City of Bismarck
Growth Management Plan

Adopted August 2003

This plan was approved by a resolution of the Bismarck Planning and Zoning Commission on July 23, 2003 and adopted by a resolution of the Bismarck Board of City Commissioners on August 26, 2003.

BISMARCK GROWTH MANAGEMENT PLAN

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BISMARCK GROWTH MANAGEMENT PLAN

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INTRODUCTION

Bismarck and the surrounding area have enjoyed a steady rate of growth for many years. Historically, most of this growth (80% or more) has taken place within the corporate limits of the City of Bismarck, but things started to change in the early 1990s. While Bismarck has continued to grow, the amount of platting activity and the number of single-family residential building permits in the extraterritorial area (ETA) – the area within two miles of the corporate limits where the City has zoning and subdivision authority – and Burleigh County have increased dramatically. The growth trends we are currently experiencing have policy implications for both the City of Bismarck and Burleigh County.

Growth requires the conversion of agricultural land and open space to residential and commercial developments. Growth brings increases in population, economic opportunities, and a larger tax base. It also brings an increased need for public services and infrastructure expansions. Bismarck is changing. Most building permits are now for new houses in large-lot rural subdivisions and the downtown's central business district is no longer the community's singular economic center.

While the growth we are experiencing is generally perceived as a positive, there are some concerns with the impacts of uncontrolled growth on the high quality of life enjoyed by residents of the community. It is not an issue of growth versus no growth, but rather an issue of managing the growth in order to encourage and support the kind of growth that enhances the quality of life and promotes the community's economic vitality.

The creation of this Growth Management Plan is the most recent activity of an ongoing effort to guide the community as it evolves. Guiding the physical growth and development of Bismarck is not a new idea. The City's first plan was prepared in 1941, followed by another plan in the late 1960s under the HUD 701 program. A 1972 plan provided a preview of what the community should look like in 1982 and included a map that identified the Hay Creek corridor. The last plan, a policy plan, was completed in the early 1980s and is still being used today. Many of these plans looked at the issue of growth management; however, policy decisions have resulted in the City responding or reacting to proposals for development rather than taking a more proactive position in guiding development.

Process

In response to concerns regarding development around the City of Bismarck, the Bismarck Board of City Commissioners began discussing the possibility of placing a moratorium on rural subdivisions and zoning map amendments. Such a moratorium would provide City staff with an opportunity to develop a Growth Management Plan to address the issues of concern. A public hearing on the proposed moratorium was held on December 11, 2002. After much discussion, the Board voted to approve the moratorium, which went into effect on January 2, 2003 at 5:00 p.m. and would extend no later than September 30, 2003.

During January and February 2003, the City's Planning and Development Department conducted research for preparation of the Growth Management Plan. The Department also prepared a draft outline of the plan and developed a tentative schedule for the project. Activities related to the Growth Management Plan were also undertaken, including working with the Metropolitan Planning Organization on the preparation of an RFP for a Fringe Area Road Master Plan and initiating a GIS project to digitize all parcels within the City's extraterritorial area.

A kick-off meeting of the Advisory Committee and Technical Committee was held on March 19, 2003. During this meeting, Committee members were provided with an overview of the project and schedule, a summary of previous planning activities, background information, and an update on related studies and activities. A majority of that first meeting was spent identifying and discussing issues, a summary of which is included in Appendix A.

Technical Committee meetings were held on April 16, May 7, and May 14 in an effort to lay the groundwork for the Growth Management Plan, to develop a purpose statement, to establish the study area boundary, and to respond to key issues identified during the kick-off meeting. The Technical Committee also developed a draft policy plan, which was presented to the Advisory Committee on May 21. A preliminary draft of this plan was presented to the Technical and Advisory Committees on June 4, and a final draft was presented to both groups on June 18.

Study Area Boundary

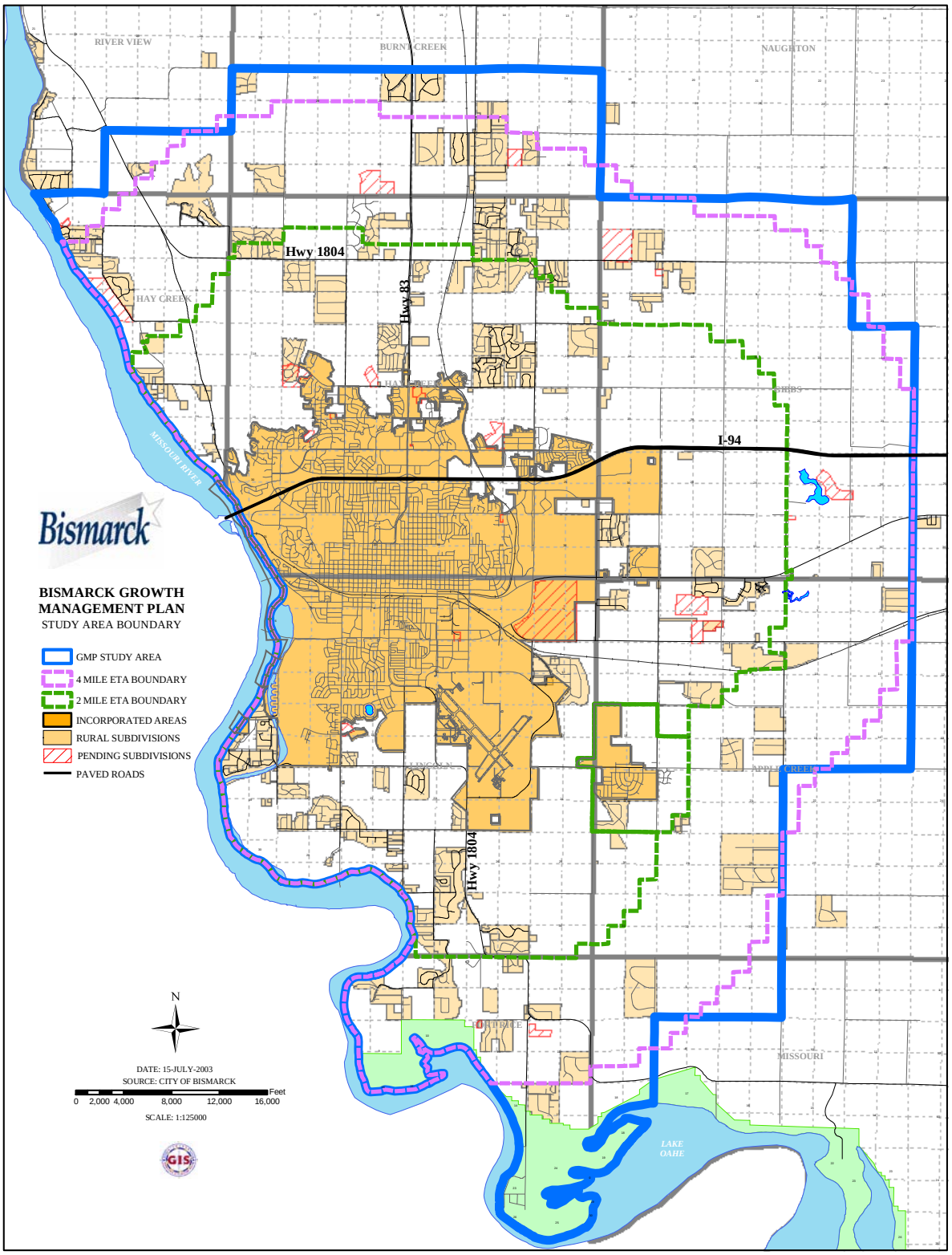
The map on the next page shows the study area boundary for the Growth Management Plan, which was established with considerable input from both the Technical Committee and the Advisory Committee. The boundary approximates the four-mile extraterritorial jurisdiction allowed under Section 40-47.01.1 of the North Dakota Century Code for municipalities the size of Bismarck to plan for future growth. The study area boundary follows section lines through adjacent townships.

Purpose

Change is inevitable as one subdivision after another makes the transition from the drawing table to the field, new streets are built, utilities are installed, and development patterns are set. The purpose of planning is to help manage change and to allow communities to guide change rather than being guided by it. Planning efforts look at the past, evaluate the present, and plan for the future. Policies that promote orderly growth result in savings of tax dollars while maintaining the community's character and quality of life.

The purpose of the Bismarck Growth Management Plan is to:

- Preserve the community's high quality of life by encouraging and supporting growth that enhances this quality of life.
- Facilitate orderly & efficient development of urban infrastructure.
- Accommodate the integration of existing rural subdivisions into the urban fabric.
- Encourage development that will rely on or improve existing infrastructure.
- Develop a proactive, future-oriented approach to development that includes long-range considerations as a part of short-term actions.
- Provide a variety of living options for residents of the community.
- Balance growth with the preservation of agricultural land and open spaces.
- Minimize urban/rural land use conflicts.
- Ensure that development at the fringe does not limit the growth of the City.
- Minimize the cost of providing infrastructure and public services to rural developments.
- Provide incentives to encourage compact and sustainable development patterns.
- Identify locations for future parks, open space, greenways and other public facilities.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BURNT CREEK
NAUGHTON
Hwy 1804
Hwy 83
HAY CREEK
MISSOURI RIVER
I-94
Bismarck
BISMARCK GROWTH
MANAGEMENT PLAN
STUDY AREA BOUNDARY
GMP STUDY AREA
4 MILE ETA BOUNDARY
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RURAL SUBDIVISIONS
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BACKGROUND

Jurisdiction and Authority

There are various jurisdictions in the area that have the authority to administer development controls, such as zoning and subdivision regulations. The City of Bismarck has authority within the corporate boundary as well as a two-mile extraterritorial area outside of corporate limits. The City of Lincoln has development authority within its corporate limits and a one-mile extraterritorial jurisdiction (less that area under Bismarck's control as negotiated between the two jurisdictions). Burleigh County has authority in those organized townships within the County that have relinquished their zoning and subdivision rights to the County and in all unorganized townships. Townships within the study area that are under the jurisdiction of Burleigh County include Riverview Township, Burnt Creek Township, Hay Creek/West Hay Creek Township, Gibbs Township, Fort Rice Township and Missouri Township. Two townships within the study area boundary have opted to retain their zoning and subdivision authority – Apple Creek Township and Naughton Township.

Population

The following table contains population statistics for Bismarck and Burleigh County. Historical figures (1920 to 2000) and projections (2010-2030) are shown. The percentage of Burleigh County's total population residing in Bismarck climbed in the years since 1920, peaking at 85% in the 1970 census. The 2000 census indicated that Bismarck residents represent 80% of the County's population, a slight decline since the 1970s.

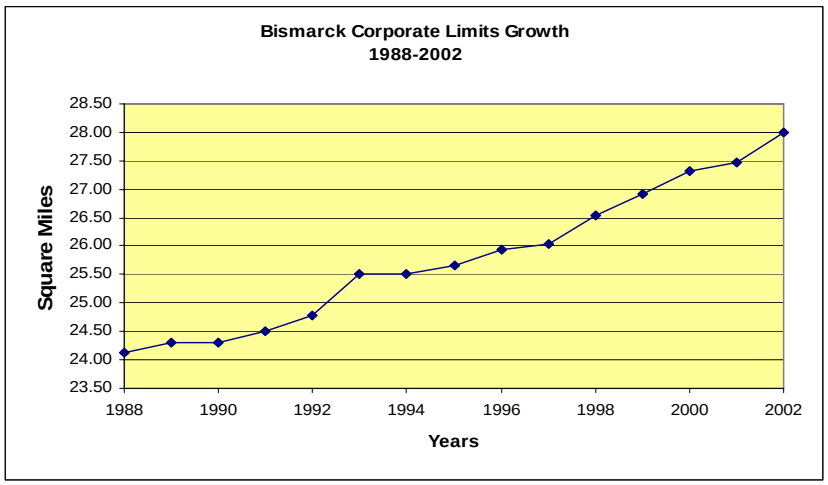
Population – Actual and Projected (1920 – 2030)

	Actual:									Projected:		
	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	2030
POPULATION												
Bismarck	7122	11090	15496	18640	27670	34703	44485	49272	55392	62744	70172	77600
Other County	8456	8679	7240	7033	6346	6011	10326	10859	14024	15686	17543	19400
Total County	15578	19769	22736	25673	34016	40714	54811	60131	69416	78430	87715	97000
10 YR INCREASE												
Bismarck	--	3968	4406	3144	9030	7033	9782	4787	6120	7352	7428	7428
Total County	--	4191	2967	2937	8343	6698	14097	5320	9285	9014	9285	9285
AVERAGE ANNUAL % INCREASE												
Bismarck	--	5.6%	4.0%	2.0%	4.8%	2.5%	2.8%	1.1%	1.3%	1.3%	1.2%	1.2%
Total County	--	2.7%	1.5%	1.3%	3.3%	2.0%	3.5%	1.0%	1.5%	1.3%	1.2%	1.2%

Corporate Limits

As the population of the City has grown, the total area within the corporate limits has also increased. Changes to the physical size of Bismarck during the period 1988-2002 are shown on the next page. A total of 2,227 acres of land has been added to the City, or an average of 148 acres per year during that 15 year period. As of 2000, Bismarck covered over 27 square miles of land area and had a population of 55,392, which translates to a population density of 2,032

persons per square mile. If the City's population reaches 77,600 by 2030 as projected, an additional 7,040 acres or 11 square miles of land area will be required (based on year 2000 population density) to accommodate this additional population growth.



Platting

Another method of measuring growth is to monitor the level of platting activity. Subdivision plats are required in both the City and the County to develop land and obtain building permits. The only exception is for single-family homes built on agriculturally zoned parcels containing forty or more acres. The following table includes information on the number of residential lots approved and the number of dwelling units permitted in Bismarck, the ETA and Burleigh County for each year from 1988 to 2002.

New Residential Lots Approved and Dwelling Units Permitted (1988 – 2002)

Year	City of Bismarck		Extraterritorial Area		Burleigh County	
	Residential Lots Approved	Dwelling Units Permitted	Residential Lots Approved	Dwelling Units Permitted	Residential Lots Approved	Dwelling Units Permitted
1988	225	163	1	9	10	10
1989	48	311	29	4	1	19
1990	51	299	10	14	18	16
1991	153	358	7	15	1	19
1992	570	420	12	29	10	42
1993	268	463	12	48	6	33
1994	846	561	120	48	29	45
1995	40	314	0	63	63	51
1996*	253	251	101	70	70	58
1997	179	456	23	61	59	55
1998	118	483	32	77	121	74
1999	63	264	18	69	73	86
2000	189	215	75	64	125	93
2001	190	453	82	80	131	114
2002	125	382	163	73	159	146
Total	3,318	5,393	685	676	876	861

* The agreement for the sale of water by the City to Burleigh Water Users Cooperative was executed in January 1996

Comparing the number of lots platted with the number of building permits issued for this period provides an overview of the absorption rate, or the rate at which the supply of vacant lots are being developed. Although there is an ample supply of undeveloped land inside and adjacent to the corporate limits, since 1994 we have seen a decrease in the number of new lots in the City and an increase in the number of new lots in both the ETA and the County. Another indication of this trend is the fact that 95% of the platted lots approved in 1991 were in the City, 4% in the ETA, and 1% in the County. By 2002, 28% of the lots approved were in the City, 36% in the ETA, and 36% in the County.

This high level of platting activity continues. As of March 1, 2003, twenty plats were pending approval, including 11 City plats with a total of 280 residential lots, three ETA plats with a total of 77 residential lots, and six County plats with a total of 147 additional residential lots.

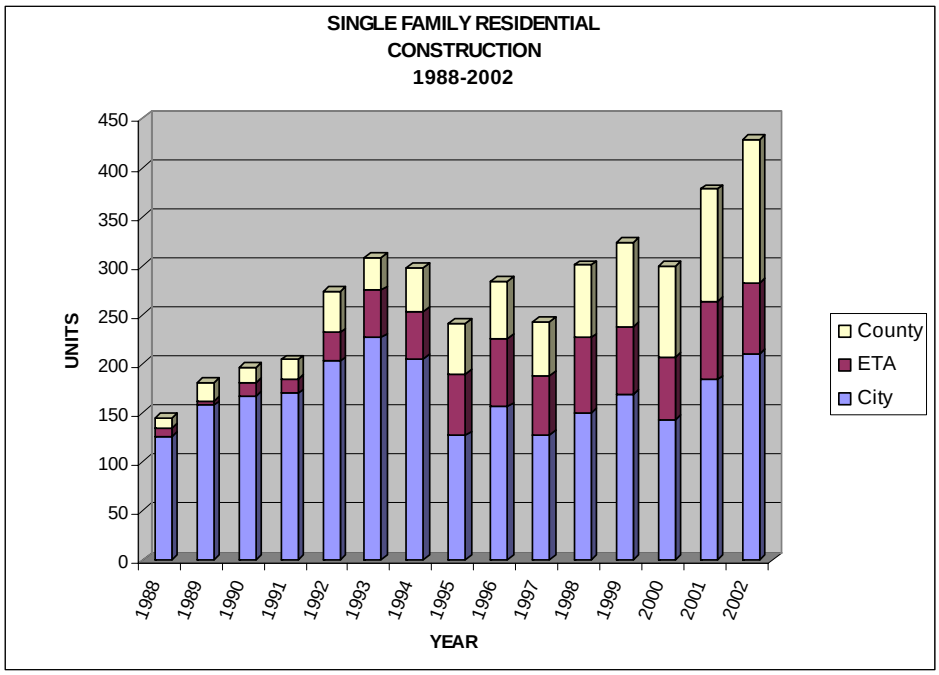
Building Permits

The following table and graph contain information on the number and percentage of residential building permits issued in the City, ETA and County for the period 1988-2002. Again, the trend shows a proportional decrease of City building permits while permits issued in areas outside the corporate limits continue to increase.

Single Family Residential Construction (1988 – 2002)

	City		ETA		County		Total
Year	No. Units	% of Total	No. Units	% of Total	No. Units	% of Total	No. Units
1988	163	89.6%	9	4.9%	10	5.5%	182
1989	311	93.1%	4	1.2%	19	5.7%	334
1990	299	90.9%	14	4.3%	16	4.8%	329
1991	358	91.3%	15	3.8%	19	4.9%	392
1992	420	85.5%	29	5.9%	42	8.6%	491
1993	463	85.1%	48	8.8%	33	6.1%	544
1994	561	85.8%	48	7.3%	45	6.9%	654
1995	314	73.4%	63	14.7%	51	11.9%	428
1996	251	66.2%	70	18.5%	58	15.3%	379
1997	456	79.9%	60	10.5%	55	9.6%	571
1998	483	76.2%	77	12.1%	74	11.7%	634
1999	267	63.6%	69	16.4%	86	20.4%	422
2000	215	57.8%	64	17.2%	93	25.0%	372
2001	453	70.0%	80	12.4%	114	17.6%	647
2002	382	63.6%	73	12.1%	146	24.3%	601
Total	5,396	77.3%	723	10.4%	861	12.3%	6,980

If only single-family permits are considered, the number built within the City in 2002 is down to 49%, compared to 51% outside the City. The City's share of new houses remained above 80% until 1992, when it dropped to 74%. That trend has continued, with City single-family permits falling under 50% in 1998, increasing slightly in 1999, and then falling below 50% again in the years since 2000.



Comprehensive Plan

The Bismarck and Burleigh County Comprehensive Plans, which were adopted in the early 1980s, contain goals and policies relating to Bismarck area growth. Both plans recognize the importance of orderly growth in the urban fringe area. To promote this goal, a series of policies were established that allow for development reasonably close in to Bismarck. Numerous platting and zoning applications have been approved outside of Bismarck, as long as the new subdivisions were located within approximately five miles of the City and in conformance with other zoning ordinance regulations. Some of the current platting regulations include road construction standards, storm water management plans, master planning of future collector streets, ghost platting to indicate the possibility of future splits of large lots, minimum lot sizing for septic tank use, and floodplain requirements, among others. In other words, the City and County are managing rural residential growth according to the current comprehensive plans.

Policy Issues

The issue of urban sprawl has been a frequent topic of discussion in recent years. This topic is not unique to Bismarck; the issue is being debated and acted on by cities throughout the country.

By comparing a 1940 map of the Bismarck area, a 2000 map, and a 20-year projection of the current development trend, it appears that Bismarck is experiencing sprawl, or at least a form of low-density residential suburbanization. The low-density, single-family pattern of development may even be changing somewhat, as multi-family zoning districts were added to the County Zoning Ordinance in 2000. Proposals for non-urban commercial developments to provide goods and services to the increased numbers of rural residents in the County will probably become more frequent.

Although not a definitive list or in any specific order, the following are some possible reasons, real or perceived, for this trend:

- A lower property tax rate outside of the corporate limits.
- A two-year property tax exemption on new residential construction in Burleigh County.
- The availability of good quality water delivered through the rural water system (South Central Regional Water District – formerly Burleigh Water Users Cooperative).
- The lower cost of land for developers.
- The lack of initial special assessments to pay for things like paved streets, curb and gutter, sidewalks, sanitary sewer, storm sewer, etc.
- A desire by residents for a specific lifestyle including a larger lot, fewer neighbors, more privacy, less noise, less traffic, and less congestion.
- A desire for natural amenities, such as scenic views and proximity to the Missouri River.
- The appeal of less restrictive land use regulations, including code requirements, larger accessory buildings, and the opportunity to keep horses on the property.
- Technological advances that allow residents to live further out and still receive traditionally urban services at reasonable prices, such as satellite TV dishes, cell phones, natural gas extensions, rural water, etc.
- Advances in emergency management, such as enhanced 911.
- Roadway access to rural subdivisions that are fairly good for a certain level of usage and the increasing trend to pave streets within rural subdivisions.

A continuation of the present development pattern raises numerous policy issues that need to be addressed. At the kick-off meeting on March 19, 2003, questions related to these policy issues were posed and discussed at length. A list of these questions, along with a summary of responses from those members of the Advisory Committee and Technical Committee in attendance, can be found in Appendix A.

ANALYSIS OF ISSUES

Development Patterns

The Bismarck area is one of the few locations in North Dakota that experienced a population increase between 1990 and 2000. With this increase in population, there continues to be an increase in the demand for a variety of living options. Some people prefer living in the city and having quick and easy access to services, while others prefer living on larger lots in the country. Developers are responding to market demands and creating both urban and rural residential subdivisions, as illustrated by the map on page 12. The proportion of rural, single-family residential lots being created has continued to outpace urban single-family lots.

Rural Water

There are several reasons for the boom in rural residential subdivisions. One primary reason is the relatively recent availability of water treated by the City and distributed by a rural water system. People don't need to have wells in the new rural subdivisions because they can now connect to the new rural water mains. The map on the following page shows how the increase in rural subdivisions corresponds to the expansion of the rural water system. The City's municipal water system and the rural water system are two separate entities, although water for both systems is made available by the City.

When areas near the City are developed and annexed, those areas are served by extensions of the municipal utility systems. The City has authority over subdivisions in its two-mile extraterritorial area and also has the authority to limit rural water service to new developments within this area. As the City and its municipal water system grow outward, it will eventually meet the rural residential subdivisions being served by rural water. There are concerns over how the existing rural system mains and service lines can be converted to municipal system mains and service lines in a cost-effective manner.

The complexity of this issue is based in part on the City's past trend of responding to proposals for new development rather than taking a proactive stance and indicating where development will occur. Guiding development to predetermined areas would allow the municipal water system to be expanded to those areas. In the absence of a policy to guide growth to pre-designated areas, the City has had little alternative but to approve expansions of the rural water system into areas that cannot be cost-effectively served by expansions of the municipal water system. Adoption of an urban service area boundary within the City's extraterritorial area will help determine which areas will be served by expansions of the municipal water system as well as other municipal utilities.

The Costs of Urban Sprawl

When the conversion of agricultural land to residential lots grows at a faster rate than the population of a community, it is often referred to as sprawl. Although the overall population of the Bismarck area is increasing, both the population density and the housing density are decreasing as lot sizes continue to increase.

Why is sprawl a concern? The problems are associated with the costs of community services. It costs more to provide services to homes that are scattered over a large area. Although a study of

our area has not been done, studies of similar communities show the local government's cost of providing services exceeds the revenue generated by low density residential properties.

It costs more to provide services to large-lot, low-density developments. The price tag for construction and maintenance of infrastructure is high. Streets, sidewalks, drainage facilities, water lines, sanitary sewer lines, curb and gutter, and street lights are always cheaper when the cost is shared by more users because those costs can be split more ways in an urban neighborhood with higher densities (more dwellings per acre). This is also true for shared infrastructure in rural neighborhoods, such as rural water lines and roadways. There is also an expectation of higher quality roadways in rural areas when residential development occurs, which increases overall infrastructure costs.

Likewise, the maintenance cost of these facilities is less when shared by more of the people who benefit from them. Snow removal is a good example. In a higher-density neighborhood, more people can be served in a shorter time with a lower operating cost. The same principle applies to school bussing costs.

Services such as ambulance, police, and fire protection have to stretch resources when their service area increases faster than the population grows. The time it takes to respond to emergencies increases as the rural subdivisions move farther away from the service centers.

The County collects property tax revenue from both urban and rural properties. Rural properties do not provide more revenue to the County than urban properties do, yet the cost to the County for providing services to sprawling development is higher. The County actually benefits more if new development occurs within the City because the County receives tax revenues from both urban and rural households yet does not need to provide the same level of services. In addition, given the County's two-year tax exemption for new rural homes, it would appear that the higher-density Bismarck homeowners are subsidizing service costs for the new rural homeowners. There is also a concern that assessed values outside of the City, especially in organized townships, are not increasing in line with market values. Because property taxes are based on assessed values for older homes, City homeowners end up paying more in shared jurisdiction taxes (such as the County and School District) than rural homeowners with comparable property values.

Infrastructure costs are paid by homeowners, whether they are urban or rural residents. In the city, prepayments and special assessments are used to finance improvements. In the country, the costs of road construction are included in the price of the lot, while city homeowners pay for roadways through special assessments. In the city, the construction of water and sewer systems are paid by the developer up front and included in the price of the lot, while in the country, homeowners pay for those separately in the form of rural water hook-up fees and installation of their septic tank and drain field.

Another expense borne by taxpayers is the cost of schools. New schools on the edge of town will be filled with new students while the old schools continue to lose students. Yet the older schools with fewer students require higher maintenance costs.

Although it is believed by many that establishing a residence in the country costs less to the homeowner, this is not necessarily the case. Given the same house at both locations, the following table shows it is to be less expensive to build on a city lot than it is to build on a lot in a rural subdivision. Another expense of rural residents, not factored into this comparison, is the cost of transportation; most rural residents commute to their jobs in Bismarck.

Comparison of Costs – New City and Rural Lots

	Rural Lots			City Lots		
	North Bismarck (paved)	Apple Meadows (paved)	South Bismarck (gravel)	Northwest Bismarck	East Bismarck	South Bismarck
Lot Cost	$ 26,500	$ 21,500	$ 17,150	$ 23,900	$21,000	$ 20,000
Rural Water	3,750	3,750	3,750	----	----	----
Septic System	9,000	6,500	6,500	----	----	----
Culvert/Approach	575	575	575	----	----	----
Road Gravel & Recycled Asphalt Driveway	1,800	1,800	1,800	----	----	----
Special Assessments	----	----	----	8,500	8,000	9,000
Total Cost of Lot	$ 41,625	$ 34,125	$ 29,775	$ 32,400	$29,000	$29,000
Value of Two Year Property Tax Exemption	(2,850)	(2,850)	(2,850)	----	----	----
Actual Cost of Lot	$ 38,775	$ 31,275	$ 26, 925	$ 32,400	$29,000	$29,000

Source: Information from area builders

Land Use Conflicts

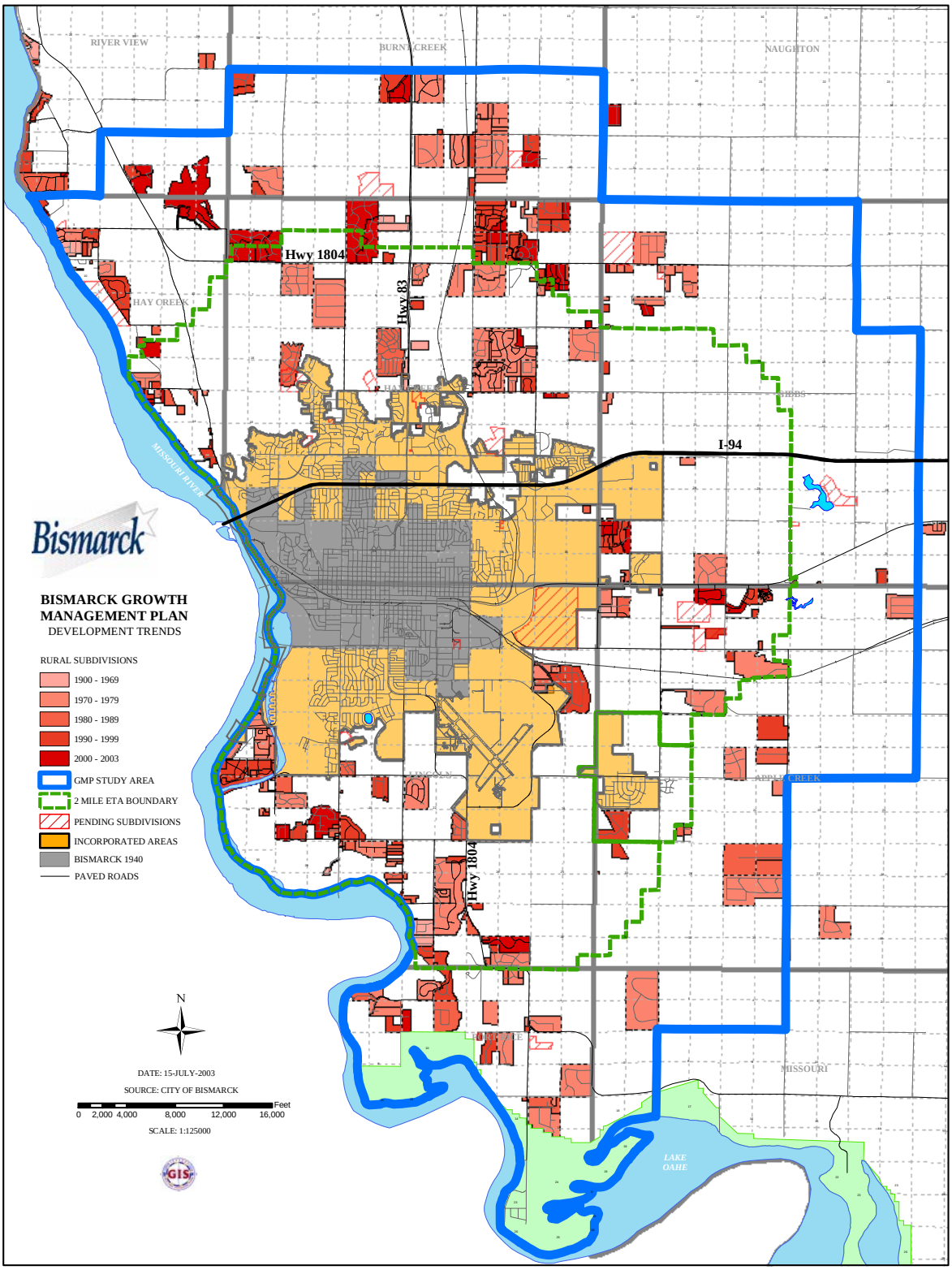
Planning for the wise use of land is an important factor in determining a community's quality of life. A standard practice in zoning is to separate incompatible land uses. For example, a residential neighborhood should not be located next to a heavy industrial area. Less obvious are the incompatibilities between residential and agricultural land uses.

Although the relative locations of larger feedlots and new residential subdivisions are currently regulated, other conflicts between city and country lifestyles often emerge after the rural subdivision is occupied. Some examples include the application of agricultural chemicals, fertilizers, and manure on farmland adjacent to residential lots; the noise of farm machinery and agricultural spray plans; the flies, noises, and odors related to livestock; dogs chasing cattle; livestock getting loose; and slow moving farm equipment on roads. As the number of rural subdivisions increases, so does the potential for conflicting life-styles.

Being Proactive Rather than Reactive

Without a future land use plan we may forfeit the opportunity to reserve areas best suited for future commercial and industrial development, as well as sites for public facilities. Without proactive planning, obvious areas with excellent access to major roadway intersections or rail service could be developed as residential rather than commercial or industrial. Areas needed to provide connections for a continuous public trails system could be built over. Areas at preferred locations for public parks and open spaces could be lost to other types of development.

A future land use plan would identify on a map, those areas best suited for certain, specific uses, and would preserve those areas for such future uses. Residential growth could be accommodated with cost-effective, scheduled utility extensions. Proactive planning done in the public interest not only saves the taxpayers money but results in more livable communities.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1900 - 1969
1970 - 1979
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GMP STUDY AREA
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GIS

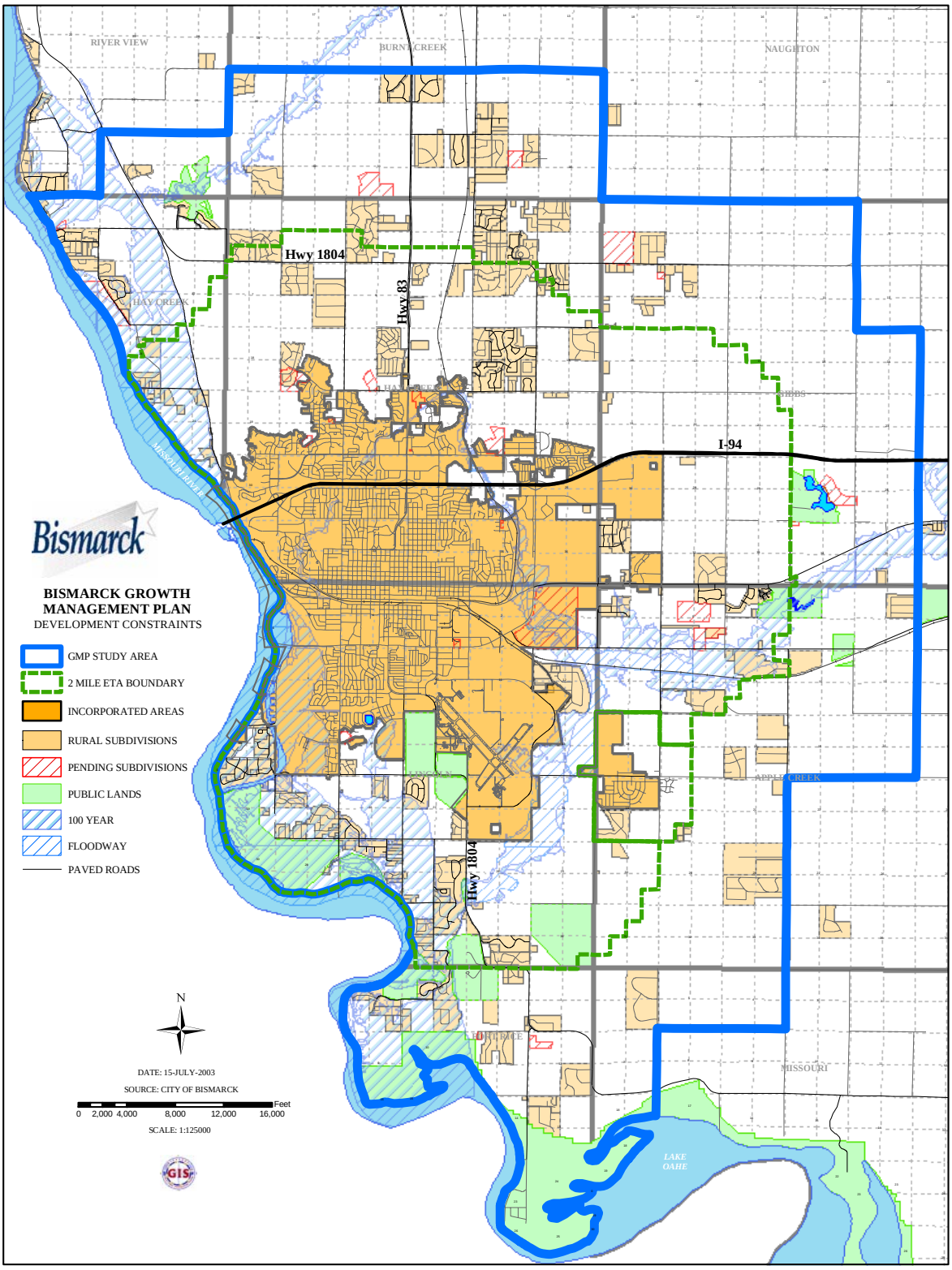
Development Constraints

Past trends in the Bismarck area show land that has been easier to develop has developed first, while land that is more challenging has not been developed or has developed at a slower pace. Features that limit growth are shown on the map on the following page. There are natural barriers, such as the Missouri River to the west, the floodway areas of Apple Creek to the east and southeast, and the poorly drained flat land to the south and southwest. There are also man-made barriers, such as existing developments and the airport to the southeast. Because of these and other limitations, the City is primarily expanding to the north. Terrain limitations exist in some areas to the north and northwest.

Public ownership of large tracts of land, although providing value to the community, can also be considered a development constraint. The Apple Creek Country Club, the McDowell Dam Recreation area, and the State-owned Section 36 property along Bismarck Expressway somewhat limit development to the east. In addition, the State Penitentiary, Game and Fish property, and Burleigh County Fairgrounds limit development in the southeast, while the Missouri River Correctional Facility limits development in the southwest.

Although some of the area's terrain limits development, these are the same natural features that contribute to the scenic beauty and high quality of life in the area. There are advantages to limiting development in certain areas in order to protect these natural features. Waterways such as rivers and streams have associated floodways and floodplains that are problematic for development. By using these areas for public access and open space with minor improvements, costly flood losses could be prevented. Reserving these areas and ravines as greenway corridors could accommodate stormwater management facilities as well as providing ideal locations for a community network of multi-use recreational trails. Steep slopes are also a development problem from a cost perspective. An advantage of limiting development of steep terrain is in protecting slopes from erosion and associated impacts on downstream waterways.

The ability to provide non-municipal services is also a development constraint. Although rural water is available, there are limits in the contract with the City regarding the provision of water to subdivisions within the extraterritorial area. There are also concerns from a County and impacted township perspective regarding the construction and surfacing of roadways and the maintenance of roadways serving rural subdivisions. Rural fire and law enforcement response times are limited by the number of personnel and the area they are expected to cover. School district bussing resources are stretched as more and more people choose to live in low-density rural settings. The ability of other utilities to provide services over a larger area is also a concern, such as electric, natural gas, telephone and cable services.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BISMARCK GROWTH
MANAGEMENT PLAN
DEVELOPMENT CONSTRAINTS
GMP STUDY AREA
2 MILE ETA BOUNDARY
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Municipal Utility System Considerations

The City of Bismarck has master plans for both the water storage and distribution system and the wastewater collection and conveyance system. Plans that address stormwater management issues are also being prepared on a watershed-by-watershed basis for property within and adjacent to the corporate limits. Information on these utility system plans is included in the Growth Management Plan in order to show how these systems relate to development and growth. The ability of the City to provide municipal utilities to specific areas in support of development, as well as the inability to service new areas within the next 10 to 15 years, resulted in the development of a proposed Urban Service Area Boundary.

Water Storage and Distribution System

In 2001, the City of Bismarck adopted a Master Plan Update for Water Storage and Distribution Facilities, which updated the 1993 Master Plan. This document provides an analysis of the existing water distribution system and facilities, makes recommendations for correcting identified deficiencies, and evaluates alternatives for future development.

Bismarck's water storage and distribution system is made up of elevated towers and ground reservoirs throughout the community along with the water mains and service lines that bring water from these storage facilities to individual properties. The city is divided into pressure zones based on ground elevation. Four of the five existing zones are open pressure systems (water flows from storage facilities through the distribution system by gravity) and all future zones are planned to be open pressure zones. The distribution system is predominantly a grid-type of system with only minor branching or dead end type of feed arrangements. The grid system is preferable, as it can supply any point in the system from at least two directions, which results in greater fire flow rates and less possibility for stagnant water to develop. In addition, repairs can be made to this type of system with minimal disruption of service.

The system improvements recommended in the plan are intended to enhance the operation of the existing distribution system and act as a guide for planning future water distribution and storage facilities through 2025. The recommended improvements also took into account the fact that Bismarck will continue to grow and that the rural residential areas around Bismarck will also continue to grow. Since the City also sells water to the rural water system, the impacts of this water use on Bismarck's distribution system and storage facilities were analyzed and specific recommendations made. Specific recommendations included in the plan, such as new feeder lines, pumping facilities and storage facilities, will allow the City to continue serving the growing population in the area.

Wastewater Collection and Conveyance System

The City also adopted a Master Plan Update for Wastewater Collection and Conveyance Facilities in 2001, which updated the 1978 Master Plan. The 1978 plan presented a proposed layout of the wastewater conveyance system to serve the existing population and future growth. The specific recommendations of this 1978 plan were implemented by the City and the system was expanded and upgraded to serve the growing population. The update adopted in 2001 was designed to help the City plan for and respond to changing development patterns, and recommend improvements that will continue to support the growth of the City.

Bismarck's wastewater collection and conveyance system is made up of collection pipes, interceptors, pump stations, forcemains, and the treatment plant. As with the water storage and distribution system, the wastewater collection and conveyance system is tied to topography.

The 2001 Master Plan Update provides an analysis of the existing collection and conveyance system, including the capacity of the system relative to existing and future wastewater flows. The plan found that the system is in good condition and has capacity to accommodate additional flow. Specific recommendations for improving the system include efforts to minimize inflow and infiltration, consideration of improvements to the wastewater treatment plant as it reaches its design capacity, and new pump station and forcemain facilities to accommodate additional growth. The location of new developments will help guide where and when new collection and conveyance facilities may need to be installed.

Drainage/Stormwater Management System

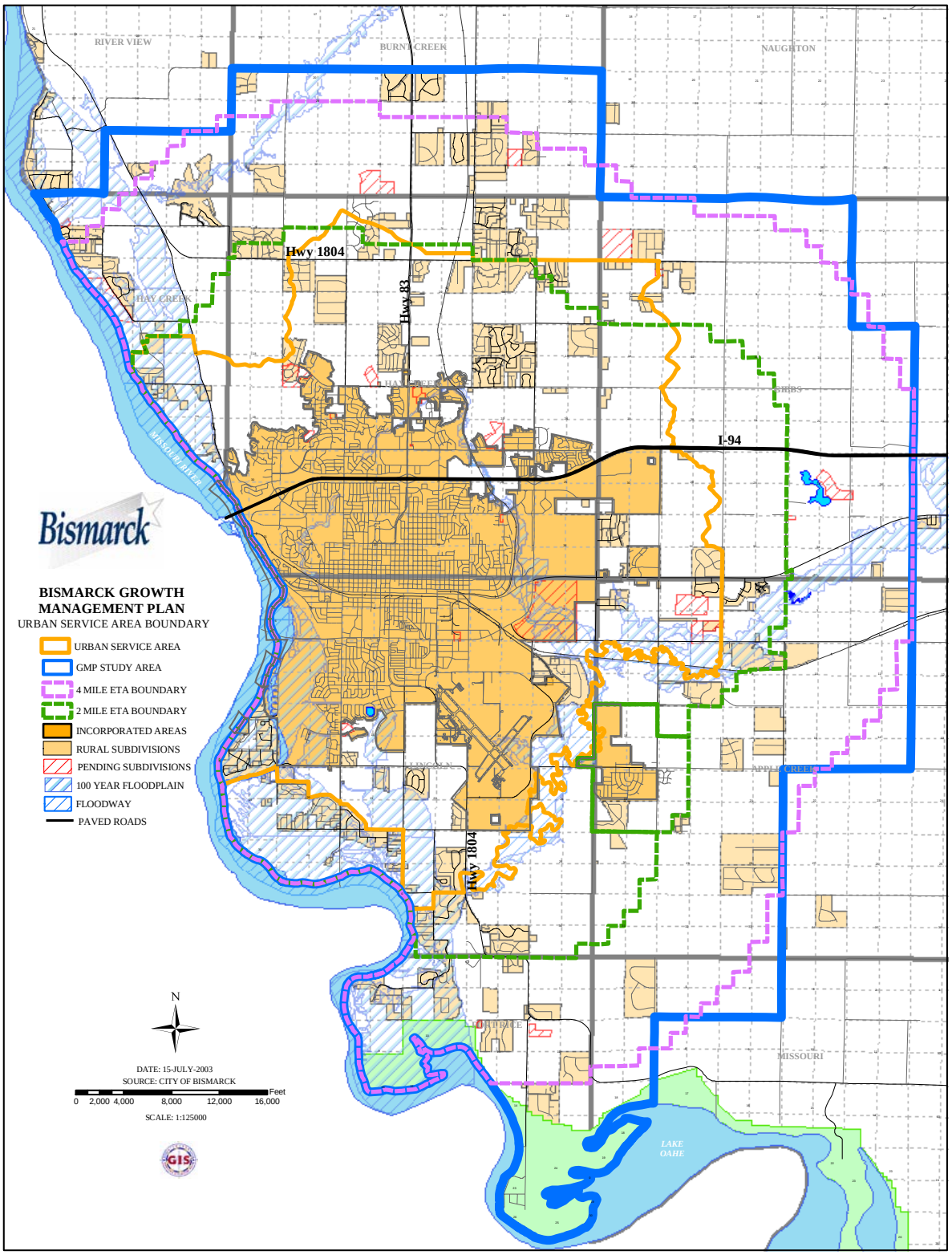
There are numerous watersheds within the City of Bismarck and the surrounding area. As drainage and stormwater management are dependent on these watersheds, the City has been proactively preparing stormwater management plans on a watershed-by-watershed basis. Stormwater Management Plans have been prepared for portions of the Hay Creek Watershed (1995), South Bismarck (2001), Tyler Coulee (2002), and the Landfill Watershed (2003) among others. Sub-watershed plans have also been prepared for smaller areas within the Hay Creek Watershed in recent years to address specific issues. As a whole, these plans address overall stormwater management needs and set the stage for managing drainage and stormwater on a regional basis.

Urban Service Area Boundary

The City has developed a proposed Urban Service Area Boundary (USAB) based on the Water Storage and Distribution System Master Plan Update, the Wastewater Collection and Conveyance System Master Plan Update and the various stormwater management plans. This Urban Service Area Boundary includes those portions of the current two-mile extraterritorial area, as well as some areas outside of the current extraterritorial area, that could reasonably be served by municipal utilities within a 10 to 15 year timeframe.

In developing this boundary, the proposed locations of both existing and future water, wastewater and stormwater management facilities were taken into consideration. Natural features, such as topography and waterways, and the ability to cross these barriers in a cost effective manner were also taken into consideration.

The Urban Service Area Boundary, as shown on the map on the following page, should be formally adopted by the City to assist in the decision- making process. The boundary would be reviewed on an annual basis in conjunction with the City's Capital Improvements Program, and would be amended as needed to incorporate expansion of the corporate limits, changes in development trends, and new master plans.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Transportation Considerations

The Bismarck-Mandan Long Range Transportation Plan was adopted in 2001 and has a 25-year planning horizon with plan updates scheduled every five years. Information from this plan is included in the Growth Management Plan to emphasize the relationship between land use and transportation. This plan identifies transportation system needs for the jurisdiction of the Metropolitan Planning Organization, which includes the City of Bismarck and the growth area around it. Information in the Long Range Transportation Plan that is of particular interest in relationship to the Growth Management Plan includes functional classification of roadways, transportation corridor preservation, and access control.

Functional Classification

Transportation planning effectively utilizes the concept of functional classification, which defines roadways by grouping streets and highways into a hierarchal class or system based on the type of service they are intended to provide. Some roads collect and distribute traffic from neighborhoods to the regional system, while other larger roads are part of the regional network. Functional classifications must be taken into consideration when making land use decisions. Large trip generators, such as employment and commercial centers, should be served by roadways with higher classifications such as arterials. Residential, neighborhood commercial uses, and places of relatively low demand should be served by roadways with lower classifications, such as collectors and local streets.

Principal arterials are the largest roads in the functional classification system. These are the highest volume corridors, usually have limited access, and generally carry the longest trips. Principal arterials carry the major portion of trips entering and leaving the urban area, and the majority of traffic through the urban area. Examples of principal arterials in the study area are Interstate 94, Highway 83/State Street north of Boulevard Avenue, University Avenue/Highway 1804 south of Bismarck Expressway, Bismarck Expressway, Main Avenue, and the 7th Street/9th Street one-way pair.

Minor arterials emphasize mobility over access and should interconnect and augment the principal arterial system. They carry trips of moderate length and have a lower level of mobility than principal arterials. Examples of minor arterials in the study area are Century Avenue, Washington Street, Rosser Avenue and Centennial Road.

Collector streets serve even shorter trips and provide both land access and traffic circulation. They collect traffic from local streets in both residential and commercial/industrial areas and channel it to the arterial system. Examples of collector streets in the study area include South 3rd Street south of Bismarck Expressway, Capitol Avenue, South 12th Street and River Road.

The existing functional classification map, prepared by the North Dakota Department of Transportation in 1992, is expected to be updated in the near future.

Transportation Corridor Preservation

The Long Range Transportation Plan advocates preservation policies that ensure the availability of adequate right-of-way to meet both existing and future needs along transportation corridors. The required corridor width is directly proportional to the functional classification of the roadway. Current requirements for urban section roadways are 150 feet for major arterials, 120 feet for minor arterials, 80 feet for collectors and 66 feet for local roadways. Current

requirements for rural section roadways are 150 feet for major and minor arterials, 120 feet for collectors, and 80 feet for local roadways.

The dedication of adequate right-of-way is part of the subdivision review and approval process. All section line roadways are considered to function as arterial roadways. Master street plans for collector roadways have also been required on a section-by-section basis and have traditionally been prepared by an engineering firm on behalf of the first developer within that section. While this process has worked in the past, there has been a tendency to avoid placing collector roadways within the initially proposed subdivision. In order to better plan for the location of future collector roadways, the Metropolitan Planning Organization is in the process of having a Fringe Area Road Master Plan prepared that will identify appropriate locations for future ½-mile collector roadways. Some primary considerations are topography and existing development patterns. Once this plan is completed and officially adopted, proposed developments will be required to conform to the designated corridor plan.

The Long Range Transportation Plan also proposed a metropolitan area beltway to address future transportation needs. The proposed beltway corridor would be Highway 1804/71st Avenue NE on the north, 66th Street on the east, and 48th Avenue on the south. Future bridge locations crossing the Missouri will also be identified connecting this section of the beltway with a similar section in Morton County. As property along the beltway is platted, a minimum right-of-way dedication of 200 feet is being required.

Access Control

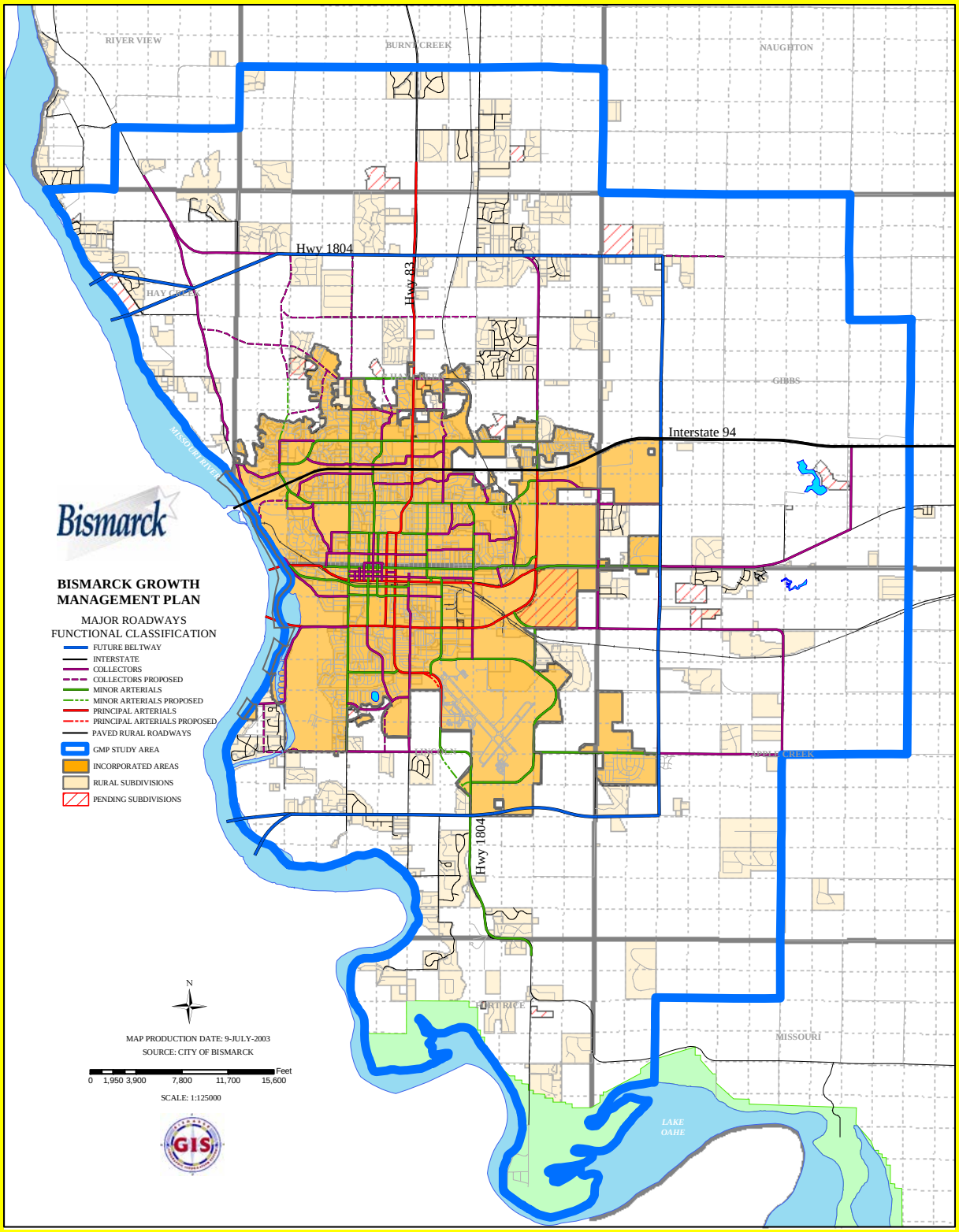
Controlling access to roadways is a way of maintaining efficiency and safety of the roadway system, enhancing the capacity of the roadway system, and minimizing the potential need for future roadway expansion. One of the functions of a roadway system is to provide access to land, which allows for development; however, uncontrolled access limits the capacity of a roadway and compromises safety. Access controls preserve the public investment in the roadway system, balancing the public interest in mobility with the property owners' interest in access.

Arterials should be oriented toward mobility (speed and capacity) rather than access, while local streets provide high levels of access. Collectors should provide a balance between access and mobility. Appropriate access control preserves the capacity on arterial roadways and reduces the need for traffic to divert to local streets. As future roadways are developed, access on arterials and collectors must continue to be managed. In general, subdivisions should be designed so that individual driveways directly access local streets rather than on arterials or collectors.

Currently, the City of Bismarck and Burleigh County allow a maximum of two approaches per one-quarter mile on developing arterial roadways (section lines). While access onto developing collector roadways has not been regulated in the past, it may be desirable to encourage subdivision designs that limit the number of such access points in the future.

Trails/Sidewalks/Walkways

As part of the Long Range Transportation Plan, the pedestrian/bicycle transportation system was analyzed and a map of existing and proposed multi-use trails was prepared. Short and long range projects were identified within the potential funding limits available through the federal Transportation Enhancement (TE) program. The plan also recommended that each jurisdiction continue to evaluate and upgrade its local sidewalk system to increase accessibility and eliminate gaps.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BISMARCK GROWTH MANAGEMENT PLAN
MAJOR ROADWAYS FUNCTIONAL CLASSIFICATION
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GROWTH MANAGEMENT PLAN

Policy Plan

The policy plan for the Growth Management Plan includes goals and objectives that will be used by decision-makers to guide growth. A goal is a general statement and indicates a broad state that the community desires to achieve. An objective is a statement that refines the goals by outlining a specific course of action.

Growth Management/Development Staging

1. Preserve the ability of the City of Bismarck to expand its corporate boundaries to accommodate future urban growth.

    a. Expand the City's extraterritorial zoning and subdivision jurisdiction to the full four miles allowed under Section 40-47.01.1 of the North Dakota Century Code.

    b. Continue to coordinate land use planning efforts with Burleigh County, the City of Lincoln, and the adjacent townships.

    c. Create an Urban Service Area Boundary to accommodate expansion of the City over the next 10 to 15 years. This boundary would include those portions of the extraterritorial area that could reasonably be served by municipal utilities within a 10 to 15 year timeframe and would be updated on an annual basis in conjunction with the capital improvement program to incorporate expansion of the corporate limits and changes in development trends.

    d. Recognize the Urban Service Area Boundary as the division between urban and rural densities and services.

    e. Respect the existing agriculture lifestyle beyond the Urban Service Area Boundary in order to minimize the cost of providing future public services and facilities and preserve the open-space character of the countryside.

    f. Refine current policies regarding the provision of rural water to development within the extraterritorial area.

    g. Establish a Transitional Urban Development zoning district to designate those properties within the Urban Service Area Boundary that are likely to be urbanized but are not currently ready for development.

    h. Establish a Residential Estates zoning district to allow the integration of existing rural residential subdivisions at the urban fringe into the urban fabric and to provide for large lot urban residential in specific areas at the urban fringe where the provision of all municipal services is problematic.

    i. Require rural residential developments to be designed and constructed in a manner that will make future annexation and incorporation into the City easier.

j. Consider the adoption of regulations to limit the use of individual septic systems within the Urban Service Area Boundary, such as licensing them for a specified period of time.

2. Maintain a compact and orderly pattern of urban growth and development that will promote an efficient use of present and future public investments in roadways, utilities and other services.

a. Update and maintain the City's vacant parcel inventory and publicize the inventory as a way to encourage the development of vacant land within the corporate limits that will utilize existing infrastructure and services.

b. Require a concept development plan for all contiguous property under common ownership to be submitted in conjunction with a request for preliminary plat approval as a means of planning for the extension of municipal improvements/ infrastructure.

c. Consider utilizing the City's capital improvements program to install utilities in advance of development and direct urban growth to designated areas.

d. Require an adequate level of public services and facilities to be in place or constructed in conjunction with development.

e. Work with property owners and developers to maintain an adequate inventory of developable land available in each zoning district.

f. Maintain compatibility between urban and rural development standards to allow rural developments to be absorbed as the corporate limits expand and equalize the cost of development between the city and extraterritorial area.

g. Continue to plan for a logical staging of infrastructure and utilities to serve urban growth through the use of utility master plans, watershed-wide stormwater management plans, and transportation master plans.

h. Coordinate stormwater management with open space and recreation needs by designating natural drainageways as greenway corridors and locating regional detention/ retention facilities in parks.

i. Coordinate school impacts associated with growth and development with the Bismarck School District.

j. Develop a method to calculate and compare the cost of urban development versus rural development.

k. Work towards consistency in the policies of the City of Bismarck and Burleigh County regarding the two-year property tax exemption on the construction of

new homes as a means of equalizing the development cost of urban and rural development.

l. Work with Burleigh County and the surrounding townships on bringing the assessed values of residential properties in line with market values as a means of equalizing the County and School District share of property taxes between urban and rural homeowners.

m. Provide incentives for revitalizing neighborhoods in the core of the city.

Land Use

1. Maintain a cohesive and balanced land use pattern that provides for a variety of residential, commercial, industrial and public uses as the community grows.

   a. Provide a range of living options for residents of the community.

   b. Limit the subdivision of land for rural residential development to those locations that will not create negative economic impacts on Burleigh County and the townships for provision of public services and facilities.

   c. Provide an adequate supply of commercial and industrial zoned land in appropriate locations to accommodate the needs of the growing community.

   d. Support platting and zoning map amendments to urban densities in conjunction with annexation.

   e. Encourage other impacted jurisdictions and agencies to have a plan for facilities to accommodate future growth and work with these agencies to identify appropriate locations for schools, fire stations, parks and other public facilities prior to development.

   f. Require new development to be compatible with existing adjacent development.

   g. Monitor the need for various land uses through the use of a vacant parcel inventory database and analysis of absorption rates. The creation of digital parcels within the extraterritorial area will assist in the administration of this inventory.

   h. Support mixed use developments as a way of creating neighborhoods rather than tracts of housing in the developing areas of the community.

   i. Encourage the use of buffers and greater setbacks for new residential neighborhoods adjacent to Interstate 94, Highway 83, and the future metropolitan beltway corridor in order to mitigate visual and noise impacts.

2. Allow rural residential development outside of the corporate limits on a case-by-case basis with stringent development standards and at densities consistent with the minimal provision of utilities and services.

a. Encourage infill of vacant rural residential subdivisions before allowing more conversion of agricultural land.

b. Allow expansion of existing rural residential subdivisions and creation of new subdivisions only in those locations where services (rural water, school bussing routes, rural fire protection and adequate roadways) are sufficient to meet anticipated demands.

c. Direct new rural residential subdivisions to those locations adjacent to existing rural residential subdivisions and with direct access to paved collector and/or arterial roadways that meet Burleigh County standards.

3. Promote a diversity of housing types in all new urban residential areas.

a. Encourage the use of a variety of residential zoning classifications in new developments in order to provide an array of housing types.

b. Direct high density residential to locations adjacent to arterial and collector roadways.

4. Identify and provide appropriate locations within the corporate limits for expansion of commercial and industrial uses that support the economic vitality of the community.

a. Support zoning map amendments for additional commercial and industrial uses only when there is a demonstrated need for additional land in these zoning classifications and the locations are adjacent to compatible land uses.

b. Promote development that supports the role of the central business district as the prime cultural, economic and governmental center of the region.

c. Direct commercial and industrial land uses to locations where adequate municipal services are available, including access to major roadways and municipal utilities, rather than to areas outside of the corporate limits because of concerns with adequate fire protection, the use of septic systems, and the desire to direct such uses to the urban core.

d. Encourage well-designed commercial development along Highway 83 from the current corporate limits northward by requiring commercial uses to develop in depth along this roadway (one-quarter to one-half mile from Highway 83) up to the intersection with Highway 1804.

e. Direct general commercial uses to areas contiguous to established commercial areas.

f. Provide opportunities for general commercial and light industrial development at the intersection of 66th Street NE and Interstate 94 when an interchange is constructed at this location.

g. Allow the development of neighborhood commercial centers at identified roadway intersections throughout the community to service the surrounding neighborhoods.

h. Direct new industrial development to areas adjacent to the existing industrial areas in the southeastern and eastern portions of the community.

5. Provide for orderly transitions between incompatible land uses.

a. Where appropriate, use zoning to provide for transitional land uses between general commercial and industrial land uses and residential land uses.

b. Use a variety of residential zoning designations to provide gradual transitions between varying densities of residential development, with the understanding that new zoning districts that regulate structure type as well as density may be required.

c. Continue to require landscape buffers and screening between incompatible land uses.

d. Support the establishment of vegetative screening along arterial roadways adjacent to residential areas with sufficient mass and continuity to provide noise and visual buffering.

Transportation

1. Establish and maintain an effective and efficient transportation system.

a. Secure sufficient right-of-way to accommodate the major street system needs, including the proposed beltway identified in the Long Range Transportation Plan (Highway 1804/71st Avenue North – 66th Street East – 48th Avenue South) and future collector roadways identified in the Fringe Area Road Master Plan.

b. Require sufficient right-of-way dedication to preserve corridors for future arterial and collector roadways during the subdivision platting process.

c. Consider the use of official mapping to preserve right-of-way for future non-section line arterial roadways in advance of development.

d. Consider developing a notification process to inform current and potential property owners along future collector and arterial roadways that the function of these roadways will change as the community grows.

e. Continue the use of access management controls along arterial roadways, collector roadways, and at roadway intersections to ensure the function of the roadway is protected and maintained.

2. Ensure that all development is adequately served by the transportation system.

    a. Provide a roadway system that is consistent with adjacent land uses.

    b. Consider functional classification, existing level of service, traffic counts and projected traffic increases when making land use decisions.

    c. Communicate with property owners and developers regarding the locations of planned arterial and collector roadways and to foster coordination between owners of adjacent property regarding the location of access points of adjacent subdivisions.

    d. Support the development of a Fringe Area Road Master Plan to identify the location of future half-mile collector roadways within each section in the urban fringe.

    e. Require traffic impact studies, at the discretion of the City and/or County Engineer, for any proposed development that is expected to significantly impact a collector or arterial roadway, require coordination and concurrence with appropriate jurisdictions, and require that any recommendations made as a result of the study are implemented at the developer's expense.

3. Support the transportation policies of the Bismarck-Mandan Metropolitan Planning Organization for the extraterritorial area.

    a. Continue to participate with adjacent local governments in transportation planning studies to ensure regional consistency between land use planning and transportation planning.

    b. Utilize the Long Range Transportation Plan when making decisions regarding land uses.

    c. Support the development of an updated functional classification map for the metropolitan area.

4 Provide for alternative modes of transportation.

    a. Provide a network of bikeways/trails and pedestrian pathways to connect residential areas with each other, with park and recreation facilities, with school facilities and with major activity centers.

    b. Continue to work with the Bismarck Parks and Recreation District, the Burleigh County Park Board, and the MPO regarding the expansion of the multi-use trail system in a manner that provides a high level of service and minimizes conflicts between vehicular and pedestrian/non-motorized traffic.

    c. Review the existing sidewalk policy and revise as needed to support the concepts of maximum accessibility and walkable communities.

Parks, Open Space and Greenways

1. Provide a high quality park and open space system in developing areas that includes both active and passive recreational opportunities to meet the needs of residents.

    a. Establish standards for neighborhood, community and regional parks for area residents.

    b. Work closely with the Bismarck Parks and Recreation District and the Burleigh County Park Board regarding plans for parks, open space and greenway corridors.

    c. Encourage subdivisions adjacent to parks and greenway corridors to have public access easements to these facilities in those situations where they can be provided in a manner that minimizes conflicts between vehicular and pedestrian/non-motorized traffic.

    d. Integrate park and open space areas into urban residential neighborhoods wherever feasible.

    e. Establish a method for acquiring land for public purposes prior to or in conjunction with development to ensure such land is available for public uses such as parks, trails, open space, recreation, stormwater management facilities, schools, and public safety facilities.

    f. Identify ways to acquire land for future parks and greenway corridors within the extraterritorial area.

    g. Support cooperative efforts between the Bismarck Parks and Recreation District and the Burleigh County Park Board on the provision of facilities in the extraterritorial area and explore the feasibility of consolidating services to the extent allowed under the North Dakota Century Code.

2. Develop a system of greenway corridors to function as part of a multi-use trails network, provide public open space, and to serve as stormwater conveyance facilities.

    a. Work with the Bismarck Parks and Recreation District and property owners to designate and acquire greenway corridors.

    b. Support the extension and expansion of the Hay Creek greenway corridor.

    c. Provide for connections to established regional facilities, such as McDowell Dam and Sibley Park, and integrate these facilities into the overall park and open space plan.

3. Protect the community’s natural resources.

    a. Utilize greenway corridors to preserve sensitive environments, mitigate erosion, and provide for the management of storm water.

b. Refine the undevelopable land policy to address the need for development control lines on platted property to limit development activity in close proximity to sensitive natural resources and require the retention of native vegetation on steep slopes.

c. Protect land that is environmentally unsuitable for development by retaining floodways, drainageways, steep slopes and other sensitive areas as open space networks for recreation and environmental protection and enhancement.

d. Encourage the preservation of natural features in the design of subdivisions.

e. Identify future access points and preserve existing public access to the Missouri River.

f. Consider the adoption of development standards for land adjacent to the Missouri River for land within the extraterritorial area.

Aesthetics

1. Encourage and support development that enhances the community's image and identity.

   a. Promote high quality development throughout the community.

   b. Maintain public facilities in an aesthetically pleasing manner.

   c. Encourage the underground placement of utilities where possible and the placement or screening of utilities, including transformer boxes, which must be located above ground to minimize adverse visual impacts.

   d. Limit the placement of additional billboards along Interstate 94 and other major arterials.

2. Create a positive image along high volume corridors that serve as gateways into the City.

   a. Utilize stringent development standards and access controls to discourage strip development along arterial roadways, such as Highway 83, Highway 1804, and County Highway 10.

   b. Develop an overlay district with specific development standards to ensure high quality and aesthetically pleasing development along major roadways.

   c. Identify opportunities to enhance primary entrances into the community.

Generalized Future Land Use Plan

The purpose of the Generalized Future Land Use Plan is to recognize the potential for non-residential land uses at specific locations and label those locations accordingly. The Generalized Future Land Use Plan identifies areas for future residential uses, neighborhood commercial uses, general commercial uses, and industrial uses.

Residential

Residential land uses are not specifically designated in the Generalized Land Use Plan, with the idea that residential land uses could be located in all developable locations not designated as commercial or industrial in accordance with the development guidelines included in the policy plan. In general, higher urban densities should be located adjacent to collector and arterial roadways and a variety of residential zoning districts should be used to provide transitions between varying densities. Multi-family residential should only be located in urban areas because of concerns with fire suppression and the availability of central water and sanitary sewer.

Neighborhood Commercial

The neighborhood commercial designation provides areas for commercial uses that provide limited retail sale of products and services to adjacent neighborhoods. This designation is applied to various growth locations of the community, usually at the intersection of two collector or arterial roadways that can be conveniently accessed from the nearby residential areas.

General Commercial

The general commercial designation is for commercial uses that provide a wide range of goods and services to the community. This designation is applied to two general locations within the growth area of the community. The area along Highway 83 from the current corporate limits north to Highway 1804 will provide an extension of the existing general commercial uses in that area. In addition, a general commercial area is provided at the intersection of Interstate 94 and 66th Street NE, although commercial development in this area would be contingent on the construction of an interchange at this location.

Industrial

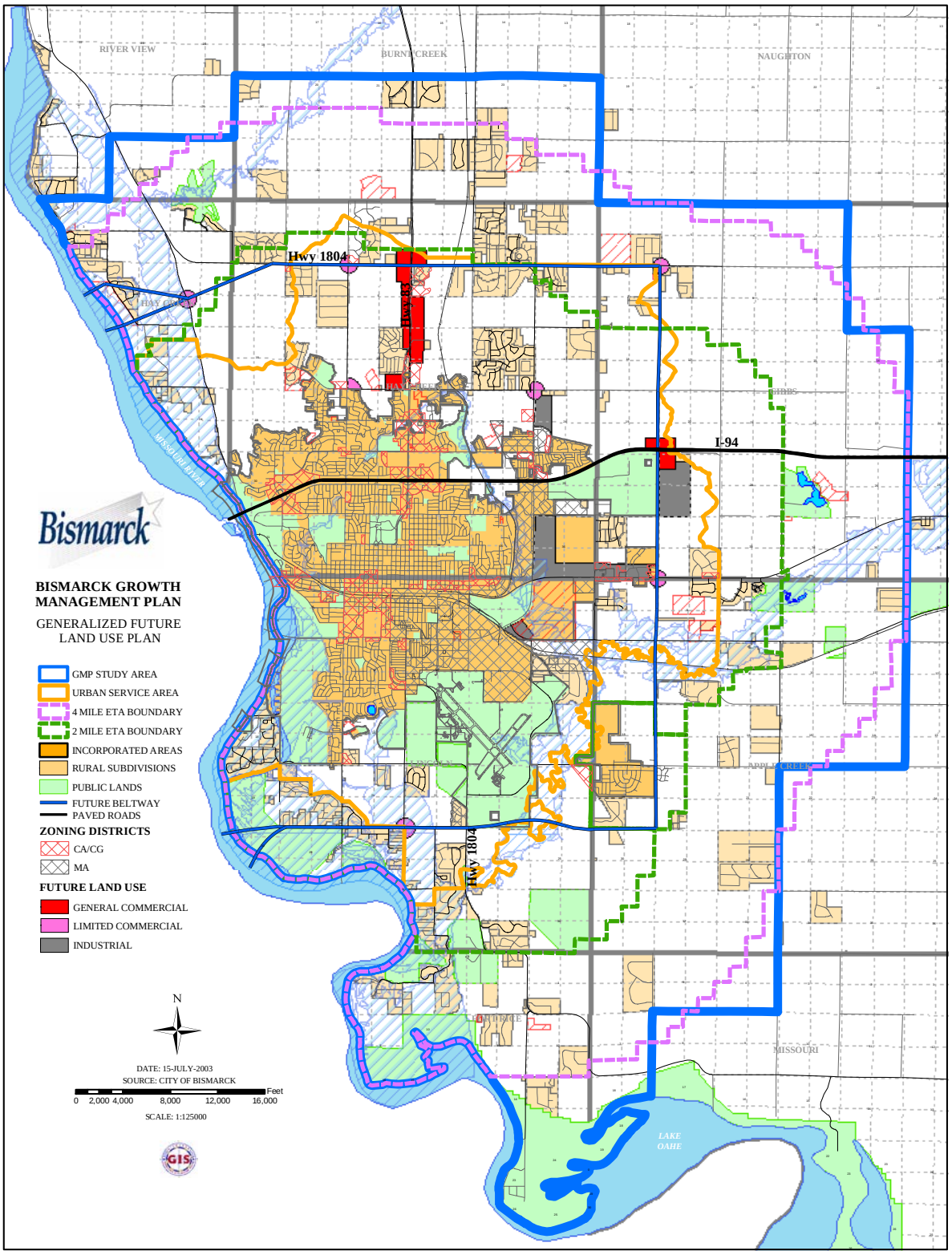
The industrial designation provides areas for commercial and industrial uses that are generally incompatible with retail commercial areas and more appropriately located adjacent to other existing industrial areas. This designation is applied to two general locations within the growth area of the community. The area along County Highway 10 and Bismarck Expressway will provide an extension of the existing industrial uses in this area. An industrial area is also provided south of the intersection of Interstate 94 and 66th Street NE, although this area would not be suitable for either commercial or industrial development until an interchange is constructed.

Parks, Open Space and Public Land Plan

The Bismarck Parks and Recreation District has developed a parks, recreation and open space position paper for consideration during the development of this Growth Management Plan. This paper provides an overview of issues and opportunities, including the lack of parks and public open spaces in developing areas, the current demand for services, the need to preserve and protect natural resources, the equity involved in providing services to non-city residents, and the value of parks and open space.

The position paper also outlines a list of tools to create a quality park, recreation and open space system, which includes: 1) adopting a natural resource, open space and public facility plan; 2) adopting a public land dedication ordinance; and 3) expanding the Bismarck Park and Recreation District service area. A draft public land dedication ordinance was also prepared in conjunction with the position paper for consideration.

The position paper goes on to discuss the vision for the community based on the adoption and implementation of the natural resource, open space and public facility plan. The benefits and effects of such a plan are discussed and an argument is made for the adoption of a public land dedication ordinance as a way to enhance the quality of life in the community and increase property values.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BURNT CREEK
NAUGHTON
Hwy 1804
Hwy 83
I-94
Bismarck
BISMARCK GROWTH MANAGEMENT PLAN
GENERALIZED FUTURE LAND USE PLAN
GMP STUDY AREA
URBAN SERVICE AREA
4 MILE ETA BOUNDARY
2 MILE ETA BOUNDARY
INCORPORATED AREAS
RURAL SUBDIVISIONS
PUBLIC LANDS
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IMPLEMENTATION

Introduction

This Growth Management Plan articulates a vision for Bismarck's growth and provides a framework for guiding development in the community. The success of this vision will require an implementation strategy that utilizes the City's official controls, combined with the capital improvements program and other specific actions.

The burdens of infrastructure and services are borne by the taxpaying residents of the community. It is an obligation of local government to represent the interests of its citizens by making the most cost effective decisions on utility expansions. Although it is difficult to put a dollar value on the quality of life, the quality factor is affected by how growth occurs. The development and implementation of a carefully considered plan will save money and maintain a high quality of life in Bismarck.

Official Controls

Official controls are the ordinances and regulations that control the physical development of the community. This Growth Management Plan, when adopted by the City in accordance with the requirements of the North Dakota Century Code, will become an official control in and of itself. The zoning ordinance, subdivision regulations, and official maps are also official controls that can be used to implement the Growth Management Plan.

Extraterritorial Area/Urban Service Area Boundary

To plan for orderly growth, State law gives North Dakota municipalities the authority to regulate development beyond corporate limits. The size of a city's extraterritorial jurisdiction is proportional to its population. Bismarck can extend its zoning and subdivision authority up to four miles beyond the corporate limits. In order to effectively implement the Growth Management Plan, it is suggested that the City:

1. Take action to expand the City's extraterritorial zoning and subdivision jurisdiction from the current two miles to the four miles allowed under Section 40-47.01.1 of the North Dakota Century Code.

2. Adopt an Urban Service Area Boundary within the extraterritorial area to accommodate expansion of the City and municipal utility systems over the next 10 to 15 years. This boundary would include those portions of the extraterritorial area that could reasonably be served by municipal utilities within a 10 to 15 year timeframe and would be updated on an annual basis to reflect new facilities, updated master plans, and the five-year capital improvements program, along with annexations and changes in development trends.

Zoning Ordinance

The City's zoning ordinance provides for the classification of land into specific zoning districts and establishes development criteria and uses for each district. Zoning is an obvious tool for implementing the policies of the Growth Management Plan.

It is recommended that the City's zoning ordinance be amended to:

1. Create a Transitional Urban Development zoning district. The purpose of this district would be to label those areas within the Urban Service Area Boundary that are likely to be urbanized within the next 10 to 15 years, but are not currently ready for development (land that is currently zoned Agriculture within the Urban Service Area Boundary). Standards should include allowing continuation of existing uses, but prohibit the expansion of uses that are inconsistent with future urbanization of the area. Agricultural operations that are exempt from zoning requirements under the North Dakota Century Code would continue to be allowed.

2. Create a Residential Estates zoning district. The purpose of this district would be to allow the integration of existing rural residential subdivisions at the edges of the community into the corporate limits and to satisfy the demand for large lot urban residential uses within the corporate limits in those locations where the provision of storm sewer or other services are problematic. Standards should include a minimum lot size of 20,000 square feet, minimum lot width of 80 feet, a provision for municipal water and sanitary sewer services, minimum 80-feet wide rights-of-way for local roadways (depending on topography) with paved rural roadway sections, stormwater management facilities similar to rural subdivisions, modified street lighting requirements, and the option of using asphalt trails in lieu of concrete sidewalks. This zoning district would only be applied to subdivisions within the corporate limits. Neither horses nor livestock would be allowed.

3. Create a Gateway Corridor overlay zoning district. The standards for such an overlay district would include design standards for the construction, alteration or expansion of any commercial or industrial property along identified gateway corridors. Design standards could regulate exterior finishes, consistency of building additions to original architecture, landscaping, downcast lighting, underground placement of utilities, and other site-specific factors. These standards would be applied to all new development and proportionately applied when existing properties were altered or expanded.

4. Modify the Rural Residential zoning district to establish a minimum lot size of 65,000 square feet, rather than having a range of lot sizes based on soil limitations for septic systems.

5. Establish development standards for land adjacent to the Missouri River within the extraterritorial area.

Subdivision Regulations

The City's subdivision regulations are also an effective tool for achieving the goals of the Growth Management Plan. Subdivision regulations control the conversion of undeveloped and agricultural land. These regulations include standards for the arrangement of lots, street, and the dedication of public right-of-way among others.

It is recommended that the City's subdivision regulations be amended to:

1. Require an informal pre-application meeting prior to the submittal of all requests for preliminary plat approval.

2. Require a concept development plan for all contiguous property under the same ownership to be submitted in conjunction with requests for preliminary plat approvals (area master plans).

3. Incorporate the undevelopable land policy into the subdivision regulations.

4. Modify the requirements for the subdivision of land *within the extraterritorial area* in order to ensure that rural residential developments are designed and constructed in a manner that will facilitate future annexation and incorporation into the City:

    a) Establish a minimum lot size of 65,000 square feet, rather than having a range of lot sizes based on soil limitations for septic systems.

    b) Include provisions for official ghost platting (such as sublots) that allow further subdivision (or lot splits) when urban services become available. Ghost platting would direct the placement of dwellings and allow for cost-sharing of future infrastructure improvements by allowing the ghost lot portion of the property to remain vacant until needed.

    c) Include provisions for dedication of adequate right-of-way to accommodate future urban densities, in order to avoid expensive acquisitions of such rights-of-way in the future. Only those facilities needed for rural densities would be constructed with initial development (prior to recording plat).

    d) Include provisions for dedication of adequate easements for stormwater conveyance facilities, in order to eliminate the need for acquiring such easement in the future. Only those facilities needed for rural densities would be constructed with initial development (prior to recording plat).

    e) Require paving of all interior subdivision roadways to County standards.

    f) Establish a review and comment procedure for local service providers, such as schools, rural fire, rural water, Burleigh County, impacted townships, and utility service providers, prior to the public hearing on subdivision requests.

    g) Written requests for waivers of any of these requirements would be considered on a case-by-case basis provided the developer is able to provide adequate justification for the request.

5. In addition to the above requirements, the subdivision regulations should be modified to include the following requirements for the subdivision of land *within the Urban Service Area Boundary* to further facilitate future annexation and incorporation into the City:

    a) Require detailed grading plans for both urban and rural roadway sections.

    b) Require master plans for the future extension of municipal water and sewer facilities.

    c) Require regional watershed master plan to urban densities be prepared.

    d) Require installation of rural water private service lines to City standards.

e) Written requests for a waiver of any of these requirements would be considered on a case-by-case basis provided the developer is able to provide adequate justification for the request.

6. Work with the Bismarck Parks and Recreation District to develop a method to acquire public land for future parks, open space and public facilities.

7. Establish buffer requirements for proposed residential development adjacent to I-94, Highway 83 and the identified metropolitan beltway corridor. The intent of this requirement would be to mitigate noise and visual impacts from these high volume roadways and avoid the demand for noise walls or other such measures in the future.

8. Establish a requirement for all new utilities to be placed underground to enhance the appearance of new subdivisions.

Stormwater Management Plan Requirements

- Amend the Stormwater Management Plan Requirements to require easements for stormwater conveyance facilities to accommodate future urban densities for all new subdivisions within the extraterritorial area, in order to eliminate the need for acquiring such easements in the future. Only those facilities needed for rural densities would need to be constructed in conjunction with initial development (prior to recording plat).

Official Mapping

Official mapping is another tool that can be utilized to preserve right-of-way and transportation corridors. Official mapping also puts property owners and developers on notice and prevents development within identified corridors.

It is recommended that the City pursue the following actions:

- Officially map the right-of-way required for a full diamond interchange at the intersection of Interstate 94 and 66th Street NE to preserve the option for a full interchange in the future.

- Officially map any non-section line arterial roadways identified in the Long Range Transportation Plan.

Capital Improvements Program

The City's Capital Improvements Program (CIP) is another tool for implementing the Growth Management Plan. The CIP is a five-year schedule of infrastructure improvements that includes the schedule, timing and details of specific capital expenditures. For each project, its year of construction, estimated cost, and funding source are included. The CIP also includes a description of the work to be completed, justification of the project, and the annual impact on income and operating costs for each project. The City of Bismarck's Capital Improvements Program is updated annually in conjunction with the budget process to reflect changing needs in the community.

Fiscal Resources

The City of Bismarck has a variety of fiscal resources to assist in the implementation of the Growth Management Plan. The methods used to finance infrastructure and other public improvements can influence how development and growth occur within the City. Property taxes, special assessments, sales tax, enterprise funds, community development block grants, and state and federal aid programs are some revenue resources available. These resources can be applied on a case-by-case basis to help achieve the goals and objectives of the Plan.

Property Taxes

Property taxes are a primary revenue source for local government. Tax rates apply uniformly to all property within the City regardless of what the property creates in terms of costs or benefits within the community. For this reason, property taxes are usually used to fund City operations.

Special Assessments

Special assessments are used to levy the costs of specific improvements against the properties that directly benefit from the improvements. Special assessments are traditionally used for infrastructure improvements, including roadways, sanitary sewer, storm sewer, and water mains. In new subdivisions, the developer is responsible for paying trunk line charges, right-of-way grading, basic water and sanitary sewer main costs up front, with the remainder of the improvements generally being assessed to the individual lots within the subdivision. The North Dakota Century Code also allows the use of special assessments to develop public parks.

Sales Tax

As a home rule municipality, Bismarck has the authority to utilize sales tax to fund specific projects and reduce property taxes. This 1% sales tax is currently used to fund roadway construction and maintenance of City facilities, economic development activities, and to offset property taxes by an equivalent of 25 mills. Sales tax is also used to fund community betterment projects, which are voted on by the residents of Bismarck. The most recent vote in 2002 authorized funding for several project that would not otherwise have funding, such as the construction of a new fire station, construction of the new 911 emergency center, development of new recreational trails, and improvements to the Community Bowl.

Enterprise Funds

The City also has several enterprise funds, which are self-supporting and function much like a business in that fees are charged for services in order to cover the cost of operation and equipment replacement. Enterprise funds within the City include the airport and flightline operations, the solid waste utility (collection and landfill), the water and sewer utility (water treatment & distribution, wastewater collection & treatment, and stormwater management facilities), and the parking authority operation.

Special Revenue Funds

Several operations of the City also operate as special funds, including the arena and exhibit functions of the Civic Center, the public library, specific function of the roads and streets department (snow gates and street lighting/traffic signals), and specific law enforcement

activities. The lodging and restaurant tax used for capital construction and government grants are also budgeted as special revenue funds.

The City of Bismarck is an entitlement community for Community Development Block Grants. These funds must be used for projects that benefit low and moderate income households, eliminate slums and blight, or mitigate a life-threatening situation. In Bismarck, CDBG funds may be utilized for infrastructure improvements in low and moderate income neighborhoods.

The City is also eligible to apply for a variety of state and federal aid programs including funding for transportation plans, airport improvements, stormwater management studies, and qualified capital improvements.

Development Impact Fees

Although development impact fees are not utilized extensively in Bismarck, they should be considered. Developers would set aside funds to be used as a portion of required future infrastructure (such as roadways, traffic signals, stormwater management facilities, etc) benefiting the property being developed. This would help eliminate the need for general taxpayer subsidy of improvements that primarily benefit specific properties.

Action Plan

It will take several years to implement this Growth Management Plan. In order to effectively implement the plan, an initial action plan has been developed to set priorities. This action plan should be reviewed on an annual basis and revised as needed to keep pace with the evolving community.

Immediate

The following actions should be taken immediately, preferably in conjunction with the adoption of the Growth Management Plan. It is possible that numerous proposals for new development will be submitted as soon as the moratorium is lifted. If there is a delay in the implementation of these critical actions, these new subdivisions would not be subject to the change in policy brought about by this Plan.

1) Extend the City's extraterritorial area jurisdiction to the full four miles allowed.
2) Adopt the proposed Urban Service Area Boundary within the extraterritorial area.
3) Amend the City's zoning ordinance to require:
    a) A minimum lot size of 65,000 square feet for RR lots
4) Amend the subdivision regulations to require:
    a) A minimum lot size of 65,000 square feet for RR lots
    b) Official ghost platting and adherence to sub-lot lines
    c) Dedication of adequate right-of-way for urban densities
    d) Construction and paving of interior subdivision roadways to County standards
    e) Dedication of adequate stormwater easements for urban densities
    f) Construction of stormwater facilities for rural densities
    g) Opportunity for review and comment by local service providers.
    h) Incorporation of the undevelopable land policy.
    i) A pre-application meeting prior to the submittal of all preliminary plats
    j) A concept development plan for contiguous property

5) Other:
    a) Adopt the Fringe Area Road Master Plan
    b) Finalize the creation of digital parcels within the ETA
    c) Review current policies regarding the provision of rural water in the ETA
    d) Work towards consistency in the policies between Bismarck and Burleigh County regarding the two year property tax exemption
    e) Work with Burleigh County on a funding mechanism for constructing and improving section line roadways serving rural subdivisions within the ETA

Short Term

The following actions should be taken within the next one to two years:

1) Amend the City's zoning ordinance to:
    a) Create a Transitional Urban Development zoning district
    b) Create a Residential Estates zoning district
    c) Create a Gateway Corridor overlay zoning district
    d) Establish buffer requirements for residential development along major arterials
    e) Establish setback regulations for land adjacent to the Missouri River
2) Other:
    a) Establish a method for acquiring land for parks, open space, and public facilities
    b) Develop a method to calculate and compare the costs and revenues of urban and rural development
    c) Update and maintain the vacant lot inventory and publicize it
    d) Refine policies regarding the provision of rural water to development within the ETA
    e) Conduct research and develop a method to utilize development impact fees for roadway and other infrastructure improvements for large-scale projects
    f) Continue to work with the Bismarck Parks and Recreation District on the expansion of the multi-use trail system
    g) Develop a system of greenway corridors for multi-use trails and stormwater conveyance
    h) Adopt a plan for parks, open space, greenways and multi-use trails, and investigate the possibility of official mapping these facilities and/or incorporating these uses into the future land use map

Long Term

The following actions are also important aspects of the Growth Management Plan; however, they are seen as long term actions to be taken within the next five years:

1) Officially map the right-of-way required for the I-94/66th Street NE interchange
2) Officially map any future non-section line arterial roadways
3) Develop a method to notify property owners along future collector and arterial roadways of the future plans for the roadway
4) Utilize the City's CIP to direct growth to designated growth areas
5) Identify methods to provide buffers and greater setbacks for residential subdivisions adjacent to arterial roadways
6) Amend the zoning ordinance to create a medium density residential district that will be a transition between the existing low density (R5 and R10) and high density (RM) development districts

BISMARCK GROWTH MANAGEMENT PLAN
ADVISORY COMMITTEE/TECHNICAL COMMITTEE
EXCERPT OF MEETING NOTES
MARCH 19, 2003

IDENTIFICATION OF ISSUES

The reasons for the existing trend of low-density residential development in the rural areas surrounding Bismarck were discussed. Some of the reasons for this trend include those identified in the Background Report and those identified by committee members in attendance:

- A lower property tax rate outside of the corporate limits.
- A two-year property tax exemption on new residential construction in Burleigh County.
- The availability of good quality water delivered through the rural water system (South Central Regional Water District).
- The lower cost of land for developers.
- The lack of initial special assessments to pay for things like paved streets, curb and gutter, sidewalks, sanitary sewer, storm sewer, etc.
- A desire by residents for a specific lifestyle including a larger lot, fewer neighbors, more privacy, less noise and less congestion.
- A desire for natural amenities, such as scenic views and proximity to the Missouri River.
- The appeal of less restrictive land use regulations, including code enforcement, larger accessory buildings, and the ability to have horses.
- Technological advances that allow residents to live further out and still receive traditionally urban services at reasonable prices, such as satellite TV dishes, cell phones, natural gas extensions, rural water, etc.
- Advances in emergency management, such as enhanced 911.
- Roadway access to rural subdivisions that are fairly good for a certain level of usage and the trend towards paved roadways within rural subdivisions.

The policy issues and questions related to this development trend were also discussed. The policy issues and questions were included in the Background Report (numbered questions) and committee members in attendance responded to the questions posed (bulleted responses).

1. Will the City find it more difficult to grow in a logical, orderly manner as it reaches rural subdivisions?
    - Tylers Western Village was absorbed by the City.

- In KMK Estates, over 200 urban lots have been created from rural lots in the last 10 years.
- Rural subdivisions would probably be re-subdivided into urban lots earlier if City utilities were available.
- The County now has stormwater management plan requirements for subdivisions and the City's regulations apply to land within the ETA.
- Ghost platting is required within the ETA, but the placement of homes is not dictated.

2. Will rural subdivisions resist annexation as the City expands?

    - Owners would support annexation if they needed City sewer and/or water.
    - Concerns that they would no longer have wide open spaces.
    - It is an issue of individual preference and geography.
    - It would be the decision of individual lot owners.
    - It would depend whether or not they had gotten their money out of improvements, such as septic systems, rural water or wells, and roadways (10-12 years).
    - These types of issues tend to divide neighborhoods, much like paving districts.
    - There is a legal basis for forced annexation, but it is a policy issue. It also depends on the ability to provide services. There are areas that are completely surrounded by the corporate limits that remain outside of the City. The Fargo/West Fargo example was cited.

3. What will be the environmental effects, if any, of the increasing numbers of septic tank systems?

    - There could be septic systems every 20,000 square feet and 60 feet from a well according to State Health Department regulations.
    - One of the problems is with enforcement and the ability to flag failing systems.
    - Because of our unique soil conditions, we may not be able to tell.
    - We now require enough area for two drainfields on rural lots and have improved technology from the older systems.
    - With a ghost platting scenario, a drainfield could occupy the area intended for a home in the future and placing a home on top of an old drainfield is problematic.
    - Inspections is no longer doing percolations tests. The options are to hire an independent soil scientist or to plat a lot to the maximum size and size a drainfield to the maximum size.
    - The cost of installing septic systems in clay soils can be between $10,000 and $12,000 versus $3,500 in sandy soils.
    - A septic system often fails because the home owner does not have the knowledge that the system is being overloaded.

- Establishing a straight minimum lot size would improve the platting process; however, soil tests would still be required for septic systems and drainfields.

4. Will land use conflicts increase as more suburban development occurs in close proximity to pre-existing agricultural uses?

    - Creating a fringe area zoning district where existing uses are grandfathered in but cannot expand may be a solution.

5. Can services such as rural fire, township road construction and maintenance, snow removal, and County law enforcement be maintained for the additional development.

    - It is a spatial arrangement issue and a density issue.
    - Rural fire does have concerns with the amount of rural residential development.

6. What is the cost of growth?

    - Do we have the ability to calculate the cost of growth within the core versus outside of the core?
    - Most of the County property taxes come from Bismarck.
    - The core is subsidizing what happens outside in the way of services – who is paying the freight?
    - There is no additional benefit to the County for rural development – the County actually benefits more if development is in the City because they do not need to provide the same level of services.
    - The cost to rural residents could be increased via assessments for services. For example, the Park District should have a larger assessment area than the corporate limits.

7. Does the City encourage rural growth because of excessive urban development costs?

    - The City needs to look at how it assesses improvements.
    - People are moving out because of higher development costs.
    - Lot development costs are going higher in the rural areas because of improvement costs, such as paved roads.
    - Taxes are not that much different in the City and in the areas around the City.
    - It is more of a demand issue – with a greater demand for lots the cost increases.
    - Land costs are higher in the rural areas, because you can only get one lot per two acres versus three lots per acre in the City.
    - Improvement costs are higher in the City because of special assessments.
    - It is an issue of country living.
    - Many people are moving to rural areas because it is cheaper, but then they expect the same level of service as in the City (rural water, rural fire, paved roads, etc).

- The assessment districts in the City are tied to a level of indebtedness.

8. Will public access to the Missouri River be compromised as riverfront is platted for private residential use?

    - In the City property can be platted over section lines, but in the County specific action needs to be taken to vacate a section line. This is a policy issue.
    - A section line in and of itself is not "access" to the river.

9. How will future parkland be reserved to serve areas that will eventually be part of Bismarck?

    - The Park District should use the same mechanism for acquisition of park land as the School District uses for acquisition of land for schools – negotiation with landowners.
    - There is a way to tie preservation of open space to stormwater management, such as along the Hay Creek corridor.
    - The idea of creating a park land dedication ordinance has been discussed.

10. How will neighbors eventually interconnect with each other and provide opportunities for pedestrian and bicycle use?

    - Trails should be developed for both bicycle and pedestrian use in rural areas, but the style of development is not conducive to such trails.
    - There is a master plan for a trail system that extends outside of the City.
    - The County Park Board should be brought into the discussion.
    - The issue of trail development could be combined with road master planning issues or could be separate from streets in greenway or recreation corridors.
    - The trail along North Washington Street was cited as an example.

11. Will a diverse mixture of various residential, commercial, industrial and public land uses be possible as more and more land is set aside for exclusively large-lot single-family residential?

    - This issue ties into the provision of services.
    - It may make sense to have a land use plan rather than just a policy plan.
    - It is important to create neighborhoods rather than just housing tracts.

12. Will storm water problems be adequately addressed at the time of initial development to prevent to need for future "fixes"?

    - There are master plans for watersheds being developed as part of the City's stormwater management efforts.
    - This issue is tied to ghost platting and whether or not the entire subdivision is replatted.

13. How will large parcels of land be set aside for economic development projects as more land is subdivided for potentially incompatible residential uses?

    - Land should be set aside for a civic center complex and/or sports facility.
    - There also needs to be adequate land set aside for commercial and industrial uses.

14. Should the City pursue a policy of directing future growth into areas planned for the systematic expansion of City services, rather than reacting to individual developers' projects?

    - It is an issue of being proactive versus being reactive.
    - This concept could be tied to the CIP, which is what Sioux Falls has done.
    - This is an important issue and direction needs to be provided by the City Commission.
    - A draft urban service area boundary has been developed inside of which municipal services could be provided within the next 10 years.
    - There is always going to be a certain amount of reactive approach because we need to work around land owners that are not willing to develop.

15. Should the City be concerned about development within the County's jurisdiction if the City's future growth can be handled within the present ETA boundary? An estimated 107,025 additional people could be accommodated if all the land area within the ETA was fully developed at urban densities.

    - It is an issue of looking at the long-range versus the short-range.
    - It is not an all or nothing issue – there are options.