.09	0.7%	0.7%
Manufactured Home Park	298.83	294.47	2.7%	2.6%
Commercial	1,363.30	1,353.56	12.1%	12.0%
Industrial	726.57	709.90	6.5%	6.3%
Public/Semi-Public	1,531.67	1,493.41	13.6%	13.3%
Hospital	7.95	7.95	0.1%	0.1%
Golf Course	152.45	140.87	1.4%	1.3%
Parks and Open Space	339.03	337.01	3.0%	3.0%
Cemetery	65.68	64.79	0.6%	0.6%
Rural/Agricultural	109.31	105.35	1.0%	0.9%
Vacant	1,319.68	1,291.20	11.7%	11.5%
Right of Way	2,192.19	2,183.38	19.5%	19.4%
Open Water	149.85	149.85	1.3%	1.3%
Wetland		135.36	0.0%	1.2%
<b>Total City</b>	<b>11,251.16</b>	<b>11,251.16</b>	<b>100.0%</b>	<b>100.0%</b>

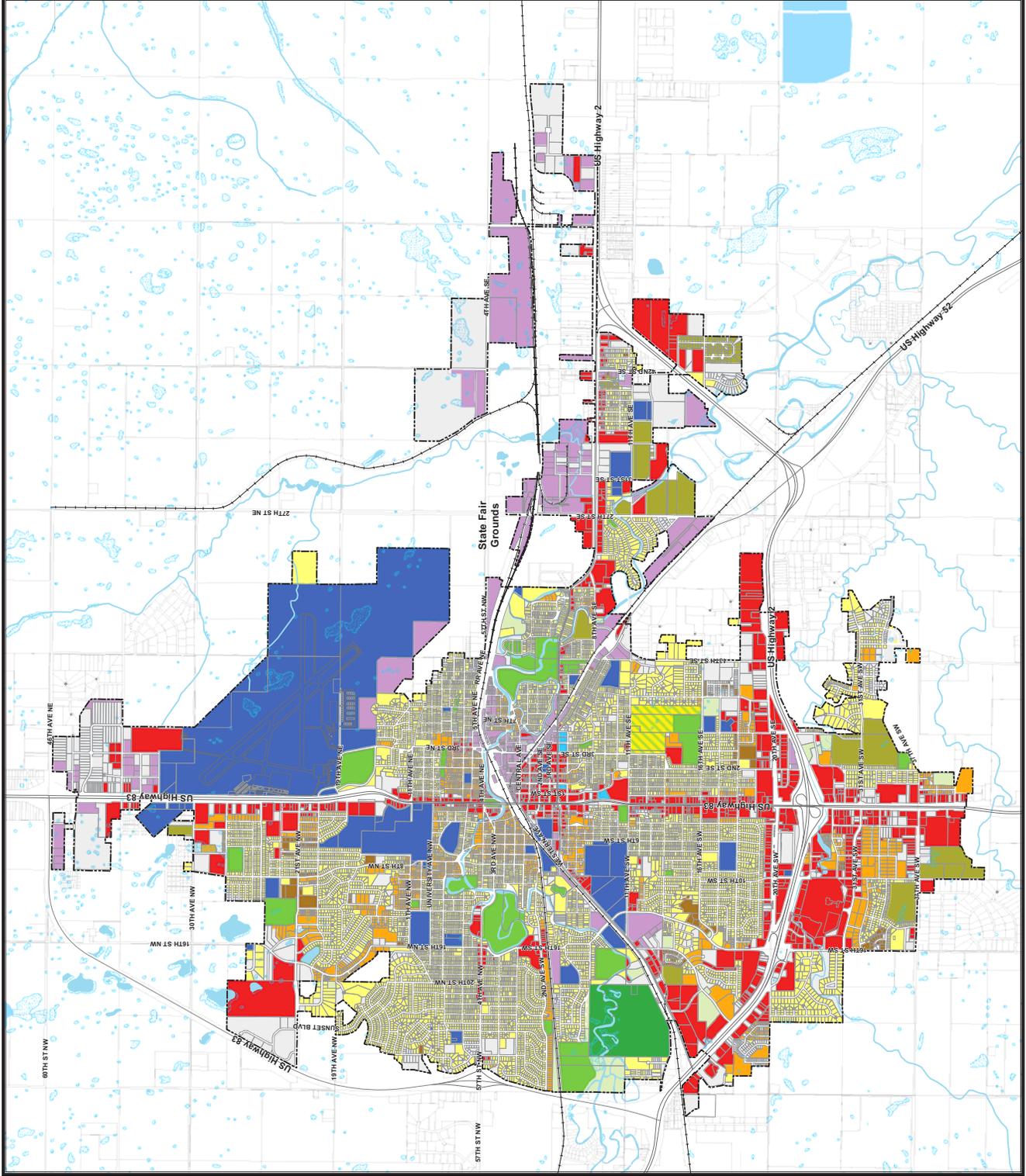
The most recent future land use plan was prepared in 1995 when a generalized plan was prepared as shown on Figure 11. Comparing this plan to what is on the ground today demonstrates the city generally followed the guidance in terms of new areas for industrial expansion to the north and east (north of and adjacent to the airport) and new commercial and residential development along and south of US Highway 2 and inside the US Highway 83 loop in the northwest corner of the City.

DRAFT

**City of Minot**  
 2011 Comprehensive Plan  
**Existing Land Use Map**

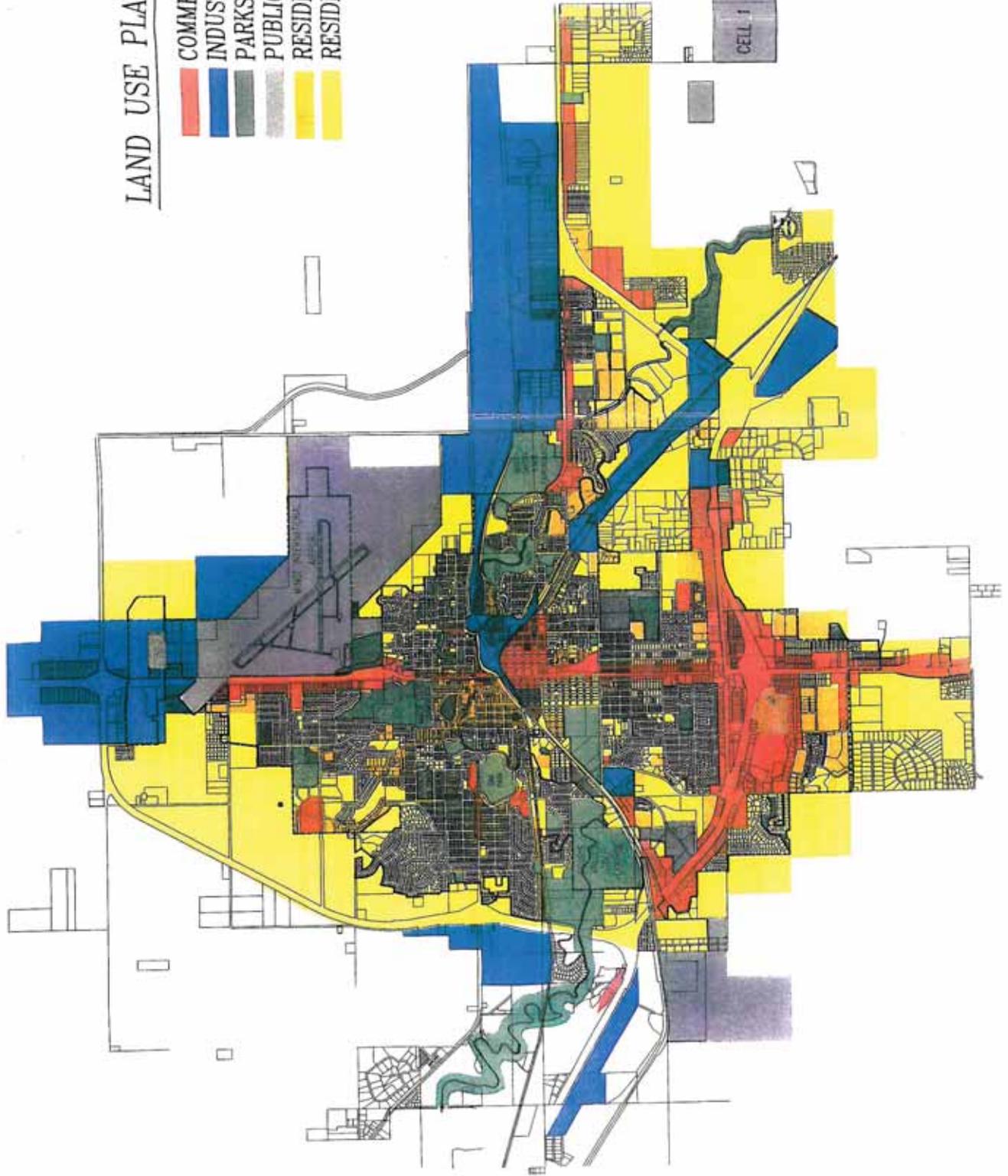


- City Boundary
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Manufactured Home Park
- Commercial
- Industrial
- Public/Semi-Public
- Hospital
- Golf Course
- Parks and Open Space
- Cemetery
- Rural/Agricultural
- Vacant
- Open Water
- Wetlands
- Streams
- Railroad



# LAND USE PLAN 1995

- COMMERCIAL
- INDUSTRIAL
- PARKS, SCHOOLS & OPEN SPACES
- PUBLIC LANDS
- RESIDENTIAL - HIGH DENSITY
- RESIDENTIAL - SINGLE FAMILY



## ECONOMIC DEVELOPMENT EFFORTS

### RENAISSANCE ZONE

The Fifty-sixth Legislative Assembly created the Renaissance Zone Act under N.D.C.C. ch. 40-63, here in after referred to the "Act", to make it possible for ND cities to apply to the ND Division of Community Services (DCS) to create a Renaissance Zone within their jurisdiction. The Fifty-seventh Legislative Assembly, through Senate Bill 2033 and House Bill 1460, made revisions to refine and provide more clarification for the program.

A Renaissance Zone may be a defined geographical area of up to 20 contiguous blocks within a continual boundary, typically in the central city that consists of residential, commercial and industrial zoned properties. These properties may be in need of revitalization and redevelopment to attract businesses and residents. The Act provides for certain types of tax exemptions and credits to encourage investment in these properties. The City of Minot was granted acceptance into the program in November 2001 with a maximum of 15 years.

The city's vision for the Zone is that of a transformed district where utilization of commercial, residential and industrial resources are maximized while maintaining the historic attractiveness of the area and quality of life attributes of the entire City. Objects of this program are to offer financial incentives, various tax exemptions and credits that will enhance desirable economic, residential and recreational opportunities through capital investment within the Zone. Specific goals and objectives of the renaissance zone included:

- Make provisions for adequate parking for current and future businesses, employees and shoppers in the CBD.
- Encourage new businesses to locate in the CBD.
- Encourage all building owners to maintain their buildings in a suitable manner and where lacking, bring buildings into code compliance.
- Encourage a continued mix of commercial, retail, services, government and residential uses in the CBD.
- Encourage the preservation and if necessary, the restoration of any historical buildings in the CBD.
- Support all activities to ensure an active, vital and prosperous CBD now and in the future.
- Increase the attractiveness of the CBD.

Available tax exemptions and credits include the following:

- State Income Tax Exemptions
  - Individual income tax exemption for rehabilitation of single-family residential property.
  - Business/investment income tax exemption for rehabilitation of residential or commercial property for any business or investment purpose.

- Property tax exemptions for single family and business/investment properties.
- Historic Preservation and Renovation Tax Credit
- State income tax credits and federal income tax credits are allowed depending on qualifications.

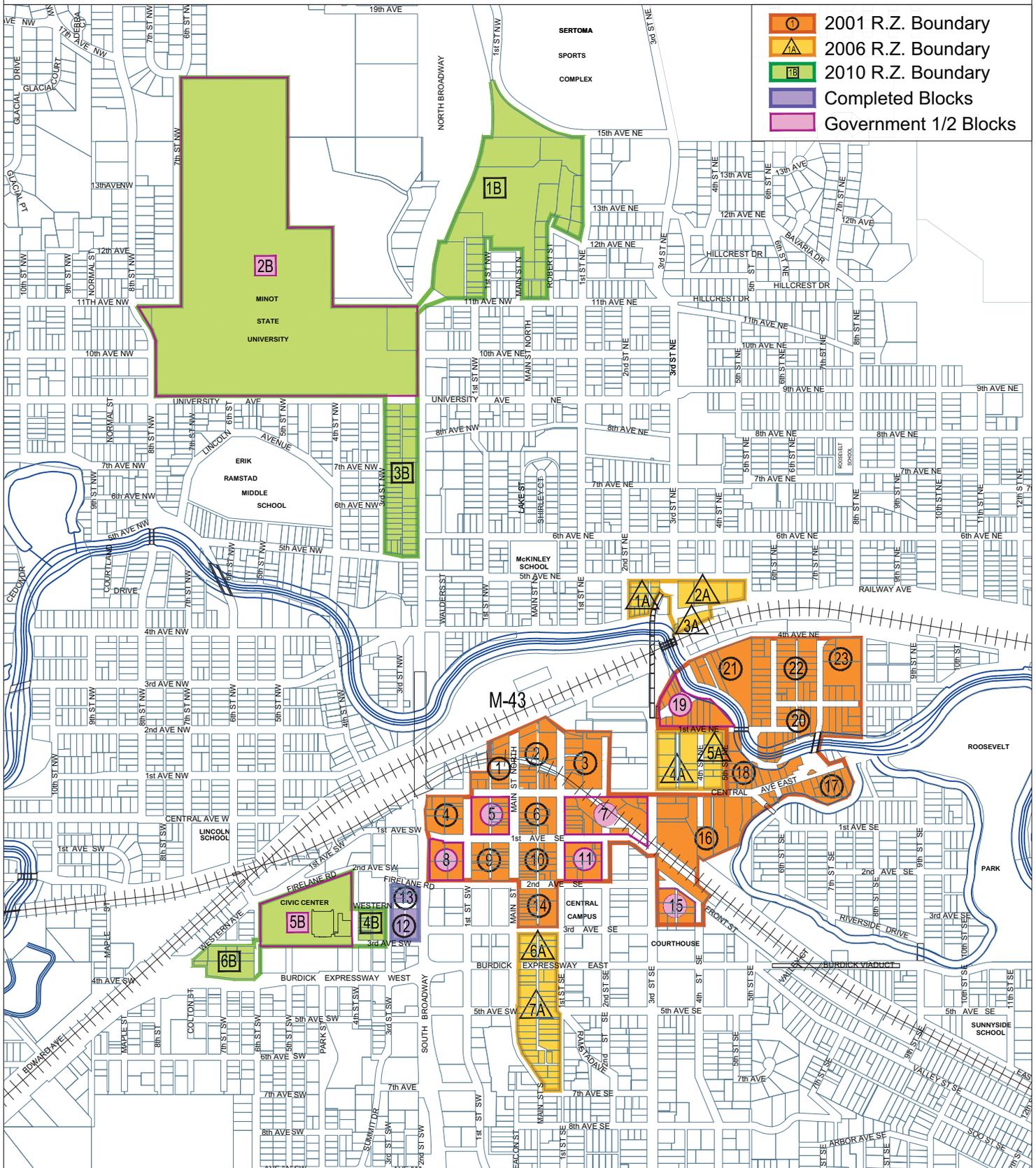
The City has a thorough application, review criteria and review process and a Renaissance Zone Review Board representing business groups, the City and residents at large. Figure 12 displays the project approval areas of the Current Renaissance Zone.

### **MINOT AREA DEVELOPMENT CORPORATION**

The Minot Area Development Corporation (MADC) provides assistance to facilitate the retention of existing businesses, support expansion, and start up or relocation of businesses to the Minot area. The MADC operates together with the support of investors including the City of Minot, Ward County, and the state of North Dakota to finance economic development programs that enable Minot to stay competitive on a national basis.

Local incentives include the MAGIC (Minot Area Growth through Investment and Cooperation) Fund which is a local economic development financial incentive funded by 1% sales tax, managed through the City of Minot. To-date the fund has assisted over 185 projects with over 25 million in funding. Another program is the Minot Area Development Corporation Jobs Development Fund (JDF). This is a private funding source managed by the MADC to assist area businesses in the creation of jobs and capital investments.

# POTENTIAL EXPANSION AREA of RENAISSANCE ZONE



## COMMUNITY FACILITIES

The City of Minot offers a variety of public services and facilities to its residents, which are noted on Figure 13, Community Facilities map. Community facilities include anything that is utilized by the general public. This section details all of the community facilities in Minot.

### **CITY HALL**

Minot City Hall is located at 515 2nd Avenue SW and houses several city departments including: City Clerk, City Manager, Finance, Human Resources, Police.

### **POLICE DEPARTMENT**

The Minot Police department is located in City Hall and includes six administrative staff including the Chief of Police, Police Operations Commander, Police Administration Commander, Police Support Commander, Police Administrative Lieutenant and Police Investigations Commander.

The patrol division is made up of three 10 hour shifts. The day shift is scheduled from 7:30 a.m. to 5:30 p.m. Afternoon shift is scheduled from 5:00 p.m. to 3:00 a.m. and night shift is scheduled from 10:00 p.m. to 8:00 a.m. The patrol shift is made up of one lieutenant, two sergeants and ten patrol officers. Also, each shift has four permanent communications officers who answer the radio and telephones. The Minot Police Department has two animal control officers and one parking control officer who are normally assigned to the day and afternoon shifts. The duties of the patrol division include responding to requests for service of the public, enforcing laws and ordinances and investigating accidents and complaints.

### **FIRE DEPARTMENT**

The City of Minot Fire Department (MFD) is served by three fire stations including: the Headquarters Station at 2111 10th St. SW; Station #2 at 201 3rd St. S.E. and Station #3 at 2300 North Broadway. The MFD provides a community of over 35,000 with full time Fire/rescue, medical, ARFF (Minot International Airport) and Hazardous Materials (Hazmat) protection. The rescue squad also protects a radius of 40 miles with Emergency Medical Services, auto extrication, high angle rescue, water/ice rescue with PADI trained divers and confined space rescue. The MFD also perform many non emergency services such as hydrant flushing, carbon monoxide checks, installing smoke detectors, public education/school talks and various fund raising and charitable events throughout the year. The Minot Fire Department employs a total of 50 within three Battalions, A, B & C, each have 15 personnel assigned to their shift, each of which consist of one Battalion Chief, three Fire Captains, one FF/Inspector and 10 Firefighters. The administration division consists of the Fire Chief, CJ Craven, the Fire Marshall, one day inspector, the Fire Mechanic and a department secretary.

### **AIRPORT**

Minot International Airport is City owned and operated. The mission is to provide the general public and airport customers/tenants with modern and well kept facilities for the safe and efficient air transportation of people and goods; to provide the use of the airport; to meet the needs of anticipated future growth; and to plan and implement expansion and modernization of facilities. There are over 40 based aircraft at the airport.

Daily service is provided by Delta Air Lines to Minneapolis/St. Paul and by United Airlines with daily service to Denver. A new airline, Allegiant is starting daily service to Las Vegas in October 2010. An updated Airport Land Use Master Plan is in the final stages of review before submittal to the Federal Aviation Administration (FAA). The Land Use Compatibility Plan is a critical piece of the Airport Master Plan in order to achieve compatible uses of lands surrounding the airport that are within the planning jurisdiction of the City of Minot. More information will follow later in the Transportation Section as well as the Land Use chapter of the comprehensive plan.

## **SCHOOLS**

Minot Public Schools operates ten elementary schools (K-5) within the City; Bel Air, Edison, Lewis and Clark, Lincoln, Longfellow, McKinley, Roosevelt, Perkett, Sunnyside and Washington. There are also two elementary schools (k-6) on the Minot Air Force Base: Dakota and North Plains.

There are three middle schools in the system Jim Hill, Erik Ramstad and Memorial on the Minot Air Force Base. The City has one public high school, Minot Senior High, divided between two campuses: Central Campus (grades 9 and 10) and Magic City Campus (grades 11 and 12). The school district also operates an Adult Learning Center, two alternative high schools campuses:

Central Campus PLUS and Souris River Campus and a Head Start program for 0-5 year-olds. Current enrollment within the district is over 6,500 students.

Minot is also home to private elementary and high schools including the Minot Catholic School system which operates Little Flower Elementary and Bishop Ryan High School (grades 6-12).

There is also Our Redeemer's Christian School which serves grades k-12.

## **HIGHER EDUCATION**

Minot State University (MSU) is located at the base of North Hill. Originally a two-year teacher's college when it opened in 1913, Minot State became a university in 1987. It is the third largest higher education institution in the state and the only non-doctoral university to grant master's degrees. Three colleges comprise the university's academic offerings: Arts and Sciences, Business, and Education and Health Sciences. Nine master's degrees and one education specialist degree are offered and more than 60 majors at the undergraduate level.

## **LIBRARY**

The Minot Public Library is located at 516 2nd Avenue SW. There are approximately 22,933 individuals registered to use the library. The library provides full service access to a wide range of information and technology including 75 electronic resources creating a gateway to lifelong learning.

## **PUBLIC WORKS**

The Public Works Facility is located at 1025 31st St. SE and houses the department of Public Works which includes Assessor, Landfill/Collection, Rosehill Cemetery, Street Department and Water and Sewer. Other city departments in this facility include Engineering, Planning, Building Inspections and Traffic.

## **LANDFILL/COLLECTION**

The City of Minot landfill is located 1 mile west of Valley Marine on 16th Street SW. The landfill is operated by the City and provides three areas for burial: municipal solid waste, construction and demolition and tires. The landfill also has areas for treatment and or transfer of trees and brush, yard wastes, batteries, propane tanks, and appliances. The landfill has been filling up faster than anticipated thus during 2009 cell #4 was constructed.

The City provides garbage with bi-weekly collection and once a week tree pickup. The city hosts an Annual Household Hazardous Waste Collection Program each spring.

## **ROSEHILL CEMETARY**

Rosehill Memorial Park was established in 1890 with a price of \$220.00 paid to John Wood for the first acres. The oldest gravesite, recorded on September 22, 1888 for Rev. J. Henz, is in the St. Leo's section of the cemetery. This old Catholic Section was added to the original City of Minot cemetery acreage in the 1960's when ownership was transferred for a \$1.00 fee. Currently, some 19,500 burials have been made in the park, with more than 200 burials completed each year. The operation of the cemetery falls under the City of Minot's Public Works Division. The superintendent, two full time equipment operators, and summer part time employees are responsible for lot sales, burials, landscaping and grounds maintenance on forty-five acres of developed cemetery grounds, office and equipment buildings, a chapel, a winter storage vault and numerous memorial monuments throughout the park. In 2009 staff performed 249 interments bringing the cemetery burial total to approximately 19,750.

## **WATER RELATED SERVICES**

Public works is responsible for providing economical water distribution to all residents and businesses of Minot. The Water and Sewer Department is responsible for maintenance of all underground water mains and sewer mains owned by the City. This also includes the collection and treatment of Minot's approximately 4.5 million gallons of sewage per day. The department also maintains 239 miles of water mains and approximately 11,600 individual services and water meters, which are read monthly.

The City's water treatment is operated 24 hours a day, seven days a week. The objectives are to soften and disinfect the city's water. The water plant pumps finished water to five ground level storage reservoirs with a combined capacity of 12.5 million gallons. From the reservoirs the

waste is pumped by six booster stations to three 500,000 gallon elevated tanks to maintain pressure in the water mains.

#### TRANSIT

The City of Minot operates a fixed route transit system. This system includes early morning services for school aged children and midday service around the city for residents going to work, shopping, medical appointments and other needs. The Minot Commission on Aging serves as the disability transportation carrier for the Minot City Transit.

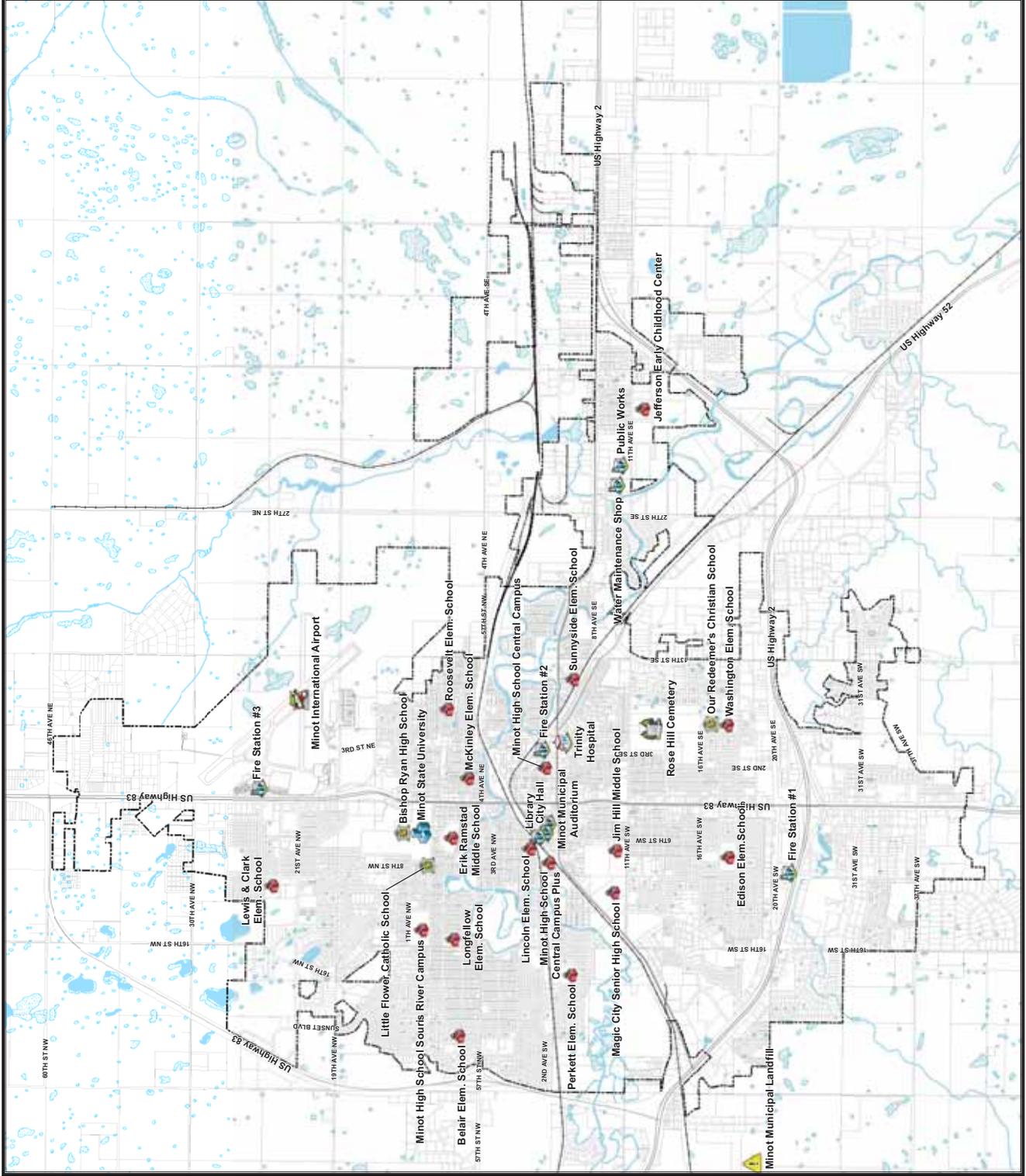
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**City of Minot**  
 2011 Comprehensive Plan  
**Community Facilities**



3,500 0 3,500 Feet

- Airport
- School
- Private School
- University
- Hospital
- Public Facility
- Landfill
- Cemetery
- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



## RECREATION AND PARKS

The City of Minot provides recreation facilities and programs to its residents. The Recreation Department emphasizes both the community value of physical activity and the considerable value of the sport and recreation sector to the economy.

### CITY AUDITORIUM

The City owns and operates the City Auditorium at 420 3rd Avenue SW. This facility holds sporting events, meetings, weddings, receptions, trade shows and conventions. In 2009 there were 256,439 people who attend events and activities in the Auditorium Complex.

### RECREATION ACTIVITIES

The City of Minot Recreation Department and Commission provides and sponsors numerous activities for youth including T-ball, baseball, basketball, softball, Track, Volleyball and Kidz Quest. Adult recreation opportunities include softball, volleyball and basketball. In addition, Minot serves as a great venue for tournaments in many of these sports throughout the year. In 2009 approximately 4,500 participants engaged in these activities.

Cameron Indoor Tennis facility is operated by the City of Minot Recreation Department. This facility provides membership and instruction for youth and adults. A full-time teaching professional/manager provides these services.

There are 171 people employed by the City of Minot Recreation Commission serving full-time, part-time or on a seasonal basis.

### MINOT PARK DISTRICT

The City of Minot Park District is an independent government entity which has been planning, acquiring and operating City parks and facilities since 1911. The Park District took over operation of the City Forestry Department in the early 90's. Like the City, the Park District is a taxing authority as established by the North Dakota Century Code. The district's mission is to "provide rewarding leisure and educational experiences for our community and region."

### HISTORY OF MINOT PARK DISTRICT

The Minot Park District provided a history of park development by which the following excerpt is from: The Minot Park District was formed by Ordinance #53 of the City of Minot which was passed and approved on August 28th, 1911. The first Park Board was elected on September 26th, 1911 and the votes were canvassed by the city commission on October 2nd, 1911. The board was seated and held their organizational meeting on October 3rd, 1911. Section 2-1 of the current City of Minot revised ordinances which were adopted on March 6, 1972 reads as follows: "The Park District of the City heretofore created by the council in accordance with and under the provisions of the appropriate laws of the State then in existence, the laws now being embodied in chapters 40-49 in the North Dakota Century Code, is hereby continued." Since the time of our inception, we have had our share of problems but we have survived to become a very viable part of the City of Minot and this region of the State.

## **CREATION OF PARKS**

In 1912 the Park Board began to purchase land for Parks. With the purchase of 85 acres, they created River Drive Park. In that same year, they purchased 60 acres in west Minot to create Oak Park. They acquired land on North Hill for Grand View Park. The original plan was to have four parks in the prominent points of Minot and connect them with Coe Drive, a two mile long wooded road north of River Drive Park. This plan never did materialize due to the lack of property on the south side of Minot.

Will O. Doolittle, the second park superintendent, was instrumental in the early development of the Minot park system, and with a bond issue, the first bathhouse in what is now Roosevelt Park was constructed, as well as the Zoology Building which is still in use today. Mr. Doolittle also became the editor of Parks and Recreation, the American Institute of Park Executives monthly magazine while he was here in Minot, and continued this job until 1953. His interest in Parks, and also zoos continued, and in 1926 he became the superintendent of parks in Tulsa, Oklahoma where he helped redevelop old parks, create new ones, and introduced the concept of a zoo to Tulsa. He received the Bronze Pugsley Medal in 1935, one of the highest honors for park professionals.

Lincoln Park, which is the present site of Eric Ramstad Middle School, was lost in a law-suit with the Minot Public Schools. The site of the old Washington Golf Course is the present Jim Hill Middle School. The Minot Park District started looking for a site for a new golf course in the late 50's and purchased land west of Minot in 1961 for that purpose. The 70's brought on a rapid expansion of the system. During this time, Minot experienced extensive flooding, and to control this, it was necessary to acquire land for right of ways. With the completion of the dike work, the City was left with land they had no need for and gave this land to the Park District for neighborhood parks.

Additional history of each of the major parks and facilities is available through the Minot Park District.

## **MINOT PARK DISTRICT FACILITIES**

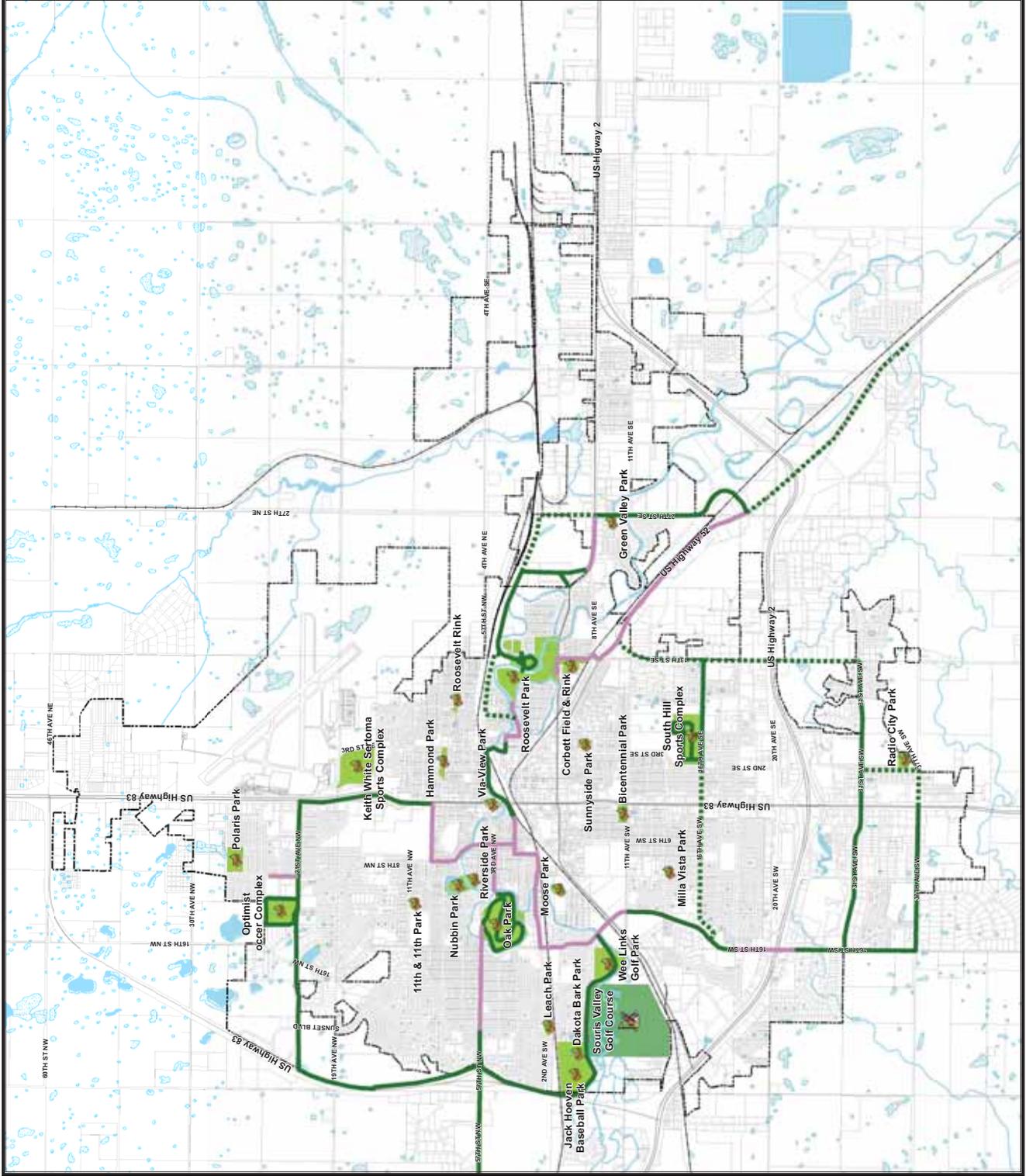
The Minot Park District is lead by the Park Board Commissioners who are elected officials of the Park District who establish the policies and ordinances for the Minot Park District. The board consists of five directors elected by city votes to four year terms. The Minot Park District operates 25 parks with various facilities as shown on Figure 14, Park and Trails.

**City of Minot**  
2011 Comprehensive Plan

**Parks and Trails**



-  Golf Course
-  Park
-  Sidewalk
-  Existing Trail
-  Proposed Trail
-  City Boundary
-  Open Water
-  Wetlands
-  Streams
-  Railroad



## MAJOR FACILITIES

Minot Park District operates and manages several major facilities including:

1. Corbett Field and Rink, home to American Legion, High School and College baseball along with rink space for hockey and skating.
2. Minot Optimist Community Soccer Complex which provides fields for high school and youth soccer.
3. Maysa Arena was built in 2000 in a partnership with the Minot Area Youth Skating Association, Minot Park District, and the City of Minot. The facility provides two indoor rinks with year round ice.
4. Golf facilities include the Souris Valley Golf Course an 18-hole golf course and Jack Hoeven Wee Links, a 9-hole golf course for kids.

Frisbee Golf, Dakota Bark Park, fishing piers throughout the city, outdoor ice rinks and cross country ski trails in various locations round out other recreation opportunities for children, family and residents of all ages.

The city's largest park is Roosevelt Park. This park includes a variety of amenities including the zoo, swimming pool, gardens, trails, fishing dock, band shelter, play ground and tennis courts. The Roosevelt Park Zoo was established in 1920 with the first animal being a male bison from Montana. The following year a bear den and zoological building were added to the zoo. During the 1940s through the 1960s, the zoo animal population greatly increased and the area started to look like a zoo. The flood of '69 caused every bird and animal to be moved from the zoo which led to the redesign of the zoo grounds. The foot bridge, a feline house, and a new bear den were constructed. Throughout the following years to the present, the zoo has expanded with the addition of new animals and new exhibits.

Oak Park is the city's second largest park with unique amenities including sand volleyball courts and a splash pad along with the Magic Smiles handi-capable playground, trails and band shelter. Camp Owetti, in the back of Oak Park, is the summer home of Girl Scouts.



*Corbett Field*



*Maysa Arena*



*Statue in Roosevelt Park*



*Stave Church*

Minot Park District also manages Minot's Scandinavian Heritage Park home to the traditional "stave church."

Established during 1988 to celebrate and preserve Scandinavian heritage, it is the only park in the world representing all five Scandinavian countries. The park is supported by the Scandinavian Heritage Association who provides a home for the Norsk Hostfest, and the Minot Convention and Visitors Bureau, both of which have offices at the park.

## **TRAILS**

Early in 1996, the Trails Committee of the Park District, in cooperation with the City of Minot, created a Master Plan of Trails for Minot. This plan is included in Figure- Parks and Trails. There are a total of 20 miles of existing trails, 6 miles of proposed trails (current plan) and over 7 miles of sidewalks within the City.

The Master Plan of Trails has become part of the Transportation Plan of the City of Minot. The ultimate plan, once complete, will result in a path around the entire city benefiting sports enthusiasts of all types.

## **MINOT PARK DISTRICT PLANNING**

In 2007 the Minot Park District completed a comprehensive telephone survey of 400 Minot residents to understand the following:

- Assesses public perception of the Minot Park District
- Measure awareness of Minot's parks and park facilities
- Gauge residents; usage of parks and park facilities
- Measure resident satisfaction with parks and park facilities
- Determine the best method of communicating park information to the public
- Assess potential motivations for visiting parks and park facilities

Summary of the survey confirms that Roosevelt Park and Oak Park are the most commonly known parks in Minot. Overall, residents feel the Minot Park Districts revenue generating facilities are in very good condition. Three out of five Minot residents visit a park at least once per month. Non-organized activities would be the type of activity most likely to motivate residents to visit a park facility. Nearly all Minot residents would be more likely to visit a park facility if they know the facilities were well maintained. Newspaper and television are the best way to communicate information about the park events to Minot residents. Detail summary and survey tabulations of the surveys are available at the Minot Park District.

Along with the survey the Board prepared the "Minot Park District Vision and Strategic Plan." Eleven action strategies and objectives were defined in this report. One notable strategy for future parking planning is the need to identify how to grow the park system as the city continues to grow. Currently, the City does not have an effective tool for acquiring park land dedication as development occurs. As evident from the Park and Trail plan there are no existing parks or planned parks and trails for areas to the south and west of the core city where new residential development is likely to continue. This need will be further discussed as growth and population projections are understood and land use alternatives are developed.

## SANITARY SEWER

### WASTEWATER SYSTEM

Major components of the sanitary sewage system consist of the collection system, pump stations, the treatment facility and treated water disposal. The treatment facility consists of aeration ponds, five lagoons and constructed wetlands. Discharge of the effluent (treated wastewater) is into the Souris River. Figure 15, Sanitary Sewer System, displays the sanitary sewer pipes and locations of manholes and lift stations.

The lagoons consist of five lagoon cells, totaling 729 acres, and constructed wetlands made up of four separate cells that are 31 acres each. There are two eight acre aeration ponds which were developed along with the wetland system in the fall of 1991. The total acreage gives the City a total holding capacity of approximately 1.6 billion gallons.

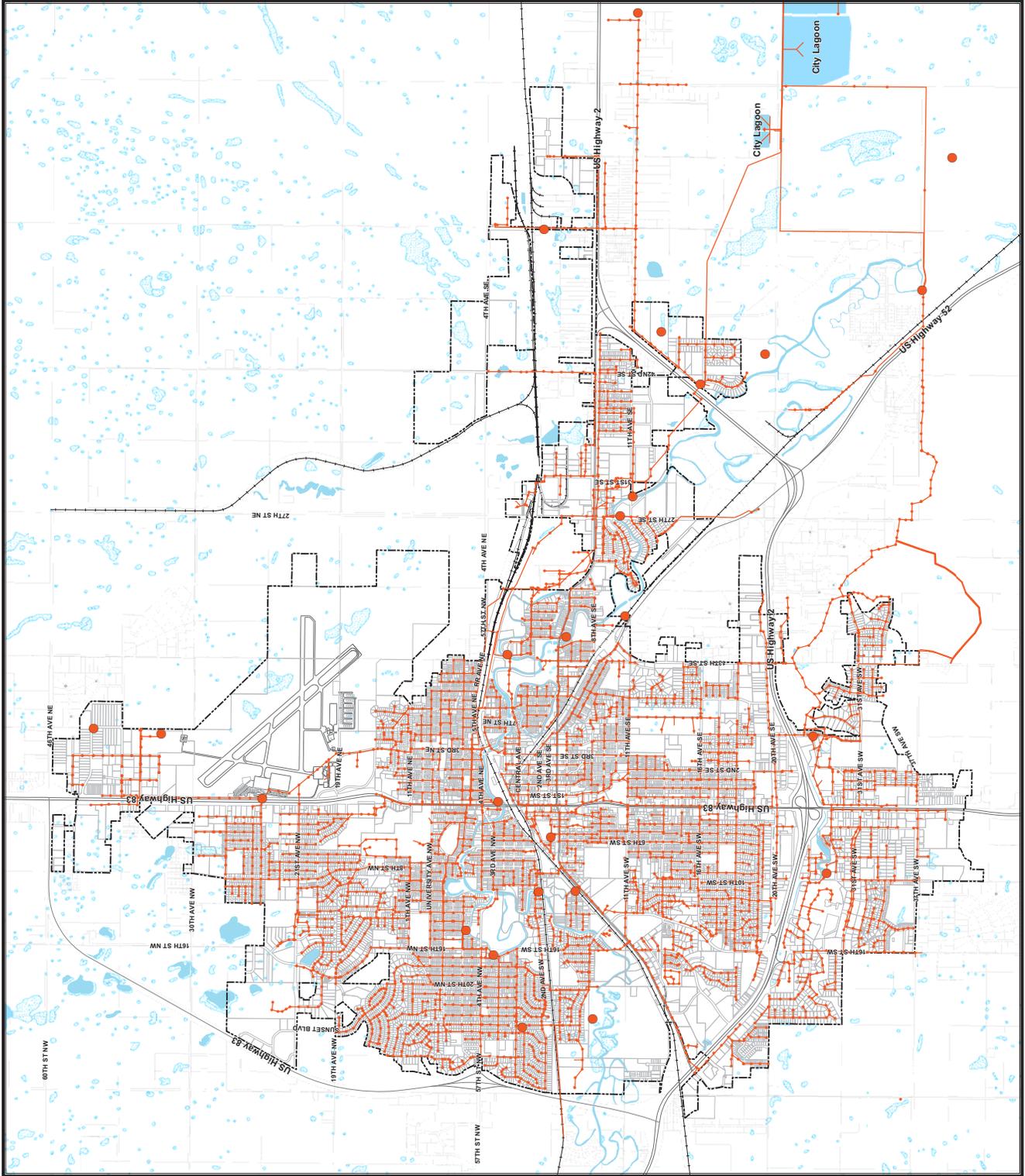
The City completed a study of the Puppy Dog Sewer System in 2006 which developed alternatives and made recommendations for future improvements for this area. The study determined future wastewater flows based on contributing land area and these flows were used to determine the size of future facilities, including interceptors, pumping stations, forcemains, and wastewater treatment facilities.

The City is currently conducting the North Minot Sanitary Sewer Study to determine the future trunk sanitary sewer infrastructure needed to facilitate growth in the north half of the City. The study will address layout, sizing, capacity, and cost of a trunk system to provide service to this area. The study will also evaluate the 21<sup>st</sup> Ave NW trunk line which is near capacity and the Valley Forcemain system along with the Control and Master lift stations.

**City of Minot**  
 2011 Comprehensive Plan  
**Sanitary Sewer System**



- Lift Station
- Manhole
- Sanitary Pipes
- - - City Boundary
- Open Water
- Wetlands
- - - Railroad



## WATER SUPPLY

The water system consists of three main components supply, treatment and distribution. Supply is provided by wells in the Minot and Sundre aquifers with transmission lines to the Water Treatment Plant. The plant is operated and manned 24 hours a day, 7 days a week. Treatment at the Water Plant consists of coagulation of sediments with the use of lime, fluoridation, chlorination and filtration. Figure 16, Municipal Watermain System, displays the location of the city's watermains, wells and towers.

The water plant pumps finished water to five ground level storage reservoirs with a combined capacity of 12.5 million gallons. The water is pumped from the reservoirs by six booster stations to three 500,000 gallons elevated tanks to maintain adequate pressure supply in the water main.

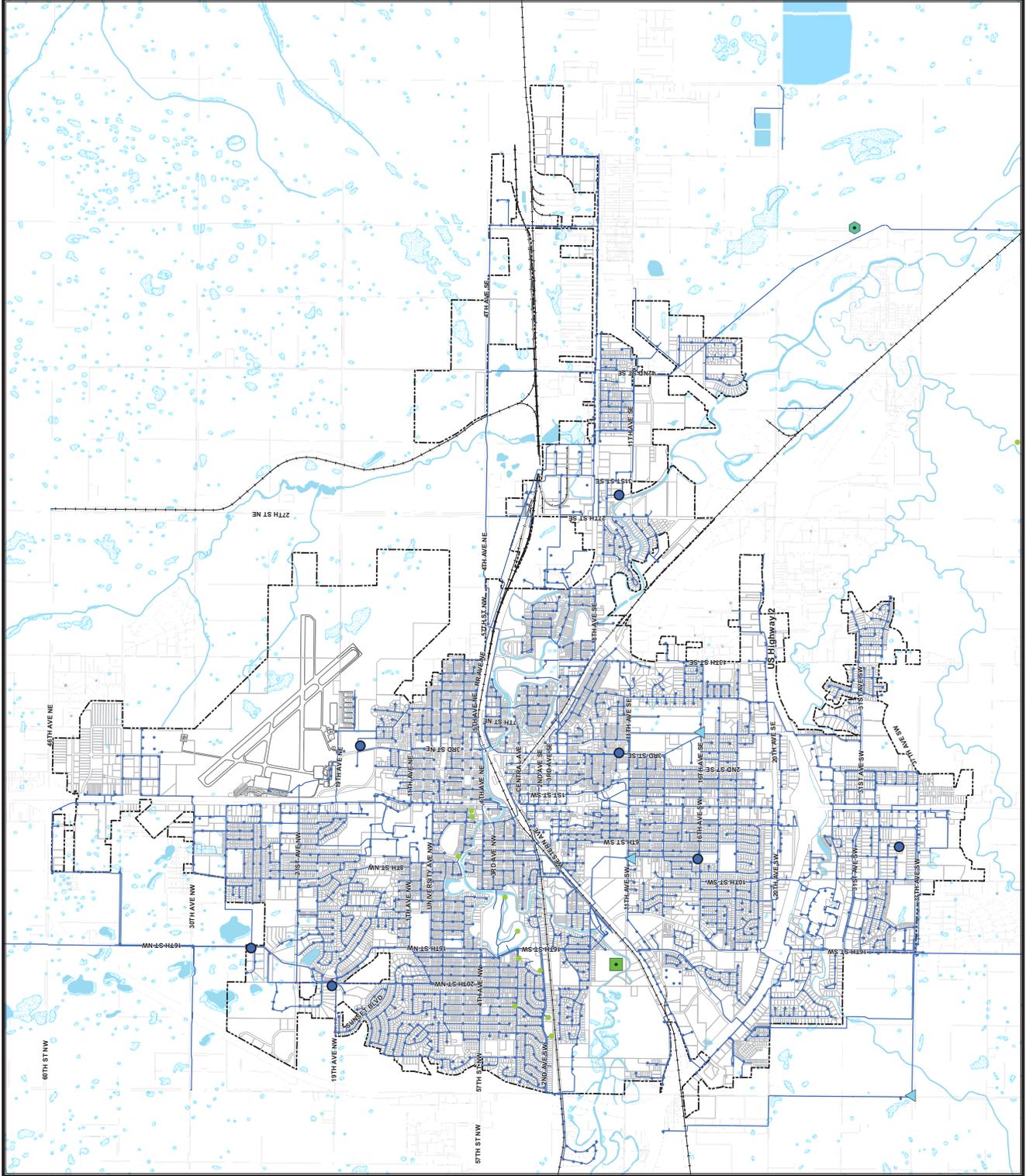
The City is part of the Northwest Area Water Supply (NAWS) project that will supply water from Lake Sakakawea to the city of Minot. Water will be drawn from Lake Sakakawea and pretreated before traveling through 45 miles of 30" and 36" pipe, generally following Hwy 83, to the municipal water treatment plant in Minot for final treatment. Once treated, the water will be supplied to not only the city of Minot and its users, but to communities and rural users throughout north central and northwest North Dakota, potentially supplying over 90,000 people. Sized to handle up to 26 million gallons per day, this project is capable of handling current demand, as well as anticipated future demand for many years. The construction of the NAWS project is being funded through the use of federal, state, and local funds.

The East Side – Valley Zone Water Distribution System Improvements Study was completed for the City in 2006. The study provided water distribution system improvement alternatives to deliver expected fire flow requirements for future industrial and residential development. The City is starting to implement some of the recommendations from the study including the construction of a elevated water storage tank at the East Industrial Site.

**City of Minot**  
**2011 Comprehensive Plan**  
**Municipal Watermain System**



- Water Treatment Plant
- Water Tower
- ▲ Booster Station
- ◆ Afterbay Reservoir
- Water Well
- Fire Hydrant
- Gate Valve in Manhole
- Watermain
- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



# STORMWATER/SURFACE WATER MANAGEMENT

## STORMWATER MANAGEMENT

The City of Minot has prepared a Storm Water Design Standards Manual (Manual) to guide and assist entities needing to comply with its Storm Water Management Ordinance. The development of the Storm Water Management Ordinance and the Storm Water Design Standards Manual was a major step in solving existing and future drainage problems in the Minot area. The City's Storm Water Management Ordinance requires the development of Storm Water Management Plans and in the future the acquisition of Storm Water Management Permits for most types of land disturbing activities within the City and its extraterritorial jurisdiction. The Storm Water Management Ordinance outlines application procedures, plan review procedures, approval standards, as well as permits, enforcement, and penalties. Figure 17, Storm Sewer System, displays the city's storm sewer pipes, life stations and manholes.

### MS4

The Environmental Protection Agency (EPA) has issued stricter storm water discharge requirements through rules enforced in the Clean Water Act. The rules require the North Dakota Department of Health, as the delegated permitting authority, to issue permits for storm water discharges from small Municipal Separate Storm Sewer Systems (MS4s).

The City of Minot due to its population of 10,000 or greater has been designated as a small MS4. The City must comply with this regulation and must develop, implement and enforce a Stormwater Management Program (SWMP). The City is required to reduce the discharge of pollutants to the maximum extent practicable (MEP) to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The SWMP will consist of a combination of Best Management Practices (BMPs), including education, maintenance, control techniques, system design and engineering methods, and such other provisions as determined to be appropriate, to meet the minimum requirements of this permit.

The MS4 general permit requires the City of Minot to create a Stormwater Pollution Prevention Program with six important components:

1. Public education and outreach, which includes teaching citizens about better stormwater management.
2. Public participation: Include citizens in solving stormwater pollution problems. This includes a required public annual meeting and an annual report.
3. A plan to detect and eliminate illicit discharges to the stormwater system (like chemical dumping and wastewater connections).
4. Construction-site runoff controls
5. Post-construction runoff controls
6. Pollution prevention and municipal "good housekeeping" measures, like covering salt piles and street-sweeping.

**FLOOD CONTROL**

The City of Minot has several dams upstream on the Souris River that provides flood protection for the City. Lake Darling Dams (constructed in 1936) and the Rafferty-Alameda Dams (developed over the 1988-95 period) provide flood protection in the Souris River Valley including the City of Minot.

The City has constructed several levee embankments along the Souris River that also provide additional protection for the City. The City is currently working to determine the 100 year flood profile throughout the City. Results of this will help identify future work or analysis that may be necessary in the future.

**FUTURE PROJECTS**

The City completed a comprehensive Storm Water Management Plan in 2003 which identified storm water facility improvements and storm water management within the City of Minot. The Plan provides a guideline or framework to decide how to best allocate resources for infrastructure improvements, manage storm water runoff associated with urban development, control development with flood prone areas, and achieve environmental regulatory compliance. Two projects that are currently underway are the 6th St SW Underpass project and the 21st Ave NW project. Table 19 lists future projects that the City has identified for improvements and have ranked the projects in order based on need.

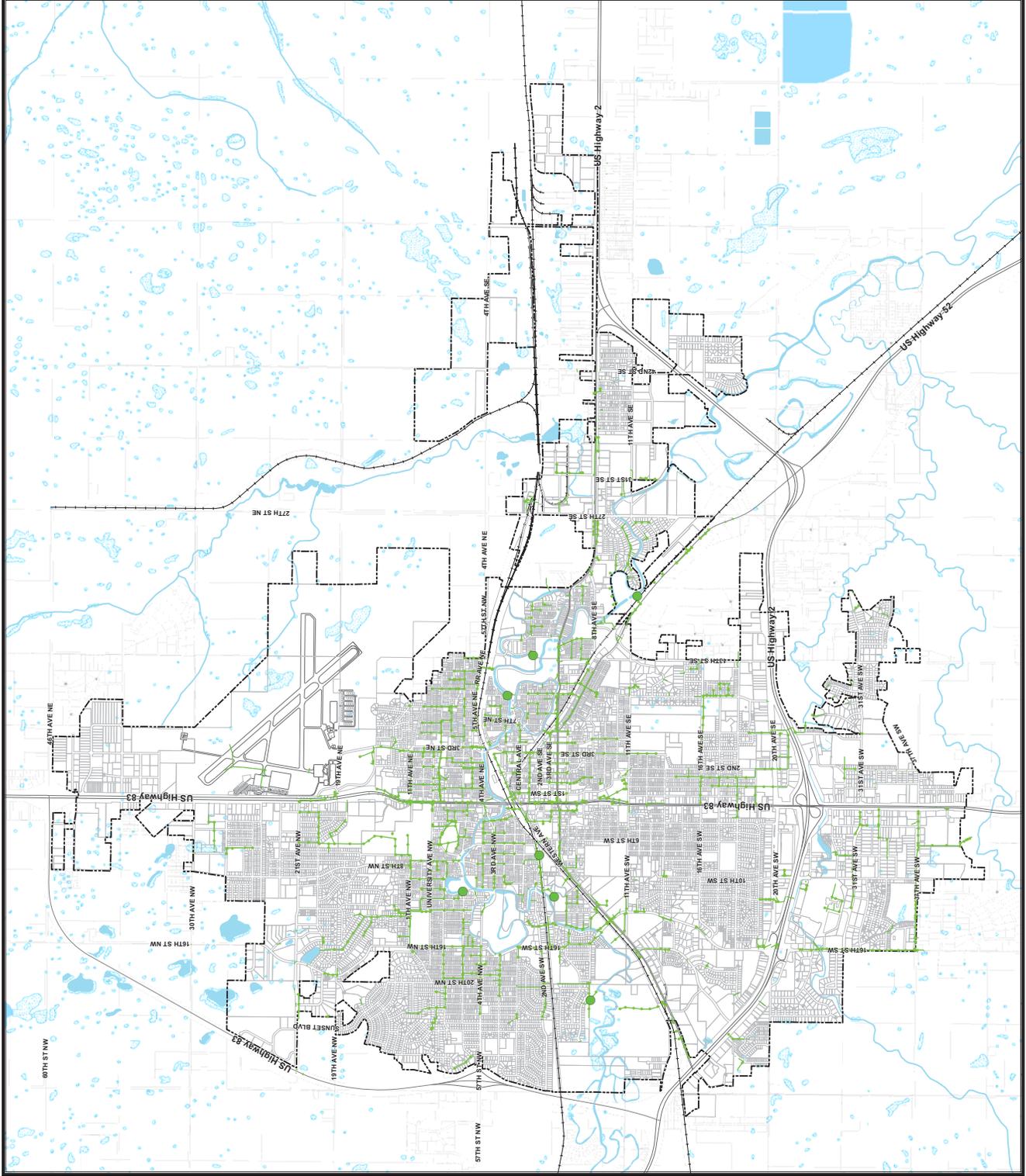
**TABLE 19**  
Future Projects

<b>Project Name</b>	<b>Rank</b>
18th Ave SW - W. of Broadway	1
4th St SW - 33rd Ave to 37th Ave	2
10th St SW - S. of 31st Ave	3
Perkett Ditch - On 25th St NW	4
16th St SW - 11th Ave to 16th Ave SW	5
11th Ave SW - To 6th St SW	6
4th Ave NW - At 8th St NW	7
Polaris Park	8
Main St - 35th Ave to 37th Ave SE	9
Southwest Knolls - Phase II at 13th St/12th Ave	10
Coulee Dr - Intersection of Northwest Ave/16th St NW	11

**City of Minot**  
**2011 Comprehensive Plan**  
**Storm Sewer System**



- Storm Sewer Lift Station
- Storm Sewer Manhole
- Storm Sewer Pipe
- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



# TRANSPORTATION

## HIGHWAY SYSTEM

### EXISTING ROADWAY JURISDICTION

Roadways are categorized under the agency that is responsible for their maintenance. The State of North Dakota is responsible for Federal Interstate, US Highways, North Dakota State Roads, and State Park Roads. The County is responsible for Ward County Roads. The City is responsible for the remainder within city limits.

### EXISTING FUNCTIONAL CLASSIFICATION

The North Dakota Department of Transportation (NDDOT) uses four roadway classifications: interstate, principal arterial, minor arterial, and collector. Of these, the interstate classification does not apply to the City of Minot.

Principal Arterial roadways are designed to carry traffic. Access may be limited to other major arterials or major collectors, with spacing limited to a minimum of one-half mile. Either intersections or interchanges are allowable. The US 2/52 Bypass, US 83 West Bypass, and the proposed East Bypass are limited-access Principal Arterials and are funded with Regional Primary funds.

Principal Arterial roadways such as Broadway (US 83), Burdick Expressway, and Valley Street, are also designed to carry traffic, but provide access to local and collector streets as well as major businesses. Improvements to principal arterials are funded with Regional Secondary funds.

Minor Arterial roadways are intended to provide access within Minot. They typically have extensive residential access and do not carry truck traffic nor heavy traffic volumes. They are used as alternates to principal arterials. Minor arterial improvements are funded with Urban Roads funds.

Collector streets provide routes for short trips or to higher classified roadways. Collector street improvements are also funded with Urban Roads funds.

Figure 18 shows the existing roadways functional classification.

### SAFETY ANALYSIS

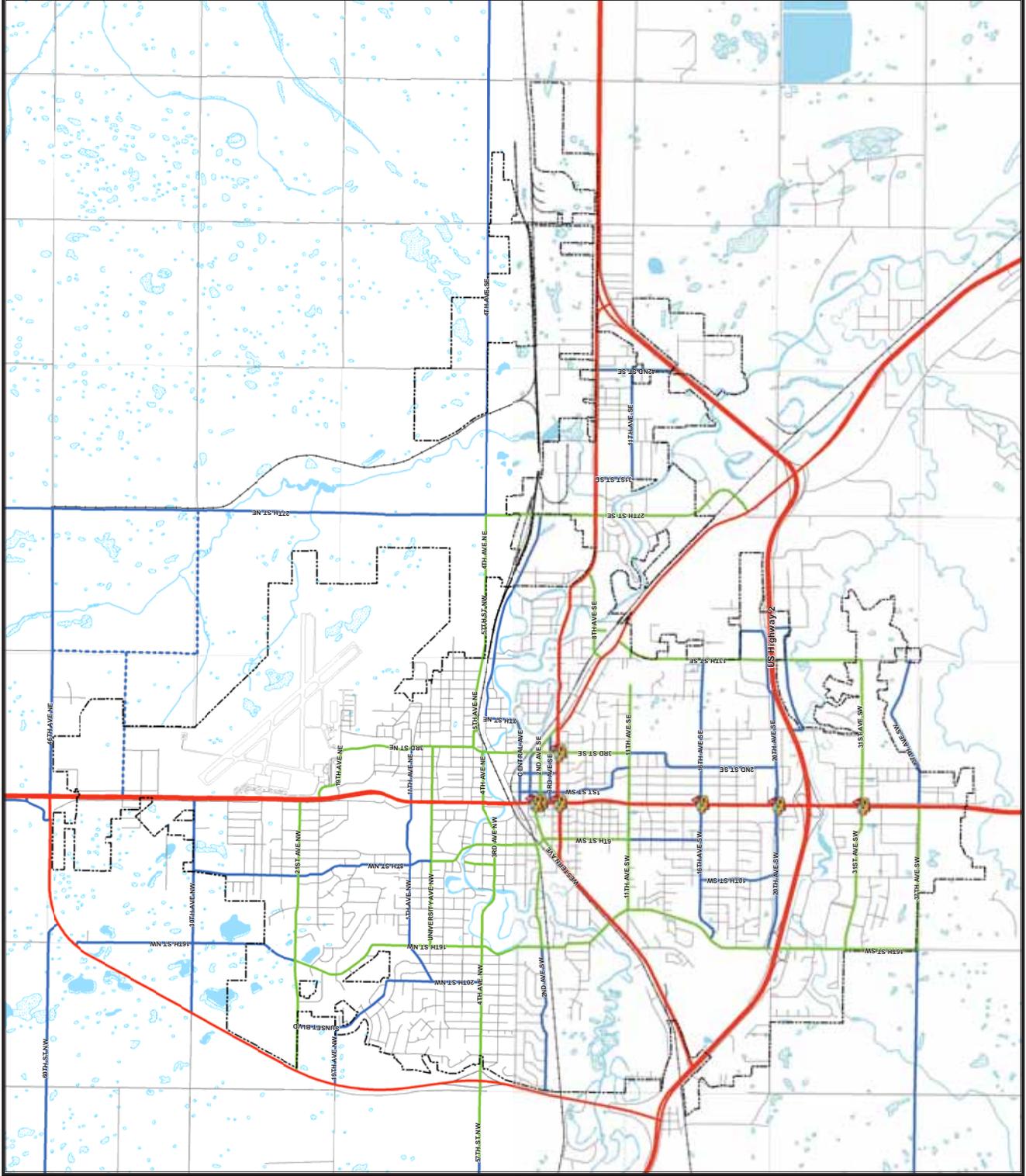
Crash data in North Dakota is collected by NDDOT and is categorized by type of crash, severity, time of day, weather, and other contributing factors. High accident intersection locations are also illustrated in Figure 18.

**City of Minot**  
 2011 Comprehensive Plan  
**Roadway Functional Classifications  
 and High Accident Locations**



3,500 0 3,500 Feet

- High Accident Locations
- Principal Arterial
- Minor Arterial
- Collector
- Proposed Collector
- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



### **EXISTING TRAFFIC VOLUMES**

The most recent daily traffic volume information for the primary roadways in Minot were obtained from NDDOT. The year 2008 daily traffic volume information is shown graphically on Figure 19. Figure 20 shows the existing typical sections of the roadway network.

### **PREVIOUS STUDIES**

#### **MINOT LAND USE AND TRANSPORTATION PLAN**

In November 2002, Olsson Associates prepared a land use and transportation plan. The transportation part of the plan documented existing conditions, modeled and analyzed future traffic volumes, and recommended a plan with specific transportation improvements.

#### **US 2/52 BYPASS STUDY**

In May 2005, Ulteig performed a corridor study on the US 2/52 Bypass. The purpose of the study was to develop alternatives that will provide acceptable traffic flow for current and future traffic, enhance access, and improve safety along the corridor. Concepts included converting the bypass into a free-flowing freeway, improving the corridor to an expressway, and consideration of a new bypass south of Minot.

#### **SOUTH BROADWAY CORRIDOR STUDY**

In 2008, URS and Houston Engineering performed a corridor study on South Broadway between 20th Avenue SW and 40th Avenue SW. The purpose of the study was to evaluate the long-term needs of the corridor, and to determine the impact from the proposed development of a 19.6 acre property on the corridor. The study examined existing conditions, trip generation due to development, and future year 2028 conditions. Recommendations included capacity and geometric improvements at certain intersections.

### **TRAFFIC SIGNALS**

All traffic signals within Minot are city maintained and operated regardless of roadway jurisdiction. Figure 21 shows the current traffic signals in the city.

### **EXISTING CONGESTION**

Broadway (US 83) has seen significant increases in volumes and delays. The existing signal controllers are not interconnected and currently run fixed-time. The City is pursuing an energy grant that could fund an improvement project to interconnect these signals.

Critical intersections include Broadway (US 83) at 31st Street S, with heavy volumes in the southbound left-turn movement, and Broadway (US 83) at 20th Avenue S. Figure 19 shows the average daily traffic on roadways.

City of Minot  
2011 Comprehensive Plan

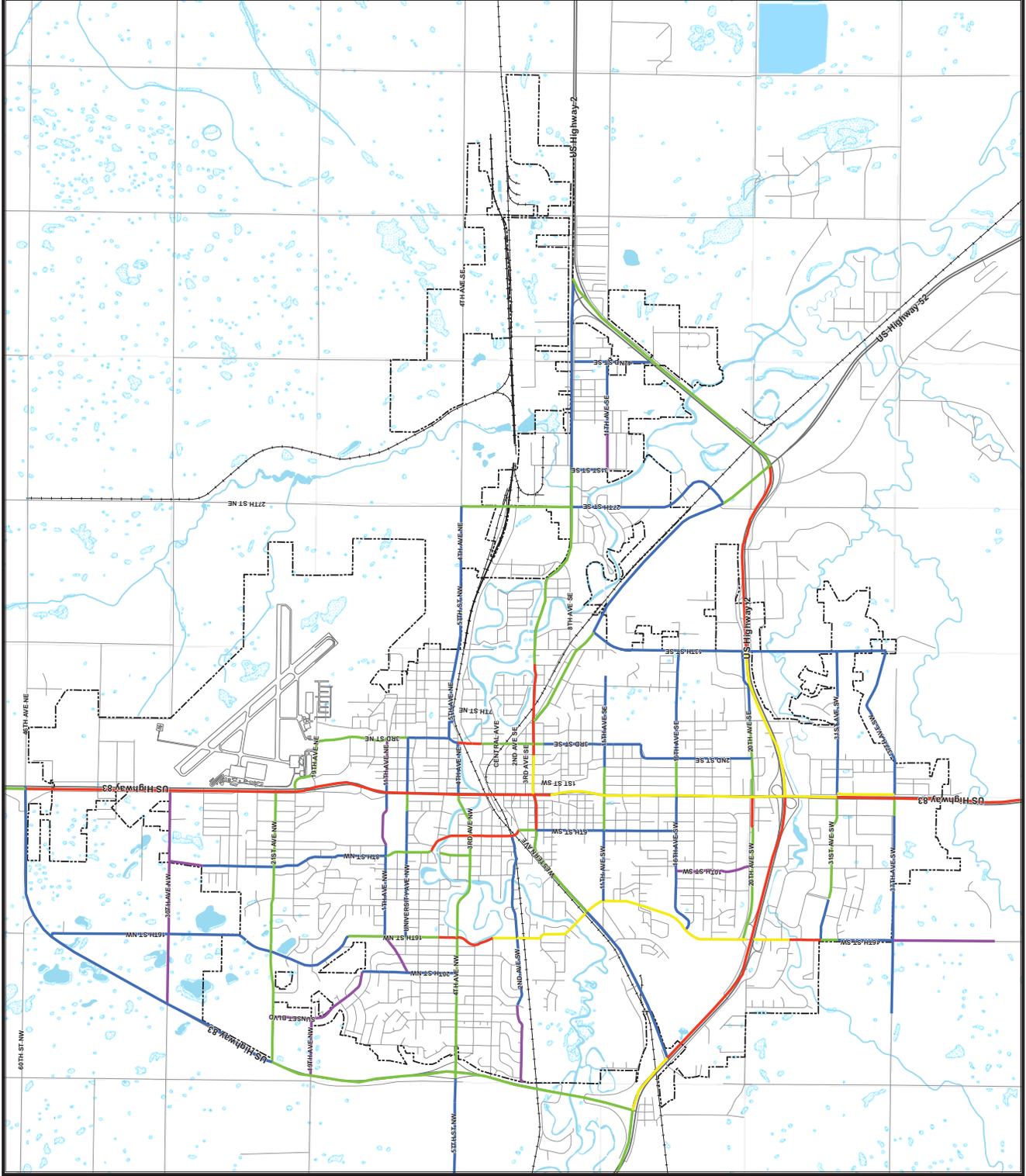
Average Daily Traffic (ADT)



ADT:

- <1,000
- 1,000 - 5,000
- 5,000 - 10,000
- 10,000 - 15,000
- >15,000

- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



**City of Minot**  
2011 Comprehensive Plan

**Roadway Sections**



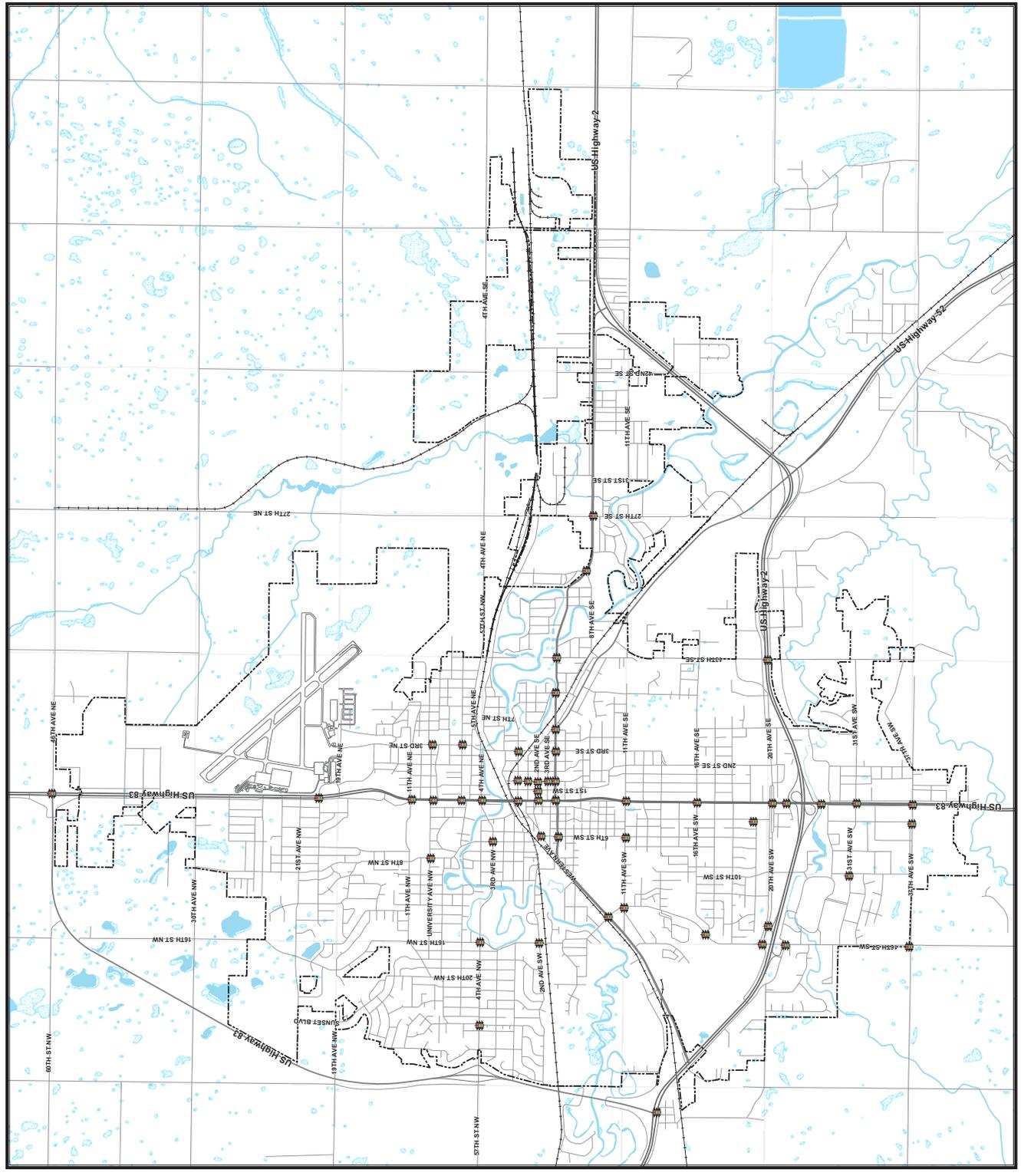
- 5 Lane
- 5 Lane (Future)
- 4 Lane Divided
- 4 Lane Undivided
- 3 Lane
- 3 Lane (Future)
- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



**City of Minot**  
**2011 Comprehensive Plan**  
**Signalized Intersections**



- Signalized Intersections
- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



## **ROADWAY IMPROVEMENT PROJECTS**

### **US 2/52 BYPASS**

NDDOT is proceeding with a project to improve US 2/52 Bypass to an expressway from 6th Street SE to 23rd Street SE. Intersection improvements include a traffic signal at US 2/52 at 13th Street SE, and  $\frac{3}{4}$  intersections at 17th Street SE, 20th Street SE, and 23rd Street SE. 6th Street SE and 21st Avenue SE will be realigned to provide a south backage road to US 2/52.

### **EAST BYPASS**

The City of Minot has applied for a TIGER grant, which stands for Transportation Investment Generating Economic Recovery under the Federal American Recovery and Reinvestment Act, to proceed with the East Bypass. The Bypass would consist of a two-lane rural section from the intersection of US 2 at 55th Street NE and continue north and west to N Broadway (US 83) at 46th Avenue N. The project would include a signalized intersection at US 2 at 55th Street NE, and a 55th Street NE overpass above the BNSF rail line north of the intersection.

### **WEST BYPASS**

NDDOT is planning within the next few years depending on funding to reconstruct the failing pavement on the West Bypass. The project is currently in the concept report phase, and some left-turn or right-turn lane additions could be included in the project.

### **13TH STREET SE/37TH AVENUE SE**

The City is planning to pave 13th Street SE from the US 2/52 Bypass to 37th Avenue SE, and 37th Avenue from Broadway (US 83) to 13th Street SE.

### **31ST AVENUE SE**

The City plans to improve 31st Avenue SE to a three-lane section between Broadway (US 83) and 13th Street SE. This improvement is planned for year 2015.

### **6TH STREET SW UNDERPASS**

6th Street SW currently crosses the CP and BNSF rail lines at a grade separated crossing west of downtown. The City plans to lower the underpass and improve storm drainage. This improvement is needed due to traffic flow, safety, and emergency vehicle mobility.

## **TRANSIT SYSTEM**

### **EXISTING TRANSIT SYSTEM**

Minot City Transit (MCT) is operated by the Minot Public Works department. It currently operates nine transit routes, including fixed-route transit service, and school service with early morning and afternoon services for schoolchildren. Figures 21 and 22 show the existing transit routes in Minot.

Accessible transportation, dial-a-ride, is provided by the Minot Commission on Aging. Figure 22 displays the Existing Early Morning Transit Routes while Figure 23 displays the Existing Mid-day Transit Routes.

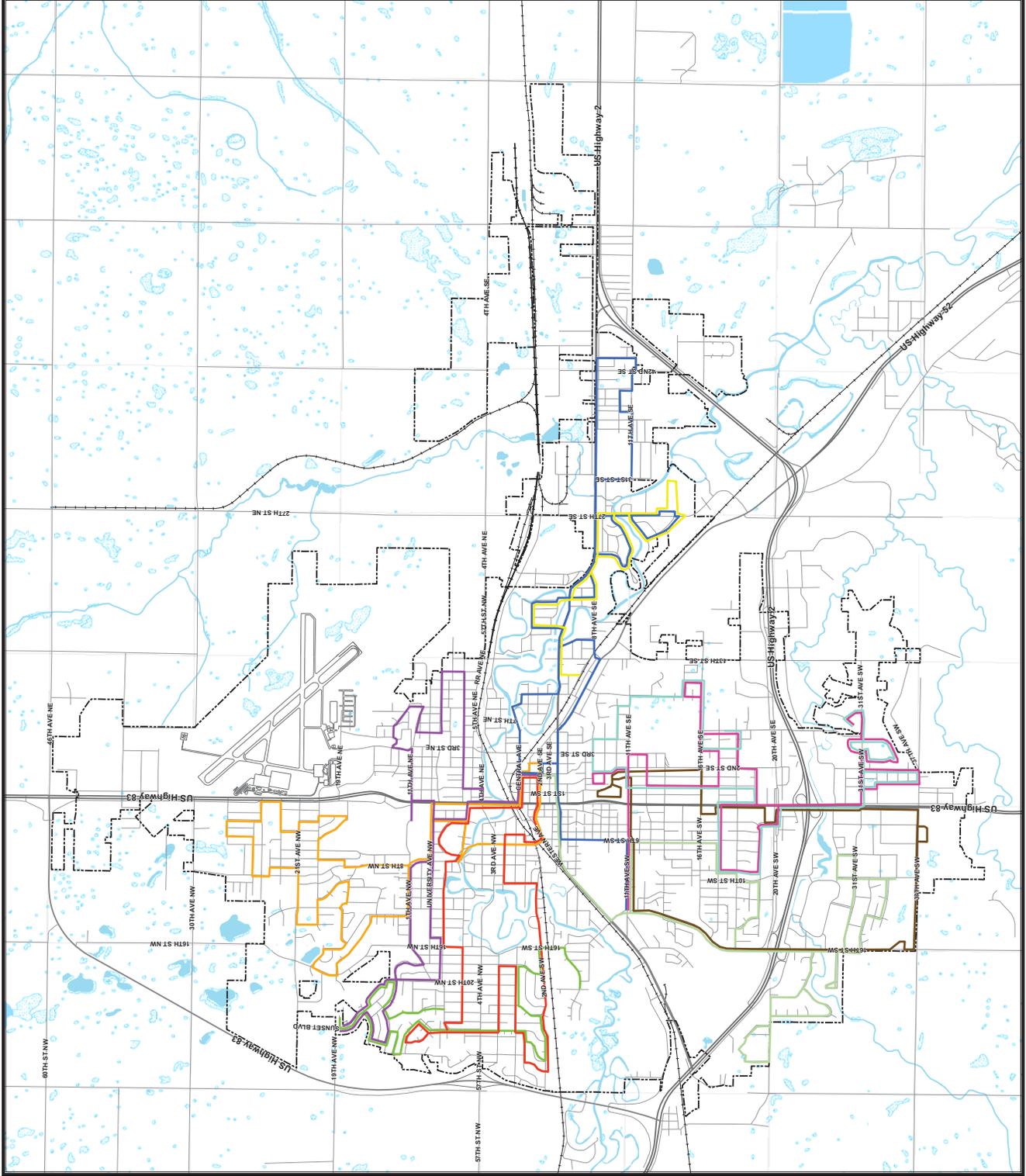
**City of Minot**  
2011 Comprehensive Plan

**Early Morning Transit Routes**



3,500 0 3,500 Feet

- Early Morning Transit Routes:**
- Belair-Pickett Route
  - East Route
  - North Route
  - North Central Route
  - South 1 Route
  - South 2 Route
  - South Route 2
  - Sunnyside Route
  - Washington School Route
  - West Route
- City Boundary  
 Open Water  
 Wetlands  
 Streams  
 Railroad



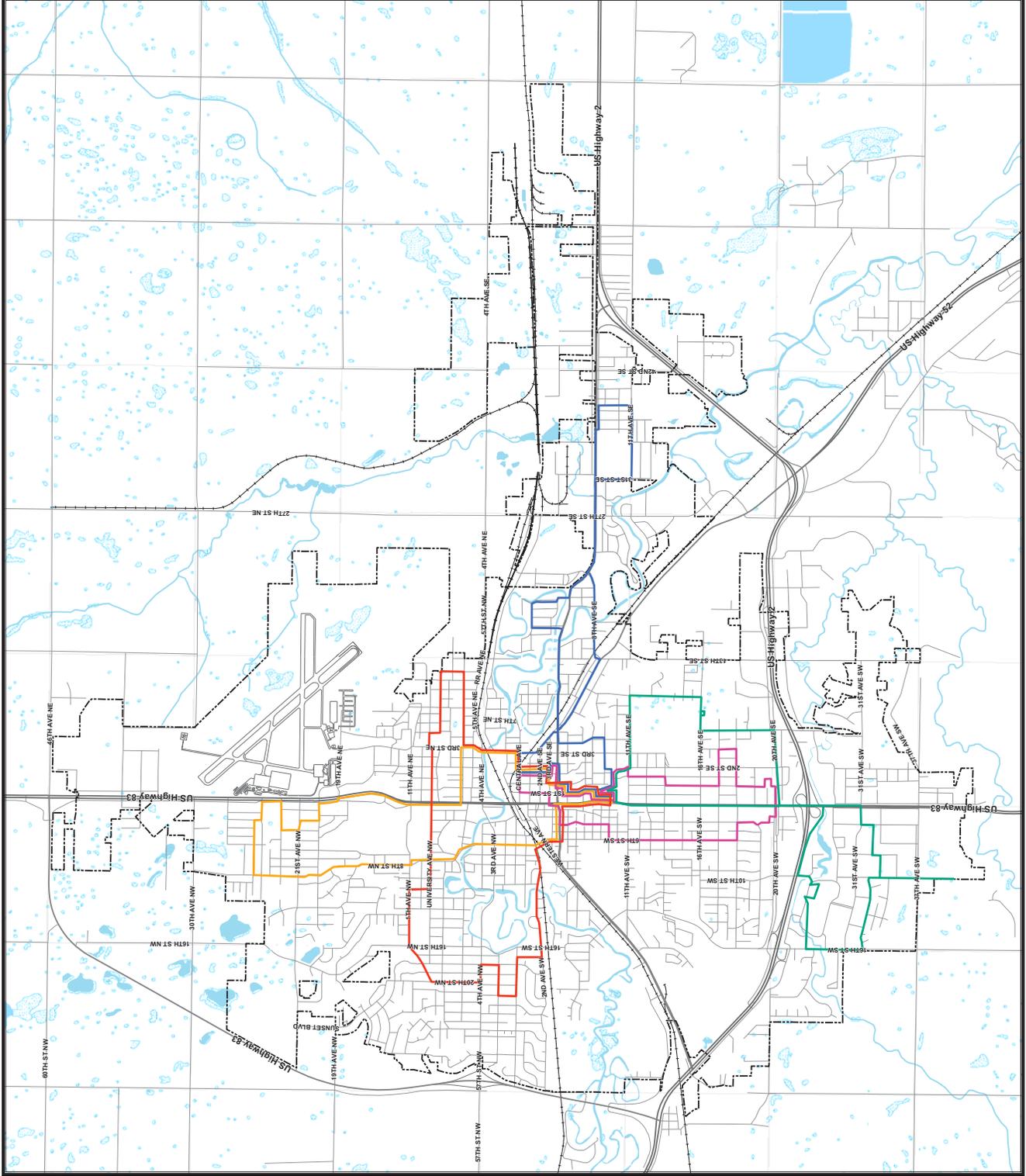
**City of Minot**  
 2011 Comprehensive Plan  
**Mid-Day Transit Routes**



**Mid-Day Transit Routes:**

- East Route
- North Route
- South Route 1
- South Route 3
- West Route

- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad



# AVIATION

## **MINOT INTERNATIONAL AIRPORT**

Minot International Airport (MOT) is a public airport located at 25 Airport Road 2 miles northeast of downtown. The airport serves over 42,000 commercial, air taxi, itinerant, local, and military operations per year. There are five daily flights to/from Minneapolis-St Paul and two daily flights between Minot and Denver served by United, and one daily flight between Minot and Las Vegas served by Allegiant.

The Airport's infrastructure includes a passenger terminal, a general aviation terminal building, three aprons, two lighted runways, and a number of hangers, offices, and other support buildings and equipment. Primary Runway 13-31 is 7,700 feet in length by 150 feet in width, and crosswind Runway 8-26 is 6,350 feet in length by 100 feet in width.

Delta Airlines, UPS, Federal Express, and DHL are the major providers of cargo services. Federal Express leases a building and has two flights per day. DHL leases an office from the airport and has one flight per day. UPS is located off property and sends delivery trucks to meet the cargo aircraft. UPS sends two flights daily.

Airport Road is a two-lane roadway that allows access to the air carrier terminal area from North Broadway at the 20th Avenue NW signalized intersection. 19th Avenue NW also serves as access between North Broadway and Airport Road.

The general aviation terminal area is accessed from driveways on North Broadway located at 22nd Avenue NW and 24th Avenue NW.

## **MINOT AIR FORCE BASE**

Minot Air Force Base Airport is located 10 miles north of Minot and is owned by the United States Air Force. It has one runway and serves 30,000 military operations per year.

## **FLYING S RANCH AIRPORT**

Flying S Ranch Airport is a privately owned airport located five miles southwest of the city. It has one runway and serves 1,000 itinerant and local operations per year.

## **TRINITY MEDICAL CENTER HELIPORT**

The Trinity Medical Center Heliport is located at the Trinity Medical Center and is used for medical purposes.

# RAILWAYS

## EXISTING FREIGHT RAIL SYSTEM

There are two class 1 commercial rail lines operating within the City of Minot. The Burlington Northern Santa Fe (BNSF) line runs from the multi-modal yard located east of 55th Street and runs east-west north of downtown and parallel to the Burdick Expressway west of town. Canadian Pacific (CP) also runs east-west and parallels Valley Street east of town. Figure 24 shows the existing rail crossings in the city. There are currently 12 grade crossings in the city.

The crossings are located in areas of relatively low traffic volumes. Crossing controls range from crossbuck signs in areas with low traffic volumes, to arms with overhead flashing lights in higher traffic areas.

The Great Northern Railway depot built in 1905 still serves as Amtrak's stop for Minot. The station is served by two trains daily and is located at 400 1st Avenue SW.

**City of Minot**  
2011 Comprehensive Plan

**Rail Crossing Locations**



- Rail Crossings
- City Boundary
- Open Water
- Wetlands
- Streams
- Railroad

