



Introduction

Sturgis is a vibrant historic community in a strategic location for future growth. The city's prospects present both exciting challenges and opportunities. Sturgis began in the shadow of Fort Meade, providing goods and services to the soldiers. Like many Black Hills communities, Sturgis has its own rowdy history. While other settlements died with the end of the gold rush, Sturgis continued to prosper. The region's history and the Sturgis Motorcycle Rally continue to create a growth and development opportunity for the city.

The Sturgis Plan is designed to provide a comprehensive vision of the city's future, based on taking actions that will improve the lives of residents and make the city uniquely attractive for potential growth.

THE ROLE OF A COMPREHENSIVE PLAN

The comprehensive development plan for Sturgis has two fundamental purposes. The first provides an essential legal basis for land use regulation such as zoning and subdivision control. Secondly, a modern comprehensive plan presents a unified and compelling vision for a community, derived from the aspirations of its citizens; and establishes the specific actions necessary to fulfill that vision.

Legal Role

Communities prepare and adopt comprehensive plans for legal purposes. South Dakota State Statutes enable cities to adopt zoning and subdivision ordinances to promote the "health, safety, or general welfare of the community." Land use regulations, such as zoning ordinances, recognize that people in a community live cooperatively and have certain responsibilities to one another. These regulations establish rules that govern how land is developed within a municipality.

However, a city may not adopt land use ordinances without first adopting a comprehensive development plan. This requirement derives from the premise that land use decisions should not be arbitrary, but should follow an accepted and reasonable concept of how the city should grow.



Under state statutes, a comprehensive development plan must address, at a minimum, the following issues:

- **Land use, or the planned distribution of activities and uses of land in the community.**
- **Transportation facilities.**
- **Community facilities, including recreation facilities, schools, public buildings, and infrastructure.**



The Community Building Role

A comprehensive development plan has an even more significant role in the growth of a community. Based on the participation of residents in the planning of their community, the plan establishes a picture of Sturgis' future. This vision continues to be crucial, as challenges related to population growth and economic changes affect the character of Sturgis. The plan is designed as a working document that both defines the future and provides a working program for realizing the city's great potential.

THE COMPREHENSIVE PLAN: APPROACH AND FORMAT

The comprehensive plan takes a goal-oriented approach to the future development of Sturgis. In 2008 the residents of Sturgis began a process called Future Sturgis. The mission of Future Sturgis is to "create a value added community that provides the citizens a voice in revitalization of the greater Sturgis area." While traditional comprehensive plans usually involve an extensive visioning and goal setting process, this had already been completed by the Future Sturgis committees. Input from residents through this process established the guiding vision for the Sturgis Comprehensive Plan. The plan is laid out in two sections: (1) identifying the city's existing conditions and growth needs, and (2) formation of a plan that fulfills the Future Sturgis vision and the city's growth needs. The traditional sections of a comprehensive plan, such as land use, housing, infrastructure, and transportation, are organized as leading components of the city's vision. This enables the plan to tell the story of the city's existing opportunities and challenges while weaving those into the future vision and development of the community.

Plan Sections

Section 1: A Profile of Sturgis

This section of the plan reviews the city’s existing conditions, growth needs, and Future Sturgis vision and is divided into four chapters:

- 1) **Sturgis’ Demographic and Economic Profile**
- 2) **Land Use Profile**
- 3) **Public Facilities and Infrastructure Profile covering transportation, parks, public buildings, and infrastructure systems.**
- 4) **An over view of the Future Sturgis process and the goals and visions identified by each of the Future Sturgis committees.**

Section 2: Community Plan

This section considers Sturgis’ most critical issues – how to accommodate growth and in what direction that growth should occur. It provides a detailed strategy to guide future growth in new development areas and the traditional community core. The city’s development strategy is holistic, incorporating all the necessary components for a strong and vibrant community, including parks, transportation, public facilities, and infrastructure. The final chapter of this section draws together the analysis and policies of the plan into a program for implementation. It summarizes the recommendations and development policies of the plan, and presents an Implementation Schedule, listing proposed projects and the time frame for their completion.





Sturgis

Chapter 1

A DEMOGRAPHIC & ECONOMIC PROFILE OF STURGIS

This chapter examines demographic and economic trends that will affect Sturgis. The analysis examines population and demographic dynamics, including future population, and important regional issues that will affect the quality of the city’s environment.

POPULATION HISTORY AND CHARACTERISTICS

This discussion presents important changes in the characteristics and dynamics of Sturgis’ population. Table 1.1 and Figures 1.1 and 1.2 indicate:

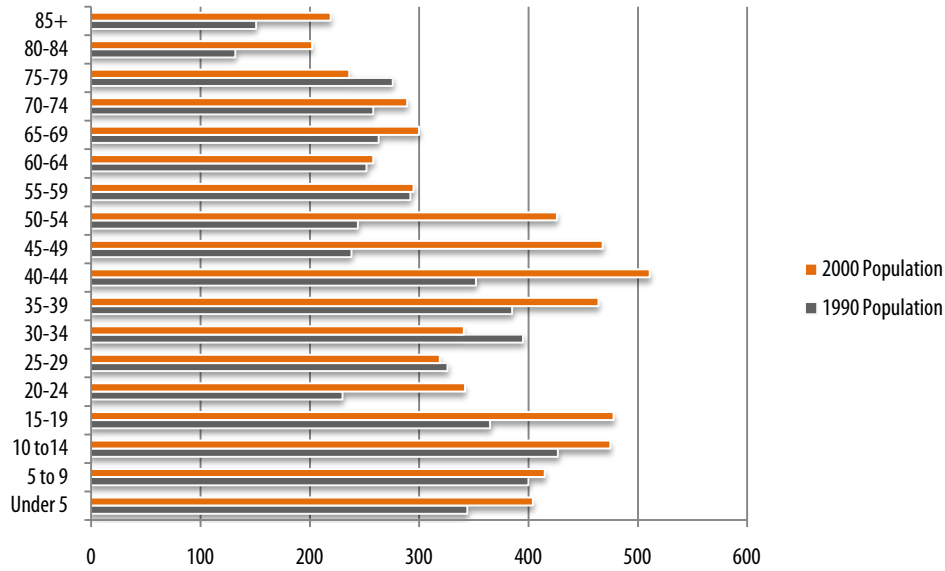
- Sturgis has experienced steady growth since the 1980s despite an estimated drop in population since 2000.
- Meade County has experienced substantial growth since 1960. Much of this has occurred outside of Sturgis. In 1960 Sturgis accounted for 39% of the county’s population, by 2000 this had dropped to 26% in 2000.
- Between 1990 and 2000 Sturgis experienced an increase in the number of higher earning residents between the ages of 35 and 54. This correlates to the “baby boom” population cohort and is also reflected in the “shadow boom” (their children) between the ages of 15 and 19.

Table 1.1: Population Change for Sturgis and Other South Dakota Cities, 1960-2000

	1960	1970	1980	1990	2000	2009 Estimate	% Change 1960-2000	% Change 2000-2008
Sturgis	4,639	4,536	5,184	5,330	6,442	5,981	38.9%	-7.2%
Belle Fourche	4,087	4,236	4,692	4,335	4,565	4,979	11.7%	9.1%
Hot Springs	4,943	4,434	4,742	4,325	4,129	4,028	-12.5%	-2.4%
Spearfish	3,682	4,661	5,251	6,966	8,606	10,010	89.2%	16.3%
Box Elder	-	607	3,186	2,680	2,841	3,517	341.5%	23.8%
Lead	6,211	5,420	4,330	3,632	3,027	2,892	-51.3%	-4.5%
Rapid City	42,399	43,836	46,492	54,523	59,607	65,491	40.6%	9.9%
Meade County	12,044	17,020	20,717	21,878	24,253	23,916	101.4%	-1.4%

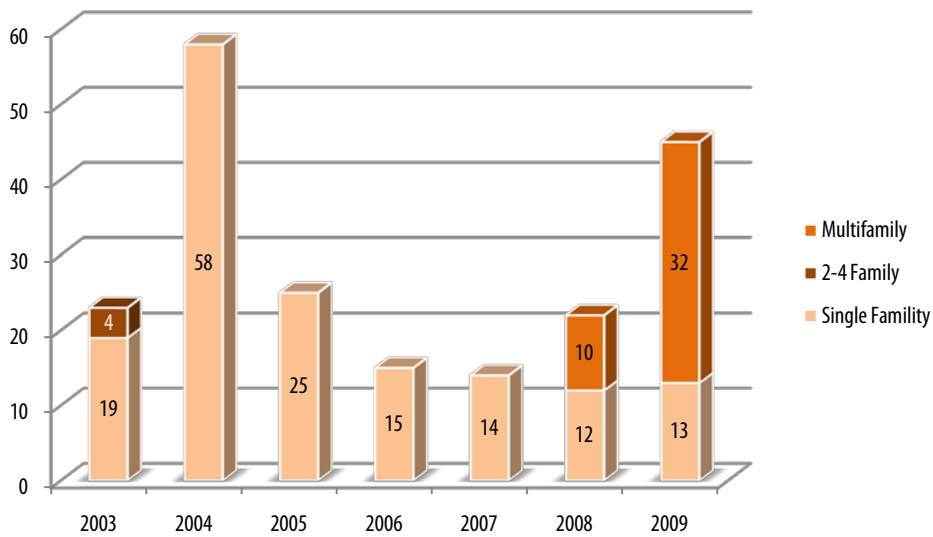
Source U.S. Census Bureau, 2009

Figure 1.1 Age Composition 1990 and 2000



The changes in lending practices and the national drop in new home construction did not affect Sturgis like other parts of the country. Sturgis experience almost no decrease in single-family activity and new construction of 42 multi-family units.

Figure 1.2 Residential Building Permits



- Between 2003 and 2009 there were 202 housing units added to the Sturgis market, 20% of which were multi-family units.
- The changes in lending practices and the national drop in new home construction did not affect Sturgis like other parts of the country. Sturgis

experience almost no decrease in single-family activity and new construction of 42 multi-family units.

- If Sturgis’ average household size was 2.29 in 2000, an additional 200 units would result in 458 new residents. However, new units are not necessarily filled by new residents and some units would have been lost during this same period to seasonal rentals, demolition or conversion to another use.



POPULATION PROJECTIONS

Projecting Sturgis’ future population is the first step in understanding the city’s future land use and community service needs. This begins with an understanding of the demographic changes that may have occurred since 2000 (Table 1.2) and then using that data to project future population scenarios (Table 1.3).

Table 1.2 Population Growth Scenarios for Sturgis

	2000	2008
Natural Pop Change	6,442	6,340
US Census	6,442	5,950
Claritas, Inc.	6,442	5,798
Construction Activity	6,442	6,800

Table 1.3 Projected Population for Sturgis, 2010-2030

	2010	2015	2020	2025	2030
Natural Pop Change	6,317	6,310	6,303	6,258	6,169
0.5% Annual Growth	6,800	6,972	7,148	7,328	7,513
0.8% Annual Growth (1960-2000 Rate)	6,800	7,076	7,364	7,663	7,975
1.9% Annual Growth (1990-2000 Rate)	6,800	7,471	8,208	9,018	9,908

- Based on natural population change, which calculates the number of births to deaths, the city’s population decreased by approximately 100 people since 2000.
- The U. S. Census Bureau’s current 2009 estimate is lower than estimated natural change and would indicate an out-migration since 2000.
- Construction activity between 2003 and 2009 would indicate that the city’s population has grown some since 2000.



- The city’s 40 year average annual growth rate (1960-2000) was 0.8%, slightly higher than construction activity would have supported in the 2000s.
- Although recent growth may not be as strong, the city’s goals should lay the ground work for continued population increases of 0.8% annually through 2030 resulting in a population of 7,975.



ECONOMIC FACTORS

Sturgis’ economy has been both dependent and independent from the larger region. Many residents live in Sturgis and commute to jobs in Rapid City and Spearfish. At the same time Sturgis, and specifically the Motorcycle Rally, is an enormous economic engine for the entire region. The following section reviews Sturgis’ employment, income, taxable retail sales and commuting patterns.

- Over 72% of Sturgis residents are employed in management, professional, service and sales occupations, comparable to the county as a whole.
- With nearly 50% of residents in what are typically lower paying sales and service occupations the, city median income is lower than the State and Meade County. It is not unusual to have higher earners living in acreage type settings just outside the city.

Table 1.4 Employment by Occupation, 2009 Estimate

	Sturgis	Meade County
Management, professional, & related occupations	23.01%	28.19%
Service occupations	22.09%	16.58%
Sales & office occupations	27.52%	27.10%
Farming, fishing, & forestry occupations	1.11%	2.03%
Construction, extraction, & maintenance occupations	11.41%	11.31%
Production, transportation, & material moving occupations	14.85%	14.80%

Source: Claritas, Inc. 2010

Table 1.5 Income Distribution for Households by Percentage

	Under \$15,000	\$15,000-24,999	\$25,000-34,999	\$35,000-49,999	\$50,000-74,999	Over \$75,000	2009 Median Income
Sturgis	18.62	15.50	13.76	20.08	19.97	12.07	\$36,595
Meade County	9.65	10.38	12.21	20.71	23.81	23.24	\$47,862
Lawrence County	15.58	15.22	12.87	17.66	19.62	19.06	\$40,386
South Dakota	13.53	12.37	13.06	17.31	21.72	22.01	\$44,568

- In 2009 an estimated 34% of Sturgis households had incomes that were 50% of the countrywide median of \$47,862.



- Table 1.6 compares change in taxable sales from 2000 to 2009. Although overall sales have increased since 2000, all areas have experienced a decrease since 2005.
- The drop in taxable sales occurred mostly between 2008 and 2009, as the national economy moved into the “Great Recession.” While Sturgis’ residential building activity did not appear to be as affected by the change in the national economy, the more regionally and nationally dependent sales were impacted by the drop in tourism dollars.
- Table 1.6 illustrates Spearfish’s role as a regional retail center. The city’s strong residential growth during the 2000s is also reflected in the more substantial growth in taxable sales.
- Commuting times for the communities identified in Table 1.9 would indicate an economy that provides jobs and housing on a regional basis.

Table 1.9 Commuting Patterns, 2009

	Average Travel Time to Work (minutes)	% Who Walked to Work
Sturgis	18.9	3.4
Rapid City	17.5	1.8
Spearfish	17.7	6.7
Deadwood	17.7	20.5
Belle Fourche	18.4	1.9
Hill City	25.9	7.5
Lead	19.2	4.8
Gillette	19.6	1.63

Source: Claritas, Inc., 2010

Table 1.6 Taxable Sales, Sturgis and Surrounding areas

	2000	2005	2009	Change 2000-2009	Per Capita Taxable Sales
Sturgis	\$102,366,617	\$131,354,622	\$121,312,260	18.5%	18,831
Meade County	140,190,217	179,610,274	172,202,616	22.8%	7,100
Spearfish	167,999,342	234,258,011	267,278,719	59.1%	31,057
Lawrence County	257,660,421	343,241,523	394,990,319	53.3%	18,117

- With Sturgis located approximately 20 to 30 minutes from Rapid City and Spearfish job markets, a number of Sturgis residents likely leave the city for work.

- Sturgis scenic beauty and expanding trail system should increase the number of residents walking and biking to work, creating a healthier community overall.



HOUSING ASSESSMENT

There is an interconnection between such demographic and economic factors as population trends, income, and employment and a community's housing stock. Tables 1.7 and 1.8 compare changes in housing occupancy and housing values.

- During the 2000s 26% fewer housing units were constructed than the previous decade. Slower growth rates slowed construction rates but a drop in speculative construction can also decrease community growth.
- Sturgis has historically had a higher percentage of rental units, providing a slightly more balanced market than many other cities of a similar size.
- Housing values in Sturgis between 1990 and 2000 experienced a 56% appreciation and slowed to 38% over the previous decade. The downturn in the economy beginning in 2008 slowed and even halted housing appreciation.

Table 1.7: Change in Key Housing Occupancy Indicators

	1990	2000	2009 Estimate	Change 1990-2000	Change 2000-2009	% Change 1990-2000
Total Housing Units	2,358	2,989	3,154	631	165	26.8%
Owner Occupied Units	1,280	1,744	1,878	464	134	36.3%
% Owner Occupied	58%	64%	65%			
Renter Occupied Units	912	994	1,011	82	17	9.0%
% Renter Occupied	42%	36%	35%			
Vacant Units	166	251	265	85	14	51.2%
Vacancy Rate	7.0%	8.4%	8.4%			
Seasonally Vacancy	0.21%	1.47%	--			
Median Value	\$47,400	\$74,200	\$102,326*	26,800	28,126	56.5%
Median Contract Rent	\$289	\$294	\$383**	5		1.7%

Source: U.S. Census Bureau and

*Claritas, Inc. 2010

** City Data

Table 1.8 Housing Value to Income, 2009

	Median Household Income	Median House Value	Value/Income Ratio
Sturgis	\$36,594	\$102,326	2.80
Rapid City	43,621	144,779	3.32
Spearfish	33,816	119,733	3.54
Deadwood	44,326	141,146	3.18
Belle Fouché	37,318	70,116	1.88
Hill City	55,511	176,639	3.18
Lead	36,733	79,533	2.17
Gillette	69,809	184,931	2.65

Source: Claritas, Inc., 2010

- Table 1.8 compares housing values to income for regional communities. Median home values in Sturgis are \$17,000 to \$42,000 less than Spearfish and Rapid City, making Sturgis an appealing residential community for workers.
- Overall Sturgis provides a good value to income, better than both Rapid City and Spearfish.

Overall Sturgis provides a good value to income, better than both Rapid City and Spearfish.



Sturgis

Chapter 2

A LAND USE PROFILE OF STURGIS

Land use is typically the central element of a comprehensive plan because it establishes the overall physical configuration of the city – the mix and location of uses and the nature of community systems that support them. Because the land use plan is a statement of policy, public and private decision makers depend on it to guide individual actions such as land purchases, project design, and the review and approval process. This chapter reviews existing patterns of development, potential market needs, and the character of the natural environment.

LAND USE PATTERNS IN STURGIS

The original town site of Sturgis was laid out in 1878 and was officially incorporated in 1886. The city was laid out in a grid format in the shadow of Bear Butte and initially grew south from the creek. The surrounding hills have limited development to the valley and along the corridors of Lazelle and Junction. In the last twenty years the city has experienced more development south of Interstate 90. Map 2.1 illustrates Sturgis' current development patterns, while Tables 2.1, 2.2, and 2.3 break down how land is used in the city and compare it to other peer communities. In Tables 2.2 and 2.3 the 37 city average is a sampling of communities in the Midwest region that RDG has worked with.

Residential Uses

- Sturgis has almost 33 acres of land in 2- to 4-family and multi-family configuration. If these developments are averaging 12 units per acre, this would generate 396 units or 12% of the city's total units (Table 1.7). However, the city's actual percentage of renter occupied units is closer to 35%. This would indicate a large number of renter occupied units in traditional single-family houses.
- The percentage of Sturgis' land in residential uses is very similar to other communities but much more dispersed. At 11.91 acres per resident, Sturgis has the lowest residential density. With a limited amount of easily developable land this development pattern could become a long term issue



for the city.

Table 2.1: Land Use in Sturgis, 2010

Land Use Category	City (Acres)	Percent	Acres per 100 People
Residential	809.93	37.8%	11.91
Single-Family	669.33	31.2%	9.84
2-4 Family	3.77	0.2%	0.06
Multi-Family	29.01	1.4%	0.43
Mobile Home	107.82	5.0%	1.59
Commercial	162.82	7.6%	2.39
Office	34.72	1.6%	0.51
Retail	96.26	4.5%	1.42
Parking	3.04	0.1%	0.04
Commercial Rec.	28.79	1.3%	0.42
Industrial	210.97	9.8%	3.10
General Industrial	179.81	8.4%	2.64
Lt. Industrial/Warehousing	31.16	1.5%	0.46
Civic	362.15	16.9%	5.33
Public-Semi Public	117.00	5.5%	1.72
Civic	110.45	5.2%	1.62
Parks & Rec.	134.70	6.3%	1.98
Transportation	598.53	27.9%	8.80
Total Developed Land	2,144.39	100.0%	31.54
Agriculture and Open Space	237.59		3.49
Vacant Urban Land	189.02		2.78
Total Area	2,571.00		37.81

Source: RDG Planning & Design, 2010



Commercial Uses

- Sturgis’ commercial uses are centered in the downtown and along the Junction and Lazelle corridors.
- Compared to other cities, Sturgis has a higher rate of commercial land use. However, much of this is seasonally oriented uses.
- The Rally has a significant impact on Sturgis’ commercial land use, including seasonally occupied store fronts and large parking lots that are only occupied during the Rally. Sturgis’ proximity to Rapid City and Spearfish has also impacted the city’s commercial environment. These larger regional commercial centers attract commercial dollars away from Sturgis and make it more difficult for the city to attract certain retailers.

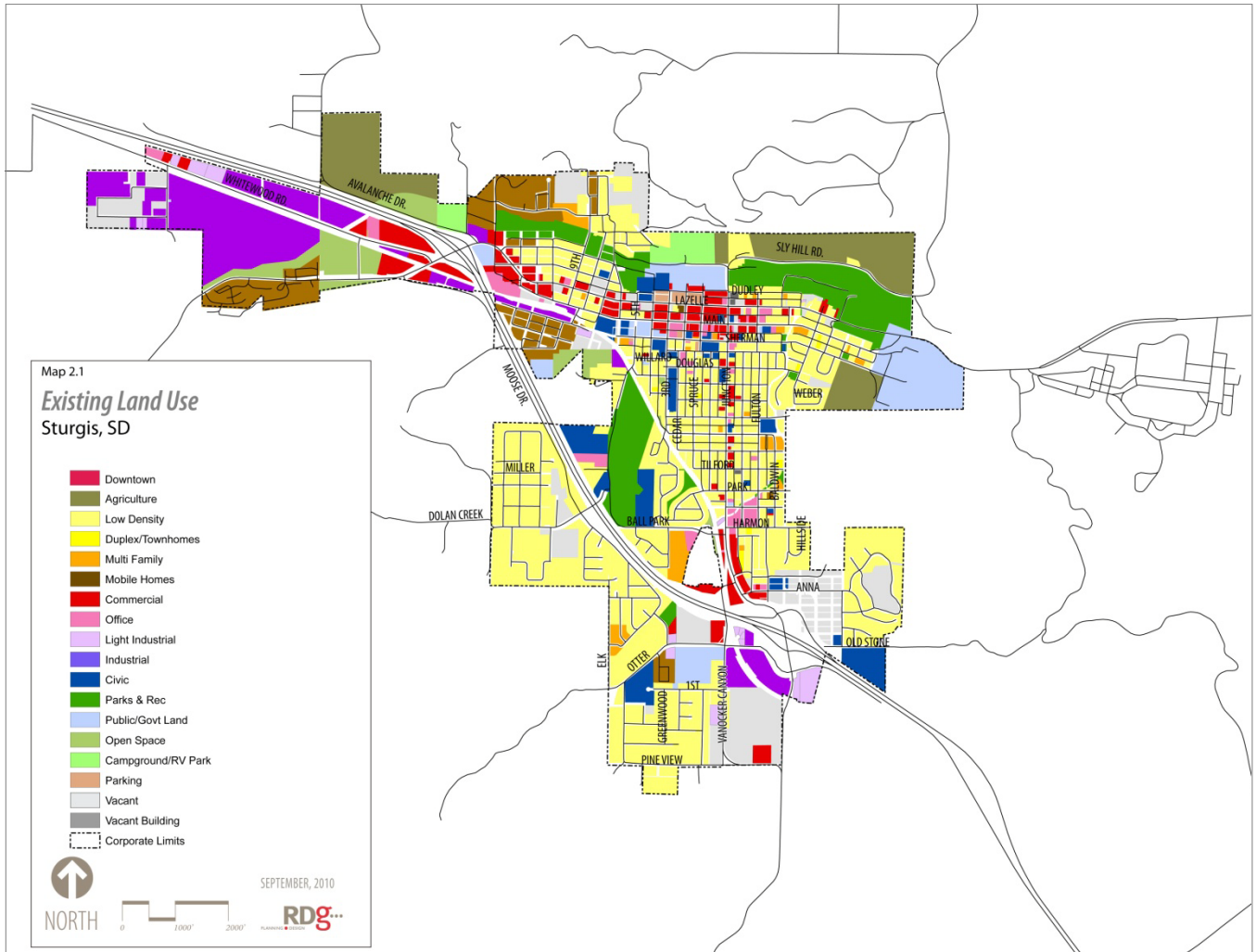


Table 2.2: Comparative Land Use by Percentage of Developed Area

	Sturgis	Yankton, SD	Gillette, WY	Plattsmouth, NE	Pella, IA	37 City Average
Residential	37.8%	25.3%	34.8%	47.0%	26.8%	36.2%
Commercial	7.6%	6.2%	14.7%	5.0%	4.3%	6.7%
Industrial	9.8%	7.1%	13.4%	2.0%	18.0%	7.5%
Civic	10.6%	29.4%	7.5%	10.0%	26.2%	15.1%
Parks	5.0%	14.1%	8.4%	7.0%	5.1%	9.3%
Transportation	29.2%	17.9%	21.2%	29.0%	19.6%	25.4%
Total Developed Area	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: RDG Planning & Design, 2010

Industrial

- Much of Sturgis’ industrial development has occurred along the railroad corridor and in the newer industrial park.
- Compared to a 37 city average of communities RDG has worked with, the city has slightly higher percentage of industrial but less than cities like Pella, Iowa and Gillette, Wyoming with large industrial bases.



Public and Semi-Public Uses

- Sturgis’ civic and public uses range from schools, churches and county buildings to the cemetery.
- The city does not have a large civic institution like a college (Yankton and Pella) and therefore has a slightly lower percentage of land in civic uses.
- Chapter 3 will provide a more detailed analysis of the city’s park system but Table 2.3 indicates that Sturgis has a lower proportion of park land to residents than many communities.
- Like most communities, the largest percentage of publicly owned land is in the city’s streets and rights-of-way, emphasizing that these areas should be considered as more than just conduits for traffic.

Table 2.3: Comparative Land Use by Acres per 100 People

	Sturgis	Yankton, SD	Gillette, WY	Plattsmouth, NE	Pella, IA	37 City Average
Residential	11.91	7.5	8.27	9.13	9.75	9.04
Commercial	2.39	1.83	1.68	0.98	1.56	1.49
Industrial	3.10	2.12	3.18	0.47	6.53	2.31
Civic	3.34	8.71	1.77	1.91	9.37	4.17
Parks	1.98	4.16	1.99	1.46	2.01	2.75
Transportation	8.80	5.29	5.04	5.62	7.12	6.37
Total Developed Area	31.54	29.61	23.76	19.57	36.34	26.41

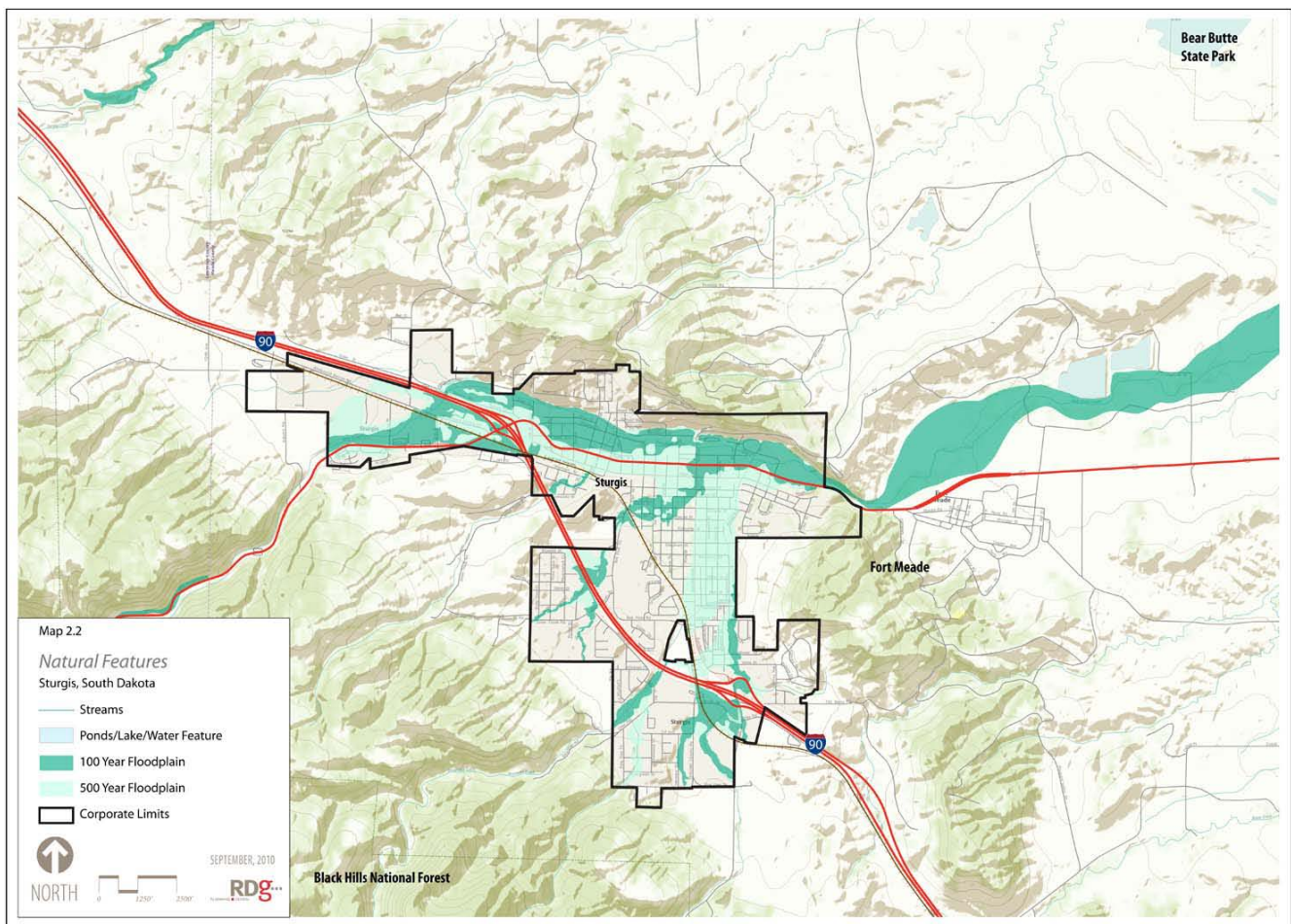
Source: RDG Planning & Design, 2010

PHYSICAL CHARACTER OF STURGIS

In addition to satisfying the demand for land resulting from growth, the Sturgis land use plan is also designed to respond to the city's physical character. Each community has distinctive physical assets and features that can strengthen it if used to best advantage. Sturgis' environmental character is one of its distinguishing assets and helps define the town's sense of place and inner harmony. Combined with an understanding of the city's basic systems, a vision for the future can be built that grows from the city's intrinsic character. Map 2.2 illustrates some of Sturgis' natural features.

Sturgis' environmental character is one of its distinguishing assets and helps define the town's sense of place and inner harmony.

- Located on the northern edge of the Black Hills, Sturgis is surrounded by scenic hills and buttes. The hills have impacted development because of their physical limitations but federal ownership to the south and large-lot residential development to the north also impact the city's growth directions. These limitations have resulted in a more linear development





pattern.

- The city's location within a valley has placed it within an important transportation route since its early history as a military community.
- Bear Butte Creek generally forms the northern boundary of the city. The creek can also quickly fill and take on a much different character during flash storms. This periodic flooding has affected the nature of the creek and development patterns surrounding it.

POPULATION AND GROWTH CONTEXT

Residential Land Use Projections

Population and development projections help to guide forecasts of land consumption needs during the planning period. Chapter 1 presented a population growth scenario that produces a 2030 population of 7,975 (Chapter 1, Table 1.3). Table 2.4 builds a 20 year housing demand model based on this projection and the following assumptions:

- Average people per household is expected to remain constant at 2.29 over the next twenty years.
- Unit demand at the end of the period is calculated by dividing household population by the number of people per household. This equals the number of occupied housing units.
- The vacancy rate over the next twenty years will remain constant at 8.4%. This represents a moderate vacancy rate for a destination community with seasonal housing.
- Unit needs at the end of each period are based on the actual household demand plus the number of projected vacant units.
- Replacement need is the number of housing units demolished or converted to other uses. Homes in poor condition or that are obsolete should gradually be replaced in the city’s housing supply.
- Cumulative need shows the number of total units needed between the base year of 2010 and the year indicated at the end of the period.



The projections in Table 2.4 indicate a cumulative need for 605 housing units in Sturgis between 2010 and 2030, based upon the projected population growth. This supports a steady growth pattern while assuming more units will not be lost to seasonal uses.

Development Program

Table 2.5 presents a ten-year housing development and pricing program for Sturgis, based on the city’s relative income distribution. The program provides production targets for various cost ranges of rental and owner-occupied units. The development program is based on the following assumptions:

- New development in Sturgis will be about 65% owner-occupied and 35% renter-occupied housing. This is similar to the city’s current mix and provides some good quality new rental housing.
- Owner-occupied housing will be distributed generally in proportion to the income distribution of households for whom ownership is a realistic

strategy. Some of the market for lower-cost owner-occupancy may be shifted toward market rate rentals.

- Households that cannot afford affordable home ownership options will generally be accommodated in rental development.



Table 2.4: Projected Housing Development Demand

	2010	2015	2020	2025	2030	Total
Population at the End of Period	6,800	7,076	7,364	7,663	7,975	
Household Population at End of Period	6,616	6,885	7,165	7,456	7,759	
Average People/Household	2.29	2.29	2.29	2.29	2.29	
Household demand at End of Period	2,889	3,007	3,129	3,256	3,388	
Projected Vacancy Rate	8.40%	8.40%	8.40%	8.40%	8.40%	
Unit Needs at End of Period	3,154	3,282	3,416	3,555	3,699	
Replacement Need		15	15	15	15	60
Cumulative Need		143	148	154	159	605
Average Annual Construction		29	30	31	32	30

Source: RDG Planning & Design, 2010

Table 2.5: Ten Year Pricing and Development Program

	2010-2014	2015-2020	Total
Total Need	143	148	292
Total Owner Occupied Units	93	96	190
Affordable Low: \$60,000-100,000	20	21	41
Affordable Moderate: \$100-130,000	29	30	59
Moderate Market: \$130-200,000	29	30	59
High Market: Over \$200,000	15	15	30
Total Renter Occupied Units	50	52	102
Low: Less than \$450	19	20	40
Affordable: \$450-700	16	17	33
Market: Over \$700	14	15	29

Source: RDG Planning & Design, 2010

The analysis indicates:

- A need for approximately 100 owner-occupied units with prices below \$130,000 and 73 units with effective rents below \$700 in current dollars, a total of 173 “affordable” units.
- To meet half this projected need, a housing program for Sturgis should establish an average annual production target of about 7 affordable units.



It is important to note that affordable housing can be produced indirectly through a filtering process. This will be the most common way to create affordable owner-occupied housing priced between \$60,000 and \$100,000. For example, a new quality unit that meets the needs of a high-income, empty-nester household may encourage that household to “buy-up” and sell their current home to a moderate-income family. Filtering processes rarely satisfy an affordable need on a one-to-one basis, but they do realistically address part of the market demand. The credit of the mid-2000s could have also created a backlog of demand for rental housing, as many households will no longer qualify for the once easy credit.

Future Land Use Needs

Residential Land Needs

Sustainable community development will involve ongoing housing improvement (including replacement of substandard housing) and moderate, managed growth. Table 2.6 calculates residential land demand based on the following factors:

- New construction will be based on the following distribution: 65% single-family detached; 15% single-family attached or townhome; 20% multi-family

Table 2.6: Required Residential Land 2010-2030

2010-2020	% of Demand	Units	Gross Density (du/A)	Land Needs	Designated Land (x2)
Single Family Detached	65%	190	3	63.2	126
Single Family Attached	15%	44	6	7.3	15
Multi-family	20%	58	12	4.9	10
Total	100%	292		75.3	151
2020-2030					
Single Family Detached	65%	204	3	67.9	136
Single Family Attached	15%	47	6	7.8	16
Multi-family	20%	63	12	5.2	10
Total	100%	313		80.9	162
Total 2008-2030		605		156.3	313

Source: RDG Planning & Design, 2010

- Average gross residential densities will be 3 units/acre for single-family detached; 6 units/acre for single-family attached or townhomes; and 12 units/acre for multi-family.
- Land designated for residential development during the planning period will be twice the area needed for actual construction to provide market choice and prevent artificial inflation of land cost.



This projection indicates:

- A need for about 156 acres of residential land between 2010 and 2030.
- At two times the “hard demand,” the plan should designate 313 acres of residential development over the next 20 years. The development concept presented in this document identifies areas where this potential development should occur.

Commercial and Industrial Land Needs

A growing population needs additional commercial services, and commercial growth is also a key part of Sturgis’ economic development strategy. While this plan does not include a retail market analysis, adequate commercial space should be identified to meet market demands and produce efficient land patterns. The demand for future industrial land is linked to opportunity and recruitment, rather than exclusively to population growth. A single major corporate decision can dramatically increase (or decrease) the projected industrial demand in a community. In addition, a decision by the city to pursue industrial or regional commercial development aggressively can affect land needs.

Despite these differences, similar projection methods are used to predict future commercial and industrial land needs. For Sturgis the two methods used are:

- *Population proportion.* This method relates land needs to population projections. It assumes that the absolute amount of commercial or industrial land per 100 people will remain relatively constant and that new development will grow in proportion to population growth.
- *Residential use proportion.* This assumes a constant relationship between the amount of land used for residential and commercial or industrial purposes, thereby relating commercial and industrial growth rates to residential development rates.

Tables 2.7 and 2.8 compare the results of these methods for commercial and industrial uses. The land “Designated” in the Future Land Use Plan should be approximately 1.5 times the hard demand or conversion need for commercial

and 3 times the need for industrial. Like the approach used in the residential model above, this provides market choice and prevents artificial inflation of land cost. Tables 2.7 and 2.8 indicate a need for:

- 28 to 31 acres of new commercial land during the next 20 years.
- 42 to 47 acres of commercial land should be identified to support local demand and provide alternative sites. This will not account for a large regional retailer like a Bass Pro, but only the demand generated by the Sturgis area population.
- 36 to 41 acres of new industrial land during the next 20 years.
- 109 to 122 acres of designated industrial land or 3 times the hard demand to provide maximum flexibility.

Table 2.7: Required Commercial Land, 2010-2030

	2010	2020	2030	Conversion Need	Designated Land (x1.5)
Population Proportion Method					
Projected Population	6,800	7,364	7,975		
Commercial Use/100 res.	2.39	2.39	2.39		
Projected Commercial Use (acres)	162.82	176.00	190.60	27.78	41.67
Residential Use Proportion Method					
Residential Land (acres)	809.93	885.26	966.20		
Commercial/Residential Ratio	0.20	0.20	0.20		
Projected Commercial Use (acres)	162.82	177.96	194.23	31.42	47.12

Source: RDG Planning & Design, 2010

Table 2.8: Required Industrial/Business Park Land, 2010-2030

	2010	2020	2030	Conversion Need	Designated Land (x3)
Population Proportion Method					
Projected Population	6,800	7,364	7,975		
Industrial Use/100 res.	210.97	228.47	247.42	36.45	109.34
Projected Industrial Use (acres)					
Residential Use Proportion Method					
Residential Land (acres)	809.93	885.26	966.20		
Industrial/Residential Ratio	0.26	0.26	0.26		
Projected Industrial Use (acres)	210.97	230.59	251.68	40.71	122.12
Projected Industrial Use (acres)	6,800	7,364	7,975		

Source: RDG Planning & Design, 2010



Sturgis